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Cambridge, Massachusetts 02139
tel: 617 452-6000
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MA6910424

June 8, 2009

Mr. Victor Alvarez
United States Environmental Protection Agency, Region 1
Municipal NPDES Branch
1 Congress Street Suite 1100
Boston, MA 02114-8127

Subject: NOI RGP
GenCorp Lawrence Location

Dear Mr. Alvarez:

On behalf of GenCorp Inc. (GenCorp) and in accordance with our meeting on February 26, 2009, Camp Dresser & McKee Inc. (CDM) is providing the Notice of Intent (NOI) for the Remedial General Permit (RGP) for the GenCorp facility in Lawrence Massachusetts. The RGP is required for ongoing remedial activities at the site, described below, as part of the efforts to restore the site to a productive re-use.

The remedial work, to be conducted under the RGP, consists of the removal of contaminated sediment and residue from subsurface interior raceways and an exterior, at grade raceway. The subsurface interior raceways are 13 feet diameter masonry stone structures, while the exterior raceway is a masonry stone open channel. The raceway system is hydraulically connected to the Spicket River. An existing Temporary Sediment Barrier at the confluence of the Spicket River and the exterior raceway will be augmented to isolate the raceway from the Spicket River during the work. The contaminated sediments will be pumped from the raceways to an upland dewatering facility. During the dredging, the pumped water from the raceway, including infiltrating groundwater, will be returned to the raceway to facilitate dredging. As needed for management of water in the raceway, and at the completion of the dredging, the pumped water will be treated and then discharged under the RGP into the Spicket River. The contaminated sediment and residue will be dewatered above ground and disposed at an approved offsite disposal facility. Following completion of the sediment removal from the raceways, several permanent concrete plugs will be placed in the subsurface interior raceways to permanently isolate them from surface water, except for a 100 year frequency flood event. At the completion of the work, the temporary facilities required for the remedial work will be removed. It is anticipated that the remedial activities will be completed by the end of 2009.



Mr. Victor Alvarez

June 8, 2009

Page 2

Following completion of this remedial work, the project area will be developed into a landscaped park and parking area by the proponent the Merrimack Valley Regional Transit Agency. As part of its remedial work, GenCorp will construct and operate a permanent groundwater treatment system at the project location using the plugged raceways as a groundwater collection system. In accordance with our discussions on February 26, 2009, a separate NOI for an RGP for the permanent groundwater treatment system discharges will be filed later during 2009.

Please do not hesitate to call me at 617-452-6271 if you have any questions or require additional information.

Very truly yours,

A handwritten signature in black ink, reading 'Chester T. Gwardyak'.

Chester T. Gwardyak, P.E., L.S.P.

Project Director

Camp Dresser & McKee Inc.

c: D. Rymph, GenCorp Inc.
J. Costanzo, MVRTA
P. Canny, MVRTA
A. Spruch, MVRTA
J. Miano, MassDep
K. Tisa, USEPA
E. Weitzler, USEPA
S. Baker, demaximis
Massachusetts Division of Watershed Management
Mayor, City of Lawrence

B. Suggested Form for Notice of Intent (NOI) for the Remediation General Permit

MA691042

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

a) Name of facility/site: GenCorp Inc. Lawrence Location		Facility/site address:	
Location of facility/site: longitude: -71.150342 latitude: 42.707905	Facility SIC code(s): 9999	Street: 70 General Street	
b) Name of facility/site owner: GenCorp Inc.		Town: Lawrence	
Email address of owner: David.Rymph@Aerojet.com	State: MA	Zip: 01840	County:
Telephone no. of facility/site owner: (248) 358-2696	Owner is (check one): 1. Federal ☐ 2. State/Tribal ☐ 3. Private ☒ 4. other, if so, describe:		
Fax no. of facility/site owner: (248) 358-2697			
Address of owner (if different from site):			
Street: 26677 W. 12 Mile Road, Suite 140			
Town: Southfield	State: MI	Zip: 48034	County: Oakland
c) Legal name of operator: GenCorp Inc.	Operator telephone no: (248) 358-2696		Operator email: David.Rymph@Aerojet.com
	Operator fax no.: (248) 358-2697		
Operator contact name and title: David Rymph, Director of Environmental Remediation			
Address of operator (if different from owner):		Street:	
Town:	State:	Zip:	County:
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:			
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 the state of NH or MA: RTN 3-0340 2. permit or license # assigned: Tier 1B # 83009 3. state agency contact information: name, location, and telephone number: Jack Miano, MassDEP NERO, (978) 694-3200	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: MAR10D557 3. individual NPDES permit? Y ☒ N ☐, if Y, number: MA0003824 4. any other water quality related permit? Y ☐ N ☒, if Y, number: _____
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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:
Surface water and groundwater seepage collected from raceways during hydraulic and mechanical dredging of contaminated raceways and removal of residue on raceway stones.

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, ft³/s)? Max. flow <u>0.446</u> Average flow <u>0.223</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. <u>-71.1485</u> lat. <u>42.7076</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>07/01/09</u> end <u>12/01/09</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	2540D	25,000	390,000	425.13	390,000	212.57
2. Total Residual Chlorine	☒		1	grab	4500CL-D	20	<20		<20	
3. Total Petroleum Hydrocarbons	☒		1	grab	1664A	4,000	<4,000		<4,000	
4. Cyanide	☒		1	grab	335.2	5	<5		<5	
5. Benzene	☒		1	grab	5030B/8260B	5.0	<5.0		<5.0	
6. Toluene	☒		1	grab	5030B/8260B	5.0	<5.0		<5.0	
7. Ethylbenzene	☒		1	grab	5030B/8260B	5.0	<5.0		<5.0	
8. (m,p,o) Xylenes	☒		1	grab	5030B/8260B	5.0	<5.0		<5.0	
9. Total BTEX ⁴	☒		1	grab	5030B/8260B	20.0	<20.0		<20.0	

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 ^s (1,2- Dibromo-methane)	✓		1	grab	504.1	0.020	<0.020		<0.020	
11. Methyl-tert-Butyl Ether (MtBE)	✓		1	grab	5030B/8260B	1.0	<1.0		<1.0	
12. tert-Butyl Alcohol (TBA)	✓		1	grab	5030B/8260B	5.0	<5.0		<5.0	
13. tert-Amyl Methyl Ether (TAME)	✓		1	grab	5030B/8260B	1.0	<1.0		<1.0	
14. Naphthalene	✓		1	grab	5030B/8260B	1.0	<1.0		<1.0	
15. Carbon Tetra-chloride	✓		1	grab	5030B/8260B	4.0	<4.0		<4.0	
16. 1,4 Dichlorobenzene	✓		1	grab	5030B/8260B	5.0	<5.0		<5.0	
17. 1,2 Dichlorobenzene	✓		1	grab	5030B/8260B	5.0	<5.0		<5.0	
18. 1,3 Dichlorobenzene	✓		1	grab	5030B/8260B	5.0	<5.0		<5.0	
19. 1,1 Dichloroethane	✓		1	grab	5030B/8260B	5.0	<5.0		<5.0	
20. 1,2 Dichloroethane	✓		1	grab	5030B/8260B	5.0	<5.0		<5.0	
21. 1,1 Dichloroethylene	✓		1	grab	5030B/8260B	3.0	<3.0		<3.0	
22. cis-1,2 Dichloro-ethylene	✓		1	grab	5030B/8260B	5.0	<5.0		<5.0	
23. Dichloromethane (Methylene Chloride)	✓		1	grab	5030B/8260B	5.0	0.56	6.10E-04	0.56	3.05E-04
24. Tetrachloroethylene	✓		1	grab	5030B/8260B	5.0	<5.0		<5.0	

^sEDB is a groundwater contaminant at fuel spill and pesticide application sites in New England.

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	5030B/8260B	5.0	<5.0		<5.0	
26. 1,1,2 Trichloroethane	✓		1	grab	5030B/8260B	5.0	<5.0		<5.0	
27. Trichloroethylene	✓		1	grab	5030B/8260B	5.0	<5.0		<5.0	
28. Vinyl Chloride	✓		1	grab	5030B/8260B	2.0	<2.0		<2.0	
29. Acetone	✓		1	grab	5030B/8260B	25	<25		<25	
30. 1,4 Dioxane	✓		1	grab	5030B/8260B	20	<20		<20	
31. Total Phenols	✓		1	grab	420.1	150	<150		<150	
32. Pentachlorophenol	✓		1	grab	8270C SIM	0.80	<0.80		<0.80	
33. Total Phthalates ⁶ (Phthalate esters)		✓	1	grab	8270C	30.0	<30.0		<30.0	
34. Bis (2-Ethylhexyl) Phthalate [Di-(ethylhexyl) Phthalate]	✓		1	grab	8270C	5.0	<5.0		<5.0	
35. Total Group I Polycyclic Aromatic Hydrocarbons (PAH)	✓		1	grab	8270C SIM	1.00	<1.00		<1.00	
a. Benzo(a) Anthracene	✓		1	grab	8270C SIM	0.05	<0.05		<0.05	
b. Benzo(a) Pyrene	✓		1	grab	8270C SIM	0.20	<0.20		<0.20	
c. Benzo(b) Fluoranthene	✓		1	grab	8270C SIM	0.10	<0.10		<0.10	
d. Benzo(k) Fluoranthene	✓		1	grab	8270C SIM	0.20	<0.20		<0.20	
e. Chrysene	✓		1	grab	8270C SIM	0.20	<0.20		<0.20	

⁶ The 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 SIM	0.10	<0.10		<0.10	
g. Indeno(1,2,3-cd)Pyrene	✓		1	grab	8270C SIM	0.15	<0.15		<0.15	
36. Total Group II Polycyclic Aromatic Hydrocarbons (PAH)	✓		1	grab	8270C SIM	1.80	<1.80		<1.80	
h. Acenaphthene	✓		1	grab	8270C SIM	0.20	<0.20		<0.20	
i. Acenaphthylene	✓		1	grab	8270C SIM	0.20	<0.20		<0.20	
j. Anthracene	✓		1	grab	8270C SIM	0.20	<0.20		<0.20	
k. Benzo(ghi) Perylene	✓		1	grab	8270C SIM	0.20	<0.20		<0.20	
l. Fluoranthene	✓		1	grab	8270C SIM	0.20	<0.20		<0.20	
m. Fluorene	✓		1	grab	8270C SIM	0.20	<0.20		<0.20	
n. Naphthalene-	✓		1	grab	8270C SIM	0.20	<0.20		<0.20	
o. Phenanthrene	✓		1	grab	8270C SIM	0.20	<0.20		<0.20	
p. Pyrene	✓		1	grab	8270C SIM	0.20	<0.20		<0.20	
37. Total Polychlorinated Biphenyls (PCBs)		✓	1	grab	608	36.47	5.58	6.08E-03 ⁺	5.58	3.04E-03
38. Antimony	✓		1	grab	6020A	1	<1		<1	
39. Arsenic		✓	1	grab	6020A	1	24	2.62E-02 ⁺	24	1.31E-02
40. Cadmium	✓		1	grab	6020A	0.2	<0.2		<0.2	
41. Chromium III	✓		1	grab	3500-Cr	10	30	3.27E-02 ⁺	30	1.64E-02
42. Chromium VI	✓		1	grab	3500CR-D	10	<10		<10	

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	6020A	1	21	2.29E-02	21	1.14E-02
44. Lead		✓	1	grab	6020A	1	8	8.72E-03	8	4.36E-03
45. Mercury	✓		1	grab	245.1	0.2	<0.2		<0.2	
46. Nickel		✓	1	grab	6020A	1	37	4.03E-02	37	2.02E-02
47. Selenium	✓		1	grab	6020A	1	<1		<1	
48. Silver	✓		1	grab	6020A	0.2	<0.2		<0.2	
49. Zinc	✓		1	grab	6020A	10	36	3.92E-02	36	1.96E-02
50. Iron		✓	1	grab	200.7	50	19,000	20.71	19,000	10.36
Other (describe):										

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 ☒ N ☐	If yes, which metals? As, Cu, Pb, Ni, Fe
<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: As, Cu, Pb, Ni, Fe DF: 3.69	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 ☒ N ☐ If "Yes," list which metals: As, Cu, Pb, Ni, Fe

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	Equalization tanks
	Chlorination	Dechlorination	Other (please describe): Sand Filter and Green Sand (as needed)	
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>100</u> Maximum flow rate of treatment system <u>200</u> Design flow rate of treatment system <u>200</u>				
d) A description of chemical additives being used or planned to be used (attach MSDS sheets): polymer				

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: Discharge by pipe direct to the Spicket River.						
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 discharges, 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 <u>1.2</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)? metals, nutrients, pathogens 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 H 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 statutory 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, to 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:	GenCorp Inc. Lawrence Location
Operator Signature	
Title	Lawrence E. Lawrence, President
Date	January 2009

Attachment

NOI for Remedial General Permit

GenCorp Inc.

Lawrence Location

1. General Facility/Site Information

The site is regulated by the Massachusetts Department of Environmental Protection (MassDEP) under the Massachusetts Contingency Plan (MCP), Release Tracking Number (RTN) #3-0340, as a Tier 1B permit, (#83009), location and by the United States Environmental Protection Agency (USEPA) under the PCB Rule as a risk based approval location for remedial activities. The remedial work to be performed is based on a Remedial Action Plan approved by the USEPA and concurred with by the MassDEP. A Remedial Implementation Plan (RIP) for the work will be submitted to the USEPA for approval and to the MassDEP before remedial work is performed. In addition, the Lawrence Conservation Commission will review the proposed work and approve it under an amendment to an existing Order of Conditions (#195-80). Existing discharges from the site, primarily storm water and groundwater, are regulated by an existing individual NPDES permit MA0003824. An NOI for a Storm Water Construction General Permit (CGP) will be filed for the project, in accordance with the provisions of the Clean Water Act and the requirements of 40 CFR 122, since the project will disturb more than an acre. A separate CGP NOI was filed for a separate project currently being implemented onsite. The USEPA tracking number for the CGP NOI for the current separate project is MAR10D557.

Included in Attachment 1 is the Department of the Army, Corps of Engineers (ACOE) permit and the MassDEP Water Quality Certificate (WQC) for the proposed remedial work. The attached documents provide additional descriptions for the proposed remedial work and figures showing proposed details.

The following agency staff has participated in consultations, permitting, and/or approvals for the proposed remedial work.

- Ms Kimberly Tisa, USEPA – Bureau of Ecosystem Protection, PCB Rule
- Ms. Ellen Weitzler, UESPA – Individual NPDES permit
- Ms. Jean Brochi, USEPA – Historical Officer

There is one discharge location, which is located at the confluence of the exterior raceway and the Spicket River, for the treated effluent proposed to be regulated by the RGP. The figures included in Attachment 2 shows the overall flow schematic for the proposed work.

- Effluent from the dredging of the raceways estimated to be approximately 400 gallons per minute (gpm), will be pumped upland and a polymer will be added to promote settling of the solids. Dredging will be performed intermittently during the work day at a production rate established for efficiency and safety during the early phase of the dredging operations. The effluent will enter a clarifier/thickner to promote separation of solids.
- Effluent flow, approximately 300 gpm, from the clarifier/thickner will be returned to the raceway as makeup water for dredging. Groundwater infiltration to the raceways will also occur during the dredging. If necessary, additional makeup water for the dredging will be obtained from the Spicket River.
- A slurry line will transport thickened slurry, approximately 100 gpm, with another polymer addition, to a lined upland dewatering pad. Seepage from the dewatering pad will be routed back to the raceway for makeup for dewatering.
- Settled solids in the dewatering pad will be transported offsite to an approved facility for disposal.
- On an intermittent basis, as needed for water management in the raceways, effluent from the dredging will be pumped to an upland temporary treatment unit, described in Item 4 below, for treatment and then will be discharged to the Spicket River. At the completion of the dredging, the effluent from the dredging remaining in the raceways, together with infiltrating groundwater, will be pumped to the treatment unit before discharge to the Spicket River.

3. Contaminant Information

Samples of groundwater from two groundwater monitoring wells, MW 28-S and MW 28-D, considered representative of influent to the treatment system and adjacent to the subsurface raceway, were collected on April 8, 2009, and analyzed for the required RGP parameters. Significant quantities of groundwater will infiltrate the raceways during the remedial work, and this groundwater will be treated and discharged under the regulations of the RGP. The results of the laboratory analysis for the two wells are provided in Attachment 3-1.

At the request of the USEPA NPDES staff, selected monitoring wells were sampled during November 2006 and analyzed for parameters pertinent to individual NPDES discharge criteria. A summary of the results of the laboratory analysis for the November 2006 samples are provided in Attachment 3-2 for information since groundwater conditions at the site may vary spatially and/or temporally and have been considered in the development of the treatment unit.

For the Comprehensive Site Investigation required by the MCP and the PCB Rule, samples of sediment in the raceways were collected for laboratory analysis. A summary

of the results of selected laboratory analysis of sediment samples is provided in Attachment 3-3 for information, and these data have been considered in the development of the treatment unit.

4. Treatment System Information

Figures in Attachment 2 show the schematic of the temporary treatment unit.

- Influent water, with a maximum flow of 200 gpm, from the raceway will be routed through a sand filter to remove particulates.
- The water, with a maximum flow of 200 gpm, will then pass through a green sand unit for iron removal.
- The water, with a maximum flow of 200 gpm, will then be routed through granular activated carbon (GAC) units to remove organics. Parallel lead and lag GAC units, each treating approximately 100 gpm, will be provided for a maximum treatment capability of 200 gpm. It is anticipated that the treatment unit will operate on an intermittent basis at 100 gpm and/or 200 gpm, as needed, for water management in the raceway during the work. The treatment unit is anticipated to operate at an average of 100 gpm, and will not exceed 200 gpm.
- The influent water from the raceway will contain a polymer additive that will be applied to promote settling of the solids during the sediment dredging and dewatering. MSDS sheets for the polymer additive are included in Attachment 4.
- At the startup of the temporary treatment unit, the treated water will be discharged to the raceways until verification is obtained that the unit can meet the discharge criteria for the receiving water, the Spicket River, discussed in Item 5 below.
- When dredging has been completed, the temporary treatment system will operate for an additional period to treat groundwater entering the raceways during the construction of permanent seals inside the subsurface raceways.

5. Receiving surface water(s) information

The treated effluent from the temporary treatment unit will be conveyed by a four inch diameter hose to the receiving water, as shown in the figures in Attachment 2.

The receiving water body is the Spicket River, adjacent to the site. The Spicket River is a MassDep Class B stream, which is required to be suitable for fishing and swimming, but is impaired. The discharge location will be at the confluence of the exterior raceway and the Spicket River, just downstream of the temporary sediment barrier.

The figures in Attachment 5 show the site, the raceways, the Spicket River and the discharge location of the treated effluent into the Spicket River. The discharge location is approximately 700 feet upstream of the confluence of the Spicket River with the Merrimack River and 300 feet upstream of the confluence of the Spicket River with the North Canal. The North Canal is a lined canal that carries water through Lawrence from upstream in the Merrimack River and overflows a weir into the Spicket River.

6. Result of Consultation with Federal Services

The ACOF permit, dated November 24, 2008, which is in Attachment 1, contains the information regarding the consultation with National Marine Fisheries Service that has been performed. In addition, in Attachment 6, is a letter from the Division of Fisheries and Wildlife (DFW), dated April 18, 2008, indicating that rare species or habitats are not present at the discharge location. DFW was contacted by telephone on April 14, 2009, to confirm that there has been no change in the determination. Consultation with appropriate agencies for preservation and/or providing mitigation for impacts to historic features has been performed as part of the overall project which includes remedial and redevelopment activities, as indicated in the ACOF permit.

Attachment 1
Army Corps of Engineers Permit and MassDEP Water
Quality Certification



REPLY TO
ATTENTION OF

DEPARTMENT OF THE ARMY
NEW ENGLAND DISTRICT, CORPS OF ENGINEERS
696 VIRGINIA ROAD
CONCORD, MASSACHUSETTS 01742-2751

November 24, 2008

Regulatory Division
CENAE-R-2007-1771

Joseph Costanzo
Merrimack Valley Regional Transit Authority
85 Railroad Avenue
Haverhill, MA 01835

Dear Mr. Costanzo:

We have reviewed your application to place fill material below the ordinary high water line of the canal raceway that flows into the Spicket River at 70 General Street in Lawrence, Massachusetts in conjunction with the installation of a groundwater collection system to treat the water before it re-enters the Spicket River. A temporary cofferdam will be installed within an area of approximately 1,440 square feet (sf) in order to isolate the raceway from the Spicket River while work is on going. An area of approximately 2,500 sf below the ordinary high water line will be filled for construction of a concrete retaining wall and backfill. Raceway and penstock plugs will be installed within three areas that total approximately 3,150 sf in order to assist in collection of ground water that will be pumped to treatment facilities. Ground water that is collected will be treated as specified by a Remedy Implementation Plan to be approved by the U.S. Environmental Protection Agency. The work is shown on the attached plans entitled "GENCORP, INC., LAWRENCE, MASSACHUSETTS", on 8 sheets dated October 2008.

Based on the information you have provided, we have determined that the proposed activity, which includes a discharge of dredged or fill material into waters or wetlands, will have only minimal individual or cumulative environmental impacts on waters of the United States, including wetlands. Therefore, this work is authorized as a Category 2 activity under the attached Federal permit known as the Massachusetts Programmatic General Permit (PGP). This work must be performed in accordance with the terms and conditions of the PGP and also in compliance with the following special condition.

The permittee shall provide the Massachusetts Historical Commission and Lawrence Historical Commission draft plans, drawings and specifications for review and approval of the interpretative kiosks to be placed within the project area and the draft project drawings and specifications for the proposed treatment to be used on a portion of the concrete retaining wall depicted on sheet 4 of the attached permit plans. These draft plans, drawings and specifications shall be submitted within 18 months of the effective date of this permit and the permittee shall complete installation of these items within three years of the effective date of this permit. The intent of this condition is to mitigate for changes to the historic canal and mill buildings by providing interpretative signs and displays within the project area and to ensure the concrete retaining wall constructed

within the canal shall have a façade in keeping with the original granite walls in the surrounding area.

The Corps of Engineers has consulted with the National Marine Fisheries Service (NMFS) regarding the effects of your project on Essential Fish Habitat (EFH) as designated under the Magnuson-Stevens Fishery Conservation and Management Act. The NMFS did not provide EFH conservation recommendations.

You are responsible for complying with all of the PGP's requirements. Please review the attached PGP carefully, in particular the PGP conditions beginning on Page 9, to familiarize yourself with its contents. You should ensure that whoever does the work fully understands the requirements and that a copy of the permit document and this authorization letter at the project site throughout the time the work is underway.

This determination becomes valid only after the Massachusetts Department of Environmental Protection (DEP) issues or waives Water Quality Certification (WQC) as required under Section 401 of the Clean Water Act. In the event the DEP denies the 401 WQC, this determination becomes null and void. The address of the DEP Regional office for your area is provided in the attached PGP.

Your project is located within, or may affect resources within the coastal zone. The Massachusetts Office of Coastal Zone Management (CZM) has already determined that no further Federal Consistency Review is required.

This authorization expires on January 20, 2010, unless the PGP is modified, suspended or revoked. You must complete the work authorized herein by January 20, 2010. If you do not, you must contact this office to determine the need for further authorization before continuing the activity. We recommend you contact us *before* this permit expires to discuss a time extension or permit reissuance.

If you change the plans or construction methods for work within our jurisdiction, please contact us immediately to discuss modification of this authorization. This office must approve any changes before you undertake them.

This authorization requires you to notify us before beginning work so we may inspect the project and to submit a Compliance Certification Form. You must complete and return the enclosed Work Start Notification Form to this office at least two weeks before the anticipated starting date. You must complete and return the enclosed Compliance Certification Form within one month following the completion of the authorized work and any required mitigation (but not mitigation monitoring, which requires separate submittals).

This authorization presumes that the work as described above and as shown on your plans noted above is in waters of the U.S. Should you desire to appeal our jurisdiction, please submit a request for an approved jurisdictional determination in writing to this office.

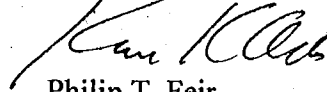
This permit does not obviate the need to obtain other Federal, state, or local authorizations required by law, as listed on Page 1 of the PGP. Performing work not specifically authorized by this determination or failing to comply with any special condition(s) provided

above or all the terms and conditions of the PGP may subject you to the enforcement provisions of our regulations.

We continually strive to improve our customer service. In order for us to better serve you, we would appreciate your completing our Customer Service Survey located at http://www.nae.usace.army.mil/reg/Customer_Service_Survey.pdf.

Please contact Ted Lento, Regulatory Branch Project Manager at (978) 318-8863 if you have any questions.

Sincerely,



Philip T. Feir
Colonel, Corps of Engineers
District Engineer

Attachments

Copies Furnished:

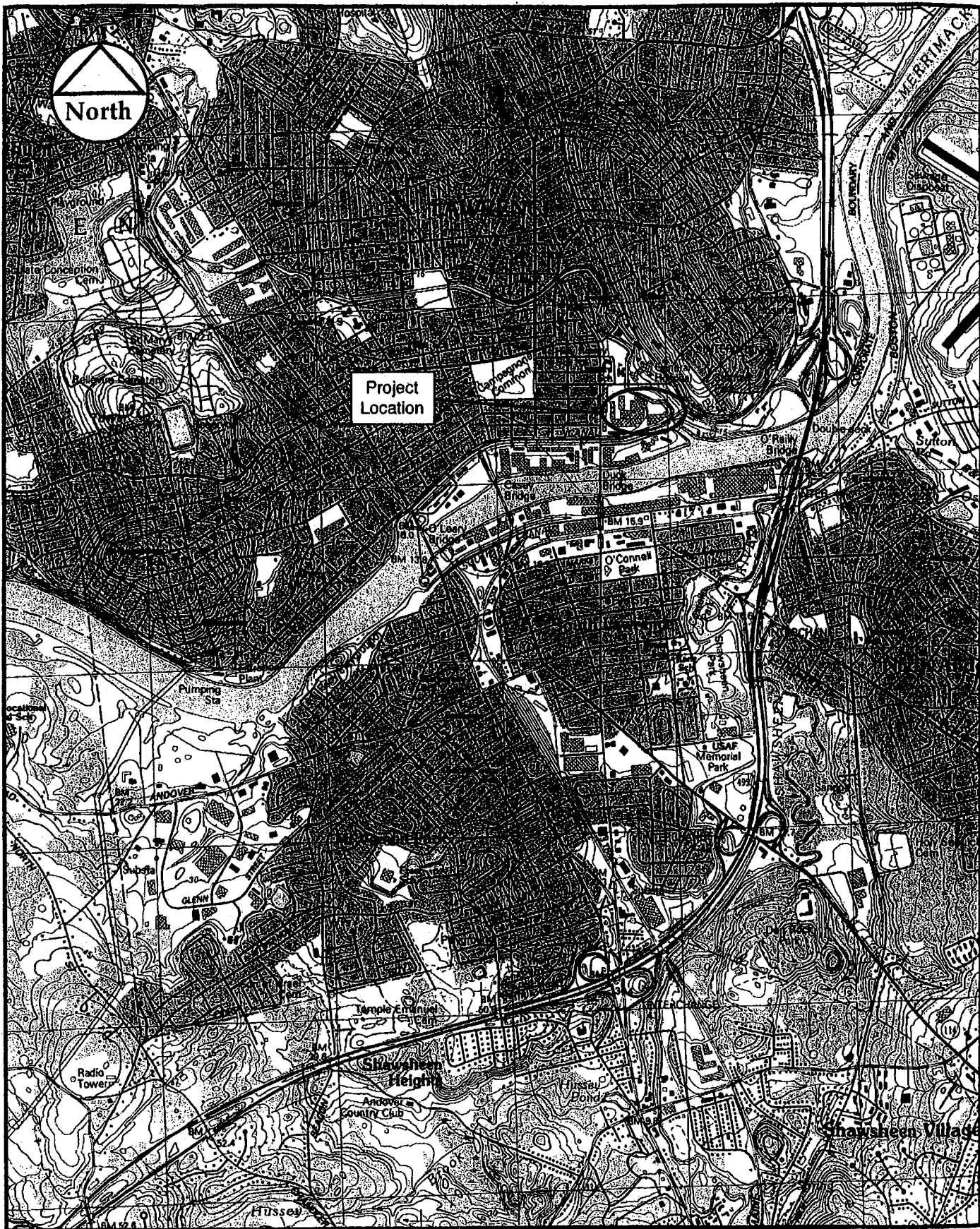
Ed Reiner, U.S. EPA, Region 1, 1 Congress Street, Suite 1100-Mail Code CWP, Boston, Massachusetts 02114-2023

Christopher Boelke, National Marine Fisheries Service, One Blackburn Drive, Gloucester, Massachusetts 01930-2298

Robert Boeri, Coastal Zone Management, 251 Causeway Street, Suite 900, Boston, Massachusetts 02114

Chester T. Gwardyak, Camp Dresser & McKee, One Cambridge Place, 50 Hampshire Place, Cambridge, MA 02139

Jean Brochi, Federal Historic Preservation Officer, US EPA, Region 1, 1 Congress Street, Suite 1100, Boston, Massachusetts 02114-2023

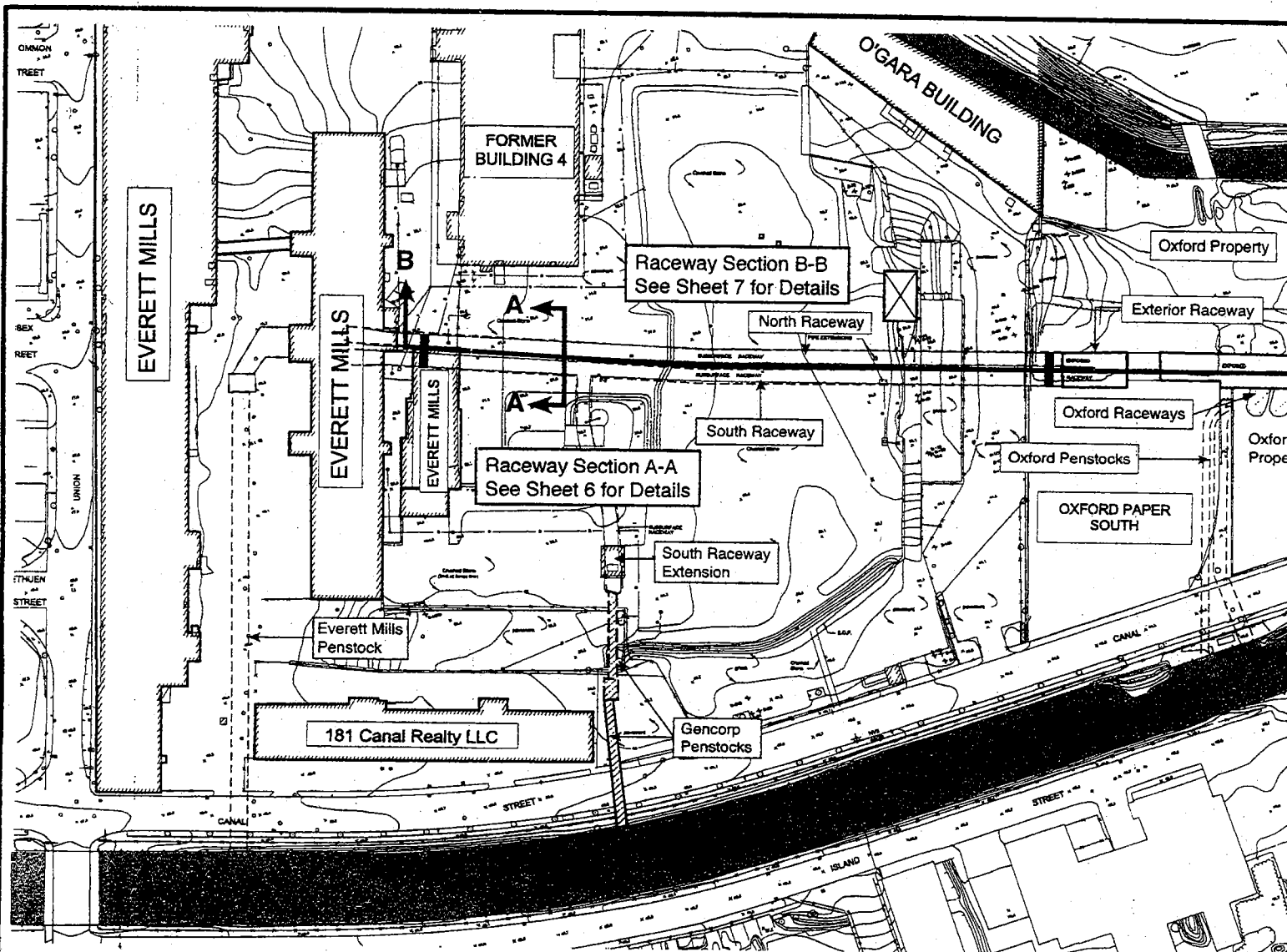


0 2000 4000
Scale in Feet

GenCorp, Inc.
Lawrence, Massachusetts

Project Location Map

ACOE PGP II Permit Application
Water Quality Certification Application



Notes:

1. Oxford Penstocks and Raceways have been filled by Massachusetts Highway Dept. Project.
2. PCB sediments proposed to be excavated from South, South Extension, North & Exterior Raceways
3. No alteration of North Canal wall is proposed.
4. GenCorp penstocks are proposed to be filled.
5. Ordinary High Water EL 13 Ft. NGVD

CDM

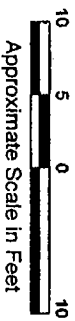
0 150 300
Scale in Feet

GenCorp
Lawrence, Mass

Site Impact

ACOE PGP II Per
Water Quality Certifi

Sheet No.2 of 8



Notes:

1. Elevations are NGVD
2. Adjacent Property is City of Lawrence
3. Granite Stone Walls and Sandbag Sediment Barrier are Existing

GenCorp, Inc.

Lawrence, Massachusetts

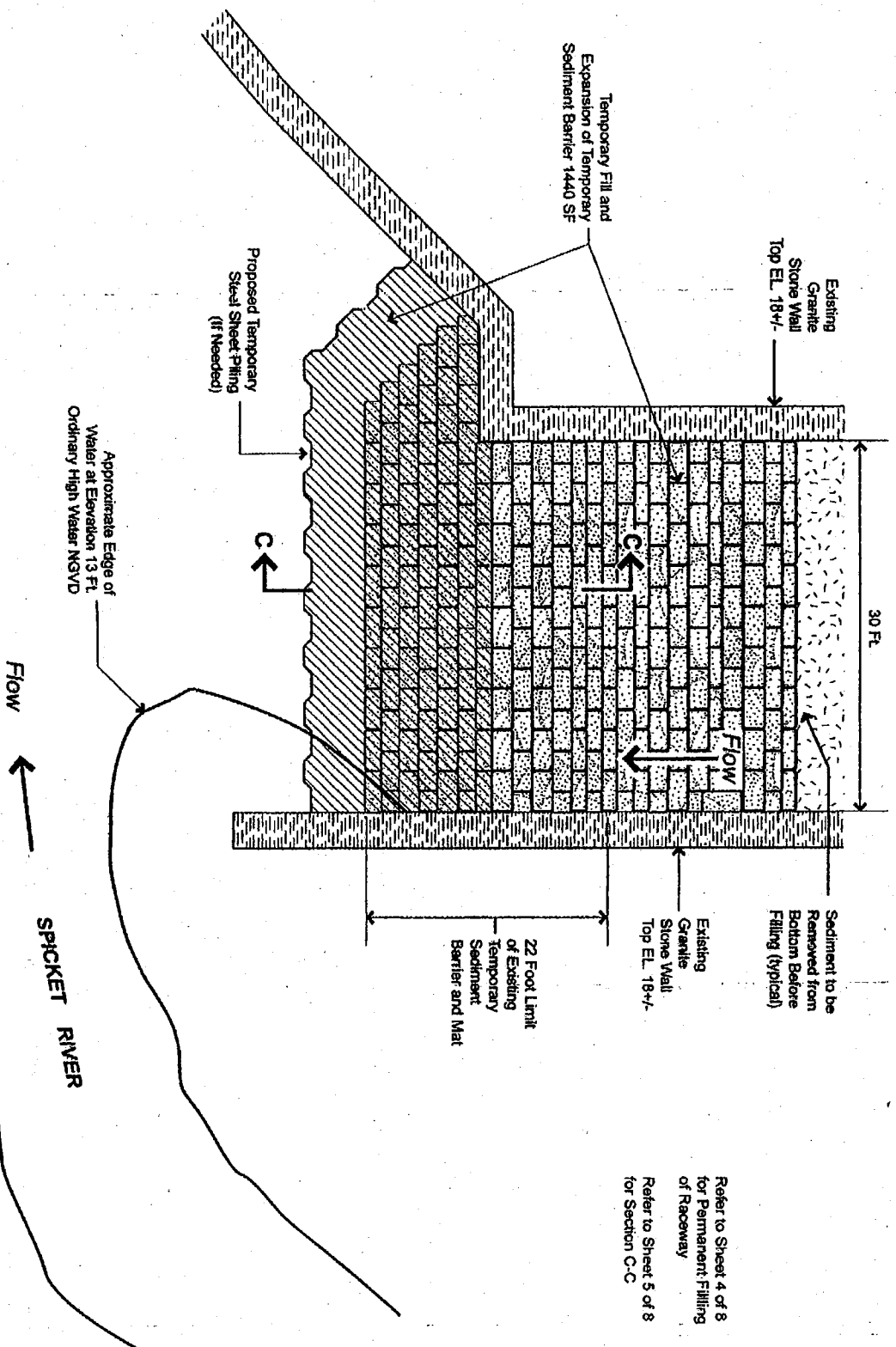
**Raceway Sediment Removal, Temporary
Sheeting and Filling Plan - Sequence 1**

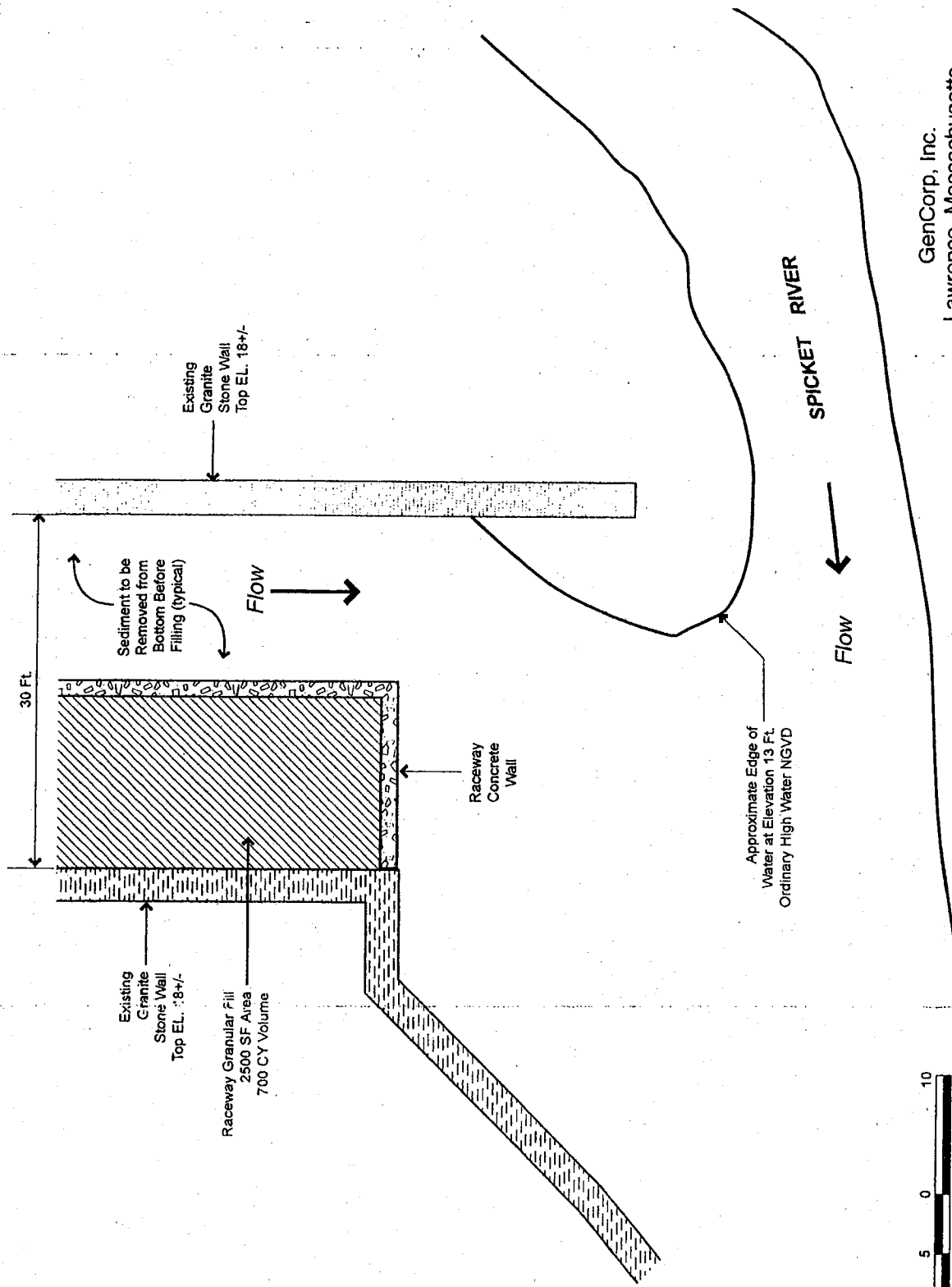
ACOE PGF II Permit Application

Water Quality Certification Application

Sheet No. 3 of 8

October 2008





10 5 0 10
Approximate Scale in Feet

Notes:

1. Elevations are NGVD
2. Adjacent Property is City of Lawrence
3. Granite Stone Walls and Sandbag Sediment Barrier are Existing

GenCorp, Inc.
Lawrence, Massachusetts

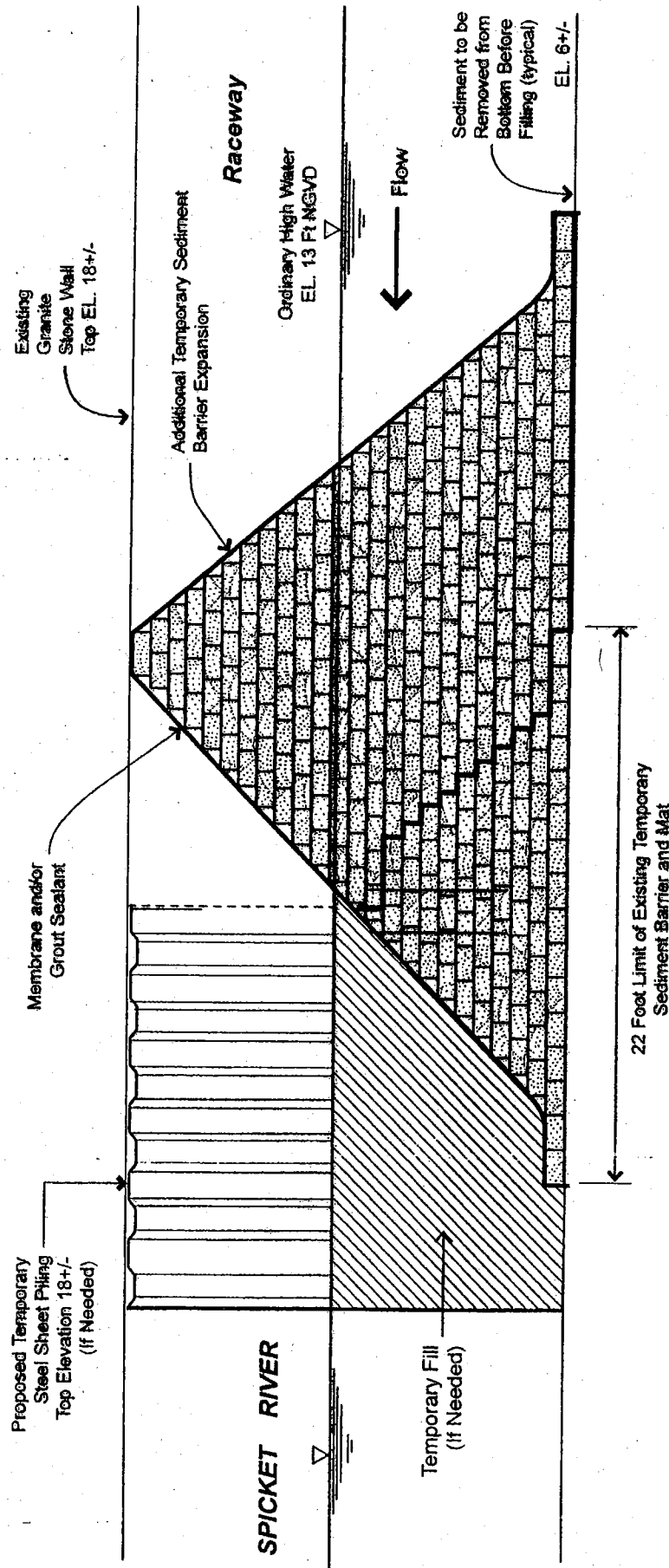
**Raceway Sediment Removal
Permanent Filling Plan - Sequence 2**

ACOE PGP II Permit Application
Water Quality Certification Application

Sheet No. 4 of 8

CDM

October 2008



Section C-C



Notes:

1. Elevations are NGVD
2. Adjacent Property is City of Lawrence
3. Granite Stone Walls and Sandbag Sediment Barrier are Existing
4. Temporary Fill, Including Expansion of Temporary Barrier, will Cover 1440 Square Feet of Raceway Area

GenCorp, Inc.
Lawrence, Massachusetts

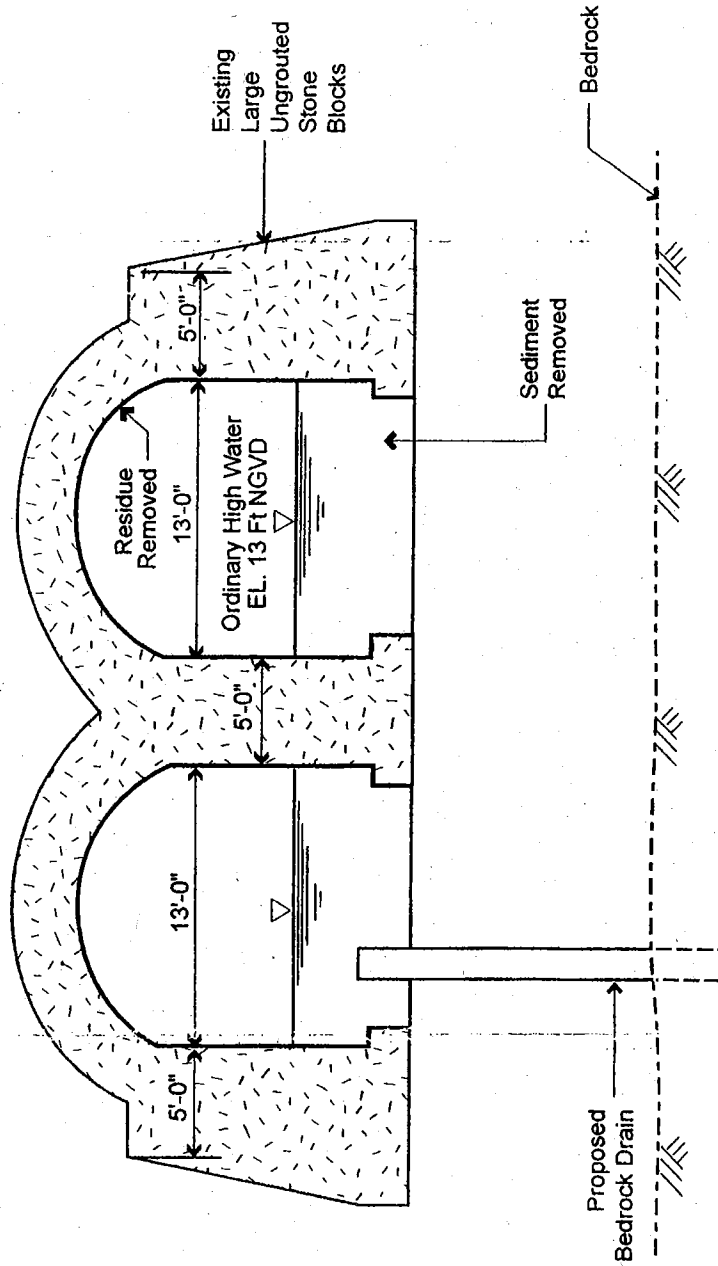
Raceway Sediment Removal, Temporary Sheetpiling and Filling Section

ACOE PGP II Permit Application
Water Quality Certification Application

Sheet No.5 of 8

October 2008

Existing Grade



GenCorp, Inc.
Lawrence, Massachusetts

0 5 10
Approximate Scale in Feet

Plume Containment with Activated Carbon Treatment and 100 Year Flood Storage - Flood Stage Typical Section A-A

ACOE PGP II Permit Application
Water Quality Certification Application

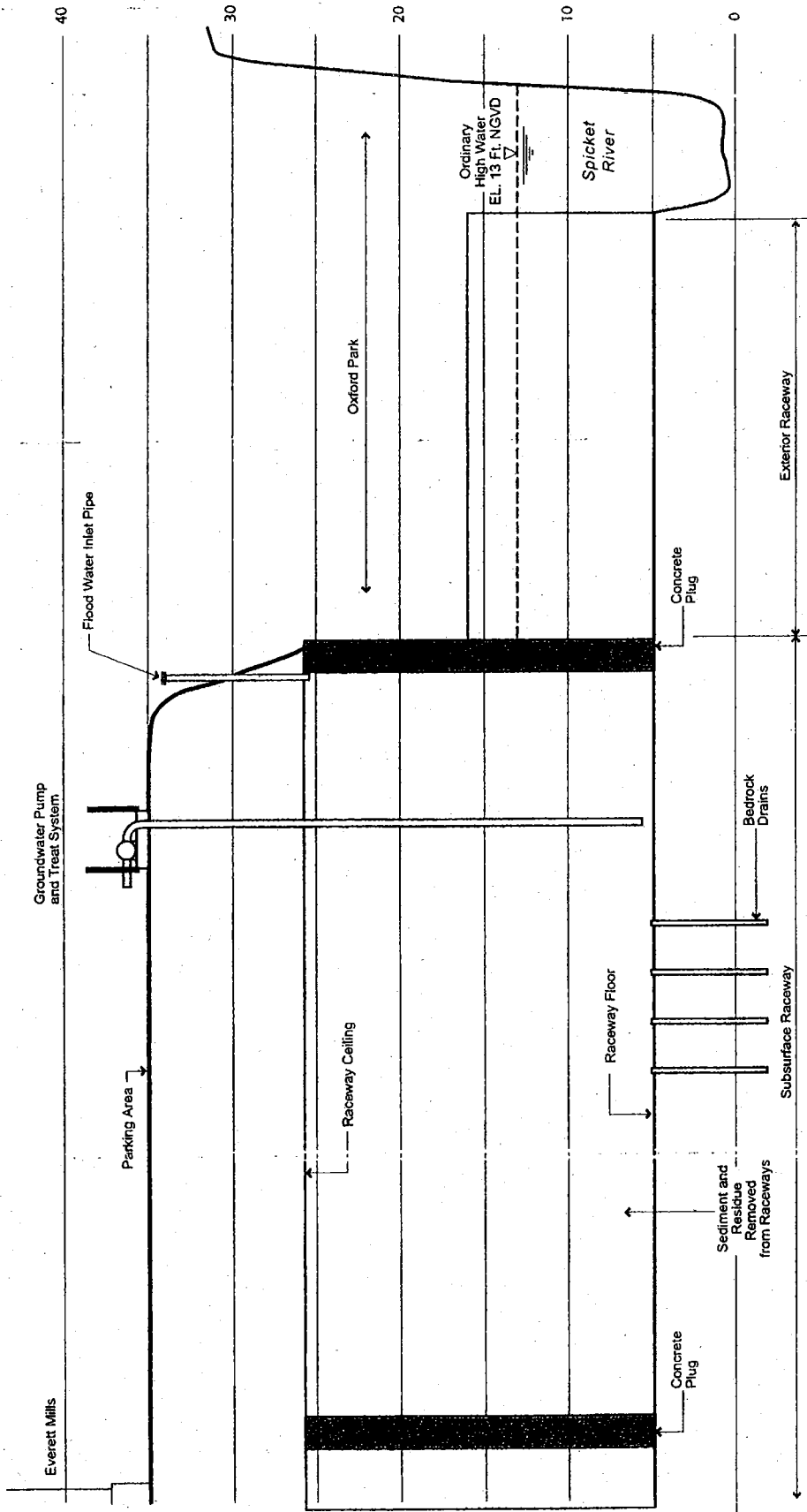
Sheet No.6 of 8

October 2008

Notes:

1. Elevations are NGVD
2. Adjacent Property is City of Lawrence
3. Granite Stone Walls and Sandbag Sediment Barrier are Existing

CDM



Note:
Exact detail/location of flood water inlet pipe will
be determined during final design of Oxford Park.

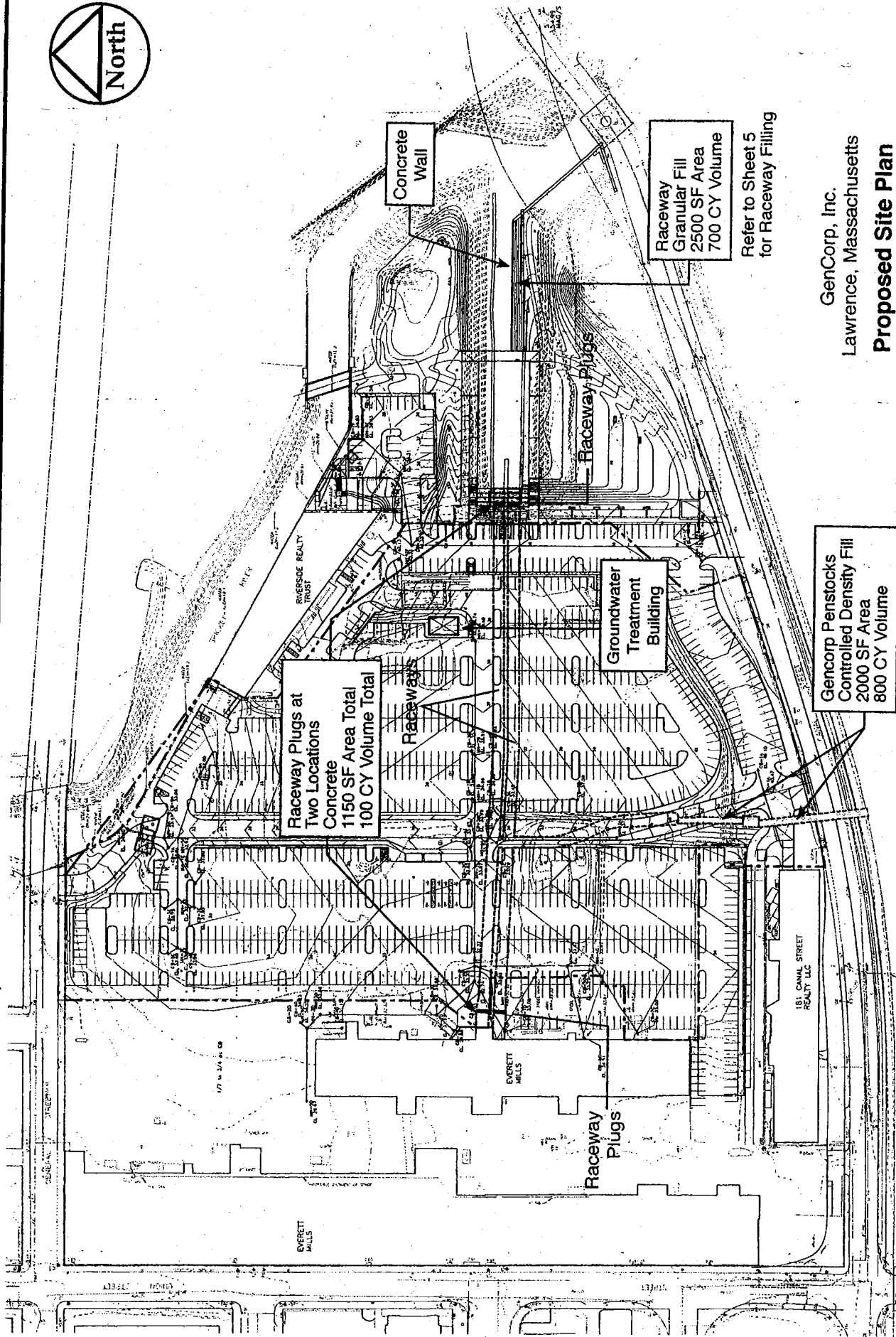
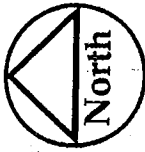
GenCorp, Inc.
Lawrence, Massachusetts

Plume Containment with Activated Carbon Treatment and 100 Year Flood Storage - Flood Stage Typical Section B-B

ACOE PGP II Permit Application
Water Quality Certification Application

Sheet No.7 of 8

October 2008



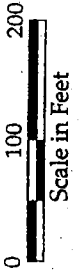
GenCorp, Inc.
Lawrence, Massachusetts

Proposed Site Plan

ACOEGP II Permit Application
Water Quality Certification Application

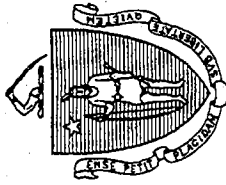
Sheet No. 8 of 8

October 2008



Note: Ordinary high water elevation: 13 Ft NGVD

CDM



COMMONWEALTH OF MASSACHUSETTS
EXECUTIVE OFFICE OF ENERGY & ENVIRONMENTAL AFFAIRS
DEPARTMENT OF ENVIRONMENTAL PROTECTION
NORTHEAST REGIONAL OFFICE

205B Lowell Street, Wilmington, MA 01887 • (978) 694-3200

DEVAL L. PATRICK
Governor

TIMOTHY P. MURRAY
Lieutenant Governor

IAN A. BOWLES
Secretary

LAURIE BURT
Commissioner

February 25, 2009

Merrimack Valley Regional Transit Authority,
in partnership with GenCorp Inc. and the City of Lawrence
c/o Camp Dresser & McKee, Inc.
50 Hampshire Street
Cambridge, MA 02139
Attn: Mr. Chester Gwardyak

RE: **Water Quality Certification**
BRP WW11
Minor Project
AT: 70 General Street, Lawrence, MA
DEP File #'s 195-0080
Transmittal Number: W150463

Dear Mr. Gwardyak:

MassDEP has reviewed your application for Water Quality Certification, as referenced above. In accordance with the provisions of MGL c.21, §§ 26-53 and Section 401 of the Federal Clean Water Act as amended (33 U.S.C. §1251 et seq.), it has been determined there is reasonable assurance the project or activity will be conducted in a manner which will not violate applicable water quality standards. It is MassDEP's opinion that a site visit was not needed because one was conducted as part of the prepermit review and was adequate for issuance of this 401 Water Quality Certification (WQC).

The purpose of the project is to remediate and redevelop a former industrial site. Specific project activities include installation of new drainage systems, abandonment and partial filling of a

falls under 401 jurisdiction because the raceways have been designated as Waters of the U.S. by the United States Army Corps of Engineers (USACOE).

The existing site contains 259,131 cubic feet of flood storage between elevation 30 and the 100 year flood elevation of 34.4, as designated by the Federal Emergency Management Agency ("FEMA"). Proposed regrading will result in 272,425 cubic feet of flood storage between elevations 30 and 34.4 for a net gain of 13,294 cubic feet of compensatory flood storage. An additional 50,997 cubic feet of compensatory flood storage not currently existing on the site will be provided between elevations 20 and 29.

The raceways are proposed to be filled as part of the contaminated sediment remediation. For the raceway filling, compensatory flood storage will be provided to the maximum extent practicable from the average water level up to elevation 34.4. The total storage loss from filling of the raceways is 42,296 cubic feet or 10.5% of their total flood storage capacity. This activity, with the associated loss of incremental flood storage, is allowable under the alternatives analysis presented in the application for 401 Certification. It is also allowable under the Wetlands Protect Act because the remediation activities, including the raceway filling, are classified as a limited project under 310 CMR 10.53(3)(q) for assessment, monitoring, containment, mitigation, and remediation of... a release or threat of release of oil and/or hazardous material in accordance with the provisions of 310 CMR 40.0000.

The Criteria for Evaluating Proposed Discharge to Wetlands of the March 1995, Regulations for the Water Quality Certification Program (the Regulations) requires the submittal of certain information that is necessary for MassDEP to determine that the project complies with the Wetland Protection Act, minimizes individual and cumulative impacts, and, complies with the Massachusetts Surface Water Quality Standards.

In accordance with the provisions of MGL c.21, §§ 26-53 and Section 401 of the Federal Clean Water Act as amended (33 U.S.C. §1251 et seq.), and the Regulations 314 CMR 9.00, and as a result of the proposed mitigation measures, as supplemented by the following Conditions, there is reasonable assurance the project will be conducted in a manner which will not violate applicable water quality standards at 314 CMR 4.00 as implemented by 314 CMR 9.00. Therefore, based on information currently in the record, MassDEP grants a Water Quality Certification for this project subject to the following conditions to maintain water quality, to minimize impact on waters and wetlands, and to ensure compliance with appropriate state law:

1. This project could result in a violation of MassDEP's Water Quality Standards, 314 CMR 4.00. Therefore, reasonable care and diligence shall be taken to assure that the proposed activity will not violate Class B standards.
2. All activity shall conform to the following plans and documents:
 - a. Application for Water Quality Certificate dated September 24, 2007, which includes: (i.) Transmittal Forms #W150463, and (ii.) Notice of Intent and accompanying narratives filed with the Lawrence Conservation Commission for DEP File #195-0080.

- b. CDM letter regarding, "Lawrence Gateway Project – Quadrant Area Redevelopment Compensatory Flood Storage (Revised)." Dated June 24, 2008, signed by Chester T. Gwardyak, P.E., LSP. Including Attachment: "Gencorp Re-Use vs Existing Volume Calculation 100 Year Floodplain – El. 34.4."
- c. CDM letter regarding, "Lawrence Gateway Project – Quadrant Area Redevelopment Compensatory Flood Storage (Revision) CDM's Letter Dated June 24, 2008." Dated November 20, 2008, signed by Chester T. Gwardyak, P.E., LSP.
- d. Plan entitled:

"Quadrant Area Reuse Plan, Lawrence, MA, Proposed Grading & Drainage Plan," Fig. 1, Scale: 1" = 40'. Dated June, 2008. Plans Prepared by: CDM, designed by K. Jarvis, drawn by, J. Coan, J. Coroa.

- 3. All activity shall conform to the requirements set forth in the Order of Conditions issued by the Lawrence Conservation Commission on June 11, 1996, currently extended until June 11, 2010, for DEP File #195-0080, unless specified herein.
- 4. All activity shall conform to the requirements set forth in the Department of the Army Massachusetts Programmatic General Permit (PGP) dated November 24, 2008.
- 5. MassDEP shall be notified of all changes in plans affecting waters or wetlands. MassDEP will determine whether the changes require a revision to this certification.
- 6. Prior to the commencement of any work on the site, the applicant or his designee (site contractor) shall submit a detailed sequence of construction, including a timetable, to MassDEP and the Lawrence Conservation Commission for approval. The sequence of construction shall include sedimentation and erosion control plan, water flow diversion and containment plan, and a demolition sequence that includes detailed steps and maintenance as well as handling and transport of removed materials. The construction sequencing plan shall be submitted sixty (60) days in advance of the proposed construction. The Lawrence Conservation Commission shall have twenty-one days after submission of the plan to submit comments to MassDEP.
- 7. Prior to the commencement of any activity on this site, there shall be a pre-construction meeting between the project supervisor, the contractor responsible for the work, the Environmental Monitor, a member of the Lawrence Conservation Commission or its Administrator, and a representative of MassDEP to ensure that the requirements of the Water Quality Certification are understood. Arrangements shall be made two weeks prior to any activity to arrange for the pre-construction meeting.
- 8. The project proponent shall notify MassDEP and the Lawrence Conservation Commission in writing, 48 hours before any activity commences on site.

9. Members and agents of MassDEP and the Lawrence Conservation Commission shall have the right to enter and inspect the premises to evaluate compliance with conditions stated in this Water Quality Certification. The project proponent shall submit any data MassDEP deems necessary for that evaluation.
10. Prior to construction, erosion controls shall be placed on site between areas of proposed work and resource areas. Haybales and/or silt fence must be staked. Silt fencing must be entrenched.
11. An adequate stockpile of erosion control materials shall be on site at all times for emergency or routine replacement and shall include materials to repair or replace silt fences, haybales, stone riprap filter berms, or any other devices planned for use during construction.
12. Erosion controls shall be deployed as shown on the reference plans and described in the Notice of Intent and application for 401 Certification. The site-specific Stormwater Pollution Prevention Plan (SWPPP) developed for construction of this project shall be supplied to the Department and Conservation Commission prior to construction activities. Noncompliance with the erosion control plan and /or SWPPP shall constitute non-compliance with the requirements of this Certification.
13. The applicant shall employ a qualified professional to oversee emergency placement of controls and regular inspection or replacement of sedimentation and turbidity control devices for this project. The name and contact information for this staff person shall be provided to the Lawrence Conservation Commission and MassDEP prior to the start of work. This staff person shall be responsible for inspection of erosion controls on a weekly basis during construction and after any storm event measuring more than ½-inch of precipitation in each 24-hour period and shall have the authority to modify existing controls or require additional controls if he or she deems it necessary. This staff person shall have the authority to require that any erosion problems are addressed immediately and shall immediately notify MassDEP and the Lawrence Conservation Commission if any discharges to streams or any other wetlands resource areas occur.
14. The Contractor shall prevent any debris from entering the Spicket River during all phases of construction.
15. Stormwater discharged to all water courses and vegetated wetlands shall be treated prior to discharge at least to a level to ensure that there is no exceedance of the effluent limitations, including thermal criteria, corresponding to the class of each receiving water, established pursuant to 314 CMR 4.00, the Massachusetts Surface Water Discharge Standards.
16. At no time during or after construction shall fill or other materials be placed, slump into or fall beyond the limit of grading as shown on the plan. The applicant shall be responsible for inspecting and maintaining all slopes and shall immediately notify

MassDEP and the Lawrence Conservation Commission if slumping, erosion, or encroachment occurs.

17. Materials and equipment shall be stored in a manner and location that will minimize the compaction of soils and the concentration of runoff in or near jurisdictional areas. Refueling of vehicles shall not occur in jurisdictional areas with the exception of pumps necessary for dewatering or by-pass pumping that will be placed within secondary containment with capacity to hold the volume of the fuel tank. In the case of stationary equipment, such as cranes, drill rigs, etc., all service vehicles must be equipped with a spill kit that is designed to hold the full volume of the vehicle's fuel tank. If a spill occurs, contaminated soils shall be removed according to the MassDEP guidance and applicable requirements of the MCP.
18. Construction-period dewatering discharge will occur on the upland side of the construction area and use a splash board and hay bale sediment barrier or equivalent as specified in the SWPPP or other approved erosion control plan. Dewatering discharges from the work area shall be effectively filtered or settled to remove silt prior to being discharged into any jurisdictional areas. Discharges from any dewatering or by-pass pumping shall not cause scouring of jurisdictional areas or erosion of adjacent upland areas.
19. The construction site shall be completely cleaned, cleared of construction equipment and debris and permanently stabilized after the completion of the work and prior to the Contractor leaving the site.
20. In the event of hazardous materials (including gasoline, fuel oils, lubricants, and hydraulic fluids), please call the appropriate agency, the Lawrence Fire Department (978-620-3400), MassDEP (888-304-1133), the Lawrence Board of Health (978-620-3260), and the Lawrence Conservation Commission (978-620-3500).
21. Upon stabilization of the site and approval by the Lawrence Conservation Commission and/or MassDEP, all erosion controls shall be removed.
22. No activity may begin prior to the expiration of the appeal period or until a final decision is issued by the MassDEP if an appeal is filed.

Failure to comply with this certification is grounds for enforcement, including civil and criminal penalties, under MGL c.21 §42, MGL c.21A §16, or other possible actions/penalties as authorized by the General Laws of the Commonwealth.

This Certification does not relieve the applicant of the obligation to comply with other appropriate state or federal statutes or regulations. This includes, but is not limited to, conditions of the individual permit from the U.S. Department of the Army.

Should you have any questions regarding this WQC, please contact Nancy White at the letterhead address or at (978) 694-3359.

Sincerely,

A handwritten signature in cursive script that reads "Rachel Freed".

Rachel Freed
Section Chief
Wetlands Program

cc: Lawrence Conservation Commission
USACOE-Regulatory Program

Notice of Appeal rights

A) Appeal Rights and Time Limits

Certain persons shall have a right to request an adjudicatory hearing concerning certifications by the MassDEP when an application is required: (a) the applicant or property owner; (b) any person aggrieved by the decision who has submitted written comments during the public comment period; any ten (10) persons of the Commonwealth pursuant to M.G.L. c. 30A where a group member has submitted written comments during the public comment period; or (c) any governmental body or private organization with a mandate to protect the environment which has submitted written comments during the public comment period. Any person aggrieved, any ten (10) persons of the Commonwealth, or a governmental body or private organization with a mandate to protect the environment may appeal without having submitted written comments during the public comment period only when the claim is based on new substantive issues arising from material changes to the scope or impact of the activity and not apparent at the time of public notice. To request an adjudicatory hearing pursuant to M.G.L. chapter 30A section 10, a Notice of Claim must be made in writing provided that the request is made by certified mail or hand delivery to the MassDEP, with the appropriate filing fee specified within 310 CMR 4.10 along with a MassDEP Fee Transmittal Form within twenty-one (21) days from the date of issuance of this Certificate, and addressed to:

Case Administrator
Dept of Environmental Protection
One Winter Street- 2nd Floor
Boston, MA 02108

A copy of the request shall at the same time be sent by certified mail or hand delivery to the issuing office of the Wetlands and Waterways Program at:

MassDEP, Northeast Regional Office
205B Lowell Street
Wilmington, MA 01887

B) Contents of Hearing Request

A Notice of Claim for Adjudicatory Hearing shall comply with the MassDEP's Rules for Adjudicatory Proceedings, 310 CMR 1.01 (6), and shall contain the following information pursuant to 314 CMR 9.10(3):

- a. the 401 Certification Transmittal Number and MassDEP Wetlands Protection Act File Number;
- b. the complete name of the applicant and address of the project;
- c. the complete name, address, and fax and telephone numbers of the party filing the request, and, if represented by counsel or other representative, the name, fax, and telephone number of the attorney;
- d. if claiming to be a party aggrieved, the specific facts that demonstrate that the party satisfies the definition of "aggrieved person" found at 314 CMR 9.02;
- e. a clear and concise statement that an adjudicatory hearing is being requested;

- f. a clear and concise statement of (1) the facts which are grounds for the proceedings, (2) the objections to the Certificate, including specifically the manner in which it is alleged to be inconsistent with the MassDEP's Water Quality Regulations, 314 CMR 9.00, and (3) the relief sought through the adjudicatory hearing, including specifically the changes desired in the final written Certification, and
- g. a statement that a copy of the request has been sent by certified mail or hand delivery to the applicant, the owner (if different from the applicant), the conservation commission of the city or town where the activity will occur, the Department of Conservation and Recreation (when the certificate concerns projects in Areas of Critical Environmental Concern), the public or private water supplier where the project is located (when the certificate concerns projects in Outstanding Resource Waters), and any other entity with responsibility for the resource where the project is located.

C) Filing Fee and Address

The hearing request along with a MassDEP Fee Transmittal Form and a valid check or money order payable to the Commonwealth of Massachusetts in the amount of one hundred dollars (\$100) must be mailed to:

Commonwealth of Massachusetts
Department of Environmental Protection
Commonwealth Master Lockbox
P.O. Box 4062
Boston, MA 02211

The request will be dismissed if the filing fee is not paid, unless the applicant is exempt or granted a waiver. The filing fee is not required if the appellant is a city or town (or municipal agency), county, or district of the Commonwealth of Massachusetts, or a municipal housing authority. The MassDEP may waive the adjudicatory hearing filing fee pursuant to 310 CMR 4.06 (2) for a person who shows that paying the fee will create an undue financial hardship. A person seeking a waiver must file an affidavit setting forth the facts believed to support the claim of undue financial hardship together with the hearing request as provided above.

ORGANICS

VOLATILES

Project Name: GENCORP
Project Number: Not Specified

Lab Number: L0904297
Report Date: 05/05/09

SAMPLE RESULTS

Lab ID: L0904297-01
Client ID: B-28S
Sample Location: LAWRENCE, MA
Matrix: Water
Analytical Method: 14,504.1
Analytical Date: 04/15/09 13:20
Analyst: JB

Date Collected: 04/08/09 08:50
Date Received: 04/08/09
Field Prep: Field Filtered

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
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Pesticides by GC - Westborough Lab

1,2-Dibromoethane	ND		ug/l	0.020	1
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Project Name: GENCORP
Project Number: Not Specified

Lab Number: L0904297
Report Date: 05/05/09

SAMPLE RESULTS

Lab ID: L0904297-02
Client ID: B-28D
Sample Location: LAWRENCE, MA
Matrix: Water
Analytical Method: 14,504.1
Analytical Date: 04/15/09 13:33
Analyst: JB

Date Collected: 04/08/09 10:30
Date Received: 04/08/09
Field Prep: Field Filtered

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Pesticides by GC - Westborough Lab					
1,2-Dibromoethane	ND		ug/l	0.019	1

Project Name: GENCORP
Project Number: Not Specified

Lab Number: L0904297
Report Date: 05/05/09

Method Blank Analysis
Batch Quality Control

Analytical Method: 14,504.1
Analytical Date: 04/15/09 11:52
Analyst: JB

Parameter	Result	Qualifier	Units	RDL
Pesticides by GC - Westborough Lab for sample(s): 01-02 Batch: WG358947-1				
1,2-Dibromoethane	ND		ug/l	0.020
1,2-Dibromo-3-chloropropane	ND		ug/l	0.020

Lab Control Sample Analysis
Batch Quality Control

Project Name: GENCORP
Project Number: Not Specified

Lab Number:
Report Date:

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD
Pesticides by GC - Westborough Lab Associated sample(s): 01-02 Batch: WG358947-2				
1,2-Dibromoethane	82	-	70-130	-
1,2-Dibromo-3-chloropropane	81	-	70-130	-

Matrix Spike Analysis Batch Quality Control

Project Name: GENCORP
Project Number: Not Specified

Lab Number: L0904297
Report Date: 05/05/09

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	MSD Recovery Limits	RPD	RPD Limits
Pesticides by GC - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG358947-3 QC Sample: L0904356-01 Client ID: MS Sample									
1,2-Dibromoethane	ND	0.241	0.180	75	-	-	70-130	-	20
1,2-Dibromo-3-chloropropane	ND	0.241	0.171	71	-	-	70-130	-	20

SEMIVOLATILES

Project Name: GENCORP
Project Number: Not Specified

Lab Number: L0904297
Report Date: 05/05/09

SAMPLE RESULTS

Lab ID: L0904297-01
Client ID: B-28S
Sample Location: LAWRENCE, MA
Matrix: Water
Analytical Method: 1,8270C
Analytical Date: 04/13/09 15:42
Analyst: HL

Date Collected: 04/08/09 08:50
Date Received: 04/08/09
Field Prep: Field Filtered
Extraction Method: EPA 3510C
Extraction Date: 04/10/09 11:25

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab					
Acenaphthene	ND		ug/l	0.19	1
Fluoranthene	ND		ug/l	0.19	1
Naphthalene	ND		ug/l	0.19	1
Benzo(a)anthracene	ND		ug/l	0.05	1
Benzo(a)pyrene	ND		ug/l	0.19	1
Benzo(b)fluoranthene	ND		ug/l	0.10	1
Benzo(k)fluoranthene	ND		ug/l	0.19	1
Chrysene	ND		ug/l	0.19	1
Acenaphthylene	ND		ug/l	0.19	1
Anthracene	ND		ug/l	0.19	1
Benzo(ghi)perylene	ND		ug/l	0.19	1
Fluorene	ND		ug/l	0.19	1
Phenanthrene	ND		ug/l	0.19	1
Dibenzo(a,h)anthracene	ND		ug/l	0.10	1
Indeno(1,2,3-cd)Pyrene	ND		ug/l	0.15	1
Pyrene	ND		ug/l	0.19	1
Pentachlorophenol	ND		ug/l	0.76	1
Surrogate	% Recovery	Qualifier	Acceptance Criteria		
2-Fluorophenol	27		21-120		
Phenol-d6	21		10-120		
Nitrobenzene-d5	47		23-120		

Project Name: GENCORP
Project Number: Not Specified

Lab Number: L0904297
Report Date: 05/05/09

SAMPLE RESULTS

Lab ID: L0904297-01
Client ID: B-28S
Sample Location: LAWRENCE, MA
Matrix: Water
Analytical Method: 1,8270C
Analytical Date: 04/14/09 13:34
Analyst: ND

Date Collected: 04/08/09 08:50
Date Received: 04/08/09
Field Prep: Field Filtered
Extraction Method: EPA 3510C
Extraction Date: 04/10/09 11:25

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
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Semivolatiles by GC/MS - Westborough Lab

Bis(2-Ethylhexyl)phthalate	ND		ug/l	4.8	1
Butyl benzyl phthalate	ND		ug/l	4.8	1
Di-n-butylphthalate	ND		ug/l	4.8	1
Di-n-octylphthalate	ND		ug/l	4.8	1
Diethyl phthalate	ND		ug/l	4.8	1
Dimethyl phthalate	ND		ug/l	4.8	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	48		23-120
2-Fluorobiphenyl	47		43-120
4-Terphenyl-d14	67		33-120

Project Name: GENCORP
Project Number: Not Specified

Lab Number: L0904297
Report Date: 05/05/09

SAMPLE RESULTS

Lab ID: L0904297-02
Client ID: B-28D
Sample Location: LAWRENCE, MA
Matrix: Water
Analytical Method: 1,8270C
Analytical Date: 04/11/09 15:12
Analyst: ND

Date Collected: 04/08/09 10:30
Date Received: 04/08/09
Field Prep: Field Filtered
Extraction Method: EPA 3510C
Extraction Date: 04/10/09 11:25

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
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Semivolatile Organics by GC/MS - Westborough Lab

Bis(2-Ethylhexyl)phthalate	ND		ug/l	5.0	1
Butyl benzyl phthalate	ND		ug/l	5.0	1
Di-n-butylphthalate	ND		ug/l	5.0	1
Di-n-octylphthalate	ND		ug/l	5.0	1
Diethyl phthalate	ND		ug/l	5.0	1
Dimethyl phthalate	ND		ug/l	5.0	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	48		23-120
2-Fluorobiphenyl	47		43-120
4-Terphenyl-d14	74		33-120

Project Name: GENCORP
Project Number: Not Specified

Lab Number: L0904297
Report Date: 05/05/09

SAMPLE RESULTS

Lab ID: L0904297-02
Client ID: B-28D
Sample Location: LAWRENCE, MA
Matrix: Water
Analytical Method: 1,8270C
Analytical Date: 04/13/09 16:11
Analyst: HL

Date Collected: 04/08/09 10:30
Date Received: 04/08/09
Field Prep: Field Filtered
Extraction Method: EPA 3510C
Extraction Date: 04/10/09 11:25

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
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Semivolatile Organics by GC/MS-SIM - Westborough Lab

Acenaphthene	ND		ug/l	0.20	1
Fluoranthene	ND		ug/l	0.20	1
Naphthalene	ND		ug/l	0.20	1
Benzo(a)anthracene	ND		ug/l	0.05	1
Benzo(a)pyrene	ND		ug/l	0.20	1
Benzo(b)fluoranthene	ND		ug/l	0.10	1
Benzo(k)fluoranthene	ND		ug/l	0.20	1
Chrysene	ND		ug/l	0.20	1
Acenaphthylene	ND		ug/l	0.20	1
Anthracene	ND		ug/l	0.20	1
Benzo(ghi)perylene	ND		ug/l	0.20	1
Fluorene	ND		ug/l	0.20	1
Phenanthrene	ND		ug/l	0.20	1
Dibenzo(a,h)anthracene	ND		ug/l	0.10	1
Indeno(1,2,3-cd)Pyrene	ND		ug/l	0.15	1
Pyrene	ND		ug/l	0.20	1
Pentachlorophenol	ND		ug/l	0.80	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	29		21-120
Phenol-d6	22		10-120
Nitrobenzene-d5	47		23-120
2-Fluorobiphenyl	44		43-120
2,4,6-Tribromophenol	69		10-120
4-Terphenyl-d14	71		33-120

Project Name: GENCORP
 Project Number: Not Specified

Lab Number: L0904297
 Report Date: 05/05/09

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270C
 Analytical Date: 04/11/09 14:49
 Analyst: ND

Extraction Method: EPA 3510C
 Extraction Date: 04/10/09 11:25

Parameter	Result	Qualifier	Units	RDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-02 Batch: WG358473-1				
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
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
NitrosoDiPhenylAmine(NDPA)/DPA	ND		ug/l	15
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

Project Name: GENCORP
Project Number: Not Specified

Lab Number: L0904297
Report Date: 05/05/09

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270C
Analytical Date: 04/11/09 14:49
Analyst: ND

Extraction Method: EPA 3510C
Extraction Date: 04/10/09 11:25

Parameter	Result	Qualifier	Units	RDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-02 Batch: WG358473-1				
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
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
2-Methylnaphthalene	ND		ug/l	5.0
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

Project Name: GENCORP
Project Number: Not Specified

Lab Number: L0904297
Report Date: 05/05/09

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270C
Analytical Date: 04/11/09 14:49
Analyst: ND

Extraction Method: EPA 3510C
Extraction Date: 04/10/09 11:25

Parameter	Result	Qualifier	Units	RDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-02 Batch: WG358473-1				
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
Benzoic Acid	ND		ug/l	50
Benzyl Alcohol	ND		ug/l	10
Carbazole	ND		ug/l	5.0
Pyridine	ND		ug/l	50

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	33		21-120
Phenol-d6	22		10-120
Nitrobenzene-d5	52		23-120
2-Fluorobiphenyl	53		43-120
2,4,6-Tribromophenol	60		10-120
4-Terphenyl-d14	66		33-120

Project Name: GENCORP
Project Number: Not Specified

Lab Number: L0904297
Report Date: 05/05/09

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270C
Analytical Date: 04/11/09 18:43
Analyst: HL

Extraction Method: EPA 3510C
Extraction Date: 04/10/09 11:25

Parameter	Result	Qualifier	Units	RDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01-02 Batch: WG358474-1				
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	0.05
Benzo(a)pyrene	ND		ug/l	0.20
Benzo(b)fluoranthene	ND		ug/l	0.10
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	0.10
Indeno(1,2,3-cd)Pyrene	ND		ug/l	0.15
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
Hexachloroethane	ND		ug/l	0.80

Project Name: GENCORP
Project Number: Not Specified

Lab Number: L0904297
Report Date: 05/05/09

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270C
Analytical Date: 04/11/09 18:43
Analyst: HL

Extraction Method: EPA 3510C
Extraction Date: 04/10/09 11:25

Parameter	Result	Qualifier	Units	RDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01-02 Batch: WG358474-1				

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	39		21-120
Phenol-d6	27		10-120
Nitrobenzene-d5	63		23-120
2-Fluorobiphenyl	59		43-120
2,4,6-Tribromophenol	72		10-120
4-Terphenyl-d14	68		33-120

Lab Control Sample Analysis

Batch Quality Control

Project Name: GENCORP
Project Number: Not Specified

Lab Number
Report Date

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 Batch: WG358473-2 WG358473-3				
Acenaphthene	79	72	46-118	9
1,2,4-Trichlorobenzene	73	64	39-98	13
2-Chloronaphthalene	80	73	40-140	9
1,2-Dichlorobenzene	68	61	40-140	11
1,4-Dichlorobenzene	65	60	36-97	8
2,4-Dinitrotoluene	94	77	24-96	20
2,6-Dinitrotoluene	81	79	40-140	3
Fluoranthene	99	92	40-140	7
4-Chlorophenyl phenyl ether	86	79	40-140	8
n-Nitrosodi-n-propylamine	79	71	41-116	11
Butyl benzyl phthalate	99	89	40-140	11
Anthracene	95	88	40-140	8
Pyrene	95	86	26-127	10
P-Chloro-M-Cresol	78	72	23-97	8
2-Chlorophenol	67	63	27-123	6
2-Nitrophenol	71	62	30-130	14
4-Nitrophenol	44	40	10-80	10
2,4-Dinitrophenol	50	46	30-130	8
Pentachlorophenol	78	68	9-103	14
Phenol	33	31	12-110	6

Lab Control Sample Analysis

Batch Quality Control

Project Name: GENCORP

Lab Number: L0904297

Project Number: Not Specified

Report Date: 05/05/09

Parameter	LCS %Recovery	LCS %Recovery	LCS %Recovery	%Recovery Limits	RPD	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 Batch: WG358473-2 WG358473-3						
Surrogate	LCS %Recovery	LCS %Recovery	LCS %Recovery	LCSD %Recovery	LCSD %Recovery	Acceptance Criteria
2-Fluorophenol	45			42		21-120
Phenol-d6	31			28		10-120
Nitrobenzene-d5	69			64		23-120
2-Fluorobiphenyl	73			69		43-120
2,4,6-Tribromophenol	88			85		10-120
4-Terphenyl-d14	88			82		33-120

Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01-02 Batch: WG358474-2 WG358474-3

Acenaphthene	83	62	40-140	29	40
2-Chloronaphthalene	79	65	40-140	19	40
Fluoranthene	99	76	40-140	26	40
Anthracene	83	66	40-140	23	40
Pyrene	100	79	40-140	23	40
Pentachlorophenol	78	63	30-130	21	40

Lab Control Sample Analysis

Batch Quality Control

Project Name: GENCORP

Lab Number: L0904297

Project Number: Not Specified

Report Date: 05/05/09

Parameter	LCS %Recovery	LCS %Recovery	LCS %Recovery	RPD	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01-02 Batch: WG358474-2 WG358474-3					
Surrogate	LCS %Recovery	LCS %Recovery	LCS %Recovery	Acceptance Criteria	
2-Fluorophenol	42	39	21-120		
Phenol-d6	31	28	10-120		
Nitrobenzene-d5	68	55	23-120		
2-Fluorobiphenyl	62	52	43-120		
2,4,6-Tribromophenol	77	68	10-120		
4-Terphenyl-d14	78	68	33-120		

PCBS

Project Name: GENCORP
Project Number: Not Specified

Lab Number: L0904297
Report Date: 05/05/09

SAMPLE RESULTS

Lab ID: L0904297-01
Client ID: B-28S
Sample Location: LAWRENCE, MA
Matrix: Water
Analytical Method: 5.608
Analytical Date: 04/16/09 09:13
Analyst: JB

Date Collected: 04/08/09 08:50
Date Received: 04/08/09
Field Prep: Field Filtered
Extraction Method: EPA 3510C
Extraction Date: 04/09/09 13:25
Cleanup Method1: EPA 3665A
Cleanup Date1: 04/10/09

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Polychlorinated Biphenyls by GC - Westborough Lab					
Aroclor 1016	ND		ug/l	5.21	20
Aroclor 1221	ND		ug/l	5.21	20
Aroclor 1232	ND		ug/l	5.21	20
Aroclor 1242	5.58		ug/l	5.21	20
Aroclor 1248	ND		ug/l	5.21	20
Aroclor 1254	ND		ug/l	5.21	20
Aroclor 1260	ND		ug/l	5.21	20

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	0		30-150	A
Decachlorobiphenyl	0		30-150	A

Project Name: GENCORP
Project Number: Not Specified

Lab Number: L0904297
Report Date: 05/05/09

SAMPLE RESULTS

Lab ID: L0904297-02
Client ID: B-28D
Sample Location: LAWRENCE, MA
Matrix: Water
Analytical Method: 5,608
Analytical Date: 04/10/09 20:41
Analyst: JB

Date Collected: 04/08/09 10:30
Date Received: 04/08/09
Field Prep: Field Filtered
Extraction Method: EPA 3510C
Extraction Date: 04/09/09 13:25
Cleanup Method1: EPA 3665A
Cleanup Date1: 04/10/09

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
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Polychlorinated Biphenyls by GC - Westborough Lab

Aroclor 1016	ND		ug/l	0.266	1
Aroclor 1221	ND		ug/l	0.266	1
Aroclor 1232	ND		ug/l	0.266	1
Aroclor 1242	ND		ug/l	0.266	1
Aroclor 1248	ND		ug/l	0.266	1
Aroclor 1254	ND		ug/l	0.266	1
Aroclor 1260	ND		ug/l	0.266	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	47		30-150	A
Decachlorobiphenyl	40		30-150	A

Project Name: GENCORP
Project Number: Not Specified

Lab Number: L0904297
Report Date: 05/05/09

Method Blank Analysis
Batch Quality Control

Analytical Method: 5,608
Analytical Date: 04/10/09 19:23
Analyst: JB

Extraction Method: EPA 3510C
Extraction Date: 04/09/09 02:13
Cleanup Method1: EPA 3665A
Cleanup Date1: 04/09/09

Parameter	Result	Qualifier	Units	RDL
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 01-02 Batch: WG358246-1				
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	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	62		30-150	A
Decachlorobiphenyl	88		30-150	A

Lab Control Sample Analysis

Batch Quality Control

Project Name: GENCORP
Project Number: Not Specified

Lab Number:
Report Date:

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01-02 Batch: WG358246-2 WG358246-3				
Aroclor 1016	88	66	40-126	28
Aroclor 1260	96	96	40-127	1

Surrogate	LCS %Recovery	Qualifier	LCSD %Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	67		54		30-150	A
Decachlorobiphenyl	100		113		30-150	A

METALS

Project Name: GENCORP
Project Number: Not Specified

Lab Number: L0904297
Report Date: 05/05/09

SAMPLE RESULTS

Lab ID: L0904297-01
Client ID: B-28S
Sample Location: LAWRENCE, MA
Matrix: Water

Date Collected: 04/08/09 08:50
Date Received: 04/08/09
Field Prep: Field Filtered

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
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Total Metals - Westborough Lab

Iron, Total	2.2		mg/l	0.05	1	04/20/09 10:40	04/22/09 12:27	EPA 3005A	19,200.7	MG
Mercury, Total	ND		mg/l	0.0002	1	04/09/09 16:20	04/10/09 12:10	EPA 245.2	3,245.1	EZ

Total Metals - Mansfield Lab

Antimony, Total	ND		mg/l	0.001	1	04/09/09 14:35	04/16/09 15:27	EPA 3005A	1,6020A	LP
Arsenic, Total	0.011		mg/l	0.001	1	04/09/09 14:35	04/16/09 15:27	EPA 3005A	1,6020A	LP
Cadmium, Total	ND		mg/l	0.0002	1	04/09/09 14:35	04/16/09 15:27	EPA 3005A	1,6020A	LP
Chromium, Total	0.001		mg/l	0.001	1	04/09/09 14:35	04/16/09 15:27	EPA 3005A	1,6020A	LP
Copper, Total	ND		mg/l	0.001	1	04/09/09 14:35	04/16/09 15:27	EPA 3005A	1,6020A	LP
Lead, Total	ND		mg/l	0.001	1	04/09/09 14:35	04/16/09 15:27	EPA 3005A	1,6020A	LP
Manganese, Total	1.56		mg/l	0.001	1	04/09/09 14:35	04/24/09 09:34	EPA 3005A	1,6020A	LP
Nickel, Total	0.004		mg/l	0.001	1	04/09/09 14:35	04/16/09 15:27	EPA 3005A	1,6020A	LP
Selenium, Total	ND		mg/l	0.001	1	04/09/09 14:35	04/16/09 15:27	EPA 3005A	1,6020A	LP
Silver, Total	ND		mg/l	0.0002	1	04/09/09 14:35	04/16/09 15:27	EPA 3005A	1,6020A	LP
Zinc, Total	ND		mg/l	0.010	1	04/09/09 14:35	04/16/09 15:27	EPA 3005A	1,6020A	LP

Total Hardness by SM 2340B - Westborough Lab

Hardness	210		mg/l	0.66	1	04/20/09 10:40	04/22/09 12:27	EPA 3005A	19,200.7	MG
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Dissolved Metals - Westborough Lab

Iron, Dissolved	0.76		mg/l	0.05	1	04/18/09 14:30	04/22/09 15:29	EPA 3005A	19,200.7	AI
Mercury, Dissolved	ND		mg/l	0.0002	1	04/09/09 16:20	04/10/09 12:56	EPA 245.2	3,245.1	EZ

Dissolved Metals - Mansfield Lab

Antimony, Dissolved	ND		mg/l	0.001	1	04/09/09 14:35	04/16/09 15:18	EPA 3005A	1,6020A	LP
Arsenic, Dissolved	0.007		mg/l	0.001	1	04/09/09 14:35	04/16/09 15:18	EPA 3005A	1,6020A	LP

Project Name: GENCORP
Project Number: Not Specified

Lab Number: L0904297
Report Date: 05/05/09

SAMPLE RESULTS

Lab ID: L0904297-01
Client ID: B-28S
Sample Location: LAWRENCE, MA
Matrix: Water

Date Collected: 04/08/09 08:50
Date Received: 04/08/09
Field Prep: Field Filtered

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Nickel, Dissolved	0.004		mg/l	0.001	1	04/09/09 14:35	04/16/09 15:18	EPA 3005A	1,6020A	LP
Selenium, Dissolved	ND		mg/l	0.001	1	04/09/09 14:35	04/16/09 15:18	EPA 3005A	1,6020A	LP
Silver, Dissolved	ND		mg/l	0.0002	1	04/09/09 14:35	04/16/09 15:18	EPA 3005A	1,6020A	LP
Zinc, Dissolved	ND		mg/l	0.010	1	04/09/09 14:35	04/16/09 15:18	EPA 3005A	1,6020A	LP

Project Name: GENCORP
Project Number: Not Specified

Lab Number: L0904297
Report Date: 05/05/09

SAMPLE RESULTS

Lab ID: L0904297-02
Client ID: B-28D
Sample Location: LAWRENCE, MA
Matrix: Water

Date Collected: 04/08/09 10:30
Date Received: 04/08/09
Field Prep: Field Filtered

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
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Total Metals - Westborough Lab

Iron, Total	19		mg/l	0.05	1	04/20/09 10:40	04/22/09 12:30	EPA 3005A	19,200.7	MG
Mercury, Total	ND		mg/l	0.0002	1	04/09/09 16:20	04/10/09 12:11	EPA 245.2	3,245.1	EZ

Total Metals - Mansfield Lab

Antimony, Total	ND		mg/l	0.001	1	04/09/09 14:35	04/16/09 15:30	EPA 3005A	1,6020A	LP
Arsenic, Total	0.024		mg/l	0.001	1	04/09/09 14:35	04/16/09 15:30	EPA 3005A	1,6020A	LP
Cadmium, Total	ND		mg/l	0.0002	1	04/09/09 14:35	04/16/09 15:30	EPA 3005A	1,6020A	LP
Chromium, Total	0.030		mg/l	0.001	1	04/09/09 14:35	04/16/09 15:30	EPA 3005A	1,6020A	LP
Copper, Total	0.021		mg/l	0.001	1	04/09/09 14:35	04/16/09 15:30	EPA 3005A	1,6020A	LP
Lead, Total	0.008		mg/l	0.001	1	04/09/09 14:35	04/16/09 15:30	EPA 3005A	1,6020A	LP
Manganese, Total	0.839		mg/l	0.001	1	04/09/09 14:35	04/24/09 09:36	EPA 3005A	1,6020A	LP
Nickel, Total	0.037		mg/l	0.001	1	04/09/09 14:35	04/16/09 15:30	EPA 3005A	1,6020A	LP
Selenium, Total	ND		mg/l	0.001	1	04/09/09 14:35	04/16/09 15:30	EPA 3005A	1,6020A	LP
Silver, Total	ND		mg/l	0.0002	1	04/09/09 14:35	04/16/09 15:30	EPA 3005A	1,6020A	LP
Zinc, Total	0.036		mg/l	0.010	1	04/09/09 14:35	04/16/09 15:30	EPA 3005A	1,6020A	LP

Total Hardness by SM 2340B - Westborough Lab

Hardness	350		mg/l	0.66	1	04/20/09 10:40	04/22/09 12:30	EPA 3005A	19,200.7	MG
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Dissolved Metals - Westborough Lab

Iron, Dissolved	0.58		mg/l	0.05	1	04/18/09 14:30	04/22/09 15:40	EPA 3005A	19,200.7	AI
Mercury, Dissolved	ND		mg/l	0.0002	1	04/09/09 16:20	04/10/09 13:05	EPA 245.2	3,245.1	EZ

Dissolved Metals - Mansfield Lab

Antimony, Dissolved	ND		mg/l	0.001	1	04/09/09 14:35	04/16/09 15:21	EPA 3005A	1,6020A	LP
Arsenic, Dissolved	0.006		mg/l	0.001	1	04/09/09 14:35	04/16/09 15:21	EPA 3005A	1,6020A	LP
Cadmium, Dissolved	ND		mg/l	0.0002	1	04/09/09 14:35	04/16/09 15:21	EPA 3005A	1,6020A	LP
Chromium, Dissolved	ND		mg/l	0.001	1	04/09/09 14:35	04/16/09 15:21	EPA 3005A	1,6020A	LP
Copper, Dissolved	0.010		mg/l	0.001	1	04/09/09 14:35	04/16/09 15:21	EPA 3005A	1,6020A	LP
Lead, Dissolved	ND		mg/l	0.001	1	04/09/09 14:35	04/16/09 15:21	EPA 3005A	1,6020A	LP
Manganese, Dissolved	0.600		mg/l	0.001	1	04/09/09 14:35	04/24/09 09:32	EPA 3005A	1,6020A	LP

Project Name: GENCORP
Project Number: Not Specified

Lab Number: L0904297
Report Date: 05/05/09

SAMPLE RESULTS

Lab ID: L0904297-02
Client ID: B-28D
Sample Location: LAWRENCE, MA
Matrix: Water

Date Collected: 04/08/09 10:30
Date Received: 04/08/09
Field Prep: Field Filtered

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Nickel, Dissolved	0.004		mg/l	0.001	1	04/09/09 14:35	04/16/09 15:21	EPA 3005A	1,6020A	LP
Selenium, Dissolved	ND		mg/l	0.001	1	04/09/09 14:35	04/16/09 15:21	EPA 3005A	1,6020A	LP
Silver, Dissolved	ND		mg/l	0.0002	1	04/09/09 14:35	04/16/09 15:21	EPA 3005A	1,6020A	LP
Zinc, Dissolved	ND		mg/l	0.010	1	04/09/09 14:35	04/16/09 15:21	EPA 3005A	1,6020A	LP

Project Name: GENCORP
Project Number: Not Specified

Lab Number: L0904297
Report Date: 05/05/09

Method Blank Analysis Batch Quality Control

Parameter	Result Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Westborough Lab for sample(s): 01-02 Batch: WG358373-1								
Mercury, Total	ND	mg/l	0.0002	1	04/09/09 16:20	04/10/09 12:06	3,245.1	EZ

Prep Information

Digestion Method: EPA 245.2

Parameter	Result Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Dissolved Metals - Westborough Lab for sample(s): 01-02 Batch: WG358377-1								
Mercury, Dissolved	ND	mg/l	0.0002	1	04/09/09 16:20	04/10/09 12:52	3,245.1	EZ

Prep Information

Digestion Method: EPA 245.2

Parameter	Result Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01-02 Batch: WG358975-1								
Antimony, Total	ND	mg/l	0.001	1	04/09/09 14:35	04/16/09 15:24	1,6020A	LP
Arsenic, Total	ND	mg/l	0.001	1	04/09/09 14:35	04/16/09 15:24	1,6020A	LP
Cadmium, Total	ND	mg/l	0.0002	1	04/09/09 14:35	04/16/09 15:24	1,6020A	LP
Chromium, Total	ND	mg/l	0.001	1	04/09/09 14:35	04/16/09 15:24	1,6020A	LP
Copper, Total	ND	mg/l	0.001	1	04/09/09 14:35	04/16/09 15:24	1,6020A	LP
Lead, Total	ND	mg/l	0.001	1	04/09/09 14:35	04/16/09 15:24	1,6020A	LP
Manganese, Total	ND	mg/l	0.001	1	04/09/09 14:35	04/24/09 09:32	1,6020A	LP
Nickel, Total	ND	mg/l	0.001	1	04/09/09 14:35	04/16/09 15:24	1,6020A	LP
Selenium, Total	ND	mg/l	0.001	1	04/09/09 14:35	04/16/09 15:24	1,6020A	LP
Silver, Total	ND	mg/l	0.0002	1	04/09/09 14:35	04/16/09 15:24	1,6020A	LP
Zinc, Total	ND	mg/l	0.010	1	04/09/09 14:35	04/16/09 15:24	1,6020A	LP

Prep Information

Digestion Method: EPA 3005A

Project Name: GENCORP
Project Number: Not Specified

Lab Number: L0904297
Report Date: 05/05/09

Method Blank Analysis Batch Quality Control

Parameter	Result Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Hardness by SM 2340B - Westborough Lab for sample(s): 01-02 Batch: WG359473-1								
Hardness	ND	mg/l	0.66	1	04/20/09 10:40	04/22/09 12:10	19,200.7	MG

Prep Information

Digestion Method: EPA 3005A

Lab Control Sample Analysis

Batch Quality Control

Project Name: GENCORP

Project Number: Not Specified

Lab Number

Report Date

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD
Total Metals - Westborough Lab Associated sample(s): 01-02 Batch: WG358373-2				
Mercury, Total	93	-		-
Dissolved Metals - Westborough Lab Associated sample(s): 01-02 Batch: WG358377-2				
Mercury, Dissolved	93	-		-
Total Metals - Mansfield Lab Associated sample(s): 01-02 Batch: WG358975-2				
Antimony, Total	103	-	80-120	-
Arsenic, Total	102	-	80-120	-
Cadmium, Total	114	-	80-120	-
Chromium, Total	115	-	80-120	-
Copper, Total	109	-	80-120	-
Lead, Total	102	-	80-120	-
Manganese, Total	108	-	80-120	-
Nickel, Total	110	-	80-120	-
Selenium, Total	98	-	80-120	-
Silver, Total	103	-	80-120	-
Zinc, Total	107	-	80-120	-

Lab Control Sample Analysis

Batch Quality Control

Lab Number: L0904297

Report Date: 05/05/09

Project Name: GENCORP

Project Number: Not Specified

Parameter	LCS %Recovery	LCS %Recovery	%Recovery Limits	RPD	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 01-02 Batch: WG358979-2					
Antimony, Dissolved	101	-	80-120	-	20
Arsenic, Dissolved	101	-	80-120	-	20
Cadmium, Dissolved	114	-	80-120	-	20
Chromium, Dissolved	110	-	80-120	-	20
Copper, Dissolved	106	-	80-120	-	20
Lead, Dissolved	106	-	80-120	-	20
Manganese, Dissolved	105	-	80-120	-	20
Nickel, Dissolved	106	-	80-120	-	20
Selenium, Dissolved	101	-	80-120	-	20
Silver, Dissolved	102	-	80-120	-	20
Zinc, Dissolved	107	-	80-120	-	20

Dissolved Metals - Westborough Lab Associated sample(s): 01-02 Batch: WG359399-2

Iron, Dissolved 110

Total Hardness by SM 2340B - Westborough Lab Associated sample(s): 01-02 Batch: WG359473-2

Hardness 100 85-115

Iron, Total 94 85-115

Matrix Spike Analysis

Batch Quality Control

Project Name: GENCORP

Lab Number: L0904297

Project Number: Not Specified

Report Date: 05/05/09

Parameter	Native Sample	MS Added	MS Found	%Recovery	MSD Found	%Recovery	MSD	Recovery Limits	RPD	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG358373-4 QC Sample: L0904316-01 Client ID: MS Sample										
Mercury, Total	0.0004	0.001	0.0014	97	-	-	-	-	-	-
Dissolved Metals - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG358377-4 QC Sample: L0904297-01 Client ID: B-28S										
Mercury, Dissolved	ND	0.001	0.0011	108	-	-	-	-	-	-
Total Metals - Mansfield Lab Associated sample(s): 01-02 QC Batch ID: WG358975-4 QC Sample: L0904297-01 Client ID: B-28S										
Antimony, Total	ND	0.5	0.522	104	-	-	-	75-125	-	20
Arsenic, Total	0.011	0.12	0.136	104	-	-	-	75-125	-	20
Cadmium, Total	ND	0.051	0.057	112	-	-	-	75-125	-	20
Chromium, Total	0.001	0.2	0.227	113	-	-	-	75-125	-	20
Copper, Total	0.001	0.25	0.266	106	-	-	-	75-125	-	20
Lead, Total	ND	0.51	0.509	100	-	-	-	75-125	-	20
Manganese, Total	1.56	0.5	2.09	106	-	-	-	75-125	-	20
Nickel, Total	0.004	0.5	0.538	107	-	-	-	75-125	-	20
Selenium, Total	ND	0.12	0.121	101	-	-	-	75-125	-	20
Silver, Total	ND	0.05	0.043	87	-	-	-	75-125	-	20
Zinc, Total	ND	0.5	0.537	107	-	-	-	75-125	-	20

Matrix Spike Analysis

Batch Quality Control

Project Name: GENCORP

Lab Number: L0904297

Project Number: Not Specified

Report Date: 05/05/09

Parameter	Native Sample	MS Added	MS Found	%Recovery	MSD Found	%Recovery	MSD	Recovery Limits	RPD	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 01-02 QC Batch ID: WG358979-4 QC Sample: L0904297-01 Client ID: B-28S										
Antimony, Dissolved	ND	0.5	0.499	100	-	-	-	75-125	-	20
Arsenic, Dissolved	0.007	0.12	0.128	100	-	-	-	75-125	-	20
Cadmium, Dissolved	ND	0.051	0.055	108	-	-	-	75-125	-	20
Chromium, Dissolved	ND	0.2	0.217	108	-	-	-	75-125	-	20
Copper, Dissolved	0.009	0.25	0.264	102	-	-	-	75-125	-	20
Lead, Dissolved	ND	0.51	0.493	97	-	-	-	75-125	-	20
Manganese, Dissolved	1.58	0.5	2.11	106	-	-	-	75-125	-	20
Nickel, Dissolved	0.004	0.5	0.516	102	-	-	-	75-125	-	20
Selenium, Dissolved	ND	0.12	0.117	98	-	-	-	75-125	-	20
Silver, Dissolved	ND	0.05	0.044	88	-	-	-	75-125	-	20
Zinc, Dissolved	ND	0.5	0.518	104	-	-	-	75-125	-	20

Dissolved Metals - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG359399-4 QC Sample: L0904297-01 Client ID: B-28S

Iron, Dissolved	0.76	1	1.9	114	-	-	-
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Total Hardness by SM 2340B - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG359473-4 QC Sample: L0904316-01 Client ID: MS

Sample

Hardness	73	66.2	140	101	-	-	75-125	-	20
Iron, Total	0.10	1	1.1	100	-	-	75-125	-	20

Lab Duplicate Analysis

Batch Quality Control

Project Name: GENCORP
Project Number: Not Specified

Lab Number: L0904297
Report Date: 05/05/09

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG358373-3 QC Sample: L0904316-01 Client ID: DUP Sample					
Mercury, Total	0.0004	0.0003	mg/l	20	
Dissolved Metals - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG358377-3 QC Sample: L0904297-01 Client ID: B-28S					
Mercury, Dissolved	ND	ND	mg/l	NC	
Total Metals - Mansfield Lab Associated sample(s): 01-02 QC Batch ID: WG358975-3 QC Sample: L0904297-01 Client ID: B-28S					
Antimony, Total	ND	ND	mg/l	NC	20
Arsenic, Total	0.011	0.010	mg/l	3	20
Cadmium, Total	ND	0.000	mg/l	NC	20
Chromium, Total	0.001	ND	mg/l	17	20
Copper, Total	0.001	ND	mg/l	NC	20
Lead, Total	ND	ND	mg/l	NC	20
Nickel, Total	0.004	0.003	mg/l	10	20
Selenium, Total	ND	ND	mg/l	NC	20
Silver, Total	ND	0.000	mg/l	NC	20
Zinc, Total	ND	ND	mg/l	NC	20
Total Metals - Mansfield Lab Associated sample(s): 01-02 QC Batch ID: WG358975-3 QC Sample: L0904297-01 Client ID: B-28S					
Manganese, Total	1.56	1.52	mg/l	3	20

Lab Duplicate Analysis

Batch Quality Control

Project Name: GENCORP
Project Number: Not Specified

Lab Number: L0904297
Report Date: 05/05/09

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 01-02 QC Batch ID: WG358979-3 QC Sample: L0904297-01 Client ID: B-28S					
Antimony, Dissolved	ND	ND	mg/l	NC	20
Arsenic, Dissolved	0.007	0.009	mg/l	15	20
Cadmium, Dissolved	ND	0.000	mg/l	NC	20
Chromium, Dissolved	ND	ND	mg/l	NC	20
Copper, Dissolved	0.009	0.010	mg/l	6	20
Lead, Dissolved	ND	ND	mg/l	NC	20
Nickel, Dissolved	0.004	0.004	mg/l	1	20
Selenium, Dissolved	ND	ND	mg/l	NC	20
Silver, Dissolved	ND	ND	mg/l	NC	20
Zinc, Dissolved	ND	ND	mg/l	NC	20
Dissolved Metals - Mansfield Lab Associated sample(s): 01-02 QC Batch ID: WG358979-3 QC Sample: L0904297-01 Client ID: B-28S					
Manganese, Dissolved	1.58	1.56	mg/l	1	20
Dissolved Metals - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG359399-3 QC Sample: L0904297-01 Client ID: B-28S					
Iron, Dissolved	0.76	0.77	mg/l	1	

INORGANICS & MISCELLANEOUS

Project Name: GENCORP
Project Number: Not Specified

Lab Number: L0904297
Report Date: 05/05/09

SAMPLE RESULTS

Lab ID: L0904297-01
Client ID: B-28S
Sample Location: LAWRENCE, MA
Matrix: Water

Date Collected: 04/08/09 08:50
Date Received: 04/08/09
Field Prep: Field Filtered

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab									
Alkalinity, Total	100		mg CaCO3/L	2.0	1	-	04/09/09 10:00	30,2320B	SD
Solids, Total Dissolved	350		mg/l	10	1	-	04/10/09 09:30	30,2540C	DW
Solids, Total Suspended	11		mg/l	5.0	1	-	04/14/09 19:50	30,2540D	DW
Cyanide, Total	ND		mg/l	0.005	1	04/09/09 16:30	04/09/09 21:08	4,335.2	DD
Chlorine, Total Residual	ND		mg/l	0.02	1	-	04/08/09 19:30	30,4500CL-D	JO
TPH	ND		mg/l	4.00	1	04/09/09 19:30	04/13/09 20:30	74,1664A	JO
Phenolics, Total	ND		mg/l	0.03	1	-	04/10/09 17:48	4,420.1	TH
Chromium, Hexavalent	ND		mg/l	0.010	1	04/08/09 23:15	04/08/09 23:15	30,3500CR-D	JT
General Chemistry									
Trivalent Chromium	ND		mg/l	0.01	1	-	04/22/09 15:00	30,3500-Cr	ED

Project Name: GENCORP
Project Number: Not Specified

Lab Number: L0904297
Report Date: 05/05/09

SAMPLE RESULTS

Lab ID: L0904297-02
Client ID: B-28D
Sample Location: LAWRENCE, MA
Matrix: Water

Date Collected: 04/08/09 10:30
Date Received: 04/08/09
Field Prep: Field Filtered

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab									
Alkalinity, Total	99		mg CaCO3/L	2.0	1	-	04/09/09 10:00	30,2320B	SD
Solids, Total Dissolved	500		mg/l	10	1	-	04/10/09 09:30	30,2540C	DW
Solids, Total Suspended	390		mg/l	25	5	-	04/14/09 19:50	30,2540D	DW
Cyanide, Total	ND		mg/l	0.005	1	04/09/09 16:30	04/09/09 21:09	4,335.2	DD
Chlorine, Total Residual	ND		mg/l	0.02	1	-	04/08/09 19:30	30,4500CL-D	JO
TPH	ND		mg/l	4.00	1	04/09/09 19:30	04/13/09 20:30	74,1664A	JO
Phenolics, Total	ND		mg/l	0.15	5	-	04/10/09 17:49	4,420.1	TH
Chromium, Hexavalent	ND		mg/l	0.010	1	04/08/09 23:15	04/08/09 23:15	30,3500CR-D	JT
General Chemistry									
Trivalent Chromium	0.03		mg/l	0.01	1	-	04/22/09 15:00	30,3500-Cr	ED

Project Name: GENCORP
Project Number: Not Specified

Lab Number: L0904297
Report Date: 05/05/09

Method Blank Analysis
Batch Quality Control

Parameter	Result Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab for sample(s): 01-02 Batch: WG358237-1								
Chromium, Hexavalent	ND	mg/l	0.010	1	04/08/09 23:15	04/08/09 23:15	30,3500CR-D	JT
General Chemistry - Westborough Lab for sample(s): 01-02 Batch: WG358242-2								
Chlorine, Total Residual	ND	mg/l	0.02	1	-	04/08/09 19:30	30,4500CL-D	JO
General Chemistry - Westborough Lab for sample(s): 01-02 Batch: WG358361-2								
Cyanide, Total	ND	mg/l	0.005	1	04/09/09 16:30	04/09/09 20:49	4,335.2	DD
General Chemistry - Westborough Lab for sample(s): 01-02 Batch: WG358367-1								
Alkalinity, Total	ND	mg CaCO3/L	2.0	1	-	04/09/09 10:00	30,2320B	SD
General Chemistry - Westborough Lab for sample(s): 01-02 Batch: WG358385-2								
TPH	ND	mg/l	4.00	1	04/09/09 19:30	04/13/09 20:30	74,1664A	JO
General Chemistry - Westborough Lab for sample(s): 01-02 Batch: WG358433-1								
Solids, Total Dissolved	ND	mg/l	10	1	-	04/10/09 09:30	30,2540C	DW
General Chemistry - Westborough Lab for sample(s): 01-02 Batch: WG358531-1								
Phenolics, Total	ND	mg/l	0.03	1	-	04/10/09 17:46	4,420.1	TH
General Chemistry - Westborough Lab for sample(s): 01-02 Batch: WG358622-1								
Solids, Total Suspended	ND	mg/l	5.0	1	-	04/14/09 19:50	30,2540D	DW

Lab Control Sample Analysis

Batch Quality Control

Project Name: GENCORP
Project Number: Not Specified

Lab Number:
Report Date:

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD
General Chemistry - Westborough Lab Associated sample(s): 01-02 Batch: WG358237-2				
Chromium, Hexavalent	99	-	85-115	-
General Chemistry - Westborough Lab Associated sample(s): 01-02 Batch: WG358242-1				
Chlorine, Total Residual	93	-		-
General Chemistry - Westborough Lab Associated sample(s): 01-02 Batch: WG358361-1				
Cyanide, Total	94	-	90-110	-
General Chemistry - Westborough Lab Associated sample(s): 01-02 Batch: WG358367-2				
Alkalinity, Total	102	-	80-115	-
General Chemistry - Westborough Lab Associated sample(s): 01-02 Batch: WG358385-1				
TPH	70	-	64-132	-
General Chemistry - Westborough Lab Associated sample(s): 01-02 Batch: WG358433-2				
Solids, Total Dissolved	94	-	72-121	-
General Chemistry - Westborough Lab Associated sample(s): 01-02 Batch: WG358531-2				
Phenolics, Total	96	-	82-111	-

Matrix Spike Analysis

Batch Quality Control

Project Name: GENCORP

Lab Number: L0904297

Project Number: Not Specified

Report Date: 05/05/09

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	MSD Limits	Recovery	RPD	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG358237-4 QC Sample: L0904297-01 Client ID: B-28S										
Chromium, Hexavalent	ND	0.1	0.102	102	-	-	85-115	-	-	20
General Chemistry - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG358361-3 QC Sample: L0904229-04 Client ID: MS Sample										
Cyanide, Total	ND	0.2	0.196	98	-	-	80-120	-	-	30
General Chemistry - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG358367-3 QC Sample: L0904303-12 Client ID: MS Sample										
Alkalinity, Total	140	100	170	28	-	-	86-116	-	-	4
General Chemistry - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG358385-3 QC Sample: L0904297-01 Client ID: B-28S										
TPH	ND	24.1	ND	78	-	-	64-132	-	-	34
General Chemistry - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG358531-3 QC Sample: L0904356-01 Client ID: MS Sample										
Phenolics, Total	ND	0.8	0.82	102	-	-	77-124	-	-	12

Lab Duplicate Analysis

Batch Quality Control

Project Name: GENCORP
Project Number: Not Specified

Lab Number: L0904297
Report Date: 05/05/09

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
General Chemistry - Westborough Lab Associated sample(s):	01-02	QC Batch ID: WG358237-3	QC Sample: L0904297-02	Client ID: B-28D	
Chromium, Hexavalent	ND	ND	mg/l	NC	20
General Chemistry - Westborough Lab Associated sample(s):	01-02	QC Batch ID: WG358242-3	QC Sample: L0904273-04	Client ID: DUP Sample	
Chlorine, Total Residual	0.36	0.37	mg/l	3	
General Chemistry - Westborough Lab Associated sample(s):	01-02	QC Batch ID: WG358361-4	QC Sample: L0904297-01	Client ID: B-28S	
Cyanide, Total	ND	ND	mg/l	NC	30
General Chemistry - Westborough Lab Associated sample(s):	01-02	QC Batch ID: WG358367-4	QC Sample: L0904303-12	Client ID: DUP Sample	
Alkalinity, Total	140	140	mg CaCO ₃ /L	0	4
General Chemistry - Westborough Lab Associated sample(s):	01-02	QC Batch ID: WG358385-4	QC Sample: L0904297-02	Client ID: B-28D	
TPH	ND	ND	mg/l	NC	34
General Chemistry - Westborough Lab Associated sample(s):	01-02	QC Batch ID: WG358433-3	QC Sample: L0904297-01	Client ID: B-28S	
Solids, Total Dissolved	350	380	mg/l	8	11
General Chemistry - Westborough Lab Associated sample(s):	01-02	QC Batch ID: WG358531-4	QC Sample: L0904297-01	Client ID: B-28S	
Phenolics, Total	ND	0.03	mg/l	NC	12
General Chemistry - Westborough Lab Associated sample(s):	01-02	QC Batch ID: WG358622-2	QC Sample: L0904272-03	Client ID: DUP Sample	
Solids, Total Suspended	570	560	mg/l	2	32