



ENVIRONMENTAL MANAGEMENT ASSOCIATES, INC.

P.O. Box 362, Erving, Massachusetts 01344-0362

Voice (413) 498-2510 • § • Fax (413) 498-2511

January 7, 2008
EMA Project No. 0701-254
MADEP RTN – 1-11931
EMA Document No. 08/000100

US Environmental Protection Agency
RGP-NOC Processing, Municipal Assistance Unit (CMU)
1 Congress Street
Boston, MA 02114-2023
Attention.: EPA-NE

RE: 425 Federal Street, Greenfield, Massachusetts
MADEP RTN 1-11931
EPA NPDES Exclusion 03I-079

The discharge will not change substantially from that reported in the initial application for NPDES Exclusion submitted by Handex, other than the addition of cartridge filter(s) to the system (Note that the CATOX was previously removed by others)

Attached please find the following electronic files:

- Remediation General Permit – Notice of Intent, including calculations
- System Layout and Trench Detail
- Process and Instrumentation Diagram
- Treatment System Layout and Details
- Plan showing Site Locus and approximate Discharge point
- Laboratory Report L0710301

If you have any questions, or require further information, please feel free to contact me by phone at 413-498-2510, or by e-mail at dbema@comcast.net.

Sincerely,
Environmental Management Associates, Inc.

Dolores M. Branco, L.S.P., P.G.
President, Senior Project Manager
DMB:db
Enclosures

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

a) Name of facility/site: Former D&B Mart		Facility/site address:	
Location of facility/site: longitude: 72° 35' 20.59" latitude: 42° 36' 21.07"	Facility SIC code(s): 447110	Street: 425 Federal Street	
b) Name of facility/site owner: Estate of Sebastian Ruggeri		Town: Greenfield	
Email address of owner:	State: MA	Zip: 01301	County: Franklin
Telephone No. of facility/site owner: 413-625-2567			
FAX No. of facility/site owner: 413-625-2568	Owner is (check one): 1. Federal ☐ 2. State/Tribal ☐		
Address of owner (if different from site):	3. Private ☒ 4. other, if so describe:		
Street: PO Box 195			
Town: Shelburne	State: MA	Zip: 01370	County: Franklin
c) Legal name of operator: Environmental Management Associates, Inc.	Operator telephone No.: 413-498-2510		
	Operator FAX No.: 413-498-2511 Operator email: dbema@comcast.net		
Operator contact name and title: Dolores M. Branco, LSP, PG, Senior Project Manager			
Address of operator (if different from owner):	Street: P.O. Box 362		
Town: Erving	State: MA	Zip: 01344	County: Franklin
d) Check "yes" or "no" for the following:			
1. Has a prior NPDES permit exclusion been granted for the Discharge? Yes ☒ No ☐ , if "yes", number: MA-03I-079			
2. Has a prior NPDES application (Form 1 & 2C) ever been filed for the Discharge? Yes ☐ No ☒ , if "yes", date and tracking #:			
3. Is the discharge a "new discharge" as defined by 40 CFR 122.2? Yes ☐ No ☒			
4. For sites in Massachusetts, is the discharge covered under the MA Contingency Plan (MCP and exempt from state permitting? Yes ☒ No ☐			

e) Is site/facility subject to any State permitting or other action which is causing the generation of discharge? Yes ☒ No ☐ If "yes" please list: 1. site identification # assigned by state of NH or MA: <u>1-11931</u> 2. permit or license # assigned: 3. state agency contact information: name, location, and telephone #: <u>Dave Slowick, MADEP-WRO, Springfield, MA 413-755-2246</u>	f) Is the site/facility covered by any other EPA permit, including: 1. multi-sector storm water general permit? Y ☐ N ☒, if Y, number 2. phase I or II construction storm water general permit? Y ☐ N ☒ if Y, number: 3. individual NPDES permit? Y ☐ N ☒, if Y, number: 4. any other water quality related permit? Y ☐ N ☒, if Y, number:
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2. Discharge information. Please provide the following information about the discharge, (attaching additional sheets as needed) including:

a) Describe the discharge activities for which the owner/applicant is seeking coverage: <u>Discharge of groundwater treated by air stripping and GAC.</u>		
b) Provide the following information about each discharge:	1) Number of discharge points: <u>1</u>	2) What is the maximum and average flow rate of discharge (in cubic feet per second, ft³/s)? Max. flow <u>0.0335</u> Average flow <u>0.0045</u> Is maximum flow a design value? Y ☒ 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 _____ lat. _____; pt. 2: long _____ lat. _____; pt. 1: long _____ lat. _____; pt. 1: long _____ lat. _____; pt. 1: long _____ lat. _____; pt. 1: long _____ lat. _____; pt. 1: long _____ lat. _____; pt. 1: 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>01/21/2008</u> end <u>02/28/2015</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	Primary 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-min)	Type of Samples (e.g. grab)	Analytical Method Used (method #)	Minimum Level (ML) of Test Method	Maximum daily value		Average daily value	
							concentration (µg/L)	mass (kg)	concentration (µg/L)	mass (kg)
1. Total Suspended Solids		✓	1	grab	2540D	50 mg/L	3400000	33.38	3400000	33.38
2. Total Residual Chlorine	✓		1	grab	4500CL-D	0.02 mg/L				
3. Total Petroleum Hydrocarbons		✓	1	grab	1664A	4.00 mg/L	0	0	0	0
4. Cyanide	✓				4500CN-CE	0.005 mg/L				
5. Benzene		✓	1	grab	624	2.5 µg/L	37	0.0004	37	0.0004
6. Toluene		✓	1	grab	624	2.5 µg/L	8.3	0.000081	8.3	0.000081
7. Ethylbenzene		✓	1	grab	624	2.5 µg/L	0	0	0	0
8. (m,p,o) Xylenes		✓	1	grab	624	5.0 µg/L	540	0.0053	540	0.0053
9. Total BTEX ⁴		✓	1	grab	624	5.0 µg/L	585.3	0.0057	585.3	0.0057

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

PARAMETER	Believe Absent	Believe Present	# of Samples (1-min)	Type of Samples (e.g. grab)	Analytical Method Used (method #)	Minimum Level (ML) of Test Method	Maximum daily value		Average daily value	
							concentration (µg/L)	mass (kg)	concentration (µg/L)	mass (kg)
10. Ethylene Dibromide ⁵ (1,2-Dibromo-ethane)	✓		1	grab	504	0.020 µg/L				
11. Methyl-tert-Butyl Ether (MTBE)		✓	1	grab	624	50 µg/L	25000	0.245	25000	0.245
12. tert-Butyl Alcohol (TBA)		✓	1	grab	624	250 µg/L	2500	0.025	2500	0.025
13. tert-Amyl Methyl Ether (TAME)		✓	1	grab	624	50 µg/L	500	0.0049	500	0.0049
14. Naphthalene		✓	1	grab	8270C	4.9 µg/L	18	0.0002	18	0.0002
15. Carbon Tetrachloride	✓		1	grab	624	2.5 µg/L				
16. 1,4-Dichlorobenzene	✓		1	grab	624	12 µg/L				
17. 1,2-Dichlorobenzene	✓		1	grab	624	12 µg/L				
18. 1,3-Dichlorobenzene	✓		1	grab	624	12 µg/L				
19. 1,1-Dichloroethane	✓		1	grab	624	3.8 µg/L				
20. 1,2-Dichloroethane	✓		1	grab	624	3.8 µg/L				
21. 1,1-Dichloroethylene	✓		1	grab	624	2.5 µg/L				
22. cis-1,2-Dichloro-ethylene	✓		1	grab	624	2.5 µg/L				
23. Dichloromethane (Methylene Chloride)	✓		1	grab	624	12 µg/L				
24. Tetrachloroethylene	✓		1	grab	624	3.8 µg/L				

⁵ EDB is a groundwater contaminant at fuel spill and pesticide application sites in New England..

PARAMETER	Believe Absent	Believe Present	# of Samples (1-min)	Type of Samples (e.g. grab)	Analytical Method Used (method #)	Minimum Level (ML) of Test Method	Maximum daily value		Average daily value	
							concentration (µg/L)	mass (kg)	concentration (µg/L)	mass (kg)
25. 1,1,1-Trichloroethane	✓		1	grab	624	5.0 µg/L				
26. 1,1,2-Trichloroethane	✓		1	grab	624	3.8 µg/L				
27. Trichloroethylene	✓		1	grab	624	2.5 µg/L				
28. Vinyl Chloride	✓		1	grab	624	5.0 µg/L				
29. Acetone	✓		1	grab	624	25 µg/L				
30. 1,4-Dioxane	✓		1	grab	624	5000 µg/L				
31. Total Phenols	✓		1	grab	420.1	0.03 µg/L				
32. Pentachlorophenol	✓		1	grab	8270C-M	0.78 µg/L				
33. Total Phthalates ⁶ (Phthalate esters)	✓		1	grab	8270C	4.9 µg/L				
34. Bis (2-Ethylhexyl) Phthalate [Di-(ethylhexyl) Phthalate	✓		1	grab	8270C	4.9 µg/L				
35. Total Group I Polycyclic Aromatic Hydrocarbons (PAH)	✓									
a. Benzo(a) Anthracene	✓		1	grab	8270C-M	0.20 µg/L				
b. Benzo(a) Pyrene	✓		1	grab	8270C-M	0.20 µg/L				
c. Benzo(b) Fluoranthene	✓		1	grab	8270C-M	0.20 µg/L				
d. Benzo(k) Fluoranthene	✓		1	grab	8270C-M	0.20 µg/L				
e. Chrysene	✓		1	grab	8270C-M	0.20 µg/L				

⁶ Sum of individual phthalate compounds..

PARAMETER	Believe Absent	Believe Present	# of Samples (1-min)	Type of Samples (e.g. grab)	Analytical Method Used (method #)	Minimum Level (ML) of Test Method	Maximum daily value		Average daily value	
							concentration (µg/L)	mass (kg)	concentration (µg/L)	mass (kg)
f. Dibenzo(a,h) anthracene	✓		1	grab	8270C-M	0.20 µg/L				
g. Indeno(1,2,3-cd) Pyrene	✓		1	grab	8270C-M	0.20 µg/L				
36. Total Group II Polycyclic Aromatic Hydrocarbons (PAH)	✓									
h. Acenaphthene	✓		1	grab	8270C-M	0.20 µg/L				
i. Acenaphthylene	✓		1	grab	8270C-M	0.20 µg/L				
j. Anthracene	✓		1	grab	8270C-M	0.20 µg/L				
k. Benzo(ghi) Perylene	✓		1	grab	8270C-M	0.20 µg/L				
l. Fluoranthene	✓		1	grab	8270C-M	0.20 µg/L				
m. Fluorene	✓		1	grab	8270C-M	0.20 µg/L				
n. Naphthalene	✓		1	grab	8270C-M	0.20 µg/L				
o. Phenanthrene	✓		1	grab	8270C-M	0.20 µg/L				
p. Pyrene	✓		1	grab	8270C-M	0.20 µg/L				
37. Total Polychlorinated Biphenyls (PCBs)	✓		1	grab	608	0.255 µg/L				
38. Antimony		✓	1	grab	6020	0.005 mg/L	0.6	0.000006	0.6	0.000006
39. Arsenic		✓	1	grab	6020	0.005 mg/L	18	0.00018	18	0.00018
40. Cadmium		✓	1	grab	6020	0.002 mg/L	2	0.000019	2	0.000019
41. Chromium (total)		✓	1	grab	6020	0.005 mg/L	19	0.00018	19	0.00018
42. Chromium (hexavalent)	✓		1	grab	3500CR-D	0.010 mg/L				

PARAMETER	Believe Absent	Believe Present	# of Samples (1-min)	Type of Samples (e.g. grab)	Analytical Method Used (method #)	Minimum Level (ML) of Test Method	Maximum daily value		Average daily value	
							concentration (µg/L)	mass (kg)	concentration (µg/L)	mass (kg)
43. Copper		✓	1	grab	6020	0.005 mg/L	22	0.0002	22	0.0002
44. Lead		✓	1	grab	6020	0.005 mg/L	11	0.0001	11	0.0001
45. Mercury	✓		1	grab	245.1	0.002 mg/L				
46. Nickel		✓	1	grab	6020	0.005 mg/L	31	0.0003	31	0.0003
47. Selenium		✓	1	grab	6020	0.001 mg/L	2	0.00002	2	0.00002
48. Silver	✓		1	grab	6020	0.004 mg/L				
49. Zinc		✓	1	grab	6020	0.0050 mg/L	60	0.00059	60	0.00059
50. Iron		✓	1	grab	200.7	0.05 mg/L	29000	0.285	29000	0.285
Other (describe):										

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

Step 1: 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? <u>arsenic, copper, iron, lead, nickel, zinc.</u>
Step 2: 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 the applicable metals? Metals: <u>arsenic, copper, iron, lead, nickel, zinc.</u> DF: <u>364.33</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: <u>iron.</u>

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:						
b) Identify each applicable treatment unit (check all that apply):	Frac. Tank	Air Stripper ☒	Oil/water separator	Equilization 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>2</u> Maximum flow rate of treatment system <u>15</u> Design flow rate of treatment system <u>15</u>						
d) A description of chemical additives being used or planned to be used (attach MSDS sheets): <u>none</u>						

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 ☐	Wetlands ☐	Other(describe):
b) Provide a narrative description of the discharge pathway, including the name(s) of the receiving waters: <u>Discharge from treatment system directly to a stormwater basin located on Silver Street, final discharge to the Green River.</u>						
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 <u>Class B</u>						
e) Provide the reported or calculated seven day-ten year low flow (7Q10) of the receiving water <u>10.9</u> 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? Yes ____ 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.

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: **Former D&B Mart**

Operator signature:



Dolores M. Branco, LSP, PG,

Title: **Senior Project Manager**

Date: **01/07/2008**

Calculation of Dilution Factor for the Metals Arsenic, Copper, Iron, Lead, Nickel, and Zinc.

$$DF = (Q_d + Q_s)/Q_d$$

Where:

DF = Dilution Factor

Q_d = Maximum flow rate of the discharge in cubic feet per second (cfs)
(1.0 gpm = 0.00223 cfs)

Q_s = Receiving Water 7Q10 flow in cfs

Data used:

Q_d = 0.03 cfs (15 gpm*0.00223)

Q_s = 10.9 cfs (provided by USGS, Massachusetts STREAMSTATS)

$$DF = (0.03 \text{ cfs} + 10.9 \text{ cfs}) / 0.03 \text{ cfs}$$

$$DF = 364.33$$

Referring to Appendix IV of the RGP, a Dilution Range >100 for the metal arsenic results in an effluent limitation of 540 µg/L.

Referring to Appendix IV of the RGP, a Dilution Range >100 for the metal copper results in an effluent limitation of 520 µg/L.

Referring to Appendix IV of the RGP, a Dilution Range >100 for the metal iron results in an effluent limitation of 5,000 µg/L.

Referring to Appendix IV of the RGP, a Dilution Range >100 for the metal lead results in an effluent limitation of 132 µg/L.

Referring to Appendix IV of the RGP, a Dilution Range >100 for the metal nickel results in an effluent limitation of 2,380 µg/L.

Referring to Appendix IV of the RGP, a Dilution Range >100 for the metal zinc results in an effluent limitation of 1,480 µg/L.

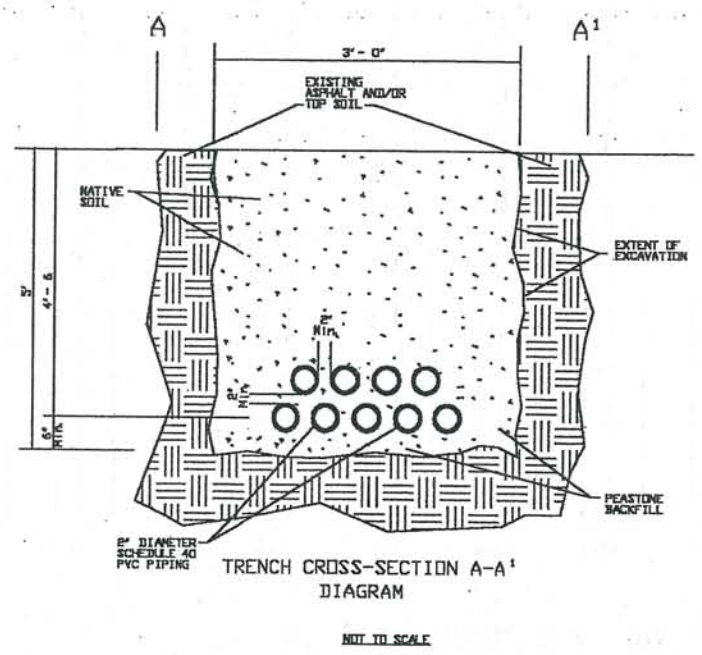
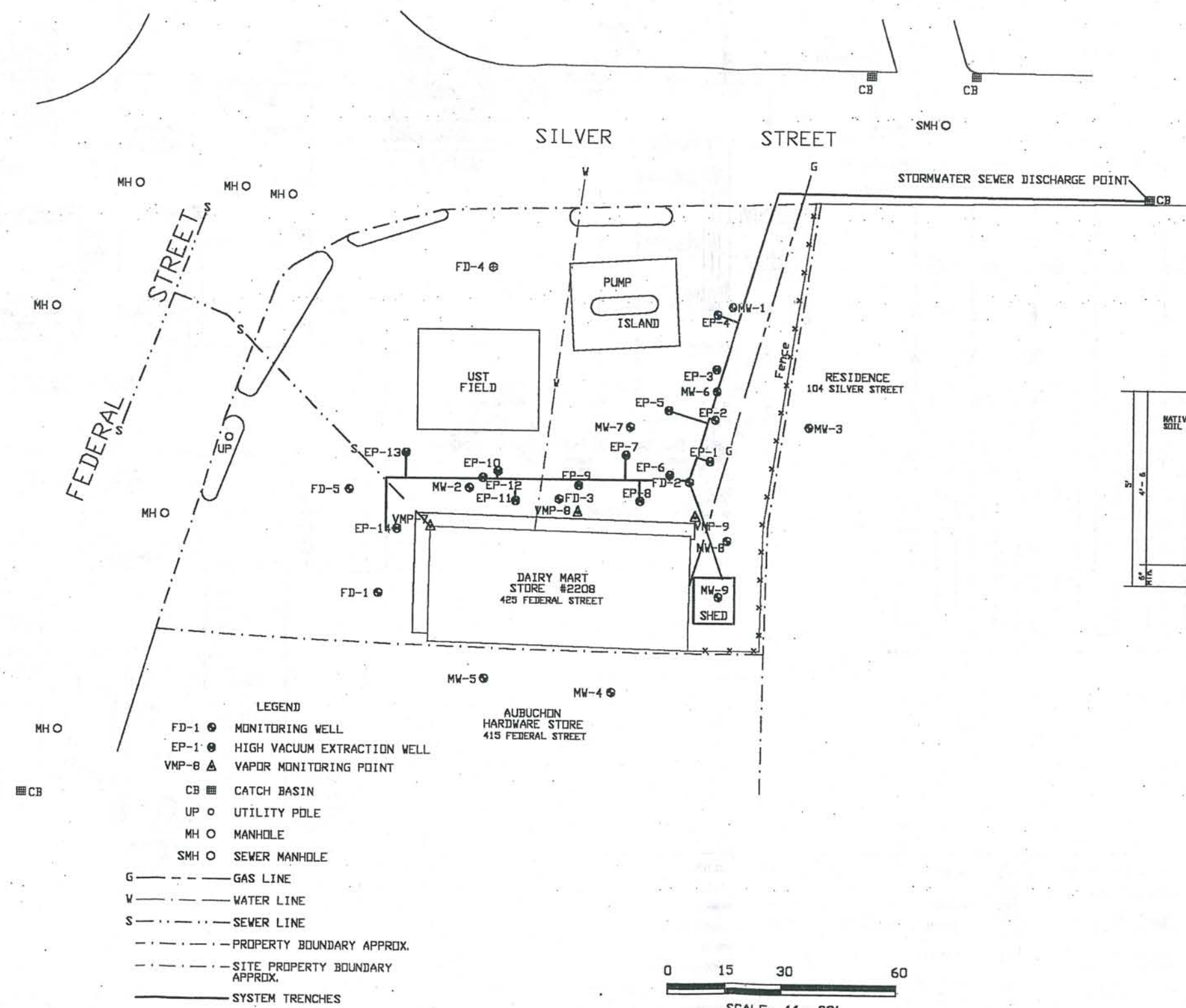
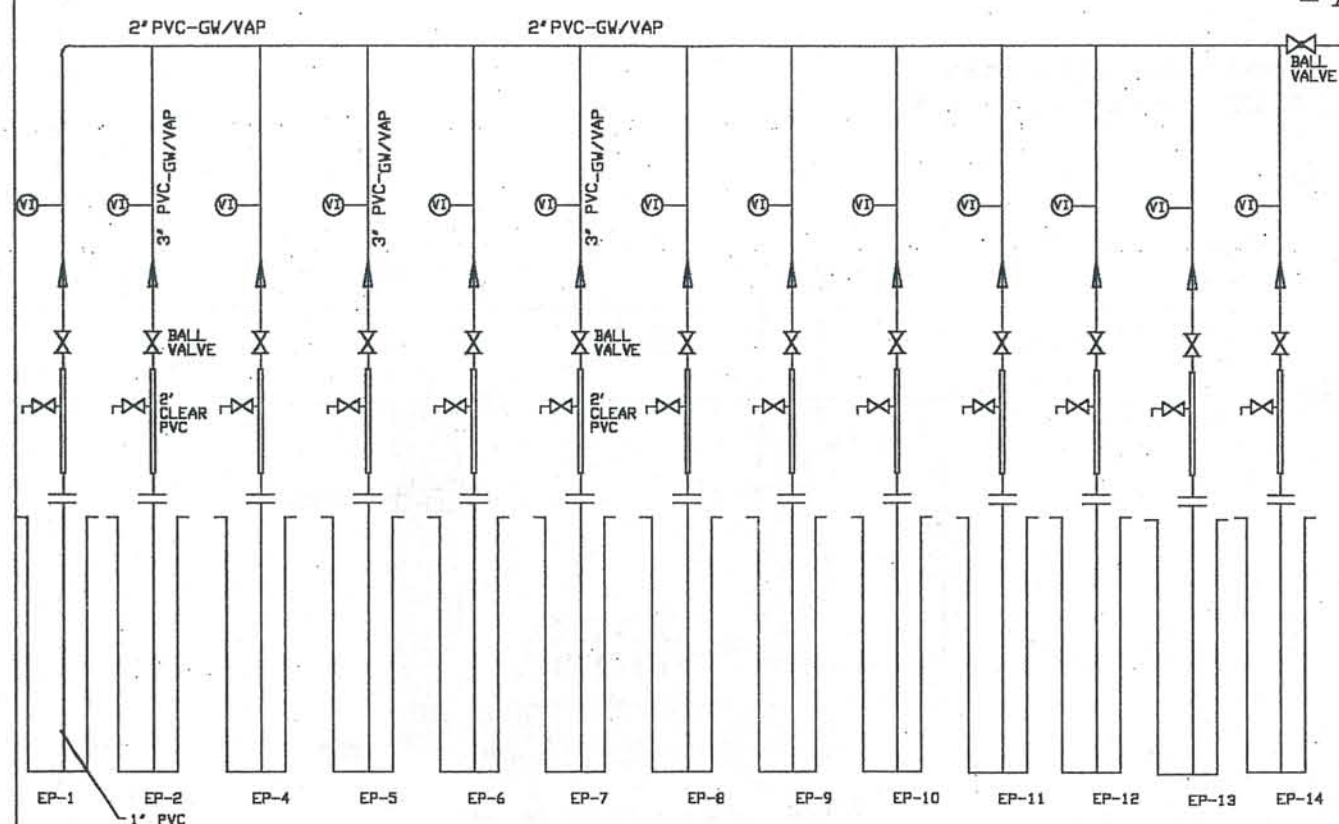


DIAGRAM 3

 HANDEX HANDEX OF NEW ENGLAND, INC. 298 CEDAR HILL STREET, MARLBORO, MASSACHUSETTS 01752	
SYSTEM LAYOUT and TRENCH DETAIL DAIRY MART 425 FEDERAL STREET GREENFIELD, MASSACHUSETTS	
SCALE - AS SHOWN	JOB No. - 117421-00
DRAWN BY - JF	DISK No. -
CHECKED BY - BAC	DWG. NAME - SITESYSM
DATE - 12-12-02	DWG. No. - 125238EX

NOTE:
1.) ALL ELECTRICAL IS
IN ACCORDANCE WITH NEC



DUAL VACUUM EXTRACTION WELLS

INSTRUMENT IDENTIFICATION LETTERS			
FIRST LETTER		SUCCEEDING LETTERS	
MEASURED OR INITIATING VARIABLE	MODIFIER	READOUT OR PASSIVE FUNCTION	OUTPUT FUNCTION & MODIFIER
A	ANALYSIS	ALARM	ALARM
C	CONDUCTIVITY		CONTROL
E		SENSOR (PRIMARY ELEMENT)	
F	FLOW RATE		
G		GAUGE (ANALOG)	
H	HAND		HIGH
I		INDICATOR	
K	TIME		
L	LEVEL		LOW
M			MIDDLE
P	PRESSURE		INTERMEDIATE
Q		INTERGRATE TOTALIZER	
R		RECORD	
S	SYSTEM	SWITCH	SENSOR TRANSMITTER
T	TEMPERATURE		
V	VACUUM, SLUDGE, EVENT, STATE, OR PRESENCE		VALVE, DAMPER INDICATOR

LEGEND

	HOSE QUICK CONNECT		PUMP	F	FILTER
	FLOW DIRECTION		BLOWER	M	MOTOR
	BALL VALVE NORMALLY OPEN		TURBINE FLOW ELEMENT	P	PUMP
	BALL VALVE NORMALLY CLOSED		STRAINER	SP	SAMPLE PORT
	BUTTERFLY VALVE		ACTUATOR	V	VALVE
	CHECK VALVE		VALVE W/MOTOR	FH	FLEXIBLE HOSE
	SAMPLE PORT		PRESSURE RELIEF VALVE	PVC	POLYVINYL CHLORIDE PIPE
	FLEXIBLE HOSE		TURBINE FLOW METER	GS	GALVANIZED STEEL
	FLANGE		FLOW DIRECTION	GW	GROUNDWATER
				CA	COMPRESSED AIR
				VA	VAPOR
				N.C.	NORMALLY CLOSED
					PRIMARY PROCESS PIPING
					SECONDARY PROCESS PIPING
					ELECTRICAL WIRING

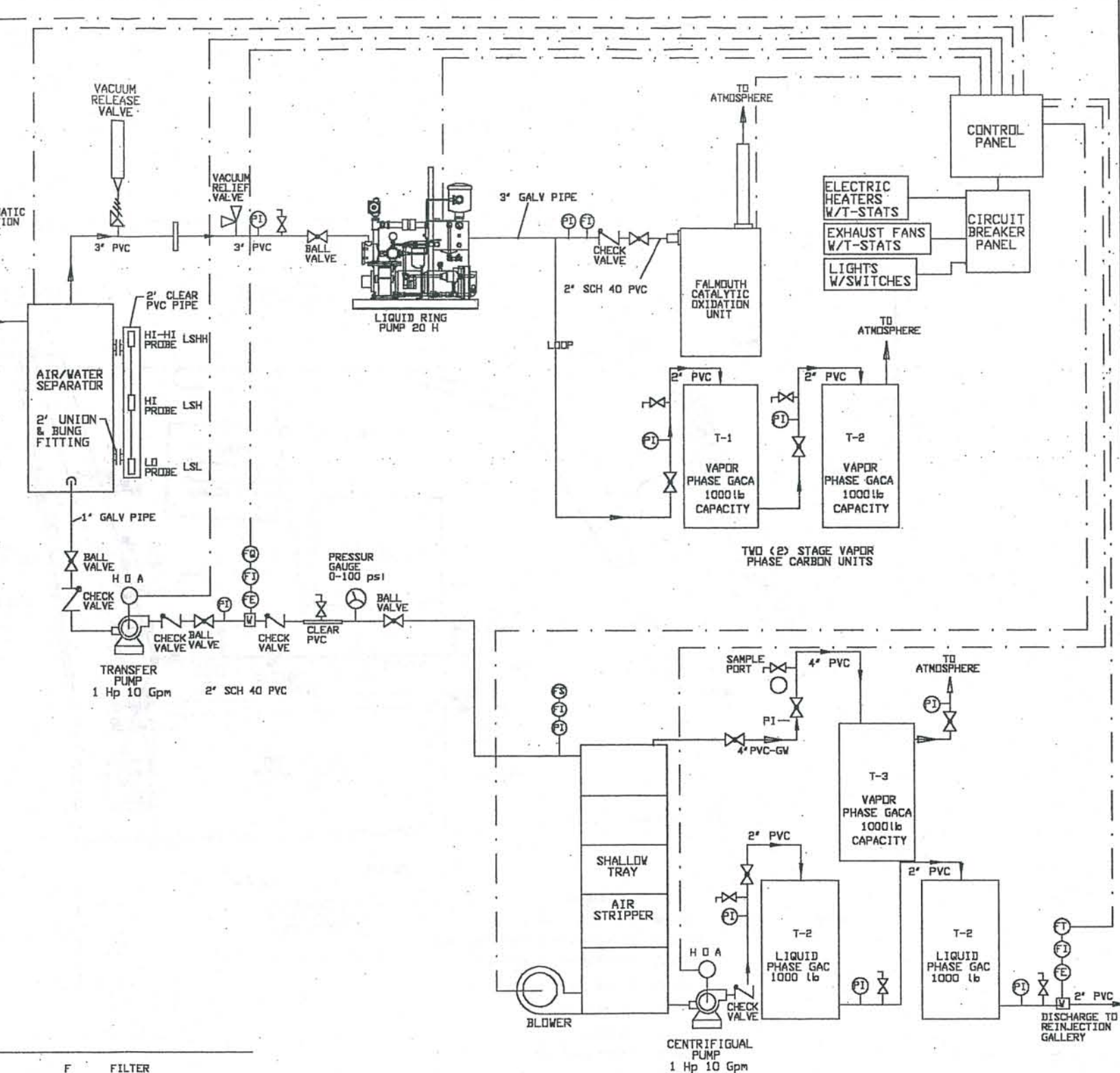


DIAGRAM 4

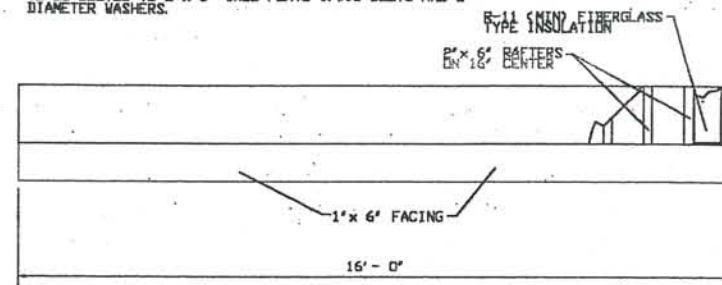
HANDEX
HANDEX OF NEW ENGLAND, INC. 595 CEDAR HILL STREET, WILBORO, MASSACHUSETTS, 01592

PROCESS and INSTRUMENTATION DIAGRAM
DAIRY MART
425 FEDERAL STREET
GREENFIELD, MASSACHUSETTS

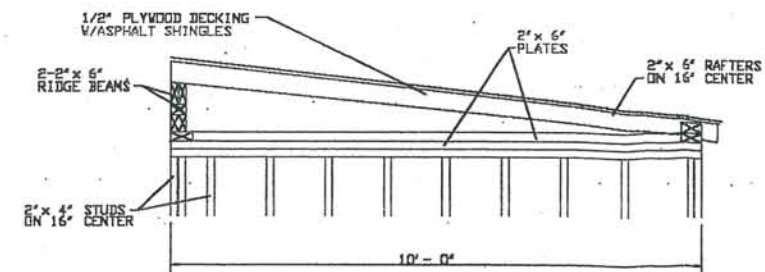
SCALE - Not to Scale	JOB No. - 117421-00
DRAWN BY - JF	DISK No. -
CHECKED BY - BAC	DWG. NAME - P&ID DIAG.
DATE - 12-12-02	DWG. No. - 117421PI

NOTE:

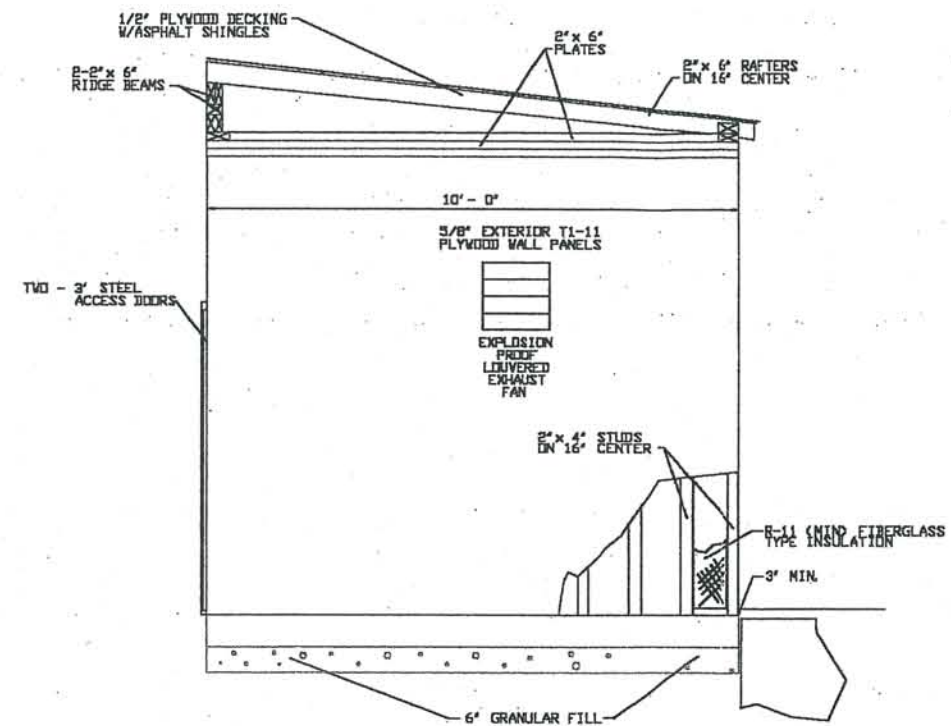
ROOF IS TO BE CONSTRUCTED TO ALLOW FOR REMOVAL AND IS TO BE BOLTED TO 2" x 6" WALL PLATE W/10 BOLTS AND 2" DIAMETER WASHERS.



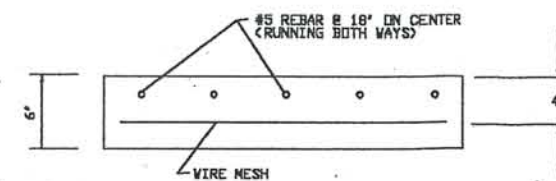
ROOF SECTION



ROOF SECTION



SIDE ELEVATION



PAD DETAIL

NOTES:

- 1) CONCRETE TO BE (CLASS B) 4000# @ 28 DAYS
- 2) CONCRETE TO HAVE A DEPTH OF SIX INCHES (6")
- 3) CONCRETE TO HAVE 6" x 6" WELDED WIRE MESH REINFORCING INSTALLED 2" FROM THE BOTTOM OF THE SLAB
- 4) CONCRETE SHALL HAVE A BROOM FINISH

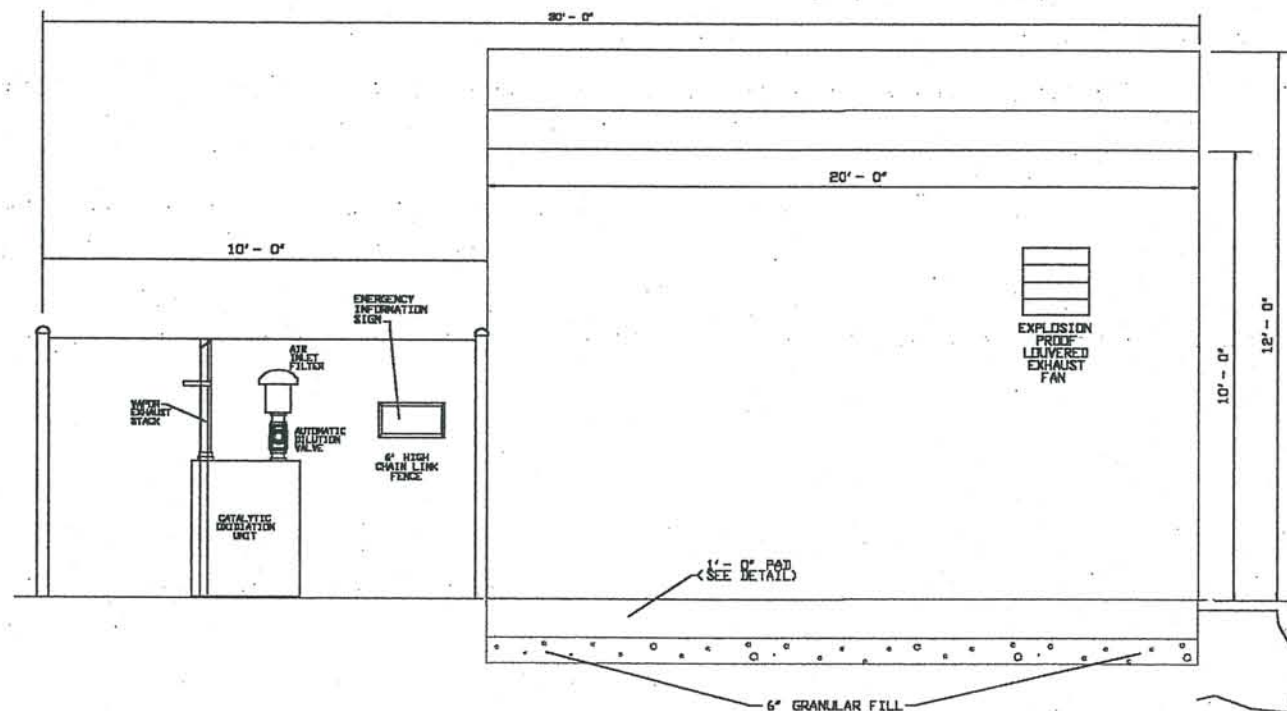
DIAGRAM 7



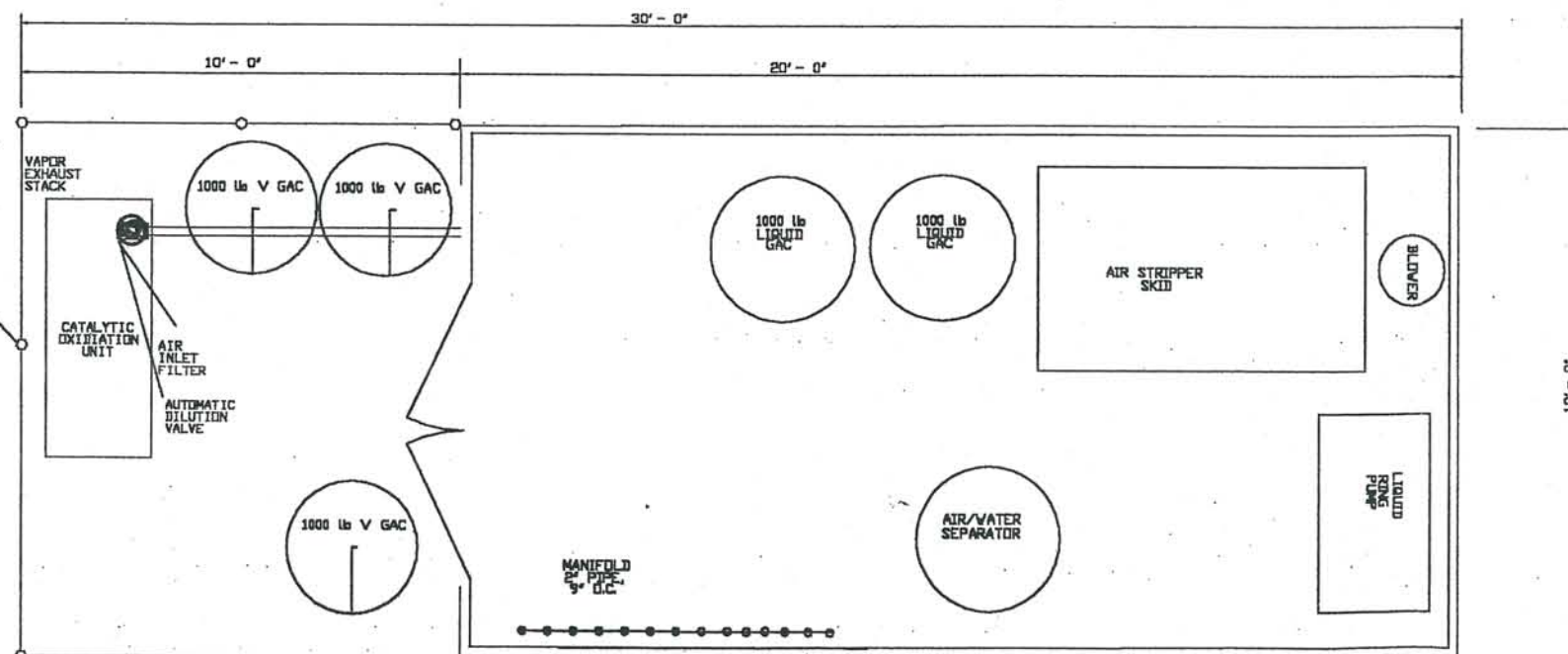
HANDEX

HANDEX OF NEW ENGLAND, INC. 990 OLD HILL STREET, MARLBOROUGH, MASSACHUSETTS, 01702

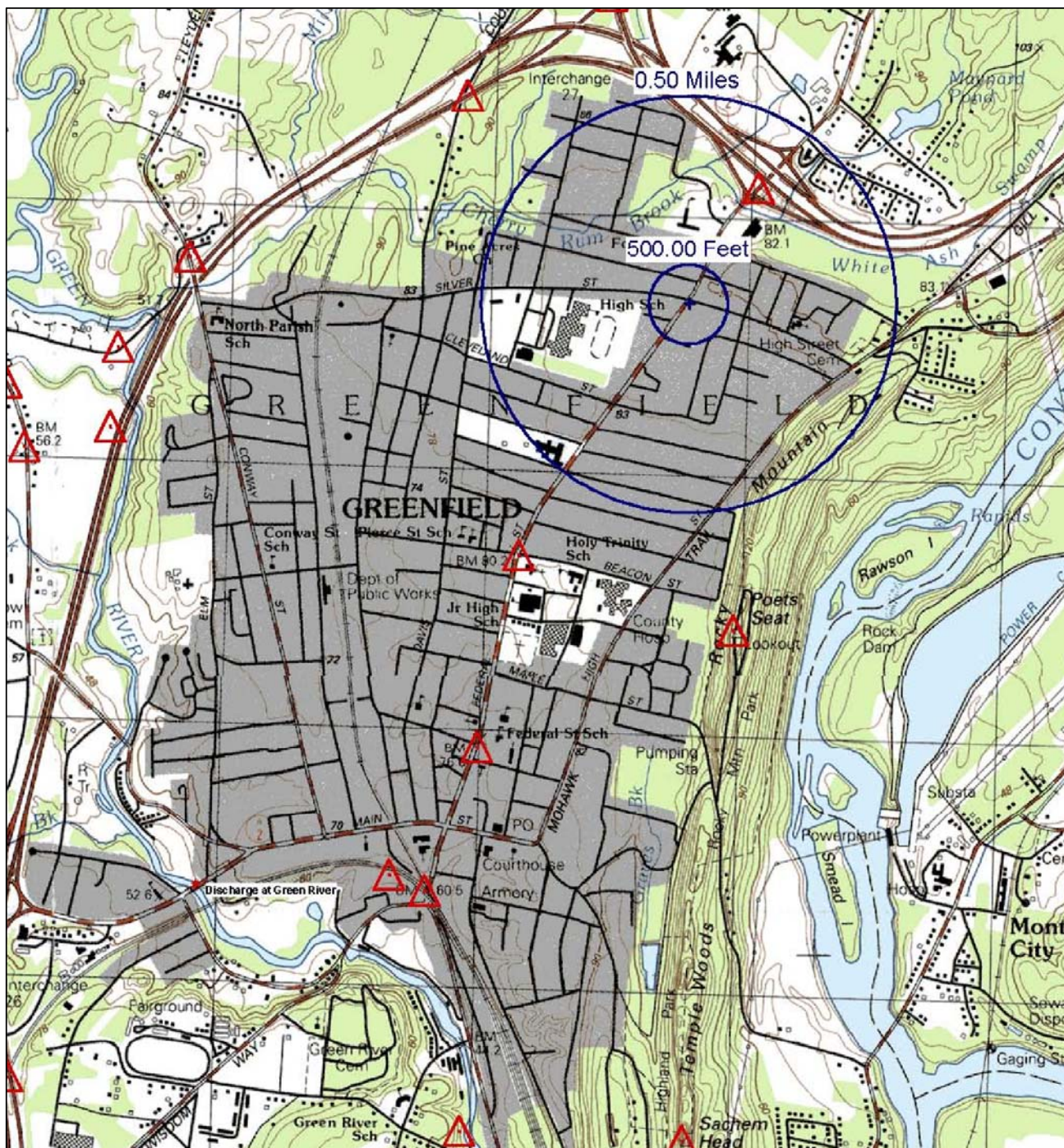
TREATMENT SYSTEM LAYOUT and DETAILS	
DAIRY MART	
425 FEDERAL STREET	
GREENFIELD, MASSACHUSETTS	
SCALE - Not To Scale	JOB No. -125238, 001
DRAWN BY - JF	DISK No. -
CHECKED BY - BAC	DWG. NAME-SITESYSM
DATE - 5-17-004	DWG. No. -117421ES



FLOOR PLAN



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SITE LOCUS PLAN

USGS QUADRANGLE
GREENFIELD, MASSACHUSETTS, 1990
42073 - D3 - TM - 025
7.5 x 15 Minute Series

SITE LOCATION:
42° 36' 21.07" latitude
72° 35' 20.59" longitude
APPROXIMATE DISCHARGE LOCATION:
42° 35' 8.60" latitude
72° 36' 44.28" longitude



= PROPERTY LOCATION



ENVIRONMENTAL
MANAGEMENT
ASSOCIATES, INC.

ERVING, MA
888-755-3067

LOCATION: 425 FEDERAL STREET

GREENFIELD, MASSACHUSETTS

DATE: 7 JAN 2008	SCALE: 1:25,000	DRAWN BY: DMB
PROJ. #: 0701-254	FIG. #: 1	CHK'D BY: DMB

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ALPHA ANALYTICAL LABORATORIES

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

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

CERTIFICATE OF ANALYSIS

Client: Environmental Management Associates, **Laboratory Job Number:** L0710301

Address: P.O. Box 362

Erving, MA 01344

Date Received: 19-JUL-2007

Attn: Ms. Dolores M. Branco, L.S.P.

Date Reported: 31-JUL-2007

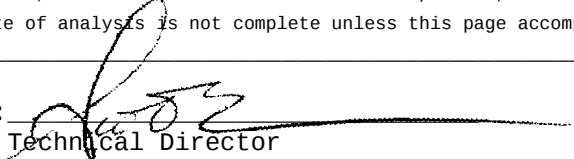
Project Number: 0701-254

Delivery Method: Alpha

Site: 425 FEDERAL ST.

ALPHA SAMPLE NUMBER	CLIENT IDENTIFICATION	SAMPLE LOCATION
L0710301-01	RGP-1 (MW-6)	GREENFIELD, 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: L0710301

Volatile Organics by GC/MS 624

L0710301-01 has elevated detection limits due to the 2.5x dilution required by the elevated concentrations of target compounds in the sample.

L0710301-01R required re-analysis on 200x dilution in order to quantitate samples within the range of the calibration. The result is reported as a greater than value for the compound that exceeded the calibration on the initial analysis. The re-analysis was performed only for the compound which exceeded the range of the calibration.

Semivolatile Organics

The LCS % recovery for Hexachloropropene is below the acceptance criteria for the method. The MS/MSD have acceptable recoveries for this affected compound. No further action was taken.

Total Suspended Solids

L0710301-01 has an elevated detection limit due to the 10x dilution required for analysis of higher TSS concentrations.

Hexavalent Chromium

The MS % recovery Hexavalent Chromium is outside the acceptance criteria for the method. The sample was analyzed on the ICP and found to be ND for Total Chrome at a 0.01ppm 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: L0710301-01	Date Collected: 19-JUL-2007 10:45
Sample Matrix: RGP-1 (MW-6)	Date Received : 19-JUL-2007
Condition of Sample: Satisfactory	Date Reported : 31-JUL-2007
Field Prep: None	
Number & Type of Containers: 7-Amber,4-Plastic,4-Vial	

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP ANAL	ID
Solids, Total Suspended	3400	mg/l	50	30 2540D	0725 16:40	DW
Cyanide, Total	ND	mg/l	0.005	30 4500CN-CE	0723 16:50 0723 22:32	DD
Chlorine, Total Residual	ND	mg/l	0.02	30 4500CL-D	0719 19:55	LR
TPH	ND	mg/l	4.00	74 1664A	0725 11:30 0726 09:00	AT
Phenolics, Total	ND	mg/l	0.03	4 420.1	0724 12:00	TH
Chromium, Hexavalent	ND	mg/l	0.010	30 3500CR-D	0719 22:53 0719 22:53	NM
Total Metals						
Antimony, Total	0.0006	mg/l	0.0005	1 6020	0723 16:20 0724 20:43	BM
Arsenic, Total	0.0180	mg/l	0.0005	1 6020	0723 16:20 0724 20:43	BM
Cadmium, Total	0.0019	mg/l	0.0002	1 6020	0723 16:20 0724 20:43	BM
Chromium, Total	0.0187	mg/l	0.0005	1 6020	0723 16:20 0724 20:43	BM
Copper, Total	0.0215	mg/l	0.0005	1 6020	0723 16:20 0724 20:43	BM
Iron, Total	29	mg/l	0.05	19 200.7	0723 16:20 0725 14:36	AI
Lead, Total	0.0111	mg/l	0.0005	1 6020	0723 16:20 0724 20:43	BM
Mercury, Total	ND	mg/l	0.0002	3 245.1	0720 15:00 0723 10:31	DM
Nickel, Total	0.0310	mg/l	0.0005	1 6020	0723 16:20 0724 20:43	BM
Selenium, Total	0.002	mg/l	0.001	1 6020	0723 16:20 0724 20:43	BM
Silver, Total	ND	mg/l	0.0004	1 6020	0723 16:20 0724 20:43	BM
Zinc, Total	0.0602	mg/l	0.0050	1 6020	0723 16:20 0724 20:43	BM
Pesticides by GC 504				14 504.1	0723 16:30 0723 20:07	SS
1,2-Dibromoethane	ND	ug/l	0.020			
Volatile Organics by GC/MS 624				5 624	0723 11:41	MM
Methylene chloride	ND	ug/l	12.			
1,1-Dichloroethane	ND	ug/l	3.8			
Chloroform	ND	ug/l	3.8			
Carbon tetrachloride	ND	ug/l	2.5			
1,2-Dichloropropane	ND	ug/l	8.8			
Dibromochloromethane	ND	ug/l	2.5			
1,1,2-Trichloroethane	ND	ug/l	3.8			
2-Chloroethylvinyl ether	ND	ug/l	25.			

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

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0710301-01
RGP-1 (MW-6)

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP ANAL	ID
Volatile Organics by GC/MS 624 cont'd				5 624	0723 11:41 MM	
Tetrachloroethene	ND	ug/l	3.8			
Chlorobenzene	ND	ug/l	8.8			
Trichlorofluoromethane	ND	ug/l	12.			
1,2-Dichloroethane	ND	ug/l	3.8			
1,1,1-Trichloroethane	ND	ug/l	5.0			
Bromodichloromethane	ND	ug/l	2.5			
trans-1,3-Dichloropropene	ND	ug/l	3.8			
cis-1,3-Dichloropropene	ND	ug/l	3.8			
Bromoform	ND	ug/l	2.5			
1,1,2,2-Tetrachloroethane	ND	ug/l	2.5			
Benzene	37	ug/l	2.5			
Toluene	8.3	ug/l	2.5			
Ethylbenzene	ND	ug/l	2.5			
Chloromethane	ND	ug/l	25.			
Bromomethane	ND	ug/l	12.			
Vinyl chloride	ND	ug/l	5.0			
Chloroethane	ND	ug/l	5.0			
1,1-Dichloroethene	ND	ug/l	2.5			
trans-1,2-Dichloroethene	ND	ug/l	3.8			
cis-1,2-Dichloroethene	ND	ug/l	2.5			
Trichloroethene	ND	ug/l	2.5			
1,2-Dichlorobenzene	ND	ug/l	12.			
1,3-Dichlorobenzene	ND	ug/l	12.			
1,4-Dichlorobenzene	ND	ug/l	12.			
p/m-Xylene	120	ug/l	5.0			
o-xylene	410	ug/l	2.5			
Xylene (Total)	540	ug/l	5.0			
Styrene	ND	ug/l	2.5			
Acetone	ND	ug/l	25.			
Carbon disulfide	ND	ug/l	12.			
2-Butanone	ND	ug/l	25.			
Vinyl acetate	ND	ug/l	50.			
4-Methyl-2-pentanone	ND	ug/l	25.			
2-Hexanone	ND	ug/l	25.			
Acrolein	ND	ug/l	20.			
Acrylonitrile	ND	ug/l	25.			
Methyl tert butyl ether	>500	ug/l	50			
1,4-Dioxane	ND	ug/l	5000			
Tert-Butyl Alcohol	2500	ug/l	250			
Tertiary-Amyl Methyl Ether	>500	ug/l	50			
Surrogate(s)	Recovery		QC Criteria			
Pentafluorobenzene	106	%	80-120			
Fluorobenzene	111	%	80-120			
4-Bromofluorobenzene	96.0	%	80-120			
Volatile Organics by GC/MS 624				5 624	0723 19:57 MM	
Methyl tert butyl ether	25000	ug/l	4000			
Tertiary-Amyl Methyl Ether	500	ug/l	400			

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

**ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS**

Laboratory Sample Number: L0710301-01
RGP-1 (MW-6)

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE		ID
					PREP	ANAL	
Volatile Organics by GC/MS 624 cont'd				5 624	0723 19:57 MM		
Surrogate(s)	Recovery		QC Criteria				
Pentafluorobenzene	104	%	80-120				
Fluorobenzene	101	%	80-120				
4-Bromofluorobenzene	98.0	%	80-120				
SVOC's by GC/MS 8270				1 8270C	0720 18:00 0724 19:03 PS		
Acenaphthene	ND	ug/l	4.9				
Benzidine	ND	ug/l	49.				
1,2,4-Trichlorobenzene	ND	ug/l	4.9				
Hexachlorobenzene	ND	ug/l	4.9				
Bis(2-chloroethyl)ether	ND	ug/l	4.9				
1-Chloronaphthalene	ND	ug/l	4.9				
2-Chloronaphthalene	ND	ug/l	5.9				
1,2-Dichlorobenzene	ND	ug/l	4.9				
1,3-Dichlorobenzene	ND	ug/l	4.9				
1,4-Dichlorobenzene	ND	ug/l	4.9				
3,3'-Dichlorobenzidine	ND	ug/l	49.				
2,4-Dinitrotoluene	ND	ug/l	5.9				
2,6-Dinitrotoluene	ND	ug/l	4.9				
Azobenzene	ND	ug/l	4.9				
Fluoranthene	ND	ug/l	4.9				
4-Chlorophenyl phenyl ether	ND	ug/l	4.9				
4-Bromophenyl phenyl ether	ND	ug/l	4.9				
Bis(2-chloroisopropyl)ether	ND	ug/l	4.9				
Bis(2-chloroethoxy)methane	ND	ug/l	4.9				
Hexachlorobutadiene	ND	ug/l	9.8				
Hexachlorocyclopentadiene	ND	ug/l	29.				
Hexachloroethane	ND	ug/l	4.9				
Isophorone	ND	ug/l	4.9				
Naphthalene	18	ug/l	4.9				
Nitrobenzene	ND	ug/l	4.9				
NDPA/DPA	ND	ug/l	15.				
n-Nitrosodi-n-propylamine	ND	ug/l	4.9				
Bis(2-ethylhexyl)phthalate	ND	ug/l	4.9				
Butyl benzyl phthalate	ND	ug/l	4.9				
Di-n-butylphthalate	ND	ug/l	4.9				
Di-n-octylphthalate	ND	ug/l	4.9				
Diethyl phthalate	ND	ug/l	4.9				
Dimethyl phthalate	ND	ug/l	4.9				
Benzo(a)anthracene	ND	ug/l	4.9				
Benzo(a)pyrene	ND	ug/l	4.9				
Benzo(b)fluoranthene	ND	ug/l	4.9				
Benzo(k)fluoranthene	ND	ug/l	4.9				
Chrysene	ND	ug/l	4.9				
Acenaphthylene	ND	ug/l	4.9				
Anthracene	ND	ug/l	4.9				
Benzo(ghi)perylene	ND	ug/l	4.9				
Fluorene	ND	ug/l	4.9				
Phenanthrene	ND	ug/l	4.9				

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

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0710301-01
RGP-1 (MW-6)

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE		ID
					PREP	ANAL	
SVOC's by GC/MS 8270 cont'd				1 8270C	0720 18:00	0724 19:03	PS
Dibenzo(a,h)anthracene	ND	ug/l	4.9				
Indeno(1,2,3-cd)pyrene	ND	ug/l	6.8				
Pyrene	ND	ug/l	4.9				
Benzo(e)pyrene	ND	ug/l	4.9				
Biphenyl	ND	ug/l	4.9				
Perylene	ND	ug/l	4.9				
Aniline	ND	ug/l	20.				
4-Chloroaniline	ND	ug/l	4.9				
1-Methylnaphthalene	7.1	ug/l	4.9				
2-Nitroaniline	ND	ug/l	4.9				
3-Nitroaniline	ND	ug/l	4.9				
4-Nitroaniline	ND	ug/l	6.8				
Dibenzofuran	ND	ug/l	4.9				
a,a-Dimethylphenethylamine	ND	ug/l	49.				
Hexachloropropene	ND	ug/l	9.8				
Nitrosodi-n-butylamine	ND	ug/l	9.8				
2-Methylnaphthalene	ND	ug/l	4.9				
1,2,4,5-Tetrachlorobenzene	ND	ug/l	20.				
Pentachlorobenzene	ND	ug/l	20.				
a-Naphthylamine	ND	ug/l	24.				
b-Naphthylamine	ND	ug/l	20.				
Phenacetin	ND	ug/l	9.8				
Dimethoate	ND	ug/l	20.				
4-Aminobiphenyl	ND	ug/l	9.8				
Pentachloronitrobenzene	ND	ug/l	9.8				
Isodrin	ND	ug/l	9.8				
p-Dimethylaminoazobenzene	ND	ug/l	9.8				
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	49.				
2,4,6-Trichlorophenol	ND	ug/l	4.9				
p-Chloro-m-cresol	ND	ug/l	4.9				
2-Chlorophenol	ND	ug/l	5.9				
2,4-Dichlorophenol	ND	ug/l	9.8				
2,4-Dimethylphenol	ND	ug/l	9.8				
2-Nitrophenol	ND	ug/l	20.				
4-Nitrophenol	ND	ug/l	9.8				
2,4-Dinitrophenol	ND	ug/l	29.				
4,6-Dinitro-o-cresol	ND	ug/l	20.				
Pentachlorophenol	ND	ug/l	9.8				
Phenol	ND	ug/l	6.8				
2-Methylphenol	ND	ug/l	5.9				
3-Methylphenol/4-Methylphenol	ND	ug/l	5.9				
2,4,5-Trichlorophenol	ND	ug/l	4.9				
2,6-Dichlorophenol	ND	ug/l	9.8				

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

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0710301-01
RGP-1 (MW-6)

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP ANAL	ID
SVOC's by GC/MS 8270 cont'd				1 8270C	0720 18:00 0724 19:03 PS	
Benzoic Acid	ND	ug/l	49.			
Benzyl Alcohol	ND	ug/l	9.8			
Carbazole	ND	ug/l	4.9			
Pyridine	ND	ug/l	49.			
2-Picoline	ND	ug/l	20.			
Pronamide	ND	ug/l	20.			
Methyl methanesulfonate	ND	ug/l	20.			
Surrogate(s)	Recovery		QC Criteria			
2-Fluorophenol	48.0	%	21-120			
Phenol-d6	44.0	%	10-120			
Nitrobenzene-d5	81.0	%	23-120			
2-Fluorobiphenyl	68.0	%	43-120			
2,4,6-Tribromophenol	90.0	%	10-120			
4-Terphenyl-d14	83.0	%	33-120			
PAH by GC/MS SIM 8270M				1 8270C-M	0720 18:00 0724 20:29 RL	
Acenaphthene	ND	ug/l	0.20			
2-Chloronaphthalene	ND	ug/l	0.20			
Fluoranthene	ND	ug/l	0.20			
Hexachlorobutadiene	ND	ug/l	0.49			
Naphthalene	16	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			
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	6.8	ug/l	0.20			
2-Methylnaphthalene	0.56	ug/l	0.20			
Pentachlorophenol	ND	ug/l	0.78			
Hexachlorobenzene	ND	ug/l	0.78			
Perylene	ND	ug/l	0.20			
Biphenyl	ND	ug/l	0.20			
2,6-Dimethylnaphthalene	0.34	ug/l	0.20			
1-Methylphenanthrene	ND	ug/l	0.20			
Benzo(e)Pyrene	ND	ug/l	0.20			
Hexachloroethane	ND	ug/l	0.78			
Surrogate(s)	Recovery		QC Criteria			
2-Fluorophenol	46.0	%	21-120			
Phenol-d6	47.0	%	10-120			

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

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0710301-01
RGP-1 (MW-6)

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP ANAL	ID
PAH by GC/MS SIM 8270M cont'd				1 8270C-M	0720 18:00 0724 20:29 RL	
Nitrobenzene-d5	118	%	23-120			
2-Fluorobiphenyl	78.0	%	43-120			
2,4,6-Tribromophenol	105	%	10-120			
4-Terphenyl-d14	113	%	33-120			
Polychlorinated Biphenyls				5 608	0720 18:30 0724 22:14 JB	
Aroclor 1016	ND	ug/l	0.255			
Aroclor 1221	ND	ug/l	0.255			
Aroclor 1232	ND	ug/l	0.255			
Aroclor 1242	ND	ug/l	0.255			
Aroclor 1248	ND	ug/l	0.255			
Aroclor 1254	ND	ug/l	0.255			
Aroclor 1260	ND	ug/l	0.255			
Surrogate(s)	Recovery		QC Criteria			
2,4,5,6-Tetrachloro-m-xylene	75.0	%	30-150			
Decachlorobiphenyl	32.0	%	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: L0710301

Parameter	Value 1	Value 2	Units	RPD	RPD Limits
Solids, Total Suspended for sample(s) 01 (L0710301-01, WG288220-2)					
Solids, Total Suspended	3400	3400	mg/l	0	32
Cyanide, Total for sample(s) 01 (L0710301-01, WG288013-3)					
Cyanide, Total	ND	ND	mg/l	NC	
Chlorine, Total Residual for sample(s) 01 (L0710301-01, WG287877-3)					
Chlorine, Total Residual	ND	ND	mg/l	NC	
TPH for sample(s) 01 (L0710301-01, WG288323-4)					
TPH	ND	ND	mg/l	NC	34
Chromium, Hexavalent for sample(s) 01 (L0710301-01, WG287728-4)					
Chromium, Hexavalent	ND	ND	mg/l	NC	20
Total Metals for sample(s) 01 (L0710332-02, WG288009-1)					
Copper, Total	0.0207	0.0201	mg/l	3	20
Selenium, Total	0.005	0.004	mg/l	2	20
Zinc, Total	16.12	15.13	mg/l	6	20
Total Metals for sample(s) 01 (L0710332-02, WG288014-1)					
Iron, Total	18	19	mg/l	5	
Total Metals for sample(s) 01 (L0710250-01, WG287810-3)					
Mercury, Total	ND	ND	mg/l	NC	
Volatile Organics by GC/MS 624 for sample(s) 01 (L0710461-02, WG287928-2)					
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

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH DUPLICATE ANALYSIS

Laboratory Job Number: L0710301

Continued

Parameter	Value 1	Value 2	Units	RPD	RPD Limits
Volatile Organics by GC/MS 624 for sample(s) 01 (L0710461-02, WG287928-2)					
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
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
Surrogate(s)	Recovery			QC Criteria	
Pentafluorobenzene	100	104	%	80-120	
Fluorobenzene	100	106	%	80-120	
4-Bromofluorobenzene	93.0	100	%	80-120	
Polychlorinated Biphenyls for sample(s) 01 (L0710301-01, WG287855-4)					
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	75.0	72.0	%	30-150	
Decachlorobiphenyl	32.0	35.0	%	30-150	

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH SPIKE ANALYSES

Laboratory Job Number: L0710301

Parameter	% Recovery	QC Criteria
Cyanide, Total LCS for sample(s) 01 (WG288013-2)		
Cyanide, Total	96	
Chlorine, Total Residual LCS for sample(s) 01 (WG287877-2)		
Chlorine, Total Residual	101	
TPH LCS for sample(s) 01 (WG288323-2)		
TPH	85	64-132
Phenolics, Total LCS for sample(s) 01 (WG288116-2)		
Phenolics, Total	89	82-111
Chromium, Hexavalent LCS for sample(s) 01 (WG287728-2)		
Chromium, Hexavalent	94	85-115
Total Metals LCS for sample(s) 01 (WG288009-4)		
Antimony, Total	96	80-120
Arsenic, Total	94	80-120
Cadmium, Total	101	80-120
Chromium, Total	100	80-120
Copper, Total	92	80-120
Lead, Total	100	80-120
Nickel, Total	94	80-120
Selenium, Total	93	80-120
Silver, Total	93	80-120
Zinc, Total	96	80-120
Total Metals LCS for sample(s) 01 (WG288014-4)		
Iron, Total	96	
Total Metals LCS for sample(s) 01 (WG287810-1)		
Mercury, Total	103	
Pesticides by GC 504 LCS for sample(s) 01 (WG288070-2)		
1,2-Dibromoethane	110	70-130
Volatile Organics by GC/MS 624 LCS for sample(s) 01 (WG287928-5)		
Methylene chloride	110	10-221
1,1-Dichloroethane	114	59-155
Chloroform	114	51-138
Carbon tetrachloride	125	70-140
1,2-Dichloropropane	95	10-210
Dibromochloromethane	112	53-149
1,1,2-Trichloroethane	110	52-150
2-Chloroethylvinyl ether	100	10-305
Tetrachloroethene	103	64-148
Chlorobenzene	99	37-160
Trichlorofluoromethane	126	17-181
1,2-Dichloroethane	119	49-155

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

Laboratory Job Number: L0710301

Continued

Parameter	% Recovery	QC Criteria
Volatile Organics by GC/MS 624 LCS for sample(s) 01 (WG287928-5)		
1,1,1-Trichloroethane	129	52-162
Bromodichloromethane	112	35-155
trans-1,3-Dichloropropene	105	17-183
cis-1,3-Dichloropropene	114	10-227
Bromoform	116	45-169
1,1,2,2-Tetrachloroethane	102	46-157
Benzene	111	37-151
Toluene	106	47-150
Ethylbenzene	106	37-162
Chloromethane	104	10-273
Bromomethane	78	10-242
Vinyl chloride	126	10-251
Chloroethane	130	14-230
1,1-Dichloroethene	108	10-234
trans-1,2-Dichloroethene	106	54-156
cis-1,2-Dichloroethene	106	60-140
Trichloroethene	100	71-157
1,2-Dichlorobenzene	99	18-190
1,3-Dichlorobenzene	98	59-156
1,4-Dichlorobenzene	98	18-190
p/m-Xylene	101	40-160
o-Xylene	105	40-160
XYLENE (TOTAL)	102	40-160
Styrene	95	40-160
Acetone	134	40-160
Carbon disulfide	122	40-160
2-Butanone	126	40-160
Vinyl acetate	112	40-160
4-Methyl-2-pentanone	125	40-160
2-Hexanone	124	40-160
Acrolein	124	40-160
Acrylonitrile	131	40-160
Surrogate(s)		
Pentafluorobenzene	99	80-120
Fluorobenzene	98	80-120
4-Bromofluorobenzene	97	80-120
Volatile Organics by GC/MS 624 LCS for sample(s) 01 (WG287928-7)		
Methylene chloride	106	10-221
1,1-Dichloroethane	110	59-155
Chloroform	104	51-138
Carbon tetrachloride	116	70-140
1,2-Dichloropropane	92	10-210
Dibromochloromethane	101	53-149
1,1,2-Trichloroethane	98	52-150
2-Chloroethylvinyl ether	93	10-305
Tetrachloroethene	97	64-148

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

Laboratory Job Number: L0710301

Continued

Parameter	% Recovery	QC Criteria
Volatile Organics by GC/MS 624 LCS for sample(s) 01 (WG287928-7)		
Chlorobenzene	95	37-160
Trichlorofluoromethane	120	17-181
1,2-Dichloroethane	109	49-155
1,1,1-Trichloroethane	124	52-162
Bromodichloromethane	102	35-155
trans-1,3-Dichloropropene	99	17-183
cis-1,3-Dichloropropene	112	10-227
Bromoform	106	45-169
1,1,2,2-Tetrachloroethane	95	46-157
Benzene	103	37-151
Toluene	100	47-150
Ethylbenzene	101	37-162
Chloromethane	120	10-273
Bromomethane	80	10-242
Vinyl chloride	122	10-251
Chloroethane	129	14-230
1,1-Dichloroethene	98	10-234
trans-1,2-Dichloroethene	99	54-156
cis-1,2-Dichloroethene	102	60-140
Trichloroethene	96	71-157
1,2-Dichlorobenzene	95	18-190
1,3-Dichlorobenzene	94	59-156
1,4-Dichlorobenzene	94	18-190
p/m-Xylene	99	40-160
o-Xylene	96	40-160
XYLENE (TOTAL)	98	40-160
Styrene	92	40-160
Acetone	114	40-160
Carbon disulfide	116	40-160
2-Butanone	104	40-160
Vinyl acetate	101	40-160
4-Methyl-2-pentanone	105	40-160
2-Hexanone	103	40-160
Acrolein	106	40-160
Acrylonitrile	113	40-160
Surrogate(s)		
Pentafluorobenzene	101	80-120
Fluorobenzene	97	80-120
4-Bromofluorobenzene	99	80-120
SVOC's by GC/MS 8270 LCS for sample(s) 01 (WG287852-2)		
Acenaphthene	66	46-118
1,2,4-Trichlorobenzene	43	39-98
2-Chloronaphthalene	56	40-140
1,2-Dichlorobenzene	45	40-140
1,4-Dichlorobenzene	43	36-97
2,4-Dinitrotoluene	92	24-96

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

Laboratory Job Number: L0710301

Continued

Parameter	% Recovery	QC Criteria
SVOC's by GC/MS 8270 LCS for sample(s) 01 (WG287852-2)		
2,6-Dinitrotoluene	84	40-140
Fluoranthene	97	40-140
4-Chlorophenyl phenyl ether	70	40-140
n-Nitrosodi-n-propylamine	68	41-116
Butyl benzyl phthalate	97	40-140
Anthracene	76	40-140
Pyrene	95	26-127
Hexachloropropene	36	40-140
P-Chloro-M-Cresol	74	23-97
2-Chlorophenol	56	27-123
2-Nitrophenol	69	30-130
4-Nitrophenol	45	10-80
2,4-Dinitrophenol	92	30-130
Pentachlorophenol	79	9-103
Phenol	26	12-110
Surrogate(s)		
2-Fluorophenol	39	21-120
Phenol-d6	35	10-120
Nitrobenzene-d5	69	23-120
2-Fluorobiphenyl	61	43-120
2,4,6-Tribromophenol	87	10-120
4-Terphenyl-d14	87	33-120
PAH by GC/MS SIM 8270M LCS for sample(s) 01 (WG287854-2)		
Acenaphthene	48	40-140
2-Chloronaphthalene	57	40-140
Fluoranthene	76	40-140
Anthracene	64	40-140
Pyrene	79	40-140
Pentachlorophenol	44	30-130
Surrogate(s)		
2-Fluorophenol	38	21-120
Phenol-d6	37	10-120
Nitrobenzene-d5	96	23-120
2-Fluorobiphenyl	60	43-120
2,4,6-Tribromophenol	70	10-120
4-Terphenyl-d14	95	33-120
Polychlorinated Biphenyls LCS for sample(s) 01 (WG287855-2)		
Aroclor 1016	81	40-140
Aroclor 1260	116	40-140
Surrogate(s)		
2,4,5,6-Tetrachloro-m-xylene	65	30-150
Decachlorobiphenyl	68	30-150

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

Laboratory Job Number: L0710301

Continued

Parameter	% Recovery	QC Criteria
Cyanide, Total SPIKE for sample(s) 01 (L0710089-01, WG288013-4)		
Cyanide, Total	104	
TPH SPIKE for sample(s) 01 (L0710305-01, WG288323-3)		
TPH	85	64-132
Phenolics, Total SPIKE for sample(s) 01 (L0710493-01, WG288116-3)		
Phenolics, Total	101	77-124
Chromium, Hexavalent SPIKE for sample(s) 01 (L0710301-01, WG287728-3)		
Chromium, Hexavalent	3	85-115
Total Metals SPIKE for sample(s) 01 (L0710332-02, WG288009-2)		
Antimony, Total	97	80-120
Arsenic, Total	100	80-120
Cadmium, Total	105	80-120
Chromium, Total	102	80-120
Copper, Total	93	80-120
Lead, Total	98	80-120
Nickel, Total	100	80-120
Selenium, Total	93	80-120
Silver, Total	92	80-120
Zinc, Total	178	80-120
Total Metals SPIKE for sample(s) 01 (L0710332-02, WG288014-2)		
Iron, Total	200	
Total Metals SPIKE for sample(s) 01 (L0710250-01, WG287810-2)		
Mercury, Total	117	
Pesticides by GC 504 SPIKE for sample(s) 01 (L0710297-01, WG288070-3)		
1,2-Dibromoethane	104	
Volatile Organics by GC/MS 624 SPIKE for sample(s) 01 (L0710297-04, WG287928-1)		
Methylene chloride	109	10-221
1,1-Dichloroethane	109	59-155
Chloroform	111	51-138
Carbon tetrachloride	121	70-140
1,2-Dichloropropane	108	10-210
Dibromochloromethane	103	53-149
1,1,2-Trichloroethane	97	52-150
2-Chloroethylvinyl ether	109	10-305
Tetrachloroethene	102	64-148
Chlorobenzene	98	37-160
Trichlorofluoromethane	123	17-181
1,2-Dichloroethane	111	49-155
1,1,1-Trichloroethane	81	52-162
Bromodichloromethane	105	35-155
trans-1,3-Dichloropropene	88	17-183

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

Laboratory Job Number: L0710301

Continued

Parameter	% Recovery	QC Criteria
Volatile Organics by GC/MS 624 SPIKE for sample(s) 01 (L0710297-04, WG287928-1)		
cis-1,3-Dichloropropene	88	10-227
Bromoform	99	45-169
1,1,2,2-Tetrachloroethane	102	46-157
Benzene	111	35-151
Toluene	109	47-150
Ethylbenzene	102	37-162
Chloromethane	108	10-273
Bromomethane	68	10-242
Vinyl chloride	120	10-251
Chloroethane	133	14-230
1,1-Dichloroethene	104	10-234
trans-1,2-Dichloroethene	106	54-156
cis-1,2-Dichloroethene	109	60-140
Trichloroethene	107	71-157
1,2-Dichlorobenzene	96	18-190
1,3-Dichlorobenzene	97	59-156
1,4-Dichlorobenzene	98	18-190
p/m-Xylene	99	40-160
o-Xylene	96	40-160
XYLENE (TOTAL)	98	40-160
Styrene	103	40-160
Acetone	118	40-160
Carbon disulfide	116	40-160
2-Butanone	120	40-160
Vinyl acetate	68	40-160
4-Methyl-2-pentanone	111	40-160
2-Hexanone	109	40-160
Acrolein	81	40-160
Acrylonitrile	74	40-160
Surrogate(s)		
Pentafluorobenzene	103	80-120
Fluorobenzene	101	80-120
4-Bromofluorobenzene	96	80-120
Polychlorinated Biphenyls SPIKE for sample(s) 01 (L0710301-01, WG287855-3)		
Aroclor 1016	124	40-140
Aroclor 1260	95	40-140
Surrogate(s)		
2,4,5,6-Tetrachloro-m-xylene	82	30-150
Decachlorobiphenyl	41	30-150

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH MS/MSD ANALYSIS

Laboratory Job Number: L0710301

Parameter	MS %	MSD %	RPD	RPD Limit	MS/MSD Limits
SVOC's by GC/MS 8270 for sample(s) 01 (L0710301-01, WG287852-4)					
Acenaphthene	75	71	5	30	46-118
1,2,4-Trichlorobenzene	56	52	7	30	39-98
2-Chloronaphthalene	71	66	7	30	40-140
1,2-Dichlorobenzene	56	52	7	30	40-140
1,4-Dichlorobenzene	52	47	10	30	36-97
2,4-Dinitrotoluene	94	94	0	30	24-96
2,6-Dinitrotoluene	85	94	10	30	40-140
Fluoranthene	99	100	1	30	40-140
4-Chlorophenyl phenyl ether	80	75	6	30	40-140
n-Nitrosodi-n-propylamine	66	66	0	30	41-116
Butyl benzyl phthalate	99	100	1	30	40-140
Anthracene	75	80	6	30	40-140
Pyrene	94	100	6	30	26-127
Hexachloropropene	52	47	10	30	40-140
p-Chloro-M-Cresol	87	87	0	30	23-97
2-Chlorophenol	63	63	0	30	27-123
2-Nitrophenol	71	73	3	30	30-130
4-Nitrophenol	75	78	4	30	10-80
2,4-Dinitrophenol	100	110	10	30	30-130
Pentachlorophenol	89	96	8	30	9-103
Phenol	42	45	7	30	12-110
Surrogate(s)					
2-Fluorophenol	56	58	4		21-120
Phenol-d6	57	61	7		10-120
Nitrobenzene-d5	69	71	3		23-120
2-Fluorobiphenyl	63	66	5		43-120
2,4,6-Tribromophenol	88	98	11		10-120
4-Terphenyl-d14	84	92	9		33-120
PAH by GC/MS SIM 8270M for sample(s) 01 (L0710301-01, WG287854-4)					
Acenaphthene	61	52	16	40	40-140
2-Chloronaphthalene	61	61	0	40	40-140
Fluoranthene	85	89	5	40	40-140
Anthracene	66	66	0	40	40-140
Pyrene	80	89	11	40	40-140
Pentachlorophenol	59	61	3	40	30-130
Surrogate(s)					
2-Fluorophenol	50	51	2		21-120
Phenol-d6	59	62	5		10-120
Nitrobenzene-d5	105	107	2		23-120
2-Fluorobiphenyl	68	71	4		43-120
2,4,6-Tribromophenol	81	88	8		10-120
4-Terphenyl-d14	82	89	8		33-120

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH BLANK ANALYSIS

Laboratory Job Number: L0710301

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Blank Analysis for sample(s) 01 (WG288220-1)							
Solids, Total Suspended	ND	mg/l	5.0	30 2540D		0725 16:40	DW
Blank Analysis for sample(s) 01 (WG288013-1)							
Cyanide, Total	ND	mg/l	0.005	30 4500CN-CE	0723 16:50	0723 22:19	DD
Blank Analysis for sample(s) 01 (WG287877-1)							
Chlorine, Total Residual	ND	mg/l	0.02	30 4500CL-D		0719 19:55	LR
Blank Analysis for sample(s) 01 (WG288323-1)							
TPH	ND	mg/l	4.00	74 1664A	0725 11:30	0726 09:00	AT
Blank Analysis for sample(s) 01 (WG288116-1)							
Phenolics, Total	ND	mg/l	0.03	4 420.1		0724 12:00	TH
Blank Analysis for sample(s) 01 (WG287728-1)							
Chromium, Hexavalent	ND	mg/l	0.010	30 3500CR-D	0719 22:53	0719 22:53	NM
Blank Analysis for sample(s) 01 (WG288009-3)							
Total Metals							
Antimony, Total	ND	mg/l	0.0005	1 6020	0723 16:20	0724 18:34	BM
Arsenic, Total	ND	mg/l	0.0005	1 6020	0723 16:20	0724 18:34	BM
Cadmium, Total	ND	mg/l	0.0002	1 6020	0723 16:20	0724 18:34	BM
Chromium, Total	ND	mg/l	0.0005	1 6020	0723 16:20	0724 18:34	BM
Copper, Total	ND	mg/l	0.0005	1 6020	0723 16:20	0724 18:34	BM
Lead, Total	ND	mg/l	0.0005	1 6020	0723 16:20	0724 18:34	BM
Nickel, Total	ND	mg/l	0.0005	1 6020	0723 16:20	0724 18:34	BM
Selenium, Total	ND	mg/l	0.001	1 6020	0723 16:20	0724 18:34	BM
Silver, Total	ND	mg/l	0.0004	1 6020	0723 16:20	0724 18:34	BM
Zinc, Total	ND	mg/l	0.0050	1 6020	0723 16:20	0724 18:34	BM
Blank Analysis for sample(s) 01 (WG288014-3)							
Total Metals							
				19 200.7			
Iron, Total	ND	mg/l	0.05	19 200.7	0723 16:20	0725 14:15	AI

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH BLANK ANALYSIS

Laboratory Job Number: L0710301

Continued

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP ANAL	ID
Blank Analysis for sample(s) 01 (WG287810-4)						
Total Metals						
Mercury, Total	ND	mg/l	0.0002	3 245.1	0720 15:00 0723 10:20	DM
Blank Analysis for sample(s) 01 (WG288070-1)						
Pesticides by GC 504						
1,2-Dibromoethane	ND	ug/l	0.020	14 504.1	0723 16:30 0723 17:30	SS
Blank Analysis for sample(s) 01 (WG287928-6)						
Volatile Organics by GC/MS 624						
Methylene chloride	ND	ug/l	5.0	5 624	0723 07:31	MM
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			
Dibromochloromethane	ND	ug/l	1.0			
1,1,2-Trichloroethane	ND	ug/l	1.5			
2-Chloroethylvinyl ether	ND	ug/l	10.			
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.			

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH BLANK ANALYSIS

Laboratory Job Number: L0710301

Continued

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP ANAL	ID
Blank Analysis for sample(s) 01 (WG287928-6)						
Volatile Organics by GC/MS 624 cont'd				5 624	0723 07:31 MM	
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 tert butyl ether	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	101	%	80-120			
Fluorobenzene	105	%	80-120			
4-Bromofluorobenzene	97.0	%	80-120			
Blank Analysis for sample(s) 01 (WG287928-8)						
Volatile Organics by GC/MS 624				5 624	0723 19:21 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			
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			

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH BLANK ANALYSIS

Laboratory Job Number: L0710301

Continued

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP ANAL	ID
Blank Analysis for sample(s) 01 (WG287928-8)						
Volatile Organics by GC/MS 624 cont'd				5 624	0723 19:21 MM	
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.			
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	101	%	80-120			
Fluorobenzene	100	%	80-120			
4-Bromofluorobenzene	96.0	%	80-120			
Blank Analysis for sample(s) 01 (WG287852-1)						
SVOC's by GC/MS 8270				1 8270C	0720 18:00 0724 16:01 PS	
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			

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH BLANK ANALYSIS

Laboratory Job Number: L0710301

Continued

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE		ID
					PREP	ANAL	
Blank Analysis for sample(s) 01 (WG287852-1)							
SVOC's by GC/MS 8270 cont'd				1 8270C	0720 18:00	0724 16:01	PS
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	ND	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				
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				

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH BLANK ANALYSIS

Laboratory Job Number: L0710301

Continued

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE		ID
					PREP	ANAL	
Blank Analysis for sample(s) 01 (WG287852-1)							
SVOC's by GC/MS 8270 cont'd				1 8270C	0720 18:00	0724 16:01	PS
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.				
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.				

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH BLANK ANALYSIS

Laboratory Job Number: L0710301

Continued

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Blank Analysis for sample(s) 01 (WG287852-1)							
SVOC's by GC/MS 8270 cont'd				1 8270C	0720 18:00	0724 16:01	PS
Surrogate(s)	Recovery		QC Criteria				
2-Fluorophenol	48.0	%	21-120				
Phenol-d6	37.0	%	10-120				
Nitrobenzene-d5	76.0	%	23-120				
2-Fluorobiphenyl	58.0	%	43-120				
2,4,6-Tribromophenol	72.0	%	10-120				
4-Terphenyl-d14	83.0	%	33-120				
Blank Analysis for sample(s) 01 (WG287854-1)							
PAH by GC/MS SIM 8270M				1 8270C-M	0720 18:00	0724 17:24	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				
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	42.0	%	21-120				
Phenol-d6	41.0	%	10-120				
Nitrobenzene-d5	103	%	23-120				
2-Fluorobiphenyl	63.0	%	43-120				
2,4,6-Tribromophenol	66.0	%	10-120				
4-Terphenyl-d14	100	%	33-120				

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH BLANK ANALYSIS

Laboratory Job Number: L0710301

Continued

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE		ID
					PREP	ANAL	
Blank Analysis for sample(s) 01 (WG287855-1)							
Polychlorinated Biphenyls				5 608	0720 18:30	0724 20:20	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	74.0	%	30-150				
Decachlorobiphenyl	60.0	%	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.
3. Methods for the Determination of Metals in Environmental Samples, Supplement I. EPA/600/R-94/111. May 1994.
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.
30. Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WPCF. 18th Edition. 1992.
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.

**ALPHA ANALYTICAL LABORATORIES
ADDENDUM I**

REFERENCES

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.



CHAIN OF CUSTODY

PAGE 1 OF 1

WESTBORO, MA
TEL: 508-898-9220
FAX: 508-898-9193

RAYNHAM, MA
TEL: 508-822-9300
FAX: 508-822-3288

Client Information

Client: EMA Inc
Address: PO Box 362
Erving MA 01344
Phone: 413 498-2510
Fax: 413 498-2511
Email: d.bama@comcast.net

☐ These samples have been previously analyzed by Alpha

Other Project Specific Requirements/Comments/Detection Limits:

EPA- Remediation General Permit Parameters

Project Information

Project Name: 425 Federal St.
Project Location: Greenfield, MA
Project #: 0701-254
Project Manager: D M Branco
ALPHA Quote #:

Turn-Around Time

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

Date Due: 7/26 Time:

Date Rec'd in Lab: 7/19

ALPHA Job #: 6071030

Report Information - Data Deliverables

☐ FAX ☐ EMAIL
☒ ADEx ☐ Add'l Deliverables

Billing Information

☐ Same as Client info PO #:
Estate of Sebastian J. Pusseri

Regulatory Requirements/Report Limits

State /Fed Program Criteria

EPA-RGP(NPRES)

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										SAMPLE HANDLING	
624 VOCs	504	8220	PAH - Low	TPH	PCBs	T. Phenol	TRC Hex, Cr	TCN	Total Metals	Filtration ☐ Done ☐ Not needed ☐ Lab to do Preservation ☐ Lab to do (Please specify below)	
Sample Specific Comments										TOTAL = 15	

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection		Sample Matrix	Sampler's Initials
		Date	Time		
103D1-01	RG-P-1 (mw-6)	7/19/07	10:45	mw	TUM

PLEASE ANSWER QUESTIONS ABOVE!

IS YOUR PROJECT
MA MCP or CT RCP?

Container Type

Preservative

V V A A A A P P P P
H H A A B H D A E C A

Relinquished By:

Date/Time

Received By:

Date/Time

Joe V. M...
K... M...

7/19/07
7/19/07 16:00

Eugene M...
K... M...

7/19/07 2:00
7/19 16:00

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.