FINAL



SHEPLEY'S HILL LANDFILL SUPPLEMENTAL GROUNDWATER AND LANDFILL CAP ASSESSMENT FOR LONG-TERM MONITORING AND MAINTENANCE – ADDENDUM REPORT

SHEPLEY'S HILL LANDFILL

FORMER FORT DEVENS ARMY INSTALLATION, DEVENS, MA

AUGUST 2011

BOOK 2 OF 4

Prepared for:
US Army Corp of Engineers
New England District
Concord, Massachusetts

Prepared by:
Sovereign Consulting Inc.
Contract No.: W912WJ-10-D-0003
Delivery Order: 0002



INORGANICS & MISCELLANEOUS

Project Name: SHL TASK 0002

Project Number: AC001

Lab Number:

L1012444

Report Date:

11/03/10

SAMPLE RESULTS

Lab ID:

L1012444-02

Client ID:

GP-10-27-035-U

Sample Location: DEVENS, MA

Matrix:

Water

Date Collected:

08/11/10 16:22

Date Received:

08/12/10

Field Prep:

None

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Wes	tborough Lab									
Solids, Total Suspended	470		mg/l	5.0	NA	1		08/13/10 16:35	30,2540D	DW
Dissolved Organic Carbon	1.3		mg/l	1.0	1,0	1	08/12/10 23:00	08/20/10 10:55	30,5310C	DW

Project Name: SHL TASK 0002

Lab Number:

Project Number: AC001 Report Date: 11/03/10

SAMPLE RESULTS

Lab ID:

L1012444-04

Client ID: Sample Location:

GP-10-27-045-U DEVENS, MA

Matrix:

Water

Date Collected:

08/11/10 16:52

L1012444

Date Received:

08/12/10

Field Prep:

None

					o'assis.	Dilution	Date	Date	Analytical	
Parameter	Result	Qualifler	Units	RL	MDL	Factor	Prepared	Analyzed	Method	Analyst
General Chemistry - Wes	stborough Lab									
Solids, Total Suspended	620		mg/l	10	NA	2		08/13/10 16:35	30,2540D	DW
Dissolved Organic Carbon	4.4		mg/l	1.0	1.0	1	08/12/10 23:00	08/20/10 10:55	30,5310C	DW

Project Name: SHL TASK 0002

Lab Number:

L1012444

Project Number: AC001

Report Date: 11/03/10

SAMPLE RESULTS

Lab ID:

L1012444-06

Client ID:

GP-10-27-055-U

Sample Location:

DEVENS, MA

Matrix:

Water

Date Collected:

08/11/10 17:30

Date Received:

08/12/10

Field Prep:

None

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Wes	tborough Lab)								
Solids, Total Suspended	2300		mg/l	10	NA	2		08/13/10 16:35	30,2540D	DW
Dissolved Organic Carbon	4.5		mg/l	1.0	1.0	1	08/12/10 23:00	08/20/10 10:55	30,5310C	DW

Project Name:

SHL TASK 0002

Lab Number:

L1012444

Project Number: AC001

Report Date:

11/03/10

SAMPLE RESULTS

Lab ID:

L1012444-07

Client ID:

SHL-23-F

Sample Location:

DEVENS, MA

Matrix:

Water

Date Collected:

08/12/10 09:15

Date Received:

08/12/10

Field Prep:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Wes	stborough Lab	i.								
Alkalinity, Total	4.3	m	ig CaCO3/L	2.0	NA	1	4	08/17/10 10:27	30,2320B	SD
Nitrogen, Ammonia	0.0496	J	mg/l	0.075	0.017	1	08/13/10 14:00	08/17/10 22:43	30,4500NH3-BH	AT
Nitrogen, Nitrite	ND		mg/l	0.02	0.002	1	141	08/12/10 22:42	30,4500NO2-B	DD
Sulfide	ND		mg/l	0.10	0.10	1	08/17/10 17:00	08/17/10 18:00	30,4500S2-AD	MW
Chemical Oxygen Demand	ND		mg/l	20	7.0	1		08/13/10 13:49	44,410.4	DW
Dissolved Organic Carbon	ND		mg/l	1.0	1.0	1	08/12/10 23:00	08/20/10 10:55	30,5310C	DW
Anions by Ion Chromatog	graphy - West	borough L	.ab							
Chloride	1.3		mg/l	0.50	0.07	1	,	08/13/10 17:46	44,300.0	AU
Nitrogen, Nitrate	0.07		mg/l	0.05	0.01	1	4	08/13/10 17:46	44,300.0	AU
Sulfate	4.9		mg/l	1.0	0.12	1.		08/13/10 17:46	44,300.0	AU

Project Name: SHL TASK 0002

Project Number: AC001

Lab Number:

L1012444

Report Date:

11/03/10

SAMPLE RESULTS

Lab ID:

L1012444-08

Client ID: Sample Location:

SHM-05-39A-F DEVENS, MA

Matrix:

Date Collected:

08/12/10 09:20

Date Received:

08/12/10

Field Prep:

See Narrative

Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - West	tborough Lab)								
Alkalinity, Total	100		mg CaCO3/L	2.0	NA	1		08/17/10 10:27	30,2320B	SD
Nitrogen, Ammonia	4.01		mg/l	0.075	0.017	1	08/13/10 14:00	08/17/10 22:46	30,4500NH3-BH	AT
Nitrogen, Nitrite	ND		mg/l	0.02	0.002	1	4	08/12/10 22:42	30,4500NO2-B	DD
Sulfide	ND		mg/l	0.10	0.10	1	08/17/10 17:00	08/17/10 18:00	30,4500S2-AD	MW
Chemical Oxygen Demand	11	J	mg/l	20	7.0	1		08/13/10 13:50	44,410.4	DW
Dissolved Organic Carbon	2.9		mg/l	1.0	1.0	1	08/12/10 23:00	08/20/10 10:55	30,5310C	DW
Anions by Ion Chromatog	raphy - West	borough	Lab							
Chloride	7.1		mg/l	0.50	0.07	1	2	08/13/10 17:58	44,300.0	AU
Nitrogen, Nitrate	0.009	J	mg/l	0.05	0.01	1		08/13/10 17:58	44,300.0	AU
Sulfate	6.0		mg/l	1.0	0.12	1		08/13/10 17:58	44,300.0	AU

Project Name: SHL TASK 0002

Project Number: AC001

Lab Number:

L1012444

Report Date:

11/03/10

SAMPLE RESULTS

Lab ID:

L1012444-09

Client ID:

SHM-07-05-F DEVENS, MA

Sample Location: Matrix:

Water

Date Collected:

08/12/10 10:00

Date Received:

08/12/10

Field Prep:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Wes	tborough Lab	i.								
Alkalinity, Total	94		mg CaCO3/L	2.0	NA	1	-	08/17/10 10:27	30,2320B	SD
Nitrogen, Ammonia	2.42		mg/l	0.075	0,017	1	08/13/10 14:00	08/17/10 22:47	30,4500NH3-BH	AT
Nitrogen, Nitrite	0.01	Ĵ	mg/l	0.02	0.002	1	16	08/12/10 22:43	30,4500NO2-B	DD
Sulfide	ND		mg/l	0.10	0.10	1	08/17/10 17:00	08/17/10 18:00	30,4500S2-AD	MW
Chemical Oxygen Demand	ND		mg/l	20	7.0	1		08/13/10 13:50	44,410.4	DW
Dissolved Organic Carbon	2.0		mg/l	1.0	1.0	1	08/12/10 23:00	08/20/10 10:55	30,5310C	DW
Anions by Ion Chromatog	raphy - West	borough	Lab							
Chloride	8.9		mg/l	0.50	0.07	1	1,0	08/13/10 18:10	44,300.0	AU
Nitrogen, Nitrate	0.06		mg/l	0.05	0.01	1	(2)	08/13/10 18:10	44,300.0	AU
Sulfate	8.1		mg/l	1.0	0.12	1		08/13/10 18:10	44,300.0	AU

Project Name: SHL TASK 0002

Project Number: AC001

Lab Number:

L1012444

Report Date:

11/03/10

SAMPLE RESULTS

Lab ID:

L1012444-10

Client ID:

SHM-99-31B-F

Sample Location:

DEVENS, MA

Matrix:

Water

Date Collected:

08/12/10 11:10

Date Received:

08/12/10

Field Prep:

Parameter	Result	Qualifier	r Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Wes	tborough Lab	1								
Alkalinity, Total	86		mg CaCO3/L	2.0	NA	1	-	08/17/10 10:27	30,2320B	SD
Nitrogen, Ammonia	4.10		mg/l	0.075	0.017	1	08/13/10 14:00	08/17/10 22:48	30,4500NH3-BH	AT
Nitrogen, Nitrite	ND		mg/l	0.02	0.002	1		08/12/10 22:43	30,4500NO2-B	DD
Sulfide	ND		mg/l	0.10	0.10	1	08/17/10 17:00	08/17/10 18:00	30,4500S2-AD	MW
Chemical Oxygen Demand	11	J	mg/l	20	7.0	1		08/13/10 13:50	44,410.4	DW
Dissolved Organic Carbon	6.5		mg/l	1.0	1.0	1	08/12/10 23:00	08/20/10 10:55	30,5310C	DW
Anions by Ion Chromatog	raphy - West	borough	Lab							
Chloride	4.0		mg/l	0.50	0.07	1	20	08/13/10 18:22	44,300.0	AU
Nitrogen, Nitrate	ND		mg/l	0.05	0.01	1		08/13/10 18:22	44,300.0	AU
Sulfate	3.0		mg/l	1.0	0.12	1	*	08/13/10 18:22	44,300.0	AU

Project Name: SHL TASK 0002

Project Number: AC001

Lab Number:

L1012444

Report Date:

11/03/10

SAMPLE RESULTS

Lab ID:

L1012444-11

Client ID:

SHM-10-10-F

Sample Location:

DEVENS, MA

Matrix:

Water

Date Collected:

08/12/10 11:38

Date Received:

08/12/10

Field Prep:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Wes	tborough Lab									
Alkalinity, Total	320	mg	CaCO3/L	2.0	NA	1	4	08/17/10 10:27	30,2320B	SD
Nitrogen, Ammonia	0.201		mg/l	0.075	0.017	1	08/13/10 14:00	08/17/10 22:49	30,4500NH3-BH	AT
Nitrogen, Nitrite	ND		mg/l	0.02	0.002	1		08/12/10 22:44	30,4500NO2-B	DD
Sulfide	ND		mg/l	0.10	0.10	1	08/17/10 17:00	08/17/10 18:00	30,4500S2-AD	MW
Chemical Oxygen Demand	25		mg/l	20	7.0	1	4	08/13/10 13:50	44,410.4	DW
Dissolved Organic Carbon	3.9		mg/l	1.0	1.0	1	08/12/10 23:00	08/20/10 10:55	30,5310C	DW
Anions by Ion Chromatog	raphy - West	borough La	b							
Chloride	23		mg/l	0.50	0.07	1		08/13/10 18:34	44,300.0	AU
Nitrogen, Nitrate	ND		mg/l	0.05	0.01	1		08/13/10 18:34	44,300.0	AU
Sulfate	0.79	J	mg/l	1.0	0.12	1	3	08/13/10 18:34	44,300.0	AU

Project Name: SHL TASK 0002

Project Number: AC001

Lab Number:

L1012444

Report Date:

11/03/10

SAMPLE RESULTS

Lab ID:

L1012444-12

Client ID:

SHM-07-03-F

Sample Location:

DEVENS, MA

Matrix:

Water

Date Collected:

08/12/10 12:20

Date Received:

08/12/10

Field Prep:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Wes	stborough Lab									
Alkalinity, Total	18	п	ng CaCO3/L	2.0	NA	1		08/17/10 10:27	30,2320B	SD
Nitrogen, Ammonia	0.0239	J	mg/l	0.075	0.017	1	08/13/10 14:00	08/17/10 22:52	30,4500NH3-BH	AT
Nitrogen, Nitrite	ND		mg/l	0.02	0.002	1		08/12/10 22:45	30,4500NO2-B	DD
Sulfide	ND		mg/l	0.10	0.10	1	08/17/10 17:00	08/17/10 18:00	30,4500S2-AD	MW
Chemical Oxygen Demand	ND		mg/l	20	7.0	1		08/13/10 13:50	44,410.4	DW
Dissolved Organic Carbon	ND		mg/l	1.0	1.0	1	08/12/10 23:00	08/20/10 10:55	30,5310C	DW
Anions by Ion Chromatog	graphy - West	borough l	Lab							
Chloride	8,2		mg/l	0.50	0.07	1	-	08/13/10 18:46	44,300.0	AU
Nitrogen, Nitrate	0.59		mg/l	0.10	0.01	2		08/13/10 18:58	44,300.0	AU
Sulfate	10		mg/l	1.0	0.12	1	181	08/13/10 18:46	44,300.0	AU

Project Name: SHL TASK 0002

Project Number: AC001

Lab Number:

L1012444

Report Date:

11/03/10

SAMPLE RESULTS

Lab ID:

L1012444-13 SHM-10-01-F

Client ID: Sample Location:

DEVENS, MA

Matrix:

Water

Date Collected:

08/12/10 12:40

Date Received:

08/12/10

Field Prep:

Parameter	Result	Qualifier Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Wes	stborough Lab								
Alkalinity, Total	130	mg CaCO3/L	2.0	NA	1		08/17/10 10:27	30,2320B	SD
Nitrogen, Ammonia	0.241	mg/l	0.075	0.017	1	08/13/10 14:00	08/17/10 22:53	30,4500NH3-BH	AT
Nitrogen, Nitrite	ND	mg/l	0.02	0.002	1		08/12/10 22:45	30,4500NO2-B	DD
Sulfide	ND	mg/l	0.10	0.10	1	08/17/10 17:00	08/17/10 18:00	30,4500S2-AD	MW
Chemical Oxygen Demand	ND	mg/l	20	7.0	1		08/13/10 13:50	44,410.4	DW
Dissolved Organic Carbon	1.5	mg/l	1.0	1.0	1	08/12/10 23:00	08/20/10 10:55	30,5310C	DW
Anions by Ion Chromatog	graphy - West	borough Lab							
Chloride	14	mg/l	0.50	0.07	1		08/13/10 19:10	44,300.0	AU
Nitrogen, Nitrate	ND	mg/l	0.05	0.01	1	14	08/13/10 19:10	44,300.0	AU
Sulfate	7.0	mg/l	1.0	0.12	1	1.4	08/13/10 19:10	44,300.0	AU

Project Name: SHL TASK 0002

Project Number: AC001

Lab Number:

L1012444

Report Date:

11/03/10

SAMPLE RESULTS

Lab ID:

L1012444-14

Client ID:

SHM-05-42A-F DEVENS, MA

Sample Location: Matrix:

Water

Date Collected:

08/12/10 13:35

Date Received:

08/12/10

Field Prep:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Wes	stborough Lab	1								
Alkalinity, Total	18	n	ng CaCO3/L	2.0	NA	1	1	08/17/10 10:27	30,2320B	SD
Nitrogen, Ammonia	0.0189	J	mg/l	0.075	0.017	1	08/13/10 14:00	08/17/10 22:54	30,4500NH3-BH	AT
Nitrogen, Nitrite	ND		mg/l	0.02	0.002	1	-	08/12/10 22:45	30,4500NO2-B	DD
Sulfide	ND		mg/l	0.10	0.10	1	08/17/10 17:00	08/17/10 18:00	30,4500S2-AD	MW
Chemical Oxygen Demand	ND		mg/l	20	7.0	1	4	08/13/10 13:51	44,410.4	DW
Dissolved Organic Carbon	ND		mg/l	1.0	1.0	1	08/12/10 23:00	08/20/10 10:55	30,5310C	DW
Anions by Ion Chromatog	graphy - West	borough l	_ab							
Chloride	1.6		mg/l	0.50	0.07	1		08/13/10 20:22	44,300.0	AU
Nitrogen, Nitrate	ND		mg/l	0.05	0.01	.1		08/13/10 20:22	44,300.0	AU
Sulfate	5.6		mg/l	1.0	0.12	1	20	08/13/10 20:22	44,300.0	AU

Project Name: SHL TASK 0002

SHL TASK 0002

Lab Number:

L1012444

Project Number: AC001

Report Date:

11/03/10

SAMPLE RESULTS

Lab ID:

L1012444-18 GP-10-27-065-U Date Collected:

08/11/10 16:00

30,5310C

DW

Client ID: Sample Location:

DEVENS, MA

Date Received:

08/12/10 23:00 08/20/10 10:55

08/12/10

Matrix:

Dissolved Organic Carbon

Water

5.7

Field Prep: None

Parameter General Chemistry - Wes	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Solids, Total Suspended	980		mg/l	15	NA	3	-	08/23/10 12:00	30,2540D	SD

1.0

1.0

mg/l

Project Name: SHL TASK 0002

Project Number: AC001

Lab Number:

L1012444

Report Date:

11/03/10

Method Blank Analysis Batch Quality Control

General Chemistry - Westb Nitrogen, Nitrite	orough La	ab for sam				Factor	Prepared	Analyzed	Method	Analyst
Nitrogen, Nitrite	ND		nple(s): 07	'-14 Ba	tch: WG	6427431-2				
	140		mg/l	0.02	0.002	1	¥.)	08/12/10 22:41	30,4500NO2-B	DD
General Chemistry - Westb	orough La	ab for san	nple(s): 07	7-14 Ba	atch: Wo	6427495-1				
Chemical Oxygen Demand	ND		mg/l	20	7.0	1	*	08/13/10 13:48	44,410.4	DW
General Chemistry - Westh	orough L	ab for san	nple(s): 02	2,04,06	Batch:	WG427579	9-1			
Solids, Total Suspended	ND		mg/l	5.0	NA	1		08/13/10 16:35	30,2540D	DW
General Chemistry - Westl	orough L	ab for san	nple(s): 07	7-14 Ba	atch: WC	3427618-1				
Nitrogen, Ammonia	ND		mg/l	0.075	0.017	1	08/13/10 14:00	08/17/10 22:30	30,4500NH3-BH	H AT
Anions by Ion Chromatogra	aphy - We	stborough	Lab for s	ample(s): 07-14	Batch: W	/G427652-1			
Chloride	ND	-	mg/l	0.50	0.07	1	de l	08/13/10 17:22	44,300.0	AU
Nitrogen, Nitrate	ND		mg/l	0.05	0.01	1	÷	08/13/10 17:22	44,300.0	AU
Sulfate	ND		mg/l	1.0	0.12	1	4	08/13/10 17:22	44,300.0	AU
General Chemistry - Westt	orough L	ab for san	nple(s): 07	7-14 Ba	atch: WO	G428068-1				
Alkalinity Total	ND		mg CaCO3/	L 20	NA	1	*	08/17/10 10 27	30.2320B	SD
General Chemistry - West	orough L	ab for san	nple(s): 07	7-14 Ba	atch: W0	G428284-1				
Sulfide	ND		mg/l	0.10	0.10	1	08/17/10 17:00	08/17/10 18:00	30,4500S2-AD	MW
General Chemistry - Westt	orough L	ab for san	nple(s): 02	2,04,06-	14,18 E	atch: WG	428767-2			
Dissolved Organic Carbon	ND		mg/l	1.0	1.0	1	08/12/10 23:00	08/20/10 10:55	30,5310C	DW
General Chemistry - West	orough L	ab for sar	nple(s): 18	B Batch	n: WG42	9144-1				
Solids, Total Suspended	ND		mg/l	5.0	NA	1		08/23/10 12:00	30,2540D	SD

Lab Control Sample Analysis Batch Quality Control

Project Name:

SHL TASK 0002

Project Number:

AC001

Lab Number:

L1012444

Report Date:

11/03/10

Parameter	LCS %Recovery Q	ual %	LCSD Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab	Associated sample(s): 07	7-14 Bat	ch: WG4274	31-1				
Nitrogen, Nitrite	100		4		90-110	-		20
General Chemistry - Westborough Lab	Associated sample(s): 07	7-14 Bat	ch: WG4274	95-2				
Chemical Oxygen Demand	100		4		95-105	*		
General Chemistry - Westborough Lab	Associated sample(s): 07	7-14 Bat	ch: WG4276	18-2				
Nitrogen, Ammonia	96 .		14		80-120			20
Anions by Ion Chromatography - Westb	orough Lab Associated s	sample(s):	07-14 Bate	ch: WG427	652-2			
Chloride	95		a contract		90-110	-		
Nitrogen, Nitrate	105				90-110	-		
Sulfate	100		4		90-110			
General Chemistry - Westborough Lab	Associated sample(s): 07	7-14 Bate	ch: WG4280	68-2				
Alkalinity, Total	104		*		80-115			4
General Chemistry - Westborough Lab	Associated sample(s): 07	7-14 Bate	ch: WG4282	84-2				
Sulfide	96 -				75-125			

Lab Control Sample Analysis Batch Quality Control

Lab Number:

L1012444

Report Date:

11/03/10-

Project Number: AC001

SHL TASK 0002

Project Name:

LCS LCSD %Recovery Parameter %Recovery %Recovery Limits RPD **RPD Limits**

General Chemistry - Westborough Lab Associated sample(s): 02,04,06-14,18 Batch: WG428767-1

Dissolved Organic Carbon

90-110

Matrix Spike Analysis Batch Quality Control

Project Name:

SHL TASK 0002

Project Number:

AC001

Lab Number:

L1012444

Report Date:

11/03/10

Parameter	Native Sample	MS . Added	MS Found	MS %Recovery	MSD Qual Found	MSD %Recovery Qua	Recovery I Limits	RPD	Qual	RPD Limits
General Chemistry - Westbo	rough Lab Asso	ciated samp	ole(s): 07-14	QC Batch I	D: WG427431-3	QC Sample: L1012	444-07 Clie	nt ID:	SHL-23	-F
Nitrogen, Nitrite	ND	0.1	0.10	100	4	-	85-115	0		20
General Chemistry - Westbo	rough Lab Asso	ciated samp	ole(s): 07-14	QC Batch I	D: WG42 7495- 3	QC Sample: L1012	444-07 Clie	nt ID:	SHL-23	-F
Chemical Oxygen Demand	ND	238	270	115		÷	80-120			20
General Chemistry - Westbo	rough Lab Asso	ciated samp	ole(s): 07-14	QC Batch I	D: WG427618-3	QC Sample: L1012	444-07 Clie	nt ID:	SHL-23	-F
Nitrogen, Ammonia	0.0496J	4	3.95	99	-	1	80-120			20
Anions by Ion Chromatograp Client ID: SHM-05-42A-F Chloride	ohy - Westborou	gh Lab Asso	ociated sam	ple(s): 07-14	QC Batch ID: W	G427652-3 WG4276 98	52-4 QC Sa 40-151	mple: I	L101244	4- 14
Nitrogen, Nitrate	ND	0.4	0.44	110	0.42	105	80-122	5		15
Sulfate	5.6	8	14	105	14	105	60-140	0		20
General Chemistry - Westbo	rough Lab Asso	ciated samp	ole(s): 07-14	QC Batch I	D: WG428068-3	QC Sample: L1012	444-14 Clie	nt ID:	SHM-05	-42A-F
Alkalinity, Total	18.	100	120	105			86-116	-		4
General Chemistry - Westbo	rough Lab Asso	ciated samp	ole(s): 07-14	QC Batch I	D: WG428284-3	QC Sample: L1012	444-07 Clie	nt ID:	SHL-23	F
Sulfide	ND	0.24.	0.19	79			75-125	de l		20
General Chemistry - Westbo 39A-F	rough Lab Asso	ciated samp	ole(s): 02,04	,06-14,18 Q	C Batch ID: WG4	28767-3 QC Samp	le: L1012444	-08 (Client ID:	SHM-
Dissolved Organic Carbon	2.9	4	7.6	118	15	1.5	79-120	10.2		20

Lab Duplicate Analysis Batch Quality Control

SHL TASK 0002

Project Number: A

Project Name:

AC001

Lab Number:

L1012444

Report Date:

11/03/10

Parameter	Nat Nat	ive Samp	le D	uplicate Samp	le Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab	Associated sample(s):	07-14	QC Batch ID:	WG427431-4	QC Sample:	L1012444-14	Client ID:	SHM-05-42A-F
Nitrogen, Nitrite		ND		ND	mg/l	NC		20
General Chemistry - Westborough Lab	Associated sample(s):	07-14	QC Batch ID:	WG427495-4	QC Sample:	L1012444-07	Client ID:	SHL-23-F
Chemical Oxygen Demand	* 1.	ND		ND	mg/l	NC		20
General Chemistry - Westborough Lab	Associated sample(s):	02,04,06	QC Batch	ID: WG427579	-2 QC Samp	le: L1012323-	20 Client	ID: DUP Sample
Solids, Total Suspended		2300		1600	mg/l	36	Q	32
General Chemistry - Westborough Lab	Associated sample(s):	07-14	QC Batch ID:	WG427618-4	QC Sample:	L1012444-07	Client ID:	SHL-23-F
Nitrogen, Ammonia	_ &	0.0496J		0.0371J	mg/l	NC		20
Anions by Ion Chromatography - Westb 95-42A-F	orough Lab Associated	d sample(s): 07-14 C	C Batch ID: W	G427652-5	QC Sample: L	1012444-1	4 Client ID: SHM-
Chloride		1.6		1.6	mg/l	0		18
Nitrogen, Nitrate	8	ND		ND	mg/l	NC		15
Sulfate	621	5.6		5.6	mg/l	0		20
General Chemistry - Westborough Lab	Associated sample(s):	07-14	QC Batch ID:	WG428068-4	QC Sample:	L1012444-14	Client ID:	SHM-05-42A-F
Alkalinity, Total	1.4	18.		21	mg CaCO3	3/L 15	Q	4
General Chemistry - Westborough Lab	Associated sample(s):	07-14	QC Batch ID:	WG428284-4	QC Sample:	L1012444-11	Client ID:	SHM-10-10-F
Sulfide	,	ND		ND	mg/l	NC		20

Lab Duplicate Analysis Batch Quality Control

SHL TASK 0002 Batch Quality Con

Lab Number:

L1012444

Report Date:

11/03/10

Parameter	Nat	ive Sample	Duplicate Sample	Units	RPD	~	RPD Limits
General Chemistry - Westborough Lab 05-F	Associated sample(s):	02,04,06-14,18	QC Batch ID: WG428	3767-4 QC Sa	mple: L101	2444-09 Cli	ent ID: SHM-07-
Dissolved Organic Carbon		2.0	2.8	mg/l	33	Q	20
General Chemistry - Westborough Lab	Associated sample(s):	18 QC Batch I	D: WG429144-2 QC	Sample: L1012	444-18 Clie	ent ID: GP-	10-27 - 065-U
Solids, Total Suspended		980	1200	mg/l	20		32

Project Name:

Project Number:

AC001

Project Name: SHL TASK 0002

Project Number: AC001

Report Date: 11/03/10

Sample Receipt and Container Information

Were project specific reporting limits specified?

YES

Reagent H2O Preserved Vials Frozen on: NA

Cooler Information Custody Seal

Cooler

B Present/Intact
C Present/Intact
A Present/Intact
D Present/Intact

	Container Info	rmation			Temp				
	Container ID	Container Type	Cooler	рН		Pres	Seal	Analysis(*)	
	L1012444-01A	Plastic 250ml HNO3 preserved	Α	<2	3.1	Υ	Present/Intact	DOD-FE-6020S(180),DOD-AS- 6020S(180)	
	L1012444-02A	Plastic 1000ml unpreserved	Α	6	3.1	Y	Present/Intact	TSS-2540(7)	
	L1012444-02B	Vial H2SO4 preserved split	Α	N/A	3.1	Y	Present/Intact	DOC-5310(28)	
	L1012444-02C	Vial H2SO4 preserved spllt	Α	N/A	3.1	Y	Present/Intact	DOC-5310(28)	
	L1012444-02D	Plastic 250ml HNO3 preserved	A	<2	3.1	Y	Present/Intact	DOD-AS-6020T(180),DOD-FE- 6020T(180)	
	L1012444-02X	Amber 250ml unpreserved	A	6	3.1	Y	Present/Intact	DOC-5310(28)	
	L1012444-03A	Plastic 250ml HNO3 preserved	D	<2	4	Y	Present/Intact	DOD-FE-6020S(180),DOD-AS- 6020S(180)	
	L1012444-04A	Plastic 1000ml unpreserved	Α	6	3.1	Y	Present/Intact	TSS-2540(7)	
	L1012444-04B	Vial H2SO4 preserved split	Α	N/A	3.1	Y	Present/Intact	DOC-5310(28)	
	L1012444-04C	Vial H2SO4 preserved split	Α	N/A	3.1	Y	Present/Intact	DOC-5310(28)	
	L1012444-04D	Plastic 250ml HNO3 preserved	Α	<2	3.1	Y	Present/Intact	DOD-AS-6020T(180),DOD-FE- 6020T(180)	
×	L1012444-04X	Amber 250ml unpreserved	. A	6	3.1	Y	Present/Intact	DOC-5310(28)	
	L1012444-05A	Plastic 250ml HNO3 preserved	D.	<2	+ 4	Υ.	Present/Intact	DOD-FE-6020S(180),DOD-AS- 6020S(180)	
	L1012444-06A	Plastic 1000ml unpreserved	Α	6	3.1	Y	Present/Intact	TSS-2540(7)	
	L1012444-06B	Vial H2SO4 preserved split	Α	N/A	3.1	Y	Present/Intact	DOC-5310(28)	
	L1012444-06C	Vial H2SO4 preserved split	Α	N/A	3.1	Y	Present/Intact	DOC-5310(28)	
	L1012444-06D	Plastic 250ml HNO3 preserved	D	<2	4	Y	Present/Intact	DOD-AS-6020T(180).DOD-FE- 6020T(180)	
	L1012444-06X	Amber 250ml unpreserved	Α	6	3.1	Y	Present/Intact	DOC-5310(28)	
	L1012444-07A	Plastic 500ml unpreserved	Α	6	3.1	Y	Present/Intact	SO4-300(28),CL-300(28),NO3- 300(2)	
	L1012444-07B	Plastic 250ml unpreserved	Α	6	3.1	Y	Present/Intact	NO2-4500NO2(2)	

Project Name: SHL TASK 0002

Project Number: AC001

Lab Number: L1012444 Report Date: 11/03/10

Container Info				Temp			
Container ID	Container Type	Cooler	pH	deg C	Pres	Seal	Analysis(*)
L1012444-07C	Plastic 250ml unpreserved	Α	N/A	3.1	Y	Present/Intact	ALK-T-2320(14)
L1012444-07D	Plastic 500ml H2SO4 preserved	Α	<2	3.1	Y	Present/Intact	COD-410(28),NH3-4500(28)
L1012444-07E	Plastic 250ml Zn Acetate/NaOH pr	Α	>12	3.1	Y	Present/Intact	SULFIDE-4500(7)
L1012444-07F	Plastic 250ml Zn Acetate/NaOH pr	Α	>12	3.1	Y	Present/Intact	SULFIDE-4500(7)
L1012444-07G	Plastic 250ml Zn Acetate/NaOH pr	Α	>12	3.1	Y	Present/Intact	SULFIDE-4500(7)
L1012444-07H	Vial H2SO4 preserved split	Α	N/A	3.1	Y	Present/Intact	DOC-5310(28)
L1012444-07I	Vial H2SO4 preserved split	Α	N/A	3.1	Y	Present/Intact	DOC-5310(28)
L1012444-07M	Plastic 500ml HNO3 preserved	A	<2	3.1	Y	Present/Intact	DOD-FE-6020S(180),DOD-MG-6020S(180),DOD-CR-6020S(180),DOD-MN-6020S(180),DOD-CA-6020S(180),DOD-NA-6020S(180),DOD-NI-6020S(180),DOD-PB-6020S(180),DOD-AS-6020S(180),DOD-AL-6020S(180),DOD-K-6020S(180)
L1012444-07X	Amber 250ml unpreserved	A	6	3.1	Y	Present/Intact	DOC-5310(28)
L1012444-08A	Plastic 500ml unpreserved	Α	6	3.1	Y	Present/Intact	SO4-300(28),CL-300(28),NO3- 300(2)
L1012444-08B	Plastic 250ml unpreserved	С	6	2.1	Y	Present/Intact	NO2-4500NO2(2)
L1012444-08C	Plastic 250ml unpreserved	A	NIA	3.1	Y	Present/Intact	ALK-T-2320(14)
L1012444-08D	Plastic 500ml H2SO4 preserved	Α	<2	3.1	Y	Present/Intact	COD-410(28),NH3-4500(28)
L1012444-08E	Plastic 250ml Zn Acetate/NaOH pr	Α	>12	3.1	Y	Present/Intact	SULFIDE-4500(7)
L1012444-08F	Plastic 250ml Zn Acetate/NaOH pr	Α	>12	3.1	Y	Present/Intact	SULFIDE-4500(7)
L1012444-08G	Plastic 250ml Zn Acetate/NaOH pr	Α	>12	3.1	Y	Present/Intact	SULFIDE-4500(7)
L1012444-08H	Vial H2SO4 preserved split	A	N/A	3.1	Y	Present/Intact	DOC-5310(28)
L1012444-08I	Vial H2SO4 preserved split	Α	N/A	3.1	Y	Present/Intact	DOC-5310(28)
L1012444-08M	Plastic 500ml HNO3 preserved	Α	<2	3.1	Ý	Present/Intact	DOD-FE-6020S(180),DOD-MG- 6020S(180),DOD-CR- 6020S(180),DOD-MN- 6020S(180),DOD-CA- 6020S(180),DOD-NA-
					14	3,134	6020S(180),DOD-NI- 6020S(180),DOD-PB- 6020S(180),DOD-AS- 6020S(180),DOD-AL- 6020S(180),DOD-K-6020S(180)
L1012444-08N	Plastic 500ml HNO3 preserved	A	<2	3.1	Y	Present/Intact	DOD-FE-6020S(180),DOD-MG-6020S(180),DOD-CR-6020S(180),DOD-MN-6020S(180),DOD-AA-6020S(180),DOD-NA-6020S(180),DOD-NI-6020S(180),DOD-PB-6020S(180),DOD-AS-6020S(180),DOD-AL-6020S(180),DOD-K-6020S(180)

Project Name: SHL TASK 0002

Project Number: AC001

Lab Number: L1012444 Report Date: 11/03/10

Container Info	ormation			Temp			
Container ID	Container Type	Cooler	pH	deg C	Pres	Seal	Analysis(*)
L1012444-08X	Amber 250ml unpreserved	Α	6	3.1	Y	Present/Intact	DOC-5310(28)
L1012444-09A	Plastic 500ml unpreserved	C	6	2.1	Y	Present/Intact	SO4-300(28), CL-300(28), NO3-300(2)
L1012444-09B	Plastic 250ml unpreserved	C	6	2.1	Y	Present/Intact	NO2-4500NO2(2)
L1012444-09C	Plastic 250ml unpreserved	D	N/A	4	Y	Present/Intact	ALK-T-2320(14)
L1012444-09D	Plastic 500ml H2SO4 preserved	C	<2	2.1	Y	Present/Intact	COD-410(28),NH3-4500(28)
L1012444-09E	Plastic 250ml Zn Acetate/NaOH pr	C	>12	2.1	Y	Present/Intact	SULFIDE-4500(7)
L1012444-09F	Plastic 250ml Zn Acetate/NaOH pr	С	>12	2.1	Ÿ	Present/Intact	SULFIDE-4500(7)
L1012444-09G	Plastic 250ml Zn Acetate/NaOH pr	С	>12	21	Y	Present/Intact	SULFIDE-4500(7)
L1012444-09H	Vial H2SO4 preserved split	C	N/A	2.1	Y	Present/Intact	DOC-5310(28)
L1012444-09I	Vial H2SO4 preserved split	C	N/A	2 1	Y	Present/Intact	DOC-5310(28)
L1012444-09M	Plastic 500ml HNO3 preserved	С	<2	2.1	Y	Present/Intact	DOD-FE-6020S(180),DOD-MG-6020S(180),DOD-CR-6020S(180),DOD-MN-6020S(180),DOD-NA-6020S(180),DOD-NI-6020S(180),DOD-NI-6020S(180),DOD-AS-6020S(180),DOD-AS-6020S(180),DOD-AL-6020S(180),DOD-K-6020S(180)
L1012444-09X	Amber 250ml unpreserved	C	6	2.1	Y	Present/Intact	DOC-5310(28)
L1012444-10A	Plastic 500ml unpreserved	С	6	2.1	Υ	Present/Intact	SO4-300(28),CL-300(28).NO3-300(2)
L1012444-10B	Plastic 250ml unpreserved	С	6	2 1	Y	Present/Intact	NO2-4500NO2(?)
L1012444-10C	Plastic 250ml unpreserved	C	N/A	2.1	Y	Present/Intact	ALK-T-2320(14)
L1012444-10D	Plastic 500ml H2SO4 preserved	C	<2	21	Y	Present/Intact	COD-410(28),NH3-4500(28)
L1012444-10E	Plastic 250ml Zn Acetale/NaOH pr	C	>12	2,1	Υ	Present/Intact	SULFIDE-4500(7)
L1012444-10F	Plastic 250ml Zn Acetate/NaOH pr	C	>12	2.1	Y	Present/Intact	SULFIDE-4500(7)
L1012444-10G	Plastic 250ml Zn Acetate/NaOH pr	C	>12	2.1	Y	Present/Intact	SULFIDE-4500(7)
L1012444-10H	Vial H2SO4 preserved split	C	N/A	2.1	Y	Present/Intact	DOC-5310(28)
L1012444-101	Vial H2SO4 preserved split	C	N/A	2.1	Y	Present/Intact	DOC-5310(28)
L1012444-10M	Plastic 500ml HNO3 preserved	C	<2	2,1	Y	Present/Intact	DOD-FE-6020S(180),DOD-MG-6020S(180),DOD-CR-6020S(180),DOD-MN-6020S(180),DOD-NA-6020S(180),DOD-NA-6020S(180),DOD-PB-6020S(180),DOD-AS-6020S(180),DOD-AL-6020S(180),DOD-K-6020S(180),DOD-K-6020S(180),DOD-K-6020S(180)
L1012444-10X	Amber 250ml unpreserved	C	6	2.1	Y	Present/Intact	DOC-5310(28)
L1012444-11A	Plastic 500ml unpreserved	В	6	2.0	Y	Present/Intact	SQ4-300(28),CL-300(28),NO3- 300(2)
L1012444-11B	Plastic 250ml unpreserved	D	6	4	Y	Present/Intact	NO2-4500NO2(2)

Project Name: SHL TASK 0002

Project Number: AC001

Lab Number: L1012444 Report Date: 11/03/10

Container Info	ormation			Temp			
Container ID	Container Type	Cooler	рН	deg C	Pres	Seal	Analysis(*)
L1012444-11C	Plastic 250ml unpreserved	D	N/A	4	Y	Present/Intact	ALK-T-2320(14)
L1012444-11D	Plastic 500ml H2SO4 preserved	В	<2	2.0	Y	Present/Intact	COD-410(28),NH3-4500(28)
L1012444-11E	Plastic 250ml Zn Acetate/NaOH pr	D	>12	4	Y	Present/Intact	SULFIDE-4500(7)
L1012444-11F	Plastic 250ml Zn Acetate/NaOH pr	D	>12	4	Y	Present/Intact	SULFIDE-4500(7)
L1012444-11G	Plastic 250ml Zn Acetate/NaOH pr	D	>12	4	Y	Present/Intact	SULFIDE-4500(7)
L1012444-11H	Vial H2SO4 preserved split	В	N/A	2.0	Y	Present/Intact	DOC-5310(28)
L1012444-11I	Vial H2SO4 preserved split	В	N/A	2.0	Y	Present/Intact	DOC-5310(28)
L1012444-11M	Plastic 500ml HNO3 preserved	В	<2	2.0	Y	Present/Intact	DOD-FE-6020S(180),DOD-MG-6020S(180),DOD-CR-6020S(180),DOD-MN-6020S(180),DOD-CA-6020S(180),DOD-NI-6020S(180),DOD-PB-6020S(180),DOD-AS-6020S(180),DOD-AL-6020S(180),DOD-K-6020S(180),DOD-K-6020S(180),DOD-K-6020S(180)
L1012444-11X	Amber 250ml unpreserved	В	6	2.0	Y	Present/Intact	DOC-5310(28)
L1012444-12A	Plastic 500ml unpreserved	D	6	4	Υ	Present/Intact	SO4-300(28),CL-300(28),NO3- 300(2)
L1012444-12B	Plastic 250ml unpreserved	В	6	2.0	Y	Present/Intact	NO2-4500NO2(2)
L1012444-12C	Plastic 250ml unpreserved	D	N/A	4	Y	Present/Intact	ALK-T-2320(14)
L1012444-12D	Plastic 500ml H2SO4 preserved	В	<2	2.0	Y	Present/Intact	COD-410(28),NH3-4500(28)
L1012444-12E	Plastic 250ml Zn Acetate/NaOH pr	D	>12	4	Y	Present/Intact	SULFIDE-4500(7)
L1012444-12F	Plastic 250ml Zn Acetate/NaOH pr	В	>12	20	Y	Present/Intact	SULFIDE-4500(7)
L1012444-12G	Plastic 250ml Zn Acetate/NaOH pr	D	>12	4	Y	Present/Intact	SULFIDE-4500(7)
L1012444-12H	Vial H2SO4 preserved split	D	N/A	4	Y	Present/Intact	DOC-5310(28)
L1012444-12I	Vial H2SO4 preserved split	D	N/A	4	Y	Present/Intact	DOC-5310(28)
L1012444-12M	Plastic 500ml HNO3 preserved	В	<2	2.0	Υ	Present/Intact	DOD-FE-6020S(180),DOD-MG- 6020S(180),DOD-CR- 6020S(180),DOD-MN-
)))	* 1 m					and 1 t	6020S(180),DOD-CA- 6020S(180),DOD-NA- 6020S(180),DOD-NI- 6020S(180),DOD-PB- 6020S(180),DOD-AL- 6020S(180),DOD-AL- 6020S(180),DOD-K-6020S(180)
L1012444-12X	Amber 250ml unpreserved	D	6	4	Y	Present/Intact	DOC-5310(28)
L1012444-13A	Plastic 500ml unpreserved	C	6	2 1	Υ	Present/Intact	SO4-300(28),CL-300(28),NO3- 300(2)
L1012444-13B	Plastic 250ml unpreserved	D	6	4	Y	Present/Intact	NO2-4500NO2(2)
L1012444-13C	Plastic 250ml unpreserved	С	N/A	2.1	Y	Present/Intact	ALK-T-2320(14)
L1012444-13D	Plastic 500ml H2SO4 preserved	С	<2	2.1	Y	Present/Intact	COD-410(28),NH3-4500(28)
L1012444-13E	Plastic 250ml Zn Acetate/NaOH pr	С	>12	2.1	Y	Present/Intact	SULFIDE-4500(7)

(608 for: Chlordane, Aldrin, Dieldrin, DDD, DDE, DDT, Heptachlor, Heptachlor Epoxide, PCBs-Water), EPA 625 for SVOC Acid Extractables and SVOC Base/Neutral Extractables, 600/4-81-045-PCB-Oil

New Hampshire Department of Environmental Services Certificate/Lab ID: 200307. NELAP Accredited.

Drinking Water (Inorganic Parameters: SM6215B, 9222B, 9223B Colilert, EPA 200.7, 200.8, 245.2, 120.1, 300.0, 314.0, SM4500CN-E, 4500H+B, 4500NO3-F, 2320B, 2510B, 2540C, 4500F-C, 5310C, 2120B, EPA 331.0. Organic

Parameters: 504.1, 524.2, SM6251B.)

Non-Potable Water (Inorganic Parameters: SM9222D, 9221B, 9222B, 9221E-EC, EPA 200.7, 200.8, 245.1, 245.2, SW-846 6010B, 6020, 7196A, 7470A, SM3500-CR-D, EPA 120.1, 300.0, 350.1, 351.1, 353.2, 420.1, 1664A, SW-846 9010, 9030, 9040B, SM426C, SM2310B, 2540B, 2540D, 4500H+B, 4500NH3-H, 4500NH3-E, 4500NO2-B, 4500P-E, 4500-S2-D, 5210B, 2320B, 2540C, 4500F-C, 5310C, 5540C, LACHAT 10-117-07-1-B, LACHAT 10-107-06-1-B, LACHAT 10-107-04-1-J, LACHAT 10-117-07-1-A, SM4500CL-E, LACHAT 10-204-00-1-A, LACHAT 10-107-06-2-D. Organic Parameters: SW-846 3005A, 3015A, 3510C, 5030B, 8021B, 8260B, 8270C, 8330, EPA 624, 625, 608, SW-846 8082, 8081A.)

Solid & Chemical Materials (Inorganic Parameters: SW-846 6010B, 7196A, 7471A, 7.3.3.2, 7.3.4.2, 1010, 1030, 9010, 9012A, 9014, 9030B, 9040, 9045C, 9050C, 1311, 3005A, 3050B, 3051A. Organic Parameters: SW-846 3540C, 3545, 3580A, 5030B, 5035, 8021B, 8260B, 8270C, 8330, 8151A, 8082, 8081A.)

New Jersey Department of Environmental Protection Certificate/Lab ID: MA935. NELAP Accredited.

Drinking Water (Inorganic Parameters: SM9222B, 9221E, 9223B, 9215B, 4500NO3-F, 4500F-C, EPA 300.0, 200.7, 2540C, 2320B, 314.0, SM2120B, 2510B, 5310C, SM4500H-B, EPA 200.8, 245.2. Organic Parameters: 504.1, SM6251B, 524.2.)

Non-Potable Water (Inorganic Parameters: SM5210B, EPA 410.4, SM5220D, 4500Cl-D, EPA 300.0, SM2120B, SM4500F-BC, EPA 200.7, 351.1, LACHAT 10-107-06-2-D, EPA 353.2, SM4500NO3-F, 4500NO2-B, EPA 1664A, SM5310B, C or D, 4500-PE, EPA 420.1, SM4500P-B5+E, 2540B, 2540C, 2540D, EPA 120.1, SM2510B, SM15 426C, SM9221CE, 9222D, 9221B, 9222B, 9215B, 2310B, 2320B, 4500NH3-H, 4500-S D, EPA 350.1, SM5210B, SW-846 3015, 6020, 7470A, 5540C, 4500H-B, EPA 200.8, SM3500Cr-D, EPA 245.1, 245.2, SW-846 9040B, 3005A, EPA 6010B, 7196A, SW-846 9010B, 9030B. Organic Parameters: SW-846 8260B, 8270C, 3510C, EPA 608, 624, 625, SW-846 5030B, 8021B, 8081A, 8082, 8151A, 8330, NJ OQA-QAM-025 Rev.7.)

Solid & Chemical Materials (Inorganic Parameters: SW-846 9040B, 3005A, 6010B, 7196A, 5030B, 9010B, 9030B, 1030, 1311, 3050B, 3051, 7471A, 9014, 9012A, 9045C, 9050A, 9065. Organic Parameters: SW-846 8021B, 8081A, 8082, 8151A, 8330, 8260B, 8270C, 1311, 1312, 3540C, 3545, 3550B, 3580A, 5035L, 5035H, NJ OQA-QAM-025 Rev 7.)

New York Department of Health Certificate/Lab ID: 11148, NELAP Accredited.

Drinking Water (Inorganic Parameters: SM9223B, 9222B, 9215B, EPA 200.8, 200.7, 245.2, SM5310C, EPA 314.0, 332.0, SM2320B, EPA 300.0, SM2120B, 4500CN-E, 4500F-C, 4500H-B, 4500NO3-F, 2540C, EPA 120.1, SM 2510B. Organic Parameters: EPA 524.2, 504.1.)

Non-Potable Water (Inorganic Parameters: SM9221E, 9222D, 9221B, 9222B, 9215B, 5210B, EPA 410.4, SM5220D, 2310B-4a, 2320B, EPA 200.7, 300.0, LACHAT 10-117-07-1A or B, SM4500CI-E, 4500F-C, SM15 426C, EPA 350.1, LACHAT 10-107-06-1-B, SM4500NH3-H, EPA 351.1, LACHAT 10-107-06-2, EPA 353.2, LACHAT 10-107-041-C, SM4500-NO3-F, 4500-NO2-B, 4500P-E, 2540C, 2540B, 2540D, EPA 200.8, EPA 6010B, 6020, EPA 7196A, SM3500Cr-D, EPA 245.1, 245.2, 7470A, SM2120B, SM4500-CN-E LACHAT 10-204-00-1-A, EPA 9040B, SM4500-HB, EPA 1664A, SM5310C, EPA 420.1, SM14 510C, EPA 120.1, SM2510B, SM4500S-D, SM5540C, EPA 3005A, 3015. Organic Parameters: EPA 624, 8260B, 8270C, 625, 608, 8081A, 8151A, 8330, 8082, EPA 3510C, 5030B, 9010B, 9030B.)

Solid & Hazardous Waste (Inorganic Parameters: 1010, 1030, SW-846 Ch 7 Sec 7.3, EPA 6010B, 7196A, 7471A, 9012A, 9014, 9040B, 9045C, 9065, 9050, EPA 1311, 1312, 3005A, 3050B, 9010B, 9030B. Organic Parameters: EPA 8260B, 8270C, 8081A, 8151A, 8330, 8082, 3540C, 3545, 3546, 3580, 5030B, 5035.)

North Carolina Department of the Environment and Natural Resources <u>Certificate/Lab ID</u>: 666. <u>Organic</u> Parameters: MA-EPH, MA-VPH.

Pennsylvania Department of Environmental Protection <u>Certificate/Lab ID</u>: 68-03671. *NELAP Accredited. Non-Potable Water* (<u>Organic Parameters</u>: EPA 3510C, 5030B, 625, 624, 608, 8081A, 8082, 8151A, 8260B, 8270C, 8330)

Solid & Hazardous Waste (Inorganic Parameters: EPA 1010, 1030, 1311, 3050B, 3051, 6010B, EPA 7.3.3.2, EPA 7.3.4.2, 7196A, 7471A, 9010B, 9012A, 9014, 9040B, 9045C, 9050, 9065. Organic Parameters: 3540C, 3545, 3580A, 5035, 8021B, 8081A, 8082, 8151A, 8260B, 8270C, 8330)

Rhode Island Department of Health <u>Certificate/Lab ID</u>: LAO00065. **NELAP Accredited via NY-DOH.**Refer to MA-DEP Certificate for Potable and Non-Potable Water.
Refer to NY-DOH Certificate for Potable and Non-Potable Water.

Texas Commisson on Environmental Quality <u>Certificate/Lab ID</u>: T104704476-09-1. *NELAP Accredited. Non-Potable Water* (<u>Inorganic Parameters</u>: EPA 120.1, 1664, 200.7, 200.8, 245.1, 245.2, 300.0, 350.1, 351.1, 353.2, 376.2, 410.4, 420.1, 6010, 6020, 7196, 7470, 9040, SM 2120B, 2310B, 2320B, 2510B, 2540B, 2540C, 2540D, 426C, 4500CL-E, 4500CN-E, 4500F-C, 4500H+B, 4500NH3-H, 4500NO2B, 4500P-E, 4500 S2¯D, 510C, 5210B, 5220D, 5310C, 5540C. <u>Organic Parameters</u>: EPA 608, 624, 625, 8081, 8082, 8151, 8260, 8270, 8330.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 1311, 1312, 9012, 9014, 9040, 9045, 9050, 9065.)

Department of Defense Certificate/Lab ID: L2217.

Drinking Water (Inorganic Parameters: SM 4500H-B. Organic Parameters: EPA 524.2, 504.1.)

Non-Potable Water (Inorganic Parameters: EPA 200.7, 200.8, 6010B, 6020, 245.1, 245.2, 7470A, 9040B, 300.0, 9251, 9038, 350.1, 353.2, 351.1, 120.1, 9050A, 410.4, 9060, 1664, 420.1, LACHAT 10-107-06-1-B, SM 4500CN-E, 4500H-B, 4500CL-E, 4500F-BC, 4500SO4-E, 426C, 4500NH3-B, 4500NH3-H, 4500NO3-F, 4500NO2-B, 4500Norg-C, 4500PE, 2510B, 5540C, 5220D, 5310C, 2540B, 2540C, 2540D, 510C, 4500S2-AD, 3005A, 3015, 9010B, 9030B. Organic Parameters: EPA 8260B, 8270C, 8330, 625, 8082, 8151A, 8081A, 3510C, 5030B, MassDEP EPH, MassDEP VPH.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 200.7, 6010B, 7471A, 9040B, 9045C, 9065, 420.1, 9012A, 6860, 1311, 1312, 3050B, 9030B, 3051, 9010B, 3540C, SM 510ABC, 4500CN-CE, 2540G, SW-846 7.3, Organic Parameters: EPA 8260B, 8270C, 8330, 8082, 8081A, 8151A, 3545, 3546, 3580, 5035, MassDEP EPH, MassDEP VPH.)

Analytes Not Accredited by NELAP

Certification is not available by NELAP for the following analytes: **EPA 8260B:** Freon-113, 1,2,4,5-Tetramethylbenzene, 4-Ethyltoluene. **EPA 8330A:** PETN, Picric Acid, Nitroglycerine, 2,6-DANT, 2,4-DANT. **EPA 8270C:** Methyl naphthalene, Dimethyl naphthalene, Total Methylnaphthalenes, Total Dimethylnaphthalenes, 1,4-Diphenylhydrazine (Azobenzene). **EPA 625:** 4-Chloroaniline. **EPA 350.1** for Ammonia in a Soil matrix.

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(Lab Use Only)		Pale 8/12/10	//38	Gu	Initials	VIV	V	W		10	1.7	1	1	/ 38	mple Spec	ific Comment	9
9718d:>(1	SHM-10-10-F	18/12/16	1220	GW	22C	VV	170	11.				+	V	-		_	9
	SHM-07-03-F			-		1 6	2	0	-	1		+	V	-	_		
	SHM-10-01-F	8/12/10	1240	GW	JAR	Viv		ا حرا	-	V	+	1		-			9
TU	SHM-05-42A-F	8/12/10	1335	GW	JAR	WV	V	1	4	~	٤.	4					9
16	RB -081210-U	8/14/10	1420	64	DIC	1					1	V					1.
-16 DUP-081210-F		8/12/10	1000	Gw	JAR	a.					Ç.		V				1
- [7]	DR2-081210-F	8/12/10	1220	68	72C								V				1
<u> </u>	GP-10-27-065 U	19/11/1	1600	600	JAR				V	V	Va	W D					
	GP-10-27-065 F	8/11/18	1600	GW	JAZ						1	P	150				
		71															
PLEASE ANSWER QUESTIONS ABOVE!					einer Type reservative	PP	-	P 1			7	-	P	Piea iplete	e printigle.	invelegibly ar cannot be	dicom:
IS YOUR PROJECT Reinguished By:				Dat	A A D HE MA A B C C C Received By: / Date/Time						on an	nuosemut t	diffine clock	MI COLO			
MAMCP or CTRCP? Mytholin					8/2/10/1600 La For 8/12/10 16							US	noles subj	nitted are su	jeenio.		
ORM NO: 01-01 (rev. 18-	Jan-2010)	four		21/2	1/0 1	ik 1	200	uJ.	4	-		12 10		(Special	everse aide	OCCUMUNICATION	
				IV.	<i>(</i>	1		-)			_	6888	28/00/3	2000	1000



ANALYTICAL REPORT

Lab Number:

L1012464

Client:

Sovereign Consulting

905B South Main Street

Mansfield, MA 02048

ATTN:

Phil McBain

Phone:

(508) 339-3200

Project Name:

SHL TASK 002

Project Number:

AC001

Report Date:

08/20/10

Certifications & Approvals: MA (M-MA086), NY NELAC (11148), CT (PH-0574), NH (2003), NJ (MA935), RI (LAO00065), ME (MA0086), PA (Registration #68-03671), USDA (Permit #S-72578), US Army Corps of Engineers, Naval FESC.

Eight Walkup Drive, Westborough, MA 01581-1019 508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com



Project Name:

SHL TASK 002

Project Number:

AC001

Lab Number:

L1012464

Report Date:

08/20/10

Client ID	Sample Location	Collection Date/Time
GP-10-27-035-U	DEVENS, MA	08/11/10 16:22
GP-10-27-045-U	DEVENS, MA	08/11/10 16:52
GP-10-27-055-U	DEVENS, MA	08/11/10 17:30
SHL-23-F	DEVENS, MA	08/12/10 09:15
SHM-05-39A-F	DEVENS, MA	08/12/10 09:20
SHM-07-05-F	DEVENS, MA	08/12/10 10:00
SHM-99-31B-F	DEVENS, MA	08/12/10 11:10
SHM-10-10-F	DEVENS, MA	08/12/10 11:38
SHM-07-03-F	DEVENS, MA	08/12/10 12:20
SHM-10-01-F	DEVENS, MA	08/12/10 12:40
SHM-05-42A-F	DEVENS, MA	08/12/10 13:35
GP-10-27-065-U	DEVENS, MA	08/11/10 16:00
	GP-10-27-035-U GP-10-27-045-U GP-10-27-055-U SHL-23-F SHM-05-39A-F SHM-07-05-F SHM-99-31B-F SHM-10-10-F SHM-07-03-F SHM-10-01-F SHM-05-42A-F	Client ID Location GP-10-27-035-U DEVENS, MA GP-10-27-045-U DEVENS, MA GP-10-27-055-U DEVENS, MA SHL-23-F DEVENS, MA SHM-05-39A-F DEVENS, MA SHM-07-05-F DEVENS, MA SHM-99-31B-F DEVENS, MA SHM-10-10-F DEVENS, MA SHM-07-03-F DEVENS, MA SHM-10-01-F DEVENS, MA SHM-05-42A-F DEVENS, MA

Project Name: Project Number: SHL TASK 002

AC001

Lab Number:

L1012464

Report Date:

08/20/10

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet all of the requirements of NELAC, for all NELAC accredited parameters. The data presented in this report is organized by parameter (i.e., VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

For additional information, please contact Client Services at 800-624-9220.

Report Submission

This report contains the results for the Dissolved Inorganic Carbon analysis. The results for all other analyses will be issued under separate cover.

Sample Receipt

L1012464-01 through -03 and -12. The samples were received at the laboratory requiring filtration for Dissolved Inorganic Carbon; however, the samples were received beyond the recommended 24 hour holding time required for filtration. The samples were filtered and preserved appropriately.

Dissolved Inorganic Carbon

L1012464-01 through -03, -05 through -10 and -12 have elevated detection limits due to the dilutions required by the elevated concentrations present in the samples.

Project Name:

SHL TASK 002

Lab Number:

L1012464

Project Number:

AC001

Report Date:

08/20/10

Case Narrative (continued)

L1012464-04 and -11 have elevated detection limits due to the dilutions required by the sample matrix.

WG428636: A matrix spike could not be performed due to insufficient sample volume available for analysis.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:

Michelle M. Morris

Title: Technical Director/Representative

Date: 08/20/10

INORGANICS & MISCELLANEOUS

Serial_No:08201015:02

Project Name:

SHL TASK 002

Lab Number:

L1012464

Project Number: AC001

Report Date:

08/20/10

SAMPLE RESULTS

Lab ID:

L1012464-01

Client ID:

GP-10-27-035-U DEVENS, MA

Sample Location: Matrix:

Water

Date Collected:

08/11/10 16:22

Date Received:

08/12/10

Field Prep:

Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry										
Dissolved Inorganic Carbon	25		mg/l	8.0	1441	8	08/12/10 23:00	08/19/10 14:31	30,5310C(M)	DW

Project Name:

SHL TASK 002

Lab Number:

L1012464

Project Number:

Sample Location:

AC001

Report Date:

08/20/10

SAMPLE RESULTS

Lab ID:

L1012464-02

Client ID:

GP-10-27-045-U DEVENS, MA

Matrix:

Water

Date Collected:

08/11/10 16:52

Date Received:

08/12/10

Field Prep:

Not Specified

Dilution Date Analytical Date Qualifier Units RL MDL Factor Prepared Analyzed Method **Parameter** Result **Analyst General Chemistry** Dissolved Inorganic Carbon 08/12/10 23:00 08/19/10 14:31 30,5310C(M) DW 64 8.0 8 mg/l

Project Name: SHL TASK 002

Project Number: AC001

Lab Number:

Report Date:

L1012464 08/20/10

SAMPLE RESULTS

Lab ID:

L1012464-03

Client ID:

Sample Location:

GP-10-27-055-U DEVENS, MA

Matrix:

Water

Date Collected:

08/11/10 17:30

Date Received:

08/12/10

Field Prep:

Not Specified

Dilution Date Date **Analytical Factor Parameter** Result Qualifier Units RL MDL Prepared Analyzed Method Analyst **General Chemistry** Dissolved Inorganic Carbon 60 8.0 8 08/12/10 23:00 08/19/10 14:31 30,5310C(M) DW mg/l

Project Name: SHL TASK 002

Lab Number:

L1012464

Project Number: AC001

Report Date:

08/20/10

SAMPLE RESULTS

Lab ID:

L1012464-04

Client ID:

SHL-23-F DEVENS, MA

Sample Location: Matrix:

Water

Date Collected:

08/12/10 09:15

Date Received:

08/12/10

Field Prep:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry										
Dissolved Inorganic Carbon	ND		mg/l	8.0		8	08/12/10 23:00	08/19/10 14:31	30,5310C(M)	DW

Project Name:

SHL TASK 002

Lab Number:

L1012464

Project Number: AC001

Report Date:

08/20/10

SAMPLE RESULTS

Lab ID:

L1012464-05

Client ID: Sample Location:

SHM-05-39A-F DEVENS, MA

Matrix:

Water

Date Collected:

08/12/10 09:20

Date Received:

08/12/10

Field Prep:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry Dissolved Inorganic Carbon	27		mg/l	8.0		8	08/12/10 23:00	08/19/10 14:31	30,5310C(M)	DW

Project Name:

SHL TASK 002

Lab Number:

L1012464

Project Number: AC001

Report Date:

08/20/10

SAMPLE RESULTS

Lab ID:

L1012464-06

Client ID:

SHM-07-05-F

Sample Location:

DEVENS, MA

Matrix:

Water

Date Collected:

08/12/10 10:00

Date Received:

08/12/10

Field Prep:

Not Specified

Dilution Date Date Analytical Factor Prepared Analyzed Method Qualifier Units MDL **Parameter** Result RL **Analyst General Chemistry** Dissolved Inorganic Carbon 08/12/10 23:00 08/19/10 14:31 30,5310C(M) DW 24 mg/l 8.0

Project Name: SHL TASK 002

Project Number: AC001

Lab Number:

L1012464

Report Date:

08/20/10

SAMPLE RESULTS

Lab ID: Client ID: L1012464-07 SHM-99-31B-F

Sample Location:

DEVENS, MA

Matrix:

Water

Date Collected:

08/12/10 11:10

Date Received:

08/12/10

Field Prep:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry										
Dissolved Inorganic Carbon	28		mg/l	8.0	44	8	08/12/10 23:00	08/19/10 14:31	30,5310C(M)	DW

Project Name: SHL TASK 002

Project Number: AC001

Lab Number:

L1012464

Report Date:

08/20/10

SAMPLE RESULTS

Lab ID:

L1012464-08

Client ID:

SHM-10-10-F

Date Collected: Date Received: Field Prep:

08/12/10 11:38

Sample Location:

DEVENS, MA

08/12/10 Not Specified

Matrix:

Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry										
Dissolved Inorganic Carbon	70		mg/l	8.0		В	08/12/10 23:00	08/19/10 14:31	30,5310C(M)	DW

Project Name:

SHL TASK 002

Project Number:

AC001

Lab Number:

L1012464

Report Date:

08/20/10

SAMPLE RESULTS

Lab ID:

L1012464-09

Client ID:

SHM-07-03-F

Sample Location:

DEVENS, MA

Matrix:

Water

Date Collected:

08/12/10 12:20

Date Received:

08/12/10

Field Prep:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry										
Dissolved Inorganic Carbon	12		mg/l	8.0		8	08/12/10 23:00	08/19/10 14:31	30,5310C(M)	DW

Project Name:

SHL TASK 002

Lab Number:

L1012464

Project Number: AC001

Report Date:

08/20/10

SAMPLE RESULTS

Lab ID:

L1012464-10

Client ID:

SHM-10-01-F

Sample Location:

DEVENS, MA

Matrix:

Water

Date Collected:

08/12/10 12:40

Date Received:

08/12/10

Field Prep:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry										
Dissolved Inorganic Carbon	31		mg/l	8.0		8	08/12/10 23:00	08/19/10 14:31	30,5310C(M)	DW

Project Name:

SHL TASK 002

Lab Number:

L1012464

08/20/10

Project Number: AC001

Sample Location:

Report Date:

SAMPLE RESULTS

Lab ID:

L1012464-11

Client ID:

SHM-05-42A-F DEVENS, MA

Matrix:

Water

Date Collected:

08/12/10 13:35

Date Received:

08/12/10

Field Prep:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry										
Dissolved Inorganic Carbon	9.4		mg/f	8.0	**	8	08/12/10 23:00	08/19/10 14:31	30,5310C(M)	DW

Project Name: SHL TASK 002

Project Number: AC001

Lab Number:

L1012464

Report Date:

08/20/10

SAMPLE RESULTS

Lab ID:

L1012464-12

Client ID: Sample Location: GP-10-27-065-U DEVENS, MA

Matrix:

Water

Date Collected:

08/11/10 16:00

Date Received:

08/12/10

Field Prep:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry										
Dissolved Inorganic Carbon	71		mg/l	20	**	20	08/12/10 23:00	08/19/10 14:31	30,5310C(M)	DW

Project Name:

SHL TASK 002

Lab Number:

L1012464

Project Number: AC001

Report Date:

08/20/10

Method Blank Analysis Batch Quality Control

Parameter General Chemistry for sa	Result Qualifier	Units	RL 8636-1	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Dissolved Inorganic Carbon	ND	mg/l	1.0	-	1	08/12/10 23:00	08/19/10 14:31	30,5310C(M)	DW

Lab Control Sample Analysis Batch Quality Control

Lab Number:

L1012464

Report Date:

08/20/10

Project Name: SHL TASK 002

Project Number: AC001

LCS LCSD %Recovery Limits Parameter %Recovery %Recovery RPD **RPD Limits** Qual Qual Qual

Associated sample(s): 01-12 Batch: WG428636-2

Dissolved Inorganic Carbon

Lab Duplicate Analysis
Batch Quality Control

Lab Number:

L1012464

Report Date:

08/20/10

Parameter	Nat	ive Sample	Duplicat	te Sampl	e Units	RPD	Qual	RPD Limits
Associated sample(s): 01-12	QC Batch ID: WG428636-3	QC Sample: L1	012464-01 C	Client ID:	GP-10-27-035-U			
Dissolved Inorganic Carbon	- x	25		26	ma/l	4		

Project Name:

Project Number: AC001

SHL TASK 002

Project Name: SHL TASK 002

Lab Number: L1012464 Project Number: AC001 Report Date: 08/20/10

Sample Receipt and Container Information

Were project specific reporting limits specified?

YES

Reagent H2O Preserved Vials Frozen on: NA

Cooler Information Custody Seal

Cooler

В Present/Intact C Present/Intact A Present/Intact D Present/Intact

Container Info	ormation			Temp				
Container ID	Container Type	Cooler	рН	deg C	Pres	Seal	Analysis(*)	
L1012464-01A	Vial H2SO4 preserved split	Α	N/A	3.1	Y	Present/Intact	SPECWC()	
L1012464-01B	Vial H2SO4 preserved split	A	N/A	3,1	Y	Present/Intact	SPECWC()	
L1012464-01X	Amber 250ml unpreserved	Α	6	3.1	Y	Present/Intact	SPECWC()	
L1012464-02A	Vial H2SO4 preserved split	Α	N/A	3.1	NA	Present/Intact	SPECWC()	
L1012464-02B	Vial H2SO4 preserved split	A	N/A	3.1	NA	Present/Intact	SPECWC()	
L1012464-02X	Amber 250ml unpreserved	Α	6	3.1	NA	Present/Intact	SPECWC()	
L1012464-03A	Vial H2SO4 preserved split	Α	N/A	3.1	NA	Present/Intact	SPECWC()	
L1012464-03B	Vial H2SO4 preserved split	A	N/A	3.1	NA	Present/Intact	SPECWC()	
L1012464-03X	Amber 250ml unpreserved	Α	6	3.1	NA	Present/Intact	SPECWC()	
L1012464-04A	Vial H2SO4 preserved split	Α	N/A	3.1	NA	Present/Intact	SPECWC()	
L1012464-04B	Vial H2SO4 preserved split	Α	N/A	3.1	NA	Present/Intact	SPECWC()	
L1012464-04X	Amber 250ml unpreserved	A	6	3.1	NA	Present/Intact	SPECWC()	
L1012464-05A	Vial H2SO4 preserved split	A	N/A	3.1	NA	Present/Intact	SPECWC()	
L1012464-05B	Vial H2SO4 preserved split	- A -	N/A	3.1	NA	Present/Intact	SPECWC()	
L1012464-05X	Amber 250ml unpreserved	Α -	6	3.1	NA.	Present/Intact	SPECWC()	
L1012464-06A	Vial H2SO4 preserved split	C	N/A	2.1	NA	Present/Intact	SPECWC()	ï
L1012464-06B	Vial H2SO4 preserved split	C	N/A	21	NA	Present/Intact	SPECWC()	
L1012464-06X	Amber 250ml unpreserved	С	6	2.1	NA	Present/Intact	SPECWC()	
L1012464-07A	Vial H2SO4 preserved split	C	N/A	21	NA	Present/Intact	SPECWC()	
L1012464-07B	Vial H2SO4 preserved split	C	N/A	2.1	NA	Present/Intact	SPECWC()	
L1012464-07X	Amber 250ml unpreserved	C	6	2.1	NA	Present/Intact	SPECWC()	
L1012464-08A	Vial H2SO4 preserved split	В	N/A	2.0	NA	Present/Intact	SPECWC()	
L1012464-08B	Vial H2SO4 preserved split	В	N/A	2.0	NA	Present/Intact	SPECWC()	

Project Name: SHL TASK 002

Project Number: AC001

Lab Number: L1012464 Report Date: 08/20/10

Container Info	ormation			Temp			
Container ID	Container Type	Cooler	рН	deg C	Pres	Seal	Analysis(*)
L1012464-08X	Amber 250ml unpreserved	В	6	2.0	NA	PresenVintact	SPECWC()
L1012464-09A	Vial H2SO4 preserved split	D	N/A	4	NA	Present/Intact	SPECWC()
L1012464-09B	Vial H2SO4 preserved split	D	N/A	4	NA	Present/Intact	SPECWC()
L1012464-09X	Amber 250ml unpreserved	D	6	4	NA	Present/Intact	SPECWC()
L1012464-10A	Vial H2SO4 preserved split	C	N/A	2.1	NA	Present/Intact	SPECWC()
L1012464-10B	Vial H2SO4 preserved split	C	N/A	2.1	NA	Present/Intact	SPECWC()
L1012464-10X	Amber 250ml unpreserved	C	6	2.1	NA	Present/Intact	SPECWC()
L1012464-11A	Vial H2SO4 preserved split	С	N/A	2.1	NA	Present/Intact	SPECWC()
L1012464-11B	Vial H2SO4 preserved split	С	N/A	2.1	NA	Present/Intact	SPECWC()
L1012464-11X	Amber 250ml unpreserved	С	6	2.1	NA	Present/Intact	SPECWC()
L1012464-12A	Vial H2SO4 preserved split	Α	N/A	3.1	NA	Present/Intact	SPECWC()
L1012464-12B	Vial H2SO4 preserved split	Α	N/A	3.1	NA	Present/Intact	SPECWC()
L1012464-12X	Amber 250ml unpreserved	Α	6	3.1	NA	Present/Intact	SPECWC()

Container Comments

L1012464-01A

L1012464-01B

L1012464-02A

L1012464-02B

L1012464-03A

L1012464-03B

L1012464-04A

L1012464-04B

L1012464-05A

L1012464-05B .

L1012464-06B

L1012464-07A

L1012464-07B

L1012464-08A

L1012464-08B

L1012464-09A

Project Name: SHL TASK 002

Project Number: AC001

Lab Number: L1012464

Report Date: 08/20/10

Container Information

Container ID Container Type

Temp

Cooler pH deg C Pres Seal

Analysis(*)

Container Comments

L1012464-09B

L1012464-10A

L1012464-10B

L1012464-11A

L1012464-11B

L1012464-12A

L1012464-12B

	CHAIN O	F CU	STO	DY P	AGE	of <u>2</u>		Rec		Lab							A E		S(elb)				
AHERLA	MANSFIELD, MA	Project	Informat	ion			Re	port	Infor			Data	_		bles	_			Inform				
WESTBORO, MA TEL: 508-090-9220	TEL: S08-822-9300 FAX: 508-822-3288	Project N	ame: SHL	Task	0002		100	FΛX		1-11	44.0	AAIL A					a s	ame	as Client	info	PO#		-
FAX: 508-898-9193 Client Informati	-	Project L	ocation: T)evens	,mA	+1	1	ADE)			- 3.0-2	ents/F		917.0	mife		77	1					
Client: Same	in Consulting Inc	Project #	ACOO	t	on an and	1 24.5 5 433			Prog					U.W.		-	2 7	12	QAT	CC	-		
Address: GACR	5. Main 53	Project M	lanager: 7	hil n	ncBair	1		A WILL			-			See 540	4.4.	_	-				FIDE	NCE PRO	то
Mans	Streld, mA 02:048	ALPHA C	Quote #:	成分起版	AFT	10:WL						ICP A	_				-						
	339. 3200	Turn-A	round Ti	me			Ø	Yes	O No		is Ma	trix Sp	ike ((MS)	Requ	ired	on t	his S	DG? (If)			la Commer	nts)
Fax: 50%	-339-3244	2 Standa	ard E	RUSH	confirmed if one-e	oprovedří	0	Yes	NO	- 1	Are C	TROP	(Re	ason	able	Conf	ider	ce P	rotocols)	Requir	ed?		-
Email: pmcb	ein Osovcon.com	Date Du	-	1100.114.0	Time:		i e	S	1	-1	1	/	1	/	-1	~7	1	0	1	SAM	PIFE	ANDLING	-
2 These samples t	nave been previously analyzed by Alph	a			,	11100-1		27	1	1	1	1	1	1	1	#/	1/	12/	1	Filtra		ANDLING	
If MS is required. (Note: All CAM m 5007# = 2		s which sample	es and what oil samples)	lests MS to b Field Fi	Hered		AW	1 3 mg	00/A	1	S. 1600	Tiss		2000	" metals	2 mek				D La	one # ot nee ab to d ervation ab to d	o on	· ·
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The second secon	SHM-99-31B-F		8/12/10	1110	Gw	35C	V	V	v	-	V		V				V						1
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EL 508-898-9220 AX: 508-896-9193	TEL: 506-822-9300 FAX: 508-822-3288	Project Name	SHL -	Tasis	0002	75	240	FAX					ET				Sam	e as Client info PO#:		_
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METELS 71 PHALab ID. ab Use Only)	Sample ID	#2-145,Fe.	Collection		Sample Metrix	Sampler Initials	/ =	5/2	0/4	=/=	SA SA	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	2/0	197	100	lote!	200	D. Lab to do (Please exposity below) Sample Specific Comm	nents:	6 mr
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the first of	GR-10-27-055-U	7/11	10 1	730	Gw.	JAR		50				-1/	1	V				15-		3
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	r CT RCP?	Relinguished	Ву:	_	-	e/Time	-	0	Re	eive	d By:				Dal	e/Time	9	start until any ambiguities All samples submitted an	are reso	olved
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TEL: 508-898-9220 FAX: 508-898-9193	TEL: 508-822-9300 FAX: 508-822-3268	Project Name: 5H	LTOSY	0002	100		FAX			ŅΕ	MAIL	ED	18		u	Sam	e as Cl	lient l	nfo F	PO#:		
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-17	SHM-07-03-F	8/12/16	120	Gh	220	V	V	V	V	1		1			V	^						9
-73	SHM-10-01-F	Stolio	1240	GW	JAR	V	1	0	V	V		V	9		L	1						9
	SHM-08-42A-F	8/12/10	1335	Gw	JAR	W	V	V	V	v		1			D	1						9
	RB -081210-U	8/12/10	1420	GW	DIC	1						-		1/	1							1
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ANALYTICAL REPORT

Lab Number:

L1013407

Client:

Sovereign Consulting

905B South Main Street

Mansfield, MA 02048

ATTN:

Phil McBain

Phone:

(508) 339-3200

Project Name:

SHL TASK 0002

Project Number:

AC001

Report Date:

09/09/10

Certifications & Approvals: MA (M-MA086), NY NELAC (11148), CT (PH-0574), NH (2003), NJ (MA935), RI (LAO00065), ME (MA0086), PA (Registration #68-03671), USDA (Permit #S-72578), US Army Corps of Engineers, Naval FESC.

Eight Walkup Drive, Westborough, MA 01581-1019 508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com

Serial_No:09091015:28

Project Name:

SHL TASK 0002

Project Number:

AC001

Lab Number:

L1013407

Report Date:

09/09/10

Alpha Sample ID	Client ID	Sample Location	Collection Date/Time
L1013407-01	SHM-10-11-F	DEVENS, MA	08/30/10 11:20
L1013407-02	SHM-10-11-U	DEVENS, MA	08/30/10 11:20
L1013407-03	SHM-10-12-F	DEVENS, MA	08/30/10 15:00
L1013407-04	SHM-10-12-U	DEVENS, MA	08/30/10 15:00
L1013407-05	DUP-083010-F	DEVENS, MA	08/30/10 15:00
L1013407-06	DUP-083010-U	DEVENS, MA	08/30/10 15:00
L1013407-07	RB-083010-U	DEVENS, MA	08/30/10 14:30

SHL TASK 0002

OFFE TAOR

Lab Number:

L1013407 09/09/10

Project Number:

AC001

Report Date:

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet all of the requirements of NELAC, for all NELAC accredited parameters. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

For additional information, please contact Client Services at 800-624-9220

Report Submission

Testing performed for the reported analyses followed the guidelines established under the DoD QSM 4.1, where applicable.

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

The Dissolved Inorganic Carbon results will be issued under separate cover.

Sample Receipt

The samples were Field Filtered for Dissolved Metals only.

Dissolved Metals

L1013407-01, -03 and -05 have elevated detection limits for all analytes, except Mercury, due to the dilutions

Project Name: Project Number: SHL TASK 0002

AC001

Lab Number:

L1013407

Report Date:

09/09/10

Case Narrative (continued)

required by the high concentrations of target analytes. The requested reporting limits were not achieved. The WG430413-3/-4 MS/MSD recoveries for Iron (670%/330%) and Manganese (MS at 140%), performed on L1013407-01, are invalid because the sample concentrations are greater than four times the spike amount added.

The WG430413-3 MS recoveries, performed on L1013407-01, are above the acceptance criteria for Arsenic (122%) and Calcium (125%). A post digestion spike was performed with unacceptable recoveries of Arsenic (128%) and Calcium (127%). This has been attributed to sample matrix. The parent sample (L1013407-01) is qualified as "J" for Arsenic and Calcium.

Total Metals

L1013407-02, -04 and -06 have elevated detection limits for all analytes, except Mercury, due to the dilutions required by the high concentrations of target analytes. The requested reporting limits were not achieved. The WG430412-4 MSD recoveries for Iron (0%) and Manganese (74%), performed on L1013407-02, are invalid because the sample concentrations are greater than four times the spike amount added.

Alkalinity

The WG430540-3 MS recovery, performed on L1013407-04, is below the acceptance criteria for Alkalinity (57%). This has been attributed to matrix interference.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Wholly UK. Uning Michelle M. Morris

Authorized Signature:

Title: Technical Director/Representative

Date: 09/09/10

METALS

SHL TASK 0002

Lab Number:

L1013407

Project Number:

Sample Location:

AC001

Report Date:

09/09/10

SAMPLE RESULTS

Lab ID:

L1013407-01

Client ID:

SHM-10-11-F DEVENS, MA

Matrix:

Water

Date Collected:

08/30/10 11:20

Date Received:

08/30/10

Field Prep:

See Narrative

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Dissolved Metals - \	Vestboro	ugh Lab									
Aluminum, Dissolved	10.2	J	ug/l	20.0	3.82	2	08/31/10 19:20	0 09/01/10 19:14	EPA 3005A	1,6020A	ВМ
Antimony, Dissolved	0.53	J	ug/I	1.00	0.240	2	08/31/10 19:20	0 09/01/10 19:14	EPA 3005A	1,6020A	ВМ
Arsenic, Dissolved	342	J	ug/l	1.00	0.226	2	08/31/10 19:20	0 09/01/10 19:14	EPA 3005A	1,6020A	ВМ
Barium, Dissolved	36.5		ug/I	1.00	0.190	2	08/31/10 19:20	09/01/10 19:14	EPA 3005A	1,6020A	ВМ
Beryllium, Dissolved	ND		ug/l	1.00	0.118	2	08/31/10 19:20	0 09/01/10 19:14	EPA 3005A	1,6020A	ВМ
Cadmium, Dissolved	ND		ug/l	1.00	0.118	2	08/31/10 19:20	09/01/10 19:14	EPA 3005A	1,6020A	ВМ
Calcium, Dissolved	21200	J	ug/l	200	25.3	2	08/31/10 19:20	0 09/01/10 19:14	EPA 3005A	1,6020A	ВМ
Chromium, Dissolved	0.52	J	ug/l	1.00	0.372	2	08/31/10 19:20	0 09/01/10 19:14	EPA 3005A	1,6020A	ВМ
Cobalt, Dissolved	5.94		ug/l	1.00	0.106	2	08/31/10 19:20	0 09/01/10 19:14	EPA 3005A	1,6020A	ВМ
Copper, Dissolved	0.45	J	ug/I	1.00	0.236	2	08/31/10 19:20	0 09/01/10 19:14	EPA 3005A	1,6020A	ВМ
Iron, Dissolved	55700		ug/l	100	16.8	2	08/31/10 19:20	0 09/01/10 19:14	EPA 3005A	1,6020A	ВМ
Lead, Dissolved	0.15	J	ug/l	1.00	0.100	2	08/31/10 19:20	09/01/10 19:14	EPA 3005A	1,6020A	ВМ
Magnesium, Dissolved	2530		ug/l	200	8,20	2	08/31/10 19:20	09/01/10 19:14	EPA 3005A	1,6020A	ВМ
Manganese, Dissolved	2320		ug/l	2.00	0.272	2	08/31/10 19:20	09/01/10 19:14	EPA 3005A	1,6020A	ВМ
Mercury, Dissolved	0.01443	J	ug/I	0 2000	0.0120	1	09/01/10 18:16	6 09/02/10 12:09	EPA 7470A	1,7470A	EZ
Nickel, Dissolved	5.43		ug/l	1.00	0.360	2	08/31/10 19:20	0 09/01/10 19:14	EPA 3005A	1,6020A	ВМ
Potassium, Dissolved	5150		ug/l	200	36.3	2	08/31/10 19:20	0 09/01/10 19:14	EPA 3005A	1,6020A	ВМ
Selenium, Dissolved	ND		ug/l	2.00	0.812	2	08/31/10 19:20	0 09/01/10 19:14	EPA 3005A	1,6020A	ВМ
Silver, Dissolved	ND		ug/l	1.00	0.170	2	08/31/10 19:20	09/01/10 19:14	EPA 3005A	1,6020A	ВМ
Sodium, Dissolved	11800		ug/l	200	36.4	2	08/31/10 19:20	09/01/10 19:14	EPA 3005A	1,6020A	ВМ
Thallium, Dissolved	ND .		ug/l	1.00	0.062	2	08/31/10 19:20	09/01/10 19:14	EPA 3005A	1,6020A	ВМ
Vanadium, Dissolved	ND	8 - 6	ug/l	1.00	0.154	ż	08/31/10 19:20	09/01/10 19:14	EPA 3005A	1,6020A	ВМ
Zinc, Dissolved	13.8		ug/l	10.0	3.25	2	08/31/10 19:20	09/01/10 19:14	EPA 3005A	1,6020A	ВМ

SHL TASK 0002

Project Number:

AC001

Lab Number:

L1013407

Report Date:

09/09/10

SAMPLE RESULTS

Lab ID:

L1013407-02

Client ID: Sample Location: SHM-10-11-U DEVENS, MA

Matrix:

Water

Date Collected:

08/30/10 11:20

Date Received:

08/30/10

Field Prep:

Not Specified

Dilution Date Date Prep Analytical Factor Prepared Parameter Result Qualifier Units RL Analyzed Method Method MDL Analyst Total Metals - Westborough Lab Aluminum, Total 113 ug/l 20.0 3.82 2 08/31/10 19:20 09/01/10 19:56 EPA 3005A 1,6020A ВМ Antimony, Total 0.26 J 2 ug/l 1.00 0.240 08/31/10 19:20 09/01/10 19:56 EPA 3005A 1,6020A BM Arsenic, Total 356 0.226 2 ug/I 1.00 08/31/10 19:20 09/01/10 19:56 EPA 3005A 1,6020A BM Barium, Total 40.3 0.190 2 ug/I 1.00 08/31/10 19:20 09/01/10 19:56 EPA 3005A 1,6020A BM Beryllium, Total ND 1.00 0.118 2 ug/l 08/31/10 19:20 09/01/10 19:56 EPA 3005A 1,6020A BM Cadmium, Total ND ug/l 1.00 0.118 2 08/31/10 19:20 09/01/10 19:56 EPA 3005A 1,6020A BM Calcium, Total 23900 200 25.3 2 ug/I 08/31/10 19:20 09/01/10 19:56 EPA 3005A 1,6020A ВМ Chromium, Total 1.44 1.00 2 ug/I 0.372 08/31/10 19:20 09/01/10 19:56 EPA 3005A 1,6020A ВМ Cobalt, Total 6.28 1.00 0.106 2 ug/l 08/31/10 19:20 09/01/10 19:56 EPA 3005A 1,6020A BM Copper, Total 0.75 J 2 ug/l 1.00 0.236 08/31/10 19:20 09/01/10 19:56 EPA 3005A 1,6020A ВМ Iron, Total 60600 100 16.8 2 ug/l 08/31/10 19:20 09/01/10 19:56 EPA 3005A 1,6020A BM Lead, Total 0.34 2 ug/I 1.00 0.100 08/31/10 19:20 09/01/10 19:56 EPA 3005A 1,6020A BM Magnesium, Total 2770 200 2 ug/l 8.20 08/31/10 19:20 09/01/10 19:56 EPA 3005A 1,6020A BN Manganese, Total 2490 ug/l 2.00 0.272 2 08/31/10 19:20 09/01/10 19:56 EPA 3005A 1,6020A BM Mercury, Total ND ug/I 0.2000 0.0120 1 09/01/10 18:16 09/02/10 12:25 EPA 7470A 1,7470A EZ Nickel, Total 5.92 1.00 0.360 2 ug/l 08/31/10 19:20 09/01/10 19:56 EPA 3005A 1,6020A BM Potassium, Total 5410 200 2 36.3 ug/l 08/31/10 19:20 09/01/10 19:56 EPA 3005A 1,6020A BM Selenium, Total ND ug/l 2.00 0.812 2 08/31/10 19:20 09/01/10 19:56 EPA 3005A 1,6020A BM Silver, Total ND 2 1.00 0.170 ug/l 08/31/10 19:20 09/01/10 19:56 EPA 3005A 1,6020A ВМ Sodium, Total 12400 200 36.4 2 ug/I 08/31/10 19:20 09/01/10 19:56 EPA 3005A 1,6020A ВМ Thallium, Total ND ug/l 1.00 0.062 2 08/31/10 19:20 09/01/10 19:56 EPA 3005A 1,6020A ВМ Vanadium, Total 0.31 ug/l 1.00 0.154 2 08/31/10 19:20 09/01/10 19:56 EPA 3005A 1,6020A BM

10.0

3.25

2

08/31/10 19:20 09/01/10 19:56 EPA 3005A

ug/l

1,6020A

BM

Zinc, Total

10.9

SHL TASK 0002

Lab Number:

L1013407

Project Number:

AC001

Report Date:

09/09/10

SAMPLE RESULTS

Lab ID: Client ID: L1013407-03

SHM-10-12-F

Sample Location:

DEVENS, MA

Matrix:

Water

Date Collected:

08/30/10 15:00

Date Received:

08/30/10

Field Prep:

See Narrative

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Dissolved Metals -	Westboro	ugh Lab									
Aluminum, Dissolved	27.6	J	ug/l	100	19.1	10	08/31/10 19:20	0 09/01/10 19:38	EPA 3005A	1,6020A	ВМ
Antimony, Dissolved	2,99	J	ug/I	5.00	1.20	10	08/31/10 19:20	0 09/01/10 19:38	EPA 3005A	1,6020A	ВМ
Arsenic, Dissolved	3560		ug/l	5.00	1.13	10	08/31/10 19:20	0 09/01/10 19:38	EPA 3005A	1,6020A	ВМ
Barium, Dissolved	55.7		ug/l	5 00	0.950	10	08/31/10 19:20	0 09/01/10 19:38	EPA 3005A	1,6020A	вм
Beryllium, Dissolved	ND		ug/l	5,00	0.590	10	08/31/10 19:20	0 09/01/10 19:38	EPA 3005A	1,6020A	вм
Cadmium, Dissolved	ND		ug/I	5.00	0.590	10	08/31/10 19:20	0 09/01/10 19:38	EPA 3005A	1,6020A	вм
Calcium, Dissolved	33000		ug/I	1000	126.	10	08/31/10 19:20	0 09/01/10 19:38	EPA 3005A	1,6020A	ВМ
Chromium, Dissolved	ND		ug/l	5.00	1.86	10	08/31/10 19:20	0 09/01/10 19:38	EPA 3005A	1,6020A	вм
Cobalt, Dissolved	8.34		ug/l	5.00	0.530	10	08/31/10 19:20	0 09/01/10 19:38	EPA 3005A	1,6020A	вм
Copper, Dissolved	ND		ug/l	5.00	1.18	10	08/31/10 19:2	0 09/01/10 19:38	EPA 3005A	1,6020A	ВМ
Iron, Dissolved	104000		ug/l	500	84.1	10	08/31/10 19:20	0 09/01/10 19:38	EPA 3005A	1,6020A	вм
Lead, Dissolved	ND		ug/l	5.00	0.500	10	08/31/10 19:20	0 09/01/10 19:38	EPA 3005A	1,6020A	ВМ
Magnesium, Dissolved	2500		ug/l	1000	41.0	10	08/31/10 19:20	0 09/01/10 19:38	EPA 3005A	1,6020A	ВМ
Manganese, Dissolved	7000		ug/l	10.0	1.36	10	08/31/10 19:20	0 09/01/10 19:38	EPA 3005A	1,6020A	ВМ
Mercury, Dissolved	ND		ug/l	0.2000	0.0120	1	09/01/10 18:10	6 09/02/10 12:18	EPA 7470A	1.7470A	EZ
Nickel, Dissolved	13.9		ug/l	5.00	1.80	10	08/31/10 19:20	0 09/01/10 19:38	EPA 3005A	1,6020A	ВМ
Potassium, Dissolved	7040		ug/l	1000	182.	10	08/31/10 19:20	0 09/01/10 19:38	EPA 3005A	1,6020A	ВМ
Selenium, Dissolved	ND		ug/l	10.0	4.06	10	08/31/10 19:20	0 09/01/10 19:38	EPA 3005A	1,6020A	ВМ
Silver, Dissolved	ND		ug/l	5.00	0.850	10	08/31/10 19:20	0 09/01/10 19:38	EPA 3005A	1,6020A	вм
Sodium, Dissolved	8780		ug/l	1000	182.	10	08/31/10 19:2	0 09/01/10 19:38	EPA 3005A	1,6020A	ВМ
Thallium, Dissolved	ND	2 31	ug/l	5.00	0.310	10	08/31/10 19:2	0 09/01/10 19:38	EPA 3005A	1,6020A	ВМ
Vanadium, Dissolved	ND		ug/l	5.00	0.770	10	08/31/10 19:2	0 09/01/10 19:38	EPA 3005A	1,6020A	вм
Zinc, Dissolved	37.7	J	ug/l	50.0	16.2	10	08/31/10 19:2	0 09/01/10 19:38	EPA 3005A	1,6020A	вм

SHL TASK 0002

Project Number:

AC001

Lab Number:

L1013407

Report Date:

09/09/10

SAMPLE RESULTS

Lab ID: Client ID:

L1013407-04

Sample Location:

SHM-10-12-U DEVENS, MA

Matrix:

Water

Date Collected:

08/30/10 15:00

Date Received: Field Prep:

08/30/10

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - West	borough L	_ab									
Aluminum, Total	50.2	J	ug/I	100	19.1	10	08/31/10 19:20	0 09/01/10 20:39	EPA 3005A	1,6020A	ВМ
Antimony, Total	1.38	J	ug/l	5,00	1.20	10	08/31/10 19:20	0 09/01/10 20:39	EPA 3005A	1,6020A	ВМ
Arsenic, Total	2880		ug/l	5.00	1.13	10	08/31/10 19:20	0 09/01/10 20:39	EPA 3005A	1,6020A	ВМ
Barium, Total	44.1		ug/l	5 00	0.950	10	08/31/10 19:20	0 09/01/10 20:39	EPA 3005A	1,6020A	ВМ
Beryllium, Total	ND		ug/l	5.00	0.590	10	08/31/10 19:20	0 09/01/10 20:39	EPA 3005A	1,6020A	ВМ
Cadmium, Total	ND		ug/l	5.00	0.590	10	08/31/10 19:20	0 09/01/10 20:39	EPA 3005A	1,6020A	ВМ
Calcium, Total	25000		ug/l	1000	126.	10	08/31/10 19:20	0 09/01/10 20:39	EPA 3005A	1,6020A	ВМ
Chromium, Total	ND		ug/l	5.00	1.86	10	08/31/10 19:20	0 09/01/10 20:39	EPA 3005A	1,6020A	ВМ
Cobalt, Total	6.36		ug/l	5.00	0,530	10	08/31/10 19:20	0 09/01/10 20:39	EPA 3005A	1,6020A	ВМ
Copper, Total	ND		ug/l	5.00	1.18	10	08/31/10 19:20	0 09/01/10 20:39	EPA 3005A	1,6020A	ВМ
Iron, Total	78600		ug/l	500	84.1	10	08/31/10 19:20	0 09/01/10 20:39	EPA 3005A	1,6020A	ВМ
Lead, Total	ND		ug/l	5.00	0.500	10	08/31/10 19:20	0 09/01/10 20:39	EPA 3005A	1,6020A	ВМ
Magnesium, Total	1940	(*)	ug/l	1000	41.0	10	08/31/10 19:20	0 09/01/10 20:39	EPA 3005A	1,6020A	BM
Manganese, Total	5400		ug/I	100	1.36	10	08/31/10 19:20	0 09/01/10 20:39	EPA 3005A	1,6020A	ВМ
Mercury, Total	ND		ug/l	0.2000	0.0120	1	09/01/10 18:10	6 09/02/10 12:34	EPA 7470A	1,7470A	EZ
Nickel, Total	11.0		ug/I	5.00	1.80	10	08/31/10 19:20	0 09/01/10 20:39	EPA 3005A	1,6020A	ВМ
Potassium, Total	5480		ug/l	1000	182	10	08/31/10 19:20	0 09/01/10 20:39	EPA 3005A	1,6020A	ВМ
Selenium, Total	ND		ug/l	10.0	4.06	10	08/31/10 19:20	0 09/01/10 20:39	EPA 3005A	1,6020A	ВМ
Silver, Total	ND		ug/l	5.00	0.850	10	08/31/10 19:20	0 09/01/10 20:39	EPA 3005A	1,6020A	ВМ
Sodium, Total	7090		ug/l	1000	182	10	08/31/10 19:20	0 09/01/10 20:39	EPA 3005A	1,6020A	ВМ
Thallium, Total	ND'		ug/l	5.00	0.310	10	08/31/10 19:20	0 09/01/10 20:39	EPA 3005A	1,6020A	ВМ
Vanadium, Total	ND .		ug/l	5,00	0.770	10	08/31/10 19:20	0 09/01/10 20:39	EPA 3005A	1,6020A	ВМ
Zinc, Total	35.2	J	ug/l	50.0	16.2	10	08/31/10 19:20	0 09/01/10 20:39	EPA 3005A	1,6020A	вм

SHL TASK 0002

Lab Number:

L1013407

Project Number:

AC001

Report Date:

09/09/10

SAMPLE RESULTS

Lab ID:

L1013407-05

Client ID:

DUP-083010-F

Sample Location:

DEVENS, MA

Date Collected:

08/30/10 15:00

Date Received:

08/30/10

Field Prep:

See Narrative

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Dissolved Metals - V	Vestboro	ugh Lab									
Aluminum, Dissolved	27.5	J	ug/l	100	19.1	10	08/31/10 19:20	0 09/01/10 19:44	EPA 3005A	1,6020A	ВМ
Antimony, Dissolved	1,56	J	ug/l	5.00	1.20	10	08/31/10 19:20	0 09/01/10 19:44	EPA 3005A	1,6020∧	вм
Arsenic, Dissolved	3410		ug/l	5.00	1.13	10	08/31/10 19:20	0 09/01/10 19:44	EPA 3005A	1,6020A	вм
Barium, Dissolved	53.7		ug/l	5.00	0.950	10	08/31/10 19:20	0 09/01/10 19:44	EPA 3005A	1,6020A	вм
Beryllium, Dissolved	ND		ug/l	5.00	0.590	10	08/31/10 19:20	0 09/01/10 19:44	EPA 3005A	1,6020A	BM
Cadmium, Dissolved	ND		ug/l	5.00	0.590	10	08/31/10 19:20	0 09/01/10 19:44	EPA 3005A	1,6020A	вм
Calcium, Dissolved	30600		ug/l	1000	126.	10	08/31/10 19:2	0 09/01/10 19:44	EPA 3005A	1,6020A	вм
Chromium, Dissolved	ND		ug/l	5.00	1.86	10	08/31/10 19:2	0 09/01/10 19:44	EPA 3005A	1,6020A	ВМ
Cobalt, Dissolved	7.64		ug/l	5.00	0.530	10	08/31/10 19:20	0 09/01/10 19:44	EPA 3005A	1,6020A	вм
Copper, Dissolved	ND		ug/l	5.00	1.18	10	08/31/10 19:2	0 09/01/10 19:44	EPA 3005A	1,6020A	ВМ
Iron, Dissolved	96000		ug/l	500	84.1	10	08/31/10 19:20	0 09/01/10 19:44	EPA 3005A	1,6020A	вм
Lead, Dissolved	ND		ug/I	5.00	0.500	10	08/31/10 19:20	0 09/01/10 19:44	EPA 3005A	1,6020A	вм
Magnesium, Dissolved	2360		ug/l	1000	41.0	10	08/31/10 19:2	0 09/01/10 19:44	EPA 3005A	1,6020A	вм
Manganese, Dissolved	6520		ug/l	10.0	1.36	10	08/31/10 19:20	0 09/01/10 19:44	EPA 3005A	1,6020A	вм
Mercury. Dissolved	0.01933	J	ug/l	0,2000	0.0120	1	09/01/10 18:10	6 09/02/10 12:20	EPA 7470A	1.7470A	EZ
Nickel, Dissolved	12.4		ug/I	5.00	1.80	10	08/31/10 19:20	0 09/01/10 19:44	EPA 3005A	1,6020A	вм
Potassium, Dissolved	6480		ug/l	1000	182	10	08/31/10 19:20	0 09/01/10 19:44	EPA 3005A	1,6020A	вм
Selenium, Dissolved	ND		ug/l	10.0	4.06	10	08/31/10 19:20	0 09/01/10 19:44	EPA 3005A	1,6020A	ВМ
Silver, Dissolved	ND		ug/l	5.00	0.850	10	08/31/10 19:20	0 09/01/10 19:44	EPA 3005A	1,6020A	вм
Sodium, Dissolved	8610		ug/l	1000	182	10	08/31/10 19:20	0 09/01/10 19:44	EPA 3005A	1,6020A	ВМ
Thallium, Dissolved	ND .		ug/l	5.00	0.310	10	08/31/10 19:20	0 09/01/10 19:44	EPA 3005A	1,6020A	BM
Vanadium, Dissolved	, ND , _	1.2	ug/l	5.00	0.770	10	08/31/10 19:20	0 09/01/10 19:44	EPA 3005A	1,6020A	ВМ
Zinc, Dissolved	36,5	J	ug/l	50.0	16.2	10	08/31/10 19:20	0 09/01/10 19:44	EPA 3005A	1,6020A	ВМ

Project Number:

SHL TASK 0002

AC001

Lab Number:

L1013407

Report Date:

09/09/10

SAMPLE RESULTS

Lab ID:

L1013407-06

Client ID:

DUP-083010-U

Sample Location: Matrix:

DEVENS, MA Water

Date Collected: Date Received: 08/30/10 15:00

08/30/10

Field Prep:

Total Metals - Westborough Lab Aluminum, Total 112 ug/l 100 19.1 10 08/31/10 19:20 09/01/10 20:45 EPA 3005A 1,6020 Antimony, Total ND ug/l 5.00 1.20 10 08/31/10 19:20 09/01/10 20:45 EPA 3005A 1,6020 Arsenic, Total 3210 ug/l 5.00 1.13 10 08/31/10 19:20 09/01/10 20:45 EPA 3005A 1,6020 Barium, Total 50.6 ug/l 5.00 0.950 10 08/31/10 19:20 09/01/10 20:45 EPA 3005A 1,6020 Beryllium, Total ND ug/l 5.00 0.590 10 08/31/10 19:20 09/01/10 20:45 EPA 3005A 1,6020 Cadmium, Total ND ug/l 5.00 0.590 10 08/31/10 19:20 09/01/10 20:45 EPA 3005A 1,6020 Calcium, Total ND ug/l 5.00 0.590 10 08/31/10 19:20 09/01/10 20:45 EPA 3005A 1,6020 Calcium, Total 27900 ug/l 1000 126. 10 08/31/10 19:20 09/01/10 20:45 EPA 3005A 1,6020	а вм
Antimony, Total ND ug/l 5.00 1.20 10 08/31/10 19:20 09/01/10 20:45 EPA 3005A 1,6020 Arsenic, Total 3210 ug/l 5.00 1.13 10 08/31/10 19:20 09/01/10 20:45 EPA 3005A 1,6020 Barium, Total 50.6 ug/l 5.00 0.950 10 08/31/10 19:20 09/01/10 20:45 EPA 3005A 1,6020 Beryllium, Total ND ug/l 5.00 0.590 10 08/31/10 19:20 09/01/10 20:45 EPA 3005A 1,6020 Cadmium, Total ND ug/l 5.00 0.590 10 08/31/10 19:20 09/01/10 20:45 EPA 3005A 1,6020 Cadmium, Total ND ug/l 5.00 0.590 10 08/31/10 19:20 09/01/10 20:45 EPA 3005A 1,6020 Cadmium, Total ND ug/l 5.00 0.590 10 08/31/10 19:20 09/01/10 20:45 EPA 3005A 1,6020 Cadmium, Total ND ug/l 5.00 0.590 10 08/31/10 19:20 09/01/10 20:45 EPA 3005A 1,6020 Cadmium, Total ND ug/l 5.00 0.590 10 08/31/10 19:20 09/01/10 20:45 EPA 3005A 1,6020 Cadmium, Total ND ug/l 5.00 0.590 10 08/31/10 19:20 09/01/10 20:45 EPA 3005A 1,6020 Cadmium, Total ND ug/l 5.00 0.590 10 08/31/10 19:20 09/01/10 20:45 EPA 3005A 1,6020 Cadmium, Total ND ug/l 5.00 0.590 10 08/31/10 19:20 09/01/10 20:45 EPA 3005A 1,6020 Cadmium, Total ND ug/l 5.00 0.590 10 08/31/10 19:20 09/01/10 20:45 EPA 3005A 1,6020 Cadmium, Total ND ug/l 5.00 0.590 10 08/31/10 19:20 09/01/10 20:45 EPA 3005A 1,6020 Cadmium, Total ND ug/l 5.00 0.590 10 08/31/10 19:20 09/01/10 20:45 EPA 3005A 1,6020 Cadmium, Total ND ug/l 5.00 0.590 10 08/31/10 19:20 09/01/10 20:45 EPA 3005A 1,6020 Cadmium, Total ND ug/l 5.00 0.590 10 08/31/10 19:20 09/01/10 20:45 EPA 3005A 1,6020 Cadmium, Total ND ug/l 5.00 0.590 10 08/31/10 19:20 09/01/10 20:45 EPA 3005A 1,6020 Cadmium, Total ND ug/l 5.00 0.590 10 08/31/10 19:20 09/01/10 20:45 EPA 3005A 1,6020 Cadmium, Total ND ug/l 5.00 0.590 10 08/31/10 19:20 09/01/10 20:45 EPA 3005A 1,6020 Cadmium, Total ND ug/l 5.00 0.590 10 08/31/10 19:20 09/01/10 20:45 EPA 3005A 1,6020 Cadmium, Total ND ug/l 5.00 0.590 10 08/31/10 19:20 09/01/10 20:45 EPA 3005A 1,6020 Cadmium, Total ND ug/l 5.00 0.590 10 08/31/10 19:20 09/01/10 20:45 EPA 3005A 1,6020 Cadmium, Total ND ug/l 5.00 0.590 10 08/31/10 19:20 09/01/10 20:	н вм
Arsenic, Total 3210 ug/l 5.00 1.13 10 08/31/10 19:20 09/01/10 20:45 EPA 3005A 1,6020 Barium, Total 50.6 ug/l 5.00 0.950 10 08/31/10 19:20 09/01/10 20:45 EPA 3005A 1,6020 Beryllium, Total ND ug/l 5.00 0.590 10 08/31/10 19:20 09/01/10 20:45 EPA 3005A 1,6020 Cadmium, Total ND ug/l 5.00 0.590 10 08/31/10 19:20 09/01/10 20:45 EPA 3005A 1,6020	
Barium, Total 50.6 ug/l 5.00 0.950 10 08/31/10 19:20 09/01/10 20:45 EPA 3005A 1,6020 Beryllium, Total ND ug/l 5.00 0.590 10 08/31/10 19:20 09/01/10 20:45 EPA 3005A 1,6020 Cadmium, Total ND ug/l 5.00 0.590 10 08/31/10 19:20 09/01/10 20:45 EPA 3005A 1,6020	A BM
Beryllium, Total ND ug/l 5.00 0.590 10 08/31/10 19:20 09/01/10 20:45 EPA 3005A 1,6020 Cadmium, Total ND ug/l 5.00 0.590 10 08/31/10 19:20 09/01/10 20:45 EPA 3005A 1,6020	А вм
Cadmium, Total ND ug/l 5.00 0.590 10 08/31/10 19:20 09/01/10 20:45 EPA 3005A 1,6020	а вм
	А ВМ
Calcium, Total 27900 ug/l 1000 126. 10 08/31/10 19:20 09/01/10 20:45 EPA 3005A 1,6020	A BM
	А вм
Chromium, Total ND ug/l 5.00 1.86 10 08/31/10 19:20 09/01/10 20:45 EPA 3005A 1,6026	А ВМ
Cobalt, Total 6.88 ug/l 5.00 0.530 10 08/31/10 19:20 09/01/10 20:45 EPA 3005A 1,6020	А ВМ
Copper, Total ND ug/l 5.00 1.18 10 08/31/10 19:20 09/01/10 20:45 EPA 3005A 1,6020	А ВМ
Iron, Total 89700 ug/l 500 84.1 10 08/31/10 19:20 09/01/10 20:45 EPA 3005A 1,6020	А ВМ
Lead, Total 0.59 J ug/l 5.00 0.500 10 08/31/10 19:20 09/01/10 20:45 EPA 3005A 1,6020	А ВМ
Magnesium, Total 2190 ug/l 1000 41.0 10 08/31/10 19:20 09/01/10 20:45 EPA 3005A 1,6020	A BM
Manganese, Total 6120 ug/l 10.0 1.36 10 08/31/10 19:20 09/01/10 20:45 EPA 3005A 1,602	A BM
Mercury, Total 0.03627 J ug/l 0.2000 0.0120 1 09/01/10 18:16 09/02/10 12:36 EPA 7470A 1,7470	A EZ
Nickel, Total 12.3 ug/l 5.00 1.80 10 08/31/10 19:20 09/01/10 20:45 EPA 3005A 1,6020	А вм
Potassium, Total 6190 ug/l 1000 182, 10 08/31/10 19:20 09/01/10 20:45 EPA 3005A 1,6020	А ВМ
Selenium, Total ND ug/l 10.0 4.06 10 08/31/10 19:20 09/01/10 20:45 EPA 3005A 1,602	А ВМ
Silver, Total ND ug/l 5.00 0.850 10 08/31/10 19:20 09/01/10 20:45 EPA 3005A 1,6020	A BM
Sodium, Total 7880 ug/l 1000 182. 10 08/31/10 19:20 09/01/10 20:45 EPA 3005A 1,6020	А ВМ
Thallium, Total ND ug/l 5.00 0.310 10 08/31/10 19:20 09/01/10 20:45 EPA 3005A 1,602	А ВМ
Vanadium, Total ND ug/l 5.00 0.770 10 08/31/10 19:20 09/01/10 20:45 EPA 3005A 1,602	А вм
Zinc, Total 46.8 J ug/l 50.0 16.2 10 08/31/10 19:20 09/01/10 20:45 EPA 3005A 1,602	А вм

SHL TASK 0002

Lab Number:

L1013407

Project Number:

Sample Location:

AC001

Report Date:

09/09/10

SAMPLE RESULTS

Lab ID: Client ID: L1013407-07 RB-083010-U

DEVENS, MA

Matrix:

Water

2.25

ug/l

5.00

1.62

Date Collected:

08/30/10 14:30

Date Received:

08/31/10 19:20 09/01/10 20:33 EPA 3005A

08/30/10

Field Prep:

Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Wes	stborough L	.ab									
Aluminum, Total	2.38	J	ug/l	10.0	1.91	1	08/31/10 19:2	0 09/01/10 20:33	EPA 3005A	1,6020A	ВМ
Antimony, Total	0.28	J	ug/l	0.500	0.120	1	08/31/10 19:2	0 09/01/10 20:33	EPA 3005A	1,6020A	ВМ
Arsenic, Total	0.29	Ĵ	ug/I	0.500	0.113	1	08/31/10 19:2	0 09/01/10 20:33	EPA 3005A	1,6020A	ВМ
Barium, Total	0.1	J	ug/I	0,500	0,095	1	08/31/10 19:2	0 09/01/10 20:33	EPA 3005A	1,6020A	BM
Beryllium, Total	ND		ug/l	0.500	0.059	1	08/31/10 19:2	0 09/01/10 20:33	EPA 3005A	1,6020A	BM
Cadmium, Total	ND		ug/l	0.500	0.059	1	08/31/10 19:2	0 09/01/10 20:33	EPA 3005A	1,6020A	BM
Calcium, Total	34.8	J	ug/l	100	12,6	1	08/31/10 19:2	0 09/01/10 20:33	EPA 3005A	1,6020A	BM
Chromium, Total	0.38	J	ug/l	0.500	0.186	1	08/31/10 19:2	0 09/01/10 20:33	EPA 3005A	1,6020A	ВМ
Cobalt, Total	ND		ug/l	0,500	0.053	1	08/31/10 19:2	0 09/01/10 20:33	EPA 3005A	1,6020A	ВМ
Copper, Total	0.520		ug/l	0.500	0.118	1	08/31/10 19:2	0 09/01/10 20:33	EPA 3005A	1,6020A	ВМ
Iron, Total	18.5	J	ug/l	50.0	8.41	1	08/31/10 19:2	0 09/01/10 20:33	EPA 3005A	1,6020A	вм
Lead, Total	0.05	J	ug/l	0.500	0.050	1	08/31/10 19:2	0 09/01/10 20:33	EPA 3005A	1,6020A	вм
Magnesium, Total	ND		ug/l	100	4.10	t	08/31/10 19:2	0 09/01/10 20:33	EPA 3005A	1,6020A	ВМ
Manganese, Total	0.83	J	ug/l	1.00	0.136	1	08/31/10 19:2	0 09/01/10 20:33	EPA 3005A	1,6020A	BM
Mercury, Total	0.03853	J	ug/l	0.2000	0.0120	1	09/01/10 18:1	6 09/02/10 12:38	EPA 7470A	1,7470A	EZ
Nickel, Total	0.38	J	ug/l	0.500	0.180	1	08/31/10 19:2	0 09/01/10 20:33	EPA 3005A	1,6020A	ВМ
Potassium, Total	33	J	ug/l	100	18.2	1	08/31/10 19:2	0 09/01/10 20:33	EPA 3005A	1,6020A	BM
Selenium, Total	ND		ug/f	1.00	0.406	1	08/31/10 19:2	0 09/01/10 20:33	EPA 3005A	1,6020A	вм
Silver, Total	ND		ug/l	0.500	0.085	1	08/31/10 19:2	0 09/01/10 20:33	EPA 3005A	1,6020A	ВМ
Sodium, Total	56	J	ug/l	100	18.2	1	08/31/10 19:2	0 09/01/10 20:33	EPA 3005A	1,6020A	ВМ
* Thallium, Total *	ND		ug/l	0.500	0.031	1	08/31/10 19:2	0 09/01/10 20:33	EPA 3005A	1,6020A	ВМ
Vanadium, Total	ND	7	ug/l	o 500	0.077	. 1	08/31/10 19:2	0 09/01/10 20:33	EPA 3005A	1,6020A	ВМ

1,6020A

вм

Zinc, Total

SHL TASK 0002

Project Number: AC001

Lab Number:

L1013407

Report Date:

09/09/10

Method Blank Analysis Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Westboro	ugh Lab fo	r sample(s):	02,04,0	06-07	Batch:	WG430412	-1			
Aluminum, Total	3.13	J	ug/l	10.0	1.91	1	08/31/10 19:20	09/01/10 18:32	1,6020A	ВМ
Antimony, Total	ND		ug/l	0.500	0.120	1	08/31/10 19:20	09/01/10 18:32	1,6020A	ВМ
Arsenic, Total	ND		ug/l	0.500	0.113	1	08/31/10 19:20	09/01/10 18:32	1,6020A	вм
Barium, Total	ND		ug/l	0.500	0.095	1	08/31/10 19:20	09/01/10 18:32	1,6020A	вм
Beryllium, Total	ND		ug/l	0.500	0.059	1	08/31/10 19:20	09/01/10 18:32	1,6020A	вм
Cadmium, Total	ND		ug/l	0.500	0.059	1	08/31/10 19:20	09/01/10 18:32	1,6020A	вм
Calcium, Total	19.4	J	ug/l	100	12.6	1	08/31/10 19:20	09/01/10 18:32	1,6020A	вм
Chromium, Total	ND		ug/l	0.500	0 186	1	08/31/10 19:20	09/01/10 18:32	1,6020A	вм
Cobalt, Total	ND		ug/l	0.500	0.053	1	08/31/10 19:20	09/01/10 18:32	1,6020A	вм
Copper, Total	ND		ug/l	0.500	0.118	1	08/31/10 19:20	09/01/10 18:32	1,6020A	вм
Iron, Total	15.8	J	ug/l	50,0	8.41	1	08/31/10 19:20	09/01/10 18:32	1,6020A	ВМ
Lead, Total	ND		ug/l	0.500	0.050	1	08/31/10 19:20	09/01/10 18:32	2 1,6020A	ВМ
Magnesium, Total	ND		ug/l	100	4.10	1	08/31/10 19:20	09/01/10 18:32	2 1,6020A	ВМ
Manganese, Total	ND		ug/l	1.00	0.136	1	08/31/10 19:20	09/01/10 18:32	1,6020A	ВМ
Nickel, Total	ND		ug/l	0.500	0 180	1	08/31/10 19:20	09/01/10 18:32	2 1,6020A	ВМ
Potassium, Total	23	Ú	ug/l	100	18.2	1	08/31/10 19:20	09/01/10 18:32	2 1,6020A	ВМ
Selenium, Total	ND		ug/l	1.00	0.406	1	08/31/10 19:20	09/01/10 18:33	2 1,6020A	вм
Silver, Total	0.13	J	ug/l	0.50	0.085	1	08/31/10 19:20	09/01/10 18:32	2 1,6020A	вм
Sodium, Total	ND		ug/l	100	18.2	1	08/31/10 19:20	09/01/10 18:3	2 1,6020A	ВМ
Thallium, Total	ND		ug/l	0.50	0 0,031	1	08/31/10 19:20	09/01/10 18:3	2 1,6020A	ВМ
Vanadium, Total	ND		ug/l	0.50	0.077	1	08/31/10 19:20	09/01/10 18:3:	2 1,6020A	ВМ
Zinc, Total	ND		ug/l	5.00	1.62	1	08/31/10 19:20	09/01/10 18:3	2 1,6020A	вм

Prep Information

Digestion Method: EPA 3005A

						Dilution	Date	Date	Analytica	t .
Parameter	Result Q	ualifier	Units	RL	MDL	Factor	Prepared	Analyzed	Method	Analyst
Dissolved Metals -	Westborough Lab	for same	ole(s): 01	1,03,05	Batch:	WG43041	3-1			
Aluminum, Dissolved	3.13	J	ug/l	10.0	1.91	1	08/31/10 19:20	09/01/10 18:32	1,6020A	ВМ
Antimony, Dissolved	ND		ug/l	0.500	0.120	1	08/31/10 19:20	09/01/10 18:32	1,6020A	ВМ
Arsenic, Dissolved	ND		ug/l	0.500	0.113	1	08/31/10 19:20	09/01/10 18:32	1,6020A	вм
Barium, Dissolved	ND		ug/l	0.500	0.095	1	08/31/10 19:20	09/01/10 18:32	1,6020A	вм



SHL TASK 0002

Lab Number:

L1013407 09/09/10

Project Number: AC001

Report Date:

Method Blank Analysis Batch Quality Control

Beryllium, Dissolved	ND		ug/l	0.500	0.059	1	08/31/10 19:20	09/01/10 18:32	1,6020A	ВМ
Cadmium, Dissolved	ND		ug/l	0.500	0.059	1	08/31/10 19:20	09/01/10 18:32	1,6020A	вм
Calcium, Dissolved	19.4	J	ug/l	100	12.6	1	08/31/10 19:20	09/01/10 18:32	1,6020A	вм
Chromium, Dissolved	ND		ug/l	0.500	0.186	1	08/31/10 19:20	09/01/10 18:32	1,6020A	вм
Cobalt, Dissolved	ND		ug/l	0.500	0.053	1	08/31/10 19:20	09/01/10 18:32	1,6020A	ВМ
Copper, Dissolved	ND		ug/l	0.500	0.118	1	08/31/10 19:20	09/01/10 18:32	1,6020A	вм
Iron, Dissolved	15.8	J	ug/l	50.0	8.41	1	08/31/10 19:20	09/01/10 18:32	1,6020A	ВМ
Lead, Dissolved	ND		ug/l	0.500	0.050	1	08/31/10 19:20	09/01/10 18:32	1,6020A	вм
Magnesium, Dissolved	ND		ug/l	100	4.10	1	08/31/10 19:20	09/01/10 18:32	1,6020A	вм
Manganese, Dissolved	ND		ug/l	1.00	0.136	1	08/31/10 19:20	09/01/10 18:32	1,6020A	вм
Nickel, Dissolved	ND		ug/I	0.500	0.180	1	08/31/10 19:20	09/01/10 18:32	1,6020A	вм
Potassium, Dissolved	23	J	ug/l	100	18.2	1	08/31/10 19:20	09/01/10 18:32	1,6020A	ВМ
Selenium, Dissolved	ND		ug/l	1.00	0.406	1	08/31/10 19:20	09/01/10 18:32	1,6020A	вм
Silver, Dissolved	0.13	J	ug/l	0.500	0.085	1	08/31/10 19:20	09/01/10 18:32	1,6020A	вм
Sodium, Dissolved	ND		ug/l	100	18.2	1	08/31/10 19:20	09/01/10 18:32	1,6020A	вм
Thallium, Dissolved	ND		ug/l	0.500	0.031	3	08/31/10 19:20	09/01/10 18:32	1,6020A	вм
Vanadium, Dissolved	ND		ug/l	0.500	0.077	1	08/31/10 19:20	09/01/10 18:32	1,6020A	вм
Zinc, Dissolved	ND		ug/l	5.00	1.62	1	08/31/10 19:20	09/01/10 18:32	1,6020A	ВМ

Prep Information

Digestion Method: EPA 3005A

	Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method		
2	Dissolved Metals - Westbo	rough Lab for sam	ple(s): 01	,03,05	Batch:	WG43059	11-1			G 7 6	
	Mercury, Dissolved	ND .	ug/l	0.2000	0.0120	1	09/01/10 18:16	09/02/10 12:15	1,7470A	EZ	

Prep Information

Digestion Method: EPA 7470A

Parameter	Result Q	ualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	
Total Metals - Westboro	ugh Lab for s	ample(s): 02,04,0	06-07	Batch: \	WG430592	-1			
Mercury, Total	0.01808	J	ug/l	0.2000	0.0120	1	09/01/10 18:16	09/02/10 12:22	1,7470A	EZ



Serial_No:09091015:28

Project Name: SHL TASK 0002

Project Number: AC001

Lab Number:

L1013407

Report Date:

09/09/10

Method Blank Analysis Batch Quality Control

Prep Information

Digestion Method: EPA 7470A

Project Name:

SHL TASK 0002

Project Number:

AC001

Lab Number:

L1013407

Report Date:

Parameter	LCS %Recovery Qual	LCSD %Recovery Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Westborough Lab	Associated sample(s): 02,04,06-07	Batch: WG430412-2				
Aluminum, Total	97 ^	4	80-120	-		
Antimony, Total	97 *		80-120			
Arsenic, Total	98	×	80-120			
Barium, Total	99		80-120	,		
Beryllium, Total	97	9	80-120	-		
Cadmium, Total	110	+	80-120			
Calcium, Total	102		80-120	1.5		
Chromium, Total	97 .	-	80-120	-		
Cobalt, Total	105		80-120			
Copper, Total	105	4	80-120	100		
Iron, Total	108	4	80-120			
Lead, Total	102	*	80-120	14		
Magnesium, Total	103		80-120			
Manganese, Total	102		80-120			
Nickel, Total	103	*	80-120			
Potassium, Total	102		80-120	-5,		
Selenium, Total	105	4	80-120			
Silver, Total	97	*	80-120	3		
Sodium, Total	96		80-120	*		
Thallium, Total	94		80-120	2		
Vanadium, Total	102		80-120			

Lab Number:

L1013407

Report Date:

09/09/10

Project Name: SHL TASK 0002

Project Number: AC001

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Westborough La	Associated sample(s): 02,04,06-07	Batch: WG430412-2			
Zinc, Total	101	4.	80-120		

Project Name:

SHL TASK 0002

Project Number:

AC001

Lab Number:

L1013407

Report Date:

Parameter	LĊS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Dissolved Metals - Westborough Lab	Associated sample(s):	01,03,05 Batch: WG430	413-2		
Aluminum, Dissolved	.97		80-120		
Antimony, Dissolved	97 🐐	-	80-120		
Arsenic, Dissolved	98		80-120	2.	
Barium, Dissolved	99		80-120	4	
Beryllium, Dissolved	97		80-120	9/	
Cadmium, Dissolved	110		80-120		
Calcium, Dissolved	102		80-120		
Chromium, Dissolved	97		80-120	4	
Cobalt, Dissolved	105		80-120	-	
Copper, Dissolved	105		80-120	1.67	
Iron, Dissolved	108	*	80-120	100	
Lead, Dissolved	102	1	80-120	,	
Magnesium, Dissolved	103 .		80-120	4.7	
Manganese, Dissolved	102	*	80-120	4.	
Nickel, Dissolved	103		80-120		
Potassium, Dissolved	102	8	80-120		
Selenium, Dissolved	105	105	80-120		
Silver, Dissolved	97		80-120	3	
Sodium, Dissolved	96	4	80-120	4	
Thallium, Dissolved	94	16.	80-120	-	
Vanadium, Dissolved	102		80-120		

SHL TASK 0002 Batch Quality

Lab Number:

L1013407

Report Date:

09/09/10

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Dissolved Metals - Westborough La	b Associated sample(s):	01,03,05 Batch: WG430413-2			
Zinc, Dissolved	101	14	80-120		
Dissolved Metals - Westborough La	b Associated sample(s):	01,03,05 Batch: WG430591-2			
Mercury, Dissolved	106	+	80-120		20
Total Metals - Westborough Lab As	sociated sample(s): 02,0	04,06-07 Batch: WG430592-2			
Mercury, Total	106		80-120	*	20

Project Name:

Project Number:

AC001

Project Name:

SHL TASK 0002

Project Number:

AC001

Lab Number:

L1013407

Report Date:

Parameter	Native Sample	MS - Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	RPD Qual Limits
Total Metals - Westborough La 10-11-U	ab Associated	sample(s);0	2,04,06-07	QC Batch II	D: WG43	30412-3 \	WG430412-4	QC San	nple: L10134	107-02	Client ID: SHM
Aluminum, Total	113	2000	2010	95		2010	95		80-120	0	20
Antimony, Total	ND	500	506	101		488	98		80-120	4	20
Arsenic, Total	356	120	484	107		471	96		80-120	3	20
Barium, Total	40.3	2000	2110	103		2010	98		80-120	5	20
Beryllium, Total	ND	50	48.5	97		47.1	94		80-120	3	20
Cadmium, Total	ND	51	58.6	115		56.2	110		80-120	4	20
Calcium, Total	23900	10000	34400	105		33600	97		80-120	2	20
Chromium, Total	1.44	200	196	97		190	94		80-120	3	20
Cobalt, Total	6.28	500	532	105		525	104		80-120	1	20
Copper, Total	ND	250	262	105		255	102		80-120	3	20
Iron, Total	60600	1000	61500	90		59000	0		80-120	4	20
Lead, Total	ND	510	520	102		509	100		80-120	2	20
Magnesium, Total	2770	10000	12800	100		12800	100		80-120	0	20
Manganese, Total	2490	500	2960	94		2860	74		80-120	3	20
Nickel, Total	5,92	500	521	103		511	101		80-120	2	20
Potassium, Total	5410	10000	15400	100		15100	97		80-120	2	20
Selenium, Total	ND	120	124	103		124	103		80-120	0	20
Silver, Total	ND	50	49.3	99		47.4	95		80-120	4	20
Sodium, Total	12400	10000	21900	95		21000	86		80-120	4	20
Thallium, Total	ND	120	112	93		111	92		80-120	1	20
Vanadium, Total	ND	500	513	103		504	101		80-120	2	20

Project Name:

SHL TASK 0002

2.7

4 8

Project Number:

AC001

Lab Number:

L1013407

Report Date:

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recover	Recovery Limits	RPD	RPD Limits
Total Metals - Westborough La 10-11-U	b Associated	sample(s):	02,04,06-07	QC Batch ID:	: WG430412-3	WG430412-4	QC Sample: L1013	407-02	Client ID: SHM-
Zinc, Total	10.9	500	522	102	509	100	80-120	3	20

Project Name:

SHL TASK 0002

Project Number:

AC001

Lab Number:

L1013407

Report Date:

Parameter	Native Sample	MS Added	MS Found	MS %Recovery		MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Dissolved Metals - Westbord SHM-10-11-F	ough Lab Assoc	iated sample	Batella of some one	5 QC Batch I	D: W	G430413-3	WG430413-4	QC Sample: L101	3407-01	Client ID:
Aluminum, Dissolved	ND	2000	1990	100		1920	96	80-120	4	20
Antimony, Dissolved	ND	500	512	102		501	100	80-120	2	20
Arsenic, Dissolved	342	120	488	122	Q	466	103	80-120	5	20
Barium, Dissolved	36.5	2000	2110	104		2060	101	80-120	2	20
Beryllium, Dissolved	ND	50	48.7	97		47.4	95	80-120	3	20
Cadmium, Dissolved	ND	51-	59.2	116		57.2	112	80-120	3	20
Calcium, Dissolved	21200	10000	33700	125	Q	32400	112	80-120	4	20
Chromium, Dissolved	ND	200 .'	201	100		195	98	80-120	3	20
Cobalt, Dissolved	5.94	500	544	108		528	104	80-120	3	20
Copper, Dissolved	ND	250	271	108		263	105	80-120	3	20
Iron, Dissolved	55700	1000	62400	670		59000	330	80-120	6	20
Lead, Dissolved	ND	510	530	104		512	100	80-120	3	20
Magnesium, Dissolved	2530	10000	13200	107		12800	103	80-120	3	20
Manganese, Dissolved	2320	500	3020	140		2850	106	80-120	6	20
Nickel, Dissolved	5.43	500	538	106		526	104	80-120	2	20
Potassium, Dissolved	5150	10000	15900	108		15200	100	80-120	5	20
Selenium, Dissolved	ND	120	127	106		121	101	80-120	5	20
Silver, Dissolved	ND	50	50.0	100		48.5	97	80-120	3	20
Sodium, Dissolved	11800	10000	22200	104		20800	90	80-120	7	20
Thallium, Dissolved	ND	120	115	96		111	92	80-120	4	20
Vanadium, Dissolved	ND	500	528	106		513	103	80-120	3	20

Project Name:

SHL TASK 0002

Project Number:

AC001

Lab Number:

L1013407

Report Date:

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits RPD	RPD Limits
Dissolved Metals - Westborough SHM-10-11-F	Lab Associ	ated sample(s	s): 01,03,0	5 QC Batch ID): WG430413-3	WG430413-4	QC Sample: L1013407-0	1 Client ID:
Zinc, Dissolved	13,8	500	524	102	521	101	80-120 1	20
Dissolved Metals - Westborough SHM-10-11-F	Lab Associ	ated sample(s	s): 01,03,0	5 QC Batch ID): WG430591-3	WG430591-4	QC Sample: L1013407-0	1 Client ID:
Mercury, Dissolved	ND	1 ,	1.185	118	1.174	117	80-120 1	20
Total Metals - Westborough Lab / 10-11-U	Associated	sample(s): 02	2,04,06-07	QC Batch ID:	WG430592-3 \	WG430592-4 (QC Sample: L1013407-02	Client ID: SHN
Mercury, Total	ND	1×	1.070	107	1.132	113	80-120 6	20

INORGANICS & MISCELLANEOUS

Serial_No:09091015:28

Project Name: SHL TASK 0002

Project Number: AC001

Lab Number:

L1013407

Report Date:

09/09/10

SAMPLE RESULTS

Lab ID:

L1013407-02

Client ID:

SHM-10-11-U

Sample Location:

DEVENS, MA

Matrix:

Water

Date Collected:

08/30/10 11:20

Date Received:

08/30/10

Field Prep:

Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Wes	stborough Lab)								
Alkalinity, Total	160	J	ng CaCO3/L	2.0	NA	1	-	09/01/10 08:23	30,2320B	SD
Solids, Total Suspended	15		mg/l	5.0	NA	1	ě.	09/02/10 10:20	30,2540D	DW
Nitrogen, Ammonia	2.79		mg/l	0.075	0.017	1	08/31/10 13:30	09/01/10 20:07	30,4500NH3-BH	AT
Nitrogen, Nitrite	ND		mg/l	0.02	0.002	1	¥.	08/30/10 20:02	30,4500NO2-B	DD
Sulfide	ND		mg/l	0.10	0.10	1	08/31/10 18:15	08/31/10 19:15	30,4500S2-AD	AT
Chemical Oxygen Demand	22		mg/l	20	7.0	1		09/02/10 12:39	44,410.4	DW
Dissolved Organic Carbon	3.3		mg/l	1.0	1.0	1	08/30/10 19:30	09/03/10 07:16	30,5310C	DW
Anions by Ion Chromatog	graphy - West	borough	Lab							
Chloride	24		mg/l	0.50	0.07	1	-	08/31/10 13:41	44,300.0	AU
Nitrogen, Nitrate	0.019	J	mg/l	0.05	0.01	1	-	08/31/10 13:41	44,300.0	AU
Sulfate	19		mg/l	1.0	0.12	1		08/31/10 13:41	44,300.0	AU

Project Name:

SHL TASK 0002

Lab Number:

L1013407

Project Number: AC001

Report Date:

09/09/10

SAMPLE RESULTS

Lab ID:

L1013407-04

Client ID:

SHM-10-12-U DEVENS, MA

Sample Location: Matrix:

Sulfate

Water

1.7

Date Collected:

08/30/10 15:00

Date Received:

08/30/10

Field Prep:

08/31/10 13:53

Not Specified

44,300.0

AU

Parameter	Result	Qualifier Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Wes	stborough Lab								
Alkalinity, Total	240	mg CaCO3/L	2.0	NA	1		09/01/10 08:23	30,2320B	SD
Solids, Total Suspended	12	mg/l	5.0	NA	1	16.	09/02/10 10:20	30,2540D	DW

Alkalinity, Total	240		mg CaCO3/L	2.0	NA	1		09/01/10 08:23	30,2320B	SD
Solids, Total Suspended	12		mg/l	5.0	NA	1	16.	09/02/10 10:20	30,2540D	DW
Nitrogen, Ammonia	3.70		mg/l	0.075	0.017	1	08/31/10 13:30	09/01/10 20:08	30,4500NH3-BH	AT
Nitrogen, Nitrite	ND		mg/l	0.02	0.002	1		08/30/10 20:03	30,4500NO2-B	DD
Sulfide	ND		mg/l	0.10	0.10	1	08/31/10 18:15	08/31/10 19:15	30,4500S2-AD	AT
Chemical Oxygen Demand	31		mg/l	20	7.0	1		09/02/10 12:39	44,410.4	DW
Dissolved Organic Carbon	4.1		mg/l	1.0	1.0	1	08/30/10 19:30	09/03/10 07:16	30,5310C	DW
Anions by Ion Chromatog	graphy - Wes	tborough	n Lab							
Chloride	3.7		mg/l	0.50	0.07	1		08/31/10 13:53	44,300.0	AU
Nitrogen, Nitrate	0.035	J	mg/l	0.05	0.01	1	(4)	08/31/10 13:53	44,300.0	AU

0.12

1.0

mg/l

Serial_No:09091015:28

Project Name:

SHL TASK 0002

Project Number: AC001

Lab Number:

L1013407

Report Date:

09/09/10

Method Blank Analysis Batch Quality Control

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Wes	stborough Lab for sam	nple(s): 02	,04 Ba	tch: WG	430178-2				
Nitrogen, Nitrite	ND	mg/l	0.02	0.002	1	4	08/30/10 20:01	30,4500NO2-B	DD
General Chemistry - Wes	stborough Lab for san	nple(s): 02	,04 Ba	tch: WG	430360-1				
Nitrogen, Ammonia	ND	mg/l	0.075	0.017	1	08/31/10 13:30	09/01/10 20:04	30,4500NH3-BH	AT.
Anions by Ion Chromato	graphy - Westborough	Lab for sa	mple(s): 02,04	Batch: W	G430376-1			
Chloride	ND	mg/l	0.50	0.07	1	9	08/31/10 13:05	44,300 0	AU
Nitrogen, Nitrate	ND	mg/l	0.05	0.01	1	-	08/31/10 13:05	44,300.0	AU
Sulfate	ND	mg/l	1.0	0.12	1	2	08/31/10 13:05	44,300.0	AU
General Chemistry - Wes	stborough Lab for sar	nple(s): 02	,04 Ba	atch: WG	430495-1				
Solids, Total Suspended	ND	mg/l	5.0	NA	1	4	09/02/10 10:20	30,2540D	DW
General Chemistry - We	stborough Lab for sar	nple(s): 02	,04 Ba	atch: WG	6430540-1				
Alkalinity, Total	ND	mg CaCO3/	20	NA	1	-	09/01/10 08:23	30,2320B	SD
General Chemistry - We	stborough Lab for sar	nple(s): 02	,04 Ba	atch: WC	6430659-1				
Chemical Oxygen Demand	9,7 J	mg/l	20	7.0	1	*	09/02/10 12:37	44.410.4	DW
General Chemistry - We	stborough Lab for sar	nple(s): 02	2,04 Ba	atch: WC	6430849-1				
Sulfide	ND	mg/l	0.10	0.10	1	08/31/10 18:15	08/31/10 19:15	30,4500S2-AD	AT
General Chemistry - We	stborough Lab for sar	nple(s): 02	2,04 Ba	atch: WC	6431003-1				
Dissolved Organic Carbon	ND	mg/l	1.0	1.0	1	08/30/10 19:30	09/03/10 07:16	30,5310C	DW

Project Name:

SHL TASK 0002

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Project Number:

AC001

Lab Number:

L1013407

Report Date:

Parameter	LCS %Recovery Q	LCSD ual %Recovery Qual	%Recovery Limits	RPD	Qual RPD Limits
General Chemistry - Westborough Lab	Associated sample(s):	02,04 Batch: WG430178-1			
Nitrogen, Nitrite	100	- Sa	90-110	1.4	20
General Chemistry - Westborough Lab	Associated sample(s):	02,04 Batch: WG430360-2			
Nitrogen, Ammonia	100	*	80-120	•	20
Anions by Ion Chromatography - Westt	orough Lab Associated	sample(s): 02,04 Batch: WG	430376-2		
Chloride	100		90-110		
Nitrogen, Nitrate	100	14	90-110	4.7	
Sulfate	100		90-110	*	
General Chemistry - Westborough Lab	Associated sample(s):	02,04 Batch: WG430540-2			
Alkalinity, Total	110		80-115		4
General Chemistry - Westborough Lab	Associated sample(s):	02,04 Batch: WG430659-2			
Chemical Oxygen Demand	104		95-105		
General Chemistry - Westborough Lab	Associated sample(s):	02,04 Batch: WG430849-2			
Sulfide	87		75-125	*	

Lab Number:

L1013407

Report Date:

09/09/10

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
General Chemistry - Westborough	Lab Associated sample(s): 02,04	Batch: WG431003-2			
Dissolved Organic Carbon	102.7		90-110		

Project Name:

Project Number:

SHL TASK 0002

AC001

Project Name:

SHL TASK 0002

Project Number:

AC001

Lab Number:

L1013407

Report Date:

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery		overy nits RI	PD Qual	RPD Limits
General Chemistry - Westbo	rough Lab Asso	ciated samp	le(s): 02,04	QC Batch I	D: WG4	30178-3	QC Sample: L	1013407-02	Client ID	: SHM-1	0-11-U
Nitrogen, Nitrite	ND	0.1	0,10	100		9	*	85-	115		20
General Chemistry - Westbo	rough Lab Asso	ciated samp	le(s): 02,04	QC Batch I	D: WG4	30360-3	QC Sample: L	1013407-04	Client ID	: SHM-1	0-12-U
Nitrogen, Ammonia	3.70	4	7.60	98		*	4	80-	120		20
Anions by Ion Chromatograp Client ID: SHM-10-11-U	ohy - Westborou	gh Lab Asso	ciated sam	ple(s): 02,04	QC Bat	tch ID: W	G430376-3 WG	430376-4 C	(C Sample	e: L10134	07-02
Chloride	24	4	27	75		27	75	40-	151	0	18
Nitrogen, Nitrate	ND	0.4	0.42	105		0.43	108	80-	122	2	15
Sulfate	19	8	27	100		27	100	60-	140	0	20
General Chemistry - Westbo	rough Lab Asso	ciated sample	le(s): 02,04	QC Batch 1	D: WG4:	30540-3	QC Sample: L	1013407-04	Client ID	: SHM-1	0-12-U
Alkalinity, Total	240	100	300	57	Q	2		86-	116		4
General Chemistry - Westbo	rough Lab Asso	ciated sampl	le(s): 02,04	QC Batch I	D: WG4	30659-3	QC Sample: L	1013407-04	Client ID	: SHM-1	0-12-U
Chemical Oxygen Demand	31	238	290	110			*	80-	120		20
General Chemistry - Westbo	rough Lab Asso	ciated sample	le(s): 02,04	QC Batch I	D: WG4:	30849-3	QC Sample: L	1013407-04	Client ID	: SHM-1	0-12-U
Sulfide	ND	0.24	0.18	75			*	75-	125		20
General Chemistry - Westbo	rough Lab Asso	ciated sampl	e(s): 02,04	QC Batch I	D: WG43	31003-3	QC Sample: L	1013407-02	Client ID	: SHM-1	0-11-U
Dissolved Organic Carbon	3.3	4	7.6	108		y		79-	120		20

Lab Duplicate Analysis Batch Quality Control

Project Name:

SHL TASK 0002

Project Number: AC001

Lab Number:

L1013407

Report Date:

Parameter	. Nat	ive Sam	ple [Ouplicate Samp	ole Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab	Associated sample(s):	02,04	QC Batch ID:	WG430178-4	QC Sample:	L1013407-02	Client ID:	SHM-10-11-U
Nitrogen, Nitrite	-	ND		ND	mg/l	NC		20
General Chemistry - Westborough Lab	Associated sample(s):	02,04	QC Batch ID:	WG430360-4	QC Sample:	L1013407-04	Client ID:	SHM-10-12-U
Nitrogen, Ammonia	·.	3.70		3.67	mg/l	1		20
Anions by Ion Chromatography - Westb I0-11-U	oorough Lab Associated	d sample	e(s): 02,04 C	QC Batch ID: W	/G430376-5	QC Sample: L	1013407-0	2 Client ID: SHM-
Chloride	* .	24.		24	mg/l	0		18
Nitrogen, Nitrate		0.019J		0. 02 J	mg/l	NC		15
Sulfate		19.		19	mg/l	0		20
General Chemistry - Westborough Lab	Associated sample(s):	02,04	QC Batch ID:	WG430495-2	QC Sample:	L1013315-01	Client ID:	DUP Sample
Solids, Total Suspended		4000		4400	mg/l	10		32
General Chemistry - Westborough Lab	Associated sample(s):	02,04	QC Batch ID:	WG430540-4	QC Sample:	L1013407-04	Client ID:	SHM-10-12-U
Alkalinity, Total		240		250	mg CaCO3	3/L 4		4
General Chemistry - Westborough Lab	Associated sample(s):	02,04	QC Batch ID:	WG430659-4	QC Sample:	L1013407-04	Client ID:	SHM-10-12-U
Chemical Oxygen Demand		31.		36	mg/l	15		20
General Chemistry - Westborough Lab	Associated sample(s):	02,04	QC Batch ID:	WG430849-4	QC Sample:	L1013407-04	Client ID:	SHM-10-12-U
Sulfide		ND		ND	mg/l	NC		20
General Chemistry - Westborough Lab	Associated sample(s):	02,04	QC Batch ID:	WG431003-4	QC Sample:	L1013407-04	Client ID:	SHM-10-12-U
Dissolved Organic Carbon		4.1		4.3	mg/l	5		20

Serial_No:09091015:28

Project Name: SHL TASK 0002

Lab Number: L1013407 Project Number: AC001 Report Date: 09/09/10

Sample Receipt and Container Information

Were project specific reporting limits specified?

YES

Reagent H2O Preserved Vials Frozen on: NA

Cooler Information Custody Seal

Cooler

Present/Intact A

Container Info	rmation			Temp			
Container ID	Container Type	Cooler	pH	deg C	Pres	Seal	Analysis(*)
L1013407-01A	Plastic 250ml HNO3 preserved	A	<2	3.0	Y	Present/Intact	DOD-BA-6020S(180),DOD-FE-6020S(180),DOD-MG-6020S(180),DOD-MG-6020S(180),DOD-CR-6020S(180),DOD-MN-6020S(180),DOD-TL-6020S(180),DOD-CO-6020S(180),DOD-AG-6020S(180),DOD-AG-6020S(180),DOD-NA-6020S(180),DOD-NI-6020S(180),DOD-PB-6020S(180),DOD-PB-6020S(180),DOD-CD-6020S(180),DOD-BE-6020S(180),DOD-BE-6020S(180),DOD-CD-6020S(180),DOD-CD-6020S(180),DOD-CD-6020S(180),DOD-CN-6020S(180),DOD-CN-6020S(180),DOD-CN-6020S(180),DOD-CN-6020S(180),DOD-SE-6020S(180),DOD-SE-6020S(180),DOD-SE-6020S(180),DOD-SE-6020S(180),DOD-SE-6020S(180),DOD-SE-6020S(180),DOD-SE-6020S(180),DOD-SE-6020S(180),DOD-SE-6020S(180),DOD-SE-6020S(180),DOD-SE-6020S(180),DOD-SE-6020S(180),DOD-HG-7470S(28)
L1013407-01B	Plastic 250ml HNO3 preserved	A	<2	3.0	Υ	Present/Intact	DOD-BA-6020S(180),DOD-FE- 6020S(180),DOD-MG- 6020S(180),DOD-SB- 6020S(180),DOD-CR- 6020S(180),DOD-MN- 6020S(180),DOD-TL-
							6020S(180),DOD-CQ- 6020S(180),DOD-AG- 6020S(180),DOD-CA- 6020S(180),DOD-NA- 6020S(180),DOD-NI- 6020S(180),DOD-PB- 6020S(180),DOD-AS- 6020S(180),DOD-CD- 6020S(180),DOD-CD- 6020S(180),DOD-CU- 6020S(180),DOD-ZN- 6020S(180),DOD-AL- 6020S(180),DOD-AL- 6020S(180),DOD-K- 6020S(180),DOD-K- 6020S(180),DOD-K- 6020S(180),DOD-K- 6020S(180),DOD-HG-7470S(28)
L1013407-02A	Vial H2SO4 preserved split	Α	N/A	3.0	Y	Present/Intact	DOC-5310(28)

Project Name: SHL TASK 0002

Project Number: AC001

Lab Number: L1013407 Report Date: 09/09/10

Container Info	ermation			Temp			
Container ID	Container Type	Cooler	рН	The second secon	Pres	Seal	Analysis(*)
L1013407-02B	Vial H2SO4 preserved split	Α	N/A	3.0	Y	Present/Intact	DOC-5310(28)
L1013407-02C	Plastic 250ml unpreserved	A	N/A	3.0	Y	Present/Intact	ALK-T-2320(14)
L1013407-02D	Plastic 250ml unpreserved	Α	6	3.0	Y	Present/Intact	NO2-4500NO2(2)
L1013407-02E	Plastic 250ml Zn Acetate/NaOH pr	Α	>12	3.0	Y	Present/Intact	SULFIDE-4500(7)
L1013407-02F	Plastic 250ml Zn Acetate/NaOH pr	Α	>12	3.0	Y	Present/Intact	SULFIDE-4500(7)
L1013407-02G	Plastic 250ml Zn Acetate/NaOH pr	Α	>12	3.0	Y	Present/Intact	SULFIDE-4500(7)
L1013407-02H	Plastic 500ml HNO3 preserved	A	<2	3.0	Y	Present/Intact	DOD-CD-6020T(180),DOD-NA-6020T(180),DOD-V-6020T(180),DOD-NI-6020T(180),DOD-SE-6020T(180),DOD-TL-6020T(180),DOD-TL-6020T(180),DOD-CA-6020T(180),DOD-CA-6020T(180),DOD-HG-7470T(28),DOD-SB-6020T(180),DOD-AG-6020T(180),DOD-AG-6020T(180),DOD-AS-6020T(180),DOD-BA-6020T(180),DOD-BA-6020T(180),DOD-K-6020T(180),DOD-K-6020T(180),DOD-K-6020T(180),DOD-BE-6020T(180),DOD-BE-6020T(180),DOD-BE-6020T(180),DOD-FE-6020T(180),DOD-FE-6020T(180),DOD-FE-6020T(180),DOD-PB-6020T(180),DOD-PB-6020T(180),DOD-PB-6020T(180),DOD-PB-6020T(180),DOD-PB-6020T(180),DOD-PB-6020T(180),DOD-PB-6020T(180),DOD-PB-6020T(180),DOD-PB-6020T(180),DOD-PB-6020T(180),DOD-PB-6020T(180)
L1013407-02I	Plastic 500ml HNO3 preserved	A	<2	3.0	Y	Present/Intact	DOD-CD-6020T (180), DOD-NA-6020T (180), DOD-V-6020T (180), DOD-ZN-6020T (180), DOD-NI-6020T (180), DOD-SE-6020T (180), DOD-TL-6020T (180), DOD-CA-6020T (180), DOD-CA-6020T (180), DOD-CO-6020T (180), DOD-MN-6020T (180), DOD-HG-
		7,7	3		12,00	65	7470T(28),DOD-SB- 6020T(180),DOD-AG- 6020T(180),DOD-AL- 6020T(180),DOD-BA- 6020T(180),DOD-BA- 6020T(180),DOD-CR- 6020T(180),DOD-K- 6020T(180),DOD-MG- 6020T(180),DOD-MG- 6020T(180),DOD-FE- 6020T(180),DOD-FE- 6020T(180),DOD-PB- 6020T(180),DOD-PB- 6020T(180)
L1013407-02J	Plastic 500ml unpreserved	A	6	3,0	Υ	Present/Intact	SO4-300(28),CL-300(28),NO3-300(2)
L1013407-02K	Plastic 500ml H2SO4 preserved	Α	<2	3.0	Y	Present/Intact	COD-410(28),NH3-4500(28)
L1013407-02L	Plastic 1000ml unpreserved	Α	6	3.0	Y	Present/Intact	TSS-2540(7)

Project Name: SHL TASK 0002

Project Number: AC001

Lab Number: L1013407 **Report Date**: 09/09/10

Container Info	rmation			Temp			
Container ID	Container Type	Cooler	рΗ	deg C	Pres	Seal	Analysis(*)
L1013407-02X	Amber 250ml unpreserved	Α	6	3.0	Y	Present/Intact	DOC-5310(28)
L1013407-03A	Plastic 250ml HNO3 preserved	A	<2	3.0	Y	Present/Intact	DOD-BA-6020S(180),DOD-FE-6020S(180),DOD-MG-6020S(180),DOD-MG-6020S(180),DOD-CR-6020S(180),DOD-MN-6020S(180),DOD-TL-6020S(180),DOD-AG-6020S(180),DOD-AG-6020S(180),DOD-NA-6020S(180),DOD-NA-6020S(180),DOD-PB-6020S(180),DOD-PB-6020S(180),DOD-CD-6020S(180),DOD-CD-6020S(180),DOD-CD-6020S(180),DOD-CD-6020S(180),DOD-CD-6020S(180),DOD-CD-6020S(180),DOD-CU-6020S(180),DOD-AL-6020S(180),DOD-AL-6020S(180),DOD-AL-6020S(180),DOD-AL-6020S(180),DOD-AL-6020S(180),DOD-SE-6020S(180),DOD-SE-6020S(180),DOD-BE-6020S(180),DOD-SE-6020S(180),DOD-SE-6020S(180),DOD-BE-6020S(180),DOD-BE-6020S(180),DOD-SE-6020S(180),DOD-BE-6020S
L1013407-04A	Vial H2SO4 preserved split	Α	N/A	3.0	Y	Present/Intact	DOC-5310(28)
L1013407-04B	Vial H2SO4 preserved split	Α	N/A	3.0	Y	Present/Intact	DOC-5310(28)
L1013407-04C	Plastic 250ml unpreserved	Α	N/A	3.0	Y	Present/Intact	ALK-T-2320(14)
L1013407-04D	Plastic 250ml unpreserved	Α	6	3.0	Y	Present/Intact	NO2-4500NO2(2)
L1013407-04E	Plastic 250ml Zn Acetate/NaOH pr	Α	>12	30	Y	Present/Intact	SULFIDE-4500(7)
L1013407-04F	Plastic 250ml Zn Acetate/NaOH pr	Α	>12	3.0	Y	Present/Intact	SULFIDE-4500(7)
L1013407-04G	Plastic 250ml Zn Acetate/NaOH pr	Α	>12	3.0	Y	Present/Intact	SULFIDE-4500(7)
L1013407-04H	Plastic 500ml HNO3 preserved	A	<2	3.0	Υ	Present/Intact	DOD-CD-6020T(180),DOD-NA-6020T(180),DOD-V-6020T(180),DOD-ZN-6020T(180),DOD-NI-6020T(180),DOD-SE-6020T(180),DOD-TL-6020T(180),DOD-CA-6020T(180),DOD-CA-6020T(180),DOD-CO-6020T(180),DOD-MN-
		- <u>-</u> ù					6020T(180),DOD-HG- 7470T(28),DOD-SB- 6020T(180),DOD-AG- 6020T(180),DOD-AL- 6020T(180),DOD-AS- 6020T(180),DOD-BA- 6020T(180),DOD-CR- 6020T(180),DOD-K- 6020T(180),DOD-BE- 6020T(180),DOD-MG- 6020T(180),DOD-FE- 6020T(180),DOD-PB- 6020T(180),DOD-PB- 6020T(180),DOD-PB- 6020T(180),DOD-PB-
L1013407-04I	Plastic 500ml unpreserved	Α	6	3.0	Y	Present/Intact	SO4-300(28),CL-300(28),NO3- 300(2)

Project Name: SHL TASK 0002

Project Number: AC001

Lab Number: L1013407 Report Date: 09/09/10

Container Info	ormation			Temp			
Container ID	Container Type	Cooler	рН	2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Pres	Seal	Analysis(*)
L1013407-04J	Plastic 500ml H2SO4 preserved	Α	<2	3.0	Y	Present/Intact	COD-410(28),NH3-4500(28)
L1013407-04K	Plastic 1000ml unpreserved	Α	6	3,0	Y	Present/Intact	TSS-2540(7)
L1013407-04X	Amber 250ml unpreserved	Α	6	3.0	Y	Present/Intact	DOC-5310(28)
L1013407-05A	Plastic 250ml HNO3 preserved	A	<2	3.0	Y	Present/Intact	DOD-BA-6020S(180),DOD-FE-6020S(180),DOD-MG-6020S(180),DOD-SB-6020S(180),DOD-CR-6020S(180),DOD-MN-6020S(180),DOD-TL-6020S(180),DOD-CD-6020S(180),DOD-CA-6020S(180),DOD-NA-6020S(180),DOD-NA-6020S(180),DOD-NB-6020S(180),DOD-PB-6020S(180),DOD-PB-6020S(180),DOD-CD-6020S(180),DOD-CD-6020S(180),DOD-CD-6020S(180),DOD-CD-6020S(180),DOD-CD-6020S(180),DOD-CD-6020S(180),DOD-CU-6020S(180),DOD-CU-6020S(180),DOD-AL-6020S(180),DOD-K-6020S(180),DOD-K-6020S(180),DOD-K-6020S(180),DOD-SE-6020S(180),DOD-SE-6020S(180),DOD-SE-6020S(180),DOD-SE-6020S(180),DOD-HG-7470S(28)
L1013407-06A	Plastic 500ml HNO3 preserved	A	<2	3.0	Y	Present/Intact	DOD-CD-6020T(180),DOD-NA-6020T(180),DOD-V-6020T(180),DOD-ZN-6020T(180),DOD-NI-6020T(180),DOD-NI-6020T(180),DOD-CA-6020T(180),DOD-CA-6020T(180),DOD-MN-6020T(180),DOD-HG-7470T(28),DOD-HG-7470T(28),DOD-AG-6020T(180),DOD-AG-6020T(180),DOD-AS-6020T(180),DOD-AS-6020T(180),DOD-BA-6020T(180),DOD-BA-6020T(180),DOD-BA-6020T(180),DOD-CR-6020T(180),DOD-CR-6020T(180),DOD-CR-6020T(180),DOD-CR-6020T(180),DOD-K-
6.	E 200 - 2			े अबने हो	* *	43.8	6020T(180),DOD-BE- 6020T(180),DOD-MG- 6020T(180),DOD-FE- 6020T(180),DOD-CU- 6020T(180),DOD-PB- 6020T(180)

Serial_No:09091015:28

Project Name: SHL TASK 0002

Project Number: AC001

Lab Number: L1013407

Report Date: 09/09/10

Container Info	rmation			Temp			
Container ID	Container Type	Cooler	рН	deg C	Pres	Seal	Analysis(*)
L1013407-07A	Plastic 500ml HNO3 preserved	A	<2	3.0	Y	Present/Intact	DOD-CD-6020T(180),DOD-NA-6020T(180),DOD-V-6020T(180),DOD-V-6020T(180),DOD-NI-6020T(180),DOD-SE-6020T(180),DOD-TL-6020T(180),DOD-CA-6020T(180),DOD-CO-6020T(180),DOD-MN-6020T(180),DOD-MS-6020T(180),DOD-AG-6020T(180),DOD-AG-6020T(180),DOD-AL-6020T(180),DOD-AS-6020T(180),DOD-BA-6020T(180),DOD-CR-6020T(180),DOD-K-6020T(180),DOD-K-6020T(180),DOD-K-6020T(180),DOD-K-6020T(180),DOD-K-6020T(180),DOD-K-6020T(180),DOD-K-6020T(180),DOD-FE-6020T(180),DOD-FE-6020T(180),DOD-FE-6020T(180),DOD-PB-6020T(180),DOD-PB-6020T(180),DOD-PB-6020T(180),DOD-PB-6020T(180),DOD-PB-6020T(180),DOD-PB-6020T(180),DOD-PB-6020T(180),DOD-PB-6020T(180),DOD-PB-6020T(180),DOD-PB-6020T(180),DOD-PB-6020T(180),DOD-PB-6020T(180),DOD-PB-6020T(180)

Container Comments

L1013407-02A

L1013407-02B

L1013407-04A

L1013407-04B

Project Name:

SHL TASK 0002

Lab Number:

L1013407

Project Number:

AC001

Report Date:

09/09/10

GLOSSARY

Acconymis

EPA Environmental Protection Agency.

 Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LCSD - Laboratory Control Sample Duplicate: Refer to LCS.

MDL • Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

 MS - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.

MSD - Matrix Spike Sample Duplicate: Refer to MS.

NA - Not Applicable.

 NC -Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.

NI - Not Ignitable.

Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration.
 The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to
assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD).
 Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the
absolute difference between the values; although the RPD value will be provided in the report.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Data Qualifiers

- A Spectra identified as "Aldol Condensation Product".
- The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than five times (5x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank.
- Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- The RPD between the results for the two columns exceeds the method-specified criterin; however, the lower value has been reported due to obvious interference.
- P The RPD between the results for the two columns exceeds the method-specified criteria.
- •The quality control sample exceeds the associated acceptance criteria. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R Analytical results are from sample re-analysis.

Report Format:

DU Report with "J" Qualifiers

Project Name: SHL TASK 0002 Lab Number: L1013407

Project Number: AC001 Report Date: 09/09/10

Data Qualifiers

RE Analytical results are from sample re-extraction.

 Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL). This represents an estimated concentration for Tentatively Identified Compounds (TICs).

ND Not detected at the method detection limit (MDL) for the sample.

Report Format: DU Report with "J" Qualifiers

Project Name:

SHL TASK 0002

Lab Number:

L1013407

Project Number:

AC001

Report Date:

09/09/10

REFERENCES

Test Methods for Evaluating Solid Waste: Physical/Chemical Methods, EPA SW-846. Third Edition. Updates I - IIIA, 1997.

- 30 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WPCF. 18th Edition. 1992.
- 44 Methods for the Determination of Inorganic Substances in Environmental Samples, EPA/600/R-93/100, August 1993.

The analyses performed on the sample(s) within this report are in accordance with the minimum established guidelines set forth in the Department of Defense Quality Systems Manual, Version 4.1, issued April 22, 2009

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Certificate/Approval Program Summary

Last revised July 19, 2010 - Westboro Facility

The following list includes only those analytes/methods for which certification/approval is currently held.

For a complete listing of analytes for the referenced methods, please contact your Alpha Customer Service Representative.

Connecticut Department of Public Health Certificate/Lab ID: PH-0574. NELAP Accredited Solid Waste/Soil.

Drinking Water (Inorganic Parameters: Color, pH, Turbidity, Conductivity, Alkalinity, Chloride, Free Residual Chlorine, Fluoride, Calcium Hardness, Sulfate, Nitrate, Nitrite, Aluminum, Antimony, Arsenic, Barium, Beryllium, Cadmium, Calcium, Chromium, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Vanadium, Zinc, Total Dissolved Solids, Total Organic Carbon, Total Cyanide, Perchlorate, Organic Parameters: Volatile Organics 524.2, Total Trihalomethanes 524.2, 1,2-Dibromo-3-chloropropane (DBCP), Ethylene Dibromide (EDB), 1,4-Dioxane (Mod 8270). Microbiology Parameters: Total Coliform-MF mEndo (SM9222B), Total Coliform – Colilert (SM9223 P/A), E. Coli. – Colilert (SM9223 P/A), HPC – Pour Plate (SM9215B), Fecal Coliform – MF m-FC (SM9222D))

Wastewater/Non-Potable Water (Inorganic Parameters: Color, pH, Conductivity, Acidity, Alkalinity, Chloride, Total Residual Chlorine, Fluoride, Total Hardness, Silica, Sulfate, Sulfide, Ammonia, Kjeldahl Nitrogen, Nitrate, Nitrite, O-Phosphate, Total Phosphorus, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Strontium, Thallium, Tin, Titanium, Vanadium, Zinc, Total Residue (Solids), Total Dissolved Solids, Total Suspended Solids (non-filterable), BOD, CBOD, COD, TOC, Total Cyanide, Phenolics, Foaming Agents (MBAS), Bromide, Oil and Grease. Organic Parameters: PCBs, Organochlorine Pesticides, Technical Chlordane, Toxaphene, 2,4-D, 2,4,5-TP(Silvex), Acid Extractables (Phenols), Benzidines, Phthalate Esters, Nitrosamines, Nitroaromatics & Isophorone, Polynuclear Aromatic Hydrocarbons, Haloethers, Chlorinated Hydrocarbons, Volatile Organics, TPH (HEM/SGT), Extractable Petroleum Hydrocarbons (ETPH), MA-EPH, MA-VPH. Microbiology Parameters: Total Coliform – MF mEndo (SM9222B), Total Coliform – MTF (SM9221B), HPC – Pour Plate (SM9215B), Fecal Coliform – A-1 Broth (SM9221E).)

Solid Waste/Soil (Inorganic Parameters: pH, Sulfide, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Tin, Vanadium, Zinc, Total Cyanide, Ignitability, Phenolics, Corrosivity, TCLP Leach (1311), SPLP Leach (1312 metals only), Reactivity, Organic Parameters: PCBs, PCBs in Oil, Organic Pesticides, Technical Chlordane, Toxaphene, Extractable Petroleum Hydrocarbons (ETPH), MA-EPH, MA-VPH, Dicamba, 2,4-D, 2,4,5-T, 2,4,5-TP(Silvex), Volatile Organics, Acid Extractables (Phenols), 3,3'-Dichlorobenzidine, Phthalates, Nitrosamines, Nitroaromatics & Cyclic Ketones, PAHs. Haloethers, Chlorinated Hydrocarbons.)

Maine Department of Human Services Certificate/Lab ID: 2009024.

Drinking Water (Inorganic Parameters: SM9215B, 9222D, 9223B, EPA 180.1, 300.0, 353.2, SM2130B, 2320B, 4500Cl-D, 4500CN-C, 4500CN-E, 4500F-C, 4500H+B, 4500NO3-F, EPA 200.7, EPA 200.8, 245.1, EPA 300.0. Organic Parameters: 504.1, 524.2.)

Wastewater/Non-Potable Water (Inorganic Parameters: EPA 120.1, 1664A, 350.1, 351.1, 353.2, 410.4, 420.1, Lachat 10-107-06-1-B, SM2320B, 2340B, 2510B, 2540C, 2540D, 426C, 4500Cl-D, 4500Cl-E, 4500CN-C, 4500CN-E, 4500F-B, 4500F-C, 4500H+B, 4500Norg-B, 4500Norg-C, 4500NH3-B, 4500NH3-G, 4500NH3-H, 4500NO3-F, 4500P-B.5, 4500P-E, 5210B, 5220D, 5310C, EPA 200.7, 200.8, 245.1. Organic Parameters: 608, 624, ME DRO, ME GRO, MA EPH, MA VPH.)

Solid Waste/Soil (Organic Parameters: ME DRO, ME GRO, MA EPH, MA VPH.)

Massachusetts Department of Environmental Protection Certificate/Lab ID: M-MA086.

Drinking Water

Inorganic Parameters: (EPA 200.8 for: Sb,As,Ba,Be,Cd,Cr,Cu,Pb,Ni,Se,Tl)

(EPA 200.7 for: Ba,Be,Ca,Cd,Cr,Cu,Na,Ni) 245.1, (300.0 for: Nitrate-N, Fluoride, Sulfate)

353.2 for: Nitrate-N, Nitrite-N; SM4500NO3-F, 4500F-C, 4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, 2320B, SM2540C, SM4500H-B.

Organic Parameters: (EPA 524.2 for: Trihalomethanes, Volatile Organics)

(504.1 for: 1,2-Dibromoethane, 1,2-Dibromo-3-Chloropropane), 314.0, 332

Microbiology Parameters: SM9215B; ENZ. SUB. SM9223; MF-SM9222D

Non-Potable Water

Inorganic Parameters:, (EPA 200.8 for: Al,Sb,As,Be,Cd,Cr,Cu,Pb,Mn,Ni,Se,Ag,Tl,Zn)

(EPA 200.7 for: Al,Sb,As,Be,Cd,Cr,Co,Cu,Fe,Pb,Mn,Mo,Ni,Se,Ag,Sr,Ti,Tl, V,Zn,Ca,Mg,Na,K)

245.1, SM4500H,B, EPA 120.1, SM2510B, 2540C, 2540B, 2340B, 2320B, 4500CL-E, 4500F-BC, 426C, SM4500NH3-BH, (EPA 350.1 for: Ammonia-N), LACHAT 10-107-06-1-B for Ammonia-N, SM4500NO3-F, 353.2 for Nitrate-N, SM4500NH3-B,C-Titr, SM4500NH3-BC-NES, EPA 351.1, SM4500P-E, 4500P-B,E, 5220D, EPA 410.4, SM 5210B,

5310C, 4500CL-D, EPA 1664, SM14 510AC, EPA 420, SM4500-CN-CE, SM2540D.

Organic Parameters: (EPA 624 for Volatile Halocarbons, Volatile Aromatics)

(608 for: Chlordane, Aldrin, Dieldrin, DDD, DDE, DDT, Heptachlor, Heptachlor Epoxide, PCBs-Water), EPA 625 for SVOC Acid Extractables and SVOC Base/Neutral Extractables, 600/4-81-045-PCB-Oil

New Hampshire Department of Environmental Services Certificate/Lab ID: 200307. NELAP Accredited.

Drinking Water (Inorganic Parameters: SM6215B, 9222B, 9223B Colilert, EPA 200.7, 200.8, 245.2, 120.1, 300.0, 314.0, SM4500CN-E, 4500H+B, 4500NO3-F, 2320B, 2510B, 2540C, 4500F-C, 5310C, 2120B, EPA 331.0. Organic

Parameters: 504.1, 524.2, SM6251B.)

Non-Potable Water (Inorganic Parameters: SM9222D, 9221B, 9222B, 9221E-EC, EPA 200.7, 200.8, 245.1, 245.2, SW-846 6010B, 6020, 7196A, 7470A, SM3500-CR-D, EPA 120.1, 300.0, 350.1, 351.1, 353.2, 420.1, 1664A, SW-846 9010, 9030, 9040B, SM426C, SM2310B, 2540B, 2540D, 4500H+B, 4500NH3-H, 4500NH3-E, 4500NO2-B, 4500P-E, 4500-S2-D, 5210B, 2320B, 2540C, 4500F-C, 5310C, 5540C, LACHAT 10-117-07-1-B, LACHAT 10-107-06-1-B, LACHAT 10-107-06-1-J, LACHAT 10-117-07-1-A, SM4500CL-E, LACHAT 10-204-00-1-A, LACHAT 10-107-06-2-D. Organic Parameters: SW-846 3005A, 3015A, 3510C, 5030B, 8021B, 8260B, 8270C, 8330, EPA 624, 625, 608, SW-846 8082, 8081A.)

Solid & Chemical Materials (Inorganic Parameters: SW-846 6010B, 7196A, 7471A, 7.3.3.2, 7.3.4.2, 1010, 1030, 9010, 9012A, 9014, 9030B, 9040, 9045C, 9050C, 1311, 3005A, 3050B, 3051A. Organic Parameters: SW-846 3540C, 3545, 3580A, 5030B, 5035, 8021B, 8260B, 8270C, 8330, 8151A, 8082, 8081A.)

New Jersey Department of Environmental Protection Certificate/Lab ID: MA935. NELAP Accredited.

Drinking Water (Inorganic Parameters: SM9222B, 9221E, 9223B, 9215B, 4500NO3-F, 4500F-C, EPA 300.0, 200.7, 2540C, 2320B, 314.0, SM2120B, 2510B, 5310C, SM4500H-B, EPA 200.8, 245.2. Organic Parameters: 504.1,

SM6251B, 524.2.)

Non-Potable Water (Inorganic Parameters: SM5210B, EPA 410.4, SM5220D, 4500Cl-D, EPA 300.0, SM2120B, SM4500F-BC, EPA 200.7, 351.1, LACHAT 10-107-06-2-D, EPA 353.2, SM4500NO3-F, 4500NO2-B, EPA 1664A, SM5310B, C or D, 4500-PE, EPA 420.1, SM4500P-B5+E, 2540B, 2540C, 2540D, EPA 120.1, SM2510B, SM15 426C, SM9221CE, 9222D, 9221B, 9222B, 9215B, 2310B, 2320B, 4500NH3-H, 4500-S D, EPA 350.1, SM5210B, SW-846 3015, 6020, 7470A, 5540C, 4500H-B, EPA 200.8, SM3500Cr-D, EPA 245.1, 245.2, SW-846 9040B, 3005A, EPA 6010B, 7196A, SW-846 9010B, 9030B. Organic Parameters: SW-846 8260B, 8270C, 3510C, EPA 608, 624, 625, SW-846 5030B, 8021B, 8081A, 8082, 8151A, 8330, NJ OQA-QAM-025 Rev.7.)

Solid & Chemical Materials (Inorganic Parameters: SW-846 9040B, 3005A, 6010B, 7196A, 5030B, 9010B, 9030B, 1030, 1311, 3050B, 3051, 7471A, 9014, 9012A, 9045C, 9050A, 9065. Organic Parameters: SW-846 8021B, 8081A, 8082, 8151A, 8330, 8260B, 8270C, 1311, 1312, 3540C, 3545, 3550B, 3580A, 5035L, 5035H, NJ OQA-QAM-025 Rev. 7.)

New York Department of Health Certificate/Lab ID: 11148, NELAP Accredited.

Drinking Water (Inorganic Parameters: SM9223B, 9222B, 9215B, EPA 200.8, 200.7, 245.2, SM5310C, EPA 314.0, 332.0, SM2320B, EPA 300.0, SM2120B, 4500CN-E, 4500F-C, 4500H-B, 4500NO3-F, 2540C, EPA 120.1, SM 2510B.

Organic Parameters: EPA 524.2, 504.1.)

Non-Potable Water (Inorganic Parameters: SM9221E, 9222D, 9221B, 9222B, 9215B, 5210B, EPA 410.4, SM5220D, 2310B-4a, 2320B, EPA 200.7, 300.0, LACHAT 10-117-07-1A or B, SM4500CI-E, 4500F-C, SM15 426C, EPA 350.1, LACHAT 10-107-06-1-B, SM4500NH3-H, EPA 351.1, LACHAT 10-107-06-2, EPA 353.2, LACHAT 10-107-041-C, SM4500-NO3-F, 4500-NO2-B, 4500P-E, 2540C, 2540B, 2540D, EPA 200.8, EPA 6010B, 6020, EPA 7196A, S\M3500Cr-D, EPA 245.1, 245.2, 7470A, SM2120B, SM4500-CN-E LACHAT 10-204-00-1-A, EPA 9040B, SM4500-HB, EPA 1664A, SM5310C, EPA 420.1, SM14 510C, EPA 120.1, SM2510B, SM4500S-D, SM5540C, EPA 3005A, 3015. Organic Parameters: EPA 624, 8260B, 8270C, 625, 608, 8081A, 8151A, 8330, 8082, EPA 3510C, 5030B, 9010B, 9030B.)

Solid & Hazardous Waste (Inorganic Parameters: 1010, 1030, SW-846 Ch 7 Sec 7.3, EPA 6010B, 7196A, 7471A, 9012A, 9014, 9040B, 9045C, 9065, 9050, EPA 1311, 1312, 3005A, 3050B, 9010B, 9030B. Organic Parameters: EPA 8260B, 8270C, 8081A, 8151A, 8330, 8082, 3540C, 3545, 3546, 3580, 5030B, 5035.)

North Carolina Department of the Environment and Natural Resources Certificate/Lab ID: 666, Organic Parameters: MA-EPH, MA-VPH.

Pennsylvania Department of Environmental Protection <u>Certificate/Lab ID</u>: 68-03671. *NELAP Accredited. Non-Potable Water* (<u>Organic Parameters</u>: EPA 3510C, 5030B, 625, 624, 608, 8081A, 8082, 8151A, 8260B, 8270C, 8330)

Solid & Hazardous Waste (Inorganic Parameters: EPA 1010, 1030, 1311, 3050B, 3051, 6010B, EPA 7.3.3.2, EPA 7.3.4.2, 7196A, 7471A, 9010B, 9012A, 9014, 9040B, 9045C, 9050, 9065. Organic Parameters: 3540C, 3545, 3580A, 5035, 8021B, 8081A, 8082, 8151A, 8260B, 8270C, 8330)

Rhode Island Department of Health Certificate/Lab ID: LAO00065. NELAP Accredited via NY-DOH.

Refer to MA-DEP Certificate for Potable and Non-Potable Water.

Refer to NY-DOH Certificate for Potable and Non-Potable Water.

Texas Commisson on Environmental Quality <u>Certificate/Lab ID</u>: T104704476-09-1. *NELAP Accredited*. *Non-Potable Water* (<u>Inorganic Parameters</u>: EPA 120.1, 1664, 200.7, 200.8, 245.1, 245.2, 300.0, 350.1, 351.1, 353.2, 376.2, 410.4, 420.1, 6010, 6020, 7196, 7470, 9040, SM 2120B, 2310B, 2320B, 2510B, 2540B, 2540C, 2540D, 426C, 4500CL-E, 4500CN-E, 4500F-C, 4500H+B, 4500NH3-H, 4500NO2B, 4500P-E, 4500 S2⁻D, 510C, 5210B, 5220D, 5310C, 5540C. <u>Organic Parameters</u>: EPA 608, 624, 625, 8081, 8082, 8151, 8260, 8270, 8330.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 1311, 1312, 9012, 9014, 9040, 9045, 9050, 9065.)

Department of Defense Certificate/Lab ID: L2217.

Drinking Water (Inorganic Parameters: SM 4500H-B. Organic Parameters: EPA 524.2, 504.1.)

Non-Potable Water (Inorganic Parameters: EPA 200.7, 200.8, 6010B, 6020, 245.1, 245.2, 7470A, 9040B, 300.0, 9251, 9038, 350.1, 353.2, 351.1, 120.1, 9050A, 410.4, 9060, 1664, 420.1, LACHAT 10-107-06-1-B, SM 4500CN-E, 4500H-B, 4500CL-E, 4500F-BC, 4500SO4-E, 426C, 4500NH3-B, 4500NH3-H, 4500NO3-F, 4500NO2-B, 4500Norg-C, 4500PE, 2510B, 5540C, 5220D, 5310C, 2540B, 2540C, 2540D, 510C, 4500S2-AD, 3005A, 3015, 9010B, 9030B. Organic Parameters: EPA 8260B, 8270C, 8330, 625, 8082, 8151A, 8081A, 3510C, 5030B, MassDEP EPH, MassDEP VPH.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 200.7, 6010B, 7471A, 9040B, 9045C, 9065, 420.1, 9012A, 6860, 1311, 1312, 3050B, 9030B, 3051, 9010B, 3540C, SM 510ABC, 4500CN-CE, 2540G, SW-846 7.3, Organic Parameters: EPA 8260B, 8270C, 8330, 8082, 8081A, 8151A, 3545, 3546, 3580, 5035, MassDEP EPH, MassDEP VPH.)

Analytes Not Accredited by NELAP

Certification is not available by NELAP for the following analytes: **EPA 8260B:** Freon-113, 1,2,4,5-Tetramethylbenzene, 4-Ethyltoluene. **EPA 8330A:** PETN, Picric Acid, Nitroglycerine, 2,6-DANT, 2,4-DANT. **EPA 8270C:** Methyl naphthalene, Dimethyl naphthalene, Total Methylnaphthalenes, Total Dimethylnaphthalenes, 1,4-Diphenylhydrazine (Azobenzene). **EPA 625:** 4-Chloroaniline. **EPA 350.1** for Ammonia in a Soil matrix.

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WESTBORO, MA	MANSFIELD, MA	Project	Informa	tion			R	epor	t Info	rma	tion	- Dat	a De	ivera	bles		ng Information	
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Mansfle	Id MA UZOYE	ALPHA C	Quote #:								-		-	-101			SONABLE CONFIDENCE PR	ото
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ANALYTICAL REPORT

Lab Number:

L1013411

Client:

Sovereign Consulting

905B South Main Street

Mansfield, MA 02048

ATTN:

Phil McBain

Phone:

(508) 339-3200

Project Name:

SHL TASK 0002

Project Number:

AC001

Report Date:

09/08/10

Certifications & Approvals: MA (M-MA086), NY NELAC (11148), CT (PH-0574), NH (2003), NJ (MA935), RI (LAO00065), ME (MA0086), PA (Registration #68-03671), USDA (Permit #S-72578), US Army Corps of Engineers, Naval FESC.

Eight Walkup Drive, Westborough, MA 01581-1019 508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com

Project Name:

SHL TASK 0002

Project Number:

AC001

Lab Number:

L1013411

Report Date:

09/08/10

 Alpha Sample ID
 Collection Date/Time

 L1013411-01
 SHM-10-11-U
 DEVENS, MA
 08/30/10 11:20

 L1013411-02
 SHM-10-12-U
 DEVENS, MA
 08/30/10 15:00

Project Name:

SHL TASK 0002

Project Number: AC001

Lab Number:

L1013411

Report Date:

09/08/10

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet all of the requirements of NELAC, for all NELAC accredited parameters. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

For additional information, please contact Client Services at 800-624-9220.

Report Submission

This report contains the results for the Dissolved Inorganic Carbon analysis. The results for all other analyses will be issued under separate cover.

Dissolved Inorganic Carbon

L1013411-01 and -02 have elevated detection limits due to the dilutions required by the elevated concentrations present in the samples.

A matrix spike could not be performed due to insufficient sample volume available for analysis.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:

Michelle M. Morris

Title: Technical Director/Representative

Date: 09/08/10

INORGANICS & MISCELLANEOUS



08/30/10 11:20

Lab Number:

Project Name: SHL TASK 0002

L1013411 Project Number: AC001 **Report Date:** 09/08/10

SAMPLE RESULTS

Date Collected: Lab ID: L1013411-01 SHM-10-11-U Date Received: Client ID:

08/30/10 DEVENS, MA Not Specified Sample Location: Field Prep:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry										
Dissolved Inorganic Carbon	62		mg/l	20		20	08/30/10 19:30	09/08/10 09:51	30,5310C(M)	DW

Project Name:

SHL TASK 0002

Lab Number:

L1013411

Project Number: AC001

Report Date:

09/08/10

SAMPLE RESULTS

Lab ID:

L1013411-02

Client ID:

SHM-10-12-U DEVENS, MA

Sample Location: Matrix:

Water

Date Collected:

08/30/10 15:00

Date Received:

08/30/10

Field Prep:

Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry										
Dissolved Inorganic Carbon	110		mg/l	20		20	08/30/10 19:30	09/08/10 09:51	30,5310C(M)	DW

Project Name:

SHL TASK 0002

Lab Number:

L1013411

Project Number: AC001

Report Date:

09/08/10

Method Blank Analysis Batch Quality Control

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry for sa	mple(s): 01-02 Bato	h: WG43	1416-1						
Dissolved Inorganic Carbon	ND	mg/l	1.0		1	08/30/10 19:30	09/08/10 09:51	30,5310C(M)	DW

Lab Number:

L1013411

Report Date:

09/08/10

Project Number:

Project Name:

AC001

SHL TASK 0002

LCS. LCSD %Recovery **Parameter** %Recovery %Recovery Limits RPD **RPD Limits** Qual Qual Qual

Associated sample(s): 01-02 Batch: WG431416-2

Dissolved Inorganic Carbon

110

Lab Duplicate Analysis
Batch Quality Control

Lab Number:

L1013411

Report Date:

09/08/10

Parameter	Nat	ive Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Associated sample(s): 01-02	QC Batch ID: WG431416-3	QC Sample: L1	013411-01 Client ID: SF	IM-10-11-U			
Dissolved Inorganic Carbon		62	68	mg/l	9		

Project Name:

Project Number: AC001

SHL TASK 0002

Certificate/Approval Program Summary

Last revised July 19, 2010 - Westboro Facility

The following list includes only those analytes/methods for which certification/approval is currently held.

For a complete listing of analytes for the referenced methods, please contact your Alpha Customer Service Representative.

Connecticut Department of Public Health Certificale/Lab ID: PH-0574, NELAP Accredited Solid Waste/Soil.

Drinking Water (Inorganic Parameters: Color, pH, Turbidity, Conductivity, Alkalinity, Chloride, Free Residual Chlorine, Fluoride, Calcium Hardness, Sulfate, Nitrate, Nitrite, Aluminum, Antimony, Arsenic, Barium, Beryllium, Cadmium, Calcium, Chromium, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Vanadium, Zinc, Total Dissolved Solids, Total Organic Carbon, Total Cyanide, Perchlorate.

Organic Parameters: Volatile Organics 524.2, Total Trihalomethanes 524.2, 1,2-Dibromo-3-chloropropane (DBCP), Ethylene Dibromide (EDB), 1,4-Dioxane (Mod 8270). Microbiology Parameters: Total Coliform-MF mEndo (SM9222B), Total Coliform – Colilert (SM9223 P/A), E. Coli. – Colilert (SM9223 P/A), HPC – Pour Plate (SM9215B), Fecal Coliform – MF m-FC (SM9222D))

Wastewater/Non-Potable Water (Inorganic Parameters: Color, pH, Conductivity, Acidity, Alkalinity, Chloride, Total Residual Chlorine, Fluoride, Total Hardness, Silica, Sulfate, Sulfide, Ammonia, Kjeldahl Nitrogen, Nitrate, Nitrite, O-Phosphate, Total Phosphorus, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Strontium, Thallium, Tin, Titanium, Vanadium, Zinc, Total Residue (Solids), Total Dissolved Solids, Total Suspended Solids (non-filterable), BOD, CBOD, COD, TOC, Total Cyanide, Phenolics, Foaming Agents (MBAS), Bromide, Oil and Grease. Organic Parameters: PCBs, Organochlorine Pesticides, Technical Chlordane, Toxaphene, 2,4-D, 2,4,5-T, 2,4,5-TP(Silvex), Acid Extractables (Phenols), Benzidines, Phthalate Esters, Nitrosamines, Nitroaromatics & Isophorone, Polynuclear Aromatic Hydrocarbons, Haloethers, Chlorinated Hydrocarbons, Volatile Organics, TPH (HEM/SGT), Extractable Petroleum Hydrocarbons (ETPH), MA-EPH, MA-VPH, Microbiology Parameters: Total Coliform – MF mEndo (SM9222B), Total Coliform – MTF (SM9221B), HPC – Pour Plate (SM9215B), Fecal Coliform – MF m-FC (SM9222D), Fecal Coliform – A-1 Broth (SM9221E).)

Solid Waste/Soil (Inorganic Parameters: pH, Sulfide, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Tin, Vanadium, Zinc, Total Cyanide, Ignitability, Phenolics, Corrosivity, TCLP Leach (1311), SPLP Leach (1312 metals only), Reactivity, Organic Parameters: PCBs, PCBs in Oil, Organochlorine Pesticides, Technical Chlordane, Toxaphene, Extractable Petroleum Hydrocarbons (ETPH), MA-EPH, MA-VPH, Dicamba, 2,4-D, 2,4,5-T, 2,4,5-TP(Silvex), Volatile Organics, Acid Extractables (Phenols), 3.3'-Dichlorobenzidine, Phthalates, Nitrosamines, Nitroaromatics & Cyclic Ketones, PAHs, Haloethers, Chlorinated Hydrocarbons.)

Maine Department of Human Services Certificate/Lab ID: 2009024.

Drinking Water (Inorganic Parameters: SM9215B, 9222D, 9223B, EPA 180.1, 300.0, 353.2, SM2130B, 2320B, 4500Cl-D, 4500CN-C, 4500CN-E, 4500F-C, 4500H+B, 4500NO3-F, EPA 200.7, EPA 200.8, 245.1, EPA 300.0. Organic Parameters: 504.1, 524.2.)

Wastewater/Non-Potable Water (Inorganic Parameters: EPA 120.1, 1664A, 350.1, 351.1, 353.2, 410.4, 420.1, Lachat 10-107-06-1-B, SM2320B, 2340B, 2510B, 2540C, 2540D, 426C, 4500Cl-D, 4500Cl-E, 4500CN-C, 4500CN-E, 4500F-B, 4500F-C, 4500NH3-B, 4500NH3-B, 4500NH3-H, 4500NO3-F, 4500P-B.5, 4500P-E, 5210B, 5220D, 5310C, EPA 200.7, 200.8, 245.1. Organic Parameters: 608, 624, ME DRO, ME GRO, MA EPH, MA VPH:)

Solid Waste/Soil (Organic Parameters: ME DRO, ME GRO, MA EPH, MA VPH.)

Massachusetts Department of Environmental Protection Certificate/Lab ID: M-MA086.

Drinking Water

Inorganic Parameters: (EPA 200.8 for: Sb,As,Ba,Be,Cd,Cr,Cu,Pb,Ni,Se,Tl)

(EPA 200.7 for: Ba,Be,Ca,Cd,Cr,Cu,Na,Ni) 245.1, (300.0 for: Nitrate-N, Fluoride, Sulfate)

353.2 for: Nitrate-N, Nitrite-N; SM4500NO3-F, 4500F-C, 4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, 2320B, SM2540C, SM4500H-B.

Organic Parameters: (EPA 524.2 for: Trihalomethanes, Volatile Organics)

(504.1 for: 1,2-Dibromoethane, 1,2-Dibromo-3-Chloropropane), 314.0, 332.

Microbiology Parameters: SM9215B; ENZ. SUB. SM9223; MF-SM9222D

Non-Potable Water

Inorganic Parameters:, (EPA 200.8 for: Al,Sb,As,Be,Cd,Cr,Cu,Pb,Mn,Ni,Se,Ag,Tl,Zn)

(EPA 200.7 for: Al,Sb,As,Be,Cd,Cr,Co,Cu,Fe,Pb,Mn,Mo,Ni,Se,Ag,Sr,Ti,Tl, V,Zn,Ca,Mg,Na,K)

245.1, SM4500H,B, EPA 120.1, SM2510B, 2540C, 2540B, 2340B, 2320B, 4500CL-E, 4500F-BC, 426C, SM4500NH3-BH, (EPA 350.1 for: Ammonia-N), LACHAT 10-107-06-1-B for Ammonia-N, SM4500NO3-F, 353.2 for Nitrate-N, SM4500NH3-B,C-Titr, SM4500NH3-BC-NES, EPA 351.1, SM4500P-E, 4500P-B,E, 5220D, EPA 410.4, SM 5210B,

5310C, 4500CL-D, EPA 1664, SM14 510AC, EPA 420, SM4500-CN-CE, SM2540D.

Organic Parameters: (EPA 624 for Volatile Halocarbons, Volatile Aromatics)

(608 for: Chlordane, Aldrin, Dieldrin, DDD, DDE, DDT, Heptachlor, Heptachlor Epoxide, PCBs-Water), EPA 625 for SVOC Acid Extractables and SVOC Base/Neutral Extractables, 600/4-81-045-PCB-Oil

New Hampshire Department of Environmental Services Certificate/Lab ID: 200307, NELAP Accredited.

Drinking Water (Inorganic Parameters: SM6215B, 9222B, 9223B Colilert, EPA 200.7, 200.8, 245.2, 120.1, 300.0, 314.0, SM4500CN-E, 4500H+B, 4500NO3-F, 2320B, 2510B, 2540C, 4500F-C, 5310C, 2120B, EPA 331.0. Organic

Parameters: 504.1, 524.2, SM6251B.)

Non-Potable Water (Inorganic Parameters: SM9222D, 9221B, 9222B, 9221E-EC, EPA 200.7, 200.8, 245.1, 245.2, SW-846 6010B, 6020, 7196A, 7470A, SM3500-CR-D, EPA 120.1, 300.0, 350.1, 351.1, 353.2, 420.1, 1664A, SW-846 9010, 9030, 9040B, SM426C, SM2310B, 2540B, 2540D, 4500H+B, 4500NH3-H, 4500NH3-E, 4500NO2-B, 4500P-E, 4500-S2-D, 5210B, 2320B, 2540C, 4500F-C, 5310C, 5540C, LACHAT 10-117-07-1-B, LACHAT 10-107-06-1-B, LACHAT 10-107-04-1-J, LACHAT 10-117-07-1-A, SM4500CL-E, LACHAT 10-204-00-1-A, LACHAT 10-107-06-2-D. Organic Parameters: SW-846 3005A, 3015A, 3510C, 5030B, 8021B, 8260B, 8270C, 8330, EPA 624, 625, 608, SW-846 8082, 8081A.)

Solid & Chemical Materials (Inorganic Parameters: SW-846 6010B, 7196A, 7471A, 7.3.3.2, 7.3.4.2, 1010, 1030, 9010, 9012A, 9014, 9030B, 9040, 9045C, 9050C, 1311, 3005A, 3050B, 3051A. Organic Parameters: SW-846 3540C, 3545, 3580A, 5030B, 5035, 8021B, 8260B, 8270C, 8330, 8151A, 8082, 8081A.)

New Jersey Department of Environmental Protection Certificate/Lab ID: MA935, NELAP Accredited.

Drinking Water (Inorganic Parameters: SM9222B, 9221E, 9223B, 9215B, 4500NO3-F, 4500F-C, EPA 300.0, 200.7, 2540C, 2320B, 314.0, SM2120B, 2510B, 5310C, SM4500H-B, EPA 200.8, 245.2. Organic Parameters: 504.1,

SM6251B, 524.2.)

Non-Potable Water (Inorganic Parameters: SM5210B, EPA 410.4, SM5220D, 4500Cl-D, EPA 300.0, SM2120B, SM4500F-BC, EPA 200.7, 351.1, LACHAT 10-107-06-2-D, EPA 353.2, SM4500NO3-F, 4500NO2-B, EPA 1664A, SM5310B, C or D, 4500-PE, EPA 420.1, SM4500P-B5+E, 2540B, 2540C, 2540D, EPA 120.1, SM2510B, SM15 426C, SM9221CE, 9222D, 9221B, 9222B, 9215B, 2310B, 2320B, 4500NH3-H, 4500-S D, EPA 350.1, SM5210B, SW-846 3015, 6020, 7470A, 5540C, 4500H-B, EPA 200.8, SM3500Cr-D, EPA 245.1, 245.2, SW-846 9040B, 3005A, EPA 6010B, 7196A, SW-846 9010B, 9030B. Organic Parameters: SW-846 8260B, 8270C, 3510C, EPA 608, 624, 625, SW-846 5030B, 8021B, 8081A, 8082, 8151A, 8330, NJ OQA-QAM-025 Rev.7.)

Solid & Chemical Materials (Inorganic Parameters: SW-846 9040B, 3005A, 6010B, 7196A, 5030B, 9010B, 9030B, 1030, 1311, 3050B, 3051, 7471A, 9014, 9012A, 9045C, 9050A, 9065. <u>Organic Parameters</u>: SW-846 8021B, 8081A, 8082, 8151A, 8330, 8260B, 8270C, 1311, 1312, 3540C, 3545, 3550B, 3580A, 5035L, 5035H, NJ OQA-QAM-025 Rev.7.)

New York Department of Health Certificate/Lab ID: 11148. NELAP Accredited.

Drinking Water (Inorganic Parameters: SM9223B, 9222B, 9215B, EPA 200.8, 200.7, 245.2, SM5310C, EPA 314.0, 332.0, SM2320B, EPA 300.0, SM2120B, 4500CN-E, 4500F-C, 4500H-B, 4500NO3-F, 2540C, EPA 120.1, SM 2510B.

Organic Parameters: EPA 524.2, 504.1.)

Non-Potable Water (Inorganic Parameters: SM9221E, 9222D, 9221B, 9222B, 9215B, 5210B, EPA 410.4, SM5220D, 2310B-4a, 2320B, EPA 200.7, 300.0, LACHAT 10-117-07-1A or B, SM4500CI-E, 4500F-C, SM15 426C, EPA 350.1, LACHAT 10-107-06-1-B, SM4500NH3-H, EPA 351.1, LACHAT 10-107-06-2, EPA 353.2, LACHAT 10-107-041-C, SM4500-NO3-F, 4500-NO2-B, 4500P-E, 2540C, 2540B, 2540D, EPA 200.8, EPA 6010B, 6020, EPA 7196A, SM3500Cr-D, EPA 245.1, 245.2, 7470A, SM2120B, SM4500-CN-E LACHAT 10-204-00-1-A, EPA 9040B, SM4500-HB, EPA 1664A, SM5310C, EPA 420.1, SM14 510C, EPA 120.1, SM2510B, SM4500S-D, SM5540C, EPA 3005A, 3015. Organic Parameters: EPA 624, 8260B, 8270C, 625, 608, 8081A, 8151A, 8330, 8082, EPA 3510C, 5030B, 9010B, 9030B.)

Solid & Hazardous Waste (Inorganic Parameters: 1010, 1030, SW-846 Ch 7 Sec 7.3, EPA 6010B, 7196A, 7471A, 9012A, 9014, 9040B, 9045C, 9065, 9050, EPA 1311, 1312, 3005A, 3050B, 9010B, 9030B. Organic Parameters: EPA 8260B, 8270C, 8081A, 8151A, 8330, 8082, 3540C, 3545, 3546, 3580, 5030B, 5035.)

North Carolina Department of the Environment and Natural Resources <u>Certificate/Lab ID</u>: 666. <u>Organic Parameters</u>: MA-EPH, MA-VPH.

Pennsylvania Department of Environmental Protection <u>Certificate/Lab ID</u>: 68-03671. *NELAP Accredited. Non-Potable Water* (<u>Organic Parameters</u>: EPA 3510C, 5030B, 625, 624, 608, 8081A, 8082, 8151A, 8260B, 8270C, 8330)

Solid & Hazardous Waste (Inorganic Parameters: EPA 1010, 1030, 1311, 3050B, 3051, 6010B, EPA 7.3.3.2, EPA 7.3.4.2, 7196A, 7471A, 9010B, 9012A, 9014, 9040B, 9045C, 9050, 9065. Organic Parameters: 3540C, 3545, 3580A, 5035, 8021B, 8081A, 8082, 8151A, 8260B, 8270C, 8330)

Rhode Island Department of Health <u>Certificate/Lab ID</u>: LAO00065, *NELAP Accredited via NY-DOH*. Refer to MA-DEP Certificate for Potable and Non-Potable Water. Refer to NY-DOH Certificate for Potable and Non-Potable Water.

Texas Commisson on Environmental Quality <u>Certificate/Lab ID</u>: T104704476-09-1. *NELAP Accredited*. *Non-Potable Water* (<u>Inorganic Parameters</u>: EPA 120.1, 1664, 200.7, 200.8, 245.1, 245.2, 300.0, 350.1, 351.1, 353.2, 376.2, 410.4, 420.1, 6010, 6020, 7196, 7470, 9040, SM 2120B, 2310B, 2320B, 2510B, 2540B, 2540C, 2540D, 426C, 4500CL-E, 4500CN-E, 4500F-C, 4500H+B, 4500NH3-H, 4500NO2B, 4500P-E, 4500 S2⁻D, 510C, 5210B, 5220D, 5310C, 5540C. Organic Parameters: EPA 608, 624, 625, 8081, 8082, 8151, 8260, 8270, 8330.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 1311, 1312, 9012, 9014, 9040, 9045, 9050, 9065.)

Department of Defense Certificate/Lab ID: L2217.

Drinking Water (Inorganic Parameters: SM 4500H-B. Organic Parameters: EPA 524.2, 504.1.)

Non-Potable Water (Inorganic Parameters: EPA 200.7, 200.8, 6010B, 6020, 245.1, 245.2, 7470A, 9040B, 300.0, 9251, 9038, 350.1, 353.2, 351.1, 120.1, 9050A, 410.4, 9060, 1664, 420.1, LACHAT 10-107-06-1-B, SM 4500CN-E, 4500H-B, 4500CL-E, 4500F-BC, 4500SO4-E, 426C, 4500NH3-B, 4500NH3-H, 4500NO3-F, 4500NO2-B, 4500Norg-C, 4500PE, 2510B, 5540C, 5220D, 5310C, 2540B, 2540C, 2540D, 510C, 4500S2-AD, 3005A, 3015, 9010B, 9030B. Organic Parameters: EPA 8260B, 8270C, 8330, 625, 8082, 8151A, 8081A, 3510C, 5030B, MassDEP EPH, MassDEP VPH.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 200.7, 6010B, 7471A, 9040B, 9045C, 9065, 420.1, 9012A, 6860, 1311, 1312, 3050B, 9030B, 3051, 9010B, 3540C, SM 510ABC, 4500CN-CE, 2540G, SW-846 7.3, Organic Parameters: EPA 8260B, 8270C, 8330, 8082, 8081A, 8151A, 3545, 3546, 3580, 5035, MassDEP EPH, MassDEP VPH.)

Analytes Not Accredited by NELAP

Certification is not available by NELAP for the following analytes: **EPA 8260B**: Freon-113, 1,2,4,5-Tetramethylbenzene, 4-Ethyltoluene. **EPA 830A**: PETN, Picric Acid, Nitroglycerine, 2,6-DANT, 2,4-DANT. **EPA 8270C**: Methyl naphthalene, Dimethyl naphthalene, Total Methylnapthalenes, Total Dimethylnaphthalenes, 1,4-Diphenylhydrazine (Azobenzene). **EPA 625**: 4-Chloroaniline. **EPA 350.1** for Ammonia in a Soil matrix



ANALYTICAL REPORT

Lab Number:

L1013534

Client:

Sovereign Consulting

905B South Main Street Mansfield, MA 02048

ATTN:

Phil McBain

Phone:

(508) 339-3200

Project Name:

SHL TASK 0002

Project Number:

AC001

Report Date:

09/10/10

Certifications & Approvals: MA (M-MA086), NY NELAC (11148), CT (PH-0574), NH (2003), NJ (MA935), RI (LAO00065), ME (MA0086), PA (Registration #68-03671), USDA (Permit #S-72578), US Army Corps of Engineers, Naval FESC.

Eight Walkup Drive, Westborough, MA 01581-1019 508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com

Serial_No:09101011:08

Project Name: SHL TASK 0002

Project Number: AC001

Lab Number:

L1013534

Report Date:

Alpha Sample ID	Client ID	Sample Location	Collection Date/Time
L1013534-01	SHM-10-13-090110-F	DEVENS, MA	09/01/10 11:15
L1013534-02	SHM-10-13-090110-U	DEVENS, MA	09/01/10 11:15
L1013534-03	SHM-10-15-090110-F	DEVENS, MA	09/01/10 14:55
L1013534-04	SHM-10-15-090110-U	DEVENS, MA	09/01/10 14:55
L1013534-05	DUP-090110-F	DEVENS, MA	09/01/10 14:55
L1013534-06	DUP-090110-U	DEVENS, MA	09/01/10 14:55
L1013534-07	RB-090110-U	DEVENS, MA	09/01/10 15:45

SHL TASK 0002

Project Number: AC001

Lab Number:

L1013534

Report Date:

09/10/10

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet all of the requirements of NELAC, for all NELAC accredited parameters. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter, If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

For additional information, please contact Client Services at 800-624-9220.

Report Submission

Testing performed for the reported analyses followed the guidelines established under the DoD QSM 4.1. where applicable.

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

The Dissolved Inorganic Carbon results will be issued under separate cover.

Sample Receipt

The samples were Field Filtered for Dissolved Metals only.

Dissolved Metals

L1013534-03 and -05 have elevated detection limits for all analytes, except Mercury, due to the dilution

SHL TASK 0002

Project Number: AC001

Lab Number:

L1013534

Report Date:

09/10/10

Case Narrative (continued)

required by the high concentrations of target analytes.

The WG430807-3/-4 MS/MSD recoveries for Calcium (MS at 143%) and Iron (610%/170), performed on L1013534-01, are invalid because the sample concentrations are greater than four times the spike amount added.

The WG430807-3 MS recovery, performed on L1013534-01, is above the acceptance criteria for Manganese (122%). A post digestion spike was performed with an acceptable recovery of 100%. The parent sample (L1013534-01) is qualified as "J" for Manganese.

Total Metals

L1013534-04 and -06 have elevated detection limits for all analytes, except Mercury, due to the dilution required by the high concentrations of target analytes.

The WG430806-3/-4 MS/MSD recoveries for Iron (340%/190%), performed on L1013534-02, are invalid because the sample concentration is greater than four times the spike amount added.

The WG430806-5 Post Digestion Spike recovery for Arsenic was outside the DoD acceptance criteria of 75-125%; therefore, the parent sample (L1013534-02) is qualified with a "J" for this element.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Michelle M. Morris

Authorized Signature:

Title: Technical Director/Representative

Date: 09/10/10

METALS



SHL TASK 0002

Lab Number:

L1013534

Project Number:

AC001

Report Date:

09/10/10

SAMPLE RESULTS

Lab ID:

L1013534-01

Client ID:

SHM-10-13-090110-F

Sample Location:

DEVENS, MA

Matrix:

Water

Date Collected:

09/01/10 11:15

Date Received:

09/01/10

Field Prep:

See Narrative

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Dissolved Metals - V	Vestboro	ugh Lab									
Aluminum, Dissolved	6.02	J	ug/l	10.0	1.91	1	09/02/10 15:4	5 09/08/10 00:19	EPA 3005A	1,6020A	ВМ
Antimony, Dissolved	0.17	J	ug/l	0.500	0.120	1	09/02/10 15:4	5 09/08/10 00:19	EPA 3005A	1,6020A	вм
Arsenic, Dissolved	575		ug/l	0.500	0.113	1	09/02/10 15:4	5 09/08/10 00:19	EPA 3005A	1,6020A	ВМ
Barium, Dissolved	153		ug/I	0.500	0.095	1	09/02/10 15:4	5 09/08/10 00:19	EPA 3005A	1,6020A	ВМ
Beryllium, Dissolved	ND		ug/l	0.500	0.059	1	09/02/10 15:4	5 09/08/10 00:19	EPA 3005A	1,6020A	ВМ
Cadmium, Dissolved	ND		ug/l	0.500	0.059	1	09/02/10 15:4	5 09/08/10 00:19	EPA 3005A	1,6020A	ВМ
Calcium, Dissolved	61400		ug/l	100	12.6	4	09/02/10 15:4	5 09/08/10 00:19	EPA 3005A	1,6020A	вм
Chromium, Dissolved	0.730		ug/l	0,500	0.186	1	09/02/10 15:4	5 09/08/10 00:19	EPA 3005A	1,6020A	ВМ
Cobalt, Dissolved	0.730		ug/l	0.500	0.053	1.	09/02/10 15:4	5 09/08/10 00:19	EPA 3005A	1,6020A	ВМ
Copper, Dissolved	0.34	J	ug/l	0.500	0.118	1	09/02/10 15:4	5 09/08/10 00:19	EPA 3005A	1,6020A	вм
Iron, Dissolved	84100		ug/l	50.0	8.41	1	09/02/10 15:4	5 09/08/10 00:19	EPA 3005A	1,6020A	ВМ
Lead, Dissolved	ND		ug/l	0 500	0.050	Ť	09/02/10 15:4	5 09/08/10 00:19	EPA 3005A	1,6020A	ВМ
Magnesium, Dissolved	9900		ug/l	100	4.10	1	09/02/10 15:4	5 09/08/10 00:19	EPA 3005A	1,6020A	ВМ
Manganese, Dissolved	1850	J	ug/l	1 00	0.136	1	09/02/10 15:4	5 09/08/10 00:19	EPA 3005A	1,6020A	BM
Mercury, Dissolved	ND		ug/I	0.2000	0 0120	1	09/07/10 17:0	0 09/08/10 12:56	EPA 7470A	1,7470A	TD
Nickel, Dissolved	2.60		ug/l	0.500	0.180	1	09/02/10 15:4	5 09/08/10 00:19	EPA 3005A	1,6020A	ВМ
Potassium, Dissolved	12200		ug/l	100	18.2	1	09/02/10 15:4	5 09/08/10 00:19	EPA 3005A	1,6020A	ВМ
Selenium, Dissolved	ND		ug/l	1,00	0.406	1	09/02/10 15:4	5 09/08/10 00:19	EPA 3005A	1,6020A	BM
Silver, Dissolved	ND		ug/l	0.500	0.085	1	09/02/10 15:4	5 09/08/10 00:19	EPA 3005A	1,6020A	ВМ
Sodium, Dissolved	14500		ug/l	100	18.2	Ť	09/02/10 15:4	5 09/08/10 00:19	EPA 3005A	1,6020A	ВМ
Thallium, Dissolved	ND		ug/l	0.500	0.031	Ť	09/02/10 15:4	5 09/08/10 00:19	EPA 3005A	1,6020A	ВМ
Vanadium, Dissolvéd	0.22	Ţ	ug/l	0 500	0.077	1	09/02/10 15:4	5 09/08/10 00:19	EPA 3005A	1,6020A	ВМ
Zinc, Dissolved	4.66	J	ug/l	5.00	1.62	1	09/02/10 15:4	5 09/08/10 00:19	EPA 3005A	1,6020A	ВМ

Sample Location:

SHL TASK 0002

Project Number:

Lab Number:

SAMPLE RESULTS

L1013534

AC001

Report Date:

09/10/10

Lab ID:

L1013534-02

Client ID:

SHM-10-13-090110-U

DEVENS, MA

Matrix:

Water

Date Collected:

09/01/10 11:15

Date Received: Field Prep:

09/01/10

Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - West	borough 1	_ab									
Aluminum, Total	233		ug/l	10.0	1.91	1	09/02/10 15:4:	5 09/08/10 01:02	EPA 3005A	1,6020A	вм
Antimony, Total	0.19	J	ug/l	0.500	0.120	1	09/02/10 15:4	5 09/08/10 01:02	EPA 3005A	1,6020A	ВМ
Arsenic, Total	619	J	ug/l	0.500	0.113	1	09/02/10 15:45	5 09/08/10 01:02	EPA 3005A	1,6020A	вм
Barium, Total	160		ug/I	0.500	0.095	1	09/02/10 15:4:	5 09/08/10 01:02	EPA 3005A	1,6020A	вм
Beryllium, Total	ND		ug/I	0.500	0.059	1	09/02/10 15:4	5 09/08/10 01:02	EPA 3005A	1,6020A	вм
Cadmium, Total	ND		ug/l	0.500	0.059	1	09/02/10 15:4:	5 09/08/10 01:02	EPA 3005A	1,6020A	вм
Calcium, Total	68000		ug/l	100	12.6	1	09/02/10 15:4	5 09/08/10 01:02	EPA 3005A	1,6020A	ВМ
Chromium, Total	2.66		ug/l	0.500	0.186	1	09/02/10 15:4	5 09/08/10 01:02	EPA 3005A	1,6020A	ВМ
Cobalt, Total	0.840		ug/l	0.500	0.053	1	09/02/10 15:4:	5 09/08/10 01:02	EPA 3005A	1,6020A	ВМ
Copper, Total	0.740		ug/l	0.500	0.118	1	09/02/10 15:4	5 09/08/10 01:02	EPA 3005A	1,6020A	вм
Iron, Total	88600		ug/I	50.0	8.41	1	09/02/10 15:4:	5 09/08/10 01:02	EPA 3005A	1,6020A	вм
Lead, Total	0.13	J	ug/l	0.500	0.050	1	09/02/10 15:4:	5 09/08/10 01:02	EPA 3005A	1,6020A	вм
Magnesium, Total	10500		ug/l	100	4.10	1	09/02/10 15:4:	5 09/08/10 01:02	EPA 3005A	1,6020A	BM
Manganese, Total	1900		ug/I	1.00	0.136	1	09/02/10 15:4:	5 09/08/10 01:02	EPA 3005A	1,6020A	вм
Mercury, Total	ND		ug/I	0.2000	0.0120	1	09/07/10 17:00	0 09/08/10 13:12	EPA 7470A	1.7470A	TD
Nickel, Total	3.00		ug/l	0.500	0.180	1	09/02/10 15:4:	5 09/08/10 01:02	EPA 3005A	1,6020A	вм
Potassium, Total	12500		ug/l	100	18.2	1	09/02/10 15:4	5 09/08/10 01:02	EPA 3005A	1,6020A	ВМ
Selenium, Total	0.54	J	ug/l	1.00	0.406	1	09/02/10 15:4	5 09/08/10 01:02	EPA 3005A	1,6020A	вм
Silver, Total	ND		ug/I	0.500	0.085	1	09/02/10 15:4	5 09/08/10 01:02	EPA 3005A	1,6020A	вм
Sodium, Total	15300		ug/l	100	18.2	1	09/02/10 15:4:	5 09/08/10 01:02	EPA 3005A	1,6020A	ВМ
Thallium, Total	ND		ug/l	0.500	0.031	1.	09/02/10 15:4	5 09/08/10 01:02	EPA 3005A	1,6020A	ВМ
Vanadium, Total	0.620		ug/l	0.500	0.077	1	09/02/10 15:4	5 09/08/10 01:02	EPA 3005A	1,6020Å	вм
Zinc, Total	3.49	J	ug/I	5.00	1.62	1		5 09/08/10 01:02		1,6020A	ВМ

SHL TASK 0002

Lab Number:

L1013534

Project Number:

AC001

Report Date:

09/10/10

SAMPLE RESULTS

Lab ID:

L1013534-03

Client ID:

SHM-10-15-090110-F

Sample Location:

DEVENS, MA

Matrix:

Water

Date Collected:

09/01/10 14:55

Date Received:

09/01/10

Field Prep:

See Narrative

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Dissolved Metals - W	Vestboro	ugh Lab									
Aluminum, Dissolved	ND		ug/l	100	19.1	10	09/02/10 15:45	5 09/08/10 00:43	EPA 3005A	1,6020A	вм
Antimony, Dissolved	1.87	J	ug/l	5.00	1.20	10	09/02/10 15:45	5 09/08/10 00:43	EPA 3005A	1,6020A	ВМ
Arsenic, Dissolved	8110		ug/l	5.00	1 13	10	09/02/10 15:4	5 09/08/10 00:43	EPA 3005A	1,6020A	ВМ
Barium, Dissolved	52.4		ug/l	5.00	0.950	10	09/02/10 15:45	5 09/08/10 00:43	EPA 3005A	1,6020A	ВМ
Beryllium, Dissolved	ND		ug/l	5.00	0.590	10	09/02/10 15:4	5 09/08/10 00:43	EPA 3005A	1,6020A	вм
Cadmium, Dissolved	ND		ug/l	5.00	0.590	10	09/02/10 15:45	5 09/08/10 00:43	EPA 3005A	1,6020A	ВМ
Calcium, Dissolved	61500		ug/l	1000	126.	10	09/02/10 15:4	5 09/08/10 00:43	EPA 3005A	1,6020A	ВМ
Chromium, Dissolved	ND		ug/l	5,00	1.86	10	09/02/10 15:4	5 09/08/10 00:43	EPA 3005A	1,6020A	вм
Cobalt, Dissolved	29.3		ug/l	5.00	0.530	10	09/02/10 15:45	5 09/08/10 00:43	EPA 3005A	1,6020A	вм
Copper, Dissolved	ND		ug/l	5.00	1.18	10	09/02/10 15:4:	5 09/08/10 00:43	EPA 3005A	1,6020A	ВМ
Iron, Dissolved	63300		ug/l	500	84.1	10	09/02/10 15:4	5 09/08/10 00:43	EPA 3005A	1,6020A	ВМ
Lead, Dissolved	ND		ug/l	5.00	0.500	10	09/02/10 15:4	5 09/08/10 00:43	EPA 3005A	1,6020A	вм
Magnesium, Dissolved	7880		ug/l	1000	41.0	10	09/02/10 15:4	5 09/08/10 00:43	EPA 3005A	1,6020A	ВМ
Manganese, Dissolved	10700		ug/l	100	1.36	10	09/02/10 15:45	5 09/08/10 00:43	EPA 3005A	1,6020A	ВМ
Mercury, Dissolved	ND		ug/l	0.2000	0.0120	1	09/07/10 17:00	09/08/10 13:02	EPA 7470A	1,7470A	TD
Nickel, Dissolved	20.3		ug/I	5.00	1.80	10	09/02/10 15:45	5 09/08/10 00:43	EPA 3005A	1,6020A	ВМ
Potassium, Dissolved	6880		ug/l	1000	182	10	09/02/10 15:45	5 09/08/10 00:43	EPA 3005A	1,6020A	ВМ
Selenium, Dissolved	ND		ug/l	10.0	4.06	10	09/02/10 15:4	5 09/08/10 00:43	EPA 3005A	1,6020A	вм
Silver, Dissolved	ND		ug/l	5.00	0.850	10	09/02/10 15:45	5 09/08/10 00:43	EPA 3005A	1,6020A	ВМ
Sodium, Dissolved	13900		ug/l	1000	182.	10	09/02/10 15:4	5 09/08/10 00:43	EPA 3005A	1,6020A	BM
Thallium, Dissolved	ND	1 0	ug/l	5,00	0.310	10	09/02/10 15:4	5 09/08/10 00:43	EPA 3005A	1,6020A	ВМ
Vanadium, Dissolved	ND		ug/l	5.00	0.770	10	09/02/10 15:4	09/08/10 00:43	EPA 3005A	1,6020A	ВМ
Zinc, Dissolved	26.4	J	ug/l	50.0	16.2	10	09/02/10 15:45	5 09/08/10 00:43	EPA 3005A	1,6020A	ВМ

Project Number:

SHL TASK 0002

AC001

Lab Number:

L1013534

09/10/10

Report Date:

Lab ID:

L1013534-04

Client ID:

SHM-10-15-090110-U

Sample Location:

DEVENS, MA

Matrix:

Water

Date Collected:

09/01/10 14:55

Date Received:

09/01/10

Field Prep:

Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - West	borough l	_ab									
Aluminum, Total	125		ug/l	100	19.1	10	09/02/10 15:4:	5 09/08/10 01:38	EPA 3005A	1,6020A	ВМ
Antimony, Total	1.93	J	ug/l	5.00	1.20	10	09/02/10 15:4	5 09/08/10 01:38	EPA 3005A	1,6020A	вм
Arsenic, Total	7930		ug/l	5.00	1.13	10	09/02/10 15:4	5 09/08/10 01:38	EPA 3005A	1,6020A	вм
Barium, Total	55.0		ug/l	5.00	0.950	10	09/02/10 15:4	5 09/08/10 01:38	EPA 3005A	1,6020A	ВМ
Beryllium, Total	ND		ug/l	5.00	0.590	10	09/02/10 15:4	5 09/08/10 01:38	EPA 3005A	1,6020A	вм
Cadmium, Total	ND		ug/l	5.00	0.590	10	09/02/10 15:4	5 09/08/10 01:38	EPA 3005A	1,6020A	вм
Calcium, Total	61300		ug/l	1000	126	10	09/02/10 15:4	5 09/08/10 01:38	EPA 3005A	1,6020A	ВМ
Chromium, Total	ND		ug/l	5.00	1.86	10	09/02/10 15:4	5 09/08/10 01:38	EPA 3005A	1,6020A	вм
Cobalt, Total	28.6		ug/l	5.00	0.530	10	09/02/10 15:4:	5 09/08/10 01:38	EPA 3005A	1,6020A	вм
Copper, Total	ND		ug/l	5.00	1.18	10	09/02/10 15:4	5 09/08/10 01:38	EPA 3005A	1,6020A	вм
Iron, Total	62500		ug/l	500	84,1	10	09/02/10 15:4	5 09/08/10 01:38	EPA 3005A	1,6020A	вм
Lead, Total	0.79	J	ug/l	5.00	0.500	10	09/02/10 15:4	5 09/08/10 01:38	EPA 3005A	1,6020A	вм
Magnesium, Total	7700		ug/l	1000	41.0	10	09/02/10 15:4	5 09/08/10 01:38	EPA 3005A	1,6020A	BM
Manganese. Total	10400		ug/l	10.0	1.36	10	09/02/10 15:4	5 09/08/10 01:38	EPA 3005A	1,6020A	вм
Mercury, Total	ND		ug/I	0.2000	0.0120	1	09/07/10 17:0	0 09/08/10 13:18	EPA 7470A	1,7470A	TD
Nickel, Total	20.0		ug/l	5.00	1.80	10	09/02/10 15:4	5 09/08/10 01:38	EPA 3005A	1,6020A	вм
Potassium, Total	6910		ug/l	1000	182.	10	09/02/10 15:4	5 09/08/10 01:38	EPA 3005A	1,6020A	вм
Selenium, Total	ND		ug/l	10.0	4.06	10	09/02/10 15:4	5 09/08/10 01:38	EPA 3005A	1,6020A	вм
Silver, Total	ND		ug/l	5.00	0.850	10	09/02/10 15:4	5 09/08/10 01:38	EPA 3005A	1,6020A	ВМ
Sodium, Total	13700		ug/l	1000	182.	10	09/02/10 15:4	5 09/08/10 01:38	EPA 3005A	1,6020A	вм
Thallium, Total	ND .	4	ug/l	5.00	0.310	10	09/02/10 15:4	5 09/08/10 01:38	EPA 3005A	1,6020A	вм
Vanadium, Total	ND		ug/l	5.00	0.770	10	09/02/10 15:4	5 09/08/10 01:38	EPA 3005A	1,6020A	вм
Zinc, Total	29.7	J	ug/l	50.0	16.2	10	09/02/10 15:4	5 09/08/10 01:38	EPA 3005A	1,6020A	вм

SAMPLE RESULTS

SHL TASK 0002

Lab Number:

L1013534

Project Number:

AC001

Report Date:

09/10/10

SAMPLE RESULTS

Lab ID:

L1013534-05

Client ID:

DUP-090110-F DEVENS, MA

Sample Location: Matrix:

Water

Date Collected:

09/01/10 14:55

Date Received:

09/01/10

Field Prep:

See Narrative

	Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
	Dissolved Metals - V	Vestboro	ugh Lab									
	Aluminum, Dissolved	ND		ug/l	100	19.1	10	09/02/10 15:4	5 09/08/10 00:49	EPA 3005A	1,6020A	ВМ
	Antimony, Dissolved	1,25	J.	ug/I	5.00	1.20	10	09/02/10 15:4	5 09/08/10 00:49	EPA 3005A	1,6020A	вм
	Arsenic, Dissolved	6460		ug/l	5.00	1.13	10	09/02/10 15:4	5 09/08/10 00:49	EPA 3005A	1,6020A	ВМ
	Barium, Dissolved	39.1		ug/l	5.00	0.950	10	09/02/10 15:4	5 09/08/10 00:49	EPA 3005A	1,6020A	вм
	Beryllium, Dissolved	ND		ug/l	5.00	0.590	10	09/02/10 15:4	5 09/08/10 00:49	EPA 3005A	1,6020A	вм
	Cadmium, Dissolved	ND		ug/l	5.00	0.590	10	09/02/10 15:4	5 09/08/10 00:49	EPA 3005A	1,6020A	ВМ
	Calcium, Dissolved	46800		ug/l	1000	126.	10	09/02/10 15:4	5 09/08/10 00:49	EPA 3005A	1,6020A	ВМ
	Chromium, Dissolved	ND		ug/l	5.00	1.86	10	09/02/10 15:4	5 09/08/10 00:49	EPA 3005A	1,6020A	ВМ
	Cobalt, Dissolved	22.4		ug/l	5.00	0.530	10	09/02/10 15:4	5 09/08/10 00:49	EPA 3005A	1,6020A	ВМ
	Copper, Dissolved	ND		ug/l	5.00	1.18	10	09/02/10 15:4	5 09/08/10 00:49	EPA 3005A	1,6020A	ВМ
	Iron, Dissolved	48900		ug/l	500	84.1	10	09/02/10 15:4	5 09/08/10 00:49	EPA 3005A	1,6020A	ВМ
	Lead, Dissolved	ND		ug/l	5.00	0.500	10	09/02/10 15:4	5 09/08/10 00:49	EPA 3005A	1,6020A	вм
	Magnesium, Dissolved	6050		ug/l	1000	41.0	10	09/02/10 15:4	5 09/08/10 00:49	EPA 3005A	1,6020A	ВМ
	Manganese, Dissolved	8240		ug/l	10.0	1.36	10	09/02/10 15:4	5 09/08/10 00:49	EPA 3005A	1,6020A	ВМ
	Mercury, Dissolved	ND		ug/l	0.2000	0.0120	1	09/07/10 17:0	0 09/08/10 13:03	EPA 7470A	1,7470A	TD
	Nickel, Dissolved	15.3		ug/I	5.00	1.80	10	09/02/10 15:4	5 09/08/10 00:49	EPA 3005A	1,6020A	вм
	Potassium, Dissolved	5200		ug/l	1000	182	10	09/02/10 15:4	5 09/08/10 00:49	EPA 3005A	1,6020A	ВМ
	Selenium, Dissolved	ND		ug/I	10.0	4.06	10	09/02/10 15:4	5 09/08/10 00:49	EPA 3005A	1,6020A	ВМ
	Silver, Dissolved	ND		ug/I	5.00	0.850	10	09/02/10 15:4	5 09/08/10 00:49	EPA 3005A	1,6020A	вм
	Sodium, Dissolved	11200		ug/l	1000	182.	10	09/02/10 15:4	5 09/08/10 00:49	EPA 3005A	1,6020A	вм
ć	Thailium, Dissolved	ND '	- 1	ug/l	5.00	0.310	10	09/02/10 15:4	5 09/08/10 00:49	EPA 3005A	1,6020A	вм
	Vanadium, Dissolved	ND		ug/l	5.00	0.770	10	09/02/10 15:4	5 09/08/10 00:49	EPA 3005A	1,6020A	ВМ
	Zinc, Dissolved	20.1	J	ug/I	50.0	16.2	10	09/02/10 15:4	5 09/08/10 00:49	EPA 3005A	1,6020A	ВМ

Project Name: SHL TASK 0002

Project Number: AC001

Lab Number:

L1013534

Report Date:

09/10/10

SAMPLE RESULTS

Lab ID: Client ID: L1013534-06 DUP-090110-U

Sample Location:

DEVENS, MA

Matrix:

Water

Date Collected:

09/01/10 14:55

Date Received:

09/01/10

Field Prep:

Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Wes	stborough l	_ab									
Aluminum, Total	284		ug/l	100	19.1	10	09/02/10 15:45	5 09/08/10 01:44	EPA 3005A	1,6020A	ВМ
Antimony, Total	ND		ug/l	5.00	1.20	10	09/02/10 15:45	5 09/08/10 01:44	EPA 3005A	1,6020A	ВМ
Arsenic, Total	7610		ug/l	5.00	1.13	10	09/02/10 15:45	5 09/08/10 01:44	EPA 3005A	1,6020A	ВМ
Barium, Total	50.7		ug/l	5.00	0.950	10	09/02/10 15:45	5 09/08/10 01:44	EPA 3005A	1,6020A	ВМ
Beryllium, Total	ND		ug/l	5.00	0.590	10	09/02/10 15:45	5 09/08/10 01:44	EPA 3005A	1,6020A	вм
Cadmium, Total	ND		ug/l	5.00	0.590	10	09/02/10 15:45	5 09/08/10 01:44	EPA 3005A	1,6020A	ВМ
Calcium, Total	58500		ug/l	1000	126.	10	09/02/10 15:4	5 09/08/10 01:44	EPA 3005A	1,6020A	ВМ
Chromium, Total	ND		ug/l	5.00	1.86	10	09/02/10 15:45	5 09/08/10 01:44	EPA 3005A	1,6020A	ВМ
Cobalt, Total	27.0		ug/l	5.00	0.530	10	09/02/10 15:4	5 09/08/10 01:44	EPA 3005A	1,6020A	ВМ
Copper, Total	1.37	J	ug/l	5.00	1.18	10	09/02/10 15:45	5 09/08/10 01:44	EPA 3005A	1,6020A	ВМ
Iron, Total	58700		ug/l	500	84.1	10	09/02/10 15:45	5 09/08/10 01:44	EPA 3005A	1,6020A	вм
Lead, Total	1.09	J	ug/l	5 00	0.500	10	09/02/10 15:45	5 09/08/10 01:44	EPA 3005A	1,6020A	ВМ
Magnesium, Total	7470		ug/l	1000	41.0	10	09/02/10 15:45	5 09/08/10 01:44	EPA 3005A	1,6020A	BN.
Manganese, Total	9900		ug/l	10.0	1.36	10	09/02/10 15:45	5 09/08/10 01:44	EPA 3005A	1,6020A	ВМ
Mercury, Total	ND		ug/l	0 2000	0.0120	1	09/07/10 17:00	0 09/08/10 13:19	EPA 7470A	1,7470A	TD
Nickel, Total	18.5	1.5	ug/l	5.00	1.80	10	09/02/10 15:45	5 09/08/10 01:44	EPA 3005A	1,6020A	ВМ
Potassium, Total	6390		ug/l	1000	182.	10	09/02/10 15:45	5 09/08/10 01:44	EPA 3005A	1,6020A	ВМ
Selenium, Total	ND		ug/l	10.0	4.06	10	09/02/10 15:45	5 09/08/10 01:44	EPA 3005A	1,6020A	вм
Silver, Total	ND		ug/l	5.00	0.850	10	09/02/10 15:45	5 09/08/10 01:44	EPA 3005A	1,6020A	ВМ
Sodium, Total	13100		ug/l	1000	182,	10	09/02/10 15:45	5 09/08/10 01:44	EPA 3005A	1,6020A	вм
Thallium, Total	ND		· ug/l	5.00	0.310	10	09/02/10 15:45	5 09/08/10 01:44	EPÁ 3005A	1,6020A	ВМ
Vanadium, Total	ND	× ×	ug/l	5.00	0.770	10	09/02/10 15:45	5 09/08/10 01:44	EPA 3005A	1,6020A	BM
Zinc, Total	22.7	J	ug/I	50.0	16.2	10	09/02/10 15:45	5 09/08/10 01:44	EPA 3005A	1,6020A	вм

Project Name: SHL TASK 0002

Project Number: AC001 Lab Number:

L1013534

Report Date:

09/10/10

SAMPLE RESULTS

Lab ID: Client ID:

Matrix:

Sample Location:

L1013534-07 RB-090110-U

DEVENS, MA

Water

Date Collected:

09/01/10 15:45

Date Received:

09/01/10

Field Prep:

Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - West	tborough l	_ab									
Aluminum, Total	ND		ug/l	10,0	1.91	1	09/02/10 15:4	5 09/07/10 23:49	EPA 3005A	1,6020A	вм
Antimony, Total	0.670		ug/l	0.500	0.120	1	09/02/10 15:4	5 09/07/10 23:49	EPA 3005A	1,6020A	ВМ
Arsenic, Total	0.25	J	ug/l	0.500	0.113	1	09/02/10 15:4	5 09/07/10 23:49	EPA 3005A	1,6020A	вм
Barium, Total	ND		ug/l	0.500	0.095	1	09/02/10 15:4	5 09/07/10 23:49	EPA 3005A	1,6020A	вм
Beryllium, Total	ND		ug/l	0.500	0.059	1	09/02/10 15:4	5 09/07/10 23:49	EPA 3005A	1,6020A	вм
Cadmium, Total	ND		ug/l	0.500	0.059	1	09/02/10 15:4	5 09/07/10 23:49	EPA 3005A	1,6020A	ВМ
Calcium, Total	14.1	J	ug/l	100	12.6	1	09/02/10 15:4	5 09/07/10 23:49	EPA 3005A	1,6020A	вм
Chromium, Total	0.25	J	ug/l	0.500	0.186	1	09/02/10 15:4	5 09/07/10 23:49	EPA 3005A	1,6020A	вм
Cobalt, Total	ND		ug/l	0.500	0.053	1	09/02/10 15:4	5 09/07/10 23:49	EPA 3005A	1,6020A	вм
Copper, Total	ND		ug/l	0.500	0.118	1	09/02/10 15:4	5 09/07/10 23:49	EPA 3005A	1,6020A	ВМ
Iron, Total	16.2	Ţ	ug/I	50,0	8.41	1	09/02/10 15:4	5 09/07/10 23:49	EPA 3005A	1,6020A	вм
Lead, Total	0.08	J	ug/l	0.500	0.050	1	09/02/10 15:4	5 09/07/10 23:49	EPA 3005A	1,6020A	вм
Magnesium, Total	ND		ug/l	100	4.10	1	09/02/10 15:4	5 09/07/10 23:49	EPA 3005A	1,6020A	вм
Manganese, Total	0.16	J	ug/l	1 00	0.136	1	09/02/10 15:4	5 09/07/10 23:49	EPA 3005A	1,6020A	вм
Mercury, Total	ND		ug/l	0.2000	0.0120	1	09/07/10 17:0	0 09/08/10 13:21	EPA 7470A	1,7470A	TD
Nickel, Total	ND		ug/l	0.500	0.180	1	09/02/10 15:4	5 09/07/10 23:49	EPA 3005A	1,6020A	ВМ
Potassium, Total	ND		ug/l	100	18.2	1	09/02/10 15:4	5 09/07/10 23:49	EPA 3005A	1,6020A	вм
Selenium, Total	ND		ug/l	1.00	0.406	1	09/02/10 15:4	5 09/07/10 23:49	EPA 3005A	1,6020A	ВМ
Silver, Total	ND		ug/l	0.500	0.085	1	09/02/10 15:4:	5 09/07/10 23:49	EPA 3005A	1,6020A	вм
Sodium, Total	ND		ug/l	100	18.2	1	09/02/10 15:4	5 09/07/10 23:49	EPA 3005A	1,6020A	вм
Thallium, Total	ND	9-1	ug/l	0.500	0.031	. 1,	09/02/10 15:4	5 09/07/10 23:49	EPA 3005A	1,6020A	вм'
Vanadium, Total	ND	1	ug/I	0.500	0.077	- 1	09/02/10 15:4	5 09/07/10 23:49	EPA 3005A	1,6020A	вм
Zinc, Total	ND		ug/l	5.00	1.62	1	09/02/10 15:4	5 09/07/10 23:49	EPA 3005A	1,6020A	вм

Project Name: SHL TASK 0002

Project Number: AC001

Lab Number:

L1013534

Report Date:

09/10/10

Method Blank Analysis Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytica Method	l Analyst
Total Metals - Westbord	ough Lab for	sample(s):	02,04,0	06-07	Batch:	WG430806	i-1			
Aluminum, Total	2.41	J	ug/l	10.0	1.91	1	09/02/10 15:45	09/07/10 22:15	1,6020A	вм
Antimony, Total	ND		ug/l	0.500	0 120	1	09/02/10 15:45	09/07/10 22:15	1,6020A	ВМ
Arsenic, Total	ND		ug/l	0,500	0.113	1	09/02/10 15:45	09/07/10 22:15	1,6020A	ВМ
Barium, Total	ND		ug/l	0.500	0.095	. 1	09/02/10 15:45	09/07/10 22:15	1,6020A	ВМ
Beryllium, Total	ND		ug/l	0.500	0.059		09/02/10 15:45	09/07/10 22:15	1,6020A	вм
Cadmium, Total	ND		ug/l	0,500	0.059	3	09/02/10 15:45	09/07/10 22:15	1,6020A	вм
Calcium, Total	16.9	J	ug/l	100	12.6	1	09/02/10 15:45	09/07/10 22:15	1,6020A	вм
Chromium, Total	ND		ug/l	0.500	0.186		09/02/10 15:45	09/07/10 22:15	1,6020A	вм
Cobalt, Total	ND		ug/l	0.500	0.053	1	09/02/10 15:45	09/07/10 22:1	5 1,6020A	вм
Copper, Total	0.16	J	ug/l	0.500	0 118	1	09/02/10 15:45	09/07/10 22:1	5 1,6020A	вм
Iron, Total	13	J	ug/l	50.0	8.41	1	09/02/10 15:45	09/07/10 22:15	5 1,6020A	вм
Lead, Total	ND		ug/l	0.500	0.050	1	09/02/10 15:45	09/07/10 22:1	5 1,6020A	ВМ
Magnesium, Total	ND		ug/l	100	4.10	1	09/02/10 15:45	09/07/10 22:1:	5 1,6020A	вм
Manganese, Total	0 14	I	ug/l	1 00	0.136	1	09/02/10 15:45	09/07/10 22:1	5 1,6020A	вм
Nickel, Total	ND		ug/l	0 500	0.180	0 1	09/02/10 15:45	09/07/10 22:1	5 1,6020A	ВМ
Potassium, Total	ND		ug/l	100	18.2	10	09/02/10 15:45	09/07/10 22:1	5 1,6020A	BM
Selenium, Total	ND		ug/l	1.00	0.406	1	09/02/10 15:45	09/07/10 22:1	5 1,6020A	ВМ
Silver, Total	0.13	1	ug/l	0.500	0.085	1	09/02/10 15:45	09/07/10 22:1	5 1,6020A	ВМ
Sodium, Total	ND		ug/l	100	18.2	1	09/02/10 15:45	09/07/10 22:1	5 1,6020A	BM
Thallium, Total	ND		ug/l	0.500	0.031	1	09/02/10 15:45	09/07/10 22:1	5 1,6020A	вм
Vanadium, Total	ND		ug/l	0.50	0.077	1	09/02/10 15:45	09/07/10 22:1	5 1,6020A	BM
Zinc, Total	ND		ug/l	5.00	1.62	ì	09/02/10 15:45	09/07/10 22:1	5 1,6020A	ВМ
									the second	

Prep Information

Digestion Method: EPA 3005A

Parameter	Result C	ualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Dissolved Metals -	Westborough Lab	for samp	ole(s): 01	,03,05	Batch:	WG43080	7-1			
Aluminum, Dissolved	2.41	J	ug/l	10.0	1.91	1	09/02/10 15:45	09/07/10 22:15	1,6020A	вм
Antimony, Dissolved	ND		ug/l	0.500	0.120	1	09/02/10 15:45	09/07/10 22:15	1,6020A	вм
Arsenic, Dissolved	ND		ug/l	0.500	0.113	1	09/02/10 15:45	09/07/10 22:15	1,6020A	ВМ
Barium, Dissolved	ND		ug/l	0.500	0.095	1	09/02/10 15:45	09/07/10 22:15	1,6020A	вм

SHL TASK 0002

Lab Number:

L1013534 09/10/10

Project Number: AC001

Report Date:

Method Blank Analysis **Batch Quality Control**

Beryllium, Dissolved	ND		ug/l	0.500	0.059	1	09/02/10 15:45	09/07/10 22:15	1,6020A	вм
Cadmium, Dissolved	ND		ug/l	0.500	0.059	1	09/02/10 15:45	09/07/10 22:15	1,6020A	ВМ
Calcium, Dissolved	16.9	J	ug/l	100	12.6	1	09/02/10 15:45	09/07/10 22:15	1,6020A	вм
Chromium, Dissolved	ND		ug/l	0.500	0.186	1	09/02/10 15:45	09/07/10 22:15	1,6020A	вм
Cobalt, Dissolved	ND		ug/l	0.500	0.053	1	09/02/10 15:45	09/07/10 22:15	1,6020A	вм
Copper, Dissolved	0.16	J	ug/l	0.500	0.118	1	09/02/10 15:45	09/07/10 22:15	1,6020A	вм
Iron, Dissolved	13	J	ug/l	50.0	8.41	1	09/02/10 15:45	09/07/10 22:15	1,6020A	ВМ
Lead, Dissolved	ND		ug/l	0.500	0.050	1	09/02/10 15:45	09/07/10 22:15	1,6020A	ВМ
Magnesium, Dissolved	ND		ug/l	100	4.10	1	09/02/10 15:45	09/07/10 22:15	1,6020A	вм
Manganese, Dissolved	0.14	J	ug/l	1,00	0.136	1	09/02/10 15:45	09/07/10 22:15	1,6020A	вм
Nickel, Dissolved	ND		ug/l	0.500	0.180	1	09/02/10 15:45	09/07/10 22:15	1,6020A	вм
Potassium, Dissolved	ND		ug/l	100	18.2	1	09/02/10 15:45	09/07/10 22:15	1,6020A	вм
Selenium, Dissolved	ND		ug/l	1.00	0.406	1	09/02/10 15:45	09/07/10 22:15	1,6020A	ВМ
Silver, Dissolved	0.13	J	ug/l	0.500	0.085	1	09/02/10 15:45	09/07/10 22:15	1.6020A	вм
Sodium, Dissolved	ND		ug/l	100	18.2	1	09/02/10 15:45	09/07/10 22:15	1,6020A	вм
Thallium, Dissolved	ND		ug/l	0.500	0.031	1	09/02/10 15:45	09/07/10 22:15	1,6020A	вм
Vanadium, Dissolved	ND		ug/i	0.500	0.077	1	09/02/10 15:45	09/07/10 22:15	1,6020A	вм
Zinc, Dissolved	ND		ug/l	5.00	1.62	1	09/02/10 15:45	09/07/10 22:15	1,6020A	вм

Prep Information

Digestion Method: EPA 3005A

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Dissolved Metals - Wes	stborough Lab for samp	ole(s): 01	,03,05	Batch:	WG43128	4-1	ž.		
Mercury, Dissolved	ND .	ug/l	0.2000	0.0120	11	09/07/10 17:00	09/08/10 12:53	1,7470A	TD

Prep Information

Digestion Method: EPA 7470A

Parameter	Result Qualifie	r Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytica Method	
Total Metals - Westborou	gh Lab for sample	(s): 02,04,0	06-07 E	Batch: \	WG431285	-1			
Mercury, Total	ND	ug/l	0.2000	0.0120	1	09/07/10 17:00	09/08/10 13:05	1,7470A	TD



Serial_No:09101011:08

Project Name: SHL TASK 0002

Project Number: AC001

Lab Number:

L1013534

Report Date:

09/10/10

Method Blank Analysis Batch Quality Control

Prep Information

Digestion Method: EPA 7470A



Project Name:

SHL TASK 0002

Project Number:

AC001

Lab Number:

L1013534

Report Date:

Parameter	LCS %Recovery Qual	LCSD %Recovery Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Westborough Lab	Associated sample(s): 02,04,06-07	Batch: WG430806-2				
Aluminum, Total	.98		80-120	-		
Antimony, Total	96	+	80-120	-		
Arsenic, Total	99		80-120	1,9		
Barium, Total	98		80-120	- 6		
Beryllium, Total	96		80-120			
Cadmium, Total	107	4	80-120			
Calcium, Total	103	N/	80-120			
Chromium, Total	96		80-120	-		
Cobalt, Total	102		80-120	4		
Copper, Total	101	9	80-120	-		
Iron, Total	107 .	4	80-120			
Lead, Total	100		80-120			
Magnesium, Total	104 .	9	80-120			
Manganese, Total	103		80-120			
Nickel, Total	102	ý.	80-120			
Potassium, Total	102	*	80-120			
Selenium, Total	104		80-120			
Silver, Total	97		80-120	4		
Sodium, Total	96	*	80-120			
Thallium, Total	94		80-120	3		
Vanadium, Total	100		80-120			

Lab Number:

L1013534

Report Date:

09/10/10

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Westborough La	Associated sample(s): 02,04,06-07	Batch: WG430806-2			
Zinc, Total	100		80-120		

Project Name:

Project Number:

SHL TASK 0002

AC001

Project Name:

SHL TASK 0002

Project Number:

AC001

Lab Number:

L1013534

Report Date:

Parameter	LCS %Recovery	LCS		%Recovery Limits	RPD	RPD Limits	
Dissolved Metals - Westborough Lab	Associated sample(s):	01,03,05	Batch:	WG430807-2			
Aluminum, Dissolved	98				80-120	-	
Antimony, Dissolved	96-				80-120		
Arsenic, Dissolved	99		4		80-120		
Barium, Dissolved	98		3		80-120	-	
Beryllium, Dissolved	96				80-120	*	
Cadmium, Dissolved	107		-		80-120		
Calcium, Dissolved	i03		4.		80-120		
Chromium, Dissolved	.96		(4)		80-120		
Cobalt, Dissolved	102		2		80-120		
Copper, Dissolved	101		44.0		80-120	+	
Iron. Dissolved	1,07		- 4		80-120		
Lead, Dissolved	100 +		(*)		80-120	-	
Magnesium, Dissolved	104		12		80-120	-	
Manganese, Dissolved	103		*		80-120	9	
Nickel, Dissolved	102:		+		80-120		
Potassium, Dissolved	102				80-120		
Selenium, Dissolved	104		15		80-120	*	
Silver, Dissolved	97				80-120		
Sodium, Dissolved	96		*		80-120	7	
Thallium, Dissolved	94		4		80-120	4	
Vanadium, Dissolved	100		2		80-120	4	

Project Name: SHL TASK 0002

Project Number:

AC001

Lab Number:

L1013534

Report Date:

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits	
Dissolved Metals - Westborough Lab	Associated sample(s): (01,03,05 Batch: WG430807-2				
Zinc, Dissolved	100	*	80-120			
Dissolved Metals - Westborough Lab	Associated sample(s):	01,03,05 Batch: WG431284-2				
Mercury, Dissolved	105		80-120	*	20	
Total Metals - Westborough Lab Ass	ociated sample(s): 02,04	,06-07 Batch: WG431285-2				
Mercury, Total	104		80-120		20	

Project Name:

SHL TASK 0002

Project Number:

AC001

Lab Number:

L1013534

Report Date:

Parameter	Native Sample	MS . Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Westborough La 10-13-090110-U	ab Associated	sample(s):	02,04,06-07	QC Batch ID): WG43	30806-3	WG430806-4	QC Sar	nple: L1013	534-02	Client	ID: SHM
Aluminum, Total	233	2000	2150	96		2170	97		80-120	1		20
Antimony, Total	ND	500	479	96		480	96		80-120	0		20
Arsenic, Total	619	120	750	109		742	102		80-120	1		20
Barium, Total	160	2000	2100	97		2110	98		80-120	0		20
Beryllium, Total	ND	50	46.7	93		47.5	95		80-120	2		20
Cadmium, Total	ND	51.	54.3	106		54.3	106		80-120	0		20
Calcium, Total	68000	10000	78700	107		77700	97		80-120	1		20
Chromium, Total	2.66	200	189	93		192	95		80-120	2		20
Cobalt, Total	0.840	500	502	100		507	101		80-120	1		20
Copper, Total	0.740	250	245	98		248	99		80-120	1		20
Iron, Total	88600	1000	92000	340		90500	190		80-120	2		20
Lead, Total	ND	510	518	102		527	103		80-120	2		20
Magnesium, Total	10500	10000	20600	101		20600	101		80-120	0		20
Manganese, Total	1900	500	2440	108		2410	102		80-120	1		20
Nickel, Total	3.00	500	491	98		499	99		80-120	2		20
Potassium, Total	12500	10000	22200	97		22400	99		80-120	1		20
Selenium, Total	ND	120	124	103		127	106		80-120	2		20
Silver, Total	ND	50	47,2	94		47.3	95		80-120	0		20
Sodium, Total	15300	100.00	24600	93		24500	92		80-120	0		20
Thallium, Total	ND	120	115	96		116	97		80-120	1		20
Vanadium, Total	0.620	500	497	99		500	100		80-120	1		20

Project Name:

SHL TASK 0002

Project Number:

AC001

Lab Number:

L1013534

Report Date:

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recover	Recovery y Limits	RPD	RPD Limits
Total Metals - Westborough L 10-13-090110-U	ab Associated	sample(s);	02,04,06-07	QC Batch ID: \	NG430806-3	WG430806-4	QC Sample: L1013	534-02	Client ID: SHM-
Zinc, Total	ND	500	504	101	509	102	80-120	1	20

Project Name:

SHL TASK 0002

Project Number:

AC001

Lab Number:

L1013534

Report Date:

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Dissolved Metals - Westborou SHM-10-13-090110-F	ugh Lab Assoc	iated sample	(s): 01,03,0	5 QC Batch ID	: WG430807-3	WG430807-4	QC Sample: L101:	3534-01	Client ID:
Aluminum, Dissolved	ND	2000	2030	102	1880	94	80-120	8	20
Antimony, Dissolved	ND	500	488	98	478	96	80-120	2	20
Arsenic, Dissolved	575	120	718	119	696	101	80-120	3	20
Barium, Dissolved	153	2000	2140	99	2080	96	80-120	3	20
Beryllium, Dissolved	ND	50	47.3	95	45.1	90	80-120	5	20
Cadmium, Dissolved	ND	51	55.9	110	54.4	107	80-120	3	20
Calcium, Dissolved	61400	10000	75700 -	143	71100	97	80-120	6	20
Chromium, Dissolved	0.730	200	195	97	187	93	80-120	4	20
Cobalt, Dissolved	0.730	500	515	103	491	98	80-120	5	20
Copper, Dissolved	ND	250	254	102	242	97	80-120	5	20
Iron, Dissolved	84100	1000	90200	610	85800	170	80-120	5	20
Lead, Dissolved	ND	510	520	102	511	100	80-120	2	20
Magnesium, Dissolved	9900	10000	21100	112	19900	100	80-120	6	20
Manganese, Dissolved	1850	500	2460	122	Q 2310	92	80-120	6	20
Nickel, Dissolved	2.60	500	511	102	489	97	80-120	4	20
Potassium, Dissolved	12200	10000	23300	111	22000	98	80-120	6	20
Selenium, Dissolved	ND	120	126	105	122	102	80-120	3	20
Silver, Dissolved	ND	50	48.0	96	46.6	93	80-120	3	20
Sodium, Dissolved	14500	10000	24400	99	23000	85	80-120	6	20
Thallium, Dissolved	ND	120 -	114	95	113	94	80-120	1	20
Vanadium, Dissolved	ND	500	510	102	487	97	80-120	5	20

Project Name:

SHL TASK 0002

Project Number:

AC001

Lab Number:

L1013534

Report Date:

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Dissolved Metals - Westborough SHM-10-13-090110-F	Lab Assoc	iated sample(s	s): 01,03,0	5 QC Batch ID): WG430807-3	WG430807-4	QC Sample: L1013	534-01	Client ID:
Zinc, Dissolved	ND	500	510	102	500	100	80-120	2	20
Dissolved Metals - Westborough SHM-10-13-090110-F	Lab Assoc	iated sample(s	s): 01,03,0	5 QC Batch ID): WG431284-3	WG431284-4	QC Sample: L10138	534-01	Client ID:
Mercury, Dissolved	ND	1	1.005	100	1.024	102	80-120	2	20
Total Metals - Westborough Lab 10-13-090110-U	Associated	sample(s); 02	2,04,06-07	QC Batch ID:	WG431285-3	WG431285-4	QC Sample: L101353	34-02	Client ID: SHM
Mercury, Total	ND	47	1.030	103	1,066	107	80-120	3	20

INORGANICS & MISCELLANEOUS

Serial_No:09101011:08

Project Name: SHL TASK 0002

Project Number: AC001

Lab Number:

L1013534

Report Date:

09/10/10

SAMPLE RESULTS

Lab ID:

L1013534-02

Client ID:

SHM-10-13-090110-U

Sample Location:

DEVENS, MA

Matrix:

Water

Date Collected:

09/01/10 11:15

Date Received:

09/01/10

Field Prep:

Not Specified

Parameter	Result	Qualifier Unit	s RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Wes	tborough Lab								
Alkalinity, Total	380	mg CaC	O3/L 2.0	NA	1		09/02/10 13:47	30,2320B	JO
Solids, Total Suspended	43	mg.	5.0	NA	1	-	09/03/10 08:35	30,2540D	DW
Nitrogen, Ammonia	9.70	mg	0.075	0.017	1	09/02/10 12:30	09/02/10 22:17	30,4500NH3-BH	AT
Nitrogen, Nitrite	ND	mg	0.02	0.002	1		09/03/10 10:40	30,4500NO2-B	JO
Sulfide	ND	mg	0.10	0.10	1	09/02/10 18:15	09/02/10 19:15	30,4500S2-AD	AT
Chemical Oxygen Demand	33	mg.	/1 20	7.0	1		09/07/10 15:00	44,410.4	DW
Dissolved Organic Carbon	5.6	mg	/1 1.0	1.0	1	09/01/10 23:30	09/09/10 07:43	30,5310C	DW
Anions by Ion Chromatog	graphy - West	borough Lab							
Chloride	18	mg	/ 0.50	0.07	1		09/01/10 20:55	44,300.0	AU
Nitrogen, Nitrate	0.01	J mg	/1 0.05	0.01	1		09/01/10 20:55	44,300.0	AU
Sulfate	ND	mg	/1 1.0	0.12	1		09/01/10 20:55	44,300.0	AU

Serial_No:09101011:08

Project Name:

SHL TASK 0002

Lab Number:

L1013534

Project Number: AC001

Report Date:

09/10/10

SAMPLE RESULTS

Lab ID:

L1013534-04

Client ID:

SHM-10-15-090110-U

Sample Location:

DEVENS, MA

Matrix:

Water

Date Collected:

09/01/10 14:55

Date Received:

09/01/10

Field Prep:

Not Specified

Parameter	Result	Qualifier Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Wes	stborough Lab)							
Alkalinity, Total	240	mg CaCO3/L	2.0	NA	1		09/02/10 13:47	30,2320B	JO
Solids, Total Suspended	36	mg/l	5.0	NA	1		09/03/10 08:35	30,2540D	DW
Nitrogen, Ammonia	2.26	mg/l	0.075	0.017	1	09/02/10 12:30	09/02/10 22:19	30,4500NH3-BH	AT
Nitrogen, Nitrite	ND	mg/l	0.02	0.002	1	+	09/03/10 10:41	30,4500NO2-B	JO
Sulfide	ND	mg/l	0.10	0.10	1	09/02/10 18:15	09/02/10 19:15	30,4500S2-AD	AT
Chemical Oxygen Demand	22	mg/l	20	7.0	1		09/07/10 15:00	44,410.4	DW
Dissolved Organic Carbon	3,2	mg/l	1.0	1.0	1	09/01/10 23:30	09/09/10 07:43	30,5310C	DW
Anions by Ion Chromatog	graphy - West	borough Lab							
Chloride	11	mg/l	0.50	0.07	1		09/01/10 21:07	44,300.0	AU
Nitrogen, Nitrate	ND	mg/l	0.05	0.01	1		09/01/10 21:07	44,300.0	AU
Sulfate	8.4	mg/l	1.0	0.12	1	4	09/01/10 21:07	44.300.0	AU

SHL TASK 0002

Project Number: AC001

Lab Number:

L1013534

Report Date:

09/10/10

Method Blank Analysis Batch Quality Control

Parameter	Result Qu	ualifier Units	R	L	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Wes	tborough Lab	for sample(s):	02,04	Bal	tch: WG	430705-1				
Nitrogen, Ammonia	ND	mg/	0	075	0.017	1	09/02/10 12:30	09/02/10 21:51	30,4500NH3-BH	TA H
General Chemistry - Wes	tborough Lab	for sample(s):	02,04	Bat	tch: WG	430720-2				
Alkalinity, Total	ND	mg CaC	O3/L	2.0	NA	1		09/02/10 13:47	30,2320B	JO
Anions by Ion Chromatog	raphy - Westh	orough Lab fo	r samp	le(s)	: 02,04	Batch: W	/G430845-1			
Chloride	ND	mg/	1 (0.50	0.07	1		09/01/10 20:31	44,300.0	AU
Nitrogen, Nitrate	ND	mg/	1 (0.05	0.01	1	-	09/01/10 20:31	44,300 0	AÜ
Sulfate	ND	mg/	t ·	1.0	0.12	1	3	09/01/10 20:31	44,300.0	AU
General Chemistry - Wes	tborough Lab	for sample(s):	02,04	Ва	tch: WG	430848-1				
Sulfide	ND	mg/	1)	0.10	0.10	1	09/02/10 18:15	09/02/10 19:15	30,4500S2-AD) AT
General Chemistry - Wes	tborough Lab	for sample(s):	02,04	Ва	tch: WG	430895-1				
Solids, Total Suspended	ND	mg/	1	5.0	NΛ	1	1.00	09/03/10 08:35	30,2540D	DW
General Chemistry - Wes	tborough Lab	for sample(s):	02,04	Ва	tch: WG	430933-2				
Nitrogen, Nitrite	ND	mg/	4	0.02	0 002	-1.		09/03/10 10:40	30 4500NO2-E	3 JO
General Chemistry - Wes	tborough Lab	for sample(s):	02,04	Ва	tch: WG	431147-1				
Chemical Oxygen Demand	ND	mg/	n.	20	7.0	1	-	09/07/10 15:00	44,410.4	DW
General Chemistry - Wes	tborough Lab	for sample(s):	02,04	Ba	tch: WG	431588-1				
Dissolved Organic Carbon	ND	mg/	/1	1.0	1.0	1	09/01/10 23:30	09/09/10 07:43	30,5310C	DW

Project Name:

SHL TASK 0002

Project Number:

AC001

Lab Number:

L1013534

Report Date:

Parameter	LCS %Recovery (LCSD Qual %Recovery	%Recove Qual Limits	ry RPD	Qual RPD Limits
General Chemistry - Westborough Lab	Associated sample(s):	02,04 Batch: WG43	0705-2		
Nitrogen, Ammonia	100 ·	•	80-120		20
General Chemistry - Westborough Lab	Associated sample(s):	02,04 Batch: WG43	0720-1		
Alkalinity, Total	107.		80-115	À	4
Anions by Ion Chromatography - Westb	orough Lab Associated	sample(s): 02,04 Ba	tch: WG430845-2		
Chloride	102	*	90-110	1.2	
Nitrogen, Nitrate	102		90-110		
Sulfate	102		90-110		
General Chemistry - Westborough Lab	Associated sample(s):	02,04 Batch: WG43	0848-2		
Sulfide	-87		75-125		
General Chemistry - Westborough Lab	Associated sample(s):	02,04 Batch: WG43	0933-1		
Nitrogen, Nitrite	95		90-110		20
General Chemistry - Westborough Lab	Associated sample(s):	02,04 Batch: WG43	1147-2		
Chemical Oxygen Demand	101		95-105	4	

Lab Number:

L1013534

Report Date:

09/10/10

Project	Number:	AC001	

SHL TASK 0002

Project Name:

Parameter	LCS: %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
General Chemistry - Westborough Lab	Associated sample(s): 02,04	Batch: WG431588-2			
Dissolved Organic Carbon	101		90-110		

Project Name:

SHL TASK 0002

Project Number:

AC001

Lab Number:

L1013534

Report Date:

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery		overy nits	RPD	Qual	RPD Limits
General Chemistry - Westbo 090110-U	rough Lab Asso	ociated samp	ole(s): 02,04	QC Batch I	ID: WG4:	30705-3	QC Sample: L	.1013534-02	Clier	nt ID:	SHM-10	0-13-
Nitrogen, Ammonia	9,70	4	13.6	98		10-1		80-	120	-		20
General Chemistry - Westbo	rough Lab Asso	ociated samp	ole(s): 02,04	QC Batch I	ID: WG4:	30720-3	QC Sample: L	1013142-01	Clier	nt ID:	MS San	nple
Alkalinity, Total	290	100	380	87		(4)	*	86-	116			4
Anions by Ion Chromatograp Client ID: SHM-10-13-0901		igh Lab Asso	ociated sam	ple(s): 02,04	QC Bat	tch ID: W	G430845-3 WG	430845-4	QC San	nple: L	.101353	34-02
Chloride	18	4 ,	21	75		22	100	40-	151	5		18
Nitrogen, Nitrate	ND	0.4	0.41	102		0.41	102	80-	122	0		15
Sulfate	ND	8	7.4	92		7.6	95	60-	140	3		20
General Chemistry - Westbo 090110-U	rough Lab Asso	ociated samp	ole(s): 02,04	QC Batch I	ID: WG4:	30848-3	QC Sample: L	.1013534-02	Clier	nt ID:	SHM-10)-13-
Sulfide	ND	0.24	0.19	79		-	12	75-	125	-		20
General Chemistry - Westbo 090110-U	rough Lab Asso	ociated samp	ole(s): 02,04	QC Batch I	ID: WG4	30933-3	QC Sample: L	1013534-04	Clier	nt ID:	SHM-10)-15-
Nitrogen, Nitrite	ND	0.1	0.10	100		4	(4)	85-	115	121		20
General Chemistry - Westbo 090110-U	rough Lab Asso	ociated samp	ole(s): 02,04	QC Batch I	ID: WG4	31147-3	QC Sample: L	1013534-02	Clier	nt ID:	SHM-10)-13-
Chemical Oxygen Demand	33	238	290	108		2	ξ.	80-	120			20
General Chemistry - Westbo 090110-U	rough Lab Asso	ociated samp	ole(s): 02,04	QC Batch I	ID: WG4	31588-3	QC Sample: L	1013534-04	Clier	nt ID:	SHM-10)-15-
Dissolved Organic Carbon	3.2	4	7.4	106			(5	79-	120	\times		20

Lab Duplicate Analysis Batch Quality Control

Project Name:

SHL TASK 0002

Project Number: AC001

Lab Number:

L1013534

Report Date:

Parameter	Native Sample			Ouplicate Sam	ple Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab 090110-U	Associated sample(s):	02,04	QC Batch ID:	WG430705-4	QC Sample:	L1013534-02	Client ID:	SHM-10-13-
Nitrogen, Ammonia	14	9.70		9.89	mg/l	2		20
General Chemistry - Westborough Lab	Associated sample(s):	02,04	QC Batch ID:	WG430720-4	QC Sample:	L1013142-02	Client ID:	DUP Sample
Alkalinity, Total		330		320	mg CaCO	3/L 3		4
Anions by Ion Chromatography - Westl 10-13-090110 - U	oorough Lab Associate	d sample	e(s): 02,04 C	QC Batch ID: W	/G430845-5	QC Sample: L	1013534-0	2 Client ID: SHM-
Chloride		18.		18	mg/l	0		18
Nitrogen, Nitrate	1	0.01J		0.011J	mg/l	NC		15
Sulfate	2	ND		ND	mg/l	NC		20
General Chemistry - Westborough Lab 90110-U	Associated sample(s):	02,04	QC Batch ID:	WG430848-4	QC Sample:	L1013534-04	Client ID:	SHM-10-15-
Sulfide		ND		ND	mg/l	NC		20
General Chemistry - Westborough Lab	Associated sample(s):	02,04	QC Batch ID:	WG430895-2	QC Sample:	L1013636-11	Client ID:	DUP Sample
Solids, Total Suspended	3	2000		2000	mg/l	0		32
General Chemistry - Westborough Lab	Associated sample(s):	02,04	QC Batch ID:	WG430933-4	QC Sample:	L1013534-04	Client ID:	SHM-10-15-
Nitrogen, Nitrite	2	ND		ND	mg/l	NC		20
General Chemistry - Westborough Lab 90110-U	Associated sample(s):	02,04	QC Batch ID:	WG431147-4	QC Sample:	L1013534-02	Client ID:	SHM-10-13-
Chemical Oxygen Demand		33		29	mg/l	13		20

Lab Duplicate Analysis
Batch Quality Control

Lab Number:

L1013534

Report Date:

09/10/10

Parameter	Nat	ive Sam	ple	Duplicate Samp	le Units	RPD		RPD Limits
General Chemistry - Westborough Lab 090110-U	Associated sample(s):	02,04	QC Batch ID	: WG431588-4	QC Sample:	L1013534-02	Client ID:	SHM-10-13-
Dissolved Organic Carbon		5.6		5.8	mg/l	4		20

Project Name:

Project Number:

SHL TASK 0002

AC001

Serial_No:09101011:08

Project Name: SHL TASK 0002

Project Number: AC001

Lab Number: L1013534 **Report Date**: 09/10/10

Sample Receipt and Container Information

Were project specific reporting limits specified?

YES

Reagent H2O Preserved Vials Frozen on: NA

Cooler Information Custody Seal

Cooler

Α

Present/Intact

Container ID Container Type	Container Info	ormation			Temp			
S020S(180),DOD-MG-6020S(180),DOD-MG-6020S(180),DOD-MG-6020S(180),DOD-CR-6020S(180),DOD-CR-6020S(180),DOD-CR-6020S(180),DOD-CR-6020S(180),DOD-CR-6020S(180),DOD-MA-6020S(180)	Container ID	Container Type	Cooler	pН	deg C	Pres	Seal	Analysis(*)
6020S(180),DOD-MG- 6020S(180),DOD-SB- 6020S(180),DOD-CR- 6020S(180),DOD-MN- 6020S(180),DOD-TL- 6020S(180),DOD-CO- 6020S(180),DOD-CA- 6020S(180),DOD-CA- 6020S(180),DOD-NA- 6020S(180),DOD-NI- 6020S(180),DOD-NI- 6020S(180),DOD-NI- 6020S(180),DOD-PB- 6020S(180),DOD-CD- 6020S(180),DOD-CD- 6020S(180),DOD-BE- 6020S(180),DOD-BE- 6020S(180),DOD-CL- 6020S(180),DOD-AL- 6020S(180),DOD-AL- 6020S(180),DOD-AL- 6020S(180),DOD-K- 6020S(180),DOD-SE- 6020S(180),DOD-SE- 6020S(180),DOD-SE- 6020S(180),DOD-SE- 6020S(180),DOD-SE-			A	<2	4.6	Y	Present/Intact	6020S(180),DOD-MG- 6020S(180),DOD-SB- 6020S(180),DOD-CR- 6020S(180),DOD-MN- 6020S(180),DOD-TL- 6020S(180),DOD-CO- 6020S(180),DOD-CA- 6020S(180),DOD-NA- 6020S(180),DOD-NI- 6020S(180),DOD-NI- 6020S(180),DOD-NI- 6020S(180),DOD-NI- 6020S(180),DOD-SE- 6020S(180),DOD-CD- 6020S(180),DOD-CD- 6020S(180),DOD-CD- 6020S(180),DOD-CU- 6020S(180),DOD-CU- 6020S(180),DOD-CU- 6020S(180),DOD-AL- 6020S(180),DOD-AL- 6020S(180),DOD-K- 6020S(180),DOD-K-
6020\$(180),DOD-CO-6020\$(180),DOD-AG-6020\$(180),DOD-NA-6020\$(180),DOD-NA-6020\$(180),DOD-NI-6020\$(180),DOD-PB-6020\$(180),DOD-PB-6020\$(180),DOD-AS-6020\$(180),DOD-CD-6020\$(180),DOD-CD-6020\$(180),DOD-CD-6020\$(180),DOD-CD-6020\$(180),DOD-CD-6020\$(180),DOD-CN-6020\$(180),DOD-XI-6020\$(180),DOD-XI-6020\$(180),DOD-XI-6020\$(180),DOD-XI-6020\$(180),DOD-K-6020\$(180),DOD-SE-6020\$(180),DOD-SE-6020\$(180),DOD-HG-7470\$(28)	L1013534-01B	Plastic 250ml HNO3 preserved	А	<2	4.6	Y	Present/Intact	6020S(180),DOĎ-MĞ- 6020S(180),DOD-SB- 6020S(180),DOD-CR- 6020S(180),DOD-MN-
6020S(180),DOD-CA- 6020S(180),DOD-NA- 6020S(180),DOD-NI- 6020S(180),DOD-PB- 6020S(180),DOD-V- 6020S(180),DOD-AS- 6020S(180),DOD-CD- 6020S(180),DOD-BE- 6020S(180),DOD-CU- 6020S(180),DOD-ZN- 6020S(180),DOD-AL- 6020S(180),DOD-K- 6020S(180),DOD-K- 6020S(180),DOD-K- 6020S(180),DOD-SE- 6020S(180),DOD-SE- 6020S(180),DOD-HG-7470S(28)	2.114	1 × 1	4 6	5-				
14042524.004 \/-1410004 \/-15								6020S(180),DOD-CA-6020S(180),DOD-NA-6020S(180),DOD-NI-6020S(180),DOD-NI-6020S(180),DOD-PB-6020S(180),DOD-AS-6020S(180),DOD-CD-6020S(180),DOD-CD-6020S(180),DOD-CU-6020S(180),DOD-ZN-6020S(180),DOD-ZN-6020S(180),DOD-AL-6020S(180),DOD-K-6020S(180),DOD-K-6020S(180),DOD-K-6020S(180),DOD-SE-
L1013534-02A Vial H2SO4 preserved split A N/A 4.6 Y Present/Intact DOC-5310(28)	L1013534-02A	Vial H2SO4 preserved split	Α	N/A	4.6	Y	Present/Intact	DOC-5310(28)

Project Number: AC001

Lab Number: L1013534 Report Date: 09/10/10

Container Info	ormation			Temp			
Container ID	Container Type	Cooler	рН	deg C	Pres	Seal	Analysis(*)
L1013534-02B	Vial H2SO4 preserved split	Α	N/A	4.6	Y	Present/Intact	DOC-5310(28)
L1013534-02C	Plastic 250ml unpreserved	Α	N/A	4.6	Y	Present/Intact	ALK-T-2320(14)
L1013534-02D	Plastic 250ml unpreserved	Α	6	4.6	Y	Present/Intact	NO2-4500NO2(2)
L1013534-02E	Plastic 250ml Zn Acetate/NaOH pr	Α	>12	4.6	Y	Present/Intact	SULFIDE-4500(7)
L1013534-02F	Plastic 250ml Zn Acetate/NaOH pr	Α	>12	4.6	Y	Present/Intact	SULFIDE-4500(7)
L1013534-02G	Plastic 250ml Zn Acetate/NaOH pr	Α	>12	4.6	Y	Present/Intact	SULFIDE-4500(7)
L1013534-02H	Plastic 500ml HNO3 preserved	A	<2	4.6	Y	Present/Intact	DOD-CD-6020T(180),DOD-NA-6020T(180),DOD-V-6020T(180),DOD-ZN-6020T(180),DOD-NI-6020T(180),DOD-SE-6020T(180),DOD-CA-6020T(180),DOD-CA-6020T(180),DOD-CA-6020T(180),DOD-MN-6020T(180),DOD-HG-7470T(28),DOD-SB-6020T(180),DOD-AL-6020T(180),DOD-AL-6020T(180),DOD-AS-6020T(180),DOD-BA-6020T(180),DOD-BA-6020T(180),DOD-K-6020T(180),DOD-BE-6020T(180),DOD-BE-6020T(180),DOD-HG-6020T(180),DOD-BE-6020T(180),DOD-FE-6020T(180),DOD-FE-6020T(180),DOD-FE-6020T(180),DOD-PB-6020T(180),DOD-PB-6020T(180),DOD-PB-6020T(180),DOD-PB-6020T(180),DOD-PB-6020T(180),DOD-PB-6020T(180),DOD-PB-6020T(180),DOD-PB-6020T(180),DOD-PB-6020T(180),DOD-PB-6020T(180),DOD-PB-6020T(180),DOD-PB-6020T(180),DOD-PB-6020T(180),DOD-PB-6020T(180)
L1013534-02	Plastic 500ml HNO3 preserved	A	<2	4.6	Y	Present/Intact	DOD-CD-6020T(180),DOD-NA-6020T(180),DOD-V-6020T(180),DOD-ZN-6020T(180),DOD-NI-6020T(180),DOD-SE-6020T(180),DOD-TL-6020T(180),DOD-CA-6020T(180),DOD-CA-6020T(180),DOD-MN-6020T(180),DOD-HG-
v	w - o fr th M	+ **	\$		100	11 21	7470T(28),DOD-SB- 6020T(180),DOD-AG-
234		W) 40	V V #	9			6020T(180),DOD-AL- 6020T(180),DOD-AS- 6020T(180),DOD-BA- 6020T(180),DOD-CR- 6020T(180),DOD-BE- 6020T(180),DOD-MG- 6020T(180),DOD-FE- 6020T(180),DOD-CU- 6020T(180),DOD-PB- 6020T(180),DOD-PB- 6020T(180),DOD-PB- 6020T(180)
L1013534-02J	Plastic 500ml unpreserved	Α	6	4.6	Υ	Present/Intact	SO4-300(28),CL-300(28),NO3- 300(2)
L1013534-02K	Plastic 500ml H2SO4 preserved	Α	<2	4.6	Y	Present/Intact	COD-410(28),NH3-4500(28)
L1013534-02L	Plastic 1000ml unpreserved	Α	6	4.6	Y	Present/Intact	TSS-2540(7)

Project Number: AC001

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Container Info	rmation			Temp			
Container ID	Container Type	Cooler	рН	deg C	Pres	Seal	Analysis(*)
L1013534-02X	Amber 250ml unpreserved	Α	6	4.6	Y	Present/Intact	DOC-5310(28)
L1013534-03A	Plastic 250ml HNO3 preserved	A	<2	4.6	Ý	Present/Intact	DOD-BA-6020S(180),DOD-FE-6020S(180),DOD-MG-6020S(180),DOD-SB-6020S(180),DOD-CR-6020S(180),DOD-MN-6020S(180),DOD-MN-6020S(180),DOD-MC-6020S(180),DOD-AG-6020S(180),DOD-NA-6020S(180),DOD-NI-6020S(180),DOD-NI-6020S(180),DOD-NI-6020S(180),DOD-SE-6020S(180),DOD-CD-6020S(180),DOD-CD-6020S(180),DOD-CD-6020S(180),DOD-CD-6020S(180),DOD-BE-6020S(180),DOD-CD-6020S(180),DOD-CD-6020S(180),DOD-CD-6020S(180),DOD-AL-6020S(180),DOD-K-6020S(180),DOD-K-6020S(180),DOD-K-6020S(180),DOD-K-6020S(180),DOD-SE-6020S(180),DOD-SE-6020S(180),DOD-SE-6020S(180),DOD-SE-6020S(180),DOD-HG-7470S(28)
L1013534-04A	Vial H2SO4 preserved split	Α	N/A	4.6	Y	Present/Intact	DOC-5310(28)
L1013534-04B	Vial H2SO4 preserved split	Α	N/A	4.6	Y	Present/Intact	DOC-5310(28)
L1013534-04C	Plastic 250ml unpreserved	Α	N/A	4.6	Y	Present/Intact	ALK-T-2320(14)
L1013534-04D	Plastic 250ml unpreserved	Α	6	4.6	Y	Present/Intact	NO2-4500NO2(2)
L1013534-04E	Plastic 250ml Zn Acetale/NaOH pr	Α	>12	4.6	Y	Present/Intacl	SULFIDE-4500(7)
L1013534-04F	Plastic 250ml Zn Acetate/NaOH pr	A	>12	4.6	Υ	Present/Intact	SULFIDE-4500(7)
L1013534-04G	Plastic 250ml Zn Acetate/NaOH pr	Α	>12	4.6	Y	Present/Intact	SULFIDE-4500(7)
L1013534-04H	Plastic 500ml HNO3 preserved	A	<2	4.6	Y	Present/Intact	DOD-CD-6020T(180),DOD-NA-6020T(180),DOD-V-6020T(180),DOD-ZN-6020T(180),DOD-NI-6020T(180),DOD-SE-6020T(180),DOD-TL-6020T(180),DOD-CA-6020T(180),DOD-CA-6020T(180),DOD-CA-6020T(180)
- " = 0.8		10.00	9.00	- 0	00	A	6020T(180),DOD-CO- 6020T(180),DOD-MN-
			* * *				6020T(180),DOD-HG- 7470T(28),DOD-SB- 6020T(180),DOD-AG- 6020T(180),DOD-AL- 6020T(180),DOD-BA- 6020T(180),DOD-BA- 6020T(180),DOD-K- 6020T(180),DOD-K- 6020T(180),DOD-MG- 6020T(180),DOD-MG- 6020T(180),DOD-FE- 6020T(180),DOD-CU- 6020T(180),DOD-PB- 6020T(180),DOD-PB- 6020T(180)
L1013534-04I	Plastic 500ml unpreserved	Α	6	4.6	Y	Present/Intact	SO4-300(28),CL-300(28),NO3- 300(2)

Project Number: AC001

Lab Number: L1013534 **Report Date:** 09/10/10

Container Info	ormation			Temp			
Container ID	Container Type	Cooler	pH		Pres	Seal	Analysis(*)
L1013534-04J	Plastic 500ml H2SO4 preserved	Α	<2	4.6	Y	Present/Intact	COD-410(28),NH3-4500(28)
L1013534-04K	Plastic 1000ml unpreserved	Α	6	4.6	Y	Present/Intact	TSS-2540(7)
L1013534-04X	Amber 250ml unpreserved	Α	6	4.6	Y	PresenVIntact	DOC-5310(28)
L1013534-05A	Plastic 250ml HNO3 preserved	A	<2	4.6	Y	Present/Intact	DOD-BA-6020S(180),DOD-FE-6020S(180),DOD-MG-6020S(180),DOD-SB-6020S(180),DOD-CR-6020S(180),DOD-TL-6020S(180),DOD-TL-6020S(180),DOD-CO-6020S(180),DOD-CA-6020S(180),DOD-NA-6020S(180),DOD-NA-6020S(180),DOD-NB-6020S(180),DOD-PB-6020S(180),DOD-PB-6020S(180),DOD-CD-6020S(180),DOD-CD-6020S(180),DOD-CD-6020S(180),DOD-BE-6020S(180),DOD-CD-6020S(180),DOD-CD-6020S(180),DOD-CD-6020S(180),DOD-CD-6020S(180),DOD-CD-6020S(180),DOD-CD-6020S(180),DOD-CD-6020S(180),DOD-CD-6020S(180),DOD-SE-6020S(180),DOD-K-6020S(180),DOD-K-6020S(180),DOD-SE-6020S(180),DOD-SE-6020S(180),DOD-SE-6020S(180),DOD-SE-6020S(180),DOD-HG-7470S(28)
L1013534-06A	Plastic 500ml HNO3 preserved	Α	<2	4.6	Ÿ	Present/Intact	DOD-CD-6020T(180),DOD-NA-6020T(180),DOD-V-6020T(180),DOD-ZN-6020T(180),DOD-NI-6020T(180),DOD-SE-6020T(180),DOD-CA-6020T(180),DOD-CA-6020T(180),DOD-HG-7470T(28),DOD-SB-6020T(180),DOD-AG-6020T(180),DOD-AG-6020T(180),DOD-AG-6020T(180),DOD-AS-6020T(180),DOD-AS-6020T(180),DOD-BA-6020T(180),DOD-CR-6020T(180),DOD-CR-6020T(180),DOD-K-6020T(180),DOD-K-6020T(180),DOD-K-6020T(180),DOD-K-6020T(180),DOD-BE-6020T(180),DOD-MG-
3				7	*		6020T(180),DOD-MG- 6020T(180),DOD-FE- 6020T(180),DOD-CU- 6020T(180),DOD-PB- 6020T(180)

Serial_No:09101011:08

Project Name: SHL TASK 0002

Project Number: AC001

Lab Number: L1013534

Report Date: 09/10/10

Container Info	ormation			Temp			
Container ID	Container Type	Cooler	рН	deg C	Pres	Seal	Analysis(*)
L1013534-07A	Plastic 500ml HNO3 preserved	A	<2	4.6	Y	PresenVIntact	DOD-CD-6020T(180),DOD-NA-6020T(180),DOD-V-6020T(180),DOD-ZN-6020T(180),DOD-NI-6020T(180),DOD-NI-6020T(180),DOD-SE-6020T(180),DOD-CA-6020T(180),DOD-CO-6020T(180),DOD-MN-6020T(180),DOD-HG-7470T(28),DOD-AG-6020T(180),DOD-AG-6020T(180),DOD-AS-6020T(180),DOD-AS-6020T(180),DOD-BA-6020T(180),DOD-BA-6020T(180),DOD-CR-6020T(180),DOD-BE-6020T(180),DOD-BE-6020T(180),DOD-HG-6020T(180),DOD-FE-6020T(180),DOD-FE-6020T(180),DOD-FE-6020T(180),DOD-FE-6020T(180),DOD-PB-6020T(1

Container Comments

L1013534-02J

L1013534-02X

L1013534-04X

Project Name: SHL TASK 0002 Lab Number: L1013534

Project Number: AC001 Report Date: 09/10/10

GLOSSARY

Acronyms

EPA - Environmental Protection Agency.

Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known
amounts of analytes or a material containing known and verified amounts of analytes.

LCSD - Laboratory Control Sample Duplicate: Refer to LCS.

MDL - Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

MS - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.

MSD Matrix Spike Sample Duplicate: Refer to MS.

NA - Not Applicable.

 Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.

NI - Not Ignitable.

RL —Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration.

The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to
assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD).
 Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the
absolute difference between the values; although the RPD value will be provided in the report.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Data Qualifiers

- A Spectra identified as "Aldol Condensation Product".
- The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than five times (5x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting, limit for common lab contaminants) in the associated method blank.
- Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- H The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- The RPD between the results for the two columns exceeds the method-specified criteria; however, the lower value has been reported due to obvious interference.
- P The RPD between the results for the two columns exceeds the method-specified criteria.
- The quality control sample exceeds the associated acceptance criteria. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- Analytical results are from sample re-analysis.

Report Format: DU Report with "J" Qualifiers

ALPHA

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Data Qualifiers

RE - Analytical results are from sample re-extraction.

 Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL). This represents an estimated concentration for Tentatively Identified Compounds (TICs).

ND · Not detected at the method detection limit (MDL) for the sample.

Report Format: DU Report with "J" Qualifiers

Project Name: Project Number:

SHL TASK 0002

AC001

Lab Number:

L1013534

Report Date:

09/10/10

REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IIIA, 1997.

- 30 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WPCF. 18th Edition. 1992.
- 44 Methods for the Determination of Inorganic Substances in Environmental Samples, EPA/600/R-93/100, August 1993.

The analyses performed on the sample(s) within this report are in accordance with the minimum established guidelines set forth in the Department of Defense Quality Systems Manual, Version 4.1, issued April 22, 2009

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

ALPHA

Certificate/Approval Program Summary

Last revised July 19, 2010 - Westboro Facility

The following list includes only those analytes/methods for which certification/approval is currently held. For a complete listing of analytes for the referenced methods, please contact your Alpha Customer Service Representative.

Connecticut Department of Public Health Certificate/Lab ID: PH-0574. NELAP Accredited Solid Waste/Soil.

Drinking Water (Inorganic Parameters: Color, pH, Turbidity, Conductivity, Alkalinity, Chloride, Free Residual Chlorine, Fluoride, Calcium Hardness, Sulfate, Nitrate, Nitrite, Aluminum, Antimony, Arsenic, Barium, Beryllium, Cadmium, Calcium, Chromium, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Vanadium, Zinc, Total Dissolved Solids, Total Organic Carbon, Total Cyanide, Perchlorate.

Organic Parameters: Volatile Organics 524.2, Total Trihalomethanes 524.2, 1,2-Dibromo-3-chloropropane (DBCP), Ethylene Dibromide (EDB), 1,4-Dioxane (Mod 8270). Microbiology Parameters: Total Coliform-MF mEndo (SM9222B), Total Coliform – Colilert (SM9223 P/A), E. Coli. – Colilert (SM9223 P/A), HPC – Pour Plate (SM9215B), Fecal Coliform – MF m-FC (SM9222D))

Wastewater/Non-Potable Water (Inorganic Parameters: Color, pH, Conductivity, Acidity, Alkalinity, Chloride, Total Residual Chlorine, Fluoride, Total Hardness, Silica, Sulfate, Sulfide, Ammonia, Kjeldahl Nitrogen, Nitrate, Nitrite, O-Phosphate, Total Phosphorus, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Strontium, Thallium, Tin, Titanium, Vanadium, Zinc, Total Residue (Solids), Total Dissolved Solids, Total Suspended Solids (non-filterable), BOD, CBOD, COD, TOC, Total Cyanide, Phenolics, Foaming Agents (MBAS), Bromide, Oil and Grease. Organic Parameters: PCBs, Organochlorine Pesticides, Technical Chlordane, Toxaphene, 2,4-D, 2,4,5-T, 2,4,5-TP(Silvex), Acid Extractables (Phenols), Benzidines, Phthalate Esters, Nitrosamines, Nitroaromatics & Isophorone, Polynuclear Aromatic Hydrocarbons, Haloethers, Chlorinated Hydrocarbons, Volatile Organics, TPH (HEM/SGT), Extractable Petroleum Hydrocarbons (ETPH), MA-EPH, MA-VPH, Microbiology Parameters: Total Coliform – MF mEndo (SM9222B), Total Coliform – MTF (SM9221B), HPC – Pour Plate (SM9215B), Fecal Coliform – MF m-FC (SM9222D), Fecal Coliform – A-1 Broth (SM9221E).)

Solid Waste/Soil (Inorganic Parameters: pH, Sulfide, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Tin, Vanadium, Zinc, Total Cyanide, Ignitability, Phenolics, Corrosivity, TCLP Leach (1311), SPLP Leach (1312 metals only), Reactivity, Organic Parameters: PCBs, PCBs in Oil, Organochlorine Pesticides, Technical Chlordane, Toxaphene, Extractable Petroleum Hydrocarbons (ETPH), MA-EPH, MA-VPH, Dicamba, 2,4-D, 2,4,5-T, 2,4,5-TP(Silvex), Volatile Organics, Acid Extractables (Phenols), 3 3'-Dichlorobenzidine, Phthalates, Nitrosamines, Nitroaromatics & Cyclic Ketones, PAHs, Haloethers, Chlorinated Hydrocarbons.)

Maine Department of Human Services Certificate/Lab ID: 2009024.

Drinking Water (Inorganic Parameters: SM9215B, 9222D, 9223B, EPA 180.1, 300.0, 353.2, SM2130B, 2320B, 4500Cl-D, 4500CN-C, 4500CN-E, 4500F-C, 4500H+B, 4500NO3-F, EPA 200.7, EPA 200.8, 245.1, EPA 300.0. <u>Organic Parameters</u>: 504.1, 524.2.)

Wastewater/Non-Potable Water (Inorganic Parameters: EPA 120.1, 1664A, 350.1, 351.1, 353.2, 410.4, 420.1, Lachat 10-107-06-1-B, SM2320B, 2340B, 2510B, 2540C, 2540D, 426C, 4500Cl-D, 4500Cl-E, 4500CN-C, 4500CN-E, 4500F-B, 4500F-C, 4500NH-B, 4500Norg-B, 4500Norg-C, 4500NH3-B, 4500NH3-G, 4500NH3-H, 4500NO3-F, 4500P-B.5, 4500P-E, 5210B, 5220D, 5310C, EPA 200.7, 200.8, 245.1. Organic Parameters: 608, 624, ME DRO, ME GRO, MA EPH, MA VPH.)

Solid Waste/Soil (Organic Parameters: ME DRO, ME GRO, MA EPH, MA VPH,)

Massachusetts Department of Environmental Protection Certificate/Lab ID: M-MA086.

Drinking Water

Inorganic Parameters: (EPA 200.8 for: Sb,As,Ba,Be,Cd,Cr,Cu,Pb,Ni,Se,Tl)

(EPA 200.7 for: Ba,Be,Ca,Cd,Cr,Cu,Na,Ni) 245.1, (300.0 for: Nitrate-N, Fluoride, Sulfate)

353.2 for: Nitrate-N, Nitrite-N; SM4500NO3-F, 4500F-C, 4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, 2320B, SM2540C, SM4500H-B.

Organic Parameters: (EPA 524.2 for: Trihalomethanes, Volatile Organics)

(504.1 for: 1,2-Dibromoethane, 1,2-Dibromo-3-Chloropropane), 314.0, 332.

Microbiology Parameters: SM9215B; ENZ. SUB. SM9223; MF-SM9222D

Non-Potable Water

Inorganic Parameters:, (EPA 200.8 for: Al,Sb,As,Be,Cd,Cr,Cu,Pb,Mn,Ni,Se,Ag,Tl,Zn)

(EPA 200.7 for: Al,Sb,As,Be,Cd,Cr,Co,Cu,Fe,Pb,Mn,Mo,Ni,Se,Ag,Sr,Ti,Tl, V,Zn,Ca,Mg,Na,K)

245.1, SM4500H,B, EPA 120.1, SM2510B, 2540C, 2540B, 2340B, 2320B, 4500CL-E, 4500F-BC, 426C, SM4500NH3-BH, (EPA 350.1 for: Ammonia-N), LACHAT 10-107-06-1-B for Ammonia-N, SM4500NO3-F, 353.2 for Nitrate-N, SM4500NH3-B,C-Titr, SM4500NH3-BC-NES, EPA 351.1, SM4500P-E, 4500P-B,E, 5220D, EPA 410.4, SM 5210B,

5310C, 4500CL-D, EPA 1664, SM14 510AC, EPA 420, SM4500-CN-CE, SM2540D.

Organic Parameters: (EPA 624 for Volatile Halocarbons, Volatile Aromatics)

(608 for: Chlordane, Aldrin, Dieldrin, DDD, DDE, DDT, Heptachlor, Heptachlor Epoxide, PCBs-Water), EPA 625 for SVOC Acid Extractables and SVOC Base/Neutral Extractables, 600/4-81-045-PCB-Oil

New Hampshire Department of Environmental Services Certificate/Lab ID: 200307. NELAP Accredited.

Drinking Water (Inorganic Parameters: SM6215B, 9222B, 9223B Colilert, EPA 200.7, 200.8, 245.2, 120.1, 300.0, 314.0, SM4500CN-E, 4500H+B, 4500NO3-F, 2320B, 2510B, 2540C, 4500F-C, 5310C, 2120B, EPA 331.0. Organic Parameters: 504.1, 524.2, SM6251B.)

Non-Potable Water (Inorganic Parameters: SM9222D, 9221B, 9222B, 9221E-EC, EPA 200.7, 200.8, 245.1, 245.2, SW-846 6010B, 6020, 7196A, 7470A, SM3500-CR-D, EPA 120.1, 300.0, 350.1, 351.1, 353.2, 420.1, 1664A, SW-846 9010, 9030, 9040B, SM426C, SM2310B, 2540B, 2540D, 4500H+B, 4500NH3-H, 4500NH3-E, 4500NO2-B, 4500P-E, 4500-S2-D, 5210B, 2320B, 2540C, 4500F-C, 5310C, 5540C, LACHAT 10-117-07-1-B, LACHAT 10-107-06-1-B, LACHAT 10-107-04-1-J, LACHAT 10-117-07-1-A, SM4500CL-E, LACHAT 10-204-00-1-A, LACHAT 10-107-06-2-D, Organic Parameters: SW-846 3005A, 3015A, 3510C, 5030B, 8021B, 8260B, 8270C, 8330, EPA 624, 625, 608, SW-846 8082, 8081A.)

Solid & Chemical Materials (Inorganic Parameters: SW-846 6010B, 7196A, 7471A, 7.3.3.2, 7.3.4.2, 1010, 1030, 9010, 9012A, 9014, 9030B, 9040, 9045C, 9050C, 1311, 3005A, 3050B, 3051A. Organic Parameters: SW-846 3540C, 3545, 3580A, 5030B, 5035, 8021B, 8260B, 8270C, 8330, 8151A, 8082, 8081A.)

New Jersey Department of Environmental Protection Certificate/Lab ID: MA935. NELAP Accredited.

Drinking Water (Inorganic Parameters: SM9222B, 9221E, 9223B, 9215B, 4500NO3-F, 4500F-C, EPA 300,0, 200.7, 2540C, 2320B, 314.0, SM2120B, 2510B, 5310C, SM4500H-B, EPA 200.8, 245.2. Organic Parameters: 504.1, SM6251B, 524.2.)

Non-Potable Water (Inorganic Parameters: SM5210B, EPA 410.4, SM5220D, 4500Cl-D, EPA 300.0, SM2120B, SM4500F-BC, EPA 200.7, 351.1, LACHAT 10-107-06-2-D, EPA 353.2, SM4500NO3-F, 4500NO2-B, EPA 1664A, SM5310B, C or D, 4500-PE, EPA 420.1, SM4500P-B5+E, 2540B, 2540C, 2540D, EPA 120.1, SM2510B, SM15 426C, SM9221CE, 9222D, 9221B, 9222B, 9215B, 2310B, 2320B, 4500NH3-H, 4500-S D, EPA 350.1, SM5210B, SW-846 3015, 6020, 7470A, 5540C, 4500H-B, EPA 200.8, SM3500Cr-D, EPA 245.1, 245.2, SW-846 9040B, 3005A, EPA 6010B, 7196A, SW-846 9010B, 9030B. Organic Parameters: SW-846 8260B, 8270C, 3510C, EPA 608, 624, 625, SW-846 5030B, 8021B, 8081A, 8082, 8151A, 8330, NJ OQA-QAM-025 Rev.7.)

Solid & Chemical Materials (Inorganic Parameters: SW-846 9040B, 3005A, 6010B, 7196A, 5030B, 9010B, 9030B, 1030, 1311, 3050B, 3051, 7471A, 9014, 9012A, 9045C, 9050A, 9065. Organic Parameters: SW-846 8021B, 8081A, 8082, 8151A, 8330, 8260B, 8270C, 1311, 1312, 3540C, 3545, 3550B, 3580A, 5035L, 5035H, NJ OQA-QAM-025 Rev.7.)

New York Department of Health Certificate/Lab ID: 11148. NELAP Accredited.

Drinking Water (Inorganic Parameters: SM9223B, 9222B, 9215B, EPA 200.8, 200.7, 245.2, SM5310C, EPA 314.0, 332.0, SM2320B, EPA 300.0, SM2120B, 4500CN-E, 4500F-C, 4500H-B, 4500NO3-F, 2540C, EPA 120.1, SM 2510B, Organic Parameters: EPA 524.2, 504.1.)

Non-Potable Water (Inorganic Parameters: SM9221E, 9222D, 9221B, 9222B, 9215B, 5210B, EPA 410.4, SM5220D, 2310B-4a, 2320B, EPA 200.7, 300.0, LACHAT 10-117-07-1A or B, SM4500CI-E, 4500F-C, SM15 426C, EPA 350.1, LACHAT 10-107-06-1-B, SM4500NH3-H, EPA 351.1, LACHAT 10-107-06-2, EPA 353.2, LACHAT 10-107-041-C, SM4500-NO3-F, 4500-NO2-B, 4500P-E, 2540C, 2540B, 2540D, EPA 200.8, EPA 6010B, 6020, EPA 7196A, S\M3500Cr-D, EPA 245.1, 245.2, 7470A, SM2120B, SM4500-CN-E LACHAT 10-204-00-1-A, EPA 9040B, SM4500-HB, EPA 1664A, SM5310C, EPA 420.1, SM14 510C, EPA 120.1, SM2510B, SM4500S-D, SM5540C, EPA 3005A, 3015. Organic Parameters: EPA 624, 8260B, 8270C, 625, 608, 8081A, 8151A, 8330, 8082, EPA 3510C, 5030B, 9010B, 9030B.)

Solid & Hazardous Waste (Inorganic Parameters: 1010, 1030, SW-846 Ch 7 Sec 7.3, EPA 6010B, 7196A, 7471A, 9012A, 9014, 9040B, 9045C, 9065, 9050, EPA 1311, 1312, 3005A, 3050B, 9010B, 9030B. Organic Parameters: EPA 8260B, 8270C, 8081A, 8151A, 8330, 8082, 3540C, 3545, 3546, 3580, 5030B, 5035.)

North Carolina Department of the Environment and Natural Resources Certificate/Lab ID : 666, Organic Parameters: MA-EPH, MA-VPH.

Pennsylvania Department of Environmental Protection <u>Certificate/Lab ID</u>: 68-03671. *NELAP Accredited*. *Non-Potable Water* (<u>Organic Parameters</u>: EPA 3510C, 5030B, 625, 624, 608, 8081A, 8082, 8151A, 8260B, 8270C, 8330)

Solid & Hazardous Waste (Inorganic Parameters: EPA 1010, 1030, 1311, 3050B, 3051, 6010B, EPA 7.3.3.2, EPA 7.3.4.2, 7196A, 7471A, 9010B, 9012A, 9014, 9040B, 9045C, 9050, 9065. Organic Parameters: 3540C, 3545, 3580A, 5035, 8021B, 8081A, 8082, 8151A, 8260B, 8270C, 8330)

Rhode Island Department of Health Certificate/Lab ID: LAO00065. NELAP Accredited via NY-DOH.

Refer to MA-DEP Certificate for Potable and Non-Potable Water.

Refer to NY-DOH Certificate for Potable and Non-Potable Water.

Texas Commisson on Environmental Quality Certificate/Lab ID: T104704476-09-1. NELAP Accredited. Non-Potable Water (Inorganic Parameters: EPA 120.1, 1664, 200.7, 200.8, 245.1, 245.2, 300.0, 350.1, 351.1, 353.2, 376.2, 410.4, 420.1, 6010, 6020, 7196, 7470, 9040, SM 2120B, 2310B, 2320B, 2510B, 2540B, 2540C, 2540D, 426C, 4500CL-E, 4500CN-E, 4500F-C, 4500H+B, 4500NH3-H, 4500NO2B, 4500P-E, 4500 S2⁻D, 510C, 5210B, 5220D, 5310C, 5540C. Organic Parameters: EPA 608, 624, 625, 8081, 8082, 8151, 8260, 8270, 8330.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 1311, 1312, 9012, 9014, 9040, 9045, 9050, 9065.)

Department of Defense Certificate/Lab ID: L2217.

Drinking Water (Inorganic Parameters: SM 4500H-B. Organic Parameters: EPA 524.2, 504.1.)

Non-Potable Water (Inorganic Parameters: EPA 200.7, 200.8, 6010B, 6020, 245.1, 245.2, 7470A, 9040B, 300.0, 9251, 9038, 350.1, 353.2, 351.1, 120.1, 9050A, 410.4, 9060, 1664, 420.1, LACHAT 10-107-06-1-B, SM 4500CN-E, 4500H-B, 4500CL-E, 4500F-BC, 4500SO4-E, 426C, 4500NH3-B, 4500NH3-H, 4500NO3-F, 4500NO2-B, 4500Norg-C, 4500PE, 2510B, 5540C, 5220D, 5310C, 2540B, 2540C, 2540D, 510C, 4500S2-AD, 3005A, 3015, 9010B, 9030B. Organic Parameters: EPA 8260B, 8270C, 8330, 625, 8082, 8151A, 8081A, 3510C, 5030B, MassDEP EPH, MassDEP VPH.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 200.7, 6010B, 7471A, 9040B, 9045C, 9065, 420.1, 9012A, 6860, 1311, 1312, 3050B, 9030B, 3051, 9010B, 3540C, SM 510ABC, 4500CN-CE, 2540G, SW-846 7.3, Organic Parameters: EPA 8260B, 8270C, 8330, 8082, 8081A, 8151A, 3545, 3546, 3580, 5035, MassDEP EPH, MassDEP VPH.)

Analytes Not Accredited by NELAP

Certification is not available by NELAP for the following analytes: **EPA 8260B**: Freon-113, 1,2,4,5-Tetramethylbenzene, 4-Ethyltoluene. **EPA 8330A**: PETN, Picric Acid, Nitroglycerine, 2,6-DANT, 2,4-DANT. **EPA 8270C**: Methyl naphthalene, Dimethyl naphthalene, Total Methylnaphthalenes, Total Dimethylnaphthalenes, 1,4-Diphenylhydrazine (Azobenzene). **EPA 625**: 4-Chloroaniline. **EPA 350.1** for Ammonia in a Soil matrix.

ALPHA	CHAIN OF	- CUSTO	DY ,	PAGE	OF	Date Re	c'd in	Lab;		91	111)	ALPHA Jób#: //0/3534
WESTEORO, MA	MANSFIELD, MA	Project Inform				Repor	Infor					-	Billing Information
TEL: 508-896-9220 FAX: 508-898-9193	TEL: 508-822-9300 FAX: 508-822-3288	Project Name: S	HL Tas	4 000	2	☐ FAX					-DR Iverable		3 Same as Client info PO#:
Client Informatio		Project Location:		5 MA		Regulat	11						
Ollent: Soverer	ign Consulting Inc 3 S. Main St		CO01			State /Fe					144		SEE QAPP
ddress: 905 13	3 S. Marin St	Project Manager:	Phil Mc	Bain					IPTIV	E CE	RTAIN		REASONABLE CONFIDENCE PROTO
Mansfiel	WA 02048	ALPHA Quote #:				√ Yes	A Second				-	Methods Red	Control of the Contro
	339-3200	Turn-Around	Time			Yes	□ No		ls Mat	rix Sp	ike (MS) Required or	n this SDG? (If yes see note in Comments)
1x: 508-3	35- 3248	Standard	□ RUSH (onl)	y confirmed if pre-as	proved!)	☐ Yes	₹ No	-	Are CT	RCP	(Reaso	nable Confid	dence Protocols) Required?
mail: pmcbain	@ sacan cam	12				9	1	1	1	1	/	111	SAMPLE HANDLING
	we been previously analyzed by Alpha pecific Requirements/Comm	M. OK. C. T. TR	9/9/10) committee		ANALYSIS	1	1	1	1	//	11.	SAMPLE HANDLING
(Note: All CAM met SDG+440 — C	dicate in Sample Specific Comments vindos for inorganic analyses require MS	s every 20 soil sample: one as nated - h	5)		Sampler's	1/20/	5/2	1/411	00 74 12 CO	y/5	DOCTOR	5 121 mones	□ Not needed □ Lab to do Preservation □ Lab to do (Please specify below)
(Lab Use Only)	Sample ID	Date	Time	Matrix	Initials	10/4	Y	14	10	II/	3/1		Sample Specific Comments
3534 1	SHM-10-13-09010-	F 9/1/10	1115	GW	PJV	-						V	MS/MSD metalsonly
2	5HM-10-13-090110-L	1 9/1/10	1115	GW	PSV	10	1	V	V	~	VV	1 1 1	MS/MSD Metals Conty 11
0 8 0	SHM-10-15-090110-1	= 9/1/10	1455	GV	PJV						1	4	
- 5		1 011	1455	GW	PSV	V	-	V		v	vv		
3		U 9/1/10				A comment	100000		-	-			
4	SHM-10-15-090110-1	111	1455	GW	PJV						Y	1	
<i>y</i> 5	SHM-10-15-090110-1 DUP-090110-F	9/1/10		-	-					4	v		
3 4 5 6	SHM-10-15-090110-1 DUP-090110-F DUP-090110-U	9/1/10	1455	GW	PJV PJV								
3 4 5 6 7	SHM-10-15-090110-1 DUP-090110-F	9/1/10	1455	-	PDV						V		
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3 4 5 6 7	SHM-10-15-090110-1 DUP-090110-F DUP-090110-U	9/1/10	1455	GW	PDV								
9 5 Q	SHM-10-15-090110-1 DUP-090110-F DUP-090110-U	9/1/10	1455	GW	PDV	م حرا	٩	ρ	P	PI	1 P	P	Please.print clearly, legibly and com-
4 5 Q	S HM-10-15-090110-10 DUP-090110-F DUP-090110-U RB-090110-U	9/1/10	1455	GW GW	PSV	P P A A	PA		P IT/E	P /A		P	pletely. Samples can not be logged in and turnaround time clock will not



ANALYTICAL REPORT

Lab Number:

L1013535

Client:

Sovereign Consulting

905B South Main Street

Mansfield, MA 02048

ATTN:

Phil McBain

Phone:

(508) 339-3200

Project Name:

SHL TASK 0002

Project Number:

AC001

Report Date:

09/09/10

Certifications & Approvals: MA (M-MA086), NY NELAC (11148), CT (PH-0574), NH (2003), NJ (MA935), RI (LAO00065), ME (MA0086), PA (Registration #68-03671), USDA (Permit #S-72578), US Army Corps of Engineers, Naval FESC.

Eight Walkup Drive, Westborough, MA 01581-1019 508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com



Project Name: SHL TASK 0002

Project Number: AC001

Lab Number:

L1013535

Report Date:

09/09/10

Alpha Sample ID	Client ID	Sample Location	Collection Date/Time
L1013535-01	SHM-10-13-090110-U	DEVENS, MA	09/01/10 11:15
L1013535-02	SHM-10-15-090110-U	DEVENS, MA	09/01/10 14:55

Project Name:

SHL TASK 0002

Project Number: AC001 Lab Number:

L1013535

Report Date:

09/09/10

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet all of the requirements of NELAC, for all NELAC accredited parameters. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter, If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g., more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

For additional information, please contact Client Services at 800-624-9220.

Report Submission

This report contains the results for the Dissolved Inorganic Carbon analysis. The results for all other analyses will be issued under separate cover.

Dissolved Inorganic Carbon

L1013535-01 and -02 have elevated detection limits due to the dilutions required by the elevated concentrations present in the samples.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:

Michelle UK. Uhang Michelle M. Morris

Title: Technical Director/Representative

Date: 09/09/10

INORGANICS & MISCELLANEOUS

Project Name: SHL TASK 0002

Project Number: AC001

Lab Number:

L1013535

Report Date:

09/09/10

SAMPLE RESULTS

Lab ID:

L1013535-01

Client ID:

SHM-10-13-090110-U

Sample Location:

DEVENS, MA

Matrix:

Water

Date Collected:

09/01/10 11:15

Date Received:

09/01/10

Field Prep:

Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry										
Dissolved Inorganic Carbon	140		mg/l	20	**	20	09/01/10 23:30	09/08/10 09:51	30,5310C(M)	DW

Project Name: SHL TASK 0002

Lab Number:

L1013535

Project Number: AC001

Report Date:

09/09/10

SAMPLE RESULTS

Lab ID: Client ID: L1013535-02 SHM-10-15-090110-U

Sample Location:

DEVENS, MA

Matrix:

Water

Date Collected:

09/01/10 14:55

Date Received:

09/01/10

Field Prep:

Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry										
Dissolved Inorganic Carbon	82		mg/l	20		20	09/01/10 23:30	09/08/10 09:51	30,5310C(M)	DW

Project Name:

SHL TASK 0002

Project Number: AC001

Lab Number:

L1013535

Report Date:

09/09/10

Method Blank Analysis Batch Quality Control

Parameter General Chemistry for sam	Result Qualifie		RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
							ration on a	2022002	200
Dissolved Inorganic Carbon	ND	mg/l	1.0		1	09/01/10 23:30	09/08/10 09:51	30,5310C(M)	DW

Lab Control Sample Analysis Batch Quality Control

Project Name:

SHL TASK 0002

Project Number: AC001

Dissolved Inorganic Carbon

Lab Number:

L1013535

Report Date:

09/09/10

Parameter			LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Associated sample(s):	01-02	Batch:	WG431417-2							

110%

di.

Lab Duplicate Analysis
Batch Quality Control

Lab Number:

L1013535

Report Date:

09/09/10

Parameter		Nat	ive Sample	Duplic	ate Sampl	e Units	RPD	Qual	RPD Limits
Associated sample(s): 01-02	QC Batch ID:	WG431417-3	QC Sample:	L1013535-01	Client ID:	SHM-10-13-09011	0-U		
Dissolved Inorganic Carbon		7.7	140		150	mg/l	7		

Project Name:

Project Number: AC001

SHL TASK 0002

Project Name:

SHL TASK 0002

Project Number: AC001

Lab Number: L1013535 Report Date: 09/09/10

Sample Receipt and Container Information

Were project specific reporting limits specified?

YES

Reagent H2O Preserved Vials Frozen on:

Cooler Information Custody Seal

Cooler

A

Present/Intact

Container Info	ormation	Temp							
Container ID	Container Type	Cooler	рН	deg C	Pres	Seal	Analysis(*)		
L1013535-01A	Vial H2SO4 preserved split	Α	N/A	4.6	Y	Present/Intact	SPECWC()		
L1013535-01B	Vial H2SO4 preserved split	Α	N/A	4.6	Y	Present/Intact	SPECWC()		
L1013535-01X	Amber 250ml unpreserved	Α	6	4.6	Y	Present/Intact	SPECWC()		
L1013535-02A	Vial H2SO4 preserved split	Α	N/A	4.6	Y	Present/Intact	SPECWC()		
L1013535-02B	Vial H2SO4 preserved split	Α	N/A	4.6	Y	Present/Intact	SPECWC()		
L1013535-02X	Amber 250ml unpreserved	Α	6	4.6	Y	Present/Intact	SPECWC()		

 Project Name:
 SHL TASK 0002
 Lab Number:
 L1013535

 Project Number:
 AC001
 Report Date:
 09/09/10

GLOSSARY

Acronyms

EPA - Environmental Protection Agency.

 LCS - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LCSD · Laboratory Control Sample Duplicate: Refer to LCS.

MDL -Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

 MS - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.

MSD - Matrix Spike Sample Duplicate: Refer to MS.

NA Not Applicable.

NC Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.

NI - Not Ignitable.

REPORTING Limit: The value at which an instrument can accurately measure an analyte at a specific concentration.
 The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD).
 Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Data Qualifiers

- A -Spectra identified as "Aldol Condensation Product".
- The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than five times (5x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank.
- Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- The RPD between the results for the two columns exceeds the method-specified criteria; however, the lower value has been reported due to obvious interference.
- P The RPD between the results for the two columns exceeds the method-specified criteria.
- -The quality control sample exceeds the associated acceptance criteria. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- Analytical results are from sample re-analysis.

Report Format: Data Usability Report

ALPHA

 Project Name:
 SHL TASK 0002
 Lab Number:
 L1013535

 Project Number:
 AC001
 Report Date:
 09/09/10

Data Qualifiers

RE Analytical results are from sample re-extraction.

Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

ND - Not detected at the reporting limit (RL) for the sample.

Report Format: Data Usability Report

Project Name:

SHL TASK 0002

Lab Number:

L1013535

Project Number:

AC001

Report Date:

09/09/10

REFERENCES

30 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WPCF. 18th Edition. 1992.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

Certificate/Approval Program Summary

Last revised July 19, 2010 - Westboro Facility

The following list includes only those analytes/methods for which certification/approval is currently held.

For a complete listing of analytes for the referenced methods, please contact your Alpha Customer Service Representative.

Connecticut Department of Public Health Certificate/Lab ID: PH-0574. NELAP Accredited Solid Waste/Soil.

Drinking Water (Inorganic Parameters: Color, pH, Turbidity, Conductivity, Alkalinity, Chloride, Free Residual Chlorine, Fluoride, Calcium Hardness, Sulfate, Nitrate, Nitrite, Aluminum, Antimony, Arsenic, Barium, Beryllium, Cadmium, Calcium, Chromium, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Vanadium, Zinc, Total Dissolved Solids, Total Organic Carbon, Total Cyanide, Perchlorate, Organic Parameters: Volatile Organics 524.2, Total Trihalomethanes 524.2, 1,2-Dibromo-3-chloropropane (DBCP), Ethylene Dibromide (EDB), 1,4-Dioxane (Mod 8270). Microbiology Parameters: Total Coliform-MF mEndo (SM9222B), Total Coliform – Colilert (SM9223 P/A), E. Coli. – Colilert (SM9223 P/A), HPC – Pour Plate (SM9215B), Fecal Coliform – MF m-FC (SM9222D))

Wastewater/Non-Potable Water (Inorganic Parameters: Color, pH, Conductivity, Acidity, Alkalinity, Chloride, Total Residual Chlorine, Fluoride, Total Hardness, Silica, Sulfate, Sulfide, Ammonia, Kjeldahl Nitrogen, Nitrate, Nitrite, O-Phosphate, Total Phosphorus, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Strontium, Thallium, Tin, Titanium, Vanadium, Zinc, Total Residue (Solids), Total Dissolved Solids, Total Suspended Solids (non-filterable), BOD, CBOD, COD, TOC, Total Cyanide, Phenolics, Foaming Agents (MBAS), Bromide, Oil and Grease. Organic Parameters: PCBs, Organochlorine Pesticides, Technical Chlordane, Toxaphene, 2,4-D, 2,4,5-T, 2,4,5-TP(Silvex), Acid Extractables (Phenols), Benzidines, Phthalate Esters, Nitrosamines, Nitroaromatics & Isophorone, Polynuclear Aromatic Hydrocarbons, Haloethers, Chlorinated Hydrocarbons, Volatile Organics, TPH (HEM/SGT), Extractable Petroleum Hydrocarbons (ETPH), MA-EPH, MA-VPH, Microbiology Parameters: Total Coliform – MF mEndo (SM9222B), Total Coliform – MTF (SM9221B), HPC – Pour Plate (SM9215B), Fecal Coliform – MF m-FC (SM9222D), Fecal Coliform – A-1 Broth (SM9221E).)

Solid Waste/Soil (Inorganic Parameters: pH, Sulfide, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Tin, Vanadium, Zinc, Total Cyanide, Ignitability, Phenolics, Corrosivity, TCLP Leach (1311), SPLP Leach (1312 metals only), Reactivity. Organic Parameters: PCBs, PCBs in Oil, Organochlorine Pesticides, Technical Chlordane, Toxaphene, Extractable Petroleum Hydrocarbons (ETPH), MA-EPH, MA-VPH, Dicamba, 2,4-D, 2,4,5-T, 2,4,5-TP(Silvex), Volatile Organics, Acid Extractables (Phenols), 3.3'-Dichlorobenzidine, Phthalates, Nitrosamines, Nitroaromatics & Cyclic Ketones, PAHs, Haloethers, Chlorinated Hydrocarbons)

Maine Department of Human Services Certificate/Lab ID: 2009024.

Drinking Water (Inorganic Parameters: SM9215B, 9222D, 9223B, EPA 180.1, 300.0, 353.2, SM2130B, 2320B, 4500Cl-D, 4500CN-C, 4500CN-E, 4500F-C, 4500H+B, 4500NO3-F, EPA 200.7, EPA 200.8, 245.1, EPA 300.0. Organic Parameters: 504.1, 524.2.)

Wastewater/Non-Potable Water (Inorganic Parameters: EPA 120.1, 1664A, 350.1, 351.1, 353.2, 410.4, 420.1, Lachat 10-107-06-1-B, SM2320B, 2340B, 2510B, 2540C, 2540D, 426C, 4500Cl-D, 4500Cl-E, 4500CN-C, 4500CN-E, 4500F-B, 4500F-C, 4500H+B, 4500Norg-B, 4500Norg-C, 4500NH3-B, 4500NH3-G, 4500NH3-H, 4500NO3-F, 4500P-B, 5, 4500P-E, 5210B, 5220D, 5310C, EPA 200.7, 200.8, 245.1. Organic Parameters: 608, 624, ME DRO, ME GRO, MA EPH, MA VPH.)

Solid Waste/Soil (Organic Parameters: ME DRO, ME GRO, MA EPH, MA VPH.)

Massachusetts Department of Environmental Protection Certificate/Lab ID: M-MA086.

Drinking Water

Inorganic Parameters: (EPA 200.8 for: Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Ni, Se, Tl)

(EPA 200.7 for: Ba,Be,Ca,Cd,Cr,Cu,Na,Ni) 245.1, (300.0 for: Nitrate-N, Fluoride, Sulfate)

353.2 for: Nitrate-N, Nitrite-N; SM4500NO3-F, 4500F-C, 4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, 2320B, SM2540C, SM4500H-B.

Organic Parameters: (EPA 524.2 for: Trihalomethanes, Volatile Organics)

(504.1 for: 1,2-Dibromoethane, 1,2-Dibromo-3-Chloropropane), 314.0, 332.

Microbiology Parameters: SM9215B; ENZ. SUB. SM9223; MF-SM9222D

Non-Potable Water

Inorganic Parameters:, (EPA 200.8 for: Al,Sb,As,Be,Cd,Cr,Cu,Pb,Mn,Ni,Se,Ag,Tl,Zn)

(EPA 200.7 for: Al,Sb,As,Be,Cd,Cr,Co,Cu,Fe,Pb,Mn,Mo,Ni,Se,Ag,Sr,Ti,Tl, V,Zn,Ca,Mg,Na,K)

245.1, SM4500H,B, EPA 120.1, SM2510B, 2540C, 2540B, 2340B, 2320B, 4500CL-E, 4500F-BC, 426C, SM4500NH3-BH, (EPA 350.1 for: Ammonia-N), LACHAT 10-107-06-1-B for Ammonia-N, SM4500NO3-F, 353.2 for Nitrate-N, SM4500NH3-B,C-Titr, SM4500NH3-BC-NES, EPA 351.1, SM4500P-E, 4500P-B,E, 5220D, EPA 410.4, SM 5210B,

5310C, 4500CL-D, EPA 1664, SM14 510AC, EPA 420, SM4500-CN-CE, SM2540D.

Organic Parameters: (EPA 624 for Volatile Halocarbons, Volatile Aromatics)

(608 for: Chlordane, Aldrin, Dieldrin, DDD, DDE, DDT, Heptachlor, Heptachlor Epoxide, PCBs-Water), EPA 625 for SVOC Acid Extractables and SVOC Base/Neutral Extractables, 600/4-81-045-PCB-Oil

New Hampshire Department of Environmental Services Certificate/Lab ID: 200307. NELAP Accredited.

Drinking Water (Inorganic Parameters: SM6215B, 9222B, 9223B Colilert, EPA 200.7, 200.8, 245.2, 120.1, 300.0, 314.0, SM4500CN-E, 4500H+B, 4500NO3-F, 2320B, 2510B, 2540C, 4500F-C, 5310C, 2120B, EPA 331.0. Organic

Parameters: 504.1, 524.2, SM6251B.)

Non-Potable Water (Inorganic Parameters: SM9222D, 9221B, 9222B, 9221E-EC, EPA 200.7, 200.8, 245.1, 245.2, SW-846 6010B, 6020, 7196A, 7470A, SM3500-CR-D, EPA 120.1, 300.0, 350.1, 351.1, 353.2, 420.1, 1664A, SW-846 9010, 9030, 9040B, SM426C, SM2310B, 2540B, 2540D, 4500H+B, 4500NH3-H, 4500NH3-E, 4500NO2-B, 4500P-E, 4500-S2-D, 5210B, 2320B, 2540C, 4500F-C, 5310C, 5540C, LACHAT 10-117-07-1-B, LACHAT 10-107-06-1-B, LACHA

Solid & Chemical Materials (Inorganic Parameters: SW-846 6010B, 7196A, 7471A, 7.3.3.2, 7.3.4.2, 1010, 1030, 9010, 9012A, 9014, 9030B, 9040, 9045C, 9050C, 1311, 3005A, 3050B, 3051A. Organic Parameters: SW-846 3540C, 3545, 3580A, 5030B, 5035, 8021B, 8260B, 8270C, 8330, 8151A, 8082, 8081A.)

New Jersey Department of Environmental Protection Certificate/Lab ID: MA935. NELAP Accredited.

Drinking Water (Inorganic Parameters: SM9222B, 9221E, 9223B, 9215B, 4500NO3-F, 4500F-C, EPA 300.0, 200.7, 2540C, 2320B, 314.0, SM2120B, 2510B, 5310C, SM4500H-B, EPA 200.8, 245.2. Organic Parameters: 504.1, SM6251B, 524.2.)

Non-Potable Water (Inorganic Parameters: SM5210B, EPA 410.4, SM5220D, 4500Cl-D, EPA 300.0, SM2120B, SM4500F-BC, EPA 200.7, 351.1, LACHAT 10-107-06-2-D, EPA 353.2, SM4500NO3-F, 4500NO2-B, EPA 1664A, SM5310B, C or D, 4500-PE, EPA 420.1, SM4500P-B5+E, 2540B, 2540C, 2540D, EPA 120.1, SM2510B, SM15 426C, SM9221CE, 9222D, 9221B, 9222B, 9215B, 2310B, 2320B, 4500NH3-H, 4500-S D, EPA 350.1, SM5210B, SW-846 3015, 6020, 7470A, 5540C, 4500H-B, EPA 200.8, SM3500Cr-D, EPA 245.1, 245.2, SW-846 9040B, 3005A, EPA 6010B, 7196A, SW-846 9010B, 9030B. Organic Parameters: SW-846 8260B, 8270C, 3510C, EPA 608, 624, 625, SW-846 5030B, 8021B, 8081A, 8082, 8151A, 8330, NJ OQA-QAM-025 Rev.7.)

Solid & Chemical Materials (Inorganic Parameters: SW-846 9040B, 3005A, 6010B, 7196A, 5030B, 9010B, 9030B, 1030, 1311, 3050B, 3051, 7471A, 9014, 9012A, 9045C, 9050A, 9065. Organic Parameters: SW-846 8021B, 8081A, 8082, 8151A, 8330, 8260B, 8270C, 1311, 1312, 3540C, 3545, 3550B, 3580A, 5035L, 5035H, NJ OQA-QAM-025 Rev 7.)

New York Department of Health Certificate/Lab ID: 11148. NELAP Accredited.

Drinking Water (Inorganic Parameters: SM9223B, 9222B, 9215B, EPA 200.8, 200.7, 245.2, SM5310C, EPA 314.0, 332.0, SM2320B, EPA 300.0, SM2120B, 4500CN-E, 4500F-C, 4500H-B, 4500NO3-F, 2540C, EPA 120.1, SM 2510B. Organic Parameters: EPA 524.2, 504.1.)

Non-Potable Water (Inorganic Parameters: SM9221E, 9222D, 9221B, 9222B, 9215B, 5210B, EPA 410.4, SM5220D, 2310B-4a, 2320B, EPA 200.7, 300.0, LACHAT 10-117-07-1A or B, SM4500CI-E, 4500F-C, SM15 426C, EPA 350.1, LACHAT 10-107-06-1-B, SM4500NH3-H, EPA 351.1, LACHAT 10-107-06-2, EPA 353.2, LACHAT 10-107-041-C, SM4500-NO3-F, 4500-NO2-B, 4500P-E, 2540C, 2540B, 2540D, EPA 200.8, EPA 6010B, 6020, EPA 7196A, S\M3500Cr-D, EPA 245.1, 245.2, 7470A, SM2120B, SM4500-CN-E LACHAT 10-204-00-1-A, EPA 9040B, SM4500-HB, EPA 1664A, SM5310C, EPA 420.1, SM14 510C, EPA 120.1, SM2510B, SM4500S-D, SM5540C, EPA 3005A, 3015. Organic Parameters: EPA 624, 8260B, 8270C, 625, 608, 8081A, 8151A, 8330, 8082, EPA 3510C, 5030B, 9010B, 9030B.)

Solid & Hazardous Waste (Inorganic Parameters: 1010, 1030, SW-846 Ch 7 Sec 7.3, EPA 6010B, 7196A, 7471A, 9012A, 9014, 9040B, 9045C, 9065, 9050, EPA 1311, 1312, 3005A, 3050B, 9010B, 9030B. Organic Parameters: EPA 8260B, 8270C, 8081A, 8151A, 8330, 8082, 3540C, 3545, 3546, 3580, 5030B, 5035.)

North Carolina Department of the Environment and Natural Resources Certificate/Lab ID : 666. Organic Parameters: MA-EPH, MA-VPH.

Pennsylvania Department of Environmental Protection <u>Certificate/Lab ID</u>: 68-03671. *NELAP Accredited. Non-Potable Water* (<u>Organic Parameters</u>: EPA 3510C, 5030B, 625, 624, 608, 8081A, 8082, 8151A, 8260B, 8270C, 8330)

Solid & Hazardous Waste (Inorganic Parameters: EPA 1010, 1030, 1311, 3050B, 3051, 6010B, EPA 7.3.3.2, EPA 7.3.4.2, 7196A, 7471A, 9010B, 9012A, 9014, 9040B, 9045C, 9050, 9065. Organic Parameters: 3540C, 3545, 3580A, 5035, 8021B, 8081A, 8082, 8151A, 8260B, 8270C, 8330)

Rhode Island Department of Health <u>Certificate/Lab ID</u>; LAO00065. *NELAP Accredited via NY-DOH*. Refer to MA-DEP Certificate for Potable and Non-Potable Water. Refer to NY-DOH Certificate for Potable and Non-Potable Water.

Texas Commisson on Environmental Quality <u>Certificate/Lab ID</u>: T104704476-09-1. *NELAP Accredited. Non-Potable Water* (<u>Inorganic Parameters</u>: EPA 120.1, 1664, 200.7, 200.8, 245.1, 245.2, 300.0, 350.1, 351.1, 353.2, 376.2, 410.4, 420.1, 6010, 6020, 7196, 7470, 9040, SM 2120B, 2310B, 2320B, 2510B, 2540B, 2540C, 2540D, 426C, 4500CL-E, 4500CN-E, 4500F-C, 4500H+B, 4500NH3-H, 4500NO2B, 4500P-E, 4500 S2 D, 510C, 5210B, 5220D, 5310C, 5540C. <u>Organic Parameters</u>: EPA 608, 624, 625, 8081, 8082, 8151, 8260, 8270, 8330.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 1311, 1312, 9012, 9014, 9040, 9045, 9050, 9065.)

Department of Defense Certificate/Lab ID: L2217.

Drinking Water (Inorganic Parameters: SM 4500H-B. Organic Parameters: EPA 524.2, 504.1.)

Non-Potable Water (Inorganic Parameters: EPA 200.7, 200.8, 6010B, 6020, 245.1, 245.2, 7470A, 9040B, 300.0, 9251, 9038, 350.1, 353.2, 351.1, 120.1, 9050A, 410.4, 9060, 1664, 420.1, LACHAT 10-107-06-1-B, SM 4500CN-E, 4500H-B, 4500CL-E, 4500F-BC, 4500SO4-E, 426C, 4500NH3-B, 4500NH3-H, 4500NO3-F, 4500NO2-B, 4500Norg-C, 4500PE, 2510B, 5540C, 5220D, 5310C, 2540B, 2540C, 2540D, 510C, 4500S2-AD, 3005A, 3015, 9010B, 9030B. Organic Parameters: EPA 8260B, 8270C, 8330, 625, 8082, 8151A, 8081A, 3510C, 5030B, MassDEP EPH, MassDEP VPH.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 200.7, 6010B, 7471A, 9040B, 9045C, 9065, 420.1, 9012A, 6860, 1311, 1312, 3050B, 9030B, 3051, 9010B, 3540C, SM 510ABC, 4500CN-CE, 2540G, SW-846 7.3, Organic Parameters: EPA 8260B, 8270C, 8330, 8082, 8081A, 8151A, 3545, 3546, 3580, 5035, MassDEP EPH, MassDEP VPH.)

Analytes Not Accredited by NELAP

Certification is not available by NELAP for the following analytes: **EPA 8260B:** Freon-113, 1,2,4,5-Tetramethylbenzene, 4-Ethyltoluene. **EPA 8330A:** PETN, Picric Acid, Nitroglycerine, 2,6-DANT, 2,4-DANT. **EPA 8270C:** Methyl naphthalene, Dimethyl naphthalene, Total Methylnapthalenes, Total Dimethylnaphthalenes, 1,4-Diphenylhydrazine (Azobenzene). **EPA 625:** 4-Chloroaniline. **EPA 350.1** for Ammonia in a Soil matrix.

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ANALYTICAL REPORT

Lab Number:

L1013628

Client:

Sovereign Consulting

905B South Main Street Mansfield, MA 02048

ATTN:

Phil McBain

Phone:

(508) 339-3200

Project Name:

SHL TASK 0002

Project Number:

AC001

Report Date:

09/13/10

Certifications & Approvals: MA (M-MA086), NY NELAC (11148), CT (PH-0574), NH (2003), NJ (MA935), RI (LAO00065), ME (MA0086), PA (Registration #68-03671), USDA (Permit #S-72578), US Army Corps of Engineers, Naval FESC.

Eight Walkup Drive, Westborough, MA 01581-1019 508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com

Serial_No:09131013:53

Project Name: SHL TASK 0002

Project Number: AC001

Lab Number:

L1013628

Report Date: 09/

09/13/10

Alpha Sample ID	Client ID	Sample Location	Collection Date/Time
L1013628-01	SHM-10-14-090210-F	DEVENS, MA	09/02/10 11:47
L1013628-02	SHM-10-14-090210-U	DEVENS, MA	09/02/10 11:47
L1013628-03	SHM-10-16-090210-F	DEVENS, MA	09/02/10 14:45
L1013628-04	SHM-10-16-090210-U	DEVENS, MA	09/02/10 14:45
L1013628-05	DUP-090210-F	DEVENS, MA	09/02/10 14:45
L1013628-06	DUP-090210-U	DEVENS, MA	09/02/10 14:45
L1013628-07	RB-090210-U	DEVENS, MA	09/02/10 14:50

Serial No:09131013:53

Project Name: Project Number: SHL TASK 0002

AC001

Lab Number:

L1013628

Report Date:

09/13/10

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet all of the requirements of NELAC, for all NELAC accredited parameters. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

For additional information, please contact Client Services at 800-624-9220.

Report Submission

Testing performed for the reported analyses followed the guidelines established under the DoD QSM 4.1. where applicable,

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

The Dissolved Inorganic Carbon results will be issued under separate cover.

Sample Receipt

The samples were Field Filtered for Dissolved Metals only.

Dissolved Metals

L1013628-01 has an elevated detection limit for all analytes, except Mercury, due to the dilution required by

Project Name:

SHL TASK 0002

Lab Number:

L1013628

Project Number:

AC001

Report Date:

09/13/10

Case Narrative (continued)

the high concentrations of target analytes.

The WG431091-3/-4 MS/MSD recoveries for Arsenic (333%/467%), Calcium (142%/191%), Iron (500%/1100%) and Manganese (160%/238%), performed on L1013628-01, are invalid because the sample concentrations are greater than four times the spike amount added.

The WG431091-4 MSD recovery, performed on L1013628-01, is above the acceptance criteria for Potassium (132%). A post digestion spike was performed with an acceptable recovery of 118%. The parent sample (L1013628-01) is qualified as "J" for Potassium.

Total Metals

L1013628-02 has an elevated detection limit for all analytes, except Mercury, due to the dilution required by the high concentrations of target analytes.

The WG431090-3/-4 MS/MSD recoveries for Arsenic (133%/300%), Calcium (129%/154%), Iron (520%/750%) and Manganese (158%/176%), performed on L1013628-02, are invalid because the sample concentrations are greater than four times the spike amount added.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Michelle M. Morris

Authorized Signature:

Title: Technical Director/Representative

Date: 09/13/10

METALS

Project Number: AC001

Lab Number:

L1013628

Report Date:

09/13/10

SAMPLE RESULTS

Lab ID:

Matrix:

L1013628-01

Client ID:

SHM-10-14-090210-F

Sample Location:

DEVENS, MA

DEVENS Water Date Collected:

09/02/10 11:47

Date Received: Field Prep:

09/02/10

See Narrative

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Dissolved Metals - V	Vestboro	ugh Lab									
Aluminum, Dissolved	ND		ug/l	100	19.1	10	09/04/10 14:10	0 09/08/10 01:56	EPA 3005A	1,6020A	ВМ
Antimony, Dissolved	ND		ug/l	5.00	1.20	10	09/04/10 14:10	0 09/08/10 01:56	EPA 3005A	1,6020A	вм
Arsenic, Dissolved	4100		ug/l	5.00	1.13	10	09/04/10 14:10	0 09/08/10 01:56	EPA 3005A	1,6020A	вм
Barium, Dissolved	53.8		ug/l	5.00	0.950	10	09/04/10 14:10	0 09/08/10 01:56	EPA 3005A	1,6020A	вм
Beryllium, Dissolved	ND		ug/l	5.00	0.590	10	09/04/10 14:10	0 09/08/10 01:56	EPA 3005A	1,6020A	ВМ
Cadmium, Dissolved	ND		ug/l	5.00	0.590	10	09/04/10 14:10	0 09/08/10 01:56	EPA 3005A	1,6020A	вм
Calcium, Dissolved	55300		ug/l	1000	126.	10	09/04/10 14:10	0 09/08/10 01:56	EPA 3005A	1,6020A	вм
Chromium, Dissolved	ND		ug/l	5.00	1.86	10	09/04/10 14:10	0 09/08/10 01:56	EPA 3005A	1,6020A	вм
Cobalt, Dissolved	15.6		ug/l	5.00	0.530	10	09/04/10 14:10	0 09/08/10 01:56	EPA 3005A	1,6020A	ВМ
Copper, Dissolved	1.3	J	ug/I	5.00	1.18	10	09/04/10 14:10	0 09/08/10 01:56	EPA 3005A	1,6020A	вм
Iron, Dissolved	73000		ug/l	500	84.1	10	09/04/10 14:10	0 09/08/10 01:56	EPA 3005A	1,6020A	вм
Lead, Dissolved	ND		ug/I	5.00	0.500	10	09/04/10 14:10	0 09/08/10 01:56	EPA 3005A	1,6020A	вм
Magnesium, Dissolved	4150		ug/l	1000	41.0	10	09/04/10 14:10	0 09/08/10 01:56	EPA 3005A	1,6020A	BN.
Manganese, Dissolved	4720		ug/l	10.0	1.36	10	09/04/10 14:10	0 09/08/10 01:56	EPA 3005A	1.6020A	вм
Mercury, Dissolved	ND		ug/l	0.2000	0.0120	1	09/08/10 15:50	0 09/09/10 11:08	EPA 7470A	1.7470A	TD
Nickel, Dissolved	9.16		ug/l	5.00	1.80	10	09/04/10 14:10	0 09/08/10 01:56	EPA 3005A	1,6020A	вм
Potassium, Dissolved	17600	J	ug/l	1000	182	10	09/04/10 14:10	0 09/08/10 01:56	EPA 3005A	1,6020A	вм
Selenium, Dissolved	ND		ug/l	10.0	4.06	10	09/04/10 14:10	0 09/08/10 01:56	EPA 3005A	1,6020A	вм
Silver, Dissolved	ND		ug/l	5.00	0.850	10	09/04/10 14:10	0 09/08/10 01:56	EPA 3005A	1,6020A	вм
Sodium, Dissolved	15200		ug/l	1000	182.	10	09/04/10 14:10	0 09/08/10 01:56	EPA 3005A	1,6020A	ВМ
Thallium, Dissolved	ND .		uˈg/l	5.00	0.310	10	09/04/10 14:10	0 09/08/10 01:56	EPA 3005A	1,6020A	BM
Vanadium, Dissolved	ND -		ug/l	5.00	0.770	10	09/04/10 14:10	0 09/08/10 01:56	EPA 3005A	1,6020A	вм-
Zinc, Dissolved	30.6	J	ug/l	50.0	16.2	10	09/04/10 14:10	0 09/08/10 01:56	EPA 3005A	1,6020A	вм

SHL TASK 0002

Lab Number:

L1013628

Project Number:

AC001

Report Date:

09/13/10

SAMPLE RESULTS

Lab ID:

L1013628-02

Client ID:

SHM-10-14-090210-U

Sample Location:

DEVENS, MA

Matrix:

Water

Date Collected:

09/02/10 11:47

Date Received:

09/02/10

Field Prep:

Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - West	tborough L	ab									
Aluminum, Total	262		ug/l	100	19.1	10	09/04/10 14:10	0 09/08/10 02:50	EPA 3005A	1,6020A	вм
Antimony, Total	ND		ug/l	5.00	1,20	10	09/04/10 14:10	0 09/08/10 02:50	EPA 3005A	1,6020A	ВМ
Arsenic, Total	4280		ug/I	5.00	1.13	10	09/04/10 14:10	0 09/08/10 02:50	EPA 3005A	1,6020A	вм
Barium, Total	80.5		ug/l	5.00	0.950	10	09/04/10 14:10	0 09/08/10 02:50	EPA 3005A	1,6020A	ВМ
Beryllium, Total	ND		ug/l	5.00	0.590	10	09/04/10 14:10	0 09/08/10 02:50	EPA 3005A	1,6020A	ВМ
Cadmium, Total	ND		ug/l	5.00	0.590	10	09/04/10 14:10	0 09/08/10 02:50	EPA 3005A	1,6020A	вм
Calcium, Total	69300		ug/l	1000	126.	10	09/04/10 14:10	0 09/08/10 02:50	EPA 3005A	1,6020A	вм
Chromium, Total	ND		ug/l	5.00	1.86	10	09/04/10 14:1	0 09/08/10 02:50	EPA 3005A	1,6020A	вм
Cobalt, Total	16.0		ug/l	5.00	0.530	10	09/04/10 14:1	0 09/08/10 02:50	EPA 3005A	1,6020A	ВМ
Copper, Total	1.53	J	ug/l	5.00	1.18	10	09/04/10 14:1	0 09/08/10 02:50	EPA 3005A	1,6020A	вм
Iron, Total	75200		ug/l	500	84.1	10	09/04/10 14:1	0 09/08/10 02:50	EPA 3005A	1,6020A	ВМ
Lead, Total	0.76	J	ug/l	5.00	0.500	10	09/04/10 14:10	0 09/08/10 02:50	EPA 3005A	1,6020A	вм
Magnesium, Total	4310		ug/l	1000	41.0	10	09/04/10 14:10	0 09/08/10 02:50	EPA 3005A	1,6020A	вм
Manganese, Total	4700		ug/l	10.0	1 36	10	09/04/10 14:1	0 09/08/10 02:50	EPA 3005A	1,6020A	ВМ
Mercury, Total	ND		ug/I	0.2000	0.0120	1	09/08/10 15:50	0 09/09/10 11:24	EPA 7470A	1,7470A	TD
Nickel, Total	8.07		ug/l	5.00	1.80	10	09/04/10 14:10	0 09/08/10 02:50	EPA 3005A	1,6020A	вм
Potassium, Total	18800		ug/l	1000	182	10	09/04/10 14:10	0 09/08/10 02:50	EPA 3005A	1,6020A	вм
Selenium, Total	ND		ug/l	10.0	4.06	10	09/04/10 14:10	0 09/08/10 02:50	EPA 3005A	1,6020A	вм
Silver, Total	ND		ug/l	5.00	0.850	10	09/04/10 14:19	0 09/08/10 02:50	EPA 3005A	1,6020A	вм
Sodium, Total	15500		ug/l	1000	182	10	09/04/10 14:1	0 09/08/10 02:50	EPA 3005A	1,6020A	вм
Thallium, Total	ND	100	ug/l	5.00	0.310	10	09/04/10 14:1	0 09/08/10 02:50	EPA 3005A	1,6020A	- BM
Vanadium, Total	ND		ug/l	5.00	0.770	10 "	09/04/10 14:1	0 09/08/10 02:50	EPA 3005A	1,6020Ä	ВМ
Zinc, Total	54.6		ug/I	50.0	16.2	10	09/04/10 14:1	0 09/08/10 02:50	EPA 3005A	1,6020A	ВМ

SHL TASK 0002

Lab Number:

L1013628

Project Number:

AC001

Report Date:

09/13/10

Lab ID:

SAMPLE RESULTS

10000 00

_

L1013628-03

Client ID:

SHM-10-16-090210-F

Sample Location:

DEVENS, MA

Matrix:

Water

Date Collected:

09/02/10 14:45

Date Received:

09/02/10

Field Prep:

See Narrative

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Dissolved Metals - V	Vestboro	ugh Lab									
Aluminum, Dissolved	3.59	J	ug/l	10.0	1.91	1	09/04/10 14:1	0 09/08/10 02:32	EPA 3005A	1,6020A	вм
Antimony, Dissolved	0.24	J	ug/l	0.500	0.120	1	09/04/10 14:1	0 09/08/10 02:32	EPA 3005A	1,6020A	вм
Arsenic, Dissolved	495		ug/l	0.500	0.113	1	09/04/10 14:1	0 09/08/10 02:32	EPA 3005A	1,6020A	вм
Barium, Dissolved	73.4		ug/l	0.500	0.095	1	09/04/10 14:1	0 09/08/10 02:32	EPA 3005A	1,6020A	ВМ
Beryllium, Dissolved	ND		ug/l	0.500	0.059	1	09/04/10 14:1	0 09/08/10 02:32	EPA 3005A	1,6020A	вм
Cadmium, Dissolved	ND		ug/l	0.500	0,059	1	09/04/10 14:1	0 09/08/10 02:32	EPA 3005A	1,6020A	ВМ
Calcium, Dissolved	73900		ug/l	100	12.6	1	09/04/10 14:1	0 09/08/10 02:32	EPA 3005A	1,6020A	BM
Chromium, Dissolved	0.32	J	ug/l	0.500	0.186	1	09/04/10 14:1	0 09/08/10 02:32	EPA 3005A	1,6020A	ВМ
Cobalt, Dissolved	4.97		ug/l	0.500	0.053	1	09/04/10 14:1	0 09/08/10 02:32	EPA 3005A	1,6020A	ВМ
Copper, Dissolved	0.36	J	ug/I	0.500	0.118	1	09/04/10 14:1	0 09/08/10 02:32	EPA 3005A	1,6020A	вм
Iron, Dissolved	53100		ug/l	50.0	8.41	1	09/04/10 14:1	0 09/08/10 02:32	EPA 3005A	1,6020A	ВМ
Lead, Dissolved	ND		ug/l	0.500	0.050	1	09/04/10 14:1	0 09/08/10 02:32	EPA 3005A	1,6020A	ВМ
Magnesium, Dissolved	14100		ug/l	100	4.10	1	09/04/10 14:1	0 09/08/10 02:32	EPA 3005A	1,6020A	BM
Manganese, Dissolved	1790		ug/l	1,00	0 136	1	09/04/10 14:1	0 09/08/10 02:32	EPA 3005A	1,6020A	BM
Mercury, Dissolved	ND		ug/l	0 2000	0.0120	1	09/08/10 15:5	60 09/09/10 11:17	EPA 7470A	1,7470A	TD
Nickel, Dissolved	3.54		ug/l	0.500	0.180	1	09/04/10 14:1	0 09/08/10 02:32	EPA 3005A	1,6020A	вм
Potassium, Dissolved	15500		ug/l	100	18.2	1	09/04/10 14:1	0 09/08/10 02:32	EPA 3005A	1,6020A	ВМ
Selenium, Dissolved	0.7	J	ug/l	1,00	0.406	1	09/04/10 14:1	0 09/08/10 02:32	EPA 3005A	1,6020A	ВМ
Silver, Dissolved	ND		ug/l	0.500	0.085	1	09/04/10 14:1	0 09/08/10 02:32	EPA 3005A	1,6020A	вм
Sodium, Dissolved	31400		ug/l	100	18.2	1	09/04/10 14:1	0 09/08/10 02:32	EPA 3005A	1,6020A	вм
Thallium, Dissolved	0.05	J .	ug/l	0.500	0.031	11	09/04/10 14:1	0 09/08/10 02:32	EPA 3005A	1,6020A	вм.
Vanadium, Dissolved	0.08	J	ug/i	0.500	0.077	- 1	09/04/10 14:1	10 09/08/10 02:32	EPA 3005A	-1,6020A	ВМ
Zinc, Dissolved	5.39		ug/l	5.00	1.62	1	09/04/10 14:1	0 09/08/10 02:32	EPA 3005A	1,6020A	вм

SHL TASK 0002

Lab Number:

L1013628

Project Number:

AC001

Report Date:

09/13/10

SAMPLE RESULTS

Lab ID:

L1013628-04

Client ID:

SHM-10-16-090210-U

Sample Location:

DEVENS, MA

Matrix:

Water

Date Collected:

09/02/10 14:45

Date Received:

09/02/10

Field Prep:

Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Westl	oorough L	.ab									
Aluminum, Total	1180		ug/l	10.0	1.91	1	09/04/10 14:10	0 09/08/10 03:14	EPA 3005A	1,6020A	вм
Antimony, Total	0.37	J	ug/l	0.500	0.120	1	09/04/10 14:10	0 09/08/10 03:14	EPA 3005A	1,6020A	вм
Arsenic, Total	487		ug/l	0.500	0.113	1	09/04/10 14:10	0 09/08/10 03:14	EPA 3005A	1,6020A	ВМ
Barium, Total	72.8		ug/l	0.500	0.095	1	09/04/10 14:10	0 09/08/10 03:14	EPA 3005A	1,6020A	вм
Beryllium, Total	0.07	J	ug/l	0.500	0.059	1	09/04/10 14:10	0 09/08/10 03:14	EPA 3005A	1,6020A	ВМ
Cadmium, Total	ND		ug/l	0.500	0.059	7	09/04/10 14:10	0 09/08/10 03:14	EPA 3005A	1,6020A	ВМ
Calcium, Total	69700		ug/l	100	12.6	1	09/04/10 14:10	0 09/08/10 03:14	EPA 3005A	1,6020A	вм
Chromium, Total	7.12		ug/I	0.500	0 186	1	09/04/10 14:10	0 09/08/10 03:14	EPA 3005A	1,6020A	вм
Cobalt, Total	5.27		ug/l	0.500	0.053	1	09/04/10 14:10	0 09/08/10 03:14	EPA 3005A	1,6020A	ВМ
Copper, Total	5.87		ug/l	0.500	0.118	1	09/04/10 14:10	0 09/08/10 03:14	EPA 3005A	1,6020A	вм
Iron, Total	50200		ug/l	50.0	8.41	1	09/04/10 14:10	0 09/08/10 03:14	EPA 3005A	1,6020A	вм
Lead, Total	1.65		ug/l	0,500	0,050	1	09/04/10 14:10	0 09/08/10 03:14	EPA 3005A	1,6020A	вм
Magnesium, Total	13800		ug/l	100	4.10	1	09/04/10 14:10	0 09/08/10 03:14	EPA 3005A	1,6020A	вм
Manganese, Total	1710		ug/l	1.00	0 136	1	09/04/10 14:10	0 09/08/10 03:14	EPA 3005A	1,6020A	вм
Mercury, Total	0.02776	J	ug/l	0 2000	0.0120	3	09/08/10 15:50	0 09/09/10 11:30	EPA 7470A	1,7470A	TD
Nickel, Total	6.39		ug/I	0.500	0.180	1	09/04/10 14:10	0 09/08/10 03:14	EPA 3005A	1,6020A	вм
Potassium, Total	14600		ug/l	100	18.2	1	09/04/10 14:10	0 09/08/10 03:14	EPA 3005A	1,6020A	вм
Selenium, Total	0.59	J	ug/l	1.00	0.406	1	09/04/10 14:10	0 09/08/10 03:14	EPA 3005A	1,6020A	вм
Silver, Total	ND		ug/l	0.500	0.085	1	09/04/10 14:10	0 09/08/10 03:14	EPA 3005A	1,6020A	вм
Sodium, Total	30800		ug/l	100	18.2	1	09/04/10 14:10	0 09/08/10 03:14	EPA 3005A	1,6020A	вм
Thallium, Total	0.05	J	ug/l	0.500	0.031	1 -	09/04/10 14:11	0 09/08/10 03:14	EPA 3005A	1,6020A	- BM
Vanadium, Total	1.65	11	ug/l	0.500	0.077	~ 1	09/04/10 14:10	0 09/08/10 03:14	EPA 3005A	1,6020A	ВМ
Zinc, Total	7.99		ug/l	5.00	1.62	1	09/04/10 14:10	0 09/08/10 03:14	EPA 3005A	1,6020A	ВМ

SHL TASK 0002

Project Number: AC001

Lab Number:

L1013628

Report Date:

09/13/10

SAMPLE RESULTS

Lab ID:

L1013628-05

Client ID:

Sample Location: Matrix:

DEVENS, MA

DUP-090210-F

Water

Date Collected:

09/02/10 14:45

Date Received:

09/02/10

Field Prep:

See Narrative

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Dissolved Metals - V	Vestborou	igh Lab									
Aluminum, Dissolved	3.27	J	ug/l	10.0	1.91	1	09/04/10 14:10	0 09/08/10 02:38	EPA 3005A	1,6020A	вм
Antimony, Dissolved	0.17	J	ug/l	0.500	0.120	1	09/04/10 14:10	09/08/10 02:38	EPA 3005A	1,6020A	вм
Arsenic, Dissolved	489		ug/l	0.500	0.113	1	09/04/10 14:10	0 09/08/10 02:38	EPA 3005A	1,6020A	вм
Barium, Dissolved	69.4		ug/l	0.500	0.095	1	09/04/10 14:10	0 09/08/10 02:38	EPA 3005A	1,6020A	вм
Beryllium, Dissolved	ND		ug/l	0.500	0.059	1	09/04/10 14:10	09/08/10 02:38	EPA 3005A	1,6020A	вм
Cadmium, Dissolved	ND		ug/l	0.500	0,059	1	09/04/10 14:10	0 09/08/10 02:38	EPA 3005A	1,6020A	вм
Calcium, Dissolved	70700		ug/l	100	12.6	1	09/04/10 14:10	0 09/08/10 02:38	EPA 3005A	1,6020A	вм
Chromium, Dissolved	0.3	J	ug/I	0.500	0.186	Ť	09/04/10 14:10	0 09/08/10 02:38	EPA 3005A	1,6020A	ВМ
Cobalt, Dissolved	4.85		ug/I	0.500	0.053	1	09/04/10 14:10	0 09/08/10 02:38	EPA 3005A	1,6020A	вм
Copper, Dissolved	0.34	J	ug/l	0.500	0.118	1	09/04/10 14:10	0 09/08/10 02:38	EPA 3005A	1,6020A	вм
Iron, Dissolved	51100		ug/l	50.0	8.41	1	09/04/10 14:10	0 09/08/10 02:38	EPA 3005A	1,6020A	вм
Lead, Dissolved	ND		ug/l	0.500	0.050	1	09/04/10 14:10	09/08/10 02:38	EPA 3005A	1.6020A	ВМ
Magnesium, Dissolved	13500		ug/l	100	4 10	1	09/04/10 14:10	0 09/08/10 02:38	EPA 3005A	1,6020A	BM.
Manganese, Dissolved	1680		ug/l	1 00	0.136	1	09/04/10 14:10	09/08/10 02:38	EPA 3005A	1.6020A	ВМ
Mercury, Dissolved	ND		ug/l	0.2000	0.0120	- 1	09/08/10 15:50	0 09/09/10 11:19	EPA 7470A	1.7470A	TD
Nickel, Dissolved	3.37		ug/l	0.500	0.180	1	09/04/10 14:10	0 09/08/10 02:38	EPA 3005A	1,6020A	вм
Potassium, Dissolved	14700		ug/l	100	18.2	1	09/04/10 14:10	0 09/08/10 02:38	EPA 3005A	1,6020A	ВМ
Selenium, Dissolved	0.61	J	ug/l	1.00	0.406	1	09/04/10 14:10	0 09/08/10 02:38	EPA 3005A	1,6020A	ВМ
Silver, Dissolved	ND		ug/l	0.500	0.085	1	09/04/10 14:10	0 09/08/10 02:38	EPA 3005A	1,6020A	вм
Sodium, Dissolved	31100		ug/l	100	18,2	1	09/04/10 14:10	0 09/08/10 02:38	EPA 3005A	1,6020A	ВМ
Thallium, Dissolved	ND .	-	ug/I	0.500	0.031	.1"	09/04/10 14:10	0 09/08/10 02:38	EPA 3005A	-1,6020A	ВМ
Vanadium, Dissolved	0.08-		ug/l	0.500	0.077	1	09/04/10 14:10	0 09/08/10 02:38	EPA 3005A	1,6020A	вм
Zinc, Dissolved	3.91	J	ug/l	5.00	1.62	1	09/04/10 14:10	09/08/10 02:38	EPA 3005A	1,6020A	вм

SHL TASK 0002

Lab Number:

L1013628

Project Number:

AC001

Report Date:

09/13/10

SAMPLE RESULTS

Lab ID: Client ID: L1013628-06

DUP-090210-U

Sample Location: Matrix:

DEVENS, MA Water

Date Collected:

09/02/10 14:45

Date Received:

09/02/10

Field Prep:

Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Wes	tborough L	_ab									
Aluminum, Total	1360		ug/l	10.0	1.91	1	09/04/10 14:10	0 09/08/10 03:20	EPA 3005A	1,6020A	вм
Antimony, Total	0.32	J	ug/l	0,500	0.120	1	09/04/10 14:10	0 09/08/10 03:20	EPA 3005A	1,6020A	вм
Arsenic, Total	542		ug/l	0.500	0.113	1	09/04/10 14:10	0 09/08/10 03:20	EPA 3005A	1,6020A	вм
Barium, Total	82.1		ug/l	0.500	0.095	1	09/04/10 14:10	0 09/08/10 03:20	EPA 3005A	1,6020A	вм
Beryllium, Total	0.07	J	ug/l	0,500	0.059	1	09/04/10 14:10	0 09/08/10 03:20	EPA 3005A	1,6020A	вм
Cadmium, Total	ND		ug/l	0.500	0.059	1	09/04/10 14:10	0 09/08/10 03:20	EPA 3005A	1,6020A	вм
Calcium, Total	76800		ug/l	100	12.6	1	09/04/10 14:10	0 09/08/10 03:20	EPA 3005A	1,6020A	ВМ
Chromium, Total	8.28		ug/l	0.500	0.186	1	09/04/10 14:10	0 09/08/10 03:20	EPA 3005A	1,6020A	ВМ
Cobalt, Total	5.81		ug/l	0.500	0.053	1	09/04/10 14:10	0 09/08/10 03:20	EPA 3005A	1,6020A	ВМ
Copper, Total	6.88		ug/I	0.500	0.118	1	09/04/10 14:10	0 09/08/10 03:20	EPA 3005A	1,6020A	ВМ
Iron, Total	55100		ug/l	50.0	8 41	1	09/04/10 14:10	0 09/08/10 03:20	EPA 3005A	1,6020A	ВМ
Lead, Total	1.97		ug/l	0.500	0.050	1	09/04/10 14:10	0 09/08/10 03:20	EPA 3005A	1,6020A	ВМ
Magnesium, Total	15000		ug/l	100	4.10	1	09/04/10 14:10	0 09/08/10 03:20	EPA 3005A	1,6020A	вм
Manganese, Total	1860		ug/l	1,00	0.136	1	09/04/10 14:10	0 09/08/10 03:20	EPA 3005A	1.6020A	ВМ
Mercury, Total	0.01466	J	ug/l	0.2000	0.0120	1	09/08/10 15:50	0 09/09/10 11:31	EPA 7470A	1.7470A	TD
Nickel, Total	7.06		ug/l	0.500	0.180	1	09/04/10 14:10	0 09/08/10 03:20	EPA 3005A	1,6020A	ВМ
Potassium, Total	15800		ug/l	100	18.2	1	09/04/10 14:10	0 09/08/10 03:20	EPA 3005A	1,6020A	ВМ
Selenium, Total	0.74	J	ug/l	1.00	0.406	1	09/04/10 14:10	0 09/08/10 03:20	EPA 3005A	1,6020A	ВМ
Silver, Total	ND		ug/l	0.500	0.085	1	09/04/10 14:10	0 09/08/10 03:20	EPA 3005A	1,6020A	ВМ
Sodium, Total	33400		ug/l	100	18.2	1	09/04/10 14:10	0 09/08/10 03:20	EPA 3005A	1,6020A	ВМ
Thallium, Total	0.05	J	ug/l	0.500	0.031	1	09/04/10 14:10	0 09/08/10 03:20	EPA 3005A	1,6020A	ВМ
Vanadium, Total	1.85		ug/l	0.500	0.077	Ť	09/04/10 14:10	0 09/08/10 03:20	EPA 3005A	1,6020Å	ВМ
Zinc, Total	9 34		ug/l	5.00	1.62	1	09/04/10 14:10	09/08/10 03:20	EPA 3005A	1,6020A	вм

Project Name: SHL TASK 0002

Project Number: AC001 Lab Number:

L1013628

Report Date:

09/13/10

Date Collected:

09/02/10 14:50 09/02/10

Client ID: RB-090210-U DEVENS MA Sample Location:

Ma

Lab ID:

Date Received: Field Prep:

Not Specified

ample Location.	DEVENO, IVIA	
fatrix:	Water	

L1013628-07

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - We	stborough L	_ab									
Aluminum, Total	3,24	J	ug/l	10.0	1.91	1	09/04/10 14:10	0 09/08/10 00:07	EPA 3005A	1,6020A	ВМ
Antimony, Total	0.18	J	ug/l	0.500	0.120	1	09/04/10 14:10	0 09/08/10 00:07	EPA 3005A	1,6020A	вм
Arsenic, Total	ND		ug/l	0.500	0.113	1	09/04/10 14:10	0 09/08/10 00:07	EPA 3005A	1,6020A	вм
Barium, Total	ND		ug/l	0.500	0.095	1	09/04/10 14:10	0 09/08/10 00:07	EPA 3005A	1,6020A	вм
Beryllium, Total	ND		ug/l	0.500	0.059	1	09/04/10 14:10	0 09/08/10 00:07	EPA 3005A	1,6020A	вм
Cadmium, Total	ND		ug/l	0.500	0.059	1	09/04/10 14:10	0 09/08/10 00:07	EPA 3005A	1,6020A	ВМ
Calcium, Total	87.9	J	ug/l	100	12.6	1	09/04/10 14:10	0 09/08/10 00:07	EPA 3005A	1,6020A	ВМ
Chromium, Total	0.27	J	ug/l	0.500	0.186	1	09/04/10 14:10	0 09/08/10 00:07	EPA 3005A	1,6020A	вм
Cobalt, Total	ND		ug/l	0.500	0.053	1	09/04/10 14:11	0 09/08/10 00:07	EPA 3005A	1,6020A	ВМ
Copper, Total	0.12	J	ug/l	0.500	0.118	1	09/04/10 14:10	0 09/08/10 00:07	EPA 3005A	1,6020A	вм
Iron, Total	16.2	J	ug/l	50.0	8.41	1	09/04/10 14:11	0 09/08/10 00:07	EPA 3005A	1,6020A	ВМ
Lead, Total	0.11	J	ug/l	0.500	0.050	1	09/04/10 14:10	0 09/08/10 00:07	EPA 3005A	1,6020A	ВМ
Magnesium, Total	ND		ug/l	100	4.10	1	09/04/10 14:11	0 09/08/10 00:07	EPA 3005A	1,6020A	BN
Manganese, Total	0.26	J	ug/l	1.00	0.136	1	09/04/10 14:10	0 09/08/10 00:07	EPA 3005A	1.6020A	ВМ
Mercury, Total	ND		ug/l	0 2000	0.0120	1	09/08/10 15:50	0 09/09/10 11:33	EPA 7470A	1,7470A	TD
Nickel, Total	0.4	J,	ug/l	0.500	0.180	1	09/04/10 14:10	0 09/08/10 00:07	EPA 3005A	1,6020A	ВМ
Potassium, Total	ND		ug/l	100	18.2	1	09/04/10 14:10	0 09/08/10 00:07	EPA 3005A	1,6020A	ВМ
Selenium, Total	ND		ug/l	1.00	0.406	1	09/04/10 14:10	0 09/08/10 00:07	EPA 3005A	1,6020A	ВМ
Silver, Total	ND		ug/l	0.500	0.085	1	09/04/10 14:10	0 09/08/10 00:07	EPA 3005A	1,6020A	вм
Sodium, Total	ND		ug/l	100	18.2	1	09/04/10 14:10	0 09/08/10 00:07	EPA 3005A	1,6020A	ВМ
Thallium, Total	ND :		ug/l	0.500	0.031	1	09/04/10 14:10	0 09/08/10 00:07	EPA 3005A	1,6020A	, BM
Vanadium, Total	· ND	Sep 550	uġ/l	0.500	0.077	10	09/04/10 14:10	0 09/08/10 00:07	EPA 3005A	1,6020A	ВМ
Zinc, Total	3.93	J	ug/l	5.00	1.62	1	09/04/10 14:10	0 09/08/10 00:07	EPA 3005A	1,6020A	вм

SAMPLE RESULTS

Project Name: SHL TASK 0002

Lab Number:

L1013628

Project Number: AC001

Report Date:

09/13/10

Method Blank Analysis **Batch Quality Control**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytica Method	Analyst
Total Metals - Westborough	Lab fo	or sample(s):	02,04,0	06-07	Batch:	WG431090-	1			
Aluminum, Total	ND		ug/l	10.0	1.91	1	09/04/10 14:10	09/07/10 22:27	1,6020A	вм
Antimony, Total	ND		ug/l	0.500	0,120	1	09/04/10 14:10	09/07/10 22:27	1,6020A	ВМ
Arsenic, Total	ND		ug/l	0.500	0.113	-1	09/04/10 14:10	09/07/10 22:27	1,6020A	вм
Barium, Total	ND		ug/l	0.500	0.095	1	09/04/10 14:10	09/07/10 22:27	1,6020A	вм
Beryllium, Total	ND		ug/l	0.500	0.059	1	09/04/10 14:10	09/07/10 22:27	1,6020A	вм
Cadmium, Total	ND		ug/l	0.500	0.059	1	09/04/10 14:10	09/07/10 22:27	7 1,6020A	вм
Calcium, Total	18.8	J	ug/l	100	12.6	1	09/04/10 14:10	09/07/10 22:27	1,6020A	ВМ
Chromium, Total	ND		ug/l	0.500	0.186	1	09/04/10 14:10	09/07/10 22:27	7 1,6020A	вм
Cobalt, Total	ND		ug/l	0.500	0.053	1	09/04/10 14:10	09/07/10 22:27	1,6020A	ВМ
Copper, Total	ND		ug/l	0.500	0.118	1	09/04/10 14:10	09/07/10 22:27	1,6020A	вм
Iron, Total	15.5	J	ug/l	50.0	8.41	1	09/04/10 14:10	09/07/10 22:27	7 1,6020A	ВМ
Lead, Total	ND		ug/l	0.500	0.050	1	09/04/10 14:10	09/07/10 22:27	7 1,6020A	ВМ
Magnesium, Total	ND		ug/l	100	4.10	1	09/04/10 14:10	09/07/10 22:27	7 1,6020A	ВМ
Manganese, Total	ND		ug/l	1 00	0.136	1	09/04/10 14:10	09/07/10 22:27	7 1,6020A	вм
Nickel, Total	ND		ug/l	0.500	0.180	1	09/04/10 14:10	09/07/10 22:27	1,6020A	вм
Potassium Total	ND		ug/l	100	18.2	1	09/04/10 14:10	09/07/10 22:27	1 6020A	вм
Selenium, Total	ND		ug/l	1.00	0.406	1	09/04/10 14:10	09/07/10 22:27	1,6020A	вм
Silver, Total	ND		ug/l	0.500	0.085	1	09/04/10 14:10	09/07/10 22:27	1,6020A	вм
Sodium, Total	ND		ug/l	100	18.2	1	09/04/10 14:10	09/07/10 22:27	1,6020A	вм
Thallium, Total	ND		ug/l	0.500	0.031	-1	09/04/10 14:10	09/07/10 22:27	7 1,6020A	вм
Vanadium, Total	ND		ug/l	0.500	0.077	1	09/04/10 14:10	09/07/10 22:27	1,6020A	вм
Zinc, Total	ND		ug/l	5.00	1.62	1	09/04/10 14:10	09/07/10 22:27	1,6020A	вм

Prep Information

EPA 3005A Digestion Method:

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytica Method	Analyst
Dissolved Metals - West	borough Lab for samp	ole(s): 01	,03,05	Batch:	WG43109	11-1			
Aluminum, Dissolved	ND	ug/l	10.0	1.91	1	09/04/10 14:10	09/07/10 22:27	1,6020A	вм
Antimony, Dissolved	ND	ug/l	0.500	0.120	1	09/04/10 14:10	09/07/10 22:27	1,6020A	вм
Arsenic, Dissolved	ND	ug/l	0.500	0.113	1	09/04/10 14:10	09/07/10 22:27	1,6020A	ВМ
Barium, Dissolved	ND	ug/l	0.500	0.095	1	09/04/10 14:10	09/07/10 22:27	1,6020A	вм

Project Name: SHL TASK 0002

Lab Number: L1013628 Project Number: AC001 Report Date: 09/13/10

Method Blank Analysis **Batch Quality Control**

Beryllium, Dissolved	ND		ug/l	0.500	0.059	1	09/04/10 14:10	09/07/10 22:27	1,6020A	ВМ
Cadmium, Dissolved	ND		ug/l	0.500	0.059	1	09/04/10 14:10	09/07/10 22:27	1,6020A	ВМ
Calcium, Dissolved	18.8	J	ug/l	100	12.6	1	09/04/10 14:10	09/07/10 22:27	1,6020A	ВМ
Chromium, Dissolved	ND		ug/l	0.500	0.186	1	09/04/10 14:10	09/07/10 22:27	1,6020A	ВМ
Cobalt, Dissolved	ND		ug/l	0.500	0.053	1	09/04/10 14:10	09/07/10 22:27	1,6020A	вм
Copper, Dissolved	ND		ug/l	0.500	0.118	1	09/04/10 14:10	09/07/10 22:27	1,6020A	вм
Iron, Dissolved	15.5	J	ug/t	50.0	8.41	1	09/04/10 14:10	09/07/10 22:27	1,6020A	вм
Lead, Dissolved	ND		ug/l	0.500	0.050	1	09/04/10 14:10	09/07/10 22:27	1,6020A	вм
Magnesium, Dissolved	ND		ug/l	100	4.10	1	09/04/10 14:10	09/07/10 22:27	1,6020A	ВМ
Manganese, Dissolved	ND		ug/l	1.00	0.136	1	09/04/10 14:10	09/07/10 22:27	1,6020A	ВМ
Nickel, Dissolved	ND		ug/l	0.500	0.180	1	09/04/10 14:10	09/07/10 22:27	1,6020A	BM
Potassium, Dissolved	ND		ug/l	100	18.2	1	09/04/10 14:10	09/07/10 22:27	1,6020A	вм
Selenium, Dissolved	ND		ug/l	1.00	0.406	1	09/04/10 14:10	09/07/10 22:27	1,6020A	ВМ
Silver, Dissolved	ND		ug/l	0.500	0.085	1	09/04/10 14:10	09/07/10 22:27	1,6020A	вм
Sodium, Dissolved	ND		ug/l	100	18.2	1	09/04/10 14:10	09/07/10 22:27	1,6020A	ВМ
Thallium, Dissolved	ND		ug/l	0.500	0.031	1	09/04/10 14:10	09/07/10 22:27	1,6020A	ВМ
Vanadium, Dissolved	ND		ug/l	0.500	0.077	1	09/04/10 14:10	09/07/10 22:27	1,6020A	ВМ
Zinc, Dissolved	ND		ug/l	5 00	1.62	1	09/04/10 14:10	09/07/10 22:27	1,6020A	вм

Prep Information

Digestion Method: EPA 3005A

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Dissolved Metals - We	estborough Lab for sam	ple(s): 01	,03,05	Batch:	WG43150	9-1			-
Mercury, Dissolved	ND	ug/l	0.2000	0.0120	1 .	09/08/10 15:50	09/09/10 11:05	1,7470A	TD

Prep Information

Digestion Method: EPA 7470A

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	
Total Metals - Westbo	rough Lab for sample(s): 02,04,0	06-07 B	atch:	WG431512-	1			
Mercury, Total	ND	ug/l	0.2000	0.0120	1	09/08/10 15:50	09/09/10 11:21	1,7470A	TD

L1013628

Project Name: SHL TASK 0002

Project Number: AC001

Report Date: 09/13/10

Lab Number:

Method Blank Analysis Batch Quality Control

Prep Information

Digestion Method: EPA 7470A

Lab Control Sample Analysis Batch Quality Control

Project Name:

SHL TASK 0002

Project Number: AC001

Lab Number:

L1013628

Report Date:

Parameter	LCS %Recovery Qual	LCSD %Recovery Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Westborough Lab	Associated sample(s): 02,04,06-07	Batch: WG431090-2				
Aluminum, Total	102		80-120			
Antimony, Total	97	14	80-120	4		
Arsenic, Total	-99	4	80-120	*		
Barium, Total	99		80-120			
Beryllium, Total	. 96		80-120	D-0		
Cadmium, Total	109	121	80-120	-		
Calcium, Total	108		80-120			
Chromium, Total	99		80-120			
Cobalt, Total	. 105	*	80-120	-		
Copper, Total	104	(4)	80-120			
Iron, Total	110	4	80-120	4		
Lead, Total	.100	9	80-120			
Magnesium, Total	108		80-120	-		
Manganese, Total	. 106	2	80-120	-		
Nickel, Total	105		80-120	-		
Potassium, Total	105.	×-	80-120	1		
Selenium, Total	102	4	80-120	-		
Silver, Total	97 *	4	80-120	•		
Sodium, Total	96.	÷1	80-120			
Thallium, Total	.93		80-120	1-		
Vanadium, Total	103	5.	80-120	-		

SHL TASK 0002

Project Number:

AC001

Lab Control Sample Analysis
Batch Quality Control

Lab Number:

L1013628

Report Date:

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Westborough Lab A	associated sample(s); 02,04,06-07	Batch: WG431090-2			
Zinc, Total	104	*	80-120		

Lab Control Sample Analysis Batch Quality Control

Project Name: SHL TASK 0002

Project Number: AC001

Lab Number: L1013628

Report Date: 09/13/10

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Dissolved Metals - Westborough Lab	Associated sample(s):	01,03,05 Batch: WG4	431091-2		
Aluminum, Dissolved	102	4	80-120	2	
Antimony, Dissolved	97	4	80-120	*	
Arsenic, Dissolved	99	4	80-120	30	
Barium, Dissolved	99	¥1	80-120		
Beryllium, Dissolved	96	4	80-120		
Cadmium, Dissolved	109		80-120		
Calcium, Dissolved	108	4	80-120	-	
Chromium, Dissolved	.99	9.	80-120	Ġ.	
Cobalt, Dissolved	105		80-120		
Copper, Dissolved	1.04	7	80-120		
Iron, Dissolved	110		80-120	ě	
Lead, Dissolved	100)	k .	80-120	7.	
Magnesium, Dissolved	108	1	80-120		
Manganese, Dissolved	106		80-120	- 2	
Nickel, Dissolved	105		80-120	÷	
Potassium, Dissolved	. 105.		80-120	5	
Selenium, Dissolved	102	*	80-120	4	
Silver, Dissolved	97	4	80-120	4.1	
Sodium, Dissolved	96	12	80-120		
Thallium, Dissolved	. 93		80-120		
Vanadium, Dissolved	103	*	80-120		
	1.0				

Lab Control Sample Analysis Batch Quality Control

Project Name:

SHL TASK 0002

Project Number: A

AC001

Lab Number:

L1013628

Report Date:

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Dissolved Metals - Westborough Lab	Associated sample(s):	01,03,05 Batch: WG431091-2			
Zinc, Dissolved	104	4	80-120	+	
Dissolved Metals - Westborough Lab	Associated sample(s):	01,03,05 Batch: WG431509-2			
Mercury, Dissolved	112	7	80-120	*	20
Total Metals - Westborough Lab Ass	ociated sample(s): 02,0	04,06-07 Batch: WG431512-2			
Mercury, Total	112	-	80-120		20

Project Name:

SHL TASK 0002

Project Number:

AC001

Lab Number:

L1013628

Report Date:

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD		RPD .imits
Total Metals - Westborough Lal 10-14-090210-U	b Associated	sample(s);	2,04,06-07	QC Batch ID	: WG43	31090-3	WG431090-4	QC San	nple: L1013	628-02	Client I	D: SHM
Aluminum, Total	262	2000	2290	101		2340	104		80-120	2		20
Antimony, Total	ND	500	466	93		472	94		80-120	1		20
Arsenic, Total	4280	120	4440	133		4640	300		80-120	4		20
Barium, Total	80.5	2000	2000	96		2020	97		80-120	.1		20
Beryllium, Total	ND	50 +	46.5	93		47.3	95		80-120	2		20
Cadmium, Total	ND	51	54.3	106		54.5	107		80-120	0		20
Calcium, Total	69300	10000	82200	129		84700	154		80-120	3		20
Chromium, Total	ND	200	191	96		193	96		80-120	1		20
Cobalt, Total	16.0	500	498	96		507	98		80-120	2		20
Copper, Total	ND	250	248	99		254	102		80-120	2		20
Iron, Total	75200	1000	80400	520		82700	750		80-120	3		20
Lead, Total	ND	510	496	97		499	98		80-120	1		20
Magnesium, Total	4310	10000 -	14800	105		15200	109		80-120	3		20
Manganese, Total	4700	500	5490	158		5580	176		80-120	2		20
Nickel, Total	8.07	500	505	99		510	100		80-120	1		20
Potassium, Total	18800	10000	29300	105		30300	115		80-120	3		20
Selenium, Total	ND	120	123	102		122	102		80-120	1		20
Silver, Total	ND	50	46.8	94		48.1	96		80-120	3		20
Sodium, Total	15500	10000	25200	97		25500	100		80-120	1		20
Thallium, Total	ND	120	109	91		110	92		80-120	1		20
Vanadium, Total	ND	500	467	93		476	95		80-120	2		20

Project Name:

SHL TASK 0002

Project Number:

AC001

Lab Number:

L1013628

Report Date:

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recover	Recovery y Limits	RPD	RPD Limits
Total Metals - Westborough 10-14-090210-U	Lab Associated	sample(s):	02,04,06-07	QC Batch ID:	WG431090-3	WG431090-4	QC Sample: L1013	628-02	Client ID: SHM-
Zinc, Total	54.6	500	519	93	533	96	80-120	3	20

Project Name:

SHL TASK 0002

Project Number:

AC001

Lab Number:

L1013628

Report Date:

Dissolved Metals - Westborough Lab Associated sample(s): 01,03,05 OC Batch ID: WG431091-3 WG431091-4 OC Sample: L1013628-01 OC SHM-10-14-090210-F	Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	/ RPD	RPD Limits
Antimony, Dissolved ND 500 460 92 509 102 80-120 10 Arsenic, Dissolved 4100 120 4500 333 4660 467 80-120 3 Barium, Dissolved 53.8 2000 1950 95 2160 105 80-120 10 Beryllium, Dissolved ND 50 47.2 94 49.1 98 80-120 4 Cadmium, Dissolved ND 51 53.0 104 59.3 116 80-120 11 Calcium, Dissolved ND 51 53.0 104 59.3 116 80-120 7 Chromium, Dissolved ND 200 186 93 204 102 80-120 9 Cobalt, Dissolved 15.6 500 497 96 540 105 80-120 8 Copper, Dissolved ND 250 248 99 271 108 80-120 9 Iron, Dissolved ND 510 486 95 530 104 80-120 9 Iron, Dissolved ND 510 486 95 530 104 80-120 9 Magnesium, Dissolved 150 10000 14700 106 15800 116 80-120 9 Magnesium, Dissolved 9,16 500 501 98 549 108 80-120 9 Potassium, Dissolved 17600 10000 28500 109 30800 132 Q 80-120 9 Potassium, Dissolved ND 120 123 102 130 108 80-120 9 Selenium, Dissolved ND 50 46.3 93 51.0 102 80-120 6 Silver, Dissolved ND 50 1520 104 25800 106 80-120 10 Sodium, Dissolved ND 50 25600 104 25800 106 80-120 10 Sodium, Dissolved ND 50 25600 104 25800 106 80-120 10 Sodium, Dissolved ND 120 10000 25600 104 25800 106 80-120 10 Sodium, Dissolved ND 15000 25600 104 25800 106 80-120 10 Sodium, Dissolved ND 150000 25600 104 25800 106 80-120 10 Sodium, Dissolved ND 150000 25600 104 25800 106 80-120 10		ough Lab Assoc	ciated sample	e(s): 01,03,0	5 QC Batch ID	: WG431091-3	WG431091-4	QC Sample: L10	13628-01	Client ID:
Arsenic, Dissolved 4100 120 4500 333 4660 467 80-120 3 Barium, Dissolved 53.8 2000 1950 95 2160 105 80-120 10 Beryllium, Dissolved ND 50 47.2 94 49.1 98 80-120 4 Cadmium, Dissolved ND 51 53.0 104 59.3 116 80-120 11 Calcium, Dissolved 55300 10000 69500 142 74400 191 80-120 7 Chromium, Dissolved ND 200 186 93 204 102 80-120 9 Cobalt, Dissolved 15.6 500 497 96 540 105 80-120 8 Copper, Dissolved ND 250 248 99 271 108 80-120 9 Iron, Dissolved ND 510 486 95 530 104 80-120 9 Iron, Dissolved ND 510 486 95 530 104 80-120 9 Iron, Dissolved ND 510 486 95 530 104 80-120 9 Magnesium, Dissolved 1450 10000 14700 106 15800 116 80-120 7 Manganese, Dissolved 4720 500 5520 160 5910 238 80-120 7 Mickel, Dissolved 9.16 500 501 98 549 108 80-120 9 Potassium, Dissolved 17600 1000 28500 109 30800 132 Q 80-120 8 Selenium, Dissolved ND 120 123 102 130 108 80-120 9 Selenium, Dissolved ND 50 46.3 93 51.0 102 80-120 6 Silver, Dissolved ND 50 1000 25600 104 25800 106 80-120 10 Sodium, Dissolved ND 50 150 46.3 93 51.0 102 80-120 10 Sodium, Dissolved ND 50 1500 25600 104 25800 106 80-120 10 Sodium, Dissolved ND 50 1500 25600 104 25800 106 80-120 10 Sodium, Dissolved ND 50 120 1000 25600 104 25800 106 80-120 10	Aluminum, Dissolved	ND	2000	1980	99	2150	108	80-120	8	20
Barium, Dissolved 53.8 2000 1950 95 2160 105 80-120 10 Beryllium, Dissolved ND 50 47.2 94 49.1 98 80-120 4 Cadmium, Dissolved ND 51 53.0 104 59.3 116 80-120 11 Calcium, Dissolved 55300 10000 69500 142 74400 191 80-120 7 Chromium, Dissolved ND 200 186 93 204 102 80-120 9 Cobalt, Dissolved 15.6 500 497 96 540 105 80-120 9 Iron, Dissolved ND 250 248 99 271 108 80-120 9 Iron, Dissolved 73000 1000 78000 500 84000 1100 80-120 7 Lead, Dissolved ND 510 486 95 530 104 80-120 9 Ma	Antimony, Dissolved	ND	500	460	92	509	102	80-120	10	20
Beryllium, Dissolved ND 50 47.2 94 49.1 98 80-120 4 Cadmium, Dissolved ND 51 53.0 104 59.3 116 80-120 11 Calcium, Dissolved 55300 10000 69500 142 74400 191 80-120 7 Chromium, Dissolved ND 200 186 93 204 102 80-120 9 Cobalt, Dissolved 15.6 500 497 96 540 105 80-120 8 Copper, Dissolved ND 250 248 99 271 108 80-120 9 Iron, Dissolved 73000 1000 78000 500 84000 1100 80-120 7 Lead, Dissolved ND 510 486 95 530 104 80-120 9 Magnesium, Dissolved 4750 10000 14700 106 5910 238 80-120 7	Arsenic, Dissolved	4100	120 🚙	4500	333	4660	467	80-120	3	20
Cadmium, Dissolved ND 51 53.0 104 59.3 116 80-120 11 Calcium, Dissolved 55300 10000 69500 142 74400 191 80-120 7 Chromium, Dissolved ND 200 186 93 204 102 80-120 9 Cobalt, Dissolved 15.6 500 497 96 540 105 80-120 8 Copper, Dissolved ND 250 248 99 271 108 80-120 9 Iron, Dissolved 73000 1000 78000 500 84000 1100 80-120 7 Lead, Dissolved ND 510 486 95 530 104 80-120 9 Magnesium, Dissolved 4150 10000 14700 106 15800 116 80-120 7 Manganese, Dissolved 4720 500 5520 160 5910 238 80-120 7	Barium, Dissolved	53.8	2000	1950	95	2160	105	80-120	10	20
Calcium, Dissolved 55300 10000 69500 142 74400 191 80-120 7 Chromium, Dissolved ND 200 186 93 204 102 80-120 9 Cobalt, Dissolved 15.6 500 497 96 540 105 80-120 8 Copper, Dissolved ND 250 248 99 271 108 80-120 9 Iron, Dissolved 73000 1000 78000 500 84000 1100 80-120 7 Lead, Dissolved ND 510 486 95 530 104 80-120 7 Lead, Dissolved 1150 10000 14700 106 15800 116 80-120 7 Magnesium, Dissolved 4150 10000 14700 106 15800 116 80-120 7 Nickel, Dissolved 9.16 500 501 98 549 108 80-120 9	Beryllium, Dissolved	ND	50	47.2	94	49.1	98	80-120	4	20
Chromium, Dissolved ND 200 186 93 204 102 80-120 9 Cobalt, Dissolved 15.6 500 497 96 540 105 80-120 8 Copper, Dissolved ND 250 248 99 271 108 80-120 9 Iron, Dissolved 73000 1000 78000 500 84000 1100 80-120 7 Lead, Dissolved ND 510 486 95 530 104 80-120 9 Magnesium, Dissolved 4150 10000 14700 106 15800 116 80-120 7 Manganese, Dissolved 4720 500 5520 160 5910 238 80-120 7 Nickel, Dissolved 9.16 500 501 98 549 108 80-120 9 Potassium, Dissolved 17600 10000 28500 109 30800 132 Q 80-120 6	Cadmium, Dissolved	ND	51	53.0	104	59.3	116	80-120	11	20
Cobalt, Dissolved 15.6 500 497 96 540 105 80-120 8 Copper, Dissolved ND 250 248 99 271 108 80-120 9 Iron, Dissolved 73000 1000 78000 500 84000 1100 80-120 7 Lead, Dissolved ND 510 486 95 530 104 80-120 9 Magnesium, Dissolved 4150 10000 14700 106 15800 116 80-120 7 Manganese, Dissolved 4720 500 5520 160 5910 238 80-120 7 Nickel, Dissolved 9.16 500 501 98 549 108 80-120 9 Potassium, Dissolved 17600 10000 28500 109 30800 132 Q 80-120 8 Selenium, Dissolved ND 120 123 102 130 108 80-120 6	Calcium, Dissolved	55300	10000	69500	142	74400	191	80-120	7	20
Copper, Dissolved ND 250 248 99 271 108 80-120 9 Iron, Dissolved 73000 1000 78000 500 84000 1100 80-120 7 Lead, Dissolved ND 510 486 95 530 104 80-120 9 Magnesium, Dissolved 4150 10000 14700 106 15800 116 80-120 7 Manganese, Dissolved 4720 500 5520 160 5910 238 80-120 7 Nickel, Dissolved 9.16 500 501 98 549 108 80-120 9 Potassium, Dissolved 17600 10000 28500 109 30800 132 Q 80-120 8 Selenium, Dissolved ND 120 123 102 130 108 80-120 6 Silver, Dissolved ND 50' 46.3 93 51.0 102 80-120 1	Chromium, Dissolved	ND	200	186	93	204	102	80-120	9	20
Iron, Dissolved 73000 1000 78000 500 84000 1100 80-120 7 Lead, Dissolved ND 510 486 95 530 104 80-120 9 Magnesium, Dissolved 4150 10000 14700 106 15800 116 80-120 7 Manganese, Dissolved 4720 500 5520 160 5910 238 80-120 7 Nickel, Dissolved 9.16 500 501 98 549 108 80-120 9 Potassium, Dissolved 17600 10000 28500 109 30800 132 Q 80-120 8 Selenium, Dissolved ND 120 123 102 130 108 80-120 6 Silver, Dissolved ND 50 46.3 93 51.0 102 80-120 10 Sodium, Dissolved 15200 10000 25600 104 25800 106 80-120 <	Cobalt, Dissolved	15.6	500	497	96	540	105	80-120	8	20
Lead, Dissolved ND 510 486 95 530 104 80-120 9 Magnesium, Dissolved 4150 10000 14700 106 15800 116 80-120 7 Manganese, Dissolved 4720 500 5520 160 5910 238 80-120 7 Nickel, Dissolved 9.16 500 501 98 549 108 80-120 9 Potassium, Dissolved 17600 10000 28500 109 30800 132 Q 80-120 8 Selenium, Dissolved ND 120 123 102 130 108 80-120 6 Silver, Dissolved ND 50 46.3 93 51.0 102 80-120 10 Sodium, Dissolved 15200 10000 25600 104 25800 106 80-120 1 Thallium, Dissolved ND 120 107 89 117 98 80-120 9 <td>Copper, Dissolved</td> <td>ND</td> <td>250</td> <td>248</td> <td>99</td> <td>271</td> <td>108</td> <td>80-120</td> <td>9</td> <td>20</td>	Copper, Dissolved	ND	250	248	99	271	108	80-120	9	20
Magnesium, Dissolved 4150 10000 14700 106 15800 116 80-120 7 Manganese, Dissolved 4720 500 5520 160 5910 238 80-120 7 Nickel, Dissolved 9.16 500 501 98 549 108 80-120 9 Potassium, Dissolved 17600 10000 28500 109 30800 132 Q 80-120 8 Selenium, Dissolved ND 120 123 102 130 108 80-120 6 Silver, Dissolved ND 50 46.3 93 51.0 102 80-120 10 Sodium, Dissolved 15200 10000 25600 104 25800 106 80-120 1 Thallium, Dissolved ND 120 107 89 117 98 80-120 9	Iron, Dissolved	73000	1000	78000	500	84000	1100	80-120	7	20
Manganese, Dissolved 4720 500 5520 160 5910 238 80-120 7 Nickel, Dissolved 9.16 500 501 98 549 108 80-120 9 Potassium, Dissolved 17600 10000 28500 109 30800 132 Q 80-120 8 Selenium, Dissolved ND 120 123 102 130 108 80-120 6 Silver, Dissolved ND 50 46.3 93 51.0 102 80-120 10 Sodium, Dissolved 15200 10000 25600 104 25800 106 80-120 1 Thallium, Dissolved ND 120 107 89 117 98 80-120 9	Lead, Dissolved	ND	510	486	95	530	104	80-120	9	20
Nickel, Dissolved 9.16 500 501 98 549 108 80-120 9 Potassium, Dissolved 17600 10000 28500 109 30800 132 Q 80-120 8 Selenium, Dissolved ND 120 123 102 130 108 80-120 6 Silver, Dissolved ND 50 46.3 93 51.0 102 80-120 10 Sodium, Dissolved 15200 10000 25600 104 25800 106 80-120 1 Thallium, Dissolved ND 120 107 89 117 98 80-120 9	Magnesium, Dissolved	4150	10000	14700	106	15800	116	80-120	7	20
Potassium, Dissolved 17600 10000 28500 109 30800 132 Q 80-120 8 Selenium, Dissolved ND 120 123 102 130 108 80-120 6 Silver, Dissolved ND 50 46.3 93 51.0 102 80-120 10 Sodium, Dissolved 15200 10000 25600 104 25800 106 80-120 1 Thallium, Dissolved ND 120 107 89 117 98 80-120 9	Manganese, Dissolved	4720	500	5520	160	5910	238	80-120	7	20
Selenium, Dissolved ND 120 123 102 130 108 80-120 6 Silver, Dissolved ND 50 46.3 93 51.0 102 80-120 10 Sodium, Dissolved 15200 10000 25600 104 25800 106 80-120 1 Thallium, Dissolved ND 120 107 89 117 98 80-120 9	Nickel, Dissolved	9.16	500 -	501	98	549	108	80-120	9	20
Silver, Dissolved ND 50 46.3 93 51.0 102 80-120 10 Sodium, Dissolved 15200 10000 25600 104 25800 106 80-120 1 Thallium, Dissolved ND 120 107 89 117 98 80-120 9	Potassium, Dissolved	17600	10000	28500	109	30800	132	Q 80-120	8	20
Sodium, Dissolved 15200 10000 25600 104 25800 106 80-120 1 Thallium, Dissolved ND 120 107 89 117 98 80-120 9	Selenium, Dissolved	ND	120	123	102	130	108	80-120	6	20
Sodium, Dissolved 15200 10000 25600 104 25800 106 80-120 1 Thallium, Dissolved ND 120 107 89 117 98 80-120 9	Silver, Dissolved	ND		46.3	93	51.0	102	80-120	10	20
Thallium, Dissolved ND 120 107 89 117 98 80-120 9	Sodium, Dissolved	15200	10000	25600	104	25800	106	80-120	1	20
Vanadium, Dissolved ND 500 462 92 506 101 80-120 9	Thallium, Dissolved	ND		107	89	117	98	80-120	9	20
	Vanadium, Dissolved	ND	500	462	92	506	101	80-120	9	20

Project Name:

SHL TASK 0002

Project Number:

AC001

Lab Number:

L1013628

Report Date:

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Dissolved Metals - Westborough SHM-10-14-090210-F	Lab Assoc	iated sample(s): 01,03,0	5 QC Batch ID): WG431091-3	WG431091-4	QC Sample: L10136	528-01	Client ID:
Zinc, Dissolved	ND	500	539	108	556	111	80-120	3	20
Dissolved Metals - Westborough SHM-10-14-090210-F	Lab Assoc	iated sample(s): 01 ,03,0	5 QC Batch ID): WG431509-3	WG431509-4	QC Sample: L10136	628-01	Client ID:
Mercury, Dissolved	ND	1 -	1.142	114	1.142	114	80-120	0	20
Total Metals - Westborough Lab 10-14-090210-U	Associated	sample(s): 02	2,04,06-07	QC Batch ID:	WG431512-3	WG431512-4	QC Sample: L101362	28-02	Client ID: SHM
Mercury, Total	ND	1	1,150	115	1.096	110	80-120	5	20

INORGANICS & MISCELLANEOUS

Project Name: SHL TASK 0002

Project Number: AC001

Lab Number:

L1013628

Report Date:

09/13/10

SAMPLE RESULTS

Lab ID:

L1013628-02 SHM-10-14-090210-U

Client ID:

DEVENS, MA

Sample Location: Matrix:

Water

Date Collected:

09/02/10 11:47

Date Received:

09/02/10

Field Prep:

Not Specified

Parameter	Result	Qualifier Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Wes	tborough Lab								
Alkalinity, Total	360	mg CaCO3/L	2.0	NA	1		09/07/10 11:44	30,2320B	JO
Solids, Total Suspended	72	mg/l	5.0	NA	1		09/03/10 08:35	30,2540D	DW
Nitrogen, Ammonia	3.96	mg/l	0.075	0.017	1	09/04/10 12:45	09/07/10 19:42	30,4500NH3-BH	AT
Nitrogen, Nitrite	ND	mg/l	0.02	0.002	1		09/03/10 10:41	30,4500NO2-B	JO
Sulfide	ND	mg/l	0.10	0.10	1	09/08/10 17:15	09/08/10 18:15	30,4500S2-AD	AT
Chemical Oxygen Demand	43	mg/l	20	7.0	1		09/07/10 15:00	44,410.4	DW
Dissolved Organic Carbon	8.7	mg/l	1.0	1.0	1	09/02/10 21:30	09/09/10 07:43	30,5310C	DW
Anions by Ion Chromatog	raphy - West	borough Lab							
Chloride	6.3	mg/l	0.50	0.07	1		09/02/10 22:50	44,300.0	AU
Nitrogen, Nitrate	ND	mg/l	0.05	0.01	1	*	09/02/10 22:50	44,300.0	AU
Sulfate	3.7	mg/l	1.0	0.12	1	4	09/02/10 22:50	44,300.0	AU

Project Name: SHL TASK 0002

Project Number: AC001

Lab Number:

L1013628

Report Date:

09/13/10

SAMPLE RESULTS

Lab ID:

L1013628-04

Client ID:

SHM-10-16-090210-U

Sample Location:

DEVENS, MA

Matrix:

Water

Date Collected:

09/02/10 14:45

Date Received:

09/02/10

Field Prep:

Not Specified

Parameter	Result	Qualifier Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Wes	tborough Lab								
Alkalinity, Total	330	mg CaCO3/L	2.0	NA	1	-	09/07/10 11:44	30,2320B	JO
Solids, Total Suspended	150	mg/l	5.0	NA	9		09/03/10 08:35	30,2540D	DW
Nitrogen, Ammonia	3.31	mg/l	0.075	0.017	1	09/04/10 12:45	09/07/10 19:47	30,4500NH3-BH	AT
Nitrogen, Nitrite	ND	mg/l	0.02	0.002	1		09/03/10 10:41	30,4500NO2-B	JO
Sulfide	ND	mg/l	0.10	0.10	1	09/08/10 17:15	09/08/10 18:15	30,4500S2-AD	AT
Chemical Oxygen Demand	36	mg/l	20	7.0	1		09/07/10 15:00	44,410.4	DW
Dissolved Organic Carbon	5.3	mg/l	1.0	1.0	1	09/02/10 21:30	09/09/10 07:43	30,5310C	DW
Anions by Ion Chromatog	raphy - West	borough Lab							
Chloride	31	mg/l	0.50	0.07	1		09/02/10 23:02	44,300.0	AU
Nitrogen, Nitrate	ND	mg/l	0.05	0.01	1	.8	09/02/10 23:02	44,300.0	AU
Sulfate	2.9	mg/l	1.0	0.12	1	-	09/02/10 23:02	44,300.0	AU

Project Name: SHL TASK 0002

Project Number: AC001

Lab Number:

L1013628

Report Date:

09/13/10

Method Blank Analysis Batch Quality Control

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Wes	stborough Lab for san	nple(s): 02,	04 Ba	tch: WG	430895-1				
Solids, Total Suspended	ND	mg/l	5.0	NA	1	-	09/03/10 08:35	30,2540D	DW
General Chemistry - Wes	stborough Lab for san	nple(s): 02,	04 Ba	tch: WG	430933-2				
Nitrogen, Nitrite	ND	mg/l	0.02	0.002	1	-	09/03/10 10:40	30,4500NO2-B	JO
Anions by Ion Chromatog	graphy - Westborough	Lab for sa	mple(s)	: 02,04	Batch: W	/G431008-1			
Chloride	ND	mg/l	0.50	0.07	1	*	09/02/10 16:49	44,300.0	AU
Nitrogen, Nitrate	ND	mg/l	0.05	0.01	1	4	09/02/10 16:49	44,300.0	AU
Sulfate	ND	mg/l	1.0	0.12	1	-	09/02/10 16:49	44,300.0	AU
General Chemistry - Wes	stborough Lab for san	nple(s): 02,	04 Ba	tch: WG	431064-1				
Nitrogen, Ammonia	ND	mg/l	0.075	0.017	1	09/04/10 12:45	09/07/10 19:38	30,4500NH3-BH	AT AT
General Chemistry - Wes	stborough Lab for san	nple(s): 02,	04 Ba	tch: WG	431147-1				
Chemical Oxygen Demand	ND	mg/l	20	7.0	1		09/07/10 15:00	44,410,4	DW
eneral Chemistry - Wes	stborough Lab for san	nple(s): 02,	04 Ba	tch: WG	431206-2				
Alkalinity, Total	ND	mg CaCO3/L	20	NA	1	1.0	09/07/10 11:44	30,2320B	JO
General Chemistry - Wes	stborough Lab for san	nple(s): 02,	04 Ba	tch: WG	3431546-1				
Sulfide	ND	mg/l	0.10	0.10	1	09/08/10 17:15	09/08/10 18:15	30,4500S2-AD	AT
General Chemistry - Wes	stborough Lab for san	nple(s): 02,	04 Ba	tch: WG	6431589-1				
Dissolved Organic Carbon	ND	mg/l	1.0	1.0	1	09/02/10 21:30	09/09/10 07:43	30,5310C	DW

Lab Control Sample Analysis Batch Quality Control

SHL TASK 0002

Project Number: AC001

Project Name:

Lab Number:

L1013628

Report Date:

Parameter	LCS %Recovery (LCSD Qual %Recovery	%Recovery Qual Limits	RPD	Qual RPD Limits
General Chemistry - Westborough Lab	Associated sample(s):	02,04 Batch: WG43	0933-1		
Nitrogen, Nitrite	95	+	90-110		20
Anions by Ion Chromatography - Westb	orough Lab Associated	sample(s): 02,04 Ba	atch: WG431008-2		
Chloride	100		90-110	3	
Nitrogen, Nitrate	102	*	90-110	2	
Sulfate	98		90-110		
General Chemistry - Westborough Lab	Associated sample(s):	02,04 Batch: WG43	1064-2		
Nitrogen, Ammonia	. 98	*	80-120	Ť	20
General Chemistry - Westborough Lab	Associated sample(s):	02,04 Batch: WG43	1147-2		
Chemical Oxygen Demand	101	5	95-105	•	
General Chemistry - Westborough Lab	Associated sample(s):	02,04 Batch: WG43	1206-1		
Alkalinity, Total	106	4.	80-115	*	4
General Chemistry - Westborough Lab	Associated sample(s):	02,04 Batch: WG43	154 6-2		
Sulfide	87		75-125	4	

Lab Control Sample Analysis Batch Quality Control

Project Name:

SHL TASK 0002

Project Number:

AC001

Lab Number:

L1013628

Report Date:

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
General Chemistry - Westborough L	ab Associated sample(s): 02,04	Batch: WG431589-2			
Dissolved Organic Carbon	101		90-110		

Project Name:

SHL TASK 0002

Project Number:

AC001

Lab Number:

L1013628

Report Date:

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Qual Found	MSD %Recovery	Recovery Qual Limits		RPD Qual Limits
General Chemistry - Westbo	rough Lab Asso	ciated samp	ole(s): 02,04	QC Batch II	D: WG430933-3	QC Sample: L1	013534-04 Clie	nt ID:	MS Sample
Nitrogen, Nitrite	ND	0.1	0.10	100	~		85-115	ı.	20
Anions by Ion Chromatograp Client ID: SHM-10-14-09021		gh Lab Asso	ociated sam	ple(s): 02.04	QC Batch ID: W	G431008-3 WG4	31008-4 QC Sa	mple: l	L1013628-02
Chloride	6.3	4	10	92	10	92	40-151	0	18
Nitrogen, Nitrate	ND	0.4.	0.40	100	0.40	100	80-122	0	15
Sulfate	3.7	8	12	104	12	104	60-140	0	20
General Chemistry - Westbo 090210-U	rough Lab Asso	ciated samp	ole(s): 02,04	QC Batch II	D: WG431064-3	QC Sample: L1	013628-02 Clie	nt ID:	SHM-10-14-
Nitrogen, Ammonia	3.96	4	7.79	96	÷	¥.	80-120	-	20
General Chemistry - Westbo	rough Lab Asso	ciated samp	ole(s): 02,04	QC Batch II	D: WG431147-3	QC Sample: L1	013534-02 Clie	nt ID:	MS Sample
Chemical Oxygen Demand	33	238	290	108			80-120	r.	20
General Chemistry - Westbo	rough Lab Asso	ciated samp	le(s): 02,04	QC Batch II	D: WG431206-3	QC Sample: L1	013721-13 Clie	nt ID:	MS Sample
Alkalinity, Total	13	100	120	109	÷	1	86-116		4
General Chemistry - Westbor 090210-U	rough Lab Asso	ciated samp	le(s): 02,04	QC Batch ID	D: WG431546-3	QC Sample: L1	013628-04 Clie	nt ID:	SHM-10-16-
Sulfide	ND	0.24	0.19	79	13-	4	75-125	~	20
General Chemistry - Westbor 090210-U	rough Lab Asso	ciated s am p	le(s): 02,04	QC Batch ID	D: WG431589-3	QC Sample: L1	013628-04 Clie	nt ID:	SHM-10 - 16-
Dissolved Organic Carbon	5.3	4	9.6	108	(4)		79-120	15	20

Lab Duplicate Analysis Batch Quality Control

Project Name: SHL TASK 0002

Project Number: AC001

Lab Number:

L1013628

Report Date:

Parameter	Nati	ve Sam	nple D	Suplicate Samp	le Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab	Associated sample(s):	02,04	QC Batch ID:	WG430895-2	QC Sample:	L1013636-11	Client ID:	DUP Sample
Solids, Total Suspended		2000		2000	mg/l	Ö		32
General Chemistry - Westborough Lab	Associated sample(s):	02,04	QC Batch ID:	WG430933-4	QC Sample:	L1013534-04	Client ID:	DUP Sample
Nitrogen, Nitrite	*	ND		ND	mg/l	NC		20
Anions by Ion Chromatography - Westb 10-14-090210-U	orough Lab Associated	d sample	e(s): 02,04 C	QC Batch ID: W	G431008-5	QC Sample: L	1013628-0	2 Client ID: SHM-
Chloride		6.3		6.2	mg/l	2		18
Nitrogen, Nitrate	1.0	ND		ND	mg/l	NC		15
Sulfate	12° 6	3.7		3,6	mg/l	3		20
General Chemistry - Westborough Lab	Associated sample(s):	02,04	QC Batch ID:	WG431064-4	QC Sample:	L1013628-02	Client ID:	SHM-10-14-
Nitrogen, Ammonia		3.96		3.99	mg/l	1		20
General Chemistry - Westborough Lab	Associated sample(s):	02,04	QC Batch ID:	WG431147-4	QC Sample:	L1013534-02	Client ID:	DUP Sample
Chemical Oxygen Demand	4	33.		29	mg/l	13		20
General Chemistry - Westborough Lab	Associated sample(s):	02,04	QC Batch ID:	WG431206-4	QC Sample:	L1013721-13	Client ID:	DUP Sample
Alkalinity, Total	7	13.		14	mg CaCO	3/L 3		4
General Chemistry - Westborough Lab	Associated sample(s):	02,04	QC Batch ID:	WG431546-4	QC Sample:	L1013628-04	Client ID:	SHM-10-16-
Sulfide		ND		ND	mg/l	NC		20

Lab Duplicate Analysis
Batch Quality Control

Lab Number:

L1013628

Report Date:

09/13/10

Parameter	Native Sar	nple	Duplicate Samp	le Units	RPD		RPD Limits
General Chemistry - Westborough Lab 090210-U	Associated sample(s): 02,04	QC Batch	ID: WG431589-4	QC Sample:	L1013628-02	Client ID:	SHM-10-14-
Dissolved Organic Carbon	8.7		8.7	ma/l	0		20

Project Name:

Project Number:

SHL TASK 0002

8.0

AC001

Project Name: SHL TASK 0002

Project Number: AC001

ASK 0002 Lab Number: L1013628

Report Date: 09/13/10

Sample Receipt and Container Information

Were project specific reporting limits specified?

YES

Reagent H2O Preserved Vials Frozen on: NA

Cooler Information Custody Seal

Cooler

Α

Present/Intact

Container Info	ormation			Temp			
Container ID	Container Type	Cooler	рН	deg C	Pres	Seal	Analysis(*)
L1013628-01A	Plastic 250ml HNO3 preserved	A	<2	.3	Y	Present/Intact	DOD-BA-6020S(180),DOD-FE-6020S(180),DOD-MG-6020S(180),DOD-SB-6020S(180),DOD-CR-6020S(180),DOD-MN-6020S(180),DOD-CD-6020S(180),DOD-CA-6020S(180),DOD-NA-6020S(180),DOD-NA-6020S(180),DOD-NI-6020S(180),DOD-PB-6020S(180),DOD-SB-6020S(180),DOD-CD-6020S(180),DOD-CD-6020S(180),DOD-CD-6020S(180),DOD-CD-6020S(180),DOD-CD-6020S(180),DOD-CD-6020S(180),DOD-ZN-6020S(180),DOD-ZN-6020S(180),DOD-ZN-6020S(180),DOD-K-6020S(180),DOD-K-6020S(180),DOD-K-6020S(180),DOD-SE-6020S(180),DOD-SE-6020S(180),DOD-SE-6020S(180),DOD-SE-6020S(180),DOD-HG-7470S(28)
L1013628-01B	Plastic 250ml HNO3 preserved	Α	<2	3	Y	Present/Intact	DOD-BA-6020S(180),DOD-FE- 6020S(180),DOD-MG- 6020S(180),DOD-SB- 6020S(180),DOD-CR- 6020S(180),DOD-MN- 6020S(180),DOD-TL-
	0.4		1	I		6 9	6020S(180),DOD-CO-
			*4			* *v itr	6020S(180),DOD-AG- 6020S(180),DOD-CA- 6020S(180),DOD-NA- 6020S(180),DOD-NI- 6020S(180),DOD-PB- 6020S(180),DOD-AS- 6020S(180),DOD-CD- 6020S(180),DOD-CD- 6020S(180),DOD-BE- 6020S(180),DOD-ZN- 6020S(180),DOD-ZN- 6020S(180),DOD-AL- 6020S(180),DOD-K- 6020S(180),DOD-K- 6020S(180),DOD-SE- 6020S(180),DOD-HG-7470S(28)
L1013628-02A	Vial H2SO4 preserved split	Α	N/A	3	Y	Present/Intact	DOC-5310(28)

Project Name: SHL TASK 0002

Project Number: AC001

Lab Number: L1013628 **Report Date**: 09/13/10

Container Info	ormation			Temp			
Container ID	Container Type	Cooler	рН	deg C	Pres	Seal	Analysis(*)
L1013628-02B	Vial H2SO4 preserved split	Α	N/A	3	Y	Present/Intact	DOC-5310(28)
L1013628-02C	Plastic 250ml unpreserved	Α	N/A	3	Y	Present/Intact	ALK-T-2320(14)
L1013628-02D	Plastic 250ml unpreserved	Α	6	3	Y	Present/Intact	NO2-4500NO2(2)
L1013628-02E	Plastic 250ml Zn Acetate/NaOH pr	Α	>12	3	Y	Present/Intact	SULFIDE-4500(7)
L1013628-02F	Plastic 250ml Zn Acetate/NaOH pr	Α	>12	3	Y	Present/Intact	SULFIDE-4500(7)
L1013628-02G	Plastic 250ml Zn Acetate/NaOH pr	Α	>12	3	Y	Present/Intact	SULFIDE-4500(7)
L1013628-02H	Plastic 500ml HNO3 preserved	A	<2	3	Y	Present/Intact	DOD-CD-6020T(180),DOD-NA-6020T(180),DOD-V-6020T(180),DOD-ZN-6020T(180),DOD-NI-6020T(180),DOD-SE-6020T(180),DOD-TL-6020T(180),DOD-CA-6020T(180),DOD-CA-6020T(180),DOD-MN-6020T(180),DOD-HG-7470T(28),DOD-SB-6020T(180),DOD-AL-6020T(180),DOD-AL-6020T(180),DOD-AS-6020T(180),DOD-BA-6020T(180),DOD-BA-6020T(180),DOD-BA-6020T(180),DOD-BE-6020T(180),DOD-BE-6020T(180),DOD-HG-6020T(180),DOD-BE-6020T(180),DOD-HG-6020T(180),DOD-HG-6020T(180),DOD-FE-6020T(180),DOD-FE-6020T(180),DOD-PB-6020T(180),DOD-PB-6020T(180),DOD-PB-6020T(180),DOD-PB-6020T(180),DOD-PB-6020T(180),DOD-PB-6020T(180),DOD-PB-6020T(180),DOD-PB-6020T(180),DOD-PB-6020T(180),DOD-PB-6020T(180)
L1013628-02I	Plastic 500ml HNO3 preserved	A	<2	3	Y	Present/Intact	DOD-CD-6020T(180),DOD-NA-6020T(180),DOD-V-6020T(180),DOD-ZN-6020T(180),DOD-NI-6020T(180),DOD-SE-6020T(180),DOD-TL-6020T(180),DOD-CA-6020T(180),DOD-CA-6020T(180),DOD-MN-6020T(180),DOD-MN-6020T(180),DOD-HG-
		* 6	30			9.3 (5.	7470T(28),DOD-SB- 6020T(180),DOD-AG-
·		Yes		64 13			6020T(180), DOD-AL- 6020T(180), DOD-AS- 6020T(180), DOD-BA- 6020T(180), DOD-CR- 6020T(180), DOD-BE- 6020T(180), DOD-BE- 6020T(180), DOD-FE- 6020T(180), DOD-FE- 6020T(180), DOD-CU- 6020T(180), DOD-PB- 6020T(180)
L1013628-02J	Plastic 500ml unpreserved	Α	6	3	Y	Present/Intact	SO4-300(28),CL-300(28),NO3- 300(2)
L1013628-02K	Plastic 500ml H2SO4 preserved	Α	<2	3	Y	Present/Intact	COD-410(28),NH3-4500(28)
L1013628-02L	Plastic 1000ml unpreserved	A	6	3	Y	Present/Intact	TSS-2540(7)

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Container Info	rmation			Temp			
Container ID	Container Type	Cooler	pН	deg C	Pres	Seal	Analysis(*)
L1013628-02X	Amber 250ml unpreserved	Α	6	3	Y	Present/Intact	DOC-5310(28)
L1013628-03A	Plastic 250ml HNO3 preserved	A	<2	3	Y	Present/Intact	DOD-BA-6020S(180),DOD-FE-6020S(180),DOD-MG-6020S(180),DOD-MG-6020S(180),DOD-CR-6020S(180),DOD-MN-6020S(180),DOD-TL-6020S(180),DOD-AG-6020S(180),DOD-AG-6020S(180),DOD-NA-6020S(180),DOD-NI-6020S(180),DOD-NI-6020S(180),DOD-PB-6020S(180),DOD-PB-6020S(180),DOD-CD-6020S(180),DOD-BE-6020S(180),DOD-BE-6020S(180),DOD-CD-6020S(180),DOD-CD-6020S(180),DOD-CD-6020S(180),DOD-CN-6020S(180),DOD-CN-6020S(180),DOD-K-6020S(180),DOD-K-6020S(180),DOD-K-6020S(180),DOD-SE-6020S(180),DOD-SE-6020S(180),DOD-SE-6020S(180),DOD-SE-6020S(180),DOD-SE-6020S(180),DOD-SE-6020S(180),DOD-HG-7470S(28)
L1013628-04A	Vial H2SO4 preserved split	Α	N/A	3	Y	Present/Intact	DOC-5310(28)
L1013628-04B	Vial H2SO4 preserved split	Α	N/A	3	Y	Present/Intact	DOC-5310(28)
L1013628-04C	Plastic 250ml unpreserved	A	N/A	3	Y	Present/Intact	ALK-T-2320(14)
L1013628-04D	Plastic 250ml unpreserved	Α	6	3	Y	Present/Intact	NO2-4500NO2(2)
L1013628-04E	Plastic 250ml Zn Acetate/NaOH pr	Α	>12	3	Y	Present/Intact	SULFIDE-4500(7)
L1013628-04F	Plastic 250ml Zn Acetate/NaOH pr	A	>12	3	Y	Present/Intact	SULFIDE-4500(7)
L1013628-04G	Plastic 250ml Zn Acetate/NaOH pr	A	>12	3	Y	Present/Intact	SULFIDE-4500(7)
L1013628-04H	Plastic 500ml HNO3 preserved	Α	<2	3	Y	Present/Intact	DOD-CD-6020T(180),DOD-NA- 6020T(180),DOD-V- 6020T(180),DOD-ZN- 6020T(180),DOD-NI- 6020T(180),DOD-SE- 6020T(180),DOD-TL- 6020T(180),DOD-CA- 6020T(180),DOD-CO-
12		7	Te		4.	7 X 0 5	6020T(180),DOD-MN- 6020T(180),DOD-HG-
1.8/5							7470T(28),DOD-SB- 6020T(180),DOD-AG- 6020T(180),DOD-AL- 6020T(180),DOD-AS- 6020T(180),DOD-BA- 6020T(180),DOD-CR- 6020T(180),DOD-BE- 6020T(180),DOD-MG- 6020T(180),DOD-FE- 6020T(180),DOD-FE- 6020T(180),DOD-PB- 6020T(180),DOD-PB- 6020T(180),DOD-PB- 6020T(180)
L1013628-04J	Plastic 500ml unpreserved	Α	6	3	Y	Present/Intact	SO4-300(28),CL-300(28),NO3- 300(2)

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Container Info	rmation			Temp			
Container ID	Container Type	Cooler	pН	deg C	Pres	Seal	Analysis(*)
L1013628-04K	Plastic 500ml H2SO4 preserved	Α	<2	3	Y	Present/Intact	COD-410(28),NH3-4500(28)
L1013628-04L	Plastic 1000ml unpreserved	Α	6	3	Y	Present/Intact	TSS-2540(7)
L1013628-04X	Amber 250ml unpreserved	Α	6	3	Y	Present/Intact	DOC-5310(28)
L1013628-05A	Plastic 250ml HNO3 preserved	A	<2	3	Y	Present/Intact	DOD-BA-6020S(180),DOD-FE-6020S(180),DOD-MG-6020S(180),DOD-MG-6020S(180),DOD-CR-6020S(180),DOD-TL-6020S(180),DOD-CO-6020S(180),DOD-CA-6020S(180),DOD-AG-6020S(180),DOD-NI-6020S(180),DOD-NI-6020S(180),DOD-NI-6020S(180),DOD-SB-6020S(180),DOD-CD-6020S(180),DOD-CD-6020S(180),DOD-CD-6020S(180),DOD-CD-6020S(180),DOD-ZN-6020S(180),DOD-ZN-6020S(180),DOD-ZN-6020S(180),DOD-AL-6020S(180),DOD-K-6020S(180),DOD-K-6020S(180),DOD-K-6020S(180),DOD-SE-6020S(180),DOD-SE-6020S(180),DOD-SE-6020S(180),DOD-SE-6020S(180),DOD-HG-7470S(28)
L1013628-06A	Plastic 500ml HNO3 preserved	A	<2	3	Y	Present/Intact	DOD-CD-60201 (180), DOD-NA-6020T (180), DOD-V-6020T (180), DOD-V-6020T (180), DOD-NI-6020T (180), DOD-NI-6020T (180), DOD-TL-6020T (180), DOD-CA-6020T (180), DOD-CO-6020T (180), DOD-HG-7470T (28), DOD-SB-6020T (180), DOD-AG-6020T (180), DOD-AG-6020T (180), DOD-AG-6020T (180), DOD-AG-6020T (180), DOD-AG-6020T (180), DOD-BA-6020T (180), DOD-BA-6020T (180), DOD-CR-6020T (180), DOD-CR-60
	74 7 30		4			77 N M	6020T(180),DOD-BE- 6020T(180),DOD-MG-
							6020T(180),DOD-FE- 6020T(180),DOD-CU-
							6020T(180),DOD-PB-
							6020T(180)

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Container Info	ormation			Temp			
Container ID	Container Type	Cooler	рН	deg C	Pres	Seal	Analysis(*)
L1013628-07A	Plastic 500ml HNO3 preserved	A	<2	3	Y	Present/Intact	DOD-CD-6020T(180),DOD-NA-6020T(180),DOD-V-6020T(180),DOD-V-6020T(180),DOD-NI-6020T(180),DOD-SE-6020T(180),DOD-CA-6020T(180),DOD-CA-6020T(180),DOD-HG-7470T(28),DOD-HG-7470T(28),DOD-AG-6020T(180),DOD-AG-6020T(180),DOD-AG-6020T(180),DOD-AG-6020T(180),DOD-AS-6020T(180),DOD-AS-6020T(180),DOD-CR-6020T(180),DOD-CR-6020T(180),DOD-CR-6020T(180),DOD-BE-6020T(180),DOD-BE-6020T(180),DOD-BE-6020T(180),DOD-FE-6020T(180),DOD-FE-6020T(180),DOD-CU-6020T(180),DOD-CU-6020T(180),DOD-CU-6020T(180),DOD-CU-6020T(180),DOD-CU-6020T(180),DOD-CU-6020T(180),DOD-CU-6020T(180),DOD-PB-6020T(180),DOD-PB-6020T(180),DOD-PB-6020T(180),DOD-PB-6020T(180)

SHL TASK 0002

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GLOSSARY

Acronyms

EPA - Environmental Protection Agency.

 LCS - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LCSD - Laboratory Control Sample Duplicate: Refer to LCS.

MDL - Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

MS - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.

MSD Matrix Spike Sample Duplicate: Refer to MS.

NA Not Applicable.

NC Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.

NI Not Ignitable.

Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration.
 The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

RPD - Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Data Qualifiers

- A Spectra identified as "Aldol Condensation Product"
- The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than five times (5x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank.
- Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- The RPD between the results for the two columns exceeds the method-specified criteria: however, the lower value has been reported due to obvious interference.
- P The RPD between the results for the two columns exceeds the method-specified criteria.
- The quality control sample exceeds the associated acceptance criteria. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R Analytical results are from sample re-analysis.

Report Format: DU Report with "J" Qualifiers



 Project Name:
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Data Qualifiers

RE - Analytical results are from sample re-extraction.

Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method
Detection Limit (MDL). This represents an estimated concentration for Tentatively Identified Compounds (TICs).

ND - Not detected at the method detection limit (MDL) for the sample.

Report Format: DU Report with "J" Qualifiers

SHL TASK 0002

Project Number: AC001

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REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IIIA, 1997.

- 30 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WPCF. 18th Edition. 1992.
- 44 Methods for the Determination of Inorganic Substances in Environmental Samples, EPA/600/R-93/100, August 1993.

The analyses performed on the sample(s) within this report are in accordance with the minimum established guidelines set forth in the Department of Defense Quality Systems Manual, Version 4.1, issued April 22, 2009

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Certificate/Approval Program Summary

Last revised July 19, 2010 - Westboro Facility

The following list includes only those analytes/methods for which certification/approval is currently held. For a complete listing of analytes for the referenced methods, please contact your Alpha Customer Service Representative.

Connecticut Department of Public Health Certificate/Lab ID: PH-0574. NELAP Accredited Solid Waste/Soil.

Drinking Water (Inorganic Parameters: Color, pH, Turbidity, Conductivity, Alkalinity, Chloride, Free Residual Chlorine, Fluoride, Calcium Hardness, Sulfate, Nitrate, Nitrite, Aluminum, Antimony, Arsenic, Barium, Beryllium, Cadmium, Calcium, Chromium, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Vanadium, Zinc, Total Dissolved Solids, Total Organic Carbon, Total Cyanide, Perchlorate, Organic Parameters: Volatile Organics 524.2, Total Trihalomethanes 524.2, 1,2-Dibromo-3-chloropropane (DBCP), Ethylene Dibromide (EDB), 1,4-Dioxane (Mod 8270). Microbiology Parameters: Total Coliform-MF mEndo (SM9222B), Total Coliform – Colilert (SM9223 P/A), E. Coli. – Colilert (SM9223 P/A), HPC – Pour Plate (SM9215B), Fecal Coliform – MF m-FC (SM9222D))

Wastewater/Non-Potable Water (Inorganic Parameters: Color, pH, Conductivity, Acidity, Alkalinity, Chloride, Total Residual Chlorine, Fluoride, Total Hardness, Silica, Sulfate, Sulfide, Ammonia, Kjeldahl Nitrogen, Nitrate, Nitrite, O-Phosphate, Total Phosphorus, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Strontium, Thallium, Tin, Titanium, Vanadium, Zinc, Total Residue (Solids), Total Dissolved Solids, Total Suspended Solids (non-filterable), BOD, CBOD, COD, TOC, Total Cyanide, Phenolics, Foaming Agents (MBAS), Bromide, Oil and Grease, Organic Parameters: PCBs, Organochlorine Pesticides, Technical Chlordane, Toxaphene, 2,4-D, 2,4,5-T, 2,4,5-TP(Silvex), Acid Extractables (Phenols), Benzidines, Phthalate Esters, Nitrosamines, Nitroaromatics & Isophorone, Polynuclear Aromatic Hydrocarbons, Haloethers, Chlorinated Hydrocarbons, Volatile Organics, TPH (HEM/SGT), Extractable Petroleum Hydrocarbons (ETPH), MA-EPH, MA-VPH, Microbiology Parameters: Total Coliform – MF m-FC (SM9222B), Total Coliform – MTF (SM9221B), HPC – Pour Plate (SM9215B), Fecal Coliform – MF m-FC (SM9222D), Fecal Coliform – A-1 Broth (SM9221E).)

Solid Waste/Soil (Inorganic Parameters: pH, Sulfide, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Tin, Vanadium, Zinc, Total Cyanide, Ignitability, Phenolics, Corrosivity, TCLP Leach (1311), SPLP Leach (1312 metals only), Reactivity. Organic Parameters: PCBs, PCBs in Oil, Organochlorine Pesticides, Technical Chlordane, Toxaphene, Extractable Petroleum Hydrocarbons (ETPH), MA-EPH, MA-VPH, Dicamba, 2,4-D, 2,4,5-T, 2,4,5-TP(Silvex), Volatile Organics, Acid Extractables (Phenols), 3.3'-Dichlorobenzidine, Phthalates, Nitrosamines, Nitroaromatics & Cyclic Ketones, PAHs, Haloethers, Chlorinated Hydrocarbons.)

Maine Department of Human Services Certificate/Lab ID: 2009024.

Drinking Water (Inorganic Parameters: SM9215B, 9222D, 9223B, EPA 180.1, 300.0, 353.2, SM2130B, 2320B, 4500Cl-D, 4500CN-C, 4500CN-E, 4500F-C, 4500H+B, 4500NO3-F, EPA 200.7, EPA 200.8, 245.1, EPA 300.0. Organic Parameters: 504.1, 524.2.)

Wastewater/Non-Potable Water (Inorganic Parameters: EPA 120.1, 1664A, 350.1, 351.1, 353.2, 410.4, 420.1, Lachat 10-107-06-1-B, SM2320B, 2340B, 2510B, 2540C, 2540D, 426C, 4500Cl-D, 4500Cl-E, 4500CN-C, 4500CN-E, 4500F-B, 4500F-C, 4500NH3-B, 4500NH3-B, 4500NH3-H, 4500NO3-F, 4500P-B.5, 4500P-E, 5210B, 5220D, 5310C, EPA 200.7, 200.8, 245.1. Organic Parameters: 608, 624, ME DRO, ME GRO, MA EPH, MA VPH.)

Solid Waste/Soil (Organic Parameters: ME DRO, ME GRO, MA EPH, MA VPH.)

Massachusetts Department of Environmental Protection Certificate/Lab ID: M-MA086.

Drinking Water

Inorganic Parameters: (EPA 200.8 for: Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Ni, Se, Tl)

(EPA 200.7 for: Ba,Be,Ca,Cd,Cr,Cu,Na,Ni) 245.1, (300.0 for: Nitrate-N, Fluoride, Sulfate)

353.2 for: Nitrate-N, Nitrite-N; SM4500NO3-F, 4500F-C, 4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, 2320B, SM2540C, SM4500H-B.

Organic Parameters: (EPA 524.2 for: Trihalomethanes, Volatile Organics)

(504.1 for: 1,2-Dibromoethane, 1,2-Dibromo-3-Chloropropane), 314.0, 332.

Microbiology Parameters: SM9215B; ENZ. SUB. SM9223; MF-SM9222D

Non-Potable Water

Inorganic Parameters:, (EPA 200.8 for: Al,Sb,As,Be,Cd,Cr,Cu,Pb,Mn,Ni,Se,Ag,Tl,Zn)

(EPA 200.7 for: Al,Sb,As,Be,Cd,Cr,Co,Cu,Fe,Pb,Mn,Mo,Ni,Se,Ag,Sr,Ti,Tl, V,Zn,Ca,Mg,Na,K)

245.1, SM4500H,B, EPA 120.1, SM2510B, 2540C, 2540B, 2340B, 2320B, 4500CL-E, 4500F-BC, 426C, SM4500NH3-BH, (EPA 350.1 for: Ammonia-N), LACHAT 10-107-06-1-B for Ammonia-N, SM4500NO3-F, 353.2 for Nitrate-N,

SM4500NH3-B,C-Titr, SM4500NH3-BC-NES, EPA 351.1, SM4500P-E, 4500P-B,E, 5220D, EPA 410.4, SM 5210B,

5310C, 4500CL-D, EPA 1664, SM14 510AC, EPA 420, SM4500-CN-CE, SM2540D.

Organic Parameters: (EPA 624 for Volatile Halocarbons, Volatile Aromatics)

(608 for: Chlordane, Aldrin, Dieldrin, DDD, DDE, DDT, Heptachlor, Heptachlor Epoxide, PCBs-Water), EPA 625 for SVOC Acid Extractables and SVOC Base/Neutral Extractables, 600/4-81-045-PCB-Oil

New Hampshire Department of Environmental Services Certificate/Lab ID: 200307. NELAP Accredited.

Drinking Water (Inorganic Parameters: SM6215B, 9222B, 9223B Colilert, EPA 200.7, 200.8, 245.2, 120.1, 300.0, 314.0, SM4500CN-E, 4500H+B, 4500NO3-F, 2320B, 2510B, 2540C, 4500F-C, 5310C, 2120B, EPA 331.0. Organic

Parameters: 504.1, 524.2, SM6251B.)

Non-Potable Water (Inorganic Parameters: SM9222D, 9221B, 9222B, 9221E-EC, EPA 200.7, 200.8, 245.1, 245.2, SW-846 6010B, 6020, 7196A, 7470A, SM3500-CR-D, EPA 120.1, 300.0, 350.1, 351.1, 353.2, 420.1, 1664A, SW-846 9010, 9030, 9040B, SM426C, SM2310B, 2540B, 2540D, 4500H+B, 4500NH3-H, 4500NH3-E, 4500NO2-B, 4500P-E, 4500-S2-D, 5210B, 2320B, 2540C, 4500F-C, 5310C, 5540C, LACHAT 10-117-07-1-B, LACHAT 10-107-06-1-B, LACHAT 10-107-04-1-J, LACHAT 10-117-07-1-A, SM4500CL-E, LACHAT 10-204-00-1-A, LACHAT 10-107-06-2-D. Organic Parameters: SW-846 3005A, 3015A, 3510C, 5030B, 8021B, 8260B, 8270C, 8330, EPA 624, 625, 608, SW-846 8082, 8081A.)

Solid & Chemical Materials (Inorganic Parameters: SW-846 6010B, 7196A, 7471A, 7.3.3.2, 7.3.4.2, 1010, 1030, 9010, 9012A, 9014, 9030B, 9040, 9045C, 9050C, 1311, 3005A, 3050B, 3051A. Organic Parameters: SW-846 3540C, 3545, 3580A, 5030B, 5035, 8021B, 8260B, 8270C, 8330, 8151A, 8082, 8081A.)

New Jersey Department of Environmental Protection Certificate/Lab ID: MA935. NELAP Accredited.

Drinking Water (Inorganic Parameters: SM9222B, 9221E, 9223B, 9215B, 4500NO3-F, 4500F-C, EPA 300.0, 200.7, 2540C, 2320B, 314.0, SM2120B, 2510B, 5310C, SM4500H-B, EPA 200.8, 245.2. Organic Parameters: 504.1,

SM6251B, 524.2.)

Non-Potable Water (Inorganic Parameters: SM5210B, EPA 410.4, SM5220D, 4500Cl-D, EPA 300.0, SM2120B, SM4500F-BC, EPA 200.7, 351.1, LACHAT 10-107-06-2-D, EPA 353.2, SM4500NO3-F, 4500NO2-B, EPA 1664A, SM5310B, C or D, 4500-PE, EPA 420.1, SM4500P-B5+E, 2540B, 2540C, 2540D, EPA 120.1, SM2510B, SM15 426C, SM9221CE, 9222D, 9221B, 9222B, 9215B, 2310B, 2320B, 4500NH3-H, 4500-S D, EPA 350.1, SM5210B, SW-846 3015, 6020, 7470A, 5540C, 4500H-B, EPA 200.8, SM3500Cr-D, EPA 245.1, 245.2, SW-846 9040B, 3005A, EPA 6010B, 7196A, SW-846 9010B, 9030B. Organic Parameters: SW-846 8260B, 8270C, 3510C, EPA 608, 624, 625, SW-846 5030B, 8021B, 8081A, 8082, 8151A, 8330, NJ OQA-QAM-025 Rev.7.)

Solid & Chemical Materials (Inorganic Parameters: SW-846 9040B, 3005A, 6010B, 7196A, 5030B, 9010B, 9030B, 1030, 1311, 3050B, 3051, 7471A, 9014, 9012A, 9045C, 9050A, 9065. Organic Parameters: SW-846 8021B, 8081A, 8082, 8151A, 8330, 8260B, 8270C, 1311, 1312, 3540C, 3545, 3550B, 3580A, 5035L, 5035H, NJ OQA-QAM-025 Rev. 7.)

New York Department of Health Certificate/Lab ID: 11148. NELAP Accredited.

Drinking Water (Inorganic Parameters: SM9223B, 9222B, 9215B, EPA 200.8, 200.7, 245.2, SM5310C, EPA 314.0, 332.0, SM2320B, EPA 300.0, SM2120B, 4500CN-E, 4500F-C, 4500H-B, 4500NO3-F, 2540C, EPA 120.1, SM 2510B.

Organic Parameters: EPA 524.2, 504.1.)

Non-Potable Water (Inorganic Parameters: SM9221E, 9222D, 9221B, 9222B, 9215B, 5210B, EPA 410.4, SM5220D, 2310B-4a, 2320B, EPA 200.7, 300.0, LACHAT 10-117-07-1A or B, SM4500CI-E, 4500F-C, SM15 426C, EPA 350.1, LACHAT 10-107-06-1-B, SM4500NH3-H, EPA 351.1, LACHAT 10-107-06-2, EPA 353.2, LACHAT 10-107-041-C, SM4500-NO3-F, 4500-NO2-B, 4500P-E, 2540C, 2540B, 2540D, EPA 200.8, EPA 6010B, 6020, EPA 7196A, S\M3500Cr-D, EPA 245.1, 245.2, 7470A, SM2120B, SM4500-CN-E LACHAT 10-204-00-1-A, EPA 9040B, SM4500-HB, EPA 1664A, SM5310C, EPA 420.1, SM14 510C, EPA 120.1, SM2510B, SM4500S-D, SM5540C, EPA 3005A, 3015. Organic Parameters: EPA 624, 8260B, 8270C, 625, 608, 8081A, 8151A, 8330, 8082, EPA 3510C, 5030B, 9010B, 9030B.)

Solid & Hazardous Waste (Inorganic Parameters: 1010, 1030, SW-846 Ch 7 Sec 7.3, EPA 6010B, 7196A, 7471A, 9012A, 9014, 9040B, 9045C, 9065, 9050, EPA 1311, 1312, 3005A, 3050B, 9010B, 9030B. Organic Parameters: EPA 8260B, 8270C, 8081A, 8151A, 8330, 8082, 3540C, 3545, 3546, 3580, 5030B, 5035.)

North Carolina Department of the Environment and Natural Resources Certificate/Lab ID: 666. Organic Parameters: MA-EPH, MA-VPH.

Pennsylvania Department of Environmental Protection <u>Certificate/Lab ID</u>: 68-03671. *NELAP Accredited*. *Non-Potable Water* (<u>Organic Parameters</u>: EPA 3510C, 5030B, 625, 624. 608, 8081A, 8082, 8151A, 8260B, 8270C, 8330)

Solid & Hazardous Waste (Inorganic Parameters: EPA 1010, 1030, 1311, 3050B, 3051, 6010B, EPA 7.3.3.2, EPA 7.3.4.2, 7196A, 7471A, 9010B, 9012A, 9014, 9040B, 9045C, 9050, 9065. Organic Parameters: 3540C, 3545, 3580A, 5035, 8021B, 8081A, 8082, 8151A, 8260B, 8270C, 8330)

Rhode Island Department of Health Certificate/Lab ID: LAO00065. NELAP Accredited via NY-DOH.

Refer to MA-DEP Certificate for Potable and Non-Potable Water.

Refer to NY-DOH Certificate for Potable and Non-Potable Water.

Texas Commisson on Environmental Quality Certificate/Lab ID: T104704476-09-1. *NELAP Accredited. Non-Potable Water* (Inorganic Parameters: EPA 120.1, 1664, 200.7, 200.8, 245.1, 245.2, 300.0, 350.1, 351.1, 353.2, 376.2, 410.4, 420.1, 6010, 6020, 7196, 7470, 9040, SM 2120B, 2310B, 2320B, 2510B, 2540B, 2540C, 2540D, 426C, 4500CL-E, 4500CN-E, 4500F-C, 4500H+B, 4500NH3-H, 4500NO2B, 4500P-E, 4500 S2⁻D, 510C, 5210B, 5220D, 5310C, 5540C. Organic Parameters: EPA 608, 624, 625, 8081, 8082, 8151, 8260, 8270, 8330.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 1311, 1312, 9012, 9014, 9040, 9045, 9050, 9065.)

Department of Defense Certificate/Lab ID: L2217.

Drinking Water (Inorganic Parameters: SM 4500H-B. Organic Parameters: EPA 524.2, 504.1.)

Non-Potable Water (Inorganic Parameters: EPA 200.7, 200.8, 6010B, 6020, 245.1, 245.2, 7470A, 9040B, 300.0, 9251, 9038, 350.1, 353.2, 351.1, 120.1, 9050A, 410.4, 9060, 1664, 420.1, LACHAT 10-107-06-1-B, SM 4500CN-E, 4500H-B, 4500CL-E, 4500F-BC, 4500SO4-E, 426C, 4500NH3-B, 4500NH3-H, 4500NO3-F, 4500NO2-B, 4500Norg-C, 4500PE, 2510B, 5540C, 5220D, 5310C, 2540B, 2540C, 2540D, 510C, 4500S2-AD, 3005A, 3015, 9010B, 9030B. Organic Parameters: EPA 8260B, 8270C, 8330, 625, 8082, 8151A, 8081A, 3510C, 5030B, MassDEP EPH, MassDEP VPH.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 200.7, 6010B, 7471A, 9040B, 9045C, 9065, 420.1, 9012A, 6860, 1311, 1312, 3050B, 9030B, 3051, 9010B, 3540C, SM 510ABC, 4500CN-CE, 2540G, SW-846 7.3, Organic Parameters: EPA 8260B, 8270C, 8330, 8082, 8081A, 8151A, 3545, 3546, 3580, 5035, MassDEP EPH, MassDEP VPH.)

Analytes Not Accredited by NELAP

Certification is not available by NELAP for the following analytes: **EPA 8260B:** Freon-113, 1,2,4,5-Tetramethylbenzene, 4-Ethyltoluene. **EPA 8330A:** PETN, Picric Acid, Nitroglycerine, 2,6-DANT, 2,4-DANT. **EPA 8270C:** Methyl naphthalene, Dimethyl naphthalene, Total Methylnaphthalenes, Total Dimethylnaphthalenes, 1,4-Diphenylhydrazine (Azobenzene). **EPA 625:** 4-Chloroaniline. **EPA 350.1** for Ammonia in a Soil matrix.

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WESTBORO, MA	MANSFIELD, MA TEL: 508-822-9300		ct Informa					rt Infor						ng Information	
FAX: 506-898-9193	FAX: 508-822-3288		t Name: SA	-		,	□ FA				- Ek	and the second	U Sar	me as Client info PO#:	_
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ALPHA Lab ID (Lab Use Only)	Sample ID		Col Date	ection Time	Sample Matrix	Sampler's	1	A 10	The contract of	3/2	500	Tet /	2//	(Please specify below) Sample Specific Comments	
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3	SHM-10-16-090210.	F	9/2/10	1445	GW	PJV	-			Î		1 1			1
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ANALYTICAL REPORT

Lab Number:

L1013630

Client:

Sovereign Consulting

905B South Main Street

Mansfield, MA 02048

ATTN:

Phil McBain

Phone:

(508) 339-3200

Project Name:

SHL TASK 002

Project Number:

AC001

Report Date:

09/10/10

Certifications & Approvals: MA (M-MA086), NY NELAC (11148), CT (PH-0574), NH (2003), NJ (MA935), RI (LAO00065), ME (MA0086), PA (Registration #68-03671), USDA (Permit #S-72578), US Army Corps of Engineers, Naval FESC.

Eight Walkup Drive, Westborough, MA 01581-1019 508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com

Project Name:

SHL TASK 002

Project Number:

AC001

Lab Number:

L1013630

Report Date:

09/10/10

Alpha Sample ID

Client ID

Sample Location Collection Date/Time

L1013630-01

SHM-10-14-090210-U

DEVENS, MA

09/02/10 11:47

L1013630-02

SHM-10-16-090210-U

DEVENS, MA

09/02/10 14:45

Project Name:

SHL TASK 002

Project Number: AC001

Lab Number:

L1013630

Report Date:

09/10/10

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet all of the requirements of NELAC, for all NELAC accredited parameters. The data presented in this report is organized by parameter (i.e., VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

For additional information, please contact Client Services at 800-624-9220.

Report Submission

This report contains the results for the Dissolved Inorganic Carbon analysis. The results for all other analyses have been issued under separate cover.

Dissolved Inorganic Carbon

L1013630-01 and -02 have elevated detection limits due to the dilutions required by the elevated concentrations present in the samples.

A matrix spike could not be performed due to insufficient sample volume available for analysis.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:

Michelle UK. Many Michelle M. Morris

Title: Technical Director/Representative

Date: 09/10/10

INORGANICS & MISCELLANEOUS

Project Name:

SHL TASK 002

Lab Number:

L1013630

Project Number: AC001

Report Date:

09/10/10

SAMPLE RESULTS

Lab ID:

L1013630-01

Client ID:

SHM-10-14-090210-U

Sample Location:

DEVENS, MA

Matrix:

Water

Date Collected:

09/02/10 11:47

Date Received:

09/02/10

Field Prep:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry										
Dissolved Inorganic Carbon	120		mg/l	20	-	20	09/02/10 21:30	09/08/10 09:51	30,5310C(M)	DW

Project Name: SHL TASK 002

Lab Number:

L1013630

Project Number: AC001

Report Date:

09/10/10

SAMPLE RESULTS

Lab ID:

L1013630-02

Client ID:

SHM-10-16-090210-U

Sample Location:

DEVENS, MA

Matrix:

Water

Date Collected:

09/02/10 14:45

Date Received:

09/02/10

Field Prep:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry										
Dissolved Inorganic Carbon	91		mg/l	20	**	20	09/02/10 21:30	09/08/10 09:51	30,5310C(M)	DW

Project Name:

SHL TASK 002

Lab Number:

L1013630

09/10/10

Project Number: AC001

Report Date:

Method Blank Analysis Batch Quality Control

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry for sa	mple(s): 01-02 Batc	h: WG43	1467-1						
Dissolved Inorganic Carbon	ND	mg/l	1.0	**	1	09/02/10 21:30	09/08/10 09:51	30,5310C(M)	DW

Lab Control Sample Analysis Batch Quality Control

Lab Number:

L1013630

Report Date:

09/10/10

	LCS		LCSD		%Recovery			
Parameter	%Recovery	Qual	%Recovery	Qual	Limits	RPD	Qual	RPD Limits

Associated sample(s): 01-02 Batch: WG431467-2

SHL TASK 002

AC001

Dissolved Inorganic Carbon

Project Name:

Project Number:

110

Lab Duplicate Analysis
Batch Quality Control

Lab Number:

L1013630

Report Date:

09/10/10

Parameter	Nat	ive Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Associated sample(s): 01-02	QC Batch ID: WG431467-3	QC Sample: L1	013630-01 Client ID: 5	SHM-10-14-090	210-U		
Dissolved Inorganic Carbon	2	120	130	mg/l	8		

Project Name:

Project Number: AC001

SHL TASK 002

Project Name: SHL TASK 002

Lab Number: L1013630 Project Number: AC001 Report Date: 09/10/10

Sample Receipt and Container Information

Were project specific reporting limits specified?

YES

Reagent H2O Preserved Vials Frozen on: NA

Cooler Information Custody Seal

Cooler

A

Present/Intact

Container Info	ormation			Temp			
Container ID	Container Type	Cooler	рН	deg C	Pres	Seal	Analysis(*)
L1013630-01A	Vial H2SO4 preserved split	Α	N/A	3	Y	Present/Intact	SPECWC()
L1013630-01B	Vial H2SO4 preserved split	Α	N/A	3	Y	Present/Intact	SPECWC()
L1013630-01X	Amber 250ml unpreserved	Α	6	3	Y	Present/Intact	SPECWC()
L1013630-02A	Vial H2SO4 preserved split	Α	N/A	3	Y	Present/Intact	SPECWC()
L1013630-02B	Vial H2SO4 preserved split	Α	N/A	3	Y	Present/Intact	SPECWC()
L1013630-02X	Amber 250ml unpreserved	Α	6	3	Y	Present/Intact	SPECWC()

Project Name: SHL TASK 002 Lab Number: L1013630

Project Number: AC001 Report Date: 09/10/10

GLOSSARY

Acronyms

EPA Environmental Protection Agency.

 Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LCSD Laboratory Control Sample Duplicate: Refer to LCS.

MDL Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

MS Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.

MSD Matrix Spike Sample Duplicate: Refer to MS.

NA Not Applicable.

NC =Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.

NI Not Ignitable.

RL. Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to
assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD).
 Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the
absolute difference between the values; although the RPD value will be provided in the report.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method, (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Data Qualifiers

- A Spectra identified as "Aldol Condensation Product".
- -The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than five times (5x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank.
- Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- The RPD between the results for the two columns exceeds the method-specified criteria; however, the lower value has been reported due to obvious interference.
- P The RPD between the results for the two columns exceeds the method-specified criteria.
- The quality control sample exceeds the associated acceptance criteria. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R Analytical results are from sample re-analysis.

Report Format: Data Usability Report

ALPHA

Project Name:

SHL TASK 002

Lab Number:

L1013630

Project Number:

AC001

Report Date:

09/10/10

Data Qualifiers

RE -Analytical results are from sample re-extraction.

J Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

ND Not detected at the reporting limit (RL) for the sample.

Report Format: Data Usability Report

 Δ LPHA

Project Name: SHL TASK 002 Lab Number: L1013630

Project Number: AC001 Report Date: 09/10/10

REFERENCES

30 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WPCF. 18th Edition. 1992.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

DLPHA

Certificate/Approval Program Summary

Last revised July 19, 2010 - Westboro Facility

The following list includes only those analytes/methods for which certification/approval is currently held. For a complete listing of analytes for the referenced methods, please contact your Alpha Customer Service Representative.

Connecticut Department of Public Health Certificate/Lab ID: PH-0574. NELAP Accredited Solid Waste/Soil.

Drinking Water (Inorganic Parameters: Color, pH, Turbidity, Conductivity, Alkalinity, Chloride, Free Residual Chlorine, Fluoride, Calcium Hardness, Sulfate, Nitrate, Nitrite, Aluminum, Antimony, Arsenic, Barium, Beryllium, Cadmium, Calcium, Chromium, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Vanadium, Zinc, Total Dissolved Solids, Total Organic Carbon, Total Cyanide, Perchlorate. Organic Parameters: Volatile Organics 524.2, Total Trihalomethanes 524.2, 1,2-Dibromo-3-chloropropane (DBCP), Ethylene Dibromide (EDB), 1,4-Dioxane (Mod 8270). Microbiology Parameters: Total Coliform-MF mEndo (SM9222B), Total Coliform – Colilert (SM9223 P/A), E. Coli. – Colilert (SM9223 P/A), HPC – Pour Plate (SM9215B), Fecal Coliform – MF m-FC (SM9222D))

Wastewater/Non-Potable Water (Inorganic Parameters: Color, pH, Conductivity, Acidity, Alkalinity, Chloride, Total Residual Chlorine, Fluoride, Total Hardness, Silica, Sulfate, Sulfate, Ammonia, Kjeldahl Nitrogen, Nitrate, Nitrite, O-Phosphate, Total Phosphorus, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Strontium, Thallium, Tin, Titanium, Vanadium, Zinc, Total Residue (Solids), Total Dissolved Solids, Total Suspended Solids (non-filterable), BOD, CBOD, COD, TOC, Total Cyanide, Phenolics, Foaming Agents (MBAS), Bromide, Oil and Grease. Organic Parameters: PCBs, Organochlorine Pesticides, Technical Chlordane, Toxaphene, 2,4-D, 2,4,5-TP(Silvex), Acid Extractables (Phenols), Benzidines, Phthalate Esters, Nitrosamines, Nitroaromatics & Isophorone, Polynuclear Aromatic Hydrocarbons, Haloethers, Chlorinated Hydrocarbons, Volatile Organics, TPH (HEM/SGT), Extractable Petroleum Hydrocarbons (ETPH), MA-EPH, MA-VPH, Microbiology Parameters: Total Coliform – MF mEndo (SM9222B), Total Coliform – MTF (SM9221B), HPC – Pour Plate (SM9215B), Fecal Coliform – MF m-FC (SM9222D), Fecal Coliform – A-1 Broth (SM9221E).)

Solid Waste/Soil (Inorganic Parameters: pH, Sulfide, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Tin, Vanadium, Zinc, Total Cyanide, Ignitability, Phenolics, Corrosivity, TCLP Leach (1311), SPLP Leach (1312 metals only), Reactivity, Organic Parameters: PCBs, PCBs in Oil, Organochlorine Pesticides, Technical Chlordane, Toxaphene, Extractable Petroleum Hydrocarbons (ETPH), MA-EPH, MA-VPH, Dicamba, 2,4-D, 2,4,5-T, 2,4,5-TP(Silvex), Volatile Organics, Acid Extractables (Phenols), 3.3'-Dichlorobenzidine, Phthalates, Nitrosamines, Nitroaromatics & Cyclic Ketones, PAHs, Haloethers, Chlorinated Hydrocarbons,)

Maine Department of Human Services Certificate/Lab ID: 2009024.

Drinking Water (Inorganic Parameters: SM9215B, 9222D, 9223B, EPA 180.1, 300.0, 353.2, SM2130B, 2320B, 4500Cl-D, 4500CN-C, 4500CN-E, 4500F-C, 4500H+B, 4500NO3-F, EPA 200.7, EPA 200.8, 245.1, EPA 300.0. Organic Parameters: 504.1, 524.2.)

Wastewater/Non-Potable Water (Inorganic Parameters: EPA 120.1, 1664A, 350.1, 351.1, 353.2, 410.4, 420.1, Lachat 10-107-06-1-B, SM2320B, 2340B, 2510B, 2540C, 2540D, 426C, 4500Cl-D, 4500Cl-E, 4500CN-C, 4500CN-E, 4500F-B, 4500F-C, 4500H+B, 4500Norg-B, 4500Norg-C, 4500NH3-B, 4500NH3-G, 4500NH3-H, 4500NO3-F, 4500P-B-5, 4500P-E, 5210B, 5220D, 5310C, EPA 200.7, 200.8, 245.1. Organic Parameters: 608, 624, ME DRO, ME GRO, MA EPH, MA VPH.)

Solid Waste/Soil (Organic Parameters: ME DRO, ME GRO, MA EPH, MA VPH.)

Massachusetts Department of Environmental Protection Certificate/Lab ID: M-MA086.

Drinking Water

Inorganic Parameters: (EPA 200.8 for: Sb,As,Ba,Be,Cd,Cr,Cu,Pb,Ni,Se,TI)

(EPA 200.7 for: Ba,Be,Ca,Cd,Cr,Cu,Na,Ni) 245.1, (300.0 for: Nitrate-N, Fluoride, Sulfate)

353.2 for: Nitrate-N, Nitrite-N; SM4500NO3-F, 4500F-C, 4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, 2320B, SM2540C, SM4500H-B.

Organic Parameters: (EPA 524.2 for: Trihalomethanes, Volatile Organics)

(504.1 for: 1,2-Dibromoethane, 1,2-Dibromo-3-Chloropropane), 314.0, 332.

Microbiology Parameters: SM9215B; ENZ. SUB. SM9223; MF-SM9222D

Non-Potable Water

Inorganic Parameters:, (EPA 200.8 for: Al,Sb,As,Be,Cd,Cr,Cu,Pb,Mn,Ni,Se,Ag,Tl,Zn)

(EPA 200.7 for: Al,Sb,As,Be,Cd,Cr,Co,Cu,Fe,Pb,Mn,Mo,Ni,Se,Ag,Sr,Ti,Tl, V,Zn,Ca,Mg,Na,K)

245.1, SM4500H,B, EPA 120.1, SM2510B, 2540C, 2540B, 2340B, 2320B, 4500CL-E, 4500F-BC, 426C, SM4500NH3-BH, (EPA 350.1 for: Ammonia-N), LACHAT 10-107-06-1-B for Ammonia-N, SM4500NO3-F, 353.2 for Nitrate-N, SM4500NH3-B,C-Titr, SM4500NH3-BC-NES, EPA 351.1, SM4500P-E, 4500P-B,E, 5220D, EPA 410.4, SM 5210B,

5310C, 4500CL-D, EPA 1664, SM14 510AC, EPA 420, SM4500-CN-CE, SM2540D.

Organic Parameters: (EPA 624 for Volatile Halocarbons, Volatile Aromatics)

(608 for: Chlordane, Aldrin, Dieldrin, DDD, DDE, DDT, Heptachlor, Heptachlor Epoxide, PCBs-Water), EPA 625 for SVOC Acid Extractables and SVOC Base/Neutral Extractables, 600/4-81-045-PCB-Oil

New Hampshire Department of Environmental Services Certificate/Lab ID: 200307, NELAP Accredited.

Drinking Water (Inorganic Parameters: SM6215B, 9222B, 9223B Colilert, EPA 200.7, 200.8, 245.2, 120.1, 300.0, 314.0, SM4500CN-E, 4500H+B, 4500NO3-F, 2320B, 2510B, 2540C, 4500F-C, 5310C, 2120B, EPA 331.0. Organic Parameters: 504.1, 524.2, SM6251B.)

Non-Potable Water (Inorganic Parameters: SM9222D, 9221B, 9222B, 9221E-EC, EPA 200.7, 200.8, 245.1, 245.2, SW-846 6010B, 6020, 7196A, 7470A, SM3500-CR-D, EPA 120.1, 300.0, 350.1, 351.1, 353.2, 420.1, 1664A, SW-846 9010, 9030, 9040B, SM426C, SM2310B, 2540B, 2540D, 4500H+B, 4500NH3-H, 4500NH3-E, 4500NO2-B, 4500P-E, 4500-S2-D, 5210B, 2320B, 2540C, 4500F-C, 5310C, 5540C, LACHAT 10-117-07-1-B, LACHAT 10-107-06-1-B, LACHAT 10-107-04-1-J, LACHAT 10-117-07-1-A, SM4500CL-E, LACHAT 10-204-00-1-A, LACHAT 10-107-06-2-D. Organic Parameters: SW-846 3005A, 3015A, 3510C, 5030B, 8021B, 8260B, 8270C, 8330, EPA 624, 625, 608, SW-846 8082, 8081A.)

Solid & Chemical Materials (Inorganic Parameters: SW-846 6010B, 7196A, 7471A, 7.3.3.2, 7.3.4.2, 1010, 1030, 9010, 9012A, 9014, 9030B, 9040, 9045C, 9050C, 1311, 3005A, 3050B, 3051A. Organic Parameters: SW-846 3540C, 3545, 3580A, 5030B, 5035, 8021B, 8260B, 8270C, 8330, 8151A, 8082, 8081A.)

New Jersey Department of Environmental Protection Certificate/Lab ID: MA935. NELAP Accredited.

Drinking Water (Inorganic Parameters: SM9222B, 9221E, 9223B, 9215B, 4500NO3-F, 4500F-C, EPA 300.0, 200.7, 2540C, 2320B, 314.0, SM2120B, 2510B, 5310C, SM4500H-B, EPA 200.8, 245.2. Organic Parameters: 504.1, SM6251B, 524.2.)

Non-Potable Water (Inorganic Parameters: SM5210B, EPA 410.4, SM5220D, 4500Cl-D, EPA 300.0, SM2120B, SM4500F-BC, EPA 200.7, 351.1, LACHAT 10-107-06-2-D, EPA 353.2, SM4500NO3-F, 4500NO2-B, EPA 1664A, SM5310B, C or D, 4500-PE, EPA 420.1, SM4500P-B5+E, 2540B, 2540C, 2540D, EPA 120.1, SM2510B, SM15 426C, SM9221CE, 9222D, 9221B, 9222B, 9215B, 2310B, 2320B, 4500NH3-H, 4500-S D, EPA 350.1, SM5210B, SW-846 3015, 6020, 7470A, 5540C, 4500H-B, EPA 200.8, SM3500Cr-D, EPA 245.1, 245.2, SW-846 9040B, 3005A, EPA 6010B, 7196A, SW-846 9010B, 9030B, Organic Parameters: SW-846 8260B, 8270C, 3510C, EPA 608, 624, 625, SW-846 5030B, 8021B, 8081A, 8082, 8151A, 8330, NJ OQA-QAM-025 Rev.7.)

Solid & Chemical Materials (Inorganic Parameters: SW-846 9040B, 3005A, 6010B, 7196A, 5030B, 9010B, 9030B, 1030, 1311, 3050B, 3051, 7471A, 9014, 9012A, 9045C, 9050A, 9065. Organic Parameters: SW-846 8021B, 8081A, 8082, 8151A, 8330, 8260B, 8270C, 1311, 1312, 3540C, 3545, 3550B, 3580A, 5035L, 5035H, NJ QQA-QAM-025 Rev. 7.)

New York Department of Health Certificate/Lab ID: 11148, NELAP Accredited.

Drinking Water (Inorganic Parameters: SM9223B, 9222B, 9215B, EPA 200.8, 200.7, 245.2, SM5310C, EPA 314.0, 332.0, SM2320B, EPA 300.0, SM2120B, 4500CN-E, 4500F-C, 4500H-B, 4500NO3-F, 2540C, EPA 120.1, SM 2510B, Organic Parameters: EPA 524.2, 504.1.)

Non-Potable Water (Inorganic Parameters: SM9221E, 9222D, 9221B, 9222B, 9215B, 5210B, EPA 410.4, SM5220D, 2310B-4a, 2320B, EPA 200.7, 300.0, LACHAT 10-117-07-1A or B, SM4500CI-E, 4500F-C, SM15 426C, EPA 350.1, LACHAT 10-107-06-1-B, SM4500NH3-H, EPA 351.1, LACHAT 10-107-06-2, EPA 353.2, LACHAT 10-107-041-C, SM4500-NO3-F, 4500-NO2-B, 4500P-E, 2540C, 2540B, 2540D, EPA 200.8, EPA 6010B, 6020, EPA 7196A, SM3500Cr-D, EPA 245.1, 245.2, 7470A, SM2120B, SM4500-CN-E LACHAT 10-204-00-1-A, EPA 9040B, SM4500-HB, EPA 1664A, SM5310C, EPA 420.1, SM14 510C, EPA 120.1, SM2510B, SM4500S-D, SM5540C, EPA 3005A, 3015. Organic Parameters: EPA 624, 8260B, 8270C, 625, 608, 8081A, 8151A, 8330, 8082, EPA 3510C, 5030B, 9010B, 9030B.)

Solid & Hazardous Waste (Inorganic Parameters: 1010, 1030, SW-846 Ch 7 Sec 7.3, EPA 6010B, 7196A, 7471A, 9012A, 9014, 9040B, 9045C, 9065, 9050, EPA 1311, 1312, 3005A, 3050B, 9010B, 9030B. Organic Parameters: EPA 8260B, 8270C, 8081A, 8151A, 8330, 8082, 3540C, 3545, 3546, 3580, 5030B, 5035.)

North Carolina Department of the Environment and Natural Resources <u>Certificate/Lab ID</u>: 666, <u>Organic</u> Parameters: MA-EPH, MA-VPH.

Pennsylvania Department of Environmental Protection <u>Certificate/Lab ID</u>: 68-03671. *NELAP Accredited*. *Non-Potable Water* (<u>Organic Parameters</u>: EPA 3510C, 5030B, 625, 624. 608, 8081A, 8082, 8151A, 8260B, 8270C, 8330)

Solid & Hazardous Waste (Inorganic Parameters: EPA 1010, 1030, 1311, 3050B, 3051, 6010B, EPA 7.3.3.2, EPA 7.3.4.2, 7196A, 7471A, 9010B, 9012A, 9014, 9040B, 9045C, 9050, 9065. Organic Parameters: 3540C, 3545, 3580A, 5035, 8021B, 8081A, 8082, 8151A, 8260B, 8270C, 8330)

Rhode Island Department of Health Certificate/Lab ID: LAO00065. NELAP Accredited via NY-DOH. Refer to MA-DEP Certificate for Potable and Non-Potable Water. Refer to NY-DOH Certificate for Potable and Non-Potable Water.

Texas Commisson on Environmental Quality <u>Certificate/Lab ID</u>: T104704476-09-1. *NELAP Accredited. Non-Potable Water* (<u>Inorganic Parameters</u>: EPA 120.1, 1664, 200.7, 200.8, 245.1, 245.2, 300.0, 350.1, 351.1, 353.2, 376.2, 410.4, 420.1, 6010, 6020, 7196, 7470, 9040, SM 2120B, 2310B, 2320B, 2510B, 2540B, 2540C, 2540D, 426C, 4500CL-E, 4500CN-E, 4500F-C, 4500H+B, 4500NH3-H, 4500NO2B, 4500P-E, 4500 S2⁻D, 510C, 5210B, 5220D, 5310C, 5540C. Organic Parameters: EPA 608, 624, 625, 8081, 8082, 8151, 8260, 8270, 8330.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 1311, 1312, 9012, 9014, 9040, 9045, 9050, 9065.)

Department of Defense Certificate/Lab ID: L2217.

Drinking Water (Inorganic Parameters: SM 4500H-B. Organic Parameters: EPA 524.2, 504.1.)

Non-Potable Water (Inorganic Parameters: EPA 200.7, 200.8, 6010B, 6020, 245.1, 245.2, 7470A, 9040B, 300.0, 9251, 9038, 350.1, 353.2, 351.1, 120.1, 9050A, 410.4, 9060, 1664, 420.1, LACHAT 10-107-06-1-B, SM 4500CN-E, 4500H-B, 4500CL-E, 4500F-BC, 4500SO4-E, 426C, 4500NH3-B, 4500NH3-H, 4500NO3-F, 4500NO2-B, 4500Norg-C, 4500PE, 2510B, 5540C, 5220D, 5310C, 2540B, 2540C, 2540D, 510C, 4500S2-AD, 3005A, 3015, 9010B, 9030B. Organic Parameters: EPA 8260B, 8270C, 8330, 625, 8082, 8151A, 8081A, 3510C, 5030B, MassDEP EPH, MassDEP VPH.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 200.7, 6010B, 7471A, 9040B, 9045C, 9065, 420.1, 9012A, 6860, 1311, 1312, 3050B, 9030B, 3051, 9010B, 3540C, SM 510ABC, 4500CN-CE, 2540G, SW-846 7.3, Organic Parameters: EPA 8260B, 8270C, 8330, 8082, 8081A, 8151A, 3545, 3546, 3580, 5035, MassDEP EPH, MassDEP VPH.)

Analytes Not Accredited by NELAP

7 - 1454 a 1 1 1 1 1 1 1

Certification is not available by NELAP for the following analytes: **EPA 8260B:** Freon-113, 1,2,4,5-Tetramethylbenzene, 4-Ethyltoluene. **EPA 8330A:** PETN, Picric Acid, Nitroglycerine, 2,6-DANT, 2,4-DANT. **EPA 8270C:** Methyl naphthalene, Dimethyl naphthalene, Total Methylnaphthalenes, Total Dimethylnaphthalenes, 1,4-Diphenylhydrazine (Azobenzene). **EPA 625:** 4-Chloroaniline. **EPA 350.1** for Ammonia in a Soil matrix.

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PHA Lab LO Lb Use Orly)	Sample ID	F 9	Colle Date	ection Time	GW/	Initials PJV	Vo	1		1	-120	が	1/	Z S	1		Sample ms/ms	Specific Comment Metals call	/
PHA Lab ID ab Use Orly)	Sample ID SHM-10-14-090210- SHM-10-14-090210-	F 9 -U 9 F 9	Colle Date 7/2/10	Time	Matrix GW GW	PJV PJV	Vo	1	V	V	133	12/2/2 VI	1/	\$ 150 V	1		Sample ms/ms	Specific Comment Metals call	/
PHA Lab ID ab Use Orly) C36 O1	Sample 1D SHM-10-14-090210- SHM-10-16-090210- SHM-10-16-090210-L	F 9 -U 9 F 9	Colle Date 9/2/10 9/2/10	ection Time 1147 1147	Matrix GW GW	PJV PSV PSV	Vo	V	V	V	133	Z/-	3/1 V	\$ 100 V	\$/ / - -		Sample ms/ms	Specific Comment Metals call	/
PHA Lab ID ab Use Orly) C36 O1	Sample ID SHM-10-14-090210- SHM-10-14-090210- SHM-10-16-090210-	F 9 -U 9 F 9 U 9	Colle Date 9/2/10 9/2/10 9/2/10	1147 1147 1147 1445	Matrix GW GW GW	Initials PJV PJV PJV PJV	Vo	V	V	V	133	Z/-	3/1 V	\$ 10 V	7/		Sample ms/ms	Specific Comment Metals call	/
PHALabilD ab Use Orly)	Sample 1D SHM-10-14-090210- SHM-10-14-090210- SHM-10-16-090210-L SHM-10-16-090210-L DUP-090210-F	F 99 -U 99 -U 99	Colle Date 9/2/10 9/2/10 9/2/10	1147 1147 1147 1445 1445	Matrix GW GW GW GW	Initials PJV PJV PJV PJV	Vo	V	V	V	133	Z/-	3/1 V		\$\frac{1}{2}		Sample ms/ms	Specific Comment Metals call	/
PHALabilD ab Use Orly)	Sample 1D SHM-10-14-090210- SHM-10-16-090210- SHM-10-16-090210- SHM-10-16-090210- DUP-090210- F DUP-090210- U	F 99 -U 99 -U 99	Colle Date 9/2/10 9/2/10 9/2/10 9/2/10 9/2/10	1147 1147 1147 1445 1445 1445	Matrix GW GW GW GW GW	Initials PJV PJV PJV PJV PJV PJV	Vo	V	V	V	133	Z/-	V	\$ 150 V	7/		Sample ms/ms	Specific Comment Metals call	/
PHALabilD ab Use Orly)	Sample 1D SHM-10-14-090210- SHM-10-16-090210- SHM-10-16-090210- SHM-10-16-090210- DUP-090210- F DUP-090210- U	F 99 -U 99 -U 99	Colle Date 9/2/10 9/2/10 9/2/10 9/2/10 9/2/10	1147 1147 1147 1445 1445 1445	Matrix GW GW GW GW GW	Initials PJV PJV PJV PJV PJV PJV	Vo	V	V	V	133	Z/-	V	X 12 V	7/		Sample ms/ms	Specific Comment Metals call	/
PHALabilD ab Use Orly)	Sample 1D SHM-10-14-090210- SHM-10-16-090210- SHM-10-16-090210- SHM-10-16-090210- DUP-090210- F DUP-090210- U	F 99 -U 99 -U 99	Colle Date 9/2/10 9/2/10 9/2/10 9/2/10 9/2/10	1147 1147 1147 1445 1445 1445	Matrix GW GW GW GW GW	Initials PJV PJV PJV PJV PJV PJV	Vo	V	V	V	133	Z/-	V	X 12 V V V	7/		Sample ms/ms	Specific Comment Metals call	/
PHA Lab ID ab Use Only) C36 C1 C2	Sample 1D SHM-10-14-090210- SHM-10-16-090210- SHM-10-16-090210- SHM-10-16-090210- DUP-090210- F DUP-090210- U	F 99 -U 99 -U 99	Colle Date 9/2/10 9/2/10 9/2/10 9/2/10 9/2/10	1147 1147 1147 1445 1445 1445	Matrix GW GW GW GW GW GW	Initials PJV PJV PJV PJV PJV PJV	Vo	V	V	V	133	Z/-	3/K	\$ 100 V V V	7/		Sample MS/MSI MS/MSI	lessus specific Comment Dimetals culty Metals culty	
PHA Lab ID ab Use Orly) COL	Sample 1D SHM-10-14-090210- SHM-10-16-090210- SHM-10-16-090210- SHM-10-16-090210- DUP-090210- F DUP-090210- U RB-090210- U	F 99 -U 99 -U 99	Colle Date 9/2/10 9/2/10 9/2/10 9/2/10 9/2/10 9/2/10	1147 1147 1147 1445 1445 1445	Matrix GW GW GW GW GW GW Conta	Initials PJV PJV PJV PJV CMH	P	V	V	2	133		30 K	V V V	7/		Sample MS/MSI MS/MSI	Specific Comment Metals call	



ANALYTICAL REPORT

Lab Number:

L1013810

Client:

Sovereign Consulting

905B South Main Street

Mansfield, MA 02048

ATTN:

Phil McBain

Phone:

(508) 339-3200

Project Name:

SHL TASK 0002

Project Number:

AC001

Report Date:

09/16/10

Certifications & Approvals: MA (M-MA086), NY NELAC (11148), CT (PH-0574), NH (2003), NJ (MA935), RI (LAO00065), ME (MA0086), PA (Registration #68-03671), USDA (Permit #S-72578), US Army Corps of Engineers, Naval FESC.

Eight Walkup Drive, Westborough, MA 01581-1019 508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com

Project Name:

SHL TASK 0002

Project Number:

AC001

Lab Number:

L1013810

Report Date:

09/16/10

Alpha Sample ID	Client ID	Sample Location	Collection Date/Time
L1013810-01	SHM-10-08-090710-F	DEVENS, MA	09/07/10 11:53
L1013810-02	SHM-10-08-090710-U	DEVENS, MA	09/07/10 11:53
L1013810-03	SHM-10-03-090710-F	DEVENS, MA	09/07/10 10:45
L1013810-04	SHM-10-03-090710-U	DEVENS, MA	09/07/10 10:45
L1013810-05	SHM-10-02-090710-F	DEVENS, MA	09/07/10 14:30
L1013810-06	SHM-10-02-090710-U	DEVENS, MA	09/07/10 14:30
L1013810-07	SHM-10-04-090710-F	DEVENS, MA	09/07/10 14:30
L1013810-08	SHM-10-04-090710-U	DEVENS, MA	09/07/10 14:30
L1013810-09	RB-090710-U	DEVENS, MA	09/07/10 15:30
L1013810-10	DUP-090710-F	DEVENS, MA	09/07/10 10:45
L1013810-11	DUP-090710-U	DEVENS, MA	09/07/10 10:45

Project Name: Project Number: SHL TASK 0002

AC001

Lab Number:

L1013810

Report Date:

09/16/10

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet all of the requirements of NELAC, for all NELAC accredited parameters. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

For additional information, please contact Client Services at 800-624-9220.

Report Submission

Testing performed for the reported analyses followed the guidelines established under the DoD QSM 4.1, where applicable.

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

The Dissolved Inorganic Carbon results will be issued under separate cover.

Sample Receipt

The samples were Field Filtered for Dissolved Metals only.

Dissolved Metals

L1013810-01, -03, -05, -07 and -10 have elevated detection limits for all analytes due to the dilutions

Lab Number:

Project Name: SHL TASK 0002

L1013810 **Project Number:** AC001 Report Date: 09/16/10

Case Narrative (continued)

required by the high concentrations of target analytes. The requested reporting limits were not achieved. The WG431430-3 MS recovery for Sodium (69%), performed on L1013810-05, is invalid because the sample concentration is greater than four times the spike amount added.

The WG431430-5 Post Digestion Spike recovery for Calcium was outside the DoD acceptance criteria of 75-125%; therefore, the parent sample (L1013810-05) is qualified as "J" for Calcium.

Total Metals

L1013810-02, -04, -06, -08 and -11 have elevated detection limits for all analytes due to the dilutions required by the high concentrations of target analytes. The requested reporting limits were not achieved. The WG431429-5 Post Digestion Spike recovery for Calcium was outside the DoD acceptance criteria of 75-125%; therefore, the parent sample (L1013810-06) is qualified as "J" for Calcium.

Chloride

L1013810-02, -04, -06, -08 and -11 have elevated detection limits due to the dilutions required to quantitate the results within the calibration range.

Total Organic Carbon

L1013810-04 and -11: The samples were re-analyzed on dilution for confirmation. The results of the undiluted analyses are reported (matrix interference was noted).

Dissolved Organic Carbon

L1013810-04: The sample was re-analyzed on dilution for confirmation. The results of the undiluted analysis are reported (matrix interference was noted).

WG432106: A Matrix Spike could not be performed due to insufficient sample volume available for analysis. WG432106: A Laboratory Duplicate was performed on sample L1013810-08, instead of L1013810-06 as requested, due to insufficient sample volume available for analysis.

Project Name:

SHL TASK 0002

Lab Number:

L1013810

Project Number:

AC001

Report Date:

09/16/10

Case Narrative (continued)

Nitrogen, Nitrite

L1013810-08 has an elevated detection limit due to the dilution required to quantitate the result within the calibration range.

Nitrogen, Nitrate

L1013810-08 has an elevated detection limit due to the dilution required to quantitate the result within the calibration range.

Solids, Total Suspended

WG431564: A Laboratory Duplicate was performed on sample L1013862-01, instead of L1013810-06 as requested, due to insufficient sample volume available for analysis.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Michelle M. Unany Michelle M. Morris

Authorized Signature:

Title: Technical Director/Representative

Date: 09/16/10

METALS

Project Name:

SHL TASK 0002

Lab Number:

L1013810

Project Number:

AC001

Report Date:

09/16/10

SAMPLE RESULTS

Lab ID:

L1013810-01

Client ID:

SHM-10-08-090710-F

Sample Location:

DEVENS, MA

Matrix:

Water

Date Collected:

09/07/10 11:53

Date Received:

09/07/10

Field Prep: See Narrative

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Dissolved Metals - W	Vestboro	ugh Lab									
Aluminum, Dissolved	ND		ug/I	20.0	3.82	2	09/08/10 11:4	5 09/10/10 20:00	EPA 3005A	1,6020A	вм
Arsenic, Dissolved	1.55		ug/l	1.00	0.226	2	09/08/10 11:4	5 09/10/10 20:00	EPA 3005A	1,6020A	ВМ
Calcium, Dissolved	195000		ug/I	200	25.3	2	09/08/10 11:4	5 09/10/10 20:00	EPA 3005A	1,6020A	ВМ
Chromium, Dissolved	ND		ug/l	1.00	0.372	2	09/08/10 11:4	5 09/10/10 20:00	EPA 3005A	1,6020A	вм
Iron, Dissolved	1260		ug/I	100	16.8	2	09/08/10 11:4	5 09/10/10 20:00	EPA 3005A	1,6020A	ВМ
Lead, Dissolved	ND		ug/l	1.00	0.100	2	09/08/10 11:4	5 09/10/10 20:00	EPA 3005A	1,6020A	ВМ
Magnesium, Dissolved	25000		ug/I	200	8.20	2	09/08/10 11:4	5 09/10/10 20:00	EPA 3005A	1,6020A	вм
Manganese, Dissolved	376		ug/I	2,00	0.272	2	09/08/10 11:4	5 09/10/10 20:00	EPA 3005A	1,6020A	ВМ
Nickel, Dissolved	8.57		ug/l	1.00	0.360	2	09/08/10 11:4	5 09/10/10 20:00	EPA 3005A	1,6020A	вм
Potassium, Dissolved	5470		ug/l	200	36.3	2	09/08/10 11:4	5 09/10/10 20:00	EPA 3005A	1,6020A	ВМ
Sodium, Dissolved	50100		ug/l	200	36.4	2	09/08/10 11:4	5 09/10/10 20:00	EPA 3005A	1,6020A	ВМ

Project Name:

SHL TASK 0002

Lab Number:

L1013810

Project Number:

AC001

Report Date:

09/16/10

SAMPLE RESULTS

Lab ID:

L1013810-02

Client ID:

SHM-10-08-090710-U

Sample Location:

DEVENS, MA

Matrix:

Water

Date Collected:

09/07/10 11:53

Date Received:

09/07/10

Field Prep:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Wes	tborough L	.ab									
Aluminum, Total	33.2		ug/l	20.0	3.82	2	09/08/10 11:4:	5 09/10/10 21:12	EPA 3005A	1,6020A	ВМ
Arsenic, Total	1.40		ug/l	1.00	0.226	2	09/08/10 11:4	5 09/10/10 21:12	EPA 3005A	1,6020A	ВМ
Calcium, Total	182000		ug/l	200	25.3	2	09/08/10 11:4	5 09/10/10 21:12	EPA 3005A	1,6020A	ВМ
Chromium, Total	0.43	J	ug/l	1.00	0.372	2	09/08/10 11:4	5 09/10/10 21:12	EPA 3005A	1,6020A	ВМ
Iron, Total	1270		ug/l	100	16.8	2	09/08/10 11:4	5 09/10/10 21:12	EPA 3005A	1,6020A	ВМ
Lead, Total	ND		ug/l	1.00	0.100	2	09/08/10 11:4	5 09/10/10 21:12	EPA 3005A	1,6020A	ВМ
Magnesium, Total	23600		ug/l	200	8.20	2	09/08/10 11:4	5 09/10/10 21:12	EPA 3005A	1,6020A	ВМ
Manganese, Total	359		ug/l	2.00	0 272	2	09/08/10 11:4	5 09/10/10 21:12	EPA 3005A	1,6020A	ВМ
Nickel, Total	8.27		ug/I	1.00	0.360	2	09/08/10 11:4	5 09/10/10 21:12	EPA 3005A	1,6020A	ВМ
Potassium, Total	5240		ug/I	200	36.3	2	09/08/10 11:4	5 09/10/10 21:12	EPA 3005A	1,6020A	ВМ
Sodium, Total	46400		ug/l	200	36.4	2	09/08/10 11:4	5 09/10/10 21:12	EPA 3005A	1,6020A	ВМ
Total Hardness by	SM 2340B	- Westbor	ough Lab								
Hardness	490		mg/l	0.66	0.62	1	09/08/10 11:4	5 09/13/10 09:57	EPA 3005A	1,6010B	Al

Project Name:

SHL TASK 0002

Project Number:

AC001

Lab Number:

L1013810

Report Date:

09/16/10

SAMPLE RESULTS

Lab ID:

L1013810-03

Client ID:

SHM-10-03-090710-F

Sample Location:

DEVENS, MA

Matrix:

Water

Date Collected:

09/07/10 10:45

Date Received:

09/07/10

Field Prep: See Narrative

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Dissolved Metals - V	Vestboro	ugh Lab									
Aluminum, Dissolved	ND		ug/l	40.0	7.64	4	09/08/10 11:45	5 09/10/10 20:06	EPA 3005A	1,6020A	вм
Arsenic, Dissolved	0.51	J	ug/l	2.00	0.452	4	09/08/10 11:4	5 09/10/10 20:06	EPA 3005A	1,6020A	ВМ
Calcium, Dissolved	157000		ug/l	400	50.6	4	09/08/10 11:4	5 09/10/10 20:06	EPA 3005A	1,6020A	ВМ
Chromium, Dissolved	ND		ug/l	2.00	0.744	4	09/08/10 11:4:	5 09/10/10 20:06	EPA 3005A	1,6020A	вм
Iron, Dissolved	1030		ug/l	200	33.6	4	09/08/10 11:4	5 09/10/10 20:06	EPA 3005A	1,6020A	ВМ
Lead, Dissolved	ND		ug/l	2,00	0.200	4	09/08/10 11:4	5 09/10/10 20:06	EPA 3005A	1,6020A	вм
Magnesium, Dissolved	18500-		ug/I	400	16.4	4	09/08/10 11:4	5 09/10/10 20:06	EPA 3005A	1,6020A	ВМ
Manganese, Dissolved	44.0		ug/l	4.00	0.544	4	09/08/10 11:4	5 09/10/10 20:06	EPA 3005A	1,6020A	ВМ
Nickel, Dissolved	5.67		ug/l	2.00	0.720	4	09/08/10 11:4	5 09/10/10 20:06	EPA 3005A	1,6020A	вм
Potassium, Dissolved	6880		ug/l	400	72.6	4	09/08/10 11:4	5 09/10/10 20:06	EPA 3005A	1,6020A	ВМ
Sodium, Dissolved	536000		ug/l	400	72.8	4	09/08/10 11:4	5 09/10/10 20:06	EPA 3005A	1,6020A	вм

Project Name: Project Number:

SHL TASK 0002

Lab Number:

L1013810

AC001

Report Date:

09/16/10

SAMPLE RESULTS

Lab ID:

L1013810-04

Client ID:

SHM-10-03-090710-U

Sample Location:

DEVENS, MA

Matrix:

Water

Date Collected:

09/07/10 10:45

Date Received:

09/07/10

Field Prep:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Wes	stborough L	.ab									
Aluminum, Total	168		ug/l	40.0	7.64	4	09/08/10 11:4:	5 09/10/10 21:18	EPA 3005A	1,6020A	ВМ
Arsenic, Total	1.47	J	ug/l	2.00	0.452	4	09/08/10 11:4	5 09/10/10 21:18	EPA 3005A	1,6020A	вм
Calcium, Total	153000		ug/l	400	50.6	4	09/08/10 11:4	5 09/10/10 21:18	EPA 3005A	1,6020A	вм
Chromium, Total	2.01		ug/l	2.00	0.744	4	09/08/10 11:4	5 09/10/10 21:18	EPA 3005A	1,6020A	вм
Iron, Total	1420		ug/l	200	33.6	4	09/08/10 11:4	5 09/10/10 21:18	EPA 3005A	1,6020A	вм
Lead, Total	0.49	J	ug/l	2.00	0.200	4	09/08/10 11:4	5 09/10/10 21:18	EPA 3005A	1,6020A	ВМ
Magnesium, Total	18200		ug/l	400	16.4	4	09/08/10 11:4	5 09/10/10 21:18	EPA 3005A	1,6020A	вм
Manganese, Total	72.8		ug/l	4.00	0.544	4	09/08/10 11:4	5 09/10/10 21:18	EPA 3005A	1,6020A	ВМ
Nickel, Total	6.60		ug/I	2.00	0.720	4	09/08/10 11:4	5 09/10/10 21:18	EPA 3005A	1,6020A	ВМ
Potassium, Total	6920		ug/l	400	72.6	4	09/08/10 11:4	5 09/10/10 21:18	EPA 3005A	1,6020A	ВМ
Sodium, Total	536000		ug/l	400	72.8	4	09/08/10 11:4:	5 09/10/10 21:18	EPA 3005A	1,6020A	ВМ
Total Hardness by	SM 2340E	- Westbor	ough Lab	6							
Hardness	420		ma/l	0.66	0.62	1	09/08/10 11:4:	5 09/13/10 10:01	EPA 3005A	1,6010B	Al

Project Name:

SHL TASK 0002

Lab Number:

L1013810

Project Number:

AC001

Report Date:

09/16/10

SAMPLE RESULTS

Lab ID:

L1013810-05

Client ID:

SHM-10-02-090710-F

Sample Location:

DEVENS, MA

Matrix:

Water

Date Collected:

09/07/10 14:30

Date Received:

09/07/10

Field Prep: See Narrative

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Dissolved Metals - V	Vestborou	ugh Lab									
Aluminum, Dissolved	4.15	J	ug/l	20.0	3.82	2	09/08/10 11:4	5 09/10/10 20:18	EPA 3005A	1,6020A	ВМ
Arsenic, Dissolved	1.07		ug/I	1.00	0.226	2	09/08/10 11:4	5 09/10/10 20:18	EPA 3005A	1,6020A	вм
Calcium, Dissolved	114000	J	ug/l	200	25.3	2	09/08/10 11:4	5 09/10/10 20:18	EPA 3005A	1,6020A	ВМ
Chromium, Dissolved	ND		ug/l	1.00	0.372	2	09/08/10 11:4:	5 09/10/10 20:18	EPA 3005A	1,6020A	вм
Iron, Dissolved	843		ug/l	100	16,8	2	09/08/10 11:4	5 09/10/10 20:18	EPA 3005A	1,6020A	вм
Lead, Dissolved	ND		ug/l	1.00	0.100	2	09/08/10 11:4	5 09/10/10 20:18	EPA 3005A	1,6020A	вм
Magnesium, Dissolved	16000		ug/I	200	8.20	2	09/08/10 11:4	5 09/10/10 20:18	EPA 3005A	1,6020A	ВМ
Manganese, Dissolved	2190		ug/l	2.00	0,272	2	09/08/10 11:4	5 09/10/10 20:18	EPA 3005A	1,6020A	ВМ
Nickel, Dissolved	9 30		ug/I	1.00	0.360	2	09/08/10 11:4	5 09/10/10 20:18	EPA 3005A	1,6020A	вм
Potassium, Dissolved	4040		ug/l	200	36.3	2	09/08/10 11:4	5 09/10/10 20:18	EPA 3005A	1,6020A	ВМ
Sodium, Dissolved	50700		ug/l	200	36.4	2	09/08/10 11:4	5 09/10/10 20:18	EPA 3005A	1,6020A	вм

Project Name:

SHL TASK 0002

Lab Number:

L1013810

Project Number:

AC001

Report Date:

09/16/10

SAMPLE RESULTS

Lab ID:

L1013810-06

Client ID:

SHM-10-02-090710-U

Sample Location:

DEVENS, MA

Matrix:

Water

Date Collected:

09/07/10 14:30

Date Received:

09/07/10

Field Prep:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Wes	stborough L	.ab									
Aluminum, Total	85.3		ug/l	20.0	3.82	2	09/08/10 11:45	5 09/10/10 21:31	EPA 3005A	1,6020A	вм
Arsenic, Total	1.11		ug/l	1.00	0.226	2	09/08/10 11:45	5 09/10/10 21:31	EPA 3005A	1,6020A	ВМ
Calcium, Total	115000	J	ug/l	200	25.3	2	09/08/10 11:45	5 09/10/10 21:31	EPA 3005A	1,6020A	ВМ
Chromium, Total	0.68	J	ug/l	1.00	0.372	2	09/08/10 11:4	5 09/10/10 21:31	EPA 3005A	1,6020A	вм
Iron, Total	973		ug/l	100	16.8	2	09/08/10 11:4	5 09/10/10 21:31	EPA 3005A	1,6020A	ВМ
Lead, Total	0.18	J	ug/l	1.00	0.100	2	09/08/10 11:4	5 09/10/10 21:31	EPA 3005A	1,6020A	вм
Magnesium, Total	16000		ug/l	200	8.20	2	09/08/10 11:4:	5 09/10/10 21:31	EPA 3005A	1,6020A	ВМ
Manganese, Total	2190		ug/l	2.00	0.272	2	09/08/10 11:4	5 09/10/10 21:31	EPA 3005A	1,6020A	вм
Nickel, Total	9.58		ug/l	1.00	0.360	2	09/08/10 11:4	5 09/10/10 21:31	EPA 3005A	1, 60 20A	вм
Potassium, Total	4020		ug/l	200	36.3	2	09/08/10 11:4	5 09/10/10 21:31	EPA 3005A	1,6020A	вм
Sodium, Total	48100		ug/l	200	36.4	2	09/08/10 11:4:	5 09/10/10 21:31	EPA 3005A	1,6020A	ВМ
Total Hardness by	SM 2340B	- Westbor	ough Lab								
Hardness	330		mg/l	0.66	0.62	1	09/08/10 11:4	5 09/13/10 09:38	EPA 3005A	1,6010B	AI

Project Name:

SHL TASK 0002

Lab Number:

L1013810

Project Number:

AC001

Report Date:

09/16/10

SAMPLE RESULTS

Lab ID:

L1013810-07

Client ID:

SHM-10-04-090710-F

Sample Location:

DEVENS, MA

Matrix:

Water

Date Collected:

09/07/10 14:30

Date Received:

09/07/10

Field Prep:

See Narrative

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Dissolved Metals - V	Vestboro	ugh Lab									
Aluminum, Dissolved	ND		ug/l	40.0	7.64	4	09/08/10 11:4	5 09/10/10 20:42	EPA 3005A	1,6020A	вм
Arsenic, Dissolved	0.79	J	ug/l	2.00	0.452	4	09/08/10 11:4	5 09/10/10 20:42	EPA 3005A	1,6020A	вм
Calcium, Dissolved	72800		ug/l	400	50.6	4	09/08/10 11:4	5 09/10/10 20:42	EPA 3005A	1,6020A	ВМ
Chromium, Dissolved	ND		ug/l	2.00	0.744	4	09/08/10 11:4	5 09/10/10 20:42	EPA 3005A	1,6020A	ВМ
Iron, Dissolved	1650		ug/l	200	33.6	4	09/08/10 11:4	5 09/10/10 20:42	EPA 3005A	1,6020A	вм
Lead, Dissolved	ND		ug/l	2.00	0.200	4	09/08/10 11:4	5 09/10/10 20:42	EPA 3005A	1,6020A	ВМ
Magnesium, Dissolved	14600		ug/l	400	16.4	4	09/08/10 11:4	5 09/10/10 20:42	EPA 3005A	1,6020A	вм
Manganese, Dissolved	3100		ug/l	4.00	0.544	4	09/08/10 11:4	5 09/10/10 20:42	EPA 3005A	1,6020A	ВМ
Nickel, Dissolved	7.66		ug/l	2.00	0.720	4	09/08/10 11:4	5 09/10/10 20:42	EPA 3005A	1,6020A	ВМ
Potassium, Dissolved	3990		ug/I	400	72.6	4	09/08/10 11:4	5 09/10/10 20:42	EPA 3005A	1,6020A	ВМ
Sodium, Dissolved	35200		ug/I	400	72.8	4	09/08/10 11:4	5 09/10/10 20:42	EPA 3005A	1,6020A	ВМ

Project Name:

SHL TASK 0002

Lab Number:

L1013810

Project Number:

AC001

Report Date:

09/16/10

SAMPLE RESULTS

Lab ID:

L1013810-08

Client ID:

SHM-10-04-090710-U

Sample Location:

DEVENS, MA

Matrix:

Water

Date Collected:

09/07/10 14:30

Date Received:

09/07/10

Field Prep:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - We	stborough l	_ab									
Aluminum, Total	87,2		ug/I	40.0	7.64	4	09/08/10 11:45	5 09/10/10 21:55	EPA 3005A	1,6020A	вм
Arsenic, Total	1.	J	ug/l	2.00	0.452	4	09/08/10 11:45	5 09/10/10 21:55	EPA 3005A	1,6020A	вм
Calcium, Total	72100		ug/l	400	50.6	4	09/08/10 11:45	5 09/10/10 21:55	EPA 3005A	1,6020A	вм
Chromium, Total	0.95	J	ug/l	2.00	0.744	4	09/08/10 11:45	5 09/10/10 21:55	EPA 3005A	1,6020A	ВМ
Iron, Total	1880		ug/l	200	33.6	4	09/08/10 11:45	5 09/10/10 21:55	EPA 3005A	1,6020A	ВМ
Lead, Total	0.2	J	ug/l	2.00	0.200	4	09/08/10 11:45	5 09/10/10 21:55	EPA 3005A	1,6020A	вм
Magnesium, Total	14500		ug/l	400	16.4	4	09/08/10 11:45	5 09/10/10 21:55	EPA 3005A	1,6020A	вм
Manganese, Total	3210		ug/l	4.00	0.544	4	09/08/10 11:45	5 09/10/10 21:55	EPA 3005A	1,6020A	вм
Nickel, Total	8.10		ug/l	2.00	0.720	4	09/08/10 11:45	5 09/10/10 21:55	EPA 3005A	1,6020A	вм
Potassium, Total	4050		ug/l	400	72.6	4	09/08/10 11:45	5 09/10/10 21:55	EPA 3005A	1,6020A	вм
Sodium, Total	35800		ug/l	400	72.8	4	09/08/10 11:45	5 09/10/10 21:55	EPA 3005A	1,6020A	вм
Total Hardness by	y SM 2340E	3 - Westbor	ough Lab								
Hardness	220		mg/l	0.66	0.62	1	09/08/10 11:45	5 09/13/10 09:51	EPA 3005A	1,6010B	Al

Project Name:

SHL TASK 0002

Lab Number:

L1013810

Project Number:

AC001

Report Date:

09/16/10

Lab ID:

Date Collected:

09/07/10 15:30

Client ID: Sample Location: L1013810-09 RB-090710-U

Date Received: 09/07/10

Matrix:

Water

DEVENS, MA Field Prep:

SAMPLE RESULTS

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Dissolved Metals - V	Vestboro	ugh Lab									
Aluminum, Dissolved	ND		ug/l	10.0	1.91	1	09/08/10 11:45	5 09/10/10 20:48	EPA 3005A	1,6020A	ВМ
Arsenic, Dissolved	ND		ug/l	0.500	0.113	1	09/08/10 11:45	5 09/10/10 20:48	EPA 3005A	1,6020A	ВМ
Calcium, Dissolved	34	J	ug/l	100	12.6	1	09/08/10 11:4	5 09/10/10 20:48	EPA 3005A	1,6020A	вм
Chromium, Dissolved	ND		ug/l	0.500	0.186	1	09/08/10 11:4:	5 09/10/10 20:48	EPA 3005A	1,6020A	вм
Iron, Dissolved	13.3	J	ug/l	50.0	8.41	1	09/08/10 11:4	5 09/10/10 20:48	EPA 3005A	1,6020A	ВМ
Lead, Dissolved	ND		ug/l	0.500	0.050	1	09/08/10 11:4	5 09/10/10 20:48	EPA 3005A	1,6020A	ВМ
Magnesium, Dissolved	ND		ug/l	100	4.10	1	09/08/10 11:4	5 09/10/10 20:48	EPA 3005A	1,6020A	ВМ
Manganese, Dissolved	0.3	J	ug/l	1.00	0.136	1	09/08/10 11:4	5 09/10/10 20:48	EPA 3005A	1,6020A	ВМ
Nickel, Dissolved	ND		ug/l	0.500	0.180	1	09/08/10 11:4	5 09/10/10 20:48	EPA 3005A	1,6020A	ВМ
Potassium, Dissolved	ND		ug/l	100	18.2	1	09/08/10 11:4	5 09/10/10 20:48	EPA 3005A	1,6020A	ВМ
Sodium, Dissolved	26.3	J	ug/l	100	18.2	1	09/08/10 11:4	5 09/10/10 20:48	EPA 3005A	1,6020A	вм

Project Name:

Potassium, Dissolved

Sodium, Dissolved

SHL TASK 0002

Lab Number:

L1013810

Project Number:

AC001

Report Date:

09/16/10

SAMPLE RESULTS

Lab ID:

L1013810-10

Client ID:

DUP-090710-F DEVENS, MA

Sample Location: Matrix:

Water

6840

526000

Date Collected:

09/07/10 10:45

Date Received:

09/08/10 11:45 09/10/10 20:54 EPA 3005A

09/08/10 11:45 09/10/10 20:54 EPA 3005A

09/07/10

Field Prep:

See Narrative

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Dissolved Metals - V	Vestboro	ugh Lab									
Aluminum, Dissolved	ND		ug/I	40.0	7.64	4	09/08/10 11:45	5 09/10/10 20:54	EPA 3005A	1,6020A	вм
Arsenic, Dissolved	0.71	J	ug/I	2.00	0.452	4	09/08/10 11:45	5 09/10/10 20:54	EPA 3005A	1,6020A	ВМ
Calcium, Dissolved	154000		ug/l	400	50.6	4	09/08/10 11:45	5 09/10/10 20:54	EPA 3005A	1,6020A	ВМ
Chromium, Dissolved	ND		ug/l	2.00	0.744	4	09/08/10 11:45	5 09/10/10 20:54	EPA 3005A	1,6020A	вм
Iron, Dissolved	1040		ug/l	200	33.6	4	09/08/10 11:45	5 09/10/10 20:54	EPA 3005A	1,6020A	вм
Lead, Dissolved	ND		ug/l	2.00	0.200	4	09/08/10 11:45	5 09/10/10 20:54	EPA 3005A	1,6020A	ВМ
Magnesium, Dissolved	18000		ug/l	400	16.4	4	09/08/10 11:45	5 09/10/10 20:54	EPA 3005A	1,6020A	ВМ
Manganese, Dissolved	51.7		ug/I	4.00	0.544	4	09/08/10 11:45	5 09/10/10 20:54	EPA 3005A	1,6020A	ВМ
Nickel, Dissolved	5.68		ug/l	2.00	0.720	4	09/08/10 11:45	5 09/10/10 20:54	EPA 3005A	1,6020A	ВМ

72.6

72.8

400

400

ug/l

ug/l

1,6020A

1,6020A

BM

BM

Project Name:

Project Number: AC001

SHL TASK 0002

L1013810

Report Date:

09/16/10

SAMPLE RESULTS Lab ID:

Client ID:

L1013810-11 DUP-090710-U

Sample Location: Matrix:

DEVENS, MA Water

Date Collected:

Lab Number:

09/07/10 10:45

Date Received:

09/07/10

Field Prep:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Wes	stborough L	.ab									
Aluminum, Total	208		ug/I	40.0	7.64	4	09/08/10 11:4	5 09/10/10 22:01	EPA 3005A	1,6020A	ВМ
Arsenic, Total	1.51	J	ug/l	2.00	0.452	4	09/08/10 11:4	5 09/10/10 22:01	EPA 3005A	1,6020A	вм
Calcium, Total	149000		ug/l	400	50.6	4	09/08/10 11:4	5 09/10/10 22:01	EPA 3005A	1,6020A	ВМ
Chromium, Total	1.99	Ĵ	ug/l	2.00	0.744	4	09/08/10 11:4	5 09/10/10 22:01	EPA 3005A	1,6020A	вм
Iron, Total	1480		ug/l	200	33.6	4	09/08/10 11:4	5 09/10/10 22:01	EPA 3005A	1,6020A	ВМ
Lead, Total	0.58	J	ug/l	2.00	0.200	4	09/08/10 11:4	5 09/10/10 22:01	EPA 3005A	1,6020A	вм
Magnesium, Total	17700		ug/l	400	16.4	4	09/08/10 11:4	5 09/10/10 22:01	EPA 3005A	1,6020A	вм
Manganese, Total	70.2		ug/l	4.00	0.544	4	09/08/10 11:4	5 09/10/10 22:01	EPA 3005A	1,6020A	ВМ
Nickel, Total	6.35		ug/l	2.00	0.720	4	09/08/10 11:4	5 09/10/10 22:01	EPA 3005A	1,6020A	ВМ
Potassium, Total	6670		ug/I	400	72.6	4	09/08/10 11:4	5 09/10/10 22:01	EPA 3005A	1,6020A	вм
Sodium, Total	510000		ug/l	400	72.8	4	09/08/10 11:4	5 09/10/10 22:01	EPA 3005A	1,6020A	ВМ
Total Hardness by	SM 2340E	3 - Westbor	ough Lab	1							
Hardness	410		mg/l	0.66	0.62	1	09/08/10 11:4	5 09/13/10 09:54	EPA 3005A	1,6010B	Al

Project Name:

SHL TASK 0002

Lab Number:

L1013810

09/16/10

Project Number: AC001

Report Date:

Method Blank Analysis **Batch Quality Control**

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	
Total Hardness by SM	2340B - Westborough L	ab for sa	ample(s): 02,0	4,06,08,11	Batch: WG43	31428-1		
Hardness	ND	mg/l	0.66	0.62	1	09/08/10 11:45	09/13/10 09:15	1,6010B	Al

Prep Information

Digestion Method: EPA 3005A

Parameter	Result	t Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytica Method	Analyst
Total Metals - Westborough	Lab fo	or sample(s):	02,04	,06,08,11	Batch	: WG4314	429-1			
Aluminum, Total	2,59	j	ug/l	10.0	1.91	1	09/08/10 11:45	09/10/10 18:16	1,6020A	ВМ
Arsenic, Total	ND		ug/l	0.500	0.113	1	09/08/10 11:45	09/10/10 18:16	1,6020A	ВМ
Calcium, Total	28.7	J	ug/l	100	12.6	1	09/08/10 11:45	09/10/10 18:16	1,6020A	ВМ
Chromium, Total	ND		ug/l	0.500	0.186	1	09/08/10 11:45	09/10/10 18:16	1,6020A	ВМ
Iron, Total	12.3	J	ug/l	50 0	8.41	1	09/08/10 11:45	09/10/10 18:16	1.6020A	ВМ
Lead, Total	ND		ug/l	0.500	0.050	1	09/08/10 11:45	09/10/10 18:16	1,6020A	ВМ
Magnesium Total	ND		ug/l	100	4.10	1	09/08/10 11:45	09/10/10 18:16	1.6020A	ВМ
Manganese, Total	ND		ug/l	1.00	0.136	1	09/08/10 11:45	09/10/10 18:16	1,6020A	BM
Nickel, Total	ND		ug/l	0.500	0.180	1	09/08/10 11:45	09/10/10 18:16	1,6020A	вм
Potassium, Total	26.3	J	ug/l	100	18.2	1	09/08/10 11:45	09/10/10 18:16	1,6020A	ВМ
Sodium, Total	ND		ug/I	100	18.2	1	09/08/10 11:45	09/10/10 18:16	1,6020A	вм

Prep Information

Digestion Method: EPA 3005A

Parameter	Result C	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Dissolved Metals - Westbe	orough Lab	for samp	ole(s): 01	,03,05,0	7,09-10	Batch:	WG431430-1			
Aluminum, Dissolved	2.59	J	ug/l	10.0	1.91	1	09/08/10 11:45	09/10/10 18:16	1,6020A	вм
Arsenic, Dissolved	ND		ug/l	0.500	0.113	1	09/08/10 11:45	09/10/10 18:16	1,6020A	ВМ
Calcium, Dissolved	28.7	J	ug/l	100	12.6	1	09/08/10 11:45	09/10/10 18:16	1,6020A	ВМ
Chromium, Dissolved	ND		ug/l	0.500	0 186	1	09/08/10 11:45	09/10/10 18:16	1,6020A	вм
Iron, Dissolved	12.3	J	ug/l	50.0	8.41	1	09/08/10 11:45	09/10/10 18:16	1,6020A	вм
Lead, Dissolved	ND		ug/l	0.500	0.050	1	09/08/10 11:45	09/10/10 18:16	1,6020A	вм

Project Name:

SHL TASK 0002

Lab Number:

L1013810

Project Number: AC001

Report Date:

09/16/10

Method Blank Analysis Batch Quality Control

Magnesium, Dissolved	ND		ug/l	100	4.10	1	09/08/10 11:45	09/10/10 18:16	1,6020A	BM
Manganese, Dissolved	ND		ug/l	1.00	0.136	1	09/08/10 11:45	09/10/10 18:16	1,6020A	ВМ
Nickel, Dissolved	ND		ug/l	0.500	0.180	1	09/08/10 11:45	09/10/10 18:16	1,6020A	вм
Potassium, Dissolved	26.3	J	ug/l	100	18.2	1	09/08/10 11:45	09/10/10 18:16	1,6020A	вм
Sodium, Dissolved	ND		ug/I	100	18.2	1	09/08/10 11:45	09/10/10 18:16	1,6020A	вм

Prep Information

Digestion Method: EPA 3005A



Lab Control Sample Analysis Batch Quality Control

Lab Number:

L1013810

Report Date:

09/16/10

Project Name:	SHL TASK 0002	£_	Batch Q
ojoot italiio.	OFFE TATOR OUGE	90	

Project Number: AC001

Parameter	LCS %Recovery Qual	LCSD %Recovery	%Reco Qual Limi	A CONTRACTOR OF THE CONTRACTOR	Qual	RPD Limits
Total Hardness by SM 2340B - Westboroug	gh Lab Associated sample(s): 0	02,04,06,08,11 Ba	tch: WG431428-2			
Hardness	.92	1.40	80-12	0 -		
Total Metals - Westborough Lab Associate	d sample(s): 02,04,06,08,11	Batch: WG431429-2				
Aluminum, Total	98		80-12	0 -		
Arsenic, Total	100	*	80-12	0 -		
Calcium, Total	103		80-12	0 -		
Chromium, Total	98	-	80-12	0 -		
Iron, Total	106	8	80-12	0 -		
Lead, Total	99-	-	80-12	0 -		
Magnesium, Total	106	-	80-12	0 +		
Manganese, Total	103		80-12	0 -		
Nickel, Total	104	4	80-12	0 -		
Potassium, Total	105	4	80-12	0 -		
Sodium, Total	102		80-12	0 -		

Lab Control Sample Analysis Batch Quality Control

Project Name:

SHL TASK 0002

Project Number:

AC001

Lab Number:

L1013810

Report Date:

Parameter	LCS %Recovery %	LCSD Recovery	%Recovery Limits	RPD	RPD Limits
Dissolved Metals - Westborough Lab	Associated sample(s): 01,03,05,07,09-10	Batch: WG43143	30-2		
Aluminum, Dissolved	98	2	80-120	*	
Arsenic, Dissolved	100		80-120	3	
Calcium, Dissolved	103		80-120	.9	
Chromium, Dissolved	98 1	-	80-120		
Iron, Dissolved	106	*	80-120	•	
Lead, Dissolved	99		80-120		
Magnesium, Dissolved	106	-	80-120	· ·	
Manganese, Dissolved	103	1	80-120	4	
Nickel, Dissolved	.104		80-120	4	
Potassium, Dissolved	105	-	80-120		
Sodium, Dissolved	102		80-120	9	

Matrix Spike Analysis Batch Quality Control

Project Name:

SHL TASK 0002

Project Number:

AC001

Lab Number:

L1013810

Report Date:

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Total Hardness by SM 2340B Client ID: SHM-10-02-0907		n Lab Associ	ated samp	le(s): 02,04,06,	08,11	QC Batch	ID: WG431428	-3 W	G431428-4	QC Sa	mple: l	_1013810-06
Hardness	330	66.2	380	76		380	76		75-125	0		20
Total Metals - Westborough La SHM-10-02-090710-U	ab Associated	sample(s): 0	2,04,06,08	3,11 QC Batc	h ID: W	/G431429-3	WG431429-4	QC S	Sample: L1	013810-	06 C	lient ID:
Aluminum, Total	85.3	2000 :.	2070	99		2050	98		80-120	1		20
Arsenic, Total	1,11	120 ,	133	110		132	109		80-120	1		20
Calcium, Total	115000	10000	126000	110		125000	100		80-120	1		20
Chromium, Total	ND	200	198	99		198	99		80-120	0		20
Iron, Total	973	1000	2060	109		2060	109		80-120	0		20
Lead, Total	ND	510	524	103		518	102		80-120	1		20
Magnesium, Total	16000	10000	26600	106		26700	107		80-120	0		20
Manganese, Total	2190	500	2670	96		2690	100		80-120	1		20
Nickel, Total	9.58	500	525	103		522	102		80-120	1		20
Potassium, Total	4020	10000	14600	106		14400	104		80-120	1		20
Sodium, Total	48100	10000	56300	82		57600	95		80-120	2		20

Matrix Spike Analysis Batch Quality Control

Project Name:

SHL TASK 0002

Project Number:

AC001

Lab Number:

L1013810

Report Date:

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Dissolved Metals - Westborough ID: SHM-10-02-090710-F	n Lab Assoc	iated sample	e(s): 01,03,	05,07,09-10	QC Batch ID: WG4	31430-3 WG431430-4	4 QC Sam	ple: L101	3810-05 Client
Aluminum, Dissolved	ND	2000	1930	96	1970	98	80-120	2	20
Arsenic, Dissolved	1.07	120	130	107	133	110	80-120	2	20
Calcium, Dissolved	114000	10000	123000	90	126000	120	80-120	2	20
Chromium, Dissolved	ND	200	192	96	198	99	80-120	3	20
Iron, Dissolved	843	1000,	1860	102	1930	109	80-120	4	20
Lead, Dissolved	ND	510	512	100	521	102	80-120	2	20
Magnesium, Dissolved	16000	10000	25800	98	26600	106	80-120	3	20
Manganese, Dissolved	2190	500	2610	84	2710	104	80-120	4	20
Nickel, Dissolved	9 30	500	514	101	525	103	80-120	2	20
Potassium, Dissolved	4040	10000	14300	103	14500	105	80-120	1	20
Sodium, Dissolved	50700	10000	57600	69	59800	91	80-120	4	20

INORGANICS & MISCELLANEOUS

Project Name: SHL TASK 0002

Project Number: AC001

Lab Number:

L1013810

Report Date:

09/16/10

SAMPLE RESULTS

Lab ID:

L1013810-02

Client ID:

SHM-10-08-090710-U

Sample Location:

DEVENS, MA

Matrix:

Water

Date Collected:

09/07/10 11:53

Date Received:

09/07/10

Field Prep:

Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Wes	tborough Lab									
Alkalinity, Total	500		mg CaCO3/L	2.0	NA	1		09/14/10 06:29	30,23208	SD
Solids, Total Dissolved	630		mg/l	10	4.4	1	9	09/08/10 09:55	30,2540C	DW
Solids, Total Suspended	ND		mg/l	5.0	NA	1	*	09/09/10 08:30	30,2540D	DW
Nitrogen, Ammonia	0.084		mg/l	0.075	0.017	1	09/08/10 11:35	09/09/10 22:27	30,4500NH3-BH	AT
Nitrogen, Nitrite	ND		mg/l	0.02	0.002	1	(*)	09/08/10 17:31	30,4500NO2-B	DD
Sulfide	ND		mg/l	0.10	0.10	1	09/09/10 19:45	09/09/10 20:45	30,4500S2-AD	AT
Chemical Oxygen Demand	17	J	mg/l	20	7.0	1		09/14/10 11:55	44,410.4	DW
Total Organic Carbon	4.1		mg/l	0.50	0.03	1		09/14/10 07:34	30,5310C	DW
Dissolved Organic Carbon	3.8		mg/l	1.0	1.0	1	09/07/10 21:00	09/14/10 07:34	30,5310C	DW
Anions by Ion Chromatog	raphy - West	borough	Lab							
Chloride	79		mg/l	2.5	0.33	5	4	09/08/10 21:54	44,300.0	AU
Nitrogen, Nitrate	ND		mg/l	0.05	0.01	1	8	09/08/10 18:30	44,300.0	AU
Sulfate	15		mg/l	1.0	0.12	1	1.0	09/08/10 18:30	44 300 0	AU

Project Name:

SHL TASK 0002

Lab Number:

L1013810

Project Number: AC001

Report Date:

09/16/10

SAMPLE RESULTS

Lab ID:

L1013810-04

Client ID:

SHM-10-03-090710-U

Sample Location:

DEVENS, MA

Matrix:

Water

Date Collected:

09/07/10 10:45

Date Received:

09/07/10

Fie

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4.0 1 1000.104.	00,01110
eld Prep:	Not Specif

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Wes	stborough Lab									
Alkalinity, Total	78	n	ng CaCO3/L	2.0	NA	1	4	09/13/10 15:01	30,2320B	SD
Solids, Total Dissolved	1900		mg/l	10	4.4	1		09/08/10 09:55	30,2540C	DW
Solids, Total Suspended	28		mg/l	5.0	NA	1		09/09/10 08:30	30,2540D	DW
Nitrogen, Ammonia	0.0392	J	mg/l	0.075	0.017	1	09/08/10 11:35	09/09/10 22:21	30,4500NH3-BH	AT
Nitrogen, Nitrite	ND		mg/l	0.02	0.002	1	4	09/08/10 17:31	30,4500NO2-B	DD
Sulfide	ND		mg/l	0.10	0.10	1	09/09/10 19:45	09/09/10 20:45	30,4500S2-AD	AT
Chemical Oxygen Demand	43		mg/l	20	7.0	1		09/14/10 11:55	44,410.4	DW
Total Organic Carbon	0.66		mg/l	0.50	0.03	1		09/14/10 07:34	30,5310C	DW
Dissolved Organic Carbon	ND		mg/l	1.0	1.0	1	09/07/10 21:00	09/14/10 07:34	30,5310C	DW
Anions by Ion Chromatog	graphy - West	borough l	Lab							
Chloride	1100		mg/l	25	3.3	50	-	09/08/10 21:30	44,300.0	AU
Nitrogen, Nitrate	0.55		mg/l	0.05	0.01	1	4	09/08/10 18:42	44,300 0	AU
Sulfate	39		mg/l	1.0	0 12	1		09/08/10 18:42	44,300.0	AU

Project Name: SHL TASK 0002

Project Number: AC001

Lab Number:

L1013810

Report Date:

09/16/10

SAMPLE RESULTS

Lab ID:

L1013810-06

Client ID:

SHM-10-02-090710-U

Sample Location:

DEVENS, MA

Matrix:

Water

Date Collected:

09/07/10 14:30

Date Received:

09/07/10

Field Prep:

Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Wes	tborough Lab	r								
Alkalinity, Total	260	mg	CaCO3/L	2.0	NA	1	. 4	09/13/10 15:01	30,2320B	SD
Solids, Total Dissolved	480		mg/l	10	4.4	1		09/08/10 09:55	30,2540C	DW
Solids, Total Suspended	ND		mg/l	5.0	NA	1	-	09/09/10 08:30	30,2540D	DW
Nitrogen, Ammonia	0.238		mg/l	0.075	0.017	1	09/08/10 11:35	09/09/10 22:22	30,4500NH3-BH	AT
Nitrogen, Nitrite	ND		mg/l	0.02	0.002	1		09/08/10 17:31	30,4500NO2-B	DD
Sulfide	ND		mg/l	0.10	0.10	1	09/09/10 19:45	09/09/10 20:45	30,4500S2-AD	AT
Chemical Oxygen Demand	ND		mg/l	20	7.0	1		09/14/10 11:55	44,410.4	DW
Total Organic Carbon	2.6		mg/l	0.50	0.03	1	4	09/14/10 07:34	30,5310C	DW
Dissolved Organic Carbon	2.5		mg/l	1.0	1.0	1	09/07/10 21:00	09/14/10 07:34	30,5310C	DW
Anions by Ion Chromatog	raphy - West	borough L	ab							
Chloride	120	70.01.4 Va	mg/l	2.5	0.33	5	4	09/08/10 19:42	44,300.0	AU
Nitrogen, Nitrate	ND		mg/l	0.05	0.01	1		09/08/10 18:18	44,300.0	AU
Sulfate	19		mg/l	1.0	0.12	1	4	09/08/10 18:18	44,300.0	AU

Project Name: SHL TASK 0002

Lab Number:

L1013810 Project Number: AC001 Report Date: 09/16/10

SAMPLE RESULTS

Lab ID:

L1013810-08

Client ID:

SHM-10-04-090710-U

Sample Location:

DEVENS, MA

Matrix:

Water

Date Collected: 09/07/10 14:30 Date Received: 09/07/10

Not Specified Field Prep:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Wes	tborough Lab)								
Alkalinity, Total	100		mg CaCO3/L	2.0	NA	1		09/13/10 15:01	30,2320B	SD
Solids, Total Dissolved	390		mg/l	10	4.4	1	-	09/08/10 09:55	30,2540C	DW
Solids, Total Suspended	5.2		mg/l	5.0	NA	1	*	09/09/10 08:30	30,2540D	DW
Nitrogen, Ammonia	0.0585	J	mg/l	0.075	0.017	1	09/08/10 11:35	09/09/10 22:25	30,4500NH3-BH	AT
Nitrogen, Nitrite	0.50		mg/l	0.10	0.01	5		09/08/10 17:32	30,4500NO2-B	DD
Sulfide	ND		mg/l	0.10	0.10	1	09/09/10 19:45	09/09/10 20:45	30,4500S2-AD	AT
Chemical Oxygen Demand	ND		mg/l	20	7.0	1		09/14/10 11:55	44,410.4	DW
Total Organic Carbon	2.6		mg/l	0.50	0.03	1		09/14/10 07:34	30,5310C	DW
Dissolved Organic Carbon	2.7		mg/l	1.0	1.0	1	09/07/10 21:00	09/14/10 07:34	30,5310C	DW
Anions by Ion Chromatog	graphy - West	borough	Lab							
Chloride	92		mg/l	2.5	0.33	5	*	09/08/10 21:18	44,300.0	AU
Nitrogen, Nitrate	3.7		mg/l	0.25	0.04	5		09/08/10 21:18	44,300.0	AU
Sulfate	87		mg/l	1.0	0,12	1		09/08/10 18:54	44,300.0	AU

Project Name: SHL TASK 0002

Project Number: AC001

Lab Number:

L1013810

Report Date:

09/16/10

SAMPLE RESULTS

Lab ID:

L1013810-11

Client ID:

DUP-090710-U

Sample Location:

DEVENS, MA

Matrix:

Water

Date Collected:

09/07/10 10:45

Date Received:

09/07/10

Field Prep:

Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Wes	tborough Lab									
Alkalinity, Total	75		mg CaCO3/L	2.0	NA	1		09/13/10 15:01	30,2320B	SD
Solids, Total Dissolved	1900		mg/l	10	4.4	1		09/08/10 09:55	30,2540C	DW
Solids, Total Suspended	7.8		mg/l	5.0	NA	1		09/09/10 08:30	30,2540D	DW
Nitrogen, Ammonia	0.0204	J	mg/l	0.075	0.017	1	09/08/10 11:35	09/09/10 22:26	30,4500NH3-BH	AT
Nitrogen, Nitrite	ND		mg/l	0.02	0.002	1		09/08/10 17:32	30,4500NO2-B	DD
Sulfide	ND		mg/l	0.10	0.10	1	09/09/10 19:45	09/09/10 20:45	30,4500S2-AD	AT
Chemical Oxygen Demand	31		mg/l	20	7.0	1	-	09/14/10 11:55	44,410.4	DW
Total Organic Carbon	0.66		mg/l	0.50	0.03	1		09/14/10 07:34	30,5310C	DW
Anions by Ion Chromatog	raphy - West	borough	Lab							
Chloride	1100		mg/l	25	3.3	50	-	09/08/10 21:42	44,300.0	AU
Nitrogen, Nitrate	0.60		mg/l	0.05	0.01	1		09/08/10 19:06	44,300.0	AU
Sulfate	39		mg/l	1.0	0.12	1	- 2	09/08/10 19:06	44,300.0	AU

Project Name:

SHL TASK 0002

Lab Number:

L1013810 09/16/10

Project Number: AC001

Report Date:

Method Blank Analysis Batch Quality Control

Parameter	Result (Qualifier	Units	RL	MDL	Dilui Fac		Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - W	estborough La	b for sam	ple(s):	02,04,06,08	3,11	Batch:	WG	431328-1			
Solids, Total Dissolved	ND		mg/l	10	4.4	1	1	4	09/08/10 09:55	30,2540C	DW
General Chemistry - W	estborough La	b for sam	ple(s):	02,04,06,08	3,11	Batch:	WG	431398-1			
Nitrogen, Ammonia	0.0183	J	mg/l	0.075	0.01	17	1	09/08/10 11:35	09/09/10 21:44	30,4500NH3-BH	TA I
General Chemistry - W	estborough La	b for sam	ple(s):	02,04,06,08	3,11	Batch:	WG	431486-2			
Nitrogen, Nitrite	ND		mg/l	0.02	0.00)2	1	5	09/08/10 17:30	30,4500NO2-B	DD
Anions by Ion Chroma	tography - Wes	tborough	Lab for	sample(s):	02,0	04,06,08	,11	Batch: WG43	1545-1		
Chloride	ND		mg/l	0.50	0.0	7	1		09/08/10 17:54	44,300 0	AU
Nitrogen, Nitrate	ND		mg/l	0.05	0.0	1	t		09/08/10 17:54	44,300.0	AU
Sulfate	ND		mg/l	1.0	0.13	2	1		09/08/10 17:54	44,300.0	AU
General Chemistry - W	estborough La	b for sam	ple(s):	02,04,06,08	3,11	Batch:	WG	431564-1			
Solids, Total Suspended	ND		mg/l	5.0	NA		1	-	09/09/10 08:30	30,2540D	DW
eneral Chemistry - W	estborough La	b for sam	ple(s):	02,04,06,08	3,11	Batch:	WG	432096-1			
Sulfide	ND		mg/l	0 10	0.10	0	1	09/09/10 19:45	09/09/10 20,45	30.4500S2-AD	AT
General Chemistry - W	estborough La	b for sam	ple(s):	02,04,06,08	Ba	atch: Wo	3432	2106-1			
Dissolved Organic Carbon	ND		mg/l	1.0	1.0) 1	1	09/07/10 21:00	09/14/10 07:34	30,5310C	DW
General Chemistry - W	estborough La	b for sam	ple(s):	04,06,08,11	Ва	atch: Wo	3432	2214-1			
Alkalinity, Total	ND		mg CaCC	03/L 2.0	NA	. 1	1	141	09/13/10 15:01	30,2320B	SD
General Chemistry - W	estborough La	b for sam	ple(s):	02,04,06,08	3,11	Batch:	WG	432218-1			
Chemical Oxygen Demand	ND		mg/l	20	7.0) 1	t.		09/14/10 11:47	44,410.4	DW
General Chemistry - W	estborough La	b for sam	ple(s):	02 Batch:	WG	432251-	2	- 143 6	*1	1 2126 1	
Alkalinity, Total	ND		mg CaCC	03/L 2.0	NA		1	8	09/14/10 06:29	30,2320B	SD
General Chemistry - W	estborough La	b for sam	ple(s):	02,04,06,08	3,11	Batch:	WG	432291-1			
Total Organic Carbon	ND		mg/l	0.50	0.03	3 1	r		09/14/10 07:34	30,5310C	DW

Lab Control Sample Analysis Batch Quality Control

Project Name:

SHL TASK 0002

Project Number: AC001

Lab Number:

L1013810

Report Date:

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab	Associated sample(s): 0	2,04,06,08	3,11 Batch: WG4	31328-2				
Solids, Total Dissolved	92		÷		72-121	4		
General Chemistry - Westborough Lab	Associated sample(s): 0.	2,04,06 ,08	3,11 Batch: WG4	31398-2				
Nitrogen, Ammonia	99		161		80-120	2		20
General Chemistry - Westborough Lab	Associated sample(s): 0	2,04,06,08	3,11 Batch: WG4	31486-1				
Nitrogen, Nitrite	100		191		90-110	*		20
Anions by Ion Chromatography - Wes tb	orough Lab Associated s	sample(s):	02,04,06,08,11	Batch: WG4	131545-2			
Chloride	100				90-110	-		
Nitrogen, Nitrate	92		2		90-110	-		
Sulfate	100		346		90-110	1		
General Chemistry - Westborough Lab	Associated sample(s): 02	2,04,06,08	3,11 Batch: WG4:	32096-2				
Sulfide	91		7		75-125	:		
General Chemistry - Westborough Lab	Associated sample(s): 02	2,04,06,08	Batch: WG4321	06-2				
Dissolved Organic Carbon	100				90-110	-		

Lab Control Sample Analysis Batch Quality Control

Project Name:

SHL TASK 0002

Project Number: AC001

Lab Number:

L1013810

Report Date:

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
General Chemistry - Westborough Lab	Associated sample(s): 04,06,08,11	Batch: WG432214-2			
Alkalinity, Total	102		80-115		4
General Chemistry - Westborough Lab	Associated sample(s): 02,04,06,08,	11 Batch: WG432218-2			
Chemical Oxygen Demand	(101 ·	+	95-105	•	
General Chemistry - Westborough Lab	Associated sample(s): 02 Batch: \	NG432251-1			
Alkalinity, Total	105		80-115	*	4
General Chemistry - Westborough Lab	Associated sample(s): 02,04,06,08,	11 Batch: WG432291-2			
Total Organic Carbon	100	*	90-110		

Matrix Spike Analysis Batch Quality Control

Project Name:

SHL TASK 0002

Project Number: AC001

Lab Number:

L1013810

Report Date:

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD Qual	RPD Limits
General Chemistry - Westbo 02-090710-U	orough Lab Asso	ociated sampl	e(s): 02,0	4,06,08,11 Q	C Batch	ID: WG43	1398-3 QC S	Sample:	L1013810-0	06 Client ID	: SHM-10-
Nitrogen, Ammonia	0.238	4.	4.16	98		- 4	14		80-120		20
General Chemistry - Westbo 02-090710-U	orough Lab Asso	ociated sampl	e(s): 02,0	4,06,08,11 Q	C Batch	ID: WG43	1486-3 QC S	Sample:	L1013810-0	06 Client ID	: SHM-10-
Nitrogen, Nitrite	ND	0.1	0.10	100		-			85-115	2	20
Anions by Ion Chromatograp 06 Client ID: SHM-10-02-0		gh Lab Asso	ciated san	nple(s): 02,04,0	06,08,11	QC Batc	h ID: WG4315	45-3 W	/G431545-4	QC Sample	: L1013810
Chloride	120	20	140	107		142	103		40-151	1	18
Nitrogen, Nitrate	ND	0.4	0.35	88		0.35	88		80-122	0	15
Sulfate	19	8, '	27	100		27	100		60-140	0	20
General Chemistry - Westbo 02-090710-U	rough Lab Asso	ciated sampl	e(s): 02,0	4,06,08,11 Q	C Batch	ID: WG432	2096-3 QC S	Sample:	L1013810-0	06 Client ID	SHM-10-
Sulfide	ND	0.24	0.19	79		- 5			75-125	51	20
General Chemistry - Westbo 090710-U	rough Lab Asso	ciated sampl	e(s): 04,0	6,08,11 QC E	Batch ID:	WG43221	4-3 QC Sam	nple: L1	013810-06	Client ID: S	HM-10-02-
Alkalinity, Total	260	100	360	100		8	*		86-116	4)	4
General Chemistry - Westbo	rough Lab Asso	ciated sample	e(s): 02,04	4,06,08,11 Q	C Batch	ID: WG432	2218-3 QC S	Sample:	L1013810-0	06 Client ID	SHM-10-
Chemical Oxygen Demand	ND	238	270	114		9.	-		80-120		20
General Chemistry - Westbo	rough Lab Asso	ciated sample	e(s): 02	QC Batch ID: \	WG4322	51-3 QC	Sample: L101	3810-0	2 Client ID	: SHM-10-08	3-090710-
Alkalinity, Total	500	100	590	92			9		86-116		4

Matrix Spike Analysis Batch Quality Control

Project Name:

SHL TASK 0002

Project Number:

AC001

Lab Number:

L1013810

Report Date:

Parameter	Native Sample	MS Added	MS Found	MS . %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
General Chemistry - Westl 02-090710-U	borough Lab Asso	ociated samp	le(s): 02,0	4,06,08,11 QC Ba	atch ID: WG43	2291-3 QC Sam	ple: L1013810-0	6 Client ID	: SHM-10-
Total Organic Carbon	2.6	4	6.6	99			80-120		20

Lab Duplicate Analysis Batch Quality Control

Project Name:

SHL TASK 0002

Project Number: AC001

Lab Number:

L1013810

Report Date:

Parameter	Nat	ive Sample	Duplicate Sample	Units	RPD Qual	RPD Limits
General Chemistry - Westborough Lab 02-090710-U	Associated sample(s):	02,04,06,08,11	QC Batch ID: WG431328-	-3 QC Sample	e: L1013810-06	Client ID: SHM-10-
Solids, Total Dissolved	4	480	470	mg/l	2	1.1
General Chemistry - Westborough Lab 02-090710-U	Associated sample(s):	02,04,06,08,11	QC Batch ID: WG431398-	4 QC Sample	e: L1013810-06	Client ID: SHM-10-
Nitrogen, Ammonia		0.238	0.256	mg/l	7	20
General Chemistry - Westborough Lab 02-090710-U	Associated sample(s):	02,04,06,08,11	QC Batch ID: WG431486-	4 QC Sample	e: L1013810-06	Client ID: SHM-10-
Nitrogen, Nitrite	1.	ND	ND	mg/l	NC	20
Anions by Ion Chromatography - Westb SHM-10-02-090710-U	orough Lab Associated	d sample(s): 02,0	04,06,08,11 QC Batch ID:	WG431545-5	QC Sample: L	.1013810-06 Client ID:
Nitrogen, Nitrate		ND	ND	mg/l	NC	15
Sulfate	2.	19.	19	mg/l	5	20
Anions by Ion Chromatography - Westb SHM-10-02-090710-U	orough Lab Associated	d sample(s): 02,0	04,06,08,11 QC Batch ID:	WG431545-5	QC Sample: L	.1013810-06 Client ID:
Chloride		120	130	mg/l	8	18
General Chemistry - Westborough Lab Sample	Associated sample(s):	02,04,06,08,11	QC Batch ID: WG431564-	2 QC Sample	e: L1013862-01	Client ID: DUP
Solids, Total Suspended	4	140	150	mg/l	7	32
General Chemistry - Westborough Lab 12-090710-U	Associated sample(s):	02,04,06,08,11	QC Batch ID: WG432096-	4 QC Sample	:: L1013810-06	Client ID: SHM-10-
Sulfide		ND	ND	mg/l	NC	20

Lab Duplicate Analysis Batch Quality Control

Lab Number:

L1013810

Report Date:

09/16/10

Parameter	, Nati	ve Sample	Duplicate Sample	Units	RPD	RPD	Limits
General Chemistry - Westborough Lab 090710-U	Associated sample(s):	02,04,06,08	QC Batch ID: WG432106-4	QC Sample:	L1013810-08	Client ID: \$	SHM-10-04
Dissolved Organic Carbon	10.7	2.7	2.6	mg/l	4		20
General Chemistry - Westborough Lab 090710-U	Associated sample(s):	04,06,08,11	QC Batch ID: WG432214-4	QC Sample:	L1013810-06	Client ID: 5	SHM-10-02
Alkalinity, Total		260	270	mg CaCO3/L	4		4
General Chemistry - Westborough Lab 02-090710-U	Associated sample(s):	02,04,06,08,1	1 QC Batch ID: WG43221	8-4 QC Samp	ele: L1013810-	06 Client IE): SHM-10
Chemical Oxygen Demand		ND	7.3J	mg/l	NC		20
General Chemistry - Westborough Lab J	Associated sample(s):	02 QC Batc	h ID: WG432251-4 QC Sa	mple: L101381	0-02 Client ID	: SHM-10-0	8-090710-
Alkalinity, Total		500	490	mg CaCO3/L	2		4
General Chemistry - Westborough Lab 02-090710-U	Associated sample(s):	02,04,06,08,1	1 QC Batch ID: WG43229	1-4 QC Samp	le: L1013810-	06 Client ID): SHM-10
Total Organic Carbon	*,	2.6	2.6	mg/l	0		20

Project Name:

Project Number: AC001

SHL TASK 0002

Project Name: SHL TASK 0002

Project Number: AC001

Lab Number: L1013810 Report Date: 09/16/10

Sample Receipt and Container Information

Were project specific reporting limits specified?

YES

Reagent H2O Preserved Vials Frozen on: NA

Cooler Information Custody Seal

Cooler

В

Present/Intact

A

Present/Intact

Container Info	rmation			Temp			
Container ID	Container Type	Cooler	pН	deg C	Pres	Seal	Analysis(*)
L1013810-01A	Plastic 250ml HNO3 preserved	В	<2	4	Y	Present/Intact	DOD-FE-6020S(180),DOD-MG-6020S(180),DOD-CR-6020S(180),DOD-MN-6020S(180),DOD-NA-6020S(180),DOD-NI-6020S(180),DOD-PB-6020S(180),DOD-AS-6020S(180),DOD-AL-6020S(180),DOD-AL-6020S(180),DOD-K-6020S(180),DOD-K-6020S(180),DOD-K-6020S(180)
L1013810-02A	Vial H2SO4 preserved split	В	N/A	4	Υ	Present/Intact	DOC-5310(28)
L1013810-02B	Vial H2SO4 preserved split	В	N/A	4	Y	Present/Intact	DOC-5310(28)
L1013810-02C	Vial H2SO4 preserved	Α	N/A	3	Υ	Present/Intact	TOC-5310(28)
L1013810-02D	Vial H2SO4 preserved	Α	N/A	3	Y	PresenVIntact	TOC-5310(28)
L1013810-02E	Plastic 250ml unpreserved	В	N/A	4	Y	Present/Intact	ALK-T-2320(14)
L1013810-02F	Plastic 250ml unpreserved	В	6	4	Y	Present/Intact	NO2-4500NO2(2)
L1013810-02G	Plastic 250ml Zn Acetate/NaOH pr	В	>12	4	Y	Present/Intact	SULFIDE-4500(7)
L1013810-02H	Plastic 250ml Zn Acetate/NaOH pr	В	>12	4	Y	Present/Intact	SULFIDE-4500(7)
L1013810-021	Plastic 250ml Zn Acetate/NaOH pr	В	>12	4	Y	Present/Intact	SULFIDE-4500(7)
- L1013810-02J	Plastic 500ml HNO3 preserved	B.	<2	4	, Y	Present/Intact	DOD-NA-6020T(180),DOD-NI-6020T(180),DOD-CA-6020T(180),DOD-MN-6020T(180),DOD-AL-6020T(180),DOD-AS-6020T(180),DOD-CR-6020T(180),DOD-K-6020T(180),DOD-MG-6020T(180),DOD-FE-6020T(180),DOD-PB-6020T(180),DOD-PB-6020T(180),DOD-PB-6020T(180),DOD-PB-6020T(180),HARDT(180)
L1013810-02K	Plastic 500ml H2SO4 preserved	В	<2	4	Y	Present/Intact	COD-410(28),NH3-4500(28)
L1013810-02L	Plastic 500ml unpreserved	В	6	4	Y	Present/Intact	SO4-300(28),CL-300(28),NO3- 300(2),TDS-2540(7)
L1013810-02M	Plastic 1000ml unpreserved	В	6	4	Y	Present/Intact	TSS-2540(7)
L1013810-02X	Amber 250ml unpreserved	В	6	4	Y	Present/Intact	DOC-5310(28)

Project Number: AC001

Lab Number: L1013810 **Report Date**: 09/16/10

Container Info	ormation			Temp			
Container ID	Container Type	Cooler	рН	deg C	Pres	Seal	Analysis(*)
L1013810-03A	Plastic 250ml HNO3 preserved	В	<2	4	Y	Present/Intact	DOD-FE-6020S(180),DOD-MG-6020S(180),DOD-CR-6020S(180),DOD-MN-6020S(180),DOD-CA-6020S(180),DOD-NI-6020S(180),DOD-NI-6020S(180),DOD-PB-6020S(180),DOD-AS-6020S(180),DOD-AL-6020S(180),DOD-K-6020S(180)
L1013810-04A	Vial H2SO4 preserved split	Α	N/A	3	Y	Present/Intact	DOC-5310(28)
L1013810-04B	Vial H2SO4 preserved split	Α	N/A	3	Y	Present/Intact	DOC-5310(28)
L1013810-04C	Vial H2SO4 preserved	Α	N/A	3	Y	Present/Intact	TOC-5310(28)
L1013810-04D	Vial H2SO4 preserved	Α.	N/A	3	Y	Present/Intact	TOC-5310(28)
L1013810-04E	Plastic 250ml unpreserved	В	N/A	4	Y	Present/Intact	ALK-T-2320(14)
L1013810-04F	Plastic 250ml unpreserved	В	6	4	Y	Present/Intact	NO2-4500NO2(2)
L1013810-04G	Plastic 250ml Zn Acetate/NaOH pr	В	>12	4	Y	Present/Intact	SULFIDE-4500(7)
L1013810-04H	Plastic 250ml Zn Acetate/NaOH pr	В	>12	4	Y	Present/Intact	SULFIDE-4500(7)
L1013810-04I	Plastic 250ml Zn Acetate/NaOH pr	В	>12	4	Y	Present/Intact	SULFIDE-4500(7)
L1013810-04J	Plastic 500ml HNO3 preserved	В	<2	4	Y	Present/Intact	DOD-NA-6020T(180),DOD-NI-6020T(180),DOD-CA-6020T(180),DOD-MN-6020T(180),DOD-AL-6020T(180),DOD-AS-6020T(180),DOD-CR-6020T(180),DOD-K-6020T(180),DOD-K-6020T(180),DOD-FE-6020T(180),DOD-PB-6020T(180),DOD-PB-6020T(180),DOD-PB-6020T(180),DOD-PB-6020T(180),DOD-PB-6020T(180),DOD-PB-
L1013810-04K	Plastic 500ml H2SO4 preserved	В	<2	4	Y	Present/Intacl	COD-410(28),NH3-4500(28)
L1013810-04L	Plastic 500ml unpreserved	В	6	4	Υ	Present/Intact	SO4-300(28),CL-300(28),NO3- 300(2),TDS-2540(7)
L1013810-04M	Plastic 1000ml unpreserved	Α	6	3	Y	Present/Intact	TSS-2540(7)
L1013810-04X	Amber 250ml unpreserved	Α	6	3	Y	Present/Intact	DOC-5310(28)
L1013810-05A	Plastic 250ml HNO3 preserved	A	<2	3.	Y	Present/Intact	DOP-FE-6020S(180),DOD-MG-6020S(180),DOD-CR-6020S(180),DOD-MN-6020S(180),DOD-NA-6020S(180),DOD-NA-6020S(180),DOD-NI-6020S(180),DOD-PB-6020S(180),DOD-AS-6020S(180),DOD-AL-6020S(180),DOD-K-6020S(180),DOD-K-6020S(180)

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Container Info	ormation			Temp			
Container ID	Container Type	Cooler	рН	deg C	Pres	Seal	Analysis(*)
L1013810-05B	Plastic 250ml HNO3 preserved	A	<2	3	Ý	Present/Intact	DOD-FE-6020S(180),DOD-MG-6020S(180),DOD-CR-6020S(180),DOD-MN-6020S(180),DOD-NA-6020S(180),DOD-NI-6020S(180),DOD-PB-6020S(180),DOD-AS-6020S(180),DOD-AL-6020S(180),DOD-AL-6020S(180),DOD-K-6020S(180)
L1013810-06A	Vial H2SO4 preserved split	A	N/A	3	Y	Present/Intact	DOC-5310(28)
L1013810-06B	Vial H2SO4 preserved split	Α	N/A	3	Y	Present/Intact	DOC-5310(28)
L1013810-06C	Vial H2SO4 preserved	A	N/A	3	Y	Present/Intact	TOC-5310(28)
L1013810-06D	Vial H2SO4 preserved	A	N/A	3	Y	Present/Intact	TOC-5310(28)
L1013810-06E	Vial H2SO4 preserved	A	N/A	3	Y	Present/Intact	TOC-5310(28)
L1013810-06F	Vial H2SO4 preserved	A	N/A	3	Y	Present/Intact	TOC-5310(28)
L1013810-06G	Plastic 250ml unpreserved	Α	N/A	3	Y	Present/Intact	ALK-T-2320(14)
L1013810-06H	Plastic 250ml unpreserved	A.	N/A	3	Y	Present/Intact	ALK-T-2320(14)
L1013810-061	Plastic 250ml unpreserved	Α	6	3	Y	Present/Intact	NO2-4500NO2(2)
L1013810-06J	Plastic 250ml unpreserved	A	6	3	Y	Present/Intact	NO2-4500NO2(2)
L1013810-06K	Plastic 250ml Zn Acetate/NaOH pr	Α	>12	3	Y	Present/Intact	SULFIDE-4500(7)
L1013810-06L	Plastic 250ml Zn Acetale/NaOH pr	A	>12	.3	Y	PresenVIntact	SULFIDE-4500(7)
L1013810-06M	Plastic 250ml Zn Acetale/NaOH pr	Α	>12	3	Ÿ	PresenVIntact	SULFIDE-4500(7)
L101381U-U6N	Plastic 500ml HNO3 preserved	A	\$2	3	Y	Present/intact	DOD-NA-6020T(180),DOD-NI-6020T(180),DOD-CA-6020T(180),DOD-MNI-6020T(180),DOD-AL-6020T(180),DOD-AS-6020T(180),DOD-K-6020T(180),DOD-K-6020T(180),DOD-MG-6020T(180),DOD-FE-6020T(180),DOD-PB-6020T(180),DOD-PB-6020T(180),DOD-PB-6020T(180),DOD-PB-6020T(180),DARDT(180)
L1013810-06O	Plastic 500ml HNO3 preserved	A	<2	3	Y	Present/Intact	DOD-NA-6020T(180),DOD-NI-6020T(180),DOD-CA-6020T(180),DOD-MN-6020T(180),DOD-AL-6020T(180),DOD-CR-6020T(180),DOD-K-6020T(180),DOD-K-6020T(180),DOD-FE-6020T(180),DOD-FE-6020T(180),DOD-PB-6020T(180),DOD-PB-6020T(180),HARDT(180)
L1013810-06P	Plastic 500ml H2SO4 preserved	Α	<2	3	Y	Present/Intact	COD-410(28),NH3-4500(28)
L1013810-06Q	Plastic 500ml H2SO4 preserved	Α	<2	3	Υ	Present/Intact	COD-410(28),NH3-4500(28)
L1013810-06R	Plastic 500ml unpreserved	Α	6	3	Y	Present/Intact	SO4-300(28),CL-300(28),NO3- 300(2),TDS-2540(7)

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Container Info	ormation			Temp			
Container ID	Container Type	Cooler	рН	deg C	Pres	Seal	Analysis(*)
L1013810-06S	Plastic 500ml unpreserved	Α	6	3	Υ	Present/Intact	SO4-300(28),CL-300(28),NO3- 300(2),TDS-2540(7)
L1013810-06T	Plastic 1000ml unpreserved	Α	6	3	Y	Present/Intact	TSS-2540(7)
L1013810-06X	Amber 250ml unpreserved	Α	6	3	Y	Present/Intact	DOC-5310(28)
L1013810-07A	Plastic 250ml HNO3 preserved	В	<2	4	Y	Present/Intact	DOD-FE-6020S(180), DOD-MG-6020S(180), DOD-CR-6020S(180), DOD-MN-6020S(180), DOD-CA-6020S(180), DOD-NA-6020S(180), DOD-NI-6020S(180), DOD-PB-6020S(180), DOD-AS-6020S(180), DOD-AL-6020S(180), DOD-K-6020S(180)
L1013810-08A	Vial H2SO4 preserved split	Α	N/A	3	Y	Present/Inlact	DOC-5310(28)
L1013810-08B	Vial H2SO4 preserved split	Α	N/A	3	Y	Present/Intact	DOC-5310(28)
L1013810-08C	Vial H2SO4 preserved	Α	N/A	3	Y	Present/Intact	TOC-5310(28)
L1013810-08D	Vial H2SO4 preserved	Α	N/A	3	Y	Present/Intact	TOC-5310(28)
L1013810-08E	Plastic 250ml unpreserved	Α	N/A	3	Y	Present/Intact	ALK-T-2320(14)
L1013810-08F	Plastic 250ml unpreserved	Α	6	3	Y	Present/Intact	NO2-4500NO2(2)
L1013810-08G	Plastic 250ml Zn Acetate/NaOH pr	Α	>12	3	Y	Present/Intact	SULFIDE-4500(7)
L1013810-08H	Plastic 250ml Zn Acetate/NaOH pr	Α	>12	3	Y	Present/Intact	SULFIDE-4500(7)
L1013810-08I	Plastic 250ml Zn Acetate/NaOH pr	В	>12	4	Y	Present/Intact	SULFIDE-4500(7)
L1013810-08J	Plastic 500ml HNO3 preserved	В	<2	4	Y	Present/Intact	DOD-NA-6020T(180),DOD-NI-6020T(180),DOD-CA-6020T(180),DOD-MN-6020T(180),DOD-AL-6020T(180),DOD-AS-6020T(180),DOD-K-6020T(180),DOD-K-6020T(180),DOD-MG-6020T(180),DOD-FE-6020T(180),DOD-PB-6020T(180),DOD-PB-6020T(180),DOD-PB-6020T(180),DOD-PB-6020T(180),HARDT(180)
L1013810-08K	Plastic 500ml H2SO4 preserved	В	<2	4	Υ	Present/Intact	COD-410(28),NH3-4500(28)
. L1013810-08L	Plastic 500ml unpreserved	В.,	6	.4	Υ	Present/Intact	SO4-300(28),CL-300(28),NO3 300(2),TDS-2540(7)
L1013810-08M	Plastic 1000ml unpreserved	Α	6	3	Y	Present/Intact	TSS-2540(7)
L1013810-08X	Amber 250ml unpreserved	Α	6	3	Y	Present/Intact	DOC-5310(28)
L1013810-09A	Plastic 500ml HNO3 preserved	В	<2	4	Υ	Present/Intact	DOD-FE-6020S(180),DOD-MG-6020S(180),DOD-CR-6020S(180),DOD-MN-6020S(180),DOD-NA-6020S(180),DOD-NA-6020S(180),DOD-NI-6020S(180),DOD-PB-6020S(180),DOD-AS-6020S(180),DOD-AL-6020S(180),DOD-K-6020S(180),DOD-K-6020S(180)

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Container Info	rmation			Temp			
Container ID Container Type		Cooler	рН	deg C	Pres	Seal	Analysis(*)
L1013810-10A	Plastic 250ml HNO3 preserved	Α	<2	3	Y	Present/Intact	DOD-FE-6020S(180),DOD-MG-6020S(180),DOD-CR-6020S(180),DOD-MN-6020S(180),DOD-NA-6020S(180),DOD-NI-6020S(180),DOD-PB-6020S(180),DOD-AS-6020S(180),DOD-AL-6020S(180),DOD-K-6020S(180)
L1013810-11C	Vial H2SO4 preserved	Α	N/A	3	Y	Present/Intact	TOC-5310(28)
L1013810-11D	Vial H2SO4 preserved	Α	N/A	3	Y	Present/Intact	TOC-5310(28)
L1013810-11E	Plastic 250ml unpreserved	В	N/A	4	Y	Present/Intact	ALK-T-2320(14)
L1013810-11F	Plastic 250ml unpreserved	Α	6	3	Y	Present/Intact	NO2-4500NO2(2)
L1013810-11G	Plastic 250ml Zn Acetate/NaOH pr	В	>12	4	Y	Present/Intact	SULFIDE-4500(7)
L1013810-11H	Plastic 250ml Zn Acetate/NaOH pr	В	>12	4	Y	Present/Intact	SULFIDE-4500(7)
L1013810-11I	Plastic 250ml Zn Acetate/NaOH pr	В	>12	4	Y	Present/Intact	SULFIDE-4500(7)
L1013810-11J	Plastic 500ml HNO3 preserved	A	<2	3	Y	Present/Intact	DOD-NA-6020T(180),DOD-NI-6020T(180),DOD-CA-6020T(180),DOD-MN-6020T(180),DOD-AL-6020T(180),DOD-AS-6020T(180),DOD-CR-6020T(180),DOD-K-6020T(180),DOD-MG-6020T(180),DOD-FE-6020T(180),DOD-PB-6020T(180),DOD-PB-6020T(180),DOD-PB-6020T(180),DOD-PB-6020T(180),DOD-PB-6020T(180)
L1013810-11K	Plastic 500ml H2SO4 preserved	В	<2	4	Y	Present/Intact	COD-410(28),NH3-4500(28)
L1013810-11L	Plastic 500ml unpreserved	В	6	4	Υ	Present/Intact	SO4-300(28),CL-300(28),NO3- 300(2),TDS-2540(7)
L1013810-11M	Plastic 1000ml unpreserved	Α	6	3	Y	Present/Intact	TSS-2540(7)



 Project Name:
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GLOSSARY

Acronyms

EPA Environmental Protection Agency.

 LCS - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LCSD - Laboratory Control Sample Duplicate: Refer to LCS,

MDL Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

MS -Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.

MSD - Matrix Spike Sample Duplicate: Refer to MS.

NA - Not Applicable.

 NC -Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.

NI - Not Ignitable.

Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration.
 The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to
assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD).
 Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the
absolute difference between the values; although the RPD value will be provided in the report.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method, (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Data Qualifiers

- A Spectra identified as "Aldol Condensation Product".
- The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than five times (5x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank,
- Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument,
- The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- The RPD between the results for the two columns exceeds the method-specified criteria; however, the lower value has been reported due to obvious interference.
- P The RPD between the results for the two columns exceeds the method-specified criteria.
- The quality control sample exceeds the associated acceptance criteria. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R Analytical results are from sample re-analysis.

Report Format: DU Report with "J" Qualifiers



Project Name:

SHL TASK 0002

Lab Number:

L1013810

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Data Qualifiers

RE • Analytical results are from sample re-extraction.

 Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL). This represents an estimated concentration for Tentatively Identified Compounds (TICs).

ND - Not detected at the method detection limit (MDL) for the sample.

Report Format: DU Report with "J" Qualifiers



L1013810

Lab Number:

Project Name: SHL TASK 0002

Project Number: AC001 Report Date: 09/16/10

REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IIIA, 1997.

- 30 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WPCF, 18th Edition, 1992.
- 44 Methods for the Determination of Inorganic Substances in Environmental Samples, EPA/600/R-93/100, August 1993.

The analyses performed on the sample(s) within this report are in accordance with the minimum established guidelines set forth in the Department of Defense Quality Systems Manual, Version 4.1, issued April 22, 2009

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Certificate/Approval Program Summary

Last revised July 19, 2010 - Westboro Facility

The following list includes only those analytes/methods for which certification/approval is currently held. For a complete listing of analytes for the referenced methods, please contact your Alpha Customer Service Representative,

Connecticut Department of Public Health Certificate/Lab ID: PH-0574, NELAP Accredited Solid Waste/Soil.

Drinking Water (Inorganic Parameters: Color, pH, Turbidity, Conductivity, Alkalinity, Chloride, Free Residual Chlorine, Fluoride, Calcium Hardness, Sulfate, Nitrate, Nitrite, Aluminum, Antimony, Arsenic, Barium, Beryllium, Cadmium, Calcium, Chromium, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Vanadium, Zinc, Total Dissolved Solids, Total Organic Carbon, Total Cyanide, Perchlorate. Organic Parameters: Volatile Organics 524.2, Total Trihalomethanes 524.2, 1,2-Dibromo-3-chloropropane (DBCP), Ethylene Dibromide (EDB), 1,4-Dioxane (Mod 8270). Microbiology Parameters: Total Coliform-MF mEndo (SM9222B), Total Coliform – Colilert (SM9223 P/A), E. Coli. – Colilert (SM9223 P/A), HPC – Pour Plate (SM9215B), Fecal Coliform – MF m-FC (SM9222D))

Wastewater/Non-Potable Water (Inorganic Parameters: Color, pH, Conductivity, Acidity, Alkalinity, Chloride, Total Residual Chlorine, Fluoride, Total Hardness, Silica, Sulfate, Sulfide, Ammonia, Kjeldahl Nitrogen, Nitrate, Nitrite, O-Phosphate, Total Phosphorus, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Strontium, Thallium, Tin, Titanium, Vanadium, Zinc, Total Residue (Solids), Total Dissolved Solids, Total Suspended Solids (non-filterable), BOD, CBOD, COD, TOC, Total Cyanide, Phenolics, Foaming Agents (MBAS), Bromide, Oil and Grease. Organic Parameters: PCBs, Organochlorine Pesticides, Technical Chlordane, Toxaphene, 2,4-D, 2,4,5-T, 2,4,5-TP(Silvex), Acid Extractables (Phenols), Benzidines, Phthalate Esters, Nitrosamines, Nitroaromatics & Isophorone, Polynuclear Aromatic Hydrocarbons, Haloethers, Chlorinated Hydrocarbons, Volatile Organics, TPH (HEM/SGT), Extractable Petroleum Hydrocarbons (ETPH), MA-EPH, MA-VPH, Microbiology Parameters: Total Coliform – MF mEndo (SM9222B), Total Coliform – MTF (SM9221B), HPC – Pour Plate (SM9215B), Fecal Coliform – MF m-FC (SM9222D), Fecal Coliform – A-1 Broth (SM9221E).)

Solid Waste/Soil (Inorganic Parameters: pH, Sulfide, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Tin, Vanadium, Zinc, Total Cyanide, Ignitability, Phenolics, Corrosivity, TCLP Leach (1311), SPLP Leach (1312 metals only), Reactivity. Organic Parameters: PCBs, PCBs in Oil, Organichlorine Pesticides, Technical Chlordane, Toxaphene, Extractable Petroleum Hydrocarbons (ETPH), MA-EPH, MA-VPH, Dicamba, 2,4-D, 2,4,5-T, 2,4,5-TP(Silvex), Volatile Organics, Acid Extractables (Phenols), 3.3'-Dichlorobenzidine, Phthalates, Nitrosamines, Nitroaromatics & Cyclic Ketones, PAHs, Haloethers, Chlorinated Hydrocarbons,)

Maine Department of Human Services Certificate/Lab ID: 2009024.

Drinking Water (Inorganic Parameters: SM9215B, 9222D, 9223B, EPA 180.1, 300.0, 353.2, SM2130B, 2320B, 4500Cl-D, 4500CN-C, 4500CN-E, 4500F-C, 4500H+B, 4500NO3-F, EPA 200.7, EPA 200.8, 245.1, EPA 300.0. Organic Parameters: 504.1, 524.2.)

Wastewater/Non-Potable Water (Inorganic Parameters: EPA 120.1, 1664A, 350.1, 351.1, 353.2, 410.4, 420.1, Lachat 10-107-06-1-B, SM2320B, 2340B, 2510B, 2540C, 2540D, 426C, 4500Cl-D, 4500Cl-E, 4500CN-C, 4500CN-E, 4500F-B, 4500F-C, 4500NH-B, 4500Norg-B, 4500Norg-C, 4500NH3-B, 4500NH3-G, 4500NH3-H, 4500NO3-F, 4500P-B.5, 4500P-E, 5210B, 5220D, 5310C, EPA 200.7, 200.8, 245.1. Organic Parameters: 608, 624, ME DRO, ME GRO, MA EPH, MA VPH.)

Solid Waste/Soil (Organic Parameters: ME DRO, ME GRO, MA EPH, MA VPH.)

Massachusetts Department of Environmental Protection Certificate/Lab ID: M-MA086,

Drinking Water

Inorganic Parameters: (EPA 200.8 for: Sb,As,Ba,Be,Cd,Cr,Cu,Pb,Ni,Se,Tl)

(EPA 200.7 for: Ba,Be,Ca,Cd,Cr,Cu,Na,Ni) 245.1, (300.0 for: Nitrate-N, Fluoride, Sulfate)

353.2 for: Nitrate-N, Nitrite-N; SM4500NO3-F, 4500F-C, 4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, 2320B, SM2540C, SM4500H-B.

Organic Parameters: (EPA 524.2 for: Trihalomethanes, Volatile Organics)

(504.1 for: 1,2-Dibromoethane, 1,2-Dibromo-3-Chloropropane), 314.0, 332.

Microbiology Parameters: SM9215B; ENZ, SUB, SM9223; MF-SM9222D

Non-Potable Water

Inorganic Parameters: (EPA 200.8 for: Al,Sb,As,Be,Cd,Cr,Cu,Pb,Mn,Ni,Se,Ag,Tl,Zn)

(EPA 200.7 for: Al,Sb,As,Be,Cd,Cr,Co,Cu,Fe,Pb,Mn,Mo,Ni,Se,Ag,Sr,Ti,Tl, V,Zn,Ca,Mg,Na,K)

245.1, SM4500H,B, EPA 120.1, SM2510B, 2540C, 2540B, 2340B, 2320B, 4500CL-E, 4500F-BC, 426C, SM4500NH3-BH, (EPA 350.1 for: Ammonia-N), LACHAT 10-107-06-1-B for Ammonia-N, SM4500NO3-F, 353.2 for Nitrate-N, SM4500NH3-B,C-Titr, SM4500NH3-BC-NES, EPA 351.1, SM4500P-E, 4500P-B,E, 5220D, EPA 410.4, SM 5210B,

5310C, 4500CL-D, EPA 1664, SM14 510AC, EPA 420, SM4500-CN-CE, SM2540D.

Organic Parameters: (EPA 624 for Volatile Halocarbons, Volatile Aromatics)

(608 for: Chlordane, Aldrin, Dieldrin, DDD, DDE, DDT, Heptachlor, Heptachlor Epoxide, PCBs-Water), EPA 625 for SVOC Acid Extractables and SVOC Base/Neutral Extractables, 600/4-81-045-PCB-Oil

New Hampshire Department of Environmental Services Certificate/Lab ID: 200307. NELAP Accredited.

Drinking Water (Inorganic Parameters: SM6215B, 9222B, 9223B Colilert, EPA 200.7, 200.8, 245.2, 120.1, 300.0, 314.0, SM4500CN-E, 4500H+B, 4500NO3-F, 2320B, 2510B, 2540C, 4500F-C, 5310C, 2120B, EPA 331.0. Organic

Parameters: 504.1, 524.2, SM6251B.)

Non-Potable Water (Inorganic Parameters: SM9222D, 9221B, 9222B, 9221E-EC, EPA 200.7, 200.8, 245.1, 245.2, SW-846 6010B, 6020, 7196A, 7470A, SM3500-CR-D, EPA 120.1, 300.0, 350.1, 351.1, 353.2, 420.1, 1664A, SW-846 9010, 9030, 9040B, SM426C, SM2310B, 2540B, 2540D, 4500H+B, 4500NH3-H, 4500NH3-E, 4500NO2-B, 4500P-E, 4500-S2-D, 5210B, 2320B, 2540C, 4500F-C, 5310C, 5540C, LACHAT 10-117-07-1-B, LACHAT 10-107-06-1-B, LACHAT 10-107-04-1-J, LACHAT 10-117-07-1-A, SM4500CL-E, LACHAT 10-204-00-1-A, LACHAT 10-107-06-2-D. Organic Parameters: SW-846 3005A, 3015A, 3510C, 5030B, 8021B, 8260B, 8270C, 8330, EPA 624, 625, 608, SW-846 8082, 8081A.)

Solid & Chemical Materials (Inorganic Parameters: SW-846 6010B, 7196A, 7471A, 7.3.3.2, 7.3.4.2, 1010, 1030, 9010, 9012A, 9014, 9030B, 9040, 9045C, 9050C, 1311, 3005A, 3050B, 3051A. Organic Parameters: SW-846 3540C, 3545, 3580A, 5030B, 5035, 8021B, 8260B, 8270C, 8330, 8151A, 8082, 8081A.)

New Jersey Department of Environmental Protection Certificate/Lab ID: MA935. NELAP Accredited.

Drinking Water (Inorganic Parameters: SM9222B, 9221E, 9223B, 9215B, 4500NO3-F, 4500F-C, EPA 300.0, 200.7, 2540C, 2320B, 314.0, SM2120B, 2510B, 5310C, SM4500H-B, EPA 200.8, 245.2. Organic Parameters: 504.1,

SM6251B, 524.2.)

Non-Potable Water (Inorganic Parameters: SM5210B, EPA 410.4, SM5220D, 4500Cl-D, EPA 300.0, SM2120B, SM4500F-BC, EPA 200.7, 351.1, LACHAT 10-107-06-2-D, EPA 353.2, SM4500NO3-F, 4500NO2-B, EPA 1664A, SM5310B, C or D, 4500-PE, EPA 420.1, SM4500P-B5+E, 2540B, 2540C, 2540D, EPA 120.1, SM2510B, SM15 426C, SM9221CE, 9222D, 9221B, 9222B, 9215B, 2310B, 2320B, 4500NH3-H, 4500-S D, EPA 350.1, SM5210B, SW-846 3015, 6020, 7470A, 5540C, 4500H-B, EPA 200.8, SM3500Cr-D, EPA 245.1, 245.2, SW-846 9040B, 3005A, EPA 6010B, 7196A, SW-846 9010B, 9030B, Organic Parameters: SW-846 8260B, 8270C, 3510C, EPA 608, 624, 625, SW-846 5030B, 8021B, 8081A, 8082, 8151A, 8330, NJ OQA-QAM-025 Rev.7.)

Solid & Chemical Materials (Inorganic Parameters: SW-846 9040B, 3005A, 6010B, 7196A, 5030B, 9010B, 9030B, 1030, 1311, 3050B, 3051, 7471A, 9014, 9012A, 9045C, 9050A, 9065. Organic Parameters: SW-846 8021B, 8081A, 8082, 8151A, 8330, 8260B, 8270C, 1311, 1312, 3540C, 3545, 3550B, 3580A, 5035L, 5035H, NJ OQA-QAM-025 Rev 7.)

New York Department of Health Certificate/Lab ID: 11148. NELAP Accredited.

Drinking Water (Inorganic Parameters: SM9223B, 9222B, 9215B, EPA 200.8, 200.7, 245.2, SM5310C, EPA 314.0, 332.0, SM2320B, EPA 300.0, SM2120B, 4500CN-E, 4500F-C, 4500H-B, 4500NO3-F, 2540C, EPA 120.1, SM 2510B.

Organic Parameters: EPA 524.2, 504.1.)

Non-Potable Water (Inorganic Parameters: SM9221E, 9222D, 9221B, 9222B, 9215B, 5210B, EPA 410.4, SM5220D, 2310B-4a, 2320B, EPA 200.7, 300.0, LACHAT 10-117-07-1A or B, SM4500CI-E, 4500F-C, SM15 426C, EPA 350.1, LACHAT 10-107-06-1-B, SM4500NH3-H, EPA 351.1, LACHAT 10-107-06-2, EPA 353.2, LACHAT 10-107-041-C, SM4500-NO3-F, 4500-NO2-B, 4500P-E, 2540C, 2540B, 2540D, EPA 200.8, EPA 6010B, 6020, EPA 7196A, S\M3500Cr-D, EPA 245.1, 245.2, 7470A, SM2120B, SM4500-CN-E LACHAT 10-204-00-1-A, EPA 9040B, SM4500-HB, EPA 1664A, SM5310C, EPA 420.1, SM14-510C, EPA 120.1, SM2510B, SM4500S-D, SM5540C, EPA 3005A, 3015. Organic Parameters: EPA 624, 8260B, 8270C, 625, 608, 8081A, 8151A, 8330, 8082, EPA 3510C, 5030B, 9010B, 9030B.)

Solid & Hazardous Waste (Inorganic Parameters: 1010, 1030, SW-846 Ch 7 Sec 7.3, EPA 6010B, 7196A, 7471A, 9012A, 9014, 9040B, 9045C, 9065, 9050, EPA 1311, 1312, 3005A, 3050B, 9010B, 9030B. Organic Parameters: EPA 8260B, 8270C, 8081A, 8151A, 8330, 8082, 3540C, 3545, 3546, 3580, 5030B, 5035.)

North Carolina Department of the Environment and Natural Resources <u>Certificate/Lab ID</u>. 666. <u>Organic</u> Parameters: MA-EPH, MA-VPH.

Pennsylvania Department of Environmental Protection <u>Certificate/Lab ID</u>: 68-03671. *NELAP Accredited*. *Non-Potable Water* (<u>Organic Parameters</u>: EPA 3510C, 5030B, 625, 624. 608, 8081A, 8082, 8151A, 8260B, 8270C, 8330)

Solid & Hazardous Waste (Inorganic Parameters: EPA 1010, 1030, 1311, 3050B, 3051, 6010B, EPA 7.3.3.2, EPA 7.3.4.2, 7196A, 7471A, 9010B, 9012A, 9014, 9040B, 9045C, 9050, 9065. Organic Parameters: 3540C, 3545, 3580A, 5035, 8021B, 8081A, 8082, 8151A, 8260B, 8270C, 8330)

Rhode Island Department of Health <u>Certificate/Lab ID</u>: LAO00065. *NELAP Accredited via NY-DOH*. Refer to MA-DEP Certificate for Potable and Non-Potable Water. Refer to NY-DOH Certificate for Potable and Non-Potable Water.

Texas Commisson on Environmental Quality Certificate/Lab ID: T104704476-09-1. *NELAP Accredited. Non-Potable Water* (Inorganic Parameters: EPA 120.1, 1664, 200.7, 200.8, 245.1, 245.2, 300.0, 350.1, 351.1, 353.2, 376.2, 410.4, 420.1, 6010, 6020, 7196, 7470, 9040, SM 2120B, 2310B, 2320B, 2510B, 2540B, 2540C, 2540D, 426C, 4500CL-E, 4500CN-E, 4500F-C, 4500H+B, 4500NH3-H, 4500NO2B, 4500P-E, 4500 S2 D, 510C, 5210B, 5220D, 5310C, 5540C. Organic Parameters: EPA 608, 624, 625, 8081, 8082, 8151, 8260, 8270, 8330.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 1311, 1312, 9012, 9014, 9040, 9045, 9050, 9065.)

Department of Defense Certificate/Lab ID: L2217.

Drinking Water (Inorganic Parameters: SM 4500H-B. Organic Parameters: EPA 524.2, 504.1.)

Non-Potable Water (Inorganic Parameters: EPA 200.7, 200.8, 6010B, 6020, 245.1, 245.2, 7470A, 9040B, 300.0, 9251, 9038, 350.1, 353.2, 351.1, 120.1, 9050A, 410.4, 9060, 1664, 420.1, LACHAT 10-107-06-1-B, SM 4500CN-E, 4500H-B, 4500CL-E, 4500F-BC, 4500SO4-E, 426C, 4500NH3-B, 4500NH3-H, 4500NO3-F, 4500NO2-B, 4500Norg-C, 4500PE, 2510B, 5540C, 5220D, 5310C, 2540B, 2540C, 2540D, 510C, 4500S2-AD, 3005A, 3015, 9010B, 9030B. Organic Parameters: EPA 8260B, 8270C, 8330, 625, 8082, 8151A, 8081A, 3510C, 5030B, MassDEP EPH, MassDEP VPH.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 200.7, 6010B, 7471A, 9040B, 9045C, 9065, 420.1, 9012A, 6860, 1311, 1312, 3050B, 9030B, 3051, 9010B, 3540C, SM 510ABC, 4500CN-CE, 2540G, SW-846 7.3, Organic Parameters: EPA 8260B, 8270C, 8330, 8082, 8081A, 8151A, 3545, 3546, 3580, 5035, MassDEP EPH, MassDEP VPH.)

Analytes Not Accredited by NELAP

Certification is not available by NELAP for the following analytes: **EPA 8260B:** Freon-113, 1,2,4,5-Tetramethylbenzene, 4-Ethyltoluene. **EPA 8330A:** PETN, Picric Acid, Nitroglycerine, 2,6-DANT, 2,4-DANT. **EPA 8270C:** Methyl naphthalene, Dimethyl naphthalene, Total Methylnaphthalenes, Total Dimethylnaphthalenes, 1,4-Diphenylhydrazine (Azobenzene). **EPA 625:** 4-Chloroaniline. **EPA 350.1** for Ammonia in a Soil matrix.

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ANALYTICAL REPORT

Lab Number:

L1013812

Client:

Sovereign Consulting

905B South Main Street Mansfield, MA 02048

ATTN:

Phil McBain

Phone:

(508) 339-3200

Project Name:

SHL TASK 0002

Project Number:

AC001

Report Date:

09/20/10

Certifications & Approvals: MA (M-MA086), NY NELAC (11148), CT (PH-0574), NH (2003), NJ (MA935), RI (LAO00065), ME (MA0086), PA (Registration #68-03671), USDA (Permit #S-72578), US Army Corps of Engineers, Naval FESC.

Eight Walkup Drive, Westborough, MA 01581-1019 508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com



Project Name:

SHL TASK 0002

Project Number: AC001

Lab Number:

L1013812

Report Date:

09/20/10

Alpha Sample ID	Client ID	Sample Location	Collection Date/Time		
L1013812-01	SHM-10-08-090710-U	DEVENS, MA	09/07/10 11:53		
L1013812-02	SHM-10-03-090710-U	DEVENS, MA	09/07/10 10:45		
L1013812-03	SHM-10-02-090710-U	DEVENS, MA	09/07/10 14:30		
L1013812-04	SHM-10-04-090710-U	DEVENS, MA	09/07/10 14:30		

Project Name:

SHL TASK 0002

Project Number:

AC001

Lab Number:

L1013812

Report Date:

09/20/10

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted, Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report,

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet all of the requirements of NELAC, for all NELAC accredited parameters. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.), Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

For additional information, please contact Client Services at 800-624-9220.

Report Submission

This report contains the results for the Dissolved Inorganic Carbon analysis. The results for all other analyses have been issued under separate cover.

Dissolved Inorganic Carbon

L1013812-01 through -04 have elevated detection limits due to the dilutions required by the elevated concentrations present in the samples.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:

Michelle M. Morris

Title: Technical Director/Representative

Date: 09/20/10

INORGANICS & MISCELLANEOUS

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Serial_No:09201021:22

Project Name: SHL TASK 0002

Lab Number:

L1013812

Project Number: AC001

Report Date: 09/20/10

SAMPLE RESULTS

Lab ID:

L1013812-01

Client ID:

SHM-10-08-090710-U

Sample Location:

DEVENS, MA

Matrix:

Water

Date Collected:

09/07/10 11:53

Date Received:

09/07/10

Field Prep:

Not Specified

e red	Date Analyzed	Analytical Method	Analyst	

Date Dilution MDL Factor Prepar **Parameter** Qualifier Units Result General Chemistry Dissolved Inorganic Carbon 20 20 09/07/10 21:00 09/20/10 10:56 30,5310C(m) DW 110 mg/l

Project Name:

SHL TASK 0002

Lab Number:

L1013812

Project Number: AC001

Report Date:

09/20/10

SAMPLE RESULTS

Lab ID:

L1013812-02

Client ID:

SHM-10-03-090710-U

Sample Location:

DEVENS, MA

Matrix:

Water

Date Collected:

09/07/10 10:45

Date Received:

09/07/10

Field Prep:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry										
Dissolved Inorganic Carbon	26		mg/l	20	**	20	09/07/10 21:00	09/20/10 10:56	30,5310C(m)	DW

Project Name:

SHL TASK 0002

Project Number: AC001

Lab Number:

L1013812

Report Date:

09/20/10

SAMPLE RESULTS

Lab ID:

L1013812-03

Client ID:

SHM-10-02-090710-U

Sample Location: DEVENS, MA

Matrix:

Water

Date Collected:

09/07/10 14:30

Date Received:

09/07/10

Field Prep:

Parameter	Result	Qualifler	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry										
Dissolved Inorganic Carbon	62		mg/l	20		20	09/07/10 21:00	09/20/10 10:56	30,5310C(m)	DW

Project Name:

SHL TASK 0002

Lab Number:

L1013812

Project Number: AC001

Report Date:

09/20/10

SAMPLE RESULTS

Lab ID:

L1013812-04

Client ID:

SHM-10-04-090710-U

Sample Location: Matrix:

DEVENS, MA

Water

Date Collected:

09/07/10 14:30

Date Received:

09/07/10

Field Prep:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry										
Dissolved Inorganic Carbon	43		mg/l	20	**	20	09/07/10 21:00	09/20/10 10:56	30,5310C(m)	DW

Project Name:

SHL TASK 0002

Project Number: AC001

Lab Number:

L1013812

Report Date:

09/20/10

Method Blank Analysis Batch Quality Control

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry for sai	mple(s): 01-04 Bato	h: WG43	3232-1						
Dissolved Inorganic Carbon	ND	mg/l	1.0	-	1	09/07/10 21:00	09/20/10 10:56	30,5310C(m)	DW

Lab Control Sample Analysis
Batch Quality Control

SHL TASK 0002 Batch Quality Cont

Lab Number:

L1013812

Report Date:

09/20/10

	LCS		LCSD		%Recovery				
Parameter	%Recovery	Qual	%Recovery	Qual	Limits	RPD	Qual	RPD Limits	

Associated sample(s): 01-04 Batch: WG433232-2

AC001

Dissolved Inorganic Carbon

Project Name:

Project Number:

120

Lab Duplicate Analysis
Batch Quality Control

Lab Number:

L1013812

Report Date:

09/20/10

Parameter	Na	itive Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Associated sample(s): 01-04	QC Batch ID: WG433232-3	QC Sample: L'	1013812-03 Client ID: SI	HM-10-02-090	710-U		
Dissolved Inorganic Carbon	••	62	64	ma/l	3		

Project Name:

Project Number: AC001

SHL TASK 0002

Project Name: SHL TASK 0002

Lab Number: L1013812 Project Number: AC001 Report Date: 09/20/10

Sample Receipt and Container Information

Were project specific reporting limits specified?

YES

Reagent H2O Preserved Vials Frozen on: NA

Cooler Information Custody Seal

Cooler

В

Present/Intact

Α

Present/Intact

Container Info	ormation			Temp			
Container ID	Container Type	Cooler	рН	deg C	Pres	Seal	Analysis(*)
L1013812-01A	Vial H2SO4 preserved split	В	N/A	4	Y	Present/Intact	SPECWC()
L1013812-01B	Vial H2SO4 preserved split	В	N/A	4	Y	Present/Intact	SPECWC()
L1013812-01X	Amber 250ml unpreserved	В	6	4	Y	Present/Intact	SPECWC()
L1013812-02A	Vial H2SO4 preserved split	Α	N/A	3	Y	Present/Intact	SPECWC()
L1013812-02B	Vial H2SO4 preserved split	Α	N/A	3	Y	Present/Intact	SPECWC()
L1013812-02X	Amber 250ml unpreserved	Α	6	3	Y	Present/Intact	SPECWC()
L1013812-03A	Vial H2SO4 preserved split	Α	N/A	3	Y	Present/Intact	SPECWC()
L1013812-03B	Vial H2SO4 preserved split	Α	N/A	3	Y	Present/Intact	SPECWC()
L1013812-03X	Amber 250ml unpreserved	Α	6	3	Y	Present/Intact	SPECWC()
L1013812-04A	Vial H2SO4 preserved split	A	N/A	3	Y	Present/Intact	SPECWC()
L1013812-04B	Vial H2SO4 preserved split	Α	N/A	3	Y	Present/Intact	SPECWC()
L1013812-04X	Amber 250ml unpreserved	Α	6	3	Y	Present/Intact	SPECWC()

Container Comments

L1013812-03A

Project Name:

SHL TASK 0002

Lab Number:

L1013812

Project Number:

AC001

Report Date:

09/20/10

GLOSSARY

Acronyms

EPA - Environmental Protection Agency.

Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known
amounts of analytes or a material containing known and verified amounts of analytes.

LCSD - Laboratory Control Sample Duplicate: Refer to LCS.

MDL —Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

MS Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.

MSD Matrix Spike Sample Duplicate: Refer to MS,

NA Not Applicable.

NC Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.

NI Not Ignitable.

Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to
assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD).
 Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the
absolute difference between the values; although the RPD value will be provided in the report.

Terms

Analytical Method; Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Data Qualifiers

- A Spectra identified as "Aldol Condensation Product".
- The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than five times (5x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank.
- Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- H The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- The RPD between the results for the two columns exceeds the method-specified criteria; however, the lower value
 has been reported due to obvious interference.
- P The RPD between the results for the two columns exceeds the method-specified criteria.
- The quality control sample exceeds the associated acceptance criteria. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R Analytical results are from sample re-analysis.

Report Format: Data Usability Report

ALPHA

 Project Name:
 SHL TASK 0002
 Lab Number:
 L1013812

 Project Number:
 AC001
 Report Date:
 09/20/10

Data Qualifiers

RE - Analytical results are from sample re-extraction.

J Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

ND Not detected at the reporting limit (RL) for the sample.

Report Format: Data Usability Report

Project Name:

SHL TASK 0002

Lab Number:

L1013812

Project Number:

AC001

Report Date:

09/20/10

REFERENCES

30 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WPCF, 18th Edition, 1992.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

DIPHA

Certificate/Approval Program Summary

Last revised July 19, 2010 - Westboro Facility

The following list includes only those analytes/methods for which certification/approval is currently held.

For a complete listing of analytes for the referenced methods, please contact your Alpha Customer Service Representative.

Connecticut Department of Public Health Certificate/Lab ID: PH-0574. NELAP Accredited Solid Waste/Soil.

Drinking Water (Inorganic Parameters: Color, pH, Turbidity, Conductivity, Alkalinity, Chloride, Free Residual Chlorine, Fluoride, Calcium Hardness, Sulfate, Nitrate, Nitrite, Aluminum, Antimony, Arsenic, Barium, Beryllium, Cadmium, Calcium, Chromium, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Vanadium, Zinc, Total Dissolved Solids, Total Organic Carbon, Total Cyanide, Perchlorate. Organic Parameters: Volatile Organics 524.2, Total Trihalomethanes 524.2, 1,2-Dibromo-3-chloropropane (DBCP), Ethylene Dibromide (EDB), 1,4-Dioxane (Mod 8270). Microbiology Parameters: Total Coliform-MF mEndo (SM9222B), Total Coliform – Colilert (SM9223 P/A), E. Coli. – Colilert (SM9223 P/A), HPC – Pour Plate (SM9215B), Fecal Coliform – MF m-FC (SM9222D))

Wastewater/Non-Potable Water (Inorganic Parameters: Color, pH, Conductivity, Acidity, Alkalinity, Chloride, Total Residual Chlorine, Fluoride, Total Hardness, Silica, Sulfate, Sulfide, Ammonia, Kjeldahl Nitrogen, Nitrate, Nitrite, O-Phosphate, Total Phosphorus, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Strontium, Thallium, Tin, Titanium, Vanadium, Zinc, Total Residue (Solids), Total Dissolved Solids, Total Suspended Solids (non-filterable), BOD, CBOD, COD, TOC, Total Cyanide, Phenolics, Foaming Agents (MBAS), Bromide, Oil and Grease. Organic Parameters: PCBs, Organochlorine Pesticides, Technical Chlordane, Toxaphene, 2,4-D, 2,4,5-TP(Silvex), Acid Extractables (Phenols), Benzidines, Phthalate Esters, Nitrosamines, Nitroaromatics & Isophorone, Polynuclear Aromatic Hydrocarbons, Haloethers, Chlorinated Hydrocarbons, Volatile Organics, TPH (HEM/SGT), Extractable Petroleum Hydrocarbons (ETPH), MA-EPH, MA-VPH. Microbiology Parameters: Total Coliform – MF mendo (SM9222B), Total Coliform – MTF (SM9221B), HPC – Pour Plate (SM9215B), Fecal Coliform – MF m-FC (SM9222D), Fecal Coliform – A-1 Broth (SM9221E).)

Solid Waste/Soil (Inorganic Parameters: pH, Sulfide, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Tin, Vanadium, Zinc, Total Cyanide, Ignitability, Phenolics, Corrosivity, TCLP Leach (1311), SPLP Leach (1312 metals only), Reactivity. Organic Parameters: PCBs, PCBs in Oil, Organic Petroleum Hydrocarbons (ETPH), MA-EPH, MA-VPH, Dicamba, 2,4-D, 2,4.5-T, 2,4,5-TP(Silvex), Volatile Organics, Acid Extractables (Phenols), 3 3'-Dichlorobenzidine, Phthalates, Nitrosamines, Nitroaromatics & Cyclic Ketones, PAHs, Haloethers, Chlorinated Hydrocarbons.)

Maine Department of Human Services Certificate/Lab ID: 2009024.

Drinking Water (Inorganic Parameters: SM9215B, 9222D, 9223B, EPA 180.1, 300.0, 353.2, SM2130B, 2320B, 4500Cl-D, 4500CN-C, 4500CN-E, 4500F-C, 4500H+B, 4500NO3-F, EPA 200.7, EPA 200.8, 245.1, EPA 300.0. Organic Parameters: 504.1, 524.2.)

Wastewater/Non-Potable Water (Inorganic Parameters: EPA 120.1, 1664A, 350.1, 351.1, 353.2, 410.4, 420.1, Lachat 10-107-06-1-B, SM2320B, 2340B, 2510B, 2540C, 2540D, 426C, 4500Cl-D, 4500Cl-E, 4500CN-C, 4500CN-E, 4500F-B, 4500F-C, 4500H+B, 4500Norg-B, 4500Norg-C, 4500NH3-B, 4500NH3-G, 4500NH3-H, 4500NO3-F, 4500P-B.5, 4500P-E, 5210B, 5220D, 5310C, EPA 200.7, 200.8, 245.1. Organic Parameters: 608, 624, ME DRO, ME GRO, MA EPH, MA VPH.)

Solid Waste/Soil (Organic Parameters: ME DRO, ME GRO, MA EPH, MA VPH.)

Massachusetts Department of Environmental Protection Certificate/Lab ID: M-MA086.

Drinking Water

Inorganic Parameters: (EPA 200.8 for: Sb,As,Ba,Be,Cd,Cr,Cu,Pb,Ni,Se,Tl)

(EPA 200.7 for: Ba,Be,Ca,Cd,Cr,Cu,Na,Ni) 245.1, (300.0 for: Nitrate-N, Fluoride, Sulfate)

353.2 for: Nitrate-N, Nitrite-N; SM4500NO3-F, 4500F-C, 4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, 2320B, SM2540C, SM4500H-B.

Organic Parameters: (EPA 524.2 for: Trihalomethanes, Volatile Organics) (504.1 for: 1,2-Dibromoethane, 1,2-Dibromo-3-Chloropropane), 314.0, 332

Microbiology Parameters: SM9215B; ENZ. SUB. SM9223; MF-SM9222D

Non-Potable Water

Inorganic Parameters:, (EPA 200.8 for: Al,Sb,As,Be,Cd,Cr,Cu,Pb,Mn,Ni,Se,Ag,Tl,Zn)

(EPA 200.7 for: Al,Sb,As,Be,Cd,Cr,Co,Cu,Fe,Pb,Mn,Mo,Ni,Se,Ag,Sr,Ti,Tl, V,Zn,Ca,Mg,Na,K)

245.1, SM4500H,B, EPA 120.1, SM2510B, 2540C, 2540B, 2340B, 2320B, 4500CL-E, 4500F-BC, 426C, SM4500NH3-BH, (EPA 350.1 for: Ammonia-N), LACHAT 10-107-06-1-B for Ammonia-N, SM4500NO3-F, 353.2 for Nitrate-N, SM4500NH3-B,C-Titr, SM4500NH3-BC-NES, EPA 351.1, SM4500P-E, 4500P-B,E, 5220D, EPA 410.4, SM 5210B,

5310C, 4500CL-D, EPA 1664, SM14 510AC, EPA 420, SM4500-CN-CE, SM2540D.

Organic Parameters: (EPA 624 for Volatile Halocarbons, Volatile Aromatics)

(608 for: Chlordane, Aldrin, Dieldrin, DDD, DDE, DDT, Heptachlor, Heptachlor Epoxide, PCBs-Water), EPA 625 for SVOC Acid Extractables and SVOC Base/Neutral Extractables, 600/4-81-045-PCB-Oil

New Hampshire Department of Environmental Services Certificate/Lab ID: 200307. NELAP Accredited.

Drinking Water (Inorganic Parameters: SM6215B, 9222B, 9223B Colilert, EPA 200.7, 200.8, 245.2, 120.1, 300.0, 314.0, SM4500CN-E, 4500H+B, 4500NO3-F, 2320B, 2510B, 2540C, 4500F-C, 5310C, 2120B, EPA 331.0. Organic

Parameters: 504.1, 524.2, SM6251B.)

Non-Potable Water (Inorganic Parameters: SM9222D, 9221B, 9222B, 9221E-EC, EPA 200.7, 200.8, 245.1, 245.2, SW-846 6010B, 6020, 7196A, 7470A, SM3500-CR-D, EPA 120.1, 300.0, 350.1, 351.1, 353.2, 420.1, 1664A, SW-846 9010, 9030, 9040B, SM426C, SM2310B, 2540B, 2540D, 4500H+B, 4500NH3-H, 4500NH3-E, 4500NO2-B, 4500P-E, 4500-S2-D, 5210B, 2320B, 2540C, 4500F-C, 5310C, 5540C, LACHAT 10-117-07-1-B, LACHAT 10-107-06-1-B, LACHAT 10-107-06-1-J, LACHAT 10-117-07-1-A, SM4500CL-E, LACHAT 10-204-00-1-A, LACHAT 10-107-06-2-D. Organic Parameters: SW-846 3005A, 3015A, 3510C, 5030B, 8021B, 8260B, 8270C, 8330, EPA 624, 625, 608, SW-846 8082, 8081A.)

Solid & Chemical Materials (Inorganic Parameters: SW-846 6010B, 7196A, 7471A, 7.3.3.2, 7.3.4.2, 1010, 1030, 9010, 9012A, 9014, 9030B, 9040, 9045C, 9050C, 1311, 3005A, 3050B, 3051A. Organic Parameters: SW-846 3540C, 3545, 3580A, 5030B, 5035, 8021B, 8260B, 8270C, 8330, 8151A, 8082, 8081A.)

New Jersey Department of Environmental Protection Certificate/Lab ID: MA935. NELAP Accredited.

Drinking Water (Inorganic Parameters: SM9222B, 9221E, 9223B, 9215B, 4500NO3-F, 4500F-C, EPA 300.0, 200.7, 2540C, 2320B, 314.0, SM2120B, 2510B, 5310C, SM4500H-B, EPA 200.8, 245.2. Organic Parameters: 504.1, SM6251B, 524.2.)

Non-Potable Water (Inorganic Parameters: SM5210B, EPA 410.4, SM5220D, 4500Cl-D, EPA 300.0, SM2120B, SM4500F-BC, EPA 200.7, 351.1, LACHAT 10-107-06-2-D, EPA 353.2, SM4500NO3-F, 4500NO2-B, EPA 1664A, SM5310B, C or D, 4500-PE, EPA 420.1, SM4500P-B5+E, 2540B, 2540C, 2540D, EPA 120.1, SM2510B, SM15 426C, SM9221CE, 9222D, 9221B, 9222B, 9215B, 2310B, 2320B, 4500NH3-H, 4500-S D, EPA 350.1, SM5210B, SW-846 3015, 6020, 7470A, 5540C, 4500H-B, EPA 200.8, SM3500Cr-D, EPA 245.1, 245.2, SW-846 9040B, 3005A, EPA 6010B, 7196A, SW-846 9010B, 9030B. Organic Parameters: SW-846 8260B, 8270C, 3510C, EPA 608, 624, 625, SW-846 5030B, 8021B, 8081A, 8082, 8151A, 8330, NJ OQA-QAM-025 Rev.7.)

Solid & Chemical Materials (Inorganic Parameters: SW-846 9040B, 3005A, 6010B, 7196A, 5030B, 9010B, 9030B, 1030, 1311, 3050B, 3051, 7471A, 9014, 9012A, 9045C, 9050A, 9065, Organic Parameters: SW-846 8021B, 8081A, 8082, 8151A, 8330, 8260B, 8270C, 1311, 1312, 3540C, 3545, 3550B, 3580A, 5035L, 5035H, NJ QQA-QAM-025 Rev.7.)

New York Department of Health Certificate/Lab ID: 11148. NELAP Accredited.

Drinking Water (Inorganic Parameters: SM9223B, 9222B, 9215B, EPA 200.8, 200.7, 245.2, SM5310C, EPA 314.0, 332.0, SM2320B, EPA 300.0, SM2120B, 4500CN-E, 4500F-C, 4500H-B, 4500NO3-F, 2540C, EPA 120.1, SM 2510B, Organic Parameters: EPA 524.2, 504.1.)

Non-Potable Water (Inorganic Parameters: SM9221E, 9222D, 9221B, 9222B, 9215B, 5210B, EPA 410.4, SM5220D, 2310B-4a, 2320B, EPA 200.7, 300.0, LACHAT 10-117-07-1A or B, SM4500Cl-E, 4500F-C, SM15 426C, EPA 350.1, LACHAT 10-107-06-1-B, SM4500NH3-H, EPA 351.1, LACHAT 10-107-06-2, EPA 353.2, LACHAT 10-107-041-C, SM4500-NO3-F, 4500-NO2-B, 4500P-E, 2540C, 2540B, 2540D, EPA 200.8, EPA 6010B, 6020, EPA 7196A, SM3500Cr-D, EPA 245.1, 245.2, 7470A, SM2120B, SM4500-CN-E LACHAT 10-204-00-1-A, EPA 9040B, SM4500-HB, EPA 1664A, SM5310C, EPA 420.1, SM14 510C, EPA 120.1, SM2510B, SM4500S-D, SM5540C, EPA 3005A, 3015. Organic Parameters: EPA 624, 8260B, 8270C, 625, 608, 8081A, 8151A, 8330, 8082, EPA 3510C, 5030B, 9010B, 9030B.)

Solid & Hazardous Waste (Inorganic Parameters: 1010, 1030, SW-846 Ch 7 Sec 7.3, EPA 6010B, 7196A, 7471A, 9012A, 9014, 9040B, 9045C, 9065, 9050, EPA 1311, 1312, 3005A, 3050B, 9010B, 9030B. Organic Parameters: EPA 8260B, 8270C, 8081A, 8151A, 8330, 8082, 3540C, 3545, 3546, 3580, 5030B, 5035.)

North Carolina Department of the Environment and Natural Resources <u>Certificate/Lab ID</u>: 666. <u>Organic Parameters</u>: MA-EPH, MA-VPH.

Pennsylvania Department of Environmental Protection <u>Certificate/Lab ID</u>: 68-03671. *NELAP Accredited*. *Non-Potable Water* (<u>Organic Parameters</u>: EPA 3510C, 5030B, 625, 624. 608, 8081A, 8082, 8151A, 8260B, 8270C, 8330)

Solid & Hazardous Waste (Inorganic Parameters: EPA 1010, 1030, 1311, 3050B, 3051, 6010B, EPA 7.3.3.2, EPA 7.3.4.2, 7196A, 7471A, 9010B, 9012A, 9014, 9040B, 9045C, 9050, 9065. Organic Parameters: 3540C, 3545, 3580A, 5035, 8021B, 8081A, 8082, 8151A, 8260B, 8270C, 8330)

Rhode Island Department of Health Certificate/Lab ID: LAO00065. *NELAP Accredited via NY-DOH*. Refer to MA-DEP Certificate for Potable and Non-Potable Water. Refer to NY-DOH Certificate for Potable and Non-Potable Water.

Texas Commisson on Environmental Quality <u>Certificate/Lab ID</u>: T104704476-09-1. *NELAP Accredited*. *Non-Potable Water* (<u>Inorganic Parameters</u>: EPA 120.1, 1664, 200.7, 200.8, 245.1, 245.2, 300.0, 350.1, 351.1, 353.2, 376.2, 410.4, 420.1, 6010, 6020, 7196, 7470, 9040, SM 2120B, 2310B, 2320B, 2510B, 2540B, 2540C, 2540D, 426C, 4500CL-E, 4500CN-E, 4500F-C, 4500H+B, 4500NH3-H, 4500NO2B, 4500P-E, 4500 S2 D, 510C, 5210B, 5220D, 5310C, 5540C. <u>Organic Parameters</u>: EPA 608, 624, 625, 8081, 8082, 8151, 8260, 8270, 8330.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 1311, 1312, 9012, 9014, 9040, 9045, 9050, 9065.)

Department of Defense Certificate/Lab ID: L2217.

Drinking Water (Inorganic Parameters: SM 4500H-B. Organic Parameters: EPA 524.2, 504.1.)

Non-Potable Water (Inorganic Parameters: EPA 200.7, 200.8, 6010B, 6020, 245.1, 245.2, 7470A, 9040B, 300.0, 9251, 9038, 350.1, 353.2, 351.1, 120.1, 9050A, 410.4, 9060, 1664, 420.1, LACHAT 10-107-06-1-B, SM 4500CN-E, 4500H-B, 4500CL-E, 4500F-BC, 4500SO4-E, 426C, 4500NH3-B, 4500NH3-H, 4500NO3-F, 4500NO2-B, 4500Norg-C, 4500PE, 2510B, 5540C, 5220D, 5310C, 2540B, 2540C, 2540D, 510C, 4500S2-AD, 3005A, 3015, 9010B, 9030B. Organic Parameters: EPA 8260B, 8270C, 8330, 625, 8082, 8151A, 8081A, 3510C, 5030B, MassDEP EPH, MassDEP VPH.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 200.7, 6010B, 7471A, 9040B, 9045C, 9065, 420.1, 9012A, 6860, 1311, 1312, 3050B, 9030B, 3051, 9010B, 3540C, SM 510ABC, 4500CN-CE, 2540G, SW-846 7.3, Organic Parameters: EPA 8260B, 8270C, 8330, 8082, 8081A, 8151A, 3545, 3546, 3580, 5035, MassDEP EPH, MassDEP VPH.)

Analytes Not Accredited by NELAP

Certification is not available by NELAP for the following analytes: **EPA 8260B:** Freon-113, 1,2,4,5-Tetramethylbenzene, 4-Ethyltoluene. **EPA 8330A:** PETN, Picric Acid, Nitroglycerine, 2,6-DANT, 2,4-DANT. **EPA 8270C:** Methyl naphthalene, Dimethyl naphthalene, Total Methylnaphthalenes, Total Dimethylnaphthalenes, 1,4-Diphenylhydrazine (Azobenzene). **EPA 625:** 4-Chloroaniline. **EPA 350.1** for Ammonia in a Soil matrix.

	CHAIN OF	CU	STO	YC	PAGE /	OF	Dat	e Rec	d in	Lab:	9	17	///2			AL	РНА	Join#		
MEPHA	MANOCIEL D. MA	Project	Informati	on			Re	port	Info	rmat	ion -	Data	Dei	ivera	bles	Bil	ling l	nformati	on	
WESTBORO, MA TEL: 508-898-9220	MANSFIELD, MA TEL: 508-822-9300			-	h oces	2		FAX			E EN	AAIL (ED	R		□ St	ame a	s Client int	fo PO#:	
FAX: 508-898-9193 Client Information	FAX: 508-822-3288	Project L		7	's MA		2	ADEX			□ Add	f'i De	elivera	bles						
Section Section 1		Project #	1		3 0 10 1		Reg	ulato	ory R	lequ	ireme	ents/	Repo	ort L	imits					
	n Consulting Inc	Project N		chil M	10.		State	e /Fec	Pro	gram			3.0		C	iteria S	EE	WAPI	0	
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m	MA OZOY8	Street, Street,		and the				Yes			Are N	ICP A	nalyt	ical M	ethod	is Requir	red?			
Phone: 508-3	39-3206	Turn-A	round Tir	ne				Yes					16						see note in Comm	ents)
Fax: 507-33	39-3248	Standa	ard 🗆	RUSH (only	confirmed if pre-sp	oprovedl)	- Lu	res)	et No		Are C	RCI	PIRE	ason	able (onnoend	ce Pro	tocols) Re	driteds	
Email: pmcban	: @ sacan.com	Date Du	41		Time:			S /	1	1	1	1	1	- /	/	11	11	11		0
	ve been previously analyzed by Alpha pecific Requirements/Comm	LE-LY	91	14/10	24454		ANALLE		1	1	1	1	1	1	1	150	1	1	iltration 0.85	À
(Note: All CAM met	dicate in Sample Specific Comments whods for inorganic analyses require MS Closed Me fals = As, Fe	Done as	nil samples) nched F C. Pl. Ni,	Field F Na. G. K	Steel My			11/10	4/		00/07/3	w/ ~	1	10/0/0	100	Tokal S	/	/ 5	O Not needed Lab to do Preservation Lab to do Case specify below)	BOTT
(Lab Use Only)	Sample ID		Date	ection Time	Sample Matrix	Sampler's Initials	10	No	3/2	13	E/W	12	000	12	12/	9	1		Specific Commen	s s
13812	SAM-10-08-090710 -1		09/07/10	1153	GW	CMH							(6)			1				1
. 1	SHM-10-08-090710-L	1	9/07/10	1153	GW	CMH	V	1	V	1	V	0	V	1	1					13
	SHM-10-03-090710-1		9/7/10	1045	GW	EEF										1		- 1		1
	SHM-10-03-090710.	·U	9/7/10	1045	GW	EEF	V	1	1	V	1	1	1	1	1					13
	SAM-10-02-090710-	F	9/7/10	1430	GW	JAR										1	1	MS/MS!	0	2
	5HM-10-02-090710-	U	9/1/10	1430	6W	DAR	V	V	V	V	V	V	V	V	V		1	MS/MSL	>	20
	SHM-10-04-090710-	F	9/7/10	1430	GW	EEF														1
1 6	SHM-10-04-090710-	-U	9/7/10	1430	GW	EEF	1	V	V	1	1	V	-	V	1		M.			13
	RB-090710-U		9/7/10	1530	GW	RNM														11
	DUP-090710-F	. 1	4/7/10	1045	GN	EEF											91			1
	Dep-090710-U		9/7/10	1042	GW		1	0	V	V	-	1		V			26	opiestone se		10
PLEASE ANSWE	R QUESTIONS ABOVE!			-		iner Type	P	P	P	P	-		A	VI	PI	2	- Marie	Please or	velenių lode) a	1000
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FORM NO: 01-01 (rev. 18-Ja	an-2010)	-			1/1/1/	5	1	-	4.40		7 14	-	-	-	1	110				

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ANALYTICAL REPORT

Lab Number:

L1013865

Client:

Sovereign Consulting

905B South Main Street

Mansfield, MA 02048

ATTN:

Phil McBain

Phone:

(508) 339-3200

Project Name:

SHL TASK 0002

Project Number:

AC001

Report Date:

09/16/10

Certifications & Approvals: MA (M-MA086), NY NELAC (11148), CT (PH-0574), NH (2003), NJ (MA935), RI (LAO00065), ME (MA0086), PA (Registration #68-03671), USDA (Permit #S-72578), US Army Corps of Engineers, Naval FESC.

Eight Walkup Drive, Westborough, MA 01581-1019 508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com



Project Name:

Project Number:

SHL TASK 0002

AC001

Lab Number:

L1013865

Report Date:

Alpha Sample ID	Client ID	Sample Location	Collection Date/Time
L1013865-01	SHM-10-01-090810-F	DEVENS, MA	09/08/10 10:30
L1013865-02	SHM-10-01-090810-U	DEVENS, MA	09/08/10 10:30
L1013865-03	SHM-10-10-090810-F	DEVENS, MA	09/08/10 12:30
L1013865-04	SHM-10-10-090810-U	DEVENS, MA	09/08/10 12:30
L1013865-05	SHM-10-05A-090810-F	DEVENS, MA	09/08/10 11:00
L1013865-06	SHM-10-05A-090810-U	DEVENS, MA	09/08/10 11:00
L1013865-07	SHM-10-06-090810-F	DEVENS, MA	09/08/10 13:30
L1013865-08	SHM-10-06-090810-U	DEVENS, MA	09/08/10 13:30
L1013865-09	RB-090810-U	DEVENS, MA	09/08/10 14:00
L1013865-10	DUP-090810-F	DEVENS, MA	09/08/10 12:30
L1013865-11	DUP-090810-U	DEVENS, MA	09/08/10 12:30

Project Name: Project Number: SHL TASK 0002

AC001

Lab Number:

L1013865

Report Date:

09/16/10

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet all of the requirements of NELAC, for all NELAC accredited parameters. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

For additional information, please contact Client Services at 800-624-9220.

Report Submission

Testing performed for the reported analyses followed the guidelines established under the DoD QSM 4.1, where applicable.

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

The Dissolved Inorganic Carbon results will be issued under separate cover.

Sample Receipt

The samples were Field Filtered for Dissolved Metals only.

Dissolved Metals

L1013865-01, -03, -07 and -10 have elevated detection limits for all analytes due to the dilutions required by

Project Name:

SHL TASK 0002

Lab Number:

L1013865

Project Number:

AC001

Report Date:

09/16/10

Case Narrative (continued)

the high concentrations of target analytes. The requested reporting limits were not achieved. The WG431697-3 MS recovery for Manganese (40%), performed on L1013865-01, is invalid because the sample concentration is greater than four times the spike amount added.

Total Metals

L1013865-02, -04, -08 and -11 have elevated detection limit for all analytes due to the dilutions required by the high concentrations of target analytes. The requested reporting limits were not achieved.

The WG431695-3/-4 MS/MSD recoveries for Calcium (MSD at 127%) and Manganese (20%/220%), performed on L1013865-02, are invalid because the sample concentrations are greater than four times the spike amount added.

Solids, Total Suspended

WG431564: A Laboratory Duplicate was performed on sample L1013862-01, instead of L1013865-02 as requested, due to insufficient sample volume available for analysis.

Dissolved Organic Carbon

WG432438: A Laboratory Duplicate was performed on sample L1013865-04, instead of L1013865-02 as requested, due to insufficient sample volume available for analysis.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:

Wholl M. Unany Michelle M. Morris

Title: Technical Director/Representative

Date: 09/16/10

METALS

Project Name:

SHL TASK 0002

Lab Number:

L1013865

Project Number:

AC001

Report Date:

09/16/10

SAMPLE RESULTS

Lab ID:

L1013865-01

Client ID:

SHM-10-01-090810-F

Sample Location:

DEVENS, MA

Matrix:

Water

Date Collected:

09/08/10 10:30

Date Received:

Field Prep:

09/08/10

See Narrative

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Dissolved Metals - V	Vestboro	ugh Lab									
Aluminum, Dissolved	ND		ug/l	100	19.1	10	09/09/10 16:4	5 09/13/10 18:20	EPA 3005A	1,6020A	вм
Arsenic, Dissolved	7.87		ug/l	5.00	1.13	10	09/09/10 16:4:	5 09/13/10 18:20	EPA 3005A	1,6020A	вм
Calcium, Dissolved	43500		ug/l	1000	126.	10	09/09/10 16:4	5 09/13/10 18:20	EPA 3005A	1,6020A	ВМ
Chromium, Dissolved	ND		ug/l	5.00	1.86	10	09/09/10 16:4	5 09/13/10 18:20	EPA 3005A	1,6020A	вм
Iron, Dissolved	1680		ug/l	500	84.1	10	09/09/10 16:4	5 09/13/10 18:20	EPA 3005A	1,6020A	вм
Lead, Dissolved	ND		ug/l	5.00	0.500	10	09/09/10 16:4	5 09/13/10 18:20	EPA 3005A	1,6020A	вм
Magnesium, Dissolved	3780		ug/l	1000	41.0	10	09/09/10 16:4	5 09/13/10 18:20	EPA 3005A	1,6020A	вм
Manganese, Dissolved	10300		ug/l	10.0	1.36	10	09/09/10 16:4	5 09/13/10 18:20	EPA 3005A	1,6020A	вм
Nickel, Dissolved	4.31	J	ug/l	5.00	1.80	10	09/09/10 16:4	5 09/13/10 18:20	EPA 3005A	1,6020A	вм
Potassium, Dissolved	2280		ug/l	1000	182.	10	09/09/10 16:4	5 09/13/10 18:20	EPA 3005A	1,6020A	ВМ
Sodium, Dissolved	8770		ug/l	1000	182.	10	09/09/10 16:4	5 09/13/10 18:20	EPA 3005A	1,6020A	ВМ

Project Name:

SHL TASK 0002

Lab Number:

L1013865

Project Number:

AC001

Report Date:

09/16/10

SAMPLE RESULTS

Lab ID:

L1013865-02

Client ID:

SHM-10-01-090810-U

Sample Location:

DEVENS, MA

Matrix:

Water

Date Collected:

09/08/10 10:30

Date Received:

09/08/10

Field Prep:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Wes	stborough l	∟ab									
Aluminum, Total	33.3	J	ug/l	100	19.1	10	09/09/10 16:4	5 09/13/10 19:27	EPA 3005A	1,6020A	ВМ
Arsenic, Total	8.15		ug/l	5.00	1.13	10	09/09/10 16:4	5 09/13/10 19:27	EPA 3005A	1,6020A	ВМ
Calcium, Total	43100		ug/l	1000	126.	10	09/09/10 16:4	5 09/13/10 19:27	EPA 3005A	1,6020A	ВМ
Chromium, Total	ND		ug/l	5.00	1.86	10	09/09/10 16:4	5 09/13/10 19:27	EPA 3005A	1,6020A	ВМ
Iron, Total	1740		ug/l	500	84.1	10	09/09/10 16:4	5 09/13/10 19:27	EPA 3005A	1,6020A	вм
Lead, Total	ND		ug/l	5.00	0.500	10	09/09/10 16:4	5 09/13/10 19:27	EPA 3005A	1,6020A	вм
Magnesium, Total	3680		ug/l	1000	41.0	10	09/09/10 16:4	5 09/13/10 19:27	EPA 3005A	1,6020A	BM
Manganese, Total	10200		ug/l	10.0	1.36	10	09/09/10 16:4	5 09/13/10 19:27	EPA 3005A	1,6020A	ВМ
Nickel, Total	4.09	j	ug/l	5.00	1.80	10	09/09/10 16:4	5 09/13/10 19:27	EPA 3005A	1,6020A	ВМ
Potassium, Total	2220		ug/l	1000	182.	10	09/09/10 16:4	5 09/13/10 19:27	EPA 3005A	1,6020A	вм
Sodium, Total	8880		ug/l	1000	182.	10	09/09/10 16:4	5 09/13/10 19:27	EPA 3005A	1,6020A	вм
Total Hardness by	SM 2340E	3 - Westbor	ough Lab)							
Hardness	120		mg/l	0.66	0.62	1	09/09/10 16:4	5 09/14/10 12:34	EPA 3005A	1,6010B	Al

Project Name: SHL TASK 0002

Project Number:

Lab Number:

L1013865

AC001

Report Date:

09/16/10

SAMPLE RESULTS

Lab ID: Client ID: L1013865-03

Potassium, Dissolved

Sodium, Dissolved

SHM-10-10-090810-F

Sample Location: Matrix:

DEVENS, MA

Water

3410

27100

Date Collected: Date Received: 09/08/10 12:30

Field Prep:

09/09/10 16:45 09/13/10 18:44 EPA 3005A

09/09/10 16:45 09/13/10 18:44 EPA 3005A

09/08/10 See Narrative

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Dissolved Metals - V	Vestboro	ugh Lab									
Aluminum, Dissolved	ND		ug/l	100	19,1	10	09/09/10 16:4	5 09/13/10 18:44	EPA 3005A	1,6020A	ВМ
Arsenic, Dissolved	2.4	J	ug/l	5.00	1.13	10	09/09/10 16:4	5 09/13/10 18:44	EPA 3005A	1,6020A	вм
Calcium, Dissolved	96800		ug/l	1000	126.	10	09/09/10 16:4:	5 09/13/10 18:44	EPA 3005A	1,6020A	вм
Chromium, Dissolved	ND		ug/l	5.00	1.86	10	09/09/10 16:4	5 09/13/10 18:44	EPA 3005A	1,6020A	ВМ
Iron, Dissolved	700		ug/l	500	84.1	10	09/09/10 16:4	5 09/13/10 18:44	EPA 3005A	1,6020A	вм
Lead, Dissolved	ND		ug/l	5.00	0.500	10	09/09/10 16:4	5 09/13/10 18:44	EPA 3005A	1,6020A	вм
Magnesium, Dissolved	12000		ug/l	1000	41.0	10	09/09/10 16:4	5 09/13/10 18:44	EPA 3005A	1,6020A	вм
Manganese, Dissolved	25200		ug/l	10.0	1.36	10	09/09/10 16:4	5 09/13/10 18:44	EPA 3005A	1,6020A	BM
Nickel, Dissolved	21.5		ug/l	5.00	1.80	10	09/09/10 16:4	5 09/13/10 18:44	EPA 3005A	1,6020A	вм

182.

182.

10

10

1000

1000

ug/l

ug/l

1,6020A

1,6020A

ВМ

BM

Project Name:

SHL TASK 0002

Lab Number:

L1013865

Project Number:

AC001

Report Date:

09/16/10

SAMPLE RESULTS

Lab ID:

L1013865-04

Client ID:

SHM-10-10-090810-U

Sample Location:

DEVENS, MA

Matrix:

Water

Date Collected:

09/08/10 12:30

Date Received:

09/08/10

Field Prep:

Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Wes	tborough L	.ab									
Aluminum, Total	27.6	J	ug/l	100	19.1	10	09/09/10 16:45	5 09/13/10 19:51	EPA 3005A	1,6020A	ВМ
Arsenic, Total	2.57	J	ug/I	5.00	1.13	10	09/09/10 16:45	5 09/13/10 19:51	EPA 3005A	1,6020A	ВМ
Calcium, Total	107000		ug/l	1000	126.	10	09/09/10 16:45	5 09/13/10 19:51	EPA 3005A	1,6020A	ВМ
Chromium, Total	ND		ug/l	5.00	1.86	10	09/09/10 16:45	5 09/13/10 19:51	EPA 3005A	1,6020A	вм
Iron, Total	833		ug/l	500	84.1	10	09/09/10 16:45	5 09/13/10 19:51	EPA 3005A	1,6020A	вм
Lead, Total	1.6	J	ug/l	5.00	0.500	10	09/09/10 16:45	5 09/13/10 19:51	EPA 3005A	1,6020A	вм
Magnesium, Total	13200		ug/l	1000	41.0	10	09/09/10 16:45	5 09/13/10 19:51	EPA 3005A	1,6020A	ВМ
Manganese, Total	27400		ug/l	10.0	1.36	10	09/09/10 16:45	5 09/13/10 19:51	EPA 3005A	1,6020A	ВМ
Nickel, Total	23.5		ug/l	5.00	1.80	10	09/09/10 16:4	5 09/13/10 19:51	EPA 3005A	1,6020A	вм
Potassium, Total	3750	- W-	ug/l	1000	182.	10	09/09/10 16:45	5 09/13/10 19:51	EPA 3005A	1,6020A	ВМ
Sodium, Total	29600		ug/l	1000	182.	10	09/09/10 16:4	5 09/13/10 19:51	EPA 3005A	1,6020A	ВМ
Total Hardness by	SM 2340E	3 - Westbor	ough Lab								
Hardness	260		mg/l	0.66	0.62	1	09/09/10 16:4:	5 09/14/10 12:47	EPA 3005A	1,6010B	Al

Project Name: SHL TASK 0002

AC001

Lab Number:

L1013865

Project Number:

Report Date:

09/16/10

SAMPLE RESULTS

Lab ID:

L1013865-05

Client ID:

SHM-10-05A-090810-F

Sample Location:

DEVENS, MA

Matrix:

Water

Date Collected:

09/08/10 11:00

Date Received:

09/08/10

Field Prep:

See Narrative

Analytical Dilution Date Date Prep Factor Prepared Analyzed Method Method Parameter Result Qualifier Units RL MDL Analyst Dissolved Metals - Westborough Lab 1.91 10.0 1 09/09/10 16:45 09/13/10 19:03 EPA 3005A 1,6020A ВМ Aluminum, Dissolved 3.8 ug/l 5.21 0.500 1 1,6020A Arsenic, Dissolved ug/l 0.113 09/09/10 16:45 09/13/10 19:03 EPA 3005A BM Calcium, Dissolved 14200 100 12.6 1 09/09/10 16:45 09/13/10 19:03 EPA 3005A 1,6020A BM ug/l Chromium, Dissolved ND 0.500 0.186 1 09/09/10 16:45 09/13/10 19:03 EPA 3005A 1,6020A BM ug/l Iron, Dissolved 677 50.0 8.41 1 09/09/10 16:45 09/13/10 19:03 EPA 3005A 1,6020A ug/l BM Lead, Dissolved 0.500 0.050 1 09/09/10 16:45 09/13/10 19:03 EPA 3005A 1,6020A 0.09 ug/l BM Magnesium, Dissolved 1600 ug/l 100 4.10 1 09/09/10 16:45 09/13/10 19:03 EPA 3005A 1,6020A BM Manganese, Dissolved 122 1.00 0.136 1 09/09/10 16:45 09/13/10 19:03 EPA 3005A 1,6020A ug/I BM Nickel, Dissolved 1.72 0.500 0.180 1 09/09/10 16:45 09/13/10 19:03 EPA 3005A 1,6020A BM ug/l ug/l 1,6020A Potassium, Dissolved 1830 100 18.2 1 09/09/10 16:45 09/13/10 19:03 EPA 3005A ВМ 19700 18.2 1,6020A Sodium, Dissolved ug/l 100 09/09/10 16:45 09/13/10 19:03 EPA 3005A ВМ

Project Name:

SHL TASK 0002

Lab Number:

L1013865

Project Number:

AC001

Report Date:

09/16/10

SAMPLE RESULTS

Lab ID:

L1013865-06

Client ID:

SHM-10-05A-090810-U

Sample Location:

DEVENS, MA

Matrix:

Water

Date Collected:

09/08/10 11:00

Date Received:

09/08/10

Field

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ot Specifie
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Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Wes	tborough l	_ab									
Aluminum, Total	43.2		ug/l	10.0	1.91	1	09/09/10 16:45	5 09/13/10 19:57	EPA 3005A	1,6020A	ВМ
Arsenic, Total	5.68		ug/l	0.500	0.113	1	09/09/10 16:45	5 09/13/10 19:57	EPA 3005A	1,6020A	ВМ
Calcium, Total	14100		ug/l	100	12.6	1	09/09/10 16:45	5 09/13/10 19:57	EPA 3005A	1,6020A	ВМ
Chromium, Total	0.590		ug/l	0.500	0.186	1	09/09/10 16:48	5 09/13/10 19:57	EPA 3005A	1,6020A	ВМ
Iron, Total	790		ug/l	50.0	8.41	110	09/09/10 16:45	5 09/13/10 19:57	EPA 3005A	1,6020A	ВМ
Lead, Total	0.14	J	ug/l	0.500	0.050	1	09/09/10 16:45	5 09/13/10 19:57	EPA 3005A	1,6020A	ВМ
Magnesium, Total	1600		ug/l	100	4.10	1	09/09/10 16:45	5 09/13/10 19:57	EPA 3005A	1,6020A	ВМ
Manganese, Total	105		ug/l	1.00	0.136	1	09/09/10 16:45	5 09/13/10 19:57	EPA 3005A	1,6020A	ВМ
Nickel, Total	1.68		ug/l	0.500	0.180	1	09/09/10 16:45	5 09/13/10 19:57	EPA 3005A	1,6020A	ВМ
Potassium, Total	1770		ug/l	100	18.2	1	09/09/10 16:45	5 09/13/10 19:57	EPA 3005A	1,6020A	ВМ
Sodium, Total	19600		ug/l	100	18.2	1	09/09/10 16:45	5 09/13/10 19:57	EPA 3005A	1,6020A	ВМ
Total Hardness by	SM 2340E	3 - Westbor	ough Lat)							
Hardness	41		mg/l	0.66	0.62	1	09/09/10 16:45	5 09/14/10 12:50	EPA 3005A	1,6010B	Al

Project Name:

SHL TASK 0002

Lab Number:

L1013865

Project Number:

AC001

Report Date:

09/16/10

SAMPLE RESULTS

Lab ID:

L1013865-07

Client ID:

SHM-10-06-090810-F

Sample Location: Matrix:

DEVENS, MA

Water

Date Collected:

09/08/10 13:30

Date Received:

09/08/10

Field Prep:

See Narrative

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Dissolved Metals - V	Vestboro	ugh Lab									
Aluminum, Dissolved	ND		ug/l	100	19.1	10	09/09/10 16:45	5 09/13/10 19:09	EPA 3005A	1,6020A	ВМ
Arsenic, Dissolved	2710		ug/l	5.00	1.13	10	09/09/10 16:45	5 09/13/10 19:09	EPA 3005A	1,6020A	ВМ
Calcium, Dissolved	50300		ug/l	1000	126.	10	09/09/10 16:45	5 09/13/10 19:09	EPA 3005A	1,6020A	ВМ
Chromium, Dissolved	ND		ug/l	5.00	1.86	10	09/09/10 16:4:	5 09/13/10 19:09	EPA 3005A	1,6020A	ВМ
Iron, Dissolved	145000		ug/l	500	84.1	10	09/09/10 16:4	5 09/13/10 19:09	EPA 3005A	1,6020A	ВМ
Lead, Dissolved	0.57	J	ug/l	5.00	0.500	10	09/09/10 16:4	5 09/13/10 19:09	EPA 3005A	1,6020A	ВМ
Magnesium, Dissolved	8800		ug/l	1000	41.0	10	09/09/10 16:4	5 09/13/10 19:09	EPA 3005A	1,6020A	ВМ
Manganese, Dissolved	983		ug/l	10.0	1.36	10	09/09/10 16:4:	5 09/13/10 19:09	EPA 3005A	1,6020A	ВМ
Nickel, Dissolved	9.40		ug/l	5.00	1.80	10	09/09/10 16:4	5 09/13/10 19:09	EPA 3005A	1,6020A	вм
Potassium, Dissolved	13800		ug/l	1000	182.	10	09/09/10 16:4	5 09/13/10 19:09	EPA 3005A	1,6020A	вм
Sodium, Dissolved	23700		ug/l	1000	182.	10	09/09/10 16:4	5 09/13/10 19:09	EPA 3005A	1,6020A	вм

Project Name:

SHL TASK 0002

Lab Number:

L1013865

Project Number:

AC001

Report Date:

09/16/10

SAMPLE RESULTS

Lab ID:

L1013865-08

Client ID:

SHM-10-06-090810-U

Sample Location:

DEVENS, MA

Matrix:

Water

Date Collected:

09/08/10 13:30

Date Received:

09/08/10

Field Prep:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Wes	stborough l	_ab									
Aluminum, Total	ND		ug/l	100	19.1	10	09/09/10 16:4	5 09/13/10 20:15	EPA 3005A	1,6020A	вм
Arsenic, Total	2580		ug/l	5.00	1.13	10	09/09/10 16:4	5 09/13/10 20:15	EPA 3005A	1,6020A	ВМ
Calcium, Total	48200		ug/l	1000	126.	10	09/09/10 16:4	5 09/13/10 20:15	EPA 3005A	1,6020A	вм
Chromium, Total	ND		ug/l	5.00	1.86	10	09/09/10 16:4	5 09/13/10 20:15	EPA 3005A	1,6020A	ВМ
Iron, Total	144000		ug/l	500	84.1	10	09/09/10 16:4	5 09/13/10 20:15	EPA 3005A	1,6020A	вм
Lead, Total	ND		ug/l	5.00	0.500	10	09/09/10 16:4	5 09/13/10 20:15	EPA 3005A	1,6020A	ВМ
Magnesium, Total	8270		ug/l	1000	41.0	10	09/09/10 16:4	5 09/13/10 20:15	EPA 3005A	1,6020A	вм
Manganese, Total	954		ug/l	10.0	1.36	10	09/09/10 16:4	5 09/13/10 20:15	EPA 3005A	1,6020A	ВМ
Nickel, Total	9.11		ug/l	5.00	1.80	10	09/09/10 16:4	5 09/13/10 20:15	EPA 3005A	1,6020A	ВМ
Potassium, Total	13500		ug/l	1000	182.	10	09/09/10 16:4	5 09/13/10 20:15	EPA 3005A	1,6020A	ВМ
Sodium, Total	22800		ug/l	1000	182.	10	09/09/10 16:4	5 09/13/10 20:15	EPA 3005A	1,6020A	вм
Total Hardness by	SM 2340E	3 - Westbor	ough Lab								
Hardness	130		mg/l	0.66	0.62	1	09/09/10 16:4	5 09/14/10 12:53	EPA 3005A	1,6010B	Al

Project Name:

SHL TASK 0002

Lab Number:

L1013865

Project Number:

AC001

Report Date:

09/16/10

SAMPLE RESULTS

Lab ID: Client ID: L1013865-09

Sample Location:

RB-090810-U DEVENS, MA

Matrix:

Water

Date Collected:

Date Received:

09/08/10 14:00

09/08/10

Field Prep:

Parameter	Result	Qualifler	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Wes	stborough l	_ab									
Aluminum, Total	2.18	Ĵ	ug/l	10.0	1.91	1	09/09/10 16:4:	5 09/13/10 20:21	EPA 3005A	1,6020A	вм
Arsenic, Total	ND		ug/l	0.500	0.113	1	09/09/10 16:4	5 09/13/10 20:21	EPA 3005A	1,6020A	ВМ
Calcium, Total	13.1	J	ug/l	100	12.6	1	09/09/10 16:4	5 09/13/10 20:21	EPA 3005A	1,6020A	ВМ
Chromium, Total	ND		ug/l	0.500	0.186	1	09/09/10 16:4	5 09/13/10 20:21	EPA 3005A	1,6020A	вм
Iron, Total	ND		ug/l	50.0	8.41	1	09/09/10 16:4	5 09/13/10 20:21	EPA 3005A	1,6020A	вм
Lead, Total	0.06	3	ug/l	0.500	0.050	1	09/09/10 16:4	5 09/13/10 20:21	EPA 3005A	1,6020A	вм
Magnesium, Total	ND		ug/l	100	4.10	-1	09/09/10 16:4	5 09/13/10 20:21	EPA 3005A	1,6020A	вм
Manganese, Total	0.15	J	ug/l	1.00	0.136	1	09/09/10 16:4	5 09/13/10 20:21	EPA 3005A	1,6020A	ВМ
Nickel, Total	ND		ug/l	0.500	0.180	1	09/09/10 16:4	5 09/13/10 20:21	EPA 3005A	1,6020A	вм
Potassium, Total	ND		ug/l	100	18.2	1	09/09/10 16:4	5 09/13/10 20:21	EPA 3005A	1,6020A	ВМ
Sodium, Total	37.6	J	ug/l	100	18.2	1	09/09/10 16:4	5 09/13/10 20:21	EPA 3005A	1,6020A	ВМ
Total Hardness by	SM 2340	3 - Westbor	ough Lal	0							
Hardness	ND		mg/l	0.66	0.62	1	09/09/10 16:4	5 09/14/10 13:10	EPA 3005A	1,6010B	Al

Project Name: Project Number: SHL TASK 0002

AC001

Lab Number:

L1013865

Report Date:

09/16/10

SAMPLE RESULTS

Lab ID:

L1013865-10

Client ID:

DUP-090810-F

Sample Location:

Sodium, Dissolved

DEVENS, MA

Matrix:

Water

28500

Date Collected:

09/08/10 12:30

Date Received:

09/09/10 16:45 09/13/10 19:15 EPA 3005A

09/08/10

Field Prep:

03/00/10

rep: See Narrative

Analytical Dilution Date Date Prep Factor Prepared Analyzed Method Method Parameter Result Qualifier Units RL MDL Analyst Dissolved Metals - Westborough Lab 1.6020A ND 100 09/09/10 16:45 09/13/10 19:15 EPA 3005A ВМ Aluminum, Dissolved ug/l 19.1 10 1.6020A 6.66 09/09/10 16:45 09/13/10 19:15 EPA 3005A BM Arsenic, Dissolved 5.00 1.13 10 ug/l 1,6020A Calcium, Dissolved 101000 1000 126. 09/09/10 16:45 09/13/10 19:15 EPA 3005A BM ug/l 10 1,6020A Chromium, Dissolved ND 5.00 1.86 10 09/09/10 16:45 09/13/10 19:15 EPA 3005A BM ug/l 929 500 84.1 10 09/09/10 16:45 09/13/10 19:15 EPA 3005A 1,6020A ВМ Iron, Dissolved ug/l Lead, Dissolved 1,6020A ND 5.00 0.500 10 09/09/10 16:45 09/13/10 19:15 EPA 3005A ВМ ug/l 12600 1000 41.0 10 09/09/10 16:45 09/13/10 19:15 EPA 3005A 1,6020A ВМ Magnesium, Dissolved ug/l 1,6020A Manganese, Dissolved 25800 ug/l 10.0 1.36 10 09/09/10 16:45 09/13/10 19:15 EPA 3005A BM Nickel, Dissolved 22.2 5.00 1.80 10 09/09/10 16:45 09/13/10 19:15 EPA 3005A 1,6020A BM ug/l 1,6020A Potassium, Dissolved 3560 1000 182. 10 09/09/10 16:45 09/13/10 19:15 EPA 3005A BM ug/l

1000

182.

10

ug/l

1,6020A

ВМ

Project Name:

SHL TASK 0002

Lab Number:

L1013865

Project Number:

AC001

Report Date:

09/16/10

Lab ID:

L1013865-11

Client ID:

DUP-090810-U DEVENS, MA

Sample Location: Matrix:

Water

Date Collected:

09/08/10 12:30

Date Received:

09/08/10

Field Prep:

Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Wes	stborough L	_ab									
Aluminum, Total	86.6	J	ug/l	100	19.1	10	09/09/10 16:4	5 09/13/10 20:27	EPA 3005A	1,6020A	вм
Arsenic, Total	2.58	J	ug/l	5.00	1.13	10	09/09/10 16:4	5 09/13/10 20:27	EPA 3005A	1,6020A	ВМ
Calcium, Total	96300		ug/l	1000	126.	10	09/09/10 16:4:	5 09/13/10 20:27	EPA 3005A	1,6020A	ВМ
Chromium, Total	ND		ug/l	5.00	1.86	10	09/09/10 16:4	5 09/13/10 20:27	EPA 3005A	1,6020A	ВМ
Iron, Total	825		ug/l	500	84.1	10	09/09/10 16:4	5 09/13/10 20:27	EPA 3005A	1,6020A	ВМ
Lead, Total	ND		ug/l	5.00	0.500	10	09/09/10 16:4	5 09/13/10 20:27	EPA 3005A	1,6020A	ВМ
Magnesium, Total	11900		ug/I	1000	41.0	10	09/09/10 16:4	5 09/13/10 20:27	EPA 3005A	1,6020A	ВМ
Manganese, Total	24700		ug/l	10.0	1.36	10	09/09/10 16:4	5 09/13/10 20:27	EPA 3005A	1,6020A	вм
Nickel, Total	21.4		ug/l	5.00	1.80	10	09/09/10 16:4	5 09/13/10 20:27	EPA 3005A	1,6020A	ВМ
Potassium, Total	3380		ug/l	1000	182.	10	09/09/10 16:4	5 09/13/10 20:27	EPA 3005A	1,6020A	ВМ
Sodium, Total	26600		ug/l	1000	182.	10	09/09/10 16:4	5 09/13/10 20:27	EPA 3005A	1,6020A	ВМ
Total Hardness by	SM 2340E	3 - Westbor	ough Lat)						-	
Hardness	260		mg/l	0.66	0.62	1	09/09/10 16:4	5 09/14/10 13:13	EPA 3005A	1,6010B	Al

SAMPLE RESULTS

Project Name:

SHL TASK 0002

Lab Number:

L1013865 09/16/10

Project Number: AC001

Report Date:

Method Blank Analysis Batch Quality Control

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	
Total Hardness by SM 2	340B - Westborough L	ab for sa	ample(s): 02,0	4,06,08-09,	11 Batch: W	G431693-1		
Hardness	ND	mg/l	0.66	0.62	1	09/09/10 16:45	09/14/10 12:27	7 1,6010B	Al

Prep Information

Digestion Method: EPA 3005A

Parameter	Result Qualifie	er Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Westboroug	h Lab for sample	(s): 02,04,0	6,08-09	,11 B	atch: WG4	31695-1			
Aluminum, Total	ND	ug/l	10.0	1.91	1	09/09/10 16:45	09/13/10 17:50	1,6020A	ВМ
Arsenic, Total	ND	ug/l	0.500	0.113	1	09/09/10 16:45	09/13/10 17:50	1,6020A	вм
Calcium, Total	ND	ug/l	100	12.6	1	09/09/10 16:45	09/13/10 17:50	1,6020A	ВМ
Chromium, Total	ND	ug/l	0.500	0.186	1	09/09/10 16:45	09/13/10 17:50	1,6020A	ВМ
Iron, Total	ND	ug/l	50.0	8.41	1	09/09/10 16:45	09/13/10 17:50	1,6020A	ВМ
Lead, Total	ND	ug/l	0.500	0.050	1	09/09/10 16:45	09/13/10 17:50	1,6020A	ВМ
Magnesium, Total	ND	ug/l	100	4.10	1	09/09/10 16:45	09/13/10 17:50	1,6020A	вм
Manganese, Total	ND	ug/l	1.00	0.136	1	09/09/10 16:45	09/13/10 17:50	1,6020A	ВМ
Nickel, Total	ND	ug/l	0.500	0.180	1	09/09/10 16:45	09/13/10 17:50	1,6020A	вм
Potassium, Total	ND	ug/l	100	18.2	1	09/09/10 16:45	09/13/10 17:50	1,6020A	вм
Sodium, Total	ND	ug/l	100	18.2	1	09/09/10 16:45	09/13/10 17:50	1,6020A	вм

Prep Information

Digestion Method: EPA 3005A

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytica Method	l Analyst
Dissolved Metals - Wes	stborough Lab for samp	ole(s): 01	,03,05,0	7,10	Batch: WG	6431697-1			
Aluminum, Dissolved	ND	ug/I	10.0	1.91	1	09/09/10 16:45	09/13/10 17:50	1,6020A	вм
Arsenic, Dissolved	ND	ug/I	0.500	0.113	1	09/09/10 16:45	09/13/10 17:50	1,6020A	ВМ
Calcium, Dissolved	ND	ug/I	100	12.6	1	09/09/10 16:45	09/13/10 17:50	1,6020A	ВМ
Chromium, Dissolved	ND	ug/l	0.500	0.186	1	09/09/10 16:45	09/13/10 17:50	1,6020A	вм
Iron, Dissolved	ND	ug/l	50.0	8.41	1	09/09/10 16:45	09/13/10 17:50	1,6020A	вм
Lead, Dissolved	ND	ug/l	0.500	0.050	1	09/09/10 16:45	09/13/10 17:50	1,6020A	вм

DLPHA

Project Name: SHL TASK 0002 Lab Number: L1013865

Project Number: AC001 Report Date: 09/16/10

Method Blank Analysis Batch Quality Control

Magnesium, Dissolved	ND	ug/l	100	4.10	1	09/09/10 16:45	09/13/10 17:50	1,6020A	ВМ
Manganese, Dissolved	ND	ug/l	1.00	0.136	1	09/09/10 16:45	09/13/10 17:50	1,6020A	вм
Nickel, Dissolved	ND	ug/l	0.500	0.180	1	09/09/10 16:45	09/13/10 17:50	1,6020A	ВМ
Potassium, Dissolved	ND	ug/l	100	18.2	1	09/09/10 16:45	09/13/10 17:50	1,6020A	вм
Sodium, Dissolved	ND	ug/I	100	18.2	1	09/09/10 16:45	09/13/10 17:50	1,6020A	ВМ

Prep Information

Digestion Method: EPA 3005A

Lab Control Sample Analysis Batch Quality Control

Project Name:

SHL TASK 0002

Project Number:

AC001

Lab Number:

L1013865

Report Date:

Total Hardness by SM 2340B - Westborough La Hardness Total Metals - Westborough Lab Associated sai	97		2,04,06,08-09,11 - Batch: WG4316		G431693-2 80-120	4		
	mple(s): 02,04,06	i,08-09,11	Batch: WG4316	95-2				
Total Metals - Westborough Lab Associated sa	46.26	,08-09,11	Batch: WG4316	95-2	24			
	.97							
Aluminum, Total			4		80-120	0		
Arsenic, Total	98 -				80-120	10.1		
Calcium, Total	107		~		80-120	14		
Chromium, Total	95				80-120	1.00		
Iron, Total	104				80-120			
Lead, Total	99		2		80-120	172		
Magnesium, Total	103				80-120	4		
Manganese, Total	100		- V		80-120			
Nickel, Total	103				80-120			
Potassium, Total	104				80-120			
Sodium, Total	102-,				80-120	1		

Lab Control Sample Analysis Batch Quality Control

Project Name:

SHL TASK 0002

Project Number: AC001

Lab Number:

L1013865

Report Date:

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Dissolved Metals - Westborough Lab	Associated sample(s): 01,03,05,07,10	Batch: WG431697-2			
Aluminum, Dissolved	97		80-120		
Arsenic, Dissolved	98 .		80-120	2	
Calcium, Dissolved	107		80-120	3	
Chromium, Dissolved	95	*	80-120	-	
Iron, Dissolved	104		80-120		
Lead, Dissolved	.99	**	80-120		
Magnesium, Dissolved	103		80-120		
Manganese, Dissolved	100 :	3	80-120		
Nickel, Dissolved	103		80-120	-	
Potassium, Dissolved	104	- i	80-120		
Sodium, Dissolved	102		80-120		

Matrix Spike Analysis Batch Quality Control

Project Name:

SHL TASK 0002

Project Number:

AC001

Lab Number:

L1013865

Report Date:

Parameter	Nativ Samp		MS Found	MS %Recovery	/ Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
	y SM 2340B - Westbo Client ID: SHM-10-01-		sociated sam	ple(s): 02,04,0	06,08-09,1	1 QC Batch	n ID: WG4316	93-3	WG431693-	4 QC	Sampl	e:
Hardness	12	20 66.2	170	76		180	91		75-125	6		20
Total Metals - We SHM-10-01-0908	estborough Lab Assoc 310-U	iated sample(s): 02,04,06,0	8-09,11 QC	Batch ID:	WG431695-	3 WG431695	5-4 C	QC Sample: L	.101386	5-02	Client II
Aluminum, Total	N	D 2000	1850	92		2030	102		80-120	9		20
Arsenic, Total	8.	15 120	127	99		136	106		80-120	7		20
Calcium, Total	431	1000	52200	91		55800	127		80-120	7		20
Chromium, Total	N	D 200	178	89		195	98		80-120	9		20
Iron, Total	17-	40 1000	2630	89		2910	117		80-120	10		20
Lead, Total	N	D 510	480	94		510	100		80-120	6		20
Magnesium, Total	366	80 100 0 0	13500	98		14400	107		80-120	6		20
Manganese, Total	102	200 500	10300	20		11300	220		80-120	9		20
Nickel, Total	N	D 500	484	97		529	106		80-120	9		20
Potassium, Total	223	20 10000	12000	98		13000	108		80-120	8		20
Sodium, Total	888	80 10000	18600	97		19400	105		80-120	4		20

Matrix Spike Analysis Batch Quality Control

Project Name:

SHL TASK 0002

Project Number:

AC001

Lab Number:

L1013865

Report Date:

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Dissolved Metals - Westborough SHM-10-01-090810-F	h Lab Assoc	iated sample(s): 01,03,	05,07,10 QC Batc	h ID: WG43169	97-3 WG431697-4	QC Sample:	: L1013865-01	Client II
Aluminum, Dissolved	ND	2000	1860	93	1940	97	80-120	4	20
Arsenic, Dissolved	7.87	120	128	100	134	105	80-120	5	20
Calcium, Dissolved	43500	10000	51800	83	53800	103	80-120	4	20
Chromium, Dissolved	ND	200	181	90	189	94	80-120	4	20
Iron, Dissolved	1680	1000	2620	94	2720	104	80-120	4	20
Lead, Dissolved	ND	510	482	94	492	96	80-120	2	20
Magnesium, Dissolved	3780	10000	13400	96	13900	101	80-120	4	20
Manganese, Dissolved	10300	500	10500	40	10700	80	80-120	2	20
Nickel, Dissolved	ND	500	493	99	513	103	80-120	4	20
Potassium, Dissolved	2280	10000	12200	99	12600	103	80-120	3	20
Sodium, Dissolved	8770	10000	18600	98	19100	103	80-120	3	20

INORGANICS & MISCELLANEOUS

Project Name:

SHL TASK 0002

Lab Number: Report Date:

L1013865

09/16/10

Project Number: AC001

SAMPLE RESULTS

09/08/10 10:30

Lab ID: Client ID: L1013865-02

SHM-10-01-090810-U

Date Collected: 09/08/10

Sample Location:

DEVENS, MA

Date Received: Field Prep:

Not Specified

Matrix:

Water

Parameter	Result	Qualifie	units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Wes	tborough Lab)								
Alkalinity, Total	140		mg CaCO3/L	2.0	NA	1		09/13/10 15:01	30,2320B	SD
Solids, Total Dissolved	210		mg/l	10	4.4	1		09/13/10 10:15	30,2540C	DW
Solids, Total Suspended	ND		mg/l	5.0	NA	1	4	09/09/10 08:30	30,2540D	DW
Nitrogen, Ammonia	0.344		mg/l	0.075	0.017	1	09/09/10 09:45	09/09/10 22:47	30,4500NH3-BH	AT
Nitrogen, Nitrite	ND		mg/l	0.02	0.002	1	*	09/08/10 23:03	30,4500NO2-B	DD
Sulfide	ND		mg/l	0.10	0.10	1	09/09/10 19:45	09/09/10 20:45	30,4500S2-AD	AT
Chemical Oxygen Demand	12	J	mg/l	20	7.0	1	*	09/14/10 11:52	44,410.4	DW
Total Organic Carbon	1.6		mg/l	0.50	0.03	1	4	09/15/10 07:37	30,5310C	DW
Dissolved Organic Carbon	1.6		mg/l	1.0	1.0	1	09/08/10 22:00	09/15/10 07:37	30,5310C	DW
Anions by Ion Chromatog	graphy - West	tborough	Lab							
Chloride	11		mg/l	0.50	0.07	1	Y	09/09/10 00:06	44,300.0	AU
Nitrogen, Nitrate	ND		mg/l	0.05	0.01	1	- 19	09/09/10 00:06	44,300.0	AU
Sulfate	8.7		mg/l	1.0	0.12	1	2	09/09/10 00:06	44,300.0	AU

Project Name: SHL TASK 0002

Project Number: AC001 Lab Number:

L1013865

Report Date:

09/16/10

SAMPLE RESULTS

Lab ID:

L1013865-04

Client ID:

SHM-10-10-090810-U

Sample Location:

DEVENS, MA

Matrix:

Water

Date Collected:

09/08/10 12:30

Date Received:

09/08/10

Field Prep:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Wes	stborough Lab	i.								
Alkalinity, Total	320	1	mg CaCO3/L	2.0	NA	1		09/13/10 15:01	30,2320B	SD
Solids, Total Dissolved	380		mg/l	10	4.4	1	-	09/13/10 10:15	30,2540C	DW
Solids, Total Suspended	ND		mg/l	5.0	NA	1		09/09/10 08:30	30,2540D	DW
Nitrogen, Ammonia	0.148		mg/l	0.075	0.017	1	09/09/10 09:45	09/09/10 22:50	30,4500NH3-BH	AT
Nitrogen, Nitrite	ND		mg/l	0.02	0.002	1		09/08/10 23:04	30,4500NO2-B	DD
Sulfide	ND		mg/l	0.10	0.10	1	09/09/10 19:45	09/09/10 20:45	30,4500S2-AD	AT
Chemical Oxygen Demand	55		mg/l	20	7.0	1		09/14/10 11:52	44,410.4	DW
Total Organic Carbon	3.7		mg/I	0.50	0.03	1		09/15/10 07:37	30,5310C	DW
Dissolved Organic Carbon	3.8		mg/l	1.0	1.0	1	09/08/10 22:00	09/15/10 07:37	30,5310C	DW
Anions by Ion Chromatog	graphy - West	borough	Lab							
Chloride	17		mg/l	0.50	0.07	1		09/09/10 00:18	44,300.0	AU
Nitrogen, Nitrate	ND		mg/l	0.05	0.01	1	-	09/09/10 00:18	44,300.0	AU
Sulfale	0.34	J	mg/l	1.0	0.12	3	4.	09/09/10 00:18	44,300.0	AU

Project Name: SHL TASK 0002

Project Number: AC001

Lab Number:

L1013865

Report Date:

09/16/10

SAMPLE RESULTS

Lab ID:

L1013865-06

Client ID:

SHM-10-05A-090810-U

Sample Location:

DEVENS, MA

Matrix:

Water

Date Collected:

09/08/10 11:00

Date Received:

09/08/10

Field Prep:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Wes	tborough Lab									
Alkalinity, Total	36		mg CaCO3/L	2.0	NA	1:	*	09/13/10 15:01	30,2320B	SD
Solids, Total Dissolved	110		mg/l	10	4.4	1	-	09/13/10 10:15	30,2540C	DW
Solids, Total Suspended	ND		mg/l	5.0	NA	1		09/09/10 08:30	30,2540D	DW
Nitrogen, Ammonia	0.0335	J	mg/l	0.075	0.017	1	09/09/10 09:45	09/09/10 22:51	30,4500NH3-BH	AT
Nitrogen, Nitrite	ND		mg/l	0.02	0.002	1		09/08/10 23:04	30,4500NO2-B	DD
Sulfide	ND		mg/l	0.10	0.10	1	09/09/10 19:45	09/09/10 20:45	30,4500S2-AD	AT
Chemical Oxygen Demand	55		mg/l	20	7.0	1		09/14/10 11:52	44,410.4	DW
Total Organic Carbon	0.96		mg/l	0.50	0.03	1		09/15/10 07:37	30,5310C	DW
Dissolved Organic Carbon	ND		mg/l	1.0	1.0	1	09/08/10 22:00	09/15/10 07:37	30,5310C	DW
Anions by Ion Chromatog	raphy - West	borough	Lab							
Chloride	29		mg/l	0.50	0.07	1		09/09/10 00:30	44,300.0	AU
Nitrogen, Nitrate	0.46		mg/l	0.05	0.01	1		09/09/10 00:30	44,300 0	ΛU
Sulfate	11		mg/l	1.0	0.12	1	Ψ.	09/09/10 00:30	44,300.0	ALI

Project Name:

SHL TASK 0002

Lab Number:

L1013865

Project Number: AC001

Report Date:

09/16/10

SAMPLE RESULTS

Lab ID:

L1013865-08

Client ID:

SHM-10-06-090810-U

Sample Location:

DEVENS, MA

Matrix:

Water

Date Collected:

09/08/10 13:30

Date Received:

09/08/10

Field Prep:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Wes	stborough Lab)								
Alkalinity, Total	300		mg CaCO3/L	2.0	NA	1	17	09/13/10 15:01	30,2320B	SD
Solids, Total Dissolved	330		mg/l	10	4.4	1		09/13/10 10:15	30,2540C	DW
Solids, Total Suspended	62		mg/l	5.0	NA	1		09/09/10 08:30	30,2540D	DW
Nitrogen, Ammonia	5.13		mg/l	0.075	0.017	1	09/09/10 09:45	09/09/10 22:54	30,4500NH3-BH	AT
Nitrogen, Nitrite	ND		mg/I	0.02	0.002	1	L.	09/08/10 23:04	30,4500NO2-B	DD
Sulfide	ND		mg/l	0.10	0.10	1	09/09/10 19:45	09/09/10 20:45	30,4500S2-AD	AT
Chemical Oxygen Demand	33		mg/l	20	7.0	1		09/14/10 11:52	44,410.4	DW
Total Organic Carbon	4.2		mg/l	0.50	0.03	1	- 3	09/15/10 07:37	30,5310C	DW
Dissolved Organic Carbon	5.0		mg/l	1.0	1.0	1	09/08/10 22:00	09/15/10 07:37	30,5310C	DW
Anions by Ion Chromatog	graphy - West	borough	Lab							
Chloride	15		mg/l	0,50	0.07	1	134	09/09/10 00:42	44,300.0	AU
Nitrogen, Nitrate	0.13		mg/l	0.05	0.01	1		09/09/10 00:42	44,300.0	AU
Sulfate	0.49	J	mg/l	1.0	0.12	1	4	09/09/10 00:42	44,300 0	AU

Project Name: SHL TASK 0002

Project Number: AC001

Lab Number:

L1013865

Report Date:

09/16/10

SAMPLE RESULTS

Lab ID:

L1013865-11

Client ID:

DUP-090810-U

Sample Location:

DEVENS, MA

Matrix:

Water

Date Collected:

09/08/10 12:30

Date Received:

09/08/10

Field Prep:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Wes	tborough Lab	iv.								
Alkalinity, Total	330	m	ng CaCO3/L	2.0	NA	1		09/13/10 15:01	30,2320B	SD
Solids, Total Dissolved	350		mg/l	10	4.4	1	-	09/13/10 10:15	30,2540C	DW
Solids, Total Suspended	ND		mg/l	5.0	NA	1	12	09/09/10 08:30	30,2540D	DW
Nitrogen, Ammonia	0.168		mg/l	0.075	0.017	1	09/09/10 09:45	09/09/10 22:55	30,4500NH3-BH	AT
Nitrogen, Nitrite	ND		mg/l	0.02	0.002	1		09/08/10 23:05	30,4500NO2-B	DD
Sulfide	ND		mg/l	0.10	0.10	1	09/09/10 19:45	09/09/10 20:45	30,4500S2-AD	AT
Chemical Oxygen Demand	45		mg/l	20	7.0	1	2	09/14/10 11:52	44,410.4	DW
Total Organic Carbon	3.9		mg/l	0.50	0.03	1		09/15/10 07:37	30,5310C	DW
Anions by Ion Chromatog	graphy - West	borough t	Lab							
Chloride	17		mg/l	0.50	0.07	1	6	09/09/10 00:54	44,300.0	AU
Nitrogen, Nitrate	0.019	J	mg/l	0.05	0.01	1		09/09/10 00:54	44,300.0	AU
Sulfate	0.26	-1	mg/l	10	0.12	1	*	09/09/10 00:54	44,300.0	AU

Project Name:

SHL TASK 0002

Lab Number:

L1013865

Project Number: AC001

Report Date: 09/16/10

Method Blank Analysis Batch Quality Control

Parameter	Result Q	ualifier Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - We	estborough Lab	for sample(s):	02,04,06,0	8,11 B	atch: WG4	31542-2			
Nitrogen, Nitrite	ND	mg/	0.02	0.002	1		09/08/10 23:01	30,4500NO2-B	DD
General Chemistry - We	estborough Lab	for sample(s):	02,04,06,0	08,11 B	atch: WG4	31564-1			
Solids, Total Suspended	ND	mg/	5.0	NA	1		09/09/10 08:30	30,2540D	DW
General Chemistry - We	estborough Lab	for sample(s):	02,04,06,0	08,11 B	atch: WG4	31578-1			
Nitrogen, Ammonia	ND	mg/	0.075	0.017	1	09/09/10 09:45	09/09/10 22:33	30,4500NH3-BH	AT.
Anions by Ion Chromate	ography - Westh	orough Lab fo	r sample(s)	: 02,04,	,06,08,11	Batch: WG43	1716-1		
Chloride	ND	mg/	0.50	0.07	1	*	09/08/10 17:54	44,300.0	AU
Nitrogen, Nitrate	ND	mg/	0.05	0.01	1	9	09/08/10 17:54	44,300.0	AU
Sulfate	ND	mg/	1.0	0.12	1	*	09/08/10 17:54	44,300.0	AU
General Chemistry - W	estborough Lab	for sample(s):	02,04,06,0	08,11 B	atch: WG4	32033-1			
Solids, Total Dissolved	ND	mg/	10	4.4	1	(8)	09/13/10 10:15	30,2540C	DW
eneral Chemistry - W	estborough Lab	for sample(s):	02,04,06,0	08,11 B	atch: WG4	32097-1			
Sulfide	ND	mg/	0.10	0.10	1	09/09/10 19:45	09/09/10 20:45	30,4500S2-AD	AT
General Chemistry - W	estborough Lab	for sample(s):	02,04,06,0	08,11 B	atch: WG4	32215-1			
Alkalinity, Total	ND	mg CaC	O3/L 2.0	NA	1.		09/13/10 15:01	30,2320B	SD
General Chemistry - W	estborough Lab	for sample(s):	02,04,06,0	08,11 B	atch: WG4	32220-1			
Chemical Oxygen Demand	ND	mg/	1 20	7.0	1		09/14/10 11:47	44,410.4	DW
General Chemistry - W	estborough Lab	for sample(s):	02,04,06,0	08 Bato	h: WG432	438-1			
Dissolved Organic Carbon	· ND	mg/	1.0	1.0	1 .	09/08/10 22:00	09/15/10 07:37	30,5310C	DW
General Chemistry - W	estborough Lab	for sample(s):	02,04,06,0	08,11 B	latch: WG4	32439-1		Mary Alexander in	* (5° 1 \$
Total Organic Carbon	ND	mg/	0.50	0.03	1	-	09/15/10 07:37	30,5310C	DW

Lab Control Sample Analysis Batch Quality Control

Project Name:

SHL TASK 0002

Project Number: AC001 Lab Number:

L1013865

Report Date:

Parameter	LCS . %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab	Associated sample(s): 02	2,04,06,08	3,11 Batch: WG4	31542-1				
Nitrogen, Nitrite	100		9		90-110			20
General Chemistry - Westborough Lab	Associated sample(s): 02	2,04,06,08	3,11 Batch: WG4:	31578-2				
Nitrogen, Ammonia	102				80-120			20
Anions by Ion Chromatography - Westl	borough Lab Associated s	sample(s):	02,04,06,08,11	Batch: WG	431716-2			
Chloride	100		-		90-110	*		
Nitrogen, Nitrate	92		4		90-110	-		
Sulfate	100 :		+		90-110	· A		
General Chemistry - Westborough Lab	Associated sample(s): 02	2,04,06,08	3,11 Batch: WG43	32033-2				
Solids, Total Dissolved	. 93		8		72-121			
General Chemistry - Westborough Lab	Associated sample(s): 02	2,04,06,08	,11 Batch: WG43	32097-2				
Sulfide	91		+		75-125	*		
General Chemistry - Westborough Lab	Associated sample(s): 02	2,04,06,08	,11 Batch: WG43	32215-2				
Alkalinity, Total	102		3-1		80-115			4

Lab Control Sample Analysis Batch Quality Control

Project Name:

SHL TASK 0002

Project Number:

AC001

Lab Number:

L1013865

Report Date:

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
General Chemistry - Westborough Lab	Associated sample(s): 02,04,06,08,11	Batch: WG432220-2			
Chemical Oxygen Demand	101		95-105		
General Chemistry - Westborough Lab	Associated sample(s): 02,04,06,08	Batch: WG432438-2			
Dissolved Organic Carbon	96		90-110	0	
General Chemistry - Westborough Lab	Associated sample(s): 02,04,06,08,11	Batch: WG432439-2			
Total Organic Carbon	96	4	90-110	1.	

Matrix Spike Analysis Batch Quality Control

Project Name:

SHL TASK 0002

Project Number:

AC001

Lab Number:

L1013865

Report Date:

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Recovery Qual Limits	RPD Qui	RPD al Limits
General Chemistry - Westbor 01-090810-U	rough Lab Asso	ociated samp	le(s): 02,0	4,06,08,11 C	C Batch	ID: WG43	1542-3 QC	Sample: L1013865	-02 Client	ID: SHM-10-
Nitrogen, Nitrite	ND	0.1	0.10	100			15	85-115	-	20
General Chemistry - Westbor 01-090810-U	rough Lab Asso	ociated samp	le(s): 02,0	4,06,08,11 C	C Batch	ID: WG43	1578-3 QC S	Sample: L1013865	-02 Client	ID: SHM-10-
Nitrogen, Ammonia	0.344	4	4.10	94		1	3	80-120		20
Anions by Ion Chromatograph 02 Client ID: SHM-10-01-0		igh Lab Asso	ciated san	nple(s): 02,04,0	06,08,11	QC Bato	h ID: WG4317	16-3 WG431716-4	4 QC Samp	le: L1013865
Chloride	11	4	15	100		15	100	40-151	0	18
Nitrogen, Nitrate	ND	0.4	0.37	92		0.38	95	80-122	3	15
Sulfate	8.7	8	17	104		17	104	60-140	0	20
General Chemistry - Westbor 01-090810-U	ough Lab Asso	ociated samp	le(s): 02,0	4,06,08,11 Q	C Batch	ID: WG43	2097-3 QC 5	Sample: L1013865	-02 Client	D: SHM-10-
Sulfide	ND	0.24	0.19	79		250	*	75-125	1.5	20
General Chemistry - Westbor 01-090810-U	ough Lab Asso	ciated samp	le(s): 02,0	4,06,08,11 Q	C Batch	ID: WG43	2215-3 QC S	Sample: L1013865-	-02 Client	D: SHM-10-
Alkalinity, Total	140	100	240	95		FF	6	86-116	(+)	4
General Chemistry - Westbor 01-090810-U	ough Lab Asso	ciated samp	le(s): 02,04	4,06,08,11 Q	C Batch	ID: WG43	2220-3 QC 5	Sample: L1013865-	-02 Client	D: SHM-10-
Chemical Oxygen Demand	ND	238	270	114			76	80-120	, L	20
General Chemistry - Westbor 090810-U	ough Lab Asso	ciated samp		4,06,08 QC E	Batch ID:	WG43243	8-3 QC San	nple: L1013865-02	Client ID:	SHM-10-01-
Dissolved Organic Carbon	1.6	4 .	6.4	120			4	79-120	3	20

Matrix Spike Analysis Batch Quality Control

Project Name:

SHL TASK 0002

200

7 %

Project Number:

AC001

Lab Number:

L1013865

Report Date:

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
General Chemistry - West 01-090810-U	borough Lab Asso	ociated samp	ole(s): 02,0	4,06,08,11 QC B	atch ID: WG43	32439-3 QC Sa	ample: L1013865-0	2 Client ID	: SHM-10-
Total Organic Carbon	1.6	4.	5.8	106	4	(*)	80-120	*	20

Lab Duplicate Analysis Batch Quality Control

Project Name: SHL TASK 0002

Project Number: AC001

Quality Control Lab Num

Lab Number:

L1013865

Report Date:

Parameter	Nat	ive Sample	Duplicate Sample	Units	RPD Qual	RPD Limits
General Chemistry - Westborough Lab 01-090810-U	Associated sample(s):	02,04,06,08,11	QC Batch ID: WG431542-	4 QC Sample	: L1013865-02	Client ID: SHM-10-
Nitrogen, Nitrite		ND	ND	mg/l	NC	20
General Chemistry - Westborough Lab Sample	Associated sample(s):	02,04,06,08,11	QC Batch ID: WG431564-	2 QC Sample	: L1013862-01	Client ID: DUP
Solids, Total Suspended	. 2	140	150	mg/l	7	32
General Chemistry - Westborough Lab 01-090810-U	Associated sample(s):	02,04,06,08,11	QC Batch ID: WG431578-	4 QC Sample:	: L1013865-02	Client ID: SHM-10-
Nitrogen, Ammonia		0.344	0.339	mg/l	1	20
Anions by Ion Chromatography - Westt SHM-10-01-090810-U	oorough Lab Associated	d sample(s): 02,	04,06,08,11 QC Batch ID:	WG431716-5	QC Sample: L	1013865-02 Client ID:
Chloride	4 4	11.	12	mg/l	9	18
Nitrogen, Nitrate		ND	ND	mg/l	NC	15
Sulfate		8.7	8.9	mg/l	2	20
General Chemistry - Westborough Lab 01-090810-U	Associated sample(s):	02,04,06,08,11	QC Batch ID: WG432033-	3 QC Sample:	L1013865-02	Client ID: SHM-10-
Solids, Total Dissolved		210	200	mg/l	5	11
General Chemistry - Westborough Lab 01-090810-U	Associated sample(s):	02,04,06,08,11	QC Batch ID: WG432097-	4 QC Sample:	L1013865-02	Client ID: SHM-10-
Sulfide	2	ND	ND	mg/l	NC	20

Lab Duplicate Analysis Batch Quality Control

Project Name:

SHL TASK 0002

Project Number:

AC001

Lab Number:

L1013865

Report Date:

Parameter	Nat	ive Sample	Duplicate Sample	Units	RPD	RPD Limits
General Chemistry - Westborough Lab 01-090810-U	Associated sample(s):	02,04,06,08,1	1 QC Batch ID: WG432215	5-4 QC San	nple: L1013865-0	02 Client ID: SHM-10-
Alkalinity, Total	*	140	140	mg CaCO3/L	0	4
General Chemistry - Westborough Lab 01-090810-U	Associated sample(s):	02,04,06,08,1	1 QC Batch ID: WG432220	0-4 QC San	nple: L1013865-0	02 Client ID: SHM-10-
Chemical Oxygen Demand	ré.	12J	7.3J	mg/l	NC	20
General Chemistry - Westborough Lab 090810-U	Associated sample(s):	02,04,06,08	QC Batch ID: WG432438-4	QC Sample	e: L1013865-04	Client ID: SHM-10-10-
Dissolved Organic Carbon	+ 1	3.8	4.5	mg/l	17	20
General Chemistry - Westborough Lab 01-090810-U	Associated sample(s):	02,04,06,08,1	1 QC Batch ID: WG432439	9-4 QC Sam	nple: L1013865-0	02 Client ID: SHM-10-
Total Organic Carbon	4	1.6	1.5	mg/l	6	20

Project Name: SHL TASK 0002

Lab Number: L1013865 Project Number: AC001 Report Date: 09/16/10

Sample Receipt and Container Information

Were project specific reporting limits specified?

YES

Reagent H2O Preserved Vials Frozen on: NA

Cooler Information Custody Seal

Cooler

Present/Intact

В C

Present/Intact

A

Present/Intact

Container Info	rmation			Temp			
Container ID	Container Type	Cooler	рН	deg C	Pres	Seal	Analysis(*)
L1013865-01A	Plastic 250ml HNO3 preserved	С	<2	4.4	Y	Present/Intact	DOD-FE-6020S(180),DOD-MG-6020S(180),DOD-CR-6020S(180),DOD-MN-6020S(180),DOD-NA-6020S(180),DOD-NI-6020S(180),DOD-PB-6020S(180),DOD-AS-6020S(180),DOD-AL-6020S(180),DOD-K-6020S(180)
L1013865-01B	Plastic 250ml HNO3 preserved	C .	<2	4.4	Υ	Present/Intact	DOD-FE-6020S(180),DOD-MG- 6020S(180),DOD-CR- 6020S(180),DOD-MN- 6020S(180),DOD-CA- 6020S(180),DOD-NA- 6020S(180),DOD-NI- 6020S(180),DOD-PB- 6020S(180),DOD-AS- 6020S(180),DOD-AL- 6020S(180),DOD-K-6020S(180)
L1013865-02A	Vial H2SO4 preserved split	C	N/A	4.4	Y	Present/Intact	DOC-5310(28)
L1013865-02B	Vial H2SO4 preserved split	C	N/A	4.4	Y	Present/Intact	DOC-5310(28)
L1013865-02C	Vial H2SO4 preserved	C	N/A	4.4-	Y	Present/Intact	TOC-5310(28)
L1013865-02D	Vial H2SO4 preserved	· C	N/A	4.4	Y	Present/Intact	TOC-5310(28)
L1013865-02E	Vial H2SO4 preserved	С	N/A	4.4	Y	Present/Intact	TOC-5310(28)
L1013865-02F	Vial H2SO4 preserved	С	N/A	4.4	Y	Present/Intact	TOC-5310(28)
L1013865-02G	Plastic 250ml unpreserved	С	N/A	4.4	Y	Present/Intact	ALK-T-2320(14)
L1013865-02H	Plastic 250ml unpreserved	C	N/A	4.4	Υ	Present/Intact	ALK-T-2320(14)
L1013865-02I	Plastic 250ml unpreserved	C	6	4.4	Y	Present/Intact	NO2-4500NO2(2)
L1013865-02J	Plastic 250ml unpreserved	С	6	4.4	Y	Present/Intact	NO2-4500NO2(2)
L1013865-02K	Plastic 250ml Zn Acetate/NaOH pr	В	>12	3.9	Y	Present/Intact	SULFIDE-4500(7)
L1013865-02L	Plastic 250ml Zn Acetate/NaOH pr	Α	>12	4	Υ	Present/Intact	SULFIDE-4500(7)

Project Number: AC001

Container Info	ormation			Temp			
Container ID	Container Type	Cooler	рН	deg C	Pres	Seal	Analysis(*)
L1013865-02M	Plastic 250ml Zn Acetate/NaOH pr	Α	>12	4	Y	Present/Intact	SULFIDE-4500(7)
L1013865-02N	Plastic 500ml HNO3 preserved	A	<2	4	Y	Present/Intact	DOD-NA-6020T(180),DOD-NI-6020T(180),DOD-CA-6020T(180),DOD-MN-6020T(180),DOD-AL-6020T(180),DOD-AS-6020T(180),DOD-K-6020T(180),DOD-K-6020T(180),DOD-MG-6020T(180),DOD-FE-6020T(180),DOD-PB-6020T(180),DOD-PB-6020T(180),HARDT(180)
L1013865-02O	Plastic 500ml HNO3 preserved	A	<2	4	Y	Present/Intact	DOD-NA-6020T(180),DOD-NI-6020T(180),DOD-CA-6020T(180),DOD-MN-6020T(180),DOD-AL-6020T(180),DOD-AS-6020T(180),DOD-CR-6020T(180),DOD-K-6020T(180),DOD-MG-6020T(180),DOD-FE-6020T(180),DOD-PB-6020T(180),DOD-PB-6020T(180),HARDT(180)
L1013865-02P	Plastic 500ml H2SO4 preserved	C	<2	4.4	Υ	Present/Intact	COD-410(28),NH3-4500(28)
L1013865-02Q	Plastic 500ml H2SO4 preserved	С	<2	4.4	Y	Present/Intact	COD-410(28),NH3-4500(28)
L1013865-02R	Plastic 500ml unpreserved	С	6	4.4	Υ	Present/Intact	SO4-300(28),CL-300(28),NO3- 300(2),TDS-2540(7)
L1013865-02S	Plastic 500ml unpreserved	Α	6	4	Y	Present/Intact	SO4-300(28),CL-300(28),NO3-300(2),TDS-2540(7)
L1013865-02T	Plastic 1000ml unpreserved	C	6	4.4	Y	Present/Intact	TSS-2540(7)
L1013865-02X	Amber 250ml unpreserved	C	6	4.4	Y	Present/Intact	DOC-5310(28)
L1013865-03A	Plastic 250ml HNO3 preserved	Α	<2	4	Y	Present/Intact	DOD-FE-6020S(180),DOD-MG- 6020S(180),DOD-CR- 6020S(180),DOD-MN- 6020S(180),DOD-NA- 6020S(180),DOD-NA- 6020S(180),DOD-NI- 6020S(180),DOD-PB- 6020S(180),DOD-AS-
у у				X	- 1	- Y	6020S(180),DOD-AL- 6020S(180),DOD-K-6020S(180)
L1013865-04A	Vial H2SO4 preserved split	С	N/A	4.4	Υ	Present/Intact	DOC-5310(28)
L1013865-04B	Vial H2SO4 preserved split	С	N/A	4.4	Y	Present/Intact	DOC-5310(28)
L1013865-04C	Vial H2SO4 preserved	С	N/A	4.4	Y	Present/Intact	TOC-5310(28)
L1013865-04D	Vial H2SO4 preserved	С	N/A	4.4	Y	Present/Intact	TOC-5310(28)
L1013865-04E	Plastic 250ml unpreserved	A	N/A	4	Y	Present/Intact	ALK-T-2320(14)
L1013865-04F	Plastic 250ml unpreserved	A	6	4	Y	Present/Intact	NO2-4500NO2(2)
L1013865-04G	Plastic 250ml Zn Acetate/NaOH pr	A	>12	4	Y	Present/Intact	SULFIDE-4500(7)
L1013865-04H	Plastic 250ml Zn Acetate/NaOH pr	В	>12	3.9	Y	Present/Intact	SULFIDE-4500(7)
						Present/Intact	
L1013865-04I	Plastic 250ml Zn Acetate/NaOH pr	В	>12	3.9	Y	riesenvintact	SULFIDE-4500(7)

Project Number: AC001

CambalanauID							
Container ID	Container Type	Cooler	pH	deg C	Pres	Seal	Analysis(*)
L1013865-04J	Plastic 500ml HNO3 preserved	В	<2	3.9	Y	Present/Intact	DOD-NA-6020T(180),DOD-NI-6020T(180),DOD-CA-6020T(180),DOD-MN-6020T(180),DOD-AL-6020T(180),DOD-AS-6020T(180),DOD-CR-6020T(180),DOD-K-6020T(180),DOD-MG-6020T(180),DOD-FE-6020T(180),DOD-PB-6020T(180),DOD-PB-6020T(180),HARDT(180)
L1013865-04K	Plastic 500ml H2SO4 preserved	В	<2	3.9	Y	Present/Intact	COD-410(28),NH3-4500(28)
L1013865-04L	Plastic 500ml unpreserved	Α	6	4	Y	Present/Intact	SO4-300(28),CL-300(28),NO3- 300(2),TDS-2540(7)
L1013865-04M	Plastic 1000ml unpreserved	С	6	4.4	Y	Present/Intact	TSS-2540(7)
L1013865-04X	Amber 250ml unpreserved	C	6	4.4	Y	Present/Intact	DOC-5310(28)
L1013865-05A	Plastic 250ml HNO3 preserved	В	<2	3.9	Y	Present/Intact	DOD-FE-6020S(180),DOD-MG-6020S(180),DOD-CR-6020S(180),DOD-MN-6020S(180),DOD-CA-6020S(180),DOD-NI-6020S(180),DOD-NI-6020S(180),DOD-PB-6020S(180),DOD-AS-6020S(180),DOD-AL-6020S(180),DOD-K-6020S(180)
L1013865-06A	Vial H2SO4 preserved split	В	N/A	3.9	Y	Present/Intact	DOC-5310(28)
L1013865-06B	Vial H2SO4 preserved split	В	N/A	3.9	Y	Present/Intact	DOC-5310(28)
L1013865-06C	Vial H2SO4 preserved	В	N/A	3,9	Y	Present/Intact	TOC-5310(28)
L1013865-06D	Vial H2SO4 preserved	В	N/A	3.9	Y	Present/Intact	TOC-5310(28)
L1013865-06E	Plastic 250ml unpreserved	В	N/A	9.5	Y	Present/Intact	ALK-T-2320(14)
L1013865-06F	Plastic 250ml unpreserved	В	6	3.9	Υ	Present/Intact	NO2-4500NO2(2)
L1013865-06G	Plastic 250ml Zn Acetate/NaOH pr	В	>12	3.9	Y	Present/Intact	SULFIDE-4500(7)
L1013865-06H	Plastic 250ml Zn Acetate/NaOH pr	В	>12	3.9	Y	Present/Intact	SULFIDE-4500(7)
L1013865-06I	Plastic 250ml Zn Acetate/NaOH pr	В	>12	3,9	. Y	Present/Intact	SULFIDE-4500(7)
L10,13865-06J	Plastic 500ml HNO3 preserved	В	<2	3.9	Ÿ	Present/Intact	DOD-NA-6020T(180),DOD-NI-6020T(180),DOD-CA-6020T(180),DOD-MN-6020T(180),DOD-AL-6020T(180),DOD-CR-6020T(180),DOD-CR-6020T(180),DOD-MG-6020T(180),DOD-MG-6020T(180),DOD-FE-6020T(180),DOD-PB-6020T(180),HARDT(180)
L1013865-06K	Plastic 500ml H2SO4 preserved	В	<2	3.9	Y	Present/Intact	COD-410(28),NH3-4500(28)
L1013865-06L	Plastic 500ml unpreserved	В	6	3.9	Y	Present/Intact	SO4-300(28),CL-300(28),NO3- 300(2),TDS-2540(7)
L1013865-06M	Plastic 1000ml unpreserved	В	6	3.9	Y	Present/Intact	TSS-2540(7)

Project Number: AC001

	Container Info	rmation			Temp			
	Container ID	Container Type	Cooler	pH	deg C	Pres	Seal	Analysis(*)
	L1013865-06X	Amber 250ml unpreserved	В	6	3.9	Y	Present/Intact	DOC-5310(28)
	L1013865-07A	Plastic 250ml HNO3 preserved	В	<2	3.9	Y	Present/Intact	DOD-FE-6020S(180),DOD-MG-6020S(180),DOD-CR-6020S(180),DOD-MN-6020S(180),DOD-NA-6020S(180),DOD-NI-6020S(180),DOD-NI-6020S(180),DOD-AS-6020S(180),DOD-AS-6020S(180),DOD-AL-6020S(180),DOD-K-6020S(180)
	L1013865-08A	Vial H2SO4 preserved split	Α	N/A	4	Y	Present/Intact	DOC-5310(28)
	L1013865-08B	Vial H2SO4 preserved split	Α	N/A	4	Y	Present/Intact	DOC-5310(28)
	L1013865-08C	Vial H2SO4 preserved	C	N/A	4.4	Y	Present/Intact	TOC-5310(28)
	L1013865-08D	Vial H2SO4 preserved	C	N/A	4.4	Y	Present/Intact	TOC-5310(28)
	L1013865-08E	Plastic 250ml unpreserved	В	N/A	3.9	Y	Present/Intact	ALK-T-2320(14)
	L1013865-08F	Plastic 250ml unpreserved	В	6	3.9	Y	Present/Intact	NO2-4500NO2(2)
	L1013865-08G	Plastic 250ml Zn Acetate/NaOH pr	В	>12	3.9	Y	Present/Intact	SULFIDE-4500(7)
	L1013865-08H	Plastic 250ml Zn Acetate/NaOH pr	Α	>12	4	Y	Present/Intact	SULFIDE-4500(7)
	L1013865-08I	Plastic 250ml Zn Acetate/NaOH pr	Α	>12	4	Y	Present/Intact	SULFIDE-4500(7)
	L1013865-08J	Plastic 500ml HNO3 preserved	В	<2	3.9	Y	Present/Intact	DOD-NA-6020T(180),DOD-NI-6020T(180),DOD-CA-6020T(180),DOD-MN-6020T(180),DOD-AL-6020T(180),DOD-CR-6020T(180),DOD-K-6020T(180),DOD-K-6020T(180),DOD-FE-6020T(180),DOD-FE-6020T(180),DOD-PB-6020T(1
	L1013865-08K	Plastic 500ml H2SO4 preserved	В	<2	3.9	Y	Present/Intact	COD-410(28),NH3-4500(28)
	L1013865-08L	Plastic 500ml unpreserved	В	6	3.9	Y	Present/Intact	SO4-300(28),CL-300(28),NO3- 300(2),TDS-2540(7)
	L1013865-08M	Plastic 1000ml unpreserved	В	6	3.9.	Υ	Present/Intact	TSS-2540(7)
1	L1013865-08X	Amber 250ml unpreserved	Α	. 6	4	Υ.	Present/Intact	DOC-5310(28)
	L1013865-09A	Plastic 500ml HNO3 preserved	A	<2	4	Y	Present/Intact	DOD-NA-6020T(180),DOD-NI-6020T(180),DOD-CA-6020T(180),DOD-MN-6020T(180),DOD-AL-6020T(180),DOD-AS-6020T(180),DOD-CR-6020T(180),DOD-MG-6020T(180),DOD-MG-6020T(180),DOD-FE-6020T(180),DOD-PB-6020T(180),DOD-PB-6020T(180),HARDT(180)

Project Number: AC001

Container Info	rmation			Temp			
Container ID	Container Type	Cooler	рН	deg C	Pres	Seal	Analysis(*)
L1013865-10A	Plastic 250ml HNO3 preserved	С	<2	4.4	Y	Present/Intact	DOD-FE-6020S(180),DOD-MG-6020S(180),DOD-CR-6020S(180),DOD-MN-6020S(180),DOD-NA-6020S(180),DOD-NI-6020S(180),DOD-PB-6020S(180),DOD-AS-6020S(180),DOD-AL-6020S(180),DOD-K-6020S(180)
L1013865-11A	Vial H2SO4 preserved	С	N/A	4.4	Y	Present/Intact	TOC-5310(28)
L1013865-11B	Vial H2SO4 preserved	С	N/A	4.4	Y	Present/Intact	TOC-5310(28)
L1013865-11C	Plastic 250ml unpreserved	С	N/A	4.4	Y	Present/Intact	ALK-T-2320(14)
L1013865-11D	Plastic 250ml unpreserved	Α	6	4	Y	Present/Intact	NO2-4500NO2(2)
L1013865-11E	Plastic 250ml Zn Acetate/NaOH pr	Α	>12	4	Y	Present/Intact	SULFIDE-4500(7)
L1013865-11F	Plastic 250ml Zn Acetate/NaOH pr	С	>12	4.4	Y	Present/Intact	SULFIDE-4500(7)
L1013865-11G	Plastic 250ml Zn Acetate/NaOH pr	С	>12	4.4	Y	Present/Intact	SULFIDE-4500(7)
L1013865-11H	Plastic 500ml HNO3 preserved	A	<2	4	Υ	Present/Intact	DOD-NA-6020T(180),DOD-NI-6020T(180),DOD-CA-6020T(180),DOD-MN-6020T(180),DOD-AL-6020T(180),DOD-AS-6020T(180),DOD-CR-6020T(180),DOD-K-6020T(180),DOD-MG-6020T(180),DOD-FE-6020T(180),DOD-PB-6020T(180),DOD-PB-6020T(180),HARDT(180)
L1013865-11I	Plastic 500ml H2SO4 preserved	Α	<2	4	Y	Present/Intact	COD-410(28),NH3-4500(28)
L1013865-11J	Plastic 500ml unpreserved	Α	6	4	Y	Present/Intact	SO4-300(28),CL-300(28),NO3- 300(2),TDS-2540(7)
L1013865-11K	Plastic 1000ml unpreserved	C	6	4.4	Y	Present/Intact	.TSS-2540(7)



Project Name:

SHL TASK 0002

Lab Number:

L1013865

Project Number:

AC001

Report Date:

09/16/10

GLOSSARY

Acronyms

EPA Environmental Protection Agency.

 LCS - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LCSD + Laboratory Control Sample Duplicate: Refer to LCS.

MDL Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

MS Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.

MSD - Matrix Spike Sample Duplicate: Refer to MS.

NA Not Applicable.

NC -Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.

NI Not Ignitable.

RL Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration.

The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to
assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD).
Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the
absolute difference between the values; although the RPD value will be provided in the report.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Data Qualifiers

- A Spectra identified as "Aldol Condensation Product"
- The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than five times (5x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank.
- Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- 1 The RPD between the results for the two columns exceeds the method-specified criteria; however, the lower value has been reported due to obvious interference.
- P The RPD between the results for the two columns exceeds the method-specified criteria.
- The quality control sample exceeds the associated acceptance criteria. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R Analytical results are from sample re-analysis.

Report Format: DU Report with "J" Qualifiers

ALPHA

Project Name: SHL TASK 0002 Lab Number: L1013865

Project Number: AC001 Report Date: 09/16/10

Data Qualifiers

RE Analytical results are from sample re-extraction.

 Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL). This represents an estimated concentration for Tentatively Identified Compounds (TlCs).

ND Not detected at the method detection limit (MDL) for the sample.

Report Format: DU Report with "J" Qualifiers

Project Name:

SHL TASK 0002

L1013865

Project Number:

AC001

Lab Number: Report Date:

09/16/10

REFERENCES

Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. 1 Third Edition. Updates I - IIIA, 1997.

- 30 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WPCF. 18th Edition. 1992.
- 44 Methods for the Determination of Inorganic Substances in Environmental Samples, EPA/600/R-93/100, August 1993.

The analyses performed on the sample(s) within this report are in accordance with the minimum established guidelines set forth in the Department of Defense Quality Systems Manual, Version 4.1, issued April 22, 2009

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Certificate/Approval Program Summary

Last revised July 19, 2010 - Westboro Facility

The following list includes only those analytes/methods for which certification/approval is currently held. For a complete listing of analytes for the referenced methods, please contact your Alpha Customer Service Representative.

Connecticut Department of Public Health Certificate/Lab ID: PH-0574. NELAP Accredited Solid Waste/Soil.

Drinking Water (Inorganic Parameters: Color, pH, Turbidity, Conductivity, Alkalinity, Chloride, Free Residual Chlorine, Fluoride, Calcium Hardness, Sulfate, Nitrate, Nitrite, Aluminum, Antimony, Arsenic, Barium, Beryllium, Cadmium, Calcium, Chromium, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Vanadium, Zinc, Total Dissolved Solids, Total Organic Carbon, Total Cyanide, Perchlorate, Organic Parameters: Volatile Organics 524.2, Total Trihalomethanes 524.2, 1,2-Dibromo-3-chloropropane (DBCP), Ethylene Dibromide (EDB), 1,4-Dioxane (Mod 8270). Microbiology Parameters: Total Coliform-MF mEndo (SM9222B), Total Coliform - Colilert (SM9223 P/A), E. Coli. - Colilert (SM9223 P/A), HPC - Pour Plate (SM9215B), Fecal Coliform -MF m-FC (SM9222D))

Wastewater/Non-Potable Water (Inorganic Parameters: Color, pH, Conductivity, Acidity, Alkalinity, Chloride, Total Residual Chlorine, Fluoride, Total Hardness, Silica, Sulfate, Sulfide, Ammonia, Kieldahl Nitrogen, Nitrate, NItrite, O-Phosphate, Total Phosphorus, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Strontium, Thallium, Tin, Titanium, Vanadium, Zinc, Total Residue (Solids), Total Dissolved Solids, Total Suspended Solids (non-filterable), BOD, CBOD, COD, TOC, Total Cyanide, Phenolics, Foaming Agents (MBAS), Bromide, Oil and Grease. Organic Parameters: PCBs, Organochlorine Pesticides, Technical Chlordane, Toxaphene, 2,4-D, 2,4,5-T, 2,4,5-TP(Silvex), Acid Extractables (Phenols), Benzidines, Phthalate Esters, Nitrosamines, Nitroaromatics & Isophorone, Polynuclear Aromatic Hydrocarbons, Haloethers, Chlorinated Hydrocarbons, Volatile Organics, TPH (HEM/SGT), Extractable Petroleum Hydrocarbons (ETPH), MA-EPH, MA-VPH. Microbiology Parameters: Total Coliform - MF mEndo (SM9222B), Total Coliform - MTF (SM9221B), HPC - Pour Plate (SM9215B), Fecal Coliform - MF m-FC (SM9222D), Fecal Coliform - A-1 Broth (SM9221E).)

Solid Waste/Soil (Inorganic Parameters: pH, Sulfide, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Tin, Vanadium, Zinc, Total Cyanide, Ignitability, Phenolics, Corrosivity, TCLP Leach (1311), SPLP Leach (1312 metals only), Reactivity. Organic Parameters: PCBs, PCBs in Oil, Organochlorine Pesticides, Technical Chlordane, Toxaphene, Extractable Petroleum Hydrocarbons (ETPH), MA-EPH, MA-VPH, Dicamba, 2,4-D, 2,4,5-T, 2,4,5-TP(Silvex), Volatile Organics, Acid Extractables (Phenols), 3.3'-Dichlorobenzidine, Phthalates, Nitrosamines, Nitroaromatics & Cyclic Ketones, PAHs, Haloethers, Chlorinated Hydrocarbons.)

Maine Department of Human Services Certificate/Lab ID: 2009024.

Drinking Water (Inorganic Parameters: SM9215B, 9222D, 9223B, EPA 180.1, 300.0, 353.2, SM2130B, 2320B, 4500Cl-D, 4500CN-C, 4500CN-E, 4500F-C, 4500H+B, 4500NO3-F, EPA 200.7, EPA 200.8, 245.1, EPA 300.0. Organic Parameters: 504.1, 524.2.)

Wastewater/Non-Potable Water (Inorganic Parameters: EPA 120.1, 1664A, 350.1, 351.1, 353.2, 410.4, 420.1, Lachat 10-107-06-1-B, SM2320B, 2340B, 2510B, 2540C, 2540D, 426C, 4500Cl-D, 4500Cl-E, 4500CN-C, 4500CN-E, 4500F-B, 4500F-C, 4500H+B, 4500Norg-B, 4500Norg-C, 4500NH3-B, 4500NH3-G, 4500NH3-H, 4500NO3-F, 4500P-B.5, 45 E, 5210B, 5220D, 5310C, EPA 200.7, 200.8, 245.1, Organic Parameters: 608, 624, ME DRO, ME GRO, MA EPH, MA

Solid Waste/Soil (Organic Parameters: ME DRO, ME GRO, MA EPH, MA VPH.)

Massachusetts Department of Environmental Protection Certificate/Lab ID: M-MA086.

Drinking Water

Inorganic Parameters: (EPA 200.8 for: Sb,As,Ba,Be,Cd,Cr,Cu,Pb,Ni,Se,Tl)

(EPA 200.7 for: Ba,Be,Ca,Cd,Cr,Cu,Na,Ni) 245.1, (300.0 for: Nitrate-N, Fluoride, Sulfate)

353.2 for: Nitrate-N, Nitrite-N; SM4500NO3-F, 4500F-C, 4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, 2320B, SM2540C, SM4500H-B.

Organic Parameters: (EPA 524.2 for: Trihalomethanes, Volatile Organics)

(504.1 for: 1,2-Dibromoethane, 1,2-Dibromo-3-Chloropropane), 314.0, 332.

Microbiology Parameters: SM9215B; ENZ. SUB. SM9223; MF-SM9222D

Non-Potable Water

Inorganic Parameters:, (EPA 200.8 for: Al,Sb,As,Be,Cd,Cr,Cu,Pb,Mn,Ni,Se,Ag,Tl,Zn)

(EPA 200.7 for: Al,Sb,As,Be,Cd,Cr,Co,Cu,Fe,Pb,Mn,Mo,Ni,Se,Ag,Sr,Ti,Tl, V,Zn,Ca,Mg,Na,K)

245.1, SM4500H,B, EPA 120.1, SM2510B, 2540C, 2540B, 2340B, 2320B, 4500CL-E, 4500F-BC, 426C, SM4500NH3-BH. (EPA 350.1 for: Ammonia-N), LACHAT 10-107-06-1-B for Ammonia-N, SM4500NO3-F, 353.2 for Nitrate-N. SM4500NH3-B,C-Titr, SM4500NH3-BC-NES, EPA 351.1, SM4500P-E, 4500P-B,E, 5220D, EPA 410.4, SM 5210B, 5310C, 4500CL-D, EPA 1664, SM14 510AC, EPA 420, SM4500-CN-CE, SM2540D.

Organic Parameters: (EPA 624 for Volatile Halocarbons, Volatile Aromatics)

(608 for: Chlordane, Aldrin, Dieldrin, DDD, DDE, DDT, Heptachlor, Heptachlor Epoxide, PCBs-Water), EPA 625 for SVOC Acid Extractables and SVOC Base/Neutral Extractables, 600/4-81-045-PCB-Oil

New Hampshire Department of Environmental Services Certificate/Lab ID: 200307. NELAP Accredited.

Drinking Water (Inorganic Parameters: SM6215B, 9222B, 9223B Colilert, EPA 200.7, 200.8, 245.2, 120.1, 300.0, 314.0, SM4500CN-E, 4500H+B, 4500NO3-F, 2320B, 2510B, 2540C, 4500F-C, 5310C, 2120B, EPA 331.0. Organic

Parameters: 504.1, 524.2, SM6251B.)

Non-Potable Water (Inorganic Parameters: SM9222D, 9221B, 9222B, 9221E-EC, EPA 200.7, 200.8, 245.1, 245.2, SW-846 6010B, 6020, 7196A, 7470A, SM3500-CR-D, EPA 120.1, 300.0, 350.1, 351.1, 353.2, 420.1, 1664A, SW-846 9010, 9030, 9040B, SM426C, SM2310B, 2540B, 2540D, 4500H+B, 4500NH3-H, 4500NH3-E, 4500NO2-B, 4500P-E, 4500-S2-D, 5210B, 2320B, 2540C, 4500F-C, 5310C, 5540C, LACHAT 10-117-07-1-B, LACHAT 10-107-06-1-B, LACHAT 10-107-04-1-J, LACHAT 10-117-07-1-A, SM4500CL-E, LACHAT 10-204-00-1-A, LACHAT 10-107-06-2-D. Organic Parameters: SW-846 3005A, 3015A, 3510C, 5030B, 8021B, 8260B, 8270C, 8330, EPA 624, 625, 608, SW-846 8082, 8081A.)

Solid & Chemical Materials (Inorganic Parameters: SW-846 6010B, 7196A, 7471A, 7.3.3.2, 7.3.4.2, 1010, 1030, 9010, 9012A, 9014, 9030B, 9040, 9045C, 9050C, 1311, 3005A, 3050B, 3051A. Organic Parameters: SW-846 3540C, 3545, 3580A, 5030B, 5035, 8021B, 8260B, 8270C, 8330, 8151A, 8082, 8081A.)

New Jersey Department of Environmental Protection Certificate/Lab ID: MA935. NELAP Accredited.

Drinking Water (Inorganic Parameters: SM9222B, 9221E, 9223B, 9215B, 4500NO3-F, 4500F-C, EPA 300.0, 200.7, 2540C, 2320B, 314.0, SM2120B, 2510B, 5310C, SM4500H-B, EPA 200.8, 245.2. Organic Parameters: 504.1,

SM6251B, 524.2.)

Non-Potable Water (Inorganic Parameters: SM5210B, EPA 410.4, SM5220D, 4500Cl-D, EPA 300.0, SM2120B, SM4500F-BC, EPA 200.7, 351.1, LACHAT 10-107-06-2-D, EPA 353.2, SM4500NO3-F, 4500NO2-B, EPA 1664A, SM5310B, C or D, 4500-PE, EPA 420.1, SM4500P-B5+E, 2540B, 2540C, 2540D, EPA 120.1, SM2510B, SM15 426C, SM9221CE, 9222D, 9221B, 9222B, 9215B, 2310B, 2320B, 4500NH3-H, 4500-S D, EPA 350.1, SM5210B, SW-846 3015, 6020, 7470A, 5540C, 4500H-B, EPA 200.8, SM3500Cr-D, EPA 245.1, 245.2, SW-846 9040B, 3005A, EPA 6010B, 7196A, SW-846 9010B, 9030B. Organic Parameters: SW-846 8260B, 8270C, 3510C, EPA 608, 624, 625, SW-846 5030B, 8021B, 8081A, 8082, 8151A, 8330, NJ OQA-QAM-025 Rev.7.)

Solid & Chemical Materials (Inorganic Parameters: SW-846 9040B, 3005A, 6010B, 7196A, 5030B, 9010B, 9030B, 1030, 1311, 3050B, 3051, 7471A, 9014, 9012A, 9045C, 9050A, 9065. Organic Parameters: SW-846 8021B, 8081A, 8082, 8151A, 8330, 8260B, 8270C, 1311, 1312, 3540C, 3545, 3550B, 3580A, 5035L, 5035H, NJ OQA-QAM-025 Rev.7.)

New York Department of Health Certificate/Lab ID: 11148. NELAP Accredited.

Drinking Water (Inorganic Parameters: SM9223B, 9222B, 9215B, EPA 200.8, 200.7, 245.2, SM5310C, EPA 314.0, 332.0, SM2320B, EPA 300.0, SM2120B, 4500CN-E, 4500F-C, 4500H-B, 4500NO3-F, 2540C, EPA 120.1, SM 2510B.

Organic Parameters: EPA 524.2, 504.1.)

Non-Potable Water (Inorganic Parameters: SM9221E, 9222D, 9221B, 9222B, 9215B, 5210B, EPA 410.4, SM5220D, 2310B-4a, 2320B, EPA 200.7, 300.0, LACHAT 10-117-07-1A or B, SM4500CI-E, 4500F-C, SM15 426C, EPA 350.1, LACHAT 10-107-06-1-B, SM4500NH3-H, EPA 351.1, LACHAT 10-107-06-2, EPA 353.2, LACHAT 10-107-041-C, SM4500-NO3-F, 4500-NO2-B, 4500P-E, 2540C, 2540B, 2540D, EPA 200.8, EPA 6010B, 6020, EPA 7196A, SM3500Cr-D, EPA 245.1, 245.2, 7470A, SM2120B, SM4500-CN-E LACHAT 10-204-00-1-A, EPA 9040B, SM4500-HB, EPA 1664A, SM5310C, EPA 420.1, SM14 510C, EPA 120.1, SM2510B, SM4500S-D, SM5540C, EPA 3005A, 3015. Organic Parameters: EPA 624, 8260B, 8270C, 625, 608, 8081A, 8151A, 8330, 8082, EPA 3510C, 5030B, 9010B, 9030B.)

Solid & Hazardous Waste (Inorganic Parameters: 1010, 1030, SW-846 Ch 7 Sec 7.3, EPA 6010B, 7196A, 7471A, 9012A, 9014, 9040B, 9045C, 9065, 9050, EPA 1311, 1312, 3005A, 3050B, 9010B, 9030B. Organic Parameters: EPA 8260B, 8270C, 8081A, 8151A, 8330, 8082, 3540C, 3545, 3546, 3580, 5030B, 5035.)

North Carolina Department of the Environment and Natural Resources <u>Certificate/Lab ID</u>: 666. <u>Organic Parameters</u>: MA-EPH, MA-VPH.

Pennsylvania Department of Environmental Protection <u>Certificate/Lab ID</u>: 68-03671. *NELAP Accredited. Non-Potable Water* (<u>Organic Parameters</u>: EPA 3510C, 5030B, 625, 624, 608, 8081A, 8082, 8151A, 8260B, 8270C, 8330)

Solid & Hazardous Waste (Inorganic Parameters: EPA 1010, 1030, 1311, 3050B, 3051, 6010B, EPA 7.3.3.2, EPA 7.3.4.2, 7196A, 7471A, 9010B, 9012A, 9014, 9040B, 9045C, 9050, 9065. Organic Parameters: 3540C, 3545, 3580A, 5035, 8021B, 8081A, 8082, 8151A, 8260B, 8270C, 8330)

Rhode Island Department of Health Certificate/Lab ID: LAO00065, NELAP Accredited via NY-DOH.

Refer to MA-DEP Certificate for Potable and Non-Potable Water.

Refer to NY-DOH Certificate for Potable and Non-Potable Water.

Texas Commisson on Environmental Quality <u>Certificate/Lab ID</u>: T104704476-09-1. *NELAP Accredited*. *Non-Potable Water* (<u>Inorganic Parameters</u>: EPA 120.1, 1664, 200.7, 200.8, 245.1, 245.2, 300.0, 350.1, 351.1, 353.2, 376.2, 410.4, 420.1, 6010, 6020, 7196, 7470, 9040, SM 2120B, 2310B, 2320B, 2510B, 2540B, 2540C, 2540D, 426C, 4500CL-E, 4500CN-E, 4500F-C, 4500H+B, 4500NH3-H, 4500NO2B, 4500P-E, 4500 S2⁻D, 510C, 5210B, 5220D, 5310C, 5540C. <u>Organic Parameters</u>: EPA 608, 624, 625, 8081, 8082, 8151, 8260, 8270, 8330.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 1311, 1312, 9012, 9014, 9040, 9045, 9050, 9065.)

Department of Defense Certificate/Lab ID: L2217.

Drinking Water (Inorganic Parameters: SM 4500H-B. Organic Parameters: EPA 524.2, 504.1.)

Non-Potable Water (Inorganic Parameters: EPA 200.7, 200.8, 6010B, 6020, 245.1, 245.2, 7470A, 9040B, 300.0, 9251, 9038, 350.1, 353.2, 351.1, 120.1, 9050A, 410.4, 9060, 1664, 420.1, LACHAT 10-107-06-1-B, SM 4500CN-E, 4500H-B, 4500CL-E, 4500F-BC, 4500SO4-E, 426C, 4500NH3-B, 4500NH3-H, 4500NO3-F, 4500NO2-B, 4500Norg-C, 4500PE, 2510B, 5540C, 5220D, 5310C, 2540B, 2540C, 2540D, 510C, 4500S2-AD, 3005A, 3015, 9010B, 9030B. Organic Parameters: EPA 8260B, 8270C, 8330, 625, 8082, 8151A, 8081A, 3510C, 5030B, MassDEP EPH, MassDEP VPH.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 200.7, 6010B, 7471A, 9040B, 9045C, 9065, 420.1, 9012A, 6860, 1311, 1312, 3050B, 9030B, 3051, 9010B, 3540C, SM 510ABC, 4500CN-CE, 2540G, SW-846 7.3, Organic Parameters: EPA 8260B, 8270C, 8330, 8082, 8081A, 8151A, 3545, 3546, 3580, 5035, MassDEP EPH, MassDEP VPH.)

Analytes Not Accredited by NELAP

Certification is not available by NELAP for the following analytes: **EPA 8260B:** Freon-113, 1,2,4,5-Tetramethylbenzene, 4-Ethyltoluene. **EPA 8330A:** PETN, Picric Acid, Nitroglycerine, 2,6-DANT, 2,4-DANT. **EPA 8270C:** Methyl naphthalene, Dimethyl naphthalene, Total Methylnaphthalenes, Total Dimethylnaphthalenes, 1,4-Diphenylhydrazine (Azobenzene). **EPA 625:** 4-Chloroaniline. **EPA 350.1** for Ammonia in a Soil matrix.

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ANALYTICAL REPORT

Lab Number:

L1013874

Client:

Sovereign Consulting

905B South Main Street

Mansfield, MA 02048

ATTN:

Phil McBain

Phone:

(508) 339-3200

Project Name:

SHL TASK 0002

Project Number:

AC001

Report Date:

09/21/10

Certifications & Approvals: MA (M-MA086), NY NELAC (11148), CT (PH-0574), NH (2003), NJ (MA935), RI (LAO00065), ME (MA0086), PA (Registration #68-03671), USDA (Permit #S-72578), US Army Corps of Engineers, Naval FESC.

Eight Walkup Drive, Westborough, MA 01581-1019 508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com

Project Name: SHL TASK 0002

Project Number: AC001

Lab Number:

L1013874

Report Date:

09/21/10

Alpha Sample ID	Client ID	Sample Location	Collection Date/Time
L1013874-01	SHM-10-01-090810-U	DEVENS, MA	09/08/10 10:30
L1013874-02	SHM-10-10-090810-U	DEVENS, MA	09/08/10 12:30
L1013874-03	SHM-10-05A-090810-U	DEVENS, MA	09/08/10 11:00
L1013874-04	SHM-10-06-090810-U	DEVENS, MA	09/08/10 13:30

Project Name:

SHL TASK 0002

Project Number:

AC001

Lab Number:

L1013874

Report Date:

09/21/10

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet all of the requirements of NELAC, for all NELAC accredited parameters. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.), Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

For additional information, please contact Client Services at 800-624-9220.

Report Submission

This report contains the results for the Dissolved Inorganic Carbon analysis. The results for all other analyses have been issued under separate cover.

Dissolved Inorganic Carbon

L1013874-01 through -04 have elevated detection limits due to the dilutions required by the elevated concentrations present in the samples.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:

Michelle Un. Morris Michelle M. Morris

Title: Technical Director/Representative

Date: 09/21/10

INORGANICS & MISCELLANEOUS

Project Name: SHL TASK 0002

Project Number: AC001

Lab Number:

L1013874

Report Date:

09/21/10

SAMPLE RESULTS

Lab ID:

L1013874-01

DEVENS, MA

Client ID: Sample Location:

SHM-10-01-090810-U

Matrix:

Water

Date Collected:

09/08/10 10:30

Date Received:

09/08/10

Field Prep:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry										
Dissolved Inorganic Carbon	37		mg/l	20	**	20	09/08/10 22:00	09/20/10 13:34	30,5310C(m)	DW

Project Name:

SHL TASK 0002

Lab Number:

L1013874

Project Number:

AC001

Report Date:

09/21/10

SAMPLE RESULTS

Lab ID:

L1013874-02

Client ID:

SHM-10-10-090810-U

Sample Location:

DEVENS, MA

Matrix:

Water

Date Collected:

09/08/10 12:30

Date Received:

09/08/10

Field Prep:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry Dissolved Inorganic Carbon	76		mg/l	20		20	09/08/10 22:00	09/20/10 13:34	30.5310C(m)	DW

Project Name:

SHL TASK 0002

Lab Number:

L1013874

Project Number: AC001

Report Date:

09/21/10

SAMPLE RESULTS

Lab ID:

L1013874-03

Client ID:

SHM-10-05A-090810-U

Sample Location:

DEVENS, MA

Matrix:

Water

Date Collected:

09/08/10 11:00

Date Received:

09/08/10

Field Prep:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry										
Dissolved Inorganic Carbon	20		mg/l	20	**	20	09/08/10 22:00	09/20/10 13:34	30,5310C(m)	DW

Project Name:

SHL TASK 0002

Lab Number:

L1013874

Project Number: AC001

Report Date:

09/21/10

SAMPLE RESULTS

Lab ID:

L1013874-04

Client ID:

SHM-10-06-090810-U

Sample Location:

DEVENS, MA

Matrix:

Water

Date Collected:

09/08/10 13:30

Date Received:

09/08/10

Field Prep:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry										
Dissolved Inorganic Carbon	93		mg/l	20	-	20	09/08/10 22:00	09/20/10 13:34	30,5310C(m)	DW

Project Name: SHL TASK 0002

OFFE THOR GOO

Lab Number:

L1013874

Project Number: AC001

Report Date:

09/21/10

Method Blank Analysis Batch Quality Control

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry for sar	nple(s): 01-04 Bato	h: WG43	3278-1						
Dissolved Inorganic Carbon	ND	mg/l	1.0		1	09/08/10 22:00	09/20/10 13:34	30,5310C(m)	DW

Lab Control Sample Analysis Batch Quality Control

Lab Number:

L1013874

Report Date:

09/21/10

Project Name: SHL TASK 0002

Project Number: AC001

LCS LCSD %Recovery **Parameter** %Recovery %Recovery Limits RPD **RPD Limits** Qual Qual Qual

Associated sample(s): 01-04 Batch: WG433278-2

Dissolved Inorganic Carbon

.110

Lab Duplicate Analysis
Batch Quality Control

Lab Number:

L1013874

Report Date:

09/21/10

Parameter	Native Sample		Duplicate Sample		Units	RPD	Qual	RPD Limits
Associated sample(s): 01-04	QC Batch ID: WG433278-3	QC Sample: L1	013874-01 Client	ID: S	SHM-10-01-0908	IM-10-01-090810-U		
Dissolved Inorganic Carbon		37	41		ma/l	10		

Project Name:

Project Number: AC001

SHL TASK 0002

Project Name: SHL TASK 0002

Project Number: AC001

Lab Number: L1013874 Report Date: 09/21/10

Sample Receipt and Container Information

Were project specific reporting limits specified?

YES

Reagent H2O Preserved Vials Frozen on: NA

Cooler Information Custody Seal

Cooler

B Present/Intact

C Present/Intact

A Present/Intact

Container Info	ormation			Temp			
Container ID	Container Type	Cooler	рН	deg C	Pres	Seal	Analysis(*)
L1013874-01A	Vial H2SO4 preserved split	С	N/A	4.4	Y	Present/Intact	SPECWC()
L1013874-01B	Vial H2SO4 preserved split	С	N/A	4.4	Y	Present/Intact	SPECWC()
L1013874-01X	Amber 500ml unpreserved	С	6	4.4	Y	Present/Intact	SPECWC()
L1013874-02A	Vial H2SO4 preserved split	С	N/A	4.4	Y	Present/Intact	SPECWC()
L1013874-02B	Vial H2SO4 preserved split	C	N/A	4.4	Y	Present/Intact	SPECWC()
L1013874-02X	Amber 500ml unpreserved	С	6	4.4	Y	Present/Intact	SPECWC()
L1013874-03A	Vial H2SO4 preserved split	В	N/A	3.9	Y	Present/Intact	SPECWC()
L1013874-03B	Vial H2SO4 preserved split	В	N/A	3.9	Y	Present/Intact	SPECWC()
L1013874-03X	Amber 500ml unpreserved	В	6	3.9	Y	Present/Intact	SPECWC()
L1013874-04A	Vial H2SO4 preserved split	Α	N/A	4	Y	Present/Intact	SPECWC()
L1013874-04B	Vial H2SO4 preserved split	Α	N/A	4	Y	Present/Intact	SPECWC()
L1013874-04X	Amber 500ml unpreserved	Α	6	4	Y	Present/Intact	SPECWC()

Project Name: Project Number:

SHL TASK 0002

AC001

Lab Number:

L1013874

Report Date:

09/21/10

GLOSSARY

Acronyms

EPA Environmental Protection Agency,

LCS · Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LCSD Laboratory Control Sample Duplicate: Refer to LCS.

MDL · Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

MS - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.

MSD · Matrix Spike Sample Duplicate: Refer to MS.

NA · Not Applicable.

NC - Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.

NI. Not Ignitable.

RL Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

RPD Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Data Qualifiers

- Spectra identified as "Aldol Condensation Product".
- The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than five times (5x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank.
- D Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument. E
- -The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of H sample collection.
- The RPD between the results for the two columns exceeds the method-specified criteria: however, the lower value has been reported due to obvious interference.
- P The RPD between the results for the two columns exceeds the method-specified criteria.
- Q -The quality control sample exceeds the associated acceptance criteria. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- · Analytical results are from sample re-analysis.

Data Usability Report Report Formal:

Project Name: SHL TASK 0002 Lab Number: L1013874

Project Number: AC001 Report Date: 09/21/10

Data Qualifiers

RE - Analytical results are from sample re-extraction.

J - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

ND - Not detected at the reporting limit (RL) for the sample.

Report Format: Data Usability Report

Project Name:

SHL TASK 0002

Project Number: AC001

Lab Number:

L1013874

Report Date:

09/21/10

REFERENCES

30 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WPCF. 18th Edition. 1992.

The analyses performed on the sample(s) within this report are in accordance with the minimum established guidelines set forth in the Department of Defense Quality Systems Manual, Version 4.1, issued April 22, 2009

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Certificate/Approval Program Summary

Last revised July 19, 2010 - Westboro Facility

The following list includes only those analytes/methods for which certification/approval is currently held. For a complete listing of analytes for the referenced methods, please contact your Alpha Customer Service Representative.

Connecticut Department of Public Health Certificate/Lab ID: PH-0574. NELAP Accredited Solid Waste/Soil.

Drinking Water (Inorganic Parameters: Color, pH, Turbidity, Conductivity, Alkalinity, Chloride, Free Residual Chlorine, Fluoride, Calcium Hardness, Sulfate, Nitrate, Nitrite, Aluminum, Antimony, Arsenic, Barium, Beryllium, Cadmium, Calcium, Chromium, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Vanadium, Zinc, Total Dissolved Solids, Total Organic Carbon, Total Cyanide, Perchlorate.

Organic Parameters: Volatile Organics 524.2, Total Trihalomethanes 524.2, 1,2-Dibromo-3-chloropropane (DBCP), Ethylene Dibromide (EDB), 1,4-Dioxane (Mod 8270). Microbiology Parameters: Total Coliform-MF mEndo (SM9222B), Total Coliform – Colilert (SM9223 P/A), E. Coli. – Colilert (SM9223 P/A), HPC – Pour Plate (SM9215B), Fecal Coliform – MF m-FC (SM9222D))

Wastewater/Non-Potable Water (Inorganic Parameters: Color, pH, Conductivity, Acidity, Alkalinity, Chloride, Total Residual Chlorine, Fluoride, Total Hardness, Silica, Sulfate, Sulfide, Ammonia, Kjeldahl Nitrogen, Nitrate, Nitrite, O-Phosphate, Total Phosphorus, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Strontium, Thallium, Tin, Titanium, Vanadium, Zinc, Total Residue (Solids), Total Dissolved Solids, Total Suspended Solids (non-filterable), BOD, CBOD, COD, TOC, Total Cyanide, Phenolics, Foaming Agents (MBAS), Bromide, Oil and Grease. Organic Parameters: PCBs, Organochlorine Pesticides, Technical Chlordane, Toxaphene, 2,4-D, 2,4,5-T, 2,4,5-TP(Silvex), Acid Extractables (Phenols), Benzidines, Phthalate Esters, Nitrosamines, Nitroaromatics & Isophorone, Polynuclear Aromatic Hydrocarbons, Haloethers, Chlorinated Hydrocarbons, Volatile Organics, TPH (HEM/SGT), Extractable Petroleum Hydrocarbons (ETPH), MA-EPH, MA-VPH, Microbiology Parameters: Total Coliform – MF mendo (SM9222B), Total Coliform – MTF (SM9221B), HPC – Pour Plate (SM9215B), Fecal Coliform – A-1 Broth (SM9221E).)

Solid Waste/Soil (Inorganic Parameters: pH, Sulfide, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Tin, Vanadium, Zinc, Total Cyanide, Ignitability, Phenolics, Corrosivity, TCLP Leach (1311), SPLP Leach (1312 metals only), Reactivity. Organic Parameters: PCBs, PCBs in Oil, Organochlorine Pesticides, Technical Chlordane, Toxaphene, Extractable Petroleum Hydrocarbons (ETPH), MA-EPH, MA-VPH, Dicamba, 2,4-D, 2,4,5-T, 2,4,5-TP(Silvex), Volatile Organics, Acid Extractables (Phenols), 3,3'-Dichlorobenzidine, Phthalates, Nitrosamines, Nitroaromatics & Cyclic Ketones, PAHs, Haloethers, Chlorinated Hydrocarbons.)

Maine Department of Human Services Certificate/Lab ID: 2009024.

Drinking Water (Inorganic Parameters: SM9215B, 9222D, 9223B, EPA 180.1, 300.0, 353.2, SM2130B, 2320B, 4500Cl-D, 4500CN-C, 4500CN-E, 4500F-C, 4500H+B, 4500NO3-F, EPA 200.7, EPA 200.8, 245.1, EPA 300.0. Organic Parameters: 504.1, 524.2.)

Wastewater/Non-Potable Water (Inorganic Parameters: EPA 120.1, 1664A, 350.1, 351.1, 353.2, 410.4, 420.1, Lachat 10-107-06-1-B, SM2320B, 2340B, 2510B, 2540C, 2540D, 426C, 4500CI-D, 4500CI-E, 4500CN-C, 4500CN-E, 4500F-B, 4500F-C, 4500H+B, 4500Norg-B, 4500Norg-C, 4500NH3-B, 4500NH3-G, 4500NH3-H, 4500NO3-F, 4500P-B.5, 4500P-E, 5210B, 5220D, 5310C, EPA 200.7, 200.8, 245.1. Organic Parameters: 608, 624, ME DRO, ME GRO, MA EPH, MA VPH.)

Solid Waste/Soil (Organic Parameters: ME DRO, ME GRO, MA EPH, MA VPH.)

Massachusetts Department of Environmental Protection Certificate/Lab ID: M-MA086.

Drinking Water

Inorganic Parameters: (EPA 200.8 for: Sb,As,Ba,Be,Cd,Cr,Cu,Pb,Ni,Se,Tl)

(EPA 200.7 for: Ba,Be,Ca,Cd,Cr,Cu,Na,Ni) 245.1, (300.0 for: Nitrate-N, Fluoride, Sulfate)

353.2 for: Nitrate-N, Nitrite-N; SM4500NO3-F, 4500F-C, 4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, 2320B, SM2540C, SM4500H-B.

Organic Parameters: (EPA 524.2 for: Trihalomethanes, Volatile Organics) (504.1 for: 1,2-Dibromoethane, 1,2-Dibromo-3-Chloropropane), 314.0, 332.

Microbiology Parameters: SM9215B; ENZ. SUB. SM9223; MF-SM9222D

Non-Potable Water

Inorganic Parameters:, (EPA 200.8 for: Al,Sb,As,Be,Cd,Cr,Cu,Pb,Mn,Ni,Se,Aq,Tl,Zn)

(EPA 200.7 for: Al,Sb,As,Be,Cd,Cr,Co,Cu,Fe,Pb,Mn,Mo,Ni,Se,Ag,Sr,Ti,Tl, V,Zn,Ca,Mg,Na,K)

245.1, SM4500H,B, EPA 120.1, SM2510B, 2540C, 2540B, 2340B, 2320B, 4500CL-E, 4500F-BC, 426C, SM4500NH3-BH, (EPA 350.1 for: Ammonia-N), LACHAT 10-107-06-1-B for Ammonia-N, SM4500NO3-F, 353.2 for Nitrate-N, SM4500NH3-B,C-Titr, SM4500NH3-BC-NES, EPA 351.1, SM4500P-E, 4500P-B,E, 5220D, EPA 410.4, SM 5210B,

5310C, 4500CL-D, EPA 1664, SM14 510AC, EPA 420, SM4500-CN-CE, SM2540D.

Organic Parameters: (EPA 624 for Volatile Halocarbons, Volatile Aromatics)

(608 for: Chlordane, Aldrin, Dieldrin, DDD, DDE, DDT, Heptachlor, Heptachlor Epoxide, PCBs-Water), EPA 625 for SVOC Acid Extractables and SVOC Base/Neutral Extractables, 600/4-81-045-PCB-Oil

New Hampshire Department of Environmental Services Certificate/Lab ID: 200307. NELAP Accredited.

Drinking Water (Inorganic Parameters: SM6215B, 9222B, 9223B Colilert, EPA 200.7, 200.8, 245.2, 120.1, 300.0, 314.0, SM4500CN-E, 4500H+B, 4500NO3-F, 2320B, 2510B, 2540C, 4500F-C, 5310C, 2120B, EPA 331.0. Organic Parameters: 504.1, 524.2, SM6251B.)

Non-Potable Water (Inorganic Parameters: SM9222D, 9221B, 9222B, 9221E-EC, EPA 200.7, 200.8, 245.1, 245.2, SW-846 6010B, 6020, 7196A, 7470A, SM3500-CR-D, EPA 120.1, 300.0, 350.1, 351.1, 353.2, 420.1, 1664A, SW-846 9010, 9030, 9040B, SM426C, SM2310B, 2540B, 2540D, 4500H+B, 4500NH3-H, 4500NH3-E, 4500NO2-B, 4500P-E, 4500-S2-D, 5210B, 2320B, 2540C, 4500F-C, 5310C, 5540C, LACHAT 10-117-07-1-B, LACHAT 10-107-06-1-B, LACHAT 10-107-06-1-B, LACHAT 10-107-04-1-J, LACHAT 10-117-07-1-A, SM4500CL-E, LACHAT 10-204-00-1-A, LACHAT 10-107-06-2-D. Organic Parameters: SW-846 3005A, 3015A, 3510C, 5030B, 8021B, 8260B, 8270C, 8330, EPA 624, 625, 608, SW-846 8082, 8081A.)

Solid & Chemical Materials (Inorganic Parameters: SW-846 6010B, 7196A, 7471A, 7.3.3.2, 7.3.4.2, 1010, 1030, 9010, 9012A, 9014, 9030B, 9040, 9045C, 9050C, 1311, 3005A, 3050B, 3051A. Organic Parameters: SW-846 3540C, 3545, 3580A, 5030B, 5035, 8021B, 8260B, 8270C, 8330, 8151A, 8082, 8081A.)

New Jersey Department of Environmental Protection Certificate/Lab ID: MA935. NELAP Accredited.

Drinking Water (Inorganic Parameters: SM9222B, 9221E, 9223B, 9215B, 4500NO3-F, 4500F-C, EPA 300.0, 200.7, 2540C, 2320B, 314.0, SM2120B, 2510B, 5310C, SM4500H-B, EPA 200.8, 245.2. Organic Parameters: 504.1, SM6251B, 524.2.)

Non-Potable Water (Inorganic Parameters: SM5210B, EPA 410.4, SM5220D, 4500Cl-D, EPA 300.0, SM2120B, SM4500F-BC, EPA 200.7, 351.1, LACHAT 10-107-06-2-D, EPA 353.2, SM4500NO3-F, 4500NO2-B, EPA 1664A, SM5310B, C or D, 4500-PE, EPA 420.1, SM4500P-B5+E, 2540B, 2540C, 2540D, EPA 120.1, SM2510B, SM15 426C, SM9221CE, 9222D, 9221B, 9222B, 9215B, 2310B, 2320B, 4500NH3-H, 4500-S D, EPA 350.1, SM5210B, SW-846 3015, 6020, 7470A, 5540C, 4500H-B, EPA 200.8, SM3500Cr-D, EPA 245.1, 245.2, SW-846 9040B, 3005A, EPA 6010B, 7196A, SW-846 9010B, 9030B. Organic Parameters: SW-846 8260B, 8270C, 3510C, EPA 608, 624, 625, SW-846 5030B, 8021B, 8081A, 8082, 8151A, 8330, NJ OQA-QAM-025 Rev.7.)

Solid & Chemical Materials (Inorganic Parameters: SW-846 9040B, 3005A, 6010B, 7196A, 5030B, 9010B, 9030B, 1030, 1311, 3050B, 3051, 7471A, 9014, 9012A, 9045C, 9050A, 9065. Organic Parameters: SW-846 8021B, 8081A, 8082, 8151A, 8330, 8260B, 8270C, 1311, 1312, 3540C, 3545, 3550B, 3580A, 5035L, 5035H, NJ OQA-QAM-025 Rev.7.)

New York Department of Health Certificate/Lab ID: 11148. NELAP Accredited.

Drinking Water (Inorganic Parameters: SM9223B, 9222B, 9215B, EPA 200.8, 200.7, 245.2, SM5310C, EPA 314.0, 332.0, SM2320B, EPA 300.0, SM2120B, 4500CN-E, 4500F-C, 4500H-B, 4500NO3-F, 2540C, EPA 120.1, SM 2510B, Organic Parameters: EPA 524.2, 504.1.)

Non-Potable Water (Inorganic Parameters: SM9221E, 9222D, 9221B, 9222B, 9215B, 5210B, EPA 410.4, SM5220D, 2310B-4a, 2320B, EPA 200.7, 300.0, LACHAT 10-117-07-1A or B, SM4500CI-E, 4500F-C, SM15 426C, EPA 350.1, LACHAT 10-107-06-1-B, SM4500NH3-H, EPA 351.1, LACHAT 10-107-06-2, EPA 353.2, LACHAT 10-107-041-C, SM4500-NO3-F, 4500-NO2-B, 4500P-E, 2540C, 2540B, 2540D, EPA 200.8, EPA 6010B, 6020, EPA 7196A, SM3500Cr-D, EPA 245.1, 245.2, 7470A; SM2120B, SM4500-CN-E LACHAT 10-204-00-1-A, EPA 9040B, SM4500-HB, EPA 1664A, SM5310C, EPA 420.1, SM14 510C, EPA 120.1, SM2510B, SM4500S-D, SM5540C, EPA 3005A, 3015. Organic Parameters: EPA 624, 8260B, 8270C, 625, 608, 8081A, 8151A, 8330, 8082, EPA 3510C, 5030B, 9010B, 9030B.)

Solid & Hazardous Waste (Inorganic Parameters: 1010, 1030, SW-846 Ch 7 Sec 7.3, EPA 6010B, 7196A, 7471A, 9012A, 9014, 9040B, 9045C, 9065, 9050, EPA 1311, 1312, 3005A, 3050B, 9010B, 9030B. Organic Parameters: EPA 8260B, 8270C, 8081A, 8151A, 8330, 8082, 3540C, 3545, 3546, 3580, 5030B, 5035.)

North Carolina Department of the Environment and Natural Resources Certificate/Lab ID; 666. Organic Parameters: MA-EPH, MA-VPH.

Pennsylvania Department of Environmental Protection <u>Certificate/Lab ID</u>: 68-03671. *NELAP Accredited*. *Non-Potable Water* (<u>Organic Parameters</u>: EPA 3510C, 5030B, 625, 624, 608, 8081A, 8082, 8151A, 8260B, 8270C, 8330)

Solid & Hazardous Waste (Inorganic Parameters: EPA 1010, 1030, 1311, 3050B, 3051, 6010B, EPA 7.3.3.2, EPA 7.3.4.2, 7196A, 7471A, 9010B, 9012A, 9014, 9040B, 9045C, 9050, 9065. Organic Parameters: 3540C, 3545, 3580A, 5035, 8021B, 8081A, 8082, 8151A, 8260B, 8270C, 8330)

Rhode Island Department of Health Certificate/Lab ID: LAO00065. NELAP Accredited via NY-DOH.

Refer to MA-DEP Certificate for Potable and Non-Potable Water.

Refer to NY-DOH Certificate for Potable and Non-Potable Water.

Texas Commisson on Environmental Quality <u>Certificate/Lab ID</u>: T104704476-09-1. *NELAP Accredited. Non-Potable Water* (<u>Inorganic Parameters</u>: EPA 120.1, 1664, 200.7, 200.8, 245.1, 245.2, 300.0, 350.1, 351.1, 353.2, 376.2, 410.4, 420.1, 6010, 6020, 7196, 7470, 9040, SM 2120B, 2310B, 2320B, 2510B, 2540B, 2540C, 2540D, 426C, 4500CL-E, 4500CN-E, 4500F-C, 4500H+B, 4500NH3-H, 4500NO2B, 4500P-E, 4500 S2⁻D, 510C, 5210B, 5220D, 5310C, 5540C. <u>Organic Parameters</u>: EPA 608, 624, 625, 8081, 8082, 8151, 8260, 8270, 8330.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 1311, 1312, 9012, 9014, 9040, 9045, 9050, 9065.)

Department of Defense Certificate/Lab ID: L2217.

Drinking Water (Inorganic Parameters: SM 4500H-B. Organic Parameters: EPA 524.2, 504.1.)

Non-Potable Water (Inorganic Parameters: EPA 200.7, 200.8, 6010B, 6020, 245.1, 245.2, 7470A, 9040B, 300.0, 9251, 9038, 350.1, 353.2, 351.1, 120.1, 9050A, 410.4, 9060, 1664, 420.1, LACHAT 10-107-06-1-B, SM 4500CN-E, 4500H-B, 4500CL-E, 4500F-BC, 4500SO4-E, 426C, 4500NH3-B, 4500NH3-H, 4500NO3-F, 4500NO2-B, 4500Norg-C, 4500PE, 2510B, 5540C, 5220D, 5310C, 2540B, 2540C, 2540D, 510C, 4500S2-AD, 3005A, 3015, 9010B, 9030B. Organic Parameters: EPA 8260B, 8270C, 8330, 625, 8082, 8151A, 8081A, 3510C, 5030B, MassDEP EPH, MassDEP VPH.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 200.7, 6010B, 7471A, 9040B, 9045C, 9065, 420.1, 9012A, 6860, 1311, 1312, 3050B, 9030B, 3051, 9010B, 3540C, SM 510ABC, 4500CN-CE, 2540G, SW-846 7.3, Organic Parameters: EPA 8260B, 8270C, 8330, 8082, 8081A, 8151A, 3545, 3546, 3580, 5035, MassDEP EPH, MassDEP VPH.)

Analytes Not Accredited by NELAP

Certification is not available by NELAP for the following analytes: **EPA 8260B:** Freon-113, 1,2,4,5-Tetramethylbenzene, 4-Ethyltoluene. **EPA 8330A:** PETN, Picric Acid, Nitroglycerine, 2,6-DANT, 2,4-DANT. **EPA 8270C:** Methyl naphthalene, Dimethyl naphthalene, Total Methylnapthalenes, Total Dimethylnaphthalenes, 1,4-Diphenylhydrazine (Azobenzene). **EPA 625:** 4-Chloroaniline. **EPA 350.1** for Ammonia in a Soil matrix.



ANALYTICAL REPORT

Lab Number:

Client: Sovereign Consulting

L1013958

905B South Main Street

Mansfield, MA 02048

ATTN: Phil McBain

Phone: (508) 339-3200

Project Name: SHL TASK 0002

Project Number: AC001

Report Date: 09/17/10

Certifications & Approvals: MA (M-MA086), NY NELAC (11148), CT (PH-0574), NH (2003), NJ (MA935), RI (LAO00065), ME (MA0086), PA (Registration #68-03671), USDA (Permit #S-72578), US Army Corps of Engineers, Naval FESC.

Eight Walkup Drive, Westborough, MA 01581-1019 508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com



Project Name:

SHL TASK 0002

Project Number:

AC001

Lab Number:

L1013958

Report Date:

Alpha Sample ID	Client ID	Sample Location	Collection Date/Time
L1013958-01	SHM-10-06A-090910-F	DEVENS, MA	09/09/10 11:45
L1013958-02	SHM-10-06A-090910-U	DEVENS, MA	09/09/10 11:45
L1013958-03	SHM-10-07-090910-F	DEVENS, MA	09/09/10 11:00
L1013958-04	SHM-10-07-090910-U	DEVENS, MA	09/09/10 11:00
L1013958-05	RB-090910-U	DEVENS, MA	09/09/10 12:00
L1013958-06	DUP-090910-F	DEVENS, MA	09/09/10 11:45
L1013958-07	DUP-090910-U	DEVENS, MA	09/09/10 11:45

Project Name: SHL TASK 0002

Project Number: AC001

Lab Number:

L1013958

Report Date:

09/17/10

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet all of the requirements of NELAC, for all NELAC accredited parameters. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

For additional information, please contact Client Services at 800-624-9220.

Report Submission

Testing performed for the reported analyses followed the guidelines established under the DoD QSM 4.1, where applicable.

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

The Dissolved Inorganic Carbon results will be issued under separate cover.

Sample Receipt

The samples were Field Filtered for Dissolved Metals only.

Dissolved Metals

L1013958-01, -03 and -06 have elevated detection limits for all analytes due to the dilutions required by the

Project Name:

SHL TASK 0002

Lab Number:

L1013958 09/17/10

Project Number:

AC001

Report Date:

Case Narrative (continued)

high concentrations of target analytes. The requested reporting limits were not achieved.

The WG431887-3/-4 MS/MSD recoveries for Arsenic (MS at 143%), Calcium (MS at 143%), Iron (730%/280%) and Manganese (MS at 132%), performed on L1013958-03, are invalid because the sample concentrations are greater than four times the spike amount added.

Total Metals

L1013958-02, -04 and -07 have elevated detection limits for all analytes due to the dilutions required by the high concentrations of target analytes. The requested reporting limits were not achieved.

The WG431886-3 MS recoveries for Arsenic (59%), Calcium (78%) and Iron (0%), performed on L1013958-04, are invalid because the sample concentrations are greater than four times the spike amount added.

Chloride

The WG431902-4 MSD recovery (5%), performed on L1013958-04, is invalid because the sample concentration is greater than four times the spike amount added.

Dissolved Organic Carbon

The WG432712-3 MS (121%), performed on L1013958-04, is above the acceptance criteria. The elevated % recovery has been attributed to the non-homogeneous nature of the sample utilized for the laboratory spike (different vials).

WG432712: The Lab Duplicate was performed on sample L1013958-02, instead of L1013958-04 as requested, due to insufficient sample volume available for analysis.

Alkalinity

The WG432727-3 MS recovery (42%), performed on L1013958-04, is below the acceptance criteria. This has been attributed to matrix interference.

Solids, Total Suspended

WG431763: The Lab Duplicate was performed on sample L1013923-01, instead of L1023958-04 as

Project Name:

SHL TASK 0002

Lab Number:

L1013958

Project Number:

AC001

Report Date:

09/17/10

Case Narrative (continued)

requested, due to insufficient sample volume available for analysis.

Chemical Oxygen Demand

The WG432221-4 Laboratory Duplicate RPD (22%), performed on L1013958-04, is above the acceptance criteria; however, the sample and duplicate results are less than five times the reporting limit. Therefore, the RPD is valid.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:

Michelle M. Morris

Title: Technical Director/Representative

Date: 09/17/10

METALS

Project Name:

SHL TASK 0002

Lab Number:

L1013958

Project Number:

AC001

Report Date:

09/17/10

SAMPLE RESULTS

Lab ID:

L1013958-01

Client ID:

SHM-10-06A-090910-F

Sample Location:

DEVENS, MA

Matrix:

Water

Date Collected:

09/09/10 11:45

Date Received:

09/09/10

Field Prep:

See Narrative

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Dissolved Metals - V	Vestboro	ugh Lab									
Aluminum, Dissolved	11.6	J	ug/I	40.0	7.64	4	09/10/10 16:50	09/13/10 20:34	EPA 3005A	1,6020A	вм
Arsenic, Dissolved	94.2		ug/l	2.00	0.452	4	09/10/10 16:50	09/13/10 20:34	EPA 3005A	1,6020A	ВМ
Calcium, Dissolved	33300		ug/l	400	50.6	4	09/10/10 16:50	09/13/10 20:34	EPA 3005A	1,6020A	ВМ
Chromium, Dissolved	ND		ug/l	2.00	0.744	4	09/10/10 16:50	09/13/10 20:34	EPA 3005A	1,6020A	ВМ
Iron, Dissolved	42900		ug/l	200	33.6	4	09/10/10 16:50	0 09/13/10 20:34	EPA 3005A	1,6020A	ВМ
Lead, Dissolved	ND		ug/l	2.00	0.200	4	09/10/10 16:50	09/13/10 20:34	EPA 3005A	1,6020A	вм
Magnesium, Dissolved	4640		ug/l	400	16.4	4	09/10/10 16:50	09/13/10 20:34	EPA 3005A	1,6020A	ВМ
Manganese, Dissolved	4080		ug/l	4.00	0.544	4	09/10/10 16:50	09/13/10 20:34	EPA 3005A	1,6020A	ВМ
Nickel, Dissolved	2.34		ug/l	2.00	0.720	4	09/10/10 16:50	09/13/10 20:34	EPA 3005A	1,6020A	ВМ
Potassium, Dissolved	7640		ug/l	400	72.6	4	09/10/10 16:50	0 09/13/10 20:34	EPA 3005A	1,6020A	ВМ
Sodium, Dissolved	13200		ug/l	400	72.8	4	09/10/10 16:50	0 09/13/10 20:34	EPA 3005A	1,6020A	вм

Project Name:

Project Number:

SHL TASK 0002

AC001

Lab Number:

L1013958

Report Date:

09/17/10

Lab ID:

L1013958-02

Client ID:

SHM-10-06A-090910-U

Sample Location:

DEVENS, MA

Matrix:

Water

Date Collected:

09/09/10 11:45

Date Received:

09/09/10

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Wes	stborough l	_ab									
Aluminum, Total	1910		ug/l	40.0	7.64	4	09/10/10 16:5	0 09/13/10 21:28	EPA 3005A	1,6020A	ВМ
Arsenic, Total	102		ug/I	2.00	0.452	4	09/10/10 16:5	0 09/13/10 21:28	EPA 3005A	1,6020A	вм
Calcium, Total	33000		ug/l	400	50.6	4	09/10/10 16:5	0 09/13/10 21:28	EPA 3005A	1,6020A	вм
Chromium, Total	6.92		ug/l	2.00	0.744	4	09/10/10 16:5	0 09/13/10 21:28	EPA 3005A	1,6020A	ВМ
Iron, Total	44600		ug/l	200	33.6	4	09/10/10 16:5	0 09/13/10 21:28	EPA 3005A	1,6020A	вм
Lead, Total	2.70		ug/I	2.00	0.200	4	09/10/10 16:5	0 09/13/10 21:28	EPA 3005A	1,6020A	вм
Magnesium, Total	4940		ug/I	400	16.4	4	09/10/10 16:5	0 09/13/10 21:28	EPA 3005A	1,6020A	вм
Manganese, Total	3940		ug/l	4.00	0.544	4	09/10/10 16:5	0 09/13/10 21:28	EPA 3005A	1,6020A	вм
Nickel, Total	7.73		ug/l	2.00	0.720	4	09/10/10 16:5	60 09/13/10 21:28	EPA 3005A	1,6020A	вм
Potassium, Total	8130		ug/l	400	72.6	4	09/10/10 16:5	60 09/13/10 21:28	EPA 3005A	1,6020A	вм
Sodium, Total	13200		ug/l	400	72.8	4	09/10/10 16:5	60 09/13/10 21:28	EPA 3005A	1,6020A	вм
Total Hardness by	SM 2340	3 - Westbor	ough Lab)							
Hardness	97		mg/l	0.66	0.62	1	09/10/10 16:5	50 09/15/10 11:18	EPA 3005A	1,6010B	Al

SAMPLE RESULTS

Project Name:

SHL TASK 0002

Lab Number:

L1013958

Project Number:

AC001

Report Date:

09/17/10

SAMPLE RESULTS

Lab ID:

L1013958-03

Client ID:

SHM-10-07-090910-F

Sample Location:

DEVENS, MA

Matrix:

Water

Date Collected:

09/09/10 11:00

Date Received:

09/09/10

Field Prep:

See Narrative

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Dissolved Metals - V	Vestboro	ugh Lab									
Aluminum, Dissolved	4.17	J	ug/l	20.0	3.82	2	09/10/10 16:50	0 09/13/10 20:46	EPA 3005A	1,6020A	вм
Arsenic, Dissolved	918		ug/l	1.00	0.226	2	09/10/10 16:50	0 09/13/10 20:46	EPA 3005A	1,6020A	вм
Calcium, Dissolved	43200		ug/l	200	25.3	2	09/10/10 16:50	0 09/13/10 20:46	EPA 3005A	1,6020A	ВМ
Chromium, Dissolved	ND		ug/I	1.00	0.372	2	09/10/10 16:50	0 09/13/10 20:46	EPA 3005A	1,6020A	вм
Iron, Dissolved	56800		ug/l	100	16.8	2	09/10/10 16:50	0 09/13/10 20:46	EPA 3005A	1,6020A	ВМ
Lead, Dissolved	ND		ug/I	1.00	0.100	2	09/10/10 16:50	0 09/13/10 20:46	EPA 3005A	1,6020A	ВМ
Magnesium, Dissolved	5610		ug/l	200	8.20	2	09/10/10 16:50	0 09/13/10 20:46	EPA 3005A	1,6020A	вм
Manganese, Dissolved	1940		ug/l	2.00	0.272	2	09/10/10 16:50	0 09/13/10 20:46	EPA 3005A	1,6020A	вм
Nickel, Dissolved	5.28		ug/l	1.00	0.360	2	09/10/10 16:50	0 09/13/10 20:46	EPA 3005A	1,6020A	вм
Potassium, Dissolved	11400		ug/l	200	36.3	2	09/10/10 16:50	0 09/13/10 20:46	EPA 3005A	1,6020A	вм
Sodium, Dissolved	24400		ug/l	200	36.4	2	09/10/10 16:50	0 09/13/10 20:46	EPA 3005A	1,6020A	вм

Project Name:

SHL TASK 0002

Lab Number:

L1013958

Project Number:

AC001

Report Date:

09/17/10

Lab ID:

SAMPLE RESULTS

L1013958-04

Client ID:

SHM-10-07-090910-U

Sample Location:

DEVENS, MA

Matrix:

Water

Date Collected:

09/09/10 11:00

Date Received:

09/09/10

Field Prep:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Wes	stborough l	_ab									
Aluminum, Total	538		ug/l	20.0	3.82	2	09/10/10 16:5	0 09/13/10 21:40	EPA 3005A	1,6020A	ВМ
Arsenic, Total	979		ug/l	1.00	0.226	2	09/10/10 16:5	0 09/13/10 21:40	EPA 3005A	1,6020A	вм
Calcium, Total	47400		ug/l	200	25,3	2	09/10/10 16:5	0 09/13/10 21:40	EPA 3005A	1,6020A	вм
Chromium, Total	2.82		ug/l	1.00	0.372	2	09/10/10 16:5	0 09/13/10 21:40	EPA 3005A	1,6020A	ВМ
Iron, Total	62300		ug/l	100	16.8	2	09/10/10 16:5	0 09/13/10 21:40	EPA 3005A	1,6020A	ВМ
Lead, Total	0.95	J	ug/l	1.00	0.100	2	09/10/10 16:5	0 09/13/10 21:40	EPA 3005A	1,6020A	ВМ
Magnesium, Total	6360		ug/I	200	8.20	2	09/10/10 16:5	0 09/13/10 21:40	EPA 3005A	1,6020A	ВМ
Manganese, Total	2060		ug/l	2.00	0.272	2	09/10/10 16:5	0 09/13/10 21:40	EPA 3005A	1,6020A	ВМ
Nickel, Total	7.34		ug/l	1.00	0.360	2	09/10/10 16:5	0 09/13/10 21:40	EPA 3005A	1,6020A	ВМ
Potassium, Total	13200		ug/l	200	36.3	2	09/10/10 16:5	0 09/13/10 21:40	EPA 3005A	1,6020A	ВМ
Sodium, Total	26400		ug/l	200	36.4	2	09/10/10 16:5	0 09/13/10 21:40	EPA 3005A	1,6020A	вм
Total Hardness by	SM 2340	B - Westbo	rough Lat)							
Hardness	130		mg/l	0.66	0.62	1	09/10/10 16:5	50 09/15/10 11:05	EPA 3005A	1,6010B	AI

Project Name:

SHL TASK 0002

Lab Number:

L1013958

Project Number:

AC001

Report Date:

09/17/10

SAMPLE RESULTS

Lab ID:

L1013958-05

Client ID:

RB-090910-U DEVENS, MA

Sample Location: Matrix:

Water

Date Collected:

09/09/10 12:00

Date Received:

09/09/10

Field Prep:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Wes	stborough L	_ab									
Aluminum, Total	ND		ug/l	10.0	1.91	1	09/10/10 16:50	0 09/13/10 22:04	EPA 3005A	1,6020A	ВМ
Arsenic, Total	0.46	J	ug/l	0.500	0.113	1	09/10/10 16:5	0 09/13/10 22:04	EPA 3005A	1,6020A	ВМ
Calcium, Total	ND		ug/l	100	12.6	1	09/10/10 16:5	0 09/13/10 22:04	EPA 3005A	1,6020A	ВМ
Chromium, Total	ND		ug/l	0.500	0.186	1	09/10/10 16:50	0 09/13/10 22:04	EPA 3005A	1,6020A	ВМ
Iron, Total	ND		ug/l	50.0	8.41	1	09/10/10 16:5	0 09/13/10 22:04	EPA 3005A	1,6020A	ВМ
Lead, Total	0.06	J	ug/I	0.500	0.050	1	09/10/10 16:5	0 09/13/10 22:04	EPA 3005A	1,6020A	ВМ
Magnesium, Total	ND		ug/l	100	4.10	1	09/10/10 16:5	0 09/13/10 22:04	EPA 3005A	1,6020A	вм
Manganese, Total	0.25	J	ug/l	1.00	0.136	1	09/10/10 16:5	0 09/13/10 22:04	EPA 3005A	1,6020A	вм
Nickel, Total	ND		ug/l	0.500	0.180	1	09/10/10 16:5	0 09/13/10 22:04	EPA 3005A	1,6020A	ВМ
Potassium, Total	ND		ug/l	100	18.2	1	09/10/10 16:5	0 09/13/10 22:04	EPA 3005A	1,6020A	ВМ
Sodium, Total	ND		ug/l	100	18.2	1	09/10/10 16:5	0 09/13/10 22:04	EPA 3005A	1,6020A	ВМ
Total Hardness by	SM 2340E	3 - Westbor	ough Lab)							
Hardness	ND		mg/l	0.66	0.62	1	09/10/10 16:5	0 09/15/10 11:21	EPA 3005A	1,6010B	Al

Project Name:

SHL TASK 0002

Project Number: AC001 Lab Number:

L1013958

Report Date:

09/17/10

SAMPLE RESULTS

Lab ID:

L1013958-06

Client ID: Sample Location: DUP-090910-F DEVENS, MA

Date Collected:

09/09/10 11:45

Date Received:

09/09/10

Field Prep:

See Narrative

Matrix:

Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Dissolved Metals - V	Vestboro	ugh Lab									
Aluminum, Dissolved	8.97	J	ug/l	40.0	7.64	4	09/10/10 16:5	0 09/13/10 21:10	EPA 3005A	1,6020A	вм
Arsenic, Dissolved	83.0		ug/l	2.00	0.452	4	09/10/10 16:5	0 09/13/10 21:10	EPA 3005A	1,6020A	вм
Calcium, Dissolved	25300		ug/l	400	50.6	4	09/10/10 16:5	0 09/13/10 21:10	EPA 3005A	1,6020A	ВМ
Chromium, Dissolved	ND		ug/l	2.00	0.744	4	09/10/10 16:5	0 09/13/10 21:10	EPA 3005A	1,6020A	вм
Iron, Dissolved	32300		ug/l	200	33.6	4	09/10/10 16:5	0 09/13/10 21:10	EPA 3005A	1,6020A	вм
Lead, Dissolved	ND		ug/I	2.00	0.200	4	09/10/10 16:5	0 09/13/10 21:10	EPA 3005A	1,6020A	вм
Magnesium, Dissolved	3280		ug/I	400	16.4	4	09/10/10 16:5	0 09/13/10 21:10	EPA 3005A	1,6020A	вм
Manganese, Dissolved	3130		ug/l	4.00	0.544	4	09/10/10 16:5	0 09/13/10 21:10	EPA 3005A	1,6020A	ВМ
Nickel, Dissolved	1.68	J	ug/l	2.00	0.720	4	09/10/10 16:5	0 09/13/10 21:10	EPA 3005A	1,6020A	вм
Potassium, Dissolved	5990		ug/i	400	72.6	4	09/10/10 16:5	0 09/13/10 21:10	EPA 3005A	1,6020A	вм
Sodium, Dissolved	9240		ug/l	400	72.8	4	09/10/10 16:5	0 09/13/10 21:10	EPA 3005A	1,6020A	ВМ

Project Name:

SHL TASK 0002

Lab Number:

L1013958

Project Number:

AC001

Report Date:

09/17/10

SAMPLE RESULTS

Lab ID:

L1013958-07

Client ID:

DUP-090910-U DEVENS, MA

Sample Location: Matrix:

Water

Date Collected:

09/09/10 11:45

Date Received:

09/09/10

Field Prep:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Wes	stborough I	_ab									
Aluminum, Total	1990		ug/l	40.0	7.64	4	09/10/10 16:5	0 09/13/10 22:10	EPA 3005A	1,6020A	ВМ
Arsenic, Total	102		ug/l	2.00	0.452	4	09/10/10 16:5	0 09/13/10 22:10	EPA 3005A	1,6020A	ВМ
Calcium, Total	31800		ug/l	400	50.6	4	09/10/10 16:5	0 09/13/10 22:10	EPA 3005A	1,6020A	ВМ
Chromium, Total	7.16		ug/l	2.00	0.744	4	09/10/10 16:5	0 09/13/10 22:10	EPA 3005A	1,6020A	ВМ
Iron, Total	42700		ug/l	200	33,6	4	09/10/10 16:5	0 09/13/10 22:10	EPA 3005A	1,6020A	ВМ
Lead, Total	2.69		ug/l	2.00	0.200	4	09/10/10 16:5	0 09/13/10 22:10	EPA 3005A	1,6020A	ВМ
Magnesium, Total	4810		ug/l	400	16.4	4	09/10/10 16:5	0 09/13/10 22:10	EPA 3005A	1,6020A	вм
Manganese, Total	3820		ug/l	4.00	0.544	4	09/10/10 16:5	0 09/13/10 22:10	EPA 3005A	1,6020A	ВМ
Nickel, Total	7.97		ug/l	2.00	0.720	4	09/10/10 16:5	0 09/13/10 22:10	EPA 3005A	1,6020A	вм
Potassium, Total	7970		ug/l	400	72.6	4	09/10/10 16:5	0 09/13/10 22:10	EPA 3005A	1,6020A	ВМ
Sodium, Total	12900		ug/I	400	72.8	4	09/10/10 16:5	0 09/13/10 22:10	EPA 3005A	1,6020A	вм
Total Hardness by	SM 2340E	- Westbor	ough Lab	1							
Hardness	94		mg/l	0.66	0.62	1	09/10/10 16:5	0 09/15/10 11:25	EPA 3005A	1,6010B	AI

Project Name: SHL TASK 0002 Lab Number:

L1013958

09/17/10

Project Number: AC001

Report Date:

Method Blank Analysis Batch Quality Control

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Westborough	Lab for sample(s):	02,04-0	5,07	Batch:	WG431886-	1			
Aluminum, Total	ND	ug/l	10.0	1.91	1	09/10/10 16:50	09/13/10 17:56	6 1,6020A	вм
Arsenic, Total	ND	ug/l	0.500	0.113	1	09/10/10 16:50	09/13/10 17:56	1,6020A	вм
Calcium, Total	ND	ug/l	100	12.6	1	09/10/10 16:50	09/13/10 17:56	6 1,6020A	ВМ
Chromium, Total	ND	ug/l	0.500	0.186	1	09/10/10 16:50	09/13/10 17:56	6 1,6020A	ВМ
Iron, Total	ND	ug/l	50.0	8.41	1	09/10/10 16:50	09/13/10 17:56	6 1,6020A	вм
Lead, Total	ND	ug/l	0.500	0.050	1	09/10/10 16:50	09/13/10 17:56	5 1,6020A	вм
Magnesium, Total	ND	ug/l	100	4.10	1	09/10/10 16:50	09/13/10 17:56	6 1,6020A	ВМ
Manganese, Total	ND	ug/l	1.00	0.136	1	09/10/10 16:50	09/13/10 17:56	6 1,6020A	ВМ
Nickel, Total	ND	ug/l	0.500	0.180	1	09/10/10 16:50	09/13/10 17:50	6 1,6020A	вм
Potassium, Total	ND	ug/l	100	18.2	1	09/10/10 16:50	09/13/10 17:50	6 1,6020A	вм
Sodium, Total	ND	ug/l	100	18.2	1	09/10/10 16:50	09/13/10 17:56	6 1,6020A	ВМ

Prep Information

Digestion Method: EPA 3005A

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Dissolved Metals - Wes	stborough Lab for samp	ole(s): 01		Batch:	WG43188	37-1			
Aluminum, Dissolved	ND	ug/l	10.0	1.91	1	09/10/10 16:50	09/13/10 17:56	1,6020A	ВМ
Arsenic, Dissolved	ND	ug/l	0.500	0.113	1	09/10/10 16:50	09/13/10 17:56	1,6020A	вм
Calcium, Dissolved	ND	ug/l	100	12.6	1	09/10/10 16:50	09/13/10 17:56	1,6020A	ВМ
Chromium, Dissolved	ND	ug/l	0.500	0.186	1	09/10/10 16:50	09/13/10 17:56	1,6020A	вм
Iron, Dissolved	ND	ug/l	50.0	8.41	1	09/10/10 16:50	09/13/10 17:56	1,6020A	вм
Lead, Dissolved	ND	ug/l	0.500	0.050	1	09/10/10 16:50	09/13/10 17:56	1,6020A	вм
Magnesium, Dissolved	ND	ug/l	100	4.10	1	09/10/10 16:50	09/13/10 17:56	1,6020A	вм
Manganese, Dissolved	ND	ug/l	1.00	0.136	1	09/10/10 16:50	09/13/10 17:56	1,6020A	вм
Nickel, Dissolved	ND	ug/l	0.500	0.180	1	09/10/10 16:50	09/13/10 17:56	1,6020A	вм
Potassium, Dissolved	ND	ug/l	100	18.2	1	09/10/10 16:50	09/13/10 17:56	1,6020A	вм
Sodium, Dissolved	ND	ug/l	100	18.2	1	09/10/10 16:50	09/13/10 17:56	1,6020A	вм

Project Name:

SHL TASK 0002

Lab Number:

L1013958

09/17/10

Project Number: AC001

Report Date:

Method Blank Analysis **Batch Quality Control**

Prep Information

Digestion Method: EPA 3005A

Dilution Date Date . **Analytical** Method Analyst MDL Factor Result Qualifier Prepared Analyzed Units Parameter RL

Total Hardness by SM 2340B - Westborough Lab for sample(s): 02,04-05,07 Batch: WG431992-1

Hardness

ND

0.66 0.62

09/10/10 16:50 09/15/10 10:59 1,6010B

Al

Prep Information

Digestion Method: EPA 3005A

Lab Control Sample Analysis Batch Quality Control

Lab Number:

L1013958

Report Date:

09/17/10

Project Name:	SHL TASK 0002	
i rojour manno.	OTTE TITLETT GOOD	

Project Number: AC001

Parameter	LCS %Recovery Q	LCSD ual %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	
Total Metals - Westborough Lab	Associated sample(s): 02,04-05,07	Batch: WG431886-2						
Aluminum, Total	89			80-120				
Arsenic, Total	92			80-120				
Calcium, Total	96	4		80-120	-			
Chromium, Total	68	.*		80-120	-			
Iron, Total	95	-		80-120	*			
Lead, Total	92			80-120	-			
Magnesium, Total	96			80-120				
Manganese, Total	94	÷		80-120	0.5			
Nickel, Total	.96	*		80-120				
Potassium, Total	96			80-120	-			
Sodium, Total	96	*		80-120	*			

Lab Control Sample Analysis Batch Quality Control

Project Name:

SHL TASK 0002

Project Number:

AC001

Lab Number:

L1013958

Report Date:

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Dissolved Metals - Westborough Lab	Associated sample(s): 01,03,06	Batch: WG431887-2			
Aluminum, Dissolved	89		80-120	4	
Arsenic, Dissolved	92		80-120		
Calcium, Dissolved	96	,	80-120	•	
Chromium, Dissolved	88	,	80-120		
Iron, Dissolved	.95 "		80-120	4	
Lead, Dissolved	92	4.0	80-120	14	
Magnesium, Dissolved	96	4	80-120	14	
Manganese, Dissolved	94 -		80-120	8	
Nickel, Dissolved	96	E-	80-120	e.	
Potassium, Dissolved	96		80-120		
Sodium, Dissolved	96	4.	80-120	140	
Total Hardness by SM 2340B - West	borough Lab Associated sample(s): 02,04-05,07 Batch: WG4	131992-2		
Hardness	97		80-120	3	

Matrix Spike Analysis Batch Quality Control

Project Name:

SHL TASK 0002

Project Number:

AC001

Lab Number:

L1013958

Report Date:

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Westborough Lab 10-07-090910-U	Associated		02,04-05,07	QC Batch ID): WG43	1886-3	WG431886-4	QC Sar	mple: L1013	958-04	Clier	t ID: SHM
Aluminum, Total	538	2000	2330	90		2470	97		80-120	6		20
Arsenic, Total	979	120	1050	59		1090	92		80-120	4		20
Calcium, Total	47400	10000	55200	78		57100	97		80-120	3		20
Chromium, Total	2.82	200	186	92		193	95		80-120	4		20
Iron, Total	62300	1000	61200	0		63100	80		80-120	3		20
Lead, Total	ND	510	494	97		518	102		80-120	5		20
Magnesium, Total	6360	10000	15900	95		16700	103		80-120	5		20
Manganese, Total	2060	500	2480	84		2550	98		80-120	3		20
Nickel, Total	7.34	500	502	99		521	103		80-120	4		20
Potassium, Total	13200	10000	22600	94		23700	105		80-120	5		20
Sodium, Total	26400	10000	34800	84		37100	107		80-120	6		20

Matrix Spike Analysis Batch Quality Control

Project Name:

SHL TASK 0002

Project Number:

AC001

Lab Number:

L1013958

Report Date:

Parameter	Native Sample	MS . Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	y RPD	RPD Limits
Dissolved Metals - Westborough SHM-10-07-090910-F	Lab Assoc	iated sample	e(s): 01,03,00	6 QC Batch ID	: WG431887-3	WG431887-4	QC Sample: L10	13958-03	Client ID:
Aluminum, Dissolved	ND	2000	1940	97	1790	90	80-120	8	20
Arsenic, Dissolved	918	120	1090	143	1040	102	80-120	5	20
Calcium, Dissolved	43200	10000	57500	143	53900	107	80-120	6	20
Chromium, Dissolved	ND	200	191	96	180	90	80-120	6	20
Iron, Dissolved	56800	1000	64100	730	59600	280	80-120	7	20
Lead, Dissolved	ND	510	512	100	485	95	80-120	5	20
Magnesium, Dissolved	5610	10000	16500	109	15200	96	80-120	8	20
Manganese, Dissolved	1940	500	2600	132	2460	104	80-120	6	20
Nickel, Dissolved	5.28	500	526	104	488	96	80-120	7	20
Potassium, Dissolved	11400	10000	22700	113	21600	102	80-120	5	20
Sodium, Dissolved	24400	10000	35200	108	33700	93	80-120	4	20
Total Hardness by SM 2340B - \Client ID: SHM-10-07-090910-L		h Lab Assoc	ciated sample	e(s): 02,04-05,0	QC Batch II	D: WG43 1992-3	WG431992-4 (QC Sample	:: L1013958-
Hardness	130	66.2	190	91	200	106	75-125	5	20

INORGANICS & MISCELLANEOUS

Project Name: SHL TASK 0002

Project Number: AC001

Lab Number:

L1013958

Report Date:

09/17/10

SAMPLE RESULTS

Lab ID:

L1013958-02

Client ID:

SHM-10-06A-090910-U

Sample Location:

DEVENS, MA

Matrix:

Water

Date Collected:

09/09/10 11:45

Date Received:

09/09/10

Field Prep:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Wes	tborough Lab	1								
Alkalinity, Total	190		mg CaCO3/L	2.0	NA	1		09/16/10 11:05	30,2320B	SD
Solids, Total Dissolved	200		mg/l	10	4.4	1		09/13/10 10:15	30,2540C	DW
Solids, Total Suspended	330		mg/l	5.0	NA	1		09/10/10 20:55	30,2540D	DW
Nitrogen, Ammonia	3.90		mg/l	0.075	0.017	1	09/10/10 10:00	09/13/10 16:16	30,4500NH3-BH	AT
Nitrogen, Nitrite	ND		mg/l	0.02	0.002	1		09/10/10 19:41	30,4500NO2-B	DD
Sulfide	ND		mg/l	0.10	0.10	1	09/14/10 18:45	09/14/10 19:45	30,4500S2-AD	AT
Chemical Oxygen Demand	17	J	mg/l	20	7.0	1		09/14/10 11:49	44,410.4	DW
Total Organic Carbon	4.0		mg/l	0.50	0.03	1	9	09/16/10 07:24	30,5310C	DW
Dissolved Organic Carbon	3.3		mg/l	1.0	1.0	1	09/09/10 22:23	09/16/10 07:24	30,5310C	DW
Anions by Ion Chromatog	raphy - West	borough	Lab							
Chloride	11		mg/l	0.50	0.07	1		09/10/10 17:56	44,300.0	AU
Nitrogen, Nitrate	ND		mg/l	0.05	0.01	1	-	09/10/10 17:56	44,300.0	AU
ulfale	3.2		mg/l	1.0	0.12	1	14	09/10/10 17:56	44,300.0	AU

Project Name: SHL TASK 0002

Project Number: AC001

Lab Number:

L1013958

Report Date:

09/17/10

SAMPLE RESULTS

Lab ID:

L1013958-04

Client ID:

SHM-10-07-090910-U

Sample Location:

DEVENS, MA

Matrix:

Water

Date Collected:

09/09/10 11:00

Date Received:

09/09/10

Field Prep:

Parameter	Result	Qualifier Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Wes	tborough Lab								
Alkalinity, Total	240	mg CaCO3/L	2.0	NA	1		09/16/10 11:05	30,2320B	SD
Solids, Total Dissolved	300	mg/l	10	4.4	1		09/13/10 10:15	30,2540C	DW
Solids, Total Suspended	53	mg/l	5.0	NA	1		09/10/10 20:55	30,2540D	DW
Nitrogen, Ammonia	5.60	mg/l	0.075	0.017	1	09/10/10 10:00	09/13/10 16:20	30,4500NH3-BH	AT
Nitrogen, Nitrite	ND	mg/I	0.02	0.002	1		09/10/10 19:41	30,4500NO2-B	DD
Sulfide	ND	mg/l	0.10	0.10	1	09/14/10 18:45	09/14/10 19:45	30,4500S2-AD	AT
Chemical Oxygen Demand	29	mg/l	20	7.0	1		09/14/10 11:49	44,410.4	DW
Total Organic Carbon	3.8	mg/l	0.50	0.03	1		09/16/10 07:24	30,5310C	DW
Dissolved Organic Carbon	3.5	mg/l	1.0	1.0	1	09/09/10 22:23	09/16/10 07:24	30,5310C	DW
Anions by Ion Chromatog	raphy - West	borough Lab					(E)		
Chloride	41	mg/l	0.50	0.07	1	-	09/10/10 17:44	44,300.0	AU
Nitrogen, Nitrate	ND	mg/l	0.05	0.01	1		09/10/10 17:44	44,300.0	AU
Sulfate	2.3	mg/l	1.0	0.12	1		09/10/10 17:44	44,300 0	AU

Project Name: SHL TASK 0002

Project Number: AC001

Lab Number:

L1013958

Report Date:

09/17/10

SAMPLE RESULTS

Lab ID:

L1013958-07 DUP-090910-U

Client ID: Sample Location:

DEVENS, MA

Matrix:

Water

Date Collected:

09/09/10 11:45

Date Received:

09/09/10

Field Prep:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Wes	tborough Lab)								
Alkalinity, Total	150		mg CaCO3/L	2.0	NA	1		09/16/10 11:05	30,2320B	SD
Solids, Total Dissolved	180		mg/l	10	4.4	1	-	09/13/10 10:15	30,2540C	DW
Solids, Total Suspended	270		mg/l	5.0	NA	1		09/10/10 20:55	30,2540D	DW
Nitrogen, Ammonia	5.05		mg/l	0.075	0.017	1	09/10/10 10:00	09/13/10 16:22	30,4500NH3-BH	AT
Nitrogen, Nitrite	ND		mg/l	0.02	0.002	1		09/10/10 19:42	30,4500NO2-B	DD
Sulfide	ND		mg/l	0.10	0.10	1	09/14/10 18:45	09/14/10 19:45	30,4500S2-AD	AT
Chemical Oxygen Demand	19	J	mg/l	20	7.0	1		09/14/10 11:49	44,410.4	DW
Total Organic Carbon	4.4		mg/l	0.50	0.03	1	-	09/16/10 07:24	30,5310C	DW
Anions by Ion Chromatog	raphy - West	borough	Lab							
Chloride	11		mg/l	0.50	0.07	1	-	09/10/10 18:08	44,300.0	AU
Nitrogen, Nitrate	ND		mg/l	0.05	0.01	1		09/10/10 18:08	44,300.0	AU
Sulfate	3.2		mg/l	1.0	0.12	1		09/10/10 18:08	44,300.0	AU

Project Name:

SHL TASK 0002

Lab Number:

L1013958

09/17/10

Project Number: AC001

Report Date:

Method Blank Analysis Batch Quality Control

Parameter	Result Q	ualifier Uni	ts	RDL	Dilutio Facto			Date Analyzed	Analytical Method	Analyst
General Chemistry - West	tborough Lab	for sample(s): 02,0	4,07	Batch:	WG431762-1	1			
Nitrogen, Ammonia	ND	п	ng/l	0.075	1	09/10/10 1	10:00	09/13/10 16:10	30,4500NH3-BI	н ат
General Chemistry - West	tborough Lab	for sample(s	: 02,0	4,07	Batch:	WG431763-1	1			
Solids, Total Suspended	ND	п	ng/l	5.0	1		3	09/10/10 20:55	30,2540D	DW
General Chemistry - West	tborough Lab	for sample(s): 02,0	4,07	Batch:	WG431893-2	2			
Nitrogen, Nitrite	ND	г	ng/t	0.02	1		- 9	09/10/10 19:40	30,4500NO2-E	3 DD
Anions by Ion Chromatog	raphy - Westh	orough Lab	or sam	ple(s): 02,04	,07 Batch: \	WG43	1902-1		
Chloride	ND	r	ng/l	0.50	1	4-1		09/10/10 17:20	44,300.0	AU
Nitrogen, Nitrate	ND	r	ng/l	0.05	1		- 0	09/10/10 17:20	44,300.0	AU
Sulfate	ND	r	ng/l	1.0	1			09/10/10 17:20	44,300.0	AU
General Chemistry - Wes	tborough Lab	for sample(s): 02,0	4,07	Batch:	WG432034-	1			
Solids, Total Dissolved	ND	i	ng/l	10	1	-		09/13/10 10:15	30,2540C	DW
General Chemistry - Wes	tborough Lab	for sample(s): 02,0	4,07	Batch:	WG432221-	1			
Chemical Oxygen Demand	ND	r	ng/l	20	1		- 0	09/14/10 11:47	44,410.4	DW
General Chemistry - Wes	tborough Lab	for sample(s): 02,0	4,07	Batch:	WG432390-	1			
Sulfide	ND	r	ng/l	0.10	1	09/14/10	18:45	09/14/10 19:45	30,4500S2-AD) AT
General Chemistry - Wes	tborough Lab	for sample(s): 02,0	4,07	Batch:	WG432711-	1			
Total Organic Carbon	ND	r	ng/l	0.50	1			09/16/10 07:24	30,5310C	DW
General Chemistry - Wes	tborough Lab	for sample(s): 02,0	4 Ba	atch: W	G432712-1				
Dissolved Organic Carbon	ND .	, n	ng/l	1.0	. 1	09/09/10	22:23	09/16/10 07:24	30,5310C	DW
General Chemistry - Wes	tborough Lab	for sample(s	: 02,0	4,07	Batch:	WG432727-	1			12
Alkalinity, Total	ND	mg C	aCO3/L	2.0	1			09/16/10 11:05	30,2320B	SD

Lab Control Sample Analysis Batch Quality Control

Lab Number:

L1013958

Report Date:

09/17/10

Project Name: SHL TASK 0002

Project Number:

AC001

Parameter	LCS %Recovery Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab	Associated sample(s): 02,04,07	Batch: WG431762	-2				
Nitrogen, Ammonia	100	*		80-120	4		20
General Chemistry - Westborough Lab	Associated sample(s): 02,04,07	Batch: WG431893	-1				
Nitrogen, Nitrite	100 %	7		90-110	ű.		20
Anions by Ion Chromatography - West	oorough Lab Associated sample(s): 02,04,07 Batch:	WG43190	2-2			
Chloride	10 0 ·	-		90-110	- 19		
Nitrogen, Nitrate	100	=		90-110			
Sulfate	100	26		90-110			
General Chemistry - Westborough Lab	Associated sample(s): 02,04,07	Batch: WG432034	-2				
Solids, Total Dissolved	93			72-121	14		
General Chemistry - Westborough Lab	Associated sample(s): 02,04,07	Batch: WG432221	-2				
Chemical Oxygen Demand	100			95-105	1.		
General Chemistry - Westborough Lab	Associated sample(s): 02,04,07	Batch: WG432390	-2				
Sulfide	87	-		75-125	3		

Lab Control Sample Analysis Batch Quality Control

Project Name:

SHL TASK 0002

Project Number:

AC001

Lab Number:

L1013958

Report Date:

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
General Chemistry - Westborough Lab	Associated sample(s): 02,04,	07 Batch: WG432711-2			
Total Organic Carbon	102	÷.	90-110		
General Chemistry - Westborough Lab	Associated sample(s): 02,04	Batch: WG432712-2			
Dissolved Organic Carbon	102	11/2	90-110	-	
General Chemistry - Westborough Lab	Associated sample(s): 02,04,	07 Batch: WG432727-2			
Alkalinity, Total	109		80-115		4

Matrix Spike Analysis Batch Quality Control

Project Name:

SHL TASK 0002

Project Number:

AC001

Lab Number:

L1013958

Report Date:

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery		covery		Qual	RPD Limits
General Chemistry - Westboroug 090910-U	gh Lab Asso	ociated samp	ole(s): 02,04	1,07 QC Bato	h ID: W	G431762-3	QC Sample	e: L101395	8-04	Client ID:	SHM	-10-07-
Nitrogen, Ammonia	5.60	4	9,54	98		u -	-	-4	80-120	1 4		20
General Chemistry - Westboroug 090910-U	gh Lab Asso	ociated samp	ole(s): 02,04	1,07 QC Bato	h ID: W	G431893-3	QC Sample	e: L101395	8-04	Client ID:	SHM	-10-07-
Nitrogen, Nitrite	ND	0.1.	0.10	100		151	-	1	85-115			20
Anions by Ion Chromatography Client ID: SHM-10-07-090910-U		igh Lab Asso	ociated sam	nple(s): 02,04,0	7 QC	Batch ID: W	/G431902-3 \	WG431902	2-4 Q0	C Sample	L101	3958-04
Chloride	41	4	44	75		42	5	- 2	40-151	5		18
Nitrogen, Nitrate	ND	0.4	0.41	102		0,40	100		80-122	2		15
Sulfate	2.3	8	11	109		10	96	li di	60-140	10		20
General Chemistry - Westborou 090910-U	gh Lab Ass	ociated samp	ole(s): 02,0	4,07 QC Bato	h ID: W	/G432221-3	QC Sample	e: L101395	8-04	Client ID	: SHM	I-10 - 07-
Chemical Oxygen Demand	29	238	270	103		2	8		80-120	20		20
General Chemistry - Westborou 090910-U	gh Lab Ass	ociated samp	ole(s): 02,0	4,07 QC Bato	ch ID: W	/G432390-3	QC Sample	e: L101395	8-04	Client ID	: SHM	1-10-07-
Sulfide	ND	0,24	0.19	79		7	7		75-125	*		20
General Chemistry - Westborou 090910-U	gh Lab Ass	ociated samp	ole(s): 02,0	4,07 QC Bato	ch ID: W	/G432711-3	QC Sample	e: L101395	58-04	Client ID	: SHM	I-10 - 07
Total Organic Carbon	3.8	4.	8.1	106		2	197		80-120	÷ e		20
General Chemistry - Westborou 090910-U	gh Lab Ass	ociated samp		4 QC Batch I	D: WG4	32712-3	QC Sample: L	.1013958-0	04 CI	ient ID: S	HM-10	0-07-
Dissolved Organic Carbon	3.5	4	8.4	121	Q	4	4		79-120	4		20

Matrix Spike Analysis Batch Quality Control

Project Name:

SHL TASK 0002

Project Number:

AC001

Lab Number:

L1013958

Report Date:

Parameter	Native Sample	MS Added	MS Found	MS %Recovery		MSD Found	MSD %Recovery	Recover Limits	y RPD	RPD Limits
General Chemistry - We 090910-U	stborough Lab Asso	ociated sam	ple(s): 02,0	4,07 QC Ba	tch ID: WO	3432727-3	QC Sample:	L1013958-04	Client ID:	SHM-10-07-
Alkalinity, Total	240	100	280	42	Q			86-116	7.	4

Lab Duplicate Analysis Batch Quality Control

Project Name:

SHL TASK 0002

Project Number: AC001

Lab Number:

L1013958

Report Date:

09/17/10

Parameter	Nat	ive Sample	Dup	licate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab 090910-U	Associated sample(s):	02,04,07	QC Batch ID:	WG431762-4	QC Sample:	L1013958-04	Client ID:	SHM-10-07-
Nitrogen, Ammonia	÷ .	5.60		5.64	mg/l	1		20
General Chemistry - Westborough Lab	Associated sample(s):	02,04,07	QC Batch ID:	WG431763-2	QC Sample:	L1013923-01	Client ID:	DUP Sample
Solids, Total Suspended		35.		82	mg/l	80	Q	32
General Chemistry - Westborough Lab 090910-U	Associated sample(s):	02,04,07	QC Batch ID:	WG431893-4	QC Sample:	L1013958-04	Client ID:	SHM-10-07-
Nitrogen, Nitrite	4 *	ND		ND	mg/l	NC		20
Anions by Ion Chromatography - Westb SHM-10-07-090910-U	porough Lab Associate	d sample(s)	: 02,04,07	QC Batch ID: W	/G431902-5	QC Sample: L	1013958-0	04 Client ID:
Chloride		41.		40	mg/l	2		18
Nitrogen, Nitrate	N. ***	ND		ND	mg/l	NC		15
Sulfate	*	2.3		2.3	mg/l	0		20
General Chemistry - Westborough Lab 090910-U	Associated sample(s):	02,04,07	QC Batch ID:	WG432034-3	QC Sample:	L1013958-04	Client ID:	SHM-10-07-
Solids, Total Dissolved		300		290	mg/l	3		11
General Chemistry - Westborough Lab 090910-U	Associated sample(s):	02,04,07	QC Batch ID:	WG432221-4	QC Sample:	L1013958-04	Client ID:	SHM-10-07-
Chemical Oxygen Demand	4	29.		36	mg/l	22	Q	20
General Chemistry - Westborough Lab 090910-U	Associated sample(s):	02,04,07	QC Batch ID:	WG432390-4	QC Sample:	L1013958-04	Client ID:	SHM-10-07-
Sulfide	+	ND		ND	mg/l	NC		20
	5.6 W							

Lab Duplicate Analysis Batch Quality Control

SHL TASK 0002

Project Number: AC001

Project Name:

Lab Number:

L1013958

Report Date:

09/17/10

Parameter	Nat	ive Sampl	e Dur	olicate Sample	e Units	RPD		RPD Limits
General Chemistry - Westborough Lab 090910-U	Associated sample(s):	02,04,07	QC Batch ID	: WG432711-4	4 QC Sample:	L1013958-04	Client ID:	SHM-10-07-
Total Organic Carbon		3.8		3.7	mg/l	3		20
General Chemistry - Westborough Lab 090910-U	Associated sample(s):	02,04 C	RC Batch ID: V	VG432712-4	QC Sample: L	1013958-02 CI	ient ID: SI	H M- 10-06A-
Dissolved Organic Carbon		3.3		3.8	mg/i	14		20
General Chemistry - Westborough Lab 090910-U	Associated sample(s):	02,04,07	QC Batch ID	: WG432727-4	QC Sample:	L1013958-04	Client ID:	SHM-10-07-
Alkalinity, Total		240		240	mg CaCO3/L	0		4

Project Name: SHL TASK 0002

Project Number: AC001

Lab Number: L1013958 Report Date: 09/17/10

Sample Receipt and Container Information

Were project specific reporting limits specified?

YES

Reagent H2O Preserved Vials Frozen on:

Cooler Information Custody Seal

NA

Cooler

A

Present/Intact

Container Info	rmation			Temp			
Container ID	Container Type	Cooler	pН	deg C	Pres	Seal	Analysis(*)
L1013958-01A	Plastic 250ml HNO3 preserved	A	<2	3	Y	Present/Intact	DOD-FE-6020S(180),DOD-MG-6020S(180),DOD-CR-6020S(180),DOD-MN-6020S(180),DOD-CA-6020S(180),DOD-NA-6020S(180),DOD-NI-6020S(180),DOD-PB-6020S(180),DOD-AS-6020S(180),DOD-AL-6020S(180),DOD-K-6020S(180)
L1013958-02A	Vial H2SO4 preserved split	Α	N/A	3	Y	Present/Intact	DOC-5310(28)
L1013958-02B	Vial H2SO4 preserved split	Α	N/A	3	Y	Present/Intact	DOC-5310(28)
L1013958-02C	Vial H2SO4 preserved	Α	N/A	3	Y	Present/Intact	TOC-5310(28)
L1013958-02D	Vial H2SO4 preserved	Α	N/A	3	Y	Present/Intact	TOC-5310(28)
L1013958-02E	Plastic 250ml unpreserved	Α	N/A	3	Y	Present/Intact	ALK-T-2320(14)
L1013958-02F	Plastic 250ml unpreserved	Α	6	3	Y	Present/Intact	NO2-4500NO2(2)
L1013958-02G	Plastic 250ml Zn Acetate/NaOH pr	Α	>12	3	Y	Present/Intact	SULFIDE-4500(7)
L1013958-02H	Plastic 250ml Zn Acetate/NaOH pr	Α	>12	3	Y	Present/Intact	SULFIDE-4500(7)
L1013958-021	Plastic 250ml Zn Acetate/NaOH pr	Α	>12	3	Y	PresenVIntact	SULFIDE-4500(7)
L1013958-02J	Plastic 500ml HNO3 preserved	Α	<2	3	Y	Present/Intact	DOD-NA-6020T(180),DOD-NI- 6020T(180),DOD-CA-
\$100.		- 2	To Page			· ·	6020T(180),DOD-MN- 6020T(180),DOD-AL- 6020T(180),DOD-AS- 6020T(180),DOD-K- 6020T(180),DOD-K- 6020T(180),DOD-FE- 6020T(180),DOD-PB- 6020T(180),DOD-PB- 6020T(180),HARDT(180)
L1013958-02K	Plastic 500ml H2SO4 preserved	A	<2	3	Y	Present/Intact	COD-410(28),NH3-4500(28)
L1013958-02L	Plastic 500ml unpreserved	Α	6	3	Y	Present/Intact	SO4-300(28),CL-300(28),NO3-300(2),TDS-2540(7)
L1013958-02M	Plastic 1000ml unpreserved	Α	6	3	Υ	Present/Intact	TSS-2540(7)
L1013958-02X	Amber 250ml unpreserved	Α	6	3	Y	Present/Intact	DOC-5310(28)

Project Name: SHL TASK 0002

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Container Info	rmation			Temp			
Container ID	Container Type	Cooler	pН	deg C	Pres	Seal	Analysis(*)
L1013958-03A	Plastic 250ml HNO3 preserved	Α	<2	3	Ÿ	Present/Intact	DOD-FE-6020S(180),DOD-MG-6020S(180),DOD-CR-6020S(180),DOD-MN-6020S(180),DOD-CA-6020S(180),DOD-NA-6020S(180),DOD-NI-6020S(180),DOD-PB-6020S(180),DOD-AS-6020S(180),DOD-AL-6020S(180),DOD-K-6020S(180)
L1013958-03B	Plastic 250ml HNO3 preserved	A	<2	3	Y	Present/Intact	DOD-FE-6020S(180),DOD-MG-6020S(180),DOD-CR-6020S(180),DOD-MN-6020S(180),DOD-NA-6020S(180),DOD-NI-6020S(180),DOD-PB-6020S(180),DOD-AS-6020S(180),DOD-AL-6020S(180),DOD-K-6020S(180),DOD-K-6020S(180),DOD-K-6020S(180)
L1013958-04A	Vial H2SO4 preserved split	Α	N/A	3	Y	Present/Intact	DOC-5310(28)
L1013958-04B	Vial H2SO4 preserved split	Α	N/A	3	Y	Present/Intact	DOC-5310(28)
L1013958-04C	Vial H2SO4 preserved	Α	N/A	3	Y	Present/Intact	TOC-5310(28)
L1013958-04D	Vial H2SO4 preserved	Α	N/A	3	Y	Present/Intact	TOC-5310(28)
L1013958-04E	Vial H2SO4 preserved	Α	N/A	3	Y	Present/Intact	TOC-5310(28)
L1013958-04F	Vial H2SO4 preserved	Α	N/A	3	Y	Present/Intact	TOC-5310(28)
L1013958-04G	Plastic 250ml unpreserved	Α	N/A	3	Y	Present/Intact	ALK-T-2320(14)
L1013958-04H	Plastic 250ml unpreserved	Α	N/A	3	Y	Present/Intact	ALK-T-2320(14)
L1013958-04I	Plastic 250ml unpreserved	Α	6	3	Y	Present/Intact	NO2-4500NO2(2)
L1013958-04J	Plastic 250ml unpreserved	Α	6	3	Y	Present/Intact	NO2-4500NO2(2)
L1013958-04K	Plastic 250ml Zn Acetate/NaOH pr	Α	>12	3	Y	Present/Intact	SULFIDE-4500(7)
L1013958-04L	Plastic 250ml Zn Acetate/NaOH pr	Α	>12	3	Y	Present/Intact	SULFIDE-4500(7)
L1013958-04M	Plastic 250ml Zn Acetate/NaOH pr	Α	>12	3	Y	Present/Intact	SULFIDE-4500(7)
L1013958-04N	Plastic 500ml HNO3 preserved	Α	<2	3	Y	Present/Intact	DOD-NA-6020T(180), DOD-NI-6020T(180), DOD-CA-6020T(180), DOD-MN-6020T(180), DOD-AL-6020T(180), DOD-AS-6020T(180), DOD-CR-6020T(180), DOD-K-6020T(180), DOD-MG-6020T(180), DOD-FE-6020T(180), DOD-FE-6020T(180), DOD-PB-

Project Name: SHL TASK 0002

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Container Info	ormation			Temp			
Container ID	Container Type	Cooler	рН	deg C	Pres	Seal	Analysis(*)
L1013958-04O	Plastic 500ml HNO3 preserved	Α	<2	3	Y	Present/Intact	DOD-NA-6020T(180),DOD-NI-6020T(180),DOD-CA-6020T(180),DOD-MN-6020T(180),DOD-AL-6020T(180),DOD-AS-6020T(180),DOD-CR-6020T(180),DOD-MG-6020T(180),DOD-MG-6020T(180),DOD-PB-6020T(180),DOD-PB-6020T(180),DOD-PB-6020T(180),HARDT(180)
L1013958-04P	Plastic 500ml H2SO4 preserved	Α	<2	3	Y	Present/Intact	COD-410(28),NH3-4500(28)
L1013958-04Q	Plastic 500ml H2SO4 preserved	Α	<2	3	Y	Present/Intact	COD-410(28),NH3-4500(28)
L1013958-04R	Plastic 500ml unpreserved	Α	6	3	Y	Present/Intact	SO4-300(28),CL-300(28),NO3- 300(2),TDS-2540(7)
L1013958-04S	Plastic 500ml unpreserved	Α	6	3	Υ	Present/Intact	SO4-300(28),CL-300(28),NO3- 300(2),TDS-2540(7)
L1013958-04T	Plastic 1000ml unpreserved	Α	6	3	Y	Present/Intact	TSS-2540(7)
L1013958-04X	Amber 250ml unpreserved	Α	6	3	Y	Present/Intact	DOC-5310(28)
L1013958-05A	Plastic 500ml HNO3 preserved	A	<2	3	Y	Present/Intact	DOD-NA-6020T(180),DOD-NI-6020T(180),DOD-CA-6020T(180),DOD-MN-6020T(180),DOD-AL-6020T(180),DOD-AS-6020T(180),DOD-CR-6020T(180),DOD-K-6020T(180),DOD-MG-6020T(180),DOD-FE-6020T(180),DOD-PB-6020T(180),HARDT(180)
L1013958-06A	Plastic 250ml HNO3 preserved	A	<2	3	Υ	Present/Intact	DOD-FE-6020S(180), DOD-MG-6020S(180), DOD-CR-6020S(180), DOD-MN-6020S(180), DOD-CA-6020S(180), DOD-NI-6020S(180), DOD-NI-6020S(180), DOD-PB-6020S(180), DOD-AS-6020S(180), DOD-AL-6020S(180), DOD-K-6020S(180)
L1013958-07A	Vial H2SO4 preserved	A	- N/A	3	. Y	Present/Intact	TOC-5310(28)
L1013958-07B	Vial H2SO4 preserved	A	N/A	3	Y	Present/Intact	TOC-5310(28)
L1013958-07C	Plastic 250ml unpreserved	Α	N/A	3	Y	Present/Intact	ALK-T-2320(14)
L1013958-07D	Plastic 250ml unpreserved	Α	6	3	Y	Present/Intact	NO2-4500NO2(2)
L1013958-07E	Plastic 250ml Zn Acetate/NaOH pr	Α	>12	3	Y	Present/Intact	SULFIDE-4500(7)
L1013958-07F	Plastic 250ml Zn Acetate/NaOH pr	Α	>12	3	Y	Present/Intact	SULFIDE-4500(7)
L1013958-07G	Plastic 250ml Zn Acetate/NaOH pr	Α	>12	3	Y	Present/Intact	SULFIDE-4500(7)

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Container Info	ormation			Temp			
Container ID	Container Type	Cooler	рΗ	deg C	Pres	Seal	Analysis(*)
L1013958-07H	Plastic 500ml HNO3 preserved	A	<2	3	Υ	Present/Intact	DOD-NA-6020T(180),DOD-NI-6020T(180),DOD-CA-6020T(180),DOD-MN-6020T(180),DOD-AL-6020T(180),DOD-AS-6020T(180),DOD-CR-6020T(180),DOD-K-6020T(180),DOD-MG-6020T(180),DOD-MG-6020T(180),DOD-PB-6020T(180),DOD-PB-6020T(180),DOD-PB-6020T(180),DOD-PB-6020T(180),DOD-PB-6020T(180),HARDT(180)
L1013958-071	Plastic 500ml H2SO4 preserved	Α	<2	3	Y	Present/Intact	COD-410(28),NH3-4500(28)
L1013958-07J	Plastic 500ml unpreserved	Α	6	3	Y	Present/Intact	SO4-300(28),CL-300(28),NO3-300(2),TDS-2540(7)
L1013958-07K	Plastic 1000ml unpreserved	Α	6	3	Y	Present/Intact	TSS-2540(7)

Container Comments

L1013958-02A

L1013958-02B

L1013958-04A

L1013958-04B

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GLOSSARY

Acronyms

EPA Environmental Protection Agency.

LCS Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LCSD - Laboratory Control Sample Duplicate: Refer to LCS.

MDL Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

MS Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.

MSD Matrix Spike Sample Duplicate; Refer to MS,

NA Not Applicable.

 Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.

NI Not Ignitable.

RED. Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to
assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD).
 Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the
absolute difference between the values; although the RPD value will be provided in the report.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Data Qualifiers

- A Spectra identified as "Aldol Condensation Product".
- The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than five times (5x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank.
- Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E -Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- The RPD between the results for the two columns exceeds the method-specified criteria; however, the lower value has been reported due to obvious interference.
- P The RPD between the results for the two columns exceeds the method-specified criteria.
- The quality control sample exceeds the associated acceptance criteria. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R Analytical results are from sample re-analysis.

Report Format: DU Report with "J" Qualifiers

ALPHA

SHL TASK 0002

Lab Number:

L1013958

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Data Qualifiers

RE Analytical results are from sample re-extraction.

 Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL). This represents an estimated concentration for Tentatively Identified Compounds (TICs).

ND Not detected at the method detection limit (MDL) for the sample.

Report Format: DU Report with "J" Qualifiers

SHL TASK 0002

Project Number: AC001

Lab Number:

L1013958

Report Date:

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REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IIIA, 1997.

- 30 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WPCF, 18th Edition, 1992.
- 44 Methods for the Determination of Inorganic Substances in Environmental Samples, EPA/600/R-93/100, August 1993.

The analyses performed on the sample(s) within this report are in accordance with the minimum established guidelines set forth in the Department of Defense Quality Systems Manual, Version 4.1, issued April 22, 2009

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Certificate/Approval Program Summary

Last revised July 19, 2010 - Westboro Facility

The following list includes only those analytes/methods for which certification/approval is currently held.

For a complete listing of analytes for the referenced methods, please contact your Alpha Customer Service Representative.

Connecticut Department of Public Health Certificate/Lab ID: PH-0574. NELAP Accredited Solid Waste/Soil.

Drinking Water (Inorganic Parameters: Color, pH, Turbidity, Conductivity, Alkalinity, Chloride, Free Residual Chlorine, Fluoride, Calcium Hardness, Sulfate, Nitrate, Nitrite, Aluminum, Antimony, Arsenic, Barium, Beryllium, Cadmium, Calcium, Chromium, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Vanadium, Zinc, Total Dissolved Solids, Total Organic Carbon, Total Cyanide, Perchlorate.

Organic Parameters: Volatile Organics 524.2, Total Trihalomethanes 524.2, 1,2-Dibromo-3-chloropropane (DBCP), Ethylene Dibromide (EDB), 1,4-Dioxane (Mod 8270). Microbiology Parameters: Total Coliform-MF mEndo (SM9222B), Total Coliform – Colilert (SM9223 P/A), E. Coli. – Colilert (SM9223 P/A), HPC – Pour Plate (SM9215B), Fecal Coliform – MF m-FC (SM9222D))

Wastewater/Non-Potable Water (Inorganic Parameters: Color, pH, Conductivity, Acidity, Alkalinity, Chloride, Total Residual Chlorine, Fluoride, Total Hardness, Silica, Sulfate, Sulfide, Ammonia, Kjeldahl Nitrogen, Nitrate, Nitrite, O-Phosphate, Total Phosphorus, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Strontium, Thallium, Tin, Titanium, Vanadium, Zinc, Total Residue (Solids), Total Dissolved Solids, Total Suspended Solids (non-filterable), BOD, CBOD, COD, TOC, Total Cyanide, Phenolics, Foaming Agents (MBAS), Bromide, Oil and Grease. Organic Parameters: PCBs, Organochlorine Pesticides, Technical Chlordane, Toxaphene, 2,4-D, 2,4,5-T, 2,4,5-TP(Silvex), Acid Extractables (Phenols), Benzidines, Phthalate Esters, Nitrosamines, Nitroaromatics & Isophorone, Polynuclear Aromatic Hydrocarbons, Haloethers, Chlorinated Hydrocarbons, Volatile Organics, TPH (HEM/SGT), Extractable Petroleum Hydrocarbons (ETPH), MA-EPH, MA-VPH. Microbiology Parameters: Total Coliform – MF mEndo (SM9222B), Total Coliform – MTF (SM9221B), HPC – Pour Plate (SM9215B), Fecal Coliform – MF m-FC (SM9222D), Fecal Coliform – A-1 Broth (SM9221E).)

Solid Waste/Soil (Inorganic Parameters: pH, Sulfide, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Tin, Vanadium, Zinc, Total Cyanide, Ignitability, Phenolics, Corrosivity, TCLP Leach (1311), SPLP Leach (1312 metals only), Reactivity. Organic Parameters: PCBs, PCBs in Oil, Organichlorine Pesticides, Technical Chlordane, Toxaphene, Extractable Petroleum Hydrocarbons (ETPH), MA-EPH, MA-VPH, Dicamba, 2,4-D, 2,4,5-T, 2,4,5-TP(Silvex), Volatile Organics, Acid Extractables (Phenols), 3.3'-Dichlorobenzidine, Phthalates, Nitrosamines, Nitroaromatics & Cyclic Ketones, PAHs, Haloethers, Chlorinated Hydrocarbons.)

Maine Department of Human Services Certificate/Lab ID: 2009024.

Drinking Water (Inorganic Parameters: SM9215B, 9222D, 9223B, EPA 180.1, 300.0, 353.2, SM2130B, 2320B, 4500Cl-D, 4500CN-C, 4500CN-E, 4500F-C, 4500H+B, 4500NO3-F, EPA 200.7, EPA 200.8, 245.1, EPA 300.0. Organic Parameters: 504.1, 524.2.)

Wastewater/Non-Potable Water (Inorganic Parameters: EPA 120.1, 1664A, 350.1, 351.1, 353.2, 410.4, 420.1, Lachat 10-107-06-1-B, SM2320B, 2340B, 2510B, 2540C, 2540D, 426C, 4500Cl-D, 4500Cl-E, 4500CN-C, 4500CN-E, 4500F-B, 4500F-C, 4500H+B, 4500Norg-B, 4500Norg-C, 4500NH3-B, 4500NH3-G, 4500NH3-H, 4500NO3-F, 4500P-B.5, 4500P-E, 5210B, 5220D, 5310C, EPA 200.7, 200.8, 245.1. Organic Parameters: 608, 624, ME DRO, ME GRO, MA EPH, MA VPH.)

Solid Waste/Soil (Organic Parameters: ME DRO, ME GRO, MA EPH, MA VPH.)

Massachusetts Department of Environmental Protection Certificate/Lab ID: M-MA086.

Drinking Water

Inorganic Parameters: (EPA 200.8 for: Sb,As,Ba,Be,Cd,Cr,Cu,Pb,Ni,Se,Ti)

(EPA 200.7 for: Ba, Be, Ca, Cd, Cr, Cu, Na, Ni) 245.1, (300.0 for: Nitrate-N, Fluoride, Sulfate)

353.2 for: Nitrate-N, Nitrite-N; SM4500NO3-F, 4500F-C, 4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, 2320B, SM2540C, SM4500H-B.

Organic Parameters: (EPA 524.2 for: Trihalomethanes, Volatile Organics)

(504.1 for: 1,2-Dibromoethane, 1,2-Dibromo-3-Chloropropane), 314.0, 332.

Microbiology Parameters: SM9215B; ENZ. SUB. SM9223; MF-SM9222D

Non-Potable Water

Inorganic Parameters:, (EPA 200.8 for: Al,Sb,As,Be,Cd,Cr,Cu,Pb,Mn,Ni,Se,Ag,Tl,Zn)

(EPA 200.7 for: Al,Sb,As,Be,Cd,Cr,Co,Cu,Fe,Pb,Mn,Mo,Ni,Se,Ag,Sr,Ti,Tl, V,Zn,Ca,Mg,Na,K)

245.1, SM4500H,B, EPA 120.1, SM2510B, 2540C, 2540B, 2340B, 2320B, 4500CL-E, 4500F-BC, 426C, SM4500NH3-BH, (EPA 350.1 for: Ammonia-N), LACHAT 10-107-06-1-B for Ammonia-N, SM4500NO3-F, 353.2 for Nitrate-N, SM4500NH3-B,C-Titr, SM4500NH3-BC-NES, EPA 351.1, SM4500P-E, 4500P-B,E, 5220D, EPA 410.4, SM 5210B,

5310C, 4500CL-D, EPA 1664, SM14 510AC, EPA 420, SM4500-CN-CE, SM2540D.

Organic Parameters: (EPA 624 for Volatile Halocarbons, Volatile Aromatics)

(608 for: Chlordane, Aldrin, Dieldrin, DDD, DDE, DDT, Heptachlor, Heptachlor Epoxide, PCBs-Water), EPA 625 for SVOC Acid Extractables and SVOC Base/Neutral Extractables, 600/4-81-045-PCB-Oil

New Hampshire Department of Environmental Services Certificate/Lab ID: 200307. NELAP Accredited.

Drinking Water (Inorganic Parameters: SM6215B, 9222B, 9223B Colliert, EPA 200.7, 200.8, 245.2, 120.1, 300.0, 314.0, SM4500CN-E, 4500H+B, 4500NO3-F, 2320B, 2510B, 2540C, 4500F-C, 5310C, 2120B, EPA 331.0. Organic

Parameters: 504.1, 524.2, SM6251B.)

Non-Potable Water (Inorganic Parameters: SM9222D, 9221B, 9222B, 9221E-EC, EPA 200.7, 200.8, 245.1, 245.2, SW-846 6010B, 6020, 7196A, 7470A, SM3500-CR-D, EPA 120.1, 300.0, 350.1, 351.1, 353.2, 420.1, 1664A, SW-846 9010, 9030, 9040B, SM426C, SM2310B, 2540B, 2540D, 4500H+B, 4500NH3-H, 4500NH3-E, 4500NO2-B, 4500P-E, 4500-S2-D, 5210B, 2320B, 2540C, 4500F-C, 5310C, 5540C, LACHAT 10-117-07-1-B, LACHAT 10-107-06-1-B, LACHAT 10-107-04-1-J, LACHAT 10-117-07-1-A, SM4500CL-E, LACHAT 10-204-00-1-A, LACHAT 10-107-06-2-D. Organic Parameters: SW-846 3005A, 3015A, 3510C, 5030B, 8021B, 8260B, 8270C, 8330, EPA 624, 625, 608, SW-846 8082, 8081A.)

Solid & Chemical Materials (Inorganic Parameters: SW-846 6010B, 7196A, 7471A, 7.3.3.2, 7.3.4.2, 1010, 1030, 9010, 9012A, 9014, 9030B, 9040, 9045C, 9050C, 1311, 3005A, 3050B, 3051A. Organic Parameters: SW-846 3540C, 3545, 3580A, 5030B, 5035, 8021B, 8260B, 8270C, 8330, 8151A, 8082, 8081A.)

New Jersey Department of Environmental Protection Certificate/Lab ID: MA935. NELAP Accredited.

Drinking Water (Inorganic Parameters: SM9222B, 9221E, 9223B, 9215B, 4500NO3-F, 4500F-C, EPA 300.0, 200.7, 2540C, 2320B, 314.0, SM2120B, 2510B, 5310C, SM4500H-B, EPA 200.8, 245.2. Organic Parameters: 504.1,

SM6251B, 524.2.)

Non-Potable Water (Inorganic Parameters: SM5210B, EPA 410.4, SM5220D, 4500Cl-D, EPA 300.0, SM2120B, SM4500F-BC, EPA 200.7, 351.1, LACHAT 10-107-06-2-D, EPA 353.2, SM4500NO3-F, 4500NO2-B, EPA 1664A, SM5310B, C or D, 4500-PE, EPA 420.1, SM4500P-B5+E, 2540B, 2540C, 2540D, EPA 120.1, SM2510B, SM15 426C, SM9221CE, 9222D, 9221B, 9222B, 9215B, 2310B, 2320B, 4500NH3-H, 4500-S D, EPA 350.1, SM5210B, SW-846 3015, 6020, 7470A, 5540C, 4500H-B, EPA 200.8, SM3500Cr-D, EPA 245.1, 245.2, SW-846 9040B, 3005A, EPA 6010B, 7196A, SW-846 9010B, 9030B. Organic Parameters: SW-846 8260B, 8270C, 3510C, EPA 608, 624, 625, SW-846 5030B, 8021B, 8081A, 8082, 8151A, 8330, NJ OQA-QAM-025 Rev.7.)

Solid & Chemical Materials (Inorganic Parameters: SW-846 9040B, 3005A, 6010B, 7196A, 5030B, 9010B, 9030B, 1030, 1311, 3050B, 3051, 7471A, 9014, 9012A, 9045C, 9050A, 9065. Organic Parameters: SW-846 8021B, 8081A, 8082, 8151A, 8330, 8260B, 8270C, 1311, 1312, 3540C, 3545, 3550B, 3580A, 5035L, 5035H, NJ OQA-QAM-025 Rev. 7.)

New York Department of Health Certificate/Lab ID: 11148. NELAP Accredited.

Drinking Water (Inorganic Parameters: SM9223B, 9222B, 9215B, EPA 200.8, 200.7, 245.2, SM5310C, EPA 314.0, 332.0, SM2320B, EPA 300.0, SM2120B, 4500CN-E, 4500F-C, 4500H-B, 4500NO3-F, 2540C, EPA 120.1, SM 2510B. Organic Parameters: EPA 524.2, 504.1.)

Non-Potable Water (Inorganic Parameters: SM9221E, 9222D, 9221B, 9222B, 9215B, 5210B, EPA 410.4, SM5220D, 2310B-4a, 2320B, EPA 200.7, 300.0, LACHAT 10-117-07-1A or B, SM4500CI-E, 4500F-C, SM15 426C, EPA 350.1, LACHAT 10-107-06-1-B, SM4500NH3-H, EPA 351.1, LACHAT 10-107-06-2, EPA 353.2, LACHAT 10-107-041-C, SM4500-NO3-F, 4500-NO2-B, 4500P-E, 2540C, 2540B, 2540D, EPA 200.8, EPA 6010B, 6020, EPA 7196A, S\M3500Cr-D, EPA 245.1, 245.2, 7470A, SM2120B, SM4500-CN-E LACHAT 10-204-00-1-A, EPA 9040B, SM4500-HB, EPA 1664A, SM5310C, EPA 420.1, SM14 510C, EPA 120.1, SM2510B, SM4500S-D, SM5540C, EPA 3005A, 3015. Organic Parameters: EPA 624, 8260B, 8270C, 625, 608, 8081A, 8151A, 8330, 8082, EPA 3510C, 5030B, 9010B, 9030B.)

Solid & Hazardous Waste (Inorganic Parameters: 1010, 1030, SW-846 Ch 7 Sec 7.3, EPA 6010B, 7196A, 7471A, 9012A, 9014, 9040B, 9045C, 9065, 9050, EPA 1311, 1312, 3005A, 3050B, 9010B, 9030B. Organic Parameters: EPA 8260B, 8270C, 8081A, 8151A, 8330, 8082, 3540C, 3545, 3546, 3580, 5030B, 5035.)

North Carolina Department of the Environment and Natural Resources Certificate/Lab ID; 666, Organic Parameters: MA-EPH, MA-VPH.

Pennsylvania Department of Environmental Protection <u>Certificate/Lab ID</u>: 68-03671. *NELAP Accredited. Non-Potable Water* (<u>Organic Parameters</u>: EPA 3510C, 5030B, 625, 624, 608, 8081A, 8082, 8151A, 8260B, 8270C, 8330)

Solid & Hazardous Waste (Inorganic Parameters: EPA 1010, 1030, 1311, 3050B, 3051, 6010B, EPA 7.3.3.2, EPA 7.3.4.2, 7196A, 7471A, 9010B, 9012A, 9014, 9040B, 9045C, 9050, 9065. Organic Parameters: 3540C, 3545, 3580A, 5035, 8021B, 8081A, 8082, 8151A, 8260B, 8270C, 8330)

Rhode Island Department of Health Certificate/Lab ID: LAO00065, NELAP Accredited via NY-DOH.

Refer to MA-DEP Certificate for Potable and Non-Potable Water.

Refer to NY-DOH Certificate for Potable and Non-Potable Water.

Texas Commisson on Environmental Quality <u>Certificate/Lab ID</u>: T104704476-09-1. *NELAP Accredited. Non-Potable Water* (<u>Inorganic Parameters</u>: EPA 120.1, 1664, 200.7, 200.8, 245.1, 245.2, 300.0, 350.1, 351.1, 353.2, 376.2, 410.4, 420.1, 6010, 6020, 7196, 7470, 9040, SM 2120B, 2310B, 2320B, 2510B, 2540B, 2540C, 2540D, 426C, 4500CL-E, 4500CN-E, 4500F-C, 4500H+B, 4500NH3-H, 4500NO2B, 4500P-E, 4500 S2¯D, 510C, 5210B, 5220D, 5310C, 5540C. <u>Organic Parameters</u>: EPA 608, 624, 625, 8081, 8082, 8151, 8260, 8270, 8330.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 1311, 1312, 9012, 9014, 9040, 9045, 9050, 9065.)

Department of Defense Certificate/Lab ID: L2217.

Drinking Water (Inorganic Parameters: SM 4500H-B. Organic Parameters: EPA 524.2, 504.1.)

Non-Potable Water (Inorganic Parameters: EPA 200.7, 200.8, 6010B, 6020, 245.1, 245.2, 7470A, 9040B, 300.0, 9251, 9038, 350.1, 353.2, 351.1, 120.1, 9050A, 410.4, 9060, 1664, 420.1, LACHAT 10-107-06-1-B, SM 4500CN-E, 4500H-B, 4500CL-E, 4500F-BC, 4500SO4-E, 426C, 4500NH3-B, 4500NH3-H, 4500NO3-F, 4500NO2-B, 4500Norg-C, 4500PE, 2510B, 5540C, 5220D, 5310C, 2540B, 2540C, 2540D, 510C, 4500S2-AD, 3005A, 3015, 9010B, 9030B. Organic Parameters: EPA 8260B, 8270C, 8330, 625, 8082, 8151A, 8081A, 3510C, 5030B, MassDEP EPH, MassDEP VPH.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 200.7, 6010B, 7471A, 9040B, 9045C, 9065, 420.1, 9012A, 6860, 1311, 1312, 3050B, 9030B, 3051, 9010B, 3540C, SM 510ABC, 4500CN-CE, 2540G, SW-846 7.3, Organic Parameters: EPA 8260B, 8270C, 8330, 8082, 8081A, 8151A, 3545, 3546, 3580, 5035, MassDEP EPH, MassDEP VPH.)

Analytes Not Accredited by NELAP

Certification is not available by NELAP for the following analytes: EPA 8260B: Freon-113, 1,2,4,5-Tetramethylbenzene, 4-Ethyltoluene. EPA 8330A: PETN, Picric Acid, Nitroglycerine, 2,6-DANT, 2,4-DANT. EPA 8270C: Methyl naphthalene, Dimethyl naphthalene, Total Methylnaphthalenes, Total Dimethylnaphthalenes, 1,4-Diphenylhydrazine (Azobenzene). EPA 625: 4-Chloroaniline. EPA 350.1 for Ammonia in a Soil matrix.

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ANALYTICAL REPORT

Lab Number:

L1013961

Client:

Sovereign Consulting

905B South Main Street

Mansfield, MA 02048

ATTN:

Phil McBain

Phone:

(508) 339-3200

Project Name:

SHL TASK 0002

Project Number:

AC001

Report Date:

09/21/10

Certifications & Approvals: MA (M-MA086), NY NELAC (11148), CT (PH-0574), NH (2003), NJ (MA935), RI (LAO00065), ME (MA0086), PA (Registration #68-03671), USDA (Permit #S-72578), US Army Corps of Engineers, Naval FESC.

Eight Walkup Drive, Westborough, MA 01581-1019 508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com



Serial_No:09211015:45

Project Name:

SHL TASK 0002

Project Number:

AC001

Lab Number:

L1013961

Report Date:

09/21/10

Sample Alpha Collection Sample ID Location Date/Time Client ID L1013961-01 SHM-10-06A-090910-U DEVENS, MA 09/09/10 11:45 L1013961-02 SHM-10-07-090910-U DEVENS, MA 09/09/10 11:00

Serial_No:09211015:45

Project Name:

SHL TASK 0002

Project Number: AC001

Lab Number:

L1013961

Report Date:

09/21/10

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet all of the requirements of NELAC, for all NELAC accredited parameters. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

For additional information, please contact Client Services at 800-624-9220.

Report Submission

This report contains the results for the Dissolved Inorganic Carbon analysis. The results for all other analyses have been issued under separate cover.

Dissolved Inorganic Carbon

L1013961-01 and -02 have elevated detection limits due to the dilutions required by the elevated concentrations present in the samples.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:

Title: Technical Director/Representative

Michelle M. Uning Michelle M. Morris

Date: 09/21/10

INORGANICS & MISCELLANEOUS

Serial_No:09211015:45

Project Name: SHL TASK 0002

Project Number: AC001

Lab Number:

L1013961

Report Date:

09/21/10

SAMPLE RESULTS

Lab ID:

L1013961-01

Client ID:

SHM-10-06A-090910-U

Sample Location:

DEVENS, MA

Matrix:

Water

Date Collected:

09/09/10 11:45

Date Received:

09/09/10

Field Prep:

Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry										
Dissolved Inorganic Carbon	58		mg/l	20		20	09/09/10 22:23	09/20/10 15:44	30,5310C(m)	DW

Serial No:09211015:45

Project Name: SHL TASK 0002

Lab Number:

L1013961

Project Number: AC001

Report Date: 09/21/10

SAMPLE RESULTS

Lab ID:

L1013961-02

Client ID:

SHM-10-07-090910-U

Sample Location:

DEVENS, MA

Matrix:

Water

Date Collected:

09/09/10 11:00

Date Received:

09/09/10

Field Prep:

Not Specified

Dilution Date Date Analytical Qualifier Units RL MDL Factor Prepared Analyzed Method Result Parameter Analyst General Chemistry Dissolved Inorganic Carbon 20 20 09/09/10 22:23 09/20/10 15:44 30,5310C(m) 52 mg/l DW

Serial_No:09211015:45

Project Name:

SHL TASK 0002

Lab Number:

L1013961

09/21/10

Project Number: AC001

Report Date:

Method Blank Analysis Batch Quality Control

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry for sar	nple(s): 01-02 Bato	h: WG43	3279-1						
Dissolved Inorganic Carbon	ND	mg/l	1.0	-	1	09/09/10 22:23	09/20/10 15:44	30,5310C(m)	DW

Lab Control Sample Analysis Batch Quality Control

Lab Number:

L1013961

Report Date:

09/21/10

Project Name: SHL TASK 0002

Project Number: AC001

	LCS		LCSD		%Recovery				
Parameter	%Recovery	Qual	%Recovery	Qual	Limits	RPD	Qual	RPD Limits	

Associated sample(s): 01-02 Batch: WG433279-2

Dissolved Inorganic Carbon

Lab Duplicate Analysis
Batch Quality Control

Lab Number:

L1013961

Report Date:

09/21/10

Parameter		Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Associated sample(s): 01-02	QC Batch ID: WG433279	-3 QC Sample: L1	1013961-02 Client ID: SH	M-10-07-090	910-U		
Dissolved Inorganic Carbon		52	50	mg/l	4		

Project Name:

Project Number: AC001

SHL TASK 0002

Serial_No:09211015:45

Project Name: SHL TASK 0002

Project Number: AC001

Lab Number: L1013961 Report Date: 09/21/10

Sample Receipt and Container Information

Were project specific reporting limits specified?

YES

Reagent H2O Preserved Vials Frozen on:

Cooler Information Custody Seal

Cooler

A

Present/Intact

Container Info	ormation			Temp			
Container ID	Container Type	Cooler	рΗ	deg C	Pres	Seal	Analysis(*)
L1013961-01A	Vial H2SO4 preserved split	A	N/A	3	Y	Present/Intact	SPECWC()
L1013961-01B	Vial H2SO4 preserved split	A	N/A	3	Y	Present/Intact	SPECWC()
L1013961-01X	Amber 250ml unpreserved	Α	6	3	Y	Present/Intact	SPECWC()
L1013961-02A	Vial H2SO4 preserved split	Α	N/A	3	Y	Present/Intact	SPECWC()
L1013961-02B	Vial H2SO4 preserved split	Α	N/A	3	Y	Present/Intact	SPECWC()
L1013961-02X	Amber 250ml unpreserved	Α	6	3	Y	Present/Intact	SPECWC()

NA

Container Comments

L1013961-01A

L1013961-01B

L1013961-01X

L1013961-02A

L1013961-02B

L1013961-02X

SHL TASK 0002

Lab Number:

L1013961

Project Number:

AC001

Report Date:

09/21/10

GLOSSARY

Acronyms

EPA - Environmental Protection Agency.

LCS - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LCSD - Laboratory Control Sample Duplicate: Refer to LCS.

MDL Method Detection Limit; This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

 MS - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.

MSD - Matrix Spike Sample Duplicate: Refer to MS.

NA Not Applicable.

NC Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.

NI - Not Ignitable.

Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to
assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD).
 Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the
absolute difference between the values; although the RPD value will be provided in the report.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1.8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Data Qualifiers

- A Spectra identified as "Aldol Condensation Product".
- The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than five times (5x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank.
- Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- The RPD between the results for the two columns exceeds the method-specified criteria; however, the lower value has been reported due to obvious interference.
- P The RPD between the results for the two columns exceeds the method-specified criteria.
- The quality control sample exceeds the associated acceptance criteria. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R Analytical results are from sample re-analysis.

Report Format: Data Usability Report



Serial_No:09211015:45

Project Name: SHL TASK 0002 Lab Number: L1013961

Project Number: AC001 Report Date: 09/21/10

Data Qualifiers

RE - Analytical results are from sample re-extraction.

Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

ND - Not detected at the reporting limit (RL) for the sample.

Report Format: Data Usability Report

SHL TASK 0002

Lab Number:

L1013961

Project Number:

AC001

Report Date:

09/21/10

REFERENCES

30 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WPCF. 18th Edition. 1992.

The analyses performed on the sample(s) within this report are in accordance with the minimum established guidelines set forth in the Department of Defense Quality Systems Manual, Version 4.1, issued April 22, 2009

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

Certificate/Approval Program Summary

Last revised July 19, 2010 - Westboro Facility

The following list includes only those analytes/methods for which certification/approval is currently held. For a complete listing of analytes for the referenced methods, please contact your Alpha Customer Service Representative.

Connecticut Department of Public Health Certificate/Lab ID: PH-0574. NELAP Accredited Solid Waste/Soil.

Drinking Water (Inorganic Parameters: Color, pH, Turbidity, Conductivity, Alkalinity, Chloride, Free Residual Chlorine, Fluoride, Calcium Hardness, Sulfate, Nitrate, Nitrite, Aluminum, Antimony, Arsenic, Barium, Beryllium, Cadmium, Calcium, Chromium, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Vanadium, Zinc, Total Dissolved Solids, Total Organic Carbon, Total Cyanide, Perchlorate, Organic Parameters: Volatile Organics 524.2, Total Trihalomethanes 524.2, 1,2-Dibromo-3-chloropropane (DBCP), Ethylene Dibromide (EDB), 1,4-Dioxane (Mod 8270). Microbiology Parameters: Total Coliform-MF mEndo (SM9222B), Total Coliform – Colilert (SM9223 P/A), E. Coli. – Colilert (SM9223 P/A), HPC – Pour Plate (SM9215B), Fecal Coliform – MF m-FC (SM9222D))

Wastewater/Non-Potable Water (Inorganic Parameters: Color, pH, Conductivity, Acidity, Alkalinity, Chloride, Total Residual Chlorine, Fluoride, Total Hardness, Silica, Sulfate, Sulfide, Ammonia, Kjeldahl Nitrogen, Nitrate, Nitrite, O-Phosphate, Total Phosphorus, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Strontium, Thallium, Tin, Titanium, Vanadium, Zinc, Total Residue (Solids), Total Dissolved Solids, Total Suspended Solids (non-filterable), BOD, CBOD, COD, TOC, Total Cyanide, Phenolics, Foaming Agents (MBAS), Bromide, Oil and Grease. Organic Parameters: PCBs, Organochlorine Pesticides, Technical Chlordane, Toxaphene, 2,4-D, 2,4,5-T. 2,4,5-TP(Silvex), Acid Extractables (Phenols), Benzidines, Phthalate Esters, Nitrosamines, Nitroaromatics & Isophorone, Polynuclear Aromatic Hydrocarbons, Haloethers, Chlorinated Hydrocarbons, Volatile Organics, TPH (HEM/SGT), Extractable Petroleum Hydrocarbons (ETPH), MA-EPH, MA-VPH, Microbiology Parameters: Total Coliform – MF mendo (SM9222B), Total Coliform – MTF (SM9221B), HPC – Pour Plate (SM9215B), Fecal Coliform – MF m-FC (SM9222D), Fecal Coliform – A-1 Broth (SM9221E).)

Solid Waste/Soil (Inorganic Parameters: pH, Sulfide, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Tin, Vanadium, Zinc, Total Cyanide, Ignitability, Phenolics, Corrosivity, TCLP Leach (1311), SPLP Leach (1312 metals only), Reactivity. Organic Parameters: PCBs, PCBs in Oil, Organochlorine Pesticides, Technical Chlordane, Toxaphene, Extractable Petroleum Hydrocarbons (ETPH), MA-EPH, MA-VPH, Dicamba, 2,4-D, 2,4,5-T, 2,4,5-TP(Silvex), Volatile Organics, Acid Extractables (Phenols), 3.3'-Dichlorobenzidine, Phthalates, Nitrosamines, Nitroaromatics & Cyclic Ketones, PAHs, Haloethers, Chlorinated Hydrocarbons.)

Maine Department of Human Services Certificate/Lab ID: 2009024.

Drinking Water (Inorganic Parameters: SM9215B, 9222D, 9223B, EPA 180.1, 300.0, 353.2, SM2130B, 2320B, 4500Cl-D, 4500CN-C, 4500CN-E, 4500F-C, 4500H+B, 4500NO3-F, EPA 200.7, EPA 200.8, 245.1, EPA 300.0. Organic Parameters: 504.1, 524.2.)

Wastewater/Non-Potable Water (Inorganic Parameters: EPA 120.1, 1664A, 350.1, 351.1, 353.2, 410.4, 420.1, Lachat 10-107-06-1-B, SM2320B, 2340B, 2510B, 2540C, 2540D, 426C, 4500Cl-D, 4500Cl-E, 4500CN-C, 4500CN-E, 4500F-B, 4500F-C, 4500H+B, 4500Norg-B, 4500Norg-C, 4500NH3-B, 4500NH3-H, 4500NO3-F, 4500P-B.5, 4500P-E, 5210B, 5220D, 5310C, EPA 200.7, 200.8, 245.1. Organic Parameters: 608, 624, ME DRO, ME GRO, MA EPH, MA VPH.)

Solid Waste/Soil (Organic Parameters: ME DRO, ME GRO, MA EPH, MA VPH.)

Massachusetts Department of Environmental Protection Certificate/Lab ID: M-MA086.

Drinking Water

Inorganic Parameters: (EPA 200.8 for: Sb,As,Ba,Be,Cd,Cr,Cu,Pb,Ni,Se,Tl)

(EPA 200.7 for: Ba,Be,Ca,Cd,Cr,Cu,Na,Ni) 245.1, (300.0 for: Nitrate-N, Fluoride, Sulfate)

353.2 for: Nitrate-N, Nitrite-N; SM4500NO3-F, 4500F-C, 4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, 2320B, SM2540C, SM4500H-B.

Organic Parameters: (EPA 524.2 for: Trihalomethanes, Volatile Organics)

(504.1 for: 1,2-Dibromoethane, 1,2-Dibromo-3-Chloropropane), 314.0, 332.

Microbiology Parameters: SM9215B; ENZ. SUB. SM9223; MF-SM9222D

Non-Potable Water

Inorganic Parameters:, (EPA 200.8 for: Al,Sb,As,Be,Cd,Cr,Cu,Pb,Mn,Ni,Se,Ag,Tl,Zn)

(EPA 200.7 for: Al,Sb,As,Be,Cd,Cr,Co,Cu,Fe,Pb,Mn,Mo,Ni,Se,Ag,Sr,Ti,Tl, V,Zn,Ca,Mg,Na,K)

245.1, SM4500H,B, EPA 120.1, SM2510B, 2540C, 2540B, 2340B, 2320B, 4500CL-E, 4500F-BC, 426C, SM4500NH3-BH, (EPA 350.1 for: Ammonia-N), LACHAT 10-107-06-1-B for Ammonia-N, SM4500NO3-F, 353.2 for Nitrate-N, SM4500NH3-B, C-Titr, SM4500NH3-BC-NES, EPA 351.1, SM4500P-E, 4500P-B, E, 5220D, EPA 410.4, SM 5210B,

5310C, 4500CL-D, EPA 1664, SM14 510AC, EPA 420, SM4500-CN-CE, SM2540D.

Organic Parameters: (EPA 624 for Volatile Halocarbons, Volatile Aromatics)

(608 for: Chlordane, Aldrin, Dieldrin, DDD, DDE, DDT, Heptachlor, Heptachlor Epoxide, PCBs-Water), EPA 625 for SVOC Acid Extractables and SVOC Base/Neutral Extractables, 600/4-81-045-PCB-Oil

New Hampshire Department of Environmental Services Certificate/Lab ID: 200307. NELAP Accredited.

Drinking Water (Inorganic Parameters: SM6215B, 9222B, 9223B Colilert, EPA 200.7, 200.8, 245.2, 120.1, 300.0, 314.0, SM4500CN-E, 4500H+B, 4500NO3-F, 2320B, 2510B, 2540C, 4500F-C, 5310C, 2120B, EPA 331.0. Organic

Parameters: 504.1, 524.2, SM6251B.)

Non-Potable Water (Inorganic Parameters: SM9222D, 9221B, 9222B, 9221E-EC, EPA 200.7, 200.8, 245.1, 245.2, SW-846 6010B, 6020, 7196A, 7470A, SM3500-CR-D, EPA 120.1, 300.0, 350.1, 351.1, 353.2, 420.1, 1664A, SW-846 9010, 9030, 9040B, SM426C, SM2310B, 2540B, 2540D, 4500H+B, 4500NH3-H, 4500NH3-E, 4500NO2-B, 4500P-E, 4500P-S2-D, 5210B, 2320B, 2540C, 4500F-C, 5310C, 5540C, LACHAT 10-117-07-1-B, LACHAT 10-107-06-1-B, LACHAT 10-107-06-1-B, LACHAT 10-107-06-1-A, SM4500CL-E, LACHAT 10-204-00-1-A, LACHAT 10-107-06-2-D, Organic Parameters: SW-846 3005A, 3015A, 3510C, 5030B, 8021B, 8260B, 8270C, 8330, EPA 624, 625, 608, SW-846 8082, 8081A.)

Solid & Chemical Materials (Inorganic Parameters: SW-846 6010B, 7196A, 7471A, 7.3.3.2, 7.3.4.2, 1010, 1030, 9010, 9012A, 9014, 9030B, 9040, 9045C, 9050C, 1311, 3005A, 3050B, 3051A. Organic Parameters: SW-846 3540C, 3545, 3580A, 5030B, 5035, 8021B, 8260B, 8270C, 8330, 8151A, 8082, 8081A.)

New Jersey Department of Environmental Protection Certificate/Lab ID: MA935. NELAP Accredited.

Drinking Water (Inorganic Parameters: SM9222B, 9221E, 9223B, 9215B, 4500NO3-F, 4500F-C, EPA 300.0, 200.7, 2540C, 2320B, 314.0, SM2120B, 2510B, 5310C, SM4500H-B, EPA 200.8, 245.2. Organic Parameters: 504.1,

SM6251B, 524.2.)

Non-Potable Water (Inorganic Parameters: SM5210B, EPA 410.4, SM5220D, 4500Cl-D, EPA 300.0, SM2120B, SM4500F-BC, EPA 200.7, 351.1, LACHAT 10-107-06-2-D, EPA 353.2, SM4500NO3-F, 4500NO2-B, EPA 1664A, SM5310B, C or D, 4500-PE, EPA 420.1, SM4500P-B5+E, 2540B, 2540C, 2540D, EPA 120.1, SM2510B, SM15 426C, SM9221CE, 9222D, 9221B, 9222B, 9215B, 2310B, 2320B, 4500NH3-H, 4500-S D, EPA 350.1, SM5210B, SW-846 3015, 6020, 7470A, 5540C, 4500H-B, EPA 200.8, SM3500Cr-D, EPA 245.1, 245.2, SW-846 9040B, 3005A, EPA 6010B, 7196A, SW-846 9010B, 9030B. Organic Parameters: SW-846 8260B, 8270C, 3510C, EPA 608, 624, 625, SW-846 5030B, 8021B, 8081A, 8082, 8151A, 8330, NJ OQA-QAM-025 Rev.7.)

Solid & Chemical Materials (Inorganic Parameters: SW-846 9040B, 3005A, 6010B, 7196A, 5030B, 9010B, 9030B, 1030, 1311, 3050B, 3051, 7471A, 9014, 9012A, 9045C, 9050A, 9065. Organic Parameters: SW-846 8021B, 8081A, 8082, 8151A, 8330, 8260B, 8270C, 1311, 1312, 3540C, 3545, 3550B, 3580A, 5035L, 5035H, NJ OQA-QAM-025 Rev.7.)

New York Department of Health Certificate/Lab ID: 11148. NELAP Accredited.

Drinking Water (Inorganic Parameters: SM9223B, 9222B, 9215B, EPA 200.8, 200.7, 245.2, SM5310C, EPA 314.0, 332.0, SM2320B, EPA 300.0, SM2120B, 4500CN-E, 4500F-C, 4500H-B, 4500NO3-F, 2540C, EPA 120.1, SM 2510B.

Organic Parameters: EPA 524.2, 504.1.)

Non-Potable Water (Inorganic Parameters: SM9221E, 9222D, 9221B, 9222B, 9215B, 5210B, EPA 410.4, SM5220D, 2310B-4a, 2320B, EPA 200.7, 300.0, LACHAT 10-117-07-1A or B, SM4500CI-E, 4500F-C, SM15 426C, EPA 350.1, LACHAT 10-107-06-1-B, SM4500NH3-H, EPA 351.1, LACHAT 10-107-06-2, EPA 353.2, LACHAT 10-107-041-C, SM4500-NO3-F, 4500-NO2-B, 4500P-E, 2540C, 2540B, 2540D, EPA 200.8, EPA 6010B, 6020, EPA 7196A, S\M3500Cr-D, EPA 245.1, 245.2, 7470A, SM2120B, SM4500-CN-E LACHAT 10-204-00-1-A, EPA 9040B, SM4500-HB, EPA 1664A, SM5310C, EPA 420.1, SM14 510C, EPA 120.1, SM2510B, SM4500S-D, SM5540C, EPA 3005A, 3015: Organic Parameters: EPA 624, 8260B, 8270C, 625, 608, 8081A, 8151A, 8330, 8082, EPA 3510C, 5030B, 9010B, 9030B.)

Solid & Hazardous Waste (Inorganic Parameters: 1010, 1030, SW-846 Ch 7 Sec 7.3, EPA 6010B, 7196A, 7471A, 9012A, 9014, 9040B, 9045C, 9065, 9050, EPA 1311, 1312, 3005A, 3050B, 9010B, 9030B. Organic Parameters: EPA

8260B, 8270C, 8081A, 8151A, 8330, 8082, 3540C, 3545, 3546, 3580, 5030B, 5035.)

North Carolina Department of the Environment and Natural Resources Certificate/Lab ID: 666. Organic Parameters: MA-EPH, MA-VPH.

Pennsylvania Department of Environmental Protection <u>Certificate/Lab ID</u>: 68-03671. *NELAP Accredited. Non-Potable Water* (<u>Organic Parameters</u>: EPA 3510C, 5030B, 625, 624. 608, 8081A, 8082, 8151A, 8260B, 8270C, 8330)

Solid & Hazardous Waste (Inorganic Parameters: EPA 1010, 1030, 1311, 3050B, 3051, 6010B, EPA 7.3.3.2, EPA 7.3.4.2, 7196A, 7471A, 9010B, 9012A, 9014, 9040B, 9045C, 9050, 9065. Organic Parameters: 3540C, 3545, 3580A, 5035, 8021B, 8081A, 8082, 8151A, 8260B, 8270C, 8330)

Rhode Island Department of Health Certificate/Lab ID: LAO00065. NELAP Accredited via NY-DOH.

Refer to MA-DEP Certificate for Potable and Non-Potable Water.

Refer to NY-DOH Certificate for Potable and Non-Potable Water.

Texas Commisson on Environmental Quality <u>Certificate/Lab ID</u>: T104704476-09-1. *NELAP Accredited. Non-Potable Water* (<u>Inorganic Parameters</u>: EPA 120.1, 1664, 200.7, 200.8, 245.1, 245.2, 300.0, 350.1, 351.1, 353.2, 376.2, 410.4, 420.1, 6010, 6020, 7196, 7470, 9040, SM 2120B, 2310B, 2320B, 2510B, 2540B, 2540C, 2540D, 426C, 4500CL-E, 4500CN-E, 4500F-C, 4500H+B, 4500NH3-H, 4500NO2B, 4500P-E, 4500 S2 D, 510C, 5210B, 5220D, 5310C, 5540C. <u>Organic Parameters</u>: EPA 608, 624, 625, 8081, 8082, 8151, 8260, 8270, 8330.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 1311, 1312, 9012, 9014, 9040, 9045, 9050, 9065.)

Department of Defense Certificate/Lab ID: L2217.

Drinking Water (Inorganic Parameters: SM 4500H-B. Organic Parameters: EPA 524.2, 504.1.)

Non-Potable Water (Inorganic Parameters: EPA 200.7, 200.8, 6010B, 6020, 245.1, 245.2, 7470A, 9040B, 300.0, 9251, 9038, 350.1, 353.2, 351.1, 120.1, 9050A, 410.4, 9060, 1664, 420.1, LACHAT 10-107-06-1-B, SM 4500CN-E, 4500H-B, 4500CL-E, 4500F-BC, 4500SO4-E, 426C, 4500NH3-B, 4500NH3-H, 4500NO3-F, 4500NO2-B, 4500Norg-C, 4500PE, 2510B, 5540C, 5220D, 5310C, 2540B, 2540C, 2540D, 510C, 4500S2-AD, 3005A, 3015, 9010B, 9030B. Organic Parameters: EPA 8260B, 8270C, 8330, 625, 8082, 8151A, 8081A, 3510C, 5030B, MassDEP EPH, MassDEP VPH.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 200.7, 6010B, 7471A, 9040B, 9045C, 9065, 420.1, 9012A, 6860, 1311, 1312, 3050B, 9030B, 3051, 9010B, 3540C, SM 510ABC, 4500CN-CE, 2540G, SW-846 7.3, Organic Parameters: EPA 8260B, 8270C, 8330, 8082, 8081A, 8151A, 3545, 3546, 3580, 5035, MassDEP EPH, MassDEP VPH.)

Analytes Not Accredited by NELAP

Certification is not available by NELAP for the following analytes: **EPA 8260B:** Freon-113, 1,2,4,5-Tetramethylbenzene, 4-Ethyltoluene. **EPA 8330A:** PETN, Picric Acid, Nitroglycerine, 2,6-DANT, 2,4-DANT. **EPA 8270C:** Methyl naphthalene, Dimethyl naphthalene, Total Methylnaphthalenes, Total Dimethylnaphthalenes, 1,4-Diphenylhydrazine (Azobenzene). **EPA 625:** 4-Chloroaniline. **EPA 350.1** for Ammonia in a Soil matrix.

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ANALYTICAL REPORT

Lab Number:

L1016405

Client:

Sovereign Consulting

905B South Main Street

Mansfield, MA 02048

ATTN:

Phil McBain

Phone:

(508) 339-3200

Project Name:

SHL TASK 0002

Project Number:

AC001

Report Date:

10/27/10

Certifications & Approvals: MA (M-MA086), NY NELAC (11148), CT (PH-0574), NH (2003), NJ (MA935), RI (LAO00065), ME (MA0086), PA (Registration #68-03671), USDA (Permit #S-72578), US Army Corps of Engineers, Naval FESC.

Eight Walkup Drive, Westborough, MA 01581-1019 508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com

Project Name:

SHL TASK 0002

Project Number:

AC001

Lab Number:

L1016405

Report Date:

10/27/10

Alpha Sample ID	Client ID	Sample Location	Collection Date/Time
L1016405-01	SHM-10-13-101910-F	DEVENS, MA	10/19/10 11:13
L1016405-02	SHM-10-13-101910-U	DEVENS, MA	10/19/10 11:13
L1016405-03	SHM-10-14-101910-F	DEVENS, MA	10/19/10 11:25
L1016405-04	SHM-10-14-101910-U	DEVENS, MA	10/19/10 11:25
L1016405-05	SHM-10-11-101910-F	DEVENS, MA	10/19/10 14:45
L1016405-06	SHM-10-11-101910-U	DEVENS, MA	10/19/10 14:45
L1016405-07	DUP-101910-F	DEVENS, MA	10/19/10 11:13
L1016405-08	DUP-101910-U	DEVENS, MA	10/19/10 11:13
L1016405-09	RB-101910-U	DEVENS, MA	10/19/10 14:35

L1016405

Lab Number:

Project Name: SHL TASK 0002

Project Number: AC001 Report Date: 10/27/10

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet all of the requirements of NELAC, for all NELAC accredited parameters. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.), Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

For additional information, please contact Client Services at 800-624-9220.

Report Submission

Testing performed for the reported analyses followed the guidelines established under the DoD QSM 4.1, where applicable.

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

The results of the Dissolved Inorganic Carbon analysis will be issued under separate cover.

Sample Receipt

The samples were Field Filtered for Dissolved Metals only.

Dissolved Metals

L1016405-01, -03, -05 and -07 have elevated detection limits for all analytes, except Mercury, due to the

Project Name:

SHL TASK 0002

Project Number:

AC001

Lab Number:

L1016405

Report Date:

10/27/10

Case Narrative (continued)

dilutions required by the high concentrations of target analytes. The requested reporting limits were not achieved.

The WG438414-3/-4 MS/MSD recoveries for Arsenic (267%/350%), Calcium (MSD at 135%), Iron (310%/550%) and Manganese (MSD at 130%), performed on L1016405-03, do not apply because the sample concentrations are greater than four times the spike amount added.

The WG439294-4 MSD recovery, performed on L1016405-03, is above the acceptance criteria for Mercury (122%); however, the associated MS and LCS recoveries are within criteria. A post-digestion spike was performed with an acceptable recovery of 113%. No further action was required.

Total Metals

L1016405-02, -04, -06 and -08 have elevated detection limits for all analytes, except Mercury, due to the dilutions required by the high concentrations of target analytes. The requested reporting limits were not achieved.

The WG438412-3/-4 MS/MSD recoveries for Arsenic (MS at 17%), Iron (0%/40%) and Manganese (66%/78%), performed on L1016405-04, do not apply because the sample concentrations are greater than four times the spike amount added.

The WG439296-3/-4 MS/MSD recoveries, performed on L1016405-04, are above the acceptance criteria for Mercury (124%/134%); however, the associated LCS recovery is within criteria. A post-digestion spike was performed with an acceptable recovery of 112%. No further action was required.

Dissolved Organic Carbon

L1016405-02, -04, -06 and -08 have elevated detection limits due to the dilutions required by the sample matrices.

Nitrogen, Nitrate

The WG438484-4 MSD recovery (130%), performed on L1016405-04, is above the acceptance criteria; however, the associated LCS recovery is within criteria. No further action was required. In addition, the associated MS/MSD RPD is above the acceptance criteria (16%).

Project Name:

SHL TASK 0002

Lab Number:

L1016405

Project Number:

AC001

Report Date:

10/27/10

Case Narrative (continued)

Alkalinity, Total

The WG439215-3 MS recovery (50%), performed on L1016405-04, is below the acceptance criteria. This has been attributed to matrix interference.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Michelle M. Morris

Authorized Signature:

Title: Technical Director/Representative

Date: 10/27/10

METALS

Project Name: SHL TASK 0002

Project Number: AC001 Lab Number:

L1016405

Report Date:

10/27/10

SAMPLE RESULTS

Lab ID:

L1016405-01

Client ID:

SHM-10-13-101910-F

Sample Location:

DEVENS, MA

Matrix:

Water

Date Collected:

10/19/10 11:13

Date Received:

10/19/10

Field Prep:

See Narrative

Antimony, Dissolved ND ug/l 2.00 0.480 4 10/20/10 11:00 10/21/10 20:35 EPA 3005A 1,6020A BA Arsenic, Dissolved 672 ug/l 2.00 0.452 4 10/20/10 11:00 10/21/10 20:35 EPA 3005A 1,6020A BA Barium, Dissolved 154 ug/l 2.00 0.380 4 10/20/10 11:00 10/21/10 20:35 EPA 3005A 1,6020A BA Beryllium, Dissolved ND ug/l 2.00 0.236 4 10/20/10 11:00 10/21/10 20:35 EPA 3005A 1,6020A BA BA Beryllium, Dissolved ND ug/l 2.00 0.236 4 10/20/10 11:00 10/21/10 20:35 EPA 3005A 1,6020A BA	Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Antimony, Dissolved ND ug/l 2.00 0.480 4 10/20/10 11:00 10/21/10 20:35 EPA 3005A 1,6020A BA Arsenic, Dissolved 672 ug/l 2.00 0.452 4 10/20/10 11:00 10/21/10 20:35 EPA 3005A 1,6020A BA Berium, Dissolved 154 ug/l 2.00 0.380 4 10/20/10 11:00 10/21/10 20:35 EPA 3005A 1,6020A BA Beryllium, Dissolved ND ug/l 2.00 0.236 4 10/20/10 11:00 10/21/10 20:35 EPA 3005A 1,6020A BA BERyllium, Dissolved ND ug/l 2.00 0.236 4 10/20/10 11:00 10/21/10 20:35 EPA 3005A 1,6020A BA BA BERYllium, Dissolved ND ug/l 2.00 0.236 4 10/20/10 11:00 10/21/10 20:35 EPA 3005A 1,6020A BA	Dissolved Metals - V	Vestboro	ugh Lab									
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Beryllium, Dissolved ND ug/l 2.00 0.236 4 10/20/10 11:00 10/21/10 20:35 EPA 3005A 1.6020A BM Cadmium, Dissolved ND ug/l 2.00 0.236 4 10/20/10 11:00 10/21/10 20:35 EPA 3005A 1.6020A BM Calcium, Dissolved 65000 ug/l 400 50.6 4 10/20/10 11:00 10/21/10 20:35 EPA 3005A 1.6020A BM Chromium, Dissolved ND ug/l 2.00 0.744 4 10/20/10 11:00 10/21/10 20:35 EPA 3005A 1.6020A BM Cobalt, Dissolved 0.75 J ug/l 2.00 0.212 4 10/20/10 11:00 10/21/10 20:35 EPA 3005A 1.6020A BM Copper, Dissolved ND ug/l 2.00 0.472 4 10/20/10 11:00 10/21/10 20:35 EPA 3005A 1.6020A BM Iron, Dissolved 94600 ug/l 2.00 0.300 4 10/20/10 11:00 10/21/10 20:35 EPA 3005A 1.6020A BM Magnesium, Dissolved 0.	Arsenic, Dissolved	672		ug/l	2.00	0.452	4	10/20/10 11:00	10/21/10 20:35	EPA 3005A	1,6020A	вм
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Calcium, Dissolved 65000 ug/l 400 50.6 4 10/20/10 11:00 10/21/10 20:35 EPA 3005A 1,6020A BM Chromium, Dissolved ND ug/l 2.00 0.744 4 10/20/10 11:00 10/21/10 20:35 EPA 3005A 1,6020A BM Coball, Dissolved 0.75 J ug/l 2.00 0.212 4 10/20/10 11:00 10/21/10 20:35 EPA 3005A 1,6020A BM Copper, Dissolved ND ug/l 2.00 0.472 4 10/20/10 11:00 10/21/10 20:35 EPA 3005A 1,6020A BM Iron, Dissolved 94600 ug/l 200 33.6 4 10/20/10 11:00 10/21/10 20:35 EPA 3005A 1,6020A BM Lead, Dissolved 0.32 J ug/l 2.00 0.200 4 10/20/10 11:00 10/21/10 20:35 EPA 3005A 1,6020A BM Magnesium, Dissolved 10100 ug/l 400 16.4 4 10/20/10 11:00 10/21/10 20:35 EPA 3005A 1,6020A BM Manganese, Dissolved 2060 ug/l 4.00 0.544 4 10/20/10 11:00 10/21/10 20:35 EPA 3005A 1,6020A BM Mercury, Dissolved 0.07162 J ug/l 0.2000 0.0120 1 10/25/10 17:12 10/26/10 12:10 EPA 7470A 1,7470A EZ Nickel, Dissolved 2.54 ug/l 2.00 0.720 4 10/20/10 11:00 10/21/10 20:35 EPA 3005A 1,6020A BM Polassium, Dissolved 12500 ug/l 400 72.6 4 10/20/10 11:00 10/21/10 20:35 EPA 3005A 1,6020A BM Selenium, Dissolved ND ug/l 4.00 1.62 4 10/20/10 11:00 10/21/10 20:35 EPA 3005A 1,6020A BM Sodium, Dissolved ND ug/l 4.00 72.8 4 10/20/10 11:00 10/21/10 20:35 EPA 3005A 1,6020A BM Sodium, Dissolved ND ug/l 4.00 72.8 4 10/20/10 11:00 10/21/10 20:35 EPA 3005A 1,6020A BM Sodium, Dissolved ND ug/l 4.00 72.8 4 10/20/10 11:00 10/21/10 20:35 EPA 3005A 1,6020A BM Sodium, Dissolved ND ug/l 4.00 72.8 4 10/20/10 11:00 10/21/10 20:35 EPA 3005A 1,6020A BM Sodium, Dissolved ND ug/l 4.00 72.8 4 10/20/10 11:00 10/21/10 20:35 EPA 3005A 1,6020A BM Sodium, Dissolved ND ug/l 4.00 72.8 4 10/20/10 11:00 10/21/10 20:35 EPA 3005A 1,6020A BM Sodium, Dissolved ND ug/l 4.00 72.8 4 10/20/10 11:00 10/21/10 20:35 EPA 3005A 1,6020A BM Sodium, Dissolved ND ug/l 4.00 72.8 4 10/20/10 11:00 10/21/10 20:35 EPA 3005A 1,6020A BM Sodium, Dissolved ND ug/l 4.00 72.8 4 10/20/10 11:00 10/21/10 20:35 EPA 3005A 1,6020A BM Sodium, Dissolved ND ug/l 4.00 72.8 4 10/20/10 11:00 10/21/10 20:35 EPA 3005A 1,6020A BM Sodium, Dissolved ND ug/l 4.00 72.8 4 10	Beryllium, Dissolved	ND		ug/l	2.00	0.236	4	10/20/10 11:00	10/21/10 20:35	EPA 3005A	1,6020A	ВМ
Chromium, Dissolved ND ug/l 2.00 0.744 4 10/20/10 11:00 10/21/10 20:35 EPA 3005A 1,6020A BA Coball, Dissolved 0.75 J ug/l 2.00 0.212 4 10/20/10 11:00 10/21/10 20:35 EPA 3005A 1,6020A BA Copper, Dissolved ND ug/l 2.00 0.472 4 10/20/10 11:00 10/21/10 20:35 EPA 3005A 1,6020A BA Iron, Dissolved 94600 ug/l 200 33.6 4 10/20/10 11:00 10/21/10 20:35 EPA 3005A 1,6020A BA Lead, Dissolved 0.32 J ug/l 2.00 0.200 4 10/20/10 11:00 10/21/10 20:35 EPA 3005A 1,6020A BA Magnesium, Dissolved 10100 ug/l 400 16.4 4 10/20/10 11:00 10/21/10 20:35 EPA 3005A 1,6020A BA Manganese, Dissolved 2060 ug/l 4.00 0.544 4 10/20/10 11:00 10/21/10 20:35 EPA 3005A 1,6020A BA Mercury, Dissolved 0.07162 J ug/l 0.2000 0.0120 1 10/25/10 17:12 10/26/10 12:10 EPA 7470A 1,7470A EZ Nickel, Dissolved 2.54 ug/l 2.00 0.720 4 10/20/10 11:00 10/21/10 20:35 EPA 3005A 1,6020A BA Polassium, Dissolved 12500 ug/l 400 72.6 4 10/20/10 11:00 10/21/10 20:35 EPA 3005A 1,6020A BA Selenium, Dissolved ND ug/l 4.00 1.62 4 10/20/10 11:00 10/21/10 20:35 EPA 3005A 1,6020A BA Sodium, Dissolved ND ug/l 2.00 0.340 4 10/20/10 11:00 10/21/10 20:35 EPA 3005A 1,6020A BA Sodium, Dissolved ND ug/l 4.00 72.8 4 10/20/10 11:00 10/21/10 20:35 EPA 3005A 1,6020A BA Sodium, Dissolved ND ug/l 4.00 72.8 4 10/20/10 11:00 10/21/10 20:35 EPA 3005A 1,6020A BA Sodium, Dissolved ND ug/l 4.00 72.8 4 10/20/10 11:00 10/21/10 20:35 EPA 3005A 1,6020A BA Sodium, Dissolved ND ug/l 4.00 72.8 4 10/20/10 11:00 10/21/10 20:35 EPA 3005A 1,6020A BA Sodium, Dissolved ND ug/l 4.00 72.8 4 10/20/10 11:00 10/21/10 20:35 EPA 3005A 1,6020A BA Sodium, Dissolved ND ug/l 4.00 72.8 4 10/20/10 11:00 10/21/10 20:35 EPA 3005A 1,6020A BA Sodium, Dissolved ND ug/l 4.00 72.8 4 10/20/10 11:00 10/21/10 20:35 EPA 3005A 1,6020A BA Sodium, Dissolved ND ug/l 4.00 72.8 4 10/20/10 11:00 10/21/10 20:35 EPA 3005A 1,6020A BA Sodium, Dissolved ND ug/l 4.00 72.8 4 10/20/10 11:00 10/21/10 20:35 EPA 3005A 1,6020A BA Sodium, Dissolved ND ug/l 4.00 72.8 4 10/20/10 11:00 10/21/10 20:35 EPA 3005A 1,6020A BA Sodium, Dissolved ND ug/l 4.00 72.8 4 10/2	Cadmium, Dissolved	ND		ug/l	2.00	0.236	4	10/20/10 11:00	10/21/10 20:35	EPA 3005A	1,6020A	вм
Coball, Dissolved 0.75 J ug/l 2.00 0.212 4 10/20/10 11:00 10/21/10 20:35 EPA 3005A 1,6020A BM Copper, Dissolved ND ug/l 2.00 0.472 4 10/20/10 11:00 10/21/10 20:35 EPA 3005A 1,6020A BM Iron, Dissolved 94600 ug/l 200 33.6 4 10/20/10 11:00 10/21/10 20:35 EPA 3005A 1,6020A BM Lead, Dissolved 0.32 J ug/l 2.00 0.200 4 10/20/10 11:00 10/21/10 20:35 EPA 3005A 1,6020A BM Magnesium, Dissolved 10100 ug/l 400 16.4 4 10/20/10 11:00 10/21/10 20:35 EPA 3005A 1,6020A BM Marganese, Dissolved 2060 ug/l 4.00 0.544 4 10/20/10 11:00 10/21/10 20:35 EPA 3005A 1,6020A BM Mercury, Dissolved 0.07162 J ug/l 0.200 0.0120 1 10/25/10 17:12 10/26/10 12:10 EPA 7470A 1,7470A EZ	Calcium, Dissolved	65000		ug/l	400	50.6	4	10/20/10 11:00	10/21/10 20:35	EPA 3005A	1,6020A	вм
Copper, Dissolved ND ug/l 2.00 0.472 4 10/20/10 11:00 10/21/10 20:35 EPA 3005A 1,6020A BM Iron, Dissolved 94600 ug/l 200 33.6 4 10/20/10 11:00 10/21/10 20:35 EPA 3005A 1,6020A BM Lead, Dissolved 0.32 J ug/l 2.00 0.200 4 10/20/10 11:00 10/21/10 20:35 EPA 3005A 1,6020A BM Magnesium, Dissolved 10100 ug/l 400 16.4 4 10/20/10 11:00 10/21/10 20:35 EPA 3005A 1,6020A BM Mercury, Dissolved 2060 ug/l 4.00 0.544 4 10/20/10 11:00 10/21/10 20:35 EPA 3005A 1,6020A BM Mickel, Dissolved 0.07162 J ug/l 0.2000 0.0120 1 10/25/10 17:12 10/26/10 12:10 EPA 7470A 1,7470A EZ Nickel, Dissolved 2.54 ug/l 2.00 0.720 4 10/20/10 11:00 10/21/10 20:35 EPA 3005A 1,6020A BM Selenium, Dissolved ND ug/l 4.00 1.62 4	Chromium, Dissolved	ND		ug/l	2.00	0.744	4	10/20/10 11:00	10/21/10 20:35	EPA 3005A	1,6020A	вм
Iron, Dissolved 94600 ug/l 200 33.6 4 10/20/10 11:00 10/21/10 20:35 EPA 3005A 1,6020A BA Lead, Dissolved 0.32 J ug/l 2.00 0.200 4 10/20/10 11:00 10/21/10 20:35 EPA 3005A 1,6020A BA Magnesium, Dissolved 10100 ug/l 400 16.4 4 10/20/10 11:00 10/21/10 20:35 EPA 3005A 1,6020A BA Manganese, Dissolved 2060 ug/l 4.00 0.544 4 10/20/10 11:00 10/21/10 20:35 EPA 3005A 1,6020A BA Mercury, Dissolved 0.07162 J ug/l 0.2000 0.0120 1 10/25/10 17:12 10/26/10 12:10 EPA 7470A 1,7470A EZ Nickel, Dissolved 2.54 ug/l 2.00 0.720 4 10/20/10 11:00 10/21/10 20:35 EPA 3005A 1,6020A BA Potassium, Dissolved 12500 ug/l 400 72.6 4 10/20/10 11:00 10/21/10 20:35 EPA 3005A 1,6020A BA Silver, D	Coball, Dissolved	0.75	J	ug/l	2.00	0.212	4	10/20/10 11:00	10/21/10 20:35	EPA 3005A	1,6020A	ВМ
Lead, Dissolved 0.32 J ug/l 2.00 0.200 4 10/20/10 11:00 10/21/10 20:35 EPA 3005A 1,6020A BN Magnesium, Dissolved 10100 ug/l 400 16.4 4 10/20/10 11:00 10/21/10 20:35 EPA 3005A 1,6020A BN Manganese, Dissolved 2060 ug/l 4.00 0.544 4 10/20/10 11:00 10/21/10 20:35 EPA 3005A 1,6020A BN Mercury, Dissolved 0.07162 J ug/l 0.2000 0.0120 1 10/25/10 17:12 10/26/10 12:10 EPA 7470A 1.7470A EZ Nickel, Dissolved 2.54 ug/l 2.00 0.720 4 10/20/10 11:00 10/21/10 20:35 EPA 3005A 1,6020A BN Polassium, Dissolved 12500 ug/l 400 72.6 4 10/20/10 11:00 10/21/10 20:35 EPA 3005A 1,6020A BN Selenium, Dissolved ND ug/l 4.00 1.62 4 10/20/10 11:00 10/21/10 20:35 EPA 3005A 1,6020A BN Silver,	Copper, Dissolved	ND		ug/l	2 00	0.472	4	10/20/10 11:00	10/21/10 20:35	EPA 3005A	1,6020A	вм
Magnesium, Dissolved 10100 ug/l 400 16.4 4 10/20/10 11:00 10/21/10 20:35 EPA 3005A 1,6020A BM Manganese, Dissolved 2060 ug/l 4.00 0.544 4 10/20/10 11:00 10/21/10 20:35 EPA 3005A 1,6020A BM Mercury, Dissolved 0.07162 J ug/l 0.2000 0.0120 1 10/25/10 17:12 10/26/10 12:10 EPA 7470A 1,7470A EZ Nickel, Dissolved 2.54 ug/l 2.00 0.720 4 10/20/10 11:00 10/21/10 20:35 EPA 3005A 1,6020A BM Polassium, Dissolved 12500 ug/l 400 72.6 4 10/20/10 11:00 10/21/10 20:35 EPA 3005A 1,6020A BM Selenium, Dissolved ND ug/l 4.00 1.62 4 10/20/10 11:00 10/21/10 20:35 EPA 3005A 1,6020A BM Sodium, Dissolved ND ug/l 2.00 0.340 4 10/20/10 11:00 10/21/10 20:35 EPA 3005A 1,6020A BM Thallium, Dissolved ND ug/l 2.00 0.124 4 10	Iron, Dissolved	94600		ug/l	200	33.6	4	10/20/10 11:00	10/21/10 20:35	EPA 3005A	1,6020A	ВМ
Manganese, Dissolved 2060 ug/l 4.00 0.544 4 10/20/10 11:00 10/21/10 20:35 EPA 3005A 1,6020A BM Mercury, Dissolved 0.07162 J ug/l 0.2000 0.0120 1 10/25/10 17:12 10/26/10 12:10 EPA 7470A 1,7470A EZ Nickel, Dissolved 2.54 ug/l 2.00 0.720 4 10/20/10 11:00 10/21/10 20:35 EPA 3005A 1,6020A BM Potassium, Dissolved 12500 ug/l 400 72.6 4 10/20/10 11:00 10/21/10 20:35 EPA 3005A 1,6020A BM Selenium, Dissolved ND ug/l 4.00 1.62 4 10/20/10 11:00 10/21/10 20:35 EPA 3005A 1,6020A BM Silver, Dissolved ND ug/l 2.00 0.340 4 10/20/10 11:00 10/21/10 20:35 EPA 3005A 1,6020A BM Sodium, Dissolved 15900 ug/l 400 72.8 4 10/20/10 11:00 10/21/10 20:35 EPA 3005A 1,6020A BM Thallium, Dissolved ND ug/l 2.00 0.124 4 10/20	Lead, Dissolved	0.32	J	ug/l	2.00	0.200	4	10/20/10 11:00	10/21/10 20:35	EPA 3005A	1,6020A	ВМ
Mercury, Dissolved 0.07162 J ug/l 0.2000 0.0120 1 10/25/10 17:12 10/26/10 12:10 EPA 7470A 1.7470A EZ Nickel, Dissolved 2.54 ug/l 2.00 0.720 4 10/20/10 11:00 10/21/10 20:35 EPA 3005A 1,6020A BN Potassium, Dissolved 12500 ug/l 400 72.6 4 10/20/10 11:00 10/21/10 20:35 EPA 3005A 1,6020A BN Selenium, Dissolved ND ug/l 4.00 1.62 4 10/20/10 11:00 10/21/10 20:35 EPA 3005A 1,6020A BN Silver, Dissolved ND ug/l 2.00 0.340 4 10/20/10 11:00 10/21/10 20:35 EPA 3005A 1,6020A BN Sodium, Dissolved 15900 ug/l 400 72.8 4 10/20/10 11:00 10/21/10 20:35 EPA 3005A 1,6020A BN Thallium, Dissolved ND ug/l 2.00 0.124 4 10/20/10 11:00 10/21/10 20:35 EPA 3005A 1,6020A BN	Magnesium, Dissolved	10100		ug/l	400	16.4	4	10/20/10 11:00	10/21/10 20:35	EPA 3005A	1,6020A	вм
Nickel, Dissolved 2.54 ug/l 2.00 0.720 4 10/20/10 11:00 10/21/10 20:35 EPA 3005A 1,6020A BN Potassium, Dissolved 12500 ug/l 400 72.6 4 10/20/10 11:00 10/21/10 20:35 EPA 3005A 1,6020A BN Selenium, Dissolved ND ug/l 4.00 1.62 4 10/20/10 11:00 10/21/10 20:35 EPA 3005A 1,6020A BN Silver, Dissolved ND ug/l 2.00 0.340 4 10/20/10 11:00 10/21/10 20:35 EPA 3005A 1,6020A BN Sodium, Dissolved 15900 ug/l 400 72.8 4 10/20/10 11:00 10/21/10 20:35 EPA 3005A 1,6020A BN Thallium, Dissolved ND ug/l 2.00 0.124 4 10/20/10 11:00 10/21/10 20:35 EPA 3005A 1,6020A BN Thallium, Dissolved ND ug/l 2.00 0.124 4 10/20/10 11:00 10/21/10 20:35 EPA 3005A 1,6020A BN	Manganese, Dissolved	2060		ug/l	4.00	0.544	4	10/20/10 11:00	10/21/10 20:35	EPA 3005A	1,6020A	ВМ
Potassium, Dissolved 12500 ug/l 400 72.6 4 10/20/10 11:00 10/21/10 20:35 EPA 3005A 1,6020A BN Selenium, Dissolved ND ug/l 4.00 1.62 4 10/20/10 11:00 10/21/10 20:35 EPA 3005A 1,6020A BN Silver, Dissolved ND ug/l 2.00 0.340 4 10/20/10 11:00 10/21/10 20:35 EPA 3005A 1,6020A BN Sodium, Dissolved 15900 ug/l 400 72.8 4 10/20/10 11:00 10/21/10 20:35 EPA 3005A 1,6020A BN Thallium, Dissolved ND ug/l 2.00 0.124 4 10/20/10 11:00 10/21/10 20:35 EPA 3005A 1,6020A BN	Mercury, Dissolved	0.07162	J	ug/l	0.2000	0.0120	1	10/25/10 17:12	2 10/26/10 12:10	EPA 7470A	1,7470A	EZ
Selenium, Dissolved ND ug/l 4.00 1.62 4 10/20/10 11:00 10/21/10 20:35 EPA 3005A 1.6020A BN Silver, Dissolved ND ug/l 2.00 0.340 4 10/20/10 11:00 10/21/10 20:35 EPA 3005A 1,6020A BN Sodium, Dissolved 15900 ug/l 400 72.8 4 10/20/10 11:00 10/21/10 20:35 EPA 3005A 1,6020A BN Thallium, Dissolved ND ug/l 2.00 0.124 4 10/20/10 11:00 10/21/10 20:35 EPA 3005A 1,6020A BN	Nickel, Dissolved	2.54		ug/l	2.00	0.720	4	10/20/10 11:00	10/21/10 20:35	EPA 3005A	1,6020A	вм
Silver, Dissolved ND ug/l 2.00 0.340 4 10/20/10 11:00 10/21/10 20:35 EPA 3005A 1,6020A BN Sodium, Dissolved 15900 ug/l 400 72.8 4 10/20/10 11:00 10/21/10 20:35 EPA 3005A 1,6020A BN Thallium, Dissolved ND ug/l 2.00 0.124 4 10/20/10 11:00 10/21/10 20:35 EPA 3005A 1,6020A BN	Potassium, Dissolved	12500		ug/l	400	72.6	4	10/20/10 11:00	10/21/10 20:35	EPA 3005A	1,6020A	вм
Sodium, Dissolved 15900 ug/l 400 72.8 4 10/20/10 11:00 10/21/10 20:35 EPA 3005A 1,6020A BN Thallium, Dissolved ND ug/l 2.00 0.124 4 10/20/10 11:00 10/21/10 20:35 EPA 3005A 1,6020A BN	Selenium, Dissolved	ND		ug/l	4.00	1.62	4	10/20/10 11:00	10/21/10 20:35	EPA 3005A	1,6020A	ВМ
Thallium, Dissolved ND ug/l 2.00 0.124 4 10/20/10 11:00 10/21/10 20:35 EPA 3005A 1,6020A BM	Silver, Dissolved	ND		ug/l	2.00	0.340	4	10/20/10 11:00	10/21/10 20:35	EPA 3005A	1,6020A	ВМ
Thallium, Dissolved ND ug/l 2.00 0.124 4 10/20/10 11:00 10/21/10 20:35 EPA 3005A 1,6020A BN	Sodium, Dissolved	15900		ug/l	400	72.8	4	10/20/10 11:00	10/21/10 20:35	EPA 3005A	1,6020A	ВМ
Vanadium, Dissolved ND ug/l 2.00 0.308 4 10/20/10 11:00 10/21/10 20:35 EPA 3005A 1,6020A BA	Thallium, Dissolved	ND ·	1.00	ug/l	2.00	0.124	4	10/20/10 11:00	10/21/10 20:35	EPA 3005A	1,6020A	ВМ
	Vanadium, Dissolved	ND		ug/l	2.00	0.308	4	10/20/10 11:00	10/21/10 20:35	EPA 3005A	1,6020A	BM
Zinc, Dissolved 17.9 J ug/l 20.0 6.50 4 10/20/10 11:00 10/21/10 20:35 EPA 3005A 1,6020A BM	Zinc, Dissolved	17.9	J	ug/l	20.0	6.50	4	10/20/10 11:00	10/21/10 20:35	EPA 3005A	1,6020A	ВМ

Project Name:

SHL TASK 0002

Lab Number:

L1016405

Project Number:

AC001

Report Date:

10/27/10

Lab ID:

L1016405-02

Client ID:

SHM-10-13-101910-U

Sample Location:

DEVENS, MA

Matrix:

Water

Date Collected:

10/19/10 11:13

Date Received:

10/19/10

Field Prep:

Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - W	estborough L	ab									
Aluminum, Total	305		ug/l	40,0	7,64	4	10/20/10 11:0	0 10/21/10 21:35	EPA 3005A	1,6020A	вм
Antimony, Total	ND		ug/l	2.00	0.480	4	10/20/10 11:0	0 10/21/10 21:35	EPA 3005A	1,6020A	вм
Arsenic, Total	700		ug/l	2.00	0.452	4	10/20/10 11:0	0 10/21/10 21:35	EPA 3005A	1,6020A	вм
Barium, Total	154		ug/l	2.00	0.380	4	10/20/10 11:0	0 10/21/10 21:35	EPA 3005A	1,6020A	вм
Beryllium, Total	ND		ug/l	2.00	0 236	4	10/20/10 11:0	0 10/21/10 21:35	EPA 3005A	1,6020A	ВМ
Cadmium, Total	ND		ug/l	2.00	0.236	4	10/20/10 11:0	0 10/21/10 21:35	EPA 3005A	1,6020A	вм
Calcium, Total	67200		ug/l	400	50.6	4	10/20/10 11:0	0 10/21/10 21:35	EPA 3005A	1,6020A	ВМ
Chromium, Total	4.17		ug/l	2.00	0.744	4	10/20/10 11:0	0 10/21/10 21:35	EPA 3005A	1,6020A	вм
Cobalt, Total	0.87	-J	ug/l	2 00	0.212	4	10/20/10 11:0	0 10/21/10 21:35	EPA 3005A	1,6020A	вм
Copper, Total	1.17	J	ug/l	2.00	0.472	4	10/20/10 11:0	0 10/21/10 21:35	EPA 3005A	1,6020A	ВМ
Iron, Total	95500		ug/l	200	33.6	4	10/20/10 11:0	0 10/21/10 21:35	EPA 3005A	1,6020A	вм
Lead, Total	0.42	_J	ug/I	2.00	0.200	4	10/20/10 11:0	0 10/21/10 21:35	EPA 3005A	1,6020A	вм
Magnesium, Total	9840		ug/l	400	16.4	4	10/20/10 11:0	0 10/21/10 21:35	EPA 3005A	1,6020A	BM
Manganese, Total	2100		ug/l	4.00	0 544	4	10/20/10 11:0	0 10/21/10 21:35	EPA 3005A	1,6020A	ВМ
Mercury, Total	0.07162	J	ug/l	0.2000	0.0120	1	10/25/10 17:1	2 10/26/10 12:25	EPA 7470A	1,7470A	EZ
Nickel, Total	2.95		ug/l	2.00	0.720	4	10/20/10 11:0	0 10/21/10 21:35	EPA 3005A	1,6020A	ВМ
Potassium, Total	12300		ug/l	400	72.6	4	10/20/10 11:0	0 10/21/10 21:35	EPA 3005A	1,6020A	ВМ
Selenium, Total	ND		ug/l	4.00	1.62	4	10/20/10 11:0	0 10/21/10 21:35	EPA 3005A	1,6020A	ВМ
Silver, Total	ND		ug/l	2.00	0.340	4	10/20/10 11:0	0 10/21/10 21:35	EPA 3005A	1,6020A	вм
Sodium, Total	15600		ug/l	400	72.8	4	10/20/10 11:0	0 10/21/10 21:35	EPA 3005A	1,6020A	ВМ
Thaillium, Total	ND		ug/l	2:00	0:124	4	10/20/10 11:0	0 10/21/10 21:35	EPA 3005A	1,6020A	вм .
Vanadium, Total	0.75	J.	ug/l	2.00	0 308	4	10/20/10 11:0	0 10/21/10 21:35	EPA 3005A	1,6020A	ВМ
Zinc, Total	14,9	J	ug/l	20.0	6.50	4	10/20/10 11:0	0 10/21/10 21:35	EPA 3005A	1,6020A	вм

SAMPLE RESULTS

Project Name:

SHL TASK 0002

Lab Number:

L1016405

Project Number:

AC001

Report Date:

10/27/10

SAMPLE RESULTS

Lab ID:

L1016405-03

Client ID:

SHM-10-14-101910-F

Sample Location:

DEVENS, MA

Matrix:

Water

Date Collected:

10/19/10 11:25

Date Received:

10/19/10

Field Prep:

See Narrative

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Dissolved Metals - V	Vestboro	ugh Lab									
Aluminum, Dissolved	ND		ug/l	50.0	9.56	5	10/20/10 11:0	0 10/21/10 20:59	EPA 3005A	1,6020A	вм
Antimony, Dissolved	ND		ug/l	2.50	0.600	5	10/20/10 11:0	0 10/21/10 20:59	EPA 3005A	1,6020A	ВМ
Arsenic, Dissolved	5860		ug/l	2.50	0.565	5	10/20/10 11:00	0 10/21/10 20:59	EPA 3005A	1,6020A	ВМ
Barium, Dissolved	43.4		ug/I	2.50	0.475	5	10/20/10 11:00	0 10/21/10 20:59	EPA 3005A	1,6020A	вм
Beryllium, Dissolved	ND		ug/l	2.50	0.295	5	10/20/10 11:0	0 10/21/10 20:59	EPA 3005A	1,6020A	вм
Cadmium, Dissolved	ND		ug/l	2,50	0.295	5	10/20/10 11:0	0 10/21/10 20:59	EPA 3005A	1,6020A	вм
Calcium, Dissolved	57900		ug/l	500	63.3	5	10/20/10 11:0	0 10/21/10 20:59	EPA 3005A	1,6020A	вм
Chromium, Dissolved	ND		ug/l	2.50	0.930	5	10/20/10 11:0	0 10/21/10 20:59	EPA 3005A	1,6020A	вм
Cobalt, Dissolved	20.0		ug/l	2.50	0.265	5	10/20/10 11:0	0 10/21/10 20:59	EPA 3005A	1,6020A	вм
Copper, Dissolved	ND		ug/l	2.50	0.590	5	10/20/10 11:0	0 10/21/10 20:59	EPA 3005A	1,6020A	вм
Iron, Dissolved	92700		ug/l	250	42.0	5	10/20/10 11:0	0 10/21/10 20:59	EPA 3005A	1,6020A	ВМ
Lead, Dissolved	ND		ug/l	2.50	0.250	5	10/20/10 11:0	0 10/21/10 20:59	EPA 3005A	1,6020A	вм
Magnesium, Dissolved	3720		ug/I	500	20.5	5	10/20/10 11:0	0 10/21/10 20:59	EPA 3005A	1,6020A	ВМ
Manganese, Dissolved	4180		ug/l	5 00	0.680	5	10/20/10 11:0	0 10/21/10 20:59	EPA 3005A	1,6020A	вм
Mercury, Dissolved	0.1246	J	ug/l	0.2000	0.0120	1	10/25/10 17:1:	2 10/26/10 12:12	EPA 7470A	1,7470A	EZ
Nickel, Dissolved	7.62		ug/l	2.50	0.900	5	10/20/10 11:0	0 10/21/10 20:59	EPA 3005A	1,6020A	ВМ
Potassium, Dissolved	10100		ug/l	500	90.8	5	10/20/10 11:0	0 10/21/10 20:59	EPA 3005A	1,6020A	вм
Selenium, Dissolved	ND		ug/l	5,00	2.03	5	10/20/10 11:0	0 10/21/10 20:59	EPA 3005A	1,6020A	вм
Silver, Dissolved	ND		ug/l	2.50	0.425	5	10/20/10 11:0	0 10/21/10 20:59	EPA 3005A	1,6020A	вм
Sodium, Dissolved	8080		ug/l	500	91.0	5	10/20/10 11:0	0 10/21/10 20:59	EPA 3005A	1,6020A	вм
Thallium, Dissolved	ND	-	ug/l	2.50	0.155	5 '	10/20/10 11:0	0 10/21/10 20:59	EPA 3005A	1,6020A	вм
Vanadium, Dissolved	ND		ug/l	2.50	0.385	5	10/20/10 11:0	0 10/21/10 20:59	EPA 3005A	1,6020A	BM
Zinc, Dissolved	26.9		ug/l	25.0	8.12	5	10/20/10 11:0	0 10/21/10 20:59	EPA 3005A	1,6020A	вм

Project Name: SHL TASK 0002

Project Number: AC001 Lab Number:

L1016405

Report Date:

10/27/10

SAMPLE RESULTS

Lab ID:

L1016405-04

Client ID:

SHM-10-14-101910-U

Sample Location:

DEVENS, MA

Date Collected:

10/19/10 11:25

Date Received:

10/19/10

Field Prep:

Not Specified

Matrix:	Water
teresti in i	1.000

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Wes	tborough l	_ab									
Aluminum, Total	811		ug/l	50.0	9.56	5	10/20/10 11:00	10/21/10 21:47	EPA 3005A	1,6020A	ВМ
Antimony, Total	0.67	J	ug/l	2.50	0.600	5	10/20/10 11:00	10/21/10 21:47	EPA 3005A	1,6020A	вм
Arsenic, Total	5990	j.	ug/l	2.50	0 565	5	10/20/10 11:00	10/21/10 21:47	EPA 3005A	1,6020A	ВМ
Barium, Total	87.5		ug/I	2.50	0 475	5	10/20/10 11:00	10/21/10 21:47	EPA 3005A	1,6020A	ВМ
Beryllium, Total	ND		ug/l	2,50	0.295	5	10/20/10 11:00	10/21/10 21:47	EPA 3005A	1,6020A	вм
Cadmium, Total	ND		ug/l	2.50	0 295	5	10/20/10 11:00	10/21/10 21:47	EPA 3005A	1,6020A	ВМ
Calcium, Total	70800		ug/l	500	63,3	5	10/20/10 11:00	10/21/10 21:47	EPA 3005A	1,6020A	вм
Chromium, Total	3.25		ug/l	2.50	0.930	5	10/20/10 11:00	0 10/21/10 21:47	EPA 3005A	1,6020A	ВМ
Cobalt, Total	23.8		ug/l	2,50	0.265	.5	10/20/10 11:00	0 10/21/10 21:47	EPA 3005A	1,6020A	ВМ
Copper, Total	4.67		ug/l	2.50	0.590	5	10/20/10 11:00	0 10/21/10 21:47	EPA 3005A	1,6020A	ВМ
Iron, Total	98300		ug/l	250	42.0	5	10/20/10 11:00	0 10/21/10 21:47	EPA 3005A	1,6020A	ВМ
Lead, Total	2.27	J	ug/l	2.50	0.250	5	10/20/10 11:00	10/21/10 21:47	EPA 3005A	1,6020A	вм
Magnesium, Total	3980		ug/l	500	20.5	5	10/20/10 11:00	0 10/21/10 21:47	EPA 3005A	1,6020A	вм
Manganese, Total	4350	J	ug/l	5 00	0 680	5	10/20/10 11:00	0 10/21/10 21:47	EPA 3005A	1,6020A	вм
Mercury, Total	0.0965	J	ug/l	0.2000	0.0120	1	10/25/10 17:12	2 10/26/10 12:26	EPA 7470A	1,7470A	EZ
Nickel, Total	11.2		ug/l	2.50	0.900	5	10/20/10 11:00	0 10/21/10 21:47	EPA 3005A	1,6020A	ВМ
Potassium, Total	11400		ug/l	500	90.8	5	10/20/10 11:00	0 10/21/10 21:47	EPA 3005A	1,6020A	ВМ
Selenium, Total	ND		ug/l	5.00	2 03	5	10/20/10 11:00	0 10/21/10 21:47	EPA 3005A	1,6020A	вм
Silver, Total	ND		ug/I	2.50	0 425	5	10/20/10 11:00	0 10/21/10 21:47	EPA 3005A	1,6020A	ВМ
Sodium, Total	8500		ug/l	500	91.0	5	10/20/10 11:00	0 10/21/10 21:47	EPA 3005A	1,6020A	ВМ
Thallium, Total	ND		ug/I	2.50	0.155	5	10/20/10 11:00	0 10/21/10 21:47	EPA 3005A	1,6020A	ВМ
Vanadium, Total	0.81	Ĵ	ug/l	2.50	0.385	5	10/20/10 11:00	0 10/21/10 21:47	EPA 3005A	1,6020A	ВМ
Zinc, Total	41.0		ug/l	25.0	8.12	5	10/20/10 11:00	10/21/10 21:47	EPA 3005A	1,6020A	ВМ

Project Name:

SHL TASK 0002

Lab Number:

L1016405

Project Number:

AC001

Report Date:

10/27/10

SAMPLE RESULTS

Lab ID:

L1016405-05

Client ID:

SHM-10-11-101910-F

Sample Location:

DEVENS, MA

Matrix:

Water

Date Collected:

10/19/10 14:45

Date Received:

10/19/10

See Narrative

Field Prep:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Dissolved Metals - V	Vestboro	ugh Lab									
Aluminum, Dissolved	ND		ug/l	40.0	7.64	4	10/20/10 11:00	10/21/10 21:23	EPA 3005A	1,6020A	ВМ
Antimony, Dissolved	0.78	J	ug/l	2.00	0.480	4	10/20/10 11:00	10/21/10 21:23	EPA 3005A	1,6020A	вм
Arsenic, Dissolved	463		ug/l	2.00	0.452	4	10/20/10 11:00	10/21/10 21:23	EPA 3005A	1,6020A	вм
Barium, Dissolved	42.6		ug/l	2.00	0.380	4	10/20/10 11:00	10/21/10 21:23	EPA 3005A	1,6020A	вм
Beryllium, Dissolved	ND		ug/l	2.00	0.236	4	10/20/10 11:00	10/21/10 21:23	EPA 3005A	1,6020A	вм
Cadmium, Dissolved	ND		ug/l	2.00	0.236	4	10/20/10 11:00	10/21/10 21:23	EPA 3005A	1,6020A	ВМ
Calcium, Dissolved	22200		ug/l	400	50.6	4	10/20/10 11:00	10/21/10 21:23	EPA 3005A	1,6020A	ВМ
Chromium, Dissolved	ND		ug/l	2,00	0.744	4	10/20/10 11:00	10/21/10 21:23	EPA 3005A	1,6020A	вм
Cobalt, Dissolved	10.9		ug/l	2.00	0.212	4	10/20/10 11:00	10/21/10 21:23	EPA 3005A	1,6020A	ВМ
Copper, Dissolved	ND		ug/l	2.00	0.472	4	10/20/10 11:00	10/21/10 21:23	EPA 3005A	1,6020A	вм
Iron, Dissolved	61000		ug/l	200	33.6	4	10/20/10 11:00	10/21/10 21:23	EPA 3005A	1,6020A	ВМ
Lead, Dissolved	0.2	J	ug/l	2.00	0.200	4	10/20/10 11:00	10/21/10 21:23	EPA 3005A	1,6020A	вм
Magnesium, Dissolved	2900		ug/l	400	16.4	4	10/20/10 11:00	10/21/10 21:23	EPA 3005A	1,6020A	ВМ
Manganese, Dissolved	2260		ug/l	4_00	0.544	4	10/20/10 11:00	10/21/10 21:23	EPA 3005A	1,6020A	ВМ
Mercury, Dissolved	0.1268	J	ug/l	0,2000	0.0120	1	10/25/10 17:12	10/26/10 12:18	EPA 7470A	1,7470A	EZ
Nickel, Dissolved	6.80		ug/I	2.00	0.720	4	10/20/10 11:00	10/21/10 21:23	EPA 3005A	1.6020A	вм
Potassium, Dissolved	5390		ug/l	400	72.6	4	10/20/10 11:00	10/21/10 21:23	EPA 3005A	1,6020A	ВМ
Selenium, Dissolved	ND		ug/I	4.00	1.62	4	10/20/10 11:00	10/21/10 21:23	EPA 3005A	1,6020A	ВМ
Silver, Dissolved	ND		ug/l	2.00	0,340	4	10/20/10 11:00	10/21/10 21:23	EPA 3005A	1,6020A	ВМ
Sodium, Dissolved	13000		ug/l	400	72.8	4	10/20/10 11:00	10/21/10 21:23	EPA 3005A	1,6020A	вм
Thallium, Dissolved	ND.	0.5	ug/l	2.00	0.124	4	10/20/10 11:00	10/21/10 21:23	EPA 3005A	1,6020A	ВМ
Vanadium, Dissolved	ND		ug/l	2.00	0.308	4	10/20/10 11:00	10/21/10 21:23	EPA 3005A	1,6020A	ВМ
Zinc, Dissolved	17.9	J	ug/l	20.0	6.50	4	10/20/10 11:00	10/21/10 21:23	EPA 3005A	1,6020A	вм

Project Name:

SHL TASK 0002

Lab Number:

L1016405

Project Number:

AC001

Report Date:

10/27/10

SAMPLE RESULTS

Lab ID:

L1016405-06

Client ID:

SHM-10-11-101910-U

Sample Location:

DEVENS, MA

Matrix:

Water

Date Collected:

10/19/10 14:45

Date Received:

10/19/10

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL.	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Wes	stborough l	_ab									
Aluminum, Total	111		ug/I	40 0	7.64	4	10/20/10 11:0	0 10/21/10 22:23	EPA 3005A	1,6020A	ВМ
Antimony, Total	0.68	J	ug/l	2.00	0.480	4	10/20/10 11:0	0 10/21/10 22:23	EPA 3005A	1,6020A	ВМ
Arsenic, Total	470		ug/l	2.00	0.452	4	10/20/10 11:0	0 10/21/10 22:23	EPA 3005A	1,6020A	вм
Barium, Total	43.2		ug/l	2.00	0.380	4	10/20/10 11:0	0 10/21/10 22:23	EPA 3005A	1,6020A	вм
Beryllium, Total	ND		ug/l	2.00	0.236	4	10/20/10 11:0	0 10/21/10 22:23	EPA 3005A	1,6020A	ВМ
Cadmium, Total	ND		ug/l	2.00	0.236	4	10/20/10 11:0	0 10/21/10 22:23	EPA 3005A	1,6020A	вм
Calcium, Total	21900		ug/I	400	50.6	4	10/20/10 11:0	0 10/21/10 22:23	EPA 3005A	1,6020A	вм
Chromium, Total	1.15	J	ug/l	2.00	0.744	4	10/20/10 11:0	0 10/21/10 22:23	EPA 3005A	1,6020A	вм
Cobalt, Total	11.0		ug/l	2.00	0.212	4	10/20/10 11:0	0 10/21/10 22:23	EPA 3005A	1,6020A	ВМ
Copper, Total	0.64	J	ug/l	2.00	0.472	4	10/20/10 11:0	0 10/21/10 22:23	EPA 3005A	1,6020A	вм
Iron, Total	60500		ug/I	200	33.6	4	10/20/10 11:0	0 10/21/10 22:23	EPA 3005A	1,6020A	вм
Lead, Total	0.36	J	ug/l	2.00	0.200	4	10/20/10 11:0	0 10/21/10 22:23	EPA 3005A	1,6020A	вм
Magnesium, Total	2840		ug/l	400	16.4	4	10/20/10 11:0	0 10/21/10 22:23	EPA 3005A	1,6020A	BM
Manganese, Total	2160		ug/i	4 00	0.544	4	10/20/10 11:0	0 10/21/10 22:23	EPA 3005A	1,6020A	ВМ
Mercury, Total	0.09993		ug/l	0 2000	0.0120	1	10/25/10 17:1	2 10/26/10 12:35	EPA 7470A	1,7470A	ΕZ
Nickel, Total	6.62		ug/l	2.00	0.720	4	10/20/10 11:0	0 10/21/10 22:23	EPA 3005A	1,6020A	вм
Potassium, Total	5310		ug/l	400	72.6	4	10/20/10 11:0	0 10/21/10 22:23	EPA 3005A	1,6020A	ВМ
Selenium, Total	ND		ug/l	4 00	1.62	4	10/20/10 11:0	0 10/21/10 22:23	EPA 3005A	1,6020A	вм
Silver, Total	ND		ug/l	2.00	0.340	4	10/20/10 11:0	0 10/21/10 22:23	EPA 3005A	1,6020A	вм
Sodium, Total	12700		ug/l	400	72.8	4	10/20/10 11:0	0 10/21/10 22:23	EPA 3005A	1,6020A	вм
Thallium, Total	ND	1 1	ug/I	2.00	0.124	4	10/20/10 11:0	0 10/21/10 22:23	EPA 3005A	1,6020A	вм
Vanadium, Total	ND	*	ug/l	2.00	0.308	4	10/20/10 11:0	0 10/21/10 22:23	EPA 3005A	1,6020A	вм
Zinc, Total	17.6	J	ug/l	20.0	6.50	4	10/20/10 11:0	0 10/21/10 22:23	EPA 3005A	1,6020A	вм

Project Name:

SHL TASK 0002

Lab Number:

L1016405

Project Number:

Sample Location:

AC001

Report Date:

10/27/10

SAMPLE RESULTS

Lab ID:

L1016405-07

Client ID:

DUP-101910-F DEVENS, MA

Matrix:

Water

Date Collected:

10/19/10 11:13

Date Received:

10/19/10

Field Prep:

See Narrative

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Dissolved Metals - V	Vestboro	ugh Lab									
Aluminum, Dissolved	ND		ug/l	40.0	7.64	4	10/20/10 11:00	10/21/10 21:29	EPA 3005A	1,6020A	вм
Antimony, Dissolved	0.48	J	ug/l	2.00	0.480	4	10/20/10 11:00	10/21/10 21:29	EPA 3005A	1,6020A	ВМ
Arsenic, Dissolved	674		ug/l	2.00	0.452	4	10/20/10 11:00	10/21/10 21:29	EPA 3005A	1,6020A	вм
Barium, Dissolved	154		ug/l	2,00	0.380	4	10/20/10 11:00	10/21/10 21:29	EPA 3005A	1,6020A	вм
Beryllium, Dissolved	ND		ug/l	2.00	0.236	4	10/20/10 11:00	10/21/10 21:29	EPA 3005A	1,6020A	ВМ
Cadmium, Dissolved	ND		ug/l	2.00	0.236	4	10/20/10 11:00	10/21/10 21:29	EPA 3005A	1,6020A	ВМ
Calcium, Dissolved	64200		ug/l	400	50.6	4	10/20/10 11:00	10/21/10 21:29	EPA 3005A	1,6020A	вм
Chromium, Dissolved	ND		ug/l	2.00	0.744	4	10/20/10 11:00	10/21/10 21:29	EPA 3005A	1,6020A	ВМ
Cobalt, Dissolved	0.74	J	ug/l	2.00	0,212	4	10/20/10 11:00	10/21/10 21:29	EPA 3005A	1,6020A	ВМ
Copper, Dissolved	2.06		ug/l	2.00	0.472	4	10/20/10 11:00	10/21/10 21:29	EPA 3005A	1,6020A	вм
Iron, Dissolved	94700		ug/l	200	33.6	4	10/20/10 11:00	10/21/10 21:29	EPA 3005A	1,6020A	вм
Lead, Dissolved	ND		ug/l	2.00	0.200	4	10/20/10 11:00	10/21/10 21:29	EPA 3005A	1,6020A	вм
Magnesium, Dissolved	9920		ug/l	400	16.4	4	10/20/10 11:00	10/21/10 21:29	EPA 3005A	1,6020A	ВМ
Manganese, Dissolved	2090		ug/l	4.00	0.544	4	10/20/10 11:00	10/21/10 21:29	EPA 3005A	1,6020A	ВМ
Mercury, Dissolved	0.1059	J	ug/l	0.2000	0.0120	1	10/25/10 17:12	10/26/10 12:19	EPA 7470A	1,7470A	EZ
Nickel, Dissolved	2.48		ug/l	2.00	0,720	4	10/20/10 11:00	10/21/10 21:29	EPA 3005A	1,6020A	ВМ
Potassium, Dissolved	12200		ug/I	400	72.6	4	10/20/10 11:00	10/21/10 21:29	EPA 3005A	1,6020A	вм
Selenium, Dissolved	ND		ug/l	4.00	1.62	4	10/20/10 11:00	10/21/10 21:29	EPA 3005A	1,6020A	вм
Silver, Dissolved	ND		ug/l	2.00	0.340	4	10/20/10 11:00	10/21/10 21:29	EPA 3005A	1,6020A	вм
Sodium, Dissolved	16100		ug/l	400	72.8	4	10/20/10 11:00	10/21/10 21:29	EPA 3005A	1,6020A	вм
Thallium, Dissolved	ND	di ()	ug/l	2.00	0:124	4	10/20/10 11:00	10/21/10 21:29	EPA 3005A	1;6020A	ВМ
Vanadium, Dissolved	ND		ug/l	2.00	0.308	4	10/20/10 11:00	10/21/10 21:29	EPA 3005A	1,6020A	ВМ
Zinc, Dissolved	17.8	J	ug/l	20.0	6.50	4	10/20/10 11:00	10/21/10 21:29	EPA 3005A	1,6020A	ВМ

Project Name:

SHL TASK 0002

Lab Number:

L1016405

Project Number:

AC001

Report Date:

10/27/10

SAMPLE RESULTS

Lab ID:

L1016405-08

Date Collected: Date Received: 10/19/10 11:13

Client ID: Sample Location: DUP-101910-U DEVENS, MA

Matrix:

Water

10/19/10 Not Specified Field Prep:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Wes	tborough l	_ab									
Aluminum, Total	343		ug/l	40.0	7.64	4	10/20/10 11:00	10/21/10 22:29	EPA 3005A	1,6020A	вм
Antimony, Total	ND		ug/l	2.00	0.480	4	10/20/10 11:00	10/21/10 22:29	EPA 3005A	1,6020A	вм
Arsenic, Total	648		ug/l	2.00	0.452	4	10/20/10 11:00	10/21/10 22:29	EPA 3005A	1,6020A	вм
Barium, Total	138		ug/l	2.00	0.380	4	10/20/10 11:00	10/21/10 22:29	EPA 3005A	1,6020A	вм
Beryllium, Total	ND		ug/l	2.00	0.236	4	10/20/10 11:00	10/21/10 22:29	EPA 3005A	1,6020A	ВМ
Cadmium, Total	ND		ug/l	2,00	0.236	4	10/20/10 11:00	10/21/10 22:29	EPA 3005A	1,6020A	ВМ
Calcium, Total	60300		ug/l	400	50.6	4	10/20/10 11:00	10/21/10 22:29	EPA 3005A	1,6020A	вм
Chromium, Total	4.15		ug/l	2.00	0.744	4	10/20/10 11:00	10/21/10 22:29	EPA 3005A	1,6020A	вм
Cobalt, Total	0.89	J	ug/l	2.00	0.212	4	10/20/10 11:00	10/21/10 22:29	EPA 3005A	1,6020A	ВМ
Copper, Total	1.27	J	ug/I	2.00	0.472	4	10/20/10 11:00	10/21/10 22:29	EPA 3005A	1,6020A	ВМ
Iron, Total	87500		ug/l	200	33.6	4	10/20/10 11:00	10/21/10 22:29	EPA 3005A	1,6020A	ВМ
Lead, Total	0.44	J	ug/I	2.00	0.200	4	10/20/10 11:00	10/21/10 22:29	EPA 3005A	1,6020A	ВМ
Magnesium, Total	8720		ug/l	400	16.4	4	10/20/10 11:00	10/21/10 22:29	EPA 3005A	1,6020A	ВМ
Manganese, Total	1960		ug/l	4 00	0.544	4	10/20/10 11:00	10/21/10 22:29	EPA 3005A	1,6020A	ВМ
Mercury, Total	0 1218	J	ug/l	0 2000	0.0120	1	10/25/10 17:12	2 10/26/10 12:37	EPA 7470A	1,7470A	EZ
Nickel, Total	2.87		ug/l	2.00	0.720	4	10/20/10 11:00	0 10/21/10 22:29	EPA 3005A	1,6020A	ВМ
Potassium, Total	11000		ug/l	400	72.6	4	10/20/10 11:00	10/21/10 22:29	EPA 3005A	1,6020A	вм
Selenium, Total	ND		ug/l	4.00	1.62	4	10/20/10 11:00	10/21/10 22:29	EPA 3005A	1,6020A	ВМ
Silver, Total	ND		ug/l	2.00	0.340	4	10/20/10 11:00	0 10/21/10 22:29	EPA 3005A	1,6020A	вм
Sodium, Total	13900		ug/l	400	72.8	4	10/20/10 11:00	10/21/10 22:29	EPA 3005A	1,6020A	ВМ
Thallium, Total	ND .		ug/l	2.00	0.124	4	10/20/10 11:00	10/21/10 22:29	EPA 3005A	1,6020A	ВМ
Vanadium, Total	0.64	J	ug/l	2.00	0.308	4	10/20/10 11:00	10/21/10 22:29	EPA 3005A	1,6020A	вм
Zinc, Total	14.7	J	ug/l	20.0	6.50	4	10/20/10 11:00	10/21/10 22:29	EPA 3005A	1,6020A	вм

Project Name:

SHL TASK 0002

Lab Number:

L1016405

Project Number:

AC001

Report Date:

10/27/10

SAMPLE RESULTS

Lab ID:

L1016405-09

Client ID: Sample Location: RB-101910-U DEVENS, MA

Matrix:

Water

Date Collected:

10/19/10 14:35

Date Received:

10/19/10

Field Prep:

Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Wes	stborough I	_ab									
Aluminum, Total	2.53	J	ug/l	10.0	1,91	4	10/20/10 11:00	0 10/21/10 20:29	EPA 3005A	1,6020A	ВМ
Antimony, Total	0.23	J	ug/l	0.500	0.120	1	10/20/10 11:0	0 10/21/10 20:29	EPA 3005A	1,6020A	ВМ
Arsenic, Total	0.2	J	ug/l	0.500	0.113	1	10/20/10 11:00	0 10/21/10 20:29	EPA 3005A	1,6020A	вм
Barium, Total	0.11	J	ug/l	0.500	0.095	1	10/20/10 11:0	0 10/21/10 20:29	EPA 3005A	1,6020A	ВМ
Beryllium, Total	ND		ug/l	0.500	0.059	1	10/20/10 11:00	0 10/21/10 20:29	EPA 3005A	1,6020A	ВМ
Cadmium, Total	ND		ug/l	0.500	0.059	1	10/20/10 11:0	0 10/21/10 20:29	EPA 3005A	1,6020A	ВМ
Calcium, Total	30.1	J	ug/l	100	12.6	1	10/20/10 11:0	0 10/21/10 20:29	EPA 3005A	1,6020A	вм
Chromium, Total	0.23	J	ug/l	0.500	0.186	1	10/20/10 11:0	0 10/21/10 20:29	EPA 3005A	1,6020A	ВМ
Cobalt, Total	ND		ug/l	0.500	0.053	1	10/20/10 11:00	0 10/21/10 20:29	EPA 3005A	1,6020A	ВМ
Copper, Total	0.28	J	ug/l	0.500	0.118	1	10/20/10 11:00	0 10/21/10 20:29	EPA 3005A	1,6020A	ВМ
Iron, Total	ND		ug/l	50.0	8.41	1	10/20/10 11:00	0 10/21/10 20:29	EPA 3005A	1,6020A	вм
Lead, Total	ND		ug/l	0.500	0.050	1	10/20/10 11:00	0 10/21/10 20:29	EPA 3005A	1,6020A	вм
Magnesium, Total	ND		ug/l	100	4.10	1	10/20/10 11:00	0 10/21/10 20:29	EPA 3005A	1,6020A	вм
Manganese, Total	0.39	J	ug/l	1.00	0.136	1	10/20/10 11:00	0 10/21/10 20:29	EPA 3005A	1,6020A	ВМ
Mercury, Total	0.1177	J	ug/I	0.2000	0.0120		10/25/10 17:12	2 10/26/10 12:39	EPA 7470A	1,7470A	EZ
Nickel, Total	0.21	J	ug/l	0.500	0.180	1	10/20/10 11:00	0 10/21/10 20:29	EPA 3005A	1,6020A	ВМ
Potassium, Total	ND		ug/l	100	18.2	1	10/20/10 11:00	0 10/21/10 20:29	EPA 3005A	1,6020A	вм
Selenium, Total	ND		ug/l	1.00	0.406	1	10/20/10 11:0	0 10/21/10 20:29	EPA 3005A	1,6020A	вм
Silver, Total	ND		ug/l	0.500	0.085	1	10/20/10 11:00	0 10/21/10 20:29	EPA 3005A	1,6020A	ВМ
Sodium, Total	41.2	J	ug/l	100	18.2	1	10/20/10 11:00	0 10/21/10 20:29	EPA 3005A	1,6020A	ВМ
Thallium, Total	ND		ug/l	0.500	0.031	1 -	10/20/10 11:00	0 10/21/10 20:29	EPA 3005A	1,6020A	вм
Vanadium, Total	ND .	3 70	ug/l	0.500	0.077	1	10/20/10 11:00	0 10/21/10 20:29	EPA 3005A	1,6020A	ВМ
Zinc, Total	2.52	J	ug/l	5.00	1.62	1	10/20/10 11:00	0 10/21/10 20:29	EPA 3005A	1,6020A	ВМ

Project Name:

SHL TASK 0002

Lab Number: Report Date:

L1016405

Project Number: AC001

10/27/10

Method Blank Analysis Batch Quality Control

Parameter	Resul	t Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Westborough	Lab f	or sample(s):	02,04,	06,08-09	Batch	: WG438	412-1			
Aluminum, Total	ND		ug/l	10.0	1,91	1	10/20/10 11:00	10/21/10 18:10	1,6020A	ВМ
Antimony, Total	ND		ug/l	0.500	0.120	1	10/20/10 11:00	10/21/10 18:10	1,6020A	вм
Arsenic, Total	ND		ug/l	0.500	0.113	1	10/20/10 11:00	10/21/10 18:10	1,6020A	ВМ
Barium, Total	0.1	J	ug/l	0,500	0.095	1	10/20/10 11:00	10/21/10 18:10	1,6020A	вм
Beryllium, Total	ND		ug/t	0.500	0.059	1	10/20/10 11:00	10/21/10 18:10	1,6020A	вм
Cadmium, Total	ND		ug/l	0.500	0.059	1	10/20/10 11:00	10/21/10 18:10	1,6020A	вм
Calcium, Total	ND		ug/l	100	12.6	1	10/20/10 11:00	10/21/10 18:10	1,6020A	ВМ
Chromium, Total	ND		ug/l	0.500	0.186	1	10/20/10 11:00	10/21/10 18:10	1,6020A	вм
Cobalt, Total	ND		ug/l	0.500	0.053	1	10/20/10 11:00	10/21/10 18:10	1,6020A	вм
Copper, Total	ND		ug/l	0.500	0.118	1	10/20/10 11:00	10/21/10 18:10	1,6020A	вм
Iron, Total	ND		ug/l	50.0	8 41	1	10/20/10 11:00	10/21/10 18:10	1,6020A	вм
Lead, Total	ND		ug/l	0.500	0.050	1	10/20/10 11:00	10/21/10 18:10	1,6020A	ВМ
Magnesium, Total	ND		ug/l	100	4 10	1	10/20/10 11:00	10/21/10 18:10	1,6020A	ВМ
Manganese, Total	ND		ug/l	1.00	0.136	1	10/20/10 11:00	10/21/10 18:10	1,6020A	ВМ
Nickel, Total	ND		ug/l	0.500	0.180	1	10/20/10 11:00	10/21/10 18:10	1,6020A	ВМ
Potassium Total	ND		ug/I	100	18.2	1	10/20/10 11:00	10/21/10 18:10	1,6020A	вм
Selenium, Total	ND		ug/l	1.00	0.406	1	10/20/10 11:00	10/21/10 18:10	1,6020A	вм
Silver, Total	0 14	J	ug/l	0.500	0.085	1	10/20/10 11:00	10/21/10 18:10	1,6020A	вм
Sodium, Total	ND		ug/l	100	18.2	1	10/20/10 11:00	10/21/10 18:10	1,6020A	вм
Thallium, Total	ND		ug/l	0.500	0.031	1	10/20/10 11:00	10/21/10 18:10	1,6020A	ВМ
Vanadium, Total	ND		ug/l	0.500	0.077	1	10/20/10 11:00	10/21/10 18:10	1,6020A	вм
Zinc, Total	ND		ug/l	5.00	1.62	1	10/20/10 11:00	10/21/10 18:10	1,6020A	вм

Prep Information

Digestion Method: EPA 3005A

N	Result (Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytica	
Parameter	Kesuit	auanner	Units	KL	WIDL	ractor	riepaieu	Analyzeu	Method	Analyst
Dissolved Metals - We	stborough Lab	for samp	ole(s): 01	,03,05,0	7 Bat	ch: WG43	8414-1			
Aluminum, Dissolved	ND		ug/l	10.0	1.91	1	10/20/10 11:00	10/21/10 18:10	1,6020A	ВМ
Antimony, Dissolved	ND		ug/l	0 500	0.120	1	10/20/10 11:00	10/21/10 18:10	1,6020A	вм
Arsenic, Dissolved	ND		ug/l	0.500	0.113	1	10/20/10 11:00	10/21/10 18:10	1,6020A	вм
Barium, Dissolved	0.1	J	ug/l	0.500	0.095	1	10/20/10 11:00	10/21/10 18:10	1,6020A	вм

Project Name: SHL TASK 0002

Lab Number:

L1016405

Project Number: AC001

Report Date:

10/27/10

Method Blank Analysis Batch Quality Control

Beryllium, Dissolved	ND		ug/l	0.500	0.059	1	10/20/10 11:00	10/21/10 18:10	1,6020A	вм
Cadmium, Dissolved	ND		ug/l	0.500	0.059	1	10/20/10 11:00	10/21/10 18:10	1,6020A	вм
Calcium, Dissolved	ND		ug/l	100	12.6	1	10/20/10 11:00	10/21/10 18:10	1,6020A	ВМ
Chromium, Dissolved	ND		ug/l	0.500	0.186	1	10/20/10 11:00	10/21/10 18:10	1,6020A	вм
Cobalt, Dissolved	ND		ug/l	0.500	0.053	1	10/20/10 11:00	10/21/10 18:10	1,6020A	ВМ
Copper, Dissolved	ND		ug/l	0.500	0.118	1	10/20/10 11:00	10/21/10 18:10	1,6020A	вм
Iron, Dissolved	ND		ug/l	50.0	8.41	1	10/20/10 11:00	10/21/10 18:10	1,6020A	ВМ
Lead, Dissolved	ND		ug/l	0.500	0.050	1	10/20/10 11:00	10/21/10 18:10	1,6020A	ВМ
Magnesium, Dissolved	ND		ug/l	100	4.10	1	10/20/10 11:00	10/21/10 18:10	1,6020A	вм
Manganese, Dissolved	ND		ug/l	1.00	0.136	1	10/20/10 11:00	10/21/10 18:10	1,6020A	вм
Nickel, Dissolved	ND		ug/l	0.500	0.180	1	10/20/10 11:00	10/21/10 18:10	1,6020A	вм
Potassium, Dissolved	ND		ug/l	100	18.2	1	10/20/10 11:00	10/21/10 18:10	1,6020A	ВМ
Selenium, Dissolved	ND		ug/l	1.00	0.406	1	10/20/10 11:00	10/21/10 18:10	1,6020A	ВМ
Silver, Dissolved	0.14	J	ug/l	0.500	0.085	1	10/20/10 11:00	10/21/10 18:10	1,6020A	вм
Sodium, Dissolved	ND		ug/l	100	18.2	1	10/20/10 11:00	10/21/10 18:10	1,6020A	вм
Thallium, Dissolved	ND		ug/l	0.500	0.031	1	10/20/10 11:00	10/21/10 18:10	1,6020A	вм
Vanadium, Dissolved	ND		ug/l	0.500	0.077	1	10/20/10 11:00	10/21/10 18:10	1,6020A	ВМ
inc, Dissolved	ND		ug/l	5.00	1.62	1	10/20/10 11:00	10/21/10 18:10	1,6020A	ВМ

Prep Information

Digestion Method: EPA 3005A

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	
Dissolved Metals - We	estborough Lab for samp	ole(s): 01	,03,05,	07 Bat	ch: WG43	9294-1		think or y	
Mercury, Dissolved	ND	ug/l	0.200	0.0120	1 3	10/25/10 17:12	10/26/10 12;0	7 . 1,7470A	EZ

Prep Information

Digestion Method: EPA 7470A

Parameter	Result Qualifi	er Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytica Method	
Total Metals - Westboo	rough Lab for sample	e(s): 02,04,0	06,08-09	Batch	n: WG439	296-1			
Mercury, Total	ND	ug/l	0.2000	0.0120	1	10/25/10 17:12	10/26/10 12:32	1,7470A	EZ



Project Name: SHL TASK 0002

Project Number: AC001

Lab Number:

L1016405

Report Date:

10/27/10

Method Blank Analysis Batch Quality Control

Prep Information

Digestion Method: EPA 7470A

Project Name:

SHL TASK 0002

Project Number:

AC001

Lab Number:

L1016405

Report Date:

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Westborough Lab	Associated sample(s): 02,04,06	,08-09	Batch: WG438412-2					
Aluminum, Total	89				80-120			
Antimony, Total	92				80-120			
Arsenic, Total	96		*		80-120	6		
Barium, Total	97		1.		80-120	-		
Beryllium, Total	96 .		-		80-120	11.4		
Cadmium, Total	102		-		80-120			
Calcium, Total	98		¥21		80-120	50		
Chromium, Total	92				80-120			
Cobalt, Total	99				80-120	150		
Copper, Total	99 · ·		*		80-120	*		
Iron, Total	97		9		80-120	*		
Lead, Total	98		40		80-120	-		
Magnesium, Total	97				80-120	-		
Manganese, Total	96		9.0		80-120	4		
Nickel, Total	98		•		80-120			
Potassium, Total	95				80-120			
Selenium, Total	100		4		80-120	4		
Silver, Total	.92		*		80-120			
Sodium, Total	98 :				80-120			
Thallium, Total	84				80-120	-		
Vanadium, Total	95 1		4		80-120	-		

Lab Number:

L1016405

Report Date:

10/27/10

Project Name: SHL TASK 0002

Project Number:

AC001

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Westborough Lab	Associated sample(s): 02,04,06,08-09	Batch: WG438412-2			
Zinc, Total	99	6/	80-120		

Project Name:

SHL TASK 0002

Project Number:

AC001

Lab Number:

L1016405

Report Date:

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Dissolved Metals - Westborough Lat	Associated sample(s): 01,03,05,07	Batch: WG438414-2			
Aluminum, Dissolved	89		80-120		
Antimony, Dissolved	92	8	80-120	4	
Arsenic, Dissolved	96	is a	80-120	3	
Barium, Dissolved	97	4	80-120	4	
Beryllium, Dissolved	96	-	80-120		
Cadmium, Dissolved	102	3	80-120		
Calcium, Dissolved	98	¥	80-120		
Chromium, Dissolved	92	3	80-120	(4)	
Cobalt, Dissolved	-99	*	80-120	R	
Copper, Dissolved	99 -	15	80-120	*	
Iron, Dissolved	97	¥	80-120	. 9	
Lead, Dissolved	98	3	80-120		
Magnesium, Dissolved	97	2	80-120	19	
Manganese, Dissolved	96		80-120	**	
Nickel, Dissolved	. 98	3.0	80-120		
Potassium, Dissolved	95	1	80-120	•	
Selenium, Dissolved	100	1	80-120	-	
Silver, Dissolved	92	1.0	80-120		
Sodium, Dissolved	98	**	80-120	3	
Thallium, Dissolved	84	21	80-120	3	
Vanadium, Dissolved	95	*1	80-120	12	

Project Name:

SHL TASK 0002

Project Number:

AC001

Lab Number:

L1016405

Report Date:

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits	
Dissolved Metals - Westborough Lab	Associated sample(s): 01,03,05,07	Batch: WG438414-2				
Zinc, Dissolved	99 🛊	4	80-120	42		
Dissolved Metals - Westborough Lab	Associated sample(s): 01,03,05,07	Batch: WG439294-2				
Mercury, Dissolved	113	9	80-120		20	
Total Metals - Westborough Lab Asse	ociated sample(s): 02,04,06,08-09	Batch: WG439296-2				
Mercury, Total	119		80-120		20	

Project Name:

SHL TASK 0002

Project Number:

AC001

Lab Number:

L1016405

Report Date:

Parameter	Native Sample	MS Added	MS Found %	MS %Recovery	Qual	MSD Found	MSD %Recovery	Recovery Qual Limits	/ RPD Q	RPD ual Limits
Total Metals - Westborough La SHM-10-14-101910-U	b Associated	sample(s): 02	2,04,06,08-0	9 QC Batch	ı ID: W	G438412-3	WG438412-4	QC Sample: L1	016405-04	Client ID:
Aluminum, Total	811.	2000 ,	2560	87		2590	89	80-120	1	20
Antimony, Total	0.67J	500	469	94		474	95	80-120	1	20
Arsenic, Total	5990	120	6010	17		6100	92	80-120	1	20
Barium, Total	87.5	2000	2020	97		2030	97	80-120	0	20
Beryllium, Total	ND	50.	49.2	98		49.1	98	80-120	0	20
Cadmium, Total	ND	51	53.6	105		53.6	105	80-120	0	20
Calcium, Total	70800	10000	79200	84		79800	90	80-120	10	20
Chromium, Total	3.25	200	189	93		190	93	80-120	1	20
Cobalt, Total	23.8	500	534	102		536	102	80-120	0	20
Copper, Total	4 67	250	251	98		254	100	80-120	1	20
Iron, Total	98300	1000	97400	0		98700	40	80-120	1	20
Lead, Total	2,27J	510	504	99		520	102	80-120	3	20
Magnesium, Total	3980	10000	13600	96		13800	98	80-120	1	20
Manganese, Total	4350	500	4680	66		4740	78	80-120	1	20
Nickel, Total	11.2	500	502	98		508	99	80-120	t	20
Potassium, Total	11400	10000	20300	89		20600	92	80-120	1	20
Selenium, Total	ND	120	128	107		130	108	80-120	2	20
Silver, Total	ND	50	46.5	93		46.6	93	80-120	0	20
Sodium, Total	8500	10000	17800	93		18000	95	80-120	1	20
Thallium, Total	ND	120	104	87		107	89	80-120	3	20
Vanadium, Total	0.81J	500	488	98		493	99	80-120	1	20

Project Name:

SHL TASK 0002

Project Number:

AC001

Lab Number:

L1016405

Report Date:

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Westborough SHM-10-14-101910-U	Lab Associated	sample(s):	02,04,06,08	-09 QC Batch II	D: WG438412-3	WG438412-4	QC Sample: L10	16405-04	Client ID:
Zinc, Total	41.0	500	535	99	548	101	80-120	2	20

Project Name:

SHL TASK 0002

Project Number:

AC001

Lab Number:

L1016405

Report Date:

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Dissolved Metals - Westbor- SHM-10-14-101910-F	ough Lab Assoc	iated sample	e(s): 01,03,0	5,07 QC Batch	ID: WG438414-3	WG438414-4	QC Sample: L1	016405-03	Client ID:
Aluminum, Dissolved	ND	2000	1870	94	1900	95	80-120	2	20
Antimony, Dissolved	ND	500	484	97	498	100	80-120	3	20
Arsenic, Dissolved	5860	120 -	6180	267	6280	350	80-120	2	20
Barium, Dissolved	43.4	2000	2000	98	2040	100	80-120	2	20
Beryllium, Dissolved	ND	50	50.4	101	52.0	104	80-120	3	20
Cadmium, Dissolved	ND	51	54.4	107	55.0	108	80-120	1	20
Calcium, Dissolved	57900	10000	69000	111	71400	135	80-120	3	20
Chromium, Dissolved	ND	200	189	94	194	97	80-120	3	20
Cobalt, Dissolved	20.0	500	542	104	548	106	80-120	(1)	20
Copper, Dissolved	ND	250	254	102	259	104	80-120	2	20
Iron, Dissolved	92700	1000	95800	310	98200	550	80-120	2	20
Lead, Dissolved	ND	510	530	104	535	105	80-120	1	20
Magnesium, Dissolved	3720	10000	13800	101	14100	104	80-120	2	20
Manganese, Dissolved	4180	500	4760	116	4830	130	80-120	1	20
Nickel, Dissolved	7.62	500	508	100	516	102	80-120	2	20
Potassium, Dissolved	10100	10000	20100	100	20800	107	80-120	3	20
Selenium, Dissolved	ND	120	129	108	135	112	80-120	5	20
Silver, Dissolved	ND	50	47.1	94	47.8	96	80-120	4	20
Sodium, Dissolved	8080	10000	18300	102	18600	105	80-120	2	20
Thallium, Dissolved	ND	120	108	90	110	92	80-120	2	20
Vanadium, Dissolved	ND	500	495	99	506	101	80-120	2	20
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Project Name:

SHL TASK 0002

Project Number:

AC001

Lab Number:

L1016405

Report Date:

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Dissolved Metals - Westborou SHM-10-14-101910-F	igh Lab Assoc	iated sample	e(s): 01,03,	05,07 QC Batch I	D: WG438414-3	3 WG438414-4	QC Sample: L	1016405-03	Client ID
Zinc, Dissolved	26.9	500	551	105	556	106	80-120	1	20
Dissolved Metals - Westborou SHM-10-14-101910-F	igh Lab Assoc	ated sample	e(s): 01,03,	05,07 QC Batch I	D: WG439294-3	3 WG439294-4	QC Sample: L	1016405-03	Client ID
Mercury, Dissolved	0.1246J	1	1.178	118	1.224	122	Q 80-120	4	20
Total Metals - Westborough L SHM-10-14-101910-U	ab Associated	sample(s):	02,04,06,08	3-09 QC Batch ID	: WG439296-3	WG439296-4	QC Sample: L10	016405-04	Client ID:
Mercury, Total	0.0965J	1	1,240	124	Q 1,341	134	Q 80-120	8	20

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Project Name: SHL TASK 0002

Lab Number:

L1016405

Project Number: AC001

Report Date:

10/27/10

SAMPLE RESULTS

Lab ID:

L1016405-02

Client ID:

SHM-10-13-101910-U

Sample Location: DEVENS, MA

Matrix:

Water

Date Collected:

10/19/10 11:13

Date Received:

10/19/10

Not Specified Field Prep:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Wes	tborough Lab									
Alkalinity, Total	360	п	ng CaCO3/L	2.0	NA	1		10/22/10 11:56	30,2320B	SD
Solids, Total Suspended	62		mg/l	5.0	NA	1		10/25/10 13:40	30,2540D	DW
Nitrogen, Ammonia	9.36		mg/l	0.075	0.017	1	10/20/10 15:25	10/20/10 22:18	30,4500NH3-BH	AT
Nitrogen, Nitrite	0.01	J	mg/l	0.02	0.002	1		10/19/10 22:33	30,4500NO2-B	DD
Sulfide	ND		mg/l	0.10	0.10	1	10/25/10 16:50	10/25/10 17:50	30,4500S2-AD	AT
Chemical Oxygen Demand	36		mg/l	20	7.0	1		10/21/10 17:45	44,410.4	SD
Dissolved Organic Carbon	8.7		mg/I	8.0	8.0	8	10/19/10 22:30	10/25/10 07:51	30,5310C	DW
Anions by Ion Chromatog	raphy - West	borough L	.ab							
Chloride	21		mg/l	0.50	0.07	1		10/20/10 20:00	44,300.0	AU
Nitrogen, Nitrate	ND		mg/l	0.05	0.01	1		10/20/10 00:18	44,300.0	AU
Sulfate	ND		mg/l	1.0	0.12	1		10/20/10 00:18	44,300.0	AU

Project Name: SHL TASK 0002

Lab Number:

L1016405

Project Number: AC001

Report Date:

10/27/10

SAMPLE RESULTS

Lab ID:

L1016405-04

Client ID:

SHM-10-14-101910-U

Sample Location:

DEVENS, MA

Matrix:

Water

Date Collected:

10/19/10 11:25

Date Received:

10/19/10

Field Prep:

Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Wes	tborough Lab									
Alkalinity, Total	320		mg CaCO3/L	2.0	NA	1		10/22/10 11:56	30,2320B	SD
Solids, Total Suspended	130		mg/l	5.0	NA	1		10/25/10 13:40	30,2540D	DW
Nitrogen, Ammonia	5.28		mg/l	0.075	0.017	1	10/20/10 15:25	10/20/10 22:19	30,4500NH3-BH	AT
Nitrogen, Nitrite	0.01	J	mg/l	0.02	0.002	1		10/19/10 22:33	30,4500NO2-B	DD
Sulfide	ND		mg/l	0.10	0.10	1	10/25/10 16:50	10/25/10 17:50	30,4500S2-AD	AT
Chemical Oxygen Demand	62		mg/l	20	70	1	-	10/21/10 17:45	44,410.4	SD
Dissolved Organic Carbon	10		mg/l	8.0	8.0	8	10/19/10 22:30	10/25/10 07:51	30,5310C	DW
Anions by Ion Chromatog	raphy - West	borough	Lab							
Chloride	4.8		mg/l	0.50	0.07	1		10/20/10 21:12	44,300.0	AU
Nitrogen, Nitrate	0.08		mg/l	0.05	0.01	1		10/20/10 01:06	44,300.0	AU
Sulfate	0.67	J	mg/l	1.0	0.12	1		10/20/10 01:06	44,300.0	AU

Project Name:

SHL TASK 0002

Project Number: AC001

Lab Number:

L1016405

Report Date:

10/27/10

SAMPLE RESULTS

Lab ID:

L1016405-06

Client ID:

SHM-10-11-101910-U

Sample Location:

DEVENS, MA

Matrix:

Water

Date Collected:

10/19/10 14:45

Date Received:

10/19/10

Field Prep:

Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Wes	tborough Lab									
Alkalinity, Total	140	n	ng CaCO3/L	2.0	NA	1		10/22/10 11:56	30,2320B	SD
Solids, Total Suspended	17		mg/l	5.0	NA	1		10/25/10 13:40	30,2540D	DW
Nitrogen, Ammonia	3.13		mg/l	0.075	0.017	1	10/20/10 15:25	10/20/10 22:26	30,4500NH3-BH	AT
Nitrogen, Nitrite	0.01	J	mg/l	0.02	0.002	1		10/19/10 22:34	30,4500NO2-B	DD
Sulfide	ND		mg/l	0.10	0.10	1	10/25/10 16:50	10/25/10 17:50	30,4500S2-AD	AT
Chemical Oxygen Demand	19	J	mg/l	20	7.0	1		10/21/10 17:45	44,410.4	SD
Dissolved Organic Carbon	3.4		mg/l	2.0	2.0	2	10/19/10 22:30	10/25/10 07:51	30,5310C	DW
Anions by Ion Chromatog	graphy - West	borough I	ab							
Chloride	23		mg/l	0.50	0.07	1		10/20/10 20:12	44,300.0	AU
Nitrogen, Nitrate	ND		mg/l	0.05	0.01	1	-	10/20/10 01:18	44,300.0	AU
Sulfate	19		mg/l	1.0	0.12	1		10/20/10 01:18	44,300.0	AU

Project Name: SHL TASK 0002

Lab Number:

L1016405

Project Number: AC001

Report Date:

10/27/10

SAMPLE RESULTS

Lab ID:

L1016405-08

Client ID:

DUP-101910-U DEVENS, MA

Sample Location: Matrix:

Water

Date Collected:

10/19/10 11:13

Date Received:

10/19/10

Field Prep:

Not Specified

Dilution Date Date Analytical Factor Prepared MDL Analyzed Method Result Qualifier Units RL Parameter Analyst General Chemistry - Westborough Lab 360 mg CaCO3/L 2.0 NA 10/22/10 11:56 SD Alkalinity, Total 30,2320B Solids, Total Suspended 56 mg/l 5.0 NA 10/25/10 13:40 30,2540D DW 9.13 mg/l 0.075 0.017 10/20/10 15:25 10/20/10 22:27 30,4500NH3-BH Nitrogen, Ammonia AT ND mg/f 0.02 0.002 10/19/10 22:34 30,4500NO2-B DD Nitrogen, Nitrite Sulfide ND mg/l 0.10 0.10 10/25/10 16:50 10/25/10 17:50 30,4500S2-AD AT 20 Chemical Oxygen Demand 36 mg/l 7.0 1 10/21/10 17:45 44,410.4 SD 2.0 2 10/25/10 07:51 Dissolved Organic Carbon 6.8 mg/l 2.0 10/19/10 22:30 30,5310C DW Anions by Ion Chromatography - Westborough Lab 0.07 Chloride 20 mg/l 0.50 10/20/10 20:24 44,300.0 AU Nitrogen, Nitrate ND mg/l 0.05 0.01 1 10/20/10 01:30 44,300.0 AU Sulfate 0.25 J mg/l 1.0 0.12 10/20/10 01:30 44,300.0 AU

Project Name: SHL TASK 0002

Project Number: AC001

Lab Number:

L1016405

Report Date:

10/27/10

Method Blank Analysis Batch Quality Control

General Chemistry - Westborough Lab for sample(s): 02,04,06,08 and program (s): 0.02 and program
General Chemistry - Westborough Lab for sample(s): 02,04,06,08 Batch: WG438451 VG4700 15:25 10/20/10 21:54 30,4500NH3-BH AT Anions by Ion Chromatography - Westborough Lab for sample(s): 02,04,06,08 Batch: WG438454-1 Batch: WG438454-1 44,300.0 AU Nitrogen, Nitrate ND mg/l 0.05 0.01 1 0.10/19/10 21:54 44,300.0 AU Sulfate ND mg/l 1.0 0.12 1 0.10/19/10 21:54 44,300.0 AU General Chemistry - Westborough Lab for sample(s): 02,04,06,08 Batch: WG438728-1 Chemical Oxygen Demand ND mg/l 20 7.0 1 - 10/21/10 17:43 44,410.4 SD Anions by Ion Chromatography - Westborough Lab for sample(s): 02,04,06,08 8atch: WG438732-1 10/20/10 18:36 44,300.0 AU General Chemistry - Westborough Lab for sample(s): 02,04,06,08 8atch: WG438732-1 10/20/10 18:36 44,300.0 AU General Chemistry - Westborough Lab for sample(s): 02,04,06,08 8atch: WG438732-1 10/20/10 18:36 44,300.0 AU
Nitrogen, Ammonia ND mg/l 0.075 0.017 1 10/20/10 15:25 10/20/10 21:54 30,4500NH3-BH AT Anions by Ion Chromatography - Westborough Lab for sample(s): 0.05 0.01 1 - 10/19/10 21:54 44,300.0 AU Sulfate ND mg/l 1.0 0.12 1 - 10/19/10 21:54 44,300.0 AU General Chemistry - Westborough Lab for sample(s): 02,04,06,08 Batch: WG438728-1 WG4300.0 AU Chemical Oxygen Demand ND mg/l 20 7.0 1 - 10/21/10 17:43 44,410.4 SD Anions by Ion Chromatography - Westborough Lab for sample(s): 02,04,06,08 Batch: WG438732-1 WG438732-1 WG4300.0 AU Chloride ND mg/l 0.50 0.07 1 - 10/20/10 18:36 44,300.0 AU General Chemistry - Westborough Lab for sample(s): 02,04,06,08 Batch: WG438732-1 10/20/10 18:36 44,300.0 AU General
Anions by Ion Chromatography - Westborough Lab for sample(s): 02,04,06,08 Batch: WG438484-1 Nitrogen, Nitrate ND mg/l 0.05 0.01 1 - 10/19/10 21:54 44,300.0, AU Sulfate ND mg/l 1.0 0.12 1 - 10/19/10 21:54 44,300.0 AU General Chemistry - Westborough Lab for sample(s): 02,04,06,08 Batch: WG438728-1 Chemical Oxygen Demand ND mg/l 20 7.0 1 - 10/21/10 17:43 44,410.4 SD Anions by Ion Chromatography - Westborough Lab for sample(s): 02,04,06,08 Batch: WG438732-1 Chloride ND mg/l 0.50 0.07 1 - 10/20/10 18:36 44,300.0 AU General Chemistry - Westborough Lab for sample(s): 02,04,06,08 Batch: WG439135-1 Solids, Total Suspended ND mg/l 5.0 NA 1 - 10/25/10 13:40 30,2540D t General Chemistry - Westborough Lab for sample(s): 02,04,06,08 Batch: WG439215-1
Nitrogen, Nitrate ND mg/l 0.05 0.01 1 - 10/19/10 21:54 44,300.0 AU Sulfate ND mg/l 1.0 0.12 1 - 10/19/10 21:54 44,300.0 AU General Chemistry - Westborough Lab for sample(s): 02,04,06,08 Batch: WG438728-1 WG41/10 17:43 44,410.4 SD Anions by Ion Chromatography - Westborough Lab for sample(s): 02,04,06,08 Batch: WG438732-1 WG438732-1 Chloride ND mg/l 0.50 0.07 1 - 10/20/10 18:36 44,300.0 AU General Chemistry - Westborough Lab for sample(s): 02,04,06,08 Batch: WG438732-1 Solids, Total Suspended ND mg/l 5.0 NA 1 - 10/25/10 13:40 30,2540D F General Chemistry - Westborough Lab for sample(s): 02,04,06,08 Batch: WG439215-1 WG439215-1
Sulfate ND mg/l 1.0 0.12 1 - 10/19/10 21:54 44,300.0 AU General Chemistry - Westborough Lab for sample(s): 02,04,06,08 Batch: WG438728-1 Chemical Oxygen Demand ND mg/l 20 7.0 1 - 10/21/10 17:43 44,410.4 SD Anions by Ion Chromatography - Westborough Lab for sample(s): 02,04,06,08 Batch: WG438732-1 Chloride ND mg/l 0.50 0.07 1 - 10/20/10 18:36 44,300.0 AU General Chemistry - Westborough Lab for sample(s): 02,04,06,08 Batch: WG439135-1 Solids, Total Suspended ND mg/l 5.0 NA 1 - 10/25/10 13:40 30,2540D r General Chemistry - Westborough Lab for sample(s): 02,04,06,08 Batch: WG439215-1
General Chemistry - Westborough Lab for sample(s): 02,04,06,08 Batch: WG438728-1 Chemical Oxygen Demand ND mg/l 20 7.0 1 - 10/21/10 17:43 44,410.4 SD Anions by Ion Chromatography - Westborough Lab for sample(s): 02,04,06,08 Batch: WG438732-1 Chloride ND mg/l 0.50 0.07 1 - 10/20/10 18:36 44,300.0 AU General Chemistry - Westborough Lab for sample(s): 02,04,06,08 Batch: WG439135-1 Solids, Total Suspended ND mg/l 5.0 NA 1 - 10/25/10 13:40 30,2540D [
Chemical Oxygen Demand ND mg/l 20 7.0 1 - 10/21/10 17:43 44,410.4 SD Anions by Ion Chromatography - Westborough Lab for sample(s): 02,04,06,08 Batch: WG438732-1 Chloride ND mg/l 0.50 0.07 1 - 10/20/10 18:36 44,300.0 AU General Chemistry - Westborough Lab for sample(s): 02,04,06,08 Batch: WG439135-1 Solids, Total Suspended ND mg/l 5.0 NA 1 - 10/25/10 13:40 30,2540D r General Chemistry - Westborough Lab for sample(s): 02,04,06,08 Batch: WG439215-1
Anions by Ion Chromatography - Westborough Lab for sample(s): 02,04,06,08 Batch: WG438732-1 Chloride ND mg/l 0.50 0.07 1 - 10/20/10 18:36 44,300.0 AU General Chemistry - Westborough Lab for sample(s): 02,04,06,08 Batch: WG439135-1 Solids, Total Suspended ND mg/l 5.0 NA 1 - 10/25/10 13:40 30,2540D F General Chemistry - Westborough Lab for sample(s): 02,04,06,08 Batch: WG439215-1
Chloride ND mg/l 0.50 0.07 1 - 10/20/10 18:36 44,300.0 AU General Chemistry - Westborough Lab for sample(s): 02,04,06,08 Batch: WG439135-1 Solids, Total Suspended ND mg/l 5.0 NA 1 - 10/25/10 13:40 30,2540D r General Chemistry - Westborough Lab for sample(s): 02,04,06,08 Batch: WG439215-1
General Chemistry - Westborough Lab for sample(s): 02,04,06,08 Batch: WG439135-1 Solids, Total Suspended ND mg/l 5.0 NA 1 - 10/25/10 13:40 30,2540D [General Chemistry - Westborough Lab for sample(s): 02,04,06,08 Batch: WG439215-1
Solids, Total Suspended ND mg/l 5.0 NA 1 - 10/25/10 13:40 30,2540D [General Chemistry - Westborough Lab for sample(s): 02,04,06,08 Batch: WG439215-1
General Chemistry - Westborough Lab for sample(s): 02,04,06,08 Batch: WG439215-1
사람들이 집에 가장 보다 하나 아무리를 가장 하다는 사람들이 되었다면 사람들이 가장 하는 사람들이 살아 되었다.
Alkalinity, Total ND mg CaCO3/L 2.0 NA 1 - 10/22/10.11:56 30,2320B SD
General Chemistry - Westborough Lab for sample(s): 02,04,06,08 Batch: WG439239-1
Dissolved Organic Carbon ND mg/l 1.0 1.0 1 10/19/10 22:30 10/25/10 07:51 30,5310C DW
General Chemistry - Westborough Lab for sample(s): 02,04,06,08 Batch: WG439343-1
Sulfide ND mg/l 0.10 0,10 1 10/25/10 16:50 10/25/10 17:50 30,4500S2-AD AT

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	2						
Parameter	LCS %Recovery Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab	Associated sample(s): 02,04,06,0	08 Batch: WO	9438289-1				
Nitrogen, Nitrite	94	*		90-110	-		20
General Chemistry - Westborough Lab	Associated sample(s): 02,04,06,0	08 Batch: WC	G438 4 28-2				
Nitrogen, Ammonia	100	i.		80-120			20
Anions by Ion Chromatography - West	porough Lab Associated sample(s	s): 02,04,06,08	Batch: V	VG438484-2			
Nitrogen, Nitrate	110	3,		90-110			
Sulfate	108	÷		90-110	20		
General Chemistry - Westborough Lab	Associated sample(s): 02,04,06,	08 Batch: W0	G43 8728- 2				
Chemical Oxygen Demand	102*	4		95-105	•		
Anions by Ion Chromatography - West	borough Lab Associated sample(s	s): 02,04,06,08	Batch: V	VG438732-2			
Chloride	108			90-110	•		
General Chemistry - Westborough Lab	Associated sample(s): 02,04,06,	08 Batch: W0	3439215-2				
Alkalinity, Total	102			80-115	- 20		11
General Chemistry - Westborough Lab	Associated sample(s): 02,04,06,	08 Batch: Wo	G439239-2				
Dissolved Organic Carbon	106	*		90-110	2		

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Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
General Chemistry - Westborough Lab	Associated sample(s): 02,04,06,0	08 Batch: WG439343-2			
Sulfide	100*		75-125		

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Parameter	Native Sample	MS - Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD Qu	RPD lal Limits
General Chemistry - Westboro 101910-U	ugh Lab Asso	ciated samp	le(s): 02,0	4,06,08 QC E	Batch ID	: WG43828	39-3 QC San	nple: L1	1016405-04	Client ID	: SHM-10-14-
Nitrogen, Nitrite	0. 01J	0.1	0.10	100		•	+		85-115	40	20
General Chemistry - Westboro 101910-U	ugh Lab Asso	ociated samp	le(s): 02,0	4,06,08 QC E	Batch ID	: WG43842	28-3 QC San	nple: L	1016405-04	Client ID	: SHM-10-14-
Nitrogen, Ammonia	5.28	4	9.21	98		-5	14		80-120	de.	20
Anions by Ion Chromatography Client ID: SHM-10-14-101910		igh Lab Asso	ciated sar	nple(s): 02,04,0	06,08	QC Batch I	D: WG438484-	3 WG	438484-4 C	QC Sample	: L1016405-04
Nitrogen, Nitrate	0.08	0.4	0.51	108		0.60	130	Q	80-122	16	Q 15
Sulfate	0. 67J	8	8.8	110		10	125		60-140	13	20
General Chemistry - Westboro 101910-U	ugh Lab Asso	ociated samp	le(s): 02,0	4,06,08 QC I	Batch ID	: WG43872	28-3 QC Sar	nple: L	1016405-04	Client ID	: SHM-10-14-
Chemical Oxygen Demand	62,	238	320	108					80-120	de .	20
Anions by Ion Chromatography Client ID: SHM-10-14-101910		ıgh Lab Asso	ciated sar	nple(s): 02,04,0	06,08	QC Batch I	D: WG438732-	-3 WG	438732-4	QC Sample	: L1016405-04
Chloride	4.8	4	9.0	105		8.9	102		40-151	1	18
General Chemistry - Westboro 101910-U	ough Lab Assi	ociated samp	ole(s): 02,0	4,06,08 QC I	Batch ID	: WG4392	15-3 QC Sar	mple: L	1016405-04	Client ID	: SHM-10-14-
Alkalinity, Total	320	100	370	50	Q	4	-		86-116		- 11
General Chemistry - Westboro 101910-U	ough Lab Asso	ociated samp	ole(s): 02,0	4,06,08 QC I	Batch ID	: WG4392	39-3 QC Sar	nple: L	1016405-04	Client ID	: SHM-10-14-
Dissolved Organic Carbon	10.	32	45	109		100	- 4		79-120	*	20

Project Name:

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Report Date:

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
General Chemistry - We 101910-U	estborough Lab Asso	ciated samp	le(s): 02,0	4,06,08 QC Batch	ID: WG439343	3-3 QC Sample	: L1016405-04	Client ID:	SHM-10-14-
Sulfide	ND	0.26	0.25	96	2		75-125	2	20

Lab Duplicate Analysis Batch Quality Control

Lab Number:

L1016405

Report Date:

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Parameter	Nati	ve Sample	Duplica	ate Sample	Units	RPD C	ual RP	D Limits
General Chemistry - Westborough Lab A 101910-U	ssociated sample(s):	02,04,06,08	QC Batch ID:	WG438289	4 QC Sample:	L1016405-0	4 Client ID:	SHM-10-14-
Nitrogen, Nitrite		0.01J		0.01J	mg/l	NC		20
General Chemistry - Westborough Lab A 101910-U	ssociated sample(s):	02,04,06,08	QC Batch ID:	WG438428	-4 QC Sample:	L1016405-0	4 Client ID:	SHM-10-14-
Nitrogen, Ammonia	*	5.28		5.25	mg/l	1		20
Anions by Ion Chromatography - Westbor SHM-10-14-101910-U	ough Lab Associated	d sample(s):	02,04,06,08	QC Batch ID:	WG438484-5	QC Sample:	L1016405-0	04 Client ID:
Nitrogen, Nitrate		0.08		0.08	mg/l	1		15
Sulfate		0.67J		0.85J	mg/l	NC		20
General Chemistry - Westborough Lab A 101910-U	ssociated sample(s):	02,04,06,08	QC Batch ID:	WG438728	-4 QC Sample:	L1016405-0	4 Client ID:	SHM-10-14-
Chemical Oxygen Demand		62,		62	mg/l	0		20
Anions by Ion Chromatography - Westbo	ough Lab Associated	d sample(s):	02,04,06,08	QC Batch ID:	WG438732-5	QC Sample:	L1016405-0)4 Client ID:
Chloride		4.8		4.8	mg/l	0		18
General Chemistry - Westborough Lab A	ssociated sample(s):	02,04,06,08	QC Batch ID:	WG439135	-2 QC Sample:	L1016405-0	4 Client ID:	SHM-10-14-
Solids, Total Suspended		130		120	mg/l	8		32
General Chemistry - Westborough Lab A 101910-U	ssociated sample(s):	02,04,06,08	QC Batch ID:	WG439215	-4 QC Sample:	L1016405-0	4 Client ID:	SHM-10-14-
Alkalinity, Total		320		330	mg CaCO3/L	3		11

Project Name:

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Lab Duplicate Analysis Batch Quality Control

SHL TASK 0002 Batch C

Lab Number:

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Parameter	Nat	Duplica	te Sample	Units	RPD	RP	D Limits	
General Chemistry - Westborough Lab 101910-U	Associated sample(s):	02,04,06,08	QC Batch ID:	WG439239-4	QC Sample:	L1016405-04	Client ID:	SHM-10-14-
Dissolved Organic Carbon		10.		9.6	mg/l	4		20
General Chemistry - Westborough Lab 101910-U	Associated sample(s):	02,04,06,08	QC Batch ID:	WG439343-4	QC Sample:	L1016405-04	Client ID:	SHM-10-14-
Sulfide	9,	ND		ND	mg/l	NC		20

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Lab Number: L1016405 Project Number: AC001 Report Date: 10/27/10

Sample Receipt and Container Information

Were project specific reporting limits specified?

YES

Reagent H2O Preserved Vials Frozen on: NA

Cooler Information Custody Seal

Cooler

В

Present/Intact

A

Present/Intact

Container Info	ormation			Temp			
Container ID	Container Type	Cooler	рН	deg C	Pres	Seal	Analysis(*)
L1016405-01A	Plastic 250ml HNO3 preserved	A	<2	3	Υ	Present/Intact	DOD-BA-6020S(180), DOD-FE-6020S(180), DOD-MG-6020S(180), DOD-MG-6020S(180), DOD-CR-6020S(180), DOD-TL-6020S(180), DOD-TL-6020S(180), DOD-TL-6020S(180), DOD-CA-6020S(180), DOD-AG-6020S(180), DOD-NA-6020S(180), DOD-NA-6020S(180), DOD-NA-6020S(180), DOD-V-6020S(180), DOD-V-6020S(180), DOD-CD-6020S(180), DOD-CD-6020S(180), DOD-BE-6020S(180), DOD-BE-6020S(180), DOD-CD-6020S(180), DOD-CU-6020S(180), DOD-AL-6020S(180), DOD-AL-6020S(180), DOD-K-6020S(180), DOD-SE-6020S(180), DOD-SE-6020S(180), DOD-SE-6020S(180), DOD-SE-6020S(180), DOD-SE-6020S(180), DOD-HG-7470S(28)

Project Name: SHL TASK 0002

Project Number: AC001

Lab Number: L1016405 Report Date: 10/27/10

Container Info	ormation			Temp			
Container ID	Container Type	Cooler	рН	deg C	Pres	Seal	Analysis(*)
L1016405-02A	Plastic 250ml HNO3 preserved	В	<2	2.4	Y	Present/Intact	DOD-CD-6020T(180), DOD-NA-6020T(180), DOD-V-6020T(180), DOD-ZN-6020T(180), DOD-SE-6020T(180), DOD-SE-6020T(180), DOD-TL-6020T(180), DOD-CA-6020T(180), DOD-CA-6020T(180), DOD-CA-6020T(180), DOD-HG-7470T(28), DOD-HG-7470T(28), DOD-AG-6020T(180), DOD-AG-6020T(180), DOD-AG-6020T(180), DOD-AS-6020T(180), DOD-BA-6020T(180), DOD-BA-6020T(180), DOD-BE-6020T(180), DOD-BE-6020T(180), DOD-BE-6020T(180), DOD-HG-6020T(180), DOD-HG-6020T(180), DOD-HG-6020T(180), DOD-FE-6020T(180), DOD-CU-6020T(180), DOD-PB-6020T(180), DOD-PB-6020T(180)
L1016405-02B	Plastic 500ml unpreserved	В	6	2.4	Y	Present/Intact	SO4-300(28),CL-300(28),NO3- 300(2)
L1016405-02C	Plastic 250ml unpreserved	В	6	2.4	Y	Present/Intact	NO2-4500NO2(2)
L1016405-02D	Plastic 250ml unpreserved	В	N/A	2.4	Y	Present/Intact	ALK-T-2320(14)
L1016405-02E	Plastic 500ml H2SO4 preserved	В	<2	2.4	Y	Present/Intact	COD-410(28),NH3-4500(28)
L1016405-02F	Plastic 250ml Zn Acetate/NaOH pr	В	>12	2.4	Y	Present/Intact	SULFIDE-4500(7)
L1016405-02G	Plastic 250ml Zn Acetate/NaOH pr	В	>12	2.4	Y	Present/Intact	SULFIDE-4500(7)
L1016405-02H	Plastic 250ml Zn Acetate/NaOH pr	В	>12	2.4	Y	Present/Intact	SULFIDE-4500(7)
L1016405-02I	Plastic 1000ml unpreserved	В	6	2.4	Y	Present/Intact	TSS-2540(7)
L1016405-02J	Vial H2SO4 preserved split	В	N/A	2.4	Y	Present/Intact	DOC-5310(28)
L1016405-02K	Vial H2SO4 preserved split	В	N/A	2.4	Y	Present/Intact	DOC-5310(28)
L1016405-02X	Amber 250ml unpreserved	В	6	2.4	Y	Present/Intact	DOC-5310(28)

Project Name: SHL TASK 0002

Project Number: AC001

Lab Number: L1016405 Report Date: 10/27/10

Container Info	rmation			Temp			
Container ID	Container Type	Cooler	рН	deg C	Pres	Seal	Analysis(*)
L1016405-03A	Plastic 250ml HNO3 preserved	A	<2	3	Y	Present/Intact	DOD-BA-6020S(180), DOD-FE-6020S(180), DOD-MG-6020S(180), DOD-SB-6020S(180), DOD-CR-6020S(180), DOD-MN-6020S(180), DOD-TL-6020S(180), DOD-CO-6020S(180), DOD-CA-6020S(180), DOD-NA-6020S(180), DOD-NA-6020S(180), DOD-NI-6020S(180), DOD-NI-6020S(180), DOD-AS-6020S(180), DOD-CD-6020S(180), DOD-CD-6020S(180), DOD-CD-6020S(180), DOD-CD-6020S(180), DOD-CD-6020S(180), DOD-CU-6020S(180), DOD-CU-6020S(180), DOD-CU-6020S(180), DOD-CU-6020S(180), DOD-K-6020S(180), DOD-HG-7470S(28)
L1016405-03B	Plastic 250ml HNO3 preserved	A	<2	3	Y	Present/Intact	DOD-BA-6020S(180), DOD-FE-6020S(180), DOD-MG-6020S(180), DOD-MG-6020S(180), DOD-SB-6020S(180), DOD-CR-6020S(180), DOD-TL-6020S(180), DOD-TL-6020S(180), DOD-AG-6020S(180), DOD-AG-6020S(180), DOD-NA-6020S(180), DOD-NA-6020S(180), DOD-PB-6020S(180), DOD-PB-6020S(180), DOD-AS-6020S(180), DOD-CD-6020S(180), DOD-CD-6020S(180), DOD-BE-6020S(180), DOD-BE-6020S(180), DOD-SD-6020S(180), DOD-SD-6020S(180), DOD-SD-6020S(180), DOD-SD-6020S(180), DOD-SD-6020S(180), DOD-SD-6020S(180), DOD-K-6020S(180), DOD-K-6020S(180), DOD-SE-6020S(180), DOD-BE-6020S(180), DOD-SE-6020S(180), DOD-SE-6020S(180), DOD-HG-7470S(28)

Project Name: SHL TASK 0002

Project Number: AC001

Lab Number: L1016405 Report Date: 10/27/10

Container			Temp				
Container	ID Container Type	Cooler	pН	deg C	Pres	Seal	Analysis(*)
L1016405-04/	A Plastic 250ml HNO3 preserved	A	<2	3	Y	Present/Intact	DOD-CD-6020T(180),DOD-NA-6020T(180),DOD-V-6020T(180),DOD-ZN-6020T(180),DOD-NI-6020T(180),DOD-SE-6020T(180),DOD-CA-6020T(180),DOD-CA-6020T(180),DOD-MN-6020T(180),DOD-HG-7470T(28),DOD-SB-6020T(180),DOD-AL-6020T(180),DOD-AL-6020T(180),DOD-AS-6020T(180),DOD-BA-6020T(180),DOD-BA-6020T(180),DOD-BA-6020T(180),DOD-BE-6020T(180),DOD-BE-6020T(180),DOD-BE-6020T(180),DOD-BE-6020T(180),DOD-FE-6020T(180),DOD-FE-6020T(180),DOD-FE-6020T(180),DOD-PB-6020T(180),DOD-PB-6020T(180),DOD-PB-6020T(180),DOD-PB-6020T(180),DOD-PB-6020T(180),DOD-PB-6020T(180),DOD-PB-6020T(180),DOD-PB-6020T(180),DOD-PB-6020T(180),DOD-PB-6020T(180),DOD-PB-6020T(180),DOD-PB-6020T(180),DOD-PB-6020T(180),DOD-PB-6020T(180),DOD-PB-6020T(180)
L1016405-04	Plastic 500ml unpreserved	Α	6	3	Y	Present/Intact	SO4-300(28),CL-300(28),NO3- 300(2)
L1016405-04	Plastic 250ml unpreserved	Α	6	3	Y	Present/Intact	NO2-4500NO2(2)
L1016405-04	Plastic 250ml unpreserved	Α	N/A	3	Y	Present/Intact	ALK-T-2320(14)
L1016405-04	Plastic 500ml H2SO4 preserved	Α	<2	3	Υ	Present/Intact	COD-410(28),NH3-4500(28)
L1016405-04	Plastic 250ml Zn Acetate/NaOH pr	Α	>12	3	Y	Present/Intact	SULFIDE-4500(7)
L1016405-04	G Plastic 250ml Zn Acetate/NaOH pr	Α	>12	3	Y	Present/Intact	SULFIDE-4500(7)
L1016405-04	H Plastic 250ml Zn Acetate/NaOH pr	Α	>12	3	Y	Present/Intact	SULFIDE-4500(7)
L1016405-04	Plastic 1000ml unpreserved	A	6	3	Y	Present/Intact	TSS-2540(7)
L1016405-04	Vial H2SO4 preserved split	A	N/A	3	Y	Present/Intact	DOC-5310(28)
L1016405-04	Vial H2SO4 preserved split	Α	N/A	3	Υ	Present/Intact	DOC-5310(28)
L1016405-04	Plastic 250ml unpreserved	Α	6	3	Y	Present/Intact	ALK-T-2320(14)
L1016405-04	M Amber 250ml unpreserved	A	6	3	Y	Present/Intact	DOC-5310(28)
L1016405-04	N Plastic 500ml unpreserved	Α, -	6	. 3	Υ	Present/Intact	SO4-300(28),CL-300(28),NO3- 300(2)
L1016405-04	O Vial H2SO4 preserved split	Α	N/A	3	Y	Present/Intact	DOC-5310(28)
L1016405-04	P Plastic 500ml H2SO4 preserved	Α	<2	3	Y	Present/Intact	COD-410(28),NH3-4500(28)
L1016405-04	R Plastic 1000ml unpreserved	Α	6	3	Y	Present/Intact	TSS-2540(7)

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Container Info	ormation			Temp			
Container ID	Container Type	Cooler	рН	deg C	Pres	Seal	Analysis(*)
L1016405-04S	Plastic 250ml HNO3 preserved	A	<2	3	Y	Present/Intact	DOD-CD-6020T(180),DOD-NA-6020T(180),DOD-V-6020T(180),DOD-ZN-6020T(180),DOD-NI-6020T(180),DOD-SE-6020T(180),DOD-TL-6020T(180),DOD-CA-6020T(180),DOD-CA-6020T(180),DOD-MN-6020T(180),DOD-HG-7470T(28),DOD-AG-6020T(180),DOD-AG-6020T(180),DOD-AS-6020T(180),DOD-AS-6020T(180),DOD-AS-6020T(180),DOD-CR-6020T(180),DOD-CR-6020T(180),DOD-K-6020T(180),DOD-K-6020T(180),DOD-K-6020T(180),DOD-K-6020T(180),DOD-BE-6020T(180),DOD-HG-6020T(180),DOD-FE-6020T(180),DOD-FE-6020T(180),DOD-CU-6020T(180),DOD-PB-6020T(180)
L1016405-04T	Vial H2SO4 preserved split	A	<2	3	Y	Present/Intact	DOC-5310(28)
L1016405-04U	Plastic 250ml Zn Acetate/NaOH pr	Α	>12	3	Y	Present/Intact	SULFIDE-4500(7)
L1016405-04V	Plastic 250ml Zn Acetate/NaOH pr	Α	>12	3	Y	Present/Intact	SULFIDE-4500(7)
L1016405-04W	Plastic 250ml Zn Acetate/NaOH pr	Α	>12	3	Y	Present/Intact	SULFIDE-4500(7)
L1016405-04X	Amber 250ml unpreserved	Α	6	3	Y	Present/Intact	DOC-5310(28)
L1016405-04Y	Plastic 250ml unpreserved	Α	6	3	Y	Present/Intact	NO2-4500NO2(2)
L1016405-05A	Plastic 250ml HNO3 preserved	A	<2	3	Y	Present/Intact	DOD-BA-6020S(180),DOD-FE- 6020S(180),DOD-MG- 6020S(180),DOD-SB- 6020S(180),DOD-CR- 6020S(180),DOD-MN- 6020S(180),DOD-TL- 6020S(180),DOD-CO- 6020S(180),DOD-AG- 6020S(180),DOD-CA- 6020S(180),DOD-NA-
	₩ 0.E	3		100			6020S(180),DOD-NI- 6020S(180),DOD-PB-
	- 7 - (43.4) (4) HI			e e e e e e e e e e e e e e e e e e e			6020S(180),DOD-PS- 6020S(180),DOD-V- 6020S(180),DOD-AS- 6020S(180),DOD-BE- 6020S(180),DOD-CU- 6020S(180),DOD-ZN- 6020S(180),DOD-AL- 6020S(180),DOD-K- 6020S(180),DOD-SE- 6020S(180),DOD-BE- 6020S(180),DOD-HG-7470S(28)

Project Name: SHL TASK 0002

Project Number: AC001

Container Info	ormation			Temp			
Container ID	Container Type	Cooler	рН	deg C	Pres	Seal	Analysis(*)
L1016405-06A	Plastic 250ml HNO3 preserved	В	<2	2.4	Y	Present/Intact	DOD-CD-6020T(180),DOD-NA-6020T(180),DOD-V-6020T(180),DOD-ZN-6020T(180),DOD-SN-6020T(180),DOD-SE-6020T(180),DOD-CA-6020T(180),DOD-CA-6020T(180),DOD-CA-6020T(180),DOD-HG-7470T(28),DOD-BB-6020T(180),DOD-AL-6020T(180),DOD-AL-6020T(180),DOD-AS-6020T(180),DOD-AS-6020T(180),DOD-BA-6020T(180),DOD-BA-6020T(180),DOD-BA-6020T(180),DOD-BE-6020T(180),DOD-BE-6020T(180),DOD-BE-6020T(180),DOD-BE-6020T(180),DOD-FE-6020T(180),DOD-FE-6020T(180),DOD-PB-6020T(180),DOD-PB-6020T(180),DOD-PB-6020T(180),DOD-PB-6020T(180),DOD-PB-6020T(180),DOD-PB-6020T(180),DOD-PB-6020T(180),DOD-PB-6020T(180),DOD-PB-6020T(180),DOD-PB-6020T(180),DOD-PB-6020T(180),DOD-PB-6020T(180),DOD-PB-6020T(180),DOD-PB-6020T(180),DOD-PB-6020T(180)
L1016405-06B	Plastic 500ml unpreserved	В	6	2.4	Y	Present/Intact	SO4-300(28),CL-300(28),NO3- 300(2)
L1016405-06C	Plastic 250ml unpreserved	В	6	2.4	Υ	Present/Intact	NO2-4500NO2(2)
L1016405-06D	Plastic 250ml unpreserved	В	N/A	2.4	Y	Present/Intact	ALK-T-2320(14)
L1016405-06E	Plastic 500ml H2SO4 preserved	В	<2	2.4	Y	Present/Intact	COD-410(28),NH3-4500(28)
L1016405-06F	Plastic 250ml Zn Acetate/NaOH pr	В	>12	2.4	Y	Present/Intact	SULFIDE-4500(7)
L1016405-06G	Plastic 250ml Zn Acetate/NaOH pr	В	>12	2.4	Y	Present/Intact	SULFIDE-4500(7)
L1016405-06H	Plastic 250ml Zn Acetate/NaOH pr	В	>12	2.4	Y	Present/Intact	SULFIDE-4500(7)
L1016405-061	Plastic 1000ml unpreserved	В	6	2.4	Y	Present/Intact	TSS-2540(7)
L1016405-06J	Vial H2SO4 preserved split	В	N/A	2.4	Y	Present/Intact	DOC-5310(28)
L1016405-06K	Vial H2SO4 preserved split	В	N/A	2.4	Y	Present/Intact	DOC-5310(28)
L1016405-06X	Amber 250ml unpreserved	В	6	2.4	Y	Present/Intact	DOC-5310(28)

Project Name: SI

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Project Number: AC001

Container Info	rmation			Temp			
Container ID	Container Type	Cooler	рН	deg C	Pres	Seal	Analysis(*)
L1016405-07A	Plastic 250ml HNO3 preserved	A	<2	3	Y	Present/Intact	DOD-BA-6020S(180), DOD-FE-6020S(180), DOD-MG-6020S(180), DOD-SB-6020S(180), DOD-CR-6020S(180), DOD-TL-6020S(180), DOD-CO-6020S(180), DOD-CO-6020S(180), DOD-CA-6020S(180), DOD-NA-6020S(180), DOD-NI-6020S(180), DOD-NI-6020S(180), DOD-PB-6020S(180), DOD-PB-6020S(180), DOD-CD-6020S(180), DOD-CD-6020S(180), DOD-CD-6020S(180), DOD-CD-6020S(180), DOD-CD-6020S(180), DOD-CU-6020S(180), DOD-SE-6020S(180), DOD-K-6020S(180), DOD-K-6020S(180), DOD-K-6020S(180), DOD-K-6020S(180), DOD-K-6020S(180), DOD-K-6020S(180), DOD-K-6020S(180), DOD-SE-6020S(180), DOD-SE-6020S(180), DOD-SE-6020S(180), DOD-SE-6020S(180), DOD-HG-7470S(28)
L1016405-08A	Plastic 250ml HNO3 preserved	В	<2	2.4	•	Present/Intact	DOD-CD-6020T(180), DOD-NA-6020T(180), DOD-V-6020T(180), DOD-V-6020T(180), DOD-NI-6020T(180), DOD-NI-6020T(180), DOD-SE-6020T(180), DOD-CA-6020T(180), DOD-CA-6020T(180), DOD-MN-6020T(180), DOD-HG-7470T(28), DOD-AG-6020T(180), DOD-AG-6020T(180), DOD-AG-6020T(180), DOD-AS-6020T(180), DOD-AS-6020T(180), DOD-BA-6020T(180), DOD-BA-6020T(180), DOD-BA-6020T(180), DOD-K-6020T(180), DOD-K-6020T(180), DOD-K-6020T(180), DOD-K-6020T(180), DOD-FE-6020T(180), DOD-FE-6020T(180), DOD-FE-6020T(180), DOD-FE-6020T(180), DOD-CU-6020T(180), DOD-PB-6020T(180), DOD-PB-6020T(180), DOD-PB-6020T(180), DOD-PB-6020T(180), DOD-PB-6020T(180), DOD-PB-6020T(180), DOD-PB-6020T(180), DOD-PB-6020T(180), DOD-PB-6020T(180), DOD-PB-6020T(180)
L1016405-08B	Plastic 500ml unpreserved	В	- 6	2.4	Y	Present/Intact	SO4-300(28),CL-300(28),NO3- 300(2)
L1016405-08C	Plastic 250ml unpreserved	В	6	2.4	Y	Present/Intact	NO2-4500NO2(2)
L1016405-08D	Plastic 250ml unpreserved	В	N/A	2.4	Y	Present/Intact	ALK-T-2320(14)
L1016405-08E	Plastic 500ml H2SO4 preserved	В	<2	2.4	Y	Present/Intact	COD-410(28),NH3-4500(28)
L1016405-08F	Plastic 250ml Zn Acetale/NaOH pr	В	>12	2.4	Y	Present/Intact	SULFIDE-4500(7)
L1016405-08G	Plastic 250ml Zn Acetate/NaOH pr	В	>12	2.4	Y	Present/Intact	SULFIDE-4500(7)
L1016405-08H	Plastic 250ml Zn Acetate/NaOH pr	В	>12	2.4	Y	Present/Intact	SULFIDE-4500(7)
L1016405-08I	Plastic 1000ml unpreserved	В	6	2.4	Y	Present/Intact	TSS-2540(7)
L1016405-08J	Vial H2SO4 preserved split	В	N/A	2.4	Y	Present/Intact	DOC-5310(28)

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Project Number: AC001

Container Info	ormation			Temp			
Container ID	Container Type	Cooler	рН	deg C	Pres	Seal	Analysis(*)
L1016405-08K	Vial H2SO4 preserved split	В	N/A	2.4	Y	Present/Intact	DOC-5310(28)
L1016405-08X	Amber 250ml unpreserved	В	6	2.4	Y	Present/Intact	DOC-5310(28)
L1016405-09A	Plastic 500ml HNO3 preserved	В	<2	2.4	Y	Present/Intact	DOD-CD-6020T(180), DOD-NA-6020T(180), DOD-V-6020T(180), DOD-V-6020T(180), DOD-NI-6020T(180), DOD-SE-6020T(180), DOD-TL-6020T(180), DOD-CA-6020T(180), DOD-CA-6020T(180), DOD-CD-6020T(180), DOD-HG-7470T(28), DOD-SB-6020T(180), DOD-AL-6020T(180), DOD-AL-6020T(180), DOD-AL-6020T(180), DOD-AS-6020T(180), DOD-BA-6020T(180), DOD-BA-6020T(180), DOD-BE-6020T(180), DOD-HG-6020T(180), DOD-HG-6020T(180), DOD-HG-6020T(180), DOD-HG-6020T(180), DOD-HG-6020T(180), DOD-FE-6020T(180), DOD-FE-6020T(180), DOD-FB-6020T(180), DOD-PB-6020T(180), DOD-PB-6020T(180), DOD-PB-6020T(180)

Project Name:

SHL TASK 0002

L 1A3K 0002

Lab Number: Report Date: L1016405

Project Number:

AC001

10/27/10

GLOSSARY

Acronyms

EPA - Environmental Protection Agency.

LCS Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LCSD - Laboratory Control Sample Duplicate: Refer to LCS.

MDL Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

MS Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.

MSD Matrix Spike Sample Duplicate: Refer to MS.

NA · Not Applicable.

NC Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.

NI -Not Ignitable.

Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration.
 The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

RPD -Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Data Qualifiers

- A Spectra identified as "Aldol Condensation Product".
- The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than five times (5x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank.
- Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- The RPD between the results for the two columns exceeds the method-specified criteria; however, the lower value has been reported due to obvious interference.
- P The RPD between the results for the two columns exceeds the method-specified criteria.
- The quality control sample exceeds the associated acceptance criteria. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R Analytical results are from sample re-analysis.

Report Format: DU Report with "J" Qualifiers

ALPHA

Project Name: S

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Data Qualifiers

RE Analytical results are from sample re-extraction.

 Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL). This represents an estimated concentration for Tentatively Identified Compounds (TICs).

ND Not detected at the method detection limit (MDL) for the sample.

Report Format: DU Report with "J" Qualifiers

ДІРНА

Project Name:

SHL TASK 0002

Project Number: AC001

Lab Number:

L1016405

Report Date:

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REFERENCES

Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IIIA, 1997.

- 30 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WPCF. 18th Edition. 1992.
- 44 Methods for the Determination of Inorganic Substances in Environmental Samples, EPA/600/R-93/100, August 1993.

The analyses performed on the sample(s) within this report are in accordance with the minimum established guidelines set forth in the Department of Defense Quality Systems Manual, Version 4.1, issued April 22, 2009

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Certificate/Approval Program Summary

Last revised July 19, 2010 - Westboro Facility

The following list includes only those analytes/methods for which certification/approval is currently held.

For a complete listing of analytes for the referenced methods, please contact your Alpha Customer Service Representative.

Connecticut Department of Public Health Certificate/Lab ID: PH-0574. NELAP Accredited Solid Waste/Soil.

Drinking Water (Inorganic Parameters: Color, pH, Turbidity, Conductivity, Alkalinity, Chloride, Free Residual Chlorine, Fluoride, Calcium Hardness, Sulfate, Nitrate, Nitrite, Aluminum, Antimony, Arsenic, Barium, Beryllium, Cadmium, Calcium, Chromium, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Vanadium, Zinc, Total Dissolved Solids, Total Organic Carbon, Total Cyanide, Perchlorate, Organic Parameters: Volatile Organics 524.2, Total Trihalomethanes 524.2, 1,2-Dibromo-3-chloropropane (DBCP), Ethylene Dibromide (EDB), 1,4-Dioxane (Mod 8270). Microbiology Parameters: Total Coliform-MF mEndo (SM9222B), Total Coliform – Colilert (SM9223 P/A), E. Coli. – Colilert (SM9223 P/A), HPC – Pour Plate (SM9215B), Fecal Coliform – MF m-FC (SM9222D))

Wastewater/Non-Potable Water (Inorganic Parameters: Color, pH, Conductivity, Acidity, Alkalinity, Chloride, Total Residual Chlorine, Fluoride, Total Hardness, Silica, Sulfate, Sulfide, Ammonia, Kjeldahl Nitrogen, Nitrate, Nitrite, O-Phosphate, Total Phosphorus, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Strontium, Thallium, Tin, Titanium, Vanadium, Zinc, Total Residue (Solids), Total Dissolved Solids, Total Suspended Solids (non-filterable), BOD, CBOD, COD, TOC, Total Cyanide, Phenolics, Foaming Agents (MBAS), Bromide, Oil and Grease. Organic Parameters: PCBs, Organochlorine Pesticides, Technical Chlordane, Toxaphene, 2,4-D, 2,4,5-T, 2,4,5-TP(Silvex), Acid Extractables (Phenols), Benzidines, Phthalate Esters, Nitrosamines, Nitroaromatics & Isophorone, Polynuclear Aromatic Hydrocarbons, Haloethers, Chlorinated Hydrocarbons, Volatile Organics, TPH (HEM/SGT), Extractable Petroleum Hydrocarbons (ETPH), MA-EPH, MA-VPH, Microbiology Parameters: Total Coliform – MF mEndo (SM9222B), Total Coliform – MTF (SM9221B), HPC – Pour Plate (SM9215B), Fecal Coliform – MF m-FC (SM9222D), Fecal Coliform – A-1 Broth (SM9221E).)

Solid Waste/Soil (Inorganic Parameters: pH, Sulfide, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Tin, Vanadium, Zinc, Total Cyanide, Ignitability, Phenolics, Corrosivity, TCLP Leach (1311), SPLP Leach (1312 metals only), Reactivity. Organic Parameters: PCBs, PCBs in Oil, Organic Potalicides, Technical Chlordane, Toxaphene, Extractable Petroleum Hydrocarbons (ETPH), MA-EPH, MA-VPH, Dicamba, 2,4-D, 2,4,5-T, 2,4,5-TP(Silvex), Volatile Organics, Acid Extractables (Phenols), 3.3'-Dichlorobenzidine, Phthalates, Nitrosamines, Nitroaromatics & Cyclic Ketones, PAHs, Haloethers, Chlorinated Hydrocarbons.)

Maine Department of Human Services Certificate/Lab ID: 2009024.

Drinking Water (Inorganic Parameters: SM9215B, 9222D, 9223B, EPA 180.1, 300.0, 353.2, SM2130B, 2320B, 4500Cl-D, 4500CN-C, 4500CN-E, 4500F-C, 4500H+B, 4500NO3-F, EPA 200.7, EPA 200.8, 245.1, EPA 300.0. Organic Parameters: 504.1, 524.2.)

Wastewater/Non-Potable Water (Inorganic Parameters: EPA 120.1, 1664A, 350.1, 351.1, 353.2, 410.4, 420.1, Lachat 10-107-06-1-B, SM2320B, 2340B, 2510B, 2540C, 2540D, 426C, 4500Cl-D, 4500Cl-E, 4500CN-C, 4500CN-E, 4500F-B, 4500F-C, 4500H+B, 4500Norg-B, 4500Norg-C, 4500NH3-B, 4500NH3-G, 4500NH3-H, 4500NO3-F, 4500P-B.5, 4500P-E, 5210B, 5220D, 5310C, EPA 200.7, 200.8, 245.1. Organic Parameters: 608, 624, ME DRO, ME GRO, MA EPH, MA VPH.)

Solid Waste/Soil (Organic Parameters: ME DRO, ME GRO, MA EPH, MA VPH.)

Massachusetts Department of Environmental Protection Certificate/Lab ID: M-MA086.

Drinking Water

Inorganic Parameters: (EPA 200.8 for: Sb,As,Ba,Be,Cd,Cr,Cu,Pb,Ni,Se,Tl)

(EPA 200.7 for: Ba,Be,Ca,Cd,Cr,Cu,Na,Ni) 245.1, (300.0 for: Nitrate-N, Fluoride, Sulfate)

353.2 for: Nitrate-N, Nitrite-N; SM4500NO3-F, 4500F-C, 4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, 2320B, SM2540C, SM4500H-B.

Organic Parameters: (EPA 524.2 for: Trihalomethanes, Volatile Organics)

(504.1 for: 1,2-Dibromoethane, 1,2-Dibromo-3-Chloropropane), 314.0, 332.

Microbiology Parameters: SM9215B; ENZ. SUB. SM9223; MF-SM9222D

Non-Potable Water

Inorganic Parameters:, (EPA 200.8 for: Al,Sb,As,Be,Cd,Cr,Cu,Pb,Mn,Ni,Se,Ag,Tl,Zn)

(EPA 200.7 for: Al,Sb,As,Be,Cd,Cr,Co,Cu,Fe,Pb,Mn,Mo,Ni,Se,Ag,Sr,Ti,Tl, V,Zn,Ca,Mg,Na,K)

245.1, SM4500H,B, EPA 120.1, SM2510B, 2540C, 2540B, 2340B, 2320B, 4500CL-E, 4500F-BC, 426C, SM4500NH3-BH, (EPA 350.1 for: Ammonia-N), LACHAT 10-107-06-1-B for Ammonia-N, SM4500NO3-F, 353.2 for Nitrate-N,

SM4500NH3-B, C-Titr, SM4500NH3-BC-NES, EPA 351.1, SM4500P-E, 4500P-B,E, 5220D, EPA 410.4, SM 5210B.

5310C, 4500CL-D, EPA 1664, SM14 510AC, EPA 420, SM4500-CN-CE, SM2540D.

Organic Parameters: (EPA 624 for Volatile Halocarbons, Volatile Aromatics)

(608 for: Chlordane, Aldrin, Dieldrin, DDD, DDE, DDT, Heptachlor, Heptachlor Epoxide, PCBs-Water), EPA 625 for SVOC Acid Extractables and SVOC Base/Neutral Extractables, 600/4-81-045-PCB-Oil

New Hampshire Department of Environmental Services Certificate/Lab ID: 200307. NELAP Accredited.

Drinking Water (Inorganic Parameters: SM6215B, 9222B, 9223B Colifert, EPA 200.7, 200.8, 245.2, 120.1, 300.0, 314.0, SM4500CN-E, 4500H+B, 4500NO3-F, 2320B, 2510B, 2540C, 4500F-C, 5310C, 2120B, EPA 331.0. Organic

Parameters: 504.1, 524.2, SM6251B.)

Non-Potable Water (Inorganic Parameters: SM9222D, 9221B, 9222B, 9221E-EC, EPA 200.7, 200.8, 245.1, 245.2, SW-846 6010B, 6020, 7196A, 7470A, SM3500-CR-D, EPA 120.1, 300.0, 350.1, 351.1, 353.2, 420.1, 1664A, SW-846 9010, 9030, 9040B, SM426C, SM2310B, 2540B, 2540D, 4500H+B, 4500NH3-H, 4500NH3-E, 4500NO2-B, 4500P-E, 4500-S2-D, 5210B, 2320B, 2540C, 4500F-C, 5310C, 5540C, LACHAT 10-117-07-1-B, LACHAT 10-107-06-1-B, LACHAT 10-107-04-1-J, LACHAT 10-117-07-1-A, SM4500CL-E, LACHAT 10-204-00-1-A, LACHAT 10-107-06-2-D. Organic Parameters: SW-846 3005A, 3015A, 3510C, 5030B, 8021B, 8260B, 8270C, 8330, EPA 624, 625, 608, SW-846 8082, 8081A.)

Solid & Chemical Materials (Inorganic Parameters: SW-846 6010B, 7196A, 7471A, 7.3.3.2, 7.3.4.2, 1010, 1030, 9010, 9012A, 9014, 9030B, 9040, 9045C, 9050C, 1311, 3005A, 3050B, 3051A. Organic Parameters: SW-846 3540C, 3545, 3580A, 5030B, 5035, 8021B, 8260B, 8270C, 8330, 8151A, 8082, 8081A.)

New Jersey Department of Environmental Protection Certificate/Lab ID: MA935. NELAP Accredited.

Drinking Water (Inorganic Parameters: SM9222B, 9221E, 9223B, 9215B, 4500NO3-F, 4500F-C, EPA 300.0, 200.7, 2540C, 2320B, 314.0, SM2120B, 2510B, 5310C, SM4500H-B, EPA 200.8, 245.2. Organic Parameters: 504.1,

SM6251B, 524.2.)

Non-Potable Water (Inorganic Parameters: SM5210B, EPA 410.4, SM5220D, 4500Cl-D, EPA 300.0, SM2120B, SM4500F-BC, EPA 200.7, 351.1, LACHAT 10-107-06-2-D, EPA 353.2, SM4500NO3-F, 4500NO2-B, EPA 1664A, SM5310B, C or D, 4500-PE, EPA 420.1, SM4500P-B5+E, 2540B, 2540C, 2540D, EPA 120.1, SM2510B, SM15 426C, SM9221CE, 9222D, 9221B, 9222B, 9215B, 2310B, 2320B, 4500NH3-H, 4500-S D, EPA 350.1, SM5210B, SW-846 3015, 6020, 7470A, 5540C, 4500H-B, EPA 200.8, SM3500Cr-D, EPA 245.1, 245.2, SW-846 9040B, 3005A, EPA 6010B, 7196A, SW-846 9010B, 9030B, Organic Parameters: SW-846 8260B, 8270C, 3510C, EPA 608, 624, 625, SW-846 5030B, 8021B, 8081A, 8082, 8151A, 8330, NJ OQA-QAM-025 Rev.7.)

Solid & Chemical Materials (<u>Inorganic Parameters</u>: SW-846 9040B, 3005A, 6010B, 7196A, 5030B, 9010B, 9030B, 1030, 1311, 3050B, 3051, 7471A, 9014, 9012A, 9045C, 9050A, 9065. <u>Organic Parameters</u>: SW-846 8021B, 8081A, 8082, 8151A, 8330, 8260B, 8270C, 1311, 1312, 3540C, 3545, 3550B, 3580A, 5035L, 5035H, NJ OQA-QAM-025 Rev. 7.)

New York Department of Health Certificate/Lab ID: 11148. NELAP Accredited.

Drinking Water (Inorganic Parameters: SM9223B, 9222B, 9215B, EPA 200.8, 200.7, 245.2, SM5310C, EPA 314.0, 332.0, SM2320B, EPA 300.0, SM2120B, 4500CN-E, 4500F-C, 4500H-B, 4500NO3-F, 2540C, EPA 120.1, SM 2510B.

Organic Parameters: EPA 524.2, 504.1.)

Non-Potable Water (Inorganic Parameters: SM9221E, 9222D, 9221B, 9222B, 9215B, 5210B, EPA 410.4, SM5220D, 2310B-4a, 2320B, EPA 200.7, 300.0, LACHAT 10-117-07-1A or B, SM4500CI-E, 4500F-C, SM15 426C, EPA 350.1, LACHAT 10-107-06-1-B, SM4500NH3-H, EPA 351.1, LACHAT 10-107-06-2, EPA 353.2, LACHAT 10-107-041-C, SM4500-NO3-F, 4500-NO2-B, 4500P-E, 2540C, 2540B, 2540D, EPA 200.8, EPA 6010B, 6020, EPA 7196A, SM3500Cr-D, EPA 245.1, 245.2, 7470A, SM2120B, SM4500-CN-E LACHAT 10-204-00-1-A, EPA 9040B, SM4500-HB, EPA 1664A, SM5310C, EPA 420.1, SM14 510C, EPA 120.1, SM2510B, SM4500S-D, SM5540C, EPA 3005A, 3015. Organic Parameters: EPA 624, 8260B, 8270C, 625, 608, 8081A, 8151A, 8330, 8082, EPA 3510C, 5030B, 9010B, 9030B.)

Solid & Hazardous Waste (Inorganic Parameters: 1010, 1030, SW-846 Ch 7 Sec 7.3, EPA 6010B, 7196A, 7471A, 9012A, 9014, 9040B, 9045C, 9065, 9050, EPA 1311, 1312, 3005A, 3050B, 9010B, 9030B. Organic Parameters: EPA

8260B, 8270C, 8081A, 8151A, 8330, 8082, 3540C, 3545, 3546, 3580, 5030B, 5035.)

North Carolina Department of the Environment and Natural Resources Certificate/Lab ID: 666. Organic Parameters: MA-EPH, MA-VPH.

Pennsylvania Department of Environmental Protection <u>Certificate/Lab ID</u>: 68-03671. *NELAP Accredited*. *Non-Potable Water* (<u>Organic Parameters</u>: EPA 3510C, 5030B, 625, 624. 608, 8081A, 8082, 8151A, 8260B, 8270C, 8330)

Solid & Hazardous Waste (Inorganic Parameters: EPA 1010, 1030, 1311, 3050B, 3051, 6010B, EPA 7.3.3.2, EPA 7.3.4.2, 7196A, 7471A, 9010B, 9012A, 9014, 9040B, 9045C, 9050, 9065. Organic Parameters: 3540C, 3545, 3580A, 5035, 8021B, 8081A, 8082, 8151A, 8260B, 8270C, 8330)

Rhode Island Department of Health <u>Certificate/Lab ID</u>: LAO00065. *NELAP Accredited via NY-DOH*. Refer to MA-DEP Certificate for Potable and Non-Potable Water. Refer to NY-DOH Certificate for Potable and Non-Potable Water.

Texas Commisson on Environmental Quality <u>Certificate/Lab ID</u>: T104704476-09-1. *NELAP Accredited*. *Non-Potable Water* (<u>Inorganic Parameters</u>: EPA 120.1, 1664, 200.7, 200.8, 245.1, 245.2, 300.0, 350.1, 351.1, 353.2, 376.2, 410.4, 420.1, 6010, 6020, 7196, 7470, 9040, SM 2120B, 2310B, 2320B, 2510B, 2540B, 2540C, 2540D, 426C, 4500CL-E, 4500CN-E, 4500F-C, 4500H+B, 4500NH3-H, 4500NO2B, 4500P-E, 4500 S2 D, 510C, 5210B, 5220D, 5310C, 5540C. <u>Organic Parameters</u>: EPA 608, 624, 625, 8081, 8082, 8151, 8260, 8270, 8330.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 1311, 1312, 9012, 9014, 9040, 9045, 9050, 9065.)

Department of Defense Certificate/Lab ID: L2217.

Drinking Water (Inorganic Parameters: SM 4500H-B. Organic Parameters: EPA 524.2, 504.1.)

Non-Potable Water (Inorganic Parameters: EPA 200.7, 200.8, 6010B, 6020, 245.1, 245.2, 7470A, 9040B, 300.0, 9251, 9038, 350.1, 353.2, 351.1, 120.1, 9050A, 410.4, 9060, 1664, 420.1, LACHAT 10-107-06-1-B, SM 4500CN-E, 4500H-B, 4500CL-E, 4500F-BC, 4500SO4-E, 426C, 4500NH3-B, 4500NH3-H, 4500NO3-F, 4500NO2-B, 4500Norg-C, 4500PE, 2510B, 5540C, 5220D, 5310C, 2540B, 2540C, 2540D, 510C, 4500S2-AD, 3005A, 3015, 9010B, 9030B. Organic Parameters: EPA 8260B, 8270C, 8330, 625, 8082, 8151A, 8081A, 3510C, 5030B, MassDEP EPH, MassDEP VPH.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 200.7, 6010B, 7471A, 9040B, 9045C, 9065, 420.1, 9012A, 6860, 1311, 1312, 3050B, 9030B, 3051, 9010B, 3540C, SM 510ABC, 4500CN-CE, 2540G, SW-846 7.3, Organic Parameters: EPA 8260B, 8270C, 8330, 8082, 8081A, 8151A, 3545, 3546, 3580, 5035, MassDEP EPH, MassDEP VPH.)

Analytes Not Accredited by NELAP

Certification is not available by NELAP for the following analytes: **EPA 8260B**: Freon-113, 1,2,4,5-Tetramethylbenzene, 4-Ethyltoluene. **EPA 8330A**: PETN, Picric Acid, Nitroglycerine, 2,6-DANT, 2,4-DANT. **EPA 8270C**: Methyl naphthalene, Dimethyl naphthalene, Total Methylnapthalenes, Total Dimethylnaphthalenes, 1,4-Diphenylhydrazine (Azobenzene), **EPA 625**: 4-Chloroaniline, **EPA 350.1** for Ammonia in a Soil matrix.

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(Lab Use Only)	Sample ID	Date	Time	Matrix	Initials	10	4	4 5	a Ci	100	14	12	0	1	Sample Specific Comments	s
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-03	SHM-10-14-101910 - F	10/19/10	1125	GW	EEF										MS/MSD	
-04	SHM-10-14-101910 - U	iolisho	1125	GW	EEF	V	Vi	V	V	V	V	1			MS/MSD	2
-05	SHAR-10-11-101910-F	14/19/10	1445	GW	EEF											
	SHM-10-11-101910-U	10/19/10	1445	GW	EEF	V	VV	V	V	V	V	V				Ve
-01	DUP-101910-F	10/19/10	1113	GW	CMH											
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	or CT RCP?	Relinquished	_		te/Time	~	 ابد	Receive	ved By ≥\	-			Date/		start until any ambiguities are All samples submitted are su	ubject to
And the state of t	1625	1.24			10 1635		2.0	1	1	/			teluho	1030	Alpha's Terms and Condition See reverse side.	15.



ANALYTICAL REPORT

Lab Number:

L1016416

Client:

Sovereign Consulting

905B South Main Street Mansfield, MA 02048

ATTN:

Phil McBain

Phone:

(508) 339-3200

Project Name:

SHL TASK 0002

Project Number:

AC001

Report Date:

10/26/10

Certifications & Approvals: MA (M-MA086), NY NELAC (11148), CT (PH-0574), NH (2003), NJ (MA935), RI (LAO00065), ME (MA0086), PA (Registration #68-03671), USDA (Permit #S-72578), US Army Corps of Engineers, Naval FESC.

Eight Walkup Drive, Westborough, MA 01581-1019 508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com

Project Name:

SHL TASK 0002

Project Number:

AC001

Lab Number:

L1016416

Report Date:

10/26/10

Alpha Sample ID	Client ID	Sample Location	Collection Date/Time
L1016416-01	SHM-10-13-101910-U	DEVENS, MA	10/19/10 11:13
L1016416-02	SHM-10-14-101910-U	DEVENS, MA	10/19/10 11:25
L1016416-03	SHM-10-11-101910-U	DEVENS, MA	10/19/10 14:45
L1016416-04	DUP-101910-U	DEVENS, MA	10/19/10 11:13

Project Name: Project Number: SHL TASK 0002

AC001

Lab Number:

L1016416

Report Date:

10/26/10

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet all of the requirements of NELAC, for all NELAC accredited parameters. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

For additional information, please contact Client Services at 800-624-9220.

Report Submission

This report contains the results for the Dissolved Inorganic Carbon analysis. The results for all other analyses will be issued under separate cover.

Dissolved Inorganic Carbon

L1016416-01 through -04 have elevated detection limits due to the dilutions required by the elevated concentration present in the samples.

WG439468: A Matrix Spike could not be performed due to insufficient sample volume available for analysis.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:

Michelle M. Morris

Title: Technical Director/Representative

Date: 10/26/10

INORGANICS & MISCELLANEOUS

Project Name: SHL TASK 0002

Project Number: AC001

Lab Number:

L1016416

Report Date:

10/26/10

SAMPLE RESULTS

Lab ID:

L1016416-01

Client ID:

SHM-10-13-101910-U

Sample Location: DEVENS, MA

Matrix:

Water

Date Collected:

10/19/10 11:13

Date Received:

10/19/10

Field Prep:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry										
Dissolved Inorganic Carbon	140		mg/l	20	**	20	10/19/10 22:30	10/26/10 08:11	30,5310C(M)	DW

Project Name:

SHL TASK 0002

Lab Number:

L1016416

Project Number: AC001

Report Date:

10/26/10

SAMPLE RESULTS

Lab ID:

L1016416-02

Client ID:

SHM-10-14-101910-U

Sample Location:

DEVENS, MA

Matrix:

Water

Date Collected:

10/19/10 11:25

Date Received:

10/19/10

Field Prep:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry										
Dissolved Inorganic Carbon	140		mg/l	20	144	20	10/19/10 22:30	10/26/10 08:11	30,5310C(M)	DW

Project Name:

SHL TASK 0002

Lab Number:

L1016416

Project Number: AC001

Report Date:

10/26/10

SAMPLE RESULTS

Lab ID:

L1016416-03

Client ID:

SHM-10-11-101910-U

Sample Location: DEVENS, MA

Matrix:

Water

Date Collected:

10/19/10 14:45

Date Received:

10/19/10

Field Prep:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry										
Dissolved Inorganic Carbon	71		mg/l	20		20	10/19/10 22:30	10/26/10 08:11	30,5310C(M)	DW

Project Name: SHL TASK 0002

Project Number: AC001

Lab Number:

L1016416

Report Date:

10/26/10

SAMPLE RESULTS

Lab ID:

L1016416-04

Client ID:

DUP-101910-U

Sample Location:

DEVENS, MA

Matrix:

Water

Date Collected:

10/19/10 11:13

Date Received:

10/19/10

Field Prep:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry Dissolved Inorganic Carbon	150		mg/l	20	-	20	10/19/10 22:30	10/26/10 08:11	30,5310C(M)	DW

Project Name: SHL TASK 0002

Project Number: AC001

Lab Number:

L1016416

Report Date:

10/26/10

Method Blank Analysis Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry for sa	ample(s): 0°	1-04 Batc	h: WG43	9468-1						
Dissolved Inorganic Carbon	ND		mg/l	1.0	-	1	10/19/10 22:30	10/26/10 08:11	30,5310C(M)	DW

Lab Control Sample Analysis Batch Quality Control

SHL TASK 0002

AC001

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Lab Number:

L1016416

Report Date:

10/26/10

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Associated sample(s): 01-04	Batch: WG439468-2							

Dissolved Inorganic Carbon

Project Name:

Project Number:

120

** 2.

Lab Duplicate Analysis
Batch Quality Control

Lab Number:

L1016416

Report Date:

10/26/10

Parameter		Nat	ive Sample	Duplica	ate Sample	e Units	RPD	Qual	RPD Limits
Associated sample(s): 01-04	QC Batch ID: WG439	468-3	QC Sample: L1	016416-02	Client ID:	SHM-10-14-1019	10-U		
Dissolved Inorganic Carbon			140		140	mg/l	0		

Project Name:

Project Number:

SHL TASK 0002

16

AC001

Project Name: SHL TASK 0002

Project Number: AC001

Lab Number: L1016416 Report Date: 10/26/10

Sample Receipt and Container Information

Were project specific reporting limits specified?

YES

Reagent H2O Preserved Vials Frozen on: NA

Cooler Information Custody Seal

Cooler

В

Present/Intact

A

Present/Intact

Container Info	ormation	Temp					
Container ID	Container Type	Cooler	рН	deg C	Pres	Seal	Analysis(*)
L1016416-01A	Vial H2SO4 preserved split	В	NA	2.4	Y	Present/Intact	SPECWC()
L1016416-01B	Vial H2SO4 preserved split	В	NA	2.4	Y	Present/Intact	SPECWC()
L1016416-01X	Amber 250ml unpreserved	В	6	2.4	Y	Present/Intact	SPECWC()
L1016416-02A	Vial H2SO4 preserved split	Α	NA	3	Y	Present/Intact	SPECWC()
L1016416-02B	Vial H2SO4 preserved split	Α	NA	3	Y	Present/Intact	SPECWC()
L1016416-02M	Amber 250ml unpreserved	Α	6	3	Y	Present/Intact	SPECWC()
L1016416-02O	Vial H2SO4 preserved split	A	NA	3	Y	Present/Intact	SPECWC()
L1016416-02P	Vial H2SO4 preserved split	Α	NA	3	Y	Present/Intact	SPECWC()
L1016416-02X	Amber 250ml unpreserved	Α	6	3	Y	Present/Intact	SPECWC()
L1016416-03A	Vial H2SO4 preserved split	В	NA	2,4	Y	Present/Intact	SPECWC()
L1016416-03B	Vial H2SO4 preserved split	В	NA	2.4	Υ	Present/Intact	SPECWC()
L1016416-03X	Amber 250ml unpreserved	В	6	2.4	Y	Present/Intact	SPECWC()
L1016416-04A	Vial H2SO4 preserved split	В	NA	2.4	Y	Present/Intact	SPECWC()
L1016416-04B	Vial H2SO4 preserved split	В	NA	2.4	Y	Present/Intact	SPECWC()
L1016416-04X	Amber 250ml unpreserved	В	6	2.4	Y	Present/Intact	SPECWC()

L1016416

Lab Number:

Project Name: SHL TASK 0002

Project Number: AC001 Report Date: 10/26/10

GLOSSARY

Acronyms

EPA Environmental Protection Agency

 Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LCSD - Laboratory Control Sample Duplicate: Refer to LCS.

MDL • Method Detection Limit: This value represents the level to which target analyte concentrations are reported as
estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL
includes any adjustments from dilutions, concentrations or moisture content, where applicable.

MS - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of
matrix sample for which an independent estimate of target analyte concentration is available.

MSD Matrix Spike Sample Duplicate: Refer to MS.

NA - Not Applicable.

 Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.

NI Not Ignitable.

RE -Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to
assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD).
 Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the
absolute difference between the values; although the RPD value will be provided in the report.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Data Qualifiers

- A Spectra identified as "Aldol Condensation Product".
- The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than five times (5x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank.
- Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- 1 The RPD between the results for the two columns exceeds the method-specified criteria; however, the lower value has been reported due to obvious interference.
- The RPD between the results for the two columns exceeds the method-specified criteria.
- The quality control sample exceeds the associated acceptance criteria. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R Analytical results are from sample re-analysis.

Report Format: Data Usability Report

Project Name:

SHL TASK 0002

Lab Number:

L1016416

Project Number: A

AC001

Report Date:

10/26/10

Data Qualifiers

RE Analytical results are from sample re-extraction.

J - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

ND Not detected at the reporting limit (RL) for the sample.

Report Format: Data Usability Report

ALPHA

Project Name:

SHL TASK 0002

Lab Number:

L1016416

Project Number:

AC001

Report Date:

10/26/10

REFERENCES

30 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WPCF. 18th Edition. 1992.

The analyses performed on the sample(s) within this report are in accordance with the minimum established guidelines set forth in the Department of Defense Quality Systems Manual, Version 4.1, issued April 22, 2009

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Certificate/Approval Program Summary

Last revised July 19, 2010 - Westboro Facility

The following list includes only those analytes/methods for which certification/approval is currently held.

For a complete listing of analytes for the referenced methods, please contact your Alpha Customer Service Representative.

Connecticut Department of Public Health Certificate/Lab ID: PH-0574. NELAP Accredited Solid Waste/Soil.

Drinking Water (Inorganic Parameters: Color, pH, Turbidity, Conductivity, Alkalinity, Chloride, Free Residual Chlorine, Fluoride, Calcium Hardness, Sulfate, Nitrate, Nitrite, Aluminum, Antimony, Arsenic, Barium, Beryllium, Cadmium, Calcium, Chromium, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Vanadium, Zinc, Total Dissolved Solids, Total Organic Carbon, Total Cyanide, Perchlorate, Organic Parameters: Volatile Organics 524.2, Total Trihalomethanes 524.2, 1,2-Dibromo-3-chloropropane (DBCP), Ethylene Dibromide (EDB), 1,4-Dioxane (Mod 8270). Microbiology Parameters: Total Coliform-MF mEndo (SM9222B), Total Coliform – Colilert (SM9223 P/A), E. Coli. – Colilert (SM9223 P/A), HPC – Pour Plate (SM9215B), Fecal Coliform – MF m-FC (SM9222D))

Wastewater/Non-Potable Water (Inorganic Parameters: Color, pH, Conductivity, Acidity, Alkalinity, Chloride, Total Residual Chlorine, Fluoride, Total Hardness, Silica, Sulfate, Sulfide, Ammonia, Kjeldahl Nitrogen, Nitrate, Nitrite, O-Phosphate, Total Phosphorus, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Strontium, Thallium, Tin, Titanium, Vanadium, Zinc, Total Residue (Solids), Total Dissolved Solids, Total Suspended Solids (non-filterable), BOD, CBOD, COD, TOC, Total Cyanide, Phenolics, Foaming Agents (MBAS), Bromide, Oil and Grease. Organic Parameters: PCBs, Organochlorine Pesticides, Technical Chlordane, Toxaphene, 2,4-D, 2,4,5-T, 2,4,5-TP(Silvex), Acid Extractables (Phenols), Benzidines, Phthalate Esters, Nitrosamines, Nitroaromatics & Isophorone, Polynuclear Aromatic Hydrocarbons, Haloethers, Chlorinated Hydrocarbons, Volatile Organics, TPH (HEM/SGT), Extractable Petroleum Hydrocarbons (ETPH), MA-EPH, MA-VPH. Microbiology Parameters: Total Coliform – MF mEndo (SM9222B), Total Coliform – MTF (SM9221B), HPC – Pour Plate (SM9215B), Fecal Coliform – MF m-FC (SM9222D), Fecal Coliform – A-1 Broth (SM9221E).)

Solid Waste/Soil (Inorganic Parameters: pH, Sulfide, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Tin, Vanadium, Zinc, Total Cyanide, Ignitability, Phenolics, Corrosivity, TCLP Leach (1311), SPLP Leach (1312 metals only), Reactivity. Organic Parameters: PCBs, PCBs in Oil, Organochlorine Pesticides, Technical Chlordane, Toxaphene, Extractable Petroleum Hydrocarbons (ETPH), MA-EPH, MA-VPH, Dicamba, 2,4-D, 2,4,5-T, 2,4,5-TP(Silvex), Volatile Organics, Acid Extractables (Phenols), 3.3'-Dichlorobenzidine, Phthalates, Nitrosamines, Nitroaromatics & Cyclic Ketones, PAHs, Haloethers, Chlorinated Hydrocarbons.)

Maine Department of Human Services Certificate/Lab ID: 2009024.

Drinking Water (Inorganic Parameters: SM9215B, 9222D, 9223B, EPA 180.1, 300.0, 353.2, SM2130B, 2320B, 4500Cl-D, 4500CN-C, 4500CN-E, 4500F-C, 4500H+B, 4500NO3-F, EPA 200.7, EPA 200.8, 245.1, EPA 300.0, Organic Parameters: 504.1, 524.2.)

Wastewater/Non-Potable Water (Inorganic Parameters: EPA 120.1, 1664A, 350.1, 351.1, 353.2, 410.4, 420.1, Lachat 10-107-06-1-B, SM2320B, 2340B, 2510B, 2540C, 2540D, 426C, 4500Cl-D, 4500Cl-E, 4500CN-C, 4500CN-E, 4500F-B, 4500F-C, 4500H+B, 4500Norg-B, 4500Norg-C, 4500NH3-B, 4500NH3-G, 4500NH3-H, 4500NO3-F, 4500P-B.5, 4500P-E, 5210B, 5220D, 5310C, EPA 200.7, 200.8, 245.1. Organic Parameters: 608, 624, ME DRO, ME GRO, MA EPH, MA VPH.)

Solid Waste/Soil (Organic Parameters: ME DRO, ME GRO, MA EPH, MA VPH.)

Massachusetts Department of Environmental Protection Certificate/Lab ID: M-MA086.

Drinking Water

Inorganic Parameters: (EPA 200.8 for: Sb,As,Ba,Be,Cd,Cr,Cu,Pb,Ni,Se,Tl)

(EPA 200.7 for: Ba,Be,Ca,Cd,Cr,Cu,Na,Ni) 245.1, (300.0 for: Nitrate-N, Fluoride, Sulfate)

353.2 for: Nitrate-N, Nitrite-N; SM4500NO3-F, 4500F-C, 4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, 2320B, SM2540C, SM4500H-B.

Organic Parameters: (EPA 524.2 for: Trihalomethanes, Volatile Organics)

(504.1 for: 1,2-Dibromoethane, 1,2-Dibromo-3-Chloropropane), 314.0, 332.

Microbiology Parameters: SM9215B; ENZ. SUB. SM9223; MF-SM9222D

Non-Potable Water

Inorganic Parameters:, (EPA 200.8 for: Al,Sb,As,Be,Cd,Cr,Cu,Pb,Mn,Ni,Se,Ag,Tl,Zn)

(EPA 200.7 for: Al,Sb,As,Be,Cd,Cr,Co,Cu,Fe,Pb,Mn,Mo,Ni,Se,Ag,Sr,Ti,Tl, V,Zn,Ca,Mg,Na,K)

245.1, SM4500H,B, EPA 120.1, SM2510B, 2540C, 2540B, 2340B, 2320B, 4500CL-E, 4500F-BC, 426C, SM4500NH3-BH, (EPA 350.1 for: Ammonia-N), LACHAT 10-107-06-1-B for Ammonia-N, SM4500NO3-F, 353.2 for Nitrate-N.

SM4500NH3-B,C-Titr, SM4500NH3-BC-NES, EPA 351.1, SM4500P-E, 4500P-B,E, 5220D, EPA 410.4, SM 5210B,

5310C, 4500CL-D, EPA 1664, SM14 510AC, EPA 420, SM4500-CN-CE, SM2540D.

Organic Parameters: (EPA 624 for Volatile Halocarbons, Volatile Aromatics)

(608 for: Chlordane, Aldrin, Dieldrin, DDD, DDE, DDT, Heptachlor, Heptachlor Epoxide, PCBs-Water), EPA 625 for SVOC Acid Extractables and SVOC Base/Neutral Extractables, 600/4-81-045-PCB-Oil

New Hampshire Department of Environmental Services Certificate/Lab ID: 200307. NELAP Accredited.

Drinking Water (Inorganic Parameters: SM6215B, 9222B, 9223B Colilert, EPA 200.7, 200.8, 245.2, 120.1, 300.0, 314.0, SM4500CN-E, 4500H+B, 4500NO3-F, 2320B, 2510B, 2540C, 4500F-C, 5310C, 2120B, EPA 331.0. Organic

Parameters: 504.1, 524.2, SM6251B.)

Non-Potable Water (Inorganic Parameters: SM9222D, 9221B, 9222B, 9221E-EC, EPA 200.7, 200.8, 245.1, 245.2, SW-846 6010B, 6020, 7196A, 7470A, SM3500-CR-D, EPA 120.1, 300.0, 350.1, 351.1, 353.2, 420.1, 1664A, SW-846 9010, 9030, 9040B, SM426C, SM2310B, 2540B, 2540D, 4500H+B, 4500NH3-H, 4500NH3-E, 4500NO2-B, 4500P-E, 4500-S2-D, 5210B, 2320B, 2540C, 4500F-C, 5310C, 5540C, LACHAT 10-117-07-1-B, LACHAT 10-107-06-1-B, LACHAT 10-107-04-1-J, LACHAT 10-117-07-1-A, SM4500CL-E, LACHAT 10-204-00-1-A, LACHAT 10-107-06-2-D. Organic Parameters: SW-846 3005A, 3015A, 3510C, 5030B, 8021B, 8260B, 8270C, 8330, EPA 624, 625, 608, SW-846 8082, 8081A.)

Solid & Chemical Materials (Inorganic Parameters: SW-846 6010B, 7196A, 7471A, 7.3.3.2, 7.3.4.2, 1010, 1030, 9010, 9012A, 9014, 9030B, 9040, 9045C, 9050C, 1311, 3005A, 3050B, 3051A. Organic Parameters: SW-846 3640C, 3545, 3580A, 5030B, 5035, 8021B, 8260B, 8270C, 8330, 8151A, 8082, 8081A.)

New Jersey Department of Environmental Protection Certificate/Lab ID: MA935, NELAP Accredited.

Drinking Water (Inorganic Parameters: SM9222B, 9221E, 9223B, 9215B, 4500NO3-F, 4500F-C, EPA 300.0, 200.7, 2540C, 2320B, 314.0, SM2120B, 2510B, 5310C, SM4500H-B, EPA 200.8, 245.2. Organic Parameters: 504.1,

SM6251B, 524.2.)

Non-Potable Water (Inorganic Parameters: SM5210B, EPA 410.4, SM5220D, 4500Cl-D, EPA 300.0, SM2120B, SM4500F-BC, EPA 200.7, 351.1, LACHAT 10-107-06-2-D, EPA 353.2, SM4500NO3-F, 4500NO2-B, EPA 1664A, SM5310B, C or D, 4500-PE, EPA 420.1, SM4500P-B5+E, 2540B, 2540C, 2540D, EPA 120.1, SM2510B, SM15 426C, SM9221CE, 9222D, 9221B, 9222B, 9215B, 2310B, 2320B, 4500NH3-H, 4500-S D, EPA 350.1, SM5210B, SW-846 3015, 6020, 7470A, 5540C, 4500H-B, EPA 200.8, SM3500Cr-D, EPA 245.1, 245.2, SW-846 9040B, 3005A, EPA 6010B, 7196A, SW-846 9010B, 9030B, Organic Parameters: SW-846 8260B, 8270C, 3510C, EPA 608, 624, 625, SW-846 5030B, 8021B, 8081A, 8082, 8151A, 8330, NJ OQA-QAM-025 Rev.7.)

Solid & Chemical Materials (Inorganic Parameters: SW-846 9040B, 3005A, 6010B, 7196A, 5030B, 9010B, 9030B, 1030, 1311, 3050B, 3051, 7471A, 9014, 9012A, 9045C, 9050A, 9065. Organic Parameters: SW-846 8021B, 8081A, 8082, 8151A, 8330, 8260B, 8270C, 1311, 1312, 3540C, 3545, 3550B, 3580A, 5035L, 5035H, NJ OQA-QAM-025 Rev.7.)

New York Department of Health Certificate/Lab ID: 11148. NELAP Accredited.

Drinking Water (Inorganic Parameters: SM9223B, 9222B, 9215B, EPA 200.8, 200.7, 245.2, SM5310C, EPA 314.0, 332.0, SM2320B, EPA 300.0, SM2120B, 4500CN-E, 4500F-C, 4500H-B, 4500NO3-F, 2540C, EPA 120.1, SM 2510B.

Organic Parameters: EPA 524.2, 504.1.)

Non-Potable Water (Inorganic Parameters: SM9221E, 9222D, 9221B, 9222B, 9215B, 5210B, EPA 410.4, SM5220D, 2310B-4a, 2320B, EPA 200.7, 300.0, LACHAT 10-117-07-1A or B, SM4500CI-E, 4500F-C, SM15 426C, EPA 350.1, LACHAT 10-107-06-1-B, SM4500NH3-H, EPA 351.1, LACHAT 10-107-06-2, EPA 353.2, LACHAT 10-107-041-C, SM4500-NO3-F, 4500-NO2-B, 4500P-E, 2540C, 2540B, 2540D, EPA 200.8, EPA 6010B, 6020, EPA 7196A, S\M3500Cr-D, EPA 245.1, 245.2, 7470A; SM2120B, SM4500-CN-E LACHAT 10-204-00-1-A, EPA 9040B, SM4500-HB, EPA 1664A, SM5310C, EPA 420.1, SM14 510C, EPA 120.1, SM2510B, SM4500S-D, SM5540C, EPA 3005A, 3015. Organic Parameters: EPA 624, 8260B, 8270C, 625, 608, 8081A, 8151A, 8330, 8082, EPA 3510C, 5030B, 9010B, 9030B.)

Solid & Hazardous Waste (Inorganic Parameters: 1010, 1030, SW-846 Ch 7 Sec 7.3, EPA 6010B, 7196A, 7471A, 9012A, 9014, 9040B, 9045C, 9065, 9050, EPA 1311, 1312, 3005A, 3050B, 9010B, 9030B. Organic Parameters: EPA 8260B, 8270C, 8081A, 8151A, 8330, 8082, 3540C, 3545, 3546, 3580, 5030B, 5035.)

North Carolina Department of the Environment and Natural Resources Certificate/Lab ID: 666. Organic Parameters: MA-EPH, MA-VPH.

Pennsylvania Department of Environmental Protection <u>Certificate/Lab ID</u>: 68-03671. *NELAP Accredited. Non-Potable Water* (<u>Organic Parameters</u>: EPA 3510C, 5030B, 625, 624. 608, 8081A, 8082, 8151A, 8260B, 8270C, 8330)

Solid & Hazardous Waste (Inorganic Parameters: EPA 1010, 1030, 1311, 3050B, 3051, 6010B, EPA 7.3.3.2, EPA 7.3.4.2, 7196A, 7471A, 9010B, 9012A, 9014, 9040B, 9045C, 9050, 9065. Organic Parameters: 3540C, 3545, 3580A, 5035, 8021B, 8081A, 8082, 8151A, 8260B, 8270C, 8330)

Rhode Island Department of Health Certificate/Lab ID: LAO00065. NELAP Accredited via NY-DOH.

Refer to MA-DEP Certificate for Potable and Non-Potable Water.

Refer to NY-DOH Certificate for Potable and Non-Potable Water.

Texas Commisson on Environmental Quality Certificate/Lab ID: T104704476-09-1. *NELAP Accredited. Non-Potable Water* (Inorganic Parameters: EPA 120.1, 1664, 200.7, 200.8, 245.1, 245.2, 300.0, 350.1, 351.1, 353.2, 376.2, 410.4, 420.1, 6010, 6020, 7196, 7470, 9040, SM 2120B, 2310B, 2320B, 2510B, 2540B, 2540C, 2540D, 426C, 4500CL-E, 4500CN-E, 4500F-C, 4500H+B, 4500NH3-H, 4500NO2B, 4500P-E, 4500 S2 D, 510C, 5210B, 5220D, 5310C, 5540C. Organic Parameters: EPA 608, 624, 625, 8081, 8082, 8151, 8260, 8270, 8330.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 1311, 1312, 9012, 9014, 9040, 9045, 9050, 9065.)

Department of Defense <u>Certificate/Lab ID</u>: L2217.

Drinking Water (<u>Inorganic Parameters</u>: SM 4500H-B. <u>Organic Parameters</u>: EPA 524.2, 504.1.)

Non-Potable Water (Inorganic Parameters: EPA 200.7, 200.8, 6010B, 6020, 245.1, 245.2, 7470A, 9040B, 300.0, 9251, 9038, 350.1, 353.2, 351.1, 120.1, 9050A, 410.4, 9060, 1664, 420.1, LACHAT 10-107-06-1-B, SM 4500CN-E, 4500H-B, 4500CL-E, 4500F-BC, 4500SO4-E, 426C, 4500NH3-B, 4500NH3-H, 4500NO3-F, 4500NO2-B, 4500Norg-C, 4500PE, 2510B, 5540C, 5220D, 5310C, 2540B, 2540C, 2540D, 510C, 4500S2-AD, 3005A, 3015, 9010B, 9030B. Organic Parameters: EPA 8260B, 8270C, 8330, 625, 8082, 8151A, 8081A, 3510C, 5030B, MassDEP EPH, MassDEP VPH.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 200.7, 6010B, 7471A, 9040B, 9045C, 9065, 420.1, 9012A, 6860, 1311, 1312, 3050B, 9030B, 3051, 9010B, 3540C, SM 510ABC, 4500CN-CE, 2540G, SW-846 7.3, Organic Parameters: EPA 8260B, 8270C, 8330, 8082, 8081A, 8151A, 3545, 3546, 3580, 5035, MassDEP EPH, MassDEP VPH.)

Analytes Not Accredited by NELAP

Certification is not available by NELAP for the following analytes: **EPA 8260B**: Freon-113, 1,2,4,5-Tetramethylbenzene, 4-Ethyltoluene. **EPA 8330A**: PETN, Picric Acid, Nitroglycerine, 2,6-DANT, 2,4-DANT. **EPA 8270C**: Methyl naphthalene, Dimethyl naphthalene, Total Methylnapthalenes, Total Dimethylnaphthalenes, 1,4-Diphenylhydrazine (Azobenzene). **EPA 625**: 4-Chloroaniline. **EPA 350.1** for Ammonia in a Soil matrix.

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WESTBORO, MA	MANSFIELD, MA	Project 1	nformat	ion			Re	port	Infor	-		-			bles		Billing	Information			
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ANALYTICAL REPORT

Lab Number:

L1016506

Client:

Sovereign Consulting

905B South Main Street

Mansfield, MA 02048

ATTN:

Neil Schofield

Phone:

(508) 339-3200

Project Name:

SHL TASK 0002

Project Number:

AC001

Report Date:

11/03/10

Certifications & Approvals: MA (M-MA086), NY NELAC (11148), CT (PH-0574), NH (2003), NJ (MA935), RI (LAO00065), ME (MA0086), PA (Registration #68-03671), USDA (Permit #S-72578), US Army Corps of Engineers, Naval FESC.

Eight Walkup Drive, Westborough, MA 01581-1019 508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com

Project Name:

SHL TASK 0002

Project Number:

AC001

Lab Number:

L1016506

Report Date:

11/03/10

Alpha Sample ID	Client ID	Sample Location	Collection Date/Time
L1016506-01	SHM-10-12-102010-F	DEVENS, MA	10/20/10 10:35
L1016506-02	SHM-10-12-102010-U	DEVENS, MA	10/20/10 10:35
L1016506-03	SHM-10-15-102010-F	DEVENS, MA	10/20/10 10:50
L1016506-04	SHM-10-15-102010-U	DEVENS, MA	10/20/10 10:50
L1016506-05	SHM-10-16-102010-F	DEVENS, MA	10/20/10 14:35
L1016506-06	SHM-10-16-102010-U	DEVENS, MA	10/20/10 14:35
L1016506-07	DUP-102010-F	DEVENS, MA	10/20/10 10:35
L1016506-08	DUP-102010-U	DEVENS, MA	10/20/10 10:35
L1016506-09	RB-102010-U	DEVENS, MA	10/20/10 12:15

Project Name:

SHL TASK 0002

Project Number:

AC001

Lab Number:

L1016506

Report Date:

11/03/10

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet all of the requirements of NELAC, for all NELAC accredited parameters. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

For additional information, please contact Client Services at 800-624-9220

Report Submission

Testing performed for the reported analyses followed the guidelines established under the DoD QSM 4.1, where applicable.

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

The Dissolved Inorganic Carbon results will be issued under separate cover.

Sample Receipt

The samples were Field Filtered for Dissolved Metals only.

Dissolved Metals

L1016506-01, -03 and -07 have elevated detection limits for all analytes, except Mercury, due to the dilutions

Project Name: Project Number: SHL TASK 0002

AC001

Lab Number:

L1016506

Report Date:

11/03/10

Case Narrative (continued)

required by the high concentrations of target and non-target analytes. The requested reporting limits were not achieved.

The WG438691-3/-4 MS/MSD recoveries for Arsenic (0%/8%), Iron (0%/40%) and Manganese (MS at 76%), performed on L1016506-03, do not apply because the sample concentrations are greater than four times the spike amount added.

The WG439295-3/-4 MS/MSD recoveries, performed on L1016506-03, are outside the acceptance criteria for Mercury (130%/125%); however, the associated LCS recovery is within criteria. A post-digestion spike was performed with an acceptable recovery of 91%. No further action was required.

Total Metals

L1016506-02, -04 and -08 have elevated detection limits for all analytes, except Mercury, due to the dilutions required by the high concentrations of target and non-target analytes. The requested reporting limits were not achieved.

L1016506-09: Positve hits were confirmed by re-analysis.

The WG438690-3/-4 MS/MSD recoveries for Arsenic (MS at 8%), Iron (0%/140%) and Manganese (MS at 38%), performed on L1016506-04, do not apply because the sample concentrations are greater than four times the spike amount added.

The WG439297-3/-4 MS/MSD recoveries, performed on L1016506-04, are outside the acceptance criteria for Mercury (127%/127%); however, the associated LCS recovery is within criteria. A post-digeston spike was performed with an acceptable recovery of 98%. No further action was required.

Dissolved Organic Carbon

L1016506-02, -04, -06 and -08 have elevated detection limits due to the dilutions required by the sample matrix.

Alkalinity

The WG439450-3 MS recovery, performed on L1016506-04, is below the acceptance criteria for Alkalinity (46%). This has been attributed to matrix interference.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:

Michelle M. Morris

Title: Technical Director/Representative

Date: 11/03/10

METALS



Project Name:

SHL TASK 0002

Lab Number:

L1016506

Project Number:

AC001

Report Date:

11/03/10

SAMPLE RESULTS

Lab ID:

L1016506-01

Client ID:

SHM-10-12-102010-F

Sample Location:

DEVENS, MA

Matrix:

Water

Date Collected:

10/20/10 10:35

Date Received:

10/20/10

Field Prep:

See Narrative

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Dissolved Metals - W	estborou	igh Lab									
Aluminum, Dissolved	10.8	J	ug/l	50.0	9.56	5	10/21/10 13:30	10/26/10 02:54	EPA 3005A	1,6020A	ВМ
Antimony, Dissolved	ND		ug/l	2.50	0.600	5	10/21/10 13:30	10/26/10 02:54	EPA 3005A	1,6020A	вм
Arsenic, Dissolved	2980		ug/l	2.50	0.565	5	10/21/10 13:30	10/26/10 02:54	EPA 3005A	1,6020A	ВМ
Barium, Dissolved	42.4		ug/l	2.50	0.475	5	10/21/10 13:30	10/26/10 02:54	EPA 3005A	1,6020A	вм
Beryllium, Dissolved	ND		ug/l	2.50	0 295	5	10/21/10 13:30	10/26/10 02:54	EPA 3005A	1,6020A	ВМ
Cadmium, Dissolved	ND		ug/l	2.50	0.295	5	10/21/10 13:30	10/26/10 02:54	EPA 3005A	1,6020A	вм
Calcium, Dissolved	29000		ug/l	500	63.3	5	10/21/10 13:30	10/26/10 02:54	EPA 3005A	1,6020A	вм
Chromium, Dissolved	ND		ug/l	2.50	0.930	5	10/21/10 13:30	10/26/10 02:54	EPA 3005A	1,6020A	ВМ
Cobalt, Dissolved	7.08		ug/l	2.50	0.265	5	10/21/10 13:30	10/26/10 02:54	EPA 3005A	1,6020A	ВМ
Copper, Dissolved	ND		ug/l	2.50	0.590	5	10/21/10 13:30	10/26/10 02:54	EPA 3005A	1,6020A	ВМ
Iron, Dissolved	88700		ug/l	250	42.0	5	10/21/10 13:30	10/26/10 02:54	EPA 3005A	1,6020A	вм
Lead, Dissolved	ND		ug/l	2,50	0.250	5	10/21/10 13:30	10/26/10 02:54	EPA 3005A	1,6020A	ВМ
Magnesium, Dissolved	2180		ug/l	500	20.5	5	10/21/10 13:30	10/26/10 02:54	EPA 3005A	1,6020A	ВМ
Manganese, Dissolved	6070		ug/l	5.00	0.680	5	10/21/10 13:30	10/26/10 02:54	EPA 3005A	1,6020A	ВМ
Mercury, Dissolved	0.06209	J	ug/l	0 2000	0.0120	1	10/25/10 17:12	10/26/10 12:09	EPA 7470A	1,7470A	EZ
Nickel, Dissolved	11.7		ug/l	2,50	0.900	5	10/21/10 13:30	10/26/10 02:54	EPA 3005A	1,6020A	ВМ
Potassium, Dissolved	4820		ug/l	500	90.8	5	10/21/10 13:30	10/26/10 02:54	EPA 3005A	1,6020A	ВМ
Selenium, Dissolved	ND		ug/l	5,00	2.03	5	10/21/10 13:30	10/26/10 02:54	EPA 3005A	1,6020A	ВМ
Silver, Dissolved	ND		ug/l	2.50	0.425	5	10/21/10 13:30	10/26/10 02:54	EPA 3005A	1,6020A	ВМ
Sodium, Dissolved	5220		ug/l	500	91.0	5	10/21/10 13:30	10/26/10 02:54	EPA 3005A	1,6020A	ВМ
Thallium, Dissolved	ND		ug/l	2.50	0.155	5 .	10/21/10 13:30	10/26/10 02:54	EPA 3005A	1,6020A	ВМ
Vanadium, Dissolved	ND		ug/l	2.50	0.385	5	10/21/10 13:30	10/26/10 02:54	EPA 3005A	1,6020A	ВМ
Zinc, Dissolved	26.7		ug/l	25.0	8.12	5	10/21/10 13:30	10/26/10 02:54	EPA 3005A	1,6020A	вм

Project Name: SHL TASK 0002

AC001

Lab Number:

L1016506

Project Number:

Report Date:

11/03/10

SAMPLE RESULTS

Lab ID:

L1016506-02

Client ID:

SHM-10-12-102010-U

Sample Location:

DEVENS, MA

Matrix:

Water

Date Collected:

10/20/10 10:35

Date Received:

10/20/10

Field Prep:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Wes	tborough L	ab									
Aluminum, Total	57.4		ug/l	50.0	9.56	5	10/21/10 13:3	0 10/26/10 03:55	EPA 3005A	1,6020A	вм
Antimony, Total	ND		ug/l	2.50	0.600	5	10/21/10 13:3	0 10/26/10 03:55	EPA 3005A	1,6020A	вм
Arsenic, Total	3120		ug/l	2.50	0.565	5	10/21/10 13:3	0 10/26/10 03:55	EPA 3005A	1,6020A	вм
Barium, Total	42.6		ug/l	2.50	0.475	5	10/21/10 13:3	0 10/26/10 03:55	EPA 3005A	1,6020A	вм
Beryllium, Total	ND		ug/l	2.50	0.295	5	10/21/10 13:3	0 10/26/10 03:55	EPA 3005A	1,6020A	вм
Cadmium, Total	ND		ug/l	2.50	0.295	5	10/21/10 13:3	0 10/26/10 03:55	EPA 3005A	1,6020A	ВМ
Calcium, Total	29000		ug/l	500	63.3	5	10/21/10 13:3	0 10/26/10 03:55	EPA 3005A	1,6020A	ВМ
Chromium, Total	1,19	J	ug/l	2.50	0.930	5	10/21/10 13:3	0 10/26/10 03:55	EPA 3005A	1,6020A	ВМ
Cobalt, Total	7.38		ug/l	2.50	0.265	5	10/21/10 13:3	0 10/26/10 03:55	EPA 3005A	1,6020A	ВМ
Copper, Total	0.73	J	ug/l	2.50	0.590	5	10/21/10 13:3	0 10/26/10 03:55	EPA 3005A	1,6020A	вм
Iron, Total	90000		ug/l	250	42.0	5	10/21/10 13:3	0 10/26/10 03:55	EPA 3005A	1,6020A	вм
Lead, Total	0.79	J	ug/l	2.50	0.250	5	10/21/10 13:3	0 10/26/10 03:55	EPA 3005A	1,6020A	ВМ
Magnesium, Total	2200		ug/l	500	20.5	5	10/21/10 13:3	0 10/26/10 03:55	EPA 3005A	1,6020A	вм
Manganese, Total	6200		ug/I	5.00	0.680	5	10/21/10 13:3	0 10/26/10 03:55	EPA 3005A	1,6020A	вм
Mercury, Total	0.09511	J	ug/I	0.2000	0.0120	1	10/25/10 17:1	2 10/26/10 12:27	EPA 7470A	1,7470A	EZ
Nickel, Total	12.3		ug/l	2,50	0.900	5	10/21/10 13:3	0 10/26/10 03:55	EPA 3005A	1,6020A	ВМ
Potassium, Total	4900		ug/l	500	90.8	5	10/21/10 13:3	0 10/26/10 03:55	EPA 3005A	1,6020A	вм
Selenium, Total	ND		ug/l	5.00	2.03	5	10/21/10 13:3	0 10/26/10 03:55	EPA 3005A	1,6020A	вм
Silver, Total	ND		ug/l	2.50	0.425	5	10/21/10 13:3	0 10/26/10 03:55	EPA 3005A	1,6020A	вм
Sodium, Total	5060		ug/I	500	91.0	5	10/21/10 13:3	0 10/26/10 03:55	EPA 3005A	1,6020A	вм
Thallium, Total	ND .		ug/i	2.50	0.155	5	10/21/10 13:3	0 10/26/10 03:55	EPA 3005A	1,6020A	ВМ
Vanadium, Total	ND	Χ.	ug/l	2.50	0.385	5	10/21/10 13:3	0 10/26/10 03:55	EPA 3005A	1,6020A	ВМ
Zinc, Total	29.2		ug/l	25.0	8.12	5	10/21/10 13:3	0 10/26/10 03:55	EPA 3005A	1,6020A	вм

Project Name:

SHL TASK 0002

Lab Number:

L1016506

Project Number:

AC001

Report Date:

11/03/10

SAMPLE RESULTS

Lab ID: Client ID: L1016506-03

SHM-10-15-102010-F

DEVENS, MA

Sample Location: Matrix:

Water

Date Collected:

10/20/10 10:50

Date Received:

10/20/10

Field Prep:

See Narrative

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Dissolved Metals - V	Vestboro	ugh Lab									
Aluminum, Dissolved	ND		ug/I	100	19.1	10	10/21/10 13:30	10/26/10 03:07	EPA 3005A	1,6020A	вм
Antimony, Dissolved	ND		ug/I	5.00	1.20	10	10/21/10 13:30	10/26/10 03:07	EPA 3005A	1,6020A	вм
Arsenic, Dissolved	6230		ug/l	5.00	1.13	10	10/21/10 13:30	10/26/10 03:07	EPA 3005A	1,6020A	вм
Barium, Dissolved	43.0		ug/l	5.00	0.950	10	10/21/10 13:30	10/26/10 03:07	EPA 3005A	1,6020A	вм
Beryllium, Dissolved	ND		ug/l	5.00	0.590	10	10/21/10 13:30	10/26/10 03:07	EPA 3005A	1,6020A	вм
Cadmium, Dissolved	ND		ug/I	5.00	0.590	10	10/21/10 13:30	10/26/10 03:07	EPA 3005A	1,6020A	вм
Calcium, Dissolved	51800		ug/I	1000	126.	10	10/21/10 13:30	10/26/10 03:07	EPA 3005A	1,6020A	вм
Chromium, Dissolved	ND		ug/l	5.00	1.86	10	10/21/10 13:30	10/26/10 03:07	EPA 3005A	1,6020A	вм
Cobalt, Dissolved	23.3		ug/l	5.00	0.530	10	10/21/10 13:30	10/26/10 03:07	EPA 3005A	1,6020A	вм
Copper, Dissolved	ND		ug/l	5.00	1.18	10	10/21/10 13:30	10/26/10 03:07	EPA 3005A	1,6020A	вм
Iron, Dissolved	52000		ug/l	500	84.1	10	10/21/10 13:30	10/26/10 03:07	EPA 3005A	1,6020A	вм
Lead, Dissolved	0.7	J	ug/l	5.00	0.500	10	10/21/10 13:30	10/26/10 03:07	EPA 3005A	1,6020A	вм
Magnesium, Dissolved	6530		ug/l	1000	41.0	10	10/21/10 13:30	10/26/10 03:07	EPA 3005A	1,6020A	вм
Manganese, Dissolved	8680		ug/l	10.0	1.36	10	10/21/10 13:30	10/26/10 03:07	EPA 3005A	1,6020A	вм
Mercury, Dissolved	0.0551	J	ug/I	0.2000	0.0120	1	10/25/10 17:12	10/26/10 12:11	EPA 7470A	1,7470A	EZ
Nickel, Dissolved	15.8		ug/l	5.00	1.80	10	10/21/10 13:30	10/26/10 03:07	EPA 3005A	1,6020A	вм
Potassium, Dissolved	5500		ug/l	1000	182	10	10/21/10 13:30	10/26/10 03:07	EPA 3005A	1,6020A	ВМ
Selenium, Dissolved	ND		ug/l	10.0	4.06	10	10/21/10 13:30	10/26/10 03:07	EPA 3005A	1,6020A	вм
Silver, Dissolved	ND		ug/l	5.00	0.850	10	10/21/10 13:30	10/26/10 03:07	EPA 3005A	1,6020A	вм
Sodium, Dissolved	12400		ug/l	1000	182.	10	10/21/10 13:30	10/26/10 03:07	EPA 3005A	1,6020A	вм
Thallium, Dissolved	ND	Ser 1	ug/l	5.00	0.310	10.	10/21/10 13:30	10/26/10 03:07	EPA 3005A	1,6020A	BM*
Vanadium, Dissolved	ND		ug/l	5.00	0.770	10	10/21/10 13:30	10/26/10 03:07	EPA 3005A	1,6020A	ВМ
Zinc, Dissolved	42.8	J	ug/l	50.0	16.2	10	10/21/10 13:30	10/26/10 03:07	EPA 3005A	1,6020A	ВМ

Project Name: SHL TASK 0002

Project Number: AC001 Lab Number:

L1016506

SAMPLE RESULTS

Report Date:

11/03/10

Lab ID:

L1016506-04

Client ID:

SHM-10-15-102010-U

Sample Location:

DEVENS, MA

Matrix:

Water

Date Collected:

10/20/10 10:50

Date Received: Field Prep:

10/20/10

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Wes	stborough L	.ab									
Aluminum, Total	312		ug/l	100	19.1	10	10/21/10 13:30	10/26/10 04:07	EPA 3005A	1,6020A	ВМ
Antimony, Total	ND		ug/l	5.00	1.20	10	10/21/10 13:30	10/26/10 04:07	EPA 3005A	1,6020A	ВМ
Arsenic, Total	6090		ug/l	5.00	1.13	10	10/21/10 13:30	0 10/26/10 04:07	EPA 3005A	1,6020A	вм
Barium, Total	42.4		ug/l	5.00	0.950	10	10/21/10 13:30	0 10/26/10 04:07	EPA 3005A	1,6020A	вм
Beryllium, Total	ND		ug/l	5.00	0.590	10	10/21/10 13:30	0 10/26/10 04:07	EPA 3005A	1,6020A	вм
Cadmium, Total	ND		ug/l	5.00	0.590	10	10/21/10 13:30	0 10/26/10 04:07	EPA 3005A	1,6020A	вм
Calcium, Total	51200		ug/l	1000	126.	10	10/21/10 13:30	0 10/26/10 04:07	EPA 3005A	1,6020A	вм
Chromium, Total	ND		ug/l	5.00	1.86	10	10/21/10 13:30	0 10/26/10 04:07	EPA 3005A	1,6020A	ВМ
Cobalt, Total	22.3		ug/l	5.00	0.530	10	10/21/10 13:30	0 10/26/10 04:07	EPA 3005A	1,6020A	вм
Copper, Total	1.2	J	ug/l	5.00	1.18	10	10/21/10 13:30	10/26/10 04:07	EPA 3005A	1,6020A	вм
Iron, Total	50400		ug/l	500	84.1	10	10/21/10 13:30	0 10/26/10 04:07	EPA 3005A	1,6020A	вм
Lead, Total	1.48	J	ug/l	5.00	0.500	10	10/21/10 13:30	0 10/26/10 04:07	EPA 3005A	1,6020A	вм
Magnesium, Total	6440		ug/l	1000	41.0	10	10/21/10 13:30	0 10/26/10 04:07	EPA 3005A	1,6020A	BM.
Manganese, Total	8440		ug/I	10.0	1,36	10	10/21/10 13:30	0 10/26/10 04:07	EPA 3005A	1,6020A	ВМ
Mercury, Total	0.07762	J	ug/l	0.2000	0.0120	1	10/25/10 17:12	2 10/26/10 12:29	EPA 7470A	1,7470A	EZ
Nickel, Total	16.2		ug/l	5.00	1.80	10	10/21/10 13:30	0 10/26/10 04:07	EPA 3005A	1,6020A	вм
Potassium, Total	5350		ug/l	1000	182.	10	10/21/10 13:30	0 10/26/10 04:07	EPA 3005A	1,6020A	ВМ
Selenium, Total	ND		ug/l	10.0	4.06	10	10/21/10 13:30	0 10/26/10 04:07	EPA 3005A	1,6020A	вм
Silver, Total	ND		ug/l	5.00	0.850	10	10/21/10 13:30	0 10/26/10 04:07	EPA 3005A	1,6020A	вм
Sodium, Total	11600		ug/l	1000	182.	10	10/21/10 13:30	0 10/26/10 04:07	EPA 3005A	1,6020A	вм
Thallium, Total	ND		ug/I	5.00	0.310	10	10/21/10 13:30	0 10/26/10 04:07	EPA 3005A	1,6020A	ВМ
Vanadium, Total	ND		ug/I	5.00	0.770	10	10/21/10 13:30	0 10/26/10 04:07	EPA 3005A	1,6020A	ВМ
Zinc, Total	33.6	J	ug/I	50.0	16.2	10	10/21/10 13:30	0 10/26/10 04:07	EPA 3005A	1,6020A	вм

Project Name: SHL TASK 0002

Project Number: AC001 Lab Number: Report Date:

L1016506

SAMPLE RESULTS

11/03/10

Lab ID:

L1016506-05

Client ID:

SHM-10-16-102010-F

Sample Location:

DEVENS, MA

Matrix:

Water

Date Collected:

10/20/10 14:35

Date Received:

10/20/10

Field Prep:

See Narrative

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Dissolved Metals - V	Vestboro	ugh Lab									
Aluminum, Dissolved	2.53	J	ug/l	10.0	1.91	1	10/21/10 13:30	10/26/10 03:43	EPA 3005A	1,6020A	ВМ
Antimony, Dissolved	0.16	J	ug/l	0.500	0.120	1	10/21/10 13:30	10/26/10 03:43	EPA 3005A	1,6020A	вм
Arsenic, Dissolved	1090		ug/l	0,500	0.113	1	10/21/10 13:30	10/26/10 03:43	EPA 3005A	1,6020A	ВМ
Barium, Dissolved	51.6		ug/l	0.500	0.095	1	10/21/10 13:30	10/26/10 03;43	EPA 3005A	1,6020A	ВМ
Beryllium, Dissolved	0.06	J	ug/l	0.500	0.059	1	10/21/10 13:30	10/26/10 03:43	EPA 3005A	1,6020A	вм
Cadmium, Dissolved	0,06	J	ug/l	0.500	0.059	1	10/21/10 13:30	10/26/10 03:43	EPA 3005A	1,6020A	ВМ
Calcium, Dissolved	68100		ug/l	100	12.6	1	10/21/10 13:30	10/26/10 03:43	EPA 3005A	1,6020A	вм
Chromium, Dissolved	0.28	J	ug/l	0.500	0.186	1	10/21/10 13:30	10/26/10 03:43	EPA 3005A	1,6020A	ВМ
Cobalt, Dissolved	5.51		ug/l	0.500	0.053	1	10/21/10 13:30	10/26/10 03:43	EPA 3005A	1,6020A	ВМ
Copper, Dissolved	0.540		ug/l	0.500	0.118	1	10/21/10 13:30	10/26/10 03:43	EPA 3005A	1,6020A	ВМ
Iron, Dissolved	46900		ug/l	50.0	8.41	1	10/21/10 13:30	10/26/10 03:43	EPA 3005A	1,6020A	ВМ
Lead, Dissolved	0.08	J	ug/l	0.500	0.050	1	10/21/10 13:30	10/26/10 03:43	EPA 3005A	1,6020A	ВМ
Magnesium, Dissolved	12000		ug/l	100	4.10	1	10/21/10 13:30	10/26/10 03:43	EPA 3005A	1,6020A	ВМ
Manganese, Dissolved	1150		ug/l	1.00	0.136	1	10/21/10 13:30	10/26/10 03:43	EPA 3005A	1,6020A	ВМ
Mercury, Dissolved	0.03837	J	ug/l	0.2000	0.0120	1	10/25/10 17:12	10/26/10 12:20	EPA 7470A	1,7470A	EZ
Nickel, Dissolved	3.06		ug/l	0.500	0.180	1	10/21/10 13:30	10/26/10 03:43	EPA 3005A	1,6020A	ВМ
Potassium, Dissolved	11800		ug/l	100	18.2	1	10/21/10 13:30	10/26/10 03:43	EPA 3005A	1,6020A	ВМ
Selenium, Dissolved	0.44	J	ug/l	1.00	0.406	1	10/21/10 13:30	10/26/10 03:43	EPA 3005A	1,6020A	ВМ
Silver, Dissolved	ND		ug/l	0.500	0.085	1	10/21/10 13:30	10/26/10 03:43	EPA 3005A	1,6020A	ВМ
Sodium, Dissolved	30700		ug/l	100	18.2	1	10/21/10 13:30	10/26/10 03:43	EPA 3005A	1,6020A	ВМ
Thallium, Dissolved	0.06	J	ug/l	0.500	0.031	1	10/21/10 13:30	10/26/10 03:43	EPA 3005A	1,6020A	ВМ
Vanadium, Dissolved	0.13	J ·	ug/l	0.500	0.077	1	10/21/10 13:30	10/26/10 03:43	EPA 3005A	1,6020A	ВМ
Zinc, Dissolved	13.0		ug/l	5.00	1.62	1	10/21/10 13:30	10/26/10 03:43	EPA 3005A	1,6020A	ВМ

Project Name: SHL TASK 0002

Project Number: AC001

Lab Number:

L1016506

1 Report Date:

11/03/10

SAMPLE RESULTS

Lab ID:

L1016506-06

Client ID:

SHM-10-16-102010-U

Sample Location:

DEVENS, MA

Matrix:

Water

Date Collected:

10/20/10 14:35

Date Received:

10/20/10

Field Prep:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Wes	tborough L	_ab									
Aluminum, Total	487		ug/l	10.0	1.91	1	10/21/10 13:3	0 10/26/10 04:43	EPA 3005A	1,6020A	ВМ
Antimony, Total	ND		ug/l	0,500	0.120	1	10/21/10 13:30	0 10/26/10 04:43	EPA 3005A	1,6020A	вм
Arsenic, Total	1180		ug/l	0.500	0.113	1	10/21/10 13:3	0 10/26/10 04:43	EPA 3005A	1,6020A	вм
Barium, Total	59.2		ug/l	0.500	0.095	1	10/21/10 13:3	0 10/26/10 04:43	EPA 3005A	1,6020A	вм
Beryllium, Total	ND		ug/l	0.500	0,059	1	10/21/10 13:30	0 10/26/10 04:43	EPA 3005A	1,6020A	вм
Cadmium, Total	ND		ug/I	0.500	0.059	1	10/21/10 13:3	0 10/26/10 04:43	EPA 3005A	1,6020A	вм
Calcium, Total	73200		ug/l	100	12.6	1	10/21/10 13:3	0 10/26/10 04:43	EPA 3005A	1,6020A	вм
Chromium, Total	3.50		ug/l	0.500	0.186	1	10/21/10 13:3	0 10/26/10 04:43	EPA 3005A	1,6020A	ВМ
Cobalt, Total	6.56		ug/l	0.500	0.053	1	10/21/10 13:3	0 10/26/10 04:43	EPA 3005A	1,6020A	ВМ
Copper, Total	2.73		ug/l	0.500	0.118	1	10/21/10 13:3	0 10/26/10 04:43	EPA 3005A	1,6020A	вм
Iron, Total	51800		ug/l	50.0	8.41	1	10/21/10 13:3	0 10/26/10 04:43	EPA 3005A	1,6020A	вм
Lead, Total	0.910		ug/l	0.500	0.050	1	10/21/10 13:3	0 10/26/10 04:43	EPA 3005A	1,6020A	вм
Magnesium, Total	13100		ug/l	100	4.10	1	10/21/10 13:3	0 10/26/10 04:43	EPA 3005A	1,6020A	вм
Manganese, Total	1250		ug/l	1.00	0.136	1	10/21/10 13:3	0 10/26/10 04:43	EPA 3005A	1,6020A	ВМ
Mercury, Total	0.09046	J	ug/l	0 2000	0.0120	1	10/25/10 17:1	2 10/26/10 13:43	EPA 7470A	1,7470A	EZ
Nickel, Total	5 28		ug/l	0.500	0.180	1	10/21/10 13:3	0 10/26/10 04:43	EPA 3005A	1,6020A	ВМ
Potassium, Total	12500		ug/l	100	18.2	1	10/21/10 13:3	0 10/26/10 04:43	EPA 3005A	1,6020A	ВМ
Selenium, Total	0.43	J	ug/l	1.00	0.406	. 1	10/21/10 13/3	0 10/26/10 04:43	EPA 3005A	1,6020A	ВМ
Silver, Total	ND		ug/l	0.500	0.085	1	10/21/10 13:3	0 10/26/10 04:43	EPA 3005A	1,6020A	вм
Sodium, Total	31500		ug/I	100	18.2	1	10/21/10 13:3	0 10/26/10 04:43	EPA 3005A	1,6020A	вм
Thallium, Total	ND	E #	ug/l	0.500	0.031	1	10/21/10 13:3	0 10/26/10 04:43	EPA 3005A	1,6020A	вм
Vanadium, Total	0.810		ug/l	0.500	0.077	1	10/21/10 13:3	0 10/26/10 04:43	EPÅ 3005A	1,6020A	ВМ
Zinc, Total	36.7		ug/l	5.00	1.62	1	10/21/10 13:3	0 10/26/10 04:43	EPA 3005A	1,6020A	ВМ

Lab Number: Project Name: SHL TASK 0002 L1016506

Project Number: Report Date: AC001 11/03/10

SAMPLE RESULTS

Lab ID: L1016506-07 Client ID: DUP-102010-F Sample Location: DEVENS, MA

Matrix: Water

Date Collected: 10/20/10 10:35 Date Received: 10/20/10 Field Prep: See Narrative

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Dissolved Metals - V	Vestboro	ugh Lab									
Aluminum, Dissolved	ND		ug/l	50.0	9.56	5	10/21/10 13:30	10/26/10 03:49	EPA 3005A	1,6020A	вм
Antimony, Dissolved	ND		ug/l	2.50	0.600	5	10/21/10 13:30	10/26/10 03:49	EPA 3005A	1,6020A	вм
Arsenic, Dissolved	3000		ug/I	2.50	0.565	5	10/21/10 13:30	10/26/10 03:49	EPA 3005A	1,6020A	вм
Barium, Dissolved	41.9		ug/l	2.50	0.475	5	10/21/10 13:30	10/26/10 03:49	EPA 3005A	1,6020A	вм
Beryllium, Dissolved	ND		ug/l	2.50	0.295	5	10/21/10 13:30	10/26/10 03:49	EPA 3005A	1,6020A	вм
Cadmium, Dissolved	ND		ug/l	2.50	0.295	5	10/21/10 13:30	10/26/10 03:49	EPA 3005A	1,6020A	вм
Calcium, Dissolved	28300		ug/l	500	63.3	5	10/21/10 13:30	10/26/10 03:49	EPA 3005A	1,6020A	вм
Chromium, Dissolved	ND		ug/l	2.50	0.930	5	10/21/10 13:30	10/26/10 03:49	EPA 3005A	1,6020A	вм
Cobalt, Dissolved	6.98		ug/l	2.50	0.265	5	10/21/10 13:30	10/26/10 03:49	EPA 3005A	1,6020A	вм
Copper, Dissolved	ND		ug/I	2.50	0.590	5	10/21/10 13:30	10/26/10 03:49	EPA 3005A	1,6020A	вм
Iron, Dissolved	87400		ug/l	250	42.0	5	10/21/10 13:30	10/26/10 03:49	EPA 3005A	1,6020A	вм
Lead, Dissolved	0.27	J	ug/l	2.50	0.250	5	10/21/10 13:30	10/26/10 03:49	EPA 3005A	1.6020A	ВМ
Magnesium, Dissolved	2120		ug/l	500	20.5	5	10/21/10 13:30	10/26/10 03:49	EPA 3005A	1,6020A	вм
Manganese, Dissolved	6030		ug/l	5 00	0.680	5	10/21/10 13:30	10/26/10 03:49	EPA 3005A	1,6020A	ВМ
Mercury, Dissolved	0.0624	L	ug/l	0.2000	0.0120	1	10/25/10 17:12	10/26/10 12:22	EPA 7470A	1,7470A	EZ
Nickel, Dissolved	11.4		ug/l	2,50	0.900	5	10/21/10 13:30	10/26/10 03:49	EPA 3005A	1,6020A	вм
Potassium, Dissolved	4670		ug/l	500	90.8	5	10/21/10 13:30	10/26/10 03:49	EPA 3005A	1,6020A	вм
Selenium, Dissolved	ND		ug/l	5.00	2.03	5	10/21/10 13:30	10/26/10 03:49	EPA 3005A	1,6020A	вм
Silver, Dissolved	ND		ug/l	2.50	0.425	5	10/21/10 13:30	10/26/10 03:49	EPA 3005A	1,6020A	ВМ
Sodium, Dissolved	4870		ug/l	500	91.0	5	10/21/10 13:30	10/26/10 03:49	EPA 3005A	1,6020A	вм
Thallium, Dissolved	ND		ug/l	2.50	0.155	5	10/21/10 13:30	10/26/10 03:49	EPA 3005A	1,6020A	ВМ
Vanadium, Dissolved	ND .	¥.	ug/l	2.50	0.385	5	10/21/10 13:30	10/26/10 03:49	EPA 3005A	1,6020A	BM
Zinc, Dissolved	27.8		ug/l	25.0	8,12	5	10/21/10 13:30	10/26/10 03:49	EPA 3005A	1,6020A	вм

Project Name:

SHL TASK 0002

Lab Number:

L1016506

Project Number:

AC001

Report Date:

11/03/10

SAMPLE RESULTS

Lab ID: Client ID: L1016506-08

DUP-102010-U

Sample Location:

DEVENS, MA

Matrix:

Water

Date Collected:

10/20/10 10:35

Date Received:

10/20/10

Field Prep:

Not Specified

						Cut a	12000	22-7		\$ 7019 STORE	
Parameter	Result	Qualifier	Units	RL	MDL.	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - West	lborough l	_ab									
Aluminum, Total	50.2		ug/l	50.0	9.56	5	10/21/10 13:30	0 10/26/10 04:49	EPA 3005A	1,6020A	вм
Antimony, Total	ND		ug/l	2.50	0.600	5	10/21/10 13:30	0 10/26/10 04:49	EPA 3005A	1,6020A	вм
Arsenic, Total	3160		ug/l	2.50	0 565	5	10/21/10 13:30	0 10/26/10 04:49	EPA 3005A	1,6020A	ВМ
Barium, Total	42.8		ug/I	2.50	0.475	5	10/21/10 13:30	0 10/26/10 04:49	EPA 3005A	1,6020A	вм
Beryllium, Total	ND		ug/I	2.50	0.295	5	10/21/10 13:30	0 10/26/10 04:49	EPA 3005A	1,6020A	вм
Cadmium, Total	ND		ug/l	2 50	0.295	5	10/21/10 13:30	0 10/26/10 04:49	EPA 3005A	1,6020A	ВМ
Calcium, Total	29200		ug/l	500	63.3	5	10/21/10 13:30	0 10/26/10 04:49	EPA 3005A	1,6020A	ВМ
Chromium, Total	0.97	J	ug/l	2.50	0.930	5	10/21/10 13:30	0 10/26/10 04:49	EPA 3005A	1,6020A	вм
Cobalt, Total	7.33		ug/l	2.50	0 265	5	10/21/10 13:30	0 10/26/10 04:49	EPA 3005A	1,6020A	ВМ
Copper, Total	0.62	J	ug/l	2.50	0.590	5	10/21/10 13:30	0 10/26/10 04:49	EPA 3005A	1,6020A	вм
Iron, Total	90900		ug/l	250	42.0	5	10/21/10 13:30	0 10/26/10 04:49	EPA 3005A	1,6020A	ВМ
Lead, Total	0.7	J.	ug/l	2.50	0.250	5	10/21/10 13:30	0 10/26/10 04:49	EPA 3005A	1,6020A	вм
Magnesium, Total	2240		ug/l	500	20.5	5	10/21/10 13:30	0 10/26/10 04:49	EPA 3005A	1,6020A	ВМ
Manganese, Total	6320		ug/l	5.00	0.680	5	10/21/10 13:30	0 10/26/10 04:49	EPA 3005A	1,6020A	вм
Mercury, Total	0.1153	Ĵ	ug/l	0.2000	0.0120	1	10/25/10 17:13	2 10/26/10 13:45	EPA 7470A	1,7470A	EZ
Nickel, Total	12.3		ug/l	2.50	0.900	5	10/21/10 13:30	0 10/26/10 04:49	EPA 3005A	1,6020A	вм
Potassium, Total	4940		ug/I	500	90.8	5	10/21/10 13:30	0 10/26/10 04:49	EPA 3005A	1,6020A	ВМ
Selenium, Total	ND		ug/I	5.00	2.03	5	10/21/10 13:30	0 10/26/10 04:49	EPA 3005A	1,6020A	ВМ
Silver, Total	ND		ug/l	2.50	0.425	5	10/21/10 13:30	0 10/26/10 04:49	EPA 3005A	1,6020A	вм
Sodium, Total	5210		ug/l	500	91.0	5	10/21/10 13:30	0 10/26/10 04:49	EPA 3005A	1,6020A	вм
Thallium, Total .	ND		ug/t	2,50	0.155	5	10/21/10 13:30	0 10/26/10 04:49	EPA 3005A	1,6020A	ВМ
Vanadium, Total	ND		ug/l	2,50	0.385	5	10/21/10 13:30	0 10/26/10 04:49	EPA 3005A	1,6020A	ВМ
Zinc, Total	25.2		ug/l	25.0	8.12	5	10/21/10 13:30	0 10/26/10 04:49	EPA 3005A	1,6020A	ВМ

Project Name: SHL TASK 0002

Lab Number: L1016506

10/21/10 13:30 10/26/10 04:55 EPA 3005A

Project Number: AC001 Report Date:

11/03/10

SAMPLE RESULTS

Lab ID: Client ID: L1016506-09 RB-102010-U

Sample Location:

DEVENS, MA

2.16

J

Date Collected:

10/20/10 12:15

Date Received:

10/20/10

Field Prep:

Not Specified

Matrix:	Water						1 24.4		1,442,547		
Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Westb	orough L	.ab									
Aluminum, Total	ND		ug/l	10.0	1.91	1	10/21/10 13:30	10/26/10 04:55	EPA 3005A	1,6020A	ВМ
Antimony, Total	ND		ug/l	0.500	0.120	1	10/21/10 13:30	10/26/10 04:55	EPA 3005A	1,6020A	вм
Arsenic, Total	15.0		ug/I	0.500	0.113	1	10/21/10 13:30	10/26/10 04:55	EPA 3005A	1,6020A	вм
Barium, Total	0.23	J.	ug/l	0.500	0.095	1	10/21/10 13:30	10/26/10 04:55	EPA 3005A	1,6020A	вм
Beryllium, Total	ND		ug/l	0.500	0.059	1	10/21/10 13:30	10/26/10 04:55	EPA 3005A	1,6020A	вм
Cadmium, Total	ND		ug/l	0.500	0.059	1	10/21/10 13:30	10/26/10 04:55	EPA 3005A	1,6020A	вм
Calcium, Total	335		ug/l	100	12.6	1	10/21/10 13:30	10/26/10 04:55	EPA 3005A	1,6020A	ВМ
Chromium, Total	ND		ug/l	0.500	0.186	1	10/21/10 13:30	10/26/10 04:55	EPA 3005A	1,6020A	ВМ
Cobalt, Total	ND		ug/l	0.500	0.053	1	10/21/10 13:30	10/26/10 04:55	EPA 3005A	1,6020A	ВМ
Copper, Total	0.14	J	ug/l	0.500	0.118	1	10/21/10 13:30	0 10/26/10 04:55	EPA 3005A	1,6020A	вм
Iron, Total	106		ug/l	50.0	8.41	1	10/21/10 13:30	0 10/26/10 04:55	EPA 3005A	1,6020A	вм
Lead, Total	ND		ug/l	0.500	0.050	1	10/21/10 13:30	10/26/10 04:55	EPA 3005A	1,6020A	вм
Magnesium, Total	62.6	J	ug/l	100	4.10	1	10/21/10 13:30	0 10/26/10 04:55	EPA 3005A	1,6020A	вм
Manganese, Total	18.4		ug/l	1.00	0.136	1	10/21/10 13:30	10/26/10 04:55	EPA 3005A	1,6020A	ВМ
Mercury, Total	0.1199	J	ug/I	0,2000	0.0120	- 1	10/25/10 17:13	2 10/26/10 13:47	EPA 7470A	1,7470A	EZ
Nickel, Total	0.25	J	ug/l	0.500	0,180	1	10/21/10 13:30	10/26/10 04:55	EPA 3005A	1,6020A	вм
Potassium, Total	ND		ug/I	100	18.2	1	10/21/10 13:30	10/26/10 04:55	EPA 3005A	1,6020A	ВМ
Selenium, Total	ND		ug/l	1.00	0.406	1	10/21/10 13:30	0 10/26/10 04:55	EPA 3005A	1,6020A	вм
Silver, Total	ND		ug/l	0.500	0.085	1	10/21/10 13:30	10/26/10 04:55	EPA 3005A	1,6020A	вм
Sodium, Total	714		ug/I	100	18.2	1	10/21/10 13:30	10/26/10 04:55	EPA 3005A	1,6020A	вм
Thallium, Total	ND	+ 30 - 30	ug/l	0.500	0.031	1 "	10/21/10 13:30	10/26/10 04:55	EPA 3005A	1,6020A	ВМ
Vanadium, Total	ND .	17 +	ug/l	0.500	0.077	10.1	10/21/10 13:30	10/26/10 04:55	EPA 3005A	1,6020A	ВМ
									The state of the s	0.52500	

5.00

ug/I

1.62

1,6020A

ВМ

Zinc, Total

Project Name:

SHL TASK 0002

Project Number: AC001

Lab Number:

L1016506

Report Date:

11/03/10

Method Blank Analysis Batch Quality Control

Parameter	Resu	It Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	
Total Metals - Westborough	Lab	for sample(s):	02,04,	06,08-09	Batch	: WG438	690-1	Contract of		100
Aluminum, Total	ND		ug/I	10.0	1.91	1	10/21/10 13:30	10/25/10 22:15	1,6020A	ВМ
Antimony, Total	ND		ug/l	0.500	0 120	4	10/21/10 13:30	10/25/10 22:15	1,6020A	вм
Arsenic, Total	ND		ug/l	0.500	0.113	Ť	10/21/10 13:30	10/25/10 22:15	1,6020A	ВМ
Barium, Total	ND		ug/l	0.500	0.095	1	10/21/10 13:30	10/25/10 22:15	1,6020A	ВМ
Beryllium, Total	ND		ug/l	0.500	0.059	1	10/21/10 13:30	10/25/10 22:15	1,6020A	ВМ
Cadmium, Total	ND		ug/l	0.500	0.059	1	10/21/10 13:30	10/25/10 22:15	1,6020A	ВМ
Calcium, Total	ND		ug/l	100	12.6	1	10/21/10 13:30	10/25/10 22:15	1,6020A	вм
Chromium, Total	ND		ug/l	0.500	0.186	1	10/21/10 13:30	10/25/10 22:15	1,6020A	вм
Cobalt, Total	ND		ug/l	0.500	0.053	1	10/21/10 13:30	10/25/10 22:15	1,6020A	вм
Copper, Total	ND		ug/l	0.500	0.118	1	10/21/10 13:30	10/25/10 22:15	1,6020A	вм
Iron, Total	ND		ug/l	50.0	8.41	1	10/21/10 13:30	10/25/10 22:15	1,6020A	вм
Lead, Total	ND		ug/l	0.500	0.050	1	10/21/10 13:30	10/25/10 22:15	1,6020A	вм
Magnesium, Total	ND		ug/l	100	4.10	4	10/21/10 13:30	10/25/10 22:15	1,6020A	вм
Manganese, Total	ND		ug/I	1.00	0.136	1	10/21/10 13:30	10/25/10 22:15	1,6020A	вм
Nickel, Total	ND		ug/l	0.500	0,180	4	10/21/10 13:30	10/25/10 22:15	1,6020A	вм
Potassium Total	ND		ug/l	100	18.2	-1	10/21/10 13:30	10/25/10 22:15	1,6020A	вм
Selenium, Total	ND		ug/l	1.00	0.406	1	10/21/10 13:30	10/25/10 22:15	1,6020A	вм
Silver, Total	0.13	4	ug/l	0.500	0.085	4	10/21/10 13:30	10/25/10 22:15	1,6020A	вм
Sodium, Total	ND		ug/l	100	18,2	1	10/21/10 13:30	10/25/10 22:15	1,6020A	вм
Thallium, Total	ND		ug/l	0.500	0.031	1	10/21/10 13:30	10/25/10 22:15	1,6020A	ВМ
Vanadium, Total	ND		ug/l	0.500	0.077	1	10/21/10 13:30	10/25/10 22:15	1,6020A	вм
Zinc, Total	ND		ug/l	5.00	1.62	1	10/21/10 13:30	10/25/10 22:15	1,6020A	вм
		8 4	15	-	2 6 9		40.00	9.2	14.	

Prep Information

Digestion Method: EPA 3005A

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytica Method	l Analyst
Dissolved Metals - West	borough Lab for samp	ole(s): 01	,03,05,0	7 Bat	ch: WG43	8691-1			
Aluminum, Dissolved	ND	ug/l	10.0	1.91	1	10/21/10 13:30	10/25/10 22:15	1,6020A	вм
Antimony, Dissolved	ND	ug/l	0.500	0.120	1	10/21/10 13:30	10/25/10 22:15	1,6020A	ВМ
Arsenic, Dissolved	ND	ug/l	0.500	0.113	1	10/21/10 13:30	10/25/10 22:15	1,6020A	вм
Barium, Dissolved	ND	ug/l	0.500	0.095	1	10/21/10 13:30	10/25/10 22:15	1,6020A	вм



Project Name: SHL TASK 0002

Lab Number:

L1016506

Project Number: AC001

Report Date:

11/03/10

Method Blank Analysis Batch Quality Control

Beryllium, Dissolved	ND		ug/I	0.500	0.059	1	10/21/10 13:30	10/25/10 22:15	1,6020A	вм
Cadmium, Dissolved	ND		ug/l	0.500	0.059	1	10/21/10 13:30	10/25/10 22:15	1,6020A	вм
Calcium, Dissolved	ND		ug/l	100	12.6	1	10/21/10 13:30	10/25/10 22:15	1,6020A	вм
Chromium, Dissolved	ND		ug/l	0.500	0.186	1	10/21/10 13:30	10/25/10 22:15	1,6020A	ВМ
Cobalt, Dissolved	ND		ug/l	0.500	0.053	1	10/21/10 13:30	10/25/10 22:15	1,6020A	ВМ
Copper, Dissolved	ND		ug/l	0.500	0.118	1	10/21/10 13:30	10/25/10 22:15	1,6020A	ВМ
Iron, Dissolved	ND		ug/l	50.0	8.41	1	10/21/10 13:30	10/25/10 22:15	1,6020A	вм
Lead, Dissolved	ND		ug/l	0.500	0.050	1	10/21/10 13:30	10/25/10 22:15	1,6020A	вм
Magnesium, Dissolved	ND		ug/l	100	4.10	1	10/21/10 13:30	10/25/10 22:15	1,6020A	вм
Manganese, Dissolved	ND		ug/l	1.00	0.136	1	10/21/10 13:30	10/25/10 22:15	1,6020A	вм
Nickel, Dissolved	ND		ug/l	0.500	0.180	1	10/21/10 13:30	10/25/10 22:15	1,6020A	ВМ
Potassium, Dissolved	ND		ug/l	100	18.2	1	10/21/10 13:30	10/25/10 22:15	1,6020A	вм
Selenium, Dissolved	ND		ug/l	1.00	0.406	1	10/21/10 13:30	10/25/10 22:15	1,6020A	ВМ
Silver, Dissolved	0.13	J	ug/l	0.500	0.085	1	10/21/10 13:30	10/25/10 22:15	1,6020A	вм
Sodium, Dissolved	ND		ug/l	100	18.2	1	10/21/10 13:30	10/25/10 22:15	1,6020A	ВМ
Thallium, Dissolved	ND		ug/l	0.500	0.031	*	10/21/10 13:30	10/25/10 22:15	1,6020A	ВМ
Vanadium, Dissolved	ND		ug/l	0.500	0.077	4	10/21/10 13:30	10/25/10 22:15	1,6020A	вм
nc, Dissolved	ND		ug/I	5.00	1,62	1	10/21/10 13:30	10/25/10 22:15	1,6020A	вм

Prep Information

Digestion Method: EPA 3005A

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	
Dissolved Metals - Westl	orough Lab for samp	ole(s): 01,0	03,05,	07 Ba	tch: WG43	9295-1	. × +	8 y 4 2	
Mercury, Dissolved	ND	ug/l	0,2000	0.0120	. 5-1	. 10/25/10 17:12	10/26/10 12:0	6 1,7.470A	EZ

Prep Information

Digestion Method: EPA 7470A

Parameter	Result Qualifie	r Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	l Analyst
Total Metals - Westb	orough Lab for sample((s): 02,04,0	06,08-09	Batch	: WG439	297-1			
Mercury, Total	ND	ug/l	0.2000	0.0120	1	10/25/10 17:12	10/26/10 12:24	4 1,7470A	EZ

Project Name: SHL TASK 0002

Project Number: AC001

Lab Number:

L1016506

Report Date:

11/03/10

Method Blank Analysis Batch Quality Control

Prep Information

Digestion Method: EPA 7470A

Project Name:

SHL TASK 0002

Project Number: AC001 Lab Number:

L1016506

Report Date:

Parameter	LCS %Recovery Qual	LCSD %Recovery Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Westborough Lab A	Associated sample(s): 02,04,06,08-09	Batch: WG438690-2				
Aluminum, Total	96		80-120			
Antimony, Total	100		80-120			
Arsenic, Total	102	b.	80-120	-		
Barium, Total	99		80-120	-		
Beryllium, Total	100	+	80-120			
Cadmium, Total	109		80-120	4		
Calcium, Total	103	*	80-120	4		
Chromium, Total	,98		80-120	+		
Cobalt, Total	104 ~	4	80-120	-		
Copper, Total	105		80-120			
Iron, Total	96		80-120	2		
Lead, Total	107	÷	80-120	8		
Magnesium, Total	102	*	80-120	-		
Manganese, Total	107	30	80-120	+		
Nickel, Total	104		80-120	4		
Potassium, Total	101		80-120			
Selenium, Total	103 -	E.	80-120			
Silver, Total	97	9	80-120			
Sodium, Total	101	***	80-120			
Thallium, Total	93	nien	80-120	4		
Vanadium, Total	99	40.00	80-120	ŧ*		

Lab Number:

L1016506

Report Date:

11/03/10

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Westborough L	ab Associated sample(s): 02,04,06,08-09	Batch: WG438690-2		15	

Project Name:

Project Number:

SHL TASK 0002

AC001

Project Name:

SHL TASK 0002

Project Number:

AC001

Lab Number:

L1016506

Report Date:

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Dissolved Metals - Westborough Lab	Associated sample(s): 01,03,05,07	Batch: WG438691-2			
Aluminum, Dissolved	96	9	80-120		
Antimony, Dissolved	100		80-120		
Arsenic, Dissolved	102		80-120	197	
Barium, Dissolved	99		80-120		
Beryllium, Dissolved	100 %	211	80-120		
Cadmium, Dissolved	109		80-120		
Calcium, Dissolved	103	\$77	80-120	4	
Chromium, Dissolved	.98	21	80-120	-2	
Cobalt, Dissolved	104 -	4	80-120	-5	
Copper, Dissolved	105	9-1	80-120	3	
Iron, Dissolved	96	21	80-120	2	
Lead, Dissolved	107	Ş1	80-120	7	
Magnesium, Dissolved	102		80-120	- 2	
Manganese, Dissolved	107		80-120	15	
Nickel, Dissolved	104 -		80-120	*	
Potassium, Dissolved	101	*	80-120	18	
Selenium, Dissolved	103		80-120	.20	
Silver, Dissolved	97	9	80-120	-	
Sodium, Dissolved	101	9-1	80-120		
Thallium, Dissolved	93		80-120		
Vanadium, Dissolved	99	10	80-120	4	

Lab Number:

L1016506

Report Date:

11/03/10

Project Number:	AC001	1 9			

SHL TASK 0002

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Dissolved Metals - Westborough Lab	Associated sample(s): 01,03,05,07	Batch: WG438691-2			
Zinc, Dissolved	105	4	80-120	3-3	
Dissolved Metals - Westberough Lab	Associated sample(s): 01,03,05,07	Batch: WG439295-2			
Mercury, Dissolved	111	(5)	80-120		20
Total Metals - Westborough Lab Ass	ociated sample(s): 02,04,06,08-09	Batch: WG439297-2			
Mercury, Total	111	Ti-	80-120		20

Project Name:

Project Name:

SHL TASK 0002

Project Number:

AC001

Lab Number:

L1016506

Report Date:

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Recovery Qual Limits	RPD C	RPD Qual Limits
Total Metals - Westborough Le SHM-10-15-102010-U	ab Associated	sample(s): (02,04,06,08	-09 QC Batcl	h ID: W	G438690-3	WG438690-4	QC Sample: L10	16506-04	Client ID:
Aluminum, Total	312.	2000	2300	99		2360	102	80-120	3	20
Antimony, Total	ND	500	496	99		502	100	80-120	1	20
Arsenic, Total	6090	120	- 6100	8		6210	100	80-120	2	20
Barium, Total	42.4	2000	2040	100		2060	101	80-120	1	20
Beryllium, Total	ND	50	50.5	101		50.2	100	80-120	1	20
Cadmium, Total	ND	51	55.6	109		56.3	110	80-120	1	20
Calcium, Total	51200	10000	59800	86		60800	96	80-120	2	20
Chromium, Total	ND	200	192	96		196	98	80-120	2	20
Cobalt, Total	22.3	500	515	98		526	101	80-120	2	20
Copper, Total	1.2J	250	259	104		262	105	80-120	1	20
Iron, Total	50400	1000.	50300	0		51800	140	80-120	3	20
Lead, Total	1.48J	510	527	103		530	104	80-120	1	20
Magnesium, Total	6440	10000	16400	100		16900	105	80-120	3	20
Manganese, Total	8440	500	8630	38		8890	90	80-120	3	20
Nickel, Total	16.2	500	530	103		538	104	80-120	1	20
Potassium, Total	5350	10000	15400	100		15700	104	80-120	2	20
Selenium, Total	ND	120	123	102		124	103	80-120	1	20
Silver, Total	ND	50	48.7	97		49.4	99	80-120	1	20
Sodium, Total	11600	10000	21500	99		21800	102	80-120	1	20
Thallium, Total	ND	120	111	92		112	93	80-120	1	20
Vanadium, Total	ND	500	475	95		482	96	80-120	1	20

Project Name:

SHL TASK 0002

Project Number:

AC001

Lab Number:

L1016506

Report Date:

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Westborough Lab SHM-10-15-102010-U	Associated	sample(s):	02,04,06,08	-09 QC Batch II	D: WG438690-3	WG438690-4	QC Sample: L10	16506-04	Client ID:
Zinc, Total	33.6J	500	530	106	532	106	80-120	0	20

Project Name:

SHL TASK 0002

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Project Number:

AC001

Lab Number:

L1016506

Report Date:

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Dissolved Metals - Westboroug SHM-10-15-102010-F	gh Lab Assoc	iated sample	e(s): 01,03,	05,07 QC Batch	ID: WG438691-3	3 WG438691-4	QC Sample: L1	016506-03	Client ID:
Aluminum, Dissolved	ND	2000	2050	102	2070	104	80-120	1	20
Antimony, Dissolved	ND	500	519	104	521	104	80-120	0	20
Arsenic, Dissolved	6230	120 -	6200	0	6240	8	80-120	1	20
Barium, Dissolved	43.0	2000	2110	103	2120	104	80-120	0	20
Beryllium, Dissolved	ND	50	50.8	102	52.9	106	80-120	4	20
Cadmium, Dissolved	ND	51 .	58.1	114	58.8	115	80-120	1	20
Calcium, Dissolved	51800	10000	61700	99	62000	102	80-120	0	20
Chromium, Dissolved	ND	200 .	200	100	203	102	80-120	1	20
Cobalt, Dissolved	23.3	500	536	102	539	103	80-120	1	20
Copper, Dissolved	ND	250	268	107	270	108	80-120	1	20
Iron, Dissolved	52000	1000	51700	0	52400	40	80-120	1	20
Lead, Dissolved	0.7J	510	540	106	536	105	80-120	1	20
Magnesium, Dissolved	6530	10000	17100	106	17200	107	80-120	1	20
Manganese, Dissolved	8680	50 Q ·	9060	76	9110	86	80-120	1	20
Nickel, Dissolved	15.8	500	553	107	553	107	80-120	0	20
Potassium, Dissolved	5500	10000	16100	106	16300	108	80-120	1	20
Selenium, Dissolved	ND	120	126	105	127	106	80-120	1	20
Silver, Dissolved	ND	50	50.5	101	50.6	101	80-120	0	20
Sodium, Dissolved	12400	10000	22200	98	22600	102	80-120	2	20
Thallium, Dissolved	ND	120	114	95	113	94	80-120	1	20
Vanadium, Dissolved	ND	500	495	99	499	100	80-120	1	20

Project Name:

SHL TASK 0002

2.

Project Number:

AC001

Lab Number:

L1016506

Report Date:

Parameter	Native Sample	MS . Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Dissolved Metals - Westborough SHM-10-15-102010-F	Lab Associ	ated sample(s) : 01,03,0	05,07 QC Batch I	D: WG438691-	3 WG438691-4	QC Sample: L	1016506-03	Client ID
Zinc, Dissolved	42.8J	500	562	112	568	114	80-120	1	20
Dissolved Metals - Westborough SHM-10-15-102010-F	Lab Associ	ated sample(s): 01,03,0	05,07 QC Batch I	D: WG439295-	3 WG439295-4	QC Sample: L	1016506-03	Client ID
Mercury, Dissolved	0.0551J	1	1,305	130	Q 1. 24 8	125	Q 80-120	4	20
Total Metals - Westborough Lab / SHM-10-15-102010-U	Associated	sample(s): 02	2,04,06,08	3-09 QC Batch ID	: WG439297-3	WG439297-4	QC Sample: L10)16506-04	Client ID:
Mercury, Total	0.07762J	1	1.271	127	1.273	127	Q 80-120	0	20

INORGANICS & MISCELLANEOUS



Project Name: SHL TASK 0002

Project Number: AC001

Lab Number:

L1016506

Report Date:

11/03/10

SAMPLE RESULTS

Lab ID:

L1016506-02

Client ID:

SHM-10-12-102010-U

Sample Location:

DEVENS, MA

Matrix:

Water

Date Collected:

10/20/10 10:35

Date Received:

10/20/10

Field Prep:

Parameter	Result	Qualifier Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Wes	tborough Lab								
Alkalinity, Total	240	mg CaCO3/L	2.0	NA	1		10/25/10 11:38	30,2320B	SD
Solids, Total Suspended	16	mg/l	5.0	NA	1		10/25/10 13:40	30,2540D	DW
Nitrogen, Ammonia	3.80	mg/l	0.075	0.017	1	10/21/10 13:30	10/26/10 20:05	30,4500NH3-BH	AT
Nitrogen, Nitrite	ND	mg/l	0.02	0.002	1		10/20/10 23:58	30,4500NO2-B	DD
Sulfide	ND	mg/t	0.10	0.10	1	10/25/10 16:50	10/25/10 17:50	30,4500S2-AD	AT
Chemical Oxygen Demand	33	mg/l	20	7.0	1		10/26/10 13:09	44,410.4	DW
Dissolved Organic Carbon	4.3	mg/l	2.0	2.0	2	10/20/10 23:10	10/27/10 07:41	30,5310C	DW
Anions by Ion Chromatog	raphy - West	borough Lab							
Chloride	4.4	mg/l	0.50	0.07	1	-	10/22/10 00:26	44,300.0	AU
Nitrogen, Nitrate	ND	mg/l	0.05	0.01	1		10/22/10 00:26	44,300.0	AU
Sulfate	1.4	mg/l	1.0	0.12	1	=	10/22/10 00:26	44,300.0	AU

Project Name:

SHL TASK 0002

Lab Number:

L1016506

Project Number: AC001

Report Date:

11/03/10

SAMPLE RESULTS

Lab ID:

L1016506-04

Client ID:

SHM-10-15-102010-U

Sample Location:

DEVENS, MA

Matrix:

Water

Date Collected:

10/20/10 10:50

Date Received:

10/20/10

Field Prep:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - West	borough Lab									
Alkalinity, Total	230		mg CaCO3/L	2.0	NA	1	-	10/25/10 11:38	30,2320B	SD
Solids, Total Suspended	140		mg/l	5.0	NA	1	2	10/25/10 13:40	30,2540D	DW
Nitrogen, Ammonia	2.15		mg/l	0.075	0.017	1	10/21/10 13:30	10/26/10 20:05	30,4500NH3-BH	AT
Nitrogen, Nitrite	0.01	J	mg/l	0.02	0.002	1	,	10/20/10 23:58	30,4500NO2-B	DD
Sulfide	ND		mg/l	0.10	0.10	1	10/25/10 16:50	10/25/10 17:50	30,4500S2-AD	AT
Chemical Oxygen Demand	64		mg/l	20	7.0	1		10/26/10 13:09	44,410.4	DW
Dissolved Organic Carbon	4.0		mg/l	2.0	2.0	2	10/20/10 23:10	10/27/10 07:41	30,5310C	DW
Anions by Ion Chromatog	raphy - West	borough	Lab							
Chloride	12		mg/l	0.50	0.07	1	100	10/22/10 00:14	44,300.0	AU
Nitrogen, Nitrate	ND		mg/l	0.05	0.01	1		10/22/10 00:14	44,300.0	AU
Sulfate	10		mg/l	1.0	0.12	1	-	10/22/10 00:14	44,300.0	AU

Project Name: SHL TASK 0002

Project Number: AC001

Lab Number:

L1016506

Report Date:

11/03/10

SAMPLE RESULTS

Lab ID:

L1016506-06

Client ID:

SHM-10-16-102010-U

Sample Location:

DEVENS, MA

Matrix:

Water

Date Collected:

10/20/10 14:35

Date Received:

10/20/10

Field Prep:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry -	Westborough Lab									
Alkalinity, Total	320	mo	CaCO3/L	2.0	NA	1	2	10/25/10 11:38	30.2320B	SD

General Chemistry - wes	tool ough Lab								
Alkalinity, Total	320	mg CaCO3/L	2.0	NA	1		10/25/10 11:38	30,2320B	SD
Solids, Total Suspended	170	mg/l	5.0	NA	1	*	10/25/10 13:40	30,2540D	DW
Nitrogen, Ammonia	3.34	mg/l	0.075	0.017	1	10/21/10 13:30	10/26/10 20:08	30,4500NH3-BH	AT
Nitrogen, Nitrite	ND	mg/l	0.02	0.002	1		10/20/10 23:59	30,4500NO2-B	DD
Sulfide	ND	mg/l	0.10	0.10	1	10/25/10 16:50	10/25/10 17:50	30,4500S2-AD	AT
Chemical Oxygen Demand	57	mg/l	20	7.0	1	*	10/26/10 13:09	44,410.4	DW
Dissolved Organic Carbon	10	mg/I	8.0	8,0	8	10/20/10 23:10	10/27/10 07:41	30,5310C	DW
Anions by Ion Chromatog	graphy - Westborou	igh Lab							
Chloride	28	mg/l	0.50	0.07	1	8	10/21/10 23:26	44,300.0	AU
Nitrogen, Nitrate	ND	mg/l	0.05	0.01	1	*	10/21/10 23:26	44,300.0	AU
Sulfate	3.2	mg/l	1.0	0.12	1		10/21/10 23:26	44,300.0	AU

Project Name: SHL TASK 0002

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Lab Number:

L1016506

Project Number: AC001 Re

mg/l

mg/l

mg/l

Report Date:

11/03/10

SAMPLE RESULTS

Lab ID:

L1016506-08

Client ID:

Sample Location:

DUP-102010-U DEVENS, MA

Matrix:

Chloride

Sulfate

Nitrogen, Nitrate

Water

Anions by Ion Chromatography - Westborough Lab

4.4

ND

1.3

Date Collected:

10/20/10 10:35

Date Received:

10/22/10 00:38

10/22/10 00:38

10/22/10 00:38

10/20/10

Field Prep:

Not Specified

44,300.0

44,300.0

44,300.0

AU

AU

AU

Parameter	Result	Qualifier Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Wes	tborough Lab								
Alkalinity, Total	230	mg CaCO3	/L 2.0	NA	1		10/25/10 11:38	30,2320B	SD
Solids, Total Suspended	14	mg/l	5.0	NA	1	140	10/25/10 13:40	30,2540D	DW
Nitrogen, Ammonia	3.61	mg/l	0.075	0.017	1	10/21/10 13:30	10/26/10 20:09	30,4500NH3-BH	AT
Nitrogen, Nitrite	ND	mg/l	0.02	0.002	1		10/20/10 23:59	30,4500NO2-B	DD
Sulfide	ND	mg/I	0.10	0.10	1	10/25/10 16:50	10/25/10 17:50	30,4500S2-AD	AT
Chemical Oxygen Demand	41	mg/l	20	7.0	1	*	10/26/10 13:09	44,410.4	DW
Dissolved Organic Carbon	4.5	mg/l	2.0	2.0	2	10/20/10 23:10	10/27/10 07:41	30,5310C	DW

0.07

0.01

0.12

1

0.50

0.05

1.0

Project Name:

SHL TASK 0002

Lab Number:

L1016506

Project Number: AC001

Report Date:

11/03/10

Method Blank Analysis Batch Quality Control

Parameter	Result Qua	alifier Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analys
General Chemistry - Wes	tborough Lab f	or sample(s):	02,04,06,0	8 Batch	WG438	561-2			
Nitrogen, Nitrite	ND	mg/	0.02	0.002	1	4	10/20/10 23:57	30,4500NO2-B	DD
General Chemistry - Wes	tborough Lab f	or sample(s):	02,04,06,0	8 Batch	WG438	639-1			
Nitrogen, Ammonia	0.0203	J mg/	0.075	0.017	1	10/21/10 13:30	10/26/10 19:54	30,4500NH3-BH	AT
Anions by Ion Chromatog	raphy - Westbo	rough Lab fo	r sample(s):	02,04,0	6,08 Ba	tch: WG43886	02-1		
Chloride	ND	mg/	0.50	0.07	1	÷	10/21/10 19:38	44,300.0	AU
Nitrogen, Nitrate	ND	mg/	0.05	0.01	1	*	10/21/10 19:38	44,300.0	AU
Sulfate	0.16	J mg/	1.0	0.12	1	*	10/21/10 19:38	44,300.0	AU
General Chemistry - Wes	tborough Lab f	or sample(s):	02,04,06,0	8 Batch	: WG439	136-1			
Solids, Total Suspended	ND	mg/	5.0	NA	1	÷	10/25/10 13:40	30,2540D	DW
General Chemistry - Wes	tborough Lab f	or sample(s):	02,04,06,0	8 Batch	WG439	344-1			
Sulfide	ND	mg/	0.10	0.10	-1	10/25/10 16:50	10/25/10 17:50	30,4500S2-AD	AT
General Chemistry - Wes	tborough Lab f	or sample(s):	02,04,06,0	8 Batch	: WG439	362-1			
Chemical Oxygen Demand	ND	mg/	20	7.0	1		10/26/10 12:57	44,410.4	DW
General Chemistry - Wes	tborough Lab f	or sample(s):	02,04,06,0	8 Batch	: WG439	450-1			
Alkalinity, Total	ND	mg CaC	O3/L 2.0	NA	1		10/25/10 11:38	30,2320B	SD
General Chemistry - Wes	tborough Lab f	or sample(s):	02,04,06,0	8 Batch	: WG439	746-1			
Dissolved Organic Carbon	ND	mg/	1.0	1.0	1	10/20/10 23:10	10/27/10 07:41	30,5310C	DW

Project Name:

SHL TASK 0002

Project Number: AC001

Lab Number:

L1016506

Report Date:

Parameter	LCS %Recovery	Qual %	LCSD 6Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab	Associated sample(s)	: 02,04,06,0	8 Batch: Wo	3438561-1				
Nitrogen, Nitrite	100		10		90-110	-		20
General Chemistry - Westborough Lab	Associated sample(s)	: 02,04,06,0	8 Batch: Wo	3438639-2				
Nitrogen, Ammonia	100		3		80-120	-		20
Anions by Ion Chromatography - Westb	orough Lab Associate	ed sample(s)	: 02,04,06,08	Batch: W	/G438802-2			
Chloride	100		*		90-110			
Nitrogen, Nitrate	100				90-110			
Sulfate	405		3		90-110			
General Chemistry - Westborough Lab	Associated sample(s)): 02,04,06,0	8 Batch: W	G439344-2				
Sulfide	100		- 1		75-125	1,2		
General Chemistry - Westborough Lab	Associated sample(s)): 02,04,06,0	8 Batch: We	G439362-2				
Chemical Oxygen Demand	.101				95-105			
General Chemistry - Westborough Lab	Associated sample(s): 02,04,06,0	8 Batch: W	G439450-2				
Alkalinity, Total	101				80-115	-		11

Project Name:

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L1016506

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Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
General Chemistry - Westborough L	ab Associated sample(s): 02,04,06,0	8 Batch: WG439746-2			
Dissolved Organic Carbon	106		90-110	12.0	

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Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Recovery Qual Limits	RPD Qua	RPD Limits
General Chemistry - Westbor 102010-U	rough Lab Asso	ociated sampl	le(s): 02,0	4,06,08 QC	Batch ID	WG43856	1-3 QC San	nple: L1016506-04	Client ID:	SHM-10-15
Nitrogen, Nitrite	0.01J	0.1	0.10	100		-		85-115		20
General Chemistry - Westbor 102010-U	rough Lab Asso	ociated samp	le(s): 02,0	4,06,08 QC	Batch ID	: WG43863	9-3 QC Sar	nple: L1016506-04	Client ID:	SHM-10-15
Nitrogen, Ammonia	2.15	4	6.04	97		0.2	€.	80-120	-	20
Anions by Ion Chromatograp Client ID: SHM-10-15-1020		igh Lab Asso	ciated sar	nple(s): 02,04,	06,08	QC Batch IE	D: WG438802-	3 WG438802-4 C	C Sample:	L1016506-0
Chloride	12	4 -	15	75		15	75	40-151	0	18
Nitrogen, Nitrate	ND	0.4	0.43	108		0.43	108	80-122	0	15
Sulfate	10.	8	19	112		19	112	60-140	0	20
General Chemistry - Westbor 102010-U	rough Lab Ass	ociated samp	le(s): 02,0	4,06,08 QC	Batch ID	: WG43934	4-3 QC Sar	mple: L1016506-04	Client ID:	SHM-10-15
Sulfide	ND	0.26	0.25	96		-	₩.	75-125	200	20
General Chemistry - Westbo 102010-U	rough Lab Ass	ociated samp	le(s): 02,0	4,06,08 QC	Batch ID	: WG43936	2-3 QC Sar	mple: L1016506-04	Client ID:	SHM-10-15
Chemical Oxygen Demand	64.	238	290	94		102	125	80-120	*	20
General Chemistry - Westbor 102010-U	rough Lab Ass	ociated samp	le(s): 02,0	4,06,08 QC	Batch ID	: WG43945	0-3 QC Sar	mple: L1016506-04	Client ID:	SHM-10-15
Alkalinity, Total	230	100	280	46	Q		-	86-116		11
General Chemistry - Westbo 102010-U	rough Lab Ass	ociated samp	le(s): 02,0	4,06,08 QC	Batch ID	: WG43974	6-3 QC Sar	mple: L1016506-04	Client ID:	SHM-10-15
Dissolved Organic Carbon	4.0	8-	12	99		4.	÷.	79-120	4	20

Lab Duplicate Analysis Batch Quality Control

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Parameter	Nat	ive Sample	Duplicate Sample Units			RPD C	Qual RF	D Limits
General Chemistry - Westborough Lab 102010-U	Associated sample(s):	02,04,06,08	QC Batch ID:	WG438561-4	QC Sample:	L1016506-0	4 Client ID:	SHM-10-15-
Nitrogen, Nitrite	17.	0.01J		0.01J	mg/l	NC		20
General Chemistry - Westborough Lab 102010-U	Associated sample(s):	02,04,06,08	QC Batch ID:	WG438639-4	QC Sample:	L1016506-0	4 Client ID:	SHM-10-15-
Nitrogen, Ammonia		2.15		2.22	mg/l	3		20
Anions by Ion Chromatography - Westl SHM-10-15-102010-U	oorough Lab Associated	d sample(s):	02,04,06,08	QC Batch ID: \	NG438802-5	QC Sample:	L1016506-0	4 Client ID:
Chloride		12.		11	mg/l	9		18
Nitrogen, Nitrate		ND		ND	mg/l	NC		15
Sulfate	1.1	10.		10	mg/l	0		20
General Chemistry - Westborough Lab	Associated sample(s):	02,04,06,08	QC Batch ID:	WG439136-2	QC Sample:	L1016506-04	4 Client ID:	SHM-10-15-
Solids, Total Suspended	0474	140		180	mg/l	25		32
General Chemistry - Westborough Lab 102010-U	Associated sample(s):	02,04,06,08	QC Batch ID:	WG439344-4	QC Sample:	L1016506-04	4 Client ID:	SHM-10-15-
Sulfide		ND		ND	mg/l	NC		20
General Chemistry - Westborough Lab 02010-U	Associated sample(s):	02,04,06,08	QC Batch ID:	WG439362-4	QC Sample:	L1016506-04	4 Client ID:	SHM-10-15-
Chemical Oxygen Demand	λ	64.		62	mg/l	3		20

Lab Duplicate Analysis Batch Quality Control

Project Name: SHL TASK 0002

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Parameter	Nativ	Duplica	te Sample	Units	RPD	D Limits		
General Chemistry - Westborough Lab 102010-U	Associated sample(s):	02,04,06,08	QC Batch ID:	WG439450-4	QC Sample:	L1016506-04	Client ID:	SHM-10-15-
Alkalinity, Total	7.	230		220	mg CaCO3/L	4		11
General Chemistry - Westborough Lab 102010-U	Associated sample(s):	02,04,06,08	QC Batch ID:	WG439746-4	QC Sample:	L1016506-04	Client ID:	SHM-10-15-
Dissolved Organic Carbon	3.0	4.0		3.5	mg/l	13		20

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Sample Receipt and Container Information

Were project specific reporting limits specified?

YES

Reagent H2O Preserved Vials Frozen on: NA

Cooler Information Custody Seal

Cooler

В

Present/Intact

A

Present/Intact

Container Info	ormation Container Type	Cooler	рН	Temp deg C	Pres	Seal	Analysis(*)
L1016506-01A	Plastic 250ml HNO3 preserved	A	<2	2	Y	Present/Intact	DOD-BA-6020S(180),DOD-FE-6020S(180),DOD-MG-6020S(180),DOD-MG-6020S(180),DOD-SB-6020S(180),DOD-CR-6020S(180),DOD-TL-6020S(180),DOD-CO-6020S(180),DOD-AG-6020S(180),DOD-NA-6020S(180),DOD-NI-6020S(180),DOD-NI-6020S(180),DOD-PB-6020S(180),DOD-AS-6020S(180),DOD-AS-6020S(180),DOD-AS-6020S(180),DOD-BE-6020S(180),DOD-BE-6020S(180),DOD-CU-6020S(180),DOD-CU-6020S(180),DOD-CU-6020S(180),DOD-CU-6020S(180),DOD-AS-6020S(180),DOD-AS-6020S(180),DOD-SE-6020S

Project Name: SHL TASK 0002

Project Number: AC001

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Container Info	ormation			Temp			
Container ID	Container Type	Cooler	рН	deg C	Pres	Seal	Analysis(*)
L1016506-02A	Plastic 250ml HNO3 preserved	A	<2	2	Y	Present/Intact	DOD-CD-6020T(180),DOD-NA-6020T(180),DOD-V-6020T(180),DOD-ZN-6020T(180),DOD-NI-6020T(180),DOD-SE-6020T(180),DOD-CA-6020T(180),DOD-CA-6020T(180),DOD-MN-6020T(180),DOD-HG-7470T(28),DOD-AG-6020T(180),DOD-AG-6020T(180),DOD-AG-6020T(180),DOD-AS-6020T(180),DOD-BA-6020T(180),DOD-BA-6020T(180),DOD-CR-6020T(180),DOD-K-6020T(180),DOD-K-6020T(180),DOD-BE-6020T(180),DOD-BE-6020T(180),DOD-BE-6020T(180),DOD-HG-6020T(180),DOD-FE-6020T(180),DOD-PB-6020T(180),DOD-PB-6020T(180),DOD-PB-6020T(180),DOD-PB-6020T(180),DOD-PB-6020T(180),DOD-PB-6020T(180),DOD-PB-6020T(180),DOD-PB-6020T(180),DOD-PB-6020T(180),DOD-PB-6020T(180),DOD-PB-6020T(180),DOD-PB-6020T(180),DOD-PB-6020T(180),DOD-PB-6020T(180),DOD-PB-6020T(180),DOD-PB-6020T(180)
L1016506-02B	Plastic 500ml unpreserved	Α	7	2	Y	Present/Intact	SO4-300(28),CL-300(28),NO3- 300(2)
L1016506-02C	Plastic 250ml unpreserved	Α	7	2	Y	Present/Intact	NO2-4500NO2(2)
L1016506-02D	Plastic 250ml unpreserved	Α	N/A	2	Y	Present/Intact	ALK-T-2320(14)
L1016506-02E	Plastic 500ml H2SO4 preserved	Α	<2	2	Y	Present/Intact	COD-410(28),NH3-4500(28)
L1016506-02F	Plastic 250ml Zn Acetate/NaOH pr	Α	>12	2	Y	Present/Intact	SULFIDE-4500(7)
L1016506-02G	Plastic 250ml Zn Acetate/NaOH pr	Α	>12	2	Y	Present/Intact	SULFIDE-4500(7)
L1016506-021	Plastic 1000ml unpreserved	Α	7	2	Y	Present/Intact	TSS-2540(7)
L1016506-02J	Vial H2SO4 preserved split	Α	N/A	2	Y	Present/Intact	DOC-5310(28)
L1016506-02K	Vial H2SO4 preserved split	Α	N/A	2	Y	Present/Intact	DOC-5310(28)
L1016506-02X	Amber 250ml unpreserved	Α	7	2	Y	Present/Intact	DOC-5310(28)

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Container Info		Zane.	e.Ka	Temp			
Container ID	Container Type	Cooler	рН	deg C	Pres	Seal	Analysis(*)
L1016506-03A	Plastic 250ml HNO3 preserved	A	<2	2	Y	Present/Intact	DOD-BA-6020S(180), DOD-FE-6020S(180), DOD-MG-6020S(180), DOD-SB-6020S(180), DOD-CR-6020S(180), DOD-MN-6020S(180), DOD-L-6020S(180), DOD-AG-6020S(180), DOD-AG-6020S(180), DOD-NI-6020S(180), DOD-NI-6020S(180), DOD-NI-6020S(180), DOD-NI-6020S(180), DOD-SB-6020S(180), DOD-BE-6020S(180), DOD-BE-6020S(180), DOD-CU-6020S(180), DOD-CU-6020S(180), DOD-CU-6020S(180), DOD-CU-6020S(180), DOD-CU-6020S(180), DOD-K-6020S(180), DOD-K-6020S(180), DOD-K-6020S(180), DOD-K-6020S(180), DOD-K-6020S(180), DOD-K-6020S(180), DOD-K-6020S(180), DOD-SE-6020S(180), DOD-SE-6020S(180), DOD-HG-7470S(28)
L1016506-03B	Plastic 250ml HNO3 preserved	A	<2	2	Y	Present/Intact	DOD-BA-6020S(180),DOD-FE-6020S(180),DOD-MG-6020S(180),DOD-SB-6020S(180),DOD-CR-6020S(180),DOD-TL-6020S(180),DOD-TL-6020S(180),DOD-AG-6020S(180),DOD-AG-6020S(180),DOD-NI-6020S(180),DOD-NI-6020S(180),DOD-NI-6020S(180),DOD-V-6020S(180),DOD-V-6020S(180),DOD-CD-6020S(180),DOD-CD-6020S(180),DOD-CD-6020S(180),DOD-CD-6020S(180),DOD-CD-6020S(180),DOD-CD-6020S(180),DOD-CD-6020S(180),DOD-CN-6020S(180),DOD-AL-6020S(180),DOD-AL-6020S(180),DOD-K-6020S(180),DOD-SE-6020S(180),DOD-SE-6020S(180),DOD-SE-6020S(180),DOD-SE-6020S(180),DOD-SE-6020S(180),DOD-HG-7470S(28)

Project Name: SHL TASK 0002

Project Number: AC001

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Container Info	ormation			Temp			
Container ID	Container Type	Cooler	pН	deg C	Pres	Seal	Analysis(*)
L1016506-04A	Plastic 250ml HNO3 preserved	A	<2	2	Y	Present/Intact	DOD-CD-6020T(180), DOD-NA-6020T(180), DOD-V-6020T(180), DOD-V-6020T(180), DOD-NI-6020T(180), DOD-SE-6020T(180), DOD-SE-6020T(180), DOD-CA-6020T(180), DOD-CA-6020T(180), DOD-HG-7470T(28), DOD-AG-6020T(180), DOD-AG-6020T(180), DOD-AG-6020T(180), DOD-AG-6020T(180), DOD-AG-6020T(180), DOD-AG-6020T(180), DOD-BA-6020T(180), DOD-BA-6020T(180), DOD-BE-6020T(180), DOD-BE-6020T(180), DOD-BE-6020T(180), DOD-HG-6020T(180), DOD-HG-6020T(180), DOD-HG-6020T(180), DOD-HG-6020T(180), DOD-CU-6020T(180), DOD-PB-6020T(180), DOD-PB-6020T(180)
L1016506-04B	Plastic 500ml unpreserved	Α	7	2	Y	Present/Intact	SO4-300(28),CL-300(28),NO3-300(2)
L1016506-04C	Plastic 250ml unpreserved	Α	7	2	Y	Present/Intact	NO2-4500NO2(2)
L1016506-04D	Plastic 250ml unpreserved	Α	N/A	2	Y	Present/Intact	ALK-T-2320(14)
L1016506-04E	Plastic 500ml H2SO4 preserved	Α	<2	2	Y	Present/Intact	COD-410(28),NH3-4500(28)
L1016506-04F	Plastic 250ml Zn Acetate/NaOH pr	Α	>12	2	Y	Present/Intact	SULFIDE-4500(7)
L1016506-04G	Plastic 250ml Zn Acetate/NaOH pr	Α	>12	2	Y	Present/Intact	SULFIDE-4500(7)
L1016506-041	Plastic 1000ml unpreserved	Α	7	2	Υ	Present/Intact	TSS-2540(7)
L1016506-04J	Vial H2SO4 preserved split	Α	N/A	2	Y	Present/Intact	DOC-5310(28)
L1016506-04K	Vial H2SO4 preserved split	Α	N/A	2	Y	Present/Intact	DOC-5310(28)
L1016506-04L	Plastic 250ml unpreserved	A	N/A	2	Y	Present/Intact	ALK-T-2320(14)
L1016506-04M	Amber 250ml unpreserved	A	7	2	Y	Present/Intact	DOC-5310(28)
L1016506-04N	Plastic 500ml unpreserved	A	7	2	Y	Present/Intact	SO4-300(28),CL-300(28),NO3- 300(2)
L1016506-04O	Vial H2SO4 preserved split	Α	·N/A	_ 2	ΥΥ	Present/Intact	DOC-5310(28)
L1016506-04P	Plastic 500ml H2SO4 preserved	Α	<2	2	Y	Present/Intact	COD-410(28),NH3-4500(28)
L1016506-04R	Plastic 1000ml unpreserved	Α	7	2	Y	Present/Intact	TSS-2540(7)

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Container Info	rmation			Temp				
Container ID	Container Type	Cooler	pH	deg C	Pres	Seal	Analysis(*)	
L1016506-04S	Plastic 250ml HNO3 preserved	A	<2	2	Y	Present/Intact	DOD-CD-6020T(180),DOD-NA-6020T(180),DOD-V-6020T(180),DOD-ZN-6020T(180),DOD-NI-6020T(180),DOD-SE-6020T(180),DOD-CA-6020T(180),DOD-CA-6020T(180),DOD-CA-6020T(180),DOD-HG-7470T(28),DOD-BA-6020T(180),DOD-AL-6020T(180),DOD-AL-6020T(180),DOD-AL-6020T(180),DOD-AS-6020T(180),DOD-CR-6020T(180),DOD-CR-6020T(180),DOD-K-6020T(180),DOD-K-6020T(180),DOD-BA-6020T(180),DOD-BA-6020T(180),DOD-BA-6020T(180),DOD-BE-6020T(180),DOD-BE-6020T(180),DOD-FE-6020T(180),DOD-FE-6020T(180),DOD-CU-6020T(180),DOD-CU-6020T(180),DOD-PB-6020T(180),DOD-PB-6020T(180),DOD-PB-6020T(180),DOD-PB-6020T(180),DOD-PB-6020T(180),DOD-PB-6020T(180),DOD-PB-6020T(180),DOD-PB-6020T(180),DOD-PB-6020T(180),DOD-PB-6020T(180),DOD-PB-6020T(180),DOD-PB-6020T(180),DOD-PB-6020T(180),DOD-PB-6020T(180),DOD-PB-6020T(180),DOD-PB-6020T(180),DOD-PB-6020T(180),DOD-PB-6020T(180),DOD-PB-6020T(180)	
L1016506-04T	Vial H2SO4 preserved split	Α	N/A	2	Y	Present/Intact	DOC-5310(28)	
L1016506-04U	Plastic 250ml Zn Acetate/NaOH pr	Α	>12	2	Y	Present/Intact	SULFIDE-4500(7)	
L1016506-04V	Plastic 250ml Zn Acetate/NaOH pr	Α	>12	2	Y	Present/Intact	SULFIDE-4500(7)	
L1016506-04X	Amber 250ml unpreserved	Α	7	2	Y	Present/Intact	DOC-5310(28)	
L1016506-04Y	Plastic 250ml unpreserved	Α	7	2	Y	Present/Intact	NO2-4500NO2(2)	
L1016506-05A	Plastic 250ml HNO3 preserved	A	<2	2	Y	Present/Intact	DOD-BA-6020S(180).DOD-FE-6020S(180).DOD-MG-6020S(180).DOD-SB-6020S(180).DOD-CR-6020S(180).DOD-MN-6020S(180).DOD-TL-6020S(180).DOD-CO-6020S(180).DOD-AG-6020S(180).DOD-AG-6020S(180).DOD-AG-6020S(180).DOD-NA-6020S(180).DOD-NA-6020S(180).DOD-NA-6020S(180).DOD-NI-	
		0.5			3.		6020S(180),DOD-PB- 6020S(180),DOD-V-	
Full Time	6. 0.8					4 m	6020S(180),DOD-AS-	
4		218 8.7					6020S(180),DOD-CD" 6020S(180),DOD-BE- 6020S(180),DOD-CU- 6020S(180),DOD-ZN- 6020S(180),DOD-AL- 6020S(180),DOD-K- 6020S(180),DOD-SE- 6020S(180),DOD-HG-7470S(28)	

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Container Info	ormation			Temp			
Container ID	Container Type	Cooler	рН	deg C	Pres	Seal	Analysis(*)
L1016506-06A	Plastic 250ml HNO3 preserved	A	<2	2	Y	Present/Intact	DOD-CD-6020T(180),DOD-NA-6020T(180),DOD-V-6020T(180),DOD-ZN-6020T(180),DOD-NI-6020T(180),DOD-SE-6020T(180),DOD-CA-6020T(180),DOD-CA-6020T(180),DOD-CA-6020T(180),DOD-HG-7470T(28),DOD-HG-7470T(28),DOD-AG-6020T(180),DOD-AG-6020T(180),DOD-AS-6020T(180),DOD-BA-6020T(180),DOD-BA-6020T(180),DOD-K-6020T(180),DOD-K-6020T(180),DOD-BE-6020T(180),DOD-BE-6020T(180),DOD-HG-6020T(180),DOD-HG-6020T(180),DOD-FE-6020T(180),DOD-FE-6020T(180),DOD-PB-6020T(180),DOD-PB-6020T(180),DOD-PB-6020T(180),DOD-PB-6020T(180),DOD-PB-6020T(180),DOD-PB-6020T(180),DOD-PB-6020T(180),DOD-PB-6020T(180),DOD-PB-6020T(180),DOD-PB-6020T(180),DOD-PB-6020T(180),DOD-PB-6020T(180),DOD-PB-6020T(180),DOD-PB-6020T(180),DOD-PB-6020T(180)
L1016506-06B	Plastic 500 ml unpreserved	Α	7	2	Y	Present/Intact	SO4-300(28),CL-300(28),NO3- 300(2)
L1016506-06C	Plastic 250 ml unpreserved	Α	7	2	Υ	Present/Intact	NO2-4500NO2(2)
L1016506-06D	Plastic 250 ml unpreserved	Α	N/A	2	Y	Present/Intact	ALK-T-2320(14)
L1016506-06E	Plastic 500 ml H2SO4 preserved	Α	<2	2	Y	Present/Intact	COD-410(28),NH3-4500(28)
L1016506-06F	Plastic 250 ml Zn Acetate/NaOH pr	Α	>12	2	Y	Present/Intact	SULFIDE-4500(7)
L1016506-06G	Plastic 250 ml Zn Acetale/NaOH pr	Α	>12	2	Y	Present/Intact	SULFIDE-4500(7)
L1016506-06I	Plastic 1000ml unpreserved	Α	7	2	Y	Present/Intact	TSS-2540(7)
L1016506-06J	Vial H2SO4 preserved split	Α	N/A	2	Y	Present/Intact	DOC-5310(28)
L1016506-06K	Vial H2SO4 preserved split	Α	N/A	2	Υ	Present/Intact	DOC-5310(28)
L1016506-06X	Amber 250ml unpreserved	Ā	7	2	Y	Present/Intact	DOC-5310(28)

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Container ID Container Type	Container Info	rmation			Temp				
Book	Container ID	Container Type	Cooler	рН		Pres	Seal	Analysis(*)	
SO20T(180),DOD-V-6020T(180),DOD-V-6020T(180),DOD-V-6020T(180),DOD-S-6020T(180),DOD-S-6020T(180),DOD-CA-6020T(180),DOD-CA-6020T(180),DOD-CA-6020T(180),DOD-CA-6020T(180),DOD-CA-6020T(180),DOD-AB-6020T(180),DOD-AB-6020T(180),DOD-AB-6020T(180),DOD-AB-6020T(180),DOD-AB-6020T(180),DOD-CA-6020T(180),DOD-CA-6020T(180),DOD-CA-6020T(180),DOD-CA-6020T(180),DOD-CB-6020T(180),DOD-	L1016506-07A		A	<2	2	Y	Present/Intact	6020S(180),DOD-MG- 6020S(180),DOD-SB- 6020S(180),DOD-CR- 6020S(180),DOD-MN- 6020S(180),DOD-MN- 6020S(180),DOD-CO- 6020S(180),DOD-AG- 6020S(180),DOD-NA- 6020S(180),DOD-NI- 6020S(180),DOD-NI- 6020S(180),DOD-PB- 6020S(180),DOD-V- 6020S(180),DOD-AS- 6020S(180),DOD-BE- 6020S(180),DOD-CD- 6020S(180),DOD-CU- 6020S(180),DOD-CU- 6020S(180),DOD-CU- 6020S(180),DOD-AL- 6020S(180),DOD-AL- 6020S(180),DOD-K- 6020S(180),DOD-K- 6020S(180),DOD-SE-	
L1016506-08B Plastic 500ml unpreserved A 7 2 Y Present/Intact SO4-300(28),CL-300(28),NO3 300(2) L1016506-08C Plastic 250ml unpreserved A 7 2 Y Present/Intact NO2-4500NO2(2) L1016506-08D Plastic 250ml unpreserved A N/A 2 Y Present/Intact ALK-T-2320(14) L1016506-08E Plastic 500ml H2SO4 preserved A <2 2 Y Present/Intact COD-410(28),NH3-4500(28) L1016506-08F Plastic 250ml Zn Acetate/NaOH pr A >12 Z Y Present/Intact SULFIDE-4500(7) L1016506-08G Plastic 250ml Zn Acetate/NaOH pr A >12 Z Y Present/Intact SULFIDE-4500(7) L1016506-08I Plastic 1000ml unpreserved A 7 Z Y Present/Intact TSS-2540(7) L1016506-08J Vial H2SO4 preserved split A N/A 2 Y Present/Intact DOC-5310(28)	L1016506-08A		A	<2	2	Y	Present/Intact	6020T(180),DOD-V- 6020T(180),DOD-ZN- 6020T(180),DOD-NI- 6020T(180),DOD-SE- 6020T(180),DOD-TL- 6020T(180),DOD-CA- 6020T(180),DOD-CA- 6020T(180),DOD-MN- 6020T(180),DOD-HG- 7470T(28),DOD-AG- 6020T(180),DOD-AG- 6020T(180),DOD-AS- 6020T(180),DOD-AS- 6020T(180),DOD-BA- 6020T(180),DOD-BA- 6020T(180),DOD-K- 6020T(180),DOD-K- 6020T(180),DOD-BE- 6020T(180),DOD-MG- 6020T(180),DOD-FE- 6020T(180),DOD-FE- 6020T(180),DOD-CU- 6020T(180),DOD-CU-	A-
L1016506-08C Plastic 250ml unpreserved A 7 2 Y Present/Intact NO2-4500NO2(2) L1016506-08D Plastic 250ml unpreserved A N/A 2 Y Present/Intact ALK-T-2320(14) L1016506-08E Plastic 500ml H2SO4 preserved A <2	L1016506-08B	Plastic 500ml unpreserved	7A -	7	2	· , Y·,	. Present/Intact	SO4-300(28),CL-300(28),NO	3
L1016506-08E Plastic 500ml H2SO4 preserved A <2 2 Y Present/Intact COD-410(28),NH3-4500(28) L1016506-08F Plastic 250ml Zn Acetate/NaOH pr A >12 2 Y Present/Intact SULFIDE-4500(7) L1016506-08G Plastic 250ml Zn Acetate/NaOH pr A >12 2 Y Present/Intact SULFIDE-4500(7) L1016506-08I Plastic 1000ml unpreserved A 7 2 Y Present/Intact TSS-2540(7) L1016506-08J Vial H2SO4 preserved split A N/A 2 Y Present/Intact DOC-5310(28)	L1016506-08C	Plastic 250ml unpreserved	A	7	2	Y	Present/Intact		
L1016506-08F Plastic 250ml Zn Acetate/NaOH pr A >12 2 Y Present/Intact SULFIDE-4500(7) L1016506-08G Plastic 250ml Zn Acetate/NaOH pr A >12 2 Y Present/Intact SULFIDE-4500(7) L1016506-08I Plastic 1000ml unpreserved A 7 2 Y Present/Intact TSS-2540(7) L1016506-08J Vial H2SO4 preserved split A N/A 2 Y Present/Intact DOC-5310(28)	L1016506-08D	Plastic 250ml unpreserved	A	N/A	2	Y	Present/Intact	ALK-T-2320(14)	
L1016506-08G Plastic 250ml Zn Acetate/NaOH pr A >12 2 Y Present/Intact SULFIDE-4500(7) L1016506-08I Plastic 1000ml unpreserved A 7 2 Y Present/Intact TSS-2540(7) L1016506-08J Vial H2SO4 preserved split A N/A 2 Y Present/Intact DOC-5310(28)	L1016506-08E	Plastic 500ml H2SO4 preserved	Α	<2	2	Y	Present/Intact	COD-410(28),NH3-4500(28)	
L1016506-08I Plastic 1000ml unpreserved A 7 2 Y Present/Intact TSS-2540(7) L1016506-08J Vial H2SO4 preserved split A N/A 2 Y Present/Intact DOC-5310(28)	L1016506-08F	Plastic 250ml Zn Acetate/NaOH pr	Α	>12	2	Y	Present/Intact	SULFIDE-4500(7)	
L1016506-08J Vial H2SO4 preserved split A N/A 2 Y Present/Intact DOC-5310(28)	L1016506-08G	Plastic 250ml Zn Acetate/NaOH pr	Α	>12	2	Y	Present/Intact	SULFIDE-4500(7)	
	L1016506-08I	Plastic 1000ml unpreserved	Α	7	2	Y	Present/Intact	TSS-2540(7)	
L1016506-08K Vial H2SO4 preserved split A N/A 2 Y Present/Intact DOC-5310(28)	L1016506-08J	Vial H2SO4 preserved split	Α	N/A	2	Y	Present/Intact	DOC-5310(28)	
	L1016506-08K	Vial H2SO4 preserved split	A	N/A	2	Y	Present/Intact	DOC-5310(28)	

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Project Name: SHL TASK 0002

Project Number: ACOO1

Lab Number: L1016506 Report Date: 11/03/10

Container Info	ormation			Temp			
Container ID	Container Type	Cooler	рН	deg C	Pres	Seal	Analysis(*)
L1016506-08X	Amber 250ml unpreserved	Α	7	2	Y	Present/Intact	DOC-5310(28)
L1016506-09A	Plastic 500ml HNO3 preserved	A	<2	2	Y	Present/Intact	DOD-CD-6020T(180),DOD-NA-6020T(180),DOD-V-6020T(180),DOD-ZN-6020T(180),DOD-NI-6020T(180),DOD-SE-6020T(180),DOD-TL-6020T(180),DOD-CA-6020T(180),DOD-MN-6020T(180),DOD-MN-6020T(180),DOD-AG-7470T(28),DOD-AG-6020T(180),DOD-AG-6020T(180),DOD-AS-6020T(180),DOD-AS-6020T(180),DOD-CR-6020T(180),DOD-CR-6020T(180),DOD-CR-6020T(180),DOD-BE-6020T(180),DOD-BE-6020T(180),DOD-MG-6020T(180),DOD-MG-6020T(180),DOD-FE-6020T(180),DOD-FE-6020T(180),DOD-CR-6020T(180),DOD-PB-6020T(180),DOD-CR-6020T(180),DOD-CR-6020T(180),DOD-PB-6020T(180),DOD-CR-6020T(180),DOD-CR-6020T(180),DOD-CR-6020T(180),DOD-CR-6020T(180),DOD-CR-6020T(180),DOD-PB-6020T(180),DOD-PB-6020T(180)

Project Name:

SHL TASK 0002

Lab Number:

L1016506

Project Number:

AC001

Report Date:

11/03/10

GLOSSARY

Acronyms

EPA Environmental Protection Agency.

LCS Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LCSD Laboratory Control Sample Duplicate: Refer to LCS.

MDL - Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

 MS • Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.

MSD - Matrix Spike Sample Duplicate: Refer to MS.

NA - Not Applicable.

 Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.

NI - Not Ignitable.

Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration.
 The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to
assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD).
 Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the
absolute difference between the values; although the RPD value will be provided in the report.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Data Qualifiers

- A Spectra identified as "Aldol Condensation Product".
- The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than five times (5x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank.
- Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- The RPD between the results for the two columns exceeds the method-specified criteria; however, the lower value
 has been reported due to obvious interference,
- P The RPD between the results for the two columns exceeds the method-specified criteria.
- -The quality control sample exceeds the associated acceptance criteria. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R Analytical results are from sample re-analysis.

Report Format: DU Report with "J" Qualifiers



Serial_No:11031013:12

Project Name: SHL TASK 0002 Lab Number: L1016506
Project Number: AC001 Report Date: 11/03/10

Data Qualifiers

RE - Analytical results are from sample re-extraction.

 Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL). This represents an estimated concentration for Tentatively Identified Compounds (TICs).

ND Not detected at the method detection limit (MDL) for the sample.

Report Format: DU Report with "J" Qualifiers

Project Name:

SHL TASK 0002

Project Number: AC001

Lab Number:

L1016506

Report Date:

11/03/10

REFERENCES

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IIIA, 1997.
- 30 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WPCF. 18th Edition. 1992.
- 44 Methods for the Determination of Inorganic Substances in Environmental Samples, EPA/600/R-93/100, August 1993.

The analyses performed on the sample(s) within this report are in accordance with the minimum established guidelines set forth in the Department of Defense Quality Systems Manual, Version 4.1, issued April 22, 2009

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Certificate/Approval Program Summary

Last revised July 19, 2010 - Westboro Facility

The following list includes only those analytes/methods for which certification/approval is currently held.

For a complete listing of analytes for the referenced methods, please contact your Alpha Customer Service Representative.

Connecticut Department of Public Health Certificate/Lab ID: PH-0574. NELAP Accredited Solid Waste/Soil.

Drinking Water (Inorganic Parameters: Color, pH, Turbidity, Conductivity, Alkalinity, Chloride, Free Residual Chlorine, Fluoride, Calcium Hardness, Sulfate, Nitrate, Nitrite, Aluminum, Antimony, Arsenic, Barium, Beryllium, Cadmium, Calcium, Chromium, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Vanadium, Zinc, Total Dissolved Solids, Total Organic Carbon, Total Cyanide, Perchlorate. Organic Parameters: Volatile Organics 524.2, Total Trihalomethanes 524.2, 1,2-Dibromo-3-chloropropane (DBCP), Ethylene Dibromide (EDB), 1,4-Dioxane (Mod 8270). Microbiology Parameters: Total Coliform-MF mEndo (SM9222B), Total Coliform – Colilert (SM9223 P/A), E. Coli. – Colilert (SM9223 P/A), HPC – Pour Plate (SM9215B), Fecal Coliform – MF m-FC (SM9222D))

Wastewater/Non-Potable Water (Inorganic Parameters: Color, pH, Conductivity, Acidity, Alkalinity, Chloride, Total Residual Chlorine, Fluoride, Total Hardness, Silica, Sulfate, Sulfide, Ammonia, Kjeldahl Nitrogen, Nitrate, Nitrite, O-Phosphate, Total Phosphorus, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Strontium, Thallium, Tin, Titanium, Vanadium, Zinc, Total Residue (Solids), Total Dissolved Solids, Total Suspended Solids (non-filterable), BOD, CBOD, COD, TOC, Total Cyanide, Phenolics, Foaming Agents (MBAS), Bromide, Oil and Grease. Organic Parameters: PCBs, Organochlorine Pesticides, Technical Chlordane, Toxaphene, 2,4-D, 2,4,5-T, 2,4,5-TP(Silvex), Acid Extractables (Phenols), Benzidines, Phthalate Esters, Nitrosamines, Nitroaromatics & Isophorone, Polynuclear Aromatic Hydrocarbons, Haloethers, Chlorinated Hydrocarbons, Volatile Organics, TPH (HEM/SGT), Extractable Petroleum Hydrocarbons (ETPH), MA-EPH, MA-VPH, Microbiology Parameters: Total Coliform – MF mEndo (SM9222B), Total Coliform – MTF (SM9221B), HPC – Pour Plate (SM9215B), Fecal Coliform – MF m-FC (SM9222D), Fecal Coliform – A-1 Broth (SM9221E).)

Solid Waste/Soil (Inorganic Parameters: pH, Sulfide, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Tin, Vanadium, Zinc, Total Cyanide, Ignitability, Phenolics, Corrosivity, TCLP Leach (1311), SPLP Leach (1312 metals only), Reactivity, Organic Parameters: PCBs, PCBs in Oil, Organochlorine Pesticides, Technical Chlordane, Toxaphene, Extractable Petroleum Hydrocarbons (ETPH), MA-EPH, MA-VPH, Dicamba, 2,4-D, 2,4,5-T, 2,4,5-TP(Silvex), Volatile Organics, Acid Extractables (Phenols), 3,3'-Dichlorobenzidine, Phthalates, Nitrosamines, Nitroaromatics & Cyclic Ketones, PAHs, Haloethers, Chlorinated Hydrocarbons.)

Maine Department of Human Services Certificate/Lab ID: 2009024.

Drinking Water (Inorganic Parameters: SM9215B, 9222D, 9223B, EPA 180.1, 300.0, 353.2, SM2130B, 2320B, 4500Cl-D, 4500CN-C, 4500CN-E, 4500F-C, 4500H+B, 4500NO3-F, EPA 200.7, EPA 200.8, 245.1, EPA 300.0 Organic Parameters: 504.1, 524.2.)

Wastewater/Non-Potable Water (Inorganic Parameters: EPA 120.1, 1664A, 350.1, 351.1, 353.2, 410.4, 420.1, Lachat 10-107-06-1-B, SM2320B, 2340B, 2510B, 2540C, 2540D, 426C, 4500Cl-D, 4500Cl-E, 4500CN-C, 4500CN-E, 4500F-B, 4500F-C, 4500H+B, 4500Norg-B, 4500Norg-C, 4500NH3-B, 4500NH3-B, 4500NH3-H, 4500NO3-F, 4500P-B.5, 4500P-E, 5210B, 5220D, 5310C, EPA 200.7, 200.8, 245.1. Organic Parameters: 608, 624, ME DRO, ME GRO, MA EPH, MA VPH.)

Solid Waste/Soil (Organic Parameters: ME DRO, ME GRO, MA EPH, MA VPH.)

Massachusetts Department of Environmental Protection Certificate/Lab ID: M-MA086,

Drinking Water

Inorganic Parameters: (EPA 200.8 for: Sb,As,Ba,Be,Cd,Cr,Cu,Pb,Ni,Se,Tl)

(EPA 200.7 for: Ba,Be,Ca,Cd,Cr,Cu,Na,Ni) 245.1, (300.0 for: Nitrate-N, Fluoride, Sulfate)

353.2 for: Nitrate-N, Nitrite-N; SM4500NO3-F, 4500F-C, 4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, 2320B, SM2540C, SM4500H-B.

Organic Parameters: (EPA 524.2 for: Trihalomethanes, Volatile Organics)

(504.1 for: 1,2-Dibromoethane, 1,2-Dibromo-3-Chloropropane), 314.0, 332.

Microbiology Parameters: SM9215B; ENZ, SUB, SM9223; MF-SM9222D

Non-Potable Water

Inorganic Parameters:, (EPA 200.8 for: Al,Sb,As,Be,Cd,Cr,Cu,Pb,Mn,Ni,Se,Ag,Tl,Zn)

(EPA 200.7 for: Al,Sb,As,Be,Cd,Cr,Co,Cu,Fe,Pb,Mn,Mo,Ni,Se,Ag,Sr,Ti,Tl, V,Zn,Ca,Mg,Na,K)

245.1, SM4500H,B, EPA 120.1, SM2510B, 2540C, 2540B, 2340B, 2320B, 4500CL-E, 4500F-BC, 426C, SM4500NH3-BH, (EPA 350.1 for: Ammonia-N), LACHAT 10-107-06-1-B for Ammonia-N, SM4500NO3-F, 353.2 for Nitrate-N,

SM4500NH3-B,C-Titr, SM4500NH3-BC-NES, EPA 351.1, SM4500P-E, 4500P-B,E, 5220D, EPA 410.4, SM 5210B,

5310C, 4500CL-D, EPA 1664, SM14 510AC, EPA 420, SM4500-CN-CE, SM2540D.

Organic Parameters: (EPA 624 for Volatile Halocarbons, Volatile Aromatics)

(608 for: Chlordane, Aldrin, Dieldrin, DDD, DDE, DDT, Heptachlor, Heptachlor Epoxide, PCBs-Water), EPA 625 for SVOC Acid Extractables and SVOC Base/Neutral Extractables, 600/4-81-045-PCB-Oil

New Hampshire Department of Environmental Services Certificate/Lab ID: 200307. NELAP Accredited.

Drinking Water (Inorganic Parameters: SM6215B, 9222B, 9223B Colilert, EPA 200.7, 200.8, 245.2, 120.1, 300.0, 314.0, SM4500CN-E, 4500H+B, 4500NO3-F, 2320B, 2510B, 2540C, 4500F-C, 5310C, 2120B, EPA 331.0. Organic SM6254B

Parameters: 504.1, 524.2, SM6251B.)

Non-Potable Water (Inorganic Parameters: SM9222D, 9221B, 9222B, 9221E-EC, EPA 200.7, 200.8, 245.1, 245.2, SW-846 6010B, 6020, 7196A, 7470A, SM3500-CR-D, EPA 120.1, 300.0, 350.1, 351.1, 353.2, 420.1, 1664A, SW-846 9010, 9030, 9040B, SM426C, SM2310B, 2540B, 2540D, 4500H+B, 4500NH3-H, 4500NH3-E, 4500NO2-B, 4500P-E, 4500-S2-D, 5210B, 2320B, 2540C, 4500F-C, 5310C, 5540C, LACHAT 10-117-07-1-B, LACHAT 10-107-06-1-B, LACHAT 10-107-04-1-J, LACHAT 10-117-07-1-A, SM4500CL-E, LACHAT 10-204-00-1-A, LACHAT 10-107-06-2-D. Organic Parameters: SW-846 3005A, 3015A, 3510C, 5030B, 8021B, 8260B, 8270C, 8330, EPA 624, 625, 608, SW-846 8082, 8081A.)

Solid & Chemical Materials (Inorganic Parameters: SW-846 6010B, 7196A, 7471A, 7.3.3.2, 7.3.4.2, 1010, 1030, 9010, 9012A, 9014, 9030B, 9040, 9045C, 9050C, 1311, 3005A, 3050B, 3051A. Organic Parameters: SW-846 3540C, 3545, 3580A, 5030B, 5035, 8021B, 8260B, 8270C, 8330, 8151A, 8082, 8081A.)

New Jersey Department of Environmental Protection Certificate/Lab ID: MA935. NELAP Accredited.

Drinking Water (Inorganic Parameters: SM9222B, 9221E, 9223B, 9215B, 4500NO3-F, 4500F-C, EPA 300.0, 200.7, 2540C, 2320B, 314.0, SM2120B, 2510B, 5310C, SM4500H-B, EPA 200.8, 245.2. Organic Parameters: 504.1, SM6251B, 524.2.)

Non-Potable Water (Inorganic Parameters: SM5210B, EPA 410.4, SM5220D, 4500Cl-D, EPA 300.0, SM2120B, SM4500F-BC, EPA 200.7, 351.1, LACHAT 10-107-06-2-D, EPA 353.2, SM4500NO3-F, 4500NO2-B, EPA 1664A, SM5310B, C or D, 4500-PE, EPA 420.1, SM4500P-B5+E, 2540B, 2540C, 2540D, EPA 120.1, SM2510B, SM15 426C, SM9221CE, 9222D, 9221B, 9222B, 9215B, 2310B, 2320B, 4500NH3-H, 4500-S D, EPA 350.1, SM5210B, SW-846 3015, 6020, 7470A, 5540C, 4500H-B, EPA 200.8, SM3500Cr-D, EPA 245.1, 245.2, SW-846 9040B, 3005A, EPA 6010B, 7196A, SW-846 9010B, 9030B. Organic Parameters: SW-846 8260B, 8270C, 3510C, EPA 608, 624, 625, SW-846 5030B, 8021B, 8081A, 8082, 8151A, 8330, NJ OQA-QAM-025 Rev.7.)

Solid & Chemical Materials (Inorganic Parameters: SW-846 9040B, 3005A, 6010B, 7196A, 5030B, 9010B, 9030B, 1030, 1311, 3050B, 3051, 7471A, 9014, 9012A, 9045C, 9050A, 9065. Organic Parameters: SW-846 8021B, 8081A, 8082, 8151A, 8330, 8260B, 8270C, 1311, 1312, 3540C, 3545, 3550B, 3580A, 5035L, 5035H, NJ OQA-QAM-025 Rev. 7.)

New York Department of Health Certificate/Lab ID: 11148. NELAP Accredited.

Drinking Water (Inorganic Parameters: SM9223B, 9222B, 9215B, EPA 200.8, 200.7, 245.2, SM5310C, EPA 314.0, 332.0, SM2320B, EPA 300.0, SM2120B, 4500CN-E, 4500F-C, 4500H-B, 4500NO3-F, 2540C, EPA 120.1, SM 2510B, Organic Parameters: EPA 524.2, 504.1.)

Non-Potable Water (Inorganic Parameters: SM9221E, 9222D, 9221B, 9222B, 9215B, 5210B, EPA 410.4, SM5220D, 2310B-4a, 2320B, EPA 200.7, 300.0, LACHAT 10-117-07-1A or B, SM4500Cl-E, 4500F-C, SM15 426C, EPA 350.1, LACHAT 10-107-06-1-B, SM4500NH3-H, EPA 351.1, LACHAT 10-107-06-2, EPA 353.2, LACHAT 10-107-041-C, SM4500-NO3-F, 4500-NO2-B, 4500P-E, 2540C, 2540B, 2540D, EPA 200.8, EPA 6010B, 6020, EPA 7196A, SM3500Cr-D, EPA 245.1, 245.2, 7470A, SM2120B, SM4500-CN-E LACHAT 10-204-00-1-A, EPA 9040B, SM4500-HB, EPA 1664A, SM5310C, EPA 420.1, SM14 510C, EPA 120.1, SM2510B, SM4500S-D, SM5540C, EPA 3005A, 3015. Organic Parameters: EPA 624, 8260B, 8270C, 625, 608, 8081A, 8151A, 8330, 8082, EPA 3510C, 5030B, 9010B, 9030B.)

Solid & Hazardous Waste (Inorganic Parameters: 1010, 1030, SW-846 Ch 7 Sec 7.3, EPA 6010B, 7196A, 7471A, 9012A, 9014, 9040B, 9045C, 9065, 9050, EPA 1311, 1312, 3005A, 3050B, 9010B, 9030B. Organic Parameters: EPA 8260B, 8270C, 8081A, 8151A, 8330, 8082, 3540C, 3545, 3546, 3580, 5030B, 5035.)

North Carolina Department of the Environment and Natural Resources Certificate/Lab ID: 666. Organic Parameters: MA-EPH, MA-VPH.

Pennsylvania Department of Environmental Protection <u>Certificate/Lab ID</u>: 68-03671. *NELAP Accredited*. *Non-Potable Water* (<u>Organic Parameters</u>: EPA 3510C, 5030B, 625, 624, 608, 8081A, 8082, 8151A, 8260B, 8270C, 8330)

Solid & Hazardous Waste (Inorganic Parameters: EPA 1010, 1030, 1311, 3050B, 3051, 6010B, EPA 7.3.3.2, EPA 7.3.4.2, 7196A, 7471A, 9010B, 9012A, 9014, 9040B, 9045C, 9050, 9065. Organic Parameters: 3540C, 3545, 3580A, 5035, 8021B, 8081A, 8082, 8151A, 8260B, 8270C, 8330)

Rhode Island Department of Health Certificate/Lab ID: LAO00065. NELAP Accredited via NY-DOH.

Refer to MA-DEP Certificate for Potable and Non-Potable Water.

Refer to NY-DOH Certificate for Potable and Non-Potable Water.

Texas Commisson on Environmental Quality <u>Certificate/Lab ID</u>: T104704476-09-1. *NELAP Accredited. Non-Potable Water* (<u>Inorganic Parameters</u>: EPA 120.1, 1664, 200.7, 200.8, 245.1, 245.2, 300.0, 350.1, 351.1, 353.2, 376.2, 410.4, 420.1, 6010, 6020, 7196, 7470, 9040, SM 2120B, 2310B, 2320B, 2510B, 2540B, 2540C, 2540D, 426C, 4500CL-E, 4500CN-E, 4500F-C, 4500H+B, 4500NH3-H, 4500NO2B, 4500P-E, 4500 S2 D, 510C, 5210B, 5220D, 5310C, 5540C. Organic Parameters: EPA 608, 624, 625, 8081, 8082, 8151, 8260, 8270, 8330.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 1311, 1312, 9012, 9014, 9040, 9045, 9050, 9065.)

Department of Defense Certificate/Lab ID: L2217.

Drinking Water (Inorganic Parameters: SM 4500H-B. Organic Parameters: EPA 524.2, 504.1.)

Non-Potable Water (Inorganic Parameters: EPA 200.7, 200.8, 6010B, 6020, 245.1, 245.2, 7470A, 9040B, 300.0, 9251, 9038, 350.1, 353.2, 351.1, 120.1, 9050A, 410.4, 9060, 1664, 420.1, LACHAT 10-107-06-1-B, SM 4500CN-E, 4500H-B, 4500CL-E, 4500F-BC, 4500SO4-E, 426C, 4500NH3-B, 4500NH3-H, 4500NO3-F, 4500NO2-B, 4500Norg-C, 4500PE, 2510B, 5540C, 5220D, 5310C, 2540B, 2540C, 2540D, 510C, 4500S2-AD, 3005A, 3015, 9010B, 9030B. Organic Parameters: EPA 8260B, 8270C, 8330, 625, 8082, 8151A, 8081A, 3510C, 5030B, MassDEP EPH, MassDEP VPH.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 200.7, 6010B, 7471A, 9040B, 9045C, 9065, 420.1, 9012A, 6860, 1311, 1312, 3050B, 9030B, 3051, 9010B, 3540C, SM 510ABC, 4500CN-CE, 2540G, SW-846 7.3, Organic Parameters: EPA 8260B, 8270C, 8330, 8082, 8081A, 8151A, 3545, 3546, 3580, 5035, MassDEP EPH, MassDEP VPH.)

Analytes Not Accredited by NELAP

Certification is not available by NELAP for the following analytes: **EPA 8260B:** Freon-113, 1,2,4,5-Tetramethylbenzene, 4-Ethyltoluene. **EPA 8330A:** PETN, Picric Acid, Nitroglycerine, 2,6-DANT, 2,4-DANT. **EPA 8270C:** Methyl naphthalene, Dimethyl naphthalene, Total Methylnaphthalenes, Total Dimethylnaphthalenes, 1,4-Diphenylhydrazine (Azobenzene), **EPA 625:** 4-Chloroaniline. **EPA 350.1** for Ammonia in a Soil matrix.



ANALYTICAL REPORT

Lab Number:

L1016507

Client:

Sovereign Consulting

905B South Main Street

Mansfield, MA 02048

ATTN:

Neil Schofield

Phone:

(508) 339-3200

Project Name:

SHL TASK 0002

Project Number:

AC001

Report Date:

10/26/10

Certifications & Approvals: MA (M-MA086), NY NELAC (11148), CT (PH-0574), NH (2003), NJ (MA935), RI (LAO00065), ME (MA0086), PA (Registration #68-03671), USDA (Permit #S-72578), US Army Corps of Engineers, Naval FESC.

Eight Walkup Drive, Westborough, MA 01581-1019 508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com



Project Name:

SHL TASK 0002

Project Number: AC

AC001

Lab Number:

L1016507

Report Date:

10/26/10

Alpha Sample ID	Client ID	Sample Location	Collection Date/Time
L1016507-01	SHM-10-12-102010-U	DEVENS, MA	10/20/10 10:35
L1016507-02	SHM-10-15-102010-U	DEVENS, MA	10/20/10 10:50
L1016507-03	SHM-10-16-102010-U	DEVENS, MA	10/20/10 14:35
L1016507-04	DUP-102010-U	DEVENS, MA	10/20/10 10:35

Lab Number:

Project Name: SHL TASK 0002

L1016507 **Project Number:** AC001 Report Date: 10/26/10

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipl, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet all of the requirements of NELAC, for all NELAC accredited parameters. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

For additional information, please contact Client Services at 800-624-9220.

Report Submission

This report contains the results for the Dissolved Inorganic Carbon analysis. The results for all other analyses will be issued under separate cover.

Dissolved Inorganic Carbon

L1016507-01 through -04 have elevated detection limits due to the dilutions required by the elevated concentration present in the samples.

WG439469: A matrix spike could not be performed due to insufficient sample volume available for analysis.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Michelle M. Morris

Authorized Signature:

Title: Technical Director/Representative

Date: 10/26/10

INORGANICS & MISCELLANEOUS

Project Name: SHL TASK 0002

Project Number: AC001

Lab Number:

L1016507

Report Date:

10/26/10

SAMPLE RESULTS

Lab ID:

L1016507-01

Client ID:

SHM-10-12-102010-U

Sample Location:

DEVENS, MA

Matrix:

Water

Date Collected:

10/20/10 10:35

Date Received:

10/20/10

Field Prep:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry										
Dissolved Inorganic Carbon	130		mg/l	20		20	10/20/10 23:10	10/26/10 08:11	30,5310C(M)	DW

Project Name: SHL TASK 0002

Project Number: AC001

Lab Number:

L1016507

Report Date:

10/26/10

SAMPLE RESULTS

Lab ID:

L1016507-02

Client ID:

SHM-10-15-102010-U

Sample Location:

DEVENS, MA

Matrix:

Water

Date Collected:

10/20/10 10:50

Date Received:

10/20/10

Field Prep:

Parameter	Result	Qualifler	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry										
Dissolved Inorganic Carbon	95		mg/l	20	**	20	10/20/10 23:10	10/26/10 08:11	30,5310C(M)	DW

Project Name: SHL TASK 0002

Project Number: AC001

Lab Number:

L1016507

Report Date:

10/26/10

SAMPLE RESULTS

Lab ID:

L1016507-03

Client ID:

SHM-10-16-102010-U

Sample Location:

DEVENS, MA

Matrix:

Water

Date Collected:

10/20/10 14:35

Date Received:

10/20/10

Field Prep:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry										
Dissolved Inorganic Carbon	100		mg/l	20		20	10/20/10 23:10	10/26/10 08:11	30,5310C(M)	DW

Project Name:

SHL TASK 0002

Lab Number:

L1016507

Project Number: AC001

Sample Location:

Report Date:

10/26/10

SAMPLE RESULTS

Lab ID:

L1016507-04

Client ID:

DUP-102010-U DEVENS, MA

Matrix:

Water

Date Collected:

10/20/10 10:35

Date Received:

10/20/10

Field Prep:

Parameter	Result	Qualifler	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry										
Dissolved Inorganic Carbon	140		mg/l	20	**	20	10/20/10 23:10	10/26/10 08:11	30,5310C(M)	DW

Project Name:

SHL TASK 0002

Lab Number:

L1016507

Project Number: AC001

Report Date:

10/26/10

Method Blank Analysis Batch Quality Control

Dilution Date Analytical Date Factor **Parameter** Result Qualifier Units RL MDL Prepared Analyzed Method Analyst General Chemistry for sample(s): 01-04 Batch: WG439469-1 ND Dissolved Inorganic Carbon mg/l 1.0 10/20/10 23:10 10/26/10 08:11 30,5310C(M) DW

Lab Control Sample Analysis
Batch Quality Control

Lab Number:

L1016507

Report Date:

10/26/10

	LCS		LCSD		%Recovery				
Parameter	%Recovery	Qual	%Recovery	Qual	Limits	RPD	Qual	RPD Limits	

Associated sample(s): 01-04 Batch: WG439469-2

AC001

SHL TASK 0002

Dissolved Inorganic Carbon

Project Name:

Project Number:

Lab Duplicate Analysis
Batch Quality Control

Lab Number:

L1016507

Report Date:

10/26/10

Parameter	Nat	ive Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Associated sample(s): 01-04	QC Batch ID: WG439469-3	QC Sample: L1	016507-02 Client ID: SH	M-10-15-102	010-U		
Dissolved Inorganic Carbon		95	98	ma/l	3		

Project Name:

Project Number:

SHL TASK 0002

AC001

Project Name: SHL TASK 0002

Project Number: AC001

Lab Number: L1016507

Report Date: 10/26/10

Sample Receipt and Container Information

Were project specific reporting limits specified?

YES

Reagent H2O Preserved Vials Frozen on: NA

Cooler Information Custody Seal

Cooler

В

Present/Intact

A

Present/Intact

Container Info	ormation			Temp				
Container ID	Container Type	Cooler	рН	deg C	Pres	Seal	Analysis(*)	
L1016507-01A	Vial H2SO4 preserved split	Α	N/A	2	Y	Present/Intact	SPECWC()	
L1016507-01B	Vial H2SO4 preserved split	Α	N/A	2	Y	Present/Intact	SPECWC()	
L1016507-01X	Amber 250ml unpreserved	Α	7	2	Y	Present/Intact	SPECWC()	
L1016507-02A	Vial H2SO4 preserved split	Α	N/A	2	Y	Present/Intact	SPECWC()	
L1016507-02B	Vial H2SO4 preserved split	Α	N/A	2	Y	Present/Intact	SPECWC()	
L1016507-02C	Vial H2SO4 preserved split	Α	N/A	2	Y	Present/Intact	SPECWC()	
L1016507-02D	Vial H2SO4 preserved split	Α	N/A	2	Y	Present/Intact	SPECWC()	
L1016507-02X	Amber 250ml unpreserved	A	7	2	Y	Present/Intact	SPECWC()	
L1016507-02Y	Amber 250ml unpreserved	Α	7	2	Y	Present/Intact	SPECWC()	
L1016507-03A	Vial H2SO4 preserved split	В	N/A	2	Y	Present/Intact	SPECWC()	
L1016507-03B	Vial H2SO4 preserved split	В	N/A	2	Y	Present/Intact	SPECWC()	
L1016507-03X	Amber 250ml unpreserved	В	7	2	Y	Present/Intact	SPECWC()	
L1016507-04A	Vial H2SO4 preserved split	Α	N/A	2	Y	Present/Intact	SPECWC()	
L1016507-04B	Vial H2SO4 preserved split	Α	N/A	2	Y	Present/Intact	SPECWC()	
L1016507-04X	Amber 250ml unpreserved	Α	7	2	Y	Present/Intact	SPECWC()	

Project Name:

SHL TASK 0002

Lab Number:

L1016507

Project Number:

AC001

Report Date:

10/26/10

GLOSSARY

Acronyms

EPA Environmental Protection Agency.

 Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LCSD · Laboratory Control Sample Duplicate: Refer to LCS.

MDL Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

 MS - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.

MSD - Matrix Spike Sample Duplicate: Refer to MS.

NA -Not Applicable.

 Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.

NI Not Ignitable.

RE Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

RPD Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method, (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Data Qualifiers

- A Spectra identified as "Aldel Condensation Product".
- The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than five times (5x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank.
- Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- H The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- 1 The RPD between the results for the two columns exceeds the method-specified criteria: however, the lower value has been reported due to obvious interference.
- P The RPD between the results for the two columns exceeds the method-specified criteria.
- The quality control sample exceeds the associated acceptance criteria. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R Analytical results are from sample re-analysis.

Report Format: Data Usability Report

ALPHA

Project Name:

SHL TASK 0002

Lab Number:

L1016507

Project Number:

AC001

Report Date:

10/26/10

Data Qualifiers

RE Analytical results are from sample re-extraction.

J - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

ND Not detected at the reporting limit (RL) for the sample.

Report Format: Data Usability Report

ALPHA

Project Name:

SHL TASK 0002

Lab Number:

L1016507

Project Number:

AC001

Report Date:

10/26/10

REFERENCES

30 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WPCF. 18th Edition. 1992.

The analyses performed on the sample(s) within this report are in accordance with the minimum established guidelines set forth in the Department of Defense Quality Systems Manual, Version 4.1. issued April 22, 2009

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Certificate/Approval Program Summary

Last revised July 19, 2010 - Westboro Facility

The following list includes only those analytes/methods for which certification/approval is currently held.

For a complete listing of analytes for the referenced methods, please contact your Alpha Customer Service Representative.

Connecticut Department of Public Health Certificate/Lab ID: PH-0574. NELAP Accredited Solid Waste/Soil.

Drinking Water (Inorganic Parameters: Color, pH, Turbidity, Conductivity, Alkalinity, Chloride, Free Residual Chlorine, Fluoride, Calcium Hardness, Sulfate, Nitrate, Nitrite, Aluminum, Antimony, Arsenic, Barium, Beryllium, Cadmium, Calcium, Chromium, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Vanadium, Zinc, Total Dissolved Solids, Total Organic Carbon, Total Cyanide, Perchlorate. Organic Parameters: Volatile Organics 524.2, Total Trihalomethanes 524.2, 1,2-Dibromo-3-chloropropane (DBCP), Ethylene Dibromide (EDB), 1,4-Dioxane (Mod 8270). Microbiology Parameters: Total Coliform-MF mEndo (SM9222B), Total Coliform – Colilert (SM9223 P/A), E. Coli. – Colilert (SM9223 P/A), HPC – Pour Plate (SM9215B), Fecal Coliform – MF m-FC (SM9222D))

Wastewater/Non-Potable Water (Inorganic Parameters: Color, pH, Conductivity, Acidity, Alkalinity, Chloride, Total Residual Chlorine, Fluoride, Total Hardness, Silica, Sulfate, Sulfide, Ammonia, Kjeldahl Nitrogen, Nitrate, Nitrite, O-Phosphate, Total Phosphorus, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Strontium, Thallium, Tin, Titanium, Vanadium, Zinc, Total Residue (Solids), Total Dissolved Solids, Total Suspended Solids (non-filterable), BOD, CBOD, COD, TOC, Total Cyanide, Phenolics, Foaming Agents (MBAS), Bromide, Oil and Grease. Organic Parameters: PCBs, Organochlorine Pesticides, Technical Chlordane, Toxaphene, 2,4-D, 2,4,5-TP(Silvex), Acid Extractables (Phenols), Benzidines, Phthalate Esters, Nitrosamines, Nitroaromatics & Isophorone, Polynuclear Aromatic Hydrocarbons, Haloethers, Chlorinated Hydrocarbons, Volatile Organics, TPH (HEM/SGT), Extractable Petroleum Hydrocarbons (ETPH), MA-EPH, MA-VPH. Microbiology Parameters: Total Coliform – MF mEndo (SM9222B), Total Coliform – MTF (SM9221B), HPC – Pour Plate (SM9215B), Fecal Coliform – MF m-FC (SM9222D), Fecal Coliform – A-1 Broth (SM9221E).)

Solid Waste/Soil (Inorganic Parameters: pH, Sulfide, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Tin, Vanadium, Zinc, Total Cyanide, Ignitability, Phenolics, Corrosivity, TCLP Leach (1311), SPLP Leach (1312 metals only), Reactivity. Organic Parameters: PCBs, PCBs in Oil, Organochlorine Pesticides, Technical Chlordane, Toxaphene, Extractable Petroleum Hydrocarbons (ETPH), MA-EPH, MA-VPH, Dicamba, 2,4-D, 2,4,5-T, 2,4,5-TP(Silvex), Volatile Organics, Acid Extractables (Phenols), 3.3'-Dichlorobenzidine, Phthalates, Nitrosamines, Nitroaromatics & Cyclic Ketones, PAHs, Haloethers, Chlorinated Hydrocarbons,)

Maine Department of Human Services Certificate/Lab ID: 2009024.

Drinking Water (Inorganic Parameters: SM9215B, 9222D, 9223B, EPA 180.1, 300.0, 353.2, SM2130B, 2320B, 4500Cl-D, 4500CN-C, 4500CN-E, 4500F-C, 4500H+B, 4500NO3-F, EPA 200.7, EPA 200.8, 245.1, EPA 300.0. Organic Parameters: 504.1, 524.2.)

Wastewater/Non-Potable Water (Inorganic Parameters: EPA 120.1, 1664A, 350.1, 351.1, 353.2, 410.4, 420.1, Lachat 10-107-06-1-B, SM2320B, 2340B, 2510B, 2540C, 2540D, 426C, 4500Cl-D, 4500Cl-E, 4500CN-C, 4500CN-E, 4500F-B, 4500F-C, 4500H+B, 4500Norg-B, 4500Norg-C, 4500NH3-B, 4500NH3-B, 4500NH3-H, 4500NO3-F, 4500P-B.5, 4500P-E, 5210B, 5220D, 5310C, EPA 200.7, 200.8, 245.1. Organic Parameters: 608, 624, ME DRO, ME GRO, MA EPH, MA VPH.)

Solid Waste/Soil (Organic Parameters: ME DRO, ME GRO, MA EPH, MA VPH.)

Massachusetts Department of Environmental Protection Certificate/Lab ID: M-MA086.

Drinking Water

Inorganic Parameters: (EPA 200.8 for: Sb,As,Ba,Be,Cd,Cr,Cu,Pb,Ni,Se,Tl)

(EPA 200.7 for: Ba, Be, Ca, Cd, Cr, Cu, Na, Ni) 245.1, (300.0 for: Nitrate-N, Fluoride, Sulfate)

353.2 for: Nitrate-N, Nitrite-N; SM4500NO3-F, 4500F-C, 4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, 2320B, SM2540C, SM4500H-B.

Organic Parameters: (EPA 524.2 for: Trihalomethanes, Volatile Organics)

(504.1 for: 1,2-Dibromoethane, 1,2-Dibromo-3-Chloropropane), 314.0, 332.

Microbiology Parameters: SM9215B; ENZ. SUB. SM9223; MF-SM9222D

Non-Potable Water

Inorganic Parameters:, (EPA 200.8 for: AI,Sb,As,Be,Cd,Cr,Cu,Pb,Mn,Ni,Se,Ag,Tl,Zn)

(EPA 200.7 for: Al,Sb,As,Be,Cd,Cr,Co,Cu,Fe,Pb,Mn,Mo,Ni,Se,Ag,Sr,Ti,Tl, V,Zn,Ca,Mg,Na,K)

245.1, SM4500H,B, EPA 120.1, SM2510B, 2540C, 2540B, 2340B, 2320B, 4500CL-E, 4500F-BC, 426C, SM4500NH3-BH, (EPA 350.1 for: Ammonia-N), LACHAT 10-107-06-1-B for Ammonia-N, SM4500NO3-F, 353.2 for Nitrate-N,

SM4500NH3-B,C-Titr, SM4500NH3-BC-NES, EPA 351.1, SM4500P-E, 4500P-B,E, 5220D, EPA 410.4, SM 5210B,

5310C, 4500CL-D, EPA 1664, SM14 510AC, EPA 420, SM4500-CN-CE, SM2540D.

Organic Parameters: (EPA 624 for Volatile Halocarbons, Volatile Aromatics)

(608 for: Chlordane, Aldrin, Dieldrin, DDD, DDE, DDT, Heptachlor, Heptachlor Epoxide, PCBs-Water), EPA 625 for SVOC Acid Extractables and SVOC Base/Neutral Extractables, 600/4-81-045-PCB-Oil

New Hampshire Department of Environmental Services Certificate/Lab ID: 200307, NELAP Accredited.

Drinking Water (Inorganic Parameters: SM6215B, 9222B, 9223B Colilert, EPA 200.7, 200.8, 245.2, 120.1, 300.0, 314.0, SM4500CN-E, 4500H+B, 4500NO3-F, 2320B, 2510B, 2540C, 4500F-C, 5310C, 2120B, EPA 331.0. Organic

Parameters: 504.1, 524.2, SM6251B.)

Non-Potable Water (Inorganic Parameters: SM9222D, 9221B, 9222B, 9221E-EC, EPA 200.7, 200.8, 245.1, 245.2, SW-846 6010B, 6020, 7196A, 7470A, SM3500-CR-D, EPA 120.1, 300.0, 350.1, 351.1, 353.2, 420.1, 1664A, SW-846 9010, 9030, 9040B, SM426C, SM2310B, 2540B, 2540D, 4500H+B, 4500NH3-H, 4500NH3-E, 4500NO2-B, 4500P-E, 4500-S2-D, 5210B, 2320B, 2540C, 4500F-C, 5310C, 5540C, LACHAT 10-117-07-1-B, LACHAT 10-107-06-1-B, LACHAT 10-107-06-1-J, LACHAT 10-117-07-1-A, SM4500CL-E, LACHAT 10-204-00-1-A, LACHAT 10-107-06-2-D. Organic Parameters: SW-846 3005A, 3015A, 3510C, 5030B, 8021B, 8260B, 8270C, 8330, EPA 624, 625, 608, SW-846 8082, 8081A.)

Solid & Chemical Materials (Inorganic Parameters: SW-846 6010B, 7196A, 7471A, 7.3.3.2, 7.3.4.2, 1010, 1030, 9010, 9012A, 9014, 9030B, 9040, 9045C, 9050C, 1311, 3005A, 3050B, 3051A. Organic Parameters: SW-846 3540C, 3545, 3580A, 5030B, 5035, 8021B, 8260B, 8270C, 8330, 8151A, 8082, 8081A.)

New Jersey Department of Environmental Protection Certificate/Lab ID: MA935. NELAP Accredited.

Drinking Water (Inorganic Parameters: SM9222B, 9221E, 9223B, 9215B, 4500NO3-F, 4500F-C, EPA 300.0, 200.7, 2540C, 2320B, 314.0, SM2120B, 2510B, 5310C, SM4500H-B, EPA 200.8, 245.2. Organic Parameters: 504.1,

SM6251B, 524.2.)

Non-Potable Water (Inorganic Parameters; SM5210B, EPA 410.4, SM5220D, 4500Cl-D, EPA 300.0, SM2120B, SM4500F-BC, EPA 200.7, 351.1, LACHAT 10-107-06-2-D, EPA 353.2, SM4500NO3-F, 4500NO2-B, EPA 1664A, SM5310B, C or D, 4500-PE, EPA 420.1, SM4500P-B5+E, 2540B, 2540C, 2540D, EPA 120.1, SM2510B, SM15 426C, SM9221CE, 9222D, 9221B, 9222B, 9215B, 2310B, 2320B, 4500NH3-H, 4500-S D, EPA 350.1, SM5210B, SW-846 3015, 6020, 7470A, 5540C, 4500H-B, EPA 200.8, SM3500Cr-D, EPA 245.1, 245.2, SW-846 9040B, 3005A, EPA 6010B, 7196A, SW-846 9010B, 9030B, Organic Parameters: SW-846 8260B, 8270C, 3510C, EPA 608, 624, 625, SW-846 5030B, 8021B, 8081A, 8082, 8151A, 8330, NJ OQA-QAM-025 Rev.7.)

Solid & Chemical Materials (Inorganic Parameters: SW-846 9040B, 3005A, 6010B, 7196A, 5030B, 9010B, 9030B, 1030, 1311, 3050B, 3051, 7471A, 9014, 9012A, 9045C, 9050A, 9065. Organic Parameters: SW-846 8021B, 8081A, 8082, 8151A, 8330, 8260B, 8270C, 1311, 1312, 3540C, 3545, 3550B, 3580A, 5035L, 5035H, NJ OQA-QAM-025 Rev.7.)

New York Department of Health Certificate/Lab ID: 11148. NELAP Accredited.

Drinking Water (Inorganic Parameters: SM9223B, 9222B, 9215B, EPA 200.8, 200.7, 245.2, SM5310C, EPA 314.0, 332.0, SM2320B, EPA 300.0, SM2120B, 4500CN-E, 4500F-C, 4500H-B, 4500NO3-F, 2540C, EPA 120.1, SM 2510B.

Organic Parameters: EPA 524.2, 504.1.)

Non-Potable Water (Inorganic Parameters: SM9221E, 9222D, 9221B, 9222B, 9215B, 5210B, EPA 410.4, SM5220D, 2310B-4a, 2320B, EPA 200.7, 300.0, LACHAT 10-117-07-1A or B, SM4500Cl-E, 4500F-C, SM15 426C, EPA 350.1, LACHAT 10-107-06-1-B, SM4500NH3-H, EPA 351.1, LACHAT 10-107-06-2, EPA 353.2, LACHAT 10-107-041-C, SM4500-NO3-F, 4500-NO2-B, 4500P-E, 2540C, 2540B, 2540D, EPA 200.8, EPA 6010B, 6020, EPA 7196A, S\M3500Cr-D, EPA 245.1, 245.2, 7470A, SM2120B, SM4500-CN-E LACHAT 10-204-00-1-A, EPA 9040B, SM4500-HB, EPA 1664A, SM5310C, EPA 420.1, SM14 510C, EPA 120.1, SM2510B, SM4500S-D, SM554QC, EPA 3005A, 3015. Organic Parameters: EPA 624, 8260B, 8270C, 625, 608, 8081A, 8151A, 8330, 8082, EPA 3510C, 5030B, 9010B, 9030B.)

Solid & Hazardous Waste (Inorganic Parameters: 1010, 1030, SW-846 Ch 7 Sec 7.3, EPA 6010B, 7196A, 7471A, 9012A, 9014, 9040B, 9045C, 9065, 9050, EPA 1311, 1312, 3005A, 3050B, 9010B, 9030B. Organic Parameters: EPA 2000B, 2010B, 2010B,

8260B, 8270C, 8081A, 8151A, 8330, 8082, 3540C, 3545, 3546, 3580, 5030B, 5035.)

North Carolina Department of the Environment and Natural Resources Certificate/Lab ID: 666. Organic Parameters: MA-EPH, MA-VPH.

Pennsylvania Department of Environmental Protection Certificate/Lab ID: 68-03671. NELAP Accredited. Non-Potable Water (Organic Parameters: EPA 3510C, 5030B, 625, 624, 608, 8081A, 8082, 8151A, 8260B, 8270C, 8330)

Solid & Hazardous Waste (Inorganic Parameters: EPA 1010, 1030, 1311, 3050B, 3051, 6010B, EPA 7.3.3.2, EPA 7.3.4.2, 7196A, 7471A, 9010B, 9012A, 9014, 9040B, 9045C, 9050, 9065. Organic Parameters: 3540C, 3545, 3580A, 5035, 8021B, 8081A, 8082, 8151A, 8260B, 8270C, 8330)

Rhode Island Department of Health Certificate/Lab ID: LAO00065. NELAP Accredited via NY-DOH.

Refer to MA-DEP Certificate for Potable and Non-Potable Water.

Refer to NY-DOH Certificate for Potable and Non-Potable Water.

Texas Commisson on Environmental Quality <u>Certificate/Lab ID</u>: T104704476-09-1. *NELAP Accredited. Non-Potable Water* (<u>Inorganic Parameters</u>: EPA 120.1, 1664, 200.7, 200.8, 245.1, 245.2, 300.0, 350.1, 351.1, 353.2, 376.2, 410.4, 420.1, 6010, 6020, 7196, 7470, 9040, SM 2120B, 2310B, 2320B, 2510B, 2540B, 2540C, 2540D, 426C, 4500CL-E, 4500CN-E, 4500F-C, 4500H+B, 4500NH3-H, 4500NO2B, 4500P-E, 4500 S2 D, 510C, 5210B, 5220D, 5310C, 5540C. <u>Organic Parameters</u>: EPA 608, 624, 625, 8081, 8082, 8151, 8260, 8270, 8330.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 1311, 1312, 9012, 9014, 9040, 9045, 9050, 9065.)

Department of Defense Certificate/Lab ID: L2217.

Drinking Water (Inorganic Parameters: SM 4500H-B. Organic Parameters: EPA 524.2, 504.1.)

Non-Potable Water (Inorganic Parameters: EPA 200.7, 200.8, 6010B, 6020, 245.1, 245.2, 7470A, 9040B, 300.0, 9251, 9038, 350.1, 353.2, 351.1, 120.1, 9050A, 410.4, 9060, 1664, 420.1, LACHAT 10-107-06-1-B, SM 4500CN-E, 4500H-B, 4500CL-E, 4500F-BC, 4500SO4-E, 426C, 4500NH3-B, 4500NH3-H, 4500NO3-F, 4500NO2-B, 4500Norg-C, 4500PE, 2510B, 5540C, 5220D, 5310C, 2540B, 2540C, 2540D, 510C, 4500S2-AD, 3005A, 3015, 9010B, 9030B. Organic Parameters: EPA 8260B, 8270C, 8330, 625, 8082, 8151A, 8081A, 3510C, 5030B, MassDEP EPH, MassDEP VPH.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 200.7, 6010B, 7471A, 9040B, 9045C, 9065, 420.1, 9012A, 6860, 1311, 1312, 3050B, 9030B, 3051, 9010B, 3540C, SM 510ABC, 4500CN-CE, 2540G, SW-846 7.3, Organic Parameters: EPA 8260B, 8270C, 8330, 8082, 8081A, 8151A, 3545, 3546, 3580, 5035, MassDEP EPH, MassDEP VPH.)

Analytes Not Accredited by NELAP

Certification is not available by NELAP for the following analytes: **EPA 8260B:** Freon-113, 1,2,4,5-Tetramethylbenzene, 4-Ethyltoluene. **EPA 8330A:** PETN, Picric Acid, Nitroglycerine, 2,6-DANT, 2,4-DANT. **EPA 8270C:** Methyl naphthalene, Dimethyl naphthalene, Total Methylnapthalenes, Total Dimethylnaphthalenes, 1,4-Diphenylhydrazine (Azobenzene). **EPA 625:** 4-Chloroaniline. **EPA 350.1** for Ammonia in a Soil matrix.

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