



39 Spruce Street ° East Longmeadow, MA 01028 ° FAX 413/525-6405 ° TEL. 413/525-2332

RICH CUSHING

CUSHING, JAMMALLO & WHEELER

180 STONE STREET

CLINTON, MA 01510

Purchase Order No.:

12/27/2005

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Project Location: 106 WATER ST, LEOMINSTER MA

LIMS-BAT #: LIMS-94076

Date Received: 12/19/2005

Job Number: 5067

Field Sample #: PRE-TREAT INF-1

Sample ID: 05B49291

Sampled: 12/19/2005

FRAC TANK

Sample Matrix: WASTE WATER

Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P / F
SPECIAL TEST		12/22/05	SBP			

TRIVALENT CHROMIUM= TOTAL CHROMIUM - HEXAVALENT CHROMIUM

CR3 = <0.0035 MG/L - <0.004 MG/L

CR3 = <0.0035 MG/L

TOTAL CHROMIUM METHOD EPA 200.7 RL = 0.0035 MG/L

HEXAVALENT CHROMIUM METHOD SM 3500 CRD RL = 0.004 MG/L

RL = Reporting Limit

ND = Not Detected at or above the Reporting Limit

NM = Not Measured

* = See end of report for comments and notes applying to this sample

SPEC LIMIT = a client specified recommended or regulatory level for comparison with data to determine PASS (P) or FAIL (F) condition of results.



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Sampled : 12/19/2005

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Sample Matrix: WASTE WATER

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
Zinc	mg/l	0.038	12/21/05	KSH	0.005		

Analytical Method:

EPA 200.7/SW846 6010

SAMPLES ARE ANALYZED BY INDUCTIVELY COUPLED PLASMA EMISSION SPECTROMETRY (ICP).

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The following notes were attached to the reported analysis :

Sample ID: * 05B49291

Analysis: Silver

MATRIX SPIKE IS OUTSIDE OF CON-TEST CONTROL LIMITS. ANALYSIS IS IN CONTROL BASED ON LABORATORY FORTIFIED BLANK RECOVERY.

Sample ID: * 05B49291

Analysis: Total Residual Chlorine

TIME ANALYZED: 6:55 PM.

Sample ID: * 05B49291

Analysis: Chromium (+6)

ANALYZED 8:40 AM

** END OF REPORT **

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QC SUMMARY REPORT

SAMPLE QC: Sample Results with Duplicates

BATCH QC: Lab fortified Blanks and Duplicates

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Method Blanks

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QC Batch Number: CYANIDE-2065

Sample Id	Analysis	QC Analysis	Values	Units	Limits
LFBLANK-47322	Cyanide	Lab Fort Blank Amt.	0.322	mg/l	
		Lab Fort Blk. Found	0.282	mg/l	
		Lab Fort Blk. % Rec.	87.578	%	
STDADD-30369	Cyanide	Standard Measured	0.238	mg/l	
		Standard Amt Added	0.256	mg/l	
		Standard % Recovery	92.969	%	80-120



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QC Batch Number: GC/ECD-8141

Sample Id	Analysis	QC Analysis	Values	Units	Limits
05B49291	Decachlorobiphenyl	Surrogate Recovery	94.0	%	30-150
	Tetrachloro-m-Xylene	Surrogate Recovery	117.0	%	30-150
BLANK-82515	PCB-1232	Blank	<0.20	ug/l	
	PCB-1242	Blank	<0.20	ug/l	
	PCB-1254	Blank	<0.20	ug/l	
	PCB-1260	Blank	<0.20	ug/l	
	PCB-1248	Blank	<0.20	ug/l	
	PCB-1221	Blank	<0.20	ug/l	
	PCB 1016	Blank	<0.20	ug/l	
LFBLANK-47357	PCB-1260	Lab Fort Blank Amt.	0.50	ug/l	
		Lab Fort Blk. Found	0.56	ug/l	
		Lab Fort Blk. % Rec.	111.80	%	40-140
	PCB 1016	Lab Fort Blank Amt.	0.50	ug/l	
		Lab Fort Blk. Found	0.67	ug/l	
		Lab Fort Blk. % Rec.	134.80	%	40-140



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QC Batch Number: GCMS/SEMI-7665

Sample Id	Analysis	QC Analysis	Values	Units	Limits
05B49291	Phenol-d6	Surrogate Recovery	39.2	%	15-110
	Nitrobenzene-d5	Surrogate Recovery	81.4	%	30-130
	2-Fluorobiphenyl	Surrogate Recovery	83.5	%	30-130
	2,4,6-Tribromophenol	Surrogate Recovery	98.2	%	15-110
	Terphenyl-d14	Surrogate Recovery	82.1	%	30-130
	2-Fluorophenol	Surrogate Recovery	57.3	%	15-110
BLANK-82442	1,4-Dichlorobenzene	Blank	<5.00	ug/l	
	Naphthalene	Blank	<1.00	ug/l	
	1,2-Dichlorobenzene	Blank	<5.00	ug/l	
	1,3-Dichlorobenzene	Blank	<5.00	ug/l	
	Acenaphthene	Blank	<0.30	ug/l	
	Acenaphthylene	Blank	<0.30	ug/l	
	Aniline	Blank	<5.00	ug/l	
	Anthracene	Blank	<0.20	ug/l	
	Benzo(a)anthracene	Blank	<0.050	ug/l	
	Benzo(a)pyrene	Blank	<0.100	ug/l	
	Benzo(b)fluoranthene	Blank	<0.050	ug/l	
	Benzo(g,h,i)perylene	Blank	<0.500	ug/l	
	Benzoic Acid	Blank	<30.0	ug/l	
	Bis(2-chloroethyl)ether	Blank	<10.0	ug/l	
	Bis(2-chloroethoxy)methane	Blank	<10.0	ug/l	
	Bis(2-chloroisopropyl)ether	Blank	<10.0	ug/l	
	Bis(2-ethylhexyl)phthalate	Blank	<1.00	ug/l	
	4-Bromophenyl phenyl ether	Blank	<10.0	ug/l	
	Butylbenzylphthalate	Blank	<20.0	ug/l	
	4-Chloroaniline	Blank	<20.0	ug/l	
	2-Chloronaphthalene	Blank	<10.0	ug/l	
	4-Chlorophenylphenyl ether	Blank	<10.0	ug/l	
	Chrysene	Blank	<0.20	ug/l	
	Dibenz(a,h)anthracene	Blank	<0.500	ug/l	
	Dibenzofuran	Blank	<10.0	ug/l	
	3,3-Dichlorobenzidine	Blank	<10.0	ug/l	
	Diethylphthalate	Blank	<10.0	ug/l	
	Dimethylphthalate	Blank	<20.0	ug/l	
	Di-n-butylphthalate	Blank	<10.0	ug/l	
	2,4-Dinitrotoluene	Blank	<10.0	ug/l	
	2,6-Dinitrotoluene	Blank	<10.0	ug/l	
	1,2-Diphenylhydrazine (as Azobenzene)	Blank	<10.0	ug/l	
	Di-n-octylphthalate	Blank	<20.0	ug/l	
	Fluoranthene	Blank	<0.50	ug/l	
	Fluorene	Blank	<1.00	ug/l	
	Hexachlorobenzene	Blank	<0.05	ug/l	



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Sample Id	Analysis	QC Analysis	Values	Units	Limits
BLANK-82442	Hexachlorobutadiene	Blank	<0.20	ug/l	
	Hexachlorocyclopentadiene	Blank	<20.0	ug/l	
	Hexachloroethane	Blank	<1.00	ug/l	
	Indeno(1,2,3-cd)pyrene	Blank	<0.500	ug/l	
	Isophorone	Blank	<10.0	ug/l	
	2-Methylnaphthalene	Blank	<1.00	ug/l	
	2-Nitroaniline	Blank	<10.0	ug/l	
	3-Nitroaniline	Blank	<10.0	ug/l	
	Nitrobenzene	Blank	<10.0	ug/l	
	N-Nitroso-di-n-propylamine	Blank	<10.0	ug/l	
	N-Nitrosodiphenylamine	Blank	<10.0	ug/l	
	Phenanthrene	Blank	<0.10	ug/l	
	Pyrene	Blank	<1.00	ug/l	
	1,2,4-Trichlorobenzene	Blank	<5.00	ug/l	
	4-Chloro-3-methylphenol	Blank	<20.0	ug/l	
	2-Chlorophenol	Blank	<10.0	ug/l	
	2,4-Dichlorophenol	Blank	<10.0	ug/l	
	2,4-Dimethylphenol	Blank	<40.0	ug/l	
	4,6-Dinitro-2-methylphenol	Blank	<10.0	ug/l	
	2,4-Dinitrophenol	Blank	<20.0	ug/l	
	o-cresol	Blank	<10.0	ug/l	
	m & p-Cresol(s)	Blank	<20.0	ug/l	
	2-Nitrophenol	Blank	<10.0	ug/l	
	4-Nitrophenol	Blank	<20.0	ug/l	
	Phenol	Blank	<10.0	ug/l	
	2,4,5-Trichlorophenol	Blank	<10.0	ug/l	
	2,4,6-Trichlorophenol	Blank	<10.0	ug/l	
	Pentachlorophenol	Blank	<1.00	ug/l	
	Pyridine	Blank	<5.0	ug/l	
	Benzo(k)fluoranthene	Blank	<0.200	ug/l	
	4-Nitroaniline	Blank	<10.0	ug/l	
	Acetophenone	Blank	<10.0	ug/l	
LFBLANK-47315	1,4-Dichlorobenzene	Lab Fort Blank Amt.	100.00	ug/l	
		Lab Fort Blk. Found	57.22	ug/l	
		Lab Fort Blk. % Rec.	57.22	%	30-130
	Naphthalene	Lab Fort Blank Amt.	100.00	ug/l	
		Lab Fort Blk. Found	64.94	ug/l	
		Lab Fort Blk. % Rec.	64.94	%	30-130
	1,2-Dichlorobenzene	Lab Fort Blank Amt.	100.00	ug/l	
		Lab Fort Blk. Found	57.12	ug/l	
		Lab Fort Blk. % Rec.	57.12	%	30-130
	1,3-Dichlorobenzene	Lab Fort Blank Amt.	100.00	ug/l	



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Sample Id	Analysis	QC Analysis	Values	Units	Limits
LFBLANK-47315					
1,3-Dichlorobenzene		Lab Fort Blk. Found	56.25	ug/l	30-130
		Lab Fort Blk. % Rec.	56.25	%	
Acenaphthene		Lab Fort Blank Amt.	100.00	ug/l	40-140
		Lab Fort Blk. Found	72.77	ug/l	
Acenaphthylene		Lab Fort Blk. % Rec.	72.77	%	40-140
		Lab Fort Blank Amt.	100.00	ug/l	
		Lab Fort Blk. Found	81.47	ug/l	40-140
		Lab Fort Blk. % Rec.	81.47	%	
Aniline		Lab Fort Blank Amt.	100.00	ug/l	
		Lab Fort Blk. Found	52.54	ug/l	
		Lab Fort Blk. % Rec.	52.54	%	
		Lab Fort Blank Amt.	100.00	ug/l	
Anthracene		Lab Fort Blk. Found	83.77	ug/l	40-140
		Lab Fort Blk. % Rec.	83.77	%	
Benzo(a)anthracene		Lab Fort Blank Amt.	100.000	ug/l	40-140
		Lab Fort Blk. Found	79.750	ug/l	
		Lab Fort Blk. % Rec.	79.750	%	40-140
		Lab Fort Blank Amt.	100.000	ug/l	
Benzo(a)pyrene		Lab Fort Blk. Found	87.120	ug/l	40-140
		Lab Fort Blk. % Rec.	87.120	%	
Benzo(b)fluoranthene		Lab Fort Blank Amt.	100.000	ug/l	40-140
		Lab Fort Blk. Found	85.630	ug/l	
		Lab Fort Blk. % Rec.	85.630	%	40-140
		Lab Fort Blank Amt.	100.000	ug/l	
Benzo(g,h,i)perylene		Lab Fort Blk. Found	88.100	ug/l	30-130
		Lab Fort Blk. % Rec.	88.100	%	
Benzoic Acid		Lab Fort Blank Amt.	100.00	ug/l	
		Lab Fort Blk. Found	14.17	ug/l	
		Lab Fort Blk. % Rec.	14.17	%	
		Lab Fort Blank Amt.	100.00	ug/l	
Bis(2-chloroethyl)ether		Lab Fort Blk. Found	60.20	ug/l	30-130
		Lab Fort Blk. % Rec.	60.20	%	
Bis(2-chloroethoxy)methane		Lab Fort Blank Amt.	100.00	ug/l	
		Lab Fort Blk. Found	66.77	ug/l	
		Lab Fort Blk. % Rec.	66.77	%	
		Lab Fort Blank Amt.	100.00	ug/l	
Bis(2-chloroisopropyl)ether		Lab Fort Blk. Found	46.78	ug/l	30-130
		Lab Fort Blk. % Rec.	46.78	%	
Bis(2-ethylhexyl)phthalate		Lab Fort Blank Amt.	100.00	ug/l	30-130
		Lab Fort Blk. Found	82.50	ug/l	
		Lab Fort Blk. % Rec.	82.50	%	30-130
		Lab Fort Blank Amt.	100.00	ug/l	
4-Bromophenyl phenyl ether		Lab Fort Blk. Found	74.70	ug/l	



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Sample Id	Analysis	QC Analysis	Values	Units	Limits
LFBLANK-47315					
4-Bromophenyl phenyl ether	Butylbenzylphthalate	Lab Fort Blk. % Rec.	74.70	%	
		Lab Fort Blank Amt.	100.00	ug/l	
		Lab Fort Blk. Found	78.32	ug/l	
4-Chloroaniline		Lab Fort Blk. % Rec.	78.32	%	
		Lab Fort Blank Amt.	100.00	ug/l	
		Lab Fort Blk. Found	66.48	ug/l	
2-Chloronaphthalene		Lab Fort Blk. % Rec.	66.48	%	40-140
		Lab Fort Blank Amt.	100.00	ug/l	
		Lab Fort Blk. Found	76.71	ug/l	
4-Chlorophenylphenyl ether		Lab Fort Blk. % Rec.	76.71	%	
		Lab Fort Blank Amt.	100.00	ug/l	
		Lab Fort Blk. Found	103.42	ug/l	
Chrysene		Lab Fort Blk. % Rec.	103.42	%	
		Lab Fort Blank Amt.	100.00	ug/l	
		Lab Fort Blk. Found	83.63	ug/l	
Dibenz(a,h)anthracene		Lab Fort Blk. % Rec.	83.63	%	40-140
		Lab Fort Blank Amt.	100.000	ug/l	
		Lab Fort Blk. Found	81.890	ug/l	
Dibenzofuran		Lab Fort Blk. % Rec.	81.890	%	30-130
		Lab Fort Blank Amt.	100.00	ug/l	
		Lab Fort Blk. Found	97.46	ug/l	
3,3-Dichlorobenzidine		Lab Fort Blk. % Rec.	97.46	%	40-140
		Lab Fort Blank Amt.	100.00	ug/l	
		Lab Fort Blk. Found	76.64	ug/l	
Diethylphthalate		Lab Fort Blk. % Rec.	76.64	%	40-140
		Lab Fort Blank Amt.	100.00	ug/l	
		Lab Fort Blk. Found	64.94	ug/l	
Dimethylphthalate		Lab Fort Blk. % Rec.	64.94	%	30-130
		Lab Fort Blank Amt.	100.00	ug/l	
		Lab Fort Blk. Found	35.80	ug/l	
DI-n-butylphthalate		Lab Fort Blk. % Rec.	35.80	%	10-130
		Lab Fort Blank Amt.	100.00	ug/l	
		Lab Fort Blk. Found	82.13	ug/l	
2,4-Dinitrotoluene		Lab Fort Blk. % Rec.	82.13	%	40-140
		Lab Fort Blank Amt.	100.00	ug/l	
		Lab Fort Blk. Found	96.69	ug/l	
2,6-Dinitrotoluene		Lab Fort Blk. % Rec.	96.69	%	40-140
		Lab Fort Blank Amt.	100.00	ug/l	
		Lab Fort Blk. Found	85.05	ug/l	
1,2-Diphenylhydrazine (as Azobenzene)		Lab Fort Blk. % Rec.	85.05	%	40-140
		Lab Fort Blank Amt.	100.00	ug/l	
		Lab Fort Blk. Found	74.74	ug/l	
		Lab Fort Blk. % Rec.	74.74	%	



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QC Batch Number: GCMS/SEMI-7665

Sample Id	Analysis	QC Analysis	Values	Units	Limits
LFBLANK-47315	Di-n-octylphthalate	Lab Fort Blank Amt.	100.00	ug/l	
		Lab Fort Blk. Found	82.47	ug/l	
		Lab Fort Blk. % Rec.	82.47	%	
	Fluoranthene	Lab Fort Blank Amt.	100.00	ug/l	
		Lab Fort Blk. Found	87.79	ug/l	
		Lab Fort Blk. % Rec.	87.79	%	40-140
	Fluorene	Lab Fort Blank Amt.	100.00	ug/l	
		Lab Fort Blk. Found	77.14	ug/l	
		Lab Fort Blk. % Rec.	77.14	%	40-140
	Hexachlorobenzene	Lab Fort Blank Amt.	100.00	ug/l	
		Lab Fort Blk. Found	84.69	ug/l	
		Lab Fort Blk. % Rec.	84.69	%	40-140
	Hexachlorobutadiene	Lab Fort Blank Amt.	100.00	ug/l	
		Lab Fort Blk. Found	71.07	ug/l	
		Lab Fort Blk. % Rec.	71.07	%	20-130
	Hexachlorocyclopentadiene	Lab Fort Blank Amt.	100.00	ug/l	
		Lab Fort Blk. Found	68.02	ug/l	
		Lab Fort Blk. % Rec.	68.02	%	
	Hexachloroethane	Lab Fort Blank Amt.	100.00	ug/l	
		Lab Fort Blk. Found	52.10	ug/l	
		Lab Fort Blk. % Rec.	52.10	%	20-130
	Indeno(1,2,3-cd)pyrene	Lab Fort Blank Amt.	100.000	ug/l	
		Lab Fort Blk. Found	85.870	ug/l	
		Lab Fort Blk. % Rec.	85.870	%	40-140
	Isophorone	Lab Fort Blank Amt.	100.00	ug/l	
		Lab Fort Blk. Found	62.89	ug/l	
		Lab Fort Blk. % Rec.	62.89	%	40-140
	2-Methylnaphthalene	Lab Fort Blank Amt.	100.00	ug/l	
		Lab Fort Blk. Found	66.13	ug/l	
		Lab Fort Blk. % Rec.	66.13	%	30-130
	2-Nitroaniline	Lab Fort Blank Amt.	100.00	ug/l	
		Lab Fort Blk. Found	70.12	ug/l	
		Lab Fort Blk. % Rec.	70.12	%	
	3-Nitroaniline	Lab Fort Blank Amt.	100.00	ug/l	
		Lab Fort Blk. Found	75.04	ug/l	
		Lab Fort Blk. % Rec.	75.04	%	
	Nitrobenzene	Lab Fort Blank Amt.	100.00	ug/l	
		Lab Fort Blk. Found	58.69	ug/l	
		Lab Fort Blk. % Rec.	58.69	%	30-130
	N-Nitroso-di-n-propylamine	Lab Fort Blank Amt.	100.00	ug/l	
		Lab Fort Blk. Found	59.41	ug/l	
		Lab Fort Blk. % Rec.	59.41	%	30-108
	N-Nitrosodiphenylamine	Lab Fort Blank Amt.	100.00	ug/l	



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Sample Id	Analysis	QC Analysis	Values	Units	Limits
LFBLANK-47315					
	N-Nitrosodiphenylamine	Lab Fort Blk. Found	85.70	ug/l	
		Lab Fort Blk. % Rec.	85.70	%	
	Phenanthrene	Lab Fort Blank Amt.	100.00	ug/l	
		Lab Fort Blk. Found	81.77	ug/l	
		Lab Fort Blk. % Rec.	81.77	%	40-140
	Pyrene	Lab Fort Blank Amt.	100.00	ug/l	
		Lab Fort Blk. Found	81.23	ug/l	
		Lab Fort Blk. % Rec.	81.23	%	40-140
	1,2,4-Trichlorobenzene	Lab Fort Blank Amt.	100.00	ug/l	
		Lab Fort Blk. Found	64.28	ug/l	
		Lab Fort Blk. % Rec.	64.28	%	30-130
	4-Chloro-3-methylphenol	Lab Fort Blank Amt.	100.00	ug/l	
		Lab Fort Blk. Found	67.88	ug/l	
		Lab Fort Blk. % Rec.	67.88	%	32-120
	2-Chlorophenol	Lab Fort Blank Amt.	100.00	ug/l	
		Lab Fort Blk. Found	60.92	ug/l	
		Lab Fort Blk. % Rec.	60.92	%	30-130
	2,4-Dichlorophenol	Lab Fort Blank Amt.	100.00	ug/l	
		Lab Fort Blk. Found	70.13	ug/l	
		Lab Fort Blk. % Rec.	70.13	%	30-130
	2,4-Dimethylphenol	Lab Fort Blank Amt.	100.00	ug/l	
		Lab Fort Blk. Found	68.30	ug/l	
		Lab Fort Blk. % Rec.	68.30	%	30-130
	4,6-Dinitro-2-methylphenol	Lab Fort Blank Amt.	100.00	ug/l	
		Lab Fort Blk. Found	87.02	ug/l	
		Lab Fort Blk. % Rec.	87.02	%	
	2,4-Dinitrophenol	Lab Fort Blank Amt.	100.00	ug/l	
		Lab Fort Blk. Found	70.47	ug/l	
		Lab Fort Blk. % Rec.	70.47	%	10-130
	o-cresol	Lab Fort Blank Amt.	100.00	ug/l	
		Lab Fort Blk. Found	57.46	ug/l	
		Lab Fort Blk. % Rec.	57.46	%	30-130
	m & p-Cresol(s)	Lab Fort Blank Amt.	100.00	ug/l	
		Lab Fort Blk. Found	58.67	ug/l	
		Lab Fort Blk. % Rec.	58.67	%	30-130
	2-Nitrophenol	Lab Fort Blank Amt.	100.00	ug/l	
		Lab Fort Blk. Found	67.96	ug/l	
		Lab Fort Blk. % Rec.	67.96	%	30-130
	4-Nitrophenol	Lab Fort Blank Amt.	100.00	ug/l	
		Lab Fort Blk. Found	32.94	ug/l	
		Lab Fort Blk. % Rec.	32.94	%	14-100
	Phenol	Lab Fort Blank Amt.	100.00	ug/l	
		Lab Fort Blk. Found	26.10	ug/l	



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QC Batch Number: GCMS/SEMI-7665

Sample Id	Analysis	QC Analysis	Values	Units	Limits
LFBLANK-47315	Phenol	Lab Fort Blk. % Rec.	26.10	%	20-130
		Lab Fort Blank Amt.	100.00	ug/l	
	2,4,5-Trichlorophenol	Lab Fort Blk. Found	68.46	ug/l	
		Lab Fort Blk. % Rec.	68.46	%	
	2,4,6-Trichlorophenol	Lab Fort Blank Amt.	100.00	ug/l	30-130
		Lab Fort Blk. Found	85.22	ug/l	
		Lab Fort Blk. % Rec.	85.22	%	30-130
		Lab Fort Blank Amt.	100.00	ug/l	
	Pentachlorophenol	Lab Fort Blk. Found	95.61	ug/l	
		Lab Fort Blk. % Rec.	95.61	%	
	Pyridine	Lab Fort Blank Amt.	100.0	ug/l	30-130
		Lab Fort Blk. Found	30.3	ug/l	
		Lab Fort Blk. % Rec.	30.3	%	
		Lab Fort Blank Amt.	100.000	ug/l	
	Benzo(k)fluoranthene	Lab Fort Blk. Found	84.780	ug/l	
		Lab Fort Blk. % Rec.	84.780	%	
	4-Nitroaniline	Lab Fort Blank Amt.	100.00	ug/l	40-140
		Lab Fort Blk. Found	82.22	ug/l	
		Lab Fort Blk. % Rec.	82.22	%	
		Lab Fort Blank Amt.	100.00	ug/l	
	Acetophenone	Lab Fort Blk. Found	66.86	ug/l	
		Lab Fort Blk. % Rec.	66.86	%	



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QC Batch Number: GCMS/VOL-13667

Sample Id	Analysis	QC Analysis	Values	Units	Limits
05B49291	1,2-Dichloroethane-d4	Surrogate Recovery	97.4	%	70-130
	Toluene-d8	Surrogate Recovery	105.6	%	70-130
	Bromofluorobenzene	Surrogate Recovery	98.4	%	70-130
BLANK-82371	Acetone	Blank	<50.0	ug/l	
	Benzene	Blank	<1.0	ug/l	
	Carbon Tetrachloride	Blank	<1.0	ug/l	
	Chloroform	Blank	<2.0	ug/l	
	1,2-Dichloroethane	Blank	<1.0	ug/l	
	1,4-Dichlorobenzene	Blank	<1.0	ug/l	
	Ethyl Benzene	Blank	<1.0	ug/l	
	2-Butanone (MEK)	Blank	<20.0	ug/l	
	MIBK	Blank	<10.0	ug/l	
	Naphthalene	Blank	<5.0	ug/l	
	Styrene	Blank	<2.0	ug/l	
	Tetrachloroethylene	Blank	<1.0	ug/l	
	Toluene	Blank	<1.0	ug/l	
	1,1,1-Trichloroethane	Blank	<1.0	ug/l	
	Trichloroethylene	Blank	<1.0	ug/l	
	Trichlorofluoromethane	Blank	<2.0	ug/l	
	o-Xylene	Blank	<1.0	ug/l	
	m + p Xylene	Blank	<2.0	ug/l	
	1,2-Dichlorobenzene	Blank	<1.0	ug/l	
	1,3-Dichlorobenzene	Blank	<1.0	ug/l	
	1,1-Dichloroethane	Blank	<1.0	ug/l	
	1,1-Dichloroethylene	Blank	<1.0	ug/l	
	1,4-Dioxane	Blank	<50.0	ug/l	
	MTBE	Blank	<2.0	ug/l	
	trans-1,2-Dichloroethylene	Blank	<1.0	ug/l	
	Vinyl Chloride	Blank	<2.0	ug/l	
	Methylene Chloride	Blank	<5.0	ug/l	
	Chlorobenzene	Blank	<1.0	ug/l	
	Chloromethane	Blank	<2.0	ug/l	
	Bromomethane	Blank	<2.0	ug/l	
	Chloroethane	Blank	<2.0	ug/l	
	cis-1,3-Dichloropropene	Blank	<2.0	ug/l	
	trans-1,3-Dichloropropene	Blank	<2.0	ug/l	
	Chlorodibromomethane	Blank	<2.0	ug/l	
	1,1,2-Trichloroethane	Blank	<1.0	ug/l	
	Bromoform	Blank	<3.0	ug/l	
	1,1,2,2-Tetrachloroethane	Blank	<0.5	ug/l	
	2-Chlorotoluene	Blank	<1.0	ug/l	
	Hexachlorobutadiene	Blank	<1.0	ug/l	



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QC Batch Number: GCMS/VOL-13667

Sample Id	Analysis	QC Analysis	Values	Units	Limits
BLANK-82371					
	Isopropylbenzene	Blank	<2.0	ug/l	
	p-Isopropyltoluene	Blank	<2.0	ug/l	
	n-Propylbenzene	Blank	<1.0	ug/l	
	sec-Butylbenzene	Blank	<1.0	ug/l	
	tert-Butylbenzene	Blank	<2.0	ug/l	
	1,2,3-Trichlorobenzene	Blank	<5.0	ug/l	
	1,2,4-Trichlorobenzene	Blank	<1.0	ug/l	
	1,2,4-Trimethylbenzene	Blank	<1.0	ug/l	
	1,3,5-Trimethylbenzene	Blank	<2.0	ug/l	
	Dibromomethane	Blank	<1.0	ug/l	
	cis-1,2-Dichloroethylene	Blank	<1.0	ug/l	
	4-Chlorotoluene	Blank	<1.0	ug/l	
	1,1-Dichloropropene	Blank	<2.0	ug/l	
	1,2-Dichloropropane	Blank	<1.0	ug/l	
	1,3-Dichloropropane	Blank	<0.5	ug/l	
	2,2-Dichloropropane	Blank	<5.0	ug/l	
	1,1,1,2-Tetrachloroethane	Blank	<1.0	ug/l	
	1,2,3-Trichloropropane	Blank	<2.0	ug/l	
	n-Butylbenzene	Blank	<2.0	ug/l	
	Dichlorodifluoromethane	Blank	<2.0	ug/l	
	Bromochloromethane	Blank	<1.0	ug/l	
	Bromobenzene	Blank	<1.0	ug/l	
	Acrylonitrile	Blank	<5.0	ug/l	
	Carbon Disulfide	Blank	<3.0	ug/l	
	2-Hexanone	Blank	<10.0	ug/l	
	trans-1,4-Dichloro-2-Butene	Blank	<2.0	ug/l	
	Diethyl Ether	Blank	<2.0	ug/l	
	Bromodichloromethane	Blank	<1.0	ug/l	
	1,2-Dibromo-3-Chloropropane	Blank	<5.0	ug/l	
	1,2-Dibromoethane	Blank	<1.00	ug/l	
	Tetrahydrofuran	Blank	<10.0	ug/l	
	tert-Butyl Alcohol	Blank	<20.0	ug/l	
	Diisopropyl Ether	Blank	<0.5	ug/l	
	tert-Butylethyl Ether	Blank	<0.5	ug/l	
	tert-Amylmethyl Ether	Blank	<0.5	ug/l	



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QC Batch Number: HG-6085

Sample Id	Analysis	QC Analysis	Values	Units	Limits
05B49291	Mercury	Sample Amount	<0.00004	mg/l	
		Matrix Spk Amt Added	0.00200	mg/l	
		MS Amt Measured	0.00172	mg/l	
		Matrix Spike % Rec.	86.00000	%	75-125
BLANK-82316	Mercury	Blank	<0.00004	mg/l	



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QC Batch Number: HGA/AA-4939

Sample Id	Analysis	QC Analysis	Values	Units	Limits
05B49291	Silver	Sample Amount	<0.0005	mg/l	
		Matrix Spk Amt Added	2.0000	mg/l	
		MS Amt Measured	0.0324	mg/l	
		Matrix Spike % Rec.	1.6220	%	
	Arsenic	Sample Amount	0.0013	mg/l	
		Duplicate Value	0.0012	mg/l	
		Duplicate RPD	6.7004	%	
		Sample Amount	0.0013	mg/l	
	Lead	Matrix Spk Amt Added	2.0000	mg/l	
		MS Amt Measured	2.1860	mg/l	
		Matrix Spike % Rec.	109.2337	%	59.7-136
		Sample Amount	0.0014	mg/l	
	Antimony	Duplicate Value	0.0013	mg/l	
		Duplicate RPD	7.0902	%	
		Sample Amount	0.0014	mg/l	
		Matrix Spk Amt Added	2.0000	mg/l	
	Selenium	MS Amt Measured	2.2340	mg/l	
		Matrix Spike % Rec.	111.6281	%	
		Sample Amount	<0.0015	mg/l	
		Matrix Spk Amt Added	2.0000	mg/l	
	BLANK-82367	MS Amt Measured	1.8980	mg/l	
		Matrix Spike % Rec.	94.9000	%	80-120
		Sample Amount	<0.0005	mg/l	
		Matrix Spk Amt Added	2.0000	mg/l	
	LFBLANK-47256	MS Amt Measured	2.2920	mg/l	
		Matrix Spike % Rec.	114.6000	%	
BLANK-82367	Silver	Blank	<0.0005	mg/l	
	Arsenic	Blank	<0.0005	mg/l	
	Lead	Blank	<0.0005	mg/l	
	Antimony	Blank	<0.0015	mg/l	
LFBLANK-47256	Selenium	Blank	<0.0005	mg/l	
	Silver	Lab Fort Blank Amt.	2.0000	mg/l	
		Lab Fort Blk. Found	1.8780	mg/l	
		Lab Fort Blk. % Rec.	93.9000	%	
	Arsenic	Lab Fort Blank Amt.	2.0000	mg/l	
		Lab Fort Blk. Found	2.0780	mg/l	
		Lab Fort Blk. % Rec.	103.9000	%	
	Lead	Lab Fort Blank Amt.	2.0000	mg/l	
		Lab Fort Blk. Found	2.2620	mg/l	
		Lab Fort Blk. % Rec.	113.1000	%	
	Antimony	Lab Fort Blank Amt.	2.0000	mg/l	



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QC Batch Number: HGA/AA-4939

Sample Id	Analysis	QC Analysis	Values	Units	Limits
LFBLANK-47256	Antimony	Lab Fort Blk. Found	1.8740	mg/l	85-115
		Lab Fort Blk. % Rec.	93.7000	%	
	Selenium	Lab Fort Blank Amt.	2.0000	mg/l	
		Lab Fort Blk. Found	2.1480	mg/l	
		Lab Fort Blk. % Rec.	107.4000	%	



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QC Batch Number: ICP-13234

Sample Id	Analysis	QC Analysis	Values	Units	Limits
05B49291	Cadmium	Sample Amount	0.0009	mg/l	
		Duplicate Value	0.0008	mg/l	
		Duplicate RPD	5.7143	%	0-20
		Sample Amount	0.0009	mg/l	
		Matrix Spk Amt Added	2.0000	mg/l	
		MS Amt Measured	1.9426	mg/l	
	Chromium	Matrix Spike % Rec.	97.0850	%	70-130
		Sample Amount	<0.004	mg/l	
		Matrix Spk Amt Added	2.000	mg/l	
		MS Amt Measured	2.007	mg/l	
		Matrix Spike % Rec.	100.370	%	70-130
	Copper	Sample Amount	0.0025	mg/l	
		Duplicate Value	0.0024	mg/l	
		Duplicate RPD	2.0202	%	0-30
		Sample Amount	0.0025	mg/l	
		Matrix Spk Amt Added	2.0000	mg/l	
		MS Amt Measured	1.9645	mg/l	
	Iron	Matrix Spike % Rec.	98.1000	%	70-130
		Sample Amount	0.88	mg/l	
		Duplicate Value	0.83	mg/l	
		Duplicate RPD	6.38	%	0-30
		Sample Amount	0.88	mg/l	
		Matrix Spk Amt Added	2.00	mg/l	
	Nickel	MS Amt Measured	2.71	mg/l	
		Matrix Spike % Rec.	91.04	%	70-130
		Sample Amount	0.004	mg/l	
		Duplicate Value	0.004	mg/l	
		Duplicate RPD	0.000	%	0-20
		Sample Amount	0.004	mg/l	
	Zinc	Matrix Spk Amt Added	2.000	mg/l	
		MS Amt Measured	1.956	mg/l	
		Matrix Spike % Rec.	97.578	%	70-130
		Sample Amount	0.038	mg/l	
		Duplicate Value	0.034	mg/l	
		Duplicate RPD	9.167	%	0-20
BLANK-82339		Sample Amount	0.038	mg/l	
		Matrix Spk Amt Added	2.000	mg/l	
		MS Amt Measured	1.946	mg/l	
		Matrix Spike % Rec.	95.428	%	70-130
	Cadmium	Blank	<0.0005	mg/l	
		Chromium	<0.004	mg/l	
		Copper	0.0010	mg/l	



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QC Batch Number: ICP-13234

Sample Id	Analysis	QC Analysis	Values	Units	Limits
BLANK-82339	Iron	Blank	<0.03	mg/l	
	Nickel	Blank	<0.003	mg/l	
	Zinc	Blank	<0.005	mg/l	
LFBLANK-47233	Cadmium	Lab Fort Blank Amt.	2.0000	mg/l	
		Lab Fort Blk. Found	1.9306	mg/l	
		Lab Fort Blk. % Rec.	96.5300	%	85-115
	Chromium	Lab Fort Blank Amt.	2.000	mg/l	
		Lab Fort Blk. Found	2.028	mg/l	
		Lab Fort Blk. % Rec.	101.380	%	85-115
	Copper	Lab Fort Blank Amt.	2.0000	mg/l	
		Lab Fort Blk. Found	1.9532	mg/l	
		Lab Fort Blk. % Rec.	97.6600	%	85-115
	Iron	Lab Fort Blank Amt.	2.00	mg/l	
		Lab Fort Blk. Found	2.00	mg/l	
		Lab Fort Blk. % Rec.	99.84	%	85-115
	Nickel	Lab Fort Blank Amt.	2.000	mg/l	
		Lab Fort Blk. Found	1.987	mg/l	
		Lab Fort Blk. % Rec.	99.345	%	85-115
	Zinc	Lab Fort Blank Amt.	2.000	mg/l	
		Lab Fort Blk. Found	1.913	mg/l	
		Lab Fort Blk. % Rec.	95.660	%	85-115



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QC Batch Number: SOLIDS-5049

Sample Id	Analysis	QC Analysis	Values	Units	Limits
STDADD-30362	Total suspended solids	Standard Measured	200.0	mg/l	
		Standard Amt Added	200.0	mg/l	
		Standard % Recovery	100.0	%	88.5-106



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QC Batch Number: WETCHEM-10620

Sample Id	Analysis	QC Analysis	Values	Units	Limits
05B49291	Chromium (+6)	Sample Amount	<0.004	mg/l	
		Matrix Spk Amt Added	0.100	mg/l	
		MS Amt Measured	0.100	mg/l	
		Matrix Spike % Rec.	100.500	%	75-125
LFBLANK-47218	Chromium (+6)	Lab Fort Blank Amt.	0.100	mg/l	
		Lab Fort Blk. Found	0.100	mg/l	
		Lab Fort Blk. % Rec.	100.500	%	
STDADD-30348	Chromium (+6)	Standard Measured	0.095	mg/l	
		Standard Amt Added	0.100	mg/l	
		Standard % Recovery	94.700	%	80-120



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QC Batch Number: WETCHEM-10630

Sample Id	Analysis	QC Analysis	Values	Units	Limits
05B49291	Phenolics	Sample Amount	<0.0500	mg/l	
		Matrix Spk Amt Added	0.5000	mg/l	
		MS Amt Measured	0.4680	mg/l	
		Matrix Spike % Rec.	93.6000	%	70.3-113
LFBLANK-47307	Phenolics	Lab Fort Blank Amt.	0.5000	mg/l	
		Lab Fort Blk. Found	0.5220	mg/l	
		Lab Fort Blk. % Rec.	104.4000	%	89.7-118
STDADD-30368	Phenolics	Standard Measured	0.5370	mg/l	
		Standard Amt Added	0.5000	mg/l	
		Standard % Recovery	107.4000	%	92.6-117



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NOTES:

QC Batch No. : WETCHEM-10620

Sample ID : 05B49291

Analysis : Chromium (+6)

ANALYZED 8:40 AM

QC Batch No. : HGA/AA-4939

Sample ID : 05B49291

Analysis : Silver

MATRIX SPIKE IS OUTSIDE OF CON-TEST CONTROL LIMITS. ANALYSIS IS IN CONTROL BASED ON LABORATORY FORTIFIED BLANK RECOVERY.



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QUALITY CONTROL DEFINITIONS AND ABBREVIATIONS

QC BATCH NUMBER	This is the number assigned to all samples analyzed together that would be subject to comparison with a particular set of Quality Control Data.
LIMITS	Upper and Lower Control Limits for the QC ANALYSIS Reported. All values normally would fall within these statistically determined limits, unless there is an unusual circumstance that would be documented in a NOTE appearing on the last page of the QC SUMMARY REPORT. Not all QC results will have Limits defined.
Sample Amount	Amount of analyte found in a sample.
Blank	Method Blank that has been taken though all the steps of the analysis.
LFBLANK	Laboratory Fortified Blank (a control sample)
STDADD	Standard Added (a laboratory control sample)
Matrix Spk Amt Added	Amount of analyte spiked into a sample
MS Amt Measured	Amount of analyte found including amount that was spiked
Matrix Spike % Rec.	% Recovery of spiked amount in sample.
Duplicate Value	The result from the Duplicate analysis of the sample.
Duplicate RPD	The Relative Percent Difference between two Duplicate Analyses.
Surrogate Recovery	The % Recovery for non-environmental compounds (surrogates) spiked into samples to determine the performance of the analytical methods.
Sur. Recovery (ELCD)	Surrogate Recovery on the Electrolytic Conductivity Detector.
Sur. Recovery (PID)	Surrogate Recovery on the Photoionization Detector.
Standard Measured	Amount measured for a laboratory control sample
Standard Amt Added	Known value for a laboratory control sample
Standard % Recovery	% recovered for a laboratory control sample with a known value.
Lab Fort Blank Amt	Laboratory Fortified Blank Amount Added
Lab Fort Blk. Found	Laboratory Fortified Blank Amount Found
Lab Fort Blk % Rec	Laboratory Fortified Blank % Recovered
Dup Lab Fort Bl Amt	Duplicate Laboratory Fortified Blank Amount Added
Dup Lab Fort Bl Fnd	Duplicate Laboratory Fortified Blank Amount Found
Dup Lab Fort Bl % Rec	Duplicate Laboratory Fortified Blank % Recovery
Lab Fort Blank Range	Laboratory Fortified Blank Range (Absolute value of difference between recoveries for Lab Fortified Blank and Lab Fortified Blank Duplicate).
Lab Fort Bl. Av. Rec.	Laboratory Fortified Blank Average Recovery
Duplicate Sample Amt	Sample Value for Duplicate used with Matrix Spike Duplicate
MSD Amount Added	Matrix Spike Duplicate Amount Added (Spiked)
MSD Amt Measured	Matrix Spike Duplicate Amount Measured
MSD % Recovery	Matrix Spike Duplicate % Recovery
MSD Range	Absolute difference between Matrix Spike and Matrix Spike Duplicate Recoveries

Company Name: CJW
Address: 180 Stone Street
Clinton, Mass.
Attention: Rich Cushing
Project Location: 106 Water Street, Leamaster, Mass.
Sampled By: GRM

Telephone: () _____
Project # 5067
Client PO # _____

DATA DELIVERY (check one):

☐ FAX ☐ EMAIL ☒ WEBSITE CLIENT

Fax # : _____

Email: _____

Format: ☐ EXCEL ☐ PDF ☐ GIS KEY

Proposal Provided? (For Billing purposes)
☐ yes _____ proposal date

State Form Required?
☐ yes ☒ no

Date Sampled

[illegible]

Con-Test Laboratory is the ONLY independent laboratory in all of New England with both prestigious AIHA and NELAP Certifications and WBE/DBE Certified!



SAMPLE RECEIPT CHECKLIST

CLIENT NAME: CJW

RECEIVED BY: (Q)

DATE: 12/19/05

1. Was chain of custody relinquished and signed?

YES

NO

2. Does Chain agree with samples?

YES

NO

If not, explain:

3. All Samples in good condition?

YES

NO

If not, explain:

4. Were samples received in compliance with Temperature 0-6 degrees C?

YES

NO

Degrees:

3.0

5. Are there any on hold samples?

YES

NO

6. Laboratory analysts notified?

YES

NO

Who WMS

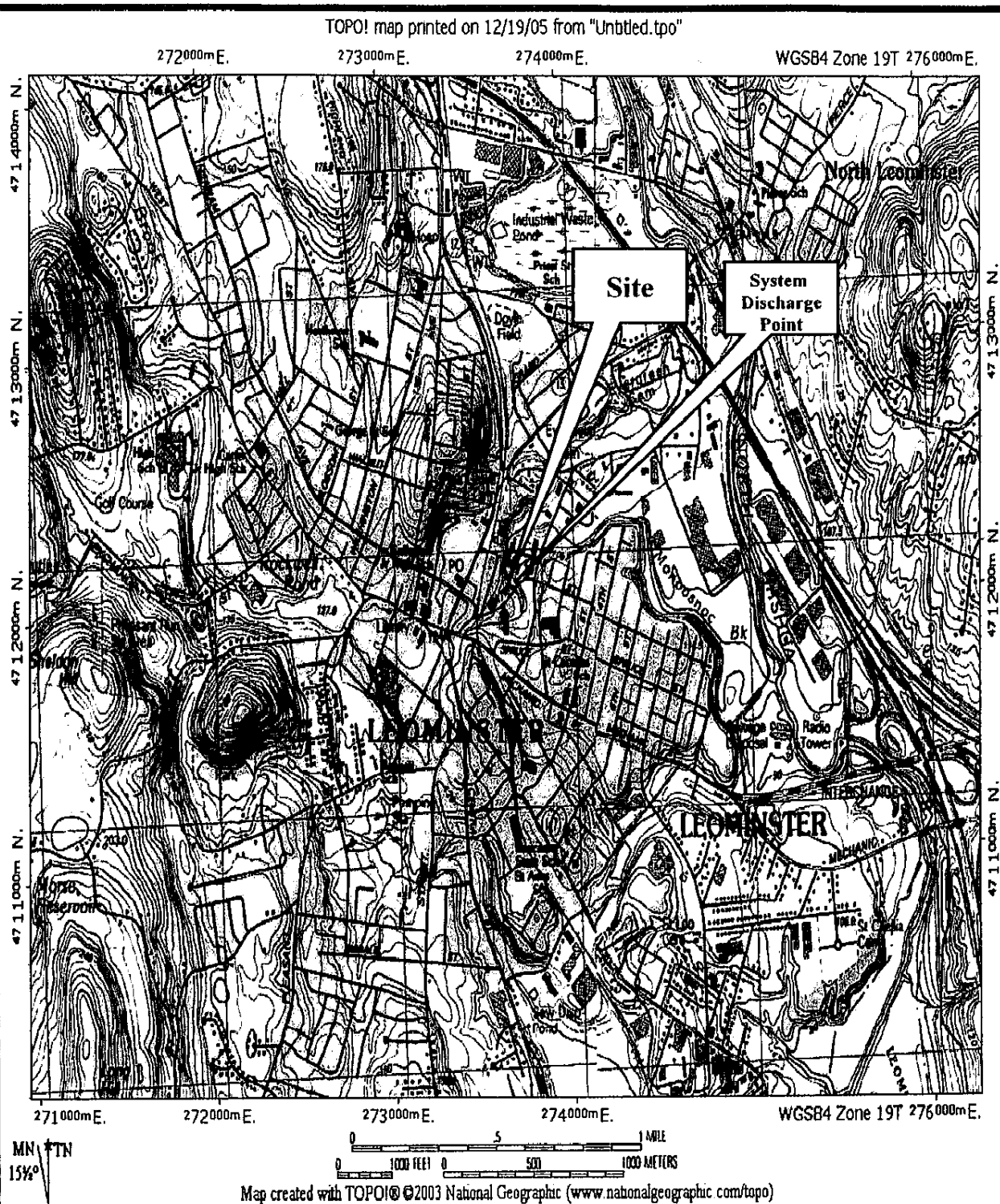
Time 6:30

Date 12/19/05

7. Location where samples are stored: 1E

CONTAINERS SENT IN TO CON-TEST	# of containers	CONTAINERS SENT TO CON-TEST	# of containers
1 liter amber	<u>13</u>	Air Cassettes	
500 ml amber	<u>1</u>	8 oz clear jar	
250 ml amber (8oz. Amber)		4 oz clear jar	
1 liter plastic	<u>3</u>	2 oz clear jar	
500 ml plastic	<u>1</u>	Plastic bag	
250 ml plastic	<u>2</u>	Encore	
40 ml vial	<u>4</u>	Brass Sleeves	
Colisure bottle		Tubes	
Dissolved oxygen bottle		Summa cans	
Flashpoint bottle		Other	

Laboratory comments:



**CUSHING, JAMMALLO
& WHEELER, INC.**

LOCUS MAP

Waterway Apartments
106 Water Street
Leominster, Massachusetts



FIGURE 1

