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

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

| | | | | |
|---|---|---|---|---|
| a) Name of **facility/site**: Highgate Associates Realty Trust | | **Facility/site** address: 1105 East Street, Dedham, Massachusetts | | |
| Location of **facility/site**: longitude: 71095 latitude: 42133 | Facility SIC code(s): 7538 | Street: 1105 East Street | | |
| b) Name of **facility/site owner:** Norman Thomas | | Town: Dedham | | |
| Email address of owner: | | State: MA | Zip: 02026 | County: Norfolk |
| Telephone no.of facility/site **owner**: (781) 308-4401 | | | | |
| Fax no. of facility/site **owner**: | | **Owner** is (check one): 1. Federal____ 2. State/Tribal_____ 3. Private ✔ 4. other, if so, describe: | | |
| Address of **owner** (if different from site): | | | | |
| Street: 1069 East Street | | | | |
| Town: Dedham | State: MA | Zip: 02026 | County: Norfolk | |
| c) Legal name of **operator**: Comprehensive Environmnetal Inc. (CEI) | **Operator** telephone no: (800) 725-2550 | | | |
| | **Operator** fax no.: (800) 331-0892 | **Operator** email: rcote@ceiengineers.com | | |
| **Operator** contact name and title: Richard Cote, P.E., LSP, Manager of Engineering | | | | |

| Address of **operator** (if different from owner): | Street: 64 Dilla Street | | |
|---|---|---|---|
| Town: Milford | State: MA | Zip: 01757 | County: Worcester |

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✔<br>If "yes," please list:<br>1. site identification # assigned by the state of NH or MA:<br>2. permit or license # assigned:<br>3. state agency contact information: name, location, and telephone number: | f) Is the site/facility covered by any other EPA permit, including:<br>1. multi-sector storm water general permit? Y___ N✔, if Y, number:<br>2. phase I or II construction storm water general permit? Y✔ N___, if Y, number:<br>3. individual NPDES permit? Y___ N✔, if Y, number:<br>4. any other water quality related permit? Y___ N✔, if Y, number: |
|---|---|

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

a) Describe the discharge activities for which the owner/applicant is seeking coverage:

The discharge will be conducted during the excavation dewatering activities to remediate petroleum impacted soils in accordance with the Massachusetts Contingency Plan (MCP) and the Release Abatement Measure (RAM) Plan dated March 26, 2007 for RTN 3-4448. Pumped groundwater will be treated using 2 fractionation tanks with weir walls, an oil/water separator, a sand filter, bag filters and a granular activated carbon (GAC) system. The treated effluent will be discharged to an existing on-site drainage swale >200' from the wetlands bordering Little Wigwam Pond. Additional information is discussed on the next page.

| b) Provide the following information about each discharge: | 1) Number of discharge points:<br>1 | 2) What is the **maximum** and **average flow rate** of discharge (in cubic feet per second, $ft^3/s$)? Max. flow 0.45<br>Average flow 0.33 Is maximum flow a **design value**? Y✔ N___<br>For average flow, include the units and appropriate notation if this value is a design value or estimate if not available.<br>150 gpm - estimate value |
|---|---|---|

3) Latitude and longitude of each discharge within 100 feet: pt.1:long. 71095 lat. 42133 ; 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 ____?<br>Is discharge ongoing Yes ____ No ✔ ? |
| c) Expected dates of discharge (mm/dd/yy): start 05/15/07 end 07/15/07 | |
| d) Please attach a line drawing or flow schematic showing water flow through the facility including:<br>1. sources of intake water, 2. contributing flow from the operation, 3. treatment units, and 4. discharge points and receiving waters(s). | |

a) (continued): The treatment system is designed to handle light non-aqueous phase liquid (LNAPL) that is present at the site. A dewatering and treatment system schematic and site map are attached. Dewatering activities are anticipated for removal of soils at the Phase I area depicted on the site map. Excavation activities at the Phase II area will be conducted at a later date; however, dewatering activities are expected to be consistent with that described in this RGP application.

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

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

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

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

| PARAMETER | Believe Absent | Believe Present | # of Samples (1 minimum) | Type of Sample (e.g., grab) | Analytical Method Used (method #) | Minimum Level (ML) of Test Method | Maximum daily value | | Avg. daily value | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | concentration (ug/l) | mass (kg) | concentration (ug/l) | mass (kg) |
| **1. Total Suspended Solids** | | ✔ | 1 | grab | 160.2 | <4 mg/L | | | 74000 | 80.6 |
| **2. Total Residual Chlorine** | ✔ | | 1 | grab | 8167 | 16ug/L | | | ND | 0 |
| **3. Total Petroleum Hydrocarbons** | | ✔ | 1 | grab | 8100 | 21 mg/L | | | 147000 | 160.2 |
| **4. Cyanide** | ✔ | | 1 | grab | 335.2 | 16ug/L | | | ND | 0 |
| **5. Benzene** | ✔ | | 1 | grab | 8260B | <5 ug/L | | | ND | 0 |
| **6. Toluene** | ✔ | | 1 | grab | 8260B | <5 ug/L | | | ND | 0 |
| **7. Ethylbenzene** | | ✔ | 1 | grab | 8260B | <5 ug/L | | | 5.62 | 0.0061 |
| **8. (m,p,o) Xylenes** | ✔ | | 1 | grab | 8260B | <5 ug/L | | | ND | 0 |
| **9. Total BTEX[4]** | | ✔ | 1 | grab | 8260B | <5 ug/L | | | 5.62 | 0.0061 |

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

| PARAMETER | Believe Absent | Believe Present | # of Samples (1 min-imum) | Type of Sample (e.g., grab) | Analytical Method Used (method #) | Minimum Level (ML) of Test Method | Maximum daily value | | Avg. daily value | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | concentration (ug/l) | mass (kg) | concentration (ug/l) | mass (kg) |
| **10. Ethylene Dibromide (1,2- Dibromo-methane)** | ✔ | | 1 | grab | 8260B | 2ug/L | | | ND | 0 |
| **11. Methyl-tert-Butyl Ether (MtBE)** | ✔ | | 1 | grab | 8260B | 5ug/L | | | ND | 0 |
| **12. tert-Butyl Alcohol (TBA)** | ✔ | | 1 | grab | 8260B | | | | ND | 0 |
| **13. tert-Amyl Methyl Ether (TAME)** | ✔ | | 1 | grab | 8260B | | | | ND | 0 |
| **14. Naphthalene** | | ✔ | 1 | grab | 8260B | 20ug/L | | | 39.4 | 0.043 |
| **15. Carbon Tetra-chloride** | ✔ | | 1 | grab | 8260B | 2ug/L | | | ND | 0 |
| **16. 1,4 Dichlorobenzene** | ✔ | | 1 | grab | 8260B | 5ug/L | | | ND | 0 |
| **17. 1,2 Dichlorobenzene** | ✔ | | 1 | grab | 8260B | 5ug/L | | | ND | 0 |
| **18. 1,3 Dichlorobenzene** | ✔ | | 1 | grab | 8260B | 5ug/L | | | ND | 0 |
| **19. 1,1 Dichloroethane** | ✔ | | 1 | grab | 8260B | 5ug/L | | | ND | 0 |
| **20. 1,2 Dichloroethane** | ✔ | | 1 | grab | 8260B | 2ug/L | | | ND | 0 |
| **21. 1,1 Dichloroethylene** | ✔ | | 1 | grab | 8260B | 5ug/L | | | ND | 0 |
| **22. cis-1,2 Dichloro-ethylene** | | ✔ | 1 | grab | 8260B | 5ug/L | | | 6.57 | 0.007 |
| **23. Dichloromethane (Methylene Chloride)** | ✔ | | 1 | grab | 8260B | 5ug/L | | | ND | 0 |
| **24. Tetrachloroethylene** | ✔ | | 1 | grab | 8260B | 5ug/L | | | ND | 0 |

| PARAMETER | Believe Absent | Believe Present | # of Samples (1 min-imum) | Type of Sample (e.g., grab) | Analytical Method Used (method #) | Minimum Level (ML) of Test Method | Maximum daily value | | Avg. daily Value | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | concentration (ug/l) | mass (kg) | concentration (ug/l) | mass (kg) |
| **25. 1,1,1 Trichloroethane** | ✔ | | 1 | grab | 8260B | 5ugL | | | ND | 0 |
| **26. 1,1,2 Trichloroethane** | ✔ | | 1 | grab | 8260B | 5ug/L | | | ND | 0 |
| **27. Trichloroethylene** | | ✔ | 1 | grab | 8260B | 5ug/L | | | 6.03 | 0.007 |
| **28. Vinyl Chloride** | ✔ | | 1 | grab | 8260B | 2ug/L | | | ND | 0 |
| **29. Acetone** | ✔ | | 1 | grab | 8260B | 50ug/L | | | ND | 0 |
| **30. 1,4 Dioxane** | ✔ | | 1 | grab | 8270C | | | | ND | 0 |
| **31. Total Phenols** | | ✔ | 1 | grab | 8270C | 0.5ug/L | | | 3.516 | 0.004 |
| **32. Pentachlorophenol** | ✔ | | 1 | grab | 8270C | 0.5ug/L | | | ND | 0 |
| **33. Total Phthalates [5] (Phthalate esthers)** | | ✔ | 1 | grab | 8270C | 0.5ug/L | | | 4.29 | 0.005 |
| **34. Bis (2-Ethylhexyl) Phthalate [Di-(ethylhexyl) Phthalate]** | | ✔ | 1 | grab | 8270C | 0.5ug/L | | | 4.29 | 0.005 |
| **35. Total Group I Polycyclic Aromatic Hydrocarbons (PAH)** | | ✔ | 1 | grab | 8270C | 1ug/L | | | 0.180 | 0.0002 |
| **a. Benzo(a) Anthracene** | | ✔ | 1 | grab | 8270C | 0.1ug/L | | | 0.180 | 0.0002 |
| **b. Benzo(a) Pyrene** | ✔ | | 1 | grab | 8270C | 0.1ug/L | | | ND | 0 |
| **c. Benzo(b)Fluoranthene** | ✔ | | 1 | grab | 8270C | 1ug/L | | | ND | 0 |
| **d. Benzo(k) Fluoranthene** | ✔ | | 1 | grab | 8270C | 1ug/L | | | ND | 0 |
| **e. Chrysene** | ✔ | | 1 | grab | 8270C | 1ug/L | | | ND | 0 |

[5] The sum of individual phthalate compounds.

| PARAMETER | Believe Absent | Believe Present | # of Samples (1 min-imum) | Type of Sample (e.g., grab) | Analytical Method Used (method #) | Minimum Level (ML) of Test Method | Maximum daily value | | Average daily value | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | concentration (ug/l) | mass (kg) | concentration (ug/l) | mass (kg) |
| **f. Dibenzo(a,h) anthracene** | ✔ | | 1 | grab | 8270C | 0.1ug/L | | | ND | 0 |
| **g. Indeno(1,2,3-cd) Pyrene** | ✔ | | 1 | grab | 8270C | 0.1ug/L | | | ND | 0 |
| **36. Total Group II Polycyclic Aromatic Hydrocarbons (PAH)** | | ✔ | 1 | grab | 8270C | 1 ug/L | | | 132.8 | 0.145 |
| **h. Acenaphthene** | ✔ | | 1 | grab | 8270C | 1 ug/L | | | ND | 0 |
| **i. Acenaphthylene** | ✔ | | 1 | grab | 8270C | 1 ug/L | | | ND | 0 |
| **j. Anthracene** | | ✔ | 1 | grab | 8270C | 1 ug/L | | | 2.24 | 0.002 |
| **k. Benzo(ghi) Perylene** | ✔ | | 1 | grab | 8270C | 1 ug/L | | | ND | 0 |
| **l. Fluoranthene** | | ✔ | 1 | grab | 8270C | 1 ug/L | | | 2.58 | 0.003 |
| **m. Fluorene** | ✔ | | 1 | grab | 8270C | 1 ug/L | | | ND | 0 |
| **n. Naphthalene-** | | ✔ | 1 | grab | 8270C | 1 ug/L | | | 87.9 | 0.096 |
| **o. Phenanthrene** | | ✔ | 1 | grab | 8270C | 1 ug/L | | | 32.1 | 0.035 |
| **p. Pyrene** | | ✔ | 1 | grab | 8270C | 1 ug/L | | | 7.93 | 0.009 |
| **37. Total Polychlorinated Biphenyls (PCBs)** | ✔ | | 1 | grab | 8082 | .25ug/L | | | ND | 0 |
| **38. Antimony** | ✔ | | 1 | grab | 6020A | 1ug/L | | | ND | 0 |
| **39. Arsenic** | | ✔ | 1 | grab | 6020A | 1ug/L | | | 3.53 | 0.004 |
| **40. Cadmium** | ✔ | | 1 | grab | 200.7 | <5ug/L | | | ND | 0 |
| **41. Chromium III** | ✔ | | 1 | grab | 200.7 | 60ug/L | | | ND | 0 |
| **42. Chromium VI** | ✔ | | 1 | grab | 3500 | 50ug/L | | | ND | 0 |

| PARAMETER | Believe Absent | Believe Present | # of Samples (1 minimum) | Type of Sample (e.g., grab) | Analytical Method Used (method #) | Minimum Level (ML) of Test Method | Maximum daily value | | Avg. daily value | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | concentration (ug/l) | mass (kg) | concentration (ug/l) | mass (kg) |
| **43. Copper** | ✔ | | 1 | grab | 200.7 | <8ug/L | | | ND | 0 |
| **44. Lead** | ✔ | | 1 | grab | 200.7 | <10ug/L | | | ND | 0 |
| **45. Mercury** | ✔ | | 1 | grab | 245.1 | 0.2ug/L | | | ND | 0 |
| **46. Nickel** | ✔ | | 1 | grab | 200.7 | <10ug/L | | | ND | 0 |
| **47. Selenium** | ✔ | | 1 | grab | 200.7 | <50ug/L | | | ND | 0 |
| **48. Silver** | ✔ | | 1 | grab | 200.7 | 2ug/L | | | ND | 0 |
| **49. Zinc** | | ✔ | 1 | grab | 200.7 | 10ug/L | | | 47.2 | 0.514 |
| **50. Iron** | | ✔ | 1 | grab | 200.7 | 50ug/L | | | 18.99 | 0.021 |
| **Other (describe):** | | | | | | | | | | |

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

| | |
|---|---|
| *Step 1:* Do any of the metals in the influent have a **reasonable potential** to exceed the effluent limits in Appendix III (i.e., the limits set at zero to five dilutions)? Y____ N___✔ | If yes, which metals? |
| *Step 2:* For any metals which have **reasonable potential** to exceed the **Appendix III** limits, calculate the **dilution factor (DF)** using the formula in Part I.A.3.c) (step 2) of the NOI instructions or as determined by the State prior to the submission of this NOI.<br>What is the dilution factor for applicable metals?<br>Metals:_____<br>DF: _____ | 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)?<br>Y____ N____ If "Yes," list which metals: |

**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:

Pumped groundwater will be treated using 2 fractionation tanks with weir walls, an oil/water separator, a sand filter, bag filters and a granular activated carbon (GAC) system. The treatment system is designed to handle light non-aqueous phase liquid (LNAPL) that is present at the site. A dewatering and treatment system schematic and site map are attached. The discharge point is an existing on-site drainage swale located in the northern corner of 1105 East Street. Additional erosion controls will be added if necessary to dissipate the velocity at the discharge and prevent scouring.

| b) Identify each applicable treatment unit (check all that apply): | Frac. tank ✔ | Air stripper | Oil/water separator ✔ | Equalization tanks | Bag filter ✔ | GAC filter ✔ |
|---|---|---|---|---|---|---|
| | Chlorination | Dechlorination | Other (please describe): Sand filter before bag filters | | | |

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 150 Maximum flow rate of treatment system 200 Design flow rate of treatment system 200

d) A description of chemical additives being used or planned to be used (attach MSDS sheets):

None

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

| a) Identify the discharge pathway: | Direct____ | Within facility__ | Storm drain____ | River/brook____ | Wetlands____ | Other (describe): Swale |
|---|---|---|---|---|---|---|

b) Provide a narrative description of the discharge pathway, including the name(s) of the receiving waters:

The existing drainage swale is located downgradient of the excavation activities at the northern part of 1105 East Street (see attached site map). The treated effluent will be discharged into the drainage swale and travel approximately 225 feet through the swale to Little Wigwam Pond. Little Wigam Pond discharges into Wigwam Pond and Wigwam Pond eventually discharges into the Charles 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 dischargers, indicate the location of the discharge to the indirect conveyance and the discharge to surface water
The map should also include the location and distance to the nearest sanitary sewer as well as the locus of nearby sensitive receptors (based on USGS topographical mapping), such as surface waters, drinking water supplies, and wetland areas.

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

e) Provide the reported or calculated seven day-ten year low flow (7Q10) of the receiving water 185.57 cfs 7Q10 for the Charles River, not available for Little Wigwam Pond
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)?
The Charles River (segment ID MA72-07_2004) is listed for priority organics, nutrients, organic enrichment/low DO, pathogens, noxious aquatic plants & turbidity.

Is there a TMDL? Yes____ No ✔ If yes, for which pollutant(s)?
Draft TMDLs have been prepared for the Charles River to address pathogens and nutrients (phosphorous).

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

a) Are any listed threatened or endangered species, or designated critical habitat, in proximity to the discharge? Yes____ No ✔
Has any consultation with the federal services been completed ? No ✔ or is consultation underway? Yes ✔ No____
What were the results of the consultation with the U.S. Fish and Wildlife Service and/or National Marine Fisheries Service (check one):
a "no jeopardy" opinion? _____ or written concurrence____ on a finding that the discharges are not likely to adversely affect any endangered species or critical habitat?

b) Are any historic properties listed or eligible for listing on the National Register of Historic Places located on the facility or site or in proximity to the discharge?
Yes_____ No ✔ Have any state or tribal historic preservation officer been consulted in this determination (Massachusetts only)? Yes_____ No ✔

Based on a review of the Massachusetts Natural Heritage Atlas (12th Edition, Effective October 1, 2006), Northwood Quad, there are no priority habitats, estimated habitats or certified vernal pools located in proximity to the proposed discharge. Confirmation of this information with the MA Natural Heritage and Endangered Species Program is underway.

Based on a review of the MA GIS Database for the location of historic properties maintained by the Massachusetts Historic Commission, the site is not a historic property and there are no historic properties/places in proximity to the proposed discharge.

**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.

Analytical data used in this NOI application were collected from an on-site monitoring well in the proposed area of dewatering/excavation. The site and/or proposed discharge are not located in an Area of Critical Environmental Concern, Outstanding Resource Water or existing drinking water supply protection area. A sensitive resource map is attached for reference. The Little Wigwam Pond area is a Protected Open Space that is managed by the Dedham Conservation Commission. The proposed discharge is not expected to adversely affect the value and/or function of this open space. Additional protection measures such as erosion and sediment controls will be implemented as part of the Stormwater Pollution Prevention Plan (SWPPP) under the NPDES Construction General Permit (CGP) that is pending.

Attachments: Dewatering & Treatment System Schematic, Site Plan, sensitive resource map, laboratory data sheets

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

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

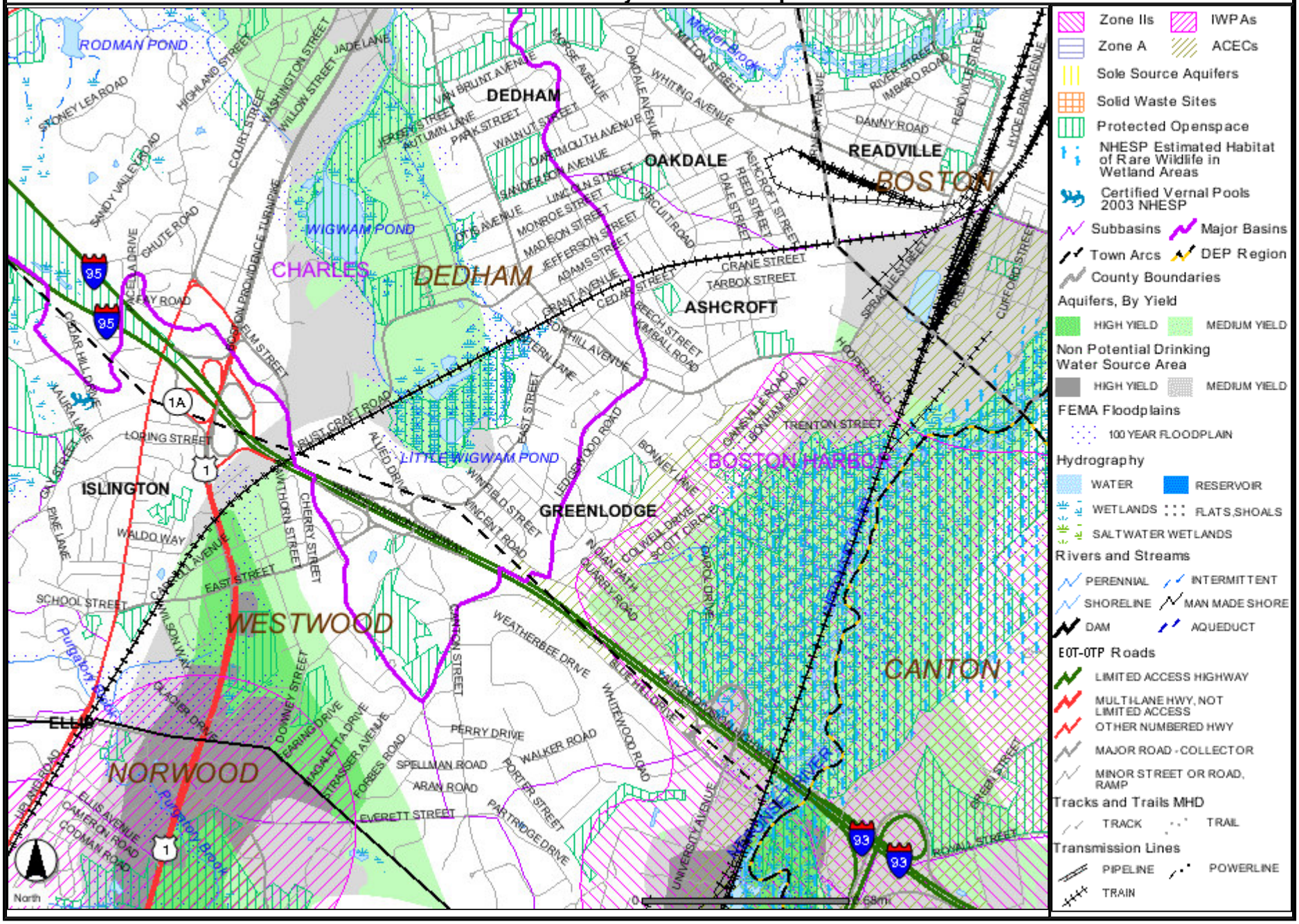
Facility/Site Name: 1105 East Street

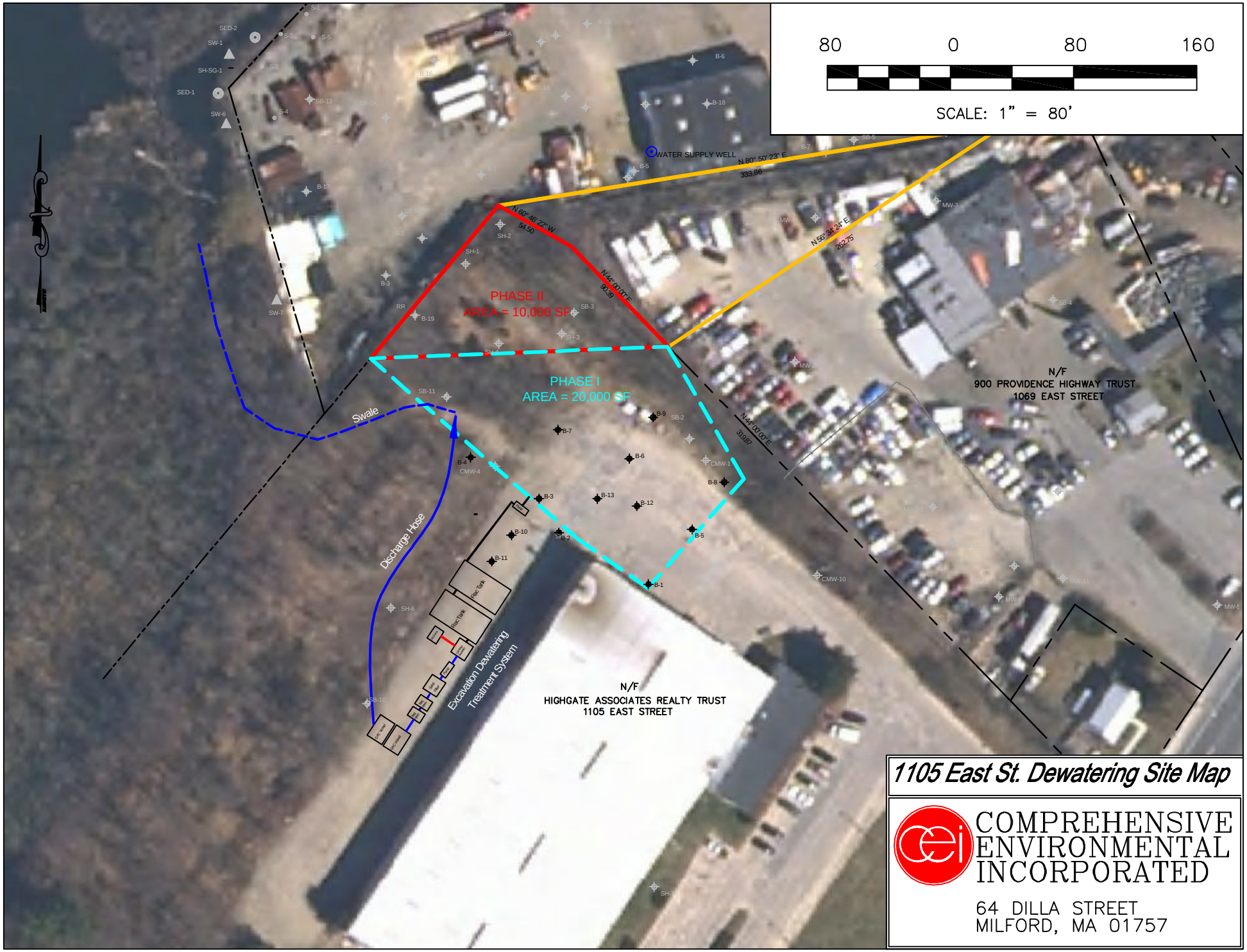
Operator signature: 5/04/07

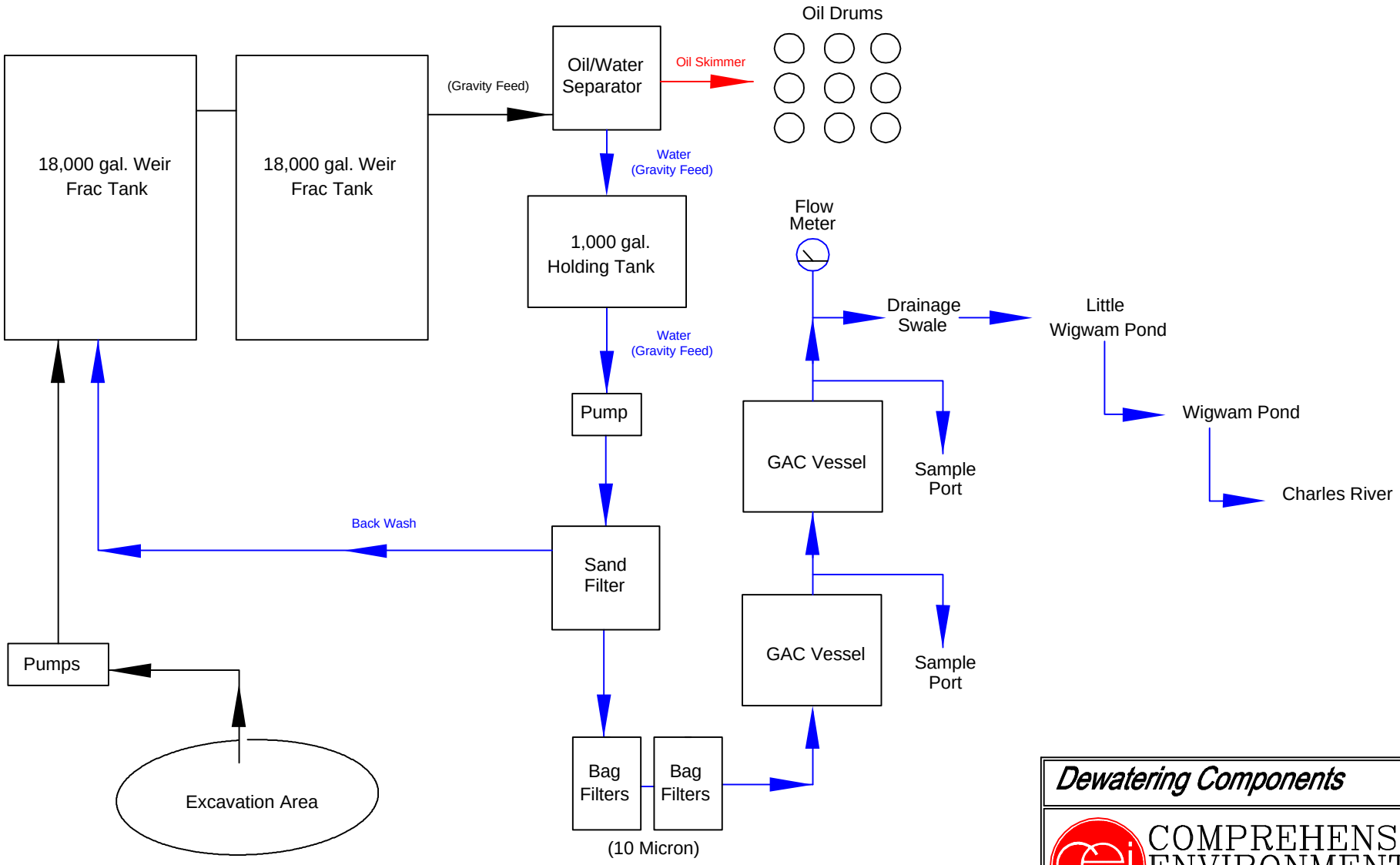
Title: P.E., LSP, Manager of Engineering

Date:

# DEP Priority Resource Map




80 0 80 160
SCALE: 1" = 80'
WATER SUPPLY WELL
N 80° 50' 23" E
333.86
N 60° 46' 22" W
54.50
N 44° 00' 00" E
90.39
N 50° 38' 24" E
262.75
N 44° 00' 00" E
319.87
PHASE II
AREA = 10,000 SF
PHASE I
AREA = 20,000 SF
Swale
Discharge Hose
Excavation Dewatering Treatment System
Frac Tank
Frac Tank
N/F
900 PROVIDENCE HIGHWAY TRUST
1069 EAST STREET
N/F
HIGHGATE ASSOCIATES REALTY TRUST
1105 EAST STREET
1105 East St. Dewatering Site Map
COMPREHENSIVE ENVIRONMENTAL INCORPORATED
64 DILLA STREET
MILFORD, MA 01757




# 200 GPM Treatment System

*Dewatering Components*

COMPREHENSIVE ENVIRONMENTAL INCORPORATED

64 DILLA STREET
MILFORD, MA 01757

Tuesday, April 10, 2007

GeoLabs, Inc.
45 Johnson Lane
Braintree MA 02184
Tele: 781 848 7844
Fax: 781 848 7811

Jason Guertin
CEI
64 Dilla Street
Milford, MA 01757

TEL: (508) 482-5557
FAX: (508) 482-5445

Project: 587-2
Location: 1105 East Street

Order No.: 0704035

Dear Jason Guertin:

GeoLabs, Inc. received 1 sample(s) on 4/3/2007 for the analyses presented in the following report.

There were no problems with the analyses and all data for associated QC met EPA or laboratory specifications.

Analytical methods and results meet requirements of 310CMR 40.1056(J) as per MADEP Compendium of Analytical Methods (CAM).

If you have any questions regarding these tests results, please feel free to call.

Sincerely,

Jim Chen
Laboratory Director

**Certifications:**

**CT (PH-0148) - MA (M-MA015) - NH (2508) - NJ (MA009) - NY (11796) - RI (LA000252)**

**GeoLabs, Inc.** **Date:** *10-Apr-07*

**CLIENT:** CEI
**Project:** 587-2
**Lab Order:** 0704035

# CASE NARRATIVE

MADEP MCP Response Action Analytical Report Certification Form

Laboratory Name: GeoLabs, Inc. Project # 587-2
Project Location: 1105 East St MADEP RTN #:

This form provides certification for the following data set: 0704035 (001)

Sample Matrix: Groundwater

MCP SW-846 Methods Used: 8082, 200.7, 245.1, 6020A, 8260B, 335.2, 8100M, 8167, 160.2, 8270C, 3500 Cr-D

An affirmative answer to questions A, B and C are required for "Presumptive Certainty" status

A. Were all samples received by the laboratory in a condition consistent with that described on the Chain of custody documentation for the data set? YES

B. Were all QA/QC procedures required for the specified method(s) included in this report followed, including the requirement to note and discuss in a narrative QC data that did not meet appropriate standards or guidelines? YES

C. Does the analytical data included in this report meet all the requirements for "Presumptive Certainty" as described in Section 2.0 of the MADEP documents CAM VII A "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"? YES

D. VPH and EPH Methods only: Was the VPH or EPH Method conducted without significant modifications (see Section 11.3 of respective Methods) N/A

A response to questions E and F are required for "Presumptive Certainty" status

E. Were all QC performance standards and recommendations for the specified methods achieved? NO
F. Were results for all analyte-list compounds/elements for the specified method(s) reported?
YES

All NO answers need to be addressed in an attached Environmental Laboratory case narrative.

| | |
|---|---|
| **CLIENT:** | CEI |
| **Project:** | 587-2 |
| **Lab Order:** | 0704035 |

# CASE NARRATIVE

CASE NARRATIVE

Physical Condition of Samples

The project was received by the laboratory in satisfactory condition. The sample(s) were received undamaged, in appropriate containers with the correct preservation.

Project Documentation

The project was accompanied by satisfactory Chain of Custody documentation.

Analysis of Sample(s)

The following analytical anomalies or non-conformances were noted by the laboratory during the processing of these samples:

PCB Method Blank and LCS recoveries for Decachlorobiphenyl Signal 1 fail due to lab contamination.

8260 LCS percent recovery for Acrolein does not meet MCP limits and is above the quantitation range.

EDB by 8260 is not achievable at GW-1 limits.

I, the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this analytical report is, to the best of my knowledge and belief, accurate and complete.

Signature: Jim Chen

Position: Lab Director

Printed Name: Jim Chen

Date: April 10, 2007

# GeoLabs, Inc.

**Reported Date:**

| | | | |
|---|---|---|---|
| **CLIENT:** | CEI | **Client Sample ID:** | SH-3 |
| **Lab Order:** | 0704035 | **Collection Date:** | 4/2/2007 4:20:00 PM |
| **Project:** | 587-2 | **Date Received:** | 4/3/2007 |
| **Lab ID:** | 0704035-001 | **Matrix:** | GROUNDWATER |

| Analyses | Result | Det. Limit | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **TOTAL SUSPENDED SOLIDS - E160.2** | | | | | | Analyst: **FC** |
| Total Suspended Solids | ***74.0*** | 4.00 | | mg/L | 1 | 4/3/2007 |
| **TOTAL PETROLEUM HYDROCARBONS - 8100M** | | | | **(8100M)** | | Analyst: **MJP** |
| Total Petroleum Hydrocarbons | ***147*** | 20.6 | | mg/L | 100 | 4/4/2007 |
| Surr: o-Terphenyl | 62.0 | 40-140 | | %REC | 1 | 4/4/2007 |
| **POLYCHLORINATED BIPHENYLS - SW8082** | | | | **(SW3510B)** | | Analyst: **GP** |
| Aroclor 1016/1242 | ND | 0.250 | | µg/L | 1 | 4/5/2007 |
| Aroclor 1221 | ND | 0.250 | | µg/L | 1 | 4/5/2007 |
| Aroclor 1232 | ND | 0.250 | | µg/L | 1 | 4/5/2007 |
| Aroclor 1248 | ND | 0.250 | | µg/L | 1 | 4/5/2007 |
| Aroclor 1254 | ND | 0.250 | | µg/L | 1 | 4/5/2007 |
| Aroclor 1260 | ND | 0.250 | | µg/L | 1 | 4/5/2007 |
| Aroclor 1262 | ND | 0.250 | | µg/L | 1 | 4/5/2007 |
| Aroclor 1268 | ND | 0.250 | | µg/L | 1 | 4/5/2007 |
| Surr: Decachlorobiphenyl Sig 1 | 178 | 30-150 | S | %REC | 1 | 4/5/2007 |
| Surr: Decachlorobiphenyl Sig 2 | 98.0 | 30-150 | | %REC | 1 | 4/5/2007 |
| Surr: Tetrachloro-m-Xylene Sig 1 | 114 | 30-150 | | %REC | 1 | 4/5/2007 |
| Surr: Tetrachloro-m-Xylene Sig 2 | 130 | 30-150 | | %REC | 1 | 4/5/2007 |

**NOTES:**
DCBP signal 1 fails due to lab contamination.

| | | | | | | |
|---|---|---|---|---|---|---|
| **TOTAL METALS BY ICP - E200.7** | | | | **(SW3010A)** | | Analyst: **QS** |
| Beryllium | ND | 0.00200 | | mg/L | 1 | 4/4/2007 |
| Cadmium | ND | 0.00500 | | mg/L | 1 | 4/4/2007 |
| Chromium | ND | 0.0600 | | mg/L | 1 | 4/4/2007 |
| Copper | ND | 0.00800 | | mg/L | 1 | 4/4/2007 |
| Lead | ND | 0.0100 | | mg/L | 1 | 4/4/2007 |
| Nickel | ND | 0.0100 | | mg/L | 1 | 4/4/2007 |
| Selenium | ND | 0.0500 | | mg/L | 1 | 4/4/2007 |
| Zinc | ***0.0472*** | 0.0100 | | mg/L | 1 | 4/4/2007 |
| **METALS BY ICP / MS - SW6020A** | | | | | | Analyst: **QS** |
| Antimony | ND | 0.00100 | | mg/L | 1 | 4/6/2007 |
| Arsenic | ***0.00353*** | 0.00100 | | mg/L | 1 | 4/6/2007 |
| Thallium | ND | 0.00100 | | mg/L | 1 | 4/6/2007 |
| **TOTAL SILVER - E200.7** | | | | **(SW3010A)** | | Analyst: **QS** |
| Silver | ND | 0.00200 | | mg/L | 1 | 4/5/2007 |

| **Qualifiers:** | | | | |
|---|---|---|---|---|
| | B | Analyte detected in the associated Method Blank | E | Value above quantitation range |
| | H | Holding times for preparation or analysis exceeded | J | Analyte detected below quantitation limits |
| | ND | Not Detected at the Reporting Limit | S | Spike Recovery outside accepted recovery limits |

# GeoLabs, Inc.

**Reported Date:**

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|---|---|---|---|
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| **Project:** | 587-2 | **Date Received:** | 4/3/2007 |
| **Lab ID:** | 0704035-001 | **Matrix:** | GROUNDWATER |

| Analyses | Result | Det. Limit | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **TOTAL SILVER - E200.7** | | | | **(SW3010A)** | | Analyst: **QS** |
| **TOTAL MERCURY - E245.1** | | | | **(SW7470A/E245.1)** | | Analyst: **BF** |
| Mercury | ND | 0.0002 | | mg/L | 1 | 4/4/2007 |
| **PAH - SW8270C** | | | | **(SW3510)** | | Analyst: **ZYZ** |
| 2-Methylnaphthalene | ***98.6*** | 1.03 | | µg/L | 1 | 4/3/2007 5:07:00 PM |
| Acenaphthene | ND | 1.03 | | µg/L | 1 | 4/3/2007 5:07:00 PM |
| Acenaphthylene | ND | 1.03 | | µg/L | 1 | 4/3/2007 5:07:00 PM |
| Anthracene | ***2.24*** | 1.03 | | µg/L | 1 | 4/3/2007 5:07:00 PM |
| Benz(a)Anthracene | ***0.180*** | 0.103 | | µg/L | 1 | 4/3/2007 5:07:00 PM |
| Benzo(a)Pyrene | ND | 0.103 | | µg/L | 1 | 4/3/2007 5:07:00 PM |
| Benzo(b)Fluoranthene | ND | 1.03 | | µg/L | 1 | 4/3/2007 5:07:00 PM |
| Benzo(g,h,i)Perylene | ND | 1.03 | | µg/L | 1 | 4/3/2007 5:07:00 PM |
| Benzo(k)Fluoranthene | ND | 1.03 | | µg/L | 1 | 4/3/2007 5:07:00 PM |
| Chrysene | ND | 1.03 | | µg/L | 1 | 4/3/2007 5:07:00 PM |
| Dibenz(a,h)Anthracene | ND | 0.103 | | µg/L | 1 | 4/3/2007 5:07:00 PM |
| Fluoranthene | ***2.58*** | 1.03 | | µg/L | 1 | 4/3/2007 5:07:00 PM |
| Fluorene | ND | 1.03 | | µg/L | 1 | 4/3/2007 5:07:00 PM |
| Indeno(1,2,3-cd)Pyrene | ND | 0.103 | | µg/L | 1 | 4/3/2007 5:07:00 PM |
| Naphthalene | ***87.9*** | 1.03 | | µg/L | 1 | 4/3/2007 5:07:00 PM |
| Phenanthrene | ***32.1*** | 1.03 | | µg/L | 1 | 4/3/2007 5:07:00 PM |
| Pyrene | ***7.93*** | 1.03 | | µg/L | 1 | 4/3/2007 5:07:00 PM |
| Surr: 2-Fluorobiphenyl | 63.4 | 30-130 | | %REC | 1 | 4/3/2007 5:07:00 PM |
| Surr: Nitrobenzene-d5 | 55.1 | 30-130 | | %REC | 1 | 4/3/2007 5:07:00 PM |
| Surr: Terphenyl-d14 | 52.5 | 30-130 | | %REC | 1 | 4/3/2007 5:07:00 PM |
| **VOLATILE ORGANIC COMPOUNDS - SW8260B** | | | | | | Analyst: **JG** |
| 1,1,1,2-Tetrachloroethane | ND | 5.00 | | µg/L | 1 | 4/5/2007 6:30:00 PM |
| 1,1,1-Trichloroethane | ND | 5.00 | | µg/L | 1 | 4/5/2007 6:30:00 PM |
| 1,1,2,2-Tetrachloroethane | ***5.35*** | 2.00 | | µg/L | 1 | 4/5/2007 6:30:00 PM |
| 1,1,2-Trichloroethane | ND | 5.00 | | µg/L | 1 | 4/5/2007 6:30:00 PM |
| 1,1-Dichloroethane | ND | 5.00 | | µg/L | 1 | 4/5/2007 6:30:00 PM |
| 1,1-Dichloroethene | ND | 5.00 | | µg/L | 1 | 4/5/2007 6:30:00 PM |
| 1,1-Dichloropropene | ND | 5.00 | | µg/L | 1 | 4/5/2007 6:30:00 PM |
| 1,2,3-Trichlorobenzene | ND | 5.00 | | µg/L | 1 | 4/5/2007 6:30:00 PM |
| 1,2,3-Trichloropropane | ND | 5.00 | | µg/L | 1 | 4/5/2007 6:30:00 PM |
| 1,2,4-Trichlorobenzene | ND | 5.00 | | µg/L | 1 | 4/5/2007 6:30:00 PM |
| 1,2,4-Trimethylbenzene | ***45.4*** | 5.00 | | µg/L | 1 | 4/5/2007 6:30:00 PM |
| 1,2-Dibromo-3-Chloropropane | ND | 5.00 | | µg/L | 1 | 4/5/2007 6:30:00 PM |

**Qualifiers:**

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# GeoLabs, Inc.

**Reported Date:**

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|---|---|---|---|
| **CLIENT:** | CEI | **Client Sample ID:** | SH-3 |
| **Lab Order:** | 0704035 | **Collection Date:** | 4/2/2007 4:20:00 PM |
| **Project:** | 587-2 | **Date Received:** | 4/3/2007 |
| **Lab ID:** | 0704035-001 | **Matrix:** | GROUNDWATER |

| Analyses | Result | Det. Limit | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **VOLATILE ORGANIC COMPOUNDS - SW8260B** | | | | | | Analyst: **JG** |
| 1,2-Dibromoethane | ND | 2.00 | | µg/L | 1 | 4/5/2007 6:30:00 PM |
| 1,2-Dichlorobenzene | ND | 5.00 | | µg/L | 1 | 4/5/2007 6:30:00 PM |
| 1,2-Dichloroethane | ND | 2.00 | | µg/L | 1 | 4/5/2007 6:30:00 PM |
| 1,2-Dichloropropane | ND | 2.00 | | µg/L | 1 | 4/5/2007 6:30:00 PM |
| 1,3,5-Trimethylbenzene | ***21.7*** | 5.00 | | µg/L | 1 | 4/5/2007 6:30:00 PM |
| 1,3-Dichlorobenzene | ND | 5.00 | | µg/L | 1 | 4/5/2007 6:30:00 PM |
| 1,3-Dichloropropane | ND | 5.00 | | µg/L | 1 | 4/5/2007 6:30:00 PM |
| 1,4-Dichlorobenzene | ND | 5.00 | | µg/L | 1 | 4/5/2007 6:30:00 PM |
| 2,2-Dichloropropane | ND | 5.00 | | µg/L | 1 | 4/5/2007 6:30:00 PM |
| 2-Butanone | ND | 10.0 | | µg/L | 1 | 4/5/2007 6:30:00 PM |
| 2-Chloroethyl Vinyl Ether | ND | 5.00 | | µg/L | 1 | 4/5/2007 6:30:00 PM |
| 2-Chlorotoluene | ND | 5.00 | | µg/L | 1 | 4/5/2007 6:30:00 PM |
| 2-Hexanone | ND | 10.0 | | µg/L | 1 | 4/5/2007 6:30:00 PM |
| 4-Chlorotoluene | ND | 5.00 | | µg/L | 1 | 4/5/2007 6:30:00 PM |
| 4-Isopropyltoluene | ***7.97*** | 5.00 | | µg/L | 1 | 4/5/2007 6:30:00 PM |
| 4-Methyl-2-Pentanone | ND | 5.00 | | µg/L | 1 | 4/5/2007 6:30:00 PM |
| Acetone | ND | 50.0 | | µg/L | 1 | 4/5/2007 6:30:00 PM |
| Acrolein | ND | 50.0 | | µg/L | 1 | 4/5/2007 6:30:00 PM |
| Acrylonitrile | ND | 50.0 | | µg/L | 1 | 4/5/2007 6:30:00 PM |
| Benzene | ND | 5.00 | | µg/L | 1 | 4/5/2007 6:30:00 PM |
| Bromobenzene | ND | 5.00 | | µg/L | 1 | 4/5/2007 6:30:00 PM |
| Bromochloromethane | ND | 2.00 | | µg/L | 1 | 4/5/2007 6:30:00 PM |
| Bromodichloromethane | ND | 2.00 | | µg/L | 1 | 4/5/2007 6:30:00 PM |
| Bromoform | ND | 2.00 | | µg/L | 1 | 4/5/2007 6:30:00 PM |
| Bromomethane | ND | 2.00 | | µg/L | 1 | 4/5/2007 6:30:00 PM |
| Carbon Disulfide | ND | 5.00 | | µg/L | 1 | 4/5/2007 6:30:00 PM |
| Carbon Tetrachloride | ND | 2.00 | | µg/L | 1 | 4/5/2007 6:30:00 PM |
| Chlorobenzene | ND | 5.00 | | µg/L | 1 | 4/5/2007 6:30:00 PM |
| Chloroethane | ND | 5.00 | | µg/L | 1 | 4/5/2007 6:30:00 PM |
| Chloroform | ND | 5.00 | | µg/L | 1 | 4/5/2007 6:30:00 PM |
| Chloromethane | ND | 5.00 | | µg/L | 1 | 4/5/2007 6:30:00 PM |
| cis-1,2-Dichloroethene | ***6.57*** | 5.00 | | µg/L | 1 | 4/5/2007 6:30:00 PM |
| cis-1,3-Dichloropropene | ND | 0.500 | | µg/L | 1 | 4/5/2007 6:30:00 PM |
| Dibromochloromethane | ND | 2.00 | | µg/L | 1 | 4/5/2007 6:30:00 PM |
| Dibromomethane | ND | 5.00 | | µg/L | 1 | 4/5/2007 6:30:00 PM |
| Dichlorodifluoromethane | ND | 5.00 | | µg/L | 1 | 4/5/2007 6:30:00 PM |
| Ethylbenzene | ***5.62*** | 5.00 | | µg/L | 1 | 4/5/2007 6:30:00 PM |
| Hexachlorobutadiene | ND | 0.500 | | µg/L | 1 | 4/5/2007 6:30:00 PM |
| Isopropylbenzene | ND | 5.00 | | µg/L | 1 | 4/5/2007 6:30:00 PM |
| Methyl Tert-Butyl Ether | ND | 5.00 | | µg/L | 1 | 4/5/2007 6:30:00 PM |

**Qualifiers:**

| | | | |
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# GeoLabs, Inc.

**Reported Date:**

| | | | |
|---|---|---|---|
| **CLIENT:** | CEI | **Client Sample ID:** | SH-3 |
| **Lab Order:** | 0704035 | **Collection Date:** | 4/2/2007 4:20:00 PM |
| **Project:** | 587-2 | **Date Received:** | 4/3/2007 |
| **Lab ID:** | 0704035-001 | **Matrix:** | GROUNDWATER |

| Analyses | Result | Det. Limit | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **VOLATILE ORGANIC COMPOUNDS - SW8260B** | | | | | | Analyst: **JG** |
| Methylene Chloride | ND | 5.00 | | µg/L | 1 | 4/5/2007 6:30:00 PM |
| Naphthalene | ***39.4*** | 20.0 | | µg/L | 1 | 4/5/2007 6:30:00 PM |
| n-Butylbenzene | ND | 5.00 | | µg/L | 1 | 4/5/2007 6:30:00 PM |
| n-Propylbenzene | ND | 5.00 | | µg/L | 1 | 4/5/2007 6:30:00 PM |
| sec-Butylbenzene | ND | 5.00 | | µg/L | 1 | 4/5/2007 6:30:00 PM |
| Styrene | ND | 5.00 | | µg/L | 1 | 4/5/2007 6:30:00 PM |
| tert-Butylbenzene | ND | 5.00 | | µg/L | 1 | 4/5/2007 6:30:00 PM |
| Tetrachloroethene | ND | 5.00 | | µg/L | 1 | 4/5/2007 6:30:00 PM |
| Toluene | ND | 5.00 | | µg/L | 1 | 4/5/2007 6:30:00 PM |
| trans-1,2-Dichloroethene | ND | 5.00 | | µg/L | 1 | 4/5/2007 6:30:00 PM |
| trans-1,3-Dichloropropene | ND | 0.500 | | µg/L | 1 | 4/5/2007 6:30:00 PM |
| Trichloroethene | ***6.03*** | 5.00 | | µg/L | 1 | 4/5/2007 6:30:00 PM |
| Trichlorofluoromethane | ND | 5.00 | | µg/L | 1 | 4/5/2007 6:30:00 PM |
| Vinyl Chloride | ND | 2.00 | | µg/L | 1 | 4/5/2007 6:30:00 PM |
| Xylenes, Total | ND | 5.00 | | µg/L | 1 | 4/5/2007 6:30:00 PM |
| Surr: 1,2-Dichloroethane-d4 | 99.9 | 70-130 | | %REC | 1 | 4/5/2007 6:30:00 PM |
| Surr: 4-Bromofluorobenzene | 93.9 | 70-130 | | %REC | 1 | 4/5/2007 6:30:00 PM |
| Surr: Dibromofluoromethane | 105 | 70-130 | | %REC | 1 | 4/5/2007 6:30:00 PM |
| Surr: Toluene-d8 | 97.2 | 70-130 | | %REC | 1 | 4/5/2007 6:30:00 PM |
| **CYANIDE, TOTAL - E335.2** | | | | | | Analyst: **WFR** |
| Cyanide, Total | ND | 0.016 | | mg/L | 1 | 4/4/2007 |
| **HEXAVALENT CHROMIUM - SM3500-CR-D** | | | | | | Analyst: **RP** |
| Chromium, Hexavalent | ND | 0.0500 | | mg/L | 1 | 4/3/2007 |
| **TOTAL RESIDUAL CHLORINE - HACH 8167** | | | | | | Analyst: **RP** |
| Total Residual Chlorine | ND | 0.162 | | mg/L | 1 | 4/3/2007 |

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| | ND | Not Detected at the Reporting Limit | S | Spike Recovery outside accepted recovery limits |

GeoLabs, Inc.

**Date:** *10-Apr-07*

**CLIENT:** CEI
**Work Order:** 0704035
**Project:** 587-2

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 200.7_W**

Sample ID: **MB-6910** SampType: **MBLK** TestCode: **200.7_W** Units: **mg/L** Prep Date: RunNo: **16276**
Client ID: **ZZZZZ** Batch ID: **6910** TestNo: **E200.7** **(SW3010A)** Analysis Date: **4/4/2007** SeqNo: **143321**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Beryllium | ND | 0.00200 | | | | | | | | | |
| Cadmium | ND | 0.00500 | | | | | | | | | |
| Chromium | ND | 0.0600 | | | | | | | | | |
| Copper | ND | 0.00800 | | | | | | | | | |
| Lead | ND | 0.0150 | | | | | | | | | |
| Nickel | ND | 0.0100 | | | | | | | | | |
| Selenium | ND | 0.0500 | | | | | | | | | |
| Zinc | ND | 0.100 | | | | | | | | | |

Sample ID: **LCS-6910** SampType: **LCS** TestCode: **200.7_W** Units: **mg/L** Prep Date: RunNo: **16276**
Client ID: **ZZZZZ** Batch ID: **6910** TestNo: **E200.7** **(SW3010A)** Analysis Date: **4/4/2007** SeqNo: **143322**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Beryllium | 2.150 | 0.00200 | 2 | 0 | 108 | 85 | 115 | | | | |
| Cadmium | 2.010 | 0.00500 | 2 | 0 | 101 | 85 | 115 | | | | |
| Chromium | 2.090 | 0.0600 | 2 | 0 | 104 | 85 | 115 | | | | |
| Copper | 2.060 | 0.00800 | 2 | 0 | 103 | 85 | 115 | | | | |
| Lead | 1.950 | 0.0150 | 2 | 0 | 97.5 | 85 | 115 | | | | |
| Nickel | 2.030 | 0.0100 | 2 | 0 | 102 | 85 | 115 | | | | |
| Selenium | 2.110 | 0.0500 | 2 | 0.0123 | 105 | 85 | 115 | | | | |
| Zinc | 2.120 | 0.100 | 2 | 0.0115 | 105 | 85 | 115 | | | | |

**Qualifiers:**
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

**CLIENT:** CEI
**Work Order:** 0704035
**Project:** 587-2

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 6020A_W**

Sample ID: **MB-R16324** SampType: **MBLK** TestCode: **6020A_W** Units: **mg/L** Prep Date: RunNo: **16324**
Client ID: **ZZZZZ** Batch ID: **R16324** TestNo: **SW6020** Analysis Date: **4/6/2007** SeqNo: **143624**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Antimony | ND | 0.00100 | | | | | | | | | |
| Arsenic | ND | 0.00100 | | | | | | | | | |
| Thallium | ND | 0.00100 | | | | | | | | | |

Sample ID: **LCS-R16324** SampType: **LCS** TestCode: **6020A_W** Units: **mg/L** Prep Date: RunNo: **16324**
Client ID: **ZZZZZ** Batch ID: **R16324** TestNo: **SW6020** Analysis Date: **4/6/2007** SeqNo: **143625**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Antimony | 0.01764 | 0.00100 | 0.02 | 0 | 88.2 | 80 | 120 | | | | |
| Arsenic | 0.01814 | 0.00100 | 0.02 | 0 | 90.7 | 80 | 120 | | | | |
| Thallium | 0.01758 | 0.00100 | 0.02 | 0 | 87.9 | 80 | 120 | | | | |

**Qualifiers:**
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

**CLIENT:** CEI
**Work Order:** 0704035
**Project:** 587-2

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 8082_w**

Sample ID: **MB-6915** SampType: **MBLK** TestCode: **8082_w** Units: **µg/L** Prep Date: **4/5/2007** RunNo: **16313**
Client ID: **ZZZZZ** Batch ID: **6915** TestNo: **SW8082** **(SW3510B)** Analysis Date: **4/5/2007** SeqNo: **143631**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Aroclor 1221 | ND | 0.250 | | | | | | | | | |
| Aroclor 1232 | ND | 0.250 | | | | | | | | | |
| Aroclor 1248 | ND | 0.250 | | | | | | | | | |
| Aroclor 1254 | ND | 0.250 | | | | | | | | | |
| Aroclor 1260 | ND | 0.250 | | | | | | | | | |
| Aroclor 1262 | ND | 0.250 | | | | | | | | | |
| Aroclor 1268 | ND | 0.250 | | | | | | | | | |
| Surr: Decachlorobiphenyl Sig 1 | 264.0 | 0 | 50 | 0 | 528 | 30 | 150 | | | | S |
| Surr: Decachlorobiphenyl Sig 2 | 49.00 | 0 | 50 | 0 | 98.0 | 30 | 150 | | | | |
| Surr: Tetrachloro-m-Xylene Sig 1 | 35.00 | 0 | 50 | 0 | 70.0 | 30 | 150 | | | | |
| Surr: Tetrachloro-m-Xylene Sig 2 | 44.00 | 0 | 50 | 0 | 88.0 | 30 | 150 | | | | |

Sample ID: **LCS-6915** SampType: **LCS** TestCode: **8082_w** Units: **µg/L** Prep Date: **4/5/2007** RunNo: **16313**
Client ID: **ZZZZZ** Batch ID: **6915** TestNo: **SW8082** **(SW3510B)** Analysis Date: **4/5/2007** SeqNo: **143632**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Aroclor 1016/1242 | 60.50 | 0.250 | 50 | 0 | 121 | 40 | 140 | | | | |
| Aroclor 1260 | 52.50 | 0.250 | 50 | 0 | 105 | 40 | 140 | | | | |
| Surr: Decachlorobiphenyl Sig 1 | 91.00 | 0 | 50 | 0 | 182 | 30 | 150 | | | | S |
| Surr: Decachlorobiphenyl Sig 2 | 48.50 | 0 | 50 | 0 | 97.0 | 30 | 150 | | | | |
| Surr: Tetrachloro-m-Xylene Sig 1 | 52.50 | 0 | 50 | 0 | 105 | 30 | 150 | | | | |
| Surr: Tetrachloro-m-Xylene Sig 2 | 43.50 | 0 | 50 | 0 | 87.0 | 30 | 150 | | | | |

Sample ID: **LCS2-6915** SampType: **LCS** TestCode: **8082_w** Units: **µg/L** Prep Date: **4/5/2007** RunNo: **16313**
Client ID: **ZZZZZ** Batch ID: **6915** TestNo: **SW8082** **(SW3510B)** Analysis Date: **4/5/2007** SeqNo: **143634**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Aroclor 1016/1242 | 59.50 | 0.250 | 50 | 0 | 119 | 40 | 140 | | | | |
| Aroclor 1221 | ND | 0.250 | | | | | | | | | |
| Aroclor 1232 | ND | 0.250 | | | | | | | | | |

**Qualifiers:**
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

**CLIENT:** CEI
**Work Order:** 0704035
**Project:** 587-2

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 8082_w**

Sample ID: **LCS2-6915** SampType: **LCS** TestCode: **8082_w** Units: **µg/L** Prep Date: **4/5/2007** RunNo: **16313**
Client ID: **ZZZZZ** Batch ID: **6915** TestNo: **SW8082** **(SW3510B)** Analysis Date: **4/5/2007** SeqNo: **143634**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Aroclor 1248 | ND | 0.250 | | | | | | | | | |
| Aroclor 1254 | ND | 0.250 | | | | | | | | | |
| Aroclor 1260 | 53.00 | 0.250 | 50 | 0 | 106 | 40 | 140 | | | | |
| Aroclor 1262 | ND | 0.250 | | | | | | | | | |
| Aroclor 1268 | ND | 0.250 | | | | | | | | | |
| Surr: Decachlorobiphenyl Sig 1 | 77.50 | 0 | 50 | 0 | 155 | 30 | 150 | | | | S |
| Surr: Decachlorobiphenyl Sig 2 | 23.00 | 0 | 50 | 0 | 46.0 | 30 | 150 | | | | |
| Surr: Tetrachloro-m-Xylene Sig 1 | 22.50 | 0 | 50 | 0 | 45.0 | 30 | 150 | | | | |
| Surr: Tetrachloro-m-Xylene Sig 2 | 23.00 | 0 | 50 | 0 | 46.0 | 30 | 150 | | | | |

**Qualifiers:**
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

**CLIENT:** CEI
**Work Order:** 0704035
**Project:** 587-2

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 8260B_W**

Sample ID: **MB** SampType: **MBLK** TestCode: **8260B_W** Units: **µg/L** Prep Date: RunNo: **16311**
Client ID: **ZZZZZ** Batch ID: **R16311** TestNo: **SW8260B** Analysis Date: **4/5/2007** SeqNo: **143635**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ND | 5.00 | | | | | | | | | |
| 1,1,1-Trichloroethane | ND | 5.00 | | | | | | | | | |
| 1,1,2,2-Tetrachloroethane | ND | 2.00 | | | | | | | | | |
| 1,1,2-Trichloroethane | ND | 5.00 | | | | | | | | | |
| 1,1-Dichloroethane | ND | 5.00 | | | | | | | | | |
| 1,1-Dichloroethene | ND | 5.00 | | | | | | | | | |
| 1,1-Dichloropropene | ND | 5.00 | | | | | | | | | |
| 1,2,3-Trichlorobenzene | ND | 5.00 | | | | | | | | | |
| 1,2,3-Trichloropropane | ND | 5.00 | | | | | | | | | |
| 1,2,4-Trichlorobenzene | ND | 5.00 | | | | | | | | | |
| 1,2,4-Trimethylbenzene | ND | 5.00 | | | | | | | | | |
| 1,2-Dibromo-3-Chloropropane | ND | 5.00 | | | | | | | | | |
| 1,2-Dibromoethane | ND | 2.00 | | | | | | | | | |
| 1,2-Dichlorobenzene | ND | 5.00 | | | | | | | | | |
| 1,2-Dichloroethane | ND | 2.00 | | | | | | | | | |
| 1,2-Dichloropropane | ND | 2.00 | | | | | | | | | |
| 1,3,5-Trimethylbenzene | ND | 5.00 | | | | | | | | | |
| 1,3-Dichlorobenzene | ND | 5.00 | | | | | | | | | |
| 1,3-Dichloropropane | ND | 5.00 | | | | | | | | | |
| 1,4-Dichlorobenzene | ND | 5.00 | | | | | | | | | |
| 2,2-Dichloropropane | ND | 5.00 | | | | | | | | | |
| 2-Butanone | ND | 10.0 | | | | | | | | | |
| 2-Chloroethyl Vinyl Ether | ND | 5.00 | | | | | | | | | |
| 2-Chlorotoluene | ND | 5.00 | | | | | | | | | |
| 2-Hexanone | ND | 10.0 | | | | | | | | | |
| 4-Chlorotoluene | ND | 5.00 | | | | | | | | | |
| 4-Isopropyltoluene | ND | 5.00 | | | | | | | | | |
| 4-Methyl-2-Pentanone | ND | 5.00 | | | | | | | | | |
| Acetone | ND | 50.0 | | | | | | | | | |
| Acrolein | ND | 50.0 | | | | | | | | | |
| Acrylonitrile | ND | 50.0 | | | | | | | | | |

**Qualifiers:**
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

**CLIENT:** CEI
**Work Order:** 0704035
**Project:** 587-2

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 8260B_W**

| Sample ID: **MB** | SampType: **MBLK** | TestCode: **8260B_W** | Units: **µg/L** | Prep Date: | RunNo: **16311** |
|---|---|---|---|---|---|
| Client ID: **ZZZZZ** | Batch ID: **R16311** | TestNo: **SW8260B** | | Analysis Date: **4/5/2007** | SeqNo: **143635** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | ND | 5.00 | | | | | | | | | |
| Bromobenzene | ND | 5.00 | | | | | | | | | |
| Bromochloromethane | ND | 2.00 | | | | | | | | | |
| Bromodichloromethane | ND | 2.00 | | | | | | | | | |
| Bromoform | ND | 2.00 | | | | | | | | | |
| Bromomethane | ND | 2.00 | | | | | | | | | |
| Carbon Disulfide | ND | 5.00 | | | | | | | | | |
| Carbon Tetrachloride | ND | 2.00 | | | | | | | | | |
| Chlorobenzene | ND | 5.00 | | | | | | | | | |
| Chloroethane | ND | 5.00 | | | | | | | | | |
| Chloroform | ND | 5.00 | | | | | | | | | |
| Chloromethane | ND | 5.00 | | | | | | | | | |
| cis-1,2-Dichloroethene | ND | 5.00 | | | | | | | | | |
| cis-1,3-Dichloropropene | ND | 0.500 | | | | | | | | | |
| Dibromochloromethane | ND | 2.00 | | | | | | | | | |
| Dibromomethane | ND | 5.00 | | | | | | | | | |
| Dichlorodifluoromethane | ND | 5.00 | | | | | | | | | |
| Ethylbenzene | ND | 5.00 | | | | | | | | | |
| Hexachlorobutadiene | ND | 0.500 | | | | | | | | | |
| Isopropylbenzene | ND | 5.00 | | | | | | | | | |
| Methyl Tert-Butyl Ether | ND | 5.00 | | | | | | | | | |
| Methylene Chloride | ND | 5.00 | | | | | | | | | |
| Naphthalene | ND | 20.0 | | | | | | | | | |
| n-Butylbenzene | ND | 5.00 | | | | | | | | | |
| n-Propylbenzene | ND | 5.00 | | | | | | | | | |
| sec-Butylbenzene | ND | 5.00 | | | | | | | | | |
| Styrene | ND | 5.00 | | | | | | | | | |
| tert-Butylbenzene | ND | 5.00 | | | | | | | | | |
| Tetrachloroethene | ND | 5.00 | | | | | | | | | |
| Toluene | ND | 5.00 | | | | | | | | | |
| trans-1,2-Dichloroethene | ND | 5.00 | | | | | | | | | |

**Qualifiers:**
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

**CLIENT:** CEI
**Work Order:** 0704035
**Project:** 587-2

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 8260B_W**

Sample ID: **MB** SampType: **MBLK** TestCode: **8260B_W** Units: **µg/L** Prep Date: RunNo: **16311**
Client ID: **ZZZZZ** Batch ID: **R16311** TestNo: **SW8260B** Analysis Date: **4/5/2007** SeqNo: **143635**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| trans-1,3-Dichloropropene | ND | 0.500 | | | | | | | | | |
| Trichloroethene | ND | 5.00 | | | | | | | | | |
| Trichlorofluoromethane | ND | 5.00 | | | | | | | | | |
| Vinyl Chloride | ND | 2.00 | | | | | | | | | |
| Xylenes, Total | ND | 5.00 | | | | | | | | | |
| Surr: 1,2-Dichloroethane-d4 | 31.69 | 0 | 30 | 0 | 106 | 70 | 130 | | | | |
| Surr: 4-Bromofluorobenzene | 28.88 | 0 | 30 | 0 | 96.3 | 70 | 130 | | | | |
| Surr: Dibromofluoromethane | 32.49 | 0 | 30 | 0 | 108 | 70 | 130 | | | | |
| Surr: Toluene-d8 | 29.16 | 0 | 30 | 0 | 97.2 | 70 | 130 | | | | |

Sample ID: **LCS** SampType: **LCS** TestCode: **8260B_W** Units: **µg/L** Prep Date: RunNo: **16311**
Client ID: **ZZZZZ** Batch ID: **R16311** TestNo: **SW8260B** Analysis Date: **4/5/2007** SeqNo: **143499**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | 54.27 | 5.00 | 50 | 0 | 109 | 70 | 130 | | | | |
| 1,1,1-Trichloroethane | 55.27 | 5.00 | 50 | 0 | 111 | 70 | 130 | | | | |
| 1,1,2,2-Tetrachloroethane | 48.25 | 2.00 | 50 | 0 | 96.5 | 70 | 130 | | | | |
| 1,1,2-Trichloroethane | 50.78 | 5.00 | 50 | 0 | 102 | 70 | 130 | | | | |
| 1,1-Dichloroethane | 50.33 | 5.00 | 50 | 0 | 101 | 70 | 130 | | | | |
| 1,1-Dichloroethene | 51.34 | 5.00 | 50 | 0 | 103 | 70 | 130 | | | | |
| 1,1-Dichloropropene | 51.23 | 5.00 | 50 | 0 | 102 | 70 | 130 | | | | |
| 1,2,3-Trichlorobenzene | 46.90 | 5.00 | 50 | 0 | 93.8 | 70 | 130 | | | | |
| 1,2,3-Trichloropropane | 48.13 | 5.00 | 50 | 0 | 96.3 | 70 | 130 | | | | |
| 1,2,4-Trichlorobenzene | 50.43 | 5.00 | 50 | 0 | 101 | 70 | 130 | | | | |
| 1,2,4-Trimethylbenzene | 55.05 | 5.00 | 50 | 0 | 110 | 70 | 130 | | | | |
| 1,2-Dibromo-3-Chloropropane | 40.20 | 5.00 | 50 | 0 | 80.4 | 70 | 130 | | | | |
| 1,2-Dibromoethane | 50.37 | 2.00 | 50 | 0 | 101 | 70 | 130 | | | | |
| 1,2-Dichlorobenzene | 50.01 | 5.00 | 50 | 0 | 100 | 70 | 130 | | | | |
| 1,2-Dichloroethane | 54.20 | 2.00 | 50 | 0 | 108 | 70 | 130 | | | | |
| 1,2-Dichloropropane | 45.69 | 2.00 | 50 | 0 | 91.4 | 70 | 130 | | | | |

**Qualifiers:**
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

**CLIENT:** CEI
**Work Order:** 0704035
**Project:** 587-2

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 8260B_W**

Sample ID: **LCS** SampType: **LCS** TestCode: **8260B_W** Units: **µg/L** Prep Date: RunNo: **16311**
Client ID: **ZZZZZ** Batch ID: **R16311** TestNo: **SW8260B** Analysis Date: **4/5/2007** SeqNo: **143499**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,3,5-Trimethylbenzene | 54.41 | 5.00 | 50 | 0 | 109 | 70 | 130 | | | | |
| 1,3-Dichlorobenzene | 52.55 | 5.00 | 50 | 0 | 105 | 70 | 130 | | | | |
| 1,3-Dichloropropane | 49.68 | 5.00 | 50 | 0 | 99.4 | 70 | 130 | | | | |
| 1,4-Dichlorobenzene | 52.09 | 5.00 | 50 | 0 | 104 | 70 | 130 | | | | |
| 2,2-Dichloropropane | 62.06 | 5.00 | 50 | 0 | 124 | 70 | 130 | | | | |
| 2-Butanone | 40.41 | 10.0 | 50 | 0 | 80.8 | 70 | 130 | | | | |
| 2-Chloroethyl Vinyl Ether | 45.44 | 5.00 | 50 | 0 | 90.9 | 70 | 130 | | | | |
| 2-Chlorotoluene | 57.14 | 5.00 | 50 | 0 | 114 | 70 | 130 | | | | |
| 2-Hexanone | 39.99 | 10.0 | 50 | 0 | 80.0 | 70 | 130 | | | | |
| 4-Chlorotoluene | 50.46 | 5.00 | 50 | 0 | 101 | 70 | 130 | | | | |
| 4-Isopropyltoluene | 50.86 | 5.00 | | | | | | | | | |
| 4-Methyl-2-Pentanone | 39.49 | 5.00 | 50 | 0 | 79.0 | 70 | 130 | | | | |
| Acetone | ND | 50.0 | 50 | 0 | 93.2 | 70 | 130 | | | | |
| Acrolein | 289.6 | 50.0 | 100 | 0 | 290 | 70 | 130 | | | | SE |
| Acrylonitrile | 90.61 | 50.0 | 100 | 0 | 90.6 | 70 | 130 | | | | |
| Benzene | 49.13 | 5.00 | 50 | 0 | 98.3 | 70 | 130 | | | | |
| Bromobenzene | 54.99 | 5.00 | 50 | 0 | 110 | 70 | 130 | | | | |
| Bromochloromethane | 49.78 | 2.00 | 50 | 0 | 99.6 | 70 | 130 | | | | |
| Bromodichloromethane | 51.98 | 2.00 | 50 | 0 | 104 | 70 | 130 | | | | |
| Bromoform | 50.24 | 2.00 | 50 | 0 | 100 | 70 | 130 | | | | |
| Bromomethane | 63.90 | 2.00 | 50 | 0 | 128 | 70 | 130 | | | | |
| Carbon Disulfide | 53.61 | 5.00 | 50 | 0 | 107 | 70 | 130 | | | | |
| Carbon Tetrachloride | 57.56 | 2.00 | 50 | 0 | 115 | 70 | 130 | | | | |
| Chlorobenzene | 51.87 | 5.00 | 50 | 0 | 104 | 70 | 130 | | | | |
| Chloroethane | 59.70 | 5.00 | 50 | 0 | 119 | 70 | 130 | | | | |
| Chloroform | 57.63 | 5.00 | 50 | 0 | 115 | 70 | 130 | | | | |
| Chloromethane | 44.67 | 5.00 | 50 | 0 | 89.3 | 70 | 130 | | | | |
| cis-1,2-Dichloroethene | 51.68 | 5.00 | 50 | 0 | 103 | 70 | 130 | | | | |
| cis-1,3-Dichloropropene | 47.95 | 0.500 | 50 | 0 | 95.9 | 70 | 130 | | | | |
| Dibromochloromethane | 51.70 | 2.00 | 50 | 0 | 103 | 70 | 130 | | | | |
| Dibromomethane | 49.37 | 5.00 | 50 | 0 | 98.7 | 70 | 130 | | | | |

**Qualifiers:**
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

**CLIENT:** CEI
**Work Order:** 0704035
**Project:** 587-2

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 8260B_W**

Sample ID: **LCS** SampType: **LCS** TestCode: **8260B_W** Units: **µg/L** Prep Date: RunNo: **16311**
Client ID: **ZZZZZ** Batch ID: **R16311** TestNo: **SW8260B** Analysis Date: **4/5/2007** SeqNo: **143499**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | 53.68 | 5.00 | 50 | 0 | 107 | 70 | 130 | | | | |
| Ethylbenzene | 52.21 | 5.00 | 50 | 0 | 104 | 70 | 130 | | | | |
| Hexachlorobutadiene | 47.43 | 0.500 | 50 | 0 | 94.9 | 70 | 130 | | | | |
| Isopropylbenzene | 53.64 | 5.00 | 50 | 0 | 107 | 70 | 130 | | | | |
| Methyl Tert-Butyl Ether | 47.74 | 5.00 | 50 | 0 | 95.5 | 70 | 130 | | | | |
| Methylene Chloride | 52.91 | 5.00 | 50 | 0 | 106 | 70 | 130 | | | | |
| Naphthalene | 44.49 | 20.0 | 50 | 0 | 89.0 | 70 | 130 | | | | |
| n-Butylbenzene | 48.04 | 5.00 | 50 | 0 | 96.1 | 70 | 130 | | | | |
| n-Propylbenzene | 53.28 | 5.00 | 50 | 0 | 107 | 70 | 130 | | | | |
| sec-Butylbenzene | 50.09 | 5.00 | 50 | 0 | 100 | 70 | 130 | | | | |
| Styrene | 52.87 | 5.00 | 50 | 0 | 106 | 70 | 130 | | | | |
| tert-Butylbenzene | 55.37 | 5.00 | 50 | 0 | 111 | 70 | 130 | | | | |
| Tetrachloroethene | 57.73 | 5.00 | 50 | 0 | 115 | 70 | 130 | | | | |
| Toluene | 51.73 | 5.00 | 50 | 0 | 103 | 70 | 130 | | | | |
| trans-1,2-Dichloroethene | 52.52 | 5.00 | 50 | 0 | 105 | 70 | 130 | | | | |
| trans-1,3-Dichloropropene | 49.12 | 0.500 | 50 | 0 | 98.2 | 70 | 130 | | | | |
| Trichloroethene | 53.83 | 5.00 | 50 | 0 | 108 | 70 | 130 | | | | |
| Trichlorofluoromethane | 63.80 | 5.00 | 50 | 0 | 128 | 70 | 130 | | | | |
| Vinyl Chloride | 44.06 | 2.00 | 50 | 0 | 88.1 | 70 | 130 | | | | |
| Xylenes, Total | 160.9 | 5.00 | 150 | 0 | 107 | 70 | 130 | | | | |
| Surr: 1,2-Dichloroethane-d4 | 30.75 | 0 | 30 | 0 | 103 | 70 | 130 | | | | |
| Surr: 4-Bromofluorobenzene | 29.44 | 0 | 30 | 0 | 98.1 | 70 | 130 | | | | |
| Surr: Dibromofluoromethane | 31.21 | 0 | 30 | 0 | 104 | 70 | 130 | | | | |
| Surr: Toluene-d8 | 29.84 | 0 | 30 | 0 | 99.5 | 70 | 130 | | | | |

**Qualifiers:**
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

**CLIENT:** CEI
**Work Order:** 0704035
**Project:** 587-2

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 8270_W_PAH**

Sample ID: **MB-6891** SampType: **MBLK** TestCode: **8270_W_PAH** Units: **µg/L** Prep Date: **4/3/2007** RunNo: **16256**
Client ID: **ZZZZZ** Batch ID: **6891** TestNo: **SW8270C** **(SW3510)** Analysis Date: **4/3/2007** SeqNo: **143138**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2-Methylnaphthalene | ND | 1.00 | | | | | | | | | |
| Acenaphthene | ND | 1.00 | | | | | | | | | |
| Acenaphthylene | ND | 1.00 | | | | | | | | | |
| Anthracene | ND | 1.00 | | | | | | | | | |
| Benz(a)Anthracene | ND | 0.100 | | | | | | | | | |
| Benzo(a)Pyrene | ND | 0.100 | | | | | | | | | |
| Benzo(b)Fluoranthene | ND | 1.00 | | | | | | | | | |
| Benzo(g,h,i)Perylene | ND | 1.00 | | | | | | | | | |
| Benzo(k)Fluoranthene | ND | 1.00 | | | | | | | | | |
| Chrysene | ND | 1.00 | | | | | | | | | |
| Dibenz(a,h)Anthracene | ND | 0.100 | | | | | | | | | |
| Fluoranthene | ND | 1.00 | | | | | | | | | |
| Fluorene | ND | 1.00 | | | | | | | | | |
| Indeno(1,2,3-cd)Pyrene | ND | 0.100 | | | | | | | | | |
| Naphthalene | ND | 1.00 | | | | | | | | | |
| Phenanthrene | ND | 1.00 | | | | | | | | | |
| Pyrene | ND | 1.00 | | | | | | | | | |
| Surr: 2-Fluorobiphenyl | 27.34 | 0 | 50 | 0 | 54.7 | 30 | 130 | | | | |
| Surr: Nitrobenzene-d5 | 26.01 | 0 | 50 | 0 | 52.0 | 30 | 130 | | | | |
| Surr: Terphenyl-d14 | 39.63 | 0 | 50 | 0 | 79.3 | 30 | 130 | | | | |

Sample ID: **LCS-6891** SampType: **LCS** TestCode: **8270_W_PAH** Units: **µg/L** Prep Date: **4/3/2007** RunNo: **16256**
Client ID: **ZZZZZ** Batch ID: **6891** TestNo: **SW8270C** **(SW3510)** Analysis Date: **4/3/2007** SeqNo: **143139**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2-Methylnaphthalene | 12.95 | 1.00 | 25 | 0 | 51.8 | 40 | 140 | | | | |
| Acenaphthene | 15.86 | 1.00 | 25 | 0 | 63.4 | 40 | 140 | | | | |
| Acenaphthylene | 17.48 | 1.00 | 25 | 0 | 69.9 | 40 | 140 | | | | |
| Anthracene | 19.22 | 1.00 | 25 | 0 | 76.9 | 40 | 140 | | | | |
| Benz(a)Anthracene | 18.08 | 0.100 | 25 | 0 | 72.3 | 40 | 140 | | | | |

**Qualifiers:**
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

**CLIENT:** CEI
**Work Order:** 0704035
**Project:** 587-2

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 8270_W_PAH**

Sample ID: **LCS-6891** SampType: **LCS** TestCode: **8270_W_PAH** Units: **µg/L** Prep Date: **4/3/2007** RunNo: **16256**
Client ID: **ZZZZZ** Batch ID: **6891** TestNo: **SW8270C** **(SW3510)** Analysis Date: **4/3/2007** SeqNo: **143139**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Benzo(a)Pyrene | 17.38 | 0.100 | 25 | 0 | 69.5 | 40 | 140 | | | | |
| Benzo(b)Fluoranthene | 18.74 | 1.00 | 25 | 0 | 75.0 | 40 | 140 | | | | |
| Benzo(g,h,i)Perylene | 14.22 | 1.00 | 25 | 0 | 56.9 | 40 | 140 | | | | |
| Benzo(k)Fluoranthene | 21.14 | 1.00 | 25 | 0 | 84.5 | 40 | 140 | | | | |
| Chrysene | 18.65 | 1.00 | 25 | 0 | 74.6 | 40 | 140 | | | | |
| Dibenz(a,h)Anthracene | 15.46 | 0.100 | 25 | 0 | 61.8 | 40 | 140 | | | | |
| Fluoranthene | 16.01 | 1.00 | 25 | 0 | 64.0 | 40 | 140 | | | | |
| Fluorene | 14.53 | 1.00 | 25 | 0 | 58.1 | 40 | 140 | | | | |
| Indeno(1,2,3-cd)Pyrene | 15.30 | 0.100 | 25 | 0 | 61.2 | 40 | 140 | | | | |
| Naphthalene | 14.76 | 1.00 | 25 | 0 | 59.0 | 40 | 140 | | | | |
| Phenanthrene | 17.53 | 1.00 | 25 | 0 | 70.1 | 40 | 140 | | | | |
| Pyrene | 24.44 | 1.00 | 25 | 0 | 97.8 | 40 | 140 | | | | |
| Surr: 2-Fluorobiphenyl | 31.03 | 0 | 50 | 0 | 62.1 | 30 | 130 | | | | |
| Surr: Nitrobenzene-d5 | 32.87 | 0 | 50 | 0 | 65.7 | 30 | 130 | | | | |
| Surr: Terphenyl-d14 | 39.85 | 0 | 50 | 0 | 79.7 | 30 | 130 | | | | |

**Qualifiers:**
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

**CLIENT:** CEI
**Work Order:** 0704035
**Project:** 587-2

# ANALYTICAL QC SUMMARY REPORT

**TestCode:** CN_335.2_W

Sample ID: **MB-R16269** SampType: **MBLK** TestCode: **CN_335.2_W** Units: **mg/L** Prep Date: RunNo: **16269**
Client ID: **ZZZZZ** Batch ID: **R16269** TestNo: **E335.2** Analysis Date: **4/4/2007** SeqNo: **143242**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Cyanide, Total | ND | 0.0160 | | | | | | | | | |

Sample ID: **LCS-R16269** SampType: **LCS** TestCode: **CN_335.2_W** Units: **mg/L** Prep Date: RunNo: **16269**
Client ID: **ZZZZZ** Batch ID: **R16269** TestNo: **E335.2** Analysis Date: **4/4/2007** SeqNo: **143243**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Cyanide, Total | 0.1645 | 0.0160 | 0.184 | 0 | 89.4 | 80 | 120 | | | | |

**Qualifiers:**
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

**CLIENT:** CEI
**Work Order:** 0704035
**Project:** 587-2

# ANALYTICAL QC SUMMARY REPORT

**TestCode: Cr6_WW**

Sample ID: **MB-R16251** SampType: **MBLK** TestCode: **Cr6_WW** Units: **mg/L** Prep Date: RunNo: **16251**
Client ID: **ZZZZZ** Batch ID: **R16251** TestNo: **M3500-Cr D** Analysis Date: **4/3/2007** SeqNo: **143030**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Chromium, Hexavalent | ND | 0.0500 | | | | | | | | | |

Sample ID: **LCS-R16251** SampType: **LCS** TestCode: **Cr6_WW** Units: **mg/L** Prep Date: RunNo: **16251**
Client ID: **ZZZZZ** Batch ID: **R16251** TestNo: **M3500-Cr D** Analysis Date: **4/3/2007** SeqNo: **143031**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Chromium, Hexavalent | 0.5120 | 0.0500 | 0.5 | 0 | 102 | 85 | 115 | | | | |

**Qualifiers:**
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

**CLIENT:** CEI
**Work Order:** 0704035
**Project:** 587-2

# ANALYTICAL QC SUMMARY REPORT

**TestCode: hg-245.1_w**

| Sample ID: **MB-6913** | SampType: **MBLK** | TestCode: **hg-245.1_w** | Units: **mg/L** | Prep Date: **4/4/2007** | RunNo: **16266** |
|---|---|---|---|---|---|
| Client ID: **ZZZZZ** | Batch ID: **6913** | TestNo: **E245.1** | **(SW7470A/E2** | Analysis Date: **4/4/2007** | SeqNo: **143207** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Mercury | ND | 0.000500 | | | | | | | | | |

| Sample ID: **LCS-6913** | SampType: **LCS** | TestCode: **hg-245.1_w** | Units: **mg/L** | Prep Date: **4/4/2007** | RunNo: **16266** |
|---|---|---|---|---|---|
| Client ID: **ZZZZZ** | Batch ID: **6913** | TestNo: **E245.1** | **(SW7470A/E2** | Analysis Date: **4/4/2007** | SeqNo: **143208** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Mercury | 0.005050 | 0.000500 | 0.005 | 0.00002 | 101 | 80 | 120 | | | | |

**Qualifiers:**

| | | | | | |
|---|---|---|---|---|---|
| E | Value above quantitation range | H | Holding times for preparation or analysis exceeded | J | Analyte detected below quantitation limits |
| ND | Not Detected at the Reporting Limit | R | RPD outside accepted recovery limits | S | Spike Recovery outside accepted recovery limits |

**CLIENT:** CEI
**Work Order:** 0704035
**Project:** 587-2

# ANALYTICAL QC SUMMARY REPORT

**TestCode: TPH_W**

Sample ID: **MB-6896** SampType: **MBLK** TestCode: **TPH_W** Units: **mg/L** Prep Date: **4/3/2007** RunNo: **16261**
Client ID: **ZZZZZ** Batch ID: **6896** TestNo: **8100M** **(8100M)** Analysis Date: **4/3/2007** SeqNo: **143151**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Total Petroleum Hydrocarbons | ND | 0.200 | | | | | | | | | |
| Surr: o-Terphenyl | 95.00 | 0 | 100 | 0 | 95.0 | 40 | 140 | | | | |

Sample ID: **LCS-6896** SampType: **LCS** TestCode: **TPH_W** Units: **mg/L** Prep Date: **4/3/2007** RunNo: **16261**
Client ID: **ZZZZZ** Batch ID: **6896** TestNo: **8100M** **(8100M)** Analysis Date: **4/3/2007** SeqNo: **143152**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Total Petroleum Hydrocarbons | 1.414 | 0.200 | 2 | 0 | 70.7 | 40 | 140 | | | | |
| Surr: o-Terphenyl | 75.00 | 0 | 100 | 0 | 75.0 | 40 | 140 | | | | |

**Qualifiers:**
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

**CLIENT:** CEI
**Work Order:** 0704035
**Project:** 587-2

# ANALYTICAL QC SUMMARY REPORT

**TestCode: TRC_W**

Sample ID: **MB-R16246** SampType: **MBLK** TestCode: **TRC_W** Units: **mg/L** Prep Date: RunNo: **16246**
Client ID: **ZZZZZ** Batch ID: **R16246** TestNo: **Hach 8167** Analysis Date: **4/3/2007** SeqNo: **142988**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Total Residual Chlorine | ND | 0.162 | | | | | | | | | |

Sample ID: **LCS-R16246** SampType: **LCS** TestCode: **TRC_W** Units: **mg/L** Prep Date: RunNo: **16246**
Client ID: **ZZZZZ** Batch ID: **R16246** TestNo: **Hach 8167** Analysis Date: **4/3/2007** SeqNo: **142989**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Total Residual Chlorine | 1.090 | 0.162 | 1 | 0 | 109 | 85 | 115 | | | | |

**Qualifiers:**
- E Value above quantitation range
- ND Not Detected at the Reporting Limit
- H Holding times for preparation or analysis exceeded
- R RPD outside accepted recovery limits
- J Analyte detected below quantitation limits
- S Spike Recovery outside accepted recovery limits

**CLIENT:** CEI
**Work Order:** 0704035
**Project:** 587-2

# ANALYTICAL QC SUMMARY REPORT

**TestCode: TSS**

Sample ID: **MB-R16264** SampType: **MBLK** TestCode: **TSS** Units: **mg/L** Prep Date: RunNo: **16264**
Client ID: **ZZZZZ** Batch ID: **R16264** TestNo: **E160.2** Analysis Date: **4/3/2007** SeqNo: **143192**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Total Suspended Solids | ND | 4.00 | | | | | | | | | |

Sample ID: **LCS-R16264** SampType: **LCS** TestCode: **TSS** Units: **mg/L** Prep Date: RunNo: **16264**
Client ID: **ZZZZZ** Batch ID: **R16264** TestNo: **E160.2** Analysis Date: **4/3/2007** SeqNo: **143193**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Total Suspended Solids | 66.00 | 4.00 | 74.3 | 0 | 88.8 | 80 | 120 | | | | |

**Qualifiers:**

| | | | | | |
|---|---|---|---|---|---|
| E | Value above quantitation range | H | Holding times for preparation or analysis exceeded | J | Analyte detected below quantitation limits |
| ND | Not Detected at the Reporting Limit | R | RPD outside accepted recovery limits | S | Spike Recovery outside accepted recovery limits |

15

# CHAIN OF CUSTODY

**GeoLabs CHAIN NUMBER:** 0704035 Page 1 of 2

CHECKED ITEMS MUST BE FILLED IN

24/48 HOUR RUSHES ONLY WITH APPROVAL OF D. KAHLER OR LAB DIRECTOR


**GeoLabs, Inc.**
*Environmental Laboratories*
45 Johnson Lane
Braintree, MA 02184
Office: 781-848-7844
Fax: 781-848-7811


**Turnaround Time**

RUSH: 24hrs ☐ 48hrs ☐ 72hrs ☐

STANDARD: 5-7 Days ☒

SPECIAL INSTRUCTIONS

Note: JOBS WITH INCOMPLETELY FILLED OUT CHAINS WILL NOT BE RUN. CHAIN WILL BE RETURNED TO CLIENT FOR COMPLETION

TYPE OF CLIENT: BUS ___ LAB ___ HOMEOWNER ___

NOTE: HOMEOWNERS, LAW FIRMS MUST PAY WHEN DROPPING OFF SAMPLES

Client: X CEE
Address: X 64 Dilla St. NO P.O. BOXES
Milford, MA 01757
Phone: X 508-482-5557
Fax:
Contact: X Jason Guertin
E-mail: jguertin@ceiengineers.com

Project Number: X 587-2
Project Location: X 1105 East St.
Purchase Order #:
Collected By: X JG

CHANGES REQUESTED? Y N
BY DATE
Received on ice?

ANALYSES REQUESTED

| SAMPLE ID | COLLECTION DATE | COLLECTION TIME | SAMPLED BY | SAMPLE LOCATION | CONTAINER TYPE | CONTAINER QUANT | MATRIX | COMP | GRAB | PRES | GEOLABS SAMPLE NUMBER | PCBs 7 | 17 Metals 8 | VOCs 8260 | Cyanide 13 | TPH 8 | Total Residual Chlorine (TRC) 7 | TSS 7 | 8270 (PAHs) 7 | TEMPERATURE | LAB pH |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SH-3 | 4-2-07 | 4:20 | JG | 1105 East St. | A/P/V | 3/3/2 | GW | | X | 2/5/1 | 4035-001 | X | X | X | X | X | X | X | X | 4° | |

Verbal results given to by (date/initial)

| MATRIX CODES: | CONTAINER CODES: | PRESERVATIVE CODES: |
|---|---|---|
| GW = Ground Water | A = Amber B = Bag | 1 = HCl 5 = NaOH |
| WW = Wastewater | G = Glass P = Plastic | 2 = $HNO_3$ 6 = MeOH |
| DW = Drinking Water | S = Summa Canister | 3 = $H_2SO_4$ 7 = ICE |
| SL = Sludge | O = Other V = VOA | 4 = $Na_2S_2O_3$ |
| S = Soil A = Air | | |
| O = Oil OT = Other | | |

Terms: Payment due within 30 days unless other arrangements are made.
Past due balances subject to interest and collection costs.

| Relinquished By: | Date/Time | Received By: | Date/Time: |
|---|---|---|---|
| Jason Guertin | 4-3-07 | [illegible] | 4/3/07 10:55 |
| PRINT: Jason Guertin | | | |
| Relinquished By: | | Received By: | |
| Relinquished By: [illegible] | 4/3/07 11:50 | Received By GeoLabs: [illegible] | 4/3/07 11:50 |

Certified: MA, NH, RI, CT, NY, NJ, PA

# CHAIN OF CUSTODY

**GeoLabs CHAIN NUMBER:** 0704035

CHECKED ITEMS MUST BE FILLED IN

24/48 HOUR RUSHES ONLY WITH APPROVAL OF D. KAHLER OR LAB DIRECTOR


**GeoLabs, Inc.**
*Environmental Laboratories*
45 Johnson Lane
Braintree, MA 02184
Office: 781-848-7844
Fax: 781-848-7811


**Turnaround Time**

*RUSH:* 24hrs ☐ 48hrs ☐ 72hrs ☐

*STANDARD:* 5-7 Days ☒



SPECIAL INSTRUCTIONS

Note: JOBS WITH INCOMPLETELY FILLED OUT CHAINS WILL NOT BE RUN. CHAIN WILL BE RETURNED TO CLIENT FOR COMPLETION

TYPE OF CLIENT: BUS ___ LAB ___ HOMEOWNER ___

NOTE: HOMEOWNERS, LAW FIRMS MUST PAY WHEN DROPPING OFF SAMPLES

Client: X CEI
Address: X 64 Dilla St. NO P.O. BOXES
Milford, MA
Phone: X 508-482-5557
Fax:
Contact: X Jason Guertin
E-mail: jguertin@cejengineers.com

Project Number: X 5872
Project Location: X 1105 East St
Purchase Order #:
Collected By: X

CHANGES REQUESTED? Y N
BY DATE

Received on ice? ☐

ANALYSES REQUESTED

| SAMPLE ID | COLLECTION DATE | TIME | SAMPLED BY | SAMPLE LOCATION | CONTAINER TYPE | QUANT | MATRIX | COMP | GRAB | PRES | GEOLABS SAMPLE NUMBER | Chromium VI | | | | | | | | TEMPERATURE | LAB pH |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SH-3 | 4-2-07 | 4:20 | SG | 1105 East St. | P | 1 | GW | | X | 7 | 4035-001 | X | | | | | | | | 4° | |
| | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | |
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| | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | |

Verbal results given to by (date/initial)

*MATRIX CODES:*
GW = Ground Water
WW = Wastewater
DW = Drinking Water
SL = Sludge
S = Soil A = Air
O = Oil OT = Other

*CONTAINER CODES:*
A = Amber B = Bag
G = Glass P = Plastic
S = Summa Canister
O = Other V = VOA

*PRESERVATIVE CODES:*
1 = HCl 5 = NaOH
2 = $HNO_3$ 6 = MeOH
3 = $H_2SO_4$ 7 = ICE
4 = $Na_2S_2O_3$

Terms: Payment due within 30 days unless other arrangements are made.
Past due balances subject to interest and collection costs.

| Relinquished By: | Date/Time | Received By: | Date/Time: |
|---|---|---|---|
| Jason Guertin | 4-3-07 | [signature] | 4/3/07 10:55 |
| PRINT: Jason Guertin | | | |
| Relinquished By: | | Received By: | |
| Relinquished By: [signature] | 4/3/07 11:50 | Received By GeoLabs: [signature] | 4/3/07 11:50 |

Certified: MA, NH, RI, CT, NY, NJ, PA

Thursday, April 26, 2007

GeoLabs, Inc.
45 Johnson Lane
Braintree MA 02184
Tele: 781 848 7844
Fax: 781 848 7811

Jason Guertin
CEI
64 Dilla Street
Milford, MA 01757

TEL: (508) 482-5557
FAX: (508) 482-5445

Project: 587-2
Location: Dedham, MA

Order No.: 0704263

Dear Jason Guertin:

GeoLabs, Inc. received 1 sample(s) on 4/20/2007 for the analyses presented in the following report.

There were no problems with the analyses and all data for associated QC met EPA or laboratory specifications.

If you have any questions regarding these tests results, please feel free to call.

Sincerely,

Jim Chen
Laboratory Director

**Certifications:**

**CT (PH-0148) - MA (M-MA015) - NH (2508) - NJ (MA009) - NY (11796) - RI (LA000252)**

# GeoLabs, Inc.

**Reported Date:** 26-Apr-07

| | | | |
|---|---|---|---|
| **CLIENT:** | CEI | **Client Sample ID:** | SH-3 |
| **Lab Order:** | 0704263 | **Collection Date:** | 4/18/2007 1:00:00 PM |
| **Project:** | 587-2 | **Date Received:** | 4/20/2007 |
| **Lab ID:** | 0704263-001 | **Matrix:** | GROUNDWATER |

| Analyses | Result | Det. Limit | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **SEMIVOLATILE ORGANICS - SW8270C** | | | | **(SW3510)** | | Analyst: **ZYZ** |
| 2,3,4,6-Tetrachlorophenol | ND | 0.521 | | µg/L | 1 | 4/25/2007 12:09:00 PM |
| 2,4,5-Trichlorophenol | ND | 0.521 | | µg/L | 1 | 4/25/2007 12:09:00 PM |
| 2,4,6-Trichlorophenol | ND | 0.521 | | µg/L | 1 | 4/25/2007 12:09:00 PM |
| 2,4-Dichlorophenol | ND | 0.521 | | µg/L | 1 | 4/25/2007 12:09:00 PM |
| 2,4-Dimethylphenol | ND | 0.521 | | µg/L | 1 | 4/25/2007 12:09:00 PM |
| 2,4-Dinitrophenol | ND | 2.60 | | µg/L | 1 | 4/25/2007 12:09:00 PM |
| 2-Chlorophenol | ND | 0.521 | | µg/L | 1 | 4/25/2007 12:09:00 PM |
| 2-Methylphenol | *0.846* | 0.521 | | µg/L | 1 | 4/25/2007 12:09:00 PM |
| 2-Nitrophenol | ND | 0.521 | | µg/L | 1 | 4/25/2007 12:09:00 PM |
| 3-Methylphenol/4-Methylphenol | *2.67* | 0.521 | | µg/L | 1 | 4/25/2007 12:09:00 PM |
| 4,6-Dinitro-2-Methylphenol | ND | 2.60 | | µg/L | 1 | 4/25/2007 12:09:00 PM |
| 4-Chloro-3-Methylphenol | ND | 0.521 | | µg/L | 1 | 4/25/2007 12:09:00 PM |
| 4-Nitrophenol | ND | 0.521 | | µg/L | 1 | 4/25/2007 12:09:00 PM |
| Pentachlorophenol | ND | 0.521 | | µg/L | 1 | 4/25/2007 12:09:00 PM |
| Phenol | ND | 0.521 | | µg/L | 1 | 4/25/2007 12:09:00 PM |
| Surr: 2,4,6-Tribromophenol | 49.9 | 15-110 | | %REC | 1 | 4/25/2007 12:09:00 PM |
| Surr: 2-Fluorophenol | 28.8 | 15-110 | | %REC | 1 | 4/25/2007 12:09:00 PM |
| Surr: Phenol-d6 | 28.0 | 15-110 | | %REC | 1 | 4/25/2007 12:09:00 PM |

**NOTES:**

TIC: 1,4-Dioxane is ND

| **Qualifiers:** | | | | |
|---|---|---|---|---|
| | B | Analyte detected in the associated Method Blank | E | Value above quantitation range |
| | H | Holding times for preparation or analysis exceeded | J | Analyte detected below quantitation limits |
| | ND | Not Detected at the Reporting Limit | S | Spike Recovery outside accepted recovery limits |

# CHAIN OF CUSTODY

**GeoLabs CHAIN NUMBER:** 0704263 (SB)

CHECKED ITEMS MUST BE FILLED IN

24/48 HOUR RUSHES ONLY WITH APPROVAL OF D. KAHLER OR LAB DIRECTOR


**GeoLabs, Inc.**
*Environmental Laboratories*
45 Johnson Lane
Braintree, MA 02184
Office: 781-848-7844
Fax: 781-848-7811


**Turnaround Time**

*RUSH:* 24-48hrs ☐ 72hrs ☐ *STANDARD:* 5 Days ☒

RUSH APPROVED BY: X

Page 1 of 1

SPECIAL INSTRUCTIONS

Note: JOBS WITH INCOMPLETELY FILLED OUT CHAINS WILL NOT BE RUN. CHAIN WILL BE RETURNED TO CLIENT FOR COMPLETION

TYPE OF CLIENT: BUS ___ LAB ___ HOMEOWNER ___

NOTE: HOMEOWNERS, LAW FIRMS MUST PAY WHEN DROPPING OFF SAMPLES

Client: X Compliance Eng. Inc.
Address: X 64 Pillar St NO P.O. BOXES Milford, MA
Phone: X 508 482-5557
Fax:
Contact: X Jason Guertin
E-mail: jguertin@ceieng.com

Project Number: X 587-2
Project Location: X Dedham, MA
Purchase Order #:
Collected By: X

CHANGES REQUESTED? Y N
BY DATE

Received on ice? ☐

ANALYSES REQUESTED

| SAMPLE ID | COLLECTION DATE | TIME | SAMPLED BY | SAMPLE LOCATION | CONTAINER TYPE | QUANT | MATRIX | COMP | GRAB | PRES | GEOLABS SAMPLE NUMBER | 1,4 Dioxane | Total Phenols | | | | | | | TEMPERATURE | LAB pH |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SH-3 | 4-18-07 | 11:00 | SG | Dedham | A | 3 | GW | | X | 7 | 4263-001 | X | X | | | | | | | 5° | 7 |
| | | | | | | | | | | | | | | | | | | | | | |
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Verbal results given to by (date/initial)

*MATRIX CODES:*
GW = Ground Water
WW = Wastewater
DW = Drinking Water
SL = Sludge
S = Soil A = Air
O = Oil OT = Other

*CONTAINER CODES:*
A = Amber B = Bag
G = Glass P = Plastic
S = Summa Canister
O = Other V = VOA

*PRESERVATIVE CODES:*
1 = HCl 5 = NaOH
2 = $HNO_3$ 6 = MeOH
3 = $H_2SO_4$ 7 = ICE
4 = $Na_2S_2O_3$

Terms: Payment due within 30 days unless other arrangements are made.
Past due balances subject to interest and collection costs.

*Relinquished By:* [signature] *Date/Time* 4-18-07
PRINT: Jason Guertin

*Received By:* [signature] *Date/Time:* 4/19/07 1:35

*Relinquished By:*

*Received By:*

*Relinquished By:* [signature] 4/20/07 9:45

*Received By GeoLabs:* 4/20/07 Danielle Rega 9:45a