

1. General site information. Please provide the following information about the site:

a) Name of facility/site: Macheras Service Mart		Facility/site address: 66 Broadway Lowell, MA 01854	
Location of facility/site: longitude: <u>-71.316756</u> latitude: <u>42.644245</u>	Facility SIC code(s):	Street: 66 Broadway	
b) Name of facility/site owner: Daniel Macheras		Town: Lowell	
Email address of owner:		State: MA	Zip: 01854
Telephone no. of facility/site owner: (978) 458-2556		County: Middlesex	
Fax no. of facility/site owner:		Owner is (check one): 1. Federal____ 2. State/Tribal____ 3. Private ☒ 4. other, if so, describe:	
Address of owner (if different from site):			
Street: 66 Broadway			
Town: Lowell	State: MA	Zip: 01854	County: Middlesex
c) Legal name of operator: Coler & Colantonio, Inc.	Operator telephone no: (781) 982-5429		
	Operator fax no.: (781) 982-5486		Operator email: mgermano@col-col.com
Operator contact name and title: Mark A. Germano, LSP (Division Manager - Environmental Services)			

Address of operator (if different from owner):		Street: 101 Accord Park Drive	
Town: Norwell	State: MA	Zip: 02061	County: Plymouth
d) Check "yes" or "no" for the following: 1. Has a prior NPDES permit exclusion been granted for the discharge? Yes___ No <u>✓</u> , if "yes," number: 2. Has a prior NPDES application (Form 1 & 2C) ever been filed for the discharge? Yes___ No <u>✓</u> , if "yes," date and tracking #: 3. Is the discharge a "new discharge" as defined by 40 CFR 122.2? Yes <u>✓</u> No___ 4. For sites in Massachusetts, is the discharge covered under the MA Contingency Plan (MCP) and exempt from state permitting? Yes___ No <u>✓</u>			
e) Is site/facility subject to any State permitting or other action which is causing the generation of discharge? Yes___ No <u>✓</u> If "yes," please list: 1. site identification # assigned by the state of NH or MA: 2. permit or license # assigned: 3. state agency contact information: name, location, and telephone number:		f) Is the site/facility covered by any other EPA permit, including: 1. multi-sector storm water general permit? Y___ N <u>✓</u> , if Y, number: 2. phase I or II construction storm water general permit? Y___ N <u>✓</u> , if Y, number: 3. individual NPDES permit? Y___ N <u>✓</u> , if Y, number: 4. any other water quality related permit? Y___ N <u>✓</u> , if Y, number:	

2. Discharge information. Please provide information about the discharge, (attaching additional sheets as needed) including:

a) Describe the discharge activities for which the owner/applicant is seeking coverage: dewatering associated with the excavation of contaminated soils from the facility/site		
b) Provide the following information about each discharge:	1) Number of discharge points: 1	2) What is the maximum and average flow rate of discharge (in cubic feet per second, ft ³ /s)? Max. flow <u>0.11</u> Average flow <u>.05</u> Is maximum flow a design value ? Y <u>✓</u> N___ For average flow, include the units and appropriate notation if this value is a design value or estimate if not available.
3) Latitude and longitude of each discharge within 100 feet: pt.1: long. <u>-71.317059</u> lat. <u>42.644305</u> ; pt.2: long. _____ lat. _____ ; pt.3: long. _____ lat. _____ ; pt.4: long. _____ lat. _____ ; pt.5: long. _____ lat. _____ ; pt.6: long. _____ lat. _____ ; pt.7: long. _____ lat. _____ ; pt.8: long. _____ lat. _____ ; etc.		

4) If hydrostatic testing, total volume of the discharge (gals):	5) Is the discharge intermittent ☒ or seasonal _____? Is discharge ongoing Yes _____ No ☒ ?
c) Expected dates of discharge (mm/dd/yy): start <u>6/1/07</u> end <u>10/30/07</u>	
d) Please attach a line drawing or flow schematic showing water flow through the facility including: 1. sources of intake water, 2. contributing flow from the operation, 3. treatment units, and 4. discharge points and receiving waters(s).	

3. Contaminant information. In order to complete this section, the applicant will need to take a minimum of one sample of the untreated water and have it analyzed for all of the parameters listed in Appendix III. Historical data, (i.e., data taken no more than 2 years prior to the effective date of the permit) may be used if obtained pursuant to: i. Massachusetts' regulations 310 CMR 40.0000, the Massachusetts Contingency Plan ("Chapter 21E"); ii. New Hampshire's Title 50 RSA 485-A: Water Pollution and Waste Disposal or Title 50 RSA 485-C: Groundwater Protection Act; or iii. an EPA permit exclusion letter issued pursuant to 40 CFR 122.3, provided the data was analyzed with test methods that meet the requirements of this permit. Otherwise, a new sample shall be taken and analyzed.

a) Based on the analysis of the sample(s) of the untreated influent, the applicant must check the box of the sub-categories that the potential discharge falls within.

Gasoline Only	VOC Only	Primarily Metals	Urban Fill Sites	Contaminated Sumps	Mixed Contaminants	Aquifer Testing
Fuel Oils (and Other Oils) only	VOC with Other Contaminants	Petroleum with Other Contaminants ✓	Listed Contaminated Sites	Contaminated Dredge Condensates	Hydrostatic Testing of Pipelines/Tanks	Well Development or Rehabilitation

b) Based on the analysis of the untreated influent, the applicant must indicate whether each listed chemical is **believed present** or **believed absent** in the potential discharge. Attach additional sheets as needed.

PARAMETER	Believe Absent	Believe Present	# of Samples (1 minimum)	Type of Sample (e.g., grab)	Analytical Method Used (method #)	Minimum Level (ML) of Test Method	Maximum daily value		Avg. daily value	
							concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)
1. Total Suspended Solids		✓	1	grab	160.2	5 mg/L	380,000	12,950		
2. Total Residual Chlorine	✓		1	grab	330.1	20 ug/L	ND (<20)	0		
3. Total Petroleum Hydrocarbons		✓	1	grab	1664A	5 mg/L	167,000	5,700		
4. Cyanide		✓	1	grab	335.2	10 ug/L	10	0.4		
5. Benzene		✓	1	grab	624	2 ug/L	240	8.2		
6. Toluene		✓	1	grab	624	2 ug/L	190	6.5		
7. Ethylbenzene		✓	1	grab	624	2 ug/L	110	3.8		
8. (m,p,o) Xylenes		✓	1	grab	624	10 ug/L	700	23.9		
9. Total BTEX ⁴		✓	1	grab	624	2 ug/ L	1,250	42.6		

⁴BTEX = Sum of Benzene, Toluene, Ethylbenzene, total Xylenes.

PARAMETER	Believe Absent	Believe Present	# of Samples (1 minimum)	Type of Sample (e.g., grab)	Analytical Method Used (method #)	Minimum Level (ML) of Test Method	Maximum daily value		Avg. daily value	
							concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)
10. Ethylene Dibromide (1,2- Dibromo-methane)		✓	1	grab	504.1	0.01 ug/L	94	3.2		
11. Methyl-tert-Butyl Ether (MtBE)	✓		1	grab	624	5.0 ug/L	ND (<100)	0		
12. tert-Butyl Alcohol (TBA)	✓		1	grab	624	100 ug/L	ND (<500)	0		
13. tert-Amyl Methyl Ether (TAME)	✓		1	grab	624	0.5 ug/L	ND (<100)	0		
14. Naphthalene		✓	1	grab	8270C	0.2 ug/L	1,300	44.3		
15. Carbon Tetra-chloride	✓		1	grab	624	2 ug/L	ND (<5.0)	0		
16. 1,4 Dichlorobenzene	✓		1	grab	624	2 ug/L	ND (<25)	0		
17. 1,2 Dichlorobenzene	✓		1	grab	624	2 ug/L	ND (<25)	0		
18. 1,3 Dichlorobenzene	✓		1	grab	624	2 ug/L	ND (<25)	0		
19. 1,1 Dichloroethane	✓		1	grab	624	1 ug/L	ND (<7.5)	0		
20. 1,2 Dichloroethane	✓		1	grab	624	2 ug/L	ND (<7.5)	0		
21. 1,1 Dichloroethylene	✓		1	grab	624	2 ug/L	ND (<5.0)	0		
22. cis-1,2 Dichloro-ethylene	✓		1	grab	624	2 ug/L	ND (<5.0)	0		
23. Dichloromethane (Methylene Chloride)	✓		1	grab	624	2 ug/L	ND (<25)	0		
24. Tetrachloroethylene	✓		1	grab	624	2 ug/L	ND (<7.5)	0		

PARAMETER	Believe Absent	Believe Present	# of Samples (1 minimum)	Type of Sample (e.g., grab)	Analytical Method Used (method #)	Minimum Level (ML) of Test Method	Maximum daily value		Avg. daily Value	
							concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)
25. 1,1,1 Trichloroethane	✓		1	grab	624	2 ug/L	ND (<10)	0		
26. 1,1,2 Trichloroethane	✓		1	grab	624	2 ug/L	ND (<7.5)	0		
27. Trichloroethylene	✓		1	grab	624	2 ug/L	ND (<5.0)	0		
28. Vinyl Chloride	✓		1	grab	624	2 ug/L	ND (<10)	0		
29. Acetone		✓	1	grab	624	50 ug/L	330	11.3		
30. 1,4 Dioxane	✓		1	grab	624	50 ug/L	ND (<10,000)	0		
31. Total Phenols		✓	1	grab	420.1	1.0 ug/L	1,700	58		
32. Pentachlorophenol	✓		1	grab	8270C	1.0 ug/L	ND (<260)	0		
33. Total Phthalates ⁵ (Phthalate esthers)		✓	1	grab	8270C	5 ug/L	710	24.2		
34. Bis (2-Ethylhexyl) Phthalate [Di-(ethylhexyl) Phthalate]		✓	1	grab	8270C	5 ug/L	710	24.2		
35. Total Group I Polycyclic Aromatic Hydrocarbons (PAH)		✓	1	grab	8270C		1,550	52.8		
a. Benzo(a) Anthracene		✓	1	grab	8270C	0.05 ug/L	360	12.3		
b. Benzo(a) Pyrene		✓	1	grab	8270C	2 ug/L	250	8.6		
c. Benzo(b)Fluoranthene		✓	1	grab	8270C	0.1 ug/L	360	12.3		
d. Benzo(k) Fluoranthene		✓	1	grab	8270C	2 ug/L	140	4.8		
e. Chrysene		✓	1	grab	8270C	5 ug/L	320	10.9		

⁵The sum of individual phthalate compounds.

PARAMETER	Believe Absent	Believe Present	# of Samples (1 minimum)	Type of Sample (e.g., grab)	Analytical Method Used (method #)	Minimum Level (ML) of Test Method	Maximum daily value		Average daily value	
							concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)
f. Dibenzo(a,h) anthracene	✓		1	grab	8270C-M	0.1 ug/L	ND (<100)	0		
g. Indeno(1,2,3-cd) Pyrene		✓	1	grab	8270C-M	0.15 ug/L	120	4.1		
36. Total Group II Polycyclic Aromatic Hydrocarbons (PAH)		✓	1	grab	8270C		8,910	303.6		
h. Acenaphthene	✓		1	grab	8270C	0.5 ug/L	ND (<130)	0		
i. Acenaphthylene	✓		1	grab	8270C	0.2 ug/L	ND (<130)	0		
j. Anthracene		✓	1	grab	8270C	2 ug/L	570	19.5		
k. Benzo(ghi) Perylene		✓	1	grab	8270C	0.1 ug/L	140	4.8		
l. Fluoranthene		✓	1	grab	8270C	0.5 ug/L	1,200	40.9		
m. Fluorene		✓	1	grab	8270C	0.1 ug/L	1,500	51.1		
n. Naphthalene-		✓	1	grab	8270C	0.2 ug/L	1,300	44.3		
o. Phenanthrene		✓	1	grab	8270C	0.05 ug/L	2,900	98.8		
p. Pyrene		✓	1	grab	8270C	0.05 ug/L	1,300	44.3		
37. Total Polychlorinated Biphenyls (PCBs)	✓		1	grab	608	0.5 ug/L	ND (<0.272)	0		
38. Antimony		✓	1	grab	6020	5 ug/L	0.9	0.03		
39. Arsenic		✓	1	grab	6020	2 ug/L	193.8	6.6		
40. Cadmium		✓	1	grab	6020	0.5 ug/L	0.3	0.01		
41. Chromium III		✓	1	grab	6020	5 ug/L	36.9	1.3		
42. Chromium VI	✓		1	grab	3500CR-D	10 ug/L	ND (<100)	0		

PARAMETER	Believe Absent	Believe Present	# of Samples (1 minimum)	Type of Sample (e.g., grab)	Analytical Method Used (method #)	Minimum Level (ML) of Test Method	Maximum daily value		Avg. daily value	
							concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)
43. Copper		✓	1	grab	6020	3 ug/L	59.2	2.1		
44. Lead		✓	1	grab	6020	3 ug/L	36.6	1.3		
45. Mercury	✓		1	grab	245.2	0.2 ug/L	ND (<0.2)	0		
46. Nickel		✓	1	grab	6020	5 ug/L	43.5	1.5		
47. Selenium		✓	1	grab	6020	5 ug/L	2	0.07		
48. Silver	✓		1	grab	6020	2 ug/L	ND (<0.2)	0		
49. Zinc		✓	1	grab	6020	10 ug/L	103.1	3.51		
50. Iron		✓	1	grab	200.7		44,000	1,500		
Other (describe): See attachments	✓									

c) For discharges where **metals** are believed present, please fill out the following:

<i>Step 1:</i> Do any of the metals in the influent have a reasonable potential to exceed the effluent limits in Appendix III (i.e., the limits set at zero to five dilutions)? Y <u>✓</u> N <u> </u>	If yes, which metals? Arsenic, Cadmium, Copper, Lead, Nickel, Zinc, & Iron
<i>Step 2:</i> For any metals which have reasonable potential to exceed the Appendix III limits, calculate the dilution factor (DF) using the formula in Part I.A.3.c) (step 2) of the NOI instructions or as determined by the State prior to the submission of this NOI. What is the dilution factor for applicable metals? Metals: <u>Arsenic, Cadmium, Copper, Lead, Nickel, Zinc, & Iron</u> DF: <u>1.23</u>	Look up the limit calculated at the corresponding dilution factor in Appendix IV. Do any of the metals in the influent have the potential to exceed the corresponding effluent limits in Appendix IV (i.e., is the influent concentration above the limit set at the calculated dilution factor)? Y <u>✓</u> N <u> </u> If "Yes," list which metals: Arsenic, Cadmium, Copper, Lead, Nickel, Zinc, & Iron

4. Treatment system information. Please describe the treatment system using separate sheets as necessary, including:

a) A description of the treatment system, including a schematic of the proposed or existing treatment system: A mobile submersible pump will be moved within the excavated areas to lower the water table, ensuring excavation of dry soils. The groundwater will be pumped to the active system, consisting of an approximately 20,000 gallon frac tank, a carbon bag filter, and two drums each containing approximately 1,000 pounds of liquid phase granular activated carbon. Oil from the frac tank will be transported and disposed off site. The water will then be passed through a carbon bag filter to remove sediment and through two carbon vessels arranged in series to remove SVOC/VOC/PAH contamination before being discharged into the Western Canal. Discharge will be interminently conducted when enough water has been collect in the frac tank						
b) Identify each applicable treatment unit (check all that apply):	Frac. tank ✓	Air stripper	Oil/water separator	Equalization tanks	Bag filter ✓	GAC filter ✓
	Chlorination	Dechlorination	Other (please describe):			
c) Proposed average and maximum flow rates (gallons per minute) for the discharge and the design flow rate(s) (gallons per minute) of the treatment system: Average flow rate of discharge <u>20</u> Maximum flow rate of treatment system <u>50</u> Design flow rate of treatment system <u>50</u>						
d) A description of chemical additives being used or planned to be used (attach MSDS sheets): none						

5. Receiving surface water(s). Please provide information about the receiving water(s), using separate sheets as necessary:

a) Identify the discharge pathway:	Direct_____	Within facility__	Storm drain____	River/brook <u>✓</u>	Wetlands_____	Other (describe):
b) Provide a narrative description of the discharge pathway, including the name(s) of the receiving waters: The sump will remove water from the excavation areas and discharge the water to the Western Canal which flows along the western portion of the Site. The Western Canal discharges to the Merrimack River approximately 0.5 miles downstream of the discharge point.						

c) Attach a detailed map(s) indicating the site location and location of the outfall to the receiving water:

1. For multiple discharges, number the discharges sequentially.

2. For indirect dischargers, indicate the location of the discharge to the indirect conveyance and the discharge to surface water

The map should also include the location and distance to the nearest sanitary sewer as well as the locus of nearby sensitive receptors (based on USGS topographical mapping), such as surface waters, drinking water supplies, and wetland areas.

d) Provide the state water quality classification of the receiving water B,

e) Provide the reported or calculated seven day-ten year low flow (7Q10) of the receiving water 0.0255 cfs

Please attach any calculation sheets used to support stream flow and dilution calculations.

f) Is the receiving water a listed 303(d) water quality impaired or limited water? Yes No ✓ If yes, for which pollutant(s)?

Is there a TMDL? Yes No If yes, for which pollutant(s)?

6. Results of Consultation with Federal Services: Please provide the following information according to requirements of Part I.B.4 and Appendices II and VII.

a) Are any listed threatened or endangered species, or designated critical habitat, in proximity to the discharge? Yes No ✓

Has any consultation with the federal services been completed? No ✓ or is consultation underway? Yes No

What were the results of the consultation with the U.S. Fish and Wildlife Service and/or National Marine Fisheries Service (check one):

a "no jeopardy" opinion? or written concurrence on a finding that the discharges are not likely to adversely affect any endangered species or critical habitat?

b) Are any historic properties listed or eligible for listing on the National Register of Historic Places located on the facility or site or in proximity to the discharge?

Yes No ✓ Have any state or tribal historic preservation officer been consulted in this determination (Massachusetts only)? Yes No ✓

7. Supplemental information. :

Please provide any supplemental information. Attach any analytical data used to support the application. Attach any certification(s) required by the general permit.

See attached data.

8. Signature Requirements: The Notice of Intent must be signed by the operator in accordance with the signatory requirements of 40 CFR Section 122.22, including the following certification:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, I certify that the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I certify that I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Facility/Site Name: Macheras Service Mart

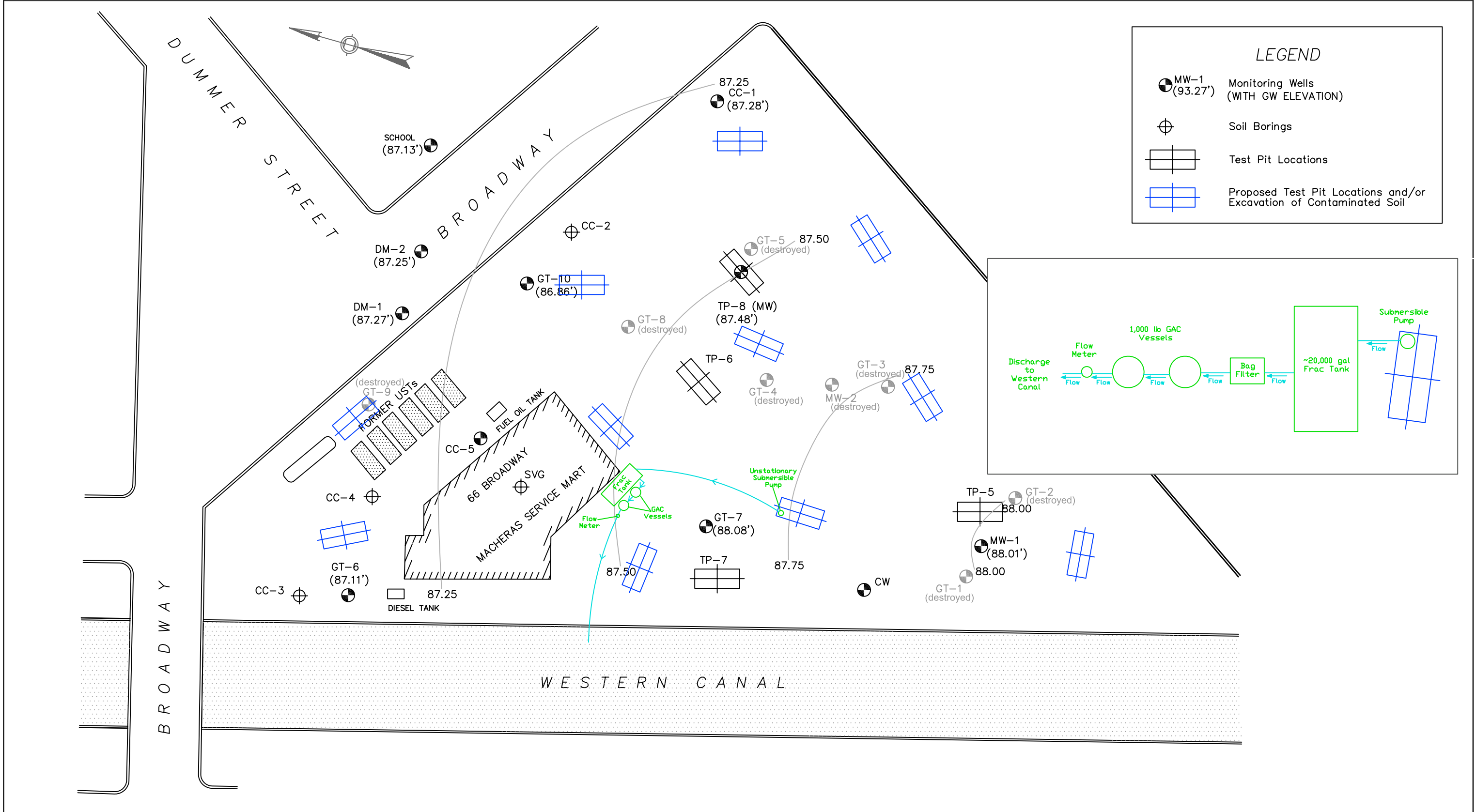
Operator signature:



Title: Coler & Colantonio, Inc. - Environmental Services Division Manager

Date:

6/5/07



Attachment for NOI Section 3. b)
Macheras Service Mart
66 Broadway
Lowell, MA

PARAMETER	Believe Absent	Believe Present	# of Samples (1 min- imum)	Type of Sample (e.g., grab)	Analytical Method Used (method #)	Minimum Level (ML) of Test Method	Maximum daily value		Avg. daily value	
							concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)
2-Butanone		✓	1	grab	624		160	5.5		
Benzo (e) pyrene		✓	1	grab	8270		180	6.2		
1-Methylnaphthalene		✓	1	grab	8270		4,800	164		
2-Methylnaphthalene		✓	1	grab	8270		4,100	140		
2,6--Dimethylnaphthalene		✓	1	grab	8270		9,800	334		
1-Methylphenanthrene		✓	1	grab	8270		1,400	47.7		

Attachment for NOI Section 3. b)
Macheras Service Mart
66 Broadway
Lowell, MA

PARAMETER	Maximum daily value		
	concentration (ug/l)	concentration (kg/l)	mass (kg) [Concentration (kg/L) x max flow rate (L/h) x max hours of discharge/day] max flow rate = 11,355 L/h max hours of discharge/day = 3 h/day
1. Total Suspended Solids	380,000	0.380000	12944.70
2. Total Residual Chlorine	ND (<20)	0	0
3. Total Petroleum Hydrocarbons	167,000	0.167000	5688.86
4. Cyanide	10	0.000010	0.34
5. Benzene	240	0.000240	8.18
6. Toluene	190	0.000190	6.47
7. Ethylbenzene	110	0.000110	3.75
8. (m,p,o) Xylenes	700	0.000700	23.85
9. Total BTEX	1,250	0.001250	42.58
10. Ethylene Dibromide (1,2- Dibromo-methane)	94	0.000094	3.20
11. Methyl-tert-Butyl Ether (MtBE)	ND (<100)	0	0
12. tert-Butyl Alcohol (TBA)	ND (<500)	0	0
13. tert-Amyl Methyl Ether (TAME)	ND (<100)	0	0
14. Naphthalene	1,300	0.001300	44.28
15. Carbon Tetrachloride	ND (<5.0)	0	0
16. 1,4 Dichlorobenzene	ND (<25)	0	0
17. 1,2 Dichlorobenzene	ND (<25)	0	0
18. 1,3 Dichlorobenzene	ND (<25)	0	0
19. 1,1 Dichloroethane	ND (<7.5)	0	0
20. 1,2 Dichloroethane	ND (<7.5)	0	0
21. 1,1 Dichloroethylene	ND (<5.0)	0	0
22. cis-1,2 Dichloroethylene	ND (<5.0)	0	0
23. Dichloromethane (Methylene Chloride)	ND (<25)	0	0
24. Tetrachloroethylene	ND (<7.5)	0	0
25. 1,1,1 Trichloroethane	ND (<10)	0	0
26. 1,1,2 Trichloroethane	ND (<7.5)	0	0
27. Trichloroethylene	ND (<5.0)	0	0
28. Vinyl Chloride	ND (<10)	0	0
29. Acetone	330	0.000330	11.24
30. 1,4 Dioxane	ND (<10,000)	0	0
31. Total Phenols	1,700	0.001700	57.91
32. Pentachlorophenol	ND (<260)	0	0
33. Total Phthalates 5 (Phthalate esthers)	710	0.000710	24.19
34. Bis (2-Ethylhexyl) Phthalate [Di(ethylhexyl) Phthalate]	710	0.000710	24.19
35. Total Group I Polycyclic Aromatic Hydrocarbons (PAH)	1,550	0.001550	52.80
a. Benzo(a) Anthracene	360	0.000360	12.26
b. Benzo(a) Pyrene	250	0.000250	8.52
c. Benzo(b)Fluoranthene	360	0.000360	12.26
d. Benzo(k) Fluoranthene	140	0.000140	4.77
e. Chrysene	320	0.000320	10.90
f. Dibenzo(a,h) anthracene	ND (<100)	0	0
g. Indeno(1,2,3-cd) Pyrene	120	0.000120	4.09
36. Total Group II Polycyclic Aromatic Hydrocarbons (PAH)	8,910	0.008910	303.52
h. Acenaphthene	ND (<130)	0	0
i. Acenaphthylene	ND (<130)	0	0
j. Anthracene	570	0.000570	19.42
k. Benzo(ghi) Perylene	140	0.000140	4.77
l. Fluoranthene	1,200	0.001200	40.88
m. Fluorene	1,500	0.001500	51.10
n. Naphthalene-	1,300	0.001300	44.28
o. Phenanthrene	2,900	0.002900	98.79
p. Pyrene	1,300	0.001300	44.28
37. Total Polychlorinated Biphenyls (PCBs)	ND (<0.272)	0	0
38. Antimony	0.9	0.000001	0.03
39. Arsenic	193.8	0.000194	6.60
40. Cadmium	0.3	0.000000	0.01
41. Chromium III	36.9	0.000037	1.26
42. Chromium VI	ND (<100)	0	0
43. Copper	59.2	0.000059	2.02
44. Lead	36.6	0.000037	1.25
45. Mercury	ND (<0.2)	0	0
46. Nickel	43.5	0.000044	1.48
47. Selenium	2	0.000002	0.07
48. Silver	ND (<0.2)	0	0
49. Zinc	103.1	0.000103	3.51
50. Iron	44,000	0.044000	1498.86
Other (describe):			
2-Butanone	160	0.000160	5.45
Benzo (e) pyrene	180	0.000180	6.13
1-Methylnaphthalene	4,800	0.004800	163.51
2-Methylnaphthalene	4,100	0.004100	139.67
2,6--Dimethylnaphthalene	9,800	0.009800	333.84
1-Methylphenanthrene	1,400	0.001400	47.69

DEP MCP 21e Map Legend

- Zone IIs
- IWPAAs
- Zone A
- Sole Source Aquifers
- Solid Waste Sites
- Protected Openspace
- ACECs
- NHESP Estimated Habitat of Rare Wildlife in Wetland Areas
- Certified Vernal Pools 2003 NHESP
- Subbasins
- Mass Major Basins
- DEP Region
- Town Arcs
- County Boundaries

Public Water Supplies

- COMMUNITY PUBLIC WATER SUPPLY - GROUNDWATER
- COMMUNITY PUBLIC WATER SUPPLY - SURFACE WATER
- NON COMMUNITY PUBLIC WATER SUPPLY

Aquifers, By Yield

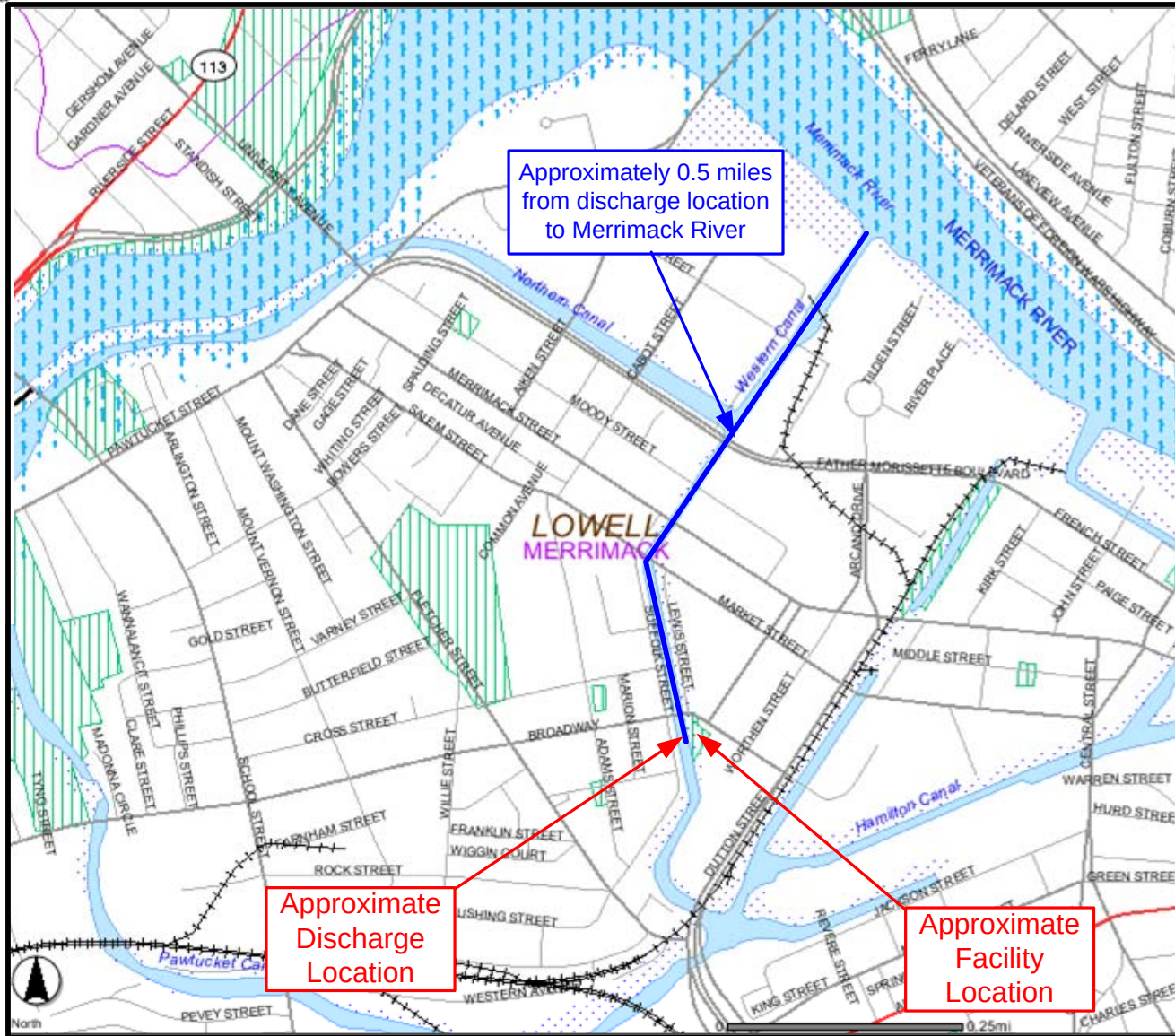
- HIGH YIELD
- MEDIUM YIELD

Non Potential Drinking Water Source Area

- HIGH YIELD
- MEDIUM YIELD

FEMA Floodplains

- 100 YEAR FLOODPLAIN



Hydrography

- WATER
- RESERVOIR
- WETLANDS
- SALT WATER WETLANDS
- FLATS, SHOALS

Rivers and Streams

- PERENNIAL
- INTERMITTENT
- SHORELINE
- MAN MADE SHORE
- DAM
- AQUEDUCT

MHD Roads

- LIMITED ACCESS HIGHWAY
- MULTI-LANE HWY, NOT LIMITED ACCESS
- OTHER NUMBERED HWY
- MAJOR ROAD - COLLECTOR
- MINOR STREET OR ROAD, RAMP

Tracks and Trails MHD

- TRACK
- TRAIL

Transmission Lines

- PIPELINE
- POWERLINE
- TRAIN

ALPHA ANALYTICAL LABORATORIES

Eight Walkup Drive
Westborough, Massachusetts 01581-1019
(508) 898-9220 www.alpha lab.com

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

CERTIFICATE OF ANALYSIS

Client: Coler & Colantonio

Laboratory Job Number: L0706825

Address: 101 Accord Park Drive

Norwell, MA 02061

Date Received: 11-MAY-2007

Attn: Ms. Lauren Gervais

Date Reported: 15-MAY-2007

Project Number: 11-1012.00

Delivery Method: Client

Site: MACHERAS SERVICE MART

ALPHA SAMPLE NUMBER	CLIENT IDENTIFICATION	SAMPLE LOCATION
L0706825-01	GT-10	LOWELL, MA

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

Authorized by: _____

Technical Representative

**ALPHA ANALYTICAL LABORATORIES
NARRATIVE REPORT**

Laboratory Job Number: L0706825

The samples were received in accordance with the chain of custody and no significant deviations were encountered during preparation or analysis unless otherwise noted below.

Chlorine, Total Residual

L0706825-02 is reported without a Laboratory Duplicate due to a laboratory error.

Phenolics, Total

L0706825-01 has an elevated limit of detection due to the 5x dilution required by the matrix of the sample.

Hexavalent Chromium

L0706825-01 was analyzed at a 10x dilution due to an oily sample matrix. The MS performed on this sample has % recovery below the acceptance criteria for the method. Although there was little spike recovery at this dilution, the result is being reported based on the ICP result of ND for Total Chromium at a 0.01 ppm Detection Limit.

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0706825-01

GT-10

Sample Matrix: WATER

Date Collected: 11-MAY-2007 15:30

Date Received : 11-MAY-2007

Date Reported : 15-MAY-2007

Condition of Sample: Satisfactory

Field Prep: None

Number & Type of Containers: 3-Amber

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE		ID
					PREP	ANAL	
Chlorine, Total Residual	ND	mg/l	0.02	4 330.1		0511 23:30	LR
Phenolics, Total	1.7	mg/l	0.15	4 420.1		0514 11:00	AT
Chromium, Hexavalent	ND	mg/l	0.100	30 3500CR-D	0511 23:50	0511 23:50	HG

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH DUPLICATE ANALYSIS

Laboratory Job Number: L0706825

Parameter	Value 1	Value 2	Units	RPD	RPD Limits
Phenolics, Total for sample(s) 01 (L0706825-01, WG280209-4)					
Phenolics, Total	1.7	1.7	mg/l	0	12
Chromium, Hexavalent for sample(s) 01 (L0706825-01, WG280079-4)					
Chromium, Hexavalent	ND	ND	mg/l	NC	20

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH SPIKE ANALYSES

Laboratory Job Number: L0706825

Parameter	% Recovery	QC Criteria
Chlorine, Total Residual LCS for sample(s) 01 (WG280292-2)		
Chlorine, Total Residual	105	
Phenolics, Total LCS for sample(s) 01 (WG280209-2)		
Phenolics, Total	95	82-111
Chromium, Hexavalent LCS for sample(s) 01 (WG280079-2)		
Chromium, Hexavalent	96	85-115
Phenolics, Total SPIKE for sample(s) 01 (L0706825-01, WG280209-3)		
Phenolics, Total	94	77-124
Chromium, Hexavalent SPIKE for sample(s) 01 (L0706825-01, WG280079-3)		
Chromium, Hexavalent	1	85-115

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH BLANK ANALYSIS

Laboratory Job Number: L0706825

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATE		ID
						PREP	ANAL	
Blank Analysis for sample(s) 01 (WG280292-1)								
Chlorine, Total Residual	ND	mg/l	0.02	4	330.1		0511 23:30	LR
Blank Analysis for sample(s) 01 (WG280209-1)								
Phenolics, Total	ND	mg/l	0.03	4	420.1		0514 11:00	AT
Blank Analysis for sample(s) 01 (WG280079-1)								
Chromium, Hexavalent	ND	mg/l	0.010	30	3500CR-D	0511 23:50	0511 23:50	HG

**ALPHA ANALYTICAL LABORATORIES
ADDENDUM I**

REFERENCES

4. Methods for Chemical Analysis of Water and Wastes. EPA 600/4-79-020. Revised March 1983.
30. Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WPCF. 18th Edition. 1992.

GLOSSARY OF TERMS AND SYMBOLS

REF	Reference number in which test method may be found.
METHOD	Method number by which analysis was performed.
ID	Initials of the analyst.
ND	Not detected in comparison to the reported detection limit.
NI	Not Ignitable.
ug/cart	Micrograms per Cartridge.

LIMITATION OF LIABILITIES

Alpha Analytical, Inc. 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, Inc., shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical, Inc. 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, Inc.

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

ALPHA ANALYTICAL LABORATORIES

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(508) 898-9220 www.alpha lab.com

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

CERTIFICATE OF ANALYSIS

Client: Coler & Colantonio

Laboratory Job Number: L0706605

Address: 101 Accord Park Drive

Norwell, MA 02061

Date Received: 08-MAY-2007

Attn: Ms. Lauren Gervais

Date Reported: 16-MAY-2007

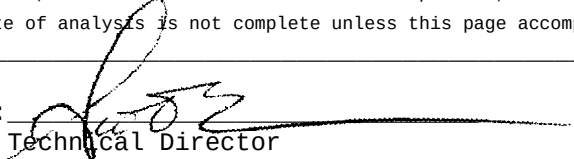
Project Number: 11-1012

Delivery Method: Alpha

Site: MACHERAS SERVICE MART

ALPHA SAMPLE NUMBER	CLIENT IDENTIFICATION	SAMPLE LOCATION
L0706605-01	GT-10	LOWELL, MA

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

Authorized by: 
Technical Director

**ALPHA ANALYTICAL LABORATORIES
NARRATIVE REPORT**

Laboratory Job Number: L0706605

The samples were received in accordance with the chain of custody and no significant deviations were encountered during preparation or analysis unless otherwise noted below.

Report Submission

The analysis of TRC and Hexavalent chromium will be re-samples because samples were received out of holding time. Also, Phenols weren't logged for that job because the sample was received in an incorrect bottle.

Solids, Total Suspended

L0706605-01 has an elevated detection limit due to the 5x dilution required for higher concentrations of Total Suspended Solids.

Volatile Organics

L0706605-01 was re-analyzed due to an over dilution on the original analysis. The results of the re-analysis is reported and has elevated detection limits due to the 5x dilutions required by the elevated concentrations of target compounds in the sample.

Semi-Volatile Organics

L0706605-01 has elevated detection limits due to the 5x dilution required by the matrix interferences encountered during the concentration of the sample. This sample also has elevated detection limits due to the additional 5x dilutions required by the elevated concentrations of target compounds in the sample. The surrogates could not be recovered due to the dilutions required to quantitate the sample.

The WG280341 Method Blank has a reportable concentration for Bis 2-ethylhexyl phthalate. All associated samples were not re-extracted due to the limited sample volume available for analysis.

The WG280341 LCS % recovery for Hexachloropropene is below method acceptance criteria. The MS and MSD were within acceptable limits for Hexachloropropene, therefore, no further action taken.

The WG280341 MSD % recovery for p-Chloro-m-cresol is above method acceptance criteria. The LCS and MS were within acceptable limits for p-Chloro-m-cresol.

PAH-LOW

L0706605-01 has elevated detection limits due to the 5x dilution required by the matrix interferences encountered during the concentration of the sample. This sample also has elevated detection limits due to the additional 100x dilutions required by the elevated concentrations of target compounds in the sample. The surrogates could not be recovered due to the dilutions required to quantitate the sample.

**ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS**

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0706605-01

Date Collected: 07-MAY-2007 13:00

GT-10

Date Received : 08-MAY-2007

Sample Matrix: WATER

Date Reported : 16-MAY-2007

Condition of Sample: Satisfactory

Field Prep: None

Number & Type of Containers: 6-Amber,8-Plastic,4-Vial

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATE PREP	DATE ANAL	ID
Solids, Total Suspended	380	mg/l	25	4	160.2		0509 16:45	DW
Cyanide, Total	0.010	mg/l	0.005	4	335.2	0510 15:30	0510 21:06	DD
TPH	167	mg/l	4.00	74	1664A	0509 10:00	0509 15:00	AT
Total Metals								
Antimony, Total	0.0009	mg/l	0.0005	1	6020	0510 15:45	0511 22:23	BM
Arsenic, Total	0.1938	mg/l	0.0005	1	6020	0510 15:45	0511 22:23	BM
Cadmium, Total	0.0003	mg/l	0.0002	1	6020	0510 15:45	0511 22:23	BM
Chromium, Total	0.0369	mg/l	0.0005	1	6020	0510 15:45	0511 22:23	BM
Copper, Total	0.0592	mg/l	0.0005	1	6020	0510 15:45	0511 22:23	BM
Iron, Total	44	mg/l	0.05	19	200.7	0510 15:45	0515 15:45	AI
Lead, Total	0.0366	mg/l	0.0005	1	6020	0510 15:45	0511 22:23	BM
Mercury, Total	ND	mg/l	0.0002	4	245.2	0510 20:20	0511 11:08	DM
Nickel, Total	0.0435	mg/l	0.0005	1	6020	0510 15:45	0511 22:23	BM
Selenium, Total	0.002	mg/l	0.001	1	6020	0510 15:45	0511 22:23	BM
Silver, Total	ND	mg/l	0.0004	1	6020	0510 15:45	0511 22:23	BM
Zinc, Total	0.1031	mg/l	0.0050	1	6020	0510 15:45	0511 22:23	BM
Pesticides by GC 504				14	504.1	0509 16:15	0509 19:49	JB
1,2-Dibromoethane	0.094	ug/l	0.020					
1,2-Dibromo-3-chloropropane	ND	ug/l	0.020					
Volatile Organics by GC/MS 624				5	624	0510 14:21		MM
Methylene chloride	ND	ug/l	25.					
1,1-Dichloroethane	ND	ug/l	7.5					
Chloroform	ND	ug/l	7.5					
Carbon tetrachloride	ND	ug/l	5.0					
1,2-Dichloropropane	ND	ug/l	18.					
Dibromochloromethane	ND	ug/l	5.0					
1,1,2-Trichloroethane	ND	ug/l	7.5					
2-Chloroethylvinyl ether	ND	ug/l	50.					
Tetrachloroethene	ND	ug/l	7.5					
Chlorobenzene	ND	ug/l	18.					
Trichlorofluoromethane	ND	ug/l	25.					
1,2-Dichloroethane	ND	ug/l	7.5					
1,1,1-Trichloroethane	ND	ug/l	10.					

Comments: Complete list of References and Glossary of Terms found in Addendum I

**ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS**

Laboratory Sample Number: L0706605-01
GT-10

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP ANAL	ID
Volatile Organics by GC/MS 624 cont'd				5 624	0510 14:21 MM	
Bromodichloromethane	ND	ug/l	5.0			
trans-1,3-Dichloropropene	ND	ug/l	7.5			
cis-1,3-Dichloropropene	ND	ug/l	7.5			
Bromoform	ND	ug/l	5.0			
1,1,2,2-Tetrachloroethane	ND	ug/l	5.0			
Benzene	240	ug/l	5.0			
Toluene	190	ug/l	5.0			
Ethylbenzene	110	ug/l	5.0			
Chloromethane	ND	ug/l	50.			
Bromomethane	ND	ug/l	25.			
Vinyl chloride	ND	ug/l	10.			
Chloroethane	ND	ug/l	10.			
1,1-Dichloroethene	ND	ug/l	5.0			
trans-1,2-Dichloroethene	ND	ug/l	7.5			
cis-1,2-Dichloroethene	ND	ug/l	5.0			
Trichloroethene	ND	ug/l	5.0			
1,2-Dichlorobenzene	ND	ug/l	25.			
1,3-Dichlorobenzene	ND	ug/l	25.			
1,4-Dichlorobenzene	ND	ug/l	25.			
p/m-Xylene	500	ug/l	10			
o-xylene	200	ug/l	5.0			
Xylene (Total)	700	ug/l	10			
Styrene	ND	ug/l	5.0			
Acetone	330	ug/l	50			
Carbon disulfide	ND	ug/l	25.			
2-Butanone	160	ug/l	50			
Vinyl acetate	ND	ug/l	100			
4-Methyl-2-pentanone	ND	ug/l	50.			
2-Hexanone	ND	ug/l	50.			
Acrolein	ND	ug/l	40.			
Acrylonitrile	ND	ug/l	50.			
Methyl tert butyl ether	ND	ug/l	100			
1,4-Dioxane	ND	ug/l	10000			
Tert-Butyl Alcohol	ND	ug/l	500			
Tertiary-Amyl Methyl Ether	ND	ug/l	100			
Surrogate(s)	Recovery		QC Criteria			
Pentafluorobenzene	92.0	%	80-120			
Fluorobenzene	92.0	%	80-120			
4-Bromofluorobenzene	82.0	%	80-120			
SVOC's by GC/MS 8270				1 8270C	0509 15:10 0514 21:17 RL	
Acenaphthene	ND	ug/l	130			
Benzidine	ND	ug/l	1300			
1,2,4-Trichlorobenzene	ND	ug/l	130			
Hexachlorobenzene	ND	ug/l	130			
Bis(2-chloroethyl)ether	ND	ug/l	130			
1-Chloronaphthalene	ND	ug/l	130			
2-Chloronaphthalene	ND	ug/l	160			

Comments: Complete list of References and Glossary of Terms found in Addendum I

**ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS**

Laboratory Sample Number: L0706605-01
GT-10

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE		ID
					PREP	ANAL	
SVOC's by GC/MS 8270 cont'd				1	8270C	0509 15:10	0514 21:17 RL
1,2-Dichlorobenzene	ND	ug/l	130				
1,3-Dichlorobenzene	ND	ug/l	130				
1,4-Dichlorobenzene	ND	ug/l	130				
3,3'-Dichlorobenzidine	ND	ug/l	1300				
2,4-Dinitrotoluene	ND	ug/l	160				
2,6-Dinitrotoluene	ND	ug/l	130				
Azobenzene	ND	ug/l	130				
Fluoranthene	1200	ug/l	130				
4-Chlorophenyl phenyl ether	ND	ug/l	130				
4-Bromophenyl phenyl ether	ND	ug/l	130				
Bis(2-chloroisopropyl)ether	ND	ug/l	130				
Bis(2-chloroethoxy)methane	ND	ug/l	130				
Hexachlorobutadiene	ND	ug/l	260				
Hexachlorocyclopentadiene	ND	ug/l	780				
Hexachloroethane	ND	ug/l	130				
Isophorone	ND	ug/l	130				
Naphthalene	1300	ug/l	130				
Nitrobenzene	ND	ug/l	130				
NDPA/DPA	ND	ug/l	390				
n-Nitrosodi-n-propylamine	ND	ug/l	130				
Bis(2-ethylhexyl)phthalate	710	ug/l	130				
Butyl benzyl phthalate	ND	ug/l	130				
Di-n-butylphthalate	ND	ug/l	130				
Di-n-octylphthalate	ND	ug/l	130				
Diethyl phthalate	ND	ug/l	130				
Dimethyl phthalate	ND	ug/l	130				
Benzo(a)anthracene	360	ug/l	130				
Benzo(a)pyrene	250	ug/l	130				
Benzo(b)fluoranthene	360	ug/l	130				
Benzo(k)fluoranthene	140	ug/l	130				
Chrysene	320	ug/l	130				
Acenaphthylene	ND	ug/l	130				
Anthracene	570	ug/l	130				
Benzo(ghi)perylene	140	ug/l	130				
Fluorene	1500	ug/l	130				
Phenanthrene	2900	ug/l	130				
Dibenzo(a,h)anthracene	ND	ug/l	130				
Indeno(1,2,3-cd)pyrene	ND	ug/l	180				
Pyrene	1300	ug/l	130				
Benzo(e)pyrene	180	ug/l	130				
Biphenyl	ND	ug/l	130				
Perylene	ND	ug/l	130				
Aniline	ND	ug/l	520				
4-Chloroaniline	ND	ug/l	130				
1-Methylnaphthalene	4500	ug/l	130				
2-Nitroaniline	ND	ug/l	130				
3-Nitroaniline	ND	ug/l	130				
4-Nitroaniline	ND	ug/l	180				
Dibenzofuran	ND	ug/l	130				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0706605-01
GT-10

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE		ID
					PREP	ANAL	
SVOC's by GC/MS 8270 cont'd				1	8270C	0509 15:10	0514 21:17 RL
a,a-Dimethylphenethylamine	ND	ug/l	1300				
Hexachloropropene	ND	ug/l	260				
Nitrosodi-n-butylamine	ND	ug/l	260				
2-Methylnaphthalene	3700	ug/l	130				
1,2,4,5-Tetrachlorobenzene	ND	ug/l	520				
Pentachlorobenzene	ND	ug/l	520				
a-Naphthylamine	ND	ug/l	650				
b-Naphthylamine	ND	ug/l	520				
Phenacetin	ND	ug/l	260				
Dimethoate	ND	ug/l	520				
4-Aminobiphenyl	ND	ug/l	260				
Pentachloronitrobenzene	ND	ug/l	260				
Isodrin	ND	ug/l	260				
p-Dimethylaminoazobenzene	ND	ug/l	260				
Chlorobenzilate	ND	ug/l	520				
3-Methylcholanthrene	ND	ug/l	520				
Ethyl Methanesulfonate	ND	ug/l	390				
Acetophenone	ND	ug/l	520				
Nitrosodipiperidine	ND	ug/l	520				
7,12-Dimethylbenz(a)anthracene	ND	ug/l	520				
n-Nitrosodimethylamine	ND	ug/l	1300				
2,4,6-Trichlorophenol	ND	ug/l	130				
p-Chloro-m-cresol	ND	ug/l	130				
2-Chlorophenol	ND	ug/l	160				
2,4-Dichlorophenol	ND	ug/l	260				
2,4-Dimethylphenol	ND	ug/l	260				
2-Nitrophenol	ND	ug/l	520				
4-Nitrophenol	ND	ug/l	260				
2,4-Dinitrophenol	ND	ug/l	780				
4,6-Dinitro-o-cresol	ND	ug/l	520				
Pentachlorophenol	ND	ug/l	260				
Phenol	ND	ug/l	180				
2-Methylphenol	ND	ug/l	160				
3-Methylphenol/4-Methylphenol	ND	ug/l	160				
2,4,5-Trichlorophenol	ND	ug/l	130				
2,6-Dichlorophenol	ND	ug/l	260				
Benzoic Acid	ND	ug/l	1300				
Benzyl Alcohol	ND	ug/l	260				
Carbazole	ND	ug/l	130				
Pyridine	ND	ug/l	1300				
2-Picoline	ND	ug/l	520				
Pronamide	ND	ug/l	520				
Methyl methanesulfonate	ND	ug/l	520				
Surrogate(s)	Recovery		QC Criteria				
2-Fluorophenol	ND	%	21-120				
Phenol-d6	ND	%	10-120				
Nitrobenzene-d5	ND	%	23-120				
2-Fluorobiphenyl	ND	%	43-120				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0706605-01
GT-10

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP ANAL	ID
SVOC's by GC/MS 8270 cont'd						
				1 8270C	0509 15:10 0514 21:17 RL	
2,4,6-Tribromophenol	ND	%	10-120			
4-Terphenyl-d14	ND	%	33-120			
PAH by GC/MS SIM 8270M						
				1 8270C-M	0509 15:10 0511 19:01 RL	
Acenaphthene	ND	ug/l	100			
2-Chloronaphthalene	ND	ug/l	100			
Fluoranthene	1000	ug/l	100			
Hexachlorobutadiene	ND	ug/l	260			
Naphthalene	1000	ug/l	100			
Benzo(a)anthracene	340	ug/l	100			
Benzo(a)pyrene	230	ug/l	100			
Benzo(b)fluoranthene	270	ug/l	100			
Benzo(k)fluoranthene	220	ug/l	100			
Chrysene	270	ug/l	100			
Acenaphthylene	ND	ug/l	100			
Anthracene	530	ug/l	100			
Benzo(ghi)perylene	110	ug/l	100			
Fluorene	1400	ug/l	100			
Phenanthrene	2600	ug/l	100			
Dibenzo(a,h)anthracene	ND	ug/l	100			
Indeno(1,2,3-cd)Pyrene	120	ug/l	100			
Pyrene	970	ug/l	100			
1-Methylnaphthalene	4800	ug/l	100			
2-Methylnaphthalene	4100	ug/l	100			
Pentachlorophenol	ND	ug/l	420			
Hexachlorobenzene	ND	ug/l	420			
Perylene	ND	ug/l	100			
Biphenyl	ND	ug/l	100			
2,6-Dimethylnaphthalene	9800	ug/l	100			
1-Methylphenanthrene	1400	ug/l	100			
Benzo(e)Pyrene	150	ug/l	100			
Hexachloroethane	ND	ug/l	420			
Surrogate(s)	Recovery		QC Criteria			
2-Fluorophenol	ND	%	21-120			
Phenol-d6	ND	%	10-120			
Nitrobenzene-d5	ND	%	23-120			
2-Fluorobiphenyl	ND	%	43-120			
2,4,6-Tribromophenol	ND	%	10-120			
4-Terphenyl-d14	ND	%	33-120			
Polychlorinated Biphenyls						
				5 608	0511 10:25 0514 19:18 JB	
Aroclor 1016	ND	ug/l	0.272			
Aroclor 1221	ND	ug/l	0.272			
Aroclor 1232	ND	ug/l	0.272			
Aroclor 1242	ND	ug/l	0.272			
Aroclor 1248	ND	ug/l	0.272			
Aroclor 1254	ND	ug/l	0.272			
Aroclor 1260	ND	ug/l	0.272			

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0706605-01
GT-10

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE		ID
					PREP	ANAL	
Polychlorinated Biphenyls cont'd				5 608	0511 10:25	0514 19:18	JB
Surrogate(s)	Recovery		QC Criteria				
2,4,5,6-Tetrachloro-m-xylene	63.0	%	30-150				
Decachlorobiphenyl	36.0	%	30-150				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH DUPLICATE ANALYSIS

Laboratory Job Number: L0706605

Parameter	Value 1	Value 2	Units	RPD	RPD Limits
Solids, Total Suspended for sample(s) 01 (L0706605-01, WG279635-2)					
Solids, Total Suspended	380	390	mg/l	3	20
Cyanide, Total for sample(s) 01 (L0706369-02, WG279879-4)					
Cyanide, Total	ND	ND	mg/l	NC	30
TPH for sample(s) 01 (L0706384-01, WG279704-4)					
TPH	5.35	5.86	mg/l	9	34
Total Metals for sample(s) 01 (L0706566-01, WG279938-1)					
Lead, Total	0.0780	0.0763	mg/l	2	20
Total Metals for sample(s) 01 (L0706696-02, WG279942-1)					
Iron, Total	0.78	0.79	mg/l	1	
Total Metals for sample(s) 01 (L0706226-02, WG279935-3)					
Mercury, Total	ND	ND	mg/l	NC	
Volatile Organics by GC/MS 624 for sample(s) 01 (L0706571-02, WG279849-2)					
Methylene chloride	ND	ND	ug/l	NC	30
1,1-Dichloroethane	ND	ND	ug/l	NC	30
Chloroform	ND	ND	ug/l	NC	30
Carbon tetrachloride	ND	ND	ug/l	NC	30
1,2-Dichloropropane	ND	ND	ug/l	NC	30
Dibromochloromethane	ND	ND	ug/l	NC	30
1,1,2-Trichloroethane	ND	ND	ug/l	NC	30
2-Chloroethylvinyl ether	ND	ND	ug/l	NC	30
Tetrachloroethene	ND	ND	ug/l	NC	30
Chlorobenzene	ND	ND	ug/l	NC	30
Trichlorofluoromethane	ND	ND	ug/l	NC	30
1,2-Dichloroethane	ND	ND	ug/l	NC	30
1,1,1-Trichloroethane	ND	ND	ug/l	NC	30
Bromodichloromethane	ND	ND	ug/l	NC	30
trans-1,3-Dichloropropene	ND	ND	ug/l	NC	30
cis-1,3-Dichloropropene	ND	ND	ug/l	NC	30
Bromoform	ND	ND	ug/l	NC	30
1,1,2,2-Tetrachloroethane	ND	ND	ug/l	NC	30
Benzene	ND	ND	ug/l	NC	30
Toluene	ND	ND	ug/l	NC	30
Ethylbenzene	ND	ND	ug/l	NC	30
Chloromethane	ND	ND	ug/l	NC	30
Bromomethane	ND	ND	ug/l	NC	30
Vinyl chloride	ND	ND	ug/l	NC	30
Chloroethane	ND	ND	ug/l	NC	30
1,1-Dichloroethene	ND	ND	ug/l	NC	30
trans-1,2-Dichloroethene	ND	ND	ug/l	NC	30
cis-1,2-Dichloroethene	ND	ND	ug/l	NC	30
Trichloroethene	ND	ND	ug/l	NC	30
1,2-Dichlorobenzene	ND	ND	ug/l	NC	30

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH DUPLICATE ANALYSIS

Laboratory Job Number: L0706605

Continued

Parameter	Value 1	Value 2	Units	RPD	RPD Limits
Volatile Organics by GC/MS 624 for sample(s) 01 (L0706571-02, WG279849-2)					
1,3-Dichlorobenzene	ND	ND	ug/l	NC	30
1,4-Dichlorobenzene	ND	ND	ug/l	NC	30
p/m-Xylene	ND	ND	ug/l	NC	30
o-xylene	ND	ND	ug/l	NC	30
Xylene (Total)	ND	ND	ug/l	NC	30
Styrene	ND	ND	ug/l	NC	30
Acetone	ND	ND	ug/l	NC	30
Carbon disulfide	ND	ND	ug/l	NC	30
2-Butanone	ND	ND	ug/l	NC	30
Vinyl acetate	ND	ND	ug/l	NC	30
4-Methyl-2-pentanone	ND	ND	ug/l	NC	30
2-Hexanone	ND	ND	ug/l	NC	30
Acrolein	ND	ND	ug/l	NC	30
Acrylonitrile	ND	ND	ug/l	NC	30
Methyl tert butyl ether	ND	ND	ug/l	NC	30
1,4-Dioxane	ND	ND	ug/l	NC	30
Tert-Butyl Alcohol	ND	ND	ug/l	NC	30
Tertiary-Amyl Methyl Ether	ND	ND	ug/l	NC	30
Surrogate(s)	Recovery				QC Criteria
Pentafluorobenzene	90.0	91.0	%		80-120
Fluorobenzene	86.0	86.0	%		80-120
4-Bromofluorobenzene	110	98.0	%		80-120
Polychlorinated Biphenyls for sample(s) 01 (L0706475-01, WG280009-4)					
Aroclor 1016	ND	ND	ug/l	NC	30
Aroclor 1221	ND	ND	ug/l	NC	30
Aroclor 1232	ND	ND	ug/l	NC	30
Aroclor 1242	ND	ND	ug/l	NC	30
Aroclor 1248	ND	ND	ug/l	NC	30
Aroclor 1254	ND	ND	ug/l	NC	30
Aroclor 1260	ND	ND	ug/l	NC	30
Surrogate(s)	Recovery				QC Criteria
2,4,5,6-Tetrachloro-m-xylene	50.0	53.0	%		30-150
Decachlorobiphenyl	59.0	59.0	%		30-150

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH SPIKE ANALYSES

Laboratory Job Number: L0706605

Parameter	% Recovery	QC Criteria
Cyanide, Total LCS for sample(s) 01 (WG279879-1)		
Cyanide, Total	94	90-110
TPH LCS for sample(s) 01 (WG279704-2)		
TPH	85	64-132
Total Metals LCS for sample(s) 01 (WG279938-4)		
Antimony, Total	102	80-120
Arsenic, Total	94	80-120
Cadmium, Total	109	80-120
Chromium, Total	107	80-120
Copper, Total	102	80-120
Lead, Total	101	80-120
Nickel, Total	106	80-120
Selenium, Total	91	80-120
Silver, Total	100	80-120
Zinc, Total	104	80-120
Total Metals LCS for sample(s) 01 (WG279942-4)		
Iron, Total	100	
Total Metals LCS for sample(s) 01 (WG279935-1)		
Mercury, Total	105	
Pesticides by GC 504 LCS for sample(s) 01 (WG279821-2)		
1,2-Dibromoethane	115	70-130
1,2-Dibromo-3-chloropropane	107	70-130
Volatile Organics by GC/MS 624 LCS for sample(s) 01 (WG279849-5)		
Methylene chloride	120	10-221
1,1-Dichloroethane	108	59-155
Chloroform	110	51-138
Carbon tetrachloride	97	70-140
1,2-Dichloropropane	96	10-210
Dibromochloromethane	81	53-149
1,1,2-Trichloroethane	88	52-150
2-Chloroethylvinyl ether	70	10-305
Tetrachloroethene	98	64-148
Chlorobenzene	100	37-160
Trichlorofluoromethane	114	17-181
1,2-Dichloroethane	102	49-155
1,1,1-Trichloroethane	103	52-162
Bromodichloromethane	85	35-155
trans-1,3-Dichloropropene	79	17-183
cis-1,3-Dichloropropene	85	10-227
Bromoform	66	45-169
1,1,2,2-Tetrachloroethane	85	46-157
Benzene	115	37-151
Toluene	108	47-150

**ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH SPIKE ANALYSES**

Laboratory Job Number: L0706605

Continued

Parameter	% Recovery	QC Criteria
Volatile Organics by GC/MS 624 LCS for sample(s) 01 (WG279849-5)		
Ethylbenzene	117	37-162
Chloromethane	104	10-273
Bromomethane	128	10-242
Vinyl chloride	109	10-251
Chloroethane	118	14-230
1,1-Dichloroethene	104	10-234
trans-1,2-Dichloroethene	117	54-156
cis-1,2-Dichloroethene	108	60-140
Trichloroethene	100	71-157
1,2-Dichlorobenzene	101	18-190
1,3-Dichlorobenzene	98	59-156
1,4-Dichlorobenzene	105	18-190
p/m-Xylene	124	40-160
o-Xylene	111	40-160
XYLENE (TOTAL)	120	40-160
Styrene	99	40-160
Acetone	93	40-160
Carbon disulfide	93	40-160
2-Butanone	87	40-160
Vinyl acetate	85	40-160
4-Methyl-2-pentanone	80	40-160
2-Hexanone	84	40-160
Acrolein	69	40-160
Acrylonitrile	104	40-160
Surrogate(s)		
Pentafluorobenzene	97	80-120
Fluorobenzene	91	80-120
4-Bromofluorobenzene	102	80-120
SVOC's by GC/MS 8270 LCS for sample(s) 01 (WG280341-2)		
Acenaphthene	65	46-118
1,2,4-Trichlorobenzene	43	39-98
2-Chloronaphthalene	60	40-140
1,2-Dichlorobenzene	44	40-140
1,4-Dichlorobenzene	39	36-97
2,4-Dinitrotoluene	94	24-96
2,6-Dinitrotoluene	99	40-140
Fluoranthene	104	40-140
4-Chlorophenyl phenyl ether	74	40-140
n-Nitrosodi-n-propylamine	57	41-116
Butyl benzyl phthalate	102	40-140
Anthracene	75	40-140
Pyrene	99	26-127
Hexachloropropene	28	40-140
P-Chloro-M-Cresol	78	23-97
2-Chlorophenol	57	27-123
2-Nitrophenol	68	30-130

**ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH SPIKE ANALYSES**

Laboratory Job Number: L0706605

Continued

Parameter	% Recovery	QC Criteria
SVOC's by GC/MS 8270 LCS for sample(s) 01 (WG280341-2)		
4-Nitrophenol	26	10-80
2,4-Dinitrophenol	85	30-130
Pentachlorophenol	75	9-103
Phenol	22	12-110
Surrogate(s)		
2-Fluorophenol	45	21-120
Phenol-d6	43	10-120
Nitrobenzene-d5	71	23-120
2-Fluorobiphenyl	66	43-120
2,4,6-Tribromophenol	115	10-120
4-Terphenyl-d14	114	33-120
PAH by GC/MS SIM 8270M LCS for sample(s) 01 (WG279719-2)		
Acenaphthene	84	40-140
2-Chloronaphthalene	86	40-140
Fluoranthene	106	40-140
Anthracene	83	40-140
Pyrene	106	40-140
Pentachlorophenol	57	30-130
Surrogate(s)		
2-Fluorophenol	38	21-120
Phenol-d6	39	10-120
Nitrobenzene-d5	93	23-120
2-Fluorobiphenyl	78	43-120
2,4,6-Tribromophenol	93	10-120
4-Terphenyl-d14	92	33-120
Polychlorinated Biphenyls LCS for sample(s) 01 (WG280009-2)		
Aroclor 1016	92	40-140
Aroclor 1260	96	40-140
Surrogate(s)		
2,4,5,6-Tetrachloro-m-xylene	68	30-150
Decachlorobiphenyl	47	30-150
Cyanide, Total SPIKE for sample(s) 01 (L0706363-02, WG279879-3)		
Cyanide, Total	26	80-120
TPH SPIKE for sample(s) 01 (L0706358-01, WG279704-3)		
TPH	86	64-132
Total Metals SPIKE for sample(s) 01 (L0706566-01, WG279938-2)		
Antimony, Total	105	80-120
Arsenic, Total	105	80-120
Cadmium, Total	113	80-120
Chromium, Total	107	80-120

**ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH SPIKE ANALYSES**

Laboratory Job Number: L0706605

Continued

Parameter	% Recovery	QC Criteria
Total Metals SPIKE for sample(s) 01 (L0706566-01, WG279938-2)		
Copper, Total	165	80-120
Lead, Total	103	80-120
Nickel, Total	106	80-120
Selenium, Total	92	80-120
Silver, Total	102	80-120
Zinc, Total	166	80-120
Total Metals SPIKE for sample(s) 01 (L0706696-02, WG279942-2)		
Iron, Total	92	
Total Metals SPIKE for sample(s) 01 (L0706226-02, WG279935-2)		
Mercury, Total	134	
Pesticides by GC 504 SPIKE for sample(s) 01 (L0706423-01, WG279821-3)		
1,2-Dibromoethane	110	
1,2-Dibromo-3-chloropropane	109	
Volatile Organics by GC/MS 624 SPIKE for sample(s) 01 (L0706571-02, WG279849-1)		
Methylene chloride	98	10-221
1,1-Dichloroethane	100	59-155
Chloroform	103	51-138
Carbon tetrachloride	98	70-140
1,2-Dichloropropane	96	10-210
Dibromochloromethane	84	53-149
1,1,2-Trichloroethane	89	52-150
2-Chloroethylvinyl ether	69	10-305
Tetrachloroethene	82	64-148
Chlorobenzene	71	37-160
Trichlorofluoromethane	102	17-181
1,2-Dichloroethane	105	49-155
1,1,1-Trichloroethane	100	52-162
Bromodichloromethane	80	35-155
trans-1,3-Dichloropropene	53	17-183
cis-1,3-Dichloropropene	25	10-227
Bromoform	69	45-169
1,1,2,2-Tetrachloroethane	88	46-157
Benzene	95	35-151
Toluene	88	47-150
Ethylbenzene	86	37-162
Chloromethane	61	10-273
Bromomethane	22	10-242
Vinyl chloride	84	10-251
Chloroethane	98	14-230
1,1-Dichloroethene	93	10-234
trans-1,2-Dichloroethene	97	54-156
cis-1,2-Dichloroethene	99	60-140
Trichloroethene	93	71-157
1,2-Dichlorobenzene	81	18-190

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH SPIKE ANALYSES

Laboratory Job Number: L0706605

Continued

Parameter	% Recovery	QC Criteria
Volatile Organics by GC/MS 624 SPIKE for sample(s) 01 (L0706571-02, WG279849-1)		
1,3-Dichlorobenzene	74	59-156
1,4-Dichlorobenzene	82	18-190
p/m-Xylene	93	40-160
o-Xylene	83	40-160
XYLENE (TOTAL)	90	40-160
Styrene	78	40-160
Acetone	115	40-160
Carbon disulfide	76	40-160
2-Butanone	110	40-160
Vinyl acetate	83	40-160
4-Methyl-2-pentanone	92	40-160
2-Hexanone	88	40-160
Acrolein	17	40-160
Acrylonitrile	116	40-160
Surrogate(s)		
Pentafluorobenzene	97	80-120
Fluorobenzene	95	80-120
4-Bromofluorobenzene	83	80-120
Polychlorinated Biphenyls SPIKE for sample(s) 01 (L0706475-01, WG280009-3)		
Aroclor 1016	86	40-140
Aroclor 1260	94	40-140
Surrogate(s)		
2,4,5,6-Tetrachloro-m-xylene	62	30-150
Decachlorobiphenyl	66	30-150

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH MS/MSD ANALYSIS

Laboratory Job Number: L0706605

Parameter	MS %	MSD %	RPD	RPD Limit	MS/MSD Limits
SVOC's by GC/MS 8270 for sample(s) 01 (L0706198-22, WG280341-4)					
Acenaphthene	68	78	14	30	46-118
1,2,4-Trichlorobenzene	49	58	17	30	39-98
2-Chloronaphthalene	63	78	21	30	40-140
1,2-Dichlorobenzene	46	53	14	30	40-140
1,4-Dichlorobenzene	44	53	19	30	36-97
2,4-Dinitrotoluene	87	92	6	30	24-96
2,6-Dinitrotoluene	100	110	10	30	40-140
Fluoranthene	97	100	3	30	40-140
4-Chlorophenyl phenyl ether	82	87	6	30	40-140
n-Nitrosodi-n-propylamine	53	63	17	30	41-116
Butyl benzyl phthalate	90	100	11	30	40-140
Anthracene	63	68	8	30	40-140
Pyrene	92	97	5	30	26-127
Hexachloropropene	48	58	19	30	40-140
p-Chloro-M-Cresol	92	100	8	30	23-97
2-Chlorophenol	56	65	15	30	27-123
2-Nitrophenol	63	70	11	30	30-130
4-Nitrophenol	58	61	5	30	10-80
2,4-Dinitrophenol	97	100	3	30	30-130
Pentachlorophenol	85	90	6	30	9-103
Phenol	41	49	18	30	12-110
Surrogate(s)					
2-Fluorophenol	52	62	18		21-120
Phenol-d6	60	71	17		10-120
Nitrobenzene-d5	63	76	19		23-120
2-Fluorobiphenyl	68	82	19		43-120
2,4,6-Tribromophenol	121	133	9		10-120
4-Terphenyl-d14	103	113	9		33-120
PAH by GC/MS SIM 8270M for sample(s) 01 (L0706571-01, WG279719-4)					
Acenaphthene	68	82	19	40	40-140
2-Chloronaphthalene	63	78	21	40	40-140
Fluoranthene	97	110	13	40	40-140
Anthracene	78	82	5	40	40-140
Pyrene	100	110	10	40	40-140
Pentachlorophenol	87	95	9	40	30-130
Surrogate(s)					
2-Fluorophenol	56	68	19		21-120
Phenol-d6	58	71	20		10-120
Nitrobenzene-d5	64	82	25		23-120
2-Fluorobiphenyl	65	82	23		43-120
2,4,6-Tribromophenol	96	105	9		10-120
4-Terphenyl-d14	101	112	10		33-120

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH BLANK ANALYSIS

Laboratory Job Number: L0706605

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATE PREP	DATE ANAL	ID
Blank Analysis for sample(s) 01 (WG279635-1)								
Solids, Total Suspended	ND	mg/l	5.0	4	160.2		0509 16:45	DW
Blank Analysis for sample(s) 01 (WG279879-2)								
Cyanide, Total	ND	mg/l	0.005	4	335.2	0510 15:30	0510 20:14	DD
Blank Analysis for sample(s) 01 (WG279704-1)								
TPH	ND	mg/l	4.00	74	1664A	0509 10:00	0509 15:00	AT
Blank Analysis for sample(s) 01 (WG279938-3)								
Total Metals								
Antimony, Total	ND	mg/l	0.0005	1	6020	0510 15:45	0511 19:53	BM
Arsenic, Total	ND	mg/l	0.0005	1	6020	0510 15:45	0511 19:53	BM
Cadmium, Total	ND	mg/l	0.0002	1	6020	0510 15:45	0511 19:53	BM
Chromium, Total	ND	mg/l	0.0005	1	6020	0510 15:45	0511 19:53	BM
Copper, Total	ND	mg/l	0.0005	1	6020	0510 15:45	0511 19:53	BM
Lead, Total	ND	mg/l	0.0005	1	6020	0510 15:45	0511 19:53	BM
Nickel, Total	ND	mg/l	0.0005	1	6020	0510 15:45	0511 19:53	BM
Selenium, Total	ND	mg/l	0.001	1	6020	0510 15:45	0511 19:53	BM
Silver, Total	ND	mg/l	0.0004	1	6020	0510 15:45	0511 19:53	BM
Zinc, Total	ND	mg/l	0.0050	1	6020	0510 15:45	0511 19:53	BM
Blank Analysis for sample(s) 01 (WG279942-3)								
Total Metals								
				19	200.7			
Iron, Total	ND	mg/l	0.05	19	200.7	0510 15:45	0511 14:54	AI
Blank Analysis for sample(s) 01 (WG279935-4)								
Total Metals								
Mercury, Total	ND	mg/l	0.0002	4	245.2	0510 20:20	0511 10:38	DM
Blank Analysis for sample(s) 01 (WG279821-1)								
Pesticides by GC 504								
				14	504.1	0509 16:15	0509 17:12	JB
1,2-Dibromoethane	ND	ug/l	0.020					
1,2-Dibromo-3-chloropropane	ND	ug/l	0.020					
Blank Analysis for sample(s) 01 (WG279849-6)								
Volatile Organics by GC/MS 624								
				5	624		0510 08:17	MM
Methylene chloride	ND	ug/l	5.0					
1,1-Dichloroethane	ND	ug/l	1.5					
Chloroform	ND	ug/l	1.5					
Carbon tetrachloride	ND	ug/l	1.0					
1,2-Dichloropropane	ND	ug/l	3.5					

**ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH BLANK ANALYSIS**

Laboratory Job Number: L0706605

Continued

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE		ID
					PREP	ANAL	
Blank Analysis for sample(s) 01 (WG279849-6)							
Volatile Organics by GC/MS 624 cont'd				5 624		0510 08:17 MM	
Dibromochloromethane	ND	ug/l	1.0				
1,1,2-Trichloroethane	ND	ug/l	1.5				
Tetrachloroethene	ND	ug/l	1.5				
Chlorobenzene	ND	ug/l	3.5				
Trichlorofluoromethane	ND	ug/l	5.0				
1,2-Dichloroethane	ND	ug/l	1.5				
1,1,1-Trichloroethane	ND	ug/l	2.0				
Bromodichloromethane	ND	ug/l	1.0				
trans-1,3-Dichloropropene	ND	ug/l	1.5				
cis-1,3-Dichloropropene	ND	ug/l	1.5				
Bromoform	ND	ug/l	1.0				
1,1,2,2-Tetrachloroethane	ND	ug/l	1.0				
Benzene	ND	ug/l	1.0				
Toluene	ND	ug/l	1.0				
Ethylbenzene	ND	ug/l	1.0				
Chloromethane	ND	ug/l	10.				
Bromomethane	ND	ug/l	5.0				
Vinyl chloride	ND	ug/l	2.0				
Chloroethane	ND	ug/l	2.0				
1,1-Dichloroethene	ND	ug/l	1.0				
trans-1,2-Dichloroethene	ND	ug/l	1.5				
cis-1,2-Dichloroethene	ND	ug/l	1.0				
Trichloroethene	ND	ug/l	1.0				
1,2-Dichlorobenzene	ND	ug/l	5.0				
1,3-Dichlorobenzene	ND	ug/l	5.0				
1,4-Dichlorobenzene	ND	ug/l	5.0				
p/m-Xylene	ND	ug/l	2.0				
o-xylene	ND	ug/l	1.0				
Xylene (Total)	ND	ug/l	2.0				
Styrene	ND	ug/l	1.0				
Acetone	ND	ug/l	10.				
Carbon disulfide	ND	ug/l	5.0				
2-Butanone	ND	ug/l	10.				
Vinyl acetate	ND	ug/l	20.				
4-Methyl-2-pentanone	ND	ug/l	10.				
2-Hexanone	ND	ug/l	10.				
Acrolein	ND	ug/l	8.0				
Acrylonitrile	ND	ug/l	10.				
Methyl Acetate	ND	ug/l	20.				
Ethyl Acetate	ND	ug/l	20.				
Tetrahydrofuran	ND	ug/l	20.				
Acetonitrile	ND	ug/l	40.				
n-Hexane	ND	ug/l	20.				
Isopropyl Ether	ND	ug/l	20.				
Cyclohexane	ND	ug/l	20.				
Heptane	ND	ug/l	20.				

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH BLANK ANALYSIS

Laboratory Job Number: L0706605

Continued

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP ANAL	ID
Blank Analysis for sample(s) 01 (WG279849-6)						
Volatile Organics by GC/MS 624 cont'd				5 624	0510 08:17 MM	
Butyl Acetate	ND	ug/l	20.			
Methyl tert butyl ether	ND	ug/l	20.			
Ethyl Ether	ND	ug/l	20.			
Dibromomethane	ND	ug/l	20.			
1,4-Dioxane	ND	ug/l	2000			
Tert-Butyl Alcohol	ND	ug/l	100			
Tertiary-Amyl Methyl Ether	ND	ug/l	20.			
Surrogate(s)	Recovery		QC Criteria			
Pentafluorobenzene	93.0	%	80-120			
Fluorobenzene	84.0	%	80-120			
4-Bromofluorobenzene	109	%	80-120			
Blank Analysis for sample(s) 01 (WG280341-1)						
SVOC's by GC/MS 8270				1 8270C	0509 15:10 0514 21:40 RL	
Acenaphthene	ND	ug/l	5.0			
Benzidine	ND	ug/l	50.			
1,2,4-Trichlorobenzene	ND	ug/l	5.0			
Hexachlorobenzene	ND	ug/l	5.0			
Bis(2-chloroethyl)ether	ND	ug/l	5.0			
1-Chloronaphthalene	ND	ug/l	5.0			
2-Chloronaphthalene	ND	ug/l	6.0			
1,2-Dichlorobenzene	ND	ug/l	5.0			
1,3-Dichlorobenzene	ND	ug/l	5.0			
1,4-Dichlorobenzene	ND	ug/l	5.0			
3,3'-Dichlorobenzidine	ND	ug/l	50.			
2,4-Dinitrotoluene	ND	ug/l	6.0			
2,6-Dinitrotoluene	ND	ug/l	5.0			
Azobenzene	ND	ug/l	5.0			
Fluoranthene	ND	ug/l	5.0			
4-Chlorophenyl phenyl ether	ND	ug/l	5.0			
4-Bromophenyl phenyl ether	ND	ug/l	5.0			
Bis(2-chloroisopropyl)ether	ND	ug/l	5.0			
Bis(2-chloroethoxy)methane	ND	ug/l	5.0			
Hexachlorobutadiene	ND	ug/l	10.			
Hexachlorocyclopentadiene	ND	ug/l	30.			
Hexachloroethane	ND	ug/l	5.0			
Isophorone	ND	ug/l	5.0			
Naphthalene	ND	ug/l	5.0			
Nitrobenzene	ND	ug/l	5.0			
NDPA/DPA	ND	ug/l	15.			
n-Nitrosodi-n-propylamine	ND	ug/l	5.0			
Bis(2-ethylhexyl)phthalate	9.4	ug/l	5.0			
Butyl benzyl phthalate	ND	ug/l	5.0			
Di-n-butylphthalate	ND	ug/l	5.0			
Di-n-octylphthalate	ND	ug/l	5.0			

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH BLANK ANALYSIS

Laboratory Job Number: L0706605

Continued

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE		ID
					PREP	ANAL	
Blank Analysis for sample(s) 01 (WG280341-1)							
SVOC's by GC/MS 8270 cont'd				1 8270C	0509 15:10	0514 21:40	RL
Diethyl phthalate	ND	ug/l	5.0				
Dimethyl phthalate	ND	ug/l	5.0				
Benzo(a)anthracene	ND	ug/l	5.0				
Benzo(a)pyrene	ND	ug/l	5.0				
Benzo(b)fluoranthene	ND	ug/l	5.0				
Benzo(k)fluoranthene	ND	ug/l	5.0				
Chrysene	ND	ug/l	5.0				
Acenaphthylene	ND	ug/l	5.0				
Anthracene	ND	ug/l	5.0				
Benzo(ghi)perylene	ND	ug/l	5.0				
Fluorene	ND	ug/l	5.0				
Phenanthrene	ND	ug/l	5.0				
Dibenzo(a,h)anthracene	ND	ug/l	5.0				
Indeno(1,2,3-cd)pyrene	ND	ug/l	7.0				
Pyrene	ND	ug/l	5.0				
Benzo(e)pyrene	ND	ug/l	5.0				
Biphenyl	ND	ug/l	5.0				
Perylene	ND	ug/l	5.0				
Aniline	ND	ug/l	20.				
4-Chloroaniline	ND	ug/l	5.0				
1-Methylnaphthalene	ND	ug/l	5.0				
2-Nitroaniline	ND	ug/l	5.0				
3-Nitroaniline	ND	ug/l	5.0				
4-Nitroaniline	ND	ug/l	7.0				
Dibenzofuran	ND	ug/l	5.0				
a,a-Dimethylphenethylamine	ND	ug/l	50.				
Hexachloropropene	ND	ug/l	10.				
Nitrosodi-n-butylamine	ND	ug/l	10.				
2-Methylnaphthalene	ND	ug/l	5.0				
1,2,4,5-Tetrachlorobenzene	ND	ug/l	20.				
Pentachlorobenzene	ND	ug/l	20.				
a-Naphthylamine	ND	ug/l	25.				
b-Naphthylamine	ND	ug/l	20.				
Phenacetin	ND	ug/l	10.				
Dimethoate	ND	ug/l	20.				
4-Aminobiphenyl	ND	ug/l	10.				
Pentachloronitrobenzene	ND	ug/l	10.				
Isodrin	ND	ug/l	10.				
p-Dimethylaminoazobenzene	ND	ug/l	10.				
Chlorobenzilate	ND	ug/l	20.				
3-Methylcholanthrene	ND	ug/l	20.				
Ethyl Methanesulfonate	ND	ug/l	15.				
Acetophenone	ND	ug/l	20.				
Nitrosodipiperidine	ND	ug/l	20.				
7,12-Dimethylbenz(a)anthracene	ND	ug/l	20.				
n-Nitrosodimethylamine	ND	ug/l	50.				

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH BLANK ANALYSIS

Laboratory Job Number: L0706605

Continued

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Blank Analysis for sample(s) 01 (WG280341-1)							
SVOC's by GC/MS 8270 cont'd				1 8270C	0509 15:10	0514 21:40	RL
2,4,6-Trichlorophenol	ND	ug/l	5.0				
p-Chloro-m-cresol	ND	ug/l	5.0				
2-Chlorophenol	ND	ug/l	6.0				
2,4-Dichlorophenol	ND	ug/l	10.				
2,4-Dimethylphenol	ND	ug/l	10.				
2-Nitrophenol	ND	ug/l	20.				
4-Nitrophenol	ND	ug/l	10.				
2,4-Dinitrophenol	ND	ug/l	30.				
4,6-Dinitro-o-cresol	ND	ug/l	20.				
Pentachlorophenol	ND	ug/l	10.				
Phenol	ND	ug/l	7.0				
2-Methylphenol	ND	ug/l	6.0				
3-Methylphenol/4-Methylphenol	ND	ug/l	6.0				
2,4,5-Trichlorophenol	ND	ug/l	5.0				
2,6-Dichlorophenol	ND	ug/l	10.				
Benzoic Acid	ND	ug/l	50.				
Benzyl Alcohol	ND	ug/l	10.				
Carbazole	ND	ug/l	5.0				
Pyridine	ND	ug/l	50.				
2-Picoline	ND	ug/l	20.				
Pronamide	ND	ug/l	20.				
Methyl methanesulfonate	ND	ug/l	20.				
Surrogate(s)	Recovery		QC Criteria				
2-Fluorophenol	40.0	%	21-120				
Phenol-d6	37.0	%	10-120				
Nitrobenzene-d5	63.0	%	23-120				
2-Fluorobiphenyl	55.0	%	43-120				
2,4,6-Tribromophenol	85.0	%	10-120				
4-Terphenyl-d14	100	%	33-120				
Blank Analysis for sample(s) 01 (WG279719-1)							
PAH by GC/MS SIM 8270M				1 8270C-M	0509 15:10	0511 16:04	RL
Acenaphthene	ND	ug/l	0.20				
2-Chloronaphthalene	ND	ug/l	0.20				
Fluoranthene	ND	ug/l	0.20				
Hexachlorobutadiene	ND	ug/l	0.50				
Naphthalene	ND	ug/l	0.20				
Benzo(a)anthracene	ND	ug/l	0.20				
Benzo(a)pyrene	ND	ug/l	0.20				
Benzo(b)fluoranthene	ND	ug/l	0.20				
Benzo(k)fluoranthene	ND	ug/l	0.20				
Chrysene	ND	ug/l	0.20				
Acenaphthylene	ND	ug/l	0.20				
Anthracene	ND	ug/l	0.20				
Benzo(ghi)perylene	ND	ug/l	0.20				

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH BLANK ANALYSIS

Laboratory Job Number: L0706605

Continued

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Blank Analysis for sample(s) 01 (WG279719-1)							
PAH by GC/MS SIM 8270M cont'd				1 8270C-M	0509 15:10	0511 16:04	RL
Fluorene	ND	ug/l	0.20				
Phenanthrene	ND	ug/l	0.20				
Dibenzo(a,h)anthracene	ND	ug/l	0.20				
Indeno(1,2,3-cd)Pyrene	ND	ug/l	0.20				
Pyrene	ND	ug/l	0.20				
1-Methylnaphthalene	ND	ug/l	0.20				
2-Methylnaphthalene	ND	ug/l	0.20				
Pentachlorophenol	ND	ug/l	0.80				
Hexachlorobenzene	ND	ug/l	0.80				
Perylene	ND	ug/l	0.20				
Biphenyl	ND	ug/l	0.20				
2,6-Dimethylnaphthalene	ND	ug/l	0.20				
1-Methylphenanthrene	ND	ug/l	0.20				
Benzo(e)Pyrene	ND	ug/l	0.20				
Hexachloroethane	ND	ug/l	0.80				
Surrogate(s)	Recovery		QC Criteria				
2-Fluorophenol	39.0	%	21-120				
Phenol-d6	33.0	%	10-120				
Nitrobenzene-d5	61.0	%	23-120				
2-Fluorobiphenyl	51.0	%	43-120				
2,4,6-Tribromophenol	67.0	%	10-120				
4-Terphenyl-d14	70.0	%	33-120				
Blank Analysis for sample(s) 01 (WG280009-1)							
Polychlorinated Biphenyls				5 608	0511 10:25	0514 21:13	JB
Aroclor 1016	ND	ug/l	0.250				
Aroclor 1221	ND	ug/l	0.250				
Aroclor 1232	ND	ug/l	0.250				
Aroclor 1242	ND	ug/l	0.250				
Aroclor 1248	ND	ug/l	0.250				
Aroclor 1254	ND	ug/l	0.250				
Aroclor 1260	ND	ug/l	0.250				
Surrogate(s)	Recovery		QC Criteria				
2,4,5,6-Tetrachloro-m-xylene	73.0	%	30-150				
Decachlorobiphenyl	40.0	%	30-150				

**ALPHA ANALYTICAL LABORATORIES
ADDENDUM I**

REFERENCES

1. Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IIIA, 1997.
4. Methods for Chemical Analysis of Water and Wastes. EPA 600/4-79-020. Revised March 1983.
5. Methods for the Organic Chemical Analysis of Municipal and Industrial Wastewater. Appendix A, Part 136, 40 CFR (Code of Federal Regulations).
14. Methods for the Determination of Organic Compounds in Finished Drinking Water and Raw Source Water. EPA/600/4-88/039, Revised July 1991.
19. Inductively Coupled Plasma Atomic Emission Spectrometric Method for Trace Element Analysis of Water and Wastes. Appendix C, Part 136, 40 CFR (Code of Federal Regulations). July 1, 1999 edition.
74. Method 1664, Revision A: N-Hexane Extractable Material (HEM; Oil & Grease) and Silica Gel Treated N-Hexane Extractable Material (SGT-HEM; Non-polar Material) by Extraction and Gravimetry, EPA-821-R-98-002, February 1999.

GLOSSARY OF TERMS AND SYMBOLS

REF	Reference number in which test method may be found.
METHOD	Method number by which analysis was performed.
ID	Initials of the analyst.
ND	Not detected in comparison to the reported detection limit.
NI	Not Ignitable.
ug/cart	Micrograms per Cartridge.

LIMITATION OF LIABILITIES

Alpha Analytical, Inc. 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, Inc., shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical, Inc. 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, Inc.

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



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FAX: 508-822-3288

CHAIN OF CUSTODY

PAGE ____ OF ____

Project Information

Project Name: Macheras Service Part

Project Location: Lowell, MA

Project #: 11-1012

Project Manager: Lauren Gervais

ALPHA Quote #:

Turn-Around Time

☒ Standard ☐ RUSH (only confirmed if pre-approved)

Date Due: 5/15 Time:

Email: lgervais@aol.com

Other Project Specific Requirements/Comments/Detection Limits:

Date Rec'd in Lab: 5/18

Report Information - Data Deliverables

☐ FAX ☒ EMAIL
☐ ADEX ☐ Add'l Deliverables

ALPHA Job #: 20706605

Billing Information

Same as Client info PO #: 11-1012

Regulatory Requirements/Report Limits

State / Fed Program Criteria

MA DEP WQ RGP Permit

MA MCP PRESUMPTIVE CERTAINTY - CT REASONABLE CONFIDENCE PROTOCOLS

☐ Yes ☒ No Are MCP Analytical Methods Required?
☐ Yes ☒ No Are CT RCP (Reasonable Confidence Protocols) Required?

ANALYSIS

Phenols
NPDES-RGP-504
NPDES-RGP-624
Total Metals
TSS
PAH-Low, 82770
TRC, Hexachrome
PCB-608
TPH-1664
T. Cyanide

SAMPLE HANDLING

Filtration ☐ Done
☒ Not needed
Lab to do Preservation
☐ Lab to do
(Please specify below)

Sample Specific Comments

ALPHA Lab ID (Lab Use Only)

Sample ID

Collection Date Time

Sample Matrix

Sampler's Initials

06605-01 GT-10

5/7/07 1:00

GW

LKG

X X X X X X X X X X

18

PLEASE ANSWER QUESTIONS ABOVE!

IS YOUR PROJECT
MA MCP or CT RCP?

Relinquished By:

Date/Time

Received By:

Date/Time

Container Type
Preservative

AVVP
CHHCPAAA

Lauren Gervais

5/7/07 4:30

Paul DeLuca

5/9/07 15:55

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Payment Terms. See reverse side.