GZA GeoEnvironmental, Inc.

CHARBERT, DIVISION OF N.F.A. BEDROCK SITE INVESTIGATION REPORT

Prepared For:
Rhode Island Department of Environmental Management
Providence, Rhode Island

Prepared By:
GZA GeoEnvironmental, Inc.
Providence, Rhode Island

December 2010
File No. 32795.35

GZA
GeoEnvironmental, Inc.

Engineers and Scientists

December 16, 2010
File 32795.35-C

Mr. Gary Jablonski
Principal Engineer
Rhode Island Department of Environmental Management
Office of Waste Management
235 Promenade Street
Providence, Rhode Island 02908-5767

Re: Charbert, Division of N.F.A.
Bedrock Site Investigation Report
Charbert Facility, Richmond, Rhode Island

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Dear Mr. Jablonski:

On behalf of our Client, Charbert, Division of NFA. Corp., GZA GeoEnvironmental, Inc. (GZA) is pleased to provide you with the attached *Bedrock Site Investigation Report* (SIR) for the Charbert Facility in Alton, Rhode Island. This SIR was prepared by GZA GeoEnvironmental, Inc. to address the applicable requirements of Section 7 of the Rhode Island Department of Environmental Management's (RIDEM's) Rules and Regulations for the Investigation and Remediation of Hazardous Material Releases (Remediation Regulations), dated February 2004, as well as requirements outlined in GZA's December 22, 2004 Phase II Subsurface Investigation Program Work Plan, and Section C(4)(u) of the July, 5 2005 Consent Agreement between NFA. Corp. and RIDEM.

We trust this report fulfills the regulatory requirements. We look forward to discussing our findings and the recommended remedial approach with the Department, and will contact you shortly to arrange a meeting. In the interim, please feel free to call Ed at (401) 427-2707 or Michael Healey at (781) 278-5886 if you have any questions or comments.

Very truly yours,

GZA GEOENVIRONMENTAL, INC.

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1.00 INTRODUCTION

This report presents the results of a Bedrock Site Investigation conducted by GZA GeoEnvironmental, Inc. (GZA) for Charbert, Division of NFA. Corp. (NFA), at property identified as the Charbert Manufacturing Facility (the "Site") located at 299 Church Street in Richmond, Rhode Island. A number of studies on the shallow and deep overburden aquifer and Site soils have been completed at the facility by GZA and others, and a significant body of environmental information exists for the Site and surrounding area. These prior studies culminated in the preparation of an overburden Site Investigation Report (SIR) for the facility which was submitted to the Rhode Island Department of Environmental Management (RIDEM) on June 2, 2005. In Section C(4)(u) of the July 5, 2005 Consent Agreement between RIDEM and Charbert, RIDEM indicated that it would not consider the SIR complete until Charbert conducted a study of the bedrock aquifer in the vicinity of the facility. This report fulfills that requirement.

In our December 22, 2004 *Phase II Subsurface Investigation Program Work Plan* GZA recommended postponing the bedrock aquifer evaluation until the extensive Phase II field work program was completed. Our rationale was that this would give us the opportunity to better define source areas both laterally and vertically, and expand our understanding of the bedrock topography, both of which are critical in planning an appropriate bedrock investigation program. RIDEM concurred with this recommendation. Charbert and RIDEM subsequently agreed that Charbert was to submit the *Bedrock Evaluation Work Plan* by March 15, 2006, and the Work Plan document was subsequently submitted to RIDEM on March 15, 2006 and approved. The work described in the March 15, 2006 Work Plan was completed by late 2007 and in a November 20, 2007 meeting with GZA and NFA., RIDEM requested that an additional round of investigations be conducted. In response, GZA submitted a *Phase II Bedrock Aquifer Evaluation Work Plan*, dated January 29, 2008, which was subsequently approved by RIDEM.

The investigation described in this report was conducted in general accordance with the March 15, 2006 and January 29, 2008 Work Plans. This report is subject to the Limitations presented in Section 10 and Appendix A.

1.10 PROJECT OBJECTIVES

The principle objectives of this *Bedrock Site Investigation Report (SIR)* was are to: 1) evaluate potential impacts from past and present activities associated with the textile manufacturing process on water quality within the bedrock aquifer; and 2) assess the potential risk to human health and the environment resulting from those impacts, if any, under current and future conditions.

Specific objectives of the investigation where to:

- Evaluate whether historic activities have impacted the bedrock aquifer;
- Delineate the extent of any observed contamination; and

- Evaluate whether conditions within the bedrock aquifer pose an on-Site or off-Site risk to human health or the environment.

2.00 BACKGROUND

The following sections briefly describe the physical characteristics of the Site and its current and past usage. For a more detailed evaluation, please refer to the June 2, 2005 SIR.

2.10 SITE DESCRIPTION

The ±113.9 acre Charbert property (consisting of Plat 11A, Lot 6) is located at the confluence of the Wood and Pawcatuck Rivers, at 299 Church Street, in the Town of Richmond, in an area referred to as the Village of Alton, Rhode Island (see Figure 1, *Exploration Location Plan*). The North American Datum (NAD) 1983 Rhode Island State Plane coordinates at the approximate center of the property are 129,015 feet north, and 267,645 feet east (latitude 41° 26'14.0" north, longitude 070° 43' 14.0" west).

The Site, which occupies the western approximately one-third of Plat 11A, Lot 6, has been the location of a textile mill since the mid-1800s. The facility formally conducted dyeing and finishing operations related to textile manufacturing; the facility ceased operations in February 2008. Since that time the process equipment has been removed from the facility and Site features related to the manufacturing process, including the former wastewater disposal lagoons and industrial wastewater pump station, have been decommissioned. The facility is currently vacant.

3.00 ENVIRONMENTAL SETTING

The following sections provide a brief overview of general physiographic and hydrologic conditions in the area of the Site. For a more detailed evaluation, please refer to the June 2, 2005 SIR.

3.10 TOPOGRAPHY AND DRAINAGE

The Site is located at the confluence of the Wood and Pawcatuck Rivers. The Wood River flows along the western property boundary from the northwest property corner at Church Street to the southern tip of the Site. The Wood River is dammed north of the Site across Church Street, which forms Alton Pond to the northwest of the property. The elevation of the pond at the dam is approximately 50 feet. The Pawcatuck River flows along the eastern property boundary to the southern tip of the Site, where it converges with the Wood River. Wetland areas associated with the Wood River are located along the western

and southwestern property boundaries. Cedar Swamp, a wetland area associated with the Pawcatuck River, is located along the southeastern portion of the Site.

According to an aerial topographic survey conducted by Aerotech International Digital Photogrammetric Mapping dated December 1, 2004, the majority of the Site surface lies at an altitude between approximately 45 feet and 65 feet above the NVGD 29 (National Vertical Geodetic Datum – 1929) formerly referred to as mean sea level (MSL). Overall, the Site is generally flat and slopes slightly to the northwest. Surface elevations slope more steeply down to an elevation of approximately 40 feet along the banks of the Wood and Pawcatuck Rivers on the southern portion of the Site.

3.20 PUBLIC WATER SUPPLIES LOCATED WITHIN 2.0 MILES OF THE SITE

According to a Wellhead Protection Areas Map, dated June 1997, the Site is currently located within a Non-Community Wellhead Protection Area associated with the Facility's potable water supply well. According to the Wellhead Protection Program, the Town of Richmond depends significantly on private wells as the primary source of drinking water. Wellhead Protection Area Maps do not depict drinking water supply reservoirs in the Town of Richmond, which includes the Village of Alton, or the neighboring Towns of Charlestown and Hopkinton.

In the vicinity of the Site, the average residential lot is approximately 0.5 acres and it is assumed that each lot has one generally shallow well for a potable water source. Most of the wells observed by GZA have either been dug wells or pushed steel well points. North of the Site, along the east edge of Alton pond, the development is more recent with larger building lots. The development to the west is minimal with a few homes on the west side of the Wood River.

3.30 GROUNDWATER CLASSIFICATION/QUALITY

The Rhode Island Groundwater Protection Act requires the classification of the State's groundwater resources using a four-class system including GAA, GA, GB, and GC. The Site is in the "Lower Wood" groundwater reservoir and is considered a critical recharge area. The northern and eastern portions of the Site are classified as "GAA." The GAA classification is reserved for areas in which the groundwater resources are known or presumed suitable for drinking water use without treatment and the aquifer soils are anticipated to provide a high yield. The remainder of the Site is classified as GA. Groundwater classified GA are groundwater resources, which like GAA, are known or presumed to be suitable for drinking water use without treatment. Most of the state, approximately 71% (761 square miles), overlies groundwater classified GA.

4.00 SUBSURFACE INVESTIGATION

GZA's subsurface field program was designed to obtain information on bedrock characteristics (fracture frequency, hydraulic conductivity, etc) and information on water quality within the bedrock aquifer. GZA's investigations were completed in two stages. The first stage involved the completion of a surficial geophysical investigation, three bedrock borings, extraction and injection packer testing, down borehole geophysics, the installation and sampling of three multi-level bedrock groundwater monitoring wells, sampling of four residential wells and diffusion bag sampling within the Wood River. The second stage included overburden groundwater sampling, Site-wide piezometric monitoring, the installation of two additional bedrock borings, extraction and injection packer testing, down borehole geophysics, and installation and sampling of two multi-level bedrock groundwater monitoring wells Wellhead elevation surveys of newly installed boreholes were also completed as part of each phase of work.

Logs of the borings and monitoring wells are attached in Appendix B. Figure 1, *Exploration Location Plan*, shows the exploration and sampling locations. Laboratory certificates of analysis related to the subsurface investigation are provided in Appendix C.

4.10 SURFICIAL GEOPHYSICAL INVESTIGATION

To aid in the selection of drilling locations, GZA contracted with Hager Geosciences, Inc. of Woburn, Massachusetts (HGI) to perform a suite of surface geophysical investigations along six primary transects covering the majority of the Charbert Facility. HGI completed there work between May 6 and June 16, 2006. Geophysical studies initially consisted of seismic refraction as outlined in Task 1 of the March 15, 2006 Work Plan. As the work progressed, Charbert elected to add ground penetrating radar (GPR) and very low frequency (VLF) studies to the program to better define the overburden thickness and bedrock characteristics. HGI's final report, dated July 2006 is provided in Appendix D. GZA and Charbert personnel, in concert with HGI, utilized the findings and recommendations of these geophysical studies, in conjunction with the findings of prior geo-hydrologic investigations, to select proposed bedrock drilling locations. Bedrock topographic contours have been inferred from the site surface geophysical survey and are presented on Figure 2.

4.20 BEDROCK BOREHOLE DRILLING

Drilling of the five bedrock boreholes installed as part of this study was conducted in two phases; the first phase was conducted by New Hampshire Boring of Londonberry, New Hampshire between October 17 and December 7, 2006 and the second phase was conducted by Geologic Earth Exploration (Geologic) of Norfolk, Massachusetts between June 15, 2009 and June 25, 2009. The locations of each borehole were proposed in Technical Memorandum #1 dated July 25, 2006 (Phase I) and #4 dated December 1, 2008 (Phase II) and subsequently approved by RIDEM. The rationale for each borehole location is provided below:

- GZ-ML-1: selected because of deep overburden contamination in vicinity, i.e. at overburden well GZ-2., and to evaluate the possibility that the lagoons act as a secondary source area for chlorinated hydrocarbon contamination (the primary source area identified in the overburden SIR is the former dry cleaning area located in the Facility building and shown on Figure 1). In addition, surface geophysical evaluation showed a localized trough in bedrock, several seismic low velocity zones (indicative of more extensive bedrock fracturing), a VLF anomaly (potentially indicative of a linear bedrock fracture zone), and a thinning of the till mantel within the vicinity of the proposed boring.

- GZ-ML-2: selected because it lies between the release area (i.e., former dry cleaning area) and several nearby residential water supply wells. In addition, the surface geophysical evaluation showed a localized trough in bedrock in this area deepening west to east and one moderate seismic low velocity zones (indicative of more extensive bedrock fracturing) in the vicinity of the proposed boring. The till mantel over bedrock is also interpreted to be relatively thin (i.e., 20 feet) in this area.

- GZ-ML-3: selected because it lies immediately downgradient of the primary release area (i.e., former dry cleaning area) and is in the vicinity of significant overburden groundwater contamination. HGI could not perform geophysical testing in the immediate area due to the presence of numerous subsurface utilities and other interferences.

- GZ-ML-4 and GZ-ML-5: delineate the southwestern extent of bedrock aquifer contaminants. These locations were chosen based primarily on the anticipated contaminant distribution (as identified and inferred from previous monitoring data), and the predicted direction of bedrock groundwater flow.

The borings were drilled by a truck mounted drill rig which advanced a 5-inch inside diameter temporary steel casing through the overburden. Once bedrock was encountered, the drill casing was advanced a minimum of 5 feet into rock, or until the rock appeared stable and self-supporting. A permanent, 4-inch inside diameter steel well casing was then installed to the base of the borehole and grouted in place, using a non-shrink cement-bentonite grout (SikaGrout or equivalent) tremied in place. The temporary drill casing was removed during the grouting process and the grout was allowed to cure overnight before bedrock drilling commenced. The boring was then advanced into the bedrock using a nominal 4-inch diameter down-hole air hammer. A GZA geologist/engineer was present during the field program to observe the investigation process, collect and screen soil samples, and prepare boring/well logs describing subsurface conditions. The five bedrock boreholes drilled as part of this study are summarized in the table, below. Boring logs are provided in Appendix B and borehole locations are shown on Figure 1.

LOCATION	DEPTH TO TILL (ft bgs)	DEPTH TO BEDROCK (ft bgs)	TOTAL EXPLORATION DEPTH (ft bgs)
Phase I			
GZ-ML-1	72	117	206
GZ-ML-2	58	83	207.5
GZ-ML-3	39	42	160
Phase II			
GZ-ML-4	34	44	200
GZ-ML-5	44	46.5	200

The bedrock borings were advanced using an air-hammer that pulverizes the bedrock into small rock chips and dust. Therefore, the only samples of the bedrock are rock chips which are described in the field and recorded on the boring logs. Overburden samples were collected during the advancing of the boring through the overburden and described in the field and recorded on the boring logs. Soil samples were field screened for volatile organic compounds (VOCs) with a Foxboro Model TVA 1000 combination flame and photoionization detector device (FID/PID). If field screening suggested that there was a potential for elevated VOC contamination (i.e., PID readings above 100 parts per million – ppm), samples of suspect soils were collected for VOC laboratory analysis by EPA Method 8260B. Three overburden samples, GZ-ML-2 S-5 (19'-21'), GZ-ML-3 S-2 (4'-6'), and GZ-ML-3 S-9 (39'-41'), triggered this criteria and were sent for laboratory testing. In addition, the following field tests were conducted on recovered soil samples to aid in the detection of DNAPL.

- Soil-water shake test – a small quantity of soil (approximately 15 cc) was placed in a clear, colorless, gas vial or jar containing an equal volume of potable or distilled water. The vial was then closed and gently shaken for approximately 10 to 20 seconds. The surface of the water was then evaluated for a visible sheen. A positive test result would be indicated by the presence of a visible sheen or foam on the surface of water.
- Oil Red O Shake Test – Following the soil-water shake test noted above, a small quantity (approximately 0.5 to 1 cc) of Oil Red O (a dye which reacts with DNAPL) powder was placed in the jar or vial with the soil and distilled water. The jar or vial was then closed and gently shaken for approximately 10 to 20 seconds. The contents in the closed jar were then, examined for visible bright red-dyed liquid inside the jar, which indicates a positive test results for DNAPL.

DNAPL was not detected during this investigation using the two field jar tests described above.

The above drilling method was selected to minimize the potential for the downward migration of DNAPL, if present, from the overburden to the bedrock aquifer, though DNAPL was not encountered during drilling. A DNAPL contingency plan, as described in the approved March 15, 2006 and January 29, 2008 work plans, was triggered on GZ-ML-1 (i.e., soil headspace VOC screening exceeded 100 ppm). As part of drilling, a five foot long sump was installed at the bottom of GZ-ML-1 and GZ-ML-2 as a precaution, as the sump would collect any DNAPL which flows into the borehole. At the time drilling was completed, a temporary inflatable packer was placed in the well to limit the potential for vertical contaminant migration. This packer was removed just prior to packer testing at this location. The packer was not reinstalled at GZ-ML-1 because laboratory analysis did not reveal elevated VOC levels in the borehole groundwater. During the investigation, DNAPL was not detected at GZ-ML-1 or any other exploration location.

4.30 DOWN BOREHOLE GEOPHYSICAL INVESTIGATIONS

A suite of down borehole geophysical testing was performed by HGI for both phases of work following the completion of drilling. The purpose of this testing was to identify and characterize hydraulically active fractures within the bedrock where they intersect the newly drilled boreholes. Acoustic Borehole Televiewer (ATV), three-arm caliper logging, and heat-pulse flow meter logging for ambient and stressed conditions were performed on each borehole. Fracture locations and characteristics were identified by HGI personnel from the ATV borehole logs. During Phase II of work, poly-electric logging with natural gamma and fluid logs were also completed by HGI as part of borehole geophysical studies. Copies of each study are provided in Appendix D and a detailed evaluation of the results is provided in Section 5.20.

4.40 EXTRACTION PACKER TESTING (DISCRETE ZONE GROUNDWATER SAMPLING)

Following borehole geophysical investigations, bedrock packer extraction testing (i.e., discrete zone groundwater sampling) was performed in approximately 10 foot intervals starting below the steel casing. Water samples from each 10-foot packer test interval were extracted using a stainless-steel and Teflon submersible pump (Grundfos Rediflo 2) suspended between a dual straddle packer system, prior to injection packer tests. Prior to sample collection, the packered-off zone was purged by removing a volume of water approximately equal to the volume of "standing water" within the zone. A borehole obstruction in GZ-ML-5 prevented extraction packer testing below approximately 126 feet below ground surface (bgs). All zones, except for three zones in GZ-ML-4, yielded sufficient water to purge and sample. A sample could not be collected from one additional zone in GZ-ML-4, due to a leaking packer assembly. Groundwater samples were collected for field screening of total VOCs using a PID, temperature, pH, specific conductance, dissolved oxygen and oxidation/reduction potential. In addition, samples were obtained for laboratory analysis by EPA Method 8260B VOCs.

As noted above, due to elevated VOC levels, a temporary inflatable packer was placed in GZ-ML-3 after in-situ testing to limit the vertical migration of contaminants. Note that testing in GZ-ML-4 began approximately 10 feet below the bottom of casing, due to problems in seating the packers against the borehole wall.

4.50 INJECTION PACKER TESTING

Bedrock packer hydraulic conductivity testing was performed in approximately 10 foot intervals, starting at the steel casing. Test zones generally coincided with those selected for discrete groundwater sampling described in Section 4.40. Standard injection packer techniques were utilized, as described in Appendix B of the approved March 15, 2006 and January 29, 2008 Work Plans. At the completion of testing each individual borehole, the packer unit and associated down hole piping was disassembled and steam cleaned prior to the start of further packer testing. A borehole obstruction in GZ-ML-5 prevented injection packer testing below approximately 125.5 feet bgs.

Hydraulic conductivity was estimated from the injection packer testing results using methods provided in the Ground Water Manual[1]. Note that testing in GZ-ML-4 began approximately 14 feet below the bottom of casing, due to problems in seating the packers against the borehole.

The accuracy of the test system was estimated based on the minimum discernable deflection of the flow meter (i.e., 0.1 gallons in Phase I and 0.01 gallons in Phase II) divided by the time between meter readings (generally 1 minute) resulting in a minimum observable flow of 0.1 gallons per minute for Phase I and 0.01 gallons/minute for Phase II. The minimum hydraulic conductivity value was calculated using the test zone length and applied pressure which yielded the minimum hydraulic conductivity value (1.8 feet/year in Phase I and 4.3 feet/year in Phase II). Note that minimum hydraulic conductivities were driven by the applied pressure, rather than the minimum observable flow rate. For purposes of reporting, zones where less than the minimum deflection were observed (i.e., a zero reading, indicating no flow into the zone) where reported as having a hydraulic conductivity less than this minimum value. The maximum quantifiable hydraulic conductivity was dependant on the flow capacity of the water supply pump at a given pressure. For each zone, injection tests were run with at least two different pressures; during Phase I, tests were run at 0.5 pound per square inch (psi) per foot of depth to the top of the test zone and 0.75 psi per foot of depth to the test zone. During Phase II, the number of tests conducted on each zone and their corresponding pressures were dependant on the response of each zone, i.e. if zones showed no flow at the lowest test pressure, the test pressure was raised gradually until a response was observed, or the maximum safe test pressure, was reached. The maximum safe test pressure is the pressure at which the injected water will not result in dilation of the fractures with an appropriate factor of safety. We used 1 psi per foot of depth from ground surface to the top of each test zone as the maximum applied pressure during this study.

[1] Ground Water Manual, A Water Resources Technical Publication, U.S. Department of the Interior Bureau of Reclamation, 1977.

4.60 MULTI LEVEL WELL INSTALLATIONS AND SAMPLING

Using the results of the in-situ testing programs described above, GZA selected three permanent groundwater sample collection zones within each borehole. The goal was to select zones with the highest levels of observed contamination (if any), highest relative hydraulic conductivity, and largest degree of observable fractures, as well as zones that provided representative coverage of the depth of bedrock penetrated. The permanent Waterloo multi-level groundwater monitoring system, developed at the University of Waterloo in Waterloo, Ontario, and manufactured by Solinst Canada, Limited of Burlington, Ontario, was chosen for each well installation. The system allows for groundwater sampling and piezometric head measurement in multiple discrete levels within a single 4-inch diameter borehole. Piezometric heads are measured using a vibrating wire transducer installed in each sample zone. Samples are collected from each zone using permanently installed dedicated stainless-steel pumps and dedicated permanently installed tubing. Samples are collected by connecting the pumps to a compressed ultra high purity nitrogen cylinder (via permanently installed dedicated drive tubing).

Our recommended sampling zones and associated rational were provided to RIDEM for review in two Technical Memoranda, dated February 23, 2007 (the first titled "Recommended Monitoring Well Installation Zones for Bedrock Boreholes") and the second designated Technical Memorandum #1 dated November 3, 2009. Zone recommendations presented in these Technical Memoranda were approved by RIDEM. Multi-level well installations were conducted in general accordance with the approved locations; major deviations are described in the following sections. Well installation logs are provided in Appendix B and are summarized in the below table. Details of multi-level well installation for each phase are provided below.

Well Zone ID	Proposed Zone Depth (feet bgs)	Actual Installed Zone Depth (feet bgs)
GZ-ML-1-1	122 to 132	122 to 132
GZ-ML-1-2	148 to 160	149 to 159.5
GZ-ML-1-3	170 to 182	170.5 to 182.5
GZ-ML-2-1	98 to 110	97.5 to 110
GZ-ML-2-2	145 to 158	145 to 157.5
GZ-ML-2-3	191 to 201	191.5 to 201
GZ-ML-3-1	49 to 65	49 to 61.66
GZ-ML-3-2	97 to 115	93.66 to 112.6
GZ-ML-3-3	148 to 158	145.2 to 158
GZ-ML-4-1	45 to 62	44 to 56.3
GZ-ML-4-2	75 to 89	69.3 to 82.8
GZ-ML-4-3	187 to 200	181.8 to 194.3
GZ-ML-5-1	46 to 60	0 to 27.9 (located in the steel casing)
GZ-ML-5-2	80 to 95	45.9 to 61.4
GZ-ML-5-3	120 to 140	86.3 to 140

4.61 Phase I

GZA and Solinst personnel were onsite from June 11, 2007 to June 13, 2007 (Solinst personnel were onsite for the first two days only) to install the three Phase I multi-level wells. The three multi-level well systems (GZ-ML-1, GZ-ML-2, and GZ-ML-3) were successfully installed; however, GZ-ML-3 stopped approximately 3.3 feet above the bottom of the borehole due to a borehole obstruction. The obstruction may have been caused by a partial collapse of the borehole or from debris loosened from the sides of the borehole during system installation. The bottom of borehole was the target depth for GZ-ML-3, but based on our evaluation of the extraction packer test chemical data and the borehole geophysical data, GZA believes the installed sampling zones capture the intended geologic features. During drilling, GZ-ML-3 was stopped at a depth of 158 ft due to an unstable borehole and GZA was concerned that if the system was removed during the installation process, the borehole would have caved in and needed to be re-drilled. Due to these considerations GZA did not feel it was necessary or feasible to remove the Waterloo system during installation and attempt to remove the obstruction.

The vibrating wire transducer installed in GZ-ML-2-2 functioned prior to installation; however, was not functional post installation and piezometric monitoring of this zone cannot be conducted.

4.62 Phase II

As described in the November 3, 2009 Technical Memorandum, between the time of drilling and borehole testing, a partial collapse occurred in borehole GZ-ML-5 at approximately 126 feet bgs, resulting in the borehole being obstructed at this depth. Multiple attempts were made to reopen the borehole, and though the borehole could be reopened temporarily by drilling through the obstruction, it became obstructed again at the same depth following each attempt. The bottom of the borehole was 200 feet bgs, which left approximately 74 feet of open borehole in which the multi-level well system could not be installed, due to the obstruction. Leaving this length of borehole open could have lead to groundwater movement upward or downward in the aquifer. To prevent this, the borehole was grouted up to 140 feet bgs on February 22 and February 23, 2010 by Geologic personnel and observed by GZA, in general accordance with the procedure described in the November 3, 2009 Technical Memorandum. High solids bentonite grout was used up to a depth of 150 feet bgs; above this alternating 1-foot thick layers of bentonite and filter sand were placed up to a depth of approximately 140 feet below grade, with the last layer consisting of filter sand.

The initial attempt at multi-level well installations in GZ-ML-4 and GZ-ML-5 was made by GZA personnel on March 8, 2010. However, the well material (specifically the packer systems) could not be advanced to the target depths due to the apparent size of the borehole. Through consultation with Geologic, it appears that the boreholes were drilled with a slightly worn bit, which resulted in a slightly smaller diameter borehole. On March

25 and 29, 2010 respectively, Geologic over drilled GZ-ML-4 and GZ-ML-5 using a new drill bit with a nominal outside diameter of approximately 4 inches.

On March 26, 2010, installation of the multi-level well in GZ-ML-4 was completed by GZA personnel; however GZ-ML-4 stopped approximately 5.8 feet above the bottom of the borehole due to a borehole obstruction. The obstruction may have been caused by a partial collapse of the borehole, from debris loosened from the sides of the borehole during system installation, or during borehole over drilling. Based on our evaluation of the extraction packer test chemical data and the borehole geophysical data, GZA believes the sampling zones as installed do capture the intended geologic features.

On April 13, 2010 installation of the multi-level well in GZ-ML-5 was completed by GZA personnel. GZ-ML-5 also stopped short of its intended installation depth by approximately 35 feet due to a borehole obstruction encountered approximately 125 feet below ground surface. Because this borehole had proved to be unstable, we decided not to attempt to remove the instrumentation because we were uncertain if the instrument could be successfully removed, and there was no reason to believe that another borehole reaming and system installation attempt would be more successful. Slight adjustments were made to align proposed Zone 3 with the proposed Zone 2 depth interval and proposed Zone 2 with the Zone 1 depth interval. GZA believes that the installation successfully captures the targeted geologic features of proposed Zones 1 and 2. Note that Zone 3 does not have a lower packer and can draw water up to 140 feet below ground, which is the top of grout seal. Zone 1 was installed within the steel casing and does not provide accurate information about subsurface conditions, and thus, was not monitored or sampled as part of this study.

4.63 Sample Collection

Samples were collected from wells GZ-ML-1, GZ-ML-2, and GZ-ML-3 on June 21, 2007, August 9, 2007, October 8, 2008, and April 26, 2010; samples were collected from wells GZ-ML-4 and GZ-ML-5 on April 27, 2010 and June 1, 2010. Prior to sampling each well, piezometric readings were taken from each zone. All sampling utilized EPA's Low *Stress (low-flow) Purging and Sampling Procedure for the Collection of Ground Water Samples from Monitoring Wells* (USEPA SOP #GW-001, July 1996 and updated January 19, 2010). This EPA-developed methodology is designed to reduce the level of suspended solids entrained in samples as part of the collection process, and therefore, decreases the occurrence of false positive findings of elevated metals concentration associated with the presence of suspended sediments. Generally, three sample zone volumes were purged prior to sampling. One sample zone volume is equal to the volume water stored in each sample zone and is calculated by subtracting the cross sectional area of the 2-inch diameter Solinst well casing from the nominal diameter of the borehole (4-inches) and multiplying by the zone length. However, due to the large sample interval volume (approximately 35 gallons) and the small sample pump used for this sampling system one sample interval volume was purged from zone GZ-ML-5-3. As noted in

Section 6.33, significant additional purging of the zones in well GZ-ML-4 was conducted prior to sample collection, because the well was submerged by flood water in April 2010.

4.70 PASSIVE DIFFUSION BAG SAMPLING

During the course of the study, it became apparent that groundwater movement from the on-Site aquifer to the adjacent Wood River needed to be evaluated in order to characterize the extent of possible contaminant flow from bedrock to the river. This was evaluated through the use of passive diffusion bags.

Passive diffusion bag samplers are low density polyethylene (LDPE) bags filled with deionized water. When a passive diffusion bag is placed in a well or buried in a river bottom (as was done at Charbert), volatile organic compounds (VOCs), excluding certain ketones, ethers, and alcohols, diffuse through the semi-permeable LDPE bag. Equilibrium then forms between the VOC concentration in the water outside and inside the bag. Generally, a minimum of two weeks is required for equilibrium to form. The bags are then retrieved and the water in them analyzed. The bags GZA deployed in the bed of the Wood River adjacent to Charbert were deployed for 3 weeks to insure equilibrium was established.

Analytical results from diffusion bag samplers buried in a river bottom are indicative of pore water quality (groundwater seeping into the river) not surface water quality. Dilution, volatilization and other attenuation mechanisms greatly reduce the concentration of constituents detected in the river from that observed in pore water.

Nine passive diffusion bag samplers were placed in the Wood River on August 10, 2007, as shown on Figure 1. Sampling locations were chosen to delineate the extent of contaminant flow to the river. Diffusion bags were buried approximately 1 ft into river sediments, approximately one-third the way between the Charbert (east) bank of the Wood River and the centerline of the river. Diffusion bags were allowed to remain in place three weeks and were retrieved on August 31, 2007. Samples were collected and laboratory tested for VOCs by EPA Method 8260B. One diffusion bag served as a blind duplicate. Additional diffusion bag sampling was conducted as part of the Site's Interim Environmental Monitoring Program, as described below:

- Five diffusion bags deployed on July 23, 2008 and removed on August 22, 2008
- Five diffusion bags deployed on August 19, 2009 and removed on September 9, 2009 (note, one diffusion bag was lost, replaced on September 9, 2009 and removed on September 30, 2009)
- Five diffusion bags deployed on September 17, 2010 and removed on October 19, 2010

4.80 SITE WIDE PIEZOMETRIC MONITORING AND COMPREHENSIVE VOC SAMPLING

In accordance with the January 29, 2008 Work Plan, GZA personnel began collecting manual groundwater readings at 52 groundwater monitoring wells (including GZ-ML-1, GZ-ML-2, and GZ-ML-3) and 10 surface water locations, (shown on Figure 1) on February 13, 2008, approximately three weeks before facility shut-down, every two weeks through July of 2008, then monthly through September 2008. The purpose of the Site wide piezometric monitoring program was to monitor potential changes in groundwater movement caused by ceasing operation of the process water supply wells and the wastewater disposal lagoons, as the groundwater table restored to an ambient condition.

In the January 29, 2008 Work Plan GZA had proposed using Geokon automated data collectors to collect groundwater reading from the existing bedrock wells. Unfortunately, the proposed data logging equipment was not operational at the time of facility shutdown. Therefore, daily groundwater readings from each zone were collected manually from February 22, 2008 (the date of facility shut down) through March 28, 2008. Weekly readings were then taken through September 15, 2008, with monthly readings taken through January 2009.

In addition, to evaluate contaminant concentrations in the overburden aquifer after the groundwater table had returned to pre-pumping/lagoon use ambient condition, GZA performed a comprehensive sampling and laboratory analytical program including shallow and deep overburden and bedrock groundwater monitoring wells in October 2008. This involved sampling and analysis of eleven shallow and deep groundwater monitoring wells and the three (at that time) existing multi-level bedrock wells for VOCs. The number and location of these wells was based on the stabilized groundwater flow directions following the mill closure, and were selected to complement other ongoing monitoring programs. The rationale for these sampling locations were provided to RIDEM in a Technical Memorandum dated October 29, 2008, and was subsequently approved by RIDEM. In addition, results from ongoing monitoring programs, i.e. Underground Injection Control (UIC) sampling, residential well sampling, perimeter well monitoring, and interim compliance monitoring program (ICMP) sampling were used in the Site-wide assessment. October 2008 analytical results from these additional programs are included with data presented in Section 6.36, to provide a comprehensive assessment of groundwater quality for the Site at the time of sampling. A detailed discussion of the ongoing overburden monitoring results is not included in this report, but is provided in the quarterly Interim Compliance Monitoring Reports provided to the Department .

4.90 WELLHEAD SURVEY AND PIEZOMETRIC LEVELS

A location/elevation survey was conducted for each borehole installed as part of this study using a TopCon Total Station survey instrument. This was done to ensure that accurate piezometric levels could be calculated for each borehole. On June 4, 2010, a comprehensive (i.e., all onsite wells, overburden and bedrock) round of groundwater

elevation readings was taken, from which groundwater elevation contours were developed. Groundwater contours developed from these readings are shown on Figure 3; piezometric data used to develop these contours are shown in Table 1.

4.11 WEST BANK RESIDENTIAL WELL TESTING AND WOOD RIVER PROPERTY EVALUATION

In order to evaluate the potential for groundwater movement under the Wood River through bedrock, four residential wells (located on three properties) on the west bank of the Wood River were sampled and collected samples analyzed for VOCs. The three residences (as shown on Map 1) are located in the Town of Hopkinton, RI. The methodology for choosing the sampling locations is described in a Memorandum to RIDEM dated September 13, 2007. The sampling locations were approved by RIDEM and GZA personnel accompanied RIDEM personnel during well sampling. Sampling dates and locations are given below

- 266 Alton Bradford Road, October 31, 2007
- 270 Alton Bradford Road, November 2, 2007
- 260 A and B Alton Bradford Road, November 11, 2007

RIDEM was able to obtain the installation log for the well at 270 Alton Bradford Road, which confirmed that the well is installed in bedrock. According to the property owner, at times the well is under an artesian condition, i.e. free flowing at ground surface.

In addition, GZA evaluated the potential for further residential development in areas adjacent to the Site. This evaluation included a review of the Hopkinton Tax Assessors Maps and available aerial photographs/environmental resource maps to evaluate if there are areas that are planned to/available for additional development. Based on our evaluation, it appears that further development of lots across the Wood River is not possible without further lot subdivision and/or zoning changes. The lots on the other side of the Wood River are long and narrow, i.e. have a relatively small road frontage on Alton Bradford Road and extend to the Wood River. Many of these lots have already been developed with a home on the property.

5.00 SUBSURFACE CONDITIONS

5.10 SITE GEOLOGY- OVERBURDEN

Overburden Site geology and subsurface conditions were described in detail in the June 2, 2005 SIR and the overburden findings for this study are generally consistent with the June 2, 2005 SIR. The following information is summarized from the June 2, 2005 SIR. Boring logs completed as part of this study are provided in Appendix B

Native soils in the area of the Site have been mapped by the United States Department of Agriculture (USDA) Soil Conservation Service (SCS July 1981) as Merrimac and Windsor sandy loams series and, to a lesser degree, Urban land complex. Merrimac sandy loam consists of nearly level excessively drained soils located on glacial outwash plains and terraces. The hydraulic conductivity is described as typically moderate. Windsor loamy sand also consists of nearly level, excessively drained soils located on terraces, outwash plains, kames and eskers. These soils generally exhibit high permeability. Urban land complex consists of areas that are mainly developed with buildings, paved roads, and parking lots.

In general, our subsurface explorations encountered 15 to 85 feet of sand, gravel and silt in multiple soil strata of varying thickness. The typical soil strata we encountered consisted of the following (from the ground surface down):

- Dark brown topsoil - <1 foot thick,
- Tan/orange sandy subsoil - generally 1 to 2 feet thick,
- Clean (i.e., less than 10% silt) gravelly fine to course sand,
- Clean fine to medium sand
- Silty, fine sand.
- Orange/brown glacial till that was encountered at depths of 36 to 85 feet below ground surface (bgs), with a thickness of up to approximately 40 feet.

5.20 SITE GEOLOGY-BEDROCK

According to the State of Rhode Island Bedrock Map (1994 Bedrock Geologic Map of Rhode Island, Hermes, Grant and Murray), the Site is located in the Sterling Igneous Suite of the Hope Valley Subterrane (late Proterozoic era, approximately 570 million years ago). Bedrock underlying the facility has been mapped as alaskite gneiss, a pale pink, orange, or gray fine to medium grained granite gneiss. This rock has been described as massive to layered and strongly foliate in nature with no primary porosity or permeability. Groundwater flow is expected to be limited to rock fractures.

The above referenced map indicates that the Site is located near an intrusion of the Narragansett Pier Plutonic Suite (Permian, approximately 245 million years ago) into the Hope Valley Subterrane matrix. This intrusion is classified as a dark pink to pale gray medium grained, equigranular granite. This rock has been described as mainly massive with local areas of faint flow foliation. This intrusion is close to the Site and may be responsible for the high degree of fracturing observed in bedrock boreholes conducted as part of this study, which is described in more detail, below.

Previous studies (ERT, November 1985; Gonthier, et al., 1974; Dickerman and Silva, 1980 Ryan and Kipp, 1984; Ryan et al., 1985 and Dickerman, Trench and Russell, 1990) have indicated that the area is underlain by a bedrock valley filled with glacial outwash deposits, which generally become finer with depth. Geologic mapping and other work conducted by GZA in the area suggests that the Site sits on the western flank of this bedrock valley that

deepens to more than 300 feet approximately 2 miles east of the Site. The lower units have been described as glacial till, fine sand and inorganic silt. The glacial till reportedly mantles the bedrock, and is typically less than 20-feet thick.

5.21 Bedrock Topography

Bedrock topographic contours have been inferred from the site surface geophysical survey and are presented on Figure 2. Depth to bedrock encountered in each bedrock borehole generally agrees with the surface geophysical survey. Generally, over the majority of the Site, bedrock slopes downward from west to east away from the Wood River; in the vicinity of the former lagoons, bedrock is inferred to slope downward from south to north. The inferred bedrock high points are located in the area between GZ-ML-4 and GZ-ML-5, and the area around former Lagoon 3, as shown on Figure 2. A small bedrock depression is located at the end of Myrtle Street.

Two subsurface cross-sectional profiles (A-A' and B-B') which show the general lithologic character of overburden and bedrock as indicated by boring logs, are shown on Figures 4 and 5. The profile locations are shown on Figure 1. Cross section A-A' runs east-west across the Site, from the River Street neighborhood to the Wood River; this cross section shows bedrock sloping downward to the east, which is consistent with the inferred bedrock contours from Figure 2. Cross section B-B' runs generally south-north across the Site from the former lagoon area to the facility building; this cross section shows bedrock sloping downward from GZ-ML-2 to GZ-ML-1, which is generally consistent with the inferred bedrock contours shown on Figure 2.

On-Site observations of bedrock conditions are generally in good agreement with conditions described in the literature references noted above. It must be recognized that interpreted conditions are based upon widely spaced explorations and actual conditions may vary from what is shown on the above referenced figures.

5.22 Fracture Frequency

Information presented on the character of the bedrock in the five GZ-ML-series boreholes is based primarily on interpretation of the ATV Logs, as no rock cores were collected. These interpretations are summarized on the geophysical logs presented in Appendix D. The interpretations consist of the number of fractures, and orientation (dip azimuth) and inclination (dip angle) of each fracture encountered.

The frequency of occurrence of apparent bedrock fractures was estimated by counting the number of fracture traces within intervals corresponding to packer test zones. This figure was then divided by the length of the test interval under consideration to determine the apparent "fracture frequency" of that interval. Data from individual intervals are presented in Table 3.

5.22.1 Statistical Evaluation of Fracture Frequency Data

Borehole fracture frequency data obtained from the five GZ-ML-series were analyzed statistically by developing a frequency distribution or histogram of observed values and then by determining the correlation coefficients of fracture frequency versus depth at each borehole. The frequency distribution, shown on Graph 1, indicates that fracture frequency is skewed slightly to the left (i.e., skewed low) compared to a normal distribution. The arithmetic average of fracture frequency for the entire data set is 2.22 fractures/foot, which is a high value for igneous bedrock in Rhode Island, based on our experience.

Analysis of fracture frequency verses depth was completed using the methods of linear regression and correlation. For each borehole, a least-squares linear regression was determined for the fracture frequency versus depth relationship and the correlation coefficients for each borehole were evaluated. The regression results were used to plot a best-fit straight line to the fracture frequency data from individual boreholes. Correlation tests are not usually affected by deviation from normality of the two variables and are useful in exploring a relationship between them. Regression implies that one variable is related to the other (e.g., that fracture frequency is a function of depth). The fracture frequency versus depth distribution and regression lines for the five individual boreholes are shown on Graphs 2 through 6. The correlation coefficients, included on the graphs range from -0.4835 (GZ-ML-3) to 0.0854 (GZ-ML-2). The closer the value is to 1.0, the stronger the correlation; 0 indicates that no correlation was found and a negative number indicates an inverse correlation. Based on the observed correlation coefficients, its does not appear that a relationship exists between fracture frequency and depth for the interval (i.e., 50 feet to 200 feet deep) evaluated.

5.23 Fracture Declination (Dip Angle) and Fracture Aperture

Naval/Facilities Engineering Command Soil Mechanics Design Manual 7.1, 1982 classifies the attitude of rock fractures, bedding and foliation as follows:

Attitude	Angle
Horizontal	0° - 5°
Shallow or low angle	5° - 35°
Moderately dipping	35° - 55°
Steep or high angle	55° - 85°
Vertical	85° - 90°

Fracture dip angle data was interpreted by HGI from acoustic televiewer logs and is provided in Appendix D. GZA applied the above criteria to the data set provided by HGI. Based on a review of the data, the majority of fractures are either moderately dipping or steep/high angle. One vertical fracture was observed in GZ-ML-1. Few shallow/low angle fractures and no horizontal fractures were observed. This relatively high proportion of steep fractures with respect to low angle fractures is again somewhat atypical for igneous bedrock in Rhode Island and may be related to the significant stresses applied during emplacement of

the Narragansett Pier Pluton, and/or the Site's close proximity to the Lake Char/Bloody Buff fault zone (along the Rhode Island/Connecticut border, approximately 4 miles west of the Site.

Each fracture observed on the acoustic televiewer logs, was classified by its aperture (i.e., apparent width at the borehole wall). Fractures were classified into the following categories, in the order of smallest aperture to largest, tight, small, moderate, or large. As shown in Appendix D, the majority of fractures observed have either a tight or small aperture.

5.24 Fracture Orientation

As stated above, the depth of individual fractures, as well as their orientation (strike or dip azimuth) and inclination (dip angle), were read directly from the televiewer logs by HGI.

The approximate orientation (strike or dip azimuth) and declination (dip angle) of individual fractures interpreted from each borehole can be graphically represented on a lower hemispherical Schmidt equal-area net. In this study, the projection of the pole of the perpendicular to each identified planar feature was plotted onto the lower hemispherical surface to produce a pole-diagram, also referred to as Pi-diagram. Pi-diagrams for each borehole are provided as part of HGI's reports, attached in Appendix D.

The Pi-diagrams show that fractures in each borehole predominately strike in the northeast to southwest direction with a steep westerly dip angle, (dip angles ranged from approximately 45 to 75 degrees from the horizontal). The majority of fracture dip azimuths for all boreholes generally range from 270 degrees to 360 degrees. Conjugate fracturing, i.e. fracturing with similar strikes and opposing dip directions with the primary fracture direction (generally 90 to 180 degrees) was also observed to varying degrees in each borehole. This fracture orientation is common in Rhode Island bedrock of this age has been attributed to east-west compressive stresses induced by the suturing of the Avalonian micro continent onto the North American Plate[2].

5.25 Bedrock Hydraulic Conductivity

A total of 50 bedrock packer injection tests were performed as part of the study to estimate hydraulic conductivity (k) of bedrock at the Site. Results are presented on Tables 4 (GZ-ML-1, GZ-ML-2, and GZ-ML-3) and Table 5 (GZ-ML-4 and GZ-ML-5). The packer test results ranged from less than 1.8 ft/yr (1.8×10^{-6} cm/sec), the lower limit of the test equipment, to 1,839 ft/yr (1.8×10^{-3} cm/sec). The arithmetic average of all values is 109 ft/yr (1.1×10^{-4} cm/sec) and the geometric mean is 17.7 ft/yr (1.7×10^{-5} cm/sec). The observed range of values is typical for Rhode Island igneous rock.

Graph 7 presents k values versus depth from top of rock, excluding the two highest values of k observed, which were both 1 order of magnitude higher than the next largest result

[2] Hermes, O.D., and Zartman, R.E., 1985, Late Proterozoic and Devonian plutonic terrain within the Avalon Zone of Rhode Island: Geological Society of American Bulletin, V. 96, p. 272-282

and likely resulted from high groundwater flow at the overburden/bedrock interface. As shown, depth from top of bedrock is not a good indicator of hydraulic conductivity at the Site. Graph 8 presents k values versus fracture frequency data for the entire data set (exclusive of the two high values noted above). As described above, fracture frequency was calculated by counting the number of fractures in each injection packer test zone and dividing by the length of the zone. As shown, fracture frequency is also not a good indicator of hydraulic conductivity at this Site.

5.30 GROUNDWATER

The following subsections characterize various aspects of the groundwater flow regime from this and previous groundwater studies completed at the Site. The discussions include groundwater flow directions and gradients, both within bedrock and overburden; however, the focus of the below discussion is on bedrock and the interaction between bedrock and overburden. A detailed discussion of overburden groundwater flow is provided in the June 2, 2005 SIR; as described below we feel the conclusions from the June 2, 2005 SIR remain valid, except as noted below. For brevity, information from the June 2, 2005 SIR is not repeated in this report unless it is relevant.

5.31 Groundwater Elevations-Site Wide Monitoring

As described in Section 4.80, piezometric monitoring was conducted prior to and following Facility closure in 2008 to evaluate possible changes in groundwater flow due to the decommissioning of the process water supply wells and industrial wastewater lagoons. Overburden piezometric measurements taken as part of this study are shown on attached Table 1; in addition, select well readings have been plotted in hydrographs, (Hydrographs 1 to 5, attached).. Piezometric monitoring conducted as part of the Site-wide piezometric program, from GZ-ML-1, GZ-ML-2, and GZ-ML-3 are provided as attached Hydrographs 6 through 8, which include daily rainfall amounts during the monitoring period. As shown on the attached hydrographs, for both overburden and bedrock, high groundwater occurred in March 2008 and low groundwater occurred in July 2008 and is fairly typical of seasonal fluctuations in Rhode Island.

There is a significant difference (i.e., 5 to 8 feet) in groundwater elevations at collocated shallow and deep clusters across much of the Site (see Hydrographs 4 and 5). This was most pronounced immediately south of the lagoons (GZ-5/GP-21 cluster) suggesting that a relatively continuous aquitard is present between the completion depths of the shallow and deep wells. As described June 2, 2005 SIR, silt lenses were observed in several explorations in this area at depths of 16 to 26 feet bgs.

Also of note is the fact that collocated shallow/deep wells in the facility area do not show a significant difference in elevations. This lends further support to our observations from the June 2, 2005 SIR, that no continuous aquitards were present in this area between ground surface and the underlying glacial till.

5.32 Groundwater Flow Directions

As depicted on Figure 3, *Overburden Groundwater Plan,* readings show a pattern similar to groundwater contours developed as part of the Site Investigation in June 2005. Overburden groundwater contours inferred from measurements taken prior to facility shutdown (February 13, 2008) are provided on Figure 6. As described in Technical Memorandum 4 dated December 1, 2008, groundwater contours developed from these readings show a pattern similar to groundwater contours developed as part of the Site Investigation in June 2005. The groundwater flow remained generally from the north to the south with the flow moving either east or west to the adjacent rivers as the groundwater moves down the on-Site peninsula. The flow pattern showed little change other than the former cone of depression around the production wells has recovered to a natural state. Note that as of this time the groundwater mound around the former wastewater disposal lagoons has dissipated, and the former lagoons have been filled in, as shown on Figure 3.

The following observations regarding horizontal and vertical groundwater flows were developed from the groundwater contour plans, hydrographs, and tables discussed above:

- As shown on Hydrographs 6 through 8, which also display surface water elevations from the Wood and/or Pawcatuck Rivers, bedrock groundwater is inferred to flow to the west/southwest toward the Wood River, with bedrock groundwater discharging to the Wood River. As discussed in later sections, diffusion bag analytical data supports Site groundwater ultimately discharging to the Wood River. Bedrock groundwater in the vicinity of GZ-ML-1 is inferred to flow towards the Wood River because GZ-ML-1 generally is at a lower piezometric head than the Pawcatuck River, although GZ-ML-1 is closer to the Pawcatuck river. The Wood River water elevation is approximately three feet lower than the Pawcatuck River; as such, it is likely that a larger proportion of bedrock groundwater within the peninsula area flows to the Wood River.
- As shown on Hydrographs 6 through 8 and Table 2, piezometric elevations within bedrock boreholes (as measured at each monitoring zone) shown no distinct pattern, with flows generally either downward or toward the middle zone of the borehole.
- Vertical gradients within bedrock are generally consistent with vertical gradients within nested well clusters, in that larger vertical gradients are observed around the former lagoon area, with vertical gradients declining to near zero around the facility building.
- Groundwater flow direction in the northern portion of the Site, in the vicinity of the known contaminant releases, is generally westerly toward the Wood River. However, localized groundwater flow in the vicinity of the manufacturing building appears to be southwest, which may be the result of the influence of the Alton Pond Dam. Note that the groundwater contour map does not indicate a cone of depression in the vicinity of the former process water supply wells since these wells are no longer pumping, as the facility has ceased operation.

- Groundwater flow direction in the northern central portion of the Site is generally to southeast and southwest, to both the Wood and Pawcatuck Rivers. Note that the groundwater mound associated with the wastewater disposal lagoons is no longer present, as the facility has ceased operations.

5.40 AFFECT OF SUBSURFACE CONDITIONS ON CONTAMINANT TRANSPORT

The fracture dip angle data indicates that the majority of fractures observed in this study have moderate to high dip angles; a high fracture frequency was also observed, which indicates that a large degree of interconnection between fractures is likely. In addition, no horizontal fracturing was observed; in general high angle fractures terminate at horizontal fractures which then carry groundwater along the primary flow direction. The lack of horizontal fractures, indicates that to move in the predominant flow direction, groundwater must follow a torturous path, through a large number of fractures. Horizontal fractures tend to be aquifer and contaminant boundaries within bedrock, as they tend to collect water flowing upward or downward. As fracture frequency was relatively uniform throughout the bedrock section evaluated, and no horizontal fractures were observed, we cannot estimate a bottom of the flow field within the bedrock aquifer. As described above and as shown in Table 2, vertical gradients observed in bedrock are generally larger than horizontal bedrock groundwater gradients.

These conditions, in general, tend to move contaminants downward through a bedrock aquifer. However, as described in the following sections, while contamination is observed in shallow bedrock, no contamination exceeding GA Groundwater Objectives is observed in deep bedrock, which indicates contamination is not moving preferentially downward. As described in the following sections, the relatively low concentrations of observed contamination is likely from a dissolved source, rather than pooled dense non-aqueous phase liquids (DNAPLs) within bedrock or sitting at the bedrock-overburden interface. If DNAPL was present, higher levels of contamination would be observed and it is likely that contamination would be observed deeper within bedrock. While we have not identified a likely aquifer flow field bottom, based on the monitoring data, we believe that the bottom of contamination has been identified, as described in the following section.

In general, we believe that the selected borehole locations were successful, as each borehole yielded sufficient water for sampling; this allowed for the assessment of water quality within the bedrock aquifer.

6.00 ANALYTICAL TESTING

As described above, a Site Investigation Report for the overburden portion of the study area was submitted to RIDEM on June 2, 2005 and subsequently approved. Analytical testing conducted as part of following reports/programs was incorporated into our evaluation but is not repeated here:

- The June 2, 2005 SIR;
- UIC sampling related to the former wastewater disposal lagoons;
- Residential well sampling from the three homes on River Street that have point of use groundwater treatment systems;
- ICMP sampling; and
- Other analytical testing associated with miscellaneous work previously conducted at the Site.

Analytical testing listed above was reviewed as part of this report as it related to bedrock aquifer quality. Where this data is used in developing conclusions it is noted in the following sections.

The analytical program used in this investigation was designed to provide a comprehensive evaluation of current conditions within the bedrock aquifer, and aid in developing an understanding of contaminant fate and transport within the bedrock aquifer.

6.10 ANALYTICAL TESTING PROTOCOLS

The analytical methods utilized by GZA were selected to provide suitable sensitivity to allow for comparison of the resulting data to applicable regulatory criteria. Each sample was collected in appropriate containers, preserved in accordance with the applicable method, labeled, placed in an ice-filled cooler and transported to the laboratory under chain-of-custody. Each testing program was documented in the March 15, 2006 and January 29, 2008 Work Plans. The testing programs were consistent with the current Site Remediation program's regulatory requirements and included the following analyte groups.

Parameter (Test Method)	Diffusion Bags (# of Samples)	Subsurface Soils (# of Samples)	Bedrock Extraction Packer Tests (# of Samples)	Residential Drinking Water Wells (# of Wells)	Bedrock Multi-Level Groundwater Monitoring Wells (# of Well Zones)	Overburden Groundwater Monitoring Wells (# of Wells)
66 VOCs (524.2/8260B)	24	3	47	4	14	11
67 SVOCs (525.2/8270C)	0	0	0	0	14	0
Priority Pollutant Metals (6010B/7470A)	0	0	0	0	14	0
Iron and Manganese (6010B)	0	0	0	0	14	0
TPH Fingerprint w/Organo-siloxanes (Massachusetts DEP Protocol)	0	0	0	0	14	0

Laboratory testing services were provided by GZA's Environmental Chemistry Laboratory in Hopkinton, Massachusetts and RI Analytical, Inc. of Warwick, Rhode Island. Each of these facilities is a RIDOH approved testing laboratory. Laboratory Certificates of Analysis are attached as Appendix C. The laboratory testing results compiled during these investigations are summarized on tables and are discussed below.

Throughout the subsequent discussions of analytical results, we have considered and/or assumed the following with respect to the applicability of regulatory criteria:

- the Site is located in a GA or GAA aquifer area;
- there are private water supply wells located within 500 feet of the Site; and
- the future use of the Site will remain Industrial/Commercial.

Consequently, to evaluate the significance of the analytical data in terms of regulatory requirements, GZA compared the laboratory findings to the following criteria:

Media	Regulation/Guideline	Applicable Criteria
Soil	Remediation Regulations	• Industrial/Commercial Direct Exposure Criteria (I-CDEC) • GA-Leachability Criteria
Groundwater	Remediation Regulations Rules and Regulations for Groundwater Quality	• GA Groundwater Objectives • Maximum Contaminant Levels

As a point of reference, we have also included the Groundwater Quality Regulation's Preventative Action Limits (PALs) on the groundwater tables. For detected compound which do not have GA Groundwater Objectives, United Stated Environmental Protection Agency (USEPA) Regional Screening Levels (RSLs) for Tap Waters for USEPA Region 3 were used. While not regulatory limits, they provide a point of comparison and are included on relevant tables.

6.11 DATA USABILITY

To assess potential laboratory induced contamination, the project laboratories prepared and analyzed Trip Blanks, Method Blanks, Laboratory Control Samples and surrogates during each round of testing. Trip Blanks follow the sample containers, and subsequently the collected samples, through the monitoring process and are used to assess the presence of non–site related contaminants that may be introduced from the environment during the sampling, handling and transportation process (e.g., benzene, toluene, or xylene from automobile exhaust fumes). Method Blanks are used to ensure that no contamination is introduced to the samples during the preparation and analytical processes (e.g., methylene chloride and acetone that are common laboratory reagents). As presented in Appendix D, no target analytes were detected within the trip blanks, except as noted below. Surrogate recoveries for all VOCs and SVOCs were within acceptable limits, except as noted below.

Excursions in recoveries for laboratory control samples (LCSs) and laboratory control sample duplicates (LCSDs), which are both measures of laboratory accuracy, were low. In general, recovery excursions in LCSs and LCSDs for VOC samples were generally high, which indicates a potential high bias; recovery excursions in LCSs and LCDSs for SVOC samples were generally low, which indicates a potential low bias. However, only two low level SVOC detections were observed in this study. Specific issues related to data usability from each of the sampling programs conducted as part of this study are discussed below. We believe that the issues described below did not affect overall data usability.

6.11.1 Extraction Bedrock Groundwater Packer Tests

Chloroform was detected in the method blank associated with extraction packer test Zones 1 through 7 in GZ-ML-2; however, chloroform was not detected in any of the samples. Extraction packer test samples from GZ-ML-3 were diluted prior to analysis due to high VOC concentrations; all surrogate recoveries were within the acceptable quality control (QC) range.

6.11.2 Overburden Groundwater Sampling

Tetrachloroethene was detected in the trip blank associated with the overburden wells samples as part of the Site-wide VOC sampling round, slightly above the method detection limit (detection of 1.5 µg/L versus a method detection limit of 1.0 µg/L). This compound was detected in one sample (CB-9) at a level of 16 µg/L. We believe this data point is valid, as the level of tetrachloroethene in the trip blank was very low. USEPA's associated data validation action level at five times the trip blank detection is 7.5 µg/L; this indicates that any detected value above 7.5 µg/L is a valid result.

6.11.3 Bedrock Groundwater Sampling-June 2007

Low SVOC surrogate recoveries in sample GZ-ML-3-1 were due to the need to re-filter the extract the sample during the concentration process. The sample was not re-digested and rerun as the entire sample was used during the extraction process. No SVOCs were detected in this sample. TPH surrogate recoveries were diluted out in sample GZ-ML-3-3 (including the blind duplicate) due to interference from the presence of a sulfonamide compound, tentatively identified as N-butyl-benzenesulfonamide (NBBS).

Greater than 90% of the detected TPH from all samples from the June 2007 round, except GZ-ML-1-1 and GZ-ML-1-2, was non-petroleum based; greater than 75% of detected TPH in GZ-ML-1-1 and GZ-ML-1-2 was due to non-petroleum based compounds. The non-petroleum based compound responsible was tentatively identified as NBBS. Subsequent TPH samples from GZ-ML-1, GZ-ML-2, and GZ-ML-3 have similar results, discussed in more detail below.

NBBS is commonly used in the production of nylon tubing; dedicated nylon tubing was installed as part of the Solinst Waterloo Multi Level Well System in GZ-ML-1, GZ-ML-

2, and GZ-ML-3. The standard tubing used in the Waterloo system is polyethylene; however, based on our experiences at other sites, we chose to use nylon tubing, due to its higher strength and operating pressure, versus polyethylene. The following journal article, provided as Appendix E, documents NBBS leaching from nylon tubing into water: "Laboratory Investigation into the concentration of Contaminants to Groundwater from Equipment Materials used in Sampling". *Ground Water Monitoring and Remediation*. Volume 24, No. 3, Summer 2004 88-94. Gilmore , T.J. et al.

Based on the above reference, other literature, and the lack of NBBS detections at other on-Site locations (overburden groundwater, industrial wastewater, etc), we believe the NBBS seen in GZ-ML-1, GZ-ML-2, and GZ-ML-3 is due to the compound leaching from the nylon sampling tubing installed as part of the Solinst multi-level wells systems. As TPH is not a Site-wide contaminant of concern in groundwater, we believe the interference caused by NBBS with TPH testing does not affect data usability.

6.11.4 Bedrock Groundwater Sampling-August 2007

The low TPH surrogate recovery in sample GZ-ML-2-2 was not confirmed by re-extraction and re-analysis, as the entire sample was consumed during the extraction process. In addition, the diluted out TPH surrogate recoveries in samples GZ-ML-2-3 are due to interference from the presence of NBB. The VOC sample for GZ-ML-3-1 (blind duplicate) was diluted prior to analysis due to high VOC concentrations; however all surrogate recoveries were within the acceptable QC range. In all TPH samples, greater than 90% of detected TPH was non-petroleum based, due to NBBS.

6.11.5 Bedrock Groundwater Sampling-October 2008

The elevated reporting limits for VOC samples from GZ-ML-3-1 (including the blind duplicate) were due to initial sample dilution, in order to detect target compounds within the linear calibration range of the instrument; the dilutions were based on historical data for the sample location.

6.11.6 Bedrock Groundwater Sampling-April 2010

The metals sample for GZ-ML-1-3 was received by the laboratory with a pH of approximately 5, which is above the method requirement (pH less than 2). The sample was re-acidified to a pH of less than 2 by the addition of 1.0 mL of nitric acid by the laboratory technician when the sample was received by the laboratory. However more than 24 hours elapsed between sample collection and acidification, which exceeds the method hold time for an unpreserved sample.

The recovery of SVOC surrogate P-Terphenyl-D14 in samples GZ-ML-1-1, GZ-ML-2-1, GZ-ML-2-2, GZ-ML-2-3, and GZ-ML-3-3 exceeded the acceptance criteria for the method. Note that EPA Method 8270 permits one surrogate to be outside of acceptance criteria as long as the recovery is greater than 10%; each sample meets the criteria and we believe the data is useable.

Greater than 90% of detected TPH for all samples from GZ-ML-1, GZ-ML-2, GZ-ML-3, except GZ-ML-1-2 and GZ-ML-3-1, was non-petroleum based, due to NBBS and/or carboxylic acids (which are also used in the production of nylon and likely leached from the tubing); TPH was not detected in GZ-ML3-1. In the TPH sample from GZ-ML-1-2, greater than 75% of detected TPH was non-petroleum based, due to NBBS.

The elevated reporting limits for VOC samples from GZ-ML-3-1 were due to initial sample dilution, in order to detect target compounds within the linear calibration range of the instrument; the dilution were based on laboratory screening data for the sample.

Greater than 90% of the hydrocarbon content of samples GZ-ML-4-1 and GZ-ML-4-2 was non-petroleum based. This is likely due to compounds leaching from the newly installed Solinst multilevel well polyethylene sample tubing and plastic casing. The TPH surrogate recoveries for samples GZ-ML-4-1 and GZ-ML-5-2 were below the laboratory acceptance criteria; however this criterion is a laboratory guideline only and is not specified by the method. As such, we believe the data is useable.

Toluene was detected at approximately 6.0 µg/L in the trip blank associated with samples GZ-ML-4-1, GZ-ML-4-2, GZ-ML-4-3, GZ-ML-5-2, and GZ-5-3. Toluene was also detected at 1.8 µg/L and 1.2 µg/L in the samples from GZ-ML-4-1 and GZ-ML-4-2. Based on the trip blank results, it appears that the samples may have been contaminated with toluene during transport; we believe that the toluene detection in these two samples is not representative of formation groundwater.

6.11.7 Bedrock Groundwater Sampling-June 2010

Greater than 90% of the hydrocarbon content of samples GZ-ML-4-1 and GZ-ML-4-2 was non-petroleum based, likely due to compounds leaching from the newly installed Solinst multilevel well polyethylene sample tubing and plastic casing. The TPH surrogate recoveries for samples GZ-ML-4-1, GZ-ML-4-2, GZ-ML-5-2 and GZ-ML-5-3 were below the laboratory acceptance criteria; however this criterion is a laboratory guideline only and is not specified by the method. As such, we believe the data is useable.

Dichloromethane was detected in the method blank associated with samples GZ-ML-4-1, GZ-ML-4-2, GZ-ML-4-3, GZ-ML-5-2 and GZ-ML-5-3; however, this compound was not detected in any of the samples.

6.20 SOIL ANALYSES

As described in Section 4.20 VOC field screening using a FID/PID triggered laboratory testing for of three overburden soil samples, ML-2 S-5 (19'-21'), ML-3 S-2 (4'-6'), and ML-3 S-9 (39'-41'), collected during drilling of the overburden portions of the bedrock boreholes. As shown on the laboratory certificates, provided in Appendix C, no VOCs were detected in these samples.

6.30 BEDROCK GROUNDWATER WATER ANALYSES

Multiple rounds of bedrock groundwater were collected, both through extraction packer testing and sample collection from the five bedrock multi-level wells. Laboratory certificates of analyses are included in Appendix C. Results are discussed in detail below. Overburden soil and groundwater is known to be impacted by both chlorinated hydrocarbons and petroleum hydrocarbons, as described in the June 2, 2005 SIR

6.31 Extraction Packer Testing

Extraction packer testing analytical results (detected compounds only) are shown in Table 6. Only VOCs were tested from extraction packer test samples. Results from GZ-ML-1 showed low level detects of two Site related contaminants (acetone and tetrachloroethene) and low level detects of one compound (toluene) that is not a Site related contaminant. GZA believes the toluene detects were likely due to contamination of the packer test equipment or laboratory error.

Results from GZ-ML-2 showed two low levels detects of two constituents (toluene and naphthalene) that are not Site related contaminants, in a packer test zone (168.4 to 180.2 feet) with no flow (as estimated through injection packer testing). Neither constituent was detected in zones above or below, and GZA believes the detects were likely due to contamination from the packer test equipment or laboratory error.

In GZ-ML-3, a number of zones showed VOC detects of Site related contaminants, tetrachloroethene (PCE) and trichloroethene. Five of the ten zones in GZML-3 had no flow at either test pressure and had VOC detects. GZA believes these VOC detects where likely from residual borehole water contamination trapped between the packers that originated from zones with detectable hydraulic conductivities.

Results from GZ-ML-4 showed detects of two Site related compounds (trichloroethene and PCE), in particular in the upper test zones. Five of the fourteen packer test zones in GZ-ML-4 had no flow for at least one injection packer test pressure and had VOC detects. GZA believes these VOC detects where likely from residual borehole water contamination trapped between the packers that originated from zones with detectable hydraulic conductivities. Results from GZ-ML-5 showed low level detects of two Site related compounds (cis-1,2-dichloroethene and PCE). Note that the primary purpose of extraction packer testing was to aid in selection of bedrock monitoring zones, as described in Section 4.

6.32 Groundwater Field Screening

As described in Section 4.60, bedrock groundwater samples were collected following EPA's Low Flow well purging and sampling protocol. As part of this effort, we screened samples for oxidation reduction potential (ORP), pH, specific conductance, turbidity, dissolved oxygen (DO) and temperature. The results of the final stabilized readings from GZA's monitoring rounds (both bedrock and overburden) are provided on Table 7. ORP values ranged from -197 electron volts (eV) in GZ-ML-2-2 to +63 eV in

GZ-ML-3-1. Note that ORP numbers were generally strongly negative, which indicates that a reducing environment exists within bedrock. DO values were generally below 5 mg/L. Note that at times, a hydrogen sulfide odor was observed in purge water from GZ-ML-2, also indicating an anaerobic environmental in bedrock at this location.

Specific conductance values were generally between 0.20 and 0.60 micro-Siemens per centimeter (µS/cm). Acidity levels (pH) were generally near neutral levels, except in GZ-ML-1, where pH was generally above 8, with a high of 11.2 recorded from Zone GZ-ML-1-1. The high pH in GZ-ML-1 may be due to the influence of the former wastewater disposal lagoons. Note that pH within GZ-ML-1 has decline significantly since the lagoons ceased operation in March 2008, dropping from above 10 SU in 2007 to under 8 SU in 2010. Temperature ranged from 12.7 degrees Celsius (°C) to 17.9 °C. These values are typical on New England groundwater.

Turbidity values ranged from a low of 0 nephelometric turbidity units (NTU) to a high of 289 NTU in a sample from GZ-ML-1-2. After significant purge volumes, 33 of the 46 bedrock samples collected by GZA still exceeded the target value of 5 NTU established by EPA for Low Flow sampling. As discussed in Section 6.35 below, there were no apparent impacts to the total metals concentrations (except in the April 26, 2010 sample from GZ-ML-1-3) due to the elevated turbidity levels.

6.33 VOCs in Multi-Level Bedrock Wells

As summarized in Table 8, VOCs were observed in at least one groundwater sample from every multi-level well zone, except GZ-ML-4-3. As in overburden groundwater and soils, as described in the June 2, 2005 SIR, the majority of detected compounds fall into two categories; chlorinated hydrocarbons such as tetrachloroethene and its breakdown products (i.e., trichloroethene and cis- and trans-1,2-dichloroethene), and petroleum hydrocarbons, such as toluene and related compounds. No chlorinated hydrocarbons were observed in GZ-ML-1 or GZ-ML-2.

Table 8 compares detected compounds to RIDEM's GA Groundwater Objectives. For detected compounds which do not have GA Objectives, 1 USEPA Region 3 RSLs for Tap Waters, were used for comparison only, as described in Section 6.10.

Detected compounds in GZ-ML-1 were limited to low levels of toluene (likely from the same sources as in GZ-ML-2) acetone, 2-butanone, chloroform, and dichloromethane. Ketones, such as acetone and 2-butanone, were found in the former industrial wastewater from Charbert and it is likely that these compounds are found in GZ-ML-1 due to its proximity to the former wastewater disposal lagoons. Note that chloroform can be produced by the breakdown of ketones and its presence is also likely due to the former industrial wastewater lagoons Dichloromethane, also known as methylene chloride, was found at very low levels in two samples from GZ-ML-1 during the August 2007 sampling event. Methylene chloride is a common laboratory

contaminant, and it is likely that the detects are due to contamination at the laboratory, as this compound was not detected in any other samples collected as part of this study.

Detected compounds in GZ-ML-2 were limited to low levels of methyl-tert-butyl-ether (MTBE) and toluene, likely from a documented historical gasoline release, which occurred to the east of the Charbert Facility. It is also our experience at other Sites that the Solinst multi-level well systems leach low levels of toluene.

Exceedences of GA Groundwater Objectives were limited to the following locations/zones: GZ-ML-3-1, GZ-ML-3-2 and GZ-ML-4-1. All GA exceedences were either of tetrachloroethene (PCE) or its breakdown products (trichloroethene and cis-1,2-dichloroethene). The highest levels were observed in GZ-ML-3-1, as shown in Table 8. Low levels of toluene were observed in GZ-ML-3 and GZ-ML-4, and as in GZ-ML-1 and GZ-ML-2, it is likely either due to an upgradient, off-site release, or is due to leaching from the Solinst multi-level well equipment. PCE and/or its breakdown products were detected in GZ-ML-5 and in GZ-ML-3-3 below GA Objectives; no VOCs were detected in GZ-ML-4-3.

Note that no VOCs were detected in the April 27, 2010 sample from GZ-ML-4; this result was not expected, based on the extraction packer testing results. In March of 2010, after the multi level well system in GZ-ML-4 was installed, the Wood River flooded much of the Charbert property, including the area around GZ-ML-4 which was inundated by over 5 feet of water. Based on the sample results, it appears that the April 27, 2010 sampling event was influenced by river water which infiltrated during the March 2010. Approximately 2 weeks prior to the June 1, 2010 sampling event, approximately three well volumes were purged from each zone in GZ-ML-4. As shown on Table 8, the results from the June event are similar to the extraction packer test results. Based on the analytical data and the timing of the flood event, we feel that the April 27, 2010 sample taken from GZ-ML-4 is not representative of groundwater conditions at this location.

Bedrock groundwater VOC data is summarized on Figure 7; inferred contaminant isopleths are displayed on Figure 8. Based on the distribution of PCE and its breakdown products, it appears that these contaminants are migrating south and west from the overburden source area described in the June 2, 2005 SIR, i.e. the former dry cleaning equipment area and other suspected release areas in the rear of the facility yard and former Lagoon 5, as shown on Figure 1. Based on the contaminant levels in GZ-ML-3, GZ-ML-4, and GZ-ML-5, it appears that the extents of the PCE related bedrock plume has been delineated both in depth (although the bottom depth of the aquifer, such as a confining layer, has not been encountered) and areal extent. The plume appears to be following the general overburden groundwater flow pattern in the vicinity of the facility building (generally to the southwest).

6.34 SVOCs and TPH in Multi-Level Bedrock Wells

As shown in Table 8, TPH was detected in all but one sample collected from GZ-ML-1, GZ-ML-2, and GZ-ML-3. In addition, TPH was detected in samples from GZ-ML-4-1 and GZ-Ml-4-2. However, as discussed in Section 6.11, the majority of detected TPH in each sample is non-petroleum based and likely due to compounds leaching from the tubing installed as part of the Solinst multi-level well systems. We do not believe petroleum based contaminants are present in bedrock groundwater.

Two SVOCs, n-nitrosodi-n-propylamine (GZ-ML-1-3) and di-n-butylphthalate (GZ-ML-2-1), were detected at low levels from multi-level well samples. Both of these compounds are found in either plastics or rubber and are not know Site contaminants. Based on there use in plastics/rubber, we believe that these two compounds are either laboratory contaminants (di-n-butylphthalate is noted by EPA as a commons laboratory contaminant) or leached from plastic/rubber components of the Solinst multi-level well systems. No other SVOCs were detected as part of this study.

6.35 Metals in Multi-Level Bedrock Wells

Seven metals (beryllium, chromium, copper, iron, manganese, thallium, and zinc) were detected on a total basis in one or more of the samples from the multi-level wells. Each of these metals is naturally occurring in soils and bedrock in Rhode Island. None of the detected metals concentrations exceeded RIDEM's GA Groundwater Objectives, except beryllium, chromium, and thallium, in a sample collected from GZ-ML-1-3 on April 26, 2010. This sample had turbidity over 100 NTUs and as described in Section 6.11, required the addition of acid at the laboratory to lower the sample pH. Based on the high turbidity, it is likely that these compounds were present in the particulate matter collected with the sample and were dissolved when additional acid was added to the sample; as such, we do not feel that this sample is representative of groundwater quality at this location. Previous samples from GZ-ML-1-3 did not have GA exceedences for any tested metals.

6.36 Overburden Results

As described in Section 4.80, a comprehensive site-wide VOC sampling event was used to evaluate contaminant concentrations in the overburden aquifer after the groundwater table had returned to ambient conditions, following decommissioning of the production wells and wastewater disposal lagoons. This involved sampling of eleven shallow and deep groundwater monitoring wells in October 2008 and evaluation of VOC analysis conducted as part of on-going programs including the quarterly UIC sampling program, the quarterly ICMP, quarterly perimeter well monitoring (as requested by RIDEM), and the annual residential raw well water sampling and analysis resulting in the evaluation of data from 38 wells. The results of this sampling and analysis event have been summarized in Table 9.

Of the eleven deep and shallow monitoring wells sampled during this event (excluding well samples collected as part of ongoing programs), only one well, CB-9, contained contaminants at concentrations above the MCL. Monitoring well CB-9 contained trichloroethylene and PCE at 1.3 µg/L and 16 µg/L, respectively. When combined with the results of the aforementioned ongoing sampling programs, the only overburden monitoring wells with GA exceedences outside the areas of active treatment are CB-9 and GZ-1. Overburden wells GZ-3, GZ-20, GZ-19, RIZ-7, GZ-21, GP-26, GP-28, GZ-7 are located within the areas of active overburden treatment (soil vapor extraction and soil venting), as shown on Figure 1, and have GA Groundwater Objectives exceedences.

Comparison of the above described results with the June 2, 2005 SIR, do not show any new areas of contamination or increased contaminant concentrations. The recent monitoring of wells GZ-1, and CB-9 show lower levels of VOCs than during the 2005 Site Investigation and monitoring wells GZ-6 and 27A both had no detected VOCs in October of 2008 compared with one detected VOC and four detected VOCs, respectively, during the Site investigation. No VOCs were detected in the quarterly perimeter wells or in RIZ-18 and RIZ-19, which are located on the northern property line between the lagoons and the neighborhood between Myrtle Avenue and River Street. At this time there is no evidence of changes in overburden contaminant migration patterns from those previously documented.

6.37 Diffusion Bag Results

Passive diffusion bag results from 2007 through 2009 are shown in Table 10; diffusion bag locations are shown on Figure 1. Diffusion bag results show varying levels of PCE and/or its daughter products; this indicates that groundwater from Charbert discharge to the Wood River. Note that diffusion bag results represent pore water (i.e., groundwater discharge) conditions within the river bottom and are not indicative of surface water quality. This suggests that groundwater from Charbert is discharging to the Wood River, rather than flowing under the river.

A comparison of the 2008 results (post-overburden remedial system installation) and the 2007 (pre-overburden remedial system installation) suggest that the air sparge curtain (shown on Figure 1) along the Wood River was effective in reducing the mass of contaminants discharging to the river. The results also indicate that the chlorinated contaminant parent/daughter ratio changed from 2007 to 2008, likely as the result of the overburden aquifer becoming more oxygenated by the air sparge system. The 2009 results show a moderate increase in contaminant concentrations from 2008, and lower contaminant levels than 2007. The results also indicate that the chlorinated contaminant parent/daughter ratio has remained the same from 2008 to 2009. The increase in detected levels of PCE and trichloroethene in the 2008 and 2009 samples may be the result of the Lagoon 5 dredging which appears to have disturbed contaminants in the lagoon bottom sediments. Note that Lagoon 5 is in close proximity to the diffusion bag sampling locations. The results from 2010 indicate a decrease in contaminant concentrations from

2009 and show a higher proportion of chlorinated contaminant daughter compounds than the 2009 results.

6.38 Residential Well Results

No VOCs were detected in samples collected from the four private residential wells located on the west bank of the Wood River, as described in Section 4.90. This indicates that bedrock groundwater contamination observed at the Charbert facility is not impacting off-Site human receptors.

7.00 SUMMARY AND CONCLUSIONS

This *Bedrock Site Investigation,* conducted at the Charbert Manufacturing Facility, was performed to address the requirement for site investigation studies as presented in Section 7 of RIDEM's Rules and Regulations for the Investigation and Remediation of Hazardous Materials Releases, as amended through February 2004. In addition, this report satisfies requirements for a bedrock aquifer evaluation described in our December 22, 2004 Phase II Subsurface Investigation Program Work Plan and Section C(4)(u) of the July, 5 2005 Consent Agreement between NFA. Corp. and RIDEM. The purpose of the investigation was to characterize conditions in the bedrock aquifer, including possible contamination and assess the potential risk associated with conditions with the aquifer. This study served to supplement the June 2, 2005 SIR, which dealt with overburden soils and groundwater.

The investigation involved the completion of an extensive bedrock investigation program including: surface geophysics; drilling of five bedrock boreholes; down borehole geophysics; extraction and injection packer testing; five multilevel well installations; and collection/field screening and analysis of bedrock groundwater samples. The investigation also included passive diffusion bag sampling in the Wood River, sampling of residential wells across the Wood River from the facility, overburden and bedrock piezometric monitoring, and a Site-wide overburden VOC sampling event. The investigation incorporated information from the June 2, 2005 where applicable and incorporated laboratory results from several ongoing monitoring programs.

Based on our evaluation of the project data, the following key conclusions have been developed.

- The ±113.9 acre Charbert property consists of Plat 11A, Lot 6 and is located in a rural area in the Town of Richmond at the confluence of the Wood and Pawcatuck Rivers.

- The Site, which occupies the western approximately one-third of Plate 11A, Lot 6, has been the location of a textile mill since the mid-1800s. Note that the facility ceased operations in February 2008 and is currently vacant.

- Groundwater at the Site is present at depths of approximately 4 to 20 feet below ground surface. Groundwater flow (both in overburden and in bedrock) in the northern portion of the Site is generally westerly toward the Wood River. Groundwater flow in overburden at the southern portion of the Site is observed to be flowing both east and west toward the Pawcatuck and Wood Rivers; bedrock groundwater in the southern portion of the Site appears to flow west toward the Wood River. Note that influences from the former production wells and industrial wastewater lagoons are no longer observed on-site, as the facility ceased operation in the winter of 2008.

  Based on our evaluation of piezometric information from the bedrock monitoring zones and river elevations; it is our opinion that bedrock groundwater from the Site ultimately discharges to the Wood River.

- The property has been assigned the groundwater classification GA/GAA which is consistent with the surrounding area.

- According to the State of Rhode Island Bedrock Map (1994 Bedrock Geologic Map of Rhode Island, Hermes, Grant and Murray), the Site is located in the Sterling Igneous Suite of the Hope Valley Subterrane (late Proterozoic era). Bedrock underlying the facility has been mapped as alaskite gneiss, a pale pink, orange, or gray fine to medium grained granite gneiss.

- Bedrock was observed at depths between approximately 40 feet below ground surface in the northern portion of the Site to approximately 120 feet below ground surface in the eastern portion of the Site.

- Down borehole geophysics and in-situ injection packer testing indicates that the bedrock onsite is highly fractured and has zones of high hydraulic conductivity. No statistical relationship was observed between hydraulic conductivity, depth, and fracture frequency.

- Bedrock groundwater sample collection and laboratory analysis, in the form of both extraction packer testing and sampling of multilevel well systems, were completed in newly installed bedrock wells at the Site. The focus of sample collection and laboratory analysis was to fully characterize conditions in the bedrock aquifer and assess changes in the quality of groundwater with depth and aerial extent. We believe the current program achieved both goals.

  The associated analytical testing program included the following analysis:

  - TPH Fingerprint with Organo-siloxanes (Massachusetts DEP Protocol)
  - Volatile Organic Compounds (EPA Method 8260B)
  - Semi-volatile organic compounds (EPA Method 8270),

- 13 Priority Pollutant Metals, Iron and Manganese (EPA Method 6010B/7470A)

- Exceedences of GA Groundwater Objectives were limited to the following zones: GZ-ML-3-1, GZ-ML-3-2 and GZ-ML-4-1. All GA exceedences are either of tetrachloroethene (PCE) or its breakdown products (trichloroethene and cis-1,2-dichloroethene). As discussed in Section 6.35, we feel that metals exceedences in the April 26, 2010 sample from GZ-ML-1-3 are not representative of bedrock groundwater and are the result of suspended particulates and the sample preservation technique. The distribution/concentration of contaminants in overburden observed in this study are similar to the findings of the June 2, 2005 SIR.

- The bedrock groundwater monitoring well results provide no indication that dense non-aqueous phase liquids are present or have migrated to significant depth within the aquifer. In fact, groundwater from the deepest multi-level well zones in GZ-ML-3 and GZ-ML-4, as well as all zones in GZ-ML-1, GZ-ML-2, and GZ-ML-5 meet RIDEM's GA Groundwater Objectives.

- Residential well testing results from samples collected at 260A, 260B, 266, and 270 Alton Bradford Road (across the Wood River from Charbert) indicate that no target VOC compounds were detected. This indicates that bedrock groundwater at these locations has not been impacted by Charbert and indicates that bedrock groundwater from Charbert is not traveling under the Wood River.

- Passive diffusion bag sampling within the Wood River adjacent to Charbert, indicates, through the detection of PCE and its daughter products, that groundwater from Charbert discharges to, rather than travels under, the Wood River.

- Based on this study, it appears that currently onsite bedrock groundwater contamination is not migrating off-site and does not pose a risk to off-site receptors.

We believe that this represents the conclusion of the bedrock aquifer characterization work required to develop an appropriate remediation plan.

8.00 DEVELOPMENT OF REMEDIAL ALTERNATIVES

As summarized above, the bedrock aquifer groundwater at two locations in the vicinity of the former mill building at the Site contain hazardous materials (chlorinated hydrocarbons) that represent Method 1 exceedences (i.e., exceedences of RIDEM's GA Groundwater Objectives/MCLs) as defined by the Remediation Regulations. The sources of the contamination have generally been identified and delineated in the June 2, 2005 SIR. No

active releases were identified; however, residual contamination in the vicinity of the facility buildings continues to act as a source of ongoing bedrock groundwater contamination.

Using the format established by Section 7.04 of the Remediation Regulations, we have evaluated three remedial alternatives for the Site to address the observed regulatory exceedences and conditions of non-compliance.

1. The first remedial alternative considered is "no further action" at the Site. The "no further action" alternative assumes that there will be no restrictions on future development or use of the Site. The presence of bedrock groundwater with contaminant concentrations that exceed the GA Groundwater Objectives/MCLs does not support the viability of this alternative. As such, the "no further action" is not considered protective of human health and the environment.

2. The second alternative involves the establishment of institutional controls to prohibit any future residential development of the Site and prohibit the use of groundwater within the area of impact from use as a potable water source. Such controls could be established in the form of an Environmental Land Use Restriction (ELUR) as outlined in Section 8.09 of the Remediation Regulations. This option fails to address the continued monitoring of on-Site bedrock groundwater, in order to ensure that contaminant migration patterns do not change in the future. As such, an ELUR alone is not considered a viable remedial alternative; however, it is considered an appropriate component of a more comprehensive Site-wide remedy.

3. The third, and recommended alternative, involves a combination of remedial measures to addresses the requirements of applicable regulatory programs. Due to the nature of the bedrock environment, we believe active remediation of the observed contamination to regulatory standards is technically impracticable, based on the nature of the bedrock environment and the type of contaminants. While DNAPL was not encountered during this investigation, it is likely that residual DNAPL is present in the vicinity of the facility building within soils and/or shallow bedrock. The following reference summarizes the current status of contaminant remediation in bedrock:

   "The fractured rock environment creates additional challenges for remediation due to the dual porosity and permeability of the fracture/matrix systems, the potentially limited interconnectivity of fracture networks, and the sequestering of contaminants in the low permeability rock matrix. Currently, no remediation technologies have been proven to be successful in fractured rock, and indeed, few attempts have been made to remediate contaminants in fractured bedrock, despite the fact that a large number of contaminated sites have been identified where at least part of the contamination exists in fractured rock."[3]

[3] U.S. EPA. 2005, Steam Enhanced Remediation Research for DNAPL in Fractured Rock, Loring Air Force Base, Limestone, Maine, EPA/540/R-05/010

Based on the literature, remediation of chlorinated solvent contamination in bedrock is considered technically impracticable. We believe that existing technologies will not remediate the observed bedrock contamination. The proposed alternative consists of the following:

- Monitored natural attenuation of the observed chlorinated hydrocarbon contamination observed in the bedrock aquifer utilizing the long-term groundwater monitoring program described below. Chlorinated hydrocarbons are generally broken down slowly over time through natural processes, such as bacterial respiration. We believe this is a viable remedial approach, as observed monitoring data indicates that at the present time, off-Site bedrock groundwater has not been impacted by on-Site contamination.

- Reclassification of bedrock groundwater in the vicinity of the facility building as a "Residual Zone", as described in Section 13.3 of RIDEM's Rules and Regulations Groundwater Quality, dated June 2010. Under these regulations, a residual zone is described as a "three-dimensional zone within which the pollutant concentrations remaining in the groundwater after remediation activities are allowed to be greater than the groundwater quality standards." As we are currently treating the identified source area within Site soils and the overburden aquifer, and proposing monitored natural attenuation for bedrock groundwater, we believe reclassification of bedrock groundwater at a portion of the Site to a Residual Zone, is appropriate.

- Implement a groundwater quality and flow direction monitoring program incorporating existing bedrock monitoring multi-level wells installed as part of this report. The purpose of the monitoring program will be to monitor contaminant migration in the bedrock aquifer to ensure migration patterns do not change or pose a threat to off site receptors and to monitor the natural breakdown of the observed contamination. The sampling program will incorporate the use of EPA's Low-Flow well purging and sampling protocols. The analytical program will consist of identified contaminants of concern (VOCs) The groundwater monitoring program will be used to monitor contaminant migration patterns and will include certain scheduled milestones (i.e., 2 to 5 year reviews) at which time the frequency and duration of the sampling can be evaluated. Environmental monitoring of groundwater conditions, along with implementation of a public water supply around Charbert and a restriction on the use of on-Site groundwater (as described below), will address the regulatory exceedences of groundwater quality criteria as well as mitigating future risks to human health.

- It is our understanding that the Town's of Hopkinton and Richmond are jointly developing a public water supply to service the area around

Charbert. However, Charbert is not leading the development of the public water supply and ultimately its implementation is not directly controlled by Charbert.

- To protect the long-term effectiveness of the remedy, establish an Environmental Land Use Restriction for the property. The ELUR will serve to:
  - restrict the property's use from any residential activity;
  - prohibit the use of bedrock groundwater at the Site;
  - require RIDEM notification should soil excavation be planned in source areas and implementation of a soils management plan for this work;
  - provide for long-term maintenance, monitoring and other measures necessary to assure the integrity of the remedial action;
  - require prior notice to the RIDEM of the owner's intent to convey any interest in the property; and
  - grant RIDEM the right to enter the property for inspections and monitoring compliance with the remedial actions.
  - conduct annual inspections of the facility to assure that remedial alternatives remain in effect. These inspections will be performed by an appropriately qualified environmental professional. A report documenting the findings of the inspections will be provided to RIDEM following each inspection.

9.00 CERTIFICATION

To address Section 7.05 of the Remediation Regulations, the following certifications of completeness are provided.

GZA certifies to the best of its knowledge that this Bedrock Site Investigation Report is complete and accurate.

Edward A. Summerly, P.G.
Principal
GZA GeoEnvironmental, Inc.

Mr. Emil Bernstein, representative for owner of the property, certifies to the best of his knowledge that this Bedrock Site Investigation Report is a complete and accurate representation of the site and contains all known facts concerning the release of hazardous substances at the site.

Emil Bernstein
Executive Vice President
NFA Corp.

10.00 LIMITATIONS

GZA's work was performed in accordance with generally accepted practices of other consultants undertaking similar studies at the same time and in the same geographical area, and GZA observed that degree of care and skill generally exercised by other consultants under similar circumstances and conditions. This report is also subject to the limitations contained in Appendix A.

GZA's findings and conclusions must be considered not as scientific certainties, but rather as our professional opinion concerning the significance of the limited data gathered during the course of the environmental site investigation. No other warranty, express or implied, is made. Specifically, GZA does not and cannot represent that the Site contains no hazardous material, oil or other latent condition beyond that observed by GZA during its site investigation.

This study and report have been prepared on behalf of and for the exclusive use of the Charbert, Division of NFA Corp. solely for use in an environmental investigation of the Site.

TABLES

Table 1
Site Wide Piezometric Monitoring: 2008-2010
Bedrock Site Investigation Report
Charbert Facility, Alton RI

WELL ID	GROUNDWATER AND SURFACE WATER MEASUREMENTS																													
	1/4/08		2/13/08		2/22/08		3/6/08		3/21/08		4/3/08		4/18/08		5/2/08		5/15/08		6/2/08		6/27/08		7/18/08		8/14/08		9/10/08		11/11/08		6/4/10	
	DEPTH	ELEV.	DEPTH	ELEV.	DEPTH	ELEV.	DEPTH	ELEV.	DEPTH	ELEV.	DEPTH	ELEV.	DEPTH	ELEV.	DEPTH	ELEV.	DEPTH	ELEV.	DEPTH	ELEV.	DEPTH	ELEV.	DEPTH	ELEV.	DEPTH	ELEV.	DEPTH	ELEV.	DEPTH	ELEV.	DEPTH	ELEV.
RIZ-1	6.8	43.4	9.9	40.3	5.9	44.4	5.9	44.3	4.3	45.9	5.2	45.1	5.5	44.8	5.2	45.0	5.8	44.4	6.5	43.8	6.6	43.6	7.3	43.0	6.2	44.0	6.2	44.1	6.8	43.4	6.3	44.0
RIZ-3	7.2	41.4	7.8	40.9	6.5	42.2	6.5	42.2	4.8	43.8	5.8	42.8	6.2	42.4	5.8	42.8	6.6	42.1	7.2	41.4	7.3	41.4	8.0	40.6	6.7	41.9	6.6	42.0	7.3	41.4	7.2	41.4
RIZ-5	5.6	41.0	5.8	40.7	4.9	41.7	5.7	40.9	3.3	43.3	4.5	42.1	4.6	42.0	4.4	42.2	5.2	41.4	5.9	40.7	4.2	42.3	6.8	39.8	4.3	42.3	3.6	43.0	4.8	41.8	5.9	40.6
RIZ-6	4.0	42.3	4.1	42.2	3.2	43.2	3.0	43.3	1.9	44.5	2.9	43.4	3.4	43.0	2.9	43.4	3.6	42.7	4.2	42.1	4.3	42.1	4.8	41.5	3.7	42.6	3.6	42.7	4.2	42.1	4.2	42.1
RIZ-7	5.9	41.1	6.2	40.8	5.2	42.3	5.4	41.6	4.3	42.7	5.5	41.6	5.9	41.1	5.3	41.7	6.2	40.8	6.9	40.1	6.8	40.2	7.6	39.5	6.2	40.8	6.1	41.0	6.7	40.3	6.9	40.1
RIZ-10	--	--	15.9	48.5	15.9	48.5	17.0	47.5	16.3	48.1	17.9	46.6	18.0	46.4	16.5	48.0	18.5	46.0	19.6	44.9	20.2	44.3	20.5	43.9	21.0	43.5	Dry		Dry		Decomissioned	
RIZ-13	--	--	5.6	41.0	4.3	42.3	5.1	41.0	3.5	42.6	4.2	42.3	4.7	41.5	3.5	43.1	3.8	42.7	5.3	41.2	5.0	41.6	5.9	40.6	4.5	42.1	4.0	42.5	4.9	41.6	--	--
RIZ-14	16.7	46.0	14.9	47.7	13.9	48.7	13.6	49.0	12.8	49.8	13.1	49.5	13.4	49.3	13.8	48.8	14.1	48.6	14.6	48.0	15.2	47.4	15.8	46.8	15.9	46.7	15.9	46.7	16.1	46.5	13.9	48.8
RIZ-15	15.9	46.6	12.1	50.4	11.7	50.8	11.5	51.0	11.5	51.0	12.0	50.5	12.5	50.0	13.0	49.5	13.3	49.2	14.0	48.6	14.7	47.8	15.3	47.2	15.3	47.2	15.4	47.1	15.7	46.8	16.0	46.5
RIZ-18	19.4	46.5	18.0	47.9	17.1	48.8	16.8	49.2	15.9	50.0	16.8	49.1	16.1	49.8	16.5	49.4	16.7	49.2	17.2	48.8	17.8	48.2	18.3	47.7	18.6	47.4	18.6	47.4	18.7	47.3	16.2	49.8
RIZ-19	17.5	46.4	16.0	47.9	15.0	48.9	14.6	49.3	13.8	50.1	14.0	49.9	14.1	49.7	14.6	49.3	14.8	49.1	15.2	48.6	15.9	48.0	16.4	47.5	16.7	47.2	16.7	47.2	16.8	47.1	14.4	49.5
RIZ-20	15.1	45.7	13.3	47.5	12.1	48.7	12.1	48.7	11.8	49.0	12.3	48.5	12.6	48.2	13.1	47.7	13.3	47.5	13.8	47.0	14.4	46.4	15.0	45.8	15.0	45.8	15.0	45.8	15.3	45.5	16.1	44.7
RIZ-21	11.6	41.3	12.0	40.9	10.8	42.0	10.8	42.1	9.0	43.8	10.0	42.9	10.4	42.5	10.0	42.9	10.8	42.1	11.4	41.5	11.5	41.3	12.3	40.6	11.1	41.8	11.0	41.8	11.7	41.2	11.4	41.4
MW-2A	--	--	7.5	56.1	8.0	55.6	8.7	54.9	8.9	54.7	9.9	53.7	6.8	56.8	8.6	55.0	10.3	53.3	12.1	51.5	13.4	50.2	14.3	49.3	13.8	49.8	14.6	49.0	15.1	48.5	13.8	49.4
MW-4A	10.6	47.8	6.9	51.6	6.6	51.9	6.6	51.9	6.4	52.0	7.0	51.4	7.3	51.1	7.6	50.8	8.2	50.3	8.9	49.5	9.7	48.8	10.3	48.1	10.3	48.2	10.4	48.1	10.9	47.6	9.0	49.4
GP-15	--	--	13.6	47.2	13.0	47.9	12.6	48.3	11.7	49.1	11.8	49.1	11.8	49.1	12.1	48.7	12.2	48.6	12.6	48.3	13.0	47.8	13.4	47.4	13.7	47.2	13.7	47.1	13.6	47.3	11.7	49.2
GP-16	7.9	47.7	8.0	47.6	6.8	48.8	6.7	48.9	5.4	50.2	6.3	49.3	6.7	48.9	6.1	49.5	6.9	48.7	7.6	48.0	7.6	48.0	8.3	47.3	7.0	48.6	7.0	48.6	7.9	47.7	7.4	48.2
GP-17	27.6	46.3	27.1	46.8	27.8	46.1	26.3	47.6	25.4	48.5	25.1	48.8	24.9	48.9	25.1	48.7	25.3	48.6	25.6	48.3	26.0	47.9	26.4	47.5	26.7	47.2	26.9	46.9	26.8	47.1	23.9	50.0
GP-18	19.4	39.7	12.7	46.4	--	--	10.3	48.8	9.5	49.6	9.8	49.3	10.0	49.2	10.4	48.7	10.6	48.5	11.1	48.0	11.7	47.4	12.2	46.9	12.5	46.6	12.5	46.6	12.6	46.5	10.4	48.7
GP-19	15.9	46.2	13.5	48.6	12.7	49.4	12.5	49.6	11.9	50.2	12.3	49.8	12.7	49.4	13.1	49.0	13.4	48.7	13.9	48.2	14.6	47.5	15.2	46.9	15.3	46.8	15.2	46.9	15.5	46.5	14.0	48.1
GP-20	--	--	15.9	51.8	15.9	51.8	16.4	51.2	17.5	50.1	19.3	48.4	20.5	47.1	Dry		Dry		Dry		Dry		Dry		Dry		Dry		Dry		Decomissioned	
GP-21	--	--	12.4	52.4	12.3	52.5	12.9	51.9	12.7	52.1	13.4	51.5	13.3	51.5	13.6	51.3	14.2	50.6	15.0	49.8	15.8	49.0	16.5	48.3	16.6	48.3	17.2	47.7	17.9	47.0	17.1	47.7
GP-22	7.0	41.6	7.5	41.0	6.3	42.2	6.4	42.2	4.6	44.0	5.5	43.1	5.9	42.7	5.5	43.1	6.2	42.4	6.9	41.7	7.0	41.6	7.7	40.8	6.5	42.1	6.4	42.1	7.1	41.5	9.3[3]	39.2
GP-25	3.5	44.5	2.8	45.2	2.9	45.1	3.0	45.0	3.1	44.9	3.5	44.5	3.7	44.2	4.0	44.0	4.3	43.7	4.5	43.5	4.7	43.3	6.8	41.2	3.9	44.1	5.6	42.4	4.2	43.8	4.1	43.8
GP-26	7.9	41.4	8.2	41.0	7.1	42.1	7.0	42.2	5.6	43.7	6.6	42.7	6.5	42.7	6.5	42.7	7.2	42.0	7.9	41.4	8.0	41.3	8.7	40.6	7.4	41.9	7.3	42.0	7.9	41.3	8.2	41.0
GP-27A	10.3	41.8	10.4	41.7	9.4	42.8	9.4	42.8	7.7	44.5	8.7	43.5	9.0	43.2	8.4	43.8	9.1	43.1	9.8	42.4	9.9	42.3	10.6	41.6	9.3	42.9	9.2	43.0	9.9	42.3	9.7	42.5
GP-27B	9.9	42.3	10.3	42.0	9.1	43.1	--	--	--	--	--	--	--	--	8.7	43.6	9.4	42.8	10.0	42.2	10.1	42.1	10.8	41.4	9.5	42.7	9.5	42.7	10.2	42.0	10.0	42.2
GP-28	6.1	40.6	6.3	40.4	5.2	41.5	5.1	41.6	3.8	42.9	5.0	41.7	5.1	41.6	5.0	41.7	5.8	40.9	6.4	40.3	6.5	40.2	7.2	39.5	5.9	40.8	5.8	40.9	6.4	40.3	6.9	39.8
GP-29	--	--	19.3	47.6	19.0	47.9	19.7	47.2	19.4	47.5	20.4	46.5	19.7	47.2	19.8	47.1	21.1	45.9	22.0	44.9	22.9	44.0	23.6	43.3	23.9	43.0	24.1	42.8	24.0	42.9	19.2	41.8
GP-30	14.1	46.6	12.3	48.5	11.3	49.4	11.0	49.7	10.3	50.4	10.6	50.2	10.9	49.9	11.2	49.6	11.5	49.3	12.0	48.7	12.6	48.1	14.0	46.7	13.3	47.4	13.3	47.4	13.6	47.1	11.2	49.5
PT-1	10.0	41.7	7.4	44.4	9.2	42.6	9.2	42.6	7.6	44.2	8.6	43.2	9.0	42.8	8.6	43.2	9.3	42.4	10.0	41.8	10.2	41.6	Dry		Dry		9.6	42.1	10.2	41.6	--	--
PT-2	12.6	40.6	12.3	41.0	11.1	42.1	11.1	42.1	9.7	43.5	10.6	42.7	11.0	42.2	10.7	42.5	11.3	41.9	12.0	41.2	12.2	41.0	13.0	40.2	11.9	41.3	11.9	41.3	12.3	40.9	12.0	41.2
PT-4	7.6	40.6	8.4	39.7	8.4	38.8	8.1	40.0	6.0	41.2	7.1	41.0	7.6	39.6	7.1	40.1	7.9	39.3	8.6	38.6	9.0	38.3	9.4	37.8	8.1	39.1	8.0	39.2	8.7	38.6	8.7	38.5
PT-5	5.8	41.3	6.2	40.9	5.3	41.8	5.2	41.9	3.4	43.7	4.4	42.7	4.8	42.3	4.4	42.7	5.1	42.0	5.8	41.3	5.9	41.2	6.6	40.5	5.4	41.7	5.3	41.8	5.9	41.2	--	--
CB-9	8.0	41.4	8.5	40.9	7.3	42.1	7.3	42.1	6.6	42.8	6.6	42.8	7.0	42.4	6.5	42.8	7.3	42.1	8.0	41.4	8.0	41.3	8.8	40.6	7.5	41.9	7.4	41.9	8.0	41.3	7.9	41.4
CB-12	--	--	7.8	53.6	7.6	53.7	7.9	53.4	8.4	53.0	9.1	52.2	9.4	51.9	9.8	51.6	10.4	50.9	Destroyed		Destroyed		Destroyed		Destroyed		Destroyed		Destroyed		Destroyed	
GZ-1	15.3	41.2	15.0	41.5	13.8	42.9	13.9	42.8	12.5	44.2	13.3	43.4	13.7	43.0	13.7	42.8	14.1	42.4	15.0	41.5	15.2	41.2	16.0	40.5	15.0	41.4	15.0	41.5	15.3	41.1	14.8	41.9
GZ-2	19.5	42.0	18.6	42.8	17.6	43.9	17.7	43.8	16.5	45.0	17.2	44.3	17.5	43.9	17.6	43.9	18.0	43.4	18.7	42.8	19.1	42.4	19.8	41.7	19.1	42.3	19.2	42.3	19.4	42.1	18.6	42.9
GZ-3	7.8	41.3	8.1	41.0	7.0	42.1	7.0	42.1	5.5	43.6	6.6	42.6	6.6	42.5	6.5	42.6	7.3	41.8	8.0	41.2	8.0	41.1	8.8	40.4	7.4	41.7	7.4	41.8	8.0	41.2	8.0	41.1
GZ-4A	--	--	17.1	41.9	--	--	16.1	43.0	14.6	44.5	15.3	43.7	15.6	43.4	15.5	43.5	16.1	42.9	16.8	42.3	17.0	42.0	17.7	41.3	16.8	42.2	16.8	42.3	12.2	46.9	16.6	42.4
GZ-5	--	--	19.6	46.0	19.3	46.1	19.5	46.1	19.0	46.6	19.7	45.9	20.0	45.6	20.1	45.5	20.6	45.0	21.2	44.4	--	--	--	--	--	--	--	--	22.6	43.0	21.5	44.1
GZ-6	6.6	41.7	7.1	41.2	6.0	42.4	5.9	42.4	4.2	44.1	5.2	43.1	5.6	42.7	5.2	43.2	5.9	42.4	6.6	41.7	6.7	41.7	7.4	40.9	6.1	42.2	6.1	42.3	6.7	41.6	--	--
GZ-7	8.2	41.6	8.5	41.3	7.5	42.3	7.4	42.3	6.0	43.7	7.0	41.2	6.8	43.0	6.9	42.9	7.6	42.2	8.3	41.5	8.3	41.4	9.1	40.7	7.8	42.0	7.7	42.1	8.3	41.5	9.1	40.7
GZ-8	9.9	42.3	10.2	42.0	9.1	43.1	9.1	43.0	7.4	44.8	8.4	43.8	8.8	43.4	8.3	43.9	9.0	43.1	9.7	42.5	9.8	42.4	10.5	41.7	9.2	42.9	9.2	43.0	9.9	42.3	9.7	42.5
GZ-9	--	--	15.0	50.9	14.6	51.3	15.1	50.8	14.7	51.2	15.2	50.7	15.4	50.5	15.7	50.2	16.1	49.8	16.7	49.2	17.4	48.5	18.0	47.9	18.3	47.6	dry at 18.22		dry @ 18.19		18.2	47.7
GZ-10	--	--	14.3	44.3	13.7	44.9	14.1	44.5	13.5	45.1	14.3	44.3	14.5	44.1	14.4	44.1	15.0	43.5	15.7	42.8	16.5	42.1	17.0	41.5	17.2	41.4	17.3	41.2	17.3	41.3	16.3	42.3
GZ-11	--	--	19.4	43.3	18.6	44.1	18.8	43.9	18.0	44.7	18.8	43.9	19.1	43.6	19.1	43.6	19.6	43.1	20.4	42.3	21.0	41.7	21.8	40.9	21.3	41.4	21.3	41.4	21.4	41.2	20.9	41.8
GZ-12	--	--	Dry		Dry		Dry		14.8	48.1	14.8	48.1	14.9	48.0	14.9	48.0	14.9	48.0	Dry		Dry		Dry		Dry		Dry		Dry		Decomissioned	
GZ-13	--	--	Dry		19.4	44.6	19.1	44.9	18.1	46.0	18.9	45.1	19.5	44.6	19.7	44.3	Dry		Dry		Dry		Dry		Dry		Dry		Dry		Decomissioned	
GZ-14	--	--	21.8	43.8	21.2	44.4	21.2	44.4	20.6	45.1	21.2	44.4	21.6	44.0	21.6	44.0	22.1	43.5	22.8	42.8	23.5	42.1	24.5	41.2	23.8	41.8	23.7	41.9	24.0	41.7	23.3	42.4
GZ-15	--	--	18.5	44.1	17.7	44.9	17.8	44.8	17.1	45.5	17.7	44.9	18.1	44.5	18.3	44.3	18.6	44.0	19.1	43.4	19.9	42.7	20.7	41.9	20.6	42.0	20.6	41.9	20.5	42.1	21.9	40.6
GZ-16	--	--	18.6	44.9	17.6	45.8	17.7	45.7	17.1	46.4	17.7	45.7	18.1	45.3	18.4	45.0	18.9	44.5	19.4	44.0	20.3	43.1	21.1	42.3	21.1	42.3	21.2	42.2	21.1	42.4	Decomissioned	
GZ-17	--	--	18.3	45.4	12.0	51.7	12.4	51.4	12.2	51.5	12.7	51.0	13.1	50.6	13.4	50.3	13.9	49.8	14.7	49.0	15.8	48.0	16.5	47.2	16.9	46.9	16.7	47.1	Dry		16.4	47.3
GZ-18	--	--	18.4	45.9	17.8	46.5	18.0	46.3	17.3	47.0	18.0	46.3	18.4	45.9	18.8	45.5	19.2	45.1	20.0	44.3	Dry		Dry		Dry		Dry		Dry		Decomissioned	
GZ-19	9.0	41.1	9.3	40.7	8.2	41.8	8.1	41.9	6.7	43.3	7.9	42.2	8.1	41.9	7.8	42.3	8.6	41.5	9.3	40.8	9.3	40.7	10.1	40.0	8.7	41.3	8.6	41.4	9.2	40.8	9.4	40.6
GZ-20	7.9	41.1	8.1	40.9	7.1	41.9	7.0	42.0	6.6	42.4	6.8	42.2	7.0	41.9	6.7	42.3	7.5	41.5	8.2	40.8	8.2	40.8	9.0	40.0	7.6	41.3	7.6	41.4	8.1	40.8	8.3	40.7
GZ-21	11.9	40.7	12.3	40.3	11.4	41.3	11.1	41.5	9.8	42.8	10.9	41.7	11.4	41.2	10.7	41.9	11.7	41.0	12.3	40.4	12.3	40.3	13.1	39.5	11.7	40.9	11.6	41.0	12.2	40.4	12.4	40.2

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	1/4/08		2/13/08		2/22/08		3/6/08		3/21/08		4/3/08		4/18/08		5/2/08		5/15/08		6/2/08		6/27/08		7/18/08		8/14/08		9/10/08		11/11/08		6/4/10	
	DEPTH	ELEV.	DEPTH	ELEV.	DEPTH	ELEV.	DEPTH	ELEV.	DEPTH	ELEV.	DEPTH	ELEV.	DEPTH	ELEV.	DEPTH	ELEV.	DEPTH	ELEV.	DEPTH	ELEV.	DEPTH	ELEV.	DEPTH	ELEV.	DEPTH	ELEV.	DEPTH	ELEV.	DEPTH	ELEV.	DEPTH	ELEV.
GZ-22	12.1	40.6	12.5	40.2	11.6	41.1	11.3	41.4	9.9	42.8	11.1	41.7	11.6	41.1	10.9	41.8	11.9	40.9	12.4	40.3	12.5	40.2	13.3	39.4	11.9	40.8	11.8	40.9	12.5	40.3	12.6	40.2
GZ-23	9.0	40.5	6.3	40.3	8.3	41.2	8.1	41.5	6.8	42.7	8.0	41.5	8.6	41.0	7.9	41.7	8.8	40.7	9.4	40.1	9.5	40.1	10.2	39.3	8.8	40.7	8.8	40.8	9.4	40.2	9.6	40.0
GZ-24	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	8.4	38.1
GZ-25	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	5.3	40.3
GZ-26	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	5.6	40.3
GZ-27	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	5.5	40.3
GZ-28	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	5.6	40.3
SURFACE WATER MEASUREMENTS																																
PD-1	4.0	49.5	3.9	49.7	3.5	50.0	2.5	51.0	2.0	51.5	2.5	51.0	2.5	51.0	3.8	49.8	3.8	49.8	3.8	49.8	4.3	49.3	4.5	49.0	4.0	49.5	3.5	50.0	3.0	50.5	2.5	51.0
PD-2	13.9	40.5	14.0	40.4	13.3	41.2	12.4	42.0	11.6	42.8	13.2	41.2	13.8	40.6	12.6	41.8	14.0	40.5	14.3	40.2	14.2	40.3	14.8	39.6	13.5	40.9	13.5	40.9	14.1	40.3	14.6	39.8
SW-1	3.3	41.1	4.4	40.0	1.0	43.1	0.5	43.9	0.0	44.4	1.8	42.6	0.6	43.8	1.5	42.9	2.0	42.4	4.0	40.4	5.0	39.4	5.5	38.9	3.5	40.9	3.5	40.9	2.5	41.9	1.8	42.6
SW-2	0.8	41.6	0.1	42.3	0.6	42.4	-0.3	43.2	-0.5	43.5	-0.3	43.2	0.2	42.8	-0.5	43.5	0.3	42.6	1.0	42.0	2.0	41.0	2.5	43.0	0.3	42.7	0.0	43.0	1.0	42.0	1.3	41.7
SW-3	0.3	39.6	-0.1	39.9	0.3	40.2	-0.1	40.6	-0.3	40.8	0.3	40.2	1.0	39.5	0.0	40.5	1.2	39.3	1.5	38.3	2.0	37.8	2.8	37.1	0.5	39.3	0.3	39.6	1.0	38.8	1.0	38.8
SW-6	--	--	1.6	38.9	1.0	39.4	0.8	39.7	-0.5	40.9	0.8	39.7	2.0	38.4	1.0	39.4	2.5	37.9	3.0	37.4	4.0	36.4	3.6	36.9	3.0	37.4	2.0	38.4	3.5	36.9	--	--
LAGOON 1	--	--	--	61.0	--	63.0	--	63.0	--	62.0	--	62.0	--	58.0	--	54.5	--	55.4	--	54.0	--	54.0	--	54.0	--	54.0	--	53.3	--	--	Decomissioned	
LAGOON 2	--	--	--	60.0	--	60.0	--	59.0	--	58.0	--	53.0	--	61.0	--	60.0	--	59.4	--	56.9	--	54.9	--	53.8	--	53.0	--	54.3	--	--	Decomissioned	
LAGOON 3	--	--	--	62.5	--	61.0	--	61.0	--	62.0	--	60.0	--	61.0	--	59.0	--	56.0	--	55.1	--	54.7	--	51.6	--	51.0	--	54.2	--	--	Decomissioned	
EW-1	9.9	41.7	9.9	41.7	8.7	42.9	8.7	42.8	7.2	44.4	8.1	43.5	8.5	43.1	8.2	43.4	8.8	42.8	9.5	42.1	9.7	41.9	10.5	41.1	9.3	42.3	9.3	42.3	9.8	41.8	Decomissioned	
EW-2	11.0	41.7	17.3	35.4	10.1	42.5	10.1	42.6	8.4	44.2	9.3	43.3	9.8	42.9	9.4	43.3	10.1	42.6	10.8	41.9	11.0	41.7	11.7	41.0	10.5	42.2	10.5	42.2	11.0	41.7	Decomissioned	
EW-3	8.2	40.7	17.2	31.7	16.8	32.1	16.6	32.2	5.8	43.1	6.9	42.0	7.4	41.5	6.8	42.1	7.6	41.2	8.3	40.6	8.4	40.5	9.2	39.7	7.8	41.0	7.7	41.1	8.4	40.5	Decomissioned	
EW-4	--	--	--	--	13.6	34.1	6.1	41.6	4.4	43.3	5.4	42.3	5.8	41.9	5.4	42.4	6.1	41.6	6.8	40.9	6.9	40.9	7.6	40.1	6.4	41.4	6.3	41.5	6.9	40.8	Decomissioned	
OEW-2	18.7	41.8	17.3	43.2	16.9	43.6	17.0	43.5	15.7	44.8	16.5	44.0	16.8	43.6	16.8	43.6	17.3	43.1	18.0	42.5	18.3	42.1	19.1	41.4	18.0	42.4	18.2	42.3	18.5	42.0	Decomissioned	

Notes
1. Yellow highlighted values measured from different datum and were adjusted.
2. Orange highlighted values are estimates
3. Suspect reading which was discarded from analysis

Table 2
Bedrock Piezometric Monitoring: June 2010
Bedrock Site Investigation Report
Charbert Facility, Alton RI

WELL ID	Piezometric Elevation 6/4/10	Distance From Bottom of Zone to Top of Next Zone (ft)	Vertical Gradient Between Zones (ft/ft)	Horizontal Gradients between Shallowest Zones (ft/ft)	
GZ-ML-1-1	41.5	17	0.0135	GZ-ML-3 to GZ-ML-4	0.02
GZ-ML-1-2	41.8	11	-0.1445	GZ-ML-2 to GZ-ML-4	0.0043
GZ-ML-1-3	40.2	--	--	GZ-ML-1 to GZ-ML-5	0.005
GZ-ML-2-1	40.5	81.5	-0.0088		
GZ-ML-2-3	39.8	--	--		
GZ-ML-3-1	41.5	32	-0.0169		
GZ-ML-3-2	41.0	32.6	0.0107		
GZ-ML-3-3	41.3	--	--		
GZ-ML-4-1	39.0	13	0.1315		
GZ-ML-4-2	40.8	99	-0.0225		
GZ-ML-4-3	38.5	--	--		
GZ-ML-5-2	39.1	25	-0.0088		
GZ-ML-5-3	38.9	--	--		

Note: Zones in each bedrock multi-level well are number consecutively from shallow to deep.

Table 3
Borehole Fracture Frequency Data
Bedrock Site Investigation Report
Charbert Facility, Alton RI

BORING NO.	TEST ZONE	DEPTH INTERVAL (feet bgs)	NUMBER OF FRACTURES IN TEST ZONE	FRACTURE FREQUENCY (# fractures/ft)
GZ-ML-1	1	123.5-135.25	34	2.9
	2	137.25-149	23	2.0
	3	148.25-160	23	2.0
	4	159.25-171	18	1.5
	5	170.25-182	23	2.0
	6	181-192.75	23	2.0
	7	185.25-197	30	2.6
GZ-ML-2	1	89.3-101.1	35	3.0
	2	100.6-112.4	44	3.7
	3	111.9-123.7	27	2.3
	4	123.2-135	29	2.5
	5	134.5-146.3	37	3.1
	6	145.8-157.6	33	2.8
	7	157.1-168.9	17	1.4
	8	168.4-180.2	16	1.4
	9	179.7-191.5	29	2.5
	10	191-201	35	3.5
GZ-ML-3	1	46.3-58.1	21	1.8
	2	57.6-69.4	26	2.2
	3	68.9-80.7	24	2.0
	4	80.2-92	23	1.9
	5	91.5-103.3	23	1.9
	6	102.8-114.6	24	2.0
	7	114.1-125.9	42	3.6
	8	125.4-137.2	46	3.9
	9	136.7-148.5	42	3.6
	10	148-158	25	2.5
GZ-ML-4	1	58-68	30	3.0
	2	71-86	45	3.0
	3	87-97	14	1.4
	4	100-110	8	0.8
	5	113-123	13	1.3
	6	122-132	7	0.7
	7	131-141	10	1.0
	8	141-150	15	1.7
	9	148-158	10	1.0
	10	157-167	22	2.2
	11	166-176	21	2.1
	12	173-183	19	1.9
	13	180-191	19	1.7
	14	189-199	27	2.7
GZ-ML-5	1	45-55	16	1.6
	2	56-66	22	2.2
	3	65-75	23	2.3
	4	74-83	30	3.3
	5	84-94	18	1.8
	6	93-102	15	1.7
	7	102-111	18	2.0
	7A	105-113	22	2.8
	8	116-126	23	2.3

Notes

1. Fracture traces per foot represent the number of apparent rock fractures within each depth interval divided by the length of the test interval. Fracture trace data was obtained from Acoustic Televiewer Logs performed by Hager-Geoscience Inc. Note, Hager indicates that not all features identified in the ATV logs are necessarily rock fractures. Other features such as filled fractures, foliation, and mineralized or weathered zones may be identified and would be included here as fractures.
2. Televiewer logs for each borehole were interpreted by Hager Geosciences, Inc.

Table 4
Phase I Injection Packer Test Results
Bedrock Site Investigation Report
Charbert Facility, Alton RI

BORING NO.	TEST ZONE	DEPTH INTERVAL (feet bgs)	FRACTURE FREQUENCY (# fractures/ft)	K1 FT/YR (0.75 psi/ft)	K2 FT/YR (0.5 psi/ft)	K RESULT FT/YR (Avg.)	Comments
GZ-ML-1	1	123.5-135.25	2.9	NT	318	318	
	2	137.25-149	2.0	18	20	19	
	3	148.25-160	2.0	28	23	26	
	4	159.25-171	1.5	4	2	3	
	5	170.25-182	2.0	4	2	3	
	6	181-192.75	2.0	16	11	14	
	7	185.25-197	2.6	4	2	3	
GZ-ML-2	1	89.3-101.1	3.0	78	89	84	
	2	100.6-112.4	3.7	76	83	79	
	3	111.9-123.7	2.3	2	3	3	No Flow
	4	123.2-135	2.5	2	3	2	No Flow
	5	134.5-146.3	3.1	3	3	3	
	6	145.8-157.6	2.8	13	12	12	
	7	157.1-168.9	1.4	10	11	11	
	8	168.4-180.2	1.4	1	2	2	No Flow
	9	179.7-191.5	2.5	21	21	21	
	10	191-201	3.5	30	33	32	
GZ-ML-3	1	46.3-58.1	1.8	NT	1840	1840	
	2	57.6-69.4	2.2	NT	1567	1567	
	3	68.9-80.7	2.0	3	5	4	No Flow
	4	80.2-92	1.9	3	4	4	No Flow
	5	91.5-103.3	1.9	3	4	3	No Flow
	6	102.8-114.6	2.0	23	24	23	
	7	114.1-125.9	3.6	16	18	17	
	8	125.4-137.2	3.9	2	3	2	No Flow
	9	136.7-148.5	3.6	2	3	2	No Flow
	10	148-158	2.5	39	42	41	

Notes:
1. Hydraulic conductivity of bedrock was calculated based upon methods presented in the Groundwater Manual, (U.S. Department of the Interior, Revised Reprint 1981).
2. No Flow indicates that no water movement was recorded during the test.
3. Packer test depth intervals indicate the length of individual test zones with reference to ground surface.
4. Fracture traces per foot represent the number of apparent rock fractures within each depth interval divided by the length of the test interval. Fracture trace data was obtained from Acoustic Televiewer Logs performed by Hager-Geoscience Inc. Note, Hager indicates that not all features identified in the ATV logs are necessarily rock fractures. Other features such as filled fractures, foliation, and mineralized or weathered zones may be identified and would be included here as fractures
5. Packer tests were generally performed at approximately 0.5 to 0.75 psi per foot of depth from ground surface to the top of the test zone.
6. Televiewer logs for each borehole were interpreted by Hager Geosciences, Inc.
7. NT indicates that no pressure testing was performed over the indicated interval.

Table 5
Phase II Injection Packer Test Results
Bedrock Site Investigation Report
Charbert Facility, Alton RI

TEST ZONE	DEPTH INTERVAL (feet bgs)	FRACTURE FREQUENCY (# fractures/ft)	PRESSURE (PSI)	K FT/YR	Comments
GZ-ML-4					
1	58-68	3.0	35	<4	No Flow
			45	<4	No Flow
			63	<4	No Flow
	AVERAGE K (FT/YR)			**<4**	
2	71-86	3.0	44	67	
			60	76	
			83	75	
	AVERAGE K (FT/YR)			**73**	
3	87-97	1.4	49	24	
			66	22	
			93	35	
	AVERAGE K (FT/YR)			**27**	
4	100-110	0.8	55	3	
			75	9	
			105	70	
	AVERAGE K (FT/YR)			**27**	
5	113-123	1.3	60	9	
			84	0	
			115	62	
	AVERAGE K (FT/YR)			**24**	
6	122-132	0.7	71	<4	No Flow
			85	<4	No Flow
	AVERAGE K (FT/YR)			**<4**	
7	131-141	1.0	71	<4	No Flow
			96	<4	No Flow
			116	8	
	AVERAGE K (FT/YR)			**3**	
8	141-150	1.7	76	<4	No Flow
			105	3	
			136	78	
	AVERAGE K (FT/YR)			**40**	
9	148-158	1.0	79	<4	No Flow
			109	9	
			144	57	
	AVERAGE K (FT/YR)			**22**	
10	157-167	2.2	70	5	
			85	19	
			110	37	
	AVERAGE K (FT/YR)			**20**	

Table 5
Phase II Injection Packer Test Results
Bedrock Site Investigation Report
Charbert Facility, Alton RI

TEST ZONE	DEPTH INTERVAL (feet bgs)	FRACTURE FREQUENCY (# fractures/ft)	PRESSURE (PSI)	K FT/YR	Comments
11	166-176	2.1	75	36	
			90	45	
			120	74	
			100	49	
	AVERAGE K (FT/YR)			**51**	
12	173-183	1.9	90	31	
			105	34	
			80	30	
	AVERAGE K (FT/YR)			**32**	
13	180-191	1.7	81	17	
			91	17	
	AVERAGE K (FT/YR)			**17**	
14	189-199	2.7	86	15	
			101	14	
			111	13	
			126	14	
			86	13	
	AVERAGE K (FT/YR)			**14**	
GZ-ML-5					
1	45-55	1.6	42	501	
			57	558	
			32	634	
	AVERAGE K (FT/YR)			**564**	
2	56-66	2.2	32	<4	No Flow
			42	<4	No Flow
			57	14	
			67	33	
			77	111	
			57	76	
	AVERAGE K (FT/YR)			**39**	
3	65-75	2.3	47	<4	No Flow
			57	<4	No Flow
			67	12	
			77	10	
	AVERAGE K (FT/YR)			**6**	
4	74-83	3.3	47	<4	No Flow
			57	<4	No Flow
			67	<4	No Flow
			77	<4	No Flow
			92	<4	No Flow
	AVERAGE K (FT/YR)			**<4**	
5	84-94	1.8	51	9	
			71	13	

Table 5
Phase II Injection Packer Test Results
Bedrock Site Investigation Report
Charbert Facility, Alton RI

TEST ZONE	DEPTH INTERVAL (feet bgs)	FRACTURE FREQUENCY (# fractures/ft)	PRESSURE (PSI)	K FT/YR	Comments
			91	77	
			106	183	
	AVERAGE K (FT/YR)			**71**	
6	93-102	1.7	72	<4	
			82	10	
			102	24	
			117	59	
			82	33	
	AVERAGE K (FT/YR)			**25**	
7	102-111	2.0	81	21	
			101	136	
	AVERAGE K (FT/YR)			**78**	
7A	105-113	2.8	80	<4	No Flow
			90	<4	No Flow
			100	<4	No Flow
			110	<4	No Flow
			120	<4	No Flow
			130	10	
			140	33	
	AVERAGE K (FT/YR)			**6**	
8	116-126	2.3	87	166	
			107	174	
			127	219	
			87	114	
	AVERAGE K (FT/YR)			**168**	

Notes

1. Hydraulic conductivity of bedrock was calculated based upon methods presented in the Groundwater Manual, (U.S. Department of the Interior, Revised Reprint 1981).

2. No Flow indicates that no water movement was recorded during the test.

3. Packer test depth intervals indicate the length of individual test zones with reference to ground surface.

4. Fracture traces per foot represent the number of apparent rock fractures within each depth interval divided by the length of the test interval. Fracture trace data was obtained from Acoustic Televiewer Logs performed by Hager-Geoscience Inc. Note, Hager indicates that not all features identified in the ATV logs are necessarily rock fractures. Other features such as filled fractures, foliation, and mineralized or weathered zones may be identified and would be included here as fractures.

5. Packer tests were generally performed at variable test pressures dependant on the response of the borehole section being tested.

6. Televiewer logs for each borehole were interpreted by Hager Geosciences, Inc.

Table 6
Extraction Packer Test Results
Bedrock Site Investigation Report
Charbert Facility, Alton RI

Location/ Zone	Depth Interval (ft)	Parameter	Concentration (ug/L)
GZ-ML-1	118.25-130	All	ND
	126.25-138	All	ND
	137.25-149	Toluene	1.1
	148.25-160	Toluene	1.8
		Tetrachloroethene	1.0
	159.25-171	Acetone	40.0
		Toluene	2.4
		Tetrachloroethene	1.5
	170.25-182	Acetone	70.0
		Toluene	2.6
		Tetrachloroethene	2.2
	181-192.75	Acetone	71.0
		Toluene	2.7
	191-201	Toluene	1.1
GZ-ML-2	89.3-101.1	All	ND
	100.6-112.4	All	ND
	111.9-123.7	All	ND
	123.2-135	All	ND
	134.5-146.3	All	ND
	145.8-157.6	All	ND
	157.1-168.9	All	ND
	168.4-180.2	Toluene	3.3
		Naphthalene	3.1
	179.7-191.5	All	ND
	191-201	All	ND
GZ-ML-3	46.3-58.1	1,1,1-Trichloroethane	1.5
		Trichloroethene	14.0
		Tetrachloroethene	8,300.0
	57.6-69.4	1,1,1-Trichloroethane	1.7
		Trichloroethene	15.0
		Tetrachloroethene	8,800.0
	68.9-80.7	Trichloroethene	3.3
		Tetrachloroethene	1,400.0
	80.2-92	Trichloroethene	5.5
		Tetrachloroethene	3,200.0
	91.5-103.3	Trichloroethene	4.0
		Tetrachloroethene	2,600.0
	102.8-114.6	Trichloroethene	2.1
		Tetrachloroethene	1,100.0
	114.1-125.9	Tetrachloroethene	160.0
	125.4-137.2	Trichloroethene	2.2
		Toluene	1.2
		Tetrachloroethene	560.0
	136.7-148.5	Trichloroethene	9.9
		Toluene	1.7
		Tetrachloroethene	2,100.0
	148-158	Tetrachloroethene	11.0

Table 6
Extraction Packer Test Results
Bedrock Site Investigation Report
Charbert Facility, Alton RI

Location/ Zone	Depth Interval (ft)	Parameter	Concentration (ug/L)
GZ-ML-4	53.5-64.5	Trichloroethene	2.9
		Tetrachloroethene	46.0
		Trichloroethene-Blind Duplicate	2.9
		Tetrachloroethene-Blind Duplicate	48.0
	76.5-87.5	Tetrachloroethene	19.0
	86.5-97.5	Tetrachloroethene	12.0
	99.5-110.5	Tetrachloroethene	8.6
	112.5-123.5	Tetrachloroethene	5.6
	122-134	No sample collected due to insufficient flow rate	
	132-143	No sample collected due to insufficient flow rate	
	142-154	No sample collected due to insufficient flow rate	
	156.5-167.5	Tetrachloroethene	2.7
	170.5-181.5	Tetrachloroethene	1.6
	180.5-191.5	Tetrachloroethene	1.4
	189-200	No sample collected due to leaking packer	
GZ-ML-5	42.5-53.6	cis-1,2-Dichloroethene	5.1
		Tetrachloroethene	1.1
	56-67	cis-1,2-Dichloroethene	2.7
	66.5-77.5	cis-1,2-Dichloroethene	3.1
	73.5-84.5	cis-1,2-Dichloroethene	3.8
	84-95	cis-1,2-Dichloroethene	2.0
	96.5-107.5	cis-1,2-Dichloroethene	2.1
	107-118	cis-1,2-Dichloroethene	1.7
	114.5-125.5	All	ND

Notes:
1. Information based on extraction packer testing collection methods.
2. ND indicates no detects in zone.
3. Analytical testing conducted by GZA, GeoEnvironmental Laboratory of Hopkinton, MA using EPA Method 8260.

4. GZML-5 was drilled to an approximate depth of 200 feet below ground surface (bgs), with top of bedrock and bottom of steel casing at approximately 41 feet bgs. However, a partial collapse occurred in the borehole at approximately 126 feet bgs), resulting in the borehole being obstructed at this depth.

Table 7
Groundwater Field Screening Results
Bedrock Site Investigation Report
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LOCATION	Sample Date	pH (SU)	COND (mS/cm)	TURB (NTU)	DO (mg/L)	TEMP (^{o}C)	ORP (eV)	NOTES: Field Screening with Horiba Model U-22
GZ-ML-1-1	6/21/2007	10.5	0.644	0	3.4	15.0	+82	pH readings confirmed with a pH probe provided by Charbert personel.
GZ-ML-1-1	8/9/2007	11.2	--	28	7.0	14.6	-173	
GZ-ML-1-1	10/8/2008	8.2	0.256	3	2.4	12.7	-30	
GZ-ML-1-1	4/26/2010	8.7	0.240	9	2.3	15.3	-38	
GZ-ML-1-2	6/21/2007	10.4	0.319	9	3.7	13.7	+20	pH readings confirmed with a pH probe provided by Charbert personel.
GZ-ML-1-2	8/9/2007	9.6	--	1	6.4	14.8	-106	
GZ-ML-1-2	10/8/2008	6.8	0.492	23	0.3	12.8	-106	
GZ-ML-1-2	4/26/2010	6.7	0.411	289	0.5	15.6	-135	
GZ-ML-1-3	6/21/2007	9.8	0.162	0	0.5	13.5	-9	
GZ-ML-1-3	8/9/2007	9.3	--	6	5.1	14.1	-105	
GZ-ML-1-3	10/8/2008	6.0	0.353	119	0.5	12.9	+32	
GZ-ML-1-3	4/26/2010	5.5	3.470	110	0.1	15.5	-79	
GZ-ML-2-1	6/21/2007	7.5	0.360	0	2.8	13.6	-159	
GZ-ML-2-1	8/9/2007	7.4	--	41	5.6	15.8	-80	
GZ-ML-2-1	10/8/2008	8.1	0.384	5	0.4	13.4	-140	
GZ-ML-2-1	4/26/2010	7.0	0.464	6	2.4	14.0	-115	
GZ-ML-2-2	6/21/2007	7.7	0.382	0	1.2	14.0	-150	
GZ-ML-2-2	8/9/2007	6.9	--	0	10.4	16.6	-197	Turbiditity and dissolved oxygen readings questionable due to malfunctioning meter.
GZ-ML-2-2	10/8/2008	7.4	0.528	13	0.2	13.1	-176	
GZ-ML-2-2	4/26/2010	7.1	0.592	12	2.1	13.4	-141	
GZ-ML-2-3	6/21/2007	7.7	0.369	8	2.2	13.2	-180	
GZ-ML-2-3	8/9/2007	6.8	--	0	9.6	14.4	-184	Turbiditity and dissolved oxygen readings questionable due to malfunctioning meter.
GZ-ML-2-3	10/8/2008	7.7	0.495	13	0.5	13.2	-159	
GZ-ML-2-3	4/26/2010	7.2	0.555	22	2.3	13.1	-148	
GZ-ML-3-1	6/21/2007	7.6	0.126	9	4.5	13.2	-132	
GZ-ML-3-1	8/9/2007	5.7	--	2	3.8	14.3	+63	
GZ-ML-3-1	10/8/2008	6.6	0.136	9	0.7	13.8	-3	*ORP continued to rise after reading was taken, peaked at approximately +12.
GZ-ML-3-1	4/26/2010	6.7	0.148	73	3.3	15.1	-8	
GZ-ML-3-2	6/21/2007	6.7	0.163	0	2.7	13.0	-127	
GZ-ML-3-2	8/9/2007	5.7	--	25	5.1	15.9	-48	
GZ-ML-3-2	10/8/2008	6.9	0.192	4	0.5	14.5	-53	
GZ-ML-3-2	4/26/2010	6.6	0.220	19	2.0	14.2	-60	
GZ-ML-3-3	6/21/2007	6.5	0.163	0	2.5	13.4	-124	
GZ-ML-3-3	8/9/2007	6.2	--	20	4.6	15.3	-40	
GZ-ML-3-3	10/8/2008	7.0	0.237	34	0.7	14.5	-42	
GZ-ML-3-3	4/26/2010	6.5	0.261	16	2.2	13.4	-33	
GZ-ML-4-1	4/27/2010	6.3	0.304	83	2.3	14.5	-81	
GZ-ML-4-1	6/1/2010	6.9	0.600	77	5.9	16.4	-134	
GZ-ML-4-2	4/27/2010	6.8	0.278	21	2.0	13.4	-105	
GZ-ML-4-2	6/1/2010	7.0	0.678	59	3.9	17.9	-158	
GZ-ML-4-3	4/27/2010	6.9	0.311	191	2.9	13.1	-131	
GZ-ML-4-3	6/1/2010	6.3	3.190	58	4.0	16.8	-108	
GZ-ML-5-2	4/27/2010	6.7	0.256	13	2.7	14.4	-45	
GZ-ML-5-2	6/1/2010	6.8	0.900	66	4.2	15.9	-85	
GZ-ML-5-3	4/27/2010	7.0	0.232	27	3.3	13.9	-32	
GZ-ML-5-3	6/1/2010	6.7	2.870	68	2.9	16.4	-37	

Table 7
Groundwater Field Screening Results
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LOCATION	Sample Date	pH (SU)	COND (mS/cm)	TURB (NTU)	DO (mg/L)	TEMP (^{o}C)	ORP (eV)	NOTES: Field Screening with Horiba Model U-22
PT-2	10/6/2010	6.5	0.099	1	5.4	14.3	+231	
PT-4	10/6/2010	5.7	0.151	1	4.0	14.3	+282	
CB-9	10/6/2010	5.8	0.348	1	3.4	16.3	+274	
PT-1	10/6/2010	6.1	0.154	15	2.7	14.2	+207	
GZ-27A	10/6/2010	6.7	0.238	9	8.8	15.5	+194	
GZ-8	10/6/2010	6.0	0.119	46	1.2	13.1	+199	
GP-27B	10/6/2010	5.7	0.092	8	0.2	13.4	+199	
GZ-6	10/6/2010	5.8	0.124	5	0.1	14.0	+123	
RIZ-18	10/6/2010	5.8	0.028	6	9.8	11.8	+211	
RIZ-19	10/6/2010	5.6	0.021	15	9.1	12.1	+228	
GP-15	10/6/2010	4.2	0.525	3	4.2	15.3	+241	

Notes:
1) Readings recored by GZA personnel using a Horiba Model U10 water quality meter or a Horiba Model U22 water quality meter and ORP probe.
2) Measurements recorded as part of "Low Flow" sample collection. Readings represent final stabilized values.
3) During 8/9/2007 sampling event, conductivity probe was malfunctioning after several calibrations and readings were not taken.

Table 8
Bedrock Groundwater Analytical Results
Bedrock Site Investigation Report
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PARAMETERS	UNITS	RIDEM GA GROUNDWATER OBJECTIVE	RIDEM PREVENTIVE ACTION LIMIT	EPA REGIONAL SCREENING FOR TAP WATER	GZ-ML-1-1								GZ-ML-1-2							
					06/21/2007		08/09/2007		10/08/2008		04/26/2010		06/21/2007		08/09/2007		10/08/2008		04/26/2010	
					Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit
VOLATILE ORGANICS																				
Dichlorodifluoromethane	ug/L	---	---	---	<	2.0	<	2.0	<	2.0	<	2.0	<	2.0	<	2.0	<	2.0	<	2.0
Chloromethane	ug/L	---	---	---	<	2.0	<	2.0	<	2.0	<	2.0	<	2.0	<	2.0	<	2.0	<	2.0
Vinyl Chloride	ug/L	2	1	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
Bromomethane	ug/L	---	---	---	<	2.0	<	2.0	<	2.0	<	2.0	<	2.0	<	2.0	<	2.0	<	2.0
Chloroethane	ug/L	---	---	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
Trichlorofluoromethane	ug/L	---	---	---	<	2.0	<	2.0	<	2.0	<	2.0	<	2.0	<	2.0	<	2.0	<	2.0
Diethylether	ug/L	---	---	---	<	5.0	<	5.0	<	5.0	<	2.0	<	5.0	<	5.0	<	5.0	<	2.0
Acetone	ug/L	---	---	22,000	<	25	<	25	<	25	<	25	<	25	<	25	<	25	<	25
1,1-Dichloroethene	ug/L	7	3.5	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
Dichloromethane	ug/L	5	2.5	---	<	1.0	**1.1**	1.0	<	2.0	<	2.0	<	1.0	**1.3**	1.0	<	2.0	<	2.0
Methyl-Tert-Butyl-Ether	ug/L	40	20	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
trans-1,2-Dichloroethene	ug/L	100	50	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
1,1-Dichloroethane	ug/L	---	---	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
2-Butanone	ug/L	---	---	7,100	<	25	<	25	<	25	<	25	<	25	<	25	**57**	25	<	25
2,2-Dichloropropane	ug/L	0.2	0.1	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
cis-1,2-Dichloroethene	ug/L	70	35	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
Chloroform	ug/L	80[4]	50[4]	---	**18**	1.0	**16**	1.0	**1.6**	1.0	<	1.0	**9.3**	1.0	**7.9**	1.0	<	1.0	<	1.0
Bromochloromethane	ug/L	80[4]	50[4]	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
Tetrahydrofuran	ug/L	---	---	---	<	10	<	10	<	10	<	10	<	10	<	10	<	10	<	10
1,1,1-Trichloroethane	ug/L	200	100	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
1,1-Dichloropropene	ug/L	---	---	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
Carbon Tetrachloride	ug/L	5	2.5	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
1,2-Dichloroethane	ug/L	5	2.5	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
Benzene	ug/L	5	2.5	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
Trichloroethene	ug/L	5	2.5	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
1,2-Dichloropropane	ug/L	5	2.5	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
Bromodichloromethane	ug/L	80[4]	50[4]	---	**1.6**	1.0	<	1.0	<	1.0	<	1.0	1	1.0	<	1.0	<	1.0	<	1.0
Dibromomethane	ug/L	---	---	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
4-Methyl-2-Pentanone	ug/L	---	---	---	<	25	<	25	<	25	<	25	<	25	<	25	<	25	<	25
cis-1,3-Dichloropropene	ug/L	---	---	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
Toluene	ug/L	1,000	500	---	**2.2**	1.0	**2.5**	1.0	**1.6**	1.0	<	1.0	**5.6**	1.0	**5.5**	1.0	**1.4**	1.0	<	1.0
trans-1,3-Dichloropropene	ug/L	---	---	---	<	1.0	<	1.0	<	2.0	<	2.0	<	1.0	<	1.0	<	2.0	<	2.0
1,1,2-Trichloroethane	ug/L	5	2.5	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
2-Hexanone	ug/L	---	---	---	<	2.0	<	2.0	<	25	<	25	<	2	<	2	<	25	<	25
1,3-Dichloropropane	ug/L	---	---	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
Tetrachloroethene	ug/L	5	2.5	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
Dibromochloromethane	ug/L	100	50	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
1,2-Dibromoethane (EDB)	ug/L	0.05	0.025	---	<	2.0	<	2.0	<	2.0	<	2.0	<	2.0	<	2.0	<	2.0	<	2.0
Chlorobenzene	ug/L	100	50	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
1,1,1,2-Tetrachloroethane	ug/L	---	---	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
Ethylbenzene	ug/L	700	350	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
m&p-Xylene	ug/L	10,000	5,000	---	<	1.0	<	1.0	<	2.0	<	2.0	<	1.0	<	1.0	<	2.0	<	2.0
o-Xylene	ug/L	10,000	5,000	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
Styrene	ug/L	100	50	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
Bromoform	ug/L	80[4]	50[4]	---	<	2.0	<	2.0	<	2.0	<	2.0	<	2.0	<	2.0	<	2.0	<	2.0
Isopropylbenzene	ug/L	---	---	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
1,1,2,2-Tetrachloroethane	ug/L	---	---	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
1,2,3-Trichloropropane	ug/L	---	---	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
Bromobenzene	ug/L	---	---	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
N-Propylbenzene	ug/L	---	---	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
2-Chlorotoluene	ug/L	---	---	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
1,3,5-Trimethylbenzene	ug/L	---	---	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
4-Chlorotoluene	ug/L	---	---	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0

Table 8
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PARAMETERS	UNITS	RIDEM GA GROUNDWATER OBJECTIVE	RIDEM PREVENTIVE ACTION LIMIT	EPA REGIONAL SCREENING FOR TAP WATER	GZ-ML-1-1								GZ-ML-1-2							
					06/21/2007		08/09/2007		10/08/2008		04/26/2010		06/21/2007		08/09/2007		10/08/2008		04/26/2010	
					Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit
tert-Butylbenzene	ug/L	---	---	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
1,2,4-Trimethylbenzene	ug/L	---	---	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
sec-Butylbenzene	ug/L	---	---	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
p-Isopropyltoluene	ug/L	---	---	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
1,3-Dichlorobenzene	ug/L	600	300	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
1,4-Dichlorobenzene	ug/L	75	37.5	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
n-Butylbenzene	ug/L	---	---	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
1,2-Dichlorobenzene	ug/L	600	300	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
1,2-Dibromo-3-Chloropropane	ug/L	0.2	0.1	---	<	5.0	<	5.0	<	5.0	<	2.0	<	5.0	<	5.0	<	5.0	<	2.0
1,2,4-Trichlorobenzene	ug/L	70	35	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
Hexachlorobutadiene	ug/L	---	---	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
Naphthalene	ug/L	100	50	---	<	1.0	<	1.0	<	2.0	<	2.0	<	1.0	<	1.0	<	2.0	<	2.0
1,2,3-Trichlorobenzene	ug/L	---	---	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
SEMI-VOLATILE ORGANICS																				
Semi-Volatile Organics	ug/L	Various	Various	---	<	Various	<	Various	NT	NT	<	Various	<	Various	<	Various	NT	NT	<	Various
n-Nitrosodi-n-Propylamine	ug/L	---	---	0.0096	<	10	<	10	NT	NT	<	10	<	10	<	12	NT	NT	<	10
di-n-Butylphthalate	ug/L	---	---	3,700	<	15	<	15	NT	NT	<	10	<	15	<	17	NT	NT	<	10
TOTAL PETROLEUM HYDROCARBON																				
Hydrocarbon Content	ug/L	---	---	---	**3,200**	200	**2,200**	200	NT	NT	**920**	900	**5,300**	200	**5,400**	500	NT	NT	**710**	200
METALS																				
Silver	mg/L	---	---	---	<	0.005	<	0.005	NT	NT	<	0.005	<	0.005	<	0.005	NT	NT	<	0.005
Arsenic	mg/L	0.01	0.005	---	<	0.010	<	0.010	NT	NT	<	0.010	<	0.010	<	0.010	NT	NT	<	0.010
Beryllium	mg/L	0.004	0.002	---	<	0.004	<	0.004	NT	NT	<	0.004	<	0.004	<	0.004	NT	NT	<	0.004
Cadmium	mg/L	0.005	0.0025	---	<	0.005	<	0.005	NT	NT	<	0.005	<	0.005	<	0.005	NT	NT	<	0.005
Chromium	mg/L	0.1	0.05	---	<	0.005	<	0.005	NT	NT	<	0.005	<	0.005	**0.050**	0.005	NT	NT	**0.048**	0.005
Copper	mg/L	1.3	0.65	---	**0.018**	0.015	<	0.015	NT	NT	**0.037**	0.030	**0.017**	0.015	<	0.015	NT	NT	**0.039**	0.030
Mercury	mg/L	0.002	0.001	---	<	0.000	<	0.000	NT	NT	<	0.000	<	0.000	<	0.000	NT	NT	<	0.000
Nickel	mg/L	0.1	0.05	---	<	0.010	<	0.010	NT	NT	<	0.010	<	0.010	<	0.010	NT	NT	<	0.010
Lead	mg/L	0.015	0.0075	---	<	0.010	<	0.010	NT	NT	<	0.010	<	0.010	<	0.010	NT	NT	<	0.010
Antimony	mg/L	0.006	0.003	---	<	0.025	<	0.025	NT	NT	<	0.025	<	0.025	<	0.025	NT	NT	<	0.025
Selenium	mg/L	0.05	0.025	---	<	0.025	<	0.025	NT	NT	<	0.025	<	0.025	<	0.025	NT	NT	<	0.025
Thallium	mg/L	0.002	0.001	---	<	0.025	<	0.025	NT	NT	<	0.025	<	0.025	<	0.025	NT	NT	<	0.025
Zinc	mg/L	---	---	11	**0.011**	0.010	<	0.010	NT	NT	**0.013**	0.010	**0.015**	0.010	**0.012**	0.010	NT	NT	**0.026**	0.010
Iron	mg/L	---	---	26	**0.082**	0.025	**0.096**	0.025	NT	NT	**1.1**	0.025	**0.420**	0.025	**0.130**	0.025	NT	NT	**3.3**	0.025
Manganese	mg/L	---	---	0.88	<	0.005	<	0.005	NT	NT	**0.100**	0.005	**0.008**	0.005	**0.020**	0.005	NT	NT	**0.290**	0.005

Table 8
Bedrock Groundwater Analytical Results
Bedrock Site Investigation Report
Charbert Facility, Alton RI

PARAMETERS	UNITS	RIDEM GA GROUNDWATER OBJECTIVE	RIDEM PREVENTIVE ACTION LIMIT	EPA REGIONAL SCREENING FOR TAP WATER	GZ-ML-1-3								GZ-ML-2-1							
					06/21/2007		08/09/2007		10/08/2008		04/26/2010		06/21/2007		08/09/2007		10/08/2008		04/26/2010	
					Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit
VOLATILE ORGANICS																				
Dichlorodifluoromethane	ug/L	---	---	---	<	2.0	<	2.0	<	2.0	<	2.0	<	2.0	<	2.0	<	2.0	<	2.0
Chloromethane	ug/L	---	---	---	<	2.0	<	2.0	<	2.0	<	2.0	<	2.0	<	2.0	<	2.0	<	2.0
Vinyl Chloride	ug/L	2	1	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
Bromomethane	ug/L	---	---	---	<	2.0	<	2.0	<	2.0	<	2.0	<	2.0	<	2.0	<	2.0	<	2.0
Chloroethane	ug/L	---	---	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
Trichlorofluoromethane	ug/L	---	---	---	<	2.0	<	2.0	<	2.0	<	2.0	<	2.0	<	2.0	<	2.0	<	2.0
Diethylether	ug/L	---	---	---	<	5.0	<	5.0	<	5.0	<	2.0	<	5.0	<	5.0	<	5.0	<	2.0
Acetone	ug/L	---	---	22,000	<	25	<	25	**52**	25	**110**	25	<	25	<	25	<	25	<	25
1,1-Dichloroethene	ug/L	7	3.5	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
Dichloromethane	ug/L	5	2.5	---	<	1.0	<	1.0	<	2.0	<	2.0	<	1.0	<	1.0	<	2.0	<	2.0
Methyl-Tert-Butyl-Ether	ug/L	40	20	---	<	1.0	<	1.0	<	1.0	<	1.0	**1.1**	1.0	**1.2**	1.0	<	1.0	<	1.0
trans-1,2-Dichloroethene	ug/L	100	50	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
1,1-Dichloroethane	ug/L	---	---	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
2-Butanone	ug/L	---	---	7,100	<	25	<	25	**460**	25	**820**	25	<	25	<	25	<	25	<	25
2,2-Dichloropropane	ug/L	0.2	0.1	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
cis-1,2-Dichloroethene	ug/L	70	35	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
Chloroform	ug/L	80[4]	50[4]	---	**6.6**	1.0	**3.7**	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
Bromochloromethane	ug/L	80[4]	50[4]	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
Tetrahydrofuran	ug/L	---	---	---	<	10	<	10	<	10	<	10	<	10	<	10	<	10	<	10
1,1,1-Trichloroethane	ug/L	200	100	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
1,1-Dichloropropene	ug/L	---	---	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
Carbon Tetrachloride	ug/L	5	2.5	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
1,2-Dichloroethane	ug/L	5	2.5	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
Benzene	ug/L	5	2.5	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
Trichloroethene	ug/L	5	2.5	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
1,2-Dichloropropane	ug/L	5	2.5	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
Bromodichloromethane	ug/L	80[4]	50[4]	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
Dibromomethane	ug/L	---	---	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
4-Methyl-2-Pentanone	ug/L	---	---	---	<	25	<	25	<	25	<	25	<	25	<	25	<	25	<	25
cis-1,3-Dichloropropene	ug/L	---	---	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
Toluene	ug/L	1,000	500	---	**3.9**	1.0	**3.8**	1.0	**2.9**	1.0	**1.7**	1.0	**2.3**	1.0	**3.1**	1.0	<	1.0	<	1.0
trans-1,3-Dichloropropene	ug/L	---	---	---	<	1.0	<	1.0	<	2.0	<	2.0	<	1.0	<	1.0	<	2.0	<	2.0
1,1,2-Trichloroethane	ug/L	5	2.5	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
2-Hexanone	ug/L	---	---	---	<	2	<	2	<	25	<	25	<	2	<	2	<	25	<	25
1,3-Dichloropropane	ug/L	---	---	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
Tetrachloroethene	ug/L	5	2.5	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
Dibromochloromethane	ug/L	100	50	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
1,2-Dibromoethane (EDB)	ug/L	0.05	0.025	---	<	2.0	<	2.0	<	2.0	<	2.0	<	2.0	<	2.0	<	2.0	<	2.0
Chlorobenzene	ug/L	100	50	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
1,1,1,2-Tetrachloroethane	ug/L	---	---	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
Ethylbenzene	ug/L	700	350	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
m&p-Xylene	ug/L	10,000	5,000	---	<	1.0	<	1.0	<	2.0	<	2.0	<	1.0	<	1.0	<	2.0	<	2.0
o-Xylene	ug/L	10,000	5,000	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
Styrene	ug/L	100	50	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
Bromoform	ug/L	80[4]	50[4]	---	<	2.0	<	2.0	<	2.0	<	2.0	<	2.0	<	2.0	<	2.0	<	2.0
Isopropylbenzene	ug/L	---	---	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
1,1,2,2-Tetrachloroethane	ug/L	---	---	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
1,2,3-Trichloropropane	ug/L	---	---	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
Bromobenzene	ug/L	---	---	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
N-Propylbenzene	ug/L	---	---	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
2-Chlorotoluene	ug/L	---	---	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
1,3,5-Trimethylbenzene	ug/L	---	---	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
4-Chlorotoluene	ug/L	---	---	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0

Table 8
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PARAMETERS	UNITS	RIDEM GA GROUNDWATER OBJECTIVE	RIDEM PREVENTIVE ACTION LIMIT	EPA REGIONAL SCREENING FOR TAP WATER	GZ-ML-1-3								GZ-ML-2-1							
					06/21/2007		08/09/2007		10/08/2008		04/26/2010		06/21/2007		08/09/2007		10/08/2008		04/26/2010	
					Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit
tert-Butylbenzene	ug/L	---	---	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
1,2,4-Trimethylbenzene	ug/L	---	---	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
sec-Butylbenzene	ug/L	---	---	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
p-Isopropyltoluene	ug/L	---	---	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
1,3-Dichlorobenzene	ug/L	600	300	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
1,4-Dichlorobenzene	ug/L	75	37.5	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
n-Butylbenzene	ug/L	---	---	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
1,2-Dichlorobenzene	ug/L	600	300	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
1,2-Dibromo-3-Chloropropane	ug/L	0.2	0.1	---	<	5.0	<	5.0	<	5.0	<	2.0	<	5.0	<	5.0	<	5.0	<	2.0
1,2,4-Trichlorobenzene	ug/L	70	35	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
Hexachlorobutadiene	ug/L	---	---	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
Naphthalene	ug/L	100	50	---	<	1.0	<	1.0	<	2.0	<	2.0	<	1.0	<	1.0	<	2.0	<	2.0
1,2,3-Trichlorobenzene	ug/L	---	---	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
SEMI-VOLATILE ORGANICS																				
Semi-Volatile Organics	ug/L	Various	Various	---	<	Various	<	Various	NT	NT	<	Various	<	Various	<	Various	NT	NT	<	Various
n-Nitrosodi-n-Propylamine	ug/L	---	---	0.0096	<	10	<	11	NT	NT	**120**	100	<	10	<	11	NT	NT	<	10
di-n-Butylphthalate	ug/L	---	---	3,700	<	15	<	16	NT	NT	<	100	<	15	**35**	17	NT	NT	<	10
TOTAL PETROLEUM HYDROCARBON																				
Hydrocarbon Content	ug/L	---	---	---	**5,700**	200	**4,400**	500	NT	NT	**2,000**	1,000	**1,400**	200	**390**	200	NT	NT	**1,200**	1,000
METALS																				
Silver	mg/L	---	---	---	<	0.005	<	0.005	NT	NT	<	0.005	<	0.005	<	0.005	NT	NT	<	0.005
Arsenic	mg/L	0.01	0.005	---	<	0.010	<	0.010	NT	NT	<	0.010	<	0.010	<	0.010	NT	NT	<	0.010
Beryllium	mg/L	0.004	0.002	---	<	0.004	<	0.004	NT	NT	**0.010**	0.004	<	0.004	<	0.004	NT	NT	<	0.004
Cadmium	mg/L	0.005	0.0025	---	<	0.005	<	0.005	NT	NT	<	0.005	<	0.005	<	0.005	NT	NT	<	0.005
Chromium	mg/L	0.1	0.05	---	<	0.005	**0.008**	0.005	NT	NT	**0.290**	0.005	<	0.005	<	0.005	NT	NT	<	0.005
Copper	mg/L	1.3	0.65	---	<	0.015	<	0.015	NT	NT	<	0.030	<	0.015	<	0.015	NT	NT	**0.047**	0.030
Mercury	mg/L	0.002	0.001	---	<	0.000	<	0.000	NT	NT	<	0.000	<	0.000	<	0.000	NT	NT	<	0.000
Nickel	mg/L	0.1	0.05	---	<	0.010	<	0.010	NT	NT	<	0.010	<	0.010	<	0.010	NT	NT	<	0.010
Lead	mg/L	0.015	0.0075	---	<	0.010	<	0.010	NT	NT	<	0.010	<	0.010	<	0.010	NT	NT	<	0.010
Antimony	mg/L	0.006	0.003	---	<	0.025	<	0.025	NT	NT	<	0.025	<	0.025	<	0.025	NT	NT	<	0.025
Selenium	mg/L	0.05	0.025	---	<	0.025	<	0.025	NT	NT	<	0.025	<	0.025	<	0.025	NT	NT	<	0.025
Thallium	mg/L	0.002	0.001	---	<	0.025	<	0.025	NT	NT	**0.028**	0.025	<	0.025	<	0.025	NT	NT	<	0.025
Zinc	mg/L	---	---	11	**0.012**	0.010	**0.016**	0.010	NT	NT	**0.590**	0.010	**0.029**	0.010	**0.021**	0.010	NT	NT	**0.021**	0.010
Iron	mg/L	---	---	26	**0.130**	0.025	**0.190**	0.025	NT	NT	**120.0**	0.025	**0.270**	0.025	**0.120**	0.025	NT	NT	**0.530**	0.025
Manganese	mg/L	---	---	0.88	**0.005**	0.005	**0.007**	0.005	NT	NT	**9.500**	0.005	**0.050**	0.005	**0.037**	0.005	NT	NT	**0.140**	0.005

Table 8
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PARAMETERS	UNITS	RIDEM GA GROUNDWATER OBJECTIVE	RIDEM PREVENTIVE ACTION LIMIT	EPA REGIONAL SCREENING FOR TAP WATER	GZ-ML-2-2								GZ-ML-2-3							
					06/21/2007		08/09/2007		10/08/2008		04/26/2010		06/21/2007		08/09/2007		10/08/2008		04/26/2010	
					Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit
VOLATILE ORGANICS																				
Dichlorodifluoromethane	ug/L	---	---	---	<	2.0	<	2.0	<	2.0	<	2.0	<	2.0	<	2.0	<	2.0	<	2.0
Chloromethane	ug/L	---	---	---	<	2.0	<	2.0	<	2.0	<	2.0	<	2.0	<	2.0	<	2.0	<	2.0
Vinyl Chloride	ug/L	2	1	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
Bromomethane	ug/L	---	---	---	<	2.0	<	2.0	<	2.0	<	2.0	<	2.0	<	2.0	<	2.0	<	2.0
Chloroethane	ug/L	---	---	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
Trichlorofluoromethane	ug/L	---	---	---	<	2.0	<	2.0	<	2.0	<	2.0	<	2.0	<	2.0	<	2.0	<	2.0
Diethylether	ug/L	---	---	---	<	5.0	<	5.0	<	5.0	<	2.0	<	5.0	<	5.0	<	5.0	<	2.0
Acetone	ug/L	---	---	22,000	<	25	<	25	<	25	<	25	<	25	<	25	<	25	<	25
1,1-Dichloroethene	ug/L	7	3.5	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
Dichloromethane	ug/L	5	2.5	---	<	1.0	<	1.0	<	2.0	<	2.0	<	1.0	<	1.0	<	2.0	<	2.0
Methyl-Tert-Butyl-Ether	ug/L	40	20	---	<	1.0	<	1.0	<	1.0	<	1.0	**1**	1.0	<	1.0	<	1.0	<	1.0
trans-1,2-Dichloroethene	ug/L	100	50	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
1,1-Dichloroethane	ug/L	---	---	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
2-Butanone	ug/L	---	---	7,100	<	25	<	25	<	25	<	25	<	25	**33**	25	<	25	<	25
2,2-Dichloropropane	ug/L	0.2	0.1	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
cis-1,2-Dichloroethene	ug/L	70	35	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
Chloroform	ug/L	80[4]	50[4]	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
Bromochloromethane	ug/L	80[4]	50[4]	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
Tetrahydrofuran	ug/L	---	---	---	<	10	<	10	<	10	<	10	<	10	<	10	<	10	<	10
1,1,1-Trichloroethane	ug/L	200	100	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
1,1-Dichloropropene	ug/L	---	---	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
Carbon Tetrachloride	ug/L	5	2.5	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
1,2-Dichloroethane	ug/L	5	2.5	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
Benzene	ug/L	5	2.5	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
Trichloroethene	ug/L	5	2.5	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
1,2-Dichloropropane	ug/L	5	2.5	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
Bromodichloromethane	ug/L	80[4]	50[4]	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
Dibromomethane	ug/L	---	---	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
4-Methyl-2-Pentanone	ug/L	---	---	---	<	25	<	25	<	25	<	25	<	25	<	25	<	25	<	25
cis-1,3-Dichloropropene	ug/L	---	---	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
Toluene	ug/L	1,000	500	---	<	1.0	**1.6**	1.0	**1.9**	1.0	**1.1**	1.0	**1.8**	1.0	**6.4**	1.0	**5**	1.0	<	1.0
trans-1,3-Dichloropropene	ug/L	---	---	---	<	1.0	<	1.0	<	2.0	<	2.0	<	1.0	<	1.0	<	2.0	<	2.0
1,1,2-Trichloroethane	ug/L	5	2.5	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
2-Hexanone	ug/L	---	---	---	<	2	<	2	<	25	<	25	<	2	<	2	<	25	<	25
1,3-Dichloropropane	ug/L	---	---	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
Tetrachloroethene	ug/L	5	2.5	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
Dibromochloromethane	ug/L	100	50	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
1,2-Dibromoethane (EDB)	ug/L	0.05	0.025	---	<	2.0	<	2.0	<	2.0	<	2.0	<	2.0	<	2.0	<	2.0	<	2.0
Chlorobenzene	ug/L	100	50	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
1,1,1,2-Tetrachloroethane	ug/L	---	---	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
Ethylbenzene	ug/L	700	350	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
m&p-Xylene	ug/L	10,000	5,000	---	<	1.0	<	1.0	<	2.0	<	2.0	<	1.0	<	1.0	<	2.0	<	2.0
o-Xylene	ug/L	10,000	5,000	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
Styrene	ug/L	100	50	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
Bromoform	ug/L	80[4]	50[4]	---	<	2.0	<	2.0	<	2.0	<	2.0	<	2.0	<	2.0	<	2.0	<	2.0
Isopropylbenzene	ug/L	---	---	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
1,1,2,2-Tetrachloroethane	ug/L	---	---	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
1,2,3-Trichloropropane	ug/L	---	---	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
Bromobenzene	ug/L	---	---	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
N-Propylbenzene	ug/L	---	---	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
2-Chlorotoluene	ug/L	---	---	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
1,3,5-Trimethylbenzene	ug/L	---	---	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
4-Chlorotoluene	ug/L	---	---	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0

Table 8
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PARAMETERS	UNITS	RIDEM GA GROUNDWATER OBJECTIVE	RIDEM PREVENTIVE ACTION LIMIT	EPA REGIONAL SCREENING FOR TAP WATER	GZ-ML-2-2								GZ-ML-2-3							
					06/21/2007		08/09/2007		10/08/2008		04/26/2010		06/21/2007		08/09/2007		10/08/2008		04/26/2010	
					Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit
tert-Butylbenzene	ug/L	---	---	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
1,2,4-Trimethylbenzene	ug/L	---	---	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
sec-Butylbenzene	ug/L	---	---	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
p-Isopropyltoluene	ug/L	---	---	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
1,3-Dichlorobenzene	ug/L	600	300	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
1,4-Dichlorobenzene	ug/L	75	37.5	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
n-Butylbenzene	ug/L	---	---	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
1,2-Dichlorobenzene	ug/L	600	300	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
1,2-Dibromo-3-Chloropropane	ug/L	0.2	0.1	---	<	5.0	<	5.0	<	5.0	<	2.0	<	5.0	<	5.0	<	5.0	<	2.0
1,2,4-Trichlorobenzene	ug/L	70	35	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
Hexachlorobutadiene	ug/L	---	---	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
Naphthalene	ug/L	100	50	---	<	1.0	<	1.0	<	2.0	<	2.0	<	1.0	<	1.0	<	2.0	<	2.0
1,2,3-Trichlorobenzene	ug/L	---	---	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
SEMI-VOLATILE ORGANICS																				
Semi-Volatile Organics	ug/L	Various	Various	---	<	Various	<	Various	NT	NT	<	Various	<	Various	<	Various	NT	NT	<	Various
n-Nitrosodi-n-Propylamine	ug/L	---	---	0.0096	<	10	<	11	NT	NT	<	10	<	10	<	12	NT	NT	<	10
di-n-Butylphthalate	ug/L	---	---	3,700	<	15	<	17	NT	NT	**21**	10	<	15	<	18	NT	NT	**10**	10
TOTAL PETROLEUM HYDROCARBON																				
Hydrocarbon Content	ug/L	---	---	---	**2,000**	200	**2,100**	500	NT	NT	**2,800**	1,000	**2,500**	200	**22,000**	2,500	NT	NT	**7,100**	1,000
METALS																				
Silver	mg/L	---	---	---	<	0.005	<	0.005	NT	NT	<	0.005	<	0.005	<	0.005	NT	NT	<	0.005
Arsenic	mg/L	0.01	0.005	---	<	0.010	<	0.010	NT	NT	<	0.010	<	0.010	<	0.010	NT	NT	<	0.010
Beryllium	mg/L	0.004	0.002	---	<	0.004	<	0.004	NT	NT	<	0.004	<	0.004	<	0.004	NT	NT	<	0.004
Cadmium	mg/L	0.005	0.0025	---	<	0.005	<	0.005	NT	NT	<	0.005	<	0.005	<	0.005	NT	NT	<	0.005
Chromium	mg/L	0.1	0.05	---	<	0.005	**0.018**	0.005	NT	NT	<	0.005	<	0.005	**0.041**	0.005	NT	NT	**0.007**	0.005
Copper	mg/L	1.3	0.65	---	<	0.015	<	0.015	NT	NT	<	0.030	<	0.015	<	0.015	NT	NT	**0.032**	0.030
Mercury	mg/L	0.002	0.001	---	<	0.000	<	0.000	NT	NT	<	0.000	<	0.000	<	0.000	NT	NT	<	0.000
Nickel	mg/L	0.1	0.05	---	<	0.010	<	0.010	NT	NT	<	0.010	<	0.010	<	0.010	NT	NT	<	0.010
Lead	mg/L	0.015	0.0075	---	<	0.010	<	0.010	NT	NT	<	0.010	<	0.010	<	0.010	NT	NT	<	0.010
Antimony	mg/L	0.006	0.003	---	<	0.025	<	0.025	NT	NT	<	0.025	<	0.025	<	0.025	NT	NT	<	0.025
Selenium	mg/L	0.05	0.025	---	<	0.025	<	0.025	NT	NT	<	0.025	<	0.025	<	0.025	NT	NT	<	0.025
Thallium	mg/L	0.002	0.001	---	<	0.025	<	0.025	NT	NT	<	0.025	<	0.025	<	0.025	NT	NT	<	0.025
Zinc	mg/L	---	---	11	<	0.010	**0.017**	0.010	NT	NT	**0.011**	0.010	**0.170**	0.010	**0.200**	0.010	NT	NT	**0.120**	0.010
Iron	mg/L	---	---	26	**0.9**	0.025	**0.420**	0.025	NT	NT	**0.260**	0.025	**1.8**	0.025	**2.2**	0.025	NT	NT	**0.7**	0.025
Manganese	mg/L	---	---	0.88	**0.110**	0.005	**0.130**	0.005	NT	NT	**0.190**	0.005	**0.093**	0.005	**0.210**	0.005	NT	NT	**0.100**	0.005

Table 8
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PARAMETERS	UNITS	RIDEM GA GROUNDWATER OBJECTIVE	RIDEM PREVENTIVE ACTION LIMIT	EPA REGIONAL SCREENING FOR TAP WATER	GZ-ML-3-1												GZ-ML-3-2							
					06/21/2007		08/09/2007		8/9/2007-Blind Duplicate		10/08/2008		10/8/2008-Blind Duplicate		04/26/2010		06/21/2007		08/09/2007		10/08/2008		04/26/2010	
					Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit
VOLATILE ORGANICS																								
Dichlorodifluoromethane	ug/L	---	---	---	<	200.0	<	100.0	<	2.0	<	100.0	<	100.0	<	100.0	<	2.0	<	2.0	<	2.0	<	2.0
Chloromethane	ug/L	---	---	---	<	200.0	<	100.0	<	2.0	<	100.0	<	100.0	<	100.0	<	2.0	<	2.0	<	2.0	<	2.0
Vinyl Chloride	ug/L	2	1	---	<	100.0	<	50.0	<	1.0	<	50.0	<	50.0	<	50.0	<	1.0	<	1.0	<	1.0	<	1.0
Bromomethane	ug/L	---	---	---	<	200.0	<	100.0	<	2.0	<	100.0	<	100.0	<	100.0	<	2.0	<	2.0	<	2.0	<	2.0
Chloroethane	ug/L	---	---	---	<	100.0	<	50.0	<	1.0	<	50.0	<	50.0	<	50.0	<	1.0	<	1.0	<	1.0	<	1.0
Trichlorofluoromethane	ug/L	---	---	---	<	200.0	<	100.0	<	2.0	<	100.0	<	100.0	<	100.0	<	2.0	<	2.0	<	2.0	<	2.0
Diethylether	ug/L	---	---	---	<	500.0	<	250.0	<	5.0	<	250.0	<	250.0	<	100.0	<	5.0	<	5.0	<	5.0	<	2.0
Acetone	ug/L	---	---	22,000	<	2500	<	1300	<	25	<	1300	<	1300	<	1300	<	25	<	25	<	25	<	25
1,1-Dichloroethene	ug/L	7	3.5	---	<	100.0	<	50.0	<	1.0	<	50.0	<	50.0	<	50.0	<	1.0	<	1.0	<	1.0	<	1.0
Dichloromethane	ug/L	5	2.5	---	<	100.0	<	50.0	<	1.0	<	100.0	<	100.0	<	100.0	<	1.0	<	1.0	<	2.0	<	2.0
Methyl-Tert-Butyl-Ether	ug/L	40	20	---	<	100.0	<	50.0	<	1.0	<	50.0	<	50.0	<	50.0	<	1.0	<	1.0	<	1.0	<	1.0
trans-1,2-Dichloroethene	ug/L	100	50	---	<	100.0	<	50.0	**2.5**	1.0	<	50.0	<	50.0	<	50.0	<	1.0	<	1.0	<	1.0	<	1.0
1,1-Dichloroethane	ug/L	---	---	---	<	100.0	<	50.0	<	1.0	<	50.0	<	50.0	<	50.0	<	1.0	<	1.0	<	1.0	<	1.0
2-Butanone	ug/L	---	---	7,100	<	2500	<	1300	<	25	<	1300	<	1300	<	1300	<	25	<	25	<	25	<	25
2,2-Dichloropropane	ug/L	0.2	0.1	---	<	100.0	<	50.0	<	1.0	<	50.0	<	50.0	<	50.0	<	1.0	<	1.0	<	1.0	<	1.0
cis-1,2-Dichloroethene	ug/L	70	35	---	**110**	100.0	**260**	50.0	**270**	1.0	**87**	50.0	**82**	50.0	<	50.0	**3.2**	1.0	**12**	1.0	**6.2**	1.0	**4.4**	1.0
Chloroform	ug/L	80[4]	50[4]	---	<	100.0	<	50.0	<	1.0	<	50.0	<	50.0	<	50.0	<	1.0	<	1.0	<	1.0	<	1.0
Bromochloromethane	ug/L	80[4]	50[4]	---	<	100.0	<	50.0	<	1.0	<	50.0	<	50.0	<	50.0	<	1.0	<	1.0	<	1.0	<	1.0
Tetrahydrofuran	ug/L	---	---	---	<	1000	<	500	<	10	<	500	<	500	<	500	<	10	<	10	<	10	<	10
1,1,1-Trichloroethane	ug/L	200	100	---	<	100.0	<	50.0	<	1.0	<	50.0	<	50.0	<	50.0	<	1.0	<	1.0	<	1.0	<	1.0
1,1-Dichloropropene	ug/L	---	---	---	<	100.0	<	50.0	<	1.0	<	50.0	<	50.0	<	50.0	<	1.0	<	1.0	<	1.0	<	1.0
Carbon Tetrachloride	ug/L	5	2.5	---	<	100.0	<	50.0	<	1.0	<	50.0	<	50.0	<	50.0	<	1.0	<	1.0	<	1.0	<	1.0
1,2-Dichloroethane	ug/L	5	2.5	---	<	100.0	<	50.0	<	1.0	<	50.0	<	50.0	<	50.0	<	1.0	<	1.0	<	1.0	<	1.0
Benzene	ug/L	5	2.5	---	<	100.0	<	50.0	<	1.0	<	50.0	<	50.0	<	50.0	<	1.0	<	1.0	<	1.0	<	1.0
Trichloroethene	ug/L	5	2.5	---	<	100.0	**190**	50.0	**200**	1.0	<	50.0	<	50.0	<	50.0	<	1.0	**1.4**	1.0	<	1.0	<	1.0
1,2-Dichloropropane	ug/L	5	2.5	---	<	100.0	<	50.0	<	1.0	<	50.0	<	50.0	<	50.0	<	1.0	<	1.0	<	1.0	<	1.0
Bromodichloromethane	ug/L	80[4]	50[4]	---	<	100.0	<	50.0	<	1.0	<	50.0	<	50.0	<	50.0	<	1.0	<	1.0	<	1.0	<	1.0
Dibromomethane	ug/L	---	---	---	<	100.0	<	50.0	<	1.0	<	50.0	<	50.0	<	50.0	<	1.0	<	1.0	<	1.0	<	1.0
4-Methyl-2-Pentanone	ug/L	---	---	---	<	2500	<	1300	<	25	<	1300	<	1300	<	1300	<	25	<	25	<	25	<	25
cis-1,3-Dichloropropene	ug/L	---	---	---	<	100.0	<	50.0	<	1.0	<	50.0	<	50.0	<	50.0	<	1.0	<	1.0	<	1.0	<	1.0
Toluene	ug/L	1,000	500	---	<	100.0	<	50.0	<	1.0	<	50.0	<	50.0	<	50.0	**3.2**	1.0	**2.4**	1.0	**2.6**	1.0	<	1.0
trans-1,3-Dichloropropene	ug/L	---	---	---	<	100.0	<	50.0	<	1.0	<	100.0	<	100.0	<	100.0	<	1.0	<	1.0	<	2.0	<	2.0
1,1,2-Trichloroethane	ug/L	5	2.5	---	<	100.0	<	50.0	<	1.0	<	50.0	<	50.0	<	50.0	<	1.0	<	1.0	<	1.0	<	1.0
2-Hexanone	ug/L	---	---	---	<	200	<	100	<	2	<	1300	<	1300	<	1300	<	2	<	2	<	25	<	25
1,3-Dichloropropane	ug/L	---	---	---	<	100.0	<	50.0	<	1.0	<	50.0	<	50.0	<	50.0	<	1.0	<	1.0	<	1.0	<	1.0
Tetrachloroethene	ug/L	5	2.5	---	**3,700**	100.0	**3,400**	50.0	**3,400**	1.0	**1,300**	50.0	**1,400**	50.0	**5,500**	50.0	**11**	1.0	**6**	1.0	<	1.0	<	1.0
Dibromochloromethane	ug/L	100	50	---	<	100.0	<	50.0	<	1.0	<	50.0	<	50.0	<	50.0	<	1.0	<	1.0	<	1.0	<	1.0
1,2-Dibromoethane (EDB)	ug/L	0.05	0.025	---	<	200.0	<	100.0	<	2.0	<	100.0	<	100.0	<	100.0	<	2.0	<	2.0	<	2.0	<	2.0
Chlorobenzene	ug/L	100	50	---	<	100.0	<	50.0	<	1.0	<	50.0	<	50.0	<	50.0	<	1.0	<	1.0	<	1.0	<	1.0
1,1,1,2-Tetrachloroethane	ug/L	---	---	---	<	100.0	<	50.0	<	1.0	<	50.0	<	50.0	<	50.0	<	1.0	<	1.0	<	1.0	<	1.0
Ethylbenzene	ug/L	700	350	---	<	100.0	<	50.0	<	1.0	<	50.0	<	50.0	<	50.0	<	1.0	<	1.0	<	1.0	<	1.0
m&p-Xylene	ug/L	10,000	5,000	---	<	100.0	<	50.0	<	1.0	<	100.0	<	100.0	<	100.0	<	1.0	<	1.0	<	2.0	<	2.0
o-Xylene	ug/L	10,000	5,000	---	<	100.0	<	50.0	<	1.0	<	50.0	<	50.0	<	50.0	<	1.0	<	1.0	<	1.0	<	1.0
Styrene	ug/L	100	50	---	<	100.0	<	50.0	<	1.0	<	50.0	<	50.0	<	50.0	<	1.0	<	1.0	<	1.0	<	1.0
Bromoform	ug/L	80[4]	50[4]	---	<	200.0	<	100.0	<	2.0	<	100.0	<	100.0	<	100.0	<	2.0	<	2.0	<	2.0	<	2.0
Isopropylbenzene	ug/L	---	---	---	<	100.0	<	50.0	<	1.0	<	50.0	<	50.0	<	50.0	<	1.0	<	1.0	<	1.0	<	1.0
1,1,2,2-Tetrachloroethane	ug/L	---	---	---	<	100.0	<	50.0	<	1.0	<	50.0	<	50.0	<	50.0	<	1.0	<	1.0	<	1.0	<	1.0
1,2,3-Trichloropropane	ug/L	---	---	---	<	100.0	<	50.0	<	1.0	<	50.0	<	50.0	<	50.0	<	1.0	<	1.0	<	1.0	<	1.0
Bromobenzene	ug/L	---	---	---	<	100.0	<	50.0	<	1.0	<	50.0	<	50.0	<	50.0	<	1.0	<	1.0	<	1.0	<	1.0
N-Propylbenzene	ug/L	---	---	---	<	100.0	<	50.0	<	1.0	<	50.0	<	50.0	<	50.0	<	1.0	<	1.0	<	1.0	<	1.0
2-Chlorotoluene	ug/L	---	---	---	<	100.0	<	50.0	<	1.0	<	50.0	<	50.0	<	50.0	<	1.0	<	1.0	<	1.0	<	1.0
1,3,5-Trimethylbenzene	ug/L	---	---	---	<	100.0	<	50.0	<	1.0	<	50.0	<	50.0	<	50.0	<	1.0	<	1.0	<	1.0	<	1.0
4-Chlorotoluene	ug/L	---	---	---	<	100.0	<	50.0	<	1.0	<	50.0	<	50.0	<	50.0	<	1.0	<	1.0	<	1.0	<	1.0

Table 8
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PARAMETERS	UNITS	RIDEM GA GROUNDWATER OBJECTIVE	RIDEM PREVENTIVE ACTION LIMIT	EPA REGIONAL SCREENING FOR TAP WATER	GZ-ML-3-1												GZ-ML-3-2							
					06/21/2007		08/09/2007		8/9/2007-Blind Duplicate		10/08/2008		10/8/2008-Blind Duplicate		04/26/2010		06/21/2007		08/09/2007		10/08/2008		04/26/2010	
					Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit
tert-Butylbenzene	ug/L	---	---	---	<	100.0	<	50.0	<	1.0	<	50.0	<	50.0	<	50.0	<	1.0	<	1.0	<	1.0	<	1.0
1,2,4-Trimethylbenzene	ug/L	---	---	---	<	100.0	<	50.0	<	1.0	<	50.0	<	50.0	<	50.0	<	1.0	<	1.0	<	1.0	<	1.0
sec-Butylbenzene	ug/L	---	---	---	<	100.0	<	50.0	<	1.0	<	50.0	<	50.0	<	50.0	<	1.0	<	1.0	<	1.0	<	1.0
p-Isopropyltoluene	ug/L	---	---	---	<	100.0	<	50.0	<	1.0	<	50.0	<	50.0	<	50.0	<	1.0	<	1.0	<	1.0	<	1.0
1,3-Dichlorobenzene	ug/L	600	300	---	<	100.0	<	50.0	<	1.0	<	50.0	<	50.0	<	50.0	<	1.0	<	1.0	<	1.0	<	1.0
1,4-Dichlorobenzene	ug/L	75	37.5	---	<	100.0	<	50.0	<	1.0	<	50.0	<	50.0	<	50.0	<	1.0	<	1.0	<	1.0	<	1.0
n-Butylbenzene	ug/L	---	---	---	<	100.0	<	50.0	<	1.0	<	50.0	<	50.0	<	50.0	<	1.0	<	1.0	<	1.0	<	1.0
1,2-Dichlorobenzene	ug/L	600	300	---	<	100.0	<	50.0	<	1.0	<	50.0	<	50.0	<	50.0	<	1.0	<	1.0	<	1.0	<	1.0
1,2-Dibromo-3-Chloropropane	ug/L	0.2	0.1	---	<	500.0	<	250.0	<	5.0	<	250.0	<	250.0	<	100.0	<	5.0	<	5.0	<	5.0	<	2.0
1,2,4-Trichlorobenzene	ug/L	70	35	---	<	100.0	<	50.0	<	1.0	<	50.0	<	50.0	<	50.0	<	1.0	<	1.0	<	1.0	<	1.0
Hexachlorobutadiene	ug/L	---	---	---	<	100.0	<	50.0	<	1.0	<	50.0	<	50.0	<	50.0	<	1.0	<	1.0	<	1.0	<	1.0
Naphthalene	ug/L	100	50	---	<	100.0	<	50.0	<	1.0	<	100.0	<	100.0	<	100.0	<	1.0	<	1.0	<	2.0	<	2.0
1,2,3-Trichlorobenzene	ug/L	---	---	---	<	100.0	<	50.0	<	1.0	<	50.0	<	50.0	<	50.0	<	1.0	<	1.0	<	1.0	<	1.0
SEMI-VOLATILE ORGANICS																								
Semi-Volatile Organics	ug/L	Various	Various	---	<	Various	<	Various	<	Various	NT	NT	NT	NT	<	Various	<	Various	<	Various	NT	NT	<	Various
n-Nitrosodi-n-Propylamine	ug/L	---	---	0.0096	<	10	<	10	<	13	NT	NT	NT	NT	<	10	<	10	<	11	NT	NT	<	10
di-n-Butylphthalate	ug/L	---	---	3,700	<	15	<	15	<	19	NT	NT	NT	NT	<	10	<	15	<	16	NT	NT	<	10
TOTAL PETROLEUM HYDROCARBON																								
Hydrocarbon Content	ug/L	---	---	---	**400**	200	**260**	200	**3,300**	500	NT	NT	NT	NT	<	200	**1,500**	200	**1,000**	200	NT	NT	**760**	200
METALS																								
Silver	mg/L	---	---	---	<	0.005	<	0.005	<	0.005	NT	NT	NT	NT	<	0.005	<	0.005	<	0.005	NT	NT	<	0.005
Arsenic	mg/L	0.01	0.005	---	<	0.010	<	0.010	<	0.010	NT	NT	NT	NT	<	0.010	<	0.010	<	0.010	NT	NT	<	0.010
Beryllium	mg/L	0.004	0.002	---	<	0.004	<	0.004	<	0.004	NT	NT	NT	NT	<	0.004	<	0.004	<	0.004	NT	NT	<	0.004
Cadmium	mg/L	0.005	0.0025	---	<	0.005	<	0.005	<	0.005	NT	NT	NT	NT	<	0.005	<	0.005	<	0.005	NT	NT	<	0.005
Chromium	mg/L	0.1	0.05	---	<	0.005	<	0.005	**0.006**	0.005	NT	NT	NT	NT	<	0.005	<	0.005	<	0.005	NT	NT	<	0.005
Copper	mg/L	1.3	0.65	---	<	0.015	<	0.015	<	0.015	NT	NT	NT	NT	**0.031**	0.030	<	0.015	<	0.015	NT	NT	<	0.030
Mercury	mg/L	0.002	0.001	---	<	0.000	<	0.000	<	0.000	NT	NT	NT	NT	<	0.000	<	0.000	<	0.000	NT	NT	<	0.000
Nickel	mg/L	0.1	0.05	---	<	0.010	<	0.010	<	0.010	NT	NT	NT	NT	<	0.010	<	0.010	<	0.010	NT	NT	<	0.010
Lead	mg/L	0.015	0.0075	---	<	0.010	<	0.010	<	0.010	NT	NT	NT	NT	<	0.010	<	0.010	<	0.010	NT	NT	<	0.010
Antimony	mg/L	0.006	0.003	---	<	0.025	<	0.025	<	0.025	NT	NT	NT	NT	<	0.025	<	0.025	<	0.025	NT	NT	<	0.025
Selenium	mg/L	0.05	0.025	---	<	0.025	<	0.025	<	0.025	NT	NT	NT	NT	<	0.025	<	0.025	<	0.025	NT	NT	<	0.025
Thallium	mg/L	0.002	0.001	---	<	0.025	<	0.025	<	0.025	NT	NT	NT	NT	<	0.025	<	0.025	<	0.025	NT	NT	<	0.025
Zinc	mg/L	---	---	11	**0.014**	0.010	**0.020**	0.010	**0.012**	0.010	NT	NT	NT	NT	**0.018**	0.010	<	0.010	**0.051**	0.010	NT	NT	**0.015**	0.010
Iron	mg/L	---	---	26	**4.2**	0.025	**3.1**	0.025	**3.2**	0.025	NT	NT	NT	NT	**12.0**	0.025	4.6	0.025	**5.4**	0.025	NT	NT	**5.1**	0.025
Manganese	mg/L	---	---	0.88	**1.100**	0.005	**1.000**	0.005	**1.000**	0.005	NT	NT	NT	NT	**0.190**	0.005	0.370	0.005	**0.470**	0.005	NT	NT	**0.520**	0.005

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					06/21/2007		6/21/2007-Blind Duplicate		08/09/2007		10/08/2008		04/26/2010		04/27/2010		06/01/2010		04/27/2010		06/01/2010	
					Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit
VOLATILE ORGANICS																						
Dichlorodifluoromethane	ug/L	---	---	---	<	2.0	<	2.0	<	2.0	<	2.0	<	2.0	<	2.0	<	2.0	<	2.0	<	2.0
Chloromethane	ug/L	---	---	---	<	2.0	<	2.0	<	2.0	<	2.0	<	2.0	<	2.0	<	2.0	<	2.0	<	2.0
Vinyl Chloride	ug/L	2	1	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
Bromomethane	ug/L	---	---	---	<	2.0	<	2.0	<	2.0	<	2.0	<	2.0	<	2.0	<	2.0	<	2.0	<	2.0
Chloroethane	ug/L	---	---	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
Trichlorofluoromethane	ug/L	---	---	---	<	2.0	<	2.0	<	2.0	<	2.0	<	2.0	<	2.0	<	2.0	<	2.0	<	2.0
Diethylether	ug/L	---	---	---	<	5.0	<	5.0	<	5.0	<	5.0	<	2.0	<	2.0	<	2.0	<	2.0	<	2.0
Acetone	ug/L	---	---	22,000	<	25	<	25	<	25	<	25	<	25	**59**	25	**13**	10	<	25	<	10
1,1-Dichloroethene	ug/L	7	3.5	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
Dichloromethane	ug/L	5	2.5	---	<	1.0	<	1.0	<	1.0	<	2.0	<	2.0	<	2.0	<	2.0	<	2.0	<	2.0
Methyl-Tert-Butyl-Ether	ug/L	40	20	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
trans-1,2-Dichloroethene	ug/L	100	50	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
1,1-Dichloroethane	ug/L	---	---	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
2-Butanone	ug/L	---	---	7,100	<	25	<	25	<	25	<	25	<	25	<	25	<	10	<	25	<	10
2,2-Dichloropropane	ug/L	0.2	0.1	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
cis-1,2-Dichloroethene	ug/L	70	35	---	**2.5**	1.0	<	1.0	**1.1**	1.0	**1**	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
Chloroform	ug/L	80[4]	50[4]	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
Bromochloromethane	ug/L	80[4]	50[4]	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
Tetrahydrofuran	ug/L	---	---	---	<	10	<	10	<	10	<	10	<	10	<	10	<	10	<	10	<	10
1,1,1-Trichloroethane	ug/L	200	100	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
1,1-Dichloropropene	ug/L	---	---	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
Carbon Tetrachloride	ug/L	5	2.5	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
1,2-Dichloroethane	ug/L	5	2.5	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
Benzene	ug/L	5	2.5	---	**1.1**	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
Trichloroethene	ug/L	5	2.5	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	**1.3**	1.0	<	1.0	<	1.0
1,2-Dichloropropane	ug/L	5	2.5	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
Bromodichloromethane	ug/L	80[4]	50[4]	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
Dibromomethane	ug/L	---	---	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
4-Methyl-2-Pentanone	ug/L	---	---	---	<	25	<	25	<	25	<	25	<	25	<	25	<	10	<	25	<	10
cis-1,3-Dichloropropene	ug/L	---	---	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
Toluene	ug/L	1,000	500	---	**3.6**	1.0	<	1.0	<	1.0	**3.1**	1.0	<	1.0	**1.8**	1.0	**1.5**	1.0	**1.2**	1.0	<	1.0
trans-1,3-Dichloropropene	ug/L	---	---	---	<	1.0	<	1.0	<	1.0	<	2.0	<	2.0	<	2.0	<	2.0	<	2.0	<	2.0
1,1,2-Trichloroethane	ug/L	5	2.5	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
2-Hexanone	ug/L	---	---	---	<	2	<	2	<	2	<	25	<	25	<	25	<	10	<	25	<	10
1,3-Dichloropropane	ug/L	---	---	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
Tetrachloroethene	ug/L	5	2.5	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	**77**	1.0	<	1.0	<	1.0
Dibromochloromethane	ug/L	100	50	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
1,2-Dibromoethane (EDB)	ug/L	0.05	0.025	---	<	2.0	<	2.0	<	2.0	<	2.0	<	2.0	<	2.0	<	2.0	<	2.0	<	2.0
Chlorobenzene	ug/L	100	50	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
1,1,1,2-Tetrachloroethane	ug/L	---	---	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
Ethylbenzene	ug/L	700	350	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
m&p-Xylene	ug/L	10,000	5,000	---	<	1.0	<	1.0	<	1.0	<	2.0	<	2.0	<	2.0	<	2.0	<	2.0	<	2.0
o-Xylene	ug/L	10,000	5,000	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
Styrene	ug/L	100	50	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
Bromoform	ug/L	80[4]	50[4]	---	<	2.0	<	2.0	<	2.0	<	2.0	<	2.0	<	2.0	<	2.0	<	2.0	<	2.0
Isopropylbenzene	ug/L	---	---	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
1,1,2,2-Tetrachloroethane	ug/L	---	---	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
1,2,3-Trichloropropane	ug/L	---	---	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
Bromobenzene	ug/L	---	---	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
N-Propylbenzene	ug/L	---	---	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
2-Chlorotoluene	ug/L	---	---	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
1,3,5-Trimethylbenzene	ug/L	---	---	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
4-Chlorotoluene	ug/L	---	---	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0

Table 8
Bedrock Groundwater Analytical Results
Bedrock Site Investigation Report
Charbert Facility, Alton RI

PARAMETERS	UNITS	RIDEM GA GROUNDWATER OBJECTIVE	RIDEM PREVENTIVE ACTION LIMIT	EPA REGIONAL SCREENING FOR TAP WATER	GZ-ML-3-3										GZ-ML-4-1				GZ-ML-4-2			
					06/21/2007		6/21/2007-Blind Duplicate		08/09/2007		10/08/2008		04/26/2010		04/27/2010		06/01/2010		04/27/2010		06/01/2010	
					Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit
tert-Butylbenzene	ug/L	---	---	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
1,2,4-Trimethylbenzene	ug/L	---	---	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
sec-Butylbenzene	ug/L	---	---	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
p-Isopropyltoluene	ug/L	---	---	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
1,3-Dichlorobenzene	ug/L	600	300	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
1,4-Dichlorobenzene	ug/L	75	37.5	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
n-Butylbenzene	ug/L	---	---	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
1,2-Dichlorobenzene	ug/L	600	300	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
1,2-Dibromo-3-Chloropropane	ug/L	0.2	0.1	---	<	5.0	<	5.0	<	5.0	<	5.0	<	2.0	<	2.0	<	2.0	<	2.0	<	2.0
1,2,4-Trichlorobenzene	ug/L	70	35	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
Hexachlorobutadiene	ug/L	---	---	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
Naphthalene	ug/L	100	50	---	<	1.0	<	1.0	<	1.0	<	2.0	<	2.0	<	2.0	<	2.0	<	2.0	<	2.0
1,2,3-Trichlorobenzene	ug/L	---	---	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
SEMI-VOLATILE ORGANICS																						
Semi-Volatile Organics	ug/L	Various	Various	---	<	Various	<	Various	<	Various	NT	NT	<	Various	<	Various	<	Various	<	Various	<	Various
n-Nitrosodi-n-Propylamine	ug/L	---	---	0.0096	<	10	<	10	<	12	NT	NT	<	10	<	10	<	10	<	10	<	10
di-n-Butylphthalate	ug/L	---	---	3,700	<	15	<	15	<	18	NT	NT	<	10	<	10	<	10	<	10	<	10
TOTAL PETROLEUM HYDROCARBON																						
Hydrocarbon Content	ug/L	---	---	---	**3,000**	200	**3,800**	200	**1,600**	500	NT	NT	**2,200**	1,000	**620**	200	**300**	200	**360**	200	**340**	200
METALS																						
Silver	mg/L	---	---	---	<	0.005	<	0.005	<	0.005	NT	NT	<	0.005	<	0.005	<	0.005	<	0.005	<	0.005
Arsenic	mg/L	0.01	0.005	---	<	0.010	<	0.010	<	0.010	NT	NT	<	0.010	<	0.010	<	0.010	<	0.010	<	0.010
Beryllium	mg/L	0.004	0.002	---	<	0.004	<	0.004	<	0.004	NT	NT	<	0.004	<	0.004	<	0.004	<	0.004	<	0.004
Cadmium	mg/L	0.005	0.0025	---	<	0.005	<	0.005	<	0.005	NT	NT	<	0.005	<	0.005	<	0.005	<	0.005	<	0.005
Chromium	mg/L	0.1	0.05	---	<	0.005	<	0.005	<	0.005	NT	NT	<	0.005	<	0.005	<	0.005	<	0.005	<	0.005
Copper	mg/L	1.3	0.65	---	<	0.015	<	0.015	<	0.015	NT	NT	<	0.030	**0.023**	0.015	<	0.015	**0.025**	0.015	<	0.015
Mercury	mg/L	0.002	0.001	---	<	0.000	<	0.000	<	0.000	NT	NT	<	0.000	<	0.000	<	0.000	<	0.000	<	0.000
Nickel	mg/L	0.1	0.05	---	<	0.010	<	0.010	<	0.010	NT	NT	<	0.010	<	0.010	<	0.010	<	0.010	<	0.010
Lead	mg/L	0.015	0.0075	---	<	0.010	<	0.010	<	0.010	NT	NT	<	0.010	<	0.010	<	0.010	<	0.010	<	0.010
Antimony	mg/L	0.006	0.003	---	<	0.025	<	0.025	<	0.025	NT	NT	<	0.025	<	0.025	<	0.025	<	0.025	<	0.025
Selenium	mg/L	0.05	0.025	---	<	0.025	<	0.025	<	0.025	NT	NT	<	0.025	<	0.025	<	0.025	<	0.025	<	0.025
Thallium	mg/L	0.002	0.001	---	<	0.025	<	0.025	<	0.025	NT	NT	<	0.025	<	0.025	<	0.025	<	0.025	<	0.025
Zinc	mg/L	---	---	11	<	0.010	<	0.010	**0.012**	0.010	NT	NT	**0.013**	0.010	**0.021**	0.010	**0.042**	0.010	<	0.010	<	0.010
Iron	mg/L	---	---	26	**1.3**	0.025	**1.3**	0.025	**1.1**	0.025	NT	NT	**0.9**	0.025	**4.8**	0.025	**6.6**	0.025	**3.1**	0.025	**4.1**	0.025
Manganese	mg/L	---	---	0.88	**0.084**	0.005	**0.084**	0.005	**0.085**	0.005	NT	NT	**0.086**	0.005	**0.580**	0.005	**0.620**	0.005	**0.270**	0.005	**0.360**	0.005

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PARAMETERS	UNITS	RIDEM GA GROUNDWATER OBJECTIVE	RIDEM PREVENTIVE ACTION LIMIT	EPA REGIONAL SCREENING FOR TAP WATER	GZ-ML-4-3				GZ-ML-5-2				GZ-ML-5-3			
					04/27/2010		06/01/2010		04/27/2010		06/01/2010		04/27/2010		06/01/2010	
					Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit
VOLATILE ORGANICS																
Dichlorodifluoromethane	ug/L	---	---	---	<	2.0	<	2.0	<	2.0	<	2.0	<	2.0	<	2.0
Chloromethane	ug/L	---	---	---	<	2.0	<	2.0	<	2.0	<	2.0	<	2.0	<	2.0
Vinyl Chloride	ug/L	2	1	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
Bromomethane	ug/L	---	---	---	<	2.0	<	2.0	<	2.0	<	2.0	<	2.0	<	2.0
Chloroethane	ug/L	---	---	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
Trichlorofluoromethane	ug/L	---	---	---	<	2.0	<	2.0	<	2.0	<	2.0	<	2.0	<	2.0
Diethylether	ug/L	---	---	---	<	2.0	<	2.0	<	2.0	<	2.0	<	2.0	<	2.0
Acetone	ug/L	---	---	22,000	<	25	<	10	<	25	<	10	<	25	<	10
1,1-Dichloroethene	ug/L	7	3.5	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
Dichloromethane	ug/L	5	2.5	---	<	2.0	<	2.0	<	2.0	<	2.0	<	2.0	<	2.0
Methyl-Tert-Butyl-Ether	ug/L	40	20	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
trans-1,2-Dichloroethene	ug/L	100	50	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
1,1-Dichloroethane	ug/L	---	---	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
2-Butanone	ug/L	---	---	7,100	<	25	<	10	<	25	<	10	<	25	<	10
2,2-Dichloropropane	ug/L	0.2	0.1	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
cis-1,2-Dichloroethene	ug/L	70	35	---	<	1.0	<	1.0	**19**	1.0	**19**	1.0	**6.1**	1.0	**3.3**	1.0
Chloroform	ug/L	80[4]	50[4]	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
Bromochloromethane	ug/L	80[4]	50[4]	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
Tetrahydrofuran	ug/L	---	---	---	<	10	<	10	<	10	<	10	<	10	<	10
1,1,1-Trichloroethane	ug/L	200	100	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
1,1-Dichloropropene	ug/L	---	---	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
Carbon Tetrachloride	ug/L	5	2.5	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
1,2-Dichloroethane	ug/L	5	2.5	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
Benzene	ug/L	5	2.5	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
Trichloroethene	ug/L	5	2.5	---	<	1.0	<	1.0	**2.6**	1.0	**2.4**	1.0	<	1.0	<	1.0
1,2-Dichloropropane	ug/L	5	2.5	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
Bromodichloromethane	ug/L	80[4]	50[4]	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
Dibromomethane	ug/L	---	---	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
4-Methyl-2-Pentanone	ug/L	---	---	---	<	25	<	10	<	25	<	10	<	25	<	10
cis-1,3-Dichloropropene	ug/L	---	---	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
Toluene	ug/L	1,000	500	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
trans-1,3-Dichloropropene	ug/L	---	---	---	<	2.0	<	2.0	<	2.0	<	2.0	<	2.0	<	2.0
1,1,2-Trichloroethane	ug/L	5	2.5	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
2-Hexanone	ug/L	---	---	---	<	25	<	10	<	25	<	10	<	25	<	10
1,3-Dichloropropane	ug/L	---	---	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
Tetrachloroethene	ug/L	5	2.5	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
Dibromochloromethane	ug/L	100	50	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
1,2-Dibromoethane (EDB)	ug/L	0.05	0.025	---	<	2.0	<	2.0	<	2.0	<	2.0	<	2.0	<	2.0
Chlorobenzene	ug/L	100	50	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
1,1,1,2-Tetrachloroethane	ug/L	---	---	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
Ethylbenzene	ug/L	700	350	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
m&p-Xylene	ug/L	10,000	5,000	---	<	2.0	<	2.0	<	2.0	<	2.0	<	2.0	<	2.0
o-Xylene	ug/L	10,000	5,000	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
Styrene	ug/L	100	50	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
Bromoform	ug/L	80[4]	50[4]	---	<	2.0	<	2.0	<	2.0	<	2.0	<	2.0	<	2.0
Isopropylbenzene	ug/L	---	---	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
1,1,2,2-Tetrachloroethane	ug/L	---	---	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
1,2,3-Trichloropropane	ug/L	---	---	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
Bromobenzene	ug/L	---	---	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
N-Propylbenzene	ug/L	---	---	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
2-Chlorotoluene	ug/L	---	---	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
1,3,5-Trimethylbenzene	ug/L	---	---	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
4-Chlorotoluene	ug/L	---	---	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0

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					04/27/2010		06/01/2010		04/27/2010		06/01/2010		04/27/2010		06/01/2010	
					Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit
tert-Butylbenzene	ug/L	---	---	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
1,2,4-Trimethylbenzene	ug/L	---	---	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
sec-Butylbenzene	ug/L	---	---	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
p-Isopropyltoluene	ug/L	---	---	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
1,3-Dichlorobenzene	ug/L	600	300	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
1,4-Dichlorobenzene	ug/L	75	37.5	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
n-Butylbenzene	ug/L	---	---	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
1,2-Dichlorobenzene	ug/L	600	300	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
1,2-Dibromo-3-Chloropropane	ug/L	0.2	0.1	---	<	2.0	<	2.0	<	2.0	<	2.0	<	2.0	<	2.0
1,2,4-Trichlorobenzene	ug/L	70	35	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
Hexachlorobutadiene	ug/L	---	---	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
Naphthalene	ug/L	100	50	---	<	2.0	<	2.0	<	2.0	<	2.0	<	2.0	<	2.0
1,2,3-Trichlorobenzene	ug/L	---	---	---	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
SEMI-VOLATILE ORGANICS																
Semi-Volatile Organics	ug/L	Various	Various	---	<	Various	<	Various	<	Various	<	Various	<	Various	<	Various
n-Nitrosodi-n-Propylamine	ug/L	---	---	0.0096	<	10	<	10	<	10	<	10	<	10	<	10
di-n-Butylphthalate	ug/L	---	---	3,700	<	10	<	10	<	10	<	10	<	10	<	10
TOTAL PETROLEUM HYDROCARBON																
Hydrocarbon Content	ug/L	---	---	---	<	200	<	200	<	200	<	200	<	200	<	200
METALS																
Silver	mg/L	---	---	---	<	0.005	<	0.005	<	0.005	<	0.005	<	0.005	<	0.005
Arsenic	mg/L	0.01	0.005	---	<	0.010	<	0.010	<	0.010	<	0.010	<	0.010	<	0.010
Beryllium	mg/L	0.004	0.002	---	<	0.004	<	0.004	<	0.004	<	0.004	<	0.004	<	0.004
Cadmium	mg/L	0.005	0.0025	---	<	0.005	<	0.005	<	0.005	<	0.005	<	0.005	<	0.005
Chromium	mg/L	0.1	0.05	---	**0.012**	0.005	<	0.005	<	0.005	<	0.005	<	0.005	<	0.005
Copper	mg/L	1.3	0.65	---	**0.021**	0.015	<	0.015	**0.018**	0.015	<	0.015	**0.019**	0.015	<	0.015
Mercury	mg/L	0.002	0.001	---	<	0.000	<	0.000	<	0.000	<	0.000	<	0.000	<	0.000
Nickel	mg/L	0.1	0.05	---	<	0.010	<	0.010	<	0.010	<	0.010	<	0.010	<	0.010
Lead	mg/L	0.015	0.0075	---	<	0.010	<	0.010	<	0.010	<	0.010	<	0.010	<	0.010
Antimony	mg/L	0.006	0.003	---	<	0.025	<	0.025	<	0.025	<	0.025	<	0.025	<	0.025
Selenium	mg/L	0.05	0.025	---	<	0.025	<	0.025	<	0.025	<	0.025	<	0.025	<	0.025
Thallium	mg/L	0.002	0.001	---	<	0.025	<	0.025	<	0.025	<	0.025	<	0.025	<	0.025
Zinc	mg/L	---	---	11	**0.035**	0.010	<	0.010	**0.014**	0.010	**0.012**	0.010	**0.015**	0.010	<	0.010
Iron	mg/L	---	---	26	**3.8**	0.025	**1.7**	0.025	**2.7**	0.025	**2.8**	0.025	**1.8**	0.025	**1.4**	0.025
Manganese	mg/L	---	---	0.88	**0.150**	0.005	**0.100**	0.005	**1.100**	0.005	**1.000**	0.005	**0.410**	0.005	**0.290**	0.005

General Notes:
1. Bold results indicated a detected parameter.
2. Yellow highlighted results indicate a detected parameter that exceeds the PAL. Orange highlighted results indicate a detected parameter that exceeds the GA Groundwater Objective.
3. NT indicates "not tested".
4. The limit of 80 ppb applies to total Trihalomethanes (bromoform, bromodichloromethane, chloroform, and dibromochloromethane).
5. EPA Regional Screening Levels for Tap Water are risk based screening criteria provided here for detected compounds with no GA Groundwater Objective, for reference only. They do not represent regulatory limits.

Notes by Sampling Event:

6/21/2007 Sampling Event

1. 90% of detected TPH was due to a non petroleum based compound, tentatively identified as N-butyl-benzenesulfonamide (NBBS) in all samples, except GZ-ML-1-1 and GZ-ML-1-2, in which greater than 75% of detected TPH was due to a non petroleum based compounds, tentatively identified as NBBS.

8/9/2007 Sampling Event

1. In all samples, 90% of detected TPH was due to a non petroleum based compound, tentatively identified as NBBS.

4/26/2010 Sampling Event

1. The metals sample for GZ-ML-1-3 was received by the laboratory with a pH of approximately 5, which is above the method requirement of a pH less than 2. The sample was acidified to a pH of less than 2 by the addition of 1.0 mL of nitric acid by the laboratory technician, however more than 24 hours elapsed prior to digestion, which exceeds the method hold time for an unpreserved sample.
2. In all TPH samples from GZ-ML-1, GZ-ML-2, and GZ-ML-3, except GZ-ML-1-2 and GZ-ML-3-1, greater than 90% of detected TPH was non petroleum based, due to NBBS and/or carboxylic acids. TPH was not detected in GZ-ML3-1. In sample GZ-ML-1-2, greater than 75% of detected TPH was non petroleum based, due to NBBS.
3. Greater than 90% of the TPH in samples GZ-ML-4-1 and GZ-ML-4-2 was non-petroleum based.
4. Toluene was detected at approximately 6.0 ug/L in the trip blank associated with samples GZ-ML-4-1, GZ-ML-4-2, GZ-ML-4-3, GZ-ML-5-2, and GZ-5-3.

6/1/2010 Sampling Event

1. Greater than 90% of the TPH in samples GZ-ML-4-1 and GZ-ML-4-2 was non-petroleum based.

Table 9
Site Wide Overburden Analytical Results-October 2008
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PARAMETERS	UNITS	RIDEM STANDARDS		SITE WIDE VOC SAMPLING											
				CB - 9		GP- 15		GZ - 6		GZ - 8		GZ - 27B		GZ - 27A	
		GA	PALs	10/06/2008		10/06/2008		10/06/2008		10/06/2008		10/06/2008		10/06/2008	
				Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL
EPA 8260 VOLATILE ORGANICS															
				<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
Acetone	µg/L			<	25	<	25	<	25	<	25	<	25	<	25
trans-1,2-Dichloroethene	µg/L			<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
1,1-Dichloroethane	µg/L			<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
cis-1,2-Dichloroethene	µg/L			<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
Trichloroethene	µg/L	5	2.5	**1.3**	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
Tetrachloroethene	µg/L	5	2.5	**16**	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
o-Xylene	µg/L			<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
2-Chlorotoluene	µg/L			<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
1,2,4-Trimethylbenzene	µg/L			<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0

PARAMETERS	UNITS	RIDEM STANDARDS		SITE WIDE VOC SAMPLING											
				PT - 1		PT - 2		PT - 104 (=PT4)		RIZ - 18		RIZ-8 (Blind Dup.)		RIZ - 19	
		GA	PALs	10/06/2008		10/06/2008		10/06/2008		10/06/2008		10/06/2008		10/06/2008	
				Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL
EPA 8260 VOLATILE ORGANICS															
Vinyl Chloride	µg/L			<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
Acetone	µg/L			<	25	<	25	<	25	<	25	<	25	<	25
trans-1,2-Dichloroethene	µg/L			<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
1,1-Dichloroethane	µg/L			<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
cis-1,2-Dichloroethene	µg/L			<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
Trichloroethene	µg/L	5	2.5	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
Tetrachloroethene	µg/L	5	2.5	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0

PARAMETERS	UNITS	RIDEM STANDARDS		THIRD QUARTER 2008 PERIMETER WELL SAMPLING													
				GP - 22		GP - 22		GP - 22 (Blind Dup.)		GZ - 1		RIZ - 14		RIZ - 1		RIZ - 21	
		GA	PALs	10/03/2008		10/21/2008		10/21/2008		10/03/2008		10/03/2008		10/03/2008		10/03/2008	
				Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL
EPA 8260 VOLATILE ORGANICS																	
Vinyl Chloride	µg/L			<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
Acetone	µg/L			<	25	<	25	<	25	<	25	<	25	<	25	<	25
trans-1,2-Dichloroethene	µg/L			<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
1,1-Dichloroethane	µg/L	100	50	<	1.0	<	1.0	<	1.0	**1.5**	1.0	<	1.0	<	1.0	<	1.0
cis-1,2-Dichloroethene	µg/L	70	35	<	1.0	<	1.0	<	1.0	**39**	1.0	<	1.0	<	1.0	<	1.0
Trichloroethene	µg/L	5	2.5	<	1.0	<	1.0	<	1.0	**8.0**	1.0	<	1.0	<	1.0	<	1.0
Tetrachloroethene	µg/L	5	2.5	**12**	1.0	<	1.0	<	1.0	**1.6**	1.0	<	1.0	<	1.0	<	1.0
o-Xylene	µg/L			<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
2-Chlorotoluene	µg/L			<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
1,2,4-Trimethylbenzene	µg/L	NS	NS	<	1.0	<	1.0	<	1.0	**4.2**	1.0	<	1.0	<	1.0	<	1.0

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PARAMETERS	UNITS	RIDEM STANDARDS		THIRD QUARTER 2008 ICMP SAMPLING											
				GP - 26		GP - 28		GZ - 3		GZ - 7		GZ - 19		GZ - 20	
		GA	PALs	10/01/2008		10/01/2008		10/01/2008		10/01/2008		10/01/2008		10/01/2008	
				Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL
EPA 8260 VOLATILE ORGANICS															
Vinyl Chloride	µg/L	2	1	**16**	10	**10**	1.0	<	10	<	1.0	<	250	**15**	5.0
trans-1,2-Dichloroethene	µg/L	NS	NS	<	250	<	25	<	10	<	25	<	250	<	5.0
1,1-Dichloroethane	µg/L	100	50	**19**	10	<	1.0	<	10	<	1.0	<	250	<	5.0
cis-1,2-Dichloroethene	µg/L	70	35	<	10	<	1.0	**86**	10	<	1.0	<	250	**230**	5.0
Trichloroethene	µg/L	5	2.5	**2,300**	100	**2.9**	1.0	**93**	10	**33**	1.0	<	250	**180**	5.0
Tetrachloroethene	µg/L	5	2.5	**2,300**	100	<	1.0	**180**	10	**37**	1.0	**16,000**	250	**430**	5.0
o-Xylene	µg/L	10	5	**2,900**	100	<	1.0	<	10	**7.1**	1.0	<	250	<	5.0
2-Chlorotoluene	µg/L	NS	NS	<	10	**1.9**	1.0	<	10	<	1.0	<	250	<	5.0
1,2,4-Trimethylbenzene	µg/L	NS	NS	<	10	**1.0**	1.0	<	5.0	<	1.0	<	250	<	1.0

PARAMETERS	UNITS	RIDEM STANDARDS		THIRD QUARTER 2008 ICMP SAMPLING											
				GZ - 23		GZ - 21		GZ - 22		RIZ - 5		RIZ - 7		RIZ - 13	
		GA	PALs	10/01/2008		10/03/2008		10/03/2008		10/01/2008		10/01/2008		10/01/2008	
				Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL
EPA 8260 VOLATILE ORGANICS															
Vinyl Chloride	µg/L	2	1	<	1.0	**3.4**	1.0	<	1.0	<	1.0	**100**	1.0	<	1.0
Acetone	µg/L	NS	NS	<	25	<	25	<	25	<	1.0	**3.0**	1.0	<	1.0
trans-1,2-Dichloroethene	µg/L	NS	NS	<	1.0	<	1.0	<	1.0	<	1.0	**3.0**	1.0	<	1.0
1,1-Dichloroethane	µg/L	100	50	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
cis-1,2-Dichloroethene	µg/L	70	35	<	1.0	**4.7**	1.0	<	1.0	<	1.0	**54**	1.0	<	1.0
Trichloroethene	µg/L	5	2.5	**1.8**	1.0	**2.7**	1.0	<	1.0	<	1.0	<	1.0	<	1.0
Tetrachloroethene	µg/L	5	2.5	**1.7**	1.0	**6.1**	1.0	<	1.0	<	1.0	<	1.0	<	1.0
o-Xylene	µg/L	10	5	<	1.0	<	1.0	<	1.0	<	1.0	**1.6**	1.0	<	1.0
2-Chlorotoluene	µg/L	NS	NS	<	1.0	<	1.0	<	1.0	<	1.0	**3.2**	1.0	<	1.0

PARAMETERS	UNITS	RIDEM STANDARDS		THIRD QUARTER 2008 UIC SAMPLING											
				MW - 6		UIC - 1A		UIC - 2A		UIC - 3		UIC - 4A		UIC - 5B	
		GA	PALs	09/03/2008		09/03/2008		09/03/2008		09/03/2008		09/03/2008		09/03/2008	
				Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL
EPA 8260 VOLATILE ORGANICS															
Vinyl Chloride	µg/L			<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
Acetone	µg/L	NS	NS	<	25	<	25	<	25	**390**	25	<	25	<	25
trans-1,2-Dichloroethene	µg/L			<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
1,1-Dichloroethane	µg/L			<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
cis-1,2-Dichloroethene	µg/L			<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
Trichloroethene	µg/L			<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
Tetrachloroethene	µg/L			<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
o-Xylene	µg/L			<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
2-Chlorotoluene	µg/L			<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
1,2,4-Trimethylbenzene	µg/L			<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0

Table 9

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PARAMETERS	UNITS	RIDEM STANDARDS		2008 RIVER STREET RESIDENTIAL WELL SAMPLING - RAW WELL WATER									
				14 RIVER STREET		16 RIVER STREET		16 RIVER STREET		18 RIVER STREET		18 RIVER STREET	
		GA	PALs	2/1/08		2/1/08		9/9/02		2/1/08		8/1/08	
				Result	RL	Result	RL	Result	RL	Result	RL	Result	RL
EPA 524.2 DW VOLATILE ORGANICS													
1,1,1-Trichloroethane	ug/L	200	100	<	0.5	**5.2**	0.5	**3.3**	0.5	<	0.5	<	0.5
cis-1,2-Dichloroethene	µg/L	70	35	<	0.5	**2.7**	0.5	**1.4**	0.5	<	0.5	<	0.5
Tetrachloroethene	µg/L	5	2.5	<	0.5	**1.1**	0.5	**0.7**	0.5	<	0.5	<	0.5
Benzene	µg/L	5	2.5	<	0.5	**1.1**	0.5	<	0.5	<	0.5	<	0.5

PARAMETER DETECTED ABOVE RIDEM GA PAL

PARAMETER DETECTED ABOVE RIDEM GA STANDARD

NS = NO STANDARD

1. For a full listing of the EPA Method 8260 volatile organics included in the testing program refer to the certificates of analysis in Attachment C.
2. Bold results indicated a detected parameter.

Table 10
Diffusion Bag Results, 2007-2010
Bedrock Site Investigation Report
Charbert Facility, Alton RI

OCTOBER 2010 DIFFUSION BAG RESULTS SUMMARY						
PARAMETERS	**UNITS**	DB - 1	DB - 2	DB - 3	DB - 4	DB - 5
		10/19/2010	10/19/2010	10/19/2010	10/19/2010	10/19/2010
Volatile Organic Compounds (VOCs)						
Tetrachloroethene	µg/L	ND	2.6	ND	1.3	ND
Trichloroethene	µg/L	ND	23	ND	ND	ND
Acetone	µg/L	15	11	ND	ND	ND
Vinyl Chloride	µg/L	ND	ND	ND	1.2	ND
cis-1,2-Dichloroethene	ug/L	ND	2.2	ND	4.2	ND

AUGUST 2009 DIFFUSION BAG RESULTS SUMMARY						
PARAMETERS	**UNITS**	DB - 1[2]	DB - 2	DB - 3	DB - 4	DB - 5
		9/30/2009	9/9/2009	9/9/2009	9/9/2009	9/9/2009
Volatile Organic Compounds (VOCs)						
Tetrachloroethene	µg/L	3.6	34	3.0	22	ND
Trichloroethene	µg/L	ND	2.0	ND	2.0	ND

AUGUST 2008 DIFFUSION BAG RESULTS SUMMARY						
PARAMETERS	**UNITS**	DB - 1	DB - 2	DB - 3	DB - 4	DB - 5
		8/22/08	8/22/08	8/22/08	8/22/08	8/22/08
Volatile Organic Compounds (VOCs)						
Vinyl Chloride	µg/L	ND	ND	ND	1.5	ND
cis-1,2-Dichloroethene	µg/L	ND	ND	ND	7.5	ND
Trichloroethene	µg/L	ND	ND	ND	28	ND
Tetrachloroethene	µg/L	ND	ND	ND	26	ND

Table 10
Diffusion Bag Results, 2007-2010
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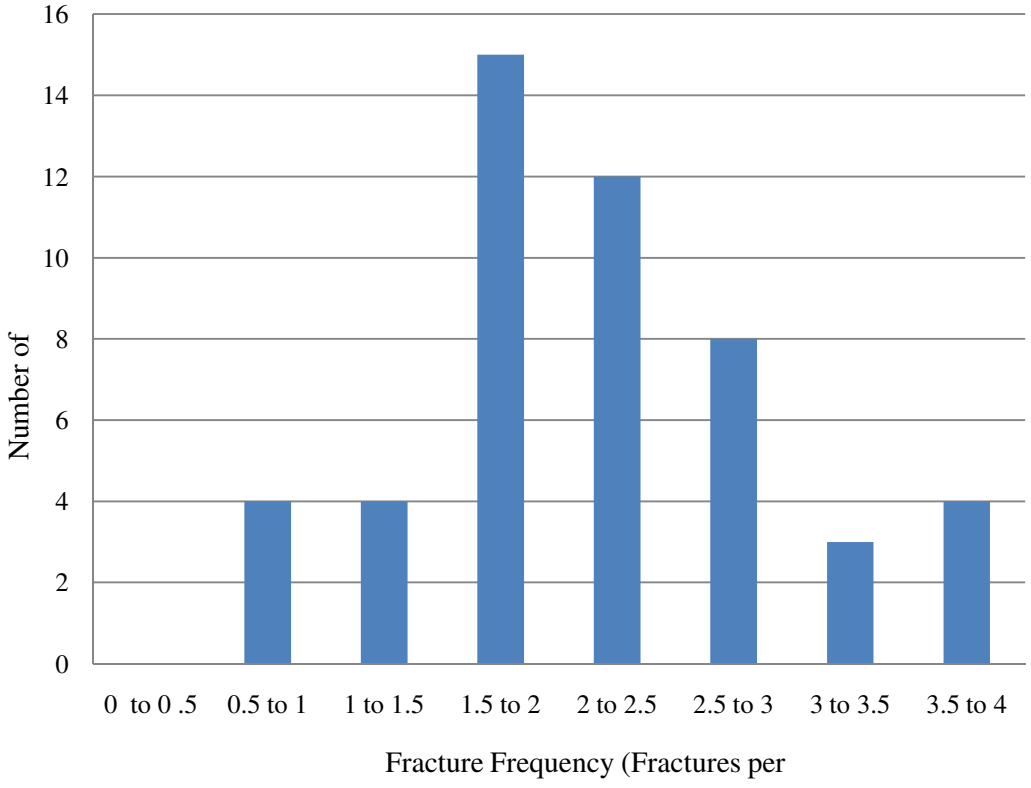
AUGUST 2007 DIFFUSION BAG RESULTS SUMMARY										
PARAMETERS	**UNITS**	DB-1	DB-2	DB-3[1]	DB-4	DB-5	DB-5 Duplicate	DB-6	DB-7	DB-8
		8/31/07	8/31/07	8/31/07	8/31/07	8/31/07	8/31/07	8/31/07	8/31/07	8/31/07
Volatile Organic Compounds (VOCs)										
cis-1,2-Dichloroethene	ug/L	ND	1	ND	5	58	63	9	ND	1
Tetrachloroethene	ug/L	ND	3	ND	ND	6	8	1	ND	ND
Trichloroethene	ug/L	ND	2	ND	ND	3	3	11	ND	ND
Vinyl Chloride	ug/L	ND	ND	ND	21	49	35	19	ND	ND
1,1-Dichloroethane	ug/L	ND	ND	ND	ND	1	1	ND	ND	ND
trans-1,2-Dichloroethylene	ug/L	ND	ND	ND	ND	1	ND	ND	ND	ND
Ethylbenzene	ug/L	ND	ND	ND	ND	1	1	ND	ND	ND
o-Xylene	ug/L	ND	ND	ND	ND	1	ND	ND	ND	ND
Benzene	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	1

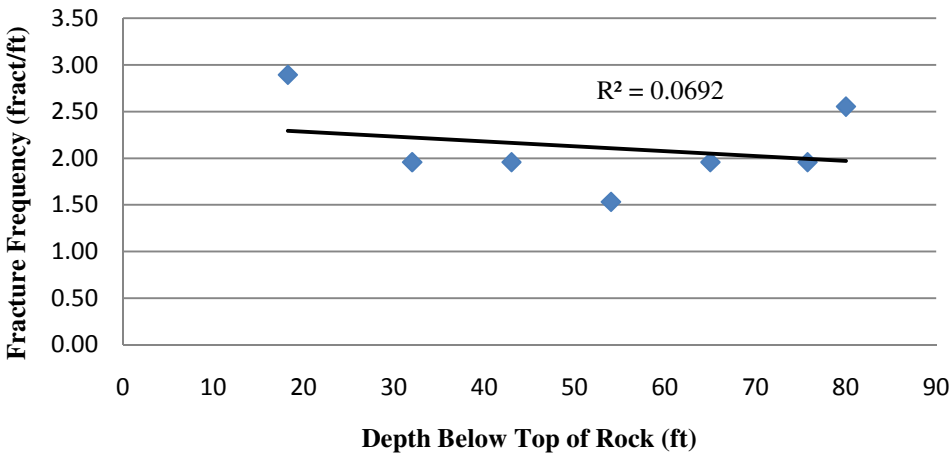
1. Diffusion bag found floating on water surface and results are likely not reflective of pore water concentrations.
2. Original diffusion bag lost and was replaced and sampled.

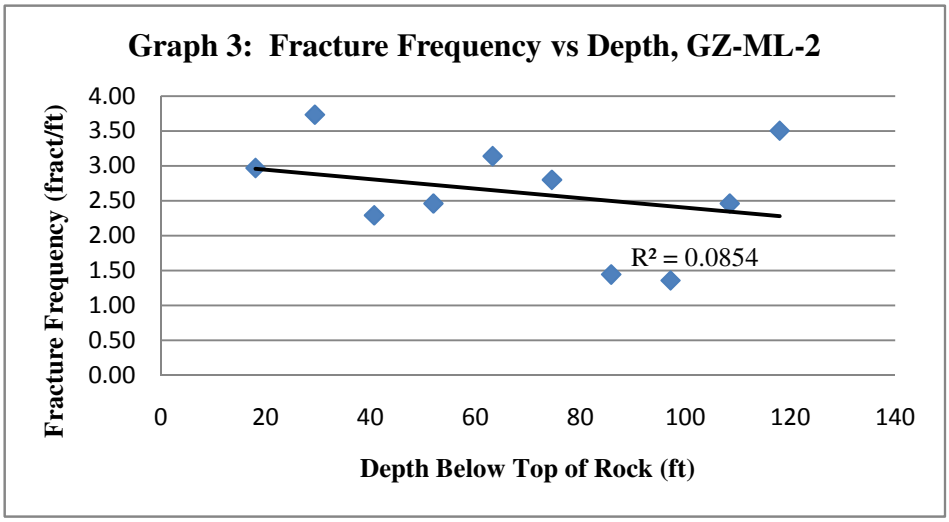
GRAPHS

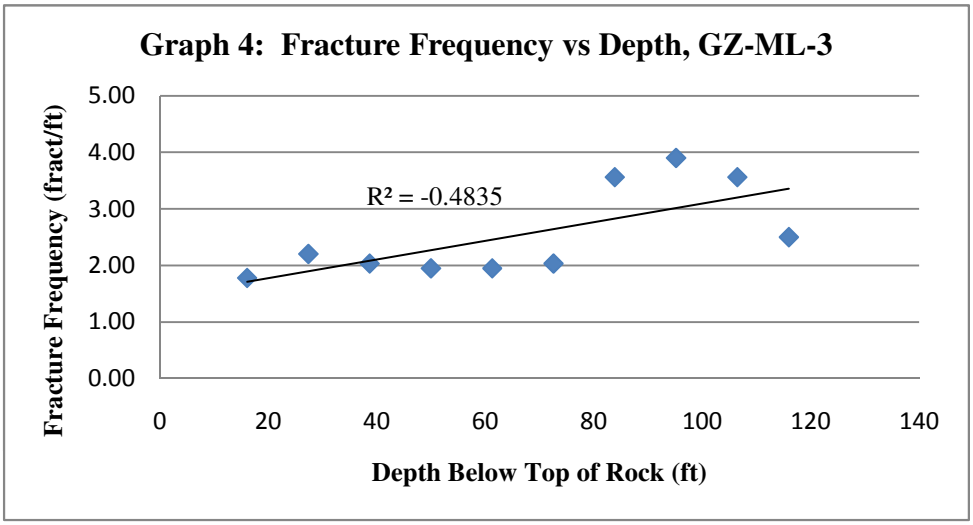
Graph 1: Frequency Distribution of Fracture Frequency Data Charbert Bedrock SIR

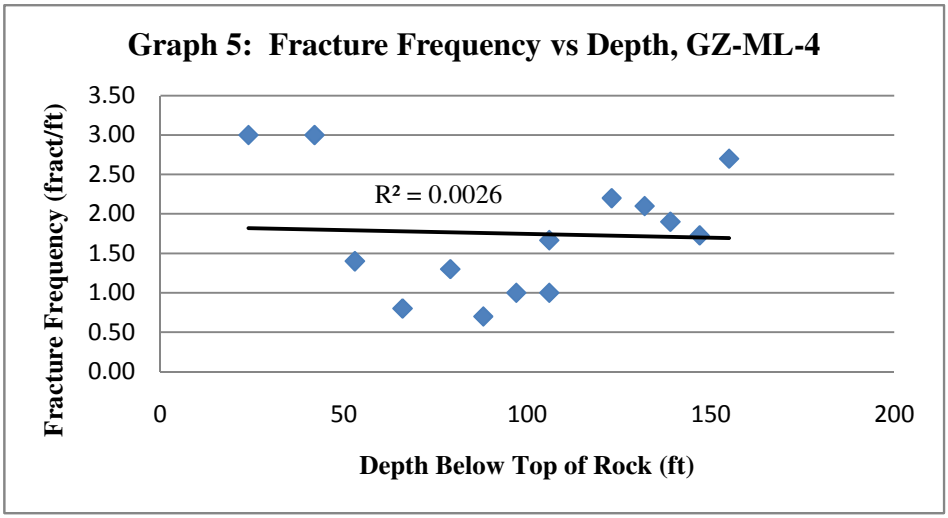


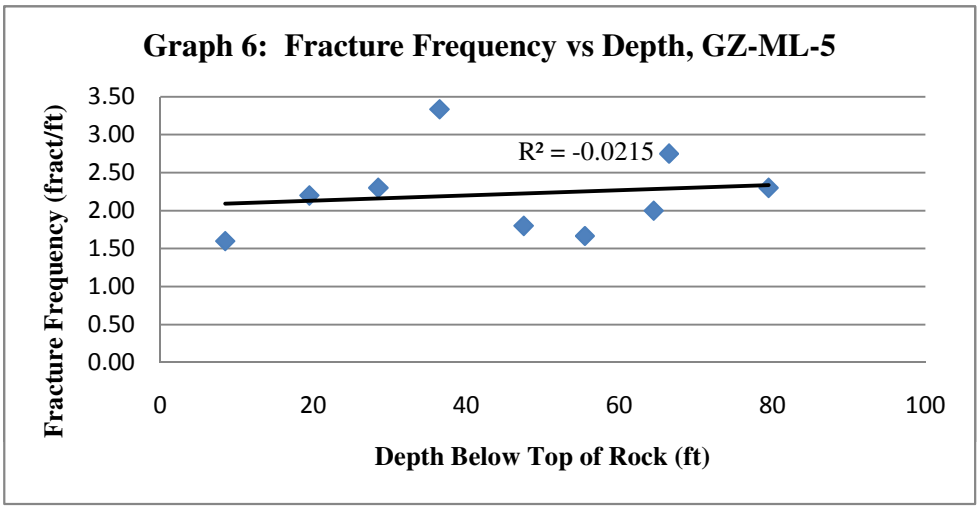
Graph 2: Fracture Frequency vs Depth, GZ-ML-1

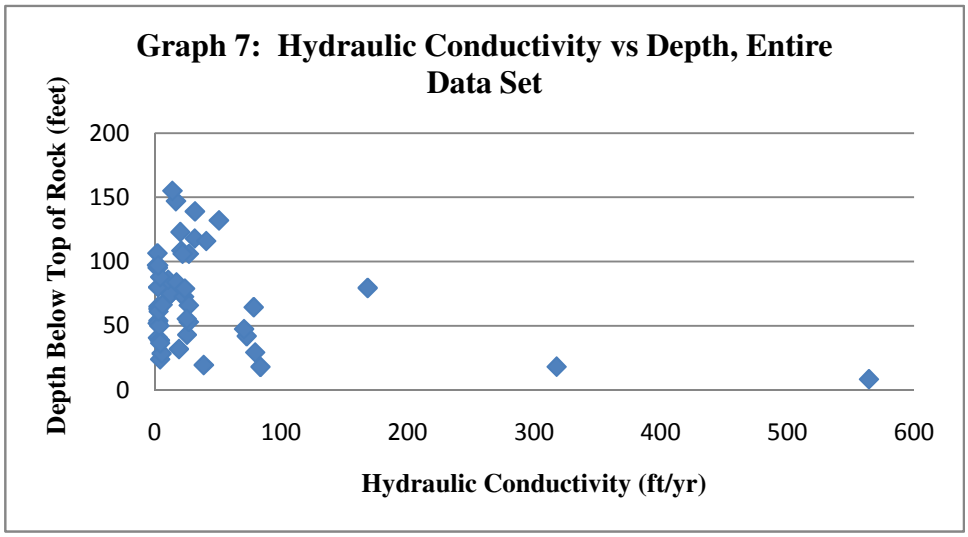


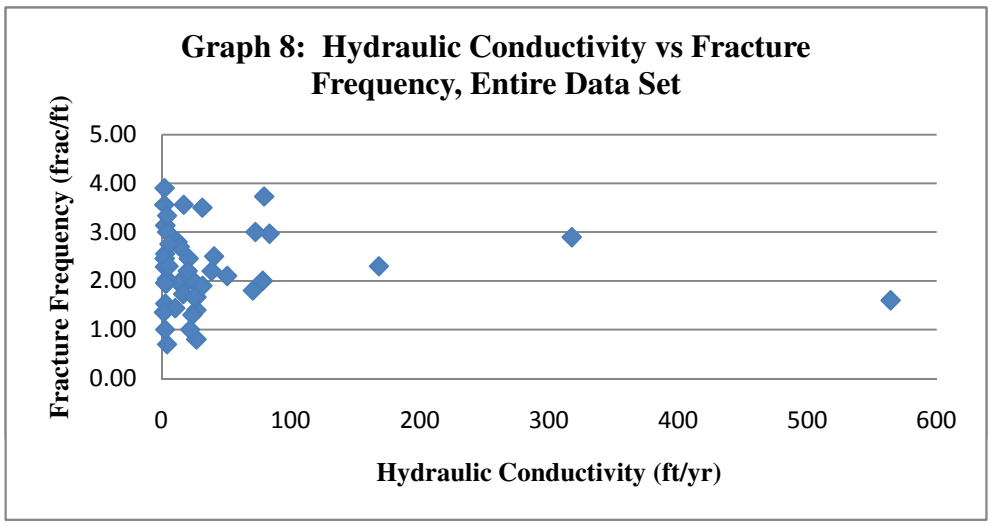

Graph 3: Fracture Frequency vs Depth, GZ-ML-2
Fracture Frequency (fract/ft)
4.00
3.50
3.00
2.50
2.00
1.50
1.00
0.50
0.00
R² = 0.0854
0
20
40
60
80
100
120
140
Depth Below Top of Rock (ft)


Graph 4: Fracture Frequency vs Depth, GZ-ML-3
Fracture Frequency (fract/ft)
5.00
4.00
3.00
2.00
1.00
0.00
R² = -0.4835
0
20
40
60
80
100
120
140
Depth Below Top of Rock (ft)


Graph 5: Fracture Frequency vs Depth, GZ-ML-4
Fracture Frequency (fract/ft)
3.50
3.00
2.50
2.00
1.50
1.00
0.50
0.00
R² = 0.0026
0
50
100
150
200
Depth Below Top of Rock (ft)

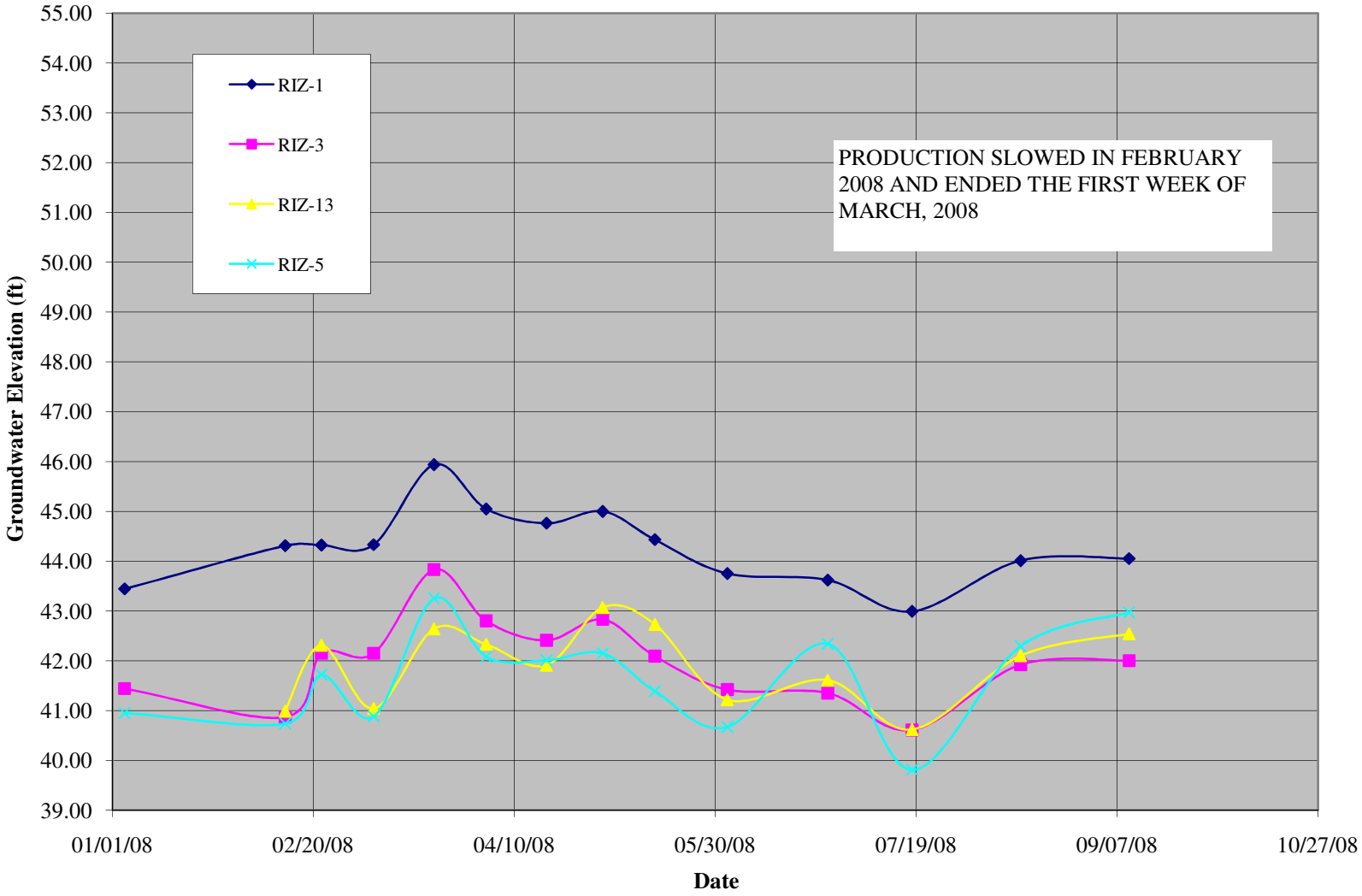

Graph 6: Fracture Frequency vs Depth, GZ-ML-5
Fracture Frequency (fract/ft)
3.50
3.00
2.50
2.00
1.50
1.00
0.50
0.00
R² = -0.0215
0
20
40
60
80
100
Depth Below Top of Rock (ft)


Graph 7: Hydraulic Conductivity vs Depth, Entire Data Set
Depth Below Top of Rock (feet)
200
150
100
50
0
0
100
200
300
400
500
600
Hydraulic Conductivity (ft/yr)

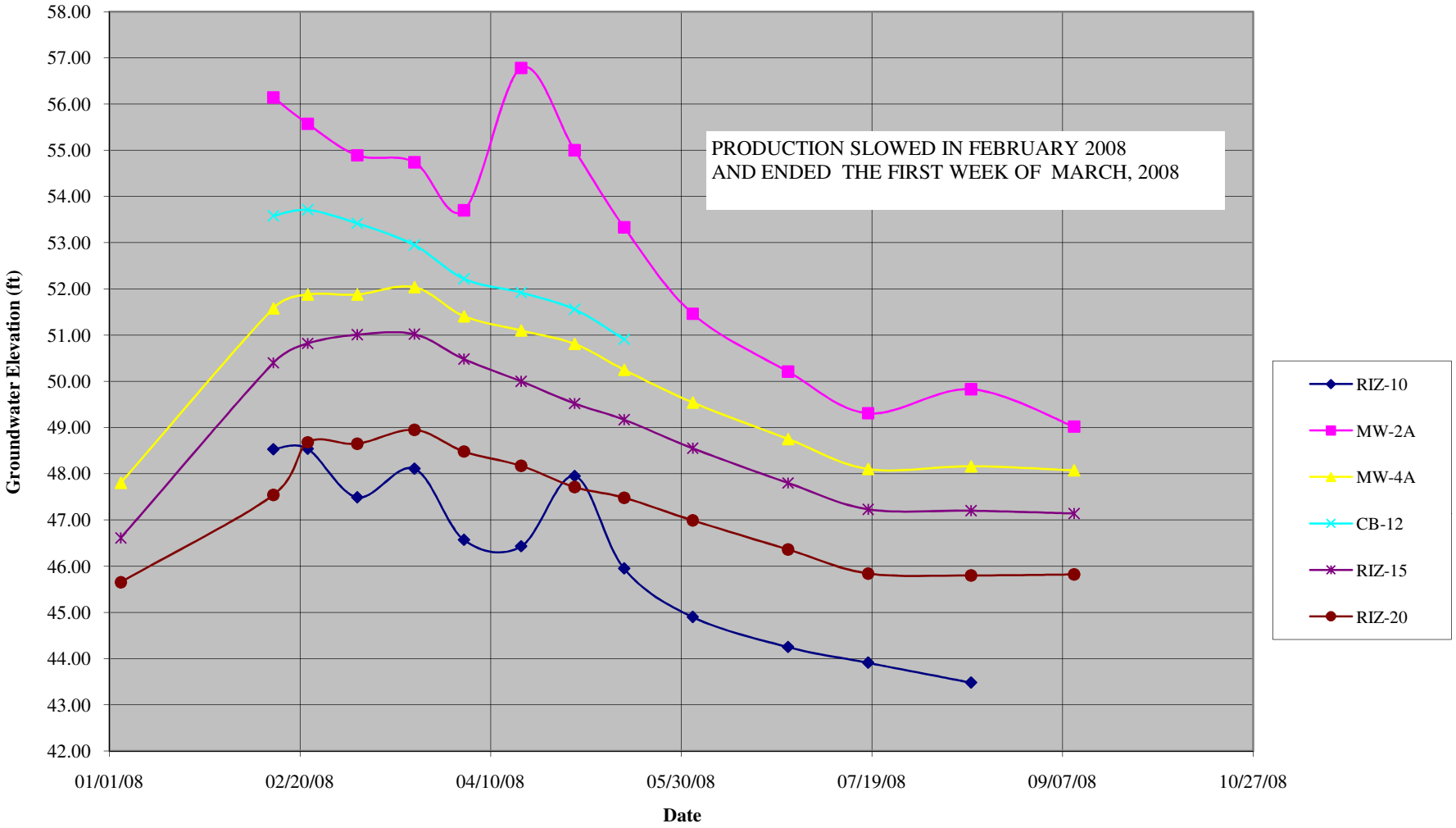

Graph 8: Hydraulic Conductivity vs Fracture Frequency, Entire Data Set
Fracture Frequency (frac/ft)
5.00
4.00
3.00
2.00
1.00
0.00
0
100
200
300
400
500
600
Hydraulic Conductivity (ft/yr)

HYDROGRAPHS

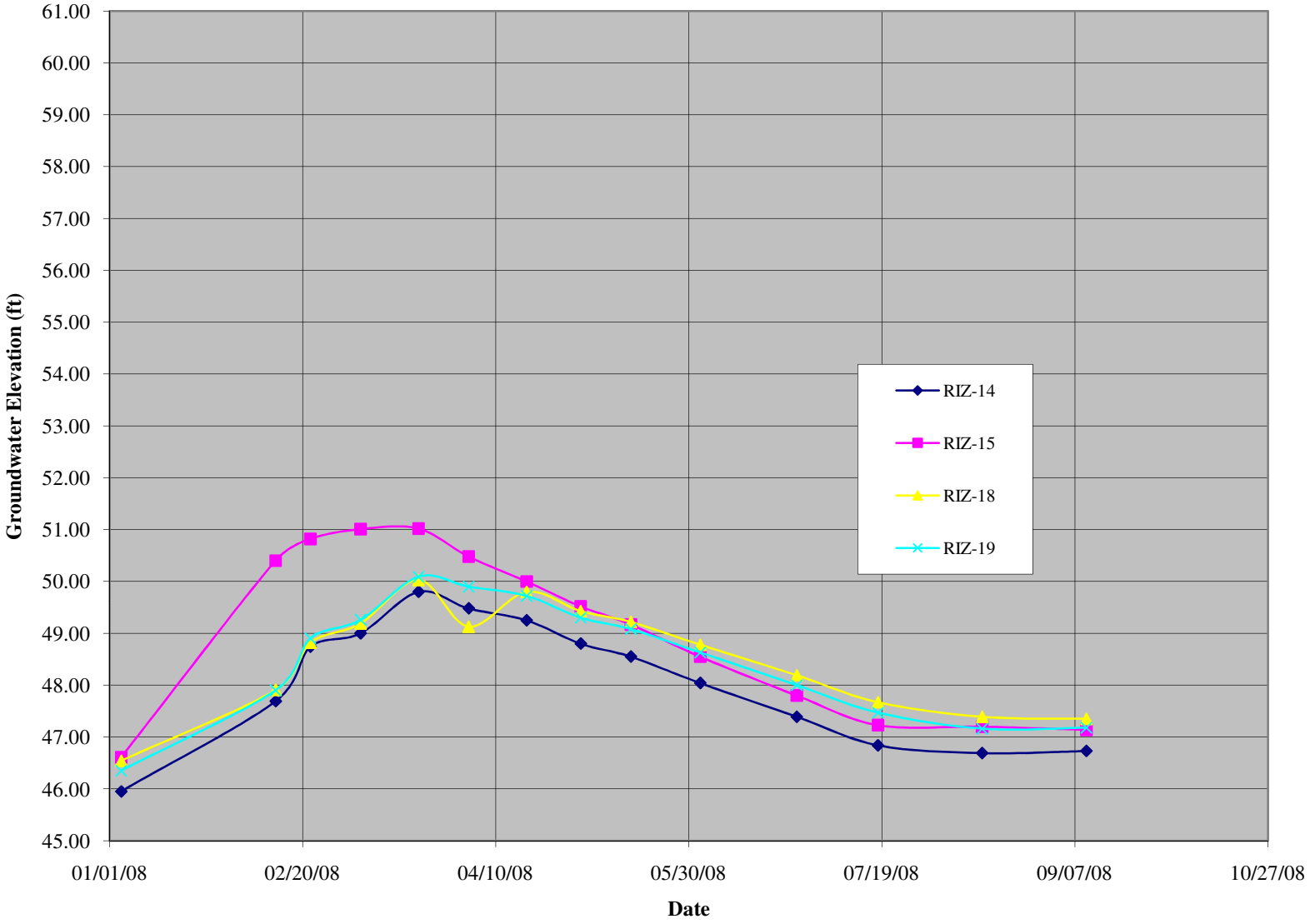
HYDROGRAPH 1
Hydrographs of Facility Area
RIZ-1, RIZ-3, RIZ-5, RIZ-10
Bedrock SIR
Charbert Facility
Alton, Rhode Island



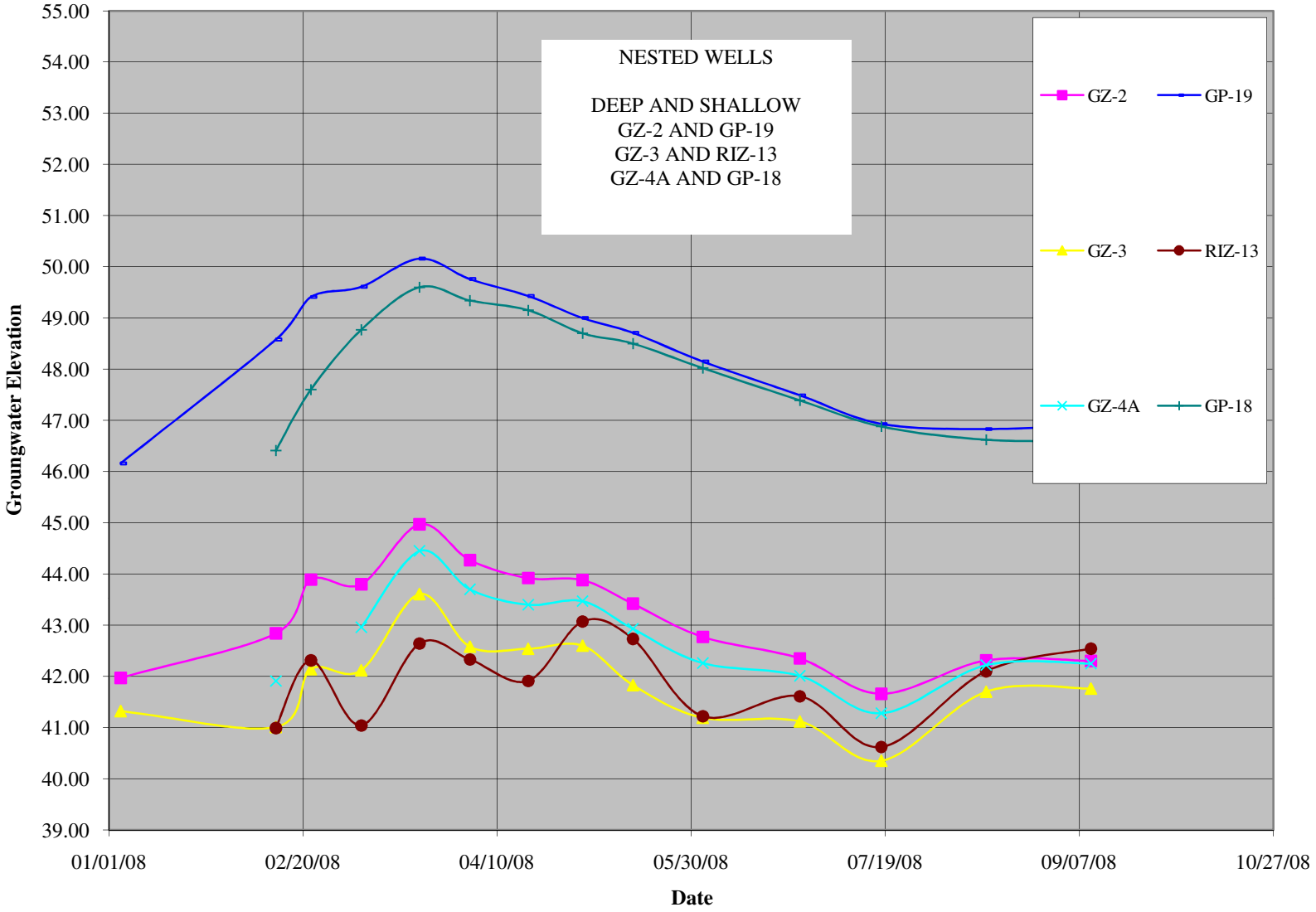
HYDROGRAPH 2
Hydrographs of the Lagoon Area
RIZ-10, RIZ-15, RIZ-20, MW-2A, MW-4A, CB-12
Bedrock SIR
Charbert Facility
Alton, Rhode Island



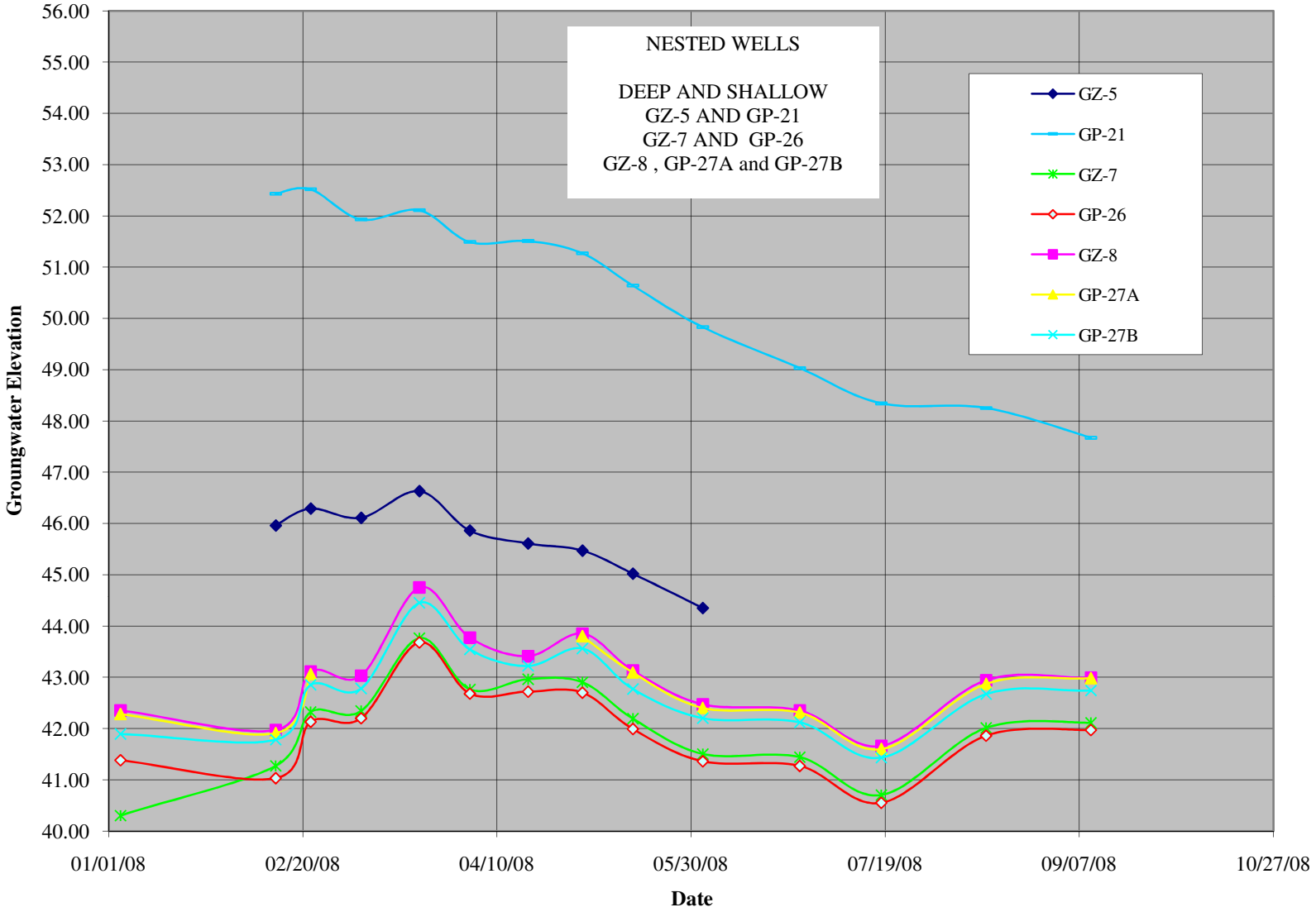
HYDROGRAPH 3
Hydrographs of Northeast Property Corner
RIZ-14, RIZ-15, RIZ 18, RIZ 19
Bedrock SIR
Charbert Facility
Alton, Rhode Island



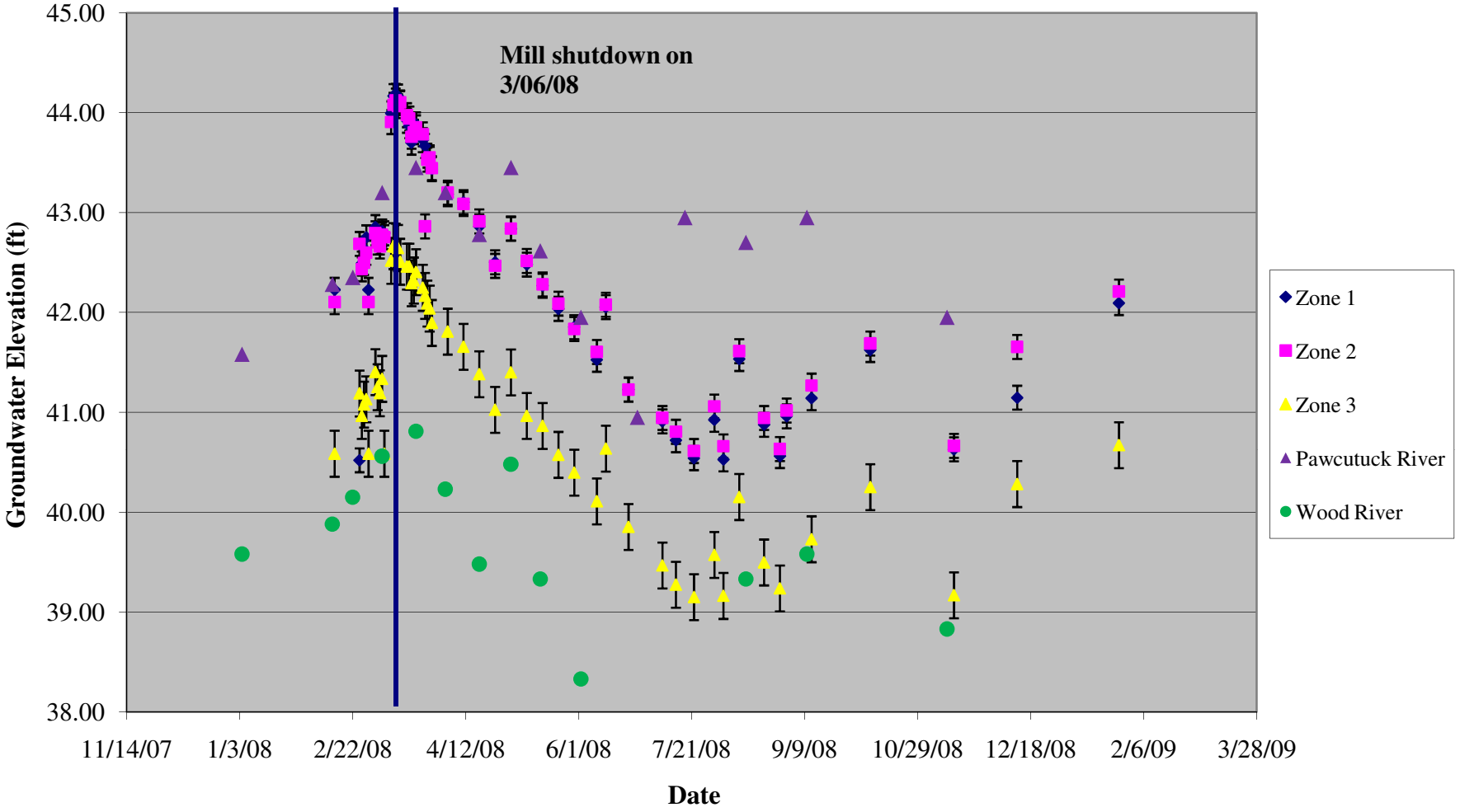
HYDROGRAPH 4
Hydrographs of GZA Nested Shallow/Deep Wells
Bedrock SIR
Charbert Facility
Alton, Rhode Island



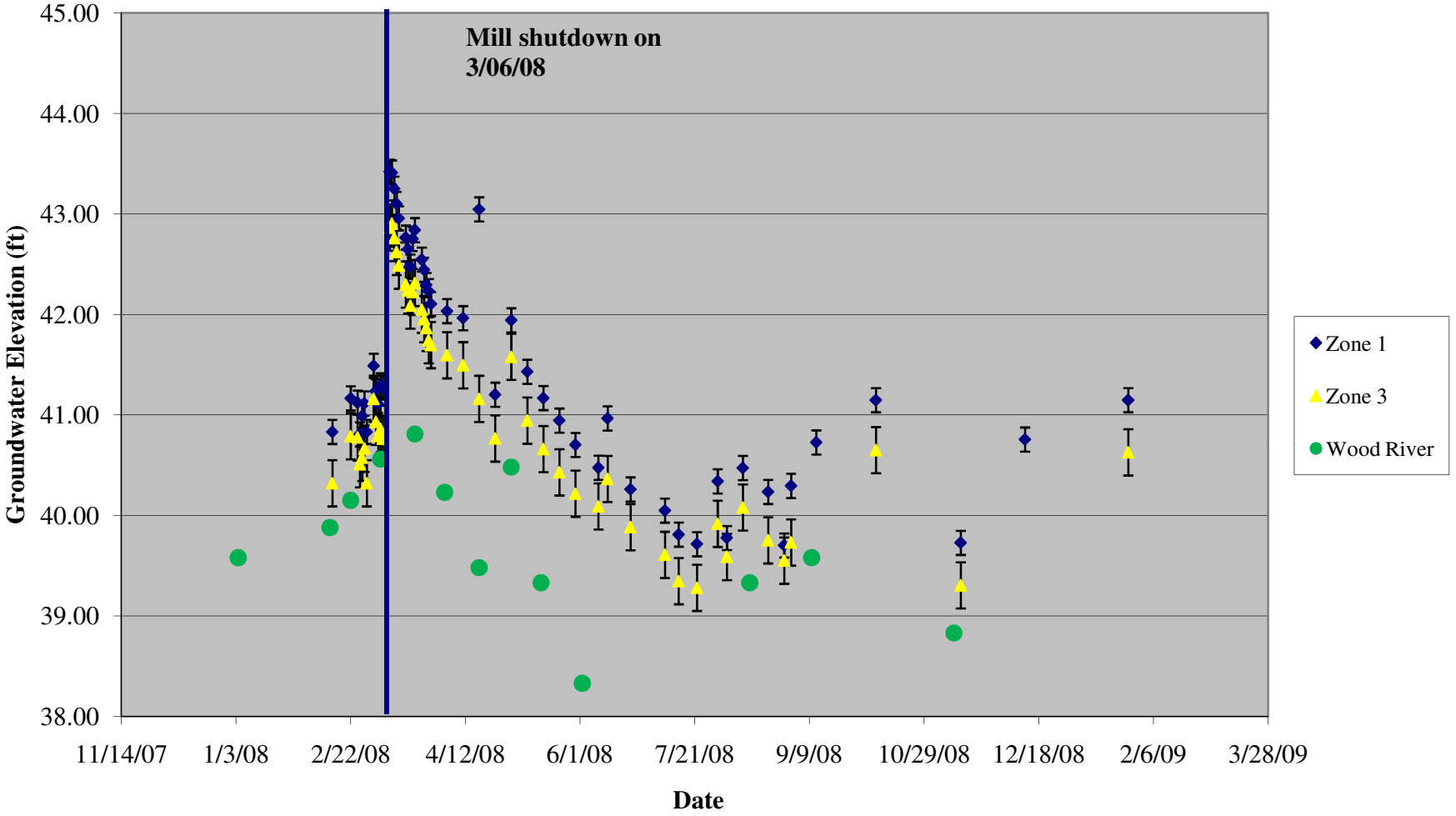
HYDROGRAPH 5
Hydrographs of GZA Nested Shallow/Deep Wells
Bedrock SIR
Charbert Facility
Alton, Rhode Island



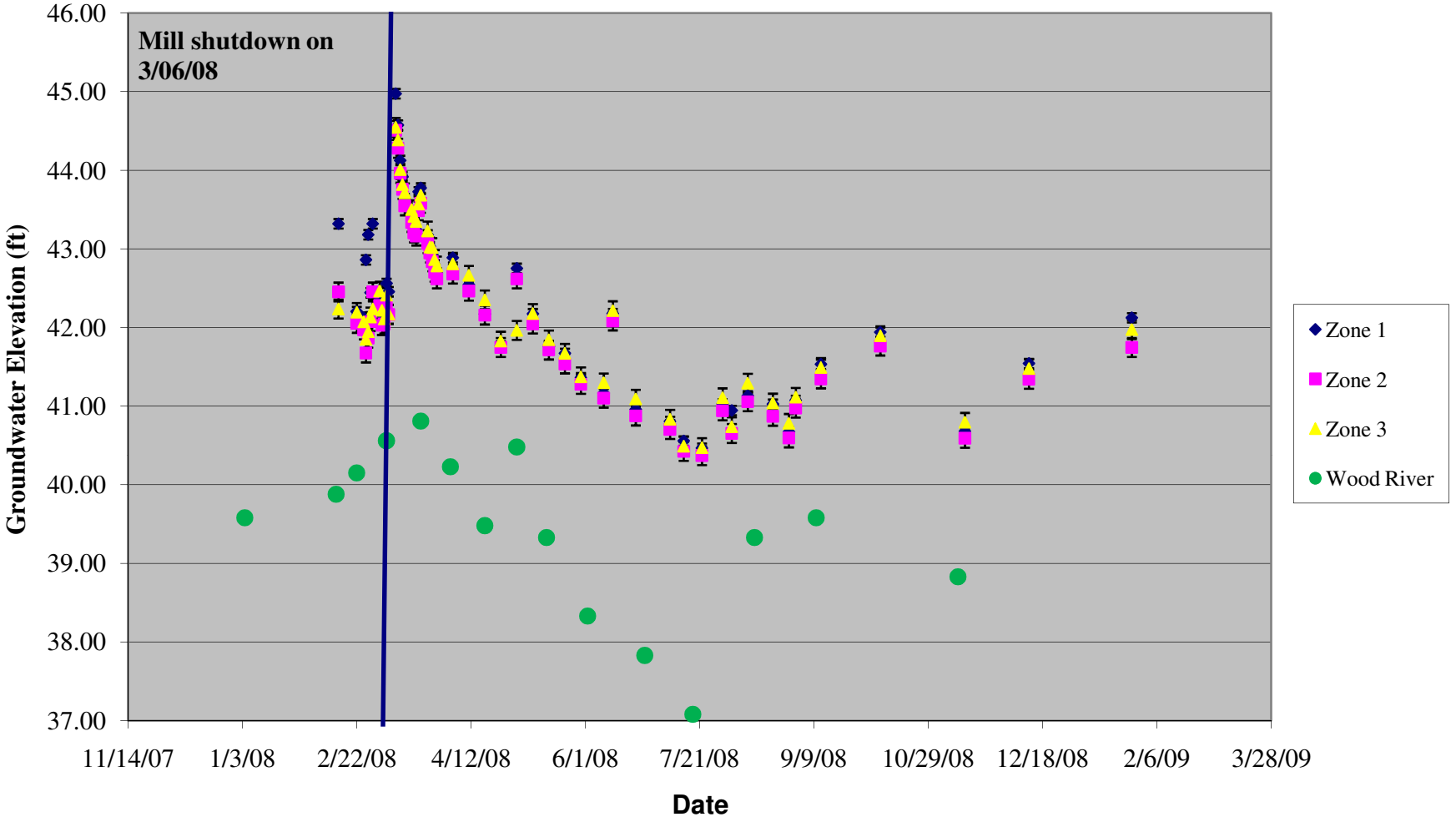
Hydrograph 6: GZ-ML-1 Groundwater Elevations
2008-2009
Bedrock SIR
Charbert Facility, Alton RI



Hydrograph 7: GZ-ML-2 Groundwater Elevations
2008-2009
Bedrock SIR
Charbert Facility, Alton RI



Hydrograph 8: GZ-ML-3 Groundwater Elevations
2008-2009
Charbert Bedrock SIR
Charbert Facility, Alton RI



MAPS

N

TESTED RESIDENTIAL WELLS

SOURCE:
1. AERIAL PHOTOGRAPH ACQUIRED WITH FROM "GOOGLE EARTH PRO" ON 11/18/2010

SCALE: 1" = 100'

0 50 100 200

BEDROCK SITE INVESTIGATION REPORT
CHARBERT FACILITY

ALTON, RHODE ISLAND

WEST BANK RESIDENTIAL WELL SAMPLING

PREPARED BY: GZA GeoEnvironmental, Inc. Engineers and Scientists www.gza.com		PREPARED FOR:	
PROJ MGR: RC	REVIEWED BY: RC	CHECKED BY: RC	FIGURE MAP-1
DESIGNED BY: RC	DRAWN BY: JRC	SCALE:	
DATE: 11/18/2010	PROJECT NO. 32795	REVISION NO.	SHEET NO.

APPENDIX A

LIMITATIONS

GEOHYDROLOGICAL LIMITATIONS

1. The conclusions and recommendations submitted in this report are based in part upon the data obtained from a limited number of soil samples from widely spaced subsurface explorations. The nature and extent of variations between these explorations may not become evident until further investigation. If variations or other latent conditions then appear evident, it will be necessary to reevaluate the recommendations of this report.

2. The generalized soil profile described in the text is intended to convey trends in subsurface conditions. The boundaries between strata are approximate and idealized and have been developed by interpretations of widely spaced explorations and samples; actual soil transitions are probably more gradual. For specific information, refer to the boring logs.

3. Water level readings have been made in the test pits, borings and/or observation wells at times and under conditions stated on the exploration logs. These data have been reviewed and interpretations have been made in the text of this report. However, it must be noted that fluctuations in the level of the groundwater may occur due to variations in rainfall and other factors different from those prevailing at the time measurements were made.

4. The conclusions and recommendations contained in this report are based in part upon various types of chemical data and are contingent upon their validity. These data have been reviewed and interpretations made in the report. As indicated within the report, some of these data are preliminary "screening" level data, and should be confirmed with quantitative analyses if more specific information is necessary. Moreover, it should be noted that variations in the types and concentrations of contaminants and variations in their flow paths may occur due to seasonal water table fluctuations, past disposal practices, the passage of time, and other factors. Should additional chemical data become available in the future, these data should be reviewed by GZA, and the conclusions and recommendations presented therein modified accordingly.

5. Chemical analyses have been performed for specific parameters during the course of this study, as detailed in the text. It must be noted that additional constituents not searched for during the current study may be present in soil and groundwater at the site.

6. It is recommended that this firm be retained to provide further engineering services during design, implementation, and/or construction of any remedial measures, if necessary. This is to observe compliance with the concepts and recommendations contained herein and to allow design changes in the event that subsurface conditions differ from those anticipated.

APPENDIX B

EXPLORATION LOGS

GZA GEOENVIRONMENTAL INC.
140 BROADWAY, PROVIDENCE, RHODE ISLAND
GEOTECH/GEOHYDROLOGICAL CONSULTANTS
HYDROLOGICAL BORING LOG

PROJECT	REPORT OF BORING NO.	GZ-ML-1
Charbert NFA	SHEET	1 of 6
Alton, Rhode Island	FILE NO.	32795.12
	CHKD BY	EAS

BORING CO.	New Hampshire Boring Company	BORING LOCATION	See Exploration Location Plan		
FOREMAN	Frank Gardella	GROUND SURFACE ELEV.	62'	DATUM	
GZA ENGINEER	Mark Dalpe	DATE START	10/17/06	DATE END	11/9/06

SAMPLER: UNLESS OTHERWISE NOTED, SAMPLER CONSISTS OF A 2" SPLIT SPOON DRIVEN USING A 140 lb. HAMMER FALLING 30 IN

CASING: UNLESS OTHERWISE NOTED, CASING DRIVEN USING A 300 LB HAMMER FALLING 24 IN.

CASING SIZE: 8" to 24' 6" to 97' OTHER:

GROUNDWATER READINGS

DATE	TIME	WATER	CASING	STABILIZATION TIME
10/24/06		9.5'	70'	16 Hours
10/25/06		9.8'	90'	17 Hours
11/10/06		15.2'	123'	17 Hours

DPTH (FT)	MIN/ FT	SAMPLE NO	PEN/REC	DEPTH (FT)	BLOWS/6"	SAMPLE DESCRIPTION BURMISTER CLASSIFICATION	STRATUM DESCRIPTION	EQUIPMENT INSTALLED	PID	FID	RK
		S-1	24/18	0-2	2-8	Medium dense, tan, fine to coarse SAND,			ND	3.71	
	52				10-12	some (+) Gravel, trace Silt		SAND			
	79							2'			
	67						FILL	4"			
5	26	S-2	24/10	4-6	3-7	Medium dense, tan, fine SAND, trace Silt		PERMANENT	0.4	7.18	
	51				10-11						
	85										
	79										
	88										
10	NA	S-3	24/13	9-11	5-7	Medium dense, tan/gray, fine (+) to medium			ND	4.04	
	NA				7-7	SAND, trace (+) fine Gravel, trace Silt	±10.5'				
	NA					(natural stratified from ±10.5-±11')		SAND			1
	NA										2
	NA										3
15	NA	S-4	24/14	14-16	17-9	Medium dense, gray, fine SAND, trace Silt			220	318	4
	NA				11-15		FINE TO				
	NA						MEDIUM				
	NA						SAND				
	NA										
20	NA	S-5	24/8	19-21	5-8	Medium dense, gray, fine SAND, trace Silt			11	17	
	NA				8-8						
	NA										
	NA										
	NA										
25	NA	S-6	24/9	24-26	6-7	Medium dense, gray, fine SAND, little (-) Silt	25' SILT		ND	2.81	
	NA				9-10	(4' mm thick Silt layer at ±25')	25.1'				
	NA						FINE TO MEDIUM				
	NA						SAND				
	NA										
30	NA	S-7	24/8	29-31	5-6	Medium dense, gray, fine (+) to medium SAND	±30.5'		0.20	125	
	NA				8-7	changing at ±30.5' to gray fine SAND, trace					
						Silt.					
							SILT				
35		S-8	24/12	34-36	11-12	Medium dense, gray, fine SAND, trace Silt			0.27	269	
	▼				10-10						

REMARKS:

1. "Super Gel-X" drilling mud utilized through overburden.
2. S-4: DNAPL contingency plan implemented: 10/18/06 ND 10/19/06 ND) (10/23/06 ND 10/24/06 ND)
3. "Wastewater" odor at S-4, S-5, S-6 (mild)
4. Installed 6" casing at ±24' (inside 8").

NOTES: 1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES; TRANSITIONS MAY BE GRADUAL.
2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED; FLUCTUATIONS OF GROUNDWATER TABLE MAY OCCUR DUE TO OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE.

GZA GEOENVIRONMENTAL INC.
140 BROADWAY, PROVIDENCE, RHODE ISLAND
GEOTECH/GEOHYDROLOGICAL CONSULTANTS

PROJECT	Charbert NFA
	Alton, Rhode Island
REPORT OF BORING NO.	GZ-ML-1
SHEET	2 of 6
FILE NO.	32795.12
CHKD BY	EAS

DPTH	MIN/FT	SAMPLE NO	PEN/REC	DEPTH (FT)	BLOWS/6"	SAMPLE DESCRIPTION BURMISTER CLASSIFICATION	STRATUM DESCRIPTION	EQUIPMENT INSTALLED	PID	FID	RK
											5
							FINE	SAND			6
40		S-9	24/10	39-41	5-7	Medium dense, gray, fine SAND, trace Silt,	SAND		0.26	127	7
					9-11	changing at ±40.7' to fine SAND and Silt					8
								4" PERMANENT STEEL CASING			
							±44'				
45		S-10	24/2	44-46	12-12	Medium dense, gray SILT, little (-) fine Sand			0.21	41	
					10-12						
							CLAYEY				
50		S-11	24/15	49-51	8-9	Medium dense, gray SILT (stratified)	SILT		0.12	7.03	
					12-16						
55		S-12	24/17	54-56	13-14	Medium dense, gray SILT, little Clay (stratified)			0.10	3.28	
					14-18						
							±59'				
60		S-13	24/12	59-61	17-11	Medium dense, fine SAND and SILT, trace			0.16	42	
					14-14	Clay (stratified)					
							SILTY FINE SAND				
65		S-14	24/2	64-66	9-9	Medium dense, tan/gray, fine SAND, some			0.10	26	
					12-14	Silt					
							±67'				
							FINE				
70		S-15	24/14	69-71	12-22	Dense, gray, fine SAND, trace Silt	SAND		0.11	38	
					20-32			70'			
							±72'	PORTLAND CEMENT			
75		S-16	24/16	74-76	78-59	Very dense, tan/orange, fine to coarse SAND,	GLACIAL		0.36	107	
					67-85	some Silt (TILL)	TILL				

REMARKS:

5. Removed 8" casing after advancing to ±55'
6. Intermittent open hole drilling from ±10' to ±117'.
7. 6" casing driven to ±97' below grounds surface (Boulder from ±97' to ±98.5').
8. Apparent top of bedrock at ±117'.

NOTES: 1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES; TRANSITIONS MAY BE GRADUAL.
2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED; FLUCTUATIONS OF GROUNDWATER TABLE MAY OCCUR DUE TO OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE.

GZA GEOENVIRONMENTAL INC.
140 BROADWAY, PROVIDENCE, RHODE ISLAND
GEOTECH/GEOHYDROLOGICAL CONSULTANTS

PROJECT	REPORT OF BORING NO.	GZ-ML-1
Charbert NFA	SHEET	3 of 6
Alton, Rhode Island	FILE NO.	32795.12
	CHKD BY	EAS

DPTH	MIN/ FT	SAMPLE NO	PEN/REC	DEPTH (FT)	BLOWS/6"	SAMPLE DESCRIPTION BURMISTER CLASSIFICATION	STRATUM DESCRIPTION	EQUIPMENT INSTALLED	PID	FID	RK
											9
80		S-17	6/0	79-79.5	120-100/1"	REFUSAL: NO RECOVERY					10
							TILL				
											11
								4" PERMANENT CASING			
											12
85		S-18	1/0	84-84.1	120/1"	REFUSAL: NO RECOVERY					
							±89'				
90		S-19	24/18	89-91	61-95	Very dense, tan, fine to medium SAND, trace			ND	1.18	
					118-162	Silt					
							FINE TO MEDIUM SAND				
95		S-20	9/8	94-96	95-100	Very dense, tan, fine to medium SAND, trace			41	5.50	
						Silt					
							±97'				
							BOULDER				
							±98.5'				
100											
							FINE SAND				
		S-21	6/5	103-103.5	131/6	REFUSAL: Very dense, tan/orange, fine			0.83	12.45	
105						SAND, little Silt					
110		S-22	6/3	109-109.5	125/6"	REFUSAL: Very dense, tan/gray, fine SAND,	±109'		0.28	13.69	
						trace (+) coarse SAND, trace (+) fine Gravel,					
						trace Silt					
							TILL				
115		S-23	9/6	114-114.7	41-120/3"	REFUSAL: Tan/gray/orange, fine SAND AND			14	14.44	
						SILT, trace (+) coarse Sand					
							±117'				
	<1						BEDROCK				

REMARKS:

9. 4" permanent casing set at ±123'.
10. Non-shrink SIKA grout tremmied from ±123' up to ±110' below ground surface.
11. Portland cement tremmied up to ±5' below ground surface. Sand placed from ±5' below ground surface up to grade.
12. Ingersoll-Rand 400 CFM compressor employed along with 4" down-hole air hammer (button-bit) for rock drilling.

NOTES: 1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES; TRANSITIONS MAY BE GRADUAL.
2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED; FLUCTUATIONS OF GROUNDWATER TABLE MAY OCCUR DUE TO OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE.

GZA GEOENVIRONMENTAL INC. 140 BROADWAY, PROVIDENCE, RHODE ISLAND GEOTECH/GEOHYDROLOGICAL CONSULTANTS	PROJECT Charbert NFA Alton, Rhode Island	REPORT OF BORING NO. GZ-ML-1 SHEET 4 of 6 FILE NO. 32795.12 CHKD BY EAS

DPTH	MIN/ FEET	SAMPLE NO	PEN/REC	DEPTH (FT)	BLOWS/6"	SAMPLE DESCRIPTION BURMISTER CLASSIFICATION	STRATUM DESCRIPTION	EQUIPMENT INSTALLED	PID	FID	R K
	<1										
	<1						117'	SIKA NON-SHRINK GROUT			
	<1										
120	<1						TOP OF				
	<1						BEDROCK				
	<1										
	<1							123'			
	<1							BOTTOM OF CASING			
125	<1										
	<1						BROWN ROCK		ND	3.07	
	<1						CUTTINGS				
130											
									ND	3.44	
							±135'				
135											
140							GRAY				
							ROCK		ND	2.89	
							CUTTINGS				
145											
	1.0										
	1.0										
	1.5										
150	1.5								ND	3.27	
	.7						±151'				
	.7										
	.8										
	.9						TAN/BROWN				
155	..9						CUTTINGS				
	.8								9.7	1.4	
	.8										
	.9										

REMARKS:

NOTES: 1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES; TRANSITIONS MAY BE GRADUAL.
2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED; FLUCTUATIONS OF GROUNDWATER TABLE MAY OCCUR DUE TO OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE.

GZA GEOENVIRONMENTAL INC. 140 BROADWAY, PROVIDENCE, RHODE ISLAND GEOTECH/GEOHYDROLOGICAL CONSULTANTS	PROJECT Charbert NFA Alton, Rhode Island	REPORT OF BORING NO. GZ-ML-1 SHEET 5 of 6 FILE NO. 32795.12 CHKD BY EAS

DPTH	MIN/ FT	SAMPLE NO	PEN/REC	DEPTH (FT)	BLOWS/6"	SAMPLE DESCRIPTION BURMISTER CLASSIFICATION	STRATUM DESCRIPTION	EQUIPMENT INSTALLED	FIELD TESTING PID	FID	R K
	.8								PID	FID	
	.8										
	.9										
160	.8						TAN/BROWN				
	.7						CUTTINGS				
	.9										
	.9								8.10	1.02	
	1.2										
165	1.0										
	1.2										
	1.2										
	1.3										
	1.3										
170	1.5						±170'				
	.5								6.26	ND	
	.5						FRACTURE ZONE				
	.8						±173'				
	.8										
175	.6										
	.6										
	.5						TAN/BROWN				
	.6						ROCK				
	.5						CUTTINGS				
180	.5										
	NR										
185	↓						±185'		6.27	ND	
	.5										
	.8										
	.7						PURPLE/TAN				
	.7						ROCK				
190	.8						CUTTINGS				
	1.0										
	1.0						±192'				
	1.0										
	.8						GRAY				
195	1.0						ROCK				
	1.0						CUTTINGS				
	1.3										
	1.3										

REMARKS:

NOTES: 1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES; TRANSITIONS MAY BE GRADUAL.
2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED; FLUCTUATIONS OF GROUNDWATER TABLE MAY OCCUR DUE TO OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE.

GZA GEOENVIRONMENTAL INC. 140 BROADWAY, PROVIDENCE, RHODE ISLAND GEOTECH/GEOHYDROLOGICAL CONSULTANTS	PROJECT Charbert NFA Alton, Rhode Island	REPORT OF BORING NO. GZ-ML-1 SHEET 6 of 6 FILE NO. 32795.12 CHKD BY EAS

DPTH	MIN/ FT	SAMPLE NO	PEN/REC	DEPTH (FT)	BLOWS/6"	SAMPLE DESCRIPTION BURMISTER CLASSIFICATION	STRATUM DESCRIPTION	EQUIPMENT INSTALLED	FIELD TESTING	R K
	1.5									
	1.5									
	1.5						LIGHT			
200	1.5						GRAY ROCK			
	0.8						CUTTINGS		6.10 ND	
	0.8									
	1.3							SUMP		
	1.8									
205	1.5									
	2.0									
						End of Exploration at ±206'				
210										
215										
220										
230										
235										
240										

REMARKS: 13. A stainless steel, 4.7 foot long sump, was placed at the bottom of the borehole (in bedrock) from approximately 206' up to 201.3'. The inside diameter of the sump was .2 feet ± and a rubber gasket was attached to the top of the sump so that the unit would seat properly in the borehole.

NOTES: 1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES; TRANSITIONS MAY BE GRADUAL.
2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED; FLUCTUATIONS OF GROUNDWATER TABLE MAY OCCUR DUE TO OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE.

GZA GEOENVIRONMENTAL INC.
140 BROADWAY, PROVIDENCE, RHODE ISLAND
GEOTECH/GEOHYDROLOGICAL CONSULTANTS
HYDROLOGICAL BORING LOG

PROJECT	REPORT OF BORING NO.	GZ-ML-2 & 2A
Charbert NFA	SHEET	1 of 6
Alton, Rhode Island	FILE NO.	32795.12
	CHKD BY	EAS

BORING CO.	New Hampshire Boring Company	BORING LOCATION	See Exploration Location Plan
FOREMAN	Frank Gardella	GROUND SURFACE ELEV.	54' DATUM
GZA ENGINEER	Mark Dalpe / Erik Beloff	DATE START	10/30/06 DATE END 11/29/06

SAMPLER: UNLESS OTHERWISE NOTED, SAMPLER CONSISTS OF A 2" SPLIT SPOON DRIVEN USING A 140 lb. HAMMER FALLING 30 IN

CASING: UNLESS OTHERWISE NOTED, CASING DRIVEN USING A 300 LB HAMMER FALLING 24 IN.

CASING SIZE: 8" to 5' 6" to 59' OTHER:

GROUNDWATER READINGS

DATE	TIME	WATER	CASING	STABILIZATION TIME
11/15/06		45.5'	72	0.8 HOURS
11/16/06		14.6'	72	19.5 HOURS

DPTH (FT)	MIN/ FT	SAMPLE NO	PEN/REC	DEPTH (FT)	BLOWS/6"	SAMPLE DESCRIPTION BURMISTER CLASSIFICATION	STRATUM DESCRIPTION	EQUIPMENT INSTALLED	FID	PID	R K
	PUSH	S-1	24/3	0-2	1-2	Loose, brown, fine to medium SAND, trace fine			1.2	2.15	
	PUSH				2-2	Gravel, trace Organics (Roots)	TOPSOIL/				
	53					(Topsoil)	SUBSOIL				
	48						±4'		25.2	4.1	
5	NA	S-2	24/7	4-6	14-19	Medium, dense, tan, fine to medium SAND, trace					
					15-20	Silt.					
							FINE TO				
							MEDIUM SAND		28.8	1.1	
10		S-3	24/6	9-11	12-17	Medium, dense, tan fine to medium SAND, trace					
					20-19	fine Gravel, trace Silt.					
							±14'		30.7	NR	
15		S-4	24-11	14-16	6-7	Loose, tan, fine SAND, trace Silt.	FINE SAND				
					6-7		±16'				
							FINE TO MEDIUM				
20		S-5	24/8	19-21	9-6	Loose, tan, fine to medium SAND, trace fine	SAND				
					8-8	Gravel, trace Silt.	±21'		31.3	2.4	
							FINE				
25		S-6	24-7	24-26	6-7	Loose, tan, fine SAND, trace Silt.	SAND				
					7-6						
									32.0	1.15	
							±29'		33.0	2.2	
30		S-7	24/12	29-31	7-12	Medium, dense, tan, fine to medium SAND, trace					
					12-10	fine Gravel, trace Silt.					
							FINE TO				
							MEDIUM				
							SAND				
35		S-8	24/10	34-36	7-7	Medium, dense, brown, fine to medium SAND,			33.6	2.2	
					9-9	trace Silt.					

4" PERMENANT STEEL CASING

PORTLAND CEMENT

REMARKS:

1. This boring log is a combination of GZML-2 (overburden) and GZML-2A (bedrock). GZML-2 was terminated because the driller set 4" casing in GZML-2 above the bedrock surface where it was determined that bedrock had not been encountered it was not possible to continue drilling this hole. The original (GZML-2) borehole was decommissioned by grouting with a cement/bentonite mixture.

NOTES:
1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES; TRANSITIONS MAY BE GRADUAL.
2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED; FLUCTUATIONS OF GROUNDWATER TABLE MAY OCCUR DUE TO OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE.

GZA GEOENVIRONMENTAL INC.
140 BROADWAY, PROVIDENCE, RHODE ISLAND
GEOTECH/GEOHYDROLOGICAL CONSULTANTS

PROJECT	REPORT OF BORING NO.	GZ-ML-2 & 2A
Charbert NFA	SHEET	2 of 6
Alton, Rhode Island	FILE NO.	32795.12
	CHKD BY	EAS

DPTH	MIN/ FT	SAMPLE NO	PEN/REC	DEPTH (FT)	BLOWS/6"	SAMPLE DESCRIPTION BURMISTER CLASSIFICATION	STRATUM DESCRIPTION	EQUIPMENT INSTALLED	FID	PID	R K
	NA						29'				
40		S-9	24/11	39-41	10-10	Medium, dense, brown fine to medium SAND,			34.0	0.4	
					10-14	trace Gravel, trace Silt.					
							FINE TO MEDIUM SAND				
45		S-10	24/10	44-46	10-8	Medium, dense, tan/brown fine to medium SAND,			35.0	-	
					7-9	trace fine to Gravel, trace Silt.					
50		S-11	24/4	49-51	18-36	Very dense, tan fine to coarse SAND, and Gravel			35.0	-	
					26-23	(cobble in tip of split spoon)	SAND AND GRAVEL				
							52'				
55		S-12	24/16	54-56	11-12	Medium, dense, gray, fine SAND, (stratified) little -			47.4	11.88	
					11-10	Silt.	FINE SAND				
								56'			
							58'	NON SHRINK GROUT			
60		S-13	24/12	59-61	15-24	Dense, tan, gray, orange fine to coarse SAND,			10.78	30	
					20-16	some - Gravel, little Silt (Till).					
							GLACIAL TILL				
65		S-14	7/7	65-64.6	58-79	REFUSAL: Very dense, tan/orange fine to coarse			14.66	36	
					100/1"	SAND and GRAVEL, little Silt (Till).					
		S-15	<1/0	65-65.1	120/<1"	REFUSAL: No Sample Recovery					
70									3.07	ND	
		S-16	1/0	73-73.1	100 61/21"	Refusal: No Sample Recovery					
75											
		S-17	7/5	76-76.6	55-120/2"	Refusal: Very dense, gray/tan, (fine to medium					
						SAND, little Gravel, trace + Silt (Till).					

4" PERMANENT STEEL CASING

REMARKS:

2. "Super Gel X" Drilling mud utilized while drilling through overburden.
3. 6" Casing advanced to 45' on 10-30-06.
4. No visual/olfactory evidence of contamination observed.

NOTES: 1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES; TRANSITIONS MAY BE GRADUAL.
2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED; FLUCTUATIONS OF GROUNDWATER TABLE MAY OCCUR DUE TO OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE.

GZA GEOENVIRONMENTAL INC. 140 BROADWAY, PROVIDENCE, RHODE ISLAND GEOTECH/GEOHYDROLOGICAL CONSULTANTS	PROJECT Charbert NFA Alton, Rhode Island	REPORT OF BORING NO. GZ-ML-2 & 2A SHEET 3 of 6 FILE NO. 32795.12 CHKD BY EAS

DPTH	MIN/ FT	SAMPLE NO	PEN/REC	DEPTH (FT)	BLOWS/6"	SAMPLE DESCRIPTION BURMISTER CLASSIFICATION	STRATUM DESCRIPTION	EQUIPMENT INSTALLED	FID	PID	RK
80		S-18	8/5	81-81.7	64/120/2"	Refusal" Very dense, gray, coarse to fine SAND,					
						little Gravel, little Silt (Till).			6.6	ND	
							GLACIAL				
							TILL				
85									8.48	ND	
		S-19	19/8	86-87.6	22-25	Refusal: Very dense, gray, fine to coarse SAND,					
					64-100/1"	little + Gravel, little + Silt (Till).		TOP OF			
							83±	ROCK			
								4" PERMENANT CASING			
90											
		S-20	2/0	91-91.3	120 61/2"	Refusal: No sample recovery.					
95							BEDROCK	95.5'			
							(Alaskite Gneiss)	BOTTOM OF ROCK	ND	ND	
	.6							SOCKET			
	.4										
	.6										
100	.7										
	1.1										
	1.1						103'				
	1.2						FRACTURE ZONE				
	0.4						104'				
105	1.0										
	1.2						106'				
	0.9						FRACTURE ZONE				
	1.1						107'				
	1.0						109'				
110	0.8						FRACTURE ZONE		ND	ND	
	0.6						110'				
	.4										
	.8										
	.8						TAN/BROWN				
115	.8						CUTTINGS				
	.5										
	.7										
	.7										

REMARKS:

NOTES: 1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES; TRANSITIONS MAY BE GRADUAL.
2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED; FLUCTUATIONS OF GROUNDWATER TABLE MAY OCCUR DUE TO OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE.

GZA GEOENVIRONMENTAL INC. 140 BROADWAY, PROVIDENCE, RHODE ISLAND GEOTECH/GEOHYDROLOGICAL CONSULTANTS	PROJECT Charbert NFA Alton, Rhode Island	REPORT OF BORING NO. GZ-ML-2 and 2A SHEET 4 of 6 FILE NO. 32795.12 CHKD BY EAS

DPTH	MIN/ FEET	SAMPLE NO	PEN/REC	DEPTH (FT)	BLOWS/6"	SAMPLE DESCRIPTION BURMISTER CLASSIFICATION	STRATUM DESCRIPTION	EQUIPMENT INSTALLED	PID	FID	R K
	.9										
120	.6								ND	ND	
	.6										
	.8										
	.9										
	.7						125'				
125	.9						MINOR FRAC.				
	.5						126'				
	.5										
	.5						SOFT				
	.5						ZONE				
130	.5								ND	ND	
	.6										
	.8										
	.6										
	.7										
135	.7						TAN/BROWN				
	1.0						CUTTINGS				
	1.5										
	1.1										
	.7										
140	1.0						140'				
	.6						MINOR FRAC		ND	ND	
	.8						141'				
	.9										
	.5										
145	.5										
	.6						PURPLE/TAN				
	.5						CUTTINGS		ND	ND	
	.5						147' MINOR FRAC				
	.6										
150	.6										
	9										
	.8										
	1.0										
	0.8										
155	.7										
	.6						157'				
	.7						MINOR FRAC		ND	ND	
	.5						158'				

REMARKS:

NOTES: 1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES; TRANSITIONS MAY BE GRADUAL.
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GZA GEOENVIRONMENTAL INC.
140 BROADWAY, PROVIDENCE, RHODE ISLAND
GEOTECH/GEOHYDROLOGICAL CONSULTANTS

PROJECT	REPORT OF BORING NO.	GZ-ML-2 and 2A
Charbert NFA	SHEET	5 of 6
Alton, Rhode Island	FILE NO.	32795.12
	CHKD BY	EAS

DPTH	MIN/ FEET	SAMPLE NO	SAMPLE PEN/REC	SAMPLE DEPTH (FT)	SAMPLE BLOWS/6"	SAMPLE DESCRIPTION BURMISTER CLASSIFICATION	STRATUM DESCRIPTION	EQUIPMENT INSTALLED	PID	FID	R K
	.9										
160	.8										
	1.0										
	.8										
	.7										
	.6										
165	.5										
	.6										
	.8										
	.9										
	1.0										
170	1.3								NR	ND	
	1.2						GRANITE				
	1.3										
	1.1										
	1.3										
175	1.1										
	1.2										
	1.3										
	1.0										
	1.0										
180	1.4								NR	ND	
	1.5										
	1.3										
	1.5										
	1.3										
185	.8										
	.6						186'				
	.4						FRAC ZONE				
	.6						187'				
	.6										
190	1.0										
	1.1										
	1.0						GRANITE				
	1.5										
	1.0										
195	NR										
	NR										
	.8										
	1.0										

REMARKS:

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GZA GEOENVIRONMENTAL INC. 140 BROADWAY, PROVIDENCE, RHODE ISLAND GEOTECH/GEOHYDROLOGICAL CONSULTANTS	PROJECT Charbert NFA Alton, Rhode Island	REPORT OF BORING NO. GZ-ML-2 and 2A SHEET 6 of 6 FILE NO. 32795.12 CHKD BY EAS

DPTH	MIN/ FEET	SAMPLE NO	PEN/REC	DEPTH (FT)	BLOWS/6"	SAMPLE DESCRIPTION BURMISTER CLASSIFICATION	STRATUM DESCRIPTION	EQUIPMENT INSTALLED	PID	FID	R K
	1.0						GRANITE				
200	NR										
	NR						LIGHT GRAY		ND	ND	
	NR						CUTTINGS	S			
	NR							U			
	NR							M			
	NR							P			
205	0.7							206'			
	0.6										
	0.6							BOTTOM OF SUMP			
						End of Exploration at 207.5'					
210											
215											
220											
230											
235											
240											

REMARKS: 13. A stainless steel, 4.7 foot long sump, was placed at the bottom of the borehole (in bedrock) from approximately 206' up to 201.3'. The inside diameter of the sump was .2 feet ± and a rubber gasket was attached to the top of the sump so that the unit would seat properly in the borehole.

NOTES: 1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES; TRANSITIONS MAY BE GRADUAL.
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GZA GEOENVIRONMENTAL INC.
140 BROADWAY, PROVIDENCE, RHODE ISLAND
GEOTECH/GEOHYDROLOGICAL CONSULTANTS
HYDROLOGICAL BORING LOG

PROJECT	REPORT OF BORING NO.	GZ-ML-3
Charbert NFA	SHEET	1 of 4
Alton, Rhode Island	FILE NO.	32795.12
	CHKD BY	EAS

BORING CO.	New Hampshire Boring Company	BORING LOCATION	See Exploration Location Plan		
FOREMAN	Frank Gardella	GROUND SURFACE ELEV.	46'	DATUM	
GZA ENGINEER	Mark Dalpe	DATE START	11-2-06	DATE END	12-7-06

SAMPLER: UNLESS OTHERWISE NOTED, SAMPLER CONSISTS OF A 2" SPLIT SPOON DRIVEN USING A 140 lb. HAMMER FALLING 30 IN

CASING: UNLESS OTHERWISE NOTED, CASING DRIVEN USING A 300 LB HAMMER FALLING 24 IN.

CASING SIZE: 8" to 24' 6" to 97' OTHER:

GROUNDWATER READINGS

DATE	TIME	WATER	CASING	STABILIZATION TIME
11-2-06	5.5'		10	10 min.
1-9-07	4.4'		49'	16 Hr.s

DPTH (FT)	MIN/ FEET	SAMPLE NO	PEN/REC	DEPTH (FT)	BLOWS/6"	SAMPLE DESCRIPTION BURMISTER CLASSIFICATION	STRATUM DESCRIPTION	EQUIPMENT INSTALLED	FIELD TESTING		RK
									FID/PID		
	NA	S-1	24/23	0-2	2-15	Medium dense, black/organge/brown, fine to					
	NA				10-8	coarse SAND, some Ash/Asphalt, concrete,	FILL				
	NA					little+ Silt, little- Gravel (FILL)	3'		13.37	1.82	1
	NA										
5	NA	S-2	24/24	4-6	2-4	Loose, orange, fine SAND, some Silt	FINE SAND	4" PERMANENT STEEL CASING	17.03	1.40	2
	NA				4-8		(SUBSOIL)				
	NA										3
	NA										
	NA										
	NA								9.98	1.89	4
10	NA	S-3	24/14	9-11	4-9	Medium dense, grey, fine + to coarse SAND,	9'				
	NA				9-10	trace- Silt	FINE TO COARSE				
	NA						SAND				
	NA						13'				
	NA										
15	NA	S-4	24/16	14-16	3-5	Loose grey/organe, fine SAND, some- Silt, trace		SAND BACKFILL	11.67	2.01	
	NA				5-7	fine Gravel (stratified: fine SAND and SILT with					
	NA					fine SAND, trace Silt)	SILTY FINE				
	NA						SAND				
	NA										
20	NA	S-5	24/10	19-21	5-6	Medium dense, grey, fine to coarse SAND,	19'		12.12	1.26	
	NA				7-9	trace- Silt, trace fine Gravel					
	NA						FINE TO COARSE				
	NA						SAND				
	NA										
25	NA	S-6	24/10	24-26	5-6	Medium dense, grey, fine+ to coarse SAND,		25'	10.44	1.05	
	NA				6-9	trace, fine Gravel, trace- Silt					
	NA										
	NA										
	NA										
30	NA	S-7	24/6	34-36	15-10	Medium dense, grey, fine+ to coarse SAND,		PORTLAND CEMENT	8.98	1.64	
	NA				7-13	trace, fine Gravel, trace- Silt					
	NA										
	NA										
	NA										
35	NA	S-8	24/12	39-41	30-38	Medium dense, grey, fine+ to coarse SAND,			6.51	4.36	
	NA				57-60	trace, fine Gravel, trace- Silt					

REMARKS:

1. "Super Gel-X" drilling mud utilized through overburden.
2. Driller noted the bedrock seems harder than at ML-1 or ML-2, harder to drill.
3. No visual/olfactory evidence of contamination observed in overburden, or rock cuttings.
4. Unstable borehole at 158'+/-. Had to terminate boring at this depth (160')

NOTES: 1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES; TRANSITIONS MAY BE GRADUAL.
2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED; FLUCTUATIONS OF GROUNDWATER TABLE MAY OCCUR DUE TO OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE.

GZA GEOENVIRONMENTAL INC.
140 BROADWAY, PROVIDENCE, RHODE ISLAND
GEOTECH/GEOHYDROLOGICAL CONSULTANTS

PROJECT	REPORT OF BORING NO.	GZ-ML-3
Charbert NFA	SHEET	2 of 4
Alton, Rhode Island	FILE NO.	32795.12
	CHKD BY	EAS

DPTH	MIN/ FEET	SAMPLE NO	SAMPLE PEN/REC	SAMPLE DEPTH (FT)	SAMPLE BLOWS/6"	SAMPLE DESCRIPTION BURMISTER CLASSIFICATION	STRATUM DESCRIPTION	EQUIPMENT INSTALLED	FIELD TESTING		R K
	NA						FINE TO COARSE		FID/PID		
	NA						SAND	37'			
	NA										
40	NA	S-9	24/12	39-41	30-38	Very dense, orange, fine to coarse SAND,	39'		2.86	6.81	
	NA				57-60	trace, fine Gravel, trace+ Silt					
	NA					Top of Rock 42'	TILL	SIKA NON-SHRINK GROUT			
	NA						42'				
	NA						TOP OF				
45	NA						BEDROCK				
	NA						(Alaskite Gneiss)				
	NA										
	NA										
	NA							49'			
50	.2						50'	BOTTOM OF STEEL			
	.4						MINOR FRACTURE	CASING	ND	ND	
	.5						51'				
	.5										
	.4										
55	.5						54'				
	.6						MINOR FRACTURE				
	.4						55'				
	.4						TAN/BROWN				
	.6						CUTTINGS				
60	.3						59'		ND	ND	
	.4						60' LRG. FRACTURE				
	.5										
	.7										
	.5										
65	.6										
	.5						66'				
	.2						67' FRACTURE				
	.5								ND	ND	
	.5										
70	.7										
	.5										
	.7										
	.9										
	1.1										
75	.9										
	.8										
	.6										
	.8										

REMARKS:

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2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED; FLUCTUATIONS OF GROUNDWATER TABLE MAY OCCUR DUE TO OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE.

GZA GEOENVIRONMENTAL INC. 140 BROADWAY, PROVIDENCE, RHODE ISLAND GEOTECH/GEOHYDROLOGICAL CONSULTANTS	PROJECT Charbert NFA Alton, Rhode Island	REPORT OF BORING NO. GZ-ML-3 SHEET 3 of 4 FILE NO. 32795.12 CHKD BY EAS

DPTH	MIN/ FEET	SAMPLE NO	SAMPLE PEN/REC	SAMPLE DEPTH (FT)	SAMPLE BLOWS/6"	SAMPLE DESCRIPTION BURMISTER CLASSIFICATION	STRATUM DESCRIPTION	EQUIPMENT INSTALLED	FIELD TESTING		R K
	1.1								FID/PID		
80	.6								ND	ND	
	.9										
	.7										
	.8						GRANITE				
	.9										
85	.5										
	.6										
	.5										
	.6										
	.7										
90	.6								ND	ND	
	.6										
	.7										
	.6						93'				
	.4										
95	.3						LARGE				
	.3						FRACTURE ZONE				
	.4										
	.8										
	.2						99'				
100	.6								ND	ND	
	.7										
	.4						101'				
	.8						102' LG FRACTURE				
	.7										
105	.6										
	.5										
	.6										
	.7						107'				
	.5						108' SM FRACTURE		ND	ND	
110	.6										
	1.0										
	.9										
	.9										
	.8										
115	.7										
	.7						115'		ND	ND	
	.8										
	.8						TAN/GREY				
	1.1						CUTTINGS				
120	.6										

REMARKS:

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GZA GEOENVIRONMENTAL INC. 140 BROADWAY, PROVIDENCE, RHODE ISLAND GEOTECH/GEOHYDROLOGICAL CONSULTANTS	PROJECT Charbert NFA Alton, Rhode Island	REPORT OF BORING NO. GZ-ML-3 SHEET 4 of 4 FILE NO. 32795.12 CHKD BY EAS

DPTH	MIN/ FEET	SAMPLE NO	PEN/REC	DEPTH (FT)	BLOWS/6"	SAMPLE DESCRIPTION BURMISTER CLASSIFICATION	STRATUM DESCRIPTION	EQUIPMENT INSTALLED	FIELD TESTING		R K
	.5								FID/PID		
	.7										
	.8										
	1.0										
125	.5										
	.7										
	1.0										
	1.3										
	.7						GRANITE				
130	.7										
	.8								ND	ND	
	.9										
	.8										
	.8										
135	.8										
	.7										
	.9										
	1.2										
	1.0										
140	1.6										
	1.1								ND	ND	
	1.6										
	1.7						143'				
	1.5						PURPLE/GREY				
145	.9						CUTTINGS				
	1.2										
	1.1						147'				
	1.1						147.5 FRACTURE				
	1.1										
150	1.1								ND	1.4	
	1.1										
	1.0										
	1.1										
	.5						153'				
155	.3						FRACTURED ZONE				
	1.1						155'				
	1.5										
	1.2						UNSTABLE				
	NR						BOREHOLE		NR	27.4	
160	6.2										
						End of Exploration at 160'					

REMARKS:

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GZA GEOENVIRONMENTAL INC.
530 BROADWAY, PROVIDENCE, RHODE ISLAND
GEOTECH/GEOHYDROLOGICAL CONSULTANTS
HYDROLOGICAL BORING LOG

PROJECT	REPORT OF BORING NO.	GZ-ML-4
Charbert Industries	SHEET	1 of 5
Phase II Bedrock Study	FILE NO.	32795.35
Alton, Rhode Island	CHKD BY	EAS

BORING CO.	Geologic	BORING LOCATION	8' EAST OF GZ-23		
FOREMAN	Charles O'Donell	GROUND SURFACE ELEV.	Approximately 49.0'	DATUM	MSL
GZA ENGINEER	Stephen Andrus	DATE START	6-16-09	DATE END	6-25-09

SAMPLER: UNLESS OTHERWISE NOTED, SAMPLER CONSISTS OF A 2" SPLIT SPOON DRIVEN USING A 140 lb. HAMMER FALLING 30 IN

CASING: UNLESS OTHERWISE NOTED, CASING DRIVEN USING A 300 LB HAMMER FALLING 24 IN.

CASING SIZE: 5" OTHER: 3 3/4" HAS Air Hammer

GROUNDWATER READINGS

DATE	TIME	WATER	CASING	STABILIZATION TIME

DPTH (FT)	CASING BLOWS	SAMPLE NO	PEN/REC	DEPTH (FT)	BLOWS/6"	SAMPLE DESCRIPTION BURMISTER CLASSIFICATION	STRATUM DESCRIPTION	EQUIPMENT INSTALLED	FID/PID TVOC	R K
		S-1	24/2	0-2	PUSH	LOAM			2/0	1
5		S-2	24/18	4-6	5-7	Medium dense, brown, fine to coarse SAND, trace fine Gr	FILL		1/1	
					8-4	trace fine Gravel, trace Silt				
10		S-3	24/12	9-11	7-8	Medium dense, brown, fine to coarse SAND,		Bentonite Grout	2/1	
					6-7	trace fine to coarse Gravel, trace Silt				
15		S-4	24/12	14-16	7-8	Loose, grey, fine to coarse SAND,	LOOSE TO MEDIUM		0/0	
					6-7	trace fine Gravel, trace- Silt	DENSE SAND			
20		S-5	24/12	19-21	5-4	Loose, grey, fine to coarse SAND,			0/0	
					6-7	trace fine Gravel, trace- Silt				
25		S-6	24/10	24-26	3-4	Loose, grey, fine to coarse SAND,		4 DIAMETER STEEL CASING	2/2	
					4-5	trace fine Gravel, trace- Silt				
30		S-7	24/12	29-31	8-6	Medium dense, grey, fine to coarse SAND,			2/0	
					6-8	trace fine Gravel, trace- Silt				
35		S-8	24/12	34-36	13-9	Medium dense, grey, fine to coarse SAND, trace fine Gravel, trace- Silt	TILL		0/0	
		S-9			11-17	Grey fine to coarse SAND, trace Gravel, trace Silt			3/2	

REMARKS:

1. Field screening with Foxboro TVA-1000 FID/PID Reported as total VOCs by Volume (TVOC) in parts per million.

NOTES:
1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES; TRANSITIONS MAY BE GRADUAL.
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GZA GEOENVIRONMENTAL INC.
530 BROADWAY, PROVIDENCE, RHODE ISLAND
GEOTECH/GEOHYDROLOGICAL CONSULTANTS

PROJECT	REPORT OF BORING NO.	GZ-ML-4
Charbert Industries	SHEET	2 of 5
Phase II Bedrock Study	FILE NO.	32795.35
Alton, Rhode Island	CHKD BY	EAS

DPTH	CASING BLOWS	SAMPLE NO	PEN/REC	DEPTH (FT)	BLOWS/6"	SAMPLE DESCRIPTION BURMISTER CLASSIFICATION	8' EAST OF GZ-23 Approximately 49.0'	EQUIPMENT INSTALLED	MSL	FIELD TESTING	RK
								4" Steel Casing			
40		S-10	24/8	39-41	19-11	Medium dense, grey, fine to coarse SAND,					
					10-18	trace fine Gravel, trace- Silt	41'				
							TILL				
			3 3/4" HAS Air Hammer				44'				
45	90	RS-1								0	2
	120					Pink/grey <1/8"	BED ROCK				3
	80										4
	90										
	80	RS-2								0	
50	100					Fracture 2" drop					
	20										
	30										
	70										
	90	RS-3				Pink/grey < 1/8"	ROCK			0	
55	60										
	90						Pink/Gray moderately				
	45						to highly fractured Hope				
	30						Valley Alaskite Gneiss				
	30					Fractured area					
60	30	RS-4				Dark grey < 1/8"				0	
	15										
	80					Pink/grey < 1/8"				1	
	40										
	40										
65	90	RS-5									
	60										
	60										
	60										
	45										
70	30	RS-6				Fractured				1	
	60										
	60										
	60					Pink/grey < 1/8"					
	45										
75	30	RS-7				Fractured					
	60										
	10										
	10					Large Fractuerd Area					

OPEN 4" HOLE

REMARKS:
2. Bedrock exploration advanced by rotary air hammer.
3. Samples (RS) were collected from Air Exhaust.
4. Field screening with Thermo Env. PID 580B with 10.6 lamp.

NOTES: 1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES; TRANSITIONS MAY BE GRADUAL.
2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED; FLUCTUATIONS OF GROUNDWATER TABLE MAY OCCUR DUE TO OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE.

GZA GEOENVIRONMENTAL INC. 530 BROADWAY, PROVIDENCE, RHODE ISLAND GEOTECH/GEOHYDROLOGICAL CONSULTANTS	PROJECT Charbert Industries Phase II Bedrock Study Alton, Rhode Island	REPORT OF BORING NO. GZ-ML-4 SHEET 3 of 5 FILE NO. 32795.35 CHKD BY EAS

DPTH	CASING BLOWS	SAMPLE NO	PEN/REC	DEPTH (FT)	BLOWS/6"	SAMPLE DESCRIPTION BURMISTER CLASSIFICATION	8' EAST OF GZ-23 Approximately 49.0'	EQUIPMENT INSTALLED	FIELD TESTING	R MSL
	30									4
80	20	RS-8				Brown mud/water in hole			0	
	40									5
	90									
	90					Pink/grey < 1/4"				
	120									
85	90	RS-10							0	
	75		3 3/4" HAS Air Hammer							
	40									
	20									
	20					3" Drop				
90	20	RS-11				2" Drop			0	
	90					Fracture area				
	40									
	60					Pin/kwhite < 1/4"				
	90					Fractured 2" Drop			0	
95	60	RS-12								
	80									
	75					Pink/white 2" drop	Pink/Gray moderately			
	105						to highly fractured Hope		0	
	90						Valley Alaskite Gneiss			
100	120	RS-13					with severely weathered			
	90						zones			
	50									
	75								0	
	75	RS-14								
105	60					Fracture				
	60									
	45									
	45								0	
	90					Fracture				
110	45	RS-15				Brown/pink/white				
	45									
	40									1
	60								0	
	60	RS-16				Red/pink				
115	45									
	60									
	40									
	70								0	
	50	RS-17				Fracture				
	30					Red/green/pink				

REMARKS:

4. Field screening with Thermo Env. PID 580B with 10.6 lamp.
5. First sign of water in the rock.

NOTES: 1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES; TRANSITIONS MAY BE GRADUAL.
2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED; FLUCTUATIONS OF GROUNDWATER TABLE MAY OCCUR DUE TO OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE.

GZA GEOENVIRONMENTAL INC.
530 BROADWAY, PROVIDENCE, RHODE ISLAND
GEOTECH/GEOHYDROLOGICAL CONSULTANTS

PROJECT	Charbert Industries
	Phase II Bedrock Study
	Alton, Rhode Island
REPORT OF BORING NO.	GZ-ML-4
SHEET	4 OF 5
FILE NO.	32795.35
CHKD BY	EAS

DPTH	CASING BLOWS	SAMPLE NO	PEN/REC	DEPTH (FT)	BLOWS/6"	SAMPLE DESCRIPTION BURMISTER CLASSIFICATION	8' EAST OF GZ-23 Approximately 49.0'	EQUIPMENT INSTALLED	FIELD TESTING	R MSL
										4
120	30									
	60									
	60					Pink/white/green				
	120									
	110	RS-18							0	
125	105									
	120		OTHER: 3 3/4" HAS Air Hammer			Pink/white/grey weathered chips				
	90									
	90									
	60					Pink/grey/red/brown				
130	110	RS-19								
	90								0	
	60									
	90					Fracture 2" Drop				
	90	RS-20								
135	60					6" Drop			0	
	30						Pink/Grey			
	60					Pink/grey	moderately to highly			
	60					Fracture pink/red	fractured Hope			
	60						Valley Alaskite			
140	40	RS-21					Gneiss			
	40					Pink/brown				
	50								0	
	45									
	60					Fracture				
145	60	RS-22								
	60								0	
	45									
	45					Pink/white				
	45	RS-23								
150	70									
	70								0	
	60									1
	60									
	60									
155	60	RS-24								
	60								0	
	60									
	75									
	90									
	90									

REMARKS:

4. Field screening with thermo env .PID 580B with 10.6 lamp.

NOTES: 1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES; TRANSITIONS MAY BE GRADUAL.
2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED; FLUCTUATIONS OF GROUNDWATER TABLE MAY OCCUR DUE TO OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE.

GZA GEOENVIRONMENTAL INC.
530 BROADWAY, PROVIDENCE, RHODE ISLAND
GEOTECH/GEOHYDROLOGICAL CONSULTANTS

PROJECT	REPORT OF BORING NO.	GZ-ML-4
Charbert Industries	SHEET	5 of 5
Phase II Bedrock Study	FILE NO.	32795.35
Alton, Rhode Island	CHKD BY	EAS

DPTH	CASING BLOWS	SAMPLE NO	PEN/REC	DEPTH (FT)	BLOWS/6"	SAMPLE DESCRIPTION BURMISTER CLASSIFICATION	8' EAST OF GZ-23 Approximately 49.0'	EQUIPMENT INSTALLED	FIELD TESTING	R MSL
									0	4
160	90	RS-25								
	90					Fracture				
	45					2" drop				
	40								0	
	65									
165	60	RS-26				Pink/white/green				
	75		OTHER: 3 3/4" HAS Air Hammer							
	90									
	80					Pink/white			0	
	60									
170	75	RS-27								
	90									
	30									
	45								0	
	75	RS-28								
175	45					Fracture				
	45						Pink/Gray moderately			
	50					Pink/white	to highly fractured Hope		0	
	80						Valley Alaskite Gneiss			
	80									
180	45	RS-29				Fracture				
	90					Pink/green				
	30								0	
	45					Pink/white				
	60									
185	45	RS-30								
	45					Fracture area				
	20					Grey/green			0	
	20	RS-31								
	40									
190	40					Pink/grey/green				
	40									
	60					Pink/white				
	60	RS-32							0	
	60									
195	40									
	20					Fracture				
	60					Pink/white/green				
	90	RS-33				White/pink/green				
	90					Pink			0	
200	90					End of Exploration				

REMARKS:

4. Field screening with Thermo Env. PID 580B with 10.6 lamp.

NOTES: 1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES; TRANSITIONS MAY BE GRADUAL.
2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED; FLUCTUATIONS OF GROUNDWATER TABLE MAY OCCUR DUE TO OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE.

GZA GEOENVIRONMENTAL INC.
530 BROADWAY, PROVIDENCE, RHODE ISLAND
GEOTECH/GEOHYDROLOGICAL CONSULTANTS
HYDROLOGICAL BORING LOG

PROJECT	REPORT OF BORING NO.	GZ-ML-5
Charbert Facility	SHEET	1 of 5
Phase II Bedrock Study	FILE NO.	32795.35
Alton, Rhode Island	CHKD BY	EAS

BORING CO.	Geologic	BORING LOCATION	East of Wood River		
FOREMAN	Charles O'Donell	GROUND SURFACE ELEV.	Approximately 50.0'	DATUM	MSL
GZA ENGINEER	Stephen Andrus	DATE START	06-15-09	DATE END	6-23-09

SAMPLER: UNLESS OTHERWISE NOTED, SAMPLER CONSISTS OF A 2" SPLIT SPOON DRIVEN USING A 140 lb. HAMMER FALLING 30 IN

CASING: UNLESS OTHERWISE NOTED, CASING DRIVEN USING A 300 LB HAMMER FALLING 24 IN.

CASING SIZE: 5" OTHER: 3 3/4" HAS Air Hammer

GROUNDWATER READINGS

DATE	TIME	WATER	CASING	STABILIZATION TIME

DPTH (FT)		SAMPLE NO	PEN/REC	DEPTH (FT)	BLOWS/6"	SAMPLE DESCRIPTION BURMISTER CLASSIFICATION	STRATUM DESCRIPTION	EQUIPMENT INSTALLED	FIELD TESTING	R K
		S-1	24/16	0-2	9-8-9-11	Medium dense, LOAM			0/0	
						Medium dense, brown, fine to medium				
						SAND, trace Silt.				
		S-2	24-12	4-6	11-10-13	Medium dense, brown, fine to medium	SAND		0/0	
5	41				13	SAND, trace Silt.				
	49									
	55									
	49									
	45								3/0	
10	52	S-3	24-12	9-11	7-6	Medium dense, brown fine to medium SAND,		Bentonite Grout		
	65				7-6	trace Silt, trace fine Gravel.	MEDIUM DENSE			
	45						SAND AND GRAVEL			
	48									
	39									
15	47	S-4	24-4	14-16	6-6	Medium dense, brown fine to medium SAND,			1/0	
	48				7-6	trace Silt, trace fine Gravel.				
	39									
	38									
	44									
20	47	S-5	24/12	19-21	6-3-4	Medium dense, brown fine to medium SAND,		4 DIAMETER STEEL CASING	5/0	
	52				5	trace Silt, trace fine Gravel.				
	43									
	44									
	56									
25	52	S-6	24/12	24-26	7-5-7	Medium dense, gray fine to medium SAND, trace Silt.	SAND		2/0	
	48	S-7			8	(Black starting at 25')			10/6	
	48									
	57									
	52									
30		S-8	24	29-31	9-5-8	Medium dense, gray fine to medium SAND, trace Silt.			2/2	
					7					
35		S-9	24/16	34-36	10.10.10	Medium dense, gray fine SAND, little Silt.	SILTY SAND		4/2	
					12					

REMARKS:

1. Field screening with Foxboro TVA-1000 FID/PID Reported as total VOCs by Volume (TVOC) in parts per million.
2. From 30' bgs down, drilled/washed ahead, then drove casing.

NOTES: 1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES; TRANSITIONS MAY BE GRADUAL.
2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED; FLUCTUATIONS OF GROUNDWATER TABLE MAY OCCUR DUE TO OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE.

GZA GEOENVIRONMENTAL INC.
530 BROADWAY, PROVIDENCE, RHODE ISLAND
GEOTECH/GEOHYDROLOGICAL CONSULTANTS

PROJECT	REPORT OF BORING NO.	GZ-ML-5
Charbert Facility	SHEET	2 of 5
Phase II Bedrock Study	FILE NO.	32795.35
Alton, Rhode Island	CHKD BY	EAS

DPTH		SAMPLE NO	PEN/REC	DEPTH (FT)	BLOWS/6"	SAMPLE DESCRIPTION BURMISTER CLASSIFICATION	STRATUM DESCRIPTION	EQUIPMENT INSTALLED	FIELD TESTING	RK
						Medium dense, gray fine to coarse SAND,	SAND AND GRAVEL	4"		
40		S-10	24/16	39-40	18 12	trace fine Gravel, trace Silt.		STEEL	7/2	
	Refusal	S-11			17 24	Orange fine to coarse SAND, trace fine Gravel,			1/0	3.
						trace Silt.				
							TILL			4.
45		S-12	11/	44-46	45-100	Weathered ROCK 46.5'	WEATHERED			5.
							ROCK		7/2	
	45							CASING		
	45									
	45									
50	45					Pink/white 2 1/4"				
	45									
	60									
	60									
	45									
55	45									
	45									
	30									
	60					Water in the hole.	BEDROCK			
	60						Pink/white moderately			
60	60					FRACTURE Weather chips.	to highly fractured		0	6.
	60						Hope Valley			
							Alaskite Gneiss			
		R S-1								
65						Pink/White/Gray				
						FRACTURE				
								4" Open Hole		
70		R S-2							0	
	150									
	25					FRACTURE - LARGE			0	
	70	R S-3								
	90									
75	60					Pink				
	45									
	45								0	
	60	R S-4								

REMARKS:

3 Casing refusal at 41'.
4. Split spoon refusal at 45'.
5 Began air rotary hammer.
6 Field screening with Thermo Environmental 580 B PID with a 10.6 bulb.

NOTES: 1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES; TRANSITIONS MAY BE GRADUAL.
2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED; FLUCTUATIONS OF GROUNDWATER TABLE MAY OCCUR DUE TO OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE.

GZA GEOENVIRONMENTAL INC. 530 BROADWAY, PROVIDENCE, RHODE ISLAND GEOTECH/GEOHYDROLOGICAL CONSULTANTS	PROJECT Charbert Facility Phase II Bedrock Study Alton, Rhode Island	REPORT OF BORING NO. GZ-ML-5 SHEET 3 of 5 FILE NO. 32795.35 CHKD BY EAS

DPTH		SAMPLE NO	SAMPLE PEN/REC	SAMPLE DEPTH (FT)	SAMPLE BLOWS/6"	SAMPLE DESCRIPTION BURMISTER CLASSIFICATION	STRATUM DESCRIPTION	EQUIPMENT INSTALLED	FIELD TESTING	R K
	60									
80	90					FRACTURE Weathered chips				
	60									
	60	RS-5								
	45									
	60								0	
85	40									
	45									
	90									
	35					FRACTURE				
	40	R S-6								
90	90									
	120	R S-7								
	80	R S-8								
	45								0	
	40									
95	40									
	40					FRACTURE 3" Drop	BEDROCK			
	45						Pink/white moderately			
	45						to highly fractured		0	
	45						Hope Valley			
100	45						Alaskite Gneiss			
	45					FRACTURE 3" Drop			0	
	60									
	60									
	60					Pink/White				
105	90	R S-9								
	45								0	
	45									
	45									
	45					Pink			0	
110	60					Pink				
	45									
	25	R S-10				FRACTURES				
	25									
	40									
115	35								0	
	55					Pink/Green				
	45					Pink/White				
	55									
	45									
120	45	R S-11							0	

4" Open Hole

REMARKS:

6. Field screening with Thermo Environmental 580 B PID with a 10.6 bulb.

NOTES: 1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES; TRANSITIONS MAY BE GRADUAL.
2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED; FLUCTUATIONS OF GROUNDWATER TABLE MAY OCCUR DUE TO OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE.

GZA GEOENVIRONMENTAL INC. 530 BROADWAY, PROVIDENCE, RHODE ISLAND GEOTECH/GEOHYDROLOGICAL CONSULTANTS	PROJECT Charbert Facility Phase II Bedrock Study Alton, Rhode Island	REPORT OF BORING NO. GZ-ML-5 SHEET 4 of 5 FILE NO. 32795.35 CHKD BY EAS

DPTH		SAMPLE NO	SAMPLE PEN/REC	SAMPLE DEPTH (FT)	SAMPLE BLOWS/6"	SAMPLE DESCRIPTION BURMISTER CLASSIFICATION	STRATUM DESCRIPTION	EQUIPMENT INSTALLED	FIELD TESTING	R K
	50									
	45	R S-12				Large FRACTURES weathered chips				
	10									
	15									
125	30	R S-13								
	30									
	35									
	65									
	90									
130	120	R S-14				Pink/white.				
	90					Pink/White 1/2" diameter chips				
	90									
	120									
	90	R S-15								
135	120					FRACTURE.				
	10	R S-16								
	60					Pink/White weathered.	BEDROCK			
	60						Pink/white moderately			
	150	R S-17				Pink/white fracture.	to highly fractured			
140	120						Hope Valley			
	120						Alaskite Gneiss			
	150	R S-18				Pink/white/gray.				
	120									
	90									
145	120									
	160									
	150									
	120									
	75	R S-19				Pink				
150	75					Pink/white/gray.				
	120					Pink/white.				
	120									
	120									
	120	R S-20								
155	120									
	120									
	60									
	45	R S-21				FRACTURE 3/4" diameter chips.				
	45									
160	45									
	90									
	60									

4" Open Hole

REMARKS:

NOTES: 1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES; TRANSITIONS MAY BE GRADUAL.
2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED; FLUCTUATIONS OF GROUNDWATER TABLE MAY OCCUR DUE TO OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE.

GZA GEOENVIRONMENTAL INC. 530 BROADWAY, PROVIDENCE, RHODE ISLAND GEOTECH/GEOHYDROLOGICAL CONSULTANTS	PROJECT Charbert Facility Phase II Bedrock Study Alton, Rhode Island	REPORT OF BORING NO. GZ-ML-5 SHEET 5 of 5 FILE NO. 32795.35 CHKD BY EAS

DPTH		SAMPLE NO	PEN/REC	DEPTH (FT)	BLOWS/6"	SAMPLE DESCRIPTION BURMISTER CLASSIFICATION	STRATUM DESCRIPTION	EQUIPMENT INSTALLED	FIELD TESTING	R K
	60	R S-22								
	120								0	
165	120					Pink/white .				
	150									
	100									
	120	R S-23				Red/pink/white.				
	90					FRACTURE 2" drop				
170	90					Pink/gray.				
	120								0	
	60	R S-24				Fracture red/pink/gray.				
	90									
	60					Pink/gray/white.				
175	75									
	110						BEDROCK		0	
	90						Pink/white moderately			
	60						to highly fractured			
	60						Hope Valley			
180	90	R S-25					Alaskite Gneiss			
	90									
	60	R S-26								
	90					Green/pink/white				
	90									
185	90								0	
	120					Weathered ROCK FRACTURE				
	60								0	
	60					FRACTURE 3" drop				
	60									
190	45	R S-27				Gray/pink/white				
	45									
	60									
	60								0	
	15	R S-28								
195	45					FRACTURE				
	60					Pink				
	90								0	
	90	R S-29								
	90									
200	90								0	
						End of Exploration				

REMARKS:

NOTES: 1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES; TRANSITIONS MAY BE GRADUAL.
2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED; FLUCTUATIONS OF GROUNDWATER TABLE MAY OCCUR DUE TO OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE.

WATERLOO INSTALLATION LOG

GZA GEOENVIRONMENTAL, Inc
140 Broadway
Providence, RI 02903
SCIENTISTS AND ENGINEERS

Client
Charbert Facility
299 Church Street
Alton, RI

WELL ID	GZ-ML-1
SHEET	1 of 1
FILE NO.	03.0032795.12
PROJECT LOCATION	Charbert Facilty

GZA ENGINEER:	RAC/EAS	DATE START/ END:	6/11/2007
CONTRACTOR:	Solinst	DEPTH TO BOTTOM:	197 ft b/g
CONTRACTOR REP:	Jordan Jakymyshyn	DEPTH TO WATER:	16.5 ft
		GROUND ELEVATION	57.17 ft asl

Equipment Used	
Unit	**Number**
10 ft casing	0
5 ft casing	33
2 ft casing	2
1 ft casing	2
0.5 ft casing	1
Base Plug	1
Chemical Packer	5
SS Port (single)	3
SS Port (double)	0
Double Valve Pump	3
VW Piezometer	3
Well Head Manifold	1

Pre-Installation Transducer Readings			
Zone	**Piezo Serial #**	**Reading**	**Temp**
A	07-5682	8863.3	13.9
B	07-5679	8882.8	15.1
C	07-5537	8664.2	16.6
Taken on 6/11/07 at 11:30, Barometric Pressure = 30.86 in Hg			

Post-Installation Transducer Readings			
Zone	**Piezo Serial #**	**Reading**	**Temp**
A	07-5682		
B	07-5679		
C	07-5537		
Taken on 6/11/07 at 3:00, Barometric Pressure = 30.86 in Hg			

Notes

All depths in feet below ground surface.

Casing Depth 123' below ground surface

DEPTH (FT)	Dsitance Above Bottom (FT)	Elevation (FT)	Waterloo Unit Installation
182.5	**14.5**	**-125.3**	**Base Plug and Packer**
177.5	19.5	-120.3	5' PVC
177.0	20.0	-119.8	.5' PVC
176.5	**20.5**	**-119.3**	**Port C**
171.5	25.5	-114.3	5' PVC
170.5	26.5	-113.3	1' PVC
167.5	**29.5**	**-110.3**	**Packer**
162.5	34.5	-105.3	5' PVC
159.5	**37.5**	**-102.3**	**Packer**
154.5	42.5	-97.3	5' PVC
154.0	**43.0**	**-96.8**	**Port B**
149.0	48.0	-91.8	5 ' PVC
146.0	**51.0**	**-88.8**	**Packer**
141.0	56.0	-83.8	5' PVC
136.0	61.0	-78.8	5' PVC
135.0	62.0	-77.8	1' PVC
132.0	**65.0**	**-74.8**	**Packer**
131.5	65.5	-74.3	2' PVC
129.5	67.5	-72.3	.5' PVC
129.0	**68.0**	**-71.8**	**Port A**
124.0	73.0	-66.8	5' PVC
119.0	78.0	-61.8	5' PVC
114.0	83.0	-56.8	5' PVC
109.0	88.0	-51.8	5' PVC
104.0	93.0	-46.8	5' PVC
99.0	98.0	-41.8	5' PVC
94.0	103.0	-36.8	5' PVC
89.0	108.0	-31.8	5' PVC
84.0	113.0	-26.8	5' PVC
79.0	118.0	-21.8	5' PVC
74.0	123.0	-16.8	5' PVC
69.0	128.0	-11.8	5' PVC
64.0	133.0	-6.8	5' PVC
59.0	138.0	-1.8	5' PVC
54.0	143.0	3.2	5' PVC
49.0	148.0	8.2	5' PVC
44.0	153.0	13.2	5' PVC
39.0	158.0	18.2	5' PVC
34.0	163.0	23.2	5' PVC
29.0	168.0	28.2	5' PVC
24.0	173.0	33.2	5' PVC
19.0	178.0	38.2	5' PVC
14.0	183.0	43.2	5' PVC
9.0	188.0	48.2	5' PVC
4.0	193.0	53.2	5' PVC
-1.0	198.0	58.2	5' PVC
-3.0	200.0	60.2	2' PVC

WATERLOO INSTALLATION LOG

GZA GEOENVIRONMENTAL, Inc
140 Broadway
Providence, RI 02903
SCIENTISTS AND ENGINEERS

Client
Charbert Facility
299 Church Street
Alton, RI

WELL ID	GZ-ML-2
SHEET	1 of 1
FILE NO.	03.0032795.12
PROJECT LOCATION	Charbert Facilty

GZA ENGINEER:	RAC/MPD	DATE START/ END:	6/13/2007
CONTRACTOR:	Solinst	DEPTH TO BOTTOM:	201 ft b/g
CONTRACTOR REP:	Not Onsite during Installation	DEPTH TO WATER:	13.05 ft
		GROUND ELEVATION	55.03 ft asl

Equipment Used	
Unit	**Number**
10 ft casing	0
5 ft casing	34
2 ft casing	9
1 ft casing	1
0.5 ft casing	0
Base Plug	1
Chemical Packer	5
SS Port (single)	3
SS Port (double)	0
Double Valve Pump	3
VW Piezometer	3
Well Head Manifold	1

Pre-Installation Transducer Readings			
Zone	**Piezo Serial #**	**Reading**	**Temp**
A	07-5683	9162.7	12.0
B	07-5680	8778.9	11.1
C	07-5536	8817.6	11.5
Taken on 6/13/07 at 9:45, Barometric Pressure = 29.47 in Hg			

Post-Installation Transducer Readings			
Zone	**Piezo Serial #**	**Reading**	**Temp**
A	07-5683	7034.3	13.8
B	07-5680	--	12.4
C	07-5536	5729.4	11.5
Taken on 6/13/07 at 3:00, Barometric Pressure = 29.47 in Hg			

Notes

All depths in feet below ground surface.

Casing Depth 95.5' below ground surface

The Transducer in Zone B was not functioning immediately after the install on 6/13/07

DEPTH (FT)	Dsitance Above Bottom (FT)	Elevation (FT)	Waterloo Unit Installation
201.0	**0.0**	**-146.0**	**Base Plug**
199.0	2.0	-144.0	2' PVC
197.0	4.0	-142.0	2' PVC
196.5	**4.5**	**-141.5**	**Port C**
191.5	9.5	-136.5	5' PVC
188.5	**12.5**	**-133.5**	**Packer**
183.5	17.5	-128.5	5' PVC
178.5	22.5	-123.5	5' PVC
173.5	27.5	-118.5	5' PVC
168.5	32.5	-113.5	5' PVC
163.5	37.5	-108.5	5' PVC
161.5	39.5	-106.5	2' PVC
160.5	40.5	-105.5	1' PVC
157.5	**43.5**	**-102.5**	**Packer**
152.5	48.5	-97.5	5' PVC
152.0	**49.0**	**-97.0**	**Port B**
147.0	54.0	-92.0	5' PVC
145.0	56.0	-90.0	2' PVC
142.0	**59.0**	**-87.0**	**Packer**
137.0	64.0	-82.0	5' PVC
132.0	69.0	-77.0	5' PVC
127.0	74.0	-72.0	5' PVC
122.0	79.0	-67.0	5' PVC
117.0	84.0	-62.0	5' PVC
115.0	86.0	-60.0	2' PVC
113.0	88.0	-58.0	2' PVC
110.0	**91.0**	**-55.0**	**Packer**
105.0	96.0	-50.0	5' PVC
104.5	**96.5**	**-49.5**	**Port A**
99.5	101.5	-44.5	5' PVC
97.5	103.5	-42.5	2' PVC
94.5	**106.5**	**-39.5**	**Packer**
89.5	111.5	-34.5	5' PVC
84.5	116.5	-29.5	5' PVC
79.5	121.5	-24.5	5' PVC
74.5	126.5	-19.5	5' PVC
69.5	131.5	-14.5	5' PVC
64.5	136.5	-9.5	5' PVC
59.5	141.5	-4.5	5' PVC
54.5	146.5	0.5	5' PVC
49.5	151.5	5.5	5' PVC
44.5	156.5	10.5	5' PVC
39.5	161.5	15.5	5' PVC
34.5	166.5	20.5	5' PVC
29.5	171.5	25.5	5' PVC
24.5	176.5	30.5	5' PVC
19.5	181.5	35.5	5' PVC
14.5	186.5	40.5	5' PVC
9.5	191.5	45.5	5' PVC
4.5	196.5	50.5	5' PVC
2.5	198.5	52.5	2' PVC
0.5	200.5	54.5	2' PVC
-4.5	205.5	59.5	5' PVC

WATERLOO INSTALLATION LOG

GZA GEOENVIRONMENTAL, Inc
140 Broadway
Providence, RI 02903
SCIENTISTS AND ENGINEERS

Client
Charbert Facility
299 Church Street
Alton, RI

WELL ID: GZ-ML-3
SHEET: 1 of 1
FILE NO.: 03.0032795.12
PROJECT LOCATION: Charbert Facilty

GZA ENGINEER: RAC/MPD/EAS
CONTRACTOR: Solinst
CONTRACTOR REP: Jordan Jakymyshyn

DATE START/ END: 6/12/2007
DEPTH TO BOTTOM: 158 ft b/g
DEPTH TO WATER: 7.95 ft
GROUND ELEVATION: 47.43 ft asl

Equipment Used	
Unit	**Number**
10 ft casing	0
5 ft casing	25
2 ft casing	5
1 ft casing	4
0.5 ft casing	5
Base Plug	1
Chemical Packer	6
SS Port (single)	2
SS Port (double)	1
Double Valve Pump	3
VW Piezometer	3
Well Head Manifold	1

Pre-Installation Transducer Readings			
Zone	**Piezo Serial #**	**Reading**	**Temp**
A	07-6655	9945.6	14.3
B	07-5684	8884.4	15.5
C	07-5678	8731.5	13.7
Taken on 6/12/07 at 10:00 AM, Barometric Pressure = 30.77 in Hg			

Post-Installation Transducer Readings			
Zone	**Piezo Serial #**	**Reading**	**Temp**
A	07-6655	6167.4	15.2
B	07-5684	6523.9	14.1
C	07-5678	4702.8	12.2
Taken on 6/12/07 at 3:00, Barometric Pressure = 30.86 in Hg			

Notes

All depths in feet below ground surface.

Casing Depth 49' below ground surface

DEPTH (FT)	Dsitance Above Bottom (FT)	Elevation (FT)	Waterloo Unit Installation
154.66	**3.3**	**-107.2**	**Base plug**
152.66	5.3	-105.2	2' PVC
151.66	6.3	-104.2	1' PVC
151.16	6.8	-103.7	.5' PVC
150.66	**7.3**	**-103.2**	**Port C**
145.66	12.3	-98.2	5' PVC
145.16	12.8	-97.7	.5' PVC
142.16	**15.8**	**-94.7**	**Packer**
137.66	20.3	-90.2	5' PVC
132.16	25.8	-84.7	5' PVC
130.16	27.8	-82.7	2' PVC
129.66	28.3	-82.2	.5' PVC
126.66	**31.3**	**-79.2**	**Packer**
121.66	36.3	-74.2	5' PVC
116.66	41.3	-69.2	5' PVC
115.66	42.3	-68.2	1' PVC
115.16	42.8	-67.7	.5' PVC
112.16	**45.8**	**-64.7**	**Packer**
107.16	50.8	-59.7	5' PVC
102.16	55.8	-54.7	5' PVC
100.16	57.8	-52.7	2' PVC
99.16	58.8	-51.7	1' PVC
98.66	**59.3**	**-51.2**	**Port B**
93.66	64.3	-46.2	5' PVC
90.66	**67.3**	**-43.2**	**Packer**
85.66	72.3	-38.2	5' PVC
80.66	77.3	-33.2	5' PVC
79.66	78.3	-32.2	1' PVC
76.66	**81.3**	**-29.2**	**Packer**
71.66	86.3	-24.2	5' PVC
66.66	91.3	-19.2	5' PVC
64.66	93.3	-17.2	2' PVC
61.66	**96.3**	**-14.2**	**Packer**
59.66	98.3	-12.2	2' PVC
59.16	98.8	-11.7	.5' PVC
58.66	**99.3**	**-11.2**	**Port A**
53.66	104.3	-6.2	5' PVC
48.66	109.3	-1.2	5' PVC
43.66	114.3	3.8	5' PVC
38.66	119.3	8.8	5' PVC
33.66	124.3	13.8	5' PVC
28.66	129.3	18.8	5' PVC
23.66	134.3	23.8	5' PVC
18.66	139.3	28.8	5' PVC
13.66	144.3	33.8	5' PVC
8.66	149.3	38.8	5' PVC
3.66	154.3	43.8	5' PVC
-1.34	159.3	48.8	5' PVC
-6.34	164.3	53.8	5' PVC

WATERLOO INSTALLATION LOG

GZA GEOENVIRONMENTAL, Inc
530 Broadway
Providence, RI 02909
SCIENTISTS AND ENGINEERS

Client
Charbert Facility
299 Church Street
Alton, RI

WELL ID: GZ-ML-4
SHEET: 1 of 1
FILE NO.: 03.0032795.35
PROJECT LOCATION: Charbert Facilty

GZA ENGINEER: RAC/MPD
CONTRACTOR: NA
CONTRACTOR REP:

DATE START/ END: 3/26/2010
DEPTH TO BOTTOM: 200 ft b/g
DEPTH TO WATER: 10 ft
GROUND ELEVATION: 50.09 ft asl

Equipment Used	
Unit	**Number**
10 ft casing	0
5 ft casing	31
2 ft casing	7
1 ft casing	3
0.5 ft casing	0
Base Plug	1
Chemical Packer	8
SS Port (single)	3
SS Port (double)	0
Double Valve Pump	3
VW Piezometer	3
Well Head Manifold	1

Pre-Installation Transducer Readings				
Zone	**Piezo Serial #**	**Reading**	**Temp**	**Bar Pressure (in Hg)**
1	0929836	9524.5	6.8	29.71
2	0939248	8787.4	8.0	29.68
3	0937164	9108.4	9.8	29.65
Taken on 3/26/10				

Post-Installation Transducer Readings			
Zone	**Piezo Serial #**	**Reading**	**Temp**
1	0929836	6979.8	12.1
2	0939248	7081.9	12.3
3	0937164	6272.0	12.0
Taken on 3/26/10 Barometric Pressure = 29.68 in Hg			

Notes

All depths in feet below ground surface.

Casing Depth 44 below ground surface

Zone 1: 44-56.25 ft bgs
Zone 2: 69.25-82.75 ft bgs
Zone 3: 181.75 to 194.25 ft bgs

DEPTH (FT)	Elevation (FT)	Waterloo Unit	Installation	
194.25	-144.16	base		
189.25	-139.16	5		
188.75	-138.66	0.5	port	
183.75	-133.66	5		
181.75	-131.66	2		
178.75	-128.66	3	packer	
176.75	-126.66	2		
171.75	-121.66	5		
166.75	-116.66	5		
161.75	-111.66	5		
156.75	-106.66	5		
153.75	-103.66	3	packer	
148.75	-98.66	5		
143.75	-93.66	5		
138.75	-88.66	5		
133.75	-83.66	5		
130.75	-80.66	3	packer	
125.75	-75.66	5		
120.75	-70.66	5		
115.75	-65.66	5		
110.75	-60.66	5		
107.75	-57.66	3	packer	
102.75	-52.66	5		
97.75	-47.66	5		
92.75	-42.66	5		
87.75	-37.66	5		
85.75	-35.66	2		
82.75	-32.66	3	packer	
77.75	-27.66	5		
76.75	-26.66	1		
76.25	-26.16	0.5	port	
71.25	-21.16	5		
69.25	-19.16	2		
66.25	-16.16	3	packer	
64.25	-14.16	2		
62.25	-12.16	2		
59.25	-9.16	3	packer	
56.25	-6.16	3	packer	
51.25	-1.16	5		
49.25	0.84	2		
48.25	1.84	1		
47.75	2.34	0.5	port	
42.75	7.34	5		
37.75	12.34	5		
32.75	17.34	5		
27.75	22.34	5		
22.75	27.34	5		
17.75	32.34	5		
12.75	37.34	5		
7.75	42.34	5		
2.75	47.34	5		
-2.25	52.34	5		
-3.25	53.34	1		

WATERLOO INSTALLATION LOG

GZA GEOENVIRONMENTAL, Inc
530 Broadway
Providence, RI 02909
SCIENTISTS AND ENGINEERS

Client
Charbert Facility
299 Church Street
Alton, RI

WELL ID: GZ-ML-5
SHEET: 1 of 1
FILE NO.: 03.0032795.35
PROJECT LOCATION: Charbert Facilty

GZA ENGINEER: RAC/MPD
CONTRACTOR: NA
CONTRACTOR REP:

DATE START/ END: 4/13/2010
DEPTH TO BOTTOM: 125 ft b/g
DEPTH TO WATER: 15 ft
GROUND ELEVATION: 53.16 ft asl

Equipment Used	
Unit	**Number**
10 ft casing	0
5 ft casing	13
2 ft casing	8
1 ft casing	3
0.5 ft casing	0
Base Plug	1
Chemical Packer	4
SS Port (single)	3
SS Port (double)	0
Double Valve Pump	3
VW Piezometer	3
Well Head Manifold	1

Pre-Installation Transducer Readings

Zone	Piezo Serial #	Reading	Temp	Bar Pressure (in Hg)
1	0929835	9774.8	13.2	30.30
2	0939247	8991.5	11.9	30.30
3	0938850	8788.2	11.3	30.30
Taken on 4/13/10				

Post-Installation Transducer Readings

Zone	Piezo Serial #	Reading	Temp
1		9062.1	10.6
2		7753.4	12.2
3		6717.0	11.7
Taken on 4/13/10 Barometric Pressure = 30.3 in Hg			

Notes

All depths in feet below ground surface.

Casing Depth 44 below ground surface

Zone 1: top-27.85 ft bgs (located in steel casing)
Zone 2: 45.85-61.35 ft bgs
Zone 3: 86.35-bottom, ft bgs

DEPTH (FT)	Elevation (FT)	Waterloo Unit Installation		
91.85	-38.69	base		
90.85	-37.69	1		
90.35	-37.19	0.5	port	
88.35	-35.19	2		
86.35	-33.19	2		
83.35	-30.19	3	packer	
78.35	-25.19	5		
73.35	-20.19	5		
68.35	-15.19	5		
66.35	-13.19	2		
64.35	-11.19	2		
61.35	-8.19	3	packer	
56.35	-3.19	5		
54.35	-1.19	2		
53.35	-0.19	1		
52.85	0.31	0.5	port	
47.85	5.31	5		
45.85	7.31	2		
42.85	10.31	3	packer	
37.85	15.31	5		
32.85	20.31	5		
30.85	22.31	2		
27.85	25.31	3	packer	
22.85	30.31	5		
21.85	31.31	1		
21.35	31.81	0.5	port	
19.35	33.81	2		
14.35	38.81	5		
9.35	43.81	5		
4.35	48.81	5		
-0.65	53.81	5		
-5.65	58.81	5		

APPENDIX C

LABORATORY CERTIFICATES

GZA GeoEnvironmental, Inc.
106 South Street
Hopkinton, MA 01748
(781) 278-4700

Laboratory Identification Numbers:
MA and ME: **MA092** NH: **2028**
CT: **PH0579** RI: **LAO00236**
NELAC - NYS DOH: **11063**

ANALYTICAL REPORT

GZA GeoEnvironmental, Inc.
140 Broadway
Providence, RI 02903

Project No.: **03.0032795.12**
Work Order No.: **0611-00036**
Date Received: **11/06/2006**
Date Reported: **11/08/2006**

SAMPLE INFORMATION

Date Sampled	Matrix	Laboratory ID	Sample ID
11/02/2006	Solid	0611-00036 001	GZ-ML3-S-2
11/02/2006	Solid	0611-00036 002	GZ-ML3-S-9

GZA GeoEnvironmental, Inc.
106 South Street
Hopkinton, MA 01748
(781) 278-4700

ANALYTICAL REPORT

GZA GeoEnvironmental, Inc.
140 Broadway
Providence, RI 02903

Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **11/06/2006**
Date Reported: **11/08/2006**
Work Order No.: **0611-00036**

PROJECT NARRATIVE:

1. Sample Receipt

The samples were received on 11/3/06 via _x_GZA courier, __EC, __FEDEX, or ___hand delivered. The temperature of the __temperature blank/_x_cooler air, was 1.7 degrees C. The temperature requirement for most analyses is above freezing to 6 degrees C. The samples were received intact for all requested analyses.

The chain of custody indicates that the samples, when required, were chemically preserved in accordance with the method they reference.

2. EPA Method 8260 - VOCs

Attach QC 8260 11/06/06 S - Solid

GZA GeoEnvironmental, Inc.
106 South Street
Hopkinton, MA 01748
(781) 278-4700

ANALYTICAL REPORT

GZA GeoEnvironmental, Inc.
140 Broadway
Providence, RI 02903

Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **11/06/2006**
Date Reported: **11/08/2006**
Work Order No.: **0611-00036**

Data Authorized By: _____

NELAC certification, as indicated by the NELAC Lab ID Number, is per analyte. For a complete list of NELAC validated analytes, please contact the laboratory.

Abbreviations:
% R = % Recovery
DF = Dilution Factor
DFS = Dilution Factor Solids
DO = Diluted Out

Method Key:
Method 8260: The current version of the method is 8260B.
Method 8021: The current version of the method is 8021B.
Method 8270: The current version of the method is 8270C.
Method 6010: The current version of the method is 6010B.

Please note that the laboratory signed copy of the chain of custody record is an integral part of the data report.

Soil data is reported on a dry weight basis unless otherwise specified.

Matrix Spike / Matrix Spike Duplicate sets are performed as per method and are reported at the end of the analytical report if assigned on the Chain of Custody.

GZA GeoEnvironmental, Inc.
106 South Street
Hopkinton, MA 01748
(781) 278-4700

ANALYTICAL REPORT

GZA GeoEnvironmental, Inc.
140 Broadway
Providence, RI 02903

Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **11/06/2006**
Date Reported: **11/08/2006**
Work Order No.: **0611-00036**

Sample ID: **GZ-ML3-S-2** Sample No.: **001**

Sample Date: **11/02/2006**

Test Performed	Method	Results	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260			MQS	11/06/2006
Dichlorodifluoromethane	EPA 8260	<140	ug/kg	MQS	11/06/2006
Chloromethane	EPA 8260	<140	ug/kg	MQS	11/06/2006
Vinyl Chloride	EPA 8260	<70	ug/kg	MQS	11/06/2006
Bromomethane	EPA 8260	<140	ug/kg	MQS	11/06/2006
Chloroethane	EPA 8260	<70	ug/kg	MQS	11/06/2006
Trichlorofluoromethane	EPA 8260	<140	ug/kg	MQS	11/06/2006
Diethylether	EPA 8260	<70	ug/kg	MQS	11/06/2006
Acetone	EPA 8260	<700	ug/kg	MQS	11/06/2006
1,1-Dichloroethene	EPA 8260	<70	ug/kg	MQS	11/06/2006
Dichloromethane	EPA 8260	<70	ug/kg	MQS	11/06/2006
Methyl-Tert-Butyl-Ether	EPA 8260	<70	ug/kg	MQS	11/06/2006
trans-1,2-Dichloroethene	EPA 8260	<70	ug/kg	MQS	11/06/2006
1,1-Dichloroethane	EPA 8260	<70	ug/kg	MQS	11/06/2006
2-Butanone	EPA 8260	<700	ug/kg	MQS	11/06/2006
2,2-Dichloropropane	EPA 8260	<70	ug/kg	MQS	11/06/2006
cis-1,2-Dichloroethene	EPA 8260	<70	ug/kg	MQS	11/06/2006
Chloroform	EPA 8260	<70	ug/kg	MQS	11/06/2006
Bromochloromethane	EPA 8260	<70	ug/kg	MQS	11/06/2006
Tetrahydrofuran	EPA 8260	<140	ug/kg	MQS	11/06/2006
1,1,1-Trichloroethane	EPA 8260	<70	ug/kg	MQS	11/06/2006
1,1-Dichloropropene	EPA 8260	<70	ug/kg	MQS	11/06/2006
Carbon Tetrachloride	EPA 8260	<70	ug/kg	MQS	11/06/2006
1,2-Dichloroethane	EPA 8260	<70	ug/kg	MQS	11/06/2006
Benzene	EPA 8260	<70	ug/kg	MQS	11/06/2006
Trichloroethene	EPA 8260	<70	ug/kg	MQS	11/06/2006
1,2-Dichloropropane	EPA 8260	<70	ug/kg	MQS	11/06/2006
Bromodichloromethane	EPA 8260	<70	ug/kg	MQS	11/06/2006
Dibromomethane	EPA 8260	<70	ug/kg	MQS	11/06/2006
4-Methyl-2-Pentanone	EPA 8260	<140	ug/kg	MQS	11/06/2006
cis-1,3-Dichloropropene	EPA 8260	<70	ug/kg	MQS	11/06/2006
Toluene	EPA 8260	<70	ug/kg	MQS	11/06/2006
trans-1,3-Dichloropropene	EPA 8260	<70	ug/kg	MQS	11/06/2006
1,1,2-Trichloroethane	EPA 8260	<70	ug/kg	MQS	11/06/2006
2-Hexanone	EPA 8260	<140	ug/kg	MQS	11/06/2006
1,3-Dichloropropane	EPA 8260	<70	ug/kg	MQS	11/06/2006
Tetrachloroethene	EPA 8260	<70	ug/kg	MQS	11/06/2006

GZA GeoEnvironmental, Inc.
106 South Street
Hopkinton, MA 01748
(781) 278-4700

ANALYTICAL REPORT

GZA GeoEnvironmental, Inc.
140 Broadway
Providence, RI 02903

Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **11/06/2006**
Date Reported: **11/08/2006**
Work Order No.: **0611-00036**

Sample ID: **GZ-ML3-S-2** Sample No.: **001**

Sample Date: **11/02/2006**

Test Performed	Method	Results	Units	Tech	Analysis Date
Dibromochloromethane	EPA 8260	<70	ug/kg	MQS	11/06/2006
1,2-Dibromoethane (EDB)	EPA 8260	<140	ug/kg	MQS	11/06/2006
Chlorobenzene	EPA 8260	<70	ug/kg	MQS	11/06/2006
1,1,1,2-Tetrachloroethane	EPA 8260	<70	ug/kg	MQS	11/06/2006
Ethylbenzene	EPA 8260	<70	ug/kg	MQS	11/06/2006
m&p-Xylene	EPA 8260	<70	ug/kg	MQS	11/06/2006
o-Xylene	EPA 8260	<70	ug/kg	MQS	11/06/2006
Styrene	EPA 8260	<70	ug/kg	MQS	11/06/2006
Bromoform	EPA 8260	<140	ug/kg	MQS	11/06/2006
Isopropylbenzene	EPA 8260	<70	ug/kg	MQS	11/06/2006
1,1,2,2-Tetrachloroethane	EPA 8260	<70	ug/kg	MQS	11/06/2006
1,2,3-Trichloropropane	EPA 8260	<70	ug/kg	MQS	11/06/2006
Bromobenzene	EPA 8260	<70	ug/kg	MQS	11/06/2006
n-Propylbenzene	EPA 8260	<70	ug/kg	MQS	11/06/2006
2-Chlorotoluene	EPA 8260	<70	ug/kg	MQS	11/06/2006
1,3,5-Trimethylbenzene	EPA 8260	<70	ug/kg	MQS	11/06/2006
4-Chlorotoluene	EPA 8260	<70	ug/kg	MQS	11/06/2006
tert-Butylbenzene	EPA 8260	<70	ug/kg	MQS	11/06/2006
1,2,4-Trimethylbenzene	EPA 8260	<70	ug/kg	MQS	11/06/2006
sec-Butylbenzene	EPA 8260	<70	ug/kg	MQS	11/06/2006
p-Isopropyltoluene	EPA 8260	<70	ug/kg	MQS	11/06/2006
1,3-Dichlorobenzene	EPA 8260	<70	ug/kg	MQS	11/06/2006
1,4-Dichlorobenzene	EPA 8260	<70	ug/kg	MQS	11/06/2006
n-Butylbenzene	EPA 8260	<70	ug/kg	MQS	11/06/2006
1,2-Dichlorobenzene	EPA 8260	<70	ug/kg	MQS	11/06/2006
1,2-Dibromo-3-Chloropropane	EPA 8260	<350	ug/kg	MQS	11/06/2006
1,2,4-Trichlorobenzene	EPA 8260	<70	ug/kg	MQS	11/06/2006
Hexachlorobutadiene	EPA 8260	<70	ug/kg	MQS	11/06/2006
Naphthalene	EPA 8260	<70	ug/kg	MQS	11/06/2006
1,2,3-Trichlorobenzene	EPA 8260	<70	ug/kg	MQS	11/06/2006
Surrogates:	EPA 8260				
***1,2-Dichloroethane-D4	EPA 8260	99.0	% R	MQS	11/06/2006
***Toluene-D8	EPA 8260	109	% R	MQS	11/06/2006
***4-Bromofluorobenzene	EPA 8260	108	% R	MQS	11/06/2006
Preparation	EPA 5035	1.0	DF	MQS	11/06/2006
PERCENT SOLID		76.3	%	TAJ	11/08/2006

GZA GeoEnvironmental, Inc.
106 South Street
Hopkinton, MA 01748
(781) 278-4700

ANALYTICAL REPORT

GZA GeoEnvironmental, Inc.
140 Broadway
Providence, RI 02903

Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **11/06/2006**
Date Reported: **11/08/2006**
Work Order No.: **0611-00036**

Sample ID: **GZ-ML3-S-9** Sample No.: **002**

Sample Date: **11/02/2006**

Test Performed	Method	Results	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260			MQS	11/06/2006
Dichlorodifluoromethane	EPA 8260	<100	ug/kg	MQS	11/06/2006
Chloromethane	EPA 8260	<100	ug/kg	MQS	11/06/2006
Vinyl Chloride	EPA 8260	<50	ug/kg	MQS	11/06/2006
Bromomethane	EPA 8260	<100	ug/kg	MQS	11/06/2006
Chloroethane	EPA 8260	<50	ug/kg	MQS	11/06/2006
Trichlorofluoromethane	EPA 8260	<100	ug/kg	MQS	11/06/2006
Diethylether	EPA 8260	<50	ug/kg	MQS	11/06/2006
Acetone	EPA 8260	<500	ug/kg	MQS	11/06/2006
1,1-Dichloroethene	EPA 8260	<50	ug/kg	MQS	11/06/2006
Dichloromethane	EPA 8260	<50	ug/kg	MQS	11/06/2006
Methyl-Tert-Butyl-Ether	EPA 8260	<50	ug/kg	MQS	11/06/2006
trans-1,2-Dichloroethene	EPA 8260	<50	ug/kg	MQS	11/06/2006
1,1-Dichloroethane	EPA 8260	<50	ug/kg	MQS	11/06/2006
2-Butanone	EPA 8260	<500	ug/kg	MQS	11/06/2006
2,2-Dichloropropane	EPA 8260	<50	ug/kg	MQS	11/06/2006
cis-1,2-Dichloroethene	EPA 8260	<50	ug/kg	MQS	11/06/2006
Chloroform	EPA 8260	<50	ug/kg	MQS	11/06/2006
Bromochloromethane	EPA 8260	<50	ug/kg	MQS	11/06/2006
Tetrahydrofuran	EPA 8260	<100	ug/kg	MQS	11/06/2006
1,1,1-Trichloroethane	EPA 8260	<50	ug/kg	MQS	11/06/2006
1,1-Dichloropropene	EPA 8260	<50	ug/kg	MQS	11/06/2006
Carbon Tetrachloride	EPA 8260	<50	ug/kg	MQS	11/06/2006
1,2-Dichloroethane	EPA 8260	<50	ug/kg	MQS	11/06/2006
Benzene	EPA 8260	<50	ug/kg	MQS	11/06/2006
Trichloroethene	EPA 8260	<50	ug/kg	MQS	11/06/2006
1,2-Dichloropropane	EPA 8260	<50	ug/kg	MQS	11/06/2006
Bromodichloromethane	EPA 8260	<50	ug/kg	MQS	11/06/2006
Dibromomethane	EPA 8260	<50	ug/kg	MQS	11/06/2006
4-Methyl-2-Pentanone	EPA 8260	<100	ug/kg	MQS	11/06/2006
cis-1,3-Dichloropropene	EPA 8260	<50	ug/kg	MQS	11/06/2006
Toluene	EPA 8260	<50	ug/kg	MQS	11/06/2006
trans-1,3-Dichloropropene	EPA 8260	<50	ug/kg	MQS	11/06/2006
1,1,2-Trichloroethane	EPA 8260	<50	ug/kg	MQS	11/06/2006
2-Hexanone	EPA 8260	<100	ug/kg	MQS	11/06/2006
1,3-Dichloropropane	EPA 8260	<50	ug/kg	MQS	11/06/2006
Tetrachloroethene	EPA 8260	<50	ug/kg	MQS	11/06/2006

GZA GeoEnvironmental, Inc.
106 South Street
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(781) 278-4700

ANALYTICAL REPORT

GZA GeoEnvironmental, Inc.
140 Broadway
Providence, RI 02903

Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **11/06/2006**
Date Reported: **11/08/2006**
Work Order No.: **0611-00036**

Sample ID: **GZ-ML3-S-9** Sample No.: **002**

Sample Date: **11/02/2006**

Test Performed	Method	Results	Units	Tech	Analysis Date
Dibromochloromethane	EPA 8260	<50	ug/kg	MQS	11/06/2006
1,2-Dibromoethane (EDB)	EPA 8260	<100	ug/kg	MQS	11/06/2006
Chlorobenzene	EPA 8260	<50	ug/kg	MQS	11/06/2006
1,1,1,2-Tetrachloroethane	EPA 8260	<50	ug/kg	MQS	11/06/2006
Ethylbenzene	EPA 8260	<50	ug/kg	MQS	11/06/2006
m&p-Xylene	EPA 8260	<50	ug/kg	MQS	11/06/2006
o-Xylene	EPA 8260	<50	ug/kg	MQS	11/06/2006
Styrene	EPA 8260	<50	ug/kg	MQS	11/06/2006
Bromoform	EPA 8260	<100	ug/kg	MQS	11/06/2006
Isopropylbenzene	EPA 8260	<50	ug/kg	MQS	11/06/2006
1,1,2,2-Tetrachloroethane	EPA 8260	<50	ug/kg	MQS	11/06/2006
1,2,3-Trichloropropane	EPA 8260	<50	ug/kg	MQS	11/06/2006
Bromobenzene	EPA 8260	<50	ug/kg	MQS	11/06/2006
n-Propylbenzene	EPA 8260	<50	ug/kg	MQS	11/06/2006
2-Chlorotoluene	EPA 8260	<50	ug/kg	MQS	11/06/2006
1,3,5-Trimethylbenzene	EPA 8260	<50	ug/kg	MQS	11/06/2006
4-Chlorotoluene	EPA 8260	<50	ug/kg	MQS	11/06/2006
tert-Butylbenzene	EPA 8260	<50	ug/kg	MQS	11/06/2006
1,2,4-Trimethylbenzene	EPA 8260	<50	ug/kg	MQS	11/06/2006
sec-Butylbenzene	EPA 8260	<50	ug/kg	MQS	11/06/2006
p-Isopropyltoluene	EPA 8260	<50	ug/kg	MQS	11/06/2006
1,3-Dichlorobenzene	EPA 8260	<50	ug/kg	MQS	11/06/2006
1,4-Dichlorobenzene	EPA 8260	<50	ug/kg	MQS	11/06/2006
n-Butylbenzene	EPA 8260	<50	ug/kg	MQS	11/06/2006
1,2-Dichlorobenzene	EPA 8260	<50	ug/kg	MQS	11/06/2006
1,2-Dibromo-3-Chloropropane	EPA 8260	<250	ug/kg	MQS	11/06/2006
1,2,4-Trichlorobenzene	EPA 8260	<50	ug/kg	MQS	11/06/2006
Hexachlorobutadiene	EPA 8260	<50	ug/kg	MQS	11/06/2006
Naphthalene	EPA 8260	<50	ug/kg	MQS	11/06/2006
1,2,3-Trichlorobenzene	EPA 8260	<50	ug/kg	MQS	11/06/2006
Surrogates:	EPA 8260				
***1,2-Dichloroethane-D4	EPA 8260	93.3	% R	MQS	11/06/2006
***Toluene-D8	EPA 8260	107	% R	MQS	11/06/2006
***4-Bromofluorobenzene	EPA 8260	108	% R	MQS	11/06/2006
Preparation	EPA 5035	1.0	DF	MQS	11/06/2006
PERCENT SOLID		89.4	%	TAJ	11/08/2006

GZA GeoEnvironmental, Inc.
106 South Street
Hopkinton, MA 01748

EPA Method 8260 Solid Method Blank (MB) and Laboratory Control Sample (LCS) Data

Method Blank

Date Analyzed:	11/6/2006	
Volatile Organics	Conc. ug/kg	Acceptance Limit
dichlorodifluoromethane	< 250	< 250
chloromethane	< 250	< 250
vinyl chloride	< 250	< 250
bromomethane	< 250	< 250
chloroethane	< 250	< 250
trichlorofluoromethane	< 250	< 250
diethyl ether	< 500	< 500
acrolein	< 1300	< 1300
acetone	< 1300	< 1300
1,1-dichloroethene	< 130	< 130
FREON-113	< 250	< 250
iodomethane	< 130	< 130
carbon disulfide	< 250	< 250
dichloromethane	< 250	< 250
tert-butyl alcohol (TBA)	< 1300	< 1300
acrylonitrile	< 250	< 250
methyl-tert-butyl-ether	< 250	< 250
trans-1,2-dichloroethene	< 130	< 130
1,1-dichloroethane	< 130	< 130
di-isopropyl ether (DIPE)	< 250	< 250
ethyl tert-butyl ether (EtBE)	< 250	< 250
vinyl acetate	< 250	< 250
2-butanone	< 1300	< 1300
2,2-dichloropropane	< 130	< 130
cis-1,2-dichloroethene	< 130	< 130
chloroform	< 130	< 130
bromochloromethane	< 130	< 130
tetrahydrafuran	< 750	< 750
1,1,1-trichloroethane	< 130	< 130
1,1-dichloropropene	< 130	< 130
carbon tetrachloride	< 130	< 130
1,2-dichloroethane	< 130	< 130
benzene	< 130	< 130
tert-amyl methyl ether (TAME)	< 250	< 250
trichloroethene	< 130	< 130
1,2-dichloropropane	< 130	< 130
bromodichloromethane	< 130	< 130
2-chloroethyl vinyl ether	< 130	< 130
1,4-Dioxane	< 2500	< 2500
dibromomethane	< 130	< 130
4-methyl-2-pentanone	< 250	< 250
cis-1,3-dichloropropene	< 130	< 130
toluene	< 130	< 130
trans-1,3-dichloropropene	< 130	< 130
1,1,2-trichloroethane	< 250	< 250
2-hexanone	< 250	< 250
1,3-dichloropropane	< 130	< 130
tetrachloroethene	< 130	< 130
dibromochloromethane	< 130	< 130
1,2-dibromoethane (EDB)	< 130	< 130
chlorobenzene	< 130	< 130
1,1,1,2-tetrachloroethane	< 130	< 130
ethylbenzene	< 130	< 130
1,1,2,2-tetrachloroethane	< 130	< 130
m&p-xylene	< 130	< 130
o-xylene	< 130	< 130
styrene	< 130	< 130
bromoform	< 130	< 130
isopropylbenzene	< 130	< 130
1,2,3-trichloropropane	< 130	< 130
bromobenzene	< 130	< 130
n-propylbenzene	< 130	< 130
2-chlorotoluene	< 130	< 130
1,3,5-trimethylbenzene	< 130	< 130
trans-1,4-dichloro-2-butene	< 250	< 250
4-chlorotoluene	< 130	< 130
tert-butyl-benzene	< 130	< 130
1,2,4-trimethylbenzene	< 130	< 130
sec-butyl-benzene	< 130	< 130
p-isopropyltoluene	< 750	< 750
1,3-dichlorobenzene	< 130	< 130
1,4-dichlorobenzene	< 130	< 130
n-butylbenzene	< 130	< 130
1,2-dichlorobenzene	< 130	< 130
1,2-dibromo-3-chloropropane	< 130	< 130
1,2,4-trichlorobenzene	< 130	< 130
hexachlorobutadiene	< 130	< 130
naphthalene	< 130	< 130
1,2,3-trichlorobenzene	< 130	< 130

Laboratory Control Sample

Date Analyzed:	11/6/2006		
Spike Concentration = 2500ug/kg	% Recovery	Acceptance Limits	Verdict
dichlorodifluoromethane	79.5	70-130	ok
chloromethane	85.0	70-130	ok
vinyl chloride	88.0	70-130	ok
bromomethane	75.6	70-130	ok
chloroethane	71.4	70-130	ok
trichlorofluoromethane	93.9	70-130	ok
diethyl ether	84.8	70-130	ok
acrolein	83.5	70-130	ok
acetone	105	70-130	ok
1,1-dichloroethene	95.4	70-130	ok
FREON-113	92.8	70-130	ok
iodomethane	88.8	70-130	ok
carbon disulfide	89.8	70-130	ok
dichloromethane	86.8	70-130	ok
tert-butyl alcohol (TBA)	145	70-130	out
acrylonitrile	106	70-130	ok
methyl-tert-butyl-ether	86.6	70-130	ok
trans-1,2-dichloroethene	96.0	70-130	ok
1,1-dichloroethane	95.1	70-130	ok
di-isopropyl ether (DIPE)	99.8	70-130	ok
ethyl tert-butyl ether (EtBE)	74.8	70-130	ok
vinyl acetate	98.1	70-130	ok
2-butanone	93.3	70-130	ok
2,2-dichloropropane	110	70-130	ok
cis-1,2-dichloroethene	95.5	70-130	ok
chloroform	98.6	70-130	ok
bromochloromethane	90.9	70-130	ok
tetrahydrafuran	84.5	70-130	ok
1,1,1-trichloroethane	109	70-130	ok
1,1-dichloropropene	95.0	70-130	ok
carbon tetrachloride	106	70-130	ok
1,2-dichloroethane	105	70-130	ok
benzene	91.3	70-130	ok
tert-amyl methyl ether (TAME)	67.5	70-130	out
trichloroethene	96.0	70-130	ok
1,2-dichloropropane	95.7	70-130	ok
bromodichloromethane	99.5	70-130	ok
2-chloroethyl vinyl ether	95.5	70-130	ok
1,4-Dioxane	92.9	70-130	ok
dibromomethane	102	70-130	ok
4-methyl-2-pentanone	99.7	70-130	ok
cis-1,3-dichloropropene	97.2	70-130	ok
toluene	99.3	70-130	ok
trans-1,3-dichloropropene	97.6	70-130	ok
1,1,2-trichloroethane	104	70-130	ok
2-hexanone	106	70-130	ok
1,3-dichloropropane	98.0	70-130	ok
tetrachloroethene	106	70-130	ok
dibromochloromethane	100	70-130	ok
1,2-dibromoethane (EDB)	107	70-130	ok
chlorobenzene	106	70-130	ok
1,1,1,2-tetrachloroethane	96.9	70-130	ok
ethylbenzene	108	70-130	ok
1,1,2,2-tetrachloroethane	95.6	70-130	ok
m&p-xylene	102	70-130	ok
o-xylene	109	70-130	ok
styrene	110	70-130	ok
bromoform	109	70-130	ok
isopropylbenzene	114	70-130	ok
1,2,3-trichloropropane	108	70-130	ok
bromobenzene	103	70-130	ok
n-propylbenzene	108	70-130	ok
2-chlorotoluene	108	70-130	ok
1,3,5-trimethylbenzene	114	70-130	ok
trans-1,4-dichloro-2-butene	111	70-130	ok
4-chlorotoluene	100.0	70-130	ok
tert-butyl-benzene	110	70-130	ok
1,2,4-trimethylbenzene	113	70-130	ok
sec-butyl-benzene	114	70-130	ok
p-isopropyltoluene	111	70-130	ok
1,3-dichlorobenzene	101	70-130	ok
1,4-dichlorobenzene	101	70-130	ok
n-butylbenzene	112	70-130	ok
1,2-dichlorobenzene	97.7	70-130	ok
1,2-dibromo-3-chloropropane	95.6	70-130	ok
1,2,4-trichlorobenzene	117	70-130	ok
hexachlorobutadiene	112	70-130	ok
naphthalene	94.7	70-130	ok
1,2,3-trichlorobenzene	112	70-130	ok

SMF criteria allows 5 compounds to be outside acceptance limits

Surrogates:	Recovery (%)	Acceptance Limits
DIBROMOFLUOROMETHANE	93.2	70-130
1,2-DICHLOROETHANE-D4	89.7	70-130
TOLUENE-D8	97.5	70-130
4-BROMOFLUOROBENZENE	107	70-130
1,2-DICHLOROBENZENE-D4	96.0	70-130

Surrogates:	Recovery (%)	Acceptance Limits	Verdict
DIBROMOFLUOROMETHANE	99.8	70-130	ok
1,2-DICHLOROETHANE-D4	105	70-130	ok
TOLUENE-D8	105	70-130	ok
4-BROMOFLUOROBENZENE	114	70-130	ok
1,2-DICHLOROBENZENE-D4	101	70-130	ok

Instrument: HP GC/MS "S"

WHITE COPY - Original YELLOW COPY - Lab Files PINK COPY - Project Manager

W.O. # 0611-00036 (for lab use only)

CHAIN-OF-CUSTODY RECORD

Sample I.D.	Date/Time Sampled (Very Important)	Matrix A=Air S=Soil GW=Ground W. SW=Surface W. WW=Waste W. DW=Drinking W. Other (specify)	WW ONLY: ☐pH ☐Cond.	☐GC Screen (VOA)	☐524.2 ☐502.2	624	☐601 ☐602	625	Formaldehyde	ANALYSIS REQUIRED: 8260	8021	8021 - "8010" List	8021 "8020" List	8270 ☐PAH ☐BN	8082-PCBs Only	8081 - Pest Only	TPH-GC (Mod. 8100)	TPH-GC w/FING	EPH (MA DEP)	VPH (MA DEP)	TCLP (Spec. Below)	Filtering (✓ if requested)	Metals ☐PPM-13 ☐ R-8	Metals (List Below)	Pb, Cd				Total # of Cont.	Note #
GZ-ML3-S-2 4'-6'	11-02-06 10:00	S								X																		2	
GZ-ML3-S-9 39-41'	11-02-06 14:30	S								X																		2	
GZ-ML2-S-14	10-31-06																								X			1	
GZ-ML2-S-12	10-31-06																								X			1	
GZ-ML-1 S-21	10-25-06																								X			1	
GZ-ML-1 S-23	10-25-06																								X			1	
PRESERVATIVE (Cl - HCl, M=MeOH, N - HNO3, S - H2SO4, Na - NaOH, O - Other)*																													
CONTAINER TYPE (P-Plastic, G-Glass, V-Vial, O-Other)*																													

RELINQUISHED BY: DATE/TIME RECEIVED BY:
Bill Braccan 11/3/06 1510

RELINQUISHED BY: DATE/TIME RECEIVED BY:
Bill Braccan 11/3/06 1555 Walgren

RELINQUISHED BY: DATE/TIME RECEIVED BY:
Walgren 11/6/06 1335

NOTES: Preservatives, special reporting limits, known contamination, additional testing parameters, etc.:

PROJECT MANAGER Mark Dalpe EXT:

DATA REPORT ☑ PDF (Adobe) ☐ ASCII ☐ EXCEL Specify State

TURNAROUND TIME: (Standard) Rush___ Days, Approved by:

LAB USE: 0614 BB

TEMP. OF COOLER 1.7 °C

GZA GEOENVIRONMENTAL, INC.
ENGINEERS AND SCIENTISTS
106 South Street
Hopkinton, MA 01748
(508) 435-9244
FAX (508) 435-9912

GZA FILE NO: 32795.14 P.O. NO.

PROJECT Chestnut Bedrock Wells

LOCATION Alton, RI

COLLECTOR(S) Mark Dalpe / Steve Madsen SHEET 1 OF 1

GZAP003

GZA GeoEnvironmental, Inc.
106 South Street
Hopkinton, MA 01748
(781) 278-4700

Laboratory Identification Numbers:
MA and ME: **MA092** NH: **2028**
CT: **PH0579** RI: **LAO00236**
NELAC - NYS DOH: **11063**

ANALYTICAL REPORT

GZA GeoEnvironmental, Inc.
140 Broadway
Providence, RI 02903

Mark Dalpe

Project No.: **03.0032795.12**
Work Order No.: **0611-00189**
Date Received: **11/22/2006**
Date Reported: **12/01/2006**

SAMPLE INFORMATION

Date Sampled	Matrix	Laboratory ID	Sample ID
11/20/2006	Solid	0611-00189 001	GZ ML 2A S-5

GZA GeoEnvironmental, Inc.
106 South Street
Hopkinton, MA 01748
(781) 278-4700

ANALYTICAL REPORT

GZA GeoEnvironmental, Inc.
140 Broadway
Providence, RI 02903

Mark Dalpe

Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **11/22/2006**
Date Reported: **12/01/2006**
Work Order No.: **0611-00189**

PROJECT NARRATIVE:

1. Sample Receipt

The samples were received on 11/22/06 via _x_GZA courier, __EC, __FEDEX, or ___hand delivered. The temperature of the __temperature blank/_x_cooler air, was 5.5 degrees C. The temperature requirement for most analyses is above freezing to 6 degrees C. The samples were received intact for all requested analyses.

The chain of custody indicates that the samples, when required, were chemically preserved in accordance with the method they reference.

2. EPA Method 8260 - VOC

Attach QC 8260 S 11/30/06 - Solid

* One or more Laboratory Control Sample Recovery(s) exceeded the acceptance limits. The number of target analytes allowed to exceed the criteria within the sporadic marginal failure rate for the analysis is:

EPA Method 8260 - VOCs - 5 target compounds are allowed 60-140%

GZA GeoEnvironmental, Inc.
106 South Street
Hopkinton, MA 01748
(781) 278-4700

ANALYTICAL REPORT

GZA GeoEnvironmental, Inc.
140 Broadway
Providence, RI 02903

Mark Dalpe

Project Name.:	**Charbert - NFA**	Date Received:	**11/22/2006**
Project No.:	**03.0032795.12**	Date Reported:	**12/01/2006**
		Work Order No.:	**0611-00189**

Data Authorized By: _____

NELAC certification, as indicated by the NELAC Lab ID Number, is per analyte. For a complete list of NELAC validated analytes, please contact the laboratory.

Abbreviations:
% R = % Recovery
DF = Dilution Factor
DFS = Dilution Factor Solids
DO = Diluted Out

Method Key:
Method 8260: The current version of the method is 8260B.
Method 8021: The current version of the method is 8021B.
Method 8270: The current version of the method is 8270C.
Method 6010: The current version of the method is 6010B.

Please note that the laboratory signed copy of the chain of custody record is an integral part of the data report.

The laboratory report shall not be reproduced except in full without the written consent of the laboratory.

Soil data is reported on a dry weight basis unless otherwise specified.

Matrix Spike / Matrix Spike Duplicate sets are performed as per method and are reported at the end of the analytical report if assigned on the Chain of Custody.

GZA GeoEnvironmental, Inc.
106 South Street
Hopkinton, MA 01748
(781) 278-4700

ANALYTICAL REPORT

GZA GeoEnvironmental, Inc.
140 Broadway
Providence, RI 02903

Mark Dalpe

Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **11/22/2006**
Date Reported: **12/01/2006**
Work Order No.: **0611-00189**

Sample ID: **GZ ML 2A S-5**
Sample No.: **001**
Sample Date: **11/20/2006**

Test Performed	Method	Results	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260			MQS	11/30/2006
Dichlorodifluoromethane	EPA 8260	<100	ug/kg	MQS	11/30/2006
Chloromethane	EPA 8260	<100	ug/kg	MQS	11/30/2006
Vinyl Chloride	EPA 8260	<50	ug/kg	MQS	11/30/2006
Bromomethane	EPA 8260	<100	ug/kg	MQS	11/30/2006
Chloroethane	EPA 8260	<50	ug/kg	MQS	11/30/2006
Trichlorofluoromethane	EPA 8260	<100	ug/kg	MQS	11/30/2006
Diethylether	EPA 8260	<50	ug/kg	MQS	11/30/2006
Acetone	EPA 8260	<500	ug/kg	MQS	11/30/2006
1,1-Dichloroethene	EPA 8260	<50	ug/kg	MQS	11/30/2006
Dichloromethane	EPA 8260	<50	ug/kg	MQS	11/30/2006
Methyl-Tert-Butyl-Ether	EPA 8260	<50	ug/kg	MQS	11/30/2006
trans-1,2-Dichloroethene	EPA 8260	<50	ug/kg	MQS	11/30/2006
1,1-Dichloroethane	EPA 8260	<50	ug/kg	MQS	11/30/2006
2-Butanone	EPA 8260	<500	ug/kg	MQS	11/30/2006
2,2-Dichloropropane	EPA 8260	<50	ug/kg	MQS	11/30/2006
cis-1,2-Dichloroethene	EPA 8260	<50	ug/kg	MQS	11/30/2006
Chloroform	EPA 8260	<50	ug/kg	MQS	11/30/2006
Bromochloromethane	EPA 8260	<50	ug/kg	MQS	11/30/2006
Tetrahydrofuran	EPA 8260	<100	ug/kg	MQS	11/30/2006
1,1,1-Trichloroethane	EPA 8260	<50	ug/kg	MQS	11/30/2006
1,1-Dichloropropene	EPA 8260	<50	ug/kg	MQS	11/30/2006
Carbon Tetrachloride	EPA 8260	<50	ug/kg	MQS	11/30/2006
1,2-Dichloroethane	EPA 8260	<50	ug/kg	MQS	11/30/2006
Benzene	EPA 8260	<50	ug/kg	MQS	11/30/2006
Trichloroethene	EPA 8260	<50	ug/kg	MQS	11/30/2006
1,2-Dichloropropane	EPA 8260	<50	ug/kg	MQS	11/30/2006
Bromodichloromethane	EPA 8260	<50	ug/kg	MQS	11/30/2006
Dibromomethane	EPA 8260	<50	ug/kg	MQS	11/30/2006
4-Methyl-2-Pentanone	EPA 8260	<100	ug/kg	MQS	11/30/2006
cis-1,3-Dichloropropene	EPA 8260	<50	ug/kg	MQS	11/30/2006
Toluene	EPA 8260	<50	ug/kg	MQS	11/30/2006
trans-1,3-Dichloropropene	EPA 8260	<50	ug/kg	MQS	11/30/2006
1,1,2-Trichloroethane	EPA 8260	<50	ug/kg	MQS	11/30/2006
2-Hexanone	EPA 8260	<100	ug/kg	MQS	11/30/2006
1,3-Dichloropropane	EPA 8260	<50	ug/kg	MQS	11/30/2006
Tetrachloroethene	EPA 8260	<50	ug/kg	MQS	11/30/2006

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ANALYTICAL REPORT

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Mark Dalpe

Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **11/22/2006**
Date Reported: **12/01/2006**
Work Order No.: **0611-00189**

Sample ID: **GZ ML 2A S-5** Sample No.: **001**

Sample Date: **11/20/2006**

Test Performed	Method	Results	Units	Tech	Analysis Date
Dibromochloromethane	EPA 8260	<50	ug/kg	MQS	11/30/2006
1,2-Dibromoethane (EDB)	EPA 8260	<100	ug/kg	MQS	11/30/2006
Chlorobenzene	EPA 8260	<50	ug/kg	MQS	11/30/2006
1,1,1,2-Tetrachloroethane	EPA 8260	<50	ug/kg	MQS	11/30/2006
Ethylbenzene	EPA 8260	<50	ug/kg	MQS	11/30/2006
m&p-Xylene	EPA 8260	<50	ug/kg	MQS	11/30/2006
o-Xylene	EPA 8260	<50	ug/kg	MQS	11/30/2006
Styrene	EPA 8260	<50	ug/kg	MQS	11/30/2006
Bromoform	EPA 8260	<100	ug/kg	MQS	11/30/2006
Isopropylbenzene	EPA 8260	<50	ug/kg	MQS	11/30/2006
1,1,2,2-Tetrachloroethane	EPA 8260	<50	ug/kg	MQS	11/30/2006
1,2,3-Trichloropropane	EPA 8260	<50	ug/kg	MQS	11/30/2006
Bromobenzene	EPA 8260	<50	ug/kg	MQS	11/30/2006
n-Propylbenzene	EPA 8260	<50	ug/kg	MQS	11/30/2006
2-Chlorotoluene	EPA 8260	<50	ug/kg	MQS	11/30/2006
1,3,5-Trimethylbenzene	EPA 8260	<50	ug/kg	MQS	11/30/2006
4-Chlorotoluene	EPA 8260	<50	ug/kg	MQS	11/30/2006
tert-Butylbenzene	EPA 8260	<50	ug/kg	MQS	11/30/2006
1,2,4-Trimethylbenzene	EPA 8260	<50	ug/kg	MQS	11/30/2006
sec-Butylbenzene	EPA 8260	<50	ug/kg	MQS	11/30/2006
p-Isopropyltoluene	EPA 8260	<50	ug/kg	MQS	11/30/2006
1,3-Dichlorobenzene	EPA 8260	<50	ug/kg	MQS	11/30/2006
1,4-Dichlorobenzene	EPA 8260	<50	ug/kg	MQS	11/30/2006
n-Butylbenzene	EPA 8260	<50	ug/kg	MQS	11/30/2006
1,2-Dichlorobenzene	EPA 8260	<50	ug/kg	MQS	11/30/2006
1,2-Dibromo-3-Chloropropane	EPA 8260	<250	ug/kg	MQS	11/30/2006
1,2,4-Trichlorobenzene	EPA 8260	<50	ug/kg	MQS	11/30/2006
Hexachlorobutadiene	EPA 8260	<50	ug/kg	MQS	11/30/2006
Naphthalene	EPA 8260	<50	ug/kg	MQS	11/30/2006
1,2,3-Trichlorobenzene	EPA 8260	<50	ug/kg	MQS	11/30/2006
Surrogates:	EPA 8260				
***1,2-Dichloroethane-D4	EPA 8260	93.6	% R	MQS	11/30/2006
***Toluene-D8	EPA 8260	109	% R	MQS	11/30/2006
***4-Bromofluorobenzene	EPA 8260	111	% R	MQS	11/30/2006
Preparation	EPA 5035	1.0	DF	MQS	11/30/2006
PERCENT SOLID		88.8	%	TAJ	11/28/2006

GZA GeoEnvironmental, Inc.
106 South Street
Hopkinton, MA 01748

EPA Method 8260 Solid Method Blank (MB) and Laboratory Control Sample (LCS) Data

Method Blank

Date Analyzed:	11/30/06	
Volatile Organics	**Conc. ug/kg**	**Acceptance Limit**
dichlorodifluoromethane	< 250	< 250
chloromethane	< 250	< 250
vinyl chloride	< 250	< 250
bromomethane	< 250	< 250
chloroethane	< 250	< 250
trichlorofluoromethane	< 250	< 250
diethyl ether	< 500	< 500
acrolein	< 1300	< 1300
acetone	< 1300	< 1300
1,1-dichloroethene	< 130	< 130
FREON-113	< 250	< 250
iodomethane	< 130	< 130
carbon disulfide	< 250	< 250
dichloromethane	< 250	< 250
tert-butyl alcohol (TBA)	< 1300	< 1300
acrylonitrile	< 250	< 250
methyl-tert-butyl-ether	< 250	< 250
trans-1,2-dichloroethene	< 130	< 130
1,1-dichloroethane	< 130	< 130
di-isopropyl ether (DIPE)	< 250	< 250
ethyl tert-butyl ether (EtBE)	< 250	< 250
vinyl acetate	< 250	< 250
2-butanone	< 1300	< 1300
2,2-dichloropropane	< 130	< 130
cis-1,2-dichloroethene	< 130	< 130
chloroform	< 130	< 130
bromochloromethane	< 130	< 130
tetrahydrafuran	< 750	< 750
1,1,1-trichloroethane	< 130	< 130
1,1-dichloropropene	< 130	< 130
carbon tetrachloride	< 130	< 130
1,2-dichloroethane	< 130	< 130
benzene	< 130	< 130
tert-amyl methyl ether (TAME)	< 250	< 250
trichloroethene	< 130	< 130
1,2-dichloropropane	< 130	< 130
bromodichloromethane	< 130	< 130
2-chloroethyl vinyl ether	< 130	< 130
1,4-Dioxane	< 2500	< 2500
dibromomethane	< 130	< 130
4-methyl-2-pentanone	< 250	< 250
cis-1,3-dichloropropene	< 130	< 130
toluene	< 130	< 130
trans-1,3-dichloropropene	< 130	< 130
1,1,2-trichloroethane	< 250	< 250
2-hexanone	< 250	< 250
1,3-dichloropropane	< 130	< 130
tetrachloroethene	< 130	< 130
dibromochloromethane	< 130	< 130
1,2-dibromoethane (EDB)	< 130	< 130
chlorobenzene	< 130	< 130
1,1,1,2-tetrachloroethane	< 130	< 130
ethylbenzene	< 130	< 130
1,1,2,2-tetrachloroethane	< 130	< 130
m&p-xylene	< 130	< 130
o-xylene	< 130	< 130
styrene	< 130	< 130
bromoform	< 130	< 130
isopropylbenzene	< 130	< 130
1,2,3-trichloropropane	< 130	< 130
bromobenzene	< 130	< 130
n-propylbenzene	< 130	< 130
2-chlorotoluene	< 130	< 130
1,3,5-trimethylbenzene	< 130	< 130
trans-1,4-dichloro-2-butene	< 250	< 250
4-chlorotoluene	< 130	< 130
tert-butyl-benzene	< 130	< 130
1,2,4-trimethylbenzene	< 130	< 130
sec-butyl-benzene	< 130	< 130
p-isopropyltoluene	< 750	< 750
1,3-dichlorobenzene	< 130	< 130
1,4-dichlorobenzene	< 130	< 130
n-butylbenzene	< 130	< 130
1,2-dichlorobenzene	< 130	< 130
1,2-dibromo-3-chloropropane	< 130	< 130
1,2,4-trichlorobenzene	< 130	< 130
hexachlorobutadiene	< 130	< 130
naphthalene	< 130	< 130
1,2,3-trichlorobenzene	< 130	< 130

Laboratory Control Sample

Date Analyzed:	11/30/06		
Spike Concentration = 2500ug/kg	**% Recovery**	**Acceptance Limits**	**Verdict**
dichlorodifluoromethane	107	70-130	ok
chloromethane	101	70-130	ok
vinyl chloride	97.2	70-130	ok
bromomethane	75.4	70-130	ok
chloroethane	79.0	70-130	ok
trichlorofluoromethane	121	70-130	ok
diethyl ether	68.7	70-130	out
acrolein	73.6	70-130	ok
acetone	92.8	70-130	ok
1,1-dichloroethene	101	70-130	ok
FREON-113	97.3	70-130	ok
iodomethane	82.0	70-130	ok
carbon disulfide	91.8	70-130	ok
dichloromethane	72.8	70-130	ok
tert-butyl alcohol (TBA)	105	70-130	ok
acrylonitrile	121	70-130	ok
methyl-tert-butyl-ether	52.6	70-130	out
trans-1,2-dichloroethene	94.6	70-130	ok
1,1-dichloroethane	95.4	70-130	ok
di-isopropyl ether (DIPE)	85.1	70-130	ok
ethyl tert-butyl ether (EtBE)	37.4	70-130	out
vinyl acetate	83.4	70-130	ok
2-butanone	74.3	70-130	ok
2,2-dichloropropane	121	70-130	ok
cis-1,2-dichloroethene	85.3	70-130	ok
chloroform	93.1	70-130	ok
bromochloromethane	71.5	70-130	ok
tetrahydrafuran	97.3	70-130	ok
1,1,1-trichloroethane	122	70-130	ok
1,1-dichloropropene	101	70-130	ok
carbon tetrachloride	122	70-130	ok
1,2-dichloroethane	92.7	70-130	ok
benzene	85.5	70-130	ok
tert-amyl methyl ether (TAME)	41.8	70-130	out
trichloroethene	96.4	70-130	ok
1,2-dichloropropane	86.3	70-130	ok
bromodichloromethane	91.7	70-130	ok
2-chloroethyl vinyl ether	86.5	70-130	ok
1,4-Dioxane	75.6	70-130	ok
dibromomethane	85.2	70-130	ok
4-methyl-2-pentanone	80.3	70-130	ok
cis-1,3-dichloropropene	82.0	70-130	ok
toluene	95.3	70-130	ok
trans-1,3-dichloropropene	80.7	70-130	ok
1,1,2-trichloroethane	98.9	70-130	ok
2-hexanone	99.9	70-130	ok
1,3-dichloropropane	92.5	70-130	ok
tetrachloroethene	136	70-130	out
dibromochloromethane	101	70-130	ok
1,2-dibromoethane (EDB)	100	70-130	ok
chlorobenzene	113	70-130	ok
1,1,1,2-tetrachloroethane	102	70-130	ok
ethylbenzene	126	70-130	ok
1,1,2,2-tetrachloroethane	86.3	70-130	ok
m&p-xylene	129	70-130	ok
o-xylene	119	70-130	ok
styrene	105	70-130	ok
bromoform	101	70-130	ok
isopropylbenzene	130	70-130	ok
1,2,3-trichloropropane	96.9	70-130	ok
bromobenzene	95.8	70-130	ok
n-propylbenzene	125	70-130	ok
2-chlorotoluene	112	70-130	ok
1,3,5-trimethylbenzene	124	70-130	ok
trans-1,4-dichloro-2-butene	84.2	70-130	ok
4-chlorotoluene	119	70-130	ok
tert-butyl-benzene	122	70-130	ok
1,2,4-trimethylbenzene	119	70-130	ok
sec-butyl-benzene	129	70-130	ok
p-isopropyltoluene	124	70-130	ok
1,3-dichlorobenzene	97.5	70-130	ok
1,4-dichlorobenzene	92.2	70-130	ok
n-butylbenzene	128	70-130	ok
1,2-dichlorobenzene	86.9	70-130	ok
1,2-dibromo-3-chloropropane	83.6	70-130	ok
1,2,4-trichlorobenzene	98.6	70-130	ok
hexachlorobutadiene	128	70-130	ok
naphthalene	70.6	70-130	ok
1,2,3-trichlorobenzene	85.5	70-130	ok

SMF criteria allows 5 compounds to be outside acceptance limits

Surrogates:	**Recovery (%)**	**Acceptance Limits**
DIBROMOFLUOROMETHANE	95.5	70-130
1,2-DICHLOROETHANE-D4	91.2	70-130
TOLUENE-D8	99.7	70-130
4-BROMOFLUOROBENZENE	113	70-130
1,2-DICHLOROBENZENE-D4	95.2	70-130

Surrogates:	**Recovery (%)**	**Acceptance Limits**	**Verdict**
DIBROMOFLUOROMETHANE	89.9	70-130	ok
1,2-DICHLOROETHANE-D4	83.2	70-130	ok
TOLUENE-D8	99.3	70-130	ok
4-BROMOFLUOROBENZENE	111	70-130	ok
1,2-DICHLOROBENZENE-D4	90.2	70-130	ok

Instrument: HP GC/MS "S"

WHITE COPY - Original YELLOW COPY - Lab Files PINK COPY - Project Manager

W.O. # 0611-00189 (for lab use only)

CHAIN-OF-CUSTODY RECORD

Sample I.D.	Date/Time Sampled (Very Important)	Matrix A=Air S=Soil GW=Ground W. SW=Surface W. WW=Waste W. DW=Drinking W. Other (specify)	WW ONLY: DpH ☐Cond.	GC Screen (VOA)	☐524.2 ☐502.2	624	☐601 ☐602	625	Formaldehyde	ANALYSIS REQUIRED: 8260	8021	8021 - "8010" List	8021 "8020" List	8270 ☐Full ☐PAH ☐BN	8082-PCBs Only	8081 - Pest Only	TPH-GC (Mod. 8100)	TPH-GC w/FING	EPH (MA DEP)	VPH (MA DEP)	TCLP (Spec. Below)	Filtering (✓ if requested)	Metals ☐PPM-13 ☐ R-8	Metals (List Below)					Total # of Cont.	Note #
GZ ML 2A S-5	11/20/06	S								X																		1	
PRESERVATIVE (Cl - HCl, M=MeOH, N - HNO3, S - H2SO4, Na - NaOH, O - Other)*										M																			
CONTAINER TYPE (P-Plastic, G-Glass, V-Vial, O-Other)*										V																			

RELINQUISHED BY:	DATE/TIME	RECEIVED BY:
[signature]	11/22/06 8:45	Bill Bureau 11/22/06 8:45
RELINQUISHED BY:	DATE/TIME	RECEIVED BY:
Bill Bureau 11/22/06	11:00	Mreid 11/22/06 1330
RELINQUISHED BY:	DATE/TIME	RECEIVED BY:

NOTES: Preservatives, special reporting limits, known contamination, additional testing parameters, etc.:

PROJECT MANAGER: Mark Dalpe EXT:

DATA REPORT ☑ PDF (Adobe) ☐ ASCII ☐ EXCEL Specify State

TURNAROUND TIME: (Standard) Rush___ Days, Approved by:___ LAB USE: TEMP. OF COOLER 5.5 °C CA 06/14

GZA FILE NO: 03.00 32795.12 P.O. NO.

PROJECT Charbert

LOCATION Alton, RI

COLLECTOR(S) Mark Dalpe SHEET 1 OF 1

GZA GEOENVIRONMENTAL, INC.
ENGINEERS AND SCIENTISTS
106 South Street
Hopkinton, MA 01748
(508) 435-9244
FAX (508) 435-9912

ACCREDITED IN ACCORDANCE WITH

GZAP003

GZA GeoEnvironmental, Inc.
106 South Street
Hopkinton, MA 01748
(781) 278-4700

Laboratory Identification Numbers:
MA and ME: **MA092** NH: **2028**
CT: **PH0579** RI: **LAO00236**
NELAC - NYS DOH: **11063**

ANALYTICAL REPORT

GZA GeoEnvironmental, Inc.
140 Broadway
Providence, RI 02903

Ed Summerly

Project No.: **03.0032795.12**
Work Order No.: **0612-00210**
Date Received: **12/22/2006**
Date Reported: **01/03/2007**

SAMPLE INFORMATION

Date Sampled	Matrix	Laboratory ID	Sample ID
12/20/2006	Aqueous	0612-00210 001	GZML-1/190.2-200.2
12/20/2006	Aqueous	0612-00210 002	GZML-1/181-192.75
12/21/2006	Aqueous	0612-00210 003	GZML-1/118.25-130
12/21/2006	Aqueous	0612-00210 004	GZML-1/170.25-182
12/21/2006	Aqueous	0612-00210 005	GZML-1/159.25-171
12/21/2006	Aqueous	0612-00210 006	GZML-1/126.25-138
12/20/2006	Aqueous	0612-00210 007	GZML-1/137.25-149
12/21/2006	Aqueous	0612-00210 008	GZML-1/148.25-160

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ANALYTICAL REPORT

GZA GeoEnvironmental, Inc.
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Providence, RI 02903

Ed Summerly

Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **12/22/2006**
Date Reported: **01/03/2007**
Work Order No.: **0612-00210**

PROJECT NARRATIVE:

1. Sample Receipt

The samples were received on 12/22/06 via _x_GZA courier, __EC, __FEDEX, or ___hand delivered. The temperature of the __temperature blank/_x_cooler air, was 3.7 degrees C. The temperature requirement for most analyses is above freezing to 6 degrees C. The samples were received intact for all requested analyses.

The chain of custody indicates that the samples, when required, were chemically preserved in accordance with the method they reference.

2. EPA Method 8260 - VOCs

Attach QC 8260 12/28/06 A - Aqueous

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ANALYTICAL REPORT

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Ed Summerly

Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **12/22/2006**
Date Reported: **01/03/2007**
Work Order No.: **0612-00210**

Data Authorized By: _____

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Abbreviations:
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DFS = Dilution Factor Solids
DO = Diluted Out

Method Key:
Method 8260: The current version of the method is 8260B.
Method 8021: The current version of the method is 8021B.
Method 8270: The current version of the method is 8270C.
Method 6010: The current version of the method is 6010B.

Please note that the laboratory signed copy of the chain of custody record is an integral part of the data report.

Soil data is reported on a dry weight basis unless otherwise specified.

Matrix Spike / Matrix Spike Duplicate sets are performed as per method and are reported at the end of the analytical report if assigned on the Chain of Custody.

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ANALYTICAL REPORT

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Ed Summerly

Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **12/22/2006**
Date Reported: **01/03/2007**
Work Order No.: **0612-00210**

Sample ID: **GZML-1/190.2-200.2** Sample No.: **001**

Sample Date: **12/20/2006**

Test Performed	Method	Results	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260			MQS	12/28/2006
Dichlorodifluoromethane	EPA 8260	<2.0	ug/L	MQS	12/28/2006
Chloromethane	EPA 8260	<2.0	ug/L	MQS	12/28/2006
Vinyl Chloride	EPA 8260	<1.0	ug/L	MQS	12/28/2006
Bromomethane	EPA 8260	<2.0	ug/L	MQS	12/28/2006
Chloroethane	EPA 8260	<1.0	ug/L	MQS	12/28/2006
Trichlorofluoromethane	EPA 8260	<2.0	ug/L	MQS	12/28/2006
Diethylether	EPA 8260	<5.0	ug/L	MQS	12/28/2006
Acetone	EPA 8260	<25	ug/L	MQS	12/28/2006
1,1-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	12/28/2006
Dichloromethane	EPA 8260	<1.0	ug/L	MQS	12/28/2006
Methyl-Tert-Butyl-Ether	EPA 8260	<1.0	ug/L	MQS	12/28/2006
trans-1,2-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	12/28/2006
1,1-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	12/28/2006
2-Butanone	EPA 8260	<25	ug/L	MQS	12/28/2006
2,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	12/28/2006
cis-1,2-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	12/28/2006
Chloroform	EPA 8260	<1.0	ug/L	MQS	12/28/2006
Bromochloromethane	EPA 8260	<1.0	ug/L	MQS	12/28/2006
Tetrahydrofuran	EPA 8260	<10	ug/L	MQS	12/28/2006
1,1,1-Trichloroethane	EPA 8260	<1.0	ug/L	MQS	12/28/2006
1,1-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	12/28/2006
Carbon Tetrachloride	EPA 8260	<1.0	ug/L	MQS	12/28/2006
1,2-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	12/28/2006
Benzene	EPA 8260	<1.0	ug/L	MQS	12/28/2006
Trichloroethene	EPA 8260	<1.0	ug/L	MQS	12/28/2006
1,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	12/28/2006
Bromodichloromethane	EPA 8260	<1.0	ug/L	MQS	12/28/2006
Dibromomethane	EPA 8260	<1.0	ug/L	MQS	12/28/2006
4-Methyl-2-Pentanone	EPA 8260	<25	ug/L	MQS	12/28/2006
cis-1,3-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	12/28/2006
Toluene	EPA 8260	1.1	ug/L	MQS	12/28/2006
trans-1,3-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	12/28/2006
1,1,2-Trichloroethane	EPA 8260	<1.0	ug/L	MQS	12/28/2006
2-Hexanone	EPA 8260	<2.0	ug/L	MQS	12/28/2006
1,3-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	12/28/2006
Tetrachloroethene	EPA 8260	<1.0	ug/L	MQS	12/28/2006

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ANALYTICAL REPORT

GZA GeoEnvironmental, Inc.
140 Broadway
Providence, RI 02903

Ed Summerly

Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **12/22/2006**
Date Reported: **01/03/2007**
Work Order No.: **0612-00210**

Sample ID: **GZML-1/190.2-200.2** Sample No.: **001**

Sample Date: **12/20/2006**

Test Performed	Method	Results	Units	Tech	Analysis Date
Dibromochloromethane	EPA 8260	<1.0	ug/L	MQS	12/28/2006
1,2-Dibromoethane (EDB)	EPA 8260	<2.0	ug/L	MQS	12/28/2006
Chlorobenzene	EPA 8260	<1.0	ug/L	MQS	12/28/2006
1,1,1,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	12/28/2006
Ethylbenzene	EPA 8260	<1.0	ug/L	MQS	12/28/2006
m&p-Xylene	EPA 8260	<1.0	ug/L	MQS	12/28/2006
o-Xylene	EPA 8260	<1.0	ug/L	MQS	12/28/2006
Styrene	EPA 8260	<1.0	ug/L	MQS	12/28/2006
Bromoform	EPA 8260	<2.0	ug/L	MQS	12/28/2006
Isopropylbenzene	EPA 8260	<1.0	ug/L	MQS	12/28/2006
1,1,2,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	12/28/2006
1,2,3-Trichloropropane	EPA 8260	<1.0	ug/L	MQS	12/28/2006
Bromobenzene	EPA 8260	<1.0	ug/L	MQS	12/28/2006
N-Propylbenzene	EPA 8260	<1.0	ug/L	MQS	12/28/2006
2-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	12/28/2006
1,3,5-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	12/28/2006
4-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	12/28/2006
tert-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	12/28/2006
1,2,4-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	12/28/2006
sec-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	12/28/2006
p-Isopropyltoluene	EPA 8260	<1.0	ug/L	MQS	12/28/2006
1,3-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	12/28/2006
1,4-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	12/28/2006
n-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	12/28/2006
1,2-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	12/28/2006
1,2-Dibromo-3-Chloropropane	EPA 8260	<5.0	ug/L	MQS	12/28/2006
1,2,4-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	12/28/2006
Hexachlorobutadiene	EPA 8260	<1.0	ug/L	MQS	12/28/2006
Naphthalene	EPA 8260	<1.0	ug/L	MQS	12/28/2006
1,2,3-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	12/28/2006
Surrogates:	EPA 8260				
***1,2-Dichloroethane-D4	EPA 8260	101	% R	MQS	12/28/2006
***Toluene-D8	EPA 8260	99.2	% R	MQS	12/28/2006
***4-Bromofluorobenzene	EPA 8260	104	% R	MQS	12/28/2006
Preparation	EPA 5030B	1.0	DF	MQS	12/28/2006

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ANALYTICAL REPORT

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Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **12/22/2006**
Date Reported: **01/03/2007**
Work Order No.: **0612-00210**

Sample ID: **GZML-1/181-192.75** Sample No.: **002**

Sample Date: **12/20/2006**

Test Performed	Method	Results	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260			MQS	12/28/2006
Dichlorodifluoromethane	EPA 8260	<2.0	ug/L	MQS	12/28/2006
Chloromethane	EPA 8260	<2.0	ug/L	MQS	12/28/2006
Vinyl Chloride	EPA 8260	<1.0	ug/L	MQS	12/28/2006
Bromomethane	EPA 8260	<2.0	ug/L	MQS	12/28/2006
Chloroethane	EPA 8260	<1.0	ug/L	MQS	12/28/2006
Trichlorofluoromethane	EPA 8260	<2.0	ug/L	MQS	12/28/2006
Diethylether	EPA 8260	<5.0	ug/L	MQS	12/28/2006
Acetone	EPA 8260	71	ug/L	MQS	12/28/2006
1,1-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	12/28/2006
Dichloromethane	EPA 8260	<1.0	ug/L	MQS	12/28/2006
Methyl-Tert-Butyl-Ether	EPA 8260	<1.0	ug/L	MQS	12/28/2006
trans-1,2-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	12/28/2006
1,1-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	12/28/2006
2-Butanone	EPA 8260	<25	ug/L	MQS	12/28/2006
2,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	12/28/2006
cis-1,2-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	12/28/2006
Chloroform	EPA 8260	<1.0	ug/L	MQS	12/28/2006
Bromochloromethane	EPA 8260	<1.0	ug/L	MQS	12/28/2006
Tetrahydrofuran	EPA 8260	<10	ug/L	MQS	12/28/2006
1,1,1-Trichloroethane	EPA 8260	<1.0	ug/L	MQS	12/28/2006
1,1-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	12/28/2006
Carbon Tetrachloride	EPA 8260	<1.0	ug/L	MQS	12/28/2006
1,2-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	12/28/2006
Benzene	EPA 8260	<1.0	ug/L	MQS	12/28/2006
Trichloroethene	EPA 8260	<1.0	ug/L	MQS	12/28/2006
1,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	12/28/2006
Bromodichloromethane	EPA 8260	<1.0	ug/L	MQS	12/28/2006
Dibromomethane	EPA 8260	<1.0	ug/L	MQS	12/28/2006
4-Methyl-2-Pentanone	EPA 8260	<25	ug/L	MQS	12/28/2006
cis-1,3-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	12/28/2006
Toluene	EPA 8260	2.7	ug/L	MQS	12/28/2006
trans-1,3-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	12/28/2006
1,1,2-Trichloroethane	EPA 8260	<1.0	ug/L	MQS	12/28/2006
2-Hexanone	EPA 8260	<2.0	ug/L	MQS	12/28/2006
1,3-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	12/28/2006
Tetrachloroethene	EPA 8260	<1.0	ug/L	MQS	12/28/2006

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ANALYTICAL REPORT

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Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **12/22/2006**
Date Reported: **01/03/2007**
Work Order No.: **0612-00210**

Sample ID: **GZML-1/181-192.75** Sample No.: **002**

Sample Date: **12/20/2006**

Test Performed	Method	Results	Units	Tech	Analysis Date
Dibromochloromethane	EPA 8260	<1.0	ug/L	MQS	12/28/2006
1,2-Dibromoethane (EDB)	EPA 8260	<2.0	ug/L	MQS	12/28/2006
Chlorobenzene	EPA 8260	<1.0	ug/L	MQS	12/28/2006
1,1,1,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	12/28/2006
Ethylbenzene	EPA 8260	<1.0	ug/L	MQS	12/28/2006
m&p-Xylene	EPA 8260	<1.0	ug/L	MQS	12/28/2006
o-Xylene	EPA 8260	<1.0	ug/L	MQS	12/28/2006
Styrene	EPA 8260	<1.0	ug/L	MQS	12/28/2006
Bromoform	EPA 8260	<2.0	ug/L	MQS	12/28/2006
Isopropylbenzene	EPA 8260	<1.0	ug/L	MQS	12/28/2006
1,1,2,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	12/28/2006
1,2,3-Trichloropropane	EPA 8260	<1.0	ug/L	MQS	12/28/2006
Bromobenzene	EPA 8260	<1.0	ug/L	MQS	12/28/2006
N-Propylbenzene	EPA 8260	<1.0	ug/L	MQS	12/28/2006
2-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	12/28/2006
1,3,5-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	12/28/2006
4-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	12/28/2006
tert-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	12/28/2006
1,2,4-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	12/28/2006
sec-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	12/28/2006
p-Isopropyltoluene	EPA 8260	<1.0	ug/L	MQS	12/28/2006
1,3-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	12/28/2006
1,4-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	12/28/2006
n-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	12/28/2006
1,2-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	12/28/2006
1,2-Dibromo-3-Chloropropane	EPA 8260	<5.0	ug/L	MQS	12/28/2006
1,2,4-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	12/28/2006
Hexachlorobutadiene	EPA 8260	<1.0	ug/L	MQS	12/28/2006
Naphthalene	EPA 8260	<1.0	ug/L	MQS	12/28/2006
1,2,3-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	12/28/2006
Surrogates:	EPA 8260				
***1,2-Dichloroethane-D4	EPA 8260	100	% R	MQS	12/28/2006
***Toluene-D8	EPA 8260	103	% R	MQS	12/28/2006
***4-Bromofluorobenzene	EPA 8260	103	% R	MQS	12/28/2006
Preparation	EPA 5030B	1.0	DF	MQS	12/28/2006

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ANALYTICAL REPORT

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Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **12/22/2006**
Date Reported: **01/03/2007**
Work Order No.: **0612-00210**

Sample ID: **GZML-1/118.25-130** Sample No.: **003**

Sample Date: **12/21/2006**

Test Performed	Method	Results	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260			MQS	12/29/2006
Dichlorodifluoromethane	EPA 8260	<2.0	ug/L	MQS	12/29/2006
Chloromethane	EPA 8260	<2.0	ug/L	MQS	12/29/2006
Vinyl Chloride	EPA 8260	<1.0	ug/L	MQS	12/29/2006
Bromomethane	EPA 8260	<2.0	ug/L	MQS	12/29/2006
Chloroethane	EPA 8260	<1.0	ug/L	MQS	12/29/2006
Trichlorofluoromethane	EPA 8260	<2.0	ug/L	MQS	12/29/2006
Diethylether	EPA 8260	<5.0	ug/L	MQS	12/29/2006
Acetone	EPA 8260	<25	ug/L	MQS	12/29/2006
1,1-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
Dichloromethane	EPA 8260	<1.0	ug/L	MQS	12/29/2006
Methyl-Tert-Butyl-Ether	EPA 8260	<1.0	ug/L	MQS	12/29/2006
trans-1,2-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
1,1-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	12/29/2006
2-Butanone	EPA 8260	<25	ug/L	MQS	12/29/2006
2,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	12/29/2006
cis-1,2-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
Chloroform	EPA 8260	<1.0	ug/L	MQS	12/29/2006
Bromochloromethane	EPA 8260	<1.0	ug/L	MQS	12/29/2006
Tetrahydrofuran	EPA 8260	<10	ug/L	MQS	12/29/2006
1,1,1-Trichloroethane	EPA 8260	<1.0	ug/L	MQS	12/29/2006
1,1-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
Carbon Tetrachloride	EPA 8260	<1.0	ug/L	MQS	12/29/2006
1,2-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	12/29/2006
Benzene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
Trichloroethene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
1,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	12/29/2006
Bromodichloromethane	EPA 8260	<1.0	ug/L	MQS	12/29/2006
Dibromomethane	EPA 8260	<1.0	ug/L	MQS	12/29/2006
4-Methyl-2-Pentanone	EPA 8260	<25	ug/L	MQS	12/29/2006
cis-1,3-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
Toluene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
trans-1,3-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
1,1,2-Trichloroethane	EPA 8260	<1.0	ug/L	MQS	12/29/2006
2-Hexanone	EPA 8260	<2.0	ug/L	MQS	12/29/2006
1,3-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	12/29/2006
Tetrachloroethene	EPA 8260	<1.0	ug/L	MQS	12/29/2006

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ANALYTICAL REPORT

GZA GeoEnvironmental, Inc.
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Ed Summerly

Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **12/22/2006**
Date Reported: **01/03/2007**
Work Order No.: **0612-00210**

Sample ID: **GZML-1/118.25-130** Sample No.: **003**

Sample Date: **12/21/2006**

Test Performed	Method	Results	Units	Tech	Analysis Date
Dibromochloromethane	EPA 8260	<1.0	ug/L	MQS	12/29/2006
1,2-Dibromoethane (EDB)	EPA 8260	<2.0	ug/L	MQS	12/29/2006
Chlorobenzene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
1,1,1,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	12/29/2006
Ethylbenzene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
m&p-Xylene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
o-Xylene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
Styrene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
Bromoform	EPA 8260	<2.0	ug/L	MQS	12/29/2006
Isopropylbenzene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
1,1,2,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	12/29/2006
1,2,3-Trichloropropane	EPA 8260	<1.0	ug/L	MQS	12/29/2006
Bromobenzene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
N-Propylbenzene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
2-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
1,3,5-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
4-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
tert-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
1,2,4-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
sec-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
p-Isopropyltoluene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
1,3-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
1,4-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
n-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
1,2-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
1,2-Dibromo-3-Chloropropane	EPA 8260	<5.0	ug/L	MQS	12/29/2006
1,2,4-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
Hexachlorobutadiene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
Naphthalene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
1,2,3-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
Surrogates:	EPA 8260				
***1,2-Dichloroethane-D4	EPA 8260	94.0	% R	MQS	12/29/2006
***Toluene-D8	EPA 8260	103	% R	MQS	12/29/2006
***4-Bromofluorobenzene	EPA 8260	101	% R	MQS	12/29/2006
Preparation	EPA 5030B	1.0	DF	MQS	12/28/2006

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ANALYTICAL REPORT

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Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **12/22/2006**
Date Reported: **01/03/2007**
Work Order No.: **0612-00210**

Sample ID: **GZML-1/170.25-182** Sample No.: **004**

Sample Date: **12/21/2006**

Test Performed	Method	Results	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260			MQS	12/29/2006
Dichlorodifluoromethane	EPA 8260	<2.0	ug/L	MQS	12/29/2006
Chloromethane	EPA 8260	<2.0	ug/L	MQS	12/29/2006
Vinyl Chloride	EPA 8260	<1.0	ug/L	MQS	12/29/2006
Bromomethane	EPA 8260	<2.0	ug/L	MQS	12/29/2006
Chloroethane	EPA 8260	<1.0	ug/L	MQS	12/29/2006
Trichlorofluoromethane	EPA 8260	<2.0	ug/L	MQS	12/29/2006
Diethylether	EPA 8260	<5.0	ug/L	MQS	12/29/2006
Acetone	EPA 8260	70	ug/L	MQS	12/29/2006
1,1-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
Dichloromethane	EPA 8260	<1.0	ug/L	MQS	12/29/2006
Methyl-Tert-Butyl-Ether	EPA 8260	<1.0	ug/L	MQS	12/29/2006
trans-1,2-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
1,1-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	12/29/2006
2-Butanone	EPA 8260	<25	ug/L	MQS	12/29/2006
2,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	12/29/2006
cis-1,2-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
Chloroform	EPA 8260	<1.0	ug/L	MQS	12/29/2006
Bromochloromethane	EPA 8260	<1.0	ug/L	MQS	12/29/2006
Tetrahydrofuran	EPA 8260	<10	ug/L	MQS	12/29/2006
1,1,1-Trichloroethane	EPA 8260	<1.0	ug/L	MQS	12/29/2006
1,1-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
Carbon Tetrachloride	EPA 8260	<1.0	ug/L	MQS	12/29/2006
1,2-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	12/29/2006
Benzene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
Trichloroethene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
1,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	12/29/2006
Bromodichloromethane	EPA 8260	<1.0	ug/L	MQS	12/29/2006
Dibromomethane	EPA 8260	<1.0	ug/L	MQS	12/29/2006
4-Methyl-2-Pentanone	EPA 8260	<25	ug/L	MQS	12/29/2006
cis-1,3-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
Toluene	EPA 8260	2.6	ug/L	MQS	12/29/2006
trans-1,3-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
1,1,2-Trichloroethane	EPA 8260	<1.0	ug/L	MQS	12/29/2006
2-Hexanone	EPA 8260	<2.0	ug/L	MQS	12/29/2006
1,3-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	12/29/2006
Tetrachloroethene	EPA 8260	2.2	ug/L	MQS	12/29/2006

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ANALYTICAL REPORT

GZA GeoEnvironmental, Inc.
140 Broadway
Providence, RI 02903

Ed Summerly

Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **12/22/2006**
Date Reported: **01/03/2007**
Work Order No.: **0612-00210**

Sample ID: **GZML-1/170.25-182** Sample No.: **004**

Sample Date: **12/21/2006**

Test Performed	Method	Results	Units	Tech	Analysis Date
Dibromochloromethane	EPA 8260	<1.0	ug/L	MQS	12/29/2006
1,2-Dibromoethane (EDB)	EPA 8260	<2.0	ug/L	MQS	12/29/2006
Chlorobenzene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
1,1,1,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	12/29/2006
Ethylbenzene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
m&p-Xylene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
o-Xylene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
Styrene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
Bromoform	EPA 8260	<2.0	ug/L	MQS	12/29/2006
Isopropylbenzene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
1,1,2,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	12/29/2006
1,2,3-Trichloropropane	EPA 8260	<1.0	ug/L	MQS	12/29/2006
Bromobenzene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
N-Propylbenzene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
2-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
1,3,5-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
4-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
tert-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
1,2,4-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
sec-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
p-Isopropyltoluene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
1,3-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
1,4-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
n-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
1,2-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
1,2-Dibromo-3-Chloropropane	EPA 8260	<5.0	ug/L	MQS	12/29/2006
1,2,4-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
Hexachlorobutadiene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
Naphthalene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
1,2,3-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
Surrogates:	EPA 8260				
***1,2-Dichloroethane-D4	EPA 8260	97.7	% R	MQS	12/29/2006
***Toluene-D8	EPA 8260	100	% R	MQS	12/29/2006
***4-Bromofluorobenzene	EPA 8260	104	% R	MQS	12/29/2006
Preparation	EPA 5030B	1.0	DF	MQS	12/28/2006

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ANALYTICAL REPORT

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Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **12/22/2006**
Date Reported: **01/03/2007**
Work Order No.: **0612-00210**

Sample ID: **GZML-1/159.25-171** Sample No.: **005**

Sample Date: **12/21/2006**

Test Performed	Method	Results	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260			MQS	12/29/2006
Dichlorodifluoromethane	EPA 8260	<2.0	ug/L	MQS	12/29/2006
Chloromethane	EPA 8260	<2.0	ug/L	MQS	12/29/2006
Vinyl Chloride	EPA 8260	<1.0	ug/L	MQS	12/29/2006
Bromomethane	EPA 8260	<2.0	ug/L	MQS	12/29/2006
Chloroethane	EPA 8260	<1.0	ug/L	MQS	12/29/2006
Trichlorofluoromethane	EPA 8260	<2.0	ug/L	MQS	12/29/2006
Diethylether	EPA 8260	<5.0	ug/L	MQS	12/29/2006
Acetone	EPA 8260	40	ug/L	MQS	12/29/2006
1,1-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
Dichloromethane	EPA 8260	<1.0	ug/L	MQS	12/29/2006
Methyl-Tert-Butyl-Ether	EPA 8260	<1.0	ug/L	MQS	12/29/2006
trans-1,2-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
1,1-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	12/29/2006
2-Butanone	EPA 8260	<25	ug/L	MQS	12/29/2006
2,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	12/29/2006
cis-1,2-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
Chloroform	EPA 8260	<1.0	ug/L	MQS	12/29/2006
Bromochloromethane	EPA 8260	<1.0	ug/L	MQS	12/29/2006
Tetrahydrofuran	EPA 8260	<10	ug/L	MQS	12/29/2006
1,1,1-Trichloroethane	EPA 8260	<1.0	ug/L	MQS	12/29/2006
1,1-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
Carbon Tetrachloride	EPA 8260	<1.0	ug/L	MQS	12/29/2006
1,2-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	12/29/2006
Benzene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
Trichloroethene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
1,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	12/29/2006
Bromodichloromethane	EPA 8260	<1.0	ug/L	MQS	12/29/2006
Dibromomethane	EPA 8260	<1.0	ug/L	MQS	12/29/2006
4-Methyl-2-Pentanone	EPA 8260	<25	ug/L	MQS	12/29/2006
cis-1,3-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
Toluene	EPA 8260	2.4	ug/L	MQS	12/29/2006
trans-1,3-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
1,1,2-Trichloroethane	EPA 8260	<1.0	ug/L	MQS	12/29/2006
2-Hexanone	EPA 8260	<2.0	ug/L	MQS	12/29/2006
1,3-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	12/29/2006
Tetrachloroethene	EPA 8260	1.5	ug/L	MQS	12/29/2006

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ANALYTICAL REPORT

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Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **12/22/2006**
Date Reported: **01/03/2007**
Work Order No.: **0612-00210**

Sample ID: **GZML-1/159.25-171** Sample No.: **005**

Sample Date: **12/21/2006**

Test Performed	Method	Results	Units	Tech	Analysis Date
Dibromochloromethane	EPA 8260	<1.0	ug/L	MQS	12/29/2006
1,2-Dibromoethane (EDB)	EPA 8260	<2.0	ug/L	MQS	12/29/2006
Chlorobenzene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
1,1,1,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	12/29/2006
Ethylbenzene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
m&p-Xylene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
o-Xylene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
Styrene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
Bromoform	EPA 8260	<2.0	ug/L	MQS	12/29/2006
Isopropylbenzene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
1,1,2,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	12/29/2006
1,2,3-Trichloropropane	EPA 8260	<1.0	ug/L	MQS	12/29/2006
Bromobenzene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
N-Propylbenzene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
2-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
1,3,5-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
4-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
tert-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
1,2,4-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
sec-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
p-Isopropyltoluene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
1,3-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
1,4-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
n-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
1,2-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
1,2-Dibromo-3-Chloropropane	EPA 8260	<5.0	ug/L	MQS	12/29/2006
1,2,4-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
Hexachlorobutadiene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
Naphthalene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
1,2,3-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
Surrogates:	EPA 8260				
***1,2-Dichloroethane-D4	EPA 8260	103	% R	MQS	12/29/2006
***Toluene-D8	EPA 8260	99.2	% R	MQS	12/29/2006
***4-Bromofluorobenzene	EPA 8260	102	% R	MQS	12/29/2006
Preparation	EPA 5030B	1.0	DF	MQS	12/28/2006

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ANALYTICAL REPORT

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Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **12/22/2006**
Date Reported: **01/03/2007**
Work Order No.: **0612-00210**

Sample ID: **GZML-1/126.25-138**
Sample No.: **006**
Sample Date: **12/21/2006**

Test Performed	Method	Results	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260			MQS	12/29/2006
Dichlorodifluoromethane	EPA 8260	<2.0	ug/L	MQS	12/29/2006
Chloromethane	EPA 8260	<2.0	ug/L	MQS	12/29/2006
Vinyl Chloride	EPA 8260	<1.0	ug/L	MQS	12/29/2006
Bromomethane	EPA 8260	<2.0	ug/L	MQS	12/29/2006
Chloroethane	EPA 8260	<1.0	ug/L	MQS	12/29/2006
Trichlorofluoromethane	EPA 8260	<2.0	ug/L	MQS	12/29/2006
Diethylether	EPA 8260	<5.0	ug/L	MQS	12/29/2006
Acetone	EPA 8260	<25	ug/L	MQS	12/29/2006
1,1-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
Dichloromethane	EPA 8260	<1.0	ug/L	MQS	12/29/2006
Methyl-Tert-Butyl-Ether	EPA 8260	<1.0	ug/L	MQS	12/29/2006
trans-1,2-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
1,1-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	12/29/2006
2-Butanone	EPA 8260	<25	ug/L	MQS	12/29/2006
2,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	12/29/2006
cis-1,2-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
Chloroform	EPA 8260	<1.0	ug/L	MQS	12/29/2006
Bromochloromethane	EPA 8260	<1.0	ug/L	MQS	12/29/2006
Tetrahydrofuran	EPA 8260	<10	ug/L	MQS	12/29/2006
1,1,1-Trichloroethane	EPA 8260	<1.0	ug/L	MQS	12/29/2006
1,1-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
Carbon Tetrachloride	EPA 8260	<1.0	ug/L	MQS	12/29/2006
1,2-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	12/29/2006
Benzene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
Trichloroethene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
1,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	12/29/2006
Bromodichloromethane	EPA 8260	<1.0	ug/L	MQS	12/29/2006
Dibromomethane	EPA 8260	<1.0	ug/L	MQS	12/29/2006
4-Methyl-2-Pentanone	EPA 8260	<25	ug/L	MQS	12/29/2006
cis-1,3-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
Toluene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
trans-1,3-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
1,1,2-Trichloroethane	EPA 8260	<1.0	ug/L	MQS	12/29/2006
2-Hexanone	EPA 8260	<2.0	ug/L	MQS	12/29/2006
1,3-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	12/29/2006
Tetrachloroethene	EPA 8260	<1.0	ug/L	MQS	12/29/2006

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ANALYTICAL REPORT

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Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **12/22/2006**
Date Reported: **01/03/2007**
Work Order No.: **0612-00210**

Sample ID: **GZML-1/126.25-138** Sample No.: **006**

Sample Date: **12/21/2006**

Test Performed	Method	Results	Units	Tech	Analysis Date
Dibromochloromethane	EPA 8260	<1.0	ug/L	MQS	12/29/2006
1,2-Dibromoethane (EDB)	EPA 8260	<2.0	ug/L	MQS	12/29/2006
Chlorobenzene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
1,1,1,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	12/29/2006
Ethylbenzene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
m&p-Xylene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
o-Xylene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
Styrene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
Bromoform	EPA 8260	<2.0	ug/L	MQS	12/29/2006
Isopropylbenzene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
1,1,2,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	12/29/2006
1,2,3-Trichloropropane	EPA 8260	<1.0	ug/L	MQS	12/29/2006
Bromobenzene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
N-Propylbenzene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
2-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
1,3,5-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
4-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
tert-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
1,2,4-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
sec-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
p-Isopropyltoluene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
1,3-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
1,4-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
n-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
1,2-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
1,2-Dibromo-3-Chloropropane	EPA 8260	<5.0	ug/L	MQS	12/29/2006
1,2,4-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
Hexachlorobutadiene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
Naphthalene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
1,2,3-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
Surrogates:	EPA 8260				
***1,2-Dichloroethane-D4	EPA 8260	93.6	% R	MQS	12/29/2006
***Toluene-D8	EPA 8260	98.6	% R	MQS	12/29/2006
***4-Bromofluorobenzene	EPA 8260	103	% R	MQS	12/29/2006
Preparation	EPA 5030B	1.0	DF	MQS	12/28/2006

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ANALYTICAL REPORT

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Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **12/22/2006**
Date Reported: **01/03/2007**
Work Order No.: **0612-00210**

Sample ID: **GZML-1/137.25-149** Sample No.: **007**

Sample Date: **12/20/2006**

Test Performed	Method	Results	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260			MQS	12/29/2006
Dichlorodifluoromethane	EPA 8260	<2.0	ug/L	MQS	12/29/2006
Chloromethane	EPA 8260	<2.0	ug/L	MQS	12/29/2006
Vinyl Chloride	EPA 8260	<1.0	ug/L	MQS	12/29/2006
Bromomethane	EPA 8260	<2.0	ug/L	MQS	12/29/2006
Chloroethane	EPA 8260	<1.0	ug/L	MQS	12/29/2006
Trichlorofluoromethane	EPA 8260	<2.0	ug/L	MQS	12/29/2006
Diethylether	EPA 8260	<5.0	ug/L	MQS	12/29/2006
Acetone	EPA 8260	<25	ug/L	MQS	12/29/2006
1,1-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
Dichloromethane	EPA 8260	<1.0	ug/L	MQS	12/29/2006
Methyl-Tert-Butyl-Ether	EPA 8260	<1.0	ug/L	MQS	12/29/2006
trans-1,2-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
1,1-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	12/29/2006
2-Butanone	EPA 8260	<25	ug/L	MQS	12/29/2006
2,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	12/29/2006
cis-1,2-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
Chloroform	EPA 8260	<1.0	ug/L	MQS	12/29/2006
Bromochloromethane	EPA 8260	<1.0	ug/L	MQS	12/29/2006
Tetrahydrofuran	EPA 8260	<10	ug/L	MQS	12/29/2006
1,1,1-Trichloroethane	EPA 8260	<1.0	ug/L	MQS	12/29/2006
1,1-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
Carbon Tetrachloride	EPA 8260	<1.0	ug/L	MQS	12/29/2006
1,2-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	12/29/2006
Benzene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
Trichloroethene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
1,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	12/29/2006
Bromodichloromethane	EPA 8260	<1.0	ug/L	MQS	12/29/2006
Dibromomethane	EPA 8260	<1.0	ug/L	MQS	12/29/2006
4-Methyl-2-Pentanone	EPA 8260	<25	ug/L	MQS	12/29/2006
cis-1,3-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
Toluene	EPA 8260	1.1	ug/L	MQS	12/29/2006
trans-1,3-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
1,1,2-Trichloroethane	EPA 8260	<1.0	ug/L	MQS	12/29/2006
2-Hexanone	EPA 8260	<2.0	ug/L	MQS	12/29/2006
1,3-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	12/29/2006
Tetrachloroethene	EPA 8260	<1.0	ug/L	MQS	12/29/2006

GZA GeoEnvironmental, Inc.
106 South Street
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(781) 278-4700

ANALYTICAL REPORT

GZA GeoEnvironmental, Inc.
140 Broadway
Providence, RI 02903

Ed Summerly

Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **12/22/2006**
Date Reported: **01/03/2007**
Work Order No.: **0612-00210**

Sample ID: **GZML-1/137.25-149** Sample No.: **007**

Sample Date: **12/20/2006**

Test Performed	Method	Results	Units	Tech	Analysis Date
Dibromochloromethane	EPA 8260	<1.0	ug/L	MQS	12/29/2006
1,2-Dibromoethane (EDB)	EPA 8260	<2.0	ug/L	MQS	12/29/2006
Chlorobenzene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
1,1,1,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	12/29/2006
Ethylbenzene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
m&p-Xylene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
o-Xylene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
Styrene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
Bromoform	EPA 8260	<2.0	ug/L	MQS	12/29/2006
Isopropylbenzene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
1,1,2,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	12/29/2006
1,2,3-Trichloropropane	EPA 8260	<1.0	ug/L	MQS	12/29/2006
Bromobenzene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
N-Propylbenzene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
2-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
1,3,5-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
4-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
tert-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
1,2,4-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
sec-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
p-Isopropyltoluene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
1,3-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
1,4-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
n-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
1,2-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
1,2-Dibromo-3-Chloropropane	EPA 8260	<5.0	ug/L	MQS	12/29/2006
1,2,4-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
Hexachlorobutadiene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
Naphthalene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
1,2,3-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
Surrogates:	EPA 8260				
***1,2-Dichloroethane-D4	EPA 8260	94.3	% R	MQS	12/29/2006
***Toluene-D8	EPA 8260	99.4	% R	MQS	12/29/2006
***4-Bromofluorobenzene	EPA 8260	102	% R	MQS	12/29/2006
Preparation	EPA 5030B	1.0	DF	MQS	12/28/2006

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ANALYTICAL REPORT

GZA GeoEnvironmental, Inc.
140 Broadway
Providence, RI 02903

Ed Summerly

Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **12/22/2006**
Date Reported: **01/03/2007**
Work Order No.: **0612-00210**

Sample ID: **GZML-1/148.25-160** Sample No.: **008**

Sample Date: **12/21/2006**

Test Performed	Method	Results	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260			MQS	12/29/2006
Dichlorodifluoromethane	EPA 8260	<2.0	ug/L	MQS	12/29/2006
Chloromethane	EPA 8260	<2.0	ug/L	MQS	12/29/2006
Vinyl Chloride	EPA 8260	<1.0	ug/L	MQS	12/29/2006
Bromomethane	EPA 8260	<2.0	ug/L	MQS	12/29/2006
Chloroethane	EPA 8260	<1.0	ug/L	MQS	12/29/2006
Trichlorofluoromethane	EPA 8260	<2.0	ug/L	MQS	12/29/2006
Diethylether	EPA 8260	<5.0	ug/L	MQS	12/29/2006
Acetone	EPA 8260	<25	ug/L	MQS	12/29/2006
1,1-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
Dichloromethane	EPA 8260	<1.0	ug/L	MQS	12/29/2006
Methyl-Tert-Butyl-Ether	EPA 8260	<1.0	ug/L	MQS	12/29/2006
trans-1,2-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
1,1-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	12/29/2006
2-Butanone	EPA 8260	<25	ug/L	MQS	12/29/2006
2,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	12/29/2006
cis-1,2-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
Chloroform	EPA 8260	<1.0	ug/L	MQS	12/29/2006
Bromochloromethane	EPA 8260	<1.0	ug/L	MQS	12/29/2006
Tetrahydrofuran	EPA 8260	<10	ug/L	MQS	12/29/2006
1,1,1-Trichloroethane	EPA 8260	<1.0	ug/L	MQS	12/29/2006
1,1-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
Carbon Tetrachloride	EPA 8260	<1.0	ug/L	MQS	12/29/2006
1,2-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	12/29/2006
Benzene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
Trichloroethene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
1,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	12/29/2006
Bromodichloromethane	EPA 8260	<1.0	ug/L	MQS	12/29/2006
Dibromomethane	EPA 8260	<1.0	ug/L	MQS	12/29/2006
4-Methyl-2-Pentanone	EPA 8260	<25	ug/L	MQS	12/29/2006
cis-1,3-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
Toluene	EPA 8260	1.8	ug/L	MQS	12/29/2006
trans-1,3-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
1,1,2-Trichloroethane	EPA 8260	<1.0	ug/L	MQS	12/29/2006
2-Hexanone	EPA 8260	<2.0	ug/L	MQS	12/29/2006
1,3-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	12/29/2006
Tetrachloroethene	EPA 8260	1.0	ug/L	MQS	12/29/2006

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ANALYTICAL REPORT

GZA GeoEnvironmental, Inc.
140 Broadway
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Ed Summerly

Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **12/22/2006**
Date Reported: **01/03/2007**
Work Order No.: **0612-00210**

Sample ID: **GZML-1/148.25-160** Sample No.: **008**

Sample Date: **12/21/2006**

Test Performed	Method	Results	Units	Tech	Analysis Date
Dibromochloromethane	EPA 8260	<1.0	ug/L	MQS	12/29/2006
1,2-Dibromoethane (EDB)	EPA 8260	<2.0	ug/L	MQS	12/29/2006
Chlorobenzene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
1,1,1,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	12/29/2006
Ethylbenzene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
m&p-Xylene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
o-Xylene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
Styrene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
Bromoform	EPA 8260	<2.0	ug/L	MQS	12/29/2006
Isopropylbenzene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
1,1,2,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	12/29/2006
1,2,3-Trichloropropane	EPA 8260	<1.0	ug/L	MQS	12/29/2006
Bromobenzene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
N-Propylbenzene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
2-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
1,3,5-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
4-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
tert-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
1,2,4-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
sec-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
p-Isopropyltoluene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
1,3-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
1,4-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
n-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
1,2-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
1,2-Dibromo-3-Chloropropane	EPA 8260	<5.0	ug/L	MQS	12/29/2006
1,2,4-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
Hexachlorobutadiene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
Naphthalene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
1,2,3-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	12/29/2006
Surrogates:	EPA 8260				
***1,2-Dichloroethane-D4	EPA 8260	93.4	% R	MQS	12/29/2006
***Toluene-D8	EPA 8260	98.8	% R	MQS	12/29/2006
***4-Bromofluorobenzene	EPA 8260	103	% R	MQS	12/29/2006
Preparation	EPA 5030B	1.0	DF	MQS	12/28/2006

GZA GeoEnvironmental, Inc.
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EPA Method 8260 / 524.2 Aqueous Method Blank (MB) and Laboratory Control Sample (LCS) Data

Method Blank

Date Analyzed:	12/28/06	
Volatile Organics	**Conc. ug/L**	**Acceptance Limit**
dichlorodifluoromethane	< 1.0	< 1.0
chloromethane	< 1.0	< 1.0
vinyl chloride	< 1.0	< 1.0
bromomethane	< 1.0	< 1.0
chloroethane	< 1.0	< 1.0
trichlorofluoromethane	< 1.0	< 1.0
diethyl ether	< 2.0	< 2.0
acrolein	< 25	< 25
acetone	< 0.5	< 0.5
1,1-dichloroethene	< 1.0	< 1.0
FREON-113	< 1.0	< 1.0
iodomethane	< 0.5	< 0.5
carbon disulfide	< 1.0	< 1.0
dichloromethane	< 1.0	< 1.0
tert-butyl alcohol (TBA)	< 25	< 25
acrylonitrile	< 1.0	< 1.0
methyl-tert-butyl-ether	< 1.0	< 1.0
trans-1,2-dichloroethene	< 0.5	< 0.5
1,1-dichloroethane	< 0.5	< 0.5
di-isopropyl ether (DIPE)	< 1.0	< 1.0
ethyl tert-butyl ether (EtBE)	< 1.0	< 1.0
vinyl acetate	< 1.0	< 1.0
2-butanone	< 25	< 25
2,2-dichloropropane	< 0.5	< 0.5
cis-1,2-dichloroethene	< 0.5	< 0.5
chloroform	< 0.5	< 0.5
bromochloromethane	< 0.5	< 0.5
tetrahydrafuran	< 5.0	< 5.0
1,1,1-trichloroethane	< 0.5	< 0.5
1,1-dichloropropene	< 0.5	< 5.0
carbon tetrachloride	< 0.5	< 0.5
1,2-dichloroethane	< 0.5	< 0.5
benzene	< 0.5	< 0.5
tert-amyl methyl ether (TAME)	< 1.0	< 1.0
trichloroethene	< 0.5	< 0.5
1,2-dichloropropane	< 0.5	< 0.5
bromodichloromethane	< 0.5	< 0.5
2-chloroethyl vinyl ether	< 1.0	< 1.0
1,4-Dioxane	< 50	< 50
dibromomethane	< 0.5	< 0.5
4-methyl-2-pentanone	< 5.0	< 5.0
cis-1,3-dichloropropene	< 0.5	< 0.5
toluene	< 0.5	< 0.5
trans-1,3-dichloropropene	< 0.5	< 0.5
1,1,2-trichloroethane	< 1.0	< 1.0
2-hexanone	< 5.0	< 5.0
1,3-dichloropropane	< 0.5	< 0.5
tetrachloroethene	< 0.5	< 0.5
dibromochloromethane	< 0.5	< 0.5
1,2-dibromoethane (EDB)	< 0.5	< 0.5
chlorobenzene	< 0.5	< 0.5
1,1,1,2-tetrachloroethane	< 0.5	< 0.5
ethylbenzene	< 0.5	< 0.5
1,1,2,2-tetrachloroethane	< 0.5	< 0.5
m&p-xylene	< 1.0	< 1.0
o-xylene	< 0.5	< 0.5
styrene	< 0.5	< 0.5
bromoform	< 0.5	< 0.5
isopropylbenzene	< 0.5	< 0.5
1,2,3-trichloropropane	< 0.5	< 0.5
bromobenzene	< 0.5	< 0.5
n-propylbenzene	< 0.5	< 0.5
2-chlorotoluene	< 0.5	< 0.5
1,3,5-trimethylbenzene	< 0.5	< 0.5
trans-1,4-dichloro-2-butene	< 1.0	< 1.0
4-chlorotoluene	< 0.5	< 0.5
tert-butyl-benzene	< 0.5	< 0.5
1,2,4-trimethylbenzene	< 0.5	< 0.5
sec-butyl-benzene	< 0.5	< 0.5
p-isopropyltoluene	< 1.0	< 1.0
1,3-dichlorobenzene	< 0.5	< 0.5
1,4-dichlorobenzene	< 0.5	< 0.5
n-butylbenzene	< 0.5	< 0.5
1,2-dichlorobenzene	< 0.5	< 0.5
1,2-dibromo-3-chloropropane	< 1.0	< 1.0
1,2,4-trichlorobenzene	< 0.5	< 0.5
hexachlorobutadiene	< 0.5	< 0.5
naphthalene	< 0.5	< 0.5
1,2,3-trichlorobenzene	< 0.5	< 0.5

Laboratory Control Sample

Date Analyzed:	12/28/06		
Spike Concentration = 20ug/L	**% Recovery**	**Acceptance Limits**	**Verdict**
dichlorodifluoromethane	178	70-130	out
chloromethane	155	70-130	out
vinyl chloride	139	70-130	out
bromomethane	126	70-130	ok
chloroethane	133	70-130	out
trichlorofluoromethane	132	70-130	out
diethyl ether	117	70-130	ok
acrolein	70.0	70-130	ok
acetone	122	70-130	ok
1,1-dichloroethene	121	70-130	ok
FREON-113	113	70-130	ok
iodomethane	109	70-130	ok
carbon disulfide	121	70-130	ok
dichloromethane	105	70-130	ok
tert-butyl alcohol (TBA)	121	70-130	ok
acrylonitrile	125	70-130	ok
methyl-tert-butyl-ether	111	70-130	ok
trans-1,2-dichloroethene	116	70-130	ok
1,1-dichloroethane	125	70-130	ok
di-isopropyl ether (DIPE)	123	70-130	ok
ethyl tert-butyl ether (EtBE)	117	70-130	ok
vinyl acetate	118	70-130	ok
2-butanone	102	70-130	ok
2,2-dichloropropane	111	70-130	ok
cis-1,2-dichloroethene	111	70-130	ok
chloroform	106	70-130	ok
bromochloromethane	104	70-130	ok
tetrahydrafuran	95.4	70-130	ok
1,1,1-trichloroethane	115	70-130	ok
1,1-dichloropropene	107	70-130	ok
carbon tetrachloride	116	70-130	ok
1,2-dichloroethane	108	70-130	ok
benzene	103	70-130	ok
tert-amyl methyl ether (TAME)	97.3	70-130	ok
trichloroethene	112	70-130	ok
1,2-dichloropropane	121	70-130	ok
bromodichloromethane	109	70-130	ok
2-chloroethyl vinyl ether	121	70-130	ok
1,4-Dioxane	106	70-130	ok
dibromomethane	112	70-130	ok
4-methyl-2-pentanone	117	70-130	ok
cis-1,3-dichloropropene	108	70-130	ok
toluene	117	70-130	ok
trans-1,3-dichloropropene	100	70-130	ok
1,1,2-trichloroethane	105	70-130	ok
2-hexanone	103	70-130	ok
1,3-dichloropropane	99.3	70-130	ok
tetrachloroethene	108	70-130	ok
dibromochloromethane	101	70-130	ok
1,2-dibromoethane (EDB)	107	70-130	ok
chlorobenzene	109	70-130	ok
1,1,1,2-tetrachloroethane	102	70-130	ok
ethylbenzene	111	70-130	ok
1,1,2,2-tetrachloroethane	106	70-130	ok
m&p-xylene	102	70-130	ok
o-xylene	107	70-130	ok
styrene	110	70-130	ok
bromoform	104	70-130	ok
isopropylbenzene	114	70-130	ok
1,2,3-trichloropropane	110	70-130	ok
bromobenzene	99.9	70-130	ok
n-propylbenzene	111	70-130	ok
2-chlorotoluene	105	70-130	ok
1,3,5-trimethylbenzene	114	70-130	ok
trans-1,4-dichloro-2-butene	104	70-130	ok
4-chlorotoluene	107	70-130	ok
tert-butyl-benzene	111	70-130	ok
1,2,4-trimethylbenzene	113	70-130	ok
sec-butyl-benzene	114	70-130	ok
p-isopropyltoluene	115	70-130	ok
1,3-dichlorobenzene	103	70-130	ok
1,4-dichlorobenzene	102	70-130	ok
n-butylbenzene	110	70-130	ok
1,2-dichlorobenzene	99.6	70-130	ok
1,2-dibromo-3-chloropropane	95.5	70-130	ok
1,2,4-trichlorobenzene	109	70-130	ok
hexachlorobutadiene	114	70-130	ok
naphthalene	95.6	70-130	ok
1,2,3-trichlorobenzene	105	70-130	ok

SMF criteria allows 5 compounds to be outside acceptance limits

Surrogates:	Recovery (%)	Acceptance Limits
DIBROMOFLUOROMETHANE	105	70-130
1,2-DICHLOROETHANE-D4	104	70-130
TOLUENE-D8	99.3	70-130
4-BROMOFLUOROBENZENE	103	70-130
1,2-DICHLOROBENZENE-D4	97.1	70-130

Surrogates:	Recovery (%)	Acceptance Limits	Verdict
DIBROMOFLUOROMETHANE	110	70-130	ok
1,2-DICHLOROETHANE-D4	103	70-130	ok
TOLUENE-D8	109	70-130	ok
4-BROMOFLUOROBENZENE	104	70-130	ok
1,2-DICHLOROBENZENE-D4	94.4	70-130	ok

Instrument: HP GC/MS "A"

WHITE COPY - Original YELLOW COPY - Lab Files PINK COPY - Project Manager

W.O. # 0612-00210 (for lab use only)

CHAIN-OF-CUSTODY RECORD

Sample I.D.	Date/Time Sampled (Very Important)	Matrix (A=Air, S=Soil, GW=Ground W., SW=Surface W., WW=Waste W., DW=Drinking W., Other (specify))	WW ONLY: □pH □Cond.	GC Screen (VOA)	□524.2 □502.2	624	□601 □602	625	Formaldehyde	ANALYSIS REQUIRED: 8260	8021	8021 - "8010" List	8021 "8020" List	8270 □Full □PAH □BN	8082-PCBs Only	8081 - Pest Only	TPH-GC (Mod. 8100)	TPH-GC w/FING	EPH (MA DEP)	VPH (MA DEP)	TCLP (Spec. Below)	Filtering (✓ if requested)	Metals □PPM-13 □R-8	Metals (List Below)	Total # of Cont.	Note #
GZML1 / 190.2 - 200.2	12/20/06	1025 GW								X														2	
GZML1 / 181 - 192.75	12/20/06	1415								X														2	
GZML1 / 118.25 - 130	12/21/06	1410								X														2	
GZML1 / 170.25 - 182	12/21/06	0800								X														2	
GZML1 / 159.25 - 171	12/21/06	0905								X														2	
GZML1 / 126.25 - 138		1330								X														2	
GZML1 / 137.25 - 149		1040								X														2	
GZML1 / 148.25 - 160										X														2	
PRESERVATIVE (Cl - HCl, M=MeOH, N - HNO3, S - H2SO4, Na - NaOH, O - Other)*																									
CONTAINER TYPE (P-Plastic, G-Glass, V-Vial, O-Other)*																									

RELINQUISHED BY: DATE/TIME: 12/21/06 RECEIVED BY: CUSTODY SEAL

RELINQUISHED BY: CS DATE/TIME: 12/22/06 RECEIVED BY: 0945 Bill Burcam

RELINQUISHED BY: Bill Burcam 12/22/06 1130 DATE/TIME: WALK IN RECEIVED BY:

WALK IN

NOTES: Preservatives, special reporting limits, known contamination, additional testing parameters, etc.:

CA 0613

PROJECT MANAGER: ED SUMMERLY EXT: Lisa Salido 12/26/06 0900

LAB USE: TEMP. OF COOLER 3.7 °C

TURNAROUND TIME: (Standard) Rush ___ Days, Approved by: ___

DATA REPORT ☑ PDF (Adobe) ☐ ASCII ☐ EXCEL Specify State ___

12/26 LG GZA FILE NO: 03.0032795.12 P.O. NO. 11495 12/22/06 LG

PROJECT CHARBERT / NFA

LOCATION ALTON, R.I.

COLLECTOR(S) MARK DALPE SHEET 1 OF 1

GZA GeoEnvironmental, Inc.
Engineers and Scientists
106 South Street
Hopkinton, MA 01748
(508) 435-9244
FAX (508) 435-9912

ACCREDITED IN ACCORDANCE WITH

GZAP003

GZA GeoEnvironmental, Inc.
106 South Street
Hopkinton, MA 01748
(781) 278-4700

Laboratory Identification Numbers:
MA and ME: **MA092** NH: **2028**
CT: **PH0579** RI: **LAO00236**
NELAC - NYS DOH: **11063**

ANALYTICAL REPORT

GZA GeoEnvironmental, Inc.
140 Broadway
Providence, RI 02903

Ed Summerly

Project No.: **03.0032795.12**
Work Order No.: **0701-00004**
Date Received: **01/02/2007**
Date Reported: **01/05/2007**

SAMPLE INFORMATION

Date Sampled	Matrix	Laboratory ID	Sample ID
12/29/2006	Aqueous	0701-00004 001	GZML-2/168.4-180.2
12/29/2006	Aqueous	0701-00004 002	GZML-2/179.7-191.5
12/28/2006	Aqueous	0701-00004 003	GZML-2/191-201

GZA GeoEnvironmental, Inc.
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ANALYTICAL REPORT

GZA GeoEnvironmental, Inc.
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Ed Summerly

Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **01/02/2007**
Date Reported: **01/05/2007**
Work Order No.: **0701-00004**

PROJECT NARRATIVE:

1. Sample Receipt

The samples were received on 01/2/07 via _x_GZA courier, __EC, __FEDEX, or ___hand delivered. The temperature of the __temperature blank/_x_cooler air, was 3.9 degrees C. The temperature requirement for most analyses is above freezing to 6 degrees C. The samples were received intact for all requested analyses.

The chain of custody indicates that the samples, when required, were chemically preserved in accordance with the method they reference.

2. EPA Method 8260 - VOCs

Attach QC 8260 01/03/07 S - Aqueous

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Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **01/02/2007**
Date Reported: **01/05/2007**
Work Order No.: **0701-00004**

Data Authorized By: _____

NELAC certification, as indicated by the NELAC Lab ID Number, is per analyte. For a complete list of NELAC validated analytes, please contact the laboratory.

Abbreviations:
% R = % Recovery
DF = Dilution Factor
DFS = Dilution Factor Solids
DO = Diluted Out

Method Key:
Method 8260: The current version of the method is 8260B.
Method 8021: The current version of the method is 8021B.
Method 8270: The current version of the method is 8270C.
Method 6010: The current version of the method is 6010B.

Please note that the laboratory signed copy of the chain of custody record is an integral part of the data report.

Soil data is reported on a dry weight basis unless otherwise specified.

Matrix Spike / Matrix Spike Duplicate sets are performed as per method and are reported at the end of the analytical report if assigned on the Chain of Custody.

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ANALYTICAL REPORT

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Ed Summerly

Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **01/02/2007**
Date Reported: **01/05/2007**
Work Order No.: **0701-00004**

Sample ID: **GZML-2/168.4-180.2**
Sample No.: **001**
Sample Date: **12/29/2006**

Test Performed	Method	Results	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260			MQS	01/03/2007
Dichlorodifluoromethane	EPA 8260	<2.0	ug/L	MQS	01/03/2007
Chloromethane	EPA 8260	<2.0	ug/L	MQS	01/03/2007
Vinyl Chloride	EPA 8260	<1.0	ug/L	MQS	01/03/2007
Bromomethane	EPA 8260	<2.0	ug/L	MQS	01/03/2007
Chloroethane	EPA 8260	<1.0	ug/L	MQS	01/03/2007
Trichlorofluoromethane	EPA 8260	<2.0	ug/L	MQS	01/03/2007
Diethylether	EPA 8260	<5.0	ug/L	MQS	01/03/2007
Acetone	EPA 8260	<25	ug/L	MQS	01/03/2007
1,1-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	01/03/2007
Dichloromethane	EPA 8260	<1.0	ug/L	MQS	01/03/2007
Methyl-Tert-Butyl-Ether	EPA 8260	<1.0	ug/L	MQS	01/03/2007
trans-1,2-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	01/03/2007
1,1-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	01/03/2007
2-Butanone	EPA 8260	<25	ug/L	MQS	01/03/2007
2,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	01/03/2007
cis-1,2-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	01/03/2007
Chloroform	EPA 8260	<1.0	ug/L	MQS	01/03/2007
Bromochloromethane	EPA 8260	<1.0	ug/L	MQS	01/03/2007
Tetrahydrofuran	EPA 8260	<10	ug/L	MQS	01/03/2007
1,1,1-Trichloroethane	EPA 8260	<1.0	ug/L	MQS	01/03/2007
1,1-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	01/03/2007
Carbon Tetrachloride	EPA 8260	<1.0	ug/L	MQS	01/03/2007
1,2-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	01/03/2007
Benzene	EPA 8260	<1.0	ug/L	MQS	01/03/2007
Trichloroethene	EPA 8260	<1.0	ug/L	MQS	01/03/2007
1,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	01/03/2007
Bromodichloromethane	EPA 8260	<1.0	ug/L	MQS	01/03/2007
Dibromomethane	EPA 8260	<1.0	ug/L	MQS	01/03/2007
4-Methyl-2-Pentanone	EPA 8260	<25	ug/L	MQS	01/03/2007
cis-1,3-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	01/03/2007
Toluene	EPA 8260	3.3	ug/L	MQS	01/03/2007
trans-1,3-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	01/03/2007
1,1,2-Trichloroethane	EPA 8260	<1.0	ug/L	MQS	01/03/2007
2-Hexanone	EPA 8260	<2.0	ug/L	MQS	01/03/2007
1,3-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	01/03/2007
Tetrachloroethene	EPA 8260	<1.0	ug/L	MQS	01/03/2007

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ANALYTICAL REPORT

GZA GeoEnvironmental, Inc.
140 Broadway
Providence, RI 02903

Ed Summerly

Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **01/02/2007**
Date Reported: **01/05/2007**
Work Order No.: **0701-00004**

Sample ID: **GZML-2/168.4-180.2** Sample No.: **001**

Sample Date: **12/29/2006**

Test Performed	Method	Results	Units	Tech	Analysis Date
Dibromochloromethane	EPA 8260	<1.0	ug/L	MQS	01/03/2007
1,2-Dibromoethane (EDB)	EPA 8260	<2.0	ug/L	MQS	01/03/2007
Chlorobenzene	EPA 8260	<1.0	ug/L	MQS	01/03/2007
1,1,1,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	01/03/2007
Ethylbenzene	EPA 8260	<1.0	ug/L	MQS	01/03/2007
m&p-Xylene	EPA 8260	<1.0	ug/L	MQS	01/03/2007
o-Xylene	EPA 8260	<1.0	ug/L	MQS	01/03/2007
Styrene	EPA 8260	<1.0	ug/L	MQS	01/03/2007
Bromoform	EPA 8260	<2.0	ug/L	MQS	01/03/2007
Isopropylbenzene	EPA 8260	<1.0	ug/L	MQS	01/03/2007
1,1,2,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	01/03/2007
1,2,3-Trichloropropane	EPA 8260	<1.0	ug/L	MQS	01/03/2007
Bromobenzene	EPA 8260	<1.0	ug/L	MQS	01/03/2007
N-Propylbenzene	EPA 8260	<1.0	ug/L	MQS	01/03/2007
2-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	01/03/2007
1,3,5-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	01/03/2007
4-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	01/03/2007
tert-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	01/03/2007
1,2,4-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	01/03/2007
sec-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	01/03/2007
p-Isopropyltoluene	EPA 8260	<1.0	ug/L	MQS	01/03/2007
1,3-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	01/03/2007
1,4-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	01/03/2007
n-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	01/03/2007
1,2-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	01/03/2007
1,2-Dibromo-3-Chloropropane	EPA 8260	<5.0	ug/L	MQS	01/03/2007
1,2,4-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	01/03/2007
Hexachlorobutadiene	EPA 8260	<1.0	ug/L	MQS	01/03/2007
Naphthalene	EPA 8260	3.1	ug/L	MQS	01/03/2007
1,2,3-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	01/03/2007
Surrogates:	EPA 8260				
***1,2-Dichloroethane-D4	EPA 8260	105	% R	MQS	01/03/2007
***Toluene-D8	EPA 8260	108	% R	MQS	01/03/2007
***4-Bromofluorobenzene	EPA 8260	115	% R	MQS	01/03/2007
Preparation	EPA 5030B	1.0	DF	MQS	01/03/2007

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ANALYTICAL REPORT

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140 Broadway
Providence, RI 02903

Ed Summerly

Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **01/02/2007**
Date Reported: **01/05/2007**
Work Order No.: **0701-00004**

Sample ID: **GZML-2/179.7-191.5** Sample No.: **002**

Sample Date: **12/29/2006**

Test Performed	Method	Results	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260			MQS	01/03/2007
Dichlorodifluoromethane	EPA 8260	<2.0	ug/L	MQS	01/03/2007
Chloromethane	EPA 8260	<2.0	ug/L	MQS	01/03/2007
Vinyl Chloride	EPA 8260	<1.0	ug/L	MQS	01/03/2007
Bromomethane	EPA 8260	<2.0	ug/L	MQS	01/03/2007
Chloroethane	EPA 8260	<1.0	ug/L	MQS	01/03/2007
Trichlorofluoromethane	EPA 8260	<2.0	ug/L	MQS	01/03/2007
Diethylether	EPA 8260	<5.0	ug/L	MQS	01/03/2007
Acetone	EPA 8260	<25	ug/L	MQS	01/03/2007
1,1-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	01/03/2007
Dichloromethane	EPA 8260	<1.0	ug/L	MQS	01/03/2007
Methyl-Tert-Butyl-Ether	EPA 8260	<1.0	ug/L	MQS	01/03/2007
trans-1,2-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	01/03/2007
1,1-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	01/03/2007
2-Butanone	EPA 8260	<25	ug/L	MQS	01/03/2007
2,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	01/03/2007
cis-1,2-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	01/03/2007
Chloroform	EPA 8260	<1.0	ug/L	MQS	01/03/2007
Bromochloromethane	EPA 8260	<1.0	ug/L	MQS	01/03/2007
Tetrahydrofuran	EPA 8260	<10	ug/L	MQS	01/03/2007
1,1,1-Trichloroethane	EPA 8260	<1.0	ug/L	MQS	01/03/2007
1,1-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	01/03/2007
Carbon Tetrachloride	EPA 8260	<1.0	ug/L	MQS	01/03/2007
1,2-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	01/03/2007
Benzene	EPA 8260	<1.0	ug/L	MQS	01/03/2007
Trichloroethene	EPA 8260	<1.0	ug/L	MQS	01/03/2007
1,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	01/03/2007
Bromodichloromethane	EPA 8260	<1.0	ug/L	MQS	01/03/2007
Dibromomethane	EPA 8260	<1.0	ug/L	MQS	01/03/2007
4-Methyl-2-Pentanone	EPA 8260	<25	ug/L	MQS	01/03/2007
cis-1,3-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	01/03/2007
Toluene	EPA 8260	<1.0	ug/L	MQS	01/03/2007
trans-1,3-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	01/03/2007
1,1,2-Trichloroethane	EPA 8260	<1.0	ug/L	MQS	01/03/2007
2-Hexanone	EPA 8260	<2.0	ug/L	MQS	01/03/2007
1,3-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	01/03/2007
Tetrachloroethene	EPA 8260	<1.0	ug/L	MQS	01/03/2007

GZA GeoEnvironmental, Inc.
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ANALYTICAL REPORT

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140 Broadway
Providence, RI 02903

Ed Summerly

Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **01/02/2007**
Date Reported: **01/05/2007**
Work Order No.: **0701-00004**

Sample ID: **GZML-2/179.7-191.5** Sample No.: **002**

Sample Date: **12/29/2006**

Test Performed	Method	Results	Units	Tech	Analysis Date
Dibromochloromethane	EPA 8260	<1.0	ug/L	MQS	01/03/2007
1,2-Dibromoethane (EDB)	EPA 8260	<2.0	ug/L	MQS	01/03/2007
Chlorobenzene	EPA 8260	<1.0	ug/L	MQS	01/03/2007
1,1,1,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	01/03/2007
Ethylbenzene	EPA 8260	<1.0	ug/L	MQS	01/03/2007
m&p-Xylene	EPA 8260	<1.0	ug/L	MQS	01/03/2007
o-Xylene	EPA 8260	<1.0	ug/L	MQS	01/03/2007
Styrene	EPA 8260	<1.0	ug/L	MQS	01/03/2007
Bromoform	EPA 8260	<2.0	ug/L	MQS	01/03/2007
Isopropylbenzene	EPA 8260	<1.0	ug/L	MQS	01/03/2007
1,1,2,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	01/03/2007
1,2,3-Trichloropropane	EPA 8260	<1.0	ug/L	MQS	01/03/2007
Bromobenzene	EPA 8260	<1.0	ug/L	MQS	01/03/2007
N-Propylbenzene	EPA 8260	<1.0	ug/L	MQS	01/03/2007
2-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	01/03/2007
1,3,5-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	01/03/2007
4-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	01/03/2007
tert-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	01/03/2007
1,2,4-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	01/03/2007
sec-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	01/03/2007
p-Isopropyltoluene	EPA 8260	<1.0	ug/L	MQS	01/03/2007
1,3-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	01/03/2007
1,4-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	01/03/2007
n-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	01/03/2007
1,2-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	01/03/2007
1,2-Dibromo-3-Chloropropane	EPA 8260	<5.0	ug/L	MQS	01/03/2007
1,2,4-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	01/03/2007
Hexachlorobutadiene	EPA 8260	<1.0	ug/L	MQS	01/03/2007
Naphthalene	EPA 8260	<1.0	ug/L	MQS	01/03/2007
1,2,3-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	01/03/2007
Surrogates:	EPA 8260				
***1,2-Dichloroethane-D4	EPA 8260	102	% R	MQS	01/03/2007
***Toluene-D8	EPA 8260	108	% R	MQS	01/03/2007
***4-Bromofluorobenzene	EPA 8260	116	% R	MQS	01/03/2007
Preparation	EPA 5030B	1.0	DF	MQS	01/03/2007

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ANALYTICAL REPORT

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Ed Summerly

Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **01/02/2007**
Date Reported: **01/05/2007**
Work Order No.: **0701-00004**

Sample ID: **GZML-2/191-201** Sample No.: **003**

Sample Date: **12/28/2006**

Test Performed	Method	Results	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260			MQS	01/03/2007
Dichlorodifluoromethane	EPA 8260	<2.0	ug/L	MQS	01/03/2007
Chloromethane	EPA 8260	<2.0	ug/L	MQS	01/03/2007
Vinyl Chloride	EPA 8260	<1.0	ug/L	MQS	01/03/2007
Bromomethane	EPA 8260	<2.0	ug/L	MQS	01/03/2007
Chloroethane	EPA 8260	<1.0	ug/L	MQS	01/03/2007
Trichlorofluoromethane	EPA 8260	<2.0	ug/L	MQS	01/03/2007
Diethylether	EPA 8260	<5.0	ug/L	MQS	01/03/2007
Acetone	EPA 8260	<25	ug/L	MQS	01/03/2007
1,1-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	01/03/2007
Dichloromethane	EPA 8260	<1.0	ug/L	MQS	01/03/2007
Methyl-Tert-Butyl-Ether	EPA 8260	<1.0	ug/L	MQS	01/03/2007
trans-1,2-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	01/03/2007
1,1-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	01/03/2007
2-Butanone	EPA 8260	<25	ug/L	MQS	01/03/2007
2,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	01/03/2007
cis-1,2-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	01/03/2007
Chloroform	EPA 8260	<1.0	ug/L	MQS	01/03/2007
Bromochloromethane	EPA 8260	<1.0	ug/L	MQS	01/03/2007
Tetrahydrofuran	EPA 8260	<10	ug/L	MQS	01/03/2007
1,1,1-Trichloroethane	EPA 8260	<1.0	ug/L	MQS	01/03/2007
1,1-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	01/03/2007
Carbon Tetrachloride	EPA 8260	<1.0	ug/L	MQS	01/03/2007
1,2-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	01/03/2007
Benzene	EPA 8260	<1.0	ug/L	MQS	01/03/2007
Trichloroethene	EPA 8260	<1.0	ug/L	MQS	01/03/2007
1,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	01/03/2007
Bromodichloromethane	EPA 8260	<1.0	ug/L	MQS	01/03/2007
Dibromomethane	EPA 8260	<1.0	ug/L	MQS	01/03/2007
4-Methyl-2-Pentanone	EPA 8260	<25	ug/L	MQS	01/03/2007
cis-1,3-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	01/03/2007
Toluene	EPA 8260	<1.0	ug/L	MQS	01/03/2007
trans-1,3-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	01/03/2007
1,1,2-Trichloroethane	EPA 8260	<1.0	ug/L	MQS	01/03/2007
2-Hexanone	EPA 8260	<2.0	ug/L	MQS	01/03/2007
1,3-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	01/03/2007
Tetrachloroethene	EPA 8260	<1.0	ug/L	MQS	01/03/2007

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ANALYTICAL REPORT

GZA GeoEnvironmental, Inc.
140 Broadway
Providence, RI 02903

Ed Summerly

Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **01/02/2007**
Date Reported: **01/05/2007**
Work Order No.: **0701-00004**

Sample ID: **GZML-2/191-201** Sample No.: **003**

Sample Date: **12/28/2006**

Test Performed	Method	Results	Units	Tech	Analysis Date
Dibromochloromethane	EPA 8260	<1.0	ug/L	MQS	01/03/2007
1,2-Dibromoethane (EDB)	EPA 8260	<2.0	ug/L	MQS	01/03/2007
Chlorobenzene	EPA 8260	<1.0	ug/L	MQS	01/03/2007
1,1,1,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	01/03/2007
Ethylbenzene	EPA 8260	<1.0	ug/L	MQS	01/03/2007
m&p-Xylene	EPA 8260	<1.0	ug/L	MQS	01/03/2007
o-Xylene	EPA 8260	<1.0	ug/L	MQS	01/03/2007
Styrene	EPA 8260	<1.0	ug/L	MQS	01/03/2007
Bromoform	EPA 8260	<2.0	ug/L	MQS	01/03/2007
Isopropylbenzene	EPA 8260	<1.0	ug/L	MQS	01/03/2007
1,1,2,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	01/03/2007
1,2,3-Trichloropropane	EPA 8260	<1.0	ug/L	MQS	01/03/2007
Bromobenzene	EPA 8260	<1.0	ug/L	MQS	01/03/2007
N-Propylbenzene	EPA 8260	<1.0	ug/L	MQS	01/03/2007
2-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	01/03/2007
1,3,5-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	01/03/2007
4-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	01/03/2007
tert-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	01/03/2007
1,2,4-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	01/03/2007
sec-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	01/03/2007
p-Isopropyltoluene	EPA 8260	<1.0	ug/L	MQS	01/03/2007
1,3-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	01/03/2007
1,4-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	01/03/2007
n-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	01/03/2007
1,2-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	01/03/2007
1,2-Dibromo-3-Chloropropane	EPA 8260	<5.0	ug/L	MQS	01/03/2007
1,2,4-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	01/03/2007
Hexachlorobutadiene	EPA 8260	<1.0	ug/L	MQS	01/03/2007
Naphthalene	EPA 8260	<1.0	ug/L	MQS	01/03/2007
1,2,3-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	01/03/2007
Surrogates:	EPA 8260				
***1,2-Dichloroethane-D4	EPA 8260	103	% R	MQS	01/03/2007
***Toluene-D8	EPA 8260	107	% R	MQS	01/03/2007
***4-Bromofluorobenzene	EPA 8260	115	% R	MQS	01/03/2007
Preparation	EPA 5030B	1.0	DF	MQS	01/03/2007

GZA GeoEnvironmental, Inc.
106 South Street
Hopkinton, MA 01748

EPA Method 8260 / 524.2 Aqueous Method Blank (MB) and Laboratory Control Sample (LCS) Data

Method Blank

Date Analyzed:	1/3/2007	
Volatile Organics	**Conc. ug/L**	**Acceptance Limit**
dichlorodifluoromethane	< 1.0	< 1.0
chloromethane	< 1.0	< 1.0
vinyl chloride	< 1.0	< 1.0
bromomethane	< 1.0	< 1.0
chloroethane	< 1.0	< 1.0
trichlorofluoromethane	< 1.0	< 1.0
diethyl ether	< 2.0	< 2.0
acrolein	< 5.0	< 5.0
acetone	< 25	< 25
1,1-dichloroethene	< 0.5	< 0.5
FREON-113	< 1.0	< 1.0
iodomethane	< 0.5	< 0.5
carbon disulfide	< 1.0	< 1.0
dichloromethane	< 1.0	< 1.0
tert-butyl alcohol (TBA)	< 25	< 25
acrylonitrile	< 1.0	< 1.0
methyl-tert-butyl-ether	< 1.0	< 1.0
trans-1,2-dichloroethene	< 0.5	< 0.5
1,1-dichloroethane	< 0.5	< 0.5
di-isopropyl ether (DIPE)	< 1.0	< 1.0
ethyl tert-butyl ether (EtBE)	< 1.0	< 1.0
vinyl acetate	< 1.0	< 1.0
2-butanone	< 25	< 25
2,2-dichloropropane	< 0.5	< 0.5
cis-1,2-dichloroethene	< 0.5	< 0.5
chloroform	< 0.5	< 0.5
bromochloromethane	< 0.5	< 0.5
tetrahydrafuran	< 5.0	< 5.0
1,1,1-trichloroethane	< 0.5	< 0.5
1,1-dichloropropene	< 0.5	< 0.5
carbon tetrachloride	< 0.5	< 0.5
1,2-dichloroethane	< 0.5	< 0.5
benzene	< 0.5	< 0.5
tert-amyl methyl ether (TAME)	< 1.0	< 1.0
trichloroethene	< 0.5	< 0.5
1,2-dichloropropane	< 0.5	< 0.5
bromodichloromethane	< 0.5	< 0.5
2-chloroethyl vinyl ether	< 1.0	< 1.0
1,4-Dioxane	< 50	< 50
dibromomethane	< 0.5	< 0.5
4-methyl-2-pentanone	< 1.0	< 1.0
cis-1,3-dichloropropene	< 0.5	< 0.5
toluene	< 0.5	< 0.5
trans-1,3-dichloropropene	< 0.5	< 0.5
1,1,2-trichloroethane	< 1.0	< 1.0
2-hexanone	< 1.0	< 1.0
1,3-dichloropropane	< 0.5	< 0.5
tetrachloroethene	< 0.5	< 0.5
dibromochloromethane	< 0.5	< 0.5
1,2-dibromoethane (EDB)	< 0.5	< 0.5
chlorobenzene	< 0.5	< 0.5
1,1,1,2-tetrachloroethane	< 0.5	< 0.5
ethylbenzene	< 0.5	< 0.5
1,1,2,2-tetrachloroethane	< 0.5	< 0.5
m&p-xylene	< 0.5	< 0.5
o-xylene	< 0.5	< 0.5
styrene	< 0.5	< 0.5
bromoform	< 0.5	< 0.5
isopropylbenzene	< 0.5	< 0.5
1,2,3-trichloropropane	< 0.5	< 0.5
bromobenzene	< 0.5	< 0.5
n-propylbenzene	< 0.5	< 0.5
2-chlorotoluene	< 0.5	< 0.5
1,3,5-trimethylbenzene	< 0.5	< 0.5
trans-1,4-dichloro-2-butene	< 1.0	< 1.0
4-chlorotoluene	< 0.5	< 0.5
tert-butyl-benzene	< 0.5	< 0.5
1,2,4-trimethylbenzene	< 0.5	< 0.5
sec-butyl-benzene	< 0.5	< 0.5
p-isopropyltoluene	< 2.5	< 2.5
1,3-dichlorobenzene	< 0.5	< 0.5
1,4-dichlorobenzene	< 0.5	< 0.5
n-butylbenzene	< 0.5	< 0.5
1,2-dichlorobenzene	< 0.5	< 0.5
1,2-dibromo-3-chloropropane	< 1.0	< 1.0
1,2,4-trichlorobenzene	< 0.5	< 0.5
hexachlorobutadiene	< 0.5	< 0.5
naphthalene	< 0.5	< 0.5
1,2,3-trichlorobenzene	< 0.5	< 0.5

Laboratory Control Sample

Date Analyzed:	1/3/2007		
Spike Concentration = 20ug/L	**% Recovery**	**Acceptance Limits**	**Verdict**
dichlorodifluoromethane	117	70-130	ok
chloromethane	110	70-130	ok
vinyl chloride	104	70-130	ok
bromomethane	110	70-130	ok
chloroethane	102	70-130	ok
trichlorofluoromethane	126	70-130	ok
diethyl ether	92.1	70-130	ok
acrolein	94.1	70-130	ok
acetone	113	70-130	ok
1,1-dichloroethene	106	70-130	ok
FREON-113	106	70-130	ok
iodomethane	98.9	70-130	ok
carbon disulfide	99.9	70-130	ok
dichloromethane	89.4	70-130	ok
tert-butyl alcohol (TBA)	176	70-130	out
acrylonitrile	117	70-130	ok
methyl-tert-butyl-ether	86.0	70-130	ok
trans-1,2-dichloroethene	104	70-130	ok
1,1-dichloroethane	104	70-130	ok
di-isopropyl ether (DIPE)	104	70-130	ok
ethyl tert-butyl ether (EtBE)	65.8	70-130	out
vinyl acetate	103	70-130	ok
2-butanone	92.8	70-130	ok
2,2-dichloropropane	125	70-130	ok
cis-1,2-dichloroethene	100	70-130	ok
chloroform	105	70-130	ok
bromochloromethane	90.9	70-130	ok
tetrahydrafuran	90.6	70-130	ok
1,1,1-trichloroethane	123	70-130	ok
1,1-dichloropropene	102	70-130	ok
carbon tetrachloride	122	70-130	ok
1,2-dichloroethane	112	70-130	ok
benzene	94.2	70-130	ok
tert-amyl methyl ether (TAME)	59.6	70-130	out
trichloroethene	101	70-130	ok
1,2-dichloropropane	98.8	70-130	ok
bromodichloromethane	109	70-130	ok
2-chloroethyl vinyl ether	98.6	70-130	ok
1,4-Dioxane	102	70-130	ok
dibromomethane	110	70-130	ok
4-methyl-2-pentanone	102	70-130	ok
cis-1,3-dichloropropene	101	70-130	ok
toluene	106	70-130	ok
trans-1,3-dichloropropene	103	70-130	ok
1,1,2-trichloroethane	98.9	70-130	ok
2-hexanone	110	70-130	ok
1,3-dichloropropane	93.6	70-130	ok
tetrachloroethene	113	70-130	ok
dibromochloromethane	105	70-130	ok
1,2-dibromoethane (EDB)	103	70-130	ok
chlorobenzene	106	70-130	ok
1,1,1,2-tetrachloroethane	98.7	70-130	ok
ethylbenzene	111	70-130	ok
1,1,2,2-tetrachloroethane	93.5	70-130	ok
m&p-xylene	113	70-130	ok
o-xylene	115	70-130	ok
styrene	110	70-130	ok
bromoform	121	70-130	ok
isopropylbenzene	118	70-130	ok
1,2,3-trichloropropane	111	70-130	ok
bromobenzene	103	70-130	ok
n-propylbenzene	116	70-130	ok
2-chlorotoluene	115	70-130	ok
1,3,5-trimethylbenzene	118	70-130	ok
trans-1,4-dichloro-2-butene	106	70-130	ok
4-chlorotoluene	119	70-130	ok
tert-butyl-benzene	113	70-130	ok
1,2,4-trimethylbenzene	118	70-130	ok
sec-butyl-benzene	117	70-130	ok
p-isopropyltoluene	115	70-130	ok
1,3-dichlorobenzene	106	70-130	ok
1,4-dichlorobenzene	105	70-130	ok
n-butylbenzene	118	70-130	ok
1,2-dichlorobenzene	99.2	70-130	ok
1,2-dibromo-3-chloropropane	106	70-130	ok
1,2,4-trichlorobenzene	117	70-130	ok
hexachlorobutadiene	119	70-130	ok
naphthalene	90.5	70-130	ok
1,2,3-trichlorobenzene	112	70-130	ok

SMF criteria allows 5 compounds to be outside acceptance limits

Surrogates:	**Recovery (%)**	**Acceptance Limits**
DIBROMOFLUOROMETHANE	99.7	70-130
1,2-DICHLOROETHANE-D4	91.0	70-130
TOLUENE-D8	95.7	70-130
4-BROMOFLUOROBENZENE	113	70-130
1,2-DICHLOROBENZENE-D4	97.5	70-130

Surrogates:	**Recovery (%)**	**Acceptance Limits**	**Verdict**
DIBROMOFLUOROMETHANE	103	70-130	ok
1,2-DICHLOROETHANE-D4	100	70-130	ok
TOLUENE-D8	105	70-130	ok
4-BROMOFLUOROBENZENE	117	70-130	ok
1,2-DICHLOROBENZENE-D4	101	70-130	ok

Instrument: HP GC/MS "S"

WHITE COPY - Original YELLOW COPY - Lab Files PINK COPY - Project Manager

W.O. # 0701-00004 (for lab use only)

CHAIN-OF-CUSTODY RECORD

Sample I.D.	Date/Time Sampled (Very Important)	Matrix (A=Air, S=Soil, GW=Ground W., SW=Surface W., WW=Waste W., DW=Drinking W., Other (specify))	☐pH ☐Cond.	GC Screen (VOA)	☐524.2 ☐502.2	WW ONLY: 624	☐601 ☐602	625	Formaldehyde	8260	8021	8021 - "8010" List	8021 "8020" List	8270 ☐Full ☐PAH ☐BN	8082-PCBs Only	8081 - Pest Only	TPH-GC (Mod. 8100)	TPH-GC w/FING	EPH (MA DEP)	VPH (MA DEP)	TCLP (Spec. Below)	Filtering (✓ if requested)	Metals ☐PPM-13 ☐ R-8	Metals (List Below)	Total # of Cont.	Note #
GZML-2/168.4-180.2	12/29/06/1315	GW								X															2	1.
GZML-2/179.7-191.5	12/29/06/1245									X															2	
GZML-2/191-201	12/29/06/1430									X															2	
PRESERVATIVE (Cl - HCl, M=MeOH, N - HNO3, S - H2SO4, Na - NaOH, O - Other)*																										
CONTAINER TYPE (P-Plastic, G-Glass, V-Vial, O-Other)*																										

RELINQUISHED BY: [signature] DATE/TIME 1/1/07 1200 RECEIVED BY: CUSTODY SEAL

RELINQUISHED BY: CS DATE/TIME [signature] 1/2/07 1210 RECEIVED BY:

RELINQUISHED BY: [signature] 1/2/07 1350 DATE/TIME RECEIVED BY: [signature] 1/2/07 1400

NOTES: Preservatives, special reporting limits, known contamination, additional testing parameters, etc.:
1. Analyze in accordance w/ CHARBERT Analytical contract.

CA 0647

PROJECT MANAGER: ED SUMMERLY EXT:

DATA REPORT ☑ PDF (Adobe) ☐ ASCII ☐ EXCEL Specify State

TURNAROUND TIME (Standard) Rush ___ Days, Approved by: ___ LAB USE: TEMP. OF COOLER 3.9 °C

11/2/06

GZA FILE NO: 03-00327795-12 P.O. NO.

PROJECT CHARBERT, N. F. A.

LOCATION ACTON, R.I.

COLLECTOR(S) MARK DALPE SHEET 1 OF 1

1/2/07 1400 LQ

GZA GeoEnvironmental, Inc.
Engineers and Scientists
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Hopkinton, MA 01748
(508) 435-9244
FAX (508) 435-9912

ACCREDITED IN ACCORDANCE WITH

GZAP003

GZA GeoEnvironmental, Inc.
106 South Street
Hopkinton, MA 01748
(781) 278-4700

Laboratory Identification Numbers:
MA and ME: **MA092** NH: **2028**
CT: **PH0579** RI: **LAO00236**
NELAC - NYS DOH: **11063**

ANALYTICAL REPORT

GZA GeoEnvironmental, Inc.
140 Broadway
Providence, RI 02903

Ed Summerly

Project No.: **03.0032795.12**
Work Order No.: **0701-00019**
Date Received: **01/04/2007**
Date Reported: **01/09/2007**

SAMPLE INFORMATION

Date Sampled	Matrix	Laboratory ID	Sample ID
01/02/2007	Aqueous	0701-00019 001	GZML-2/145.8-157.6
01/03/2007	Aqueous	0701-00019 002	GZML-2/100.6-112.4
01/02/2007	Aqueous	0701-00019 003	GZML-2/111.9-123.7
01/03/2007	Aqueous	0701-00019 004	GZML-2/89.3-101.1
01/02/2007	Aqueous	0701-00019 005	GZML-2/123.2-135
01/02/2007	Aqueous	0701-00019 006	GZML-2/134.5-146.3
01/02/2007	Aqueous	0701-00019 007	GZML-2/157.1-168.9

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ANALYTICAL REPORT

GZA GeoEnvironmental, Inc.
140 Broadway
Providence, RI 02903

Ed Summerly

Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **01/04/2007**
Date Reported: **01/09/2007**
Work Order No.: **0701-00019**

PROJECT NARRATIVE:

1. Sample Receipt

The samples were received on 01/04/07 via _x_GZA courier, __EC, __FEDEX, or ___hand delivered. The temperature of the __temperature blank/_x_cooler air, was 3.6 degrees C. The temperature requirement for most analyses is above freezing to 6 degrees C. The samples were received intact for all requested analyses.

The chain of custody indicates that the samples, when required, were chemically preserved in accordance with the method they reference.

2. EPA Method 8260 - VOCs

Any analytes detected in samples that were also detected in the associated method blank have a "B" qualifier.

* One or more Laboratory Control Sample Recovery(s) exceeded the acceptance limits. The number of target analytes allowed to exceed the criteria within the sporadic marginal failure rate for the analysis is:

EPA Method 8260 - VOCs - 5 target compounds are allowed 60-140%

Chloroform was detected in method blank (MB 25ml 01/05/07) above the reporting limit. Detects for chloroform in the associated samples are qualified with a "B".

Attach QC 8260 01/05/07 A - Aqueous

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ANALYTICAL REPORT

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Ed Summerly

Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **01/04/2007**
Date Reported: **01/09/2007**
Work Order No.: **0701-00019**

Data Authorized By: _____

NELAC certification, as indicated by the NELAC Lab ID Number, is per analyte. For a complete list of NELAC validated analytes, please contact the laboratory.

Abbreviations:
% R = % Recovery
DF = Dilution Factor
DFS = Dilution Factor Solids
DO = Diluted Out

Method Key:
Method 8260: The current version of the method is 8260B.
Method 8021: The current version of the method is 8021B.
Method 8270: The current version of the method is 8270C.
Method 6010: The current version of the method is 6010B.

Please note that the laboratory signed copy of the chain of custody record is an integral part of the data report.

Soil data is reported on a dry weight basis unless otherwise specified.

Matrix Spike / Matrix Spike Duplicate sets are performed as per method and are reported at the end of the analytical report if assigned on the Chain of Custody.

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ANALYTICAL REPORT

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Ed Summerly

Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **01/04/2007**
Date Reported: **01/09/2007**
Work Order No.: **0701-00019**

Sample ID: **GZML-2/145.8-157.6**
Sample No.: **001**

Sample Date: **01/02/2007**

Test Performed	Method	Results	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260			MQS	01/05/2007
Dichlorodifluoromethane	EPA 8260	<2.0	ug/L	MQS	01/05/2007
Chloromethane	EPA 8260	<2.0	ug/L	MQS	01/05/2007
Vinyl Chloride	EPA 8260	<1.0	ug/L	MQS	01/05/2007
Bromomethane	EPA 8260	<2.0	ug/L	MQS	01/05/2007
Chloroethane	EPA 8260	<1.0	ug/L	MQS	01/05/2007
Trichlorofluoromethane	EPA 8260	<2.0	ug/L	MQS	01/05/2007
Diethylether	EPA 8260	<5.0	ug/L	MQS	01/05/2007
Acetone	EPA 8260	<25	ug/L	MQS	01/05/2007
1,1-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
Dichloromethane	EPA 8260	<1.0	ug/L	MQS	01/05/2007
Methyl-Tert-Butyl-Ether	EPA 8260	<1.0	ug/L	MQS	01/05/2007
trans-1,2-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
1,1-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	01/05/2007
2-Butanone	EPA 8260	<25	ug/L	MQS	01/05/2007
2,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	01/05/2007
cis-1,2-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
Chloroform	EPA 8260	<1.0	ug/L	MQS	01/05/2007
Bromochloromethane	EPA 8260	<1.0	ug/L	MQS	01/05/2007
Tetrahydrofuran	EPA 8260	<10	ug/L	MQS	01/05/2007
1,1,1-Trichloroethane	EPA 8260	<1.0	ug/L	MQS	01/05/2007
1,1-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
Carbon Tetrachloride	EPA 8260	<1.0	ug/L	MQS	01/05/2007
1,2-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	01/05/2007
Benzene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
Trichloroethene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
1,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	01/05/2007
Bromodichloromethane	EPA 8260	<1.0	ug/L	MQS	01/05/2007
Dibromomethane	EPA 8260	<1.0	ug/L	MQS	01/05/2007
4-Methyl-2-Pentanone	EPA 8260	<25	ug/L	MQS	01/05/2007
cis-1,3-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
Toluene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
trans-1,3-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
1,1,2-Trichloroethane	EPA 8260	<1.0	ug/L	MQS	01/05/2007
2-Hexanone	EPA 8260	<2.0	ug/L	MQS	01/05/2007
1,3-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	01/05/2007
Tetrachloroethene	EPA 8260	<1.0	ug/L	MQS	01/05/2007

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ANALYTICAL REPORT

GZA GeoEnvironmental, Inc.
140 Broadway
Providence, RI 02903

Ed Summerly

Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **01/04/2007**
Date Reported: **01/09/2007**
Work Order No.: **0701-00019**

Sample ID: **GZML-2/145.8-157.6** Sample No.: **001**

Sample Date: **01/02/2007**

Test Performed	Method	Results	Units	Tech	Analysis Date
Dibromochloromethane	EPA 8260	<1.0	ug/L	MQS	01/05/2007
1,2-Dibromoethane (EDB)	EPA 8260	<2.0	ug/L	MQS	01/05/2007
Chlorobenzene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
1,1,1,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	01/05/2007
Ethylbenzene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
m&p-Xylene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
o-Xylene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
Styrene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
Bromoform	EPA 8260	<2.0	ug/L	MQS	01/05/2007
Isopropylbenzene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
1,1,2,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	01/05/2007
1,2,3-Trichloropropane	EPA 8260	<1.0	ug/L	MQS	01/05/2007
Bromobenzene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
N-Propylbenzene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
2-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
1,3,5-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
4-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
tert-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
1,2,4-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
sec-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
p-Isopropyltoluene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
1,3-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
1,4-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
n-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
1,2-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
1,2-Dibromo-3-Chloropropane	EPA 8260	<5.0	ug/L	MQS	01/05/2007
1,2,4-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
Hexachlorobutadiene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
Naphthalene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
1,2,3-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
Surrogates:	EPA 8260				
***1,2-Dichloroethane-D4	EPA 8260	90.3	% R	MQS	01/05/2007
***Toluene-D8	EPA 8260	97.8	% R	MQS	01/05/2007
***4-Bromofluorobenzene	EPA 8260	100	% R	MQS	01/05/2007
Preparation	EPA 5030B	1.0	DF	MQS	01/05/2007

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ANALYTICAL REPORT

GZA GeoEnvironmental, Inc.
140 Broadway
Providence, RI 02903

Ed Summerly

Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **01/04/2007**
Date Reported: **01/09/2007**
Work Order No.: **0701-00019**

Sample ID: **GZML-2/100.6-112.4**
Sample No.: **002**
Sample Date: **01/03/2007**

Test Performed	Method	Results	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260			MQS	01/05/2007
Dichlorodifluoromethane	EPA 8260	<2.0	ug/L	MQS	01/05/2007
Chloromethane	EPA 8260	<2.0	ug/L	MQS	01/05/2007
Vinyl Chloride	EPA 8260	<1.0	ug/L	MQS	01/05/2007
Bromomethane	EPA 8260	<2.0	ug/L	MQS	01/05/2007
Chloroethane	EPA 8260	<1.0	ug/L	MQS	01/05/2007
Trichlorofluoromethane	EPA 8260	<2.0	ug/L	MQS	01/05/2007
Diethylether	EPA 8260	<5.0	ug/L	MQS	01/05/2007
Acetone	EPA 8260	<25	ug/L	MQS	01/05/2007
1,1-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
Dichloromethane	EPA 8260	<1.0	ug/L	MQS	01/05/2007
Methyl-Tert-Butyl-Ether	EPA 8260	<1.0	ug/L	MQS	01/05/2007
trans-1,2-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
1,1-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	01/05/2007
2-Butanone	EPA 8260	<25	ug/L	MQS	01/05/2007
2,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	01/05/2007
cis-1,2-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
Chloroform	EPA 8260	<1.0	ug/L	MQS	01/05/2007
Bromochloromethane	EPA 8260	<1.0	ug/L	MQS	01/05/2007
Tetrahydrofuran	EPA 8260	<10	ug/L	MQS	01/05/2007
1,1,1-Trichloroethane	EPA 8260	<1.0	ug/L	MQS	01/05/2007
1,1-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
Carbon Tetrachloride	EPA 8260	<1.0	ug/L	MQS	01/05/2007
1,2-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	01/05/2007
Benzene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
Trichloroethene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
1,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	01/05/2007
Bromodichloromethane	EPA 8260	<1.0	ug/L	MQS	01/05/2007
Dibromomethane	EPA 8260	<1.0	ug/L	MQS	01/05/2007
4-Methyl-2-Pentanone	EPA 8260	<25	ug/L	MQS	01/05/2007
cis-1,3-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
Toluene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
trans-1,3-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
1,1,2-Trichloroethane	EPA 8260	<1.0	ug/L	MQS	01/05/2007
2-Hexanone	EPA 8260	<2.0	ug/L	MQS	01/05/2007
1,3-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	01/05/2007
Tetrachloroethene	EPA 8260	<1.0	ug/L	MQS	01/05/2007

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ANALYTICAL REPORT

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Ed Summerly

Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **01/04/2007**
Date Reported: **01/09/2007**
Work Order No.: **0701-00019**

Sample ID: **GZML-2/100.6-112.4** Sample No.: **002**

Sample Date: **01/03/2007**

Test Performed	Method	Results	Units	Tech	Analysis Date
Dibromochloromethane	EPA 8260	<1.0	ug/L	MQS	01/05/2007
1,2-Dibromoethane (EDB)	EPA 8260	<2.0	ug/L	MQS	01/05/2007
Chlorobenzene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
1,1,1,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	01/05/2007
Ethylbenzene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
m&p-Xylene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
o-Xylene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
Styrene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
Bromoform	EPA 8260	<2.0	ug/L	MQS	01/05/2007
Isopropylbenzene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
1,1,2,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	01/05/2007
1,2,3-Trichloropropane	EPA 8260	<1.0	ug/L	MQS	01/05/2007
Bromobenzene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
N-Propylbenzene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
2-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
1,3,5-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
4-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
tert-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
1,2,4-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
sec-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
p-Isopropyltoluene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
1,3-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
1,4-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
n-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
1,2-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
1,2-Dibromo-3-Chloropropane	EPA 8260	<5.0	ug/L	MQS	01/05/2007
1,2,4-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
Hexachlorobutadiene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
Naphthalene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
1,2,3-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
Surrogates:	EPA 8260				
***1,2-Dichloroethane-D4	EPA 8260	99.5	% R	MQS	01/05/2007
***Toluene-D8	EPA 8260	100	% R	MQS	01/05/2007
***4-Bromofluorobenzene	EPA 8260	101	% R	MQS	01/05/2007
Preparation	EPA 5030B	1.0	DF	MQS	01/05/2007

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Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **01/04/2007**
Date Reported: **01/09/2007**
Work Order No.: **0701-00019**

Sample ID: **GZML-2/111.9-123.7** Sample No.: **003**

Sample Date: **01/02/2007**

Test Performed	Method	Results	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260			MQS	01/05/2007
Dichlorodifluoromethane	EPA 8260	<2.0	ug/L	MQS	01/05/2007
Chloromethane	EPA 8260	<2.0	ug/L	MQS	01/05/2007
Vinyl Chloride	EPA 8260	<1.0	ug/L	MQS	01/05/2007
Bromomethane	EPA 8260	<2.0	ug/L	MQS	01/05/2007
Chloroethane	EPA 8260	<1.0	ug/L	MQS	01/05/2007
Trichlorofluoromethane	EPA 8260	<2.0	ug/L	MQS	01/05/2007
Diethylether	EPA 8260	<5.0	ug/L	MQS	01/05/2007
Acetone	EPA 8260	<25	ug/L	MQS	01/05/2007
1,1-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
Dichloromethane	EPA 8260	<1.0	ug/L	MQS	01/05/2007
Methyl-Tert-Butyl-Ether	EPA 8260	<1.0	ug/L	MQS	01/05/2007
trans-1,2-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
1,1-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	01/05/2007
2-Butanone	EPA 8260	<25	ug/L	MQS	01/05/2007
2,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	01/05/2007
cis-1,2-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
Chloroform	EPA 8260	<1.0	ug/L	MQS	01/05/2007
Bromochloromethane	EPA 8260	<1.0	ug/L	MQS	01/05/2007
Tetrahydrofuran	EPA 8260	<10	ug/L	MQS	01/05/2007
1,1,1-Trichloroethane	EPA 8260	<1.0	ug/L	MQS	01/05/2007
1,1-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
Carbon Tetrachloride	EPA 8260	<1.0	ug/L	MQS	01/05/2007
1,2-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	01/05/2007
Benzene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
Trichloroethene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
1,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	01/05/2007
Bromodichloromethane	EPA 8260	<1.0	ug/L	MQS	01/05/2007
Dibromomethane	EPA 8260	<1.0	ug/L	MQS	01/05/2007
4-Methyl-2-Pentanone	EPA 8260	<25	ug/L	MQS	01/05/2007
cis-1,3-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
Toluene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
trans-1,3-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
1,1,2-Trichloroethane	EPA 8260	<1.0	ug/L	MQS	01/05/2007
2-Hexanone	EPA 8260	<2.0	ug/L	MQS	01/05/2007
1,3-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	01/05/2007
Tetrachloroethene	EPA 8260	<1.0	ug/L	MQS	01/05/2007

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ANALYTICAL REPORT

GZA GeoEnvironmental, Inc.
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Ed Summerly

Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **01/04/2007**
Date Reported: **01/09/2007**
Work Order No.: **0701-00019**

Sample ID: **GZML-2/111.9-123.7**
Sample No.: **003**
Sample Date: **01/02/2007**

Test Performed	Method	Results	Units	Tech	Analysis Date
Dibromochloromethane	EPA 8260	<1.0	ug/L	MQS	01/05/2007
1,2-Dibromoethane (EDB)	EPA 8260	<2.0	ug/L	MQS	01/05/2007
Chlorobenzene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
1,1,1,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	01/05/2007
Ethylbenzene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
m&p-Xylene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
o-Xylene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
Styrene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
Bromoform	EPA 8260	<2.0	ug/L	MQS	01/05/2007
Isopropylbenzene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
1,1,2,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	01/05/2007
1,2,3-Trichloropropane	EPA 8260	<1.0	ug/L	MQS	01/05/2007
Bromobenzene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
N-Propylbenzene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
2-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
1,3,5-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
4-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
tert-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
1,2,4-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
sec-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
p-Isopropyltoluene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
1,3-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
1,4-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
n-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
1,2-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
1,2-Dibromo-3-Chloropropane	EPA 8260	<5.0	ug/L	MQS	01/05/2007
1,2,4-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
Hexachlorobutadiene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
Naphthalene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
1,2,3-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
Surrogates:	EPA 8260				
***1,2-Dichloroethane-D4	EPA 8260	89.3	% R	MQS	01/05/2007
***Toluene-D8	EPA 8260	100	% R	MQS	01/05/2007
***4-Bromofluorobenzene	EPA 8260	98.7	% R	MQS	01/05/2007
Preparation	EPA 5030B	1.0	DF	MQS	01/05/2007

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Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **01/04/2007**
Date Reported: **01/09/2007**
Work Order No.: **0701-00019**

Sample ID: **GZML-2/89.3-101.1**
Sample No.: **004**

Sample Date: **01/03/2007**

Test Performed	Method	Results	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260			MQS	01/05/2007
Dichlorodifluoromethane	EPA 8260	<2.0	ug/L	MQS	01/05/2007
Chloromethane	EPA 8260	<2.0	ug/L	MQS	01/05/2007
Vinyl Chloride	EPA 8260	<1.0	ug/L	MQS	01/05/2007
Bromomethane	EPA 8260	<2.0	ug/L	MQS	01/05/2007
Chloroethane	EPA 8260	<1.0	ug/L	MQS	01/05/2007
Trichlorofluoromethane	EPA 8260	<2.0	ug/L	MQS	01/05/2007
Diethylether	EPA 8260	<5.0	ug/L	MQS	01/05/2007
Acetone	EPA 8260	<25	ug/L	MQS	01/05/2007
1,1-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
Dichloromethane	EPA 8260	<1.0	ug/L	MQS	01/05/2007
Methyl-Tert-Butyl-Ether	EPA 8260	<1.0	ug/L	MQS	01/05/2007
trans-1,2-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
1,1-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	01/05/2007
2-Butanone	EPA 8260	<25	ug/L	MQS	01/05/2007
2,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	01/05/2007
cis-1,2-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
Chloroform	EPA 8260	<1.0	ug/L	MQS	01/05/2007
Bromochloromethane	EPA 8260	<1.0	ug/L	MQS	01/05/2007
Tetrahydrofuran	EPA 8260	<10	ug/L	MQS	01/05/2007
1,1,1-Trichloroethane	EPA 8260	<1.0	ug/L	MQS	01/05/2007
1,1-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
Carbon Tetrachloride	EPA 8260	<1.0	ug/L	MQS	01/05/2007
1,2-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	01/05/2007
Benzene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
Trichloroethene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
1,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	01/05/2007
Bromodichloromethane	EPA 8260	<1.0	ug/L	MQS	01/05/2007
Dibromomethane	EPA 8260	<1.0	ug/L	MQS	01/05/2007
4-Methyl-2-Pentanone	EPA 8260	<25	ug/L	MQS	01/05/2007
cis-1,3-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
Toluene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
trans-1,3-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
1,1,2-Trichloroethane	EPA 8260	<1.0	ug/L	MQS	01/05/2007
2-Hexanone	EPA 8260	<2.0	ug/L	MQS	01/05/2007
1,3-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	01/05/2007
Tetrachloroethene	EPA 8260	<1.0	ug/L	MQS	01/05/2007

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ANALYTICAL REPORT

GZA GeoEnvironmental, Inc.
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Ed Summerly

Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **01/04/2007**
Date Reported: **01/09/2007**
Work Order No.: **0701-00019**

Sample ID: **GZML-2/89.3-101.1**
Sample No.: **004**
Sample Date: **01/03/2007**

Test Performed	Method	Results	Units	Tech	Analysis Date
Dibromochloromethane	EPA 8260	<1.0	ug/L	MQS	01/05/2007
1,2-Dibromoethane (EDB)	EPA 8260	<2.0	ug/L	MQS	01/05/2007
Chlorobenzene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
1,1,1,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	01/05/2007
Ethylbenzene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
m&p-Xylene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
o-Xylene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
Styrene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
Bromoform	EPA 8260	<2.0	ug/L	MQS	01/05/2007
Isopropylbenzene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
1,1,2,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	01/05/2007
1,2,3-Trichloropropane	EPA 8260	<1.0	ug/L	MQS	01/05/2007
Bromobenzene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
N-Propylbenzene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
2-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
1,3,5-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
4-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
tert-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
1,2,4-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
sec-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
p-Isopropyltoluene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
1,3-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
1,4-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
n-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
1,2-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
1,2-Dibromo-3-Chloropropane	EPA 8260	<5.0	ug/L	MQS	01/05/2007
1,2,4-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
Hexachlorobutadiene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
Naphthalene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
1,2,3-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
Surrogates:	EPA 8260				
***1,2-Dichloroethane-D4	EPA 8260	89.5	% R	MQS	01/05/2007
***Toluene-D8	EPA 8260	99.6	% R	MQS	01/05/2007
***4-Bromofluorobenzene	EPA 8260	98.9	% R	MQS	01/05/2007
Preparation	EPA 5030B	1.0	DF	MQS	01/05/2007

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ANALYTICAL REPORT

GZA GeoEnvironmental, Inc.
140 Broadway
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Ed Summerly

Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **01/04/2007**
Date Reported: **01/09/2007**
Work Order No.: **0701-00019**

Sample ID: **GZML-2/123.2-135**
Sample No.: **005**
Sample Date: **01/02/2007**

Test Performed	Method	Results	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260			MQS	01/05/2007
Dichlorodifluoromethane	EPA 8260	<2.0	ug/L	MQS	01/05/2007
Chloromethane	EPA 8260	<2.0	ug/L	MQS	01/05/2007
Vinyl Chloride	EPA 8260	<1.0	ug/L	MQS	01/05/2007
Bromomethane	EPA 8260	<2.0	ug/L	MQS	01/05/2007
Chloroethane	EPA 8260	<1.0	ug/L	MQS	01/05/2007
Trichlorofluoromethane	EPA 8260	<2.0	ug/L	MQS	01/05/2007
Diethylether	EPA 8260	<5.0	ug/L	MQS	01/05/2007
Acetone	EPA 8260	<25	ug/L	MQS	01/05/2007
1,1-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
Dichloromethane	EPA 8260	<1.0	ug/L	MQS	01/05/2007
Methyl-Tert-Butyl-Ether	EPA 8260	<1.0	ug/L	MQS	01/05/2007
trans-1,2-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
1,1-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	01/05/2007
2-Butanone	EPA 8260	<25	ug/L	MQS	01/05/2007
2,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	01/05/2007
cis-1,2-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
Chloroform	EPA 8260	<1.0	ug/L	MQS	01/05/2007
Bromochloromethane	EPA 8260	<1.0	ug/L	MQS	01/05/2007
Tetrahydrofuran	EPA 8260	<10	ug/L	MQS	01/05/2007
1,1,1-Trichloroethane	EPA 8260	<1.0	ug/L	MQS	01/05/2007
1,1-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
Carbon Tetrachloride	EPA 8260	<1.0	ug/L	MQS	01/05/2007
1,2-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	01/05/2007
Benzene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
Trichloroethene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
1,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	01/05/2007
Bromodichloromethane	EPA 8260	<1.0	ug/L	MQS	01/05/2007
Dibromomethane	EPA 8260	<1.0	ug/L	MQS	01/05/2007
4-Methyl-2-Pentanone	EPA 8260	<25	ug/L	MQS	01/05/2007
cis-1,3-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
Toluene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
trans-1,3-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
1,1,2-Trichloroethane	EPA 8260	<1.0	ug/L	MQS	01/05/2007
2-Hexanone	EPA 8260	<2.0	ug/L	MQS	01/05/2007
1,3-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	01/05/2007
Tetrachloroethene	EPA 8260	<1.0	ug/L	MQS	01/05/2007

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ANALYTICAL REPORT

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Ed Summerly

Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **01/04/2007**
Date Reported: **01/09/2007**
Work Order No.: **0701-00019**

Sample ID: **GZML-2/123.2-135**
Sample No.: **005**
Sample Date: **01/02/2007**

Test Performed	Method	Results	Units	Tech	Analysis Date
Dibromochloromethane	EPA 8260	<1.0	ug/L	MQS	01/05/2007
1,2-Dibromoethane (EDB)	EPA 8260	<2.0	ug/L	MQS	01/05/2007
Chlorobenzene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
1,1,1,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	01/05/2007
Ethylbenzene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
m&p-Xylene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
o-Xylene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
Styrene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
Bromoform	EPA 8260	<2.0	ug/L	MQS	01/05/2007
Isopropylbenzene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
1,1,2,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	01/05/2007
1,2,3-Trichloropropane	EPA 8260	<1.0	ug/L	MQS	01/05/2007
Bromobenzene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
N-Propylbenzene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
2-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
1,3,5-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
4-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
tert-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
1,2,4-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
sec-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
p-Isopropyltoluene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
1,3-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
1,4-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
n-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
1,2-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
1,2-Dibromo-3-Chloropropane	EPA 8260	<5.0	ug/L	MQS	01/05/2007
1,2,4-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
Hexachlorobutadiene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
Naphthalene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
1,2,3-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
Surrogates:	EPA 8260				
***1,2-Dichloroethane-D4	EPA 8260	86.0	% R	MQS	01/05/2007
***Toluene-D8	EPA 8260	98.5	% R	MQS	01/05/2007
***4-Bromofluorobenzene	EPA 8260	99.3	% R	MQS	01/05/2007
Preparation	EPA 5030B	1.0	DF	MQS	01/05/2007

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Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **01/04/2007**
Date Reported: **01/09/2007**
Work Order No.: **0701-00019**

Sample ID: **GZML-2/134.5-146.3** Sample No.: **006**

Sample Date: **01/02/2007**

Test Performed	Method	Results	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260			MQS	01/05/2007
Dichlorodifluoromethane	EPA 8260	<2.0	ug/L	MQS	01/05/2007
Chloromethane	EPA 8260	<2.0	ug/L	MQS	01/05/2007
Vinyl Chloride	EPA 8260	<1.0	ug/L	MQS	01/05/2007
Bromomethane	EPA 8260	<2.0	ug/L	MQS	01/05/2007
Chloroethane	EPA 8260	<1.0	ug/L	MQS	01/05/2007
Trichlorofluoromethane	EPA 8260	<2.0	ug/L	MQS	01/05/2007
Diethylether	EPA 8260	<5.0	ug/L	MQS	01/05/2007
Acetone	EPA 8260	<25	ug/L	MQS	01/05/2007
1,1-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
Dichloromethane	EPA 8260	<1.0	ug/L	MQS	01/05/2007
Methyl-Tert-Butyl-Ether	EPA 8260	<1.0	ug/L	MQS	01/05/2007
trans-1,2-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
1,1-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	01/05/2007
2-Butanone	EPA 8260	<25	ug/L	MQS	01/05/2007
2,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	01/05/2007
cis-1,2-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
Chloroform	EPA 8260	<1.0	ug/L	MQS	01/05/2007
Bromochloromethane	EPA 8260	<1.0	ug/L	MQS	01/05/2007
Tetrahydrofuran	EPA 8260	<10	ug/L	MQS	01/05/2007
1,1,1-Trichloroethane	EPA 8260	<1.0	ug/L	MQS	01/05/2007
1,1-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
Carbon Tetrachloride	EPA 8260	<1.0	ug/L	MQS	01/05/2007
1,2-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	01/05/2007
Benzene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
Trichloroethene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
1,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	01/05/2007
Bromodichloromethane	EPA 8260	<1.0	ug/L	MQS	01/05/2007
Dibromomethane	EPA 8260	<1.0	ug/L	MQS	01/05/2007
4-Methyl-2-Pentanone	EPA 8260	<25	ug/L	MQS	01/05/2007
cis-1,3-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
Toluene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
trans-1,3-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
1,1,2-Trichloroethane	EPA 8260	<1.0	ug/L	MQS	01/05/2007
2-Hexanone	EPA 8260	<2.0	ug/L	MQS	01/05/2007
1,3-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	01/05/2007
Tetrachloroethene	EPA 8260	<1.0	ug/L	MQS	01/05/2007

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ANALYTICAL REPORT

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Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **01/04/2007**
Date Reported: **01/09/2007**
Work Order No.: **0701-00019**

Sample ID: **GZML-2/134.5-146.3**
Sample No.: **006**
Sample Date: **01/02/2007**

Test Performed	Method	Results	Units	Tech	Analysis Date
Dibromochloromethane	EPA 8260	<1.0	ug/L	MQS	01/05/2007
1,2-Dibromoethane (EDB)	EPA 8260	<2.0	ug/L	MQS	01/05/2007
Chlorobenzene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
1,1,1,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	01/05/2007
Ethylbenzene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
m&p-Xylene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
o-Xylene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
Styrene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
Bromoform	EPA 8260	<2.0	ug/L	MQS	01/05/2007
Isopropylbenzene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
1,1,2,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	01/05/2007
1,2,3-Trichloropropane	EPA 8260	<1.0	ug/L	MQS	01/05/2007
Bromobenzene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
N-Propylbenzene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
2-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
1,3,5-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
4-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
tert-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
1,2,4-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
sec-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
p-Isopropyltoluene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
1,3-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
1,4-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
n-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
1,2-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
1,2-Dibromo-3-Chloropropane	EPA 8260	<5.0	ug/L	MQS	01/05/2007
1,2,4-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
Hexachlorobutadiene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
Naphthalene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
1,2,3-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
Surrogates:	EPA 8260				
***1,2-Dichloroethane-D4	EPA 8260	87.2	% R	MQS	01/05/2007
***Toluene-D8	EPA 8260	98.9	% R	MQS	01/05/2007
***4-Bromofluorobenzene	EPA 8260	98.8	% R	MQS	01/05/2007
Preparation	EPA 5030B	1.0	DF	MQS	01/05/2007

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Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **01/04/2007**
Date Reported: **01/09/2007**
Work Order No.: **0701-00019**

Sample ID: **GZML-2/157.1-168.9** Sample No.: **007**

Sample Date: **01/02/2007**

Test Performed	Method	Results	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260			MQS	01/05/2007
Dichlorodifluoromethane	EPA 8260	<2.0	ug/L	MQS	01/05/2007
Chloromethane	EPA 8260	<2.0	ug/L	MQS	01/05/2007
Vinyl Chloride	EPA 8260	<1.0	ug/L	MQS	01/05/2007
Bromomethane	EPA 8260	<2.0	ug/L	MQS	01/05/2007
Chloroethane	EPA 8260	<1.0	ug/L	MQS	01/05/2007
Trichlorofluoromethane	EPA 8260	<2.0	ug/L	MQS	01/05/2007
Diethylether	EPA 8260	<5.0	ug/L	MQS	01/05/2007
Acetone	EPA 8260	<25	ug/L	MQS	01/05/2007
1,1-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
Dichloromethane	EPA 8260	<1.0	ug/L	MQS	01/05/2007
Methyl-Tert-Butyl-Ether	EPA 8260	<1.0	ug/L	MQS	01/05/2007
trans-1,2-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
1,1-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	01/05/2007
2-Butanone	EPA 8260	<25	ug/L	MQS	01/05/2007
2,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	01/05/2007
cis-1,2-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
Chloroform	EPA 8260	<1.0	ug/L	MQS	01/05/2007
Bromochloromethane	EPA 8260	<1.0	ug/L	MQS	01/05/2007
Tetrahydrofuran	EPA 8260	<10	ug/L	MQS	01/05/2007
1,1,1-Trichloroethane	EPA 8260	<1.0	ug/L	MQS	01/05/2007
1,1-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
Carbon Tetrachloride	EPA 8260	<1.0	ug/L	MQS	01/05/2007
1,2-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	01/05/2007
Benzene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
Trichloroethene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
1,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	01/05/2007
Bromodichloromethane	EPA 8260	<1.0	ug/L	MQS	01/05/2007
Dibromomethane	EPA 8260	<1.0	ug/L	MQS	01/05/2007
4-Methyl-2-Pentanone	EPA 8260	<25	ug/L	MQS	01/05/2007
cis-1,3-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
Toluene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
trans-1,3-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
1,1,2-Trichloroethane	EPA 8260	<1.0	ug/L	MQS	01/05/2007
2-Hexanone	EPA 8260	<2.0	ug/L	MQS	01/05/2007
1,3-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	01/05/2007
Tetrachloroethene	EPA 8260	<1.0	ug/L	MQS	01/05/2007

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ANALYTICAL REPORT

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Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **01/04/2007**
Date Reported: **01/09/2007**
Work Order No.: **0701-00019**

Sample ID: **GZML-2/157.1-168.9** Sample No.: **007**

Sample Date: **01/02/2007**

Test Performed	Method	Results	Units	Tech	Analysis Date
Dibromochloromethane	EPA 8260	<1.0	ug/L	MQS	01/05/2007
1,2-Dibromoethane (EDB)	EPA 8260	<2.0	ug/L	MQS	01/05/2007
Chlorobenzene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
1,1,1,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	01/05/2007
Ethylbenzene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
m&p-Xylene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
o-Xylene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
Styrene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
Bromoform	EPA 8260	<2.0	ug/L	MQS	01/05/2007
Isopropylbenzene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
1,1,2,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	01/05/2007
1,2,3-Trichloropropane	EPA 8260	<1.0	ug/L	MQS	01/05/2007
Bromobenzene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
N-Propylbenzene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
2-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
1,3,5-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
4-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
tert-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
1,2,4-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
sec-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
p-Isopropyltoluene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
1,3-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
1,4-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
n-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
1,2-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
1,2-Dibromo-3-Chloropropane	EPA 8260	<5.0	ug/L	MQS	01/05/2007
1,2,4-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
Hexachlorobutadiene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
Naphthalene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
1,2,3-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	01/05/2007
Surrogates:	EPA 8260				
***1,2-Dichloroethane-D4	EPA 8260	85.5	% R	MQS	01/05/2007
***Toluene-D8	EPA 8260	99.2	% R	MQS	01/05/2007
***4-Bromofluorobenzene	EPA 8260	97.5	% R	MQS	01/05/2007
Preparation	EPA 5030B	1.0	DF	MQS	01/05/2007

GZA GeoEnvironmental, Inc.
106 South Street
Hopkinton, MA 01748

EPA Method 8260 / 524.2 Aqueous Method Blank (MB) and Laboratory Control Sample (LCS) Data

Method Blank

Date Analyzed:	1/5/2007	
Volatile Organics	Conc. ug/L	Acceptance Limit
dichlorodifluoromethane	< 1.0	< 1.0
chloromethane	< 1.0	< 1.0
vinyl chloride	< 1.0	< 1.0
bromomethane	< 1.0	< 1.0
chloroethane	< 1.0	< 1.0
trichlorofluoromethane	< 1.0	< 1.0
diethyl ether	< 2.0	< 2.0
acrolein	< 25	< 25
acetone	< 0.5	< 0.5
1,1-dichloroethene	< 1.0	< 1.0
FREON-113	< 1.0	< 1.0
iodomethane	< 0.5	< 0.5
carbon disulfide	< 1.0	< 1.0
dichloromethane	< 1.0	< 1.0
tert-butyl alcohol (TBA)	< 25	< 25
acrylonitrile	< 1.0	< 1.0
methyl-tert-butyl-ether	< 1.0	< 1.0
trans-1,2-dichloroethene	< 0.5	< 0.5
1,1-dichloroethane	< 0.5	< 0.5
di-isopropyl ether (DIPE)	< 1.0	< 1.0
ethyl tert-butyl ether (EtBE)	< 1.0	< 1.0
vinyl acetate	< 1.0	< 1.0
2-butanone	< 25	< 25
2,2-dichloropropane	< 0.5	< 0.5
cis-1,2-dichloroethene	< 0.5	< 0.5
chloroform	1.1	< 0.5
bromochloromethane	< 0.5	< 0.5
tetrahydrafuran	< 5.0	< 5.0
1,1,1-trichloroethane	< 0.5	< 0.5
1,1-dichloropropene	< 0.5	< 5.0
carbon tetrachloride	< 0.5	< 0.5
1,2-dichloroethane	< 0.5	< 0.5
benzene	< 0.5	< 0.5
tert-amyl methyl ether (TAME)	< 1.0	< 1.0
trichloroethene	< 0.5	< 0.5
1,2-dichloropropane	< 0.5	< 0.5
bromodichloromethane	0.6	< 0.5
2-chloroethyl vinyl ether	< 1.0	< 1.0
1,4-Dioxane	< 50	< 50
dibromomethane	< 0.5	< 0.5
4-methyl-2-pentanone	< 5.0	< 5.0
cis-1,3-dichloropropene	< 0.5	< 0.5
toluene	< 0.5	< 0.5
trans-1,3-dichloropropene	< 0.5	< 0.5
1,1,2-trichloroethane	< 1.0	< 1.0
2-hexanone	< 5.0	< 5.0
1,3-dichloropropane	< 0.5	< 0.5
tetrachloroethene	< 0.5	< 0.5
dibromochloromethane	< 0.5	< 0.5
1,2-dibromoethane (EDB)	< 0.5	< 0.5
chlorobenzene	< 0.5	< 0.5
1,1,1,2-tetrachloroethane	< 0.5	< 0.5
ethylbenzene	< 0.5	< 0.5
1,1,2,2-tetrachloroethane	< 0.5	< 0.5
m&p-xylene	< 1.0	< 1.0
o-xylene	< 0.5	< 0.5
styrene	< 0.5	< 0.5
bromoform	< 0.5	< 0.5
isopropylbenzene	< 0.5	< 0.5
1,2,3-trichloropropane	< 0.5	< 0.5
bromobenzene	< 0.5	< 0.5
n-propylbenzene	< 0.5	< 0.5
2-chlorotoluene	< 0.5	< 0.5
1,3,5-trimethylbenzene	< 0.5	< 0.5
trans-1,4-dichloro-2-butene	< 1.0	< 1.0
4-chlorotoluene	< 0.5	< 0.5
tert-butyl-benzene	< 0.5	< 0.5
1,2,4-trimethylbenzene	< 0.5	< 0.5
sec-butyl-benzene	< 0.5	< 0.5
p-isopropyltoluene	< 1.0	< 1.0
1,3-dichlorobenzene	< 0.5	< 0.5
1,4-dichlorobenzene	< 0.5	< 0.5
n-butylbenzene	< 0.5	< 0.5
1,2-dichlorobenzene	< 0.5	< 0.5
1,2-dibromo-3-chloropropane	< 1.0	< 1.0
1,2,4-trichlorobenzene	< 0.5	< 0.5
hexachlorobutadiene	< 0.5	< 0.5
naphthalene	< 0.5	< 0.5
1,2,3-trichlorobenzene	< 0.5	< 0.5

Laboratory Control Sample

Date Analyzed:	1/5/2007		
Spike Concentration = 20ug/L	% Recovery	Acceptance Limits	Verdict
dichlorodifluoromethane	173	70-130	out
chloromethane	155	70-130	out
vinyl chloride	136	70-130	out
bromomethane	122	70-130	ok
chloroethane	130	70-130	out
trichlorofluoromethane	129	70-130	ok
diethyl ether	110	70-130	ok
acrolein	49.9	70-130	out
acetone	116	70-130	ok
1,1-dichloroethene	117	70-130	ok
FREON-113	104	70-130	ok
iodomethane	98.5	70-130	ok
carbon disulfide	116	70-130	ok
dichloromethane	100	70-130	ok
tert-butyl alcohol (TBA)	115	70-130	ok
acrylonitrile	122	70-130	ok
methyl-tert-butyl-ether	106	70-130	ok
trans-1,2-dichloroethene	112	70-130	ok
1,1-dichloroethane	122	70-130	ok
di-isopropyl ether (DIPE)	122	70-130	ok
ethyl tert-butyl ether (EtBE)	115	70-130	ok
vinyl acetate	117	70-130	ok
2-butanone	104	70-130	ok
2,2-dichloropropane	105	70-130	ok
cis-1,2-dichloroethene	107	70-130	ok
chloroform	106	70-130	ok
bromochloromethane	97.3	70-130	ok
tetrahydrafuran	92.8	70-130	ok
1,1,1-trichloroethane	109	70-130	ok
1,1-dichloropropene	102	70-130	ok
carbon tetrachloride	112	70-130	ok
1,2-dichloroethane	105	70-130	ok
benzene	95.9	70-130	ok
tert-amyl methyl ether (TAME)	91.7	70-130	ok
trichloroethene	106	70-130	ok
1,2-dichloropropane	120	70-130	ok
bromodichloromethane	109	70-130	ok
2-chloroethyl vinyl ether	120	70-130	ok
1,4-Dioxane	116	70-130	ok
dibromomethane	106	70-130	ok
4-methyl-2-pentanone	121	70-130	ok
cis-1,3-dichloropropene	108	70-130	ok
toluene	115	70-130	ok
trans-1,3-dichloropropene	101	70-130	ok
1,1,2-trichloroethane	101	70-130	ok
2-hexanone	105	70-130	ok
1,3-dichloropropane	95.1	70-130	ok
tetrachloroethene	94.8	70-130	ok
dibromochloromethane	93.3	70-130	ok
1,2-dibromoethane (EDB)	100	70-130	ok
chlorobenzene	103	70-130	ok
1,1,1,2-tetrachloroethane	93.6	70-130	ok
ethylbenzene	104	70-130	ok
1,1,2,2-tetrachloroethane	97.1	70-130	ok
m&p-xylene	99.6	70-130	ok
o-xylene	106	70-130	ok
styrene	109	70-130	ok
bromoform	98.9	70-130	ok
isopropylbenzene	110	70-130	ok
1,2,3-trichloropropane	109	70-130	ok
bromobenzene	92.6	70-130	ok
n-propylbenzene	108	70-130	ok
2-chlorotoluene	107	70-130	ok
1,3,5-trimethylbenzene	110	70-130	ok
trans-1,4-dichloro-2-butene	105	70-130	ok
4-chlorotoluene	103	70-130	ok
tert-butyl-benzene	109	70-130	ok
1,2,4-trimethylbenzene	110	70-130	ok
sec-butyl-benzene	112	70-130	ok
p-isopropyltoluene	114	70-130	ok
1,3-dichlorobenzene	99.0	70-130	ok
1,4-dichlorobenzene	99.5	70-130	ok
n-butylbenzene	113	70-130	ok
1,2-dichlorobenzene	97.3	70-130	ok
1,2-dibromo-3-chloropropane	98.8	70-130	ok
1,2,4-trichlorobenzene	108	70-130	ok
hexachlorobutadiene	106	70-130	ok
naphthalene	97.2	70-130	ok
1,2,3-trichlorobenzene	105	70-130	ok

SMF criteria allows 5 compounds to be outside acceptance limits

Surrogates:	Recovery (%)	Acceptance Limits
DIBROMOFLUOROMETHANE	111	70-130
1,2-DICHLOROETHANE-D4	105	70-130
TOLUENE-D8	106	70-130
4-BROMOFLUOROBENZENE	102	70-130
1,2-DICHLOROBENZENE-D4	94.6	70-130

Surrogates:	Recovery (%)	Acceptance Limits	Verdict
DIBROMOFLUOROMETHANE	110	70-130	ok
1,2-DICHLOROETHANE-D4	102	70-130	ok
TOLUENE-D8	111	70-130	ok
4-BROMOFLUOROBENZENE	104	70-130	ok
1,2-DICHLOROBENZENE-D4	92.0	70-130	ok

Instrument: HP GC/MS "A"

WHITE COPY - Original YELLOW COPY - Lab Files PINK COPY - Project Manager

W.O. # 0701-00019 (for lab use only)

CHAIN-OF-CUSTODY RECORD

Sample I.D.	Date/Time Sampled (Very Important)	Matrix (A=Air, S=Soil, GW=Ground W., SW=Surface W., WW=Waste W., DW=Drinking W., Other (specify))	WW ONLY: ☐pH ☐Cond.	☐GC Screen (VOA)	☐524.2 ☐502.2	624	☐601 ☐602	625	Formaldehyde	ANALYSIS REQUIRED: 8260	8021	8021 - "9010" List	8021 "8020" List	8270 ☐Full ☐PAH ☐BN	8082-PCBs Only	8081 - Pest Only	TPH-GC (Mod. 8100)	TPH-GC w/FING	EPH (MA DEP)	VPH (MA DEP)	TCLP (Spec. Below)	Filtering (✓ if requested)	Metals ☐PPM-13 ☐R-8	Metals (List Below)	Total # of Cont.	Note #
GZML2	145.8-157.6	1/2/07	GW							X														2	
GZML2	100.6-112.4	1/3/07								X														2	
GZML2	111.9-123.7	1/2/07								X														2	
GZML2	89.3-101.1	1/3/07								X														2	
GZML2	123.2-135	1/2/07								X														2	
GZML2	134.5-146.3	1/2/07								X														2	
GZML2	157.1-168.9	1/2/07								X														2	

PRESERVATIVE (Cl - HCl, M=MeOH, N - HNO3, S - H2SO4, Na - NaOH, O - Other)*

CONTAINER TYPE (P-Plastic, G-Glass, V-Vial, O-Other)*

RELINQUISHED BY:	DATE/TIME	RECEIVED BY:
[signature]	1/4/07	CUSTODY SEAL
CS		Bill Beacon 1/4/07 0940
Bill Beacon 1/4/07	12:15	[signature] 1/4/07 1330

NOTES: Preservatives, special reporting limits, known contamination, additional testing parameters, etc.:

06/8SA

PROJECT MANAGER: ED SUMMERLY EXT:

DATA REPORT ☑ PDF (Adobe) ☐ ASCII ☐ EXCEL Specify State

LAB USE:

TURNAROUND TIME: (Standard) Rush ___ Days, Approved by: ___ TEMP. OF COOLER 3.6 °C

1/4 LG

GZA FILE NO: 03.00 32795.12 P.O. NO. 1340 LG 1/4/08

PROJECT CHARBERT, NFA

LOCATION ALTON, R.I.

COLLECTOR(S) MARK DALPE SHEET 1 OF 1

GZA GeoEnvironmental, Inc.
Engineers and Scientists
106 South Street
Hopkinton, MA 01748
(508) 435-9244
FAX (508) 435-9912

ACCREDITED IN ACCORDANCE WITH

GZAP003

GZA GeoEnvironmental, Inc.
106 South Street
Hopkinton, MA 01748
(781) 278-4700

Laboratory Identification Numbers:
MA and ME: **MA092** NH: **2028**
CT: **PH0579** RI: **LAO00236**
NELAC - NYS DOH: **11063**

ANALYTICAL REPORT

GZA GeoEnvironmental, Inc.
140 Broadway
Providence, RI 02903

Ed Summerly

Project No.: **03.0032795.12**
Work Order No.: **0701-00052**
Date Received: **01/10/2007**
Date Reported: **01/15/2007**

SAMPLE INFORMATION

Date Sampled	Matrix	Laboratory ID	Sample ID
01/08/2007	Aqueous	0701-00052 001	GZML-3/114.1-125.9
01/08/2007	Aqueous	0701-00052 002	GZML-3/100.8-114.6
01/05/2007	Aqueous	0701-00052 003	GZML-3/148-158
01/05/2007	Aqueous	0701-00052 004	GZML-3/136.7-148.5
01/08/2007	Aqueous	0701-00052 005	GZML-3/125.4-137.2
01/08/2007	Aqueous	0701-00052 006	GZML-3/91.5-103.3
01/08/2007	Aqueous	0701-00052 007	GZML-3/80.2-92
01/09/2007	Aqueous	0701-00052 008	GZML-3/46.3-58.1
01/09/2007	Aqueous	0701-00052 009	GZML-3/68.9-80.7
01/09/2007	Aqueous	0701-00052 010	GZML-3/57.6-69.4

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ANALYTICAL REPORT

GZA GeoEnvironmental, Inc.
140 Broadway
Providence, RI 02903

Ed Summerly

Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **01/10/2007**
Date Reported: **01/15/2007**
Work Order No.: **0701-00052**

PROJECT NARRATIVE:

1. Sample Receipt

The samples were received on 01/10/07 via _x_GZA courier, __EC, __FEDEX, or ___hand delivered. The temperature of the __temperature blank/_x_cooler air, was 4.5 degrees C. The temperature requirement for most analyses is above freezing to 6 degrees C. The samples were received intact for all requested analyses.

The chain of custody indicates that the samples, when required, were chemically preserved in accordance with the method they reference.

2. EPA Method 8260 - VOCs

The percent recoveries for the surrogates in the diluted runs are as follows:

GZML-3/114.1-125.9: 1,2- Dichloroethane-D4 - 102%, Toluene-D8 - 108%, 4-Bromofluorobenzene - 117%
GZML-3/100.8-114.6: 1,2- Dichloroethane-D4 - 92.1%, Toluene-D8 - 107%, 4-Bromofluorobenzene - 115%
GZML-3/136.7-148.5: 1,2- Dichloroethane-D4 - 93.5%, Toluene-D8 - 108%, 4-Bromofluorobenzene - 113%
GZML-3/125.4-137.2: 1,2- Dichloroethane-D4 - 94.8%, Toluene-D8 - 109%, 4-Bromofluorobenzene - 114%
GZML-3/91.5-103.3: 1,2- Dichloroethane-D4 - 88.8%, Toluene-D8 - 105%, 4-Bromofluorobenzene - 112%
GZML-3/80.2-92: 1,2- Dichloroethane-D4 - 95.8%, Toluene-D8 - 105%, 4-Bromofluorobenzene - 114%
GZML-3/43.6-58.1: 1,2- Dichloroethane-D4 - 87.7%, Toluene-D8 - 101%, 4-Bromofluorobenzene - 113%
GZML-3/68.9-80.7: 1,2- Dichloroethane-D4 - 90.2%, Toluene-D8 - 101%, 4-Bromofluorobenzene - 111%
GZML-3/57.6-69.4: 1,2- Dichloroethane-D4 - 86.9%, Toluene-D8 - 99.6%, 4-Bromofluorobenzene - 114%

Attach QC 8260 01/10/07 S - Aqueous
Attach QC 8260 01/11/06 S - Aqueous

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ANALYTICAL REPORT

GZA GeoEnvironmental, Inc.
140 Broadway
Providence, RI 02903

Ed Summerly

Project Name.:	**Charbert - NFA**	Date Received:	**01/10/2007**
		Date Reported:	**01/15/2007**
Project No.:	**03.0032795.12**	Work Order No.:	**0701-00052**

Data Authorized By: _____

NELAC certification, as indicated by the NELAC Lab ID Number, is per analyte. For a complete list of NELAC validated analytes, please contact the laboratory.

Abbreviations:
% R = % Recovery
DF = Dilution Factor
DFS = Dilution Factor Solids
DO = Diluted Out

Method Key:
Method 8260: The current version of the method is 8260B.
Method 8021: The current version of the method is 8021B.
Method 8270: The current version of the method is 8270C.
Method 6010: The current version of the method is 6010B.

Please note that the laboratory signed copy of the chain of custody record is an integral part of the data report.

The laboratory report shall not be reproduced except in full without the written consent of the laboratory.

Soil data is reported on a dry weight basis unless otherwise specified.

Matrix Spike / Matrix Spike Duplicate sets are performed as per method and are reported at the end of the analytical report if assigned on the Chain of Custody.

GZA GeoEnvironmental, Inc.
106 South Street
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ANALYTICAL REPORT

GZA GeoEnvironmental, Inc.
140 Broadway
Providence, RI 02903

Ed Summerly

Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **01/10/2007**
Date Reported: **01/15/2007**
Work Order No.: **0701-00052**

Sample ID: **GZML-3/114.1-125.9** Sample No.: **001**

Sample Date: **01/08/2007**

Test Performed	Method	Results	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260			MQS	01/10/2007
Dichlorodifluoromethane	EPA 8260	<2.0	ug/L	MQS	01/10/2007
Chloromethane	EPA 8260	<2.0	ug/L	MQS	01/10/2007
Vinyl Chloride	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Bromomethane	EPA 8260	<2.0	ug/L	MQS	01/10/2007
Chloroethane	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Trichlorofluoromethane	EPA 8260	<2.0	ug/L	MQS	01/10/2007
Diethylether	EPA 8260	<5.0	ug/L	MQS	01/10/2007
Acetone	EPA 8260	<25	ug/L	MQS	01/10/2007
1,1-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Dichloromethane	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Methyl-Tert-Butyl-Ether	EPA 8260	<1.0	ug/L	MQS	01/10/2007
trans-1,2-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
1,1-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	01/10/2007
2-Butanone	EPA 8260	<25	ug/L	MQS	01/10/2007
2,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	01/10/2007
cis-1,2-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Chloroform	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Bromochloromethane	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Tetrahydrofuran	EPA 8260	<10	ug/L	MQS	01/10/2007
1,1,1-Trichloroethane	EPA 8260	<1.0	ug/L	MQS	01/10/2007
1,1-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Carbon Tetrachloride	EPA 8260	<1.0	ug/L	MQS	01/10/2007
1,2-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Benzene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Trichloroethene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
1,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Bromodichloromethane	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Dibromomethane	EPA 8260	<1.0	ug/L	MQS	01/10/2007
4-Methyl-2-Pentanone	EPA 8260	<25	ug/L	MQS	01/10/2007
cis-1,3-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Toluene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
trans-1,3-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
1,1,2-Trichloroethane	EPA 8260	<1.0	ug/L	MQS	01/10/2007
2-Hexanone	EPA 8260	<2.0	ug/L	MQS	01/10/2007
1,3-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Tetrachloroethene	EPA 8260	160	ug/L	MQS	01/11/2007

GZA GeoEnvironmental, Inc.
106 South Street
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ANALYTICAL REPORT

GZA GeoEnvironmental, Inc.
140 Broadway
Providence, RI 02903

Ed Summerly

Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **01/10/2007**
Date Reported: **01/15/2007**
Work Order No.: **0701-00052**

Sample ID: **GZML-3/114.1-125.9** Sample No.: **001**

Sample Date: **01/08/2007**

Test Performed	Method	Results	Units	Tech	Analysis Date
Dibromochloromethane	EPA 8260	<1.0	ug/L	MQS	01/10/2007
1,2-Dibromoethane (EDB)	EPA 8260	<2.0	ug/L	MQS	01/10/2007
Chlorobenzene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
1,1,1,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Ethylbenzene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
m&p-Xylene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
o-Xylene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Styrene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Bromoform	EPA 8260	<2.0	ug/L	MQS	01/10/2007
Isopropylbenzene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
1,1,2,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	01/10/2007
1,2,3-Trichloropropane	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Bromobenzene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
N-Propylbenzene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
2-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
1,3,5-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
4-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
tert-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
1,2,4-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
sec-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
p-Isopropyltoluene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
1,3-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
1,4-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
n-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
1,2-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
1,2-Dibromo-3-Chloropropane	EPA 8260	<5.0	ug/L	MQS	01/10/2007
1,2,4-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Hexachlorobutadiene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Naphthalene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
1,2,3-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Surrogates:	EPA 8260				
***1,2-Dichloroethane-D4	EPA 8260	98.7	% R	MQS	01/10/2007
***Toluene-D8	EPA 8260	109	% R	MQS	01/10/2007
***4-Bromofluorobenzene	EPA 8260	117	% R	MQS	01/10/2007
Preparation	EPA 5030B	1.0	DF	MQS	01/10/2007

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ANALYTICAL REPORT

GZA GeoEnvironmental, Inc.
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Ed Summerly

Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **01/10/2007**
Date Reported: **01/15/2007**
Work Order No.: **0701-00052**

Sample ID: **GZML-3/100.8-114.6** Sample No.: **002**

Sample Date: **01/08/2007**

Test Performed	Method	Results	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260			MQS	01/10/2007
Dichlorodifluoromethane	EPA 8260	<2.0	ug/L	MQS	01/10/2007
Chloromethane	EPA 8260	<2.0	ug/L	MQS	01/10/2007
Vinyl Chloride	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Bromomethane	EPA 8260	<2.0	ug/L	MQS	01/10/2007
Chloroethane	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Trichlorofluoromethane	EPA 8260	<2.0	ug/L	MQS	01/10/2007
Diethylether	EPA 8260	<5.0	ug/L	MQS	01/10/2007
Acetone	EPA 8260	<25	ug/L	MQS	01/10/2007
1,1-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Dichloromethane	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Methyl-Tert-Butyl-Ether	EPA 8260	<1.0	ug/L	MQS	01/10/2007
trans-1,2-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
1,1-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	01/10/2007
2-Butanone	EPA 8260	<25	ug/L	MQS	01/10/2007
2,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	01/10/2007
cis-1,2-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Chloroform	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Bromochloromethane	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Tetrahydrofuran	EPA 8260	<10	ug/L	MQS	01/10/2007
1,1,1-Trichloroethane	EPA 8260	<1.0	ug/L	MQS	01/10/2007
1,1-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Carbon Tetrachloride	EPA 8260	<1.0	ug/L	MQS	01/10/2007
1,2-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Benzene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Trichloroethene	EPA 8260	2.1	ug/L	MQS	01/10/2007
1,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Bromodichloromethane	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Dibromomethane	EPA 8260	<1.0	ug/L	MQS	01/10/2007
4-Methyl-2-Pentanone	EPA 8260	<25	ug/L	MQS	01/10/2007
cis-1,3-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Toluene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
trans-1,3-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
1,1,2-Trichloroethane	EPA 8260	<1.0	ug/L	MQS	01/10/2007
2-Hexanone	EPA 8260	<2.0	ug/L	MQS	01/10/2007
1,3-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Tetrachloroethene	EPA 8260	1100	ug/L	MQS	01/11/2007

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ANALYTICAL REPORT

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Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **01/10/2007**
Date Reported: **01/15/2007**
Work Order No.: **0701-00052**

Sample ID: **GZML-3/100.8-114.6** Sample No.: **002**

Sample Date: **01/08/2007**

Test Performed	Method	Results	Units	Tech	Analysis Date
Dibromochloromethane	EPA 8260	<1.0	ug/L	MQS	01/10/2007
1,2-Dibromoethane (EDB)	EPA 8260	<2.0	ug/L	MQS	01/10/2007
Chlorobenzene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
1,1,1,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Ethylbenzene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
m&p-Xylene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
o-Xylene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Styrene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Bromoform	EPA 8260	<2.0	ug/L	MQS	01/10/2007
Isopropylbenzene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
1,1,2,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	01/10/2007
1,2,3-Trichloropropane	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Bromobenzene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
N-Propylbenzene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
2-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
1,3,5-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
4-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
tert-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
1,2,4-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
sec-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
p-Isopropyltoluene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
1,3-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
1,4-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
n-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
1,2-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
1,2-Dibromo-3-Chloropropane	EPA 8260	<5.0	ug/L	MQS	01/10/2007
1,2,4-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Hexachlorobutadiene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Naphthalene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
1,2,3-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Surrogates:	EPA 8260				
***1,2-Dichloroethane-D4	EPA 8260	97.0	% R	MQS	01/10/2007
***Toluene-D8	EPA 8260	111	% R	MQS	01/10/2007
***4-Bromofluorobenzene	EPA 8260	120	% R	MQS	01/10/2007
Preparation	EPA 5030B	1.0	DF	MQS	01/10/2007

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Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **01/10/2007**
Date Reported: **01/15/2007**
Work Order No.: **0701-00052**

Sample ID: **GZML-3/148-158** Sample No.: **003**

Sample Date: **01/05/2007**

Test Performed	Method	Results	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260			MQS	01/11/2007
Dichlorodifluoromethane	EPA 8260	<2.0	ug/L	MQS	01/11/2007
Chloromethane	EPA 8260	<2.0	ug/L	MQS	01/11/2007
Vinyl Chloride	EPA 8260	<1.0	ug/L	MQS	01/11/2007
Bromomethane	EPA 8260	<2.0	ug/L	MQS	01/11/2007
Chloroethane	EPA 8260	<1.0	ug/L	MQS	01/11/2007
Trichlorofluoromethane	EPA 8260	<2.0	ug/L	MQS	01/11/2007
Diethylether	EPA 8260	<5.0	ug/L	MQS	01/11/2007
Acetone	EPA 8260	<25	ug/L	MQS	01/11/2007
1,1-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	01/11/2007
Dichloromethane	EPA 8260	<1.0	ug/L	MQS	01/11/2007
Methyl-Tert-Butyl-Ether	EPA 8260	<1.0	ug/L	MQS	01/11/2007
trans-1,2-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	01/11/2007
1,1-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	01/11/2007
2-Butanone	EPA 8260	<25	ug/L	MQS	01/11/2007
2,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	01/11/2007
cis-1,2-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	01/11/2007
Chloroform	EPA 8260	<1.0	ug/L	MQS	01/11/2007
Bromochloromethane	EPA 8260	<1.0	ug/L	MQS	01/11/2007
Tetrahydrofuran	EPA 8260	<10	ug/L	MQS	01/11/2007
1,1,1-Trichloroethane	EPA 8260	<1.0	ug/L	MQS	01/11/2007
1,1-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	01/11/2007
Carbon Tetrachloride	EPA 8260	<1.0	ug/L	MQS	01/11/2007
1,2-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	01/11/2007
Benzene	EPA 8260	<1.0	ug/L	MQS	01/11/2007
Trichloroethene	EPA 8260	<1.0	ug/L	MQS	01/11/2007
1,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	01/11/2007
Bromodichloromethane	EPA 8260	<1.0	ug/L	MQS	01/11/2007
Dibromomethane	EPA 8260	<1.0	ug/L	MQS	01/11/2007
4-Methyl-2-Pentanone	EPA 8260	<25	ug/L	MQS	01/11/2007
cis-1,3-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	01/11/2007
Toluene	EPA 8260	<1.0	ug/L	MQS	01/11/2007
trans-1,3-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	01/11/2007
1,1,2-Trichloroethane	EPA 8260	<1.0	ug/L	MQS	01/11/2007
2-Hexanone	EPA 8260	<2.0	ug/L	MQS	01/11/2007
1,3-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	01/11/2007
Tetrachloroethene	EPA 8260	11	ug/L	MQS	01/11/2007

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ANALYTICAL REPORT

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Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **01/10/2007**
Date Reported: **01/15/2007**
Work Order No.: **0701-00052**

Sample ID: **GZML-3/148-158** Sample No.: **003**

Sample Date: **01/05/2007**

Test Performed	Method	Results	Units	Tech	Analysis Date
Dibromochloromethane	EPA 8260	<1.0	ug/L	MQS	01/11/2007
1,2-Dibromoethane (EDB)	EPA 8260	<2.0	ug/L	MQS	01/11/2007
Chlorobenzene	EPA 8260	<1.0	ug/L	MQS	01/11/2007
1,1,1,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	01/11/2007
Ethylbenzene	EPA 8260	<1.0	ug/L	MQS	01/11/2007
m&p-Xylene	EPA 8260	<1.0	ug/L	MQS	01/11/2007
o-Xylene	EPA 8260	<1.0	ug/L	MQS	01/11/2007
Styrene	EPA 8260	<1.0	ug/L	MQS	01/11/2007
Bromoform	EPA 8260	<2.0	ug/L	MQS	01/11/2007
Isopropylbenzene	EPA 8260	<1.0	ug/L	MQS	01/11/2007
1,1,2,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	01/11/2007
1,2,3-Trichloropropane	EPA 8260	<1.0	ug/L	MQS	01/11/2007
Bromobenzene	EPA 8260	<1.0	ug/L	MQS	01/11/2007
N-Propylbenzene	EPA 8260	<1.0	ug/L	MQS	01/11/2007
2-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	01/11/2007
1,3,5-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	01/11/2007
4-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	01/11/2007
tert-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	01/11/2007
1,2,4-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	01/11/2007
sec-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	01/11/2007
p-Isopropyltoluene	EPA 8260	<1.0	ug/L	MQS	01/11/2007
1,3-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	01/11/2007
1,4-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	01/11/2007
n-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	01/11/2007
1,2-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	01/11/2007
1,2-Dibromo-3-Chloropropane	EPA 8260	<5.0	ug/L	MQS	01/11/2007
1,2,4-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	01/11/2007
Hexachlorobutadiene	EPA 8260	<1.0	ug/L	MQS	01/11/2007
Naphthalene	EPA 8260	<1.0	ug/L	MQS	01/11/2007
1,2,3-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	01/11/2007
Surrogates:	EPA 8260				
***1,2-Dichloroethane-D4	EPA 8260	84.5	% R	MQS	01/11/2007
***Toluene-D8	EPA 8260	107	% R	MQS	01/11/2007
***4-Bromofluorobenzene	EPA 8260	112	% R	MQS	01/11/2007
Preparation	EPA 5030B	1.0	DF	MQS	01/11/2007

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Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **01/10/2007**
Date Reported: **01/15/2007**
Work Order No.: **0701-00052**

Sample ID: **GZML-3/136.7-148.5** Sample No.: **004**

Sample Date: **01/05/2007**

Test Performed	Method	Results	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260			MQS	01/10/2007
Dichlorodifluoromethane	EPA 8260	<2.0	ug/L	MQS	01/10/2007
Chloromethane	EPA 8260	<2.0	ug/L	MQS	01/10/2007
Vinyl Chloride	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Bromomethane	EPA 8260	<2.0	ug/L	MQS	01/10/2007
Chloroethane	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Trichlorofluoromethane	EPA 8260	<2.0	ug/L	MQS	01/10/2007
Diethylether	EPA 8260	<5.0	ug/L	MQS	01/10/2007
Acetone	EPA 8260	<25	ug/L	MQS	01/10/2007
1,1-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Dichloromethane	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Methyl-Tert-Butyl-Ether	EPA 8260	<1.0	ug/L	MQS	01/10/2007
trans-1,2-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
1,1-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	01/10/2007
2-Butanone	EPA 8260	<25	ug/L	MQS	01/10/2007
2,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	01/10/2007
cis-1,2-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Chloroform	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Bromochloromethane	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Tetrahydrofuran	EPA 8260	<10	ug/L	MQS	01/10/2007
1,1,1-Trichloroethane	EPA 8260	<1.0	ug/L	MQS	01/10/2007
1,1-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Carbon Tetrachloride	EPA 8260	<1.0	ug/L	MQS	01/10/2007
1,2-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Benzene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Trichloroethene	EPA 8260	9.9	ug/L	MQS	01/10/2007
1,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Bromodichloromethane	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Dibromomethane	EPA 8260	<1.0	ug/L	MQS	01/10/2007
4-Methyl-2-Pentanone	EPA 8260	<25	ug/L	MQS	01/10/2007
cis-1,3-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Toluene	EPA 8260	1.7	ug/L	MQS	01/10/2007
trans-1,3-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
1,1,2-Trichloroethane	EPA 8260	<1.0	ug/L	MQS	01/10/2007
2-Hexanone	EPA 8260	<2.0	ug/L	MQS	01/10/2007
1,3-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Tetrachloroethene	EPA 8260	2100	ug/L	MQS	01/11/2007

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ANALYTICAL REPORT

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Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **01/10/2007**
Date Reported: **01/15/2007**
Work Order No.: **0701-00052**

Sample ID: **GZML-3/136.7-148.5** Sample No.: **004**

Sample Date: **01/05/2007**

Test Performed	Method	Results	Units	Tech	Analysis Date
Dibromochloromethane	EPA 8260	<1.0	ug/L	MQS	01/10/2007
1,2-Dibromoethane (EDB)	EPA 8260	<2.0	ug/L	MQS	01/10/2007
Chlorobenzene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
1,1,1,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Ethylbenzene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
m&p-Xylene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
o-Xylene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Styrene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Bromoform	EPA 8260	<2.0	ug/L	MQS	01/10/2007
Isopropylbenzene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
1,1,2,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	01/10/2007
1,2,3-Trichloropropane	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Bromobenzene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
N-Propylbenzene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
2-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
1,3,5-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
4-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
tert-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
1,2,4-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
sec-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
p-Isopropyltoluene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
1,3-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
1,4-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
n-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
1,2-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
1,2-Dibromo-3-Chloropropane	EPA 8260	<5.0	ug/L	MQS	01/10/2007
1,2,4-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Hexachlorobutadiene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Naphthalene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
1,2,3-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Surrogates:	EPA 8260				
***1,2-Dichloroethane-D4	EPA 8260	98.5	% R	MQS	01/10/2007
***Toluene-D8	EPA 8260	110	% R	MQS	01/10/2007
***4-Bromofluorobenzene	EPA 8260	119	% R	MQS	01/10/2007
Preparation	EPA 5030B	1.0	DF	MQS	01/10/2007

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ANALYTICAL REPORT

GZA GeoEnvironmental, Inc.
140 Broadway
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Ed Summerly

Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **01/10/2007**
Date Reported: **01/15/2007**
Work Order No.: **0701-00052**

Sample ID: **GZML-3/125.4-137.2** Sample No.: **005**

Sample Date: **01/08/2007**

Test Performed	Method	Results	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260			MQS	01/10/2007
Dichlorodifluoromethane	EPA 8260	<2.0	ug/L	MQS	01/10/2007
Chloromethane	EPA 8260	<2.0	ug/L	MQS	01/10/2007
Vinyl Chloride	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Bromomethane	EPA 8260	<2.0	ug/L	MQS	01/10/2007
Chloroethane	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Trichlorofluoromethane	EPA 8260	<2.0	ug/L	MQS	01/10/2007
Diethylether	EPA 8260	<5.0	ug/L	MQS	01/10/2007
Acetone	EPA 8260	<25	ug/L	MQS	01/10/2007
1,1-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Dichloromethane	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Methyl-Tert-Butyl-Ether	EPA 8260	<1.0	ug/L	MQS	01/10/2007
trans-1,2-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
1,1-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	01/10/2007
2-Butanone	EPA 8260	<25	ug/L	MQS	01/10/2007
2,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	01/10/2007
cis-1,2-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Chloroform	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Bromochloromethane	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Tetrahydrofuran	EPA 8260	<10	ug/L	MQS	01/10/2007
1,1,1-Trichloroethane	EPA 8260	<1.0	ug/L	MQS	01/10/2007
1,1-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Carbon Tetrachloride	EPA 8260	<1.0	ug/L	MQS	01/10/2007
1,2-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Benzene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Trichloroethene	EPA 8260	2.2	ug/L	MQS	01/10/2007
1,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Bromodichloromethane	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Dibromomethane	EPA 8260	<1.0	ug/L	MQS	01/10/2007
4-Methyl-2-Pentanone	EPA 8260	<25	ug/L	MQS	01/10/2007
cis-1,3-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Toluene	EPA 8260	1.2	ug/L	MQS	01/10/2007
trans-1,3-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
1,1,2-Trichloroethane	EPA 8260	<1.0	ug/L	MQS	01/10/2007
2-Hexanone	EPA 8260	<2.0	ug/L	MQS	01/10/2007
1,3-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Tetrachloroethene	EPA 8260	560	ug/L	MQS	01/11/2007

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ANALYTICAL REPORT

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Ed Summerly

Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **01/10/2007**
Date Reported: **01/15/2007**
Work Order No.: **0701-00052**

Sample ID: **GZML-3/125.4-137.2** Sample No.: **005**

Sample Date: **01/08/2007**

Test Performed	Method	Results	Units	Tech	Analysis Date
Dibromochloromethane	EPA 8260	<1.0	ug/L	MQS	01/10/2007
1,2-Dibromoethane (EDB)	EPA 8260	<2.0	ug/L	MQS	01/10/2007
Chlorobenzene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
1,1,1,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Ethylbenzene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
m&p-Xylene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
o-Xylene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Styrene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Bromoform	EPA 8260	<2.0	ug/L	MQS	01/10/2007
Isopropylbenzene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
1,1,2,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	01/10/2007
1,2,3-Trichloropropane	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Bromobenzene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
N-Propylbenzene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
2-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
1,3,5-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
4-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
tert-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
1,2,4-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
sec-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
p-Isopropyltoluene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
1,3-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
1,4-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
n-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
1,2-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
1,2-Dibromo-3-Chloropropane	EPA 8260	<5.0	ug/L	MQS	01/10/2007
1,2,4-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Hexachlorobutadiene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Naphthalene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
1,2,3-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Surrogates:	EPA 8260				
***1,2-Dichloroethane-D4	EPA 8260	91.6	% R	MQS	01/10/2007
***Toluene-D8	EPA 8260	108	% R	MQS	01/10/2007
***4-Bromofluorobenzene	EPA 8260	117	% R	MQS	01/10/2007
Preparation	EPA 5030B	1.0	DF	MQS	01/10/2007

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Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **01/10/2007**
Date Reported: **01/15/2007**
Work Order No.: **0701-00052**

Sample ID: **GZML-3/91.5-103.3** Sample No.: **006**

Sample Date: **01/08/2007**

Test Performed	Method	Results	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260			MQS	01/10/2007
Dichlorodifluoromethane	EPA 8260	<2.0	ug/L	MQS	01/10/2007
Chloromethane	EPA 8260	<2.0	ug/L	MQS	01/10/2007
Vinyl Chloride	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Bromomethane	EPA 8260	<2.0	ug/L	MQS	01/10/2007
Chloroethane	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Trichlorofluoromethane	EPA 8260	<2.0	ug/L	MQS	01/10/2007
Diethylether	EPA 8260	<5.0	ug/L	MQS	01/10/2007
Acetone	EPA 8260	<25	ug/L	MQS	01/10/2007
1,1-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Dichloromethane	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Methyl-Tert-Butyl-Ether	EPA 8260	<1.0	ug/L	MQS	01/10/2007
trans-1,2-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
1,1-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	01/10/2007
2-Butanone	EPA 8260	<25	ug/L	MQS	01/10/2007
2,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	01/10/2007
cis-1,2-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Chloroform	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Bromochloromethane	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Tetrahydrofuran	EPA 8260	<10	ug/L	MQS	01/10/2007
1,1,1-Trichloroethane	EPA 8260	<1.0	ug/L	MQS	01/10/2007
1,1-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Carbon Tetrachloride	EPA 8260	<1.0	ug/L	MQS	01/10/2007
1,2-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Benzene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Trichloroethene	EPA 8260	4.0	ug/L	MQS	01/10/2007
1,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Bromodichloromethane	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Dibromomethane	EPA 8260	<1.0	ug/L	MQS	01/10/2007
4-Methyl-2-Pentanone	EPA 8260	<25	ug/L	MQS	01/10/2007
cis-1,3-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Toluene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
trans-1,3-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
1,1,2-Trichloroethane	EPA 8260	<1.0	ug/L	MQS	01/10/2007
2-Hexanone	EPA 8260	<2.0	ug/L	MQS	01/10/2007
1,3-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Tetrachloroethene	EPA 8260	2600	ug/L	MQS	01/11/2007

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ANALYTICAL REPORT

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Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **01/10/2007**
Date Reported: **01/15/2007**
Work Order No.: **0701-00052**

Sample ID: **GZML-3/91.5-103.3** Sample No.: **006**

Sample Date: **01/08/2007**

Test Performed	Method	Results	Units	Tech	Analysis Date
Dibromochloromethane	EPA 8260	<1.0	ug/L	MQS	01/10/2007
1,2-Dibromoethane (EDB)	EPA 8260	<2.0	ug/L	MQS	01/10/2007
Chlorobenzene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
1,1,1,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Ethylbenzene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
m&p-Xylene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
o-Xylene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Styrene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Bromoform	EPA 8260	<2.0	ug/L	MQS	01/10/2007
Isopropylbenzene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
1,1,2,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	01/10/2007
1,2,3-Trichloropropane	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Bromobenzene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
N-Propylbenzene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
2-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
1,3,5-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
4-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
tert-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
1,2,4-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
sec-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
p-Isopropyltoluene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
1,3-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
1,4-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
n-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
1,2-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
1,2-Dibromo-3-Chloropropane	EPA 8260	<5.0	ug/L	MQS	01/10/2007
1,2,4-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Hexachlorobutadiene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Naphthalene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
1,2,3-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Surrogates:	EPA 8260				
***1,2-Dichloroethane-D4	EPA 8260	98.3	% R	MQS	01/10/2007
***Toluene-D8	EPA 8260	109	% R	MQS	01/10/2007
***4-Bromofluorobenzene	EPA 8260	119	% R	MQS	01/10/2007
Preparation	EPA 5030B	1.0	DF	MQS	01/10/2007

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Project Name.: **Charbert - NFA**
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Date Received: **01/10/2007**
Date Reported: **01/15/2007**
Work Order No.: **0701-00052**

Sample ID: **GZML-3/80.2-92** Sample No.: **007**

Sample Date: **01/08/2007**

Test Performed	Method	Results	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260			MQS	01/10/2007
Dichlorodifluoromethane	EPA 8260	<2.0	ug/L	MQS	01/10/2007
Chloromethane	EPA 8260	<2.0	ug/L	MQS	01/10/2007
Vinyl Chloride	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Bromomethane	EPA 8260	<2.0	ug/L	MQS	01/10/2007
Chloroethane	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Trichlorofluoromethane	EPA 8260	<2.0	ug/L	MQS	01/10/2007
Diethylether	EPA 8260	<5.0	ug/L	MQS	01/10/2007
Acetone	EPA 8260	<25	ug/L	MQS	01/10/2007
1,1-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Dichloromethane	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Methyl-Tert-Butyl-Ether	EPA 8260	<1.0	ug/L	MQS	01/10/2007
trans-1,2-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
1,1-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	01/10/2007
2-Butanone	EPA 8260	<25	ug/L	MQS	01/10/2007
2,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	01/10/2007
cis-1,2-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Chloroform	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Bromochloromethane	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Tetrahydrofuran	EPA 8260	<10	ug/L	MQS	01/10/2007
1,1,1-Trichloroethane	EPA 8260	<1.0	ug/L	MQS	01/10/2007
1,1-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Carbon Tetrachloride	EPA 8260	<1.0	ug/L	MQS	01/10/2007
1,2-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Benzene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Trichloroethene	EPA 8260	5.5	ug/L	MQS	01/10/2007
1,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Bromodichloromethane	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Dibromomethane	EPA 8260	<1.0	ug/L	MQS	01/10/2007
4-Methyl-2-Pentanone	EPA 8260	<25	ug/L	MQS	01/10/2007
cis-1,3-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Toluene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
trans-1,3-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
1,1,2-Trichloroethane	EPA 8260	<1.0	ug/L	MQS	01/10/2007
2-Hexanone	EPA 8260	<2.0	ug/L	MQS	01/10/2007
1,3-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Tetrachloroethene	EPA 8260	3200	ug/L	MQS	01/11/2007

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ANALYTICAL REPORT

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Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **01/10/2007**
Date Reported: **01/15/2007**
Work Order No.: **0701-00052**

Sample ID: **GZML-3/80.2-92** Sample No.: **007**

Sample Date: **01/08/2007**

Test Performed	Method	Results	Units	Tech	Analysis Date
Dibromochloromethane	EPA 8260	<1.0	ug/L	MQS	01/10/2007
1,2-Dibromoethane (EDB)	EPA 8260	<2.0	ug/L	MQS	01/10/2007
Chlorobenzene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
1,1,1,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Ethylbenzene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
m&p-Xylene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
o-Xylene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Styrene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Bromoform	EPA 8260	<2.0	ug/L	MQS	01/10/2007
Isopropylbenzene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
1,1,2,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	01/10/2007
1,2,3-Trichloropropane	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Bromobenzene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
N-Propylbenzene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
2-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
1,3,5-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
4-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
tert-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
1,2,4-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
sec-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
p-Isopropyltoluene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
1,3-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
1,4-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
n-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
1,2-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
1,2-Dibromo-3-Chloropropane	EPA 8260	<5.0	ug/L	MQS	01/10/2007
1,2,4-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Hexachlorobutadiene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Naphthalene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
1,2,3-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Surrogates:	EPA 8260				
***1,2-Dichloroethane-D4	EPA 8260	103	% R	MQS	01/10/2007
***Toluene-D8	EPA 8260	110	% R	MQS	01/10/2007
***1,2-Dichlorobenzene- D4	EPA 8260	109	% R	MQS	01/10/2007
Preparation	EPA 5030B	1.0	DF	MQS	01/10/2007

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ANALYTICAL REPORT

GZA GeoEnvironmental, Inc.
140 Broadway
Providence, RI 02903

Ed Summerly

Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **01/10/2007**
Date Reported: **01/15/2007**
Work Order No.: **0701-00052**

Sample ID: **GZML-3/46.3-58.1** Sample No.: **008**

Sample Date: **01/09/2007**

Test Performed	Method	Results	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260			MQS	01/10/2007
Dichlorodifluoromethane	EPA 8260	<2.0	ug/L	MQS	01/10/2007
Chloromethane	EPA 8260	<2.0	ug/L	MQS	01/10/2007
Vinyl Chloride	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Bromomethane	EPA 8260	<2.0	ug/L	MQS	01/10/2007
Chloroethane	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Trichlorofluoromethane	EPA 8260	<2.0	ug/L	MQS	01/10/2007
Diethylether	EPA 8260	<5.0	ug/L	MQS	01/10/2007
Acetone	EPA 8260	<25	ug/L	MQS	01/10/2007
1,1-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Dichloromethane	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Methyl-Tert-Butyl-Ether	EPA 8260	<1.0	ug/L	MQS	01/10/2007
trans-1,2-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
1,1-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	01/10/2007
2-Butanone	EPA 8260	<25	ug/L	MQS	01/10/2007
2,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	01/10/2007
cis-1,2-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Chloroform	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Bromochloromethane	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Tetrahydrofuran	EPA 8260	<10	ug/L	MQS	01/10/2007
1,1,1-Trichloroethane	EPA 8260	1.5	ug/L	MQS	01/10/2007
1,1-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Carbon Tetrachloride	EPA 8260	<1.0	ug/L	MQS	01/10/2007
1,2-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Benzene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Trichloroethene	EPA 8260	14	ug/L	MQS	01/10/2007
1,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Bromodichloromethane	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Dibromomethane	EPA 8260	<1.0	ug/L	MQS	01/10/2007
4-Methyl-2-Pentanone	EPA 8260	<25	ug/L	MQS	01/10/2007
cis-1,3-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Toluene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
trans-1,3-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
1,1,2-Trichloroethane	EPA 8260	<1.0	ug/L	MQS	01/10/2007
2-Hexanone	EPA 8260	<2.0	ug/L	MQS	01/10/2007
1,3-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Tetrachloroethene	EPA 8260	8300	ug/L	MQS	01/11/2007

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ANALYTICAL REPORT

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Ed Summerly

Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **01/10/2007**
Date Reported: **01/15/2007**
Work Order No.: **0701-00052**

Sample ID: **GZML-3/46.3-58.1** Sample No.: **008**

Sample Date: **01/09/2007**

Test Performed	Method	Results	Units	Tech	Analysis Date
Dibromochloromethane	EPA 8260	<1.0	ug/L	MQS	01/10/2007
1,2-Dibromoethane (EDB)	EPA 8260	<2.0	ug/L	MQS	01/10/2007
Chlorobenzene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
1,1,1,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Ethylbenzene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
m&p-Xylene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
o-Xylene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Styrene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Bromoform	EPA 8260	<2.0	ug/L	MQS	01/10/2007
Isopropylbenzene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
1,1,2,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	01/10/2007
1,2,3-Trichloropropane	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Bromobenzene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
N-Propylbenzene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
2-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
1,3,5-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
4-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
tert-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
1,2,4-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
sec-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
p-Isopropyltoluene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
1,3-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
1,4-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
n-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
1,2-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
1,2-Dibromo-3-Chloropropane	EPA 8260	<5.0	ug/L	MQS	01/10/2007
1,2,4-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Hexachlorobutadiene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Naphthalene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
1,2,3-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Surrogates:	EPA 8260				
***1,2-Dichloroethane-D4	EPA 8260	97.4	% R	MQS	01/10/2007
***Toluene-D8	EPA 8260	110	% R	MQS	01/10/2007
***4-Bromofluorobenzene	EPA 8260	120	% R	MQS	01/10/2007
Preparation	EPA 5030B	1.0	DF	MQS	01/10/2007

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Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **01/10/2007**
Date Reported: **01/15/2007**
Work Order No.: **0701-00052**

Sample ID: **GZML-3/68.9-80.7** Sample No.: **009**

Sample Date: **01/09/2007**

Test Performed	Method	Results	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260			MQS	01/10/2007
Dichlorodifluoromethane	EPA 8260	<2.0	ug/L	MQS	01/10/2007
Chloromethane	EPA 8260	<2.0	ug/L	MQS	01/10/2007
Vinyl Chloride	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Bromomethane	EPA 8260	<2.0	ug/L	MQS	01/10/2007
Chloroethane	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Trichlorofluoromethane	EPA 8260	<2.0	ug/L	MQS	01/10/2007
Diethylether	EPA 8260	<5.0	ug/L	MQS	01/10/2007
Acetone	EPA 8260	<25	ug/L	MQS	01/10/2007
1,1-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Dichloromethane	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Methyl-Tert-Butyl-Ether	EPA 8260	<1.0	ug/L	MQS	01/10/2007
trans-1,2-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
1,1-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	01/10/2007
2-Butanone	EPA 8260	<25	ug/L	MQS	01/10/2007
2,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	01/10/2007
cis-1,2-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Chloroform	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Bromochloromethane	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Tetrahydrofuran	EPA 8260	<10	ug/L	MQS	01/10/2007
1,1,1-Trichloroethane	EPA 8260	<1.0	ug/L	MQS	01/10/2007
1,1-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Carbon Tetrachloride	EPA 8260	<1.0	ug/L	MQS	01/10/2007
1,2-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Benzene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Trichloroethene	EPA 8260	3.3	ug/L	MQS	01/10/2007
1,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Bromodichloromethane	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Dibromomethane	EPA 8260	<1.0	ug/L	MQS	01/10/2007
4-Methyl-2-Pentanone	EPA 8260	<25	ug/L	MQS	01/10/2007
cis-1,3-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Toluene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
trans-1,3-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
1,1,2-Trichloroethane	EPA 8260	<1.0	ug/L	MQS	01/10/2007
2-Hexanone	EPA 8260	<2.0	ug/L	MQS	01/10/2007
1,3-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Tetrachloroethene	EPA 8260	1400	ug/L	MQS	01/11/2007

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ANALYTICAL REPORT

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Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **01/10/2007**
Date Reported: **01/15/2007**
Work Order No.: **0701-00052**

Sample ID: **GZML-3/68.9-80.7** Sample No.: **009**

Sample Date: **01/09/2007**

Test Performed	Method	Results	Units	Tech	Analysis Date
Dibromochloromethane	EPA 8260	<1.0	ug/L	MQS	01/10/2007
1,2-Dibromoethane (EDB)	EPA 8260	<2.0	ug/L	MQS	01/10/2007
Chlorobenzene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
1,1,1,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Ethylbenzene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
m&p-Xylene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
o-Xylene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Styrene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Bromoform	EPA 8260	<2.0	ug/L	MQS	01/10/2007
Isopropylbenzene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
1,1,2,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	01/10/2007
1,2,3-Trichloropropane	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Bromobenzene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
N-Propylbenzene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
2-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
1,3,5-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
4-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
tert-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
1,2,4-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
sec-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
p-Isopropyltoluene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
1,3-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
1,4-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
n-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
1,2-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
1,2-Dibromo-3-Chloropropane	EPA 8260	<5.0	ug/L	MQS	01/10/2007
1,2,4-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Hexachlorobutadiene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Naphthalene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
1,2,3-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Surrogates:	EPA 8260				
***1,2-Dichloroethane-D4	EPA 8260	99.0	% R	MQS	01/10/2007
***Toluene-D8	EPA 8260	108	% R	MQS	01/10/2007
***4-Bromofluorobenzene	EPA 8260	118	% R	MQS	01/10/2007
Preparation	EPA 5030B	1.0	DF	MQS	01/10/2007

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Project Name.: **Charbert - NFA**
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Date Received: **01/10/2007**
Date Reported: **01/15/2007**
Work Order No.: **0701-00052**

Sample ID: **GZML-3/57.6-69.4** Sample No.: **010**

Sample Date: **01/09/2007**

Test Performed	Method	Results	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260			MQS	01/10/2007
Dichlorodifluoromethane	EPA 8260	<2.0	ug/L	MQS	01/10/2007
Chloromethane	EPA 8260	<2.0	ug/L	MQS	01/10/2007
Vinyl Chloride	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Bromomethane	EPA 8260	<2.0	ug/L	MQS	01/10/2007
Chloroethane	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Trichlorofluoromethane	EPA 8260	<2.0	ug/L	MQS	01/10/2007
Diethylether	EPA 8260	<5.0	ug/L	MQS	01/10/2007
Acetone	EPA 8260	<25	ug/L	MQS	01/10/2007
1,1-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Dichloromethane	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Methyl-Tert-Butyl-Ether	EPA 8260	<1.0	ug/L	MQS	01/10/2007
trans-1,2-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
1,1-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	01/10/2007
2-Butanone	EPA 8260	<25	ug/L	MQS	01/10/2007
2,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	01/10/2007
cis-1,2-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Chloroform	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Bromochloromethane	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Tetrahydrofuran	EPA 8260	<10	ug/L	MQS	01/10/2007
1,1,1-Trichloroethane	EPA 8260	1.7	ug/L	MQS	01/10/2007
1,1-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Carbon Tetrachloride	EPA 8260	<1.0	ug/L	MQS	01/10/2007
1,2-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Benzene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Trichloroethene	EPA 8260	15	ug/L	MQS	01/10/2007
1,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Bromodichloromethane	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Dibromomethane	EPA 8260	<1.0	ug/L	MQS	01/10/2007
4-Methyl-2-Pentanone	EPA 8260	<25	ug/L	MQS	01/10/2007
cis-1,3-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Toluene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
trans-1,3-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
1,1,2-Trichloroethane	EPA 8260	<1.0	ug/L	MQS	01/10/2007
2-Hexanone	EPA 8260	<2.0	ug/L	MQS	01/10/2007
1,3-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Tetrachloroethene	EPA 8260	8800	ug/L	MQS	01/11/2007

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Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **01/10/2007**
Date Reported: **01/15/2007**
Work Order No.: **0701-00052**

Sample ID: **GZML-3/57.6-69.4** Sample No.: **010**

Sample Date: **01/09/2007**

Test Performed	Method	Results	Units	Tech	Analysis Date
Dibromochloromethane	EPA 8260	<1.0	ug/L	MQS	01/10/2007
1,2-Dibromoethane (EDB)	EPA 8260	<2.0	ug/L	MQS	01/10/2007
Chlorobenzene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
1,1,1,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Ethylbenzene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
m&p-Xylene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
o-Xylene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Styrene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Bromoform	EPA 8260	<2.0	ug/L	MQS	01/10/2007
Isopropylbenzene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
1,1,2,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	01/10/2007
1,2,3-Trichloropropane	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Bromobenzene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
N-Propylbenzene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
2-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
1,3,5-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
4-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
tert-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
1,2,4-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
sec-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
p-Isopropyltoluene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
1,3-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
1,4-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
n-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
1,2-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
1,2-Dibromo-3-Chloropropane	EPA 8260	<5.0	ug/L	MQS	01/10/2007
1,2,4-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Hexachlorobutadiene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Naphthalene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
1,2,3-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	01/10/2007
Surrogates:	EPA 8260				
***1,2-Dichloroethane-D4	EPA 8260	97.5	% R	MQS	01/10/2007
***Toluene-D8	EPA 8260	110	% R	MQS	01/10/2007
***4-Bromofluorobenzene	EPA 8260	117	% R	MQS	01/10/2007
Preparation	EPA 5030B	1.0	DF	MQS	01/10/2007

GZA GeoEnvironmental, Inc.
106 South Street
Hopkinton, MA 01748

EPA Method 8260 / 524.2 Aqueous Method Blank (MB) and Laboratory Control Sample (LCS) Data

Method Blank

Date Analyzed:	1/10/2007	
Volatile Organics	**Conc. ug/L**	**Acceptance Limit**
dichlorodifluoromethane	< 1.0	< 1.0
chloromethane	< 1.0	< 1.0
vinyl chloride	< 1.0	< 1.0
bromomethane	< 1.0	< 1.0
chloroethane	< 1.0	< 1.0
trichlorofluoromethane	< 1.0	< 1.0
diethyl ether	< 2.0	< 2.0
acrolein	< 5.0	< 5.0
acetone	< 25	< 25
1,1-dichloroethene	< 0.5	< 0.5
FREON-113	< 1.0	< 1.0
iodomethane	< 0.5	< 0.5
carbon disulfide	< 1.0	< 1.0
dichloromethane	< 1.0	< 1.0
tert-butyl alcohol (TBA)	< 25	< 25
acrylonitrile	< 1.0	< 1.0
methyl-tert-butyl-ether	< 1.0	< 1.0
trans-1,2-dichloroethene	< 0.5	< 0.5
1,1-dichloroethane	< 0.5	< 0.5
di-isopropyl ether (DIPE)	< 1.0	< 1.0
ethyl tert-butyl ether (EtBE)	< 1.0	< 1.0
vinyl acetate	< 1.0	< 1.0
2-butanone	< 25	< 25
2,2-dichloropropane	< 0.5	< 0.5
cis-1,2-dichloroethene	< 0.5	< 0.5
chloroform	< 0.5	< 0.5
bromochloromethane	< 0.5	< 0.5
tetrahydrafuran	< 5.0	< 5.0
1,1,1-trichloroethane	< 0.5	< 0.5
1,1-dichloropropene	< 0.5	< 0.5
carbon tetrachloride	< 0.5	< 0.5
1,2-dichloroethane	< 0.5	< 0.5
benzene	< 0.5	< 0.5
tert-amyl methyl ether (TAME)	< 1.0	< 1.0
trichloroethene	< 0.5	< 0.5
1,2-dichloropropane	< 0.5	< 0.5
bromodichloromethane	< 0.5	< 0.5
2-chloroethyl vinyl ether	< 1.0	< 1.0
1,4-Dioxane	< 50	< 50
dibromomethane	< 0.5	< 0.5
4-methyl-2-pentanone	< 1.0	< 1.0
cis-1,3-dichloropropene	< 0.5	< 0.5
toluene	< 0.5	< 0.5
trans-1,3-dichloropropene	< 0.5	< 0.5
1,1,2-trichloroethane	< 1.0	< 1.0
2-hexanone	< 1.0	< 1.0
1,3-dichloropropane	< 0.5	< 0.5
tetrachloroethene	< 0.5	< 0.5
dibromochloromethane	< 0.5	< 0.5
1,2-dibromoethane (EDB)	< 0.5	< 0.5
chlorobenzene	< 0.5	< 0.5
1,1,1,2-tetrachloroethane	< 0.5	< 0.5
ethylbenzene	< 0.5	< 0.5
1,1,2,2-tetrachloroethane	< 0.5	< 0.5
m&p-xylene	< 0.5	< 0.5
o-xylene	< 0.5	< 0.5
styrene	< 0.5	< 0.5
bromoform	< 0.5	< 0.5
isopropylbenzene	< 0.5	< 0.5
1,2,3-trichloropropane	< 0.5	< 0.5
bromobenzene	< 0.5	< 0.5
n-propylbenzene	< 0.5	< 0.5
2-chlorotoluene	< 0.5	< 0.5
1,3,5-trimethylbenzene	< 0.5	< 0.5
trans-1,4-dichloro-2-butene	< 1.0	< 1.0
4-chlorotoluene	< 0.5	< 0.5
tert-butyl-benzene	< 0.5	< 0.5
1,2,4-trimethylbenzene	< 0.5	< 0.5
sec-butyl-benzene	< 0.5	< 0.5
p-isopropyltoluene	< 2.5	< 2.5
1,3-dichlorobenzene	< 0.5	< 0.5
1,4-dichlorobenzene	< 0.5	< 0.5
n-butylbenzene	< 0.5	< 0.5
1,2-dichlorobenzene	< 0.5	< 0.5
1,2-dibromo-3-chloropropane	< 1.0	< 1.0
1,2,4-trichlorobenzene	< 0.5	< 0.5
hexachlorobutadiene	< 0.5	< 0.5
naphthalene	< 0.5	< 0.5
1,2,3-trichlorobenzene	< 0.5	< 0.5

Laboratory Control Sample

Date Analyzed:	1/10/2007		
Spike Concentration = 20ug/L	**% Recovery**	**Acceptance Limits**	**Verdict**
dichlorodifluoromethane	119	70-130	ok
chloromethane	110	70-130	ok
vinyl chloride	103	70-130	ok
bromomethane	111	70-130	ok
chloroethane	99.9	70-130	ok
trichlorofluoromethane	130	70-130	ok
diethyl ether	90.5	70-130	ok
acrolein	92.1	70-130	ok
acetone	114	70-130	ok
1,1-dichloroethene	108	70-130	ok
FREON-113	106	70-130	ok
iodomethane	99.9	70-130	ok
carbon disulfide	97.8	70-130	ok
dichloromethane	90.8	70-130	ok
tert-butyl alcohol (TBA)	186	70-130	out
acrylonitrile	118	70-130	ok
methyl-tert-butyl-ether	79.4	70-130	ok
trans-1,2-dichloroethene	106	70-130	ok
1,1-dichloroethane	106	70-130	ok
di-isopropyl ether (DIPE)	106	70-130	ok
ethyl tert-butyl ether (EtBE)	52.7	70-130	out
vinyl acetate	106	70-130	ok
2-butanone	94.9	70-130	ok
2,2-dichloropropane	126	70-130	ok
cis-1,2-dichloroethene	102	70-130	ok
chloroform	111	70-130	ok
bromochloromethane	92.7	70-130	ok
tetrahydrafuran	92.6	70-130	ok
1,1,1-trichloroethane	128	70-130	ok
1,1-dichloropropene	103	70-130	ok
carbon tetrachloride	127	70-130	ok
1,2-dichloroethane	116	70-130	ok
benzene	95.0	70-130	ok
tert-amyl methyl ether (TAME)	44.0	70-130	out
trichloroethene	103	70-130	ok
1,2-dichloropropane	98.7	70-130	ok
bromodichloromethane	112	70-130	ok
2-chloroethyl vinyl ether	98.5	70-130	ok
1,4-Dioxane	99.2	70-130	ok
dibromomethane	115	70-130	ok
4-methyl-2-pentanone	106	70-130	ok
cis-1,3-dichloropropene	103	70-130	ok
toluene	108	70-130	ok
trans-1,3-dichloropropene	107	70-130	ok
1,1,2-trichloroethane	106	70-130	ok
2-hexanone	108	70-130	ok
1,3-dichloropropane	97.4	70-130	ok
tetrachloroethene	118	70-130	ok
dibromochloromethane	110	70-130	ok
1,2-dibromoethane (EDB)	109	70-130	ok
chlorobenzene	111	70-130	ok
1,1,1,2-tetrachloroethane	104	70-130	ok
ethylbenzene	114	70-130	ok
1,1,2,2-tetrachloroethane	96.2	70-130	ok
m&p-xylene	117	70-130	ok
o-xylene	115	70-130	ok
styrene	110	70-130	ok
bromoform	123	70-130	ok
isopropylbenzene	119	70-130	ok
1,2,3-trichloropropane	113	70-130	ok
bromobenzene	107	70-130	ok
n-propylbenzene	115	70-130	ok
2-chlorotoluene	118	70-130	ok
1,3,5-trimethylbenzene	119	70-130	ok
trans-1,4-dichloro-2-butene	104	70-130	ok
4-chlorotoluene	118	70-130	ok
tert-butyl-benzene	115	70-130	ok
1,2,4-trimethylbenzene	119	70-130	ok
sec-butyl-benzene	119	70-130	ok
p-isopropyltoluene	115	70-130	ok
1,3-dichlorobenzene	106	70-130	ok
1,4-dichlorobenzene	106	70-130	ok
n-butylbenzene	118	70-130	ok
1,2-dichlorobenzene	100	70-130	ok
1,2-dibromo-3-chloropropane	105	70-130	ok
1,2,4-trichlorobenzene	122	70-130	ok
hexachlorobutadiene	121	70-130	ok
naphthalene	92.3	70-130	ok
1,2,3-trichlorobenzene	116	70-130	ok

SMF criteria allows 5 compounds to be outside acceptance limits

Surrogates:	**Recovery (%)**	**Acceptance Limits**
DIBROMOFLUOROMETHANE	103	70-130
1,2-DICHLOROETHANE-D4	94.9	70-130
TOLUENE-D8	98.3	70-130
4-BROMOFLUOROBENZENE	115	70-130
1,2-DICHLOROBENZENE-D4	100	70-130

Surrogates:	**Recovery (%)**	**Acceptance Limits**	**Verdict**
DIBROMOFLUOROMETHANE	107	70-130	ok
1,2-DICHLOROETHANE-D4	107	70-130	ok
TOLUENE-D8	108	70-130	ok
4-BROMOFLUOROBENZENE	118	70-130	ok
1,2-DICHLOROBENZENE-D4	101	70-130	ok

Instrument: HP GC/MS "S"

GZA GeoEnvironmental, Inc.
106 South Street
Hopkinton, MA 01748

EPA Method 8260 / 524.2 Aqueous Method Blank (MB) and Laboratory Control Sample (LCS) Data

Method Blank

Date Analyzed:	1/11/2007	
Volatile Organics	**Conc. ug/L**	**Acceptance Limit**
dichlorodifluoromethane	< 1.0	< 1.0
chloromethane	< 1.0	< 1.0
vinyl chloride	< 1.0	< 1.0
bromomethane	< 1.0	< 1.0
chloroethane	< 1.0	< 1.0
trichlorofluoromethane	< 1.0	< 1.0
diethyl ether	< 2.0	< 2.0
acrolein	< 5.0	< 5.0
acetone	< 25	< 25
1,1-dichloroethene	< 0.5	< 0.5
FREON-113	< 1.0	< 1.0
iodomethane	< 0.5	< 0.5
carbon disulfide	< 1.0	< 1.0
dichloromethane	< 1.0	< 1.0
tert-butyl alcohol (TBA)	< 25	< 25
acrylonitrile	< 1.0	< 1.0
methyl-tert-butyl-ether	< 1.0	< 1.0
trans-1,2-dichloroethene	< 0.5	< 0.5
1,1-dichloroethane	< 0.5	< 0.5
di-isopropyl ether (DIPE)	< 1.0	< 1.0
ethyl tert-butyl ether (EtBE)	< 1.0	< 1.0
vinyl acetate	< 1.0	< 1.0
2-butanone	< 25	< 25
2,2-dichloropropane	< 0.5	< 0.5
cis-1,2-dichloroethene	< 0.5	< 0.5
chloroform	< 0.5	< 0.5
bromochloromethane	< 0.5	< 0.5
tetrahydrafuran	< 5.0	< 5.0
1,1,1-trichloroethane	< 0.5	< 0.5
1,1-dichloropropene	< 0.5	< 0.5
carbon tetrachloride	< 0.5	< 0.5
1,2-dichloroethane	< 0.5	< 0.5
benzene	< 0.5	< 0.5
tert-amyl methyl ether (TAME)	< 1.0	< 1.0
trichloroethene	< 0.5	< 0.5
1,2-dichloropropane	< 0.5	< 0.5
bromodichloromethane	< 0.5	< 0.5
2-chloroethyl vinyl ether	< 1.0	< 1.0
1,4-Dioxane	< 50	< 50
dibromomethane	< 0.5	< 0.5
4-methyl-2-pentanone	< 1.0	< 1.0
cis-1,3-dichloropropene	< 0.5	< 0.5
toluene	< 0.5	< 0.5
trans-1,3-dichloropropene	< 0.5	< 0.5
1,1,2-trichloroethane	< 1.0	< 1.0
2-hexanone	< 1.0	< 1.0
1,3-dichloropropane	< 0.5	< 0.5
tetrachloroethene	< 0.5	< 0.5
dibromochloromethane	< 0.5	< 0.5
1,2-dibromoethane (EDB)	< 0.5	< 0.5
chlorobenzene	< 0.5	< 0.5
1,1,1,2-tetrachloroethane	< 0.5	< 0.5
ethylbenzene	< 0.5	< 0.5
1,1,2,2-tetrachloroethane	< 0.5	< 0.5
m&p-xylene	< 0.5	< 0.5
o-xylene	< 0.5	< 0.5
styrene	< 0.5	< 0.5
bromoform	< 0.5	< 0.5
isopropylbenzene	< 0.5	< 0.5
1,2,3-trichloropropane	< 0.5	< 0.5
bromobenzene	< 0.5	< 0.5
n-propylbenzene	< 0.5	< 0.5
2-chlorotoluene	< 0.5	< 0.5
1,3,5-trimethylbenzene	< 0.5	< 0.5
trans-1,4-dichloro-2-butene	< 1.0	< 1.0
4-chlorotoluene	< 0.5	< 0.5
tert-butyl-benzene	< 0.5	< 0.5
1,2,4-trimethylbenzene	< 0.5	< 0.5
sec-butyl-benzene	< 0.5	< 0.5
p-isopropyltoluene	< 2.5	< 2.5
1,3-dichlorobenzene	< 0.5	< 0.5
1,4-dichlorobenzene	< 0.5	< 0.5
n-butylbenzene	< 0.5	< 0.5
1,2-dichlorobenzene	< 0.5	< 0.5
1,2-dibromo-3-chloropropane	< 1.0	< 1.0
1,2,4-trichlorobenzene	< 0.5	< 0.5
hexachlorobutadiene	< 0.5	< 0.5
naphthalene	< 0.5	< 0.5
1,2,3-trichlorobenzene	< 0.5	< 0.5

Laboratory Control Sample

Date Analyzed:	1/11/2007		
Spike Concentration = 20ug/L	**% Recovery**	**Acceptance Limits**	**Verdict**
dichlorodifluoromethane	121	70-130	ok
chloromethane	113	70-130	ok
vinyl chloride	105	70-130	ok
bromomethane	112	70-130	ok
chloroethane	100	70-130	ok
trichlorofluoromethane	134	70-130	out
diethyl ether	88.1	70-130	ok
acrolein	88.5	70-130	ok
acetone	112	70-130	ok
1,1-dichloroethene	110	70-130	ok
FREON-113	111	70-130	ok
iodomethane	99.9	70-130	ok
carbon disulfide	101	70-130	ok
dichloromethane	89.1	70-130	ok
tert-butyl alcohol (TBA)	165	70-130	out
acrylonitrile	120	70-130	ok
methyl-tert-butyl-ether	84.0	70-130	ok
trans-1,2-dichloroethene	108	70-130	ok
1,1-dichloroethane	107	70-130	ok
di-isopropyl ether (DIPE)	103	70-130	ok
ethyl tert-butyl ether (EtBE)	63.0	70-130	out
vinyl acetate	104	70-130	ok
2-butanone	93.4	70-130	ok
2,2-dichloropropane	131	70-130	out
cis-1,2-dichloroethene	102	70-130	ok
chloroform	109	70-130	ok
bromochloromethane	91.2	70-130	ok
tetrahydrafuran	83.4	70-130	ok
1,1,1-trichloroethane	129	70-130	ok
1,1-dichloropropene	104	70-130	ok
carbon tetrachloride	126	70-130	ok
1,2-dichloroethane	112	70-130	ok
benzene	95.4	70-130	ok
tert-amyl methyl ether (TAME)	55.9	70-130	out
trichloroethene	105	70-130	ok
1,2-dichloropropane	98.5	70-130	ok
bromodichloromethane	110	70-130	ok
2-chloroethyl vinyl ether	98.3	70-130	ok
1,4-Dioxane	98.3	70-130	ok
dibromomethane	111	70-130	ok
4-methyl-2-pentanone	103	70-130	ok
cis-1,3-dichloropropene	99.8	70-130	ok
toluene	108	70-130	ok
trans-1,3-dichloropropene	102	70-130	ok
1,1,2-trichloroethane	106	70-130	ok
2-hexanone	107	70-130	ok
1,3-dichloropropane	96.6	70-130	ok
tetrachloroethene	124	70-130	ok
dibromochloromethane	108	70-130	ok
1,2-dibromoethane (EDB)	107	70-130	ok
chlorobenzene	112	70-130	ok
1,1,1,2-tetrachloroethane	104	70-130	ok
ethylbenzene	118	70-130	ok
1,1,2,2-tetrachloroethane	94.0	70-130	ok
m&p-xylene	121	70-130	ok
o-xylene	117	70-130	ok
styrene	109	70-130	ok
bromoform	121	70-130	ok
isopropylbenzene	122	70-130	ok
1,2,3-trichloropropane	109	70-130	ok
bromobenzene	106	70-130	ok
n-propylbenzene	120	70-130	ok
2-chlorotoluene	116	70-130	ok
1,3,5-trimethylbenzene	122	70-130	ok
trans-1,4-dichloro-2-butene	104	70-130	ok
4-chlorotoluene	120	70-130	ok
tert-butyl-benzene	119	70-130	ok
1,2,4-trimethylbenzene	121	70-130	ok
sec-butyl-benzene	124	70-130	ok
p-isopropyltoluene	119	70-130	ok
1,3-dichlorobenzene	108	70-130	ok
1,4-dichlorobenzene	106	70-130	ok
n-butylbenzene	123	70-130	ok
1,2-dichlorobenzene	101	70-130	ok
1,2-dibromo-3-chloropropane	98.0	70-130	ok
1,2,4-trichlorobenzene	123	70-130	ok
hexachlorobutadiene	127	70-130	ok
naphthalene	89.9	70-130	ok
1,2,3-trichlorobenzene	114	70-130	ok

SMF criteria allows 5 compounds to be outside acceptance limits

Surrogates:	Recovery (%)	Acceptance Limits
DIBROMOFLUOROMETHANE	99.0	70-130
1,2-DICHLOROETHANE-D4	88.2	70-130
TOLUENE-D8	98.0	70-130
4-BROMOFLUOROBENZENE	113	70-130
1,2-DICHLOROBENZENE-D4	96.3	70-130

Surrogates:	Recovery (%)	Acceptance Limits	Verdict
DIBROMOFLUOROMETHANE	103	70-130	ok
1,2-DICHLOROETHANE-D4	94.9	70-130	ok
TOLUENE-D8	104	70-130	ok
4-BROMOFLUOROBENZENE	118	70-130	ok
1,2-DICHLOROBENZENE-D4	103	70-130	ok

Instrument: HP GC/MS "S"

WHITE COPY - Original YELLOW COPY - Lab Files PINK COPY - Project Manager

W.O. # 0701-00052 (for lab use only)

CHAIN-OF-CUSTODY RECORD

Sample I.D.	Date/Time Sampled (Very Important)	Matrix (A=Air, S=Soil, GW=Ground W., SW=Surface W., WW=Waste W., DW=Drinking W., Other (specify))	WW ONLY: ☐pH ☐Cond.	☐GC Screen (VOA)	☐524.2 ☐502.2	624	☐601 ☐602	625	Formaldehyde	ANALYSIS REQUIRED: 8260	8021	8021 - "8010" List	8021 "8020" List	8270 ☐Full ☐PAH ☐BN	8082-PCBs Only	8081 - Pest Only	TPH-GC (Mod. 8100)	TPH-GC w/FING	EPH (MA DEP)	VPH (MA DEP)	TCLP (Spec. Below)	Filtering (✓ if requested)	Metals ☐PPM-13 ☐ R-8	Metals (List Below)	Total # of Cont.	Note #
GZML3 / 114.1 – 125.9	1/8/07	GW								X														2	
GZML3 / 100.8 – 114.6	1/8/07									X														2	
GZML3 / 148 – 158	1/5/07									X														2	
GZML3 / 136.7 – 148.5	1/5/07									X														2	
GZML3 / 125.4 – 137.2	1/8/07									X														2	
GZML3 / 91.5 – 103.3	1/8/07									X														2	
GZML3 / 80.2 – 92	1/8/07									X														2	
GZML3 / 46.3 – 58.1	1/9/07									X														3	
GZML3 / 68.9 – 80.7	1/9/07									X														2	
GZML3 / 57.6 – 69.4 **	1/9/07									X														3	
																								3	
PRESERVATIVE (Cl - HCl, M=MeOH, N - HNO3, S - H2SO4, Na - NaOH, O - Other)*																									
CONTAINER TYPE (P-Plastic, G-Glass, V-Vial, O-Other)*																									

RELINQUISHED BY: DATE/TIME: 1/10/07 RECEIVED BY: CUSTODY SEAL

RELINQUISHED BY: CS DATE/TIME: 1/10/07 0915 RECEIVED BY: Bill Bircom

RELINQUISHED BY: Bill Bircom 1/10/07 11:30 DATE/TIME: RECEIVED BY: 1/10/07 1135

NOTES: Preservatives, special reporting limits, known contamination, additional testing parameters, etc.:

CA 0617

PROJECT MANAGER: ED SUMMERLY EXT:

DATA REPORT ☑ PDF (Adobe) ☐ ASCII ☐ EXCEL Specify State

TURNAROUND TIME: (Standard) Rush ___ Days, Approved by: ___ LAB USE: TEMP. OF COOLER 4.5 °C

GZA FILE NO: 03.0032795.12 P.O. NO.

PROJECT CHARBERT, NFA

LOCATION ALTON, R.I.

COLLECTOR(S) MARK DALPE SHEET 1 OF 1

1/10/07 1135

GZA GEOENVIRONMENTAL, INC.
ENGINEERS AND SCIENTISTS
106 South Street
Hopkinton, MA 01748
(508) 435-9244
FAX (508) 435-9912

ACCREDITED IN ACCORDANCE WITH

GZAP003

GZA GeoEnvironmental, Inc.
106 South Street
Hopkinton, MA 01748
(781) 278-4700

Laboratory Identification Numbers:
MA and ME: **MA092** NH: **2028**
CT: **PH0579** RI: **LAO00236**
NELAC - NYS DOH: **11063**

ANALYTICAL REPORT

GZA GeoEnvironmental, Inc.
530 Broadway
Providence, RI 02909

Steve Andrus / Mike Healy

Project No.: **03.0032795.35**
Work Order No.: **0907-00033**
Date Received: **07/07/2009**
Date Reported: **07/15/2009**

SAMPLE INFORMATION

Date Sampled	Matrix	Laboratory ID	Sample ID
07/06/2009	Aqueous	0907-00033 001	TB
07/06/2009	Aqueous	0907-00033 002	GZ-ML-4 Z-1A
07/06/2009	Aqueous	0907-00033 003	GZ-ML-4 Z-2
07/06/2009	Aqueous	0907-00033 004	GZ-ML-4 Z-3A
07/06/2009	Aqueous	0907-00033 005	GZ-ML-4 BD
07/06/2009	Aqueous	0907-00033 006	GZ-ML-4 Z-4
07/06/2009	Aqueous	0907-00033 007	GZ-ML-4 Z-5
07/06/2009	Aqueous	0907-00033 008	GZ-ML-4 Z-6
07/06/2009	Aqueous	0907-00033 009	GZ-ML-4 Z-7
07/06/2009	Aqueous	0907-00033 010	GZ-ML-4 Z-11

GZA GeoEnvironmental, Inc.
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A N A L Y T I C A L R E P O R T

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Project Name.: **Phase II Bedrock - Charbert**
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PROJECT NARRATIVE:

1. Sample Receipt

The samples were received on 07/07/09 via _x_GZA courier, __EC, __FEDEX, or ___hand delivered. The temperature of the _x_temperature blank/__cooler air, was 4.9 degrees C. The temperature requirement for most analyses is above freezing to 6 degrees C. The samples were received intact for all requested analyses.

The chain of custody indicates that the samples, when required, were chemically preserved in accordance with the method they reference.

2. EPA Method 8260 - VOCs

Attach QC 8260 07/14/09 S - Aqueous

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Data Authorized By: _____

NELAC certification, as indicated by the NELAC Lab ID Number, is per analyte. For a complete list of NELAC validated analytes, please contact the laboratory.

Abbreviations:
% R = % Recovery
DF = Dilution Factor
DFS = Dilution Factor Solids
CF = Calculation Factor
DO = Diluted Out

Method Key:
Method 8260: The current version of the method is 8260B.
Method 8270: The current version of the method is 8270D.
Method 6010: The current version of the method is 6010B.

Please note that the laboratory signed copy of the chain of custody record is an integral part of the data report.

Soil data is reported on a dry weight basis unless otherwise specified.
Matrix Spike / Matrix Spike Duplicate sets are performed as per method and are reported at the end of the analytical report if assigned on the Chain of Custody.

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Project No.: **03.0032795.35**

Date Received: **07/07/2009**
Date Reported: **07/15/2009**
Work Order No.: **0907-00033**

Sample ID: **TB** Sample No.: **001**

Sample Date: **07/06/2009**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260				MQS	07/14/2009
Dichlorodifluoromethane	EPA 8260	<2.0	2.0	ug/L	MQS	07/14/2009
Chloromethane	EPA 8260	<2.0	2.0	ug/L	MQS	07/14/2009
Vinyl Chloride	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Bromomethane	EPA 8260	<2.0	2.0	ug/L	MQS	07/14/2009
Chloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Trichlorofluoromethane	EPA 8260	<2.0	2.0	ug/L	MQS	07/14/2009
Diethylether	EPA 8260	<5.0	5.0	ug/L	MQS	07/14/2009
Acetone	EPA 8260	<25	25	ug/L	MQS	07/14/2009
1,1-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Dichloromethane	EPA 8260	<2.0	2.0	ug/L	MQS	07/14/2009
Methyl-Tert-Butyl-Ether	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
trans-1,2-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
1,1-Dichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
2-Butanone	EPA 8260	<25	25	ug/L	MQS	07/14/2009
2,2-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
cis-1,2-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Chloroform	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Bromochloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Tetrahydrofuran	EPA 8260	<10	10	ug/L	MQS	07/14/2009
1,1,1-Trichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
1,1-Dichloropropene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Carbon Tetrachloride	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
1,2-Dichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Benzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Trichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
1,2-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Bromodichloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Dibromomethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
4-Methyl-2-Pentanone	EPA 8260	<25	25	ug/L	MQS	07/14/2009
cis-1,3-Dichloropropene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Toluene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
trans-1,3-Dichloropropene	EPA 8260	<2.0	2.0	ug/L	MQS	07/14/2009
1,1,2-Trichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
2-Hexanone	EPA 8260	<25	25	ug/L	MQS	07/14/2009

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Date Received: **07/07/2009**
Date Reported: **07/15/2009**
Work Order No.: **0907-00033**

Sample ID: **TB** Sample No.: **001**

Sample Date: **07/06/2009**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
1,3-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Tetrachloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Dibromochloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
1,2-Dibromoethane (EDB)	EPA 8260	<2.0	2.0	ug/L	MQS	07/14/2009
Chlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
1,1,1,2-Tetrachloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Ethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
m&p-Xylene	EPA 8260	<2.0	2.0	ug/L	MQS	07/14/2009
o-Xylene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Styrene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Bromoform	EPA 8260	<2.0	2.0	ug/L	MQS	07/14/2009
Isopropylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
1,1,2,2-Tetrachloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
1,2,3-Trichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Bromobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
N-Propylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
2-Chlorotoluene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
1,3,5-Trimethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
4-Chlorotoluene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
tert-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
1,2,4-Trimethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
sec-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
p-Isopropyltoluene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
1,3-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
1,4-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
n-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
1,2-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
1,2-Dibromo-3-Chloropropane	EPA 8260	<5.0	5.0	ug/L	MQS	07/14/2009
1,2,4-Trichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Hexachlorobutadiene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Naphthalene	EPA 8260	<2.0	2.0	ug/L	MQS	07/14/2009
1,2,3-Trichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Surrogates:	EPA 8260					
***1,2-Dichloroethane-D4	EPA 8260	92.3	70-130	% R	MQS	07/14/2009
***Toluene-D8	EPA 8260	101	70-130	% R	MQS	07/14/2009

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Date Received: **07/07/2009**
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Work Order No.: **0907-00033**

Sample ID: **TB** Sample No.: **001**

Sample Date: **07/06/2009**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
***4-Bromofluorobenzene	EPA 8260	100	70-130	% R	MQS	07/14/2009
Preparation	EPA 5030B	1.0		CF	MQS	07/14/2009

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Date Received: **07/07/2009**
Date Reported: **07/15/2009**
Work Order No.: **0907-00033**

Sample ID: **GZ-ML-4 Z-1A** Sample No.: **002**
Sample Date: **07/06/2009**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260				MQS	07/14/2009
Dichlorodifluoromethane	EPA 8260	<2.0	2.0	ug/L	MQS	07/14/2009
Chloromethane	EPA 8260	<2.0	2.0	ug/L	MQS	07/14/2009
Vinyl Chloride	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Bromomethane	EPA 8260	<2.0	2.0	ug/L	MQS	07/14/2009
Chloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Trichlorofluoromethane	EPA 8260	<2.0	2.0	ug/L	MQS	07/14/2009
Diethylether	EPA 8260	<5.0	5.0	ug/L	MQS	07/14/2009
Acetone	EPA 8260	<25	25	ug/L	MQS	07/14/2009
1,1-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Dichloromethane	EPA 8260	<2.0	2.0	ug/L	MQS	07/14/2009
Methyl-Tert-Butyl-Ether	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
trans-1,2-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
1,1-Dichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
2-Butanone	EPA 8260	<25	25	ug/L	MQS	07/14/2009
2,2-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
cis-1,2-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Chloroform	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Bromochloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Tetrahydrofuran	EPA 8260	<10	10	ug/L	MQS	07/14/2009
1,1,1-Trichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
1,1-Dichloropropene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Carbon Tetrachloride	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
1,2-Dichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Benzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Trichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
1,2-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Bromodichloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Dibromomethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
4-Methyl-2-Pentanone	EPA 8260	<25	25	ug/L	MQS	07/14/2009
cis-1,3-Dichloropropene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Toluene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
trans-1,3-Dichloropropene	EPA 8260	<2.0	2.0	ug/L	MQS	07/14/2009
1,1,2-Trichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
2-Hexanone	EPA 8260	<25	25	ug/L	MQS	07/14/2009

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Project No.: **03.0032795.35**

Date Received: **07/07/2009**
Date Reported: **07/15/2009**
Work Order No.: **0907-00033**

Sample ID: **GZ-ML-4 Z-1A** Sample No.: **002**
Sample Date: **07/06/2009**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
1,3-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Tetrachloroethene	EPA 8260	1.4	1.0	ug/L	MQS	07/14/2009
Dibromochloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
1,2-Dibromoethane (EDB)	EPA 8260	<2.0	2.0	ug/L	MQS	07/14/2009
Chlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
1,1,1,2-Tetrachloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Ethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
m&p-Xylene	EPA 8260	<2.0	2.0	ug/L	MQS	07/14/2009
o-Xylene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Styrene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Bromoform	EPA 8260	<2.0	2.0	ug/L	MQS	07/14/2009
Isopropylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
1,1,2,2-Tetrachloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
1,2,3-Trichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Bromobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
N-Propylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
2-Chlorotoluene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
1,3,5-Trimethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
4-Chlorotoluene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
tert-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
1,2,4-Trimethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
sec-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
p-Isopropyltoluene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
1,3-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
1,4-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
n-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
1,2-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
1,2-Dibromo-3-Chloropropane	EPA 8260	<5.0	5.0	ug/L	MQS	07/14/2009
1,2,4-Trichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Hexachlorobutadiene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Naphthalene	EPA 8260	<2.0	2.0	ug/L	MQS	07/14/2009
1,2,3-Trichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Surrogates:	EPA 8260					
***1,2-Dichloroethane-D4	EPA 8260	97.3	70-130	% R	MQS	07/14/2009
***Toluene-D8	EPA 8260	102	70-130	% R	MQS	07/14/2009

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Date Received: **07/07/2009**
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Work Order No.: **0907-00033**

Sample ID: **GZ-ML-4 Z-1A** Sample No.: **002**

Sample Date: **07/06/2009**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
***4-Bromofluorobenzene	EPA 8260	101	70-130	% R	MQS	07/14/2009
Preparation	EPA 5030B	1.0		CF	MQS	07/14/2009

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Date Received: **07/07/2009**
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Work Order No.: **0907-00033**

Sample ID: **GZ-ML-4 Z-2** Sample No.: **003**
Sample Date: **07/06/2009**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260				MQS	07/14/2009
Dichlorodifluoromethane	EPA 8260	<2.0	2.0	ug/L	MQS	07/14/2009
Chloromethane	EPA 8260	<2.0	2.0	ug/L	MQS	07/14/2009
Vinyl Chloride	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Bromomethane	EPA 8260	<2.0	2.0	ug/L	MQS	07/14/2009
Chloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Trichlorofluoromethane	EPA 8260	<2.0	2.0	ug/L	MQS	07/14/2009
Diethylether	EPA 8260	<5.0	5.0	ug/L	MQS	07/14/2009
Acetone	EPA 8260	<25	25	ug/L	MQS	07/14/2009
1,1-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Dichloromethane	EPA 8260	<2.0	2.0	ug/L	MQS	07/14/2009
Methyl-Tert-Butyl-Ether	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
trans-1,2-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
1,1-Dichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
2-Butanone	EPA 8260	<25	25	ug/L	MQS	07/14/2009
2,2-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
cis-1,2-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Chloroform	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Bromochloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Tetrahydrofuran	EPA 8260	<10	10	ug/L	MQS	07/14/2009
1,1,1-Trichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
1,1-Dichloropropene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Carbon Tetrachloride	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
1,2-Dichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Benzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Trichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
1,2-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Bromodichloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Dibromomethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
4-Methyl-2-Pentanone	EPA 8260	<25	25	ug/L	MQS	07/14/2009
cis-1,3-Dichloropropene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Toluene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
trans-1,3-Dichloropropene	EPA 8260	<2.0	2.0	ug/L	MQS	07/14/2009
1,1,2-Trichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
2-Hexanone	EPA 8260	<25	25	ug/L	MQS	07/14/2009

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ANALYTICAL REPORT

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Steve Andrus / Mike Healy

Project Name.: **Phase II Bedrock - Charbert**
Project No.: **03.0032795.35**

Date Received: **07/07/2009**
Date Reported: **07/15/2009**
Work Order No.: **0907-00033**

Sample ID: **GZ-ML-4 Z-2**
Sample No.: **003**
Sample Date: **07/06/2009**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
1,3-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Tetrachloroethene	EPA 8260	1.6	1.0	ug/L	MQS	07/14/2009
Dibromochloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
1,2-Dibromoethane (EDB)	EPA 8260	<2.0	2.0	ug/L	MQS	07/14/2009
Chlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
1,1,1,2-Tetrachloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Ethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
m&p-Xylene	EPA 8260	<2.0	2.0	ug/L	MQS	07/14/2009
o-Xylene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Styrene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Bromoform	EPA 8260	<2.0	2.0	ug/L	MQS	07/14/2009
Isopropylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
1,1,2,2-Tetrachloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
1,2,3-Trichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Bromobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
N-Propylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
2-Chlorotoluene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
1,3,5-Trimethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
4-Chlorotoluene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
tert-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
1,2,4-Trimethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
sec-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
p-Isopropyltoluene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
1,3-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
1,4-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
n-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
1,2-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
1,2-Dibromo-3-Chloropropane	EPA 8260	<5.0	5.0	ug/L	MQS	07/14/2009
1,2,4-Trichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Hexachlorobutadiene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Naphthalene	EPA 8260	<2.0	2.0	ug/L	MQS	07/14/2009
1,2,3-Trichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Surrogates:	EPA 8260					
***1,2-Dichloroethane-D4	EPA 8260	92.5	70-130	% R	MQS	07/14/2009
***Toluene-D8	EPA 8260	102	70-130	% R	MQS	07/14/2009

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GZA GeoEnvironmental, Inc.
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Steve Andrus / Mike Healy

Project Name.: **Phase II Bedrock - Charbert**
Project No.: **03.0032795.35**

Date Received: **07/07/2009**
Date Reported: **07/15/2009**
Work Order No.: **0907-00033**

Sample ID: **GZ-ML-4 Z-2**
Sample No.: **003**
Sample Date: **07/06/2009**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
***4-Bromofluorobenzene	EPA 8260	100	70-130	% R	MQS	07/14/2009
Preparation	EPA 5030B	1.0		CF	MQS	07/14/2009

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Project Name.: **Phase II Bedrock - Charbert**
Project No.: **03.0032795.35**

Date Received: **07/07/2009**
Date Reported: **07/15/2009**
Work Order No.: **0907-00033**

Sample ID: **GZ-ML-4 Z-3A** Sample No.: **004**
Sample Date: **07/06/2009**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260				MQS	07/14/2009
Dichlorodifluoromethane	EPA 8260	<2.0	2.0	ug/L	MQS	07/14/2009
Chloromethane	EPA 8260	<2.0	2.0	ug/L	MQS	07/14/2009
Vinyl Chloride	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Bromomethane	EPA 8260	<2.0	2.0	ug/L	MQS	07/14/2009
Chloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Trichlorofluoromethane	EPA 8260	<2.0	2.0	ug/L	MQS	07/14/2009
Diethylether	EPA 8260	<5.0	5.0	ug/L	MQS	07/14/2009
Acetone	EPA 8260	<25	25	ug/L	MQS	07/14/2009
1,1-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Dichloromethane	EPA 8260	<2.0	2.0	ug/L	MQS	07/14/2009
Methyl-Tert-Butyl-Ether	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
trans-1,2-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
1,1-Dichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
2-Butanone	EPA 8260	<25	25	ug/L	MQS	07/14/2009
2,2-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
cis-1,2-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Chloroform	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Bromochloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Tetrahydrofuran	EPA 8260	<10	10	ug/L	MQS	07/14/2009
1,1,1-Trichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
1,1-Dichloropropene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Carbon Tetrachloride	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
1,2-Dichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Benzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Trichloroethene	EPA 8260	2.9	1.0	ug/L	MQS	07/14/2009
1,2-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Bromodichloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Dibromomethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
4-Methyl-2-Pentanone	EPA 8260	<25	25	ug/L	MQS	07/14/2009
cis-1,3-Dichloropropene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Toluene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
trans-1,3-Dichloropropene	EPA 8260	<2.0	2.0	ug/L	MQS	07/14/2009
1,1,2-Trichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
2-Hexanone	EPA 8260	<25	25	ug/L	MQS	07/14/2009

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ANALYTICAL REPORT

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Steve Andrus / Mike Healy

Project Name.: **Phase II Bedrock - Charbert**
Project No.: **03.0032795.35**

Date Received: **07/07/2009**
Date Reported: **07/15/2009**
Work Order No.: **0907-00033**

Sample ID: **GZ-ML-4 Z-3A** Sample No.: **004**
Sample Date: **07/06/2009**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
1,3-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Tetrachloroethene	EPA 8260	46	1.0	ug/L	MQS	07/14/2009
Dibromochloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
1,2-Dibromoethane (EDB)	EPA 8260	<2.0	2.0	ug/L	MQS	07/14/2009
Chlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
1,1,1,2-Tetrachloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Ethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
m&p-Xylene	EPA 8260	<2.0	2.0	ug/L	MQS	07/14/2009
o-Xylene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Styrene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Bromoform	EPA 8260	<2.0	2.0	ug/L	MQS	07/14/2009
Isopropylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
1,1,2,2-Tetrachloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
1,2,3-Trichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Bromobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
N-Propylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
2-Chlorotoluene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
1,3,5-Trimethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
4-Chlorotoluene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
tert-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
1,2,4-Trimethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
sec-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
p-Isopropyltoluene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
1,3-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
1,4-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
n-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
1,2-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
1,2-Dibromo-3-Chloropropane	EPA 8260	<5.0	5.0	ug/L	MQS	07/14/2009
1,2,4-Trichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Hexachlorobutadiene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Naphthalene	EPA 8260	<2.0	2.0	ug/L	MQS	07/14/2009
1,2,3-Trichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Surrogates:	EPA 8260					
***1,2-Dichloroethane-D4	EPA 8260	98.9	70-130	% R	MQS	07/14/2009
***Toluene-D8	EPA 8260	102	70-130	% R	MQS	07/14/2009

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Steve Andrus / Mike Healy

Project Name.: **Phase II Bedrock - Charbert**
Project No.: **03.0032795.35**

Date Received: **07/07/2009**
Date Reported: **07/15/2009**
Work Order No.: **0907-00033**

Sample ID: **GZ-ML-4 Z-3A** Sample No.: **004**

Sample Date: **07/06/2009**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
***4-Bromofluorobenzene	EPA 8260	104	70-130	% R	MQS	07/14/2009
Preparation	EPA 5030B	1.0		CF	MQS	07/14/2009

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Project Name.: **Phase II Bedrock - Charbert**
Project No.: **03.0032795.35**

Date Received: **07/07/2009**
Date Reported: **07/15/2009**
Work Order No.: **0907-00033**

Sample ID: **GZ-ML-4 BD**
Sample No.: **005**
Sample Date: **07/06/2009**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260				MQS	07/14/2009
Dichlorodifluoromethane	EPA 8260	<2.0	2.0	ug/L	MQS	07/14/2009
Chloromethane	EPA 8260	<2.0	2.0	ug/L	MQS	07/14/2009
Vinyl Chloride	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Bromomethane	EPA 8260	<2.0	2.0	ug/L	MQS	07/14/2009
Chloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Trichlorofluoromethane	EPA 8260	<2.0	2.0	ug/L	MQS	07/14/2009
Diethylether	EPA 8260	<5.0	5.0	ug/L	MQS	07/14/2009
Acetone	EPA 8260	<25	25	ug/L	MQS	07/14/2009
1,1-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Dichloromethane	EPA 8260	<2.0	2.0	ug/L	MQS	07/14/2009
Methyl-Tert-Butyl-Ether	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
trans-1,2-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
1,1-Dichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
2-Butanone	EPA 8260	<25	25	ug/L	MQS	07/14/2009
2,2-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
cis-1,2-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Chloroform	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Bromochloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Tetrahydrofuran	EPA 8260	<10	10	ug/L	MQS	07/14/2009
1,1,1-Trichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
1,1-Dichloropropene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Carbon Tetrachloride	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
1,2-Dichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Benzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Trichloroethene	EPA 8260	2.9	1.0	ug/L	MQS	07/14/2009
1,2-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Bromodichloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Dibromomethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
4-Methyl-2-Pentanone	EPA 8260	<25	25	ug/L	MQS	07/14/2009
cis-1,3-Dichloropropene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Toluene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
trans-1,3-Dichloropropene	EPA 8260	<2.0	2.0	ug/L	MQS	07/14/2009
1,1,2-Trichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
2-Hexanone	EPA 8260	<25	25	ug/L	MQS	07/14/2009

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ANALYTICAL REPORT

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Project Name.: **Phase II Bedrock - Charbert**
Project No.: **03.0032795.35**

Date Received: **07/07/2009**
Date Reported: **07/15/2009**
Work Order No.: **0907-00033**

Sample ID: **GZ-ML-4 BD**
Sample No.: **005**
Sample Date: **07/06/2009**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
1,3-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Tetrachloroethene	EPA 8260	48	1.0	ug/L	MQS	07/14/2009
Dibromochloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
1,2-Dibromoethane (EDB)	EPA 8260	<2.0	2.0	ug/L	MQS	07/14/2009
Chlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
1,1,1,2-Tetrachloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Ethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
m&p-Xylene	EPA 8260	<2.0	2.0	ug/L	MQS	07/14/2009
o-Xylene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Styrene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Bromoform	EPA 8260	<2.0	2.0	ug/L	MQS	07/14/2009
Isopropylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
1,1,2,2-Tetrachloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
1,2,3-Trichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Bromobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
N-Propylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
2-Chlorotoluene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
1,3,5-Trimethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
4-Chlorotoluene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
tert-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
1,2,4-Trimethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
sec-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
p-Isopropyltoluene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
1,3-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
1,4-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
n-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
1,2-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
1,2-Dibromo-3-Chloropropane	EPA 8260	<5.0	5.0	ug/L	MQS	07/14/2009
1,2,4-Trichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Hexachlorobutadiene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Naphthalene	EPA 8260	<2.0	2.0	ug/L	MQS	07/14/2009
1,2,3-Trichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Surrogates:	EPA 8260					
***1,2-Dichloroethane-D4	EPA 8260	97.4	70-130	% R	MQS	07/14/2009
***Toluene-D8	EPA 8260	101	70-130	% R	MQS	07/14/2009

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A N A L Y T I C A L R E P O R T

GZA GeoEnvironmental, Inc.
530 Broadway
Providence, RI 02909

Steve Andrus / Mike Healy

Project Name.: **Phase II Bedrock - Charbert**
Project No.: **03.0032795.35**

Date Received: **07/07/2009**
Date Reported: **07/15/2009**
Work Order No.: **0907-00033**

Sample ID: **GZ-ML-4 BD**
Sample No.: **005**
Sample Date: **07/06/2009**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
***4-Bromofluorobenzene	EPA 8260	101	70-130	% R	MQS	07/14/2009
Preparation	EPA 5030B	1.0		CF	MQS	07/14/2009

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ANALYTICAL REPORT

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Steve Andrus / Mike Healy

Project Name.: **Phase II Bedrock - Charbert**
Project No.: **03.0032795.35**

Date Received: **07/07/2009**
Date Reported: **07/15/2009**
Work Order No.: **0907-00033**

Sample ID: **GZ-ML-4 Z-4** Sample No.: **006**
Sample Date: **07/06/2009**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260				MQS	07/14/2009
Dichlorodifluoromethane	EPA 8260	<2.0	2.0	ug/L	MQS	07/14/2009
Chloromethane	EPA 8260	<2.0	2.0	ug/L	MQS	07/14/2009
Vinyl Chloride	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Bromomethane	EPA 8260	<2.0	2.0	ug/L	MQS	07/14/2009
Chloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Trichlorofluoromethane	EPA 8260	<2.0	2.0	ug/L	MQS	07/14/2009
Diethylether	EPA 8260	<5.0	5.0	ug/L	MQS	07/14/2009
Acetone	EPA 8260	<25	25	ug/L	MQS	07/14/2009
1,1-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Dichloromethane	EPA 8260	<2.0	2.0	ug/L	MQS	07/14/2009
Methyl-Tert-Butyl-Ether	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
trans-1,2-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
1,1-Dichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
2-Butanone	EPA 8260	<25	25	ug/L	MQS	07/14/2009
2,2-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
cis-1,2-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Chloroform	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Bromochloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Tetrahydrofuran	EPA 8260	<10	10	ug/L	MQS	07/14/2009
1,1,1-Trichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
1,1-Dichloropropene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Carbon Tetrachloride	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
1,2-Dichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Benzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Trichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
1,2-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Bromodichloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Dibromomethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
4-Methyl-2-Pentanone	EPA 8260	<25	25	ug/L	MQS	07/14/2009
cis-1,3-Dichloropropene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Toluene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
trans-1,3-Dichloropropene	EPA 8260	<2.0	2.0	ug/L	MQS	07/14/2009
1,1,2-Trichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
2-Hexanone	EPA 8260	<25	25	ug/L	MQS	07/14/2009

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Steve Andrus / Mike Healy

Project Name.: **Phase II Bedrock - Charbert**
Project No.: **03.0032795.35**

Date Received: **07/07/2009**
Date Reported: **07/15/2009**
Work Order No.: **0907-00033**

Sample ID: **GZ-ML-4 Z-4**
Sample No.: **006**
Sample Date: **07/06/2009**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
1,3-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Tetrachloroethene	EPA 8260	19	1.0	ug/L	MQS	07/14/2009
Dibromochloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
1,2-Dibromoethane (EDB)	EPA 8260	<2.0	2.0	ug/L	MQS	07/14/2009
Chlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
1,1,1,2-Tetrachloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Ethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
m&p-Xylene	EPA 8260	<2.0	2.0	ug/L	MQS	07/14/2009
o-Xylene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Styrene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Bromoform	EPA 8260	<2.0	2.0	ug/L	MQS	07/14/2009
Isopropylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
1,1,2,2-Tetrachloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
1,2,3-Trichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Bromobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
N-Propylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
2-Chlorotoluene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
1,3,5-Trimethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
4-Chlorotoluene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
tert-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
1,2,4-Trimethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
sec-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
p-Isopropyltoluene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
1,3-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
1,4-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
n-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
1,2-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
1,2-Dibromo-3-Chloropropane	EPA 8260	<5.0	5.0	ug/L	MQS	07/14/2009
1,2,4-Trichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Hexachlorobutadiene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Naphthalene	EPA 8260	<2.0	2.0	ug/L	MQS	07/14/2009
1,2,3-Trichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Surrogates:	EPA 8260					
***1,2-Dichloroethane-D4	EPA 8260	94.8	70-130	% R	MQS	07/14/2009
***Toluene-D8	EPA 8260	101	70-130	% R	MQS	07/14/2009

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Steve Andrus / Mike Healy

Project Name.: **Phase II Bedrock - Charbert**
Project No.: **03.0032795.35**

Date Received: **07/07/2009**
Date Reported: **07/15/2009**
Work Order No.: **0907-00033**

Sample ID: **GZ-ML-4 Z-4** Sample No.: **006**

Sample Date: **07/06/2009**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
***4-Bromofluorobenzene	EPA 8260	102	70-130	% R	MQS	07/14/2009
Preparation	EPA 5030B	1.0		CF	MQS	07/14/2009

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Project Name.: **Phase II Bedrock - Charbert**
Project No.: **03.0032795.35**

Date Received: **07/07/2009**
Date Reported: **07/15/2009**
Work Order No.: **0907-00033**

Sample ID: **GZ-ML-4 Z-5** Sample No.: **007**
Sample Date: **07/06/2009**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260				MQS	07/14/2009
Dichlorodifluoromethane	EPA 8260	<2.0	2.0	ug/L	MQS	07/14/2009
Chloromethane	EPA 8260	<2.0	2.0	ug/L	MQS	07/14/2009
Vinyl Chloride	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Bromomethane	EPA 8260	<2.0	2.0	ug/L	MQS	07/14/2009
Chloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Trichlorofluoromethane	EPA 8260	<2.0	2.0	ug/L	MQS	07/14/2009
Diethylether	EPA 8260	<5.0	5.0	ug/L	MQS	07/14/2009
Acetone	EPA 8260	<25	25	ug/L	MQS	07/14/2009
1,1-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Dichloromethane	EPA 8260	<2.0	2.0	ug/L	MQS	07/14/2009
Methyl-Tert-Butyl-Ether	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
trans-1,2-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
1,1-Dichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
2-Butanone	EPA 8260	<25	25	ug/L	MQS	07/14/2009
2,2-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
cis-1,2-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Chloroform	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Bromochloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Tetrahydrofuran	EPA 8260	<10	10	ug/L	MQS	07/14/2009
1,1,1-Trichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
1,1-Dichloropropene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Carbon Tetrachloride	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
1,2-Dichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Benzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Trichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
1,2-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Bromodichloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Dibromomethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
4-Methyl-2-Pentanone	EPA 8260	<25	25	ug/L	MQS	07/14/2009
cis-1,3-Dichloropropene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Toluene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
trans-1,3-Dichloropropene	EPA 8260	<2.0	2.0	ug/L	MQS	07/14/2009
1,1,2-Trichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
2-Hexanone	EPA 8260	<25	25	ug/L	MQS	07/14/2009

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ANALYTICAL REPORT

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Steve Andrus / Mike Healy

Project Name.: **Phase II Bedrock - Charbert**
Project No.: **03.0032795.35**

Date Received: **07/07/2009**
Date Reported: **07/15/2009**
Work Order No.: **0907-00033**

Sample ID: **GZ-ML-4 Z-5** Sample No.: **007**
Sample Date: **07/06/2009**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
1,3-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Tetrachloroethene	EPA 8260	12	1.0	ug/L	MQS	07/14/2009
Dibromochloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
1,2-Dibromoethane (EDB)	EPA 8260	<2.0	2.0	ug/L	MQS	07/14/2009
Chlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
1,1,1,2-Tetrachloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Ethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
m&p-Xylene	EPA 8260	<2.0	2.0	ug/L	MQS	07/14/2009
o-Xylene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Styrene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Bromoform	EPA 8260	<2.0	2.0	ug/L	MQS	07/14/2009
Isopropylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
1,1,2,2-Tetrachloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
1,2,3-Trichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Bromobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
N-Propylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
2-Chlorotoluene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
1,3,5-Trimethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
4-Chlorotoluene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
tert-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
1,2,4-Trimethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
sec-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
p-Isopropyltoluene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
1,3-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
1,4-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
n-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
1,2-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
1,2-Dibromo-3-Chloropropane	EPA 8260	<5.0	5.0	ug/L	MQS	07/14/2009
1,2,4-Trichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Hexachlorobutadiene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Naphthalene	EPA 8260	<2.0	2.0	ug/L	MQS	07/14/2009
1,2,3-Trichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Surrogates:	EPA 8260					
***1,2-Dichloroethane-D4	EPA 8260	97.9	70-130	% R	MQS	07/14/2009
***Toluene-D8	EPA 8260	101	70-130	% R	MQS	07/14/2009

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Project Name.: **Phase II Bedrock - Charbert**
Project No.: **03.0032795.35**

Date Received: **07/07/2009**
Date Reported: **07/15/2009**
Work Order No.: **0907-00033**

Sample ID: **GZ-ML-4 Z-5** Sample No.: **007**

Sample Date: **07/06/2009**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
***4-Bromofluorobenzene	EPA 8260	101	70-130	% R	MQS	07/14/2009
Preparation	EPA 5030B	1.0		CF	MQS	07/14/2009

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ANALYTICAL REPORT

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Project Name.: **Phase II Bedrock - Charbert**
Project No.: **03.0032795.35**

Date Received: **07/07/2009**
Date Reported: **07/15/2009**
Work Order No.: **0907-00033**

Sample ID: **GZ-ML-4 Z-6** Sample No.: **008**
Sample Date: **07/06/2009**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260				MQS	07/14/2009
Dichlorodifluoromethane	EPA 8260	<2.0	2.0	ug/L	MQS	07/14/2009
Chloromethane	EPA 8260	<2.0	2.0	ug/L	MQS	07/14/2009
Vinyl Chloride	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Bromomethane	EPA 8260	<2.0	2.0	ug/L	MQS	07/14/2009
Chloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Trichlorofluoromethane	EPA 8260	<2.0	2.0	ug/L	MQS	07/14/2009
Diethylether	EPA 8260	<5.0	5.0	ug/L	MQS	07/14/2009
Acetone	EPA 8260	<25	25	ug/L	MQS	07/14/2009
1,1-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Dichloromethane	EPA 8260	<2.0	2.0	ug/L	MQS	07/14/2009
Methyl-Tert-Butyl-Ether	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
trans-1,2-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
1,1-Dichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
2-Butanone	EPA 8260	<25	25	ug/L	MQS	07/14/2009
2,2-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
cis-1,2-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Chloroform	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Bromochloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Tetrahydrofuran	EPA 8260	<10	10	ug/L	MQS	07/14/2009
1,1,1-Trichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
1,1-Dichloropropene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Carbon Tetrachloride	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
1,2-Dichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Benzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Trichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
1,2-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Bromodichloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Dibromomethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
4-Methyl-2-Pentanone	EPA 8260	<25	25	ug/L	MQS	07/14/2009
cis-1,3-Dichloropropene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Toluene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
trans-1,3-Dichloropropene	EPA 8260	<2.0	2.0	ug/L	MQS	07/14/2009
1,1,2-Trichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
2-Hexanone	EPA 8260	<25	25	ug/L	MQS	07/14/2009

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ANALYTICAL REPORT

GZA GeoEnvironmental, Inc.
530 Broadway
Providence, RI 02909

Steve Andrus / Mike Healy

Project Name.: **Phase II Bedrock - Charbert**
Project No.: **03.0032795.35**

Date Received: **07/07/2009**
Date Reported: **07/15/2009**
Work Order No.: **0907-00033**

Sample ID: **GZ-ML-4 Z-6**
Sample No.: **008**
Sample Date: **07/06/2009**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
1,3-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Tetrachloroethene	EPA 8260	8.6	1.0	ug/L	MQS	07/14/2009
Dibromochloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
1,2-Dibromoethane (EDB)	EPA 8260	<2.0	2.0	ug/L	MQS	07/14/2009
Chlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
1,1,1,2-Tetrachloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Ethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
m&p-Xylene	EPA 8260	<2.0	2.0	ug/L	MQS	07/14/2009
o-Xylene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Styrene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Bromoform	EPA 8260	<2.0	2.0	ug/L	MQS	07/14/2009
Isopropylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
1,1,2,2-Tetrachloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
1,2,3-Trichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Bromobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
N-Propylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
2-Chlorotoluene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
1,3,5-Trimethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
4-Chlorotoluene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
tert-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
1,2,4-Trimethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
sec-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
p-Isopropyltoluene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
1,3-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
1,4-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
n-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
1,2-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
1,2-Dibromo-3-Chloropropane	EPA 8260	<5.0	5.0	ug/L	MQS	07/14/2009
1,2,4-Trichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Hexachlorobutadiene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Naphthalene	EPA 8260	<2.0	2.0	ug/L	MQS	07/14/2009
1,2,3-Trichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Surrogates:	EPA 8260					
***1,2-Dichloroethane-D4	EPA 8260	101	70-130	% R	MQS	07/14/2009
***Toluene-D8	EPA 8260	103	70-130	% R	MQS	07/14/2009

GZA GeoEnvironmental, Inc.
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A N A L Y T I C A L R E P O R T

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530 Broadway
Providence, RI 02909

Steve Andrus / Mike Healy

Project Name.: **Phase II Bedrock - Charbert**
Project No.: **03.0032795.35**

Date Received: **07/07/2009**
Date Reported: **07/15/2009**
Work Order No.: **0907-00033**

Sample ID: **GZ-ML-4 Z-6**
Sample No.: **008**
Sample Date: **07/06/2009**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
***4-Bromofluorobenzene	EPA 8260	100	70-130	% R	MQS	07/14/2009
Preparation	EPA 5030B	1.0		CF	MQS	07/14/2009

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Project No.: **03.0032795.35**

Date Received: **07/07/2009**
Date Reported: **07/15/2009**
Work Order No.: **0907-00033**

Sample ID: **GZ-ML-4 Z-7** Sample No.: **009**
Sample Date: **07/06/2009**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260				MQS	07/14/2009
Dichlorodifluoromethane	EPA 8260	<2.0	2.0	ug/L	MQS	07/14/2009
Chloromethane	EPA 8260	<2.0	2.0	ug/L	MQS	07/14/2009
Vinyl Chloride	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Bromomethane	EPA 8260	<2.0	2.0	ug/L	MQS	07/14/2009
Chloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Trichlorofluoromethane	EPA 8260	<2.0	2.0	ug/L	MQS	07/14/2009
Diethylether	EPA 8260	<5.0	5.0	ug/L	MQS	07/14/2009
Acetone	EPA 8260	<25	25	ug/L	MQS	07/14/2009
1,1-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Dichloromethane	EPA 8260	<2.0	2.0	ug/L	MQS	07/14/2009
Methyl-Tert-Butyl-Ether	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
trans-1,2-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
1,1-Dichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
2-Butanone	EPA 8260	<25	25	ug/L	MQS	07/14/2009
2,2-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
cis-1,2-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Chloroform	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Bromochloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Tetrahydrofuran	EPA 8260	<10	10	ug/L	MQS	07/14/2009
1,1,1-Trichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
1,1-Dichloropropene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Carbon Tetrachloride	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
1,2-Dichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Benzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Trichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
1,2-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Bromodichloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Dibromomethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
4-Methyl-2-Pentanone	EPA 8260	<25	25	ug/L	MQS	07/14/2009
cis-1,3-Dichloropropene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Toluene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
trans-1,3-Dichloropropene	EPA 8260	<2.0	2.0	ug/L	MQS	07/14/2009
1,1,2-Trichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
2-Hexanone	EPA 8260	<25	25	ug/L	MQS	07/14/2009

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Project No.: **03.0032795.35**

Date Received: **07/07/2009**
Date Reported: **07/15/2009**
Work Order No.: **0907-00033**

Sample ID: **GZ-ML-4 Z-7**
Sample No.: **009**
Sample Date: **07/06/2009**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
1,3-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Tetrachloroethene	EPA 8260	5.6	1.0	ug/L	MQS	07/14/2009
Dibromochloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
1,2-Dibromoethane (EDB)	EPA 8260	<2.0	2.0	ug/L	MQS	07/14/2009
Chlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
1,1,1,2-Tetrachloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Ethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
m&p-Xylene	EPA 8260	<2.0	2.0	ug/L	MQS	07/14/2009
o-Xylene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Styrene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Bromoform	EPA 8260	<2.0	2.0	ug/L	MQS	07/14/2009
Isopropylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
1,1,2,2-Tetrachloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
1,2,3-Trichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Bromobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
N-Propylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
2-Chlorotoluene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
1,3,5-Trimethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
4-Chlorotoluene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
tert-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
1,2,4-Trimethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
sec-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
p-Isopropyltoluene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
1,3-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
1,4-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
n-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
1,2-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
1,2-Dibromo-3-Chloropropane	EPA 8260	<5.0	5.0	ug/L	MQS	07/14/2009
1,2,4-Trichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Hexachlorobutadiene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Naphthalene	EPA 8260	<2.0	2.0	ug/L	MQS	07/14/2009
1,2,3-Trichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Surrogates:	EPA 8260					
***1,2-Dichloroethane-D4	EPA 8260	95.0	70-130	% R	MQS	07/14/2009
***Toluene-D8	EPA 8260	102	70-130	% R	MQS	07/14/2009

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Date Reported: **07/15/2009**
Work Order No.: **0907-00033**

Sample ID: **GZ-ML-4 Z-7** Sample No.: **009**
Sample Date: **07/06/2009**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
***4-Bromofluorobenzene	EPA 8260	103	70-130	% R	MQS	07/14/2009
Preparation	EPA 5030B	1.0		CF	MQS	07/14/2009

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Date Received: **07/07/2009**
Date Reported: **07/15/2009**
Work Order No.: **0907-00033**

Sample ID: **GZ-ML-4 Z-11** Sample No.: **010**
Sample Date: **07/06/2009**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260				MQS	07/14/2009
Dichlorodifluoromethane	EPA 8260	<2.0	2.0	ug/L	MQS	07/14/2009
Chloromethane	EPA 8260	<2.0	2.0	ug/L	MQS	07/14/2009
Vinyl Chloride	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Bromomethane	EPA 8260	<2.0	2.0	ug/L	MQS	07/14/2009
Chloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Trichlorofluoromethane	EPA 8260	<2.0	2.0	ug/L	MQS	07/14/2009
Diethylether	EPA 8260	<5.0	5.0	ug/L	MQS	07/14/2009
Acetone	EPA 8260	<25	25	ug/L	MQS	07/14/2009
1,1-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Dichloromethane	EPA 8260	<2.0	2.0	ug/L	MQS	07/14/2009
Methyl-Tert-Butyl-Ether	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
trans-1,2-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
1,1-Dichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
2-Butanone	EPA 8260	<25	25	ug/L	MQS	07/14/2009
2,2-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
cis-1,2-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Chloroform	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Bromochloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Tetrahydrofuran	EPA 8260	<10	10	ug/L	MQS	07/14/2009
1,1,1-Trichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
1,1-Dichloropropene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Carbon Tetrachloride	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
1,2-Dichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Benzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Trichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
1,2-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Bromodichloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Dibromomethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
4-Methyl-2-Pentanone	EPA 8260	<25	25	ug/L	MQS	07/14/2009
cis-1,3-Dichloropropene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Toluene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
trans-1,3-Dichloropropene	EPA 8260	<2.0	2.0	ug/L	MQS	07/14/2009
1,1,2-Trichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
2-Hexanone	EPA 8260	<25	25	ug/L	MQS	07/14/2009

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Project No.: **03.0032795.35**

Date Received: **07/07/2009**
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Work Order No.: **0907-00033**

Sample ID: **GZ-ML-4 Z-11** Sample No.: **010**
Sample Date: **07/06/2009**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
1,3-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Tetrachloroethene	EPA 8260	2.7	1.0	ug/L	MQS	07/14/2009
Dibromochloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
1,2-Dibromoethane (EDB)	EPA 8260	<2.0	2.0	ug/L	MQS	07/14/2009
Chlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
1,1,1,2-Tetrachloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Ethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
m&p-Xylene	EPA 8260	<2.0	2.0	ug/L	MQS	07/14/2009
o-Xylene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Styrene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Bromoform	EPA 8260	<2.0	2.0	ug/L	MQS	07/14/2009
Isopropylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
1,1,2,2-Tetrachloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
1,2,3-Trichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Bromobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
N-Propylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
2-Chlorotoluene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
1,3,5-Trimethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
4-Chlorotoluene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
tert-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
1,2,4-Trimethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
sec-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
p-Isopropyltoluene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
1,3-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
1,4-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
n-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
1,2-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
1,2-Dibromo-3-Chloropropane	EPA 8260	<5.0	5.0	ug/L	MQS	07/14/2009
1,2,4-Trichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Hexachlorobutadiene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Naphthalene	EPA 8260	<2.0	2.0	ug/L	MQS	07/14/2009
1,2,3-Trichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/14/2009
Surrogates:	EPA 8260					
***1,2-Dichloroethane-D4	EPA 8260	98.0	70-130	% R	MQS	07/14/2009
***Toluene-D8	EPA 8260	102	70-130	% R	MQS	07/14/2009

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Project No.: **03.0032795.35**

Date Received: **07/07/2009**
Date Reported: **07/15/2009**
Work Order No.: **0907-00033**

Sample ID: **GZ-ML-4 Z-11** Sample No.: **010**

Sample Date: **07/06/2009**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
***4-Bromofluorobenzene	EPA 8260	104	70-130	% R	MQS	07/14/2009
Preparation	EPA 5030B	1.0		CF	MQS	07/14/2009

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EPA Method 8260 / 524.2 Aqueous Method Blank (MB) and Laboratory Control Sample/Duplicate (LCS/LCSD) Data

Method Blank			Laboratory Control Sample				Laboratory Control Sample Duplicate					
Date Analyzed:	7/14/2009		Date Analyzed:	7/14/2009			7/14/2009					
Volatile Organics	Conc. ug/L	Acceptance Limit	Spike Concentration = 20ug/L	% Recovery	Acceptance Limits	Verdict	% Recovery	Acceptance Limits	Verdict	RPD	Limit	Verdict
dichlorodifluoromethane	< 1.0	< 1.0	dichlorodifluoromethane	97.2	70-130	ok	94.9	70-130	ok	2.44	<25	ok
chloromethane	< 1.0	< 1.0	chloromethane	106	70-130	ok	110	70-130	ok	3.33	<25	ok
vinyl chloride	< 0.5	< 0.5	vinyl chloride	94.9	80-120	ok	96.2	70-130	ok	1.28	<25	ok
bromomethane	< 1.0	< 1.0	bromomethane	89.0	70-130	ok	88.1	70-130	ok	0.94	<25	ok
chloroethane	< 0.5	< 0.5	chloroethane	90.8	70-130	ok	89.7	70-130	ok	1.19	<25	ok
trichlorofluoromethane	< 1.0	< 1.0	trichlorofluoromethane	85.0	70-130	ok	82.1	70-130	ok	3.54	<25	ok
diethyl ether	< 2.5	< 2.5	diethyl ether	95.5	70-130	ok	92.2	70-130	ok	3.49	<25	ok
acetone	< 13	< 13	acetone	106	70-130	ok	103	70-130	ok	2.06	<25	ok
1,1-dichloroethene	< 0.5	< 0.5	1,1-dichloroethene	92.9	80-120	ok	91.9	70-130	ok	1.06	<25	ok
FREON-113	< 1.0	< 1.0	FREON-113	83.4	70-130	ok	84.5	70-130	ok	1.38	<25	ok
iodomethane	< 0.5	< 0.5	iodomethane	76.9	70-130	ok	78.4	70-130	ok	1.96	<25	ok
carbon disulfide	< 5.0	< 5.0	carbon disulfide	103	70-130	ok	103	70-130	ok	0.09	<25	ok
dichloromethane	< 1.0	< 1.0	dichloromethane	93.3	70-130	ok	93.6	70-130	ok	0.36	<25	ok
tert-butyl alcohol (TBA)	< 13	< 13	tert-butyl alcohol (TBA)	89.9	70-130	ok	94.5	70-130	ok	4.95	<25	ok
acrylonitrile	< 0.5	< 0.5	acrylonitrile	102	70-130	ok	103	70-130	ok	0.32	<25	ok
methyl-tert-butyl-ether	< 0.5	< 0.5	methyl-tert-butyl-ether	93.9	70-130	ok	91.7	70-130	ok	2.38	<25	ok
trans-1,2-dichloroethene	< 0.5	< 0.5	trans-1,2-dichloroethene	102	70-130	ok	99.9	70-130	ok	1.91	<25	ok
1,1-dichloroethane	< 0.5	< 0.5	1,1-dichloroethane	94.4	70-130	ok	92.5	70-130	ok	2.01	<25	ok
di-isopropyl ether (DIPE)	< 1.0	< 1.0	di-isopropyl ether (DIPE)	103	70-130	ok	102	70-130	ok	0.53	<25	ok
ethyl tert-butyl ether (EtBE)	< 1.0	< 1.0	ethyl tert-butyl ether (EtBE)	90.9	70-130	ok	90.2	70-130	ok	0.78	<25	ok
vinyl acetate	< 13	< 13	vinyl acetate	86.2	70-130	ok	87.1	70-130	ok	1.02	<25	ok
2-butanone	< 13	< 13	2-butanone	103	70-130	ok	104	70-130	ok	0.49	<25	ok
2,2-dichloropropane	< 0.5	< 0.5	2,2-dichloropropane	95.9	70-130	ok	91.7	70-130	ok	4.43	<25	ok
cis-1,2-dichloroethene	< 0.5	< 0.5	cis-1,2-dichloroethene	88.5	70-130	ok	88.3	70-130	ok	0.28	<25	ok
chloroform	< 0.5	< 0.5	chloroform	87.6	80-120	ok	85.2	70-130	ok	2.79	<25	ok
bromochloromethane	< 0.5	< 0.5	bromochloromethane	84.3	70-130	ok	84.3	70-130	ok	0.07	<25	ok
tetrahydrofuran	< 5.0	< 5.0	tetrahydrofuran	108	70-130	ok	106	70-130	ok	2.05	<25	ok
1,1,1-trichloroethane	< 0.5	< 0.5	1,1,1-trichloroethane	83.3	70-130	ok	82.2	70-130	ok	1.29	<25	ok
1,1-dichloropropene	< 0.5	< 0.5	1,1-dichloropropene	93.0	70-130	ok	91.6	70-130	ok	1.53	<25	ok
carbon tetrachloride	< 0.5	< 0.5	carbon tetrachloride	81.1	70-130	ok	78.6	70-130	ok	3.11	<25	ok
1,2-dichloroethane	< 0.5	< 0.5	1,2-dichloroethane	82.9	70-130	ok	80.7	70-130	ok	2.64	<25	ok
benzene	< 0.5	< 0.5	benzene	101	70-130	ok	100	70-130	ok	0.95	<25	ok
tert-amyl methyl ether (TAME)	< 1.0	< 1.0	tert-amyl methyl ether (TAME)	91.0	70-130	ok	90.0	70-130	ok	1.04	<25	ok
trichloroethene	< 0.5	< 0.5	trichloroethene	84.9	70-130	ok	82.1	70-130	ok	3.32	<25	ok
1,2-dichloropropane	< 0.5	< 0.5	1,2-dichloropropane	100	80-120	ok	98.9	70-130	ok	1.40	<25	ok
bromodichloromethane	< 0.5	< 0.5	bromodichloromethane	85.6	70-130	ok	83.4	70-130	ok	2.54	<25	ok
1,4-Dioxane	< 50	< 50	1,4-Dioxane	95.8	70-130	ok	98.9	70-130	ok	3.17	<25	ok
dibromomethane	< 0.5	< 0.5	dibromomethane	85.3	70-130	ok	83.5	70-130	ok	2.16	<25	ok
4-methyl-2-pentanone	< 13	< 13	4-methyl-2-pentanone	103	70-130	ok	102	70-130	ok	0.48	<25	ok
cis-1,3-dichloropropene	< 0.5	< 0.5	cis-1,3-dichloropropene	93.3	70-130	ok	91.7	70-130	ok	1.79	<25	ok
toluene	< 0.5	< 0.5	toluene	96.6	80-120	ok	95.1	70-130	ok	1.62	<25	ok
trans-1,3-dichloropropene	< 1.0	< 1.0	trans-1,3-dichloropropene	91.2	70-130	ok	88.5	70-130	ok	3.00	<25	ok
1,1,2-trichloroethane	< 0.5	< 0.5	1,1,2-trichloroethane	89.3	70-130	ok	86.9	70-130	ok	2.66	<25	ok
2-hexanone	< 13	< 13	2-hexanone	99.7	70-130	ok	99.9	70-130	ok	0.20	<25	ok
1,3-dichloropropane	< 0.5	< 0.5	1,3-dichloropropane	94.7	70-130	ok	93.1	70-130	ok	1.69	<25	ok
tetrachloroethene	< 0.5	< 0.5	tetrachloroethene	80.4	70-130	ok	82.0	70-130	ok	2.01	<25	ok
dibromochloromethane	< 0.5	< 0.5	dibromochloromethane	79.8	70-130	ok	78.7	70-130	ok	1.49	<25	ok
1,2-dibromoethane (EDB)	< 1.0	< 1.0	1,2-dibromoethane (EDB)	88.6	70-130	ok	88.4	70-130	ok	0.19	<25	ok
chlorobenzene	< 0.5	< 0.5	chlorobenzene	83.5	70-130	ok	83.4	70-130	ok	0.19	<25	ok
1,1,1,2-tetrachloroethane	< 0.5	< 0.5	1,1,1,2-tetrachloroethane	77.9	70-130	ok	77.8	70-130	ok	0.12	<25	ok
ethylbenzene	< 0.5	< 0.5	ethylbenzene	89.6	80-120	ok	88.9	70-130	ok	0.84	<25	ok
1,1,2,2-tetrachloroethane	< 0.5	< 0.5	1,1,2,2-tetrachloroethane	97.4	70-130	ok	96.5	70-130	ok	1.00	<25	ok
m&p-xylene	< 1.0	< 1.0	m&p-xylene	88.3	70-130	ok	88.0	70-130	ok	0.32	<25	ok
o-xylene	< 0.5	< 0.5	o-xylene	108	70-130	ok	105	70-130	ok	2.94	<25	ok
styrene	< 0.5	< 0.5	styrene	107	70-130	ok	105	70-130	ok	1.51	<25	ok
bromoform	< 1.0	< 1.0	bromoform	97.3	70-130	ok	95.5	70-130	ok	1.92	<25	ok
isopropylbenzene	< 0.5	< 0.5	isopropylbenzene	123	70-130	ok	119	70-130	ok	3.20	<25	ok
1,2,3-trichloropropane	< 0.5	< 0.5	1,2,3-trichloropropane	103	70-130	ok	98.1	70-130	ok	5.10	<25	ok
bromobenzene	< 0.5	< 0.5	bromobenzene	96.9	70-130	ok	95.3	70-130	ok	1.65	<25	ok
n-propylbenzene	< 0.5	< 0.5	n-propylbenzene	117	70-130	ok	114	70-130	ok	3.06	<25	ok
2-chlorotoluene	< 0.5	< 0.5	2-chlorotoluene	110	70-130	ok	108	70-130	ok	2.00	<25	ok
1,3,5-trimethylbenzene	< 0.5	< 0.5	1,3,5-trimethylbenzene	106	70-130	ok	103	70-130	ok	2.70	<25	ok
trans-1,4-dichloro-2-butene	< 1.0	< 1.0	trans-1,4-dichloro-2-butene	109	70-130	ok	105	70-130	ok	4.14	<25	ok
4-chlorotoluene	< 0.5	< 0.5	4-chlorotoluene	111	70-130	ok	107	70-130	ok	2.95	<25	ok
tert-butyl-benzene	< 0.5	< 0.5	tert-butyl-benzene	93.4	70-130	ok	91.2	70-130	ok	2.46	<25	ok
1,2,4-trimethylbenzene	< 0.5	< 0.5	1,2,4-trimethylbenzene	104	70-130	ok	103	70-130	ok	1.32	<25	ok
sec-butyl-benzene	< 0.5	< 0.5	sec-butyl-benzene	103	70-130	ok	101	70-130	ok	2.53	<25	ok
p-isopropyltoluene	< 0.5	< 0.5	p-isopropyltoluene	98.1	70-130	ok	96.0	70-130	ok	2.15	<25	ok
1,3-dichlorobenzene	< 0.5	< 0.5	1,3-dichlorobenzene	98.4	70-130	ok	95.6	70-130	ok	2.93	<25	ok
1,4-dichlorobenzene	< 0.5	< 0.5	1,4-dichlorobenzene	97.8	70-130	ok	96.7	70-130	ok	1.11	<25	ok
n-butylbenzene	< 0.5	< 0.5	n-butylbenzene	112	70-130	ok	109	70-130	ok	3.00	<25	ok
1,2-dichlorobenzene	< 0.5	< 0.5	1,2-dichlorobenzene	98.7	70-130	ok	93.7	70-130	ok	3.16	<25	ok
1,2-dibromo-3-chloropropane	< 2.5	< 2.5	1,2-dibromo-3-chloropropane	94.4	70-130	ok	92.9	70-130	ok	1.55	<25	ok
1,3,5-trichlorobenzene	< 0.5	< 0.5	1,3,5-trichlorobenzene	103	70-130	ok	100	70-130	ok	2.70	<25	ok
1,2,4-trichlorobenzene	< 0.5	< 0.5	1,2,4-trichlorobenzene	108	70-130	ok	106	70-130	ok	2.34	<25	ok
hexachlorobutadiene	< 0.5	< 0.5	hexachlorobutadiene	105	70-130	ok	103	70-130	ok	2.18	<25	ok
naphthalene	< 1.0	< 1.0	naphthalene	89.9	70-130	ok	88.9	70-130	ok	1.14	<25	ok
1,2,3-trichlorobenzene	< 0.5	< 0.5	1,2,3-trichlorobenzene	96.0	70-130	ok	95.4	70-130	ok	0.63	<25	ok

Surrogates:	Recovery (%)	Acceptance Limits	Surrogates:	Recovery (%)	Acceptance Limits	Verdict	Recovery (%)	Acceptance Limits	Verdict	RPD	Acceptance Limits	Verdict
DIBROMOFLUOROMETHANE	92.5	70-130	DIBROMOFLUOROMETHANE	90.6	70-130	ok	91.9	70-130	ok	1.41	<25	ok
1,2-DICHLOROETHANE-D4	98.8	70-130	1,2-DICHLOROETHANE-D4	98.6	70-130	ok	97.1	70-130	ok	1.52	<25	ok
TOLUENE-D8	100	70-130	TOLUENE-D8	101	70-130	ok	101	70-130	ok	0.07	<25	ok
4-BROMOFLUOROBENZENE	102	70-130	4-BROMOFLUOROBENZENE	106	70-130	ok	106	70-130	ok	0.18	<25	ok
1,2-DICHLOROBENZENE-D4	93.7	70-130	1,2-DICHLOROBENZENE-D4	103	70-130	ok	100.0	70-130	ok	3.32	<25	ok

Instrument: HP GC/MS "S"

CHAIN-OF-CUSTODY RECORD

W.O. # 0907-00033 (for lab use only)

Sample I.D.	Date/Time Sampled	Matrix (A=Air, S=Soil, GW=Ground W., SW=Surface W., WW=Waste W., DW=Drinking W., P=Product, Other (specify))	ANALYSIS REQUIRED: EPA 8260	Total # of Cont.	Note #
TB	7/6/09 8:00	GW	X	3	
GZ-ML-4 Z-1A	7/6/09 9:10	GW	X	3	
GZ-ML-4 Z-2	7/6/09 9:40	GW	X	3	
GZ-ML-4 Z-3A	7/6/09 10:00	GW	X	3	
GZ-ML-4 Z-3D	7/6/09 10:00	GW	X	3	
GZ-ML-4 Z-4	7/6/09 10:20	GW	X	3	
GZ-ML-4 Z-5	7/6/09 10:50	GW	X	3	
GZ-ML-4 Z-6	7/6/09 11:25	GW	X	3	
GZ-ML-4 Z-7	7/6/09 12:00	GW	X	3	
GZ-ML-4 Z-11	7/6/09 13:45	GW	X		
PRESERVATIVE (Cl - HCl, M=Methanol, N - HNO3, S - H2SO4, Na - NaOH, O - Other)*			Cl		
CONTAINER TYPE (P-Plastic, G-Glass, V-Vial, T-Teflon, O-Other)*			G		

NOTES: (Unless otherwise noted, all samples have been refrigerated to 4° C)
*Specify "Other" preservatives and containers types in this space.

RELINQUISHED BY: (AFFILIATION) DATE/TIME RECEIVED BY: (AFFILIATION)
7/6/09 1435

RELINQUISHED BY: (AFFILIATION) DATE/TIME RECEIVED BY: (AFFILIATION)
7/7/09

RELINQUISHED BY: (AFFILIATION) DATE/TIME RECEIVED BY: (AFFILIATION)
7/7/09 1222 7/7/09 1400

PROJECT MANAGER Mike Healy EXT:
Steve Mathews

GZA GeoEnvironmental, Inc.
Labaratory Division

106 South Street
Hopkinton, MA 01748
(781) 278-4700
FAX (508) 435-9912

TURNAROUND TIME: (Standard) Rush___ Days, Approved by _____

LAB USE: TEMP. OF COOLER 4.9 °C Temp Blank 0109 Cooler Air____

GZA FILE NO: 32795.35 TASK NO: P.O. NO.

PROJECT Chestnut Phase II Bedrock Explorations

LOCATION Canton RI

COLLECTOR(S) SMM SHEET OF

GZA GeoEnvironmental, Inc.
106 South Street
Hopkinton, MA 01748
(781) 278-4700

Laboratory Identification Numbers:
MA and ME: **MA092** NH: **2028**
CT: **PH0579** RI: **LAO00236**
NELAC - NYS DOH: **11063**

ANALYTICAL REPORT

GZA GeoEnvironmental, Inc.
530 Broadway
Providence, RI 02909

Steve Andrus / Mike Healy

Project No.: **03.0032795.35**
Work Order No.: **0907-00068**
Date Received: **07/10/2009**
Date Reported: **07/17/2009**

SAMPLE INFORMATION

Date Sampled	Matrix	Laboratory ID	Sample ID
07/08/2009	Aqueous	0907-00068 001	GZ-ML-5 Z-1
07/08/2009	Aqueous	0907-00068 002	TB
07/09/2009	Aqueous	0907-00068 003	GZ-ML-5 Z-2
07/09/2009	Aqueous	0907-00068 004	GZ-ML-5 Z-3
07/09/2009	Aqueous	0907-00068 005	GZ-ML-5 Z-4
07/09/2009	Aqueous	0907-00068 006	GZ-ML-5 Z-5
07/09/2009	Aqueous	0907-00068 007	GZ-ML-5 Z-6
07/09/2009	Aqueous	0907-00068 008	GZ-ML-5 Z-7
07/09/2009	Aqueous	0907-00068 009	GZ-ML-5 Z-8

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A N A L Y T I C A L R E P O R T

GZA GeoEnvironmental, Inc.
530 Broadway
Providence, RI 02909

Steve Andrus / Mike Healy

Project Name.: **Phase II Bedrock - Charbert**
Project No.: **03.0032795.35**

Date Received: **07/10/2009**
Date Reported: **07/17/2009**
Work Order No.: **0907-00068**

PROJECT NARRATIVE:

1. Sample Receipt

The samples were received on 07/10/09 via _x_GZA courier, __EC, __FEDEX, or ___hand delivered. The temperature of the __temperature blank/_x_cooler air, was 2.1 degrees C. The temperature requirement for most analyses is above freezing to 6 degrees C. The samples were received intact for all requested analyses.

The chain of custody indicates that the samples, when required, were chemically preserved in accordance with the method they reference.

2. EPA Method 8260 - VOCs

Attach QC 8260 07/16/09 S - Aqueous

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ANALYTICAL REPORT

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Project Name.: **Phase II Bedrock - Charbert**
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Date Received: **07/10/2009**
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Data Authorized By: _____

NELAC certification, as indicated by the NELAC Lab ID Number, is per analyte. For a complete list of NELAC validated analytes, please contact the laboratory.

Abbreviations:
% R = % Recovery
DF = Dilution Factor
DFS = Dilution Factor Solids
CF = Calculation Factor
DO = Diluted Out

Method Key:
Method 8260: The current version of the method is 8260B.
Method 8270: The current version of the method is 8270D.
Method 6010: The current version of the method is 6010B.

Please note that the laboratory signed copy of the chain of custody record is an integral part of the data report.

Soil data is reported on a dry weight basis unless otherwise specified.
Matrix Spike / Matrix Spike Duplicate sets are performed as per method and are reported at the end of the analytical report if assigned on the Chain of Custody.

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ANALYTICAL REPORT

GZA GeoEnvironmental, Inc.
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Steve Andrus / Mike Healy

Project Name.: **Phase II Bedrock - Charbert**
Project No.: **03.0032795.35**

Date Received: **07/10/2009**
Date Reported: **07/17/2009**
Work Order No.: **0907-00068**

Sample ID: **GZ-ML-5 Z-1** Sample No.: **001**
Sample Date: **07/08/2009**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260				MQS	07/16/2009
Dichlorodifluoromethane	EPA 8260	<2.0	2.0	ug/L	MQS	07/16/2009
Chloromethane	EPA 8260	<2.0	2.0	ug/L	MQS	07/16/2009
Vinyl Chloride	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Bromomethane	EPA 8260	<2.0	2.0	ug/L	MQS	07/16/2009
Chloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Trichlorofluoromethane	EPA 8260	<2.0	2.0	ug/L	MQS	07/16/2009
Diethylether	EPA 8260	<5.0	5.0	ug/L	MQS	07/16/2009
Acetone	EPA 8260	<25	25	ug/L	MQS	07/16/2009
1,1-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Dichloromethane	EPA 8260	<2.0	2.0	ug/L	MQS	07/16/2009
Methyl-Tert-Butyl-Ether	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
trans-1,2-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
1,1-Dichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
2-Butanone	EPA 8260	<25	25	ug/L	MQS	07/16/2009
2,2-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
cis-1,2-Dichloroethene	EPA 8260	5.1	1.0	ug/L	MQS	07/16/2009
Chloroform	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Bromochloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Tetrahydrofuran	EPA 8260	<10	10	ug/L	MQS	07/16/2009
1,1,1-Trichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
1,1-Dichloropropene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Carbon Tetrachloride	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
1,2-Dichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Benzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Trichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
1,2-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Bromodichloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Dibromomethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
4-Methyl-2-Pentanone	EPA 8260	<25	25	ug/L	MQS	07/16/2009
cis-1,3-Dichloropropene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Toluene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
trans-1,3-Dichloropropene	EPA 8260	<2.0	2.0	ug/L	MQS	07/16/2009
1,1,2-Trichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
2-Hexanone	EPA 8260	<25	25	ug/L	MQS	07/16/2009

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ANALYTICAL REPORT

GZA GeoEnvironmental, Inc.
530 Broadway
Providence, RI 02909

Steve Andrus / Mike Healy

Project Name.: **Phase II Bedrock - Charbert**
Project No.: **03.0032795.35**

Date Received: **07/10/2009**
Date Reported: **07/17/2009**
Work Order No.: **0907-00068**

Sample ID: **GZ-ML-5 Z-1**
Sample No.: **001**
Sample Date: **07/08/2009**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
1,3-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Tetrachloroethene	EPA 8260	1.1	1.0	ug/L	MQS	07/16/2009
Dibromochloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
1,2-Dibromoethane (EDB)	EPA 8260	<2.0	2.0	ug/L	MQS	07/16/2009
Chlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
1,1,1,2-Tetrachloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Ethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
m&p-Xylene	EPA 8260	<2.0	2.0	ug/L	MQS	07/16/2009
o-Xylene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Styrene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Bromoform	EPA 8260	<2.0	2.0	ug/L	MQS	07/16/2009
Isopropylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
1,1,2,2-Tetrachloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
1,2,3-Trichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Bromobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
N-Propylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
2-Chlorotoluene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
1,3,5-Trimethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
4-Chlorotoluene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
tert-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
1,2,4-Trimethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
sec-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
p-Isopropyltoluene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
1,3-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
1,4-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
n-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
1,2-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
1,2-Dibromo-3-Chloropropane	EPA 8260	<5.0	5.0	ug/L	MQS	07/16/2009
1,2,4-Trichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Hexachlorobutadiene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Naphthalene	EPA 8260	<2.0	2.0	ug/L	MQS	07/16/2009
1,2,3-Trichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Surrogates:	EPA 8260					
***1,2-Dichloroethane-D4	EPA 8260	94.1	70-130	% R	MQS	07/16/2009
***Toluene-D8	EPA 8260	99.0	70-130	% R	MQS	07/16/2009

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A N A L Y T I C A L R E P O R T

GZA GeoEnvironmental, Inc.
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Steve Andrus / Mike Healy

Project Name.: **Phase II Bedrock - Charbert**
Project No.: **03.0032795.35**

Date Received: **07/10/2009**
Date Reported: **07/17/2009**
Work Order No.: **0907-00068**

Sample ID: **GZ-ML-5 Z-1**
Sample No.: **001**
Sample Date: **07/08/2009**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
***4-Bromofluorobenzene	EPA 8260	105	70-130	% R	MQS	07/16/2009
Preparation	EPA 5030B	1.0		CF	MQS	07/16/2009

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Project Name.: **Phase II Bedrock - Charbert**
Project No.: **03.0032795.35**

Date Received: **07/10/2009**
Date Reported: **07/17/2009**
Work Order No.: **0907-00068**

Sample ID: **TB** Sample No.: **002**

Sample Date: **07/08/2009**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260				MQS	07/16/2009
Dichlorodifluoromethane	EPA 8260	<2.0	2.0	ug/L	MQS	07/16/2009
Chloromethane	EPA 8260	<2.0	2.0	ug/L	MQS	07/16/2009
Vinyl Chloride	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Bromomethane	EPA 8260	<2.0	2.0	ug/L	MQS	07/16/2009
Chloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Trichlorofluoromethane	EPA 8260	<2.0	2.0	ug/L	MQS	07/16/2009
Diethylether	EPA 8260	<5.0	5.0	ug/L	MQS	07/16/2009
Acetone	EPA 8260	<25	25	ug/L	MQS	07/16/2009
1,1-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Dichloromethane	EPA 8260	<2.0	2.0	ug/L	MQS	07/16/2009
Methyl-Tert-Butyl-Ether	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
trans-1,2-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
1,1-Dichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
2-Butanone	EPA 8260	<25	25	ug/L	MQS	07/16/2009
2,2-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
cis-1,2-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Chloroform	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Bromochloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Tetrahydrofuran	EPA 8260	<10	10	ug/L	MQS	07/16/2009
1,1,1-Trichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
1,1-Dichloropropene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Carbon Tetrachloride	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
1,2-Dichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Benzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Trichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
1,2-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Bromodichloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Dibromomethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
4-Methyl-2-Pentanone	EPA 8260	<25	25	ug/L	MQS	07/16/2009
cis-1,3-Dichloropropene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Toluene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
trans-1,3-Dichloropropene	EPA 8260	<2.0	2.0	ug/L	MQS	07/16/2009
1,1,2-Trichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
2-Hexanone	EPA 8260	<25	25	ug/L	MQS	07/16/2009

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ANALYTICAL REPORT

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Steve Andrus / Mike Healy

Project Name.: **Phase II Bedrock - Charbert**
Project No.: **03.0032795.35**

Date Received: **07/10/2009**
Date Reported: **07/17/2009**
Work Order No.: **0907-00068**

Sample ID: **TB** Sample No.: **002**

Sample Date: **07/08/2009**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
1,3-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Tetrachloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Dibromochloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
1,2-Dibromoethane (EDB)	EPA 8260	<2.0	2.0	ug/L	MQS	07/16/2009
Chlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
1,1,1,2-Tetrachloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Ethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
m&p-Xylene	EPA 8260	<2.0	2.0	ug/L	MQS	07/16/2009
o-Xylene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Styrene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Bromoform	EPA 8260	<2.0	2.0	ug/L	MQS	07/16/2009
Isopropylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
1,1,2,2-Tetrachloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
1,2,3-Trichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Bromobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
N-Propylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
2-Chlorotoluene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
1,3,5-Trimethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
4-Chlorotoluene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
tert-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
1,2,4-Trimethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
sec-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
p-Isopropyltoluene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
1,3-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
1,4-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
n-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
1,2-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
1,2-Dibromo-3-Chloropropane	EPA 8260	<5.0	5.0	ug/L	MQS	07/16/2009
1,2,4-Trichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Hexachlorobutadiene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Naphthalene	EPA 8260	<2.0	2.0	ug/L	MQS	07/16/2009
1,2,3-Trichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Surrogates:	EPA 8260					
***1,2-Dichloroethane-D4	EPA 8260	94.7	70-130	% R	MQS	07/16/2009
***Toluene-D8	EPA 8260	101	70-130	% R	MQS	07/16/2009

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A N A L Y T I C A L R E P O R T

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Project Name.: **Phase II Bedrock - Charbert**
Project No.: **03.0032795.35**

Date Received: **07/10/2009**
Date Reported: **07/17/2009**
Work Order No.: **0907-00068**

Sample ID: **TB** Sample No.: **002**

Sample Date: **07/08/2009**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
***4-Bromofluorobenzene	EPA 8260	105	70-130	% R	MQS	07/16/2009
Preparation	EPA 5030B	1.0		CF	MQS	07/16/2009

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Project Name.: **Phase II Bedrock - Charbert**
Project No.: **03.0032795.35**

Date Received: **07/10/2009**
Date Reported: **07/17/2009**
Work Order No.: **0907-00068**

Sample ID: **GZ-ML-5 Z-2** Sample No.: **003**
Sample Date: **07/09/2009**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260				MQS	07/16/2009
Dichlorodifluoromethane	EPA 8260	<2.0	2.0	ug/L	MQS	07/16/2009
Chloromethane	EPA 8260	<2.0	2.0	ug/L	MQS	07/16/2009
Vinyl Chloride	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Bromomethane	EPA 8260	<2.0	2.0	ug/L	MQS	07/16/2009
Chloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Trichlorofluoromethane	EPA 8260	<2.0	2.0	ug/L	MQS	07/16/2009
Diethylether	EPA 8260	<5.0	5.0	ug/L	MQS	07/16/2009
Acetone	EPA 8260	<25	25	ug/L	MQS	07/16/2009
1,1-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Dichloromethane	EPA 8260	<2.0	2.0	ug/L	MQS	07/16/2009
Methyl-Tert-Butyl-Ether	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
trans-1,2-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
1,1-Dichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
2-Butanone	EPA 8260	<25	25	ug/L	MQS	07/16/2009
2,2-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
cis-1,2-Dichloroethene	EPA 8260	2.7	1.0	ug/L	MQS	07/16/2009
Chloroform	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Bromochloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Tetrahydrofuran	EPA 8260	<10	10	ug/L	MQS	07/16/2009
1,1,1-Trichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
1,1-Dichloropropene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Carbon Tetrachloride	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
1,2-Dichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Benzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Trichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
1,2-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Bromodichloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Dibromomethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
4-Methyl-2-Pentanone	EPA 8260	<25	25	ug/L	MQS	07/16/2009
cis-1,3-Dichloropropene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Toluene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
trans-1,3-Dichloropropene	EPA 8260	<2.0	2.0	ug/L	MQS	07/16/2009
1,1,2-Trichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
2-Hexanone	EPA 8260	<25	25	ug/L	MQS	07/16/2009

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ANALYTICAL REPORT

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Steve Andrus / Mike Healy

Project Name.: **Phase II Bedrock - Charbert**
Project No.: **03.0032795.35**

Date Received: **07/10/2009**
Date Reported: **07/17/2009**
Work Order No.: **0907-00068**

Sample ID: **GZ-ML-5 Z-2**
Sample No.: **003**
Sample Date: **07/09/2009**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
1,3-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Tetrachloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Dibromochloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
1,2-Dibromoethane (EDB)	EPA 8260	<2.0	2.0	ug/L	MQS	07/16/2009
Chlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
1,1,1,2-Tetrachloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Ethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
m&p-Xylene	EPA 8260	<2.0	2.0	ug/L	MQS	07/16/2009
o-Xylene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Styrene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Bromoform	EPA 8260	<2.0	2.0	ug/L	MQS	07/16/2009
Isopropylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
1,1,2,2-Tetrachloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
1,2,3-Trichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Bromobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
N-Propylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
2-Chlorotoluene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
1,3,5-Trimethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
4-Chlorotoluene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
tert-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
1,2,4-Trimethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
sec-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
p-Isopropyltoluene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
1,3-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
1,4-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
n-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
1,2-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
1,2-Dibromo-3-Chloropropane	EPA 8260	<5.0	5.0	ug/L	MQS	07/16/2009
1,2,4-Trichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Hexachlorobutadiene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Naphthalene	EPA 8260	<2.0	2.0	ug/L	MQS	07/16/2009
1,2,3-Trichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Surrogates:	EPA 8260					
***1,2-Dichloroethane-D4	EPA 8260	95.1	70-130	% R	MQS	07/16/2009
***Toluene-D8	EPA 8260	100	70-130	% R	MQS	07/16/2009

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Project Name.: **Phase II Bedrock - Charbert**
Project No.: **03.0032795.35**

Date Received: **07/10/2009**
Date Reported: **07/17/2009**
Work Order No.: **0907-00068**

Sample ID: **GZ-ML-5 Z-2** Sample No.: **003**

Sample Date: **07/09/2009**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
***4-Bromofluorobenzene	EPA 8260	103	70-130	% R	MQS	07/16/2009
Preparation	EPA 5030B	1.0		CF	MQS	07/16/2009

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ANALYTICAL REPORT

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Project Name.: **Phase II Bedrock - Charbert**
Project No.: **03.0032795.35**

Date Received: **07/10/2009**
Date Reported: **07/17/2009**
Work Order No.: **0907-00068**

Sample ID: **GZ-ML-5 Z-3** Sample No.: **004**
Sample Date: **07/09/2009**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260				MQS	07/16/2009
Dichlorodifluoromethane	EPA 8260	<2.0	2.0	ug/L	MQS	07/16/2009
Chloromethane	EPA 8260	<2.0	2.0	ug/L	MQS	07/16/2009
Vinyl Chloride	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Bromomethane	EPA 8260	<2.0	2.0	ug/L	MQS	07/16/2009
Chloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Trichlorofluoromethane	EPA 8260	<2.0	2.0	ug/L	MQS	07/16/2009
Diethylether	EPA 8260	<5.0	5.0	ug/L	MQS	07/16/2009
Acetone	EPA 8260	<25	25	ug/L	MQS	07/16/2009
1,1-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Dichloromethane	EPA 8260	<2.0	2.0	ug/L	MQS	07/16/2009
Methyl-Tert-Butyl-Ether	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
trans-1,2-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
1,1-Dichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
2-Butanone	EPA 8260	<25	25	ug/L	MQS	07/16/2009
2,2-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
cis-1,2-Dichloroethene	EPA 8260	3.1	1.0	ug/L	MQS	07/16/2009
Chloroform	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Bromochloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Tetrahydrofuran	EPA 8260	<10	10	ug/L	MQS	07/16/2009
1,1,1-Trichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
1,1-Dichloropropene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Carbon Tetrachloride	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
1,2-Dichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Benzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Trichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
1,2-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Bromodichloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Dibromomethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
4-Methyl-2-Pentanone	EPA 8260	<25	25	ug/L	MQS	07/16/2009
cis-1,3-Dichloropropene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Toluene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
trans-1,3-Dichloropropene	EPA 8260	<2.0	2.0	ug/L	MQS	07/16/2009
1,1,2-Trichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
2-Hexanone	EPA 8260	<25	25	ug/L	MQS	07/16/2009

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ANALYTICAL REPORT

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Steve Andrus / Mike Healy

Project Name.: **Phase II Bedrock - Charbert**
Project No.: **03.0032795.35**

Date Received: **07/10/2009**
Date Reported: **07/17/2009**
Work Order No.: **0907-00068**

Sample ID: **GZ-ML-5 Z-3** Sample No.: **004**
Sample Date: **07/09/2009**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
1,3-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Tetrachloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Dibromochloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
1,2-Dibromoethane (EDB)	EPA 8260	<2.0	2.0	ug/L	MQS	07/16/2009
Chlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
1,1,1,2-Tetrachloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Ethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
m&p-Xylene	EPA 8260	<2.0	2.0	ug/L	MQS	07/16/2009
o-Xylene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Styrene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Bromoform	EPA 8260	<2.0	2.0	ug/L	MQS	07/16/2009
Isopropylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
1,1,2,2-Tetrachloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
1,2,3-Trichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Bromobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
N-Propylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
2-Chlorotoluene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
1,3,5-Trimethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
4-Chlorotoluene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
tert-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
1,2,4-Trimethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
sec-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
p-Isopropyltoluene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
1,3-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
1,4-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
n-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
1,2-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
1,2-Dibromo-3-Chloropropane	EPA 8260	<5.0	5.0	ug/L	MQS	07/16/2009
1,2,4-Trichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Hexachlorobutadiene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Naphthalene	EPA 8260	<2.0	2.0	ug/L	MQS	07/16/2009
1,2,3-Trichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Surrogates:	EPA 8260					
***1,2-Dichloroethane-D4	EPA 8260	95.1	70-130	% R	MQS	07/16/2009
***Toluene-D8	EPA 8260	102	70-130	% R	MQS	07/16/2009

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Steve Andrus / Mike Healy

Project Name.: **Phase II Bedrock - Charbert**
Project No.: **03.0032795.35**

Date Received: **07/10/2009**
Date Reported: **07/17/2009**
Work Order No.: **0907-00068**

Sample ID: **GZ-ML-5 Z-3** Sample No.: **004**

Sample Date: **07/09/2009**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
***4-Bromofluorobenzene	EPA 8260	104	70-130	% R	MQS	07/16/2009
Preparation	EPA 5030B	1.0		CF	MQS	07/16/2009

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Project Name.: **Phase II Bedrock - Charbert**
Project No.: **03.0032795.35**

Date Received: **07/10/2009**
Date Reported: **07/17/2009**
Work Order No.: **0907-00068**

Sample ID: **GZ-ML-5 Z-4** Sample No.: **005**
Sample Date: **07/09/2009**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260				MQS	07/16/2009
Dichlorodifluoromethane	EPA 8260	<2.0	2.0	ug/L	MQS	07/16/2009
Chloromethane	EPA 8260	<2.0	2.0	ug/L	MQS	07/16/2009
Vinyl Chloride	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Bromomethane	EPA 8260	<2.0	2.0	ug/L	MQS	07/16/2009
Chloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Trichlorofluoromethane	EPA 8260	<2.0	2.0	ug/L	MQS	07/16/2009
Diethylether	EPA 8260	<5.0	5.0	ug/L	MQS	07/16/2009
Acetone	EPA 8260	<25	25	ug/L	MQS	07/16/2009
1,1-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Dichloromethane	EPA 8260	<2.0	2.0	ug/L	MQS	07/16/2009
Methyl-Tert-Butyl-Ether	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
trans-1,2-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
1,1-Dichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
2-Butanone	EPA 8260	<25	25	ug/L	MQS	07/16/2009
2,2-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
cis-1,2-Dichloroethene	EPA 8260	3.8	1.0	ug/L	MQS	07/16/2009
Chloroform	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Bromochloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Tetrahydrofuran	EPA 8260	<10	10	ug/L	MQS	07/16/2009
1,1,1-Trichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
1,1-Dichloropropene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Carbon Tetrachloride	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
1,2-Dichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Benzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Trichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
1,2-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Bromodichloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Dibromomethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
4-Methyl-2-Pentanone	EPA 8260	<25	25	ug/L	MQS	07/16/2009
cis-1,3-Dichloropropene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Toluene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
trans-1,3-Dichloropropene	EPA 8260	<2.0	2.0	ug/L	MQS	07/16/2009
1,1,2-Trichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
2-Hexanone	EPA 8260	<25	25	ug/L	MQS	07/16/2009

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ANALYTICAL REPORT

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Steve Andrus / Mike Healy

Project Name.: **Phase II Bedrock - Charbert**
Project No.: **03.0032795.35**

Date Received: **07/10/2009**
Date Reported: **07/17/2009**
Work Order No.: **0907-00068**

Sample ID: **GZ-ML-5 Z-4** Sample No.: **005**
Sample Date: **07/09/2009**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
1,3-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Tetrachloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Dibromochloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
1,2-Dibromoethane (EDB)	EPA 8260	<2.0	2.0	ug/L	MQS	07/16/2009
Chlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
1,1,1,2-Tetrachloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Ethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
m&p-Xylene	EPA 8260	<2.0	2.0	ug/L	MQS	07/16/2009
o-Xylene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Styrene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Bromoform	EPA 8260	<2.0	2.0	ug/L	MQS	07/16/2009
Isopropylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
1,1,2,2-Tetrachloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
1,2,3-Trichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Bromobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
N-Propylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
2-Chlorotoluene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
1,3,5-Trimethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
4-Chlorotoluene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
tert-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
1,2,4-Trimethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
sec-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
p-Isopropyltoluene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
1,3-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
1,4-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
n-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
1,2-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
1,2-Dibromo-3-Chloropropane	EPA 8260	<5.0	5.0	ug/L	MQS	07/16/2009
1,2,4-Trichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Hexachlorobutadiene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Naphthalene	EPA 8260	<2.0	2.0	ug/L	MQS	07/16/2009
1,2,3-Trichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Surrogates:	EPA 8260					
***1,2-Dichloroethane-D4	EPA 8260	94.9	70-130	% R	MQS	07/16/2009
***Toluene-D8	EPA 8260	99.5	70-130	% R	MQS	07/16/2009

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Project Name.: **Phase II Bedrock - Charbert**
Project No.: **03.0032795.35**

Date Received: **07/10/2009**
Date Reported: **07/17/2009**
Work Order No.: **0907-00068**

Sample ID: **GZ-ML-5 Z-4** Sample No.: **005**

Sample Date: **07/09/2009**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
***4-Bromofluorobenzene	EPA 8260	105	70-130	% R	MQS	07/16/2009
Preparation	EPA 5030B	1.0		CF	MQS	07/16/2009

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Project Name.: **Phase II Bedrock - Charbert**
Project No.: **03.0032795.35**

Date Received: **07/10/2009**
Date Reported: **07/17/2009**
Work Order No.: **0907-00068**

Sample ID: **GZ-ML-5 Z-5** Sample No.: **006**
Sample Date: **07/09/2009**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260				MQS	07/16/2009
Dichlorodifluoromethane	EPA 8260	<2.0	2.0	ug/L	MQS	07/16/2009
Chloromethane	EPA 8260	<2.0	2.0	ug/L	MQS	07/16/2009
Vinyl Chloride	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Bromomethane	EPA 8260	<2.0	2.0	ug/L	MQS	07/16/2009
Chloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Trichlorofluoromethane	EPA 8260	<2.0	2.0	ug/L	MQS	07/16/2009
Diethylether	EPA 8260	<5.0	5.0	ug/L	MQS	07/16/2009
Acetone	EPA 8260	<25	25	ug/L	MQS	07/16/2009
1,1-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Dichloromethane	EPA 8260	<2.0	2.0	ug/L	MQS	07/16/2009
Methyl-Tert-Butyl-Ether	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
trans-1,2-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
1,1-Dichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
2-Butanone	EPA 8260	<25	25	ug/L	MQS	07/16/2009
2,2-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
cis-1,2-Dichloroethene	EPA 8260	2.0	1.0	ug/L	MQS	07/16/2009
Chloroform	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Bromochloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Tetrahydrofuran	EPA 8260	<10	10	ug/L	MQS	07/16/2009
1,1,1-Trichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
1,1-Dichloropropene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Carbon Tetrachloride	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
1,2-Dichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Benzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Trichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
1,2-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Bromodichloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Dibromomethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
4-Methyl-2-Pentanone	EPA 8260	<25	25	ug/L	MQS	07/16/2009
cis-1,3-Dichloropropene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Toluene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
trans-1,3-Dichloropropene	EPA 8260	<2.0	2.0	ug/L	MQS	07/16/2009
1,1,2-Trichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
2-Hexanone	EPA 8260	<25	25	ug/L	MQS	07/16/2009

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ANALYTICAL REPORT

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Project Name.: **Phase II Bedrock - Charbert**
Project No.: **03.0032795.35**

Date Received: **07/10/2009**
Date Reported: **07/17/2009**
Work Order No.: **0907-00068**

Sample ID: **GZ-ML-5 Z-5** Sample No.: **006**
Sample Date: **07/09/2009**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
1,3-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Tetrachloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Dibromochloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
1,2-Dibromoethane (EDB)	EPA 8260	<2.0	2.0	ug/L	MQS	07/16/2009
Chlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
1,1,1,2-Tetrachloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Ethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
m&p-Xylene	EPA 8260	<2.0	2.0	ug/L	MQS	07/16/2009
o-Xylene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Styrene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Bromoform	EPA 8260	<2.0	2.0	ug/L	MQS	07/16/2009
Isopropylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
1,1,2,2-Tetrachloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
1,2,3-Trichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Bromobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
N-Propylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
2-Chlorotoluene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
1,3,5-Trimethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
4-Chlorotoluene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
tert-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
1,2,4-Trimethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
sec-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
p-Isopropyltoluene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
1,3-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
1,4-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
n-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
1,2-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
1,2-Dibromo-3-Chloropropane	EPA 8260	<5.0	5.0	ug/L	MQS	07/16/2009
1,2,4-Trichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Hexachlorobutadiene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Naphthalene	EPA 8260	<2.0	2.0	ug/L	MQS	07/16/2009
1,2,3-Trichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Surrogates:	EPA 8260					
***1,2-Dichloroethane-D4	EPA 8260	93.5	70-130	% R	MQS	07/16/2009
***Toluene-D8	EPA 8260	98.7	70-130	% R	MQS	07/16/2009

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A N A L Y T I C A L R E P O R T

GZA GeoEnvironmental, Inc.
530 Broadway
Providence, RI 02909

Steve Andrus / Mike Healy

Project Name.: **Phase II Bedrock - Charbert**
Project No.: **03.0032795.35**

Date Received: **07/10/2009**
Date Reported: **07/17/2009**
Work Order No.: **0907-00068**

Sample ID: **GZ-ML-5 Z-5** Sample No.: **006**

Sample Date: **07/09/2009**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
***4-Bromofluorobenzene	EPA 8260	105	70-130	% R	MQS	07/16/2009
Preparation	EPA 5030B	1.0		CF	MQS	07/16/2009

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ANALYTICAL REPORT

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Steve Andrus / Mike Healy

Project Name.: **Phase II Bedrock - Charbert**
Project No.: **03.0032795.35**

Date Received: **07/10/2009**
Date Reported: **07/17/2009**
Work Order No.: **0907-00068**

Sample ID: **GZ-ML-5 Z-6** Sample No.: **007**
Sample Date: **07/09/2009**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260				MQS	07/16/2009
Dichlorodifluoromethane	EPA 8260	<2.0	2.0	ug/L	MQS	07/16/2009
Chloromethane	EPA 8260	<2.0	2.0	ug/L	MQS	07/16/2009
Vinyl Chloride	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Bromomethane	EPA 8260	<2.0	2.0	ug/L	MQS	07/16/2009
Chloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Trichlorofluoromethane	EPA 8260	<2.0	2.0	ug/L	MQS	07/16/2009
Diethylether	EPA 8260	<5.0	5.0	ug/L	MQS	07/16/2009
Acetone	EPA 8260	<25	25	ug/L	MQS	07/16/2009
1,1-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Dichloromethane	EPA 8260	<2.0	2.0	ug/L	MQS	07/16/2009
Methyl-Tert-Butyl-Ether	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
trans-1,2-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
1,1-Dichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
2-Butanone	EPA 8260	<25	25	ug/L	MQS	07/16/2009
2,2-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
cis-1,2-Dichloroethene	EPA 8260	2.1	1.0	ug/L	MQS	07/16/2009
Chloroform	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Bromochloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Tetrahydrofuran	EPA 8260	<10	10	ug/L	MQS	07/16/2009
1,1,1-Trichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
1,1-Dichloropropene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Carbon Tetrachloride	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
1,2-Dichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Benzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Trichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
1,2-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Bromodichloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Dibromomethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
4-Methyl-2-Pentanone	EPA 8260	<25	25	ug/L	MQS	07/16/2009
cis-1,3-Dichloropropene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Toluene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
trans-1,3-Dichloropropene	EPA 8260	<2.0	2.0	ug/L	MQS	07/16/2009
1,1,2-Trichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
2-Hexanone	EPA 8260	<25	25	ug/L	MQS	07/16/2009

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Steve Andrus / Mike Healy

Project Name.: **Phase II Bedrock - Charbert**
Project No.: **03.0032795.35**

Date Received: **07/10/2009**
Date Reported: **07/17/2009**
Work Order No.: **0907-00068**

Sample ID: **GZ-ML-5 Z-6**
Sample No.: **007**
Sample Date: **07/09/2009**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
1,3-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Tetrachloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Dibromochloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
1,2-Dibromoethane (EDB)	EPA 8260	<2.0	2.0	ug/L	MQS	07/16/2009
Chlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
1,1,1,2-Tetrachloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Ethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
m&p-Xylene	EPA 8260	<2.0	2.0	ug/L	MQS	07/16/2009
o-Xylene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Styrene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Bromoform	EPA 8260	<2.0	2.0	ug/L	MQS	07/16/2009
Isopropylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
1,1,2,2-Tetrachloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
1,2,3-Trichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Bromobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
N-Propylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
2-Chlorotoluene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
1,3,5-Trimethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
4-Chlorotoluene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
tert-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
1,2,4-Trimethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
sec-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
p-Isopropyltoluene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
1,3-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
1,4-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
n-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
1,2-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
1,2-Dibromo-3-Chloropropane	EPA 8260	<5.0	5.0	ug/L	MQS	07/16/2009
1,2,4-Trichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Hexachlorobutadiene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Naphthalene	EPA 8260	<2.0	2.0	ug/L	MQS	07/16/2009
1,2,3-Trichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Surrogates:	EPA 8260					
***1,2-Dichloroethane-D4	EPA 8260	91.6	70-130	% R	MQS	07/16/2009
***Toluene-D8	EPA 8260	99.8	70-130	% R	MQS	07/16/2009

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Project Name.: **Phase II Bedrock - Charbert**
Project No.: **03.0032795.35**

Date Received: **07/10/2009**
Date Reported: **07/17/2009**
Work Order No.: **0907-00068**

Sample ID: **GZ-ML-5 Z-6** Sample No.: **007**

Sample Date: **07/09/2009**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
***4-Bromofluorobenzene	EPA 8260	106	70-130	% R	MQS	07/16/2009
Preparation	EPA 5030B	1.0		CF	MQS	07/16/2009

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ANALYTICAL REPORT

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Project Name.: **Phase II Bedrock - Charbert**
Project No.: **03.0032795.35**

Date Received: **07/10/2009**
Date Reported: **07/17/2009**
Work Order No.: **0907-00068**

Sample ID: **GZ-ML-5 Z-7** Sample No.: **008**
Sample Date: **07/09/2009**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260				MQS	07/16/2009
Dichlorodifluoromethane	EPA 8260	<2.0	2.0	ug/L	MQS	07/16/2009
Chloromethane	EPA 8260	<2.0	2.0	ug/L	MQS	07/16/2009
Vinyl Chloride	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Bromomethane	EPA 8260	<2.0	2.0	ug/L	MQS	07/16/2009
Chloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Trichlorofluoromethane	EPA 8260	<2.0	2.0	ug/L	MQS	07/16/2009
Diethylether	EPA 8260	<5.0	5.0	ug/L	MQS	07/16/2009
Acetone	EPA 8260	<25	25	ug/L	MQS	07/16/2009
1,1-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Dichloromethane	EPA 8260	<2.0	2.0	ug/L	MQS	07/16/2009
Methyl-Tert-Butyl-Ether	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
trans-1,2-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
1,1-Dichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
2-Butanone	EPA 8260	<25	25	ug/L	MQS	07/16/2009
2,2-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
cis-1,2-Dichloroethene	EPA 8260	1.7	1.0	ug/L	MQS	07/16/2009
Chloroform	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Bromochloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Tetrahydrofuran	EPA 8260	<10	10	ug/L	MQS	07/16/2009
1,1,1-Trichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
1,1-Dichloropropene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Carbon Tetrachloride	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
1,2-Dichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Benzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Trichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
1,2-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Bromodichloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Dibromomethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
4-Methyl-2-Pentanone	EPA 8260	<25	25	ug/L	MQS	07/16/2009
cis-1,3-Dichloropropene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Toluene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
trans-1,3-Dichloropropene	EPA 8260	<2.0	2.0	ug/L	MQS	07/16/2009
1,1,2-Trichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
2-Hexanone	EPA 8260	<25	25	ug/L	MQS	07/16/2009

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ANALYTICAL REPORT

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Project Name.: **Phase II Bedrock - Charbert**
Project No.: **03.0032795.35**

Date Received: **07/10/2009**
Date Reported: **07/17/2009**
Work Order No.: **0907-00068**

Sample ID: **GZ-ML-5 Z-7**
Sample No.: **008**
Sample Date: **07/09/2009**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
1,3-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Tetrachloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Dibromochloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
1,2-Dibromoethane (EDB)	EPA 8260	<2.0	2.0	ug/L	MQS	07/16/2009
Chlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
1,1,1,2-Tetrachloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Ethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
m&p-Xylene	EPA 8260	<2.0	2.0	ug/L	MQS	07/16/2009
o-Xylene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Styrene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Bromoform	EPA 8260	<2.0	2.0	ug/L	MQS	07/16/2009
Isopropylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
1,1,2,2-Tetrachloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
1,2,3-Trichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Bromobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
N-Propylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
2-Chlorotoluene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
1,3,5-Trimethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
4-Chlorotoluene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
tert-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
1,2,4-Trimethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
sec-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
p-Isopropyltoluene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
1,3-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
1,4-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
n-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
1,2-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
1,2-Dibromo-3-Chloropropane	EPA 8260	<5.0	5.0	ug/L	MQS	07/16/2009
1,2,4-Trichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Hexachlorobutadiene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Naphthalene	EPA 8260	<2.0	2.0	ug/L	MQS	07/16/2009
1,2,3-Trichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Surrogates:	EPA 8260					
***1,2-Dichloroethane-D4	EPA 8260	93.9	70-130	% R	MQS	07/16/2009
***Toluene-D8	EPA 8260	99.5	70-130	% R	MQS	07/16/2009

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Project Name.: **Phase II Bedrock - Charbert**
Project No.: **03.0032795.35**

Date Received: **07/10/2009**
Date Reported: **07/17/2009**
Work Order No.: **0907-00068**

Sample ID: **GZ-ML-5 Z-7** Sample No.: **008**

Sample Date: **07/09/2009**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
***4-Bromofluorobenzene	EPA 8260	101	70-130	% R	MQS	07/16/2009
Preparation	EPA 5030B	1.0		CF	MQS	07/16/2009

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Project Name.: **Phase II Bedrock - Charbert**
Project No.: **03.0032795.35**

Date Received: **07/10/2009**
Date Reported: **07/17/2009**
Work Order No.: **0907-00068**

Sample ID: **GZ-ML-5 Z-8** Sample No.: **009**
Sample Date: **07/09/2009**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260				MQS	07/16/2009
Dichlorodifluoromethane	EPA 8260	<2.0	2.0	ug/L	MQS	07/16/2009
Chloromethane	EPA 8260	<2.0	2.0	ug/L	MQS	07/16/2009
Vinyl Chloride	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Bromomethane	EPA 8260	<2.0	2.0	ug/L	MQS	07/16/2009
Chloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Trichlorofluoromethane	EPA 8260	<2.0	2.0	ug/L	MQS	07/16/2009
Diethylether	EPA 8260	<5.0	5.0	ug/L	MQS	07/16/2009
Acetone	EPA 8260	<25	25	ug/L	MQS	07/16/2009
1,1-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Dichloromethane	EPA 8260	<2.0	2.0	ug/L	MQS	07/16/2009
Methyl-Tert-Butyl-Ether	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
trans-1,2-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
1,1-Dichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
2-Butanone	EPA 8260	<25	25	ug/L	MQS	07/16/2009
2,2-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
cis-1,2-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Chloroform	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Bromochloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Tetrahydrofuran	EPA 8260	<10	10	ug/L	MQS	07/16/2009
1,1,1-Trichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
1,1-Dichloropropene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Carbon Tetrachloride	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
1,2-Dichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Benzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Trichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
1,2-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Bromodichloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Dibromomethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
4-Methyl-2-Pentanone	EPA 8260	<25	25	ug/L	MQS	07/16/2009
cis-1,3-Dichloropropene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Toluene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
trans-1,3-Dichloropropene	EPA 8260	<2.0	2.0	ug/L	MQS	07/16/2009
1,1,2-Trichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
2-Hexanone	EPA 8260	<25	25	ug/L	MQS	07/16/2009

GZA GeoEnvironmental, Inc.
106 South Street
Hopkinton, MA 01748
(781) 278-4700

ANALYTICAL REPORT

GZA GeoEnvironmental, Inc.
530 Broadway
Providence, RI 02909

Steve Andrus / Mike Healy

Project Name.: **Phase II Bedrock - Charbert**
Project No.: **03.0032795.35**

Date Received: **07/10/2009**
Date Reported: **07/17/2009**
Work Order No.: **0907-00068**

Sample ID: **GZ-ML-5 Z-8** Sample No.: **009**
Sample Date: **07/09/2009**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
1,3-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Tetrachloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Dibromochloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
1,2-Dibromoethane (EDB)	EPA 8260	<2.0	2.0	ug/L	MQS	07/16/2009
Chlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
1,1,1,2-Tetrachloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Ethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
m&p-Xylene	EPA 8260	<2.0	2.0	ug/L	MQS	07/16/2009
o-Xylene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Styrene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Bromoform	EPA 8260	<2.0	2.0	ug/L	MQS	07/16/2009
Isopropylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
1,1,2,2-Tetrachloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
1,2,3-Trichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Bromobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
N-Propylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
2-Chlorotoluene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
1,3,5-Trimethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
4-Chlorotoluene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
tert-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
1,2,4-Trimethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
sec-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
p-Isopropyltoluene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
1,3-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
1,4-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
n-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
1,2-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
1,2-Dibromo-3-Chloropropane	EPA 8260	<5.0	5.0	ug/L	MQS	07/16/2009
1,2,4-Trichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Hexachlorobutadiene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Naphthalene	EPA 8260	<2.0	2.0	ug/L	MQS	07/16/2009
1,2,3-Trichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	07/16/2009
Surrogates:	EPA 8260					
***1,2-Dichloroethane-D4	EPA 8260	94.3	70-130	% R	MQS	07/16/2009
***Toluene-D8	EPA 8260	99.8	70-130	% R	MQS	07/16/2009

GZA GeoEnvironmental, Inc.
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A N A L Y T I C A L R E P O R T

GZA GeoEnvironmental, Inc.
530 Broadway
Providence, RI 02909

Steve Andrus / Mike Healy

Project Name.: **Phase II Bedrock - Charbert**
Project No.: **03.0032795.35**

Date Received: **07/10/2009**
Date Reported: **07/17/2009**
Work Order No.: **0907-00068**

Sample ID: **GZ-ML-5 Z-8** Sample No.: **009**

Sample Date: **07/09/2009**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
***4-Bromofluorobenzene	EPA 8260	104	70-130	% R	MQS	07/16/2009
Preparation	EPA 5030B	1.0		CF	MQS	07/16/2009

GZA GeoEnvironmental, Inc.
106 South Street
Hopkinton, MA 01748

EPA Method 8260 / 524.2 Aqueous Method Blank (MB) and Laboratory Control Sample/Duplicate (LCS/LCSD) Data

Method Blank			Laboratory Control Sample				Laboratory Control Sample Duplicate					
Date Analyzed:	7/16/2009		Date Analyzed:	7/16/2009			7/16/2009					
Volatile Organics	Conc. ug/L	Acceptance Limit	Spike Concentration = 20ug/L	% Recovery	Acceptance Limits	Verdict	% Recovery	Acceptance Limits	Verdict	RPD	Limit	Verdict
dichlorodifluoromethane	< 1.0	< 1.0	dichlorodifluoromethane	82.5	70-130	ok	84.9	70-130	ok	2.84	<25	ok
chloromethane	< 1.0	< 1.0	chloromethane	107	70-130	ok	111	70-130	ok	3.83	<25	ok
vinyl chloride	< 0.5	< 0.5	vinyl chloride	94.0	80-120	ok	95.0	70-130	ok	1.08	<25	ok
bromomethane	< 1.0	< 1.0	bromomethane	85.0	70-130	ok	84.1	70-130	ok	1.05	<25	ok
chloroethane	< 0.5	< 0.5	chloroethane	89.3	70-130	ok	89.2	70-130	ok	0.04	<25	ok
trichlorofluoromethane	< 1.0	< 1.0	trichlorofluoromethane	74.3	70-130	ok	75.9	70-130	ok	2.12	<25	ok
diethyl ether	< 2.5	< 2.5	diethyl ether	91.4	70-130	ok	95.8	70-130	ok	4.70	<25	ok
acetone	< 13	< 13	acetone	107	70-130	ok	107	70-130	ok	0.50	<25	ok
1,1-dichloroethene	< 0.5	< 0.5	1,1-dichloroethene	88.5	80-120	ok	91.8	70-130	ok	3.68	<25	ok
FREON-113	< 1.0	< 1.0	FREON-113	79.7	70-130	ok	81.3	70-130	ok	1.90	<25	ok
iodomethane	< 0.5	< 0.5	iodomethane	73.7	70-130	ok	74.8	70-130	ok	1.40	<25	ok
carbon disulfide	< 5.0	< 5.0	carbon disulfide	102	70-130	ok	105	70-130	ok	2.96	<25	ok
dichloromethane	< 1.0	< 1.0	dichloromethane	97.4	70-130	ok	101	70-130	ok	3.23	<25	ok
tert-butyl alcohol (TBA)	< 13	< 13	tert-butyl alcohol (TBA)	90.8	70-130	ok	93.2	70-130	ok	2.58	<25	ok
acrylonitrile	< 0.5	< 0.5	acrylonitrile	115	70-130	ok	111	70-130	ok	3.18	<25	ok
methyl-tert-butyl-ether	< 0.5	< 0.5	methyl-tert-butyl-ether	88.4	70-130	ok	92.5	70-130	ok	4.54	<25	ok
trans-1,2-dichloroethene	< 0.5	< 0.5	trans-1,2-dichloroethene	101	70-130	ok	102	70-130	ok	0.53	<25	ok
1,1-dichloroethane	< 0.5	< 0.5	1,1-dichloroethane	96.4	70-130	ok	96.1	70-130	ok	0.34	<25	ok
di-isopropyl ether (DIPE)	< 1.0	< 1.0	di-isopropyl ether (DIPE)	107	70-130	ok	110	70-130	ok	2.27	<25	ok
ethyl tert-butyl ether (EtBE)	< 1.0	< 1.0	ethyl tert-butyl ether (EtBE)	89.3	70-130	ok	91.3	70-130	ok	2.20	<25	ok
vinyl acetate	< 13	< 13	vinyl acetate	93.3	70-130	ok	92.0	70-130	ok	1.37	<25	ok
2-butanone	< 13	< 13	2-butanone	113	70-130	ok	116	70-130	ok	2.51	<25	ok
2,2-dichloropropane	< 0.5	< 0.5	2,2-dichloropropane	89.4	70-130	ok	89.4	70-130	ok	0.00	<25	ok
cis-1,2-dichloroethene	< 0.5	< 0.5	cis-1,2-dichloroethene	91.0	70-130	ok	89.2	70-130	ok	2.03	<25	ok
chloroform	< 0.5	< 0.5	chloroform	83.6	80-120	ok	82.4	70-130	ok	1.43	<25	ok
bromochloromethane	< 0.5	< 0.5	bromochloromethane	79.2	70-130	ok	78.7	70-130	ok	0.60	<25	ok
tetrahydrofuran	< 5.0	< 5.0	tetrahydrofuran	114	70-130	ok	117	70-130	ok	2.33	<25	ok
1,1,1-trichloroethane	< 0.5	< 0.5	1,1,1-trichloroethane	75.8	70-130	ok	77.1	70-130	ok	1.67	<25	ok
1,1-dichloropropene	< 0.5	< 0.5	1,1-dichloropropene	94.2	70-130	ok	92.6	70-130	ok	1.68	<25	ok
carbon tetrachloride	< 0.5	< 0.5	carbon tetrachloride	74.8	70-130	ok	75.1	70-130	ok	0.39	<25	ok
1,2-dichloroethane	< 0.5	< 0.5	1,2-dichloroethane	74.9	70-130	ok	76.2	70-130	ok	1.73	<25	ok
benzene	< 0.5	< 0.5	benzene	107	70-130	ok	107	70-130	ok	0.05	<25	ok
tert-amyl methyl ether (TAME)	< 1.0	< 1.0	tert-amyl methyl ether (TAME)	88.4	70-130	ok	92.5	70-130	ok	4.51	<25	ok
trichloroethene	< 0.5	< 0.5	trichloroethene	78.8	70-130	ok	80.1	70-130	ok	1.57	<25	ok
1,2-dichloropropane	< 0.5	< 0.5	1,2-dichloropropane	107	80-120	ok	108	70-130	ok	1.00	<25	ok
bromodichloromethane	< 0.5	< 0.5	bromodichloromethane	80.7	70-130	ok	81.0	70-130	ok	0.42	<25	ok
1,4-Dioxane	< 50	< 50	1,4-Dioxane	107	70-130	ok	114	70-130	ok	6.60	<25	ok
dibromomethane	< 0.5	< 0.5	dibromomethane	82.4	70-130	ok	82.9	70-130	ok	0.57	<25	ok
4-methyl-2-pentanone	< 13	< 13	4-methyl-2-pentanone	105	70-130	ok	109	70-130	ok	3.42	<25	ok
cis-1,3-dichloropropene	< 0.5	< 0.5	cis-1,3-dichloropropene	95.6	70-130	ok	95.1	70-130	ok	0.46	<25	ok
toluene	< 0.5	< 0.5	toluene	96.6	80-120	ok	97.8	70-130	ok	1.19	<25	ok
trans-1,3-dichloropropene	< 1.0	< 1.0	trans-1,3-dichloropropene	87.3	70-130	ok	89.3	70-130	ok	2.23	<25	ok
1,1,2-trichloroethane	< 0.5	< 0.5	1,1,2-trichloroethane	86.2	70-130	ok	85.8	70-130	ok	0.45	<25	ok
2-hexanone	< 13	< 13	2-hexanone	101	70-130	ok	102	70-130	ok	1.34	<25	ok
1,3-dichloropropane	< 0.5	< 0.5	1,3-dichloropropane	94.2	70-130	ok	95.1	70-130	ok	0.87	<25	ok
tetrachloroethene	< 0.5	< 0.5	tetrachloroethene	76.0	70-130	ok	75.2	70-130	ok	1.01	<25	ok
dibromochloromethane	< 0.5	< 0.5	dibromochloromethane	72.8	70-130	ok	72.2	70-130	ok	0.81	<25	ok
1,2-dibromoethane (EDB)	< 1.0	< 1.0	1,2-dibromoethane (EDB)	82.3	70-130	ok	82.7	70-130	ok	0.49	<25	ok
chlorobenzene	< 0.5	< 0.5	chlorobenzene	78.7	70-130	ok	78.5	70-130	ok	0.23	<25	ok
1,1,1,2-tetrachloroethane	< 0.5	< 0.5	1,1,1,2-tetrachloroethane	70.2	70-130	ok	69.4	70-130	out	1.12	<25	ok
ethylbenzene	< 0.5	< 0.5	ethylbenzene	85.8	80-120	ok	83.7	70-130	ok	2.55	<25	ok
1,1,2,2-tetrachloroethane	< 0.5	< 0.5	1,1,2,2-tetrachloroethane	94.0	70-130	ok	96.6	70-130	ok	2.71	<25	ok
m&p-xylene	< 1.0	< 1.0	m&p-xylene	84.9	70-130	ok	82.5	70-130	ok	2.87	<25	ok
o-xylene	< 0.5	< 0.5	o-xylene	113	70-130	ok	111	70-130	ok	1.58	<25	ok
styrene	< 0.5	< 0.5	styrene	113	70-130	ok	110	70-130	ok	2.30	<25	ok
bromoform	< 1.0	< 1.0	bromoform	102	70-130	ok	99.6	70-130	ok	2.14	<25	ok
isopropylbenzene	< 0.5	< 0.5	isopropylbenzene	125	70-130	ok	124	70-130	ok	0.51	<25	ok
1,2,3-trichloropropane	< 0.5	< 0.5	1,2,3-trichloropropane	105	70-130	ok	104	70-130	ok	1.71	<25	ok
bromobenzene	< 0.5	< 0.5	bromobenzene	96.5	70-130	ok	97.1	70-130	ok	0.58	<25	ok
n-propylbenzene	< 0.5	< 0.5	n-propylbenzene	123	70-130	ok	120	70-130	ok	2.84	<25	ok
2-chlorotoluene	< 0.5	< 0.5	2-chlorotoluene	113	70-130	ok	112	70-130	ok	0.93	<25	ok
1,3,5-trimethylbenzene	< 0.5	< 0.5	1,3,5-trimethylbenzene	107	70-130	ok	106	70-130	ok	1.05	<25	ok
trans-1,4-dichloro-2-butene	< 1.0	< 1.0	trans-1,4-dichloro-2-butene	114	70-130	ok	117	70-130	ok	2.45	<25	ok
4-chlorotoluene	< 0.5	< 0.5	4-chlorotoluene	113	70-130	ok	113	70-130	ok	0.45	<25	ok
tert-butyl-benzene	< 0.5	< 0.5	tert-butyl-benzene	94.0	70-130	ok	91.6	70-130	ok	2.55	<25	ok
1,2,4-trimethylbenzene	< 0.5	< 0.5	1,2,4-trimethylbenzene	105	70-130	ok	105	70-130	ok	0.19	<25	ok
sec-butyl-benzene	< 0.5	< 0.5	sec-butyl-benzene	106	70-130	ok	104	70-130	ok	1.26	<25	ok
p-isopropyltoluene	< 0.5	< 0.5	p-isopropyltoluene	97.3	70-130	ok	96.8	70-130	ok	0.51	<25	ok
1,3-dichlorobenzene	< 0.5	< 0.5	1,3-dichlorobenzene	97.2	70-130	ok	97.5	70-130	ok	0.30	<25	ok
1,4-dichlorobenzene	< 0.5	< 0.5	1,4-dichlorobenzene	97.6	70-130	ok	97.6	70-130	ok	0.04	<25	ok
n-butylbenzene	< 0.5	< 0.5	n-butylbenzene	117	70-130	ok	114	70-130	ok	2.20	<25	ok
1,2-dichlorobenzene	< 0.5	< 0.5	1,2-dichlorobenzene	94.4	70-130	ok	95.3	70-130	ok	0.90	<25	ok
1,2-dibromo-3-chloropropane	< 2.5	< 2.5	1,2-dibromo-3-chloropropane	97.7	70-130	ok	99.9	70-130	ok	2.23	<25	ok
1,3,5-trichlorobenzene	< 0.5	< 0.5	1,3,5-trichlorobenzene	104	70-130	ok	106	70-130	ok	2.56	<25	ok
1,2,4-trichlorobenzene	< 0.5	< 0.5	1,2,4-trichlorobenzene	106	70-130	ok	109	70-130	ok	3.23	<25	ok
hexachlorobutadiene	< 0.5	< 0.5	hexachlorobutadiene	106	70-130	ok	105	70-130	ok	1.07	<25	ok
naphthalene	< 1.0	< 1.0	naphthalene	87.4	70-130	ok	92.0	70-130	ok	5.15	<25	ok
1,2,3-trichlorobenzene	< 0.5	< 0.5	1,2,3-trichlorobenzene	97.3	70-130	ok	98.6	70-130	ok	1.37	<25	ok

Surrogates:	Recovery (%)	Acceptance Limits	Surrogates:	Recovery (%)	Acceptance Limits	Verdict	Recovery (%)	Acceptance Limits	Verdict	RPD	Acceptance Limits	Verdict
DIBROMOFLUOROMETHANE	83.9	70-130	DIBROMOFLUOROMETHANE	85.7	70-130	ok	86.5	70-130	ok	0.99	<25	ok
1,2-DICHLOROETHANE-D4	91.7	70-130	1,2-DICHLOROETHANE-D4	97.5	70-130	ok	91.9	70-130	ok	5.93	<25	ok
TOLUENE-D8	96.6	70-130	TOLUENE-D8	97.6	70-130	ok	97.7	70-130	ok	0.04	<25	ok
4-BROMOFLUOROBENZENE	103	70-130	4-BROMOFLUOROBENZENE	107	70-130	ok	107	70-130	ok	0.52	<25	ok
1,2-DICHLOROBENZENE-D4	92.6	70-130	1,2-DICHLOROBENZENE-D4	99.6	70-130	ok	100.0	70-130	ok	0.38	<25	ok

Instrument: HP GC/MS "S"

CHAIN-OF-CUSTODY RECORD

W.O. # 0907-00068 (for lab use only)

Sample I.D.	Date/Time Sampled	Matrix (A=Air, S=Soil, GW=Ground W., SW=Surface W., WW=Waste W., DW=Drinking W., P=Product, Other (specify))	ANALYSIS REQUIRED: pH ⌟ Cond.	Gc Methane, Ethane, Ethene	EPA 8260	EPA 8260 – 8010 List (Chlor.)	EPA 8260 – 8021 list	EPA 8021 – 8020 List (BTEx)	EPA 524.2 DW VOCs	EPA 624 WW VOCs	⌟ 601 ⌟ 602 WW VOCs	EPA 8270 FULL SVOCs	EPA 8270 ⌟ PAH ⌟ A ⌟ BN	EPA 625 WW SVOCs	EPA 8082–PCBs	EPA 8081–Pest	TPH–GC (Mod. 8100)	TPH–GC w/FING.	EPH (MA DEP)	VPH (MA DEP)	Metals ⌟ PPM–13 ⌟ Pr–8	MCP 14 Metals (MA)	Metals (List Below)**	TCLP – Specify Below	SPLP – Specify Below	EPA 300 ⌟ Cl ⌟ SO4	EPA 300 ⌟ NO2 ⌟ NO3						Total # of Cont.	Note #
GZ-ML-5 Z-1	7/8/09 14:50				X																												3	
TB	7/8/09 14:00				X																												3	
GZ-ML-5 Z-2	7/9/09 8:00				X																												3	
GZ-ML-5 Z-3	7/9/09 8:25				X																												3	
GZ-ML-5 Z-4	7/9/09 8:50				X																												3	
GZ-ML-5 Z-5	7/9/09 9:10				X																												3	
GZ-ML-5 Z-6	7/9/09 9:35				X																												3	
GZ-ML-5 Z-7	7/9/09 10:10				X																												3	
GZ-ML-5 Z-8	7/9/09 11:20				X																												3	
PRESERVATIVE (Cl - HCl, M=Methanol, N - HNO3, S - H2SO4, Na - NaOH, O - Other)*					Cl																														
CONTAINER TYPE (P-Plastic, G-Glass, V-Vial, T-Teflon, O-Other)*					G																														

RELINQUISHED BY: (AFFILIATION) DATE/TIME RECEIVED BY: (AFFILIATION)

[signature] Mid 7/10/09

RELINQUISHED BY: (AFFILIATION) DATE/TIME RECEIVED BY: (AFFILIATION)

Mid 7/10/09 1215 [signature] 7/10/09 1520

RELINQUISHED BY: (AFFILIATION) DATE/TIME RECEIVED BY: (AFFILIATION)

NOTES: (Unless otherwise noted, all samples have been refrigerated to 4° C)
*Specify "Other" preservatives and containers types in this space.

PROJECT MANAGER: Mike Healey EXT:
Steve Mabens

GZA GeoEnvironmental, Inc.
Labaratory Division

106 South Street
Hopkinton, MA 01748
(781) 278-4700
FAX (508) 435-9912

TURNAROUND TIME: Standard Rush___ Days, Approved by _____ LAB USE: TEMP. OF COOLER 2.1 °C Temp Blank____ Cooler Air 0907

7/10 7/10 03.0032745.35
GZA FILE NO: _____ TASK NO: _____ P.O. NO. _____

PROJECT Chestnut Place II Bedrock

LOCATION Alton, Rhode Island

COLLECTOR(S) SMA SHEET 1 OF _____

GZA GeoEnvironmental, Inc.
106 South Street
Hopkinton, MA 01748
(781) 278-4700

Laboratory Identification Numbers:
MA and ME: **MA092** NH: **2028**
CT: **PH0579** RI: **LAO00236**
NELAC - NYS DOH: **11063**

ANALYTICAL REPORT

GZA GeoEnvironmental, Inc.
140 Broadway
Providence, RI 02903

Ed Summerly

Project No.: **03.0032795.12**
Work Order No.: **0706-00154**
Date Received: **06/22/2007**
Date Reported: **07/03/2007**

SAMPLE INFORMATION

Date Sampled	Matrix	Laboratory ID	Sample ID
06/21/2007	Aqueous	0706-00154 001	ML - 1A
06/21/2007	Aqueous	0706-00154 002	ML - 1B
06/21/2007	Aqueous	0706-00154 003	ML - 1C
06/21/2007	Aqueous	0706-00154 004	ML - 2A
06/21/2007	Aqueous	0706-00154 005	ML - 2B
06/21/2007	Aqueous	0706-00154 006	ML - 2C
06/21/2007	Aqueous	0706-00154 007	Trip Blank 1

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ANALYTICAL REPORT

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PROJECT NARRATIVE:

1. Sample Receipt

The samples were received on 06/22/07 via _x_GZA courier, __EC, __FEDEX, or ___hand delivered. The temperature of the __temperature blank/_x_cooler air, was 3.0 degrees C. The temperature requirement for most analyses is above freezing to 6 degrees C. The samples were received intact for all requested analyses.

The chain of custody indicates that the samples, when required, were chemically preserved in accordance with the method they reference.

2. EPA Method 6010B/7470A - Metals

Attach QC 6010B 06/25/07 - Aqueous
Attach QC 7470A 06/26/07 B - Aqueous

3. EPA Method 8270 - SVOCs

Attach QC 8270 06/26/07 - Aqueous

4. EPA Method 8260 - VOCs

Attach QC 8260 06/28/07 S - Aqueous

5. Total Petroleum Hydrocarbons

* Most of the reported value for TPH is due to high levels of sulfonamide compounds. The largest constituent peak was tentatively identified by GC/MS as N-butyl-benzenesulfonamide. The "Q" value for this MS identification is <50%, therefore identification is tentative and the analyte may be a similar compound from the general class of sulfonamides.

The percent of TPH due to sulfonamide compounds for each sample is listed below:
ML-1A: >75%
ML-1B: >75%
ML-1C: >90%
ML-2A: >90%
ML-2B: >90%
ML-2C: >90%

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Data Authorized By: _____

NELAC certification, as indicated by the NELAC Lab ID Number, is per analyte. For a complete list of NELAC validated analytes, please contact the laboratory.

Abbreviations:
% R = % Recovery
DF = Dilution Factor
DFS = Dilution Factor Solids
DO = Diluted Out

Method Key:
Method 8260: The current version of the method is 8260B.
Method 8021: The current version of the method is 8021B.
Method 8270: The current version of the method is 8270C.
Method 6010: The current version of the method is 6010B.

Please note that the laboratory signed copy of the chain of custody record is an integral part of the data report.

The laboratory report shall not be reproduced except in full without the written consent of the laboratory.

Soil data is reported on a dry weight basis unless otherwise specified.

Matrix Spike / Matrix Spike Duplicate sets are performed as per method and are reported at the end of the analytical report if assigned on the Chain of Custody.

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Date Received: **06/22/2007**
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Work Order No.: **0706-00154**

Sample ID: **ML - 1A** Sample No.: **001**

Sample Date: **06/21/2007**

Test Performed	Method	Results	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260			MQS	06/28/2007
Dichlorodifluoromethane	EPA 8260	<2.0	ug/L	MQS	06/28/2007
Chloromethane	EPA 8260	<2.0	ug/L	MQS	06/28/2007
Vinyl Chloride	EPA 8260	<1.0	ug/L	MQS	06/28/2007
Bromomethane	EPA 8260	<2.0	ug/L	MQS	06/28/2007
Chloroethane	EPA 8260	<1.0	ug/L	MQS	06/28/2007
Trichlorofluoromethane	EPA 8260	<2.0	ug/L	MQS	06/28/2007
Diethylether	EPA 8260	<5.0	ug/L	MQS	06/28/2007
Acetone	EPA 8260	<25	ug/L	MQS	06/28/2007
1,1-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
Dichloromethane	EPA 8260	<1.0	ug/L	MQS	06/28/2007
Methyl-Tert-Butyl-Ether	EPA 8260	<1.0	ug/L	MQS	06/28/2007
trans-1,2-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
1,1-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	06/28/2007
2-Butanone	EPA 8260	<25	ug/L	MQS	06/28/2007
2,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	06/28/2007
cis-1,2-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
Chloroform	EPA 8260	18	ug/L	MQS	06/28/2007
Bromochloromethane	EPA 8260	<1.0	ug/L	MQS	06/28/2007
Tetrahydrofuran	EPA 8260	<10	ug/L	MQS	06/28/2007
1,1,1-Trichloroethane	EPA 8260	<1.0	ug/L	MQS	06/28/2007
1,1-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
Carbon Tetrachloride	EPA 8260	<1.0	ug/L	MQS	06/28/2007
1,2-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	06/28/2007
Benzene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
Trichloroethene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
1,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	06/28/2007
Bromodichloromethane	EPA 8260	1.6	ug/L	MQS	06/28/2007
Dibromomethane	EPA 8260	<1.0	ug/L	MQS	06/28/2007
4-Methyl-2-Pentanone	EPA 8260	<25	ug/L	MQS	06/28/2007
cis-1,3-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
Toluene	EPA 8260	2.2	ug/L	MQS	06/28/2007
trans-1,3-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
1,1,2-Trichloroethane	EPA 8260	<1.0	ug/L	MQS	06/28/2007
2-Hexanone	EPA 8260	<2.0	ug/L	MQS	06/28/2007
1,3-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	06/28/2007
Tetrachloroethene	EPA 8260	<1.0	ug/L	MQS	06/28/2007

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Project No.: **03.0032795.12**

Date Received: **06/22/2007**
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Sample ID: **ML - 1A** Sample No.: **001**

Sample Date: **06/21/2007**

Test Performed	Method	Results	Units	Tech	Analysis Date
Dibromochloromethane	EPA 8260	<1.0	ug/L	MQS	06/28/2007
1,2-Dibromoethane (EDB)	EPA 8260	<2.0	ug/L	MQS	06/28/2007
Chlorobenzene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
1,1,1,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	06/28/2007
Ethylbenzene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
m&p-Xylene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
o-Xylene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
Styrene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
Bromoform	EPA 8260	<2.0	ug/L	MQS	06/28/2007
Isopropylbenzene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
1,1,2,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	06/28/2007
1,2,3-Trichloropropane	EPA 8260	<1.0	ug/L	MQS	06/28/2007
Bromobenzene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
N-Propylbenzene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
2-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
1,3,5-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
4-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
tert-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
1,2,4-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
sec-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
p-Isopropyltoluene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
1,3-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
1,4-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
n-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
1,2-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
1,2-Dibromo-3-Chloropropane	EPA 8260	<5.0	ug/L	MQS	06/28/2007
1,2,4-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
Hexachlorobutadiene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
Naphthalene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
1,2,3-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
Surrogates:	EPA 8260				
***1,2-Dichloroethane-D4	EPA 8260	107	% R	MQS	06/28/2007
***Toluene-D8	EPA 8260	106	% R	MQS	06/28/2007
***4-Bromofluorobenzene	EPA 8260	99.9	% R	MQS	06/28/2007
Preparation	EPA 5030B	1.0	DF	MQS	06/28/2007
SEMI-VOLATILE ORGANICS	EPA 8270			CMG	06/28/2007
ACID FRACTION:	EPA 8270				

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Sample ID: **ML - 1A** Sample No.: **001**

Sample Date: **06/21/2007**

Test Performed	Method	Results	Units	Tech	Analysis Date
Phenol	EPA 8270	<10	ug/L	CMG	06/28/2007
2-Chlorophenol	EPA 8270	<10	ug/L	CMG	06/28/2007
2-Methylphenol	EPA 8270	<10	ug/L	CMG	06/28/2007
3&4-Methylphenol	EPA 8270	<10	ug/L	CMG	06/28/2007
2-Nitrophenol	EPA 8270	<10	ug/L	CMG	06/28/2007
2,4-Dimethylphenol	EPA 8270	<10	ug/L	CMG	06/28/2007
Benzoic Acid	EPA 8270	<10	ug/L	CMG	06/28/2007
2,4-Dichlorophenol	EPA 8270	<10	ug/L	CMG	06/28/2007
4-Chloro-3-Methylphenol	EPA 8270	<20	ug/L	CMG	06/28/2007
2,4,6-Trichlorophenol	EPA 8270	<10	ug/L	CMG	06/28/2007
2,4,5-Trichlorophenol	EPA 8270	<10	ug/L	CMG	06/28/2007
2,4-Dinitrophenol	EPA 8270	<100	ug/L	CMG	06/28/2007
4-Nitrophenol	EPA 8270	<50	ug/L	CMG	06/28/2007
4,6-Dinitro-2-Methylphenol	EPA 8270	<50	ug/L	CMG	06/28/2007
Pentachlorophenol	EPA 8270	<50	ug/L	CMG	06/28/2007
BASE-NEUTRAL FRACTION:					
n-Nitrosodimethylamine	EPA 8270	<10	ug/L	CMG	06/28/2007
bis(2-Chloroethyl)Ether	EPA 8270	<10	ug/L	CMG	06/28/2007
1,3-Dichlorobenzene	EPA 8270	<10	ug/L	CMG	06/28/2007
1,4-Dichlorobenzene	EPA 8270	<10	ug/L	CMG	06/28/2007
Benzyl Alcohol	EPA 8270	<20	ug/L	CMG	06/28/2007
1,2-Dichlorobenzene	EPA 8270	<10	ug/L	CMG	06/28/2007
bis(2-Chloroisopropyl)Ether	EPA 8270	<10	ug/L	CMG	06/28/2007
n-Nitrosodi-n-Propylamine	EPA 8270	<10	ug/L	CMG	06/28/2007
Hexachloroethane	EPA 8270	<10	ug/L	CMG	06/28/2007
Nitrobenzene	EPA 8270	<10	ug/L	CMG	06/28/2007
Isophorone	EPA 8270	<10	ug/L	CMG	06/28/2007
bis(2-Chloroethoxy)Methane	EPA 8270	<10	ug/L	CMG	06/28/2007
1,2,4-Trichlorobenzene	EPA 8270	<10	ug/L	CMG	06/28/2007
Naphthalene	EPA 8270	<2.0	ug/L	CMG	06/28/2007
4-Chloroaniline	EPA 8270	<20	ug/L	CMG	06/28/2007
Hexachlorobutadiene	EPA 8270	<10	ug/L	CMG	06/28/2007
2-Methylnaphthalene	EPA 8270	<2.0	ug/L	CMG	06/28/2007
Hexachlorocyclopentadiene	EPA 8270	<50	ug/L	CMG	06/28/2007
2-Chloronaphthalene	EPA 8270	<10	ug/L	CMG	06/28/2007
2-Nitroaniline	EPA 8270	<50	ug/L	CMG	06/28/2007
Dimethylphthalate	EPA 8270	<10	ug/L	CMG	06/28/2007

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Sample ID: **ML - 1A** Sample No.: **001**

Sample Date: **06/21/2007**

Test Performed	Method	Results	Units	Tech	Analysis Date
Acenaphthylene	EPA 8270	<2.0	ug/L	CMG	06/28/2007
2,6-Dinitrotoluene	EPA 8270	<10	ug/L	CMG	06/28/2007
3-Nitroaniline	EPA 8270	<50	ug/L	CMG	06/28/2007
Acenaphthene	EPA 8270	<2.0	ug/L	CMG	06/28/2007
Dibenzofuran	EPA 8270	<10	ug/L	CMG	06/28/2007
2,4-Dinitrotoluene	EPA 8270	<10	ug/L	CMG	06/28/2007
Diethylphthalate	EPA 8270	<10	ug/L	CMG	06/28/2007
Fluorene	EPA 8270	<2.0	ug/L	CMG	06/28/2007
4-Chlorophenyl Phenyl Ether	EPA 8270	<10	ug/L	CMG	06/28/2007
4-Nitroaniline	EPA 8270	<20	ug/L	CMG	06/28/2007
n-Nitrosodiphenylamine	EPA 8270	<10	ug/L	CMG	06/28/2007
4-Bromophenyl Phenyl Ether	EPA 8270	<10	ug/L	CMG	06/28/2007
Hexachlorobenzene	EPA 8270	<10	ug/L	CMG	06/28/2007
Phenanthrene	EPA 8270	<2.0	ug/L	CMG	06/28/2007
Anthracene	EPA 8270	<2.0	ug/L	CMG	06/28/2007
Carbazole	EPA 8270	<10	ug/L	CMG	06/28/2007
di-n-Butylphthalate	EPA 8270	<15	ug/L	CMG	06/28/2007
Fluoranthene	EPA 8270	<2.0	ug/L	CMG	06/28/2007
Pyrene	EPA 8270	<2.0	ug/L	CMG	06/28/2007
Butylbenzylphthalate	EPA 8270	<10	ug/L	CMG	06/28/2007
Benzo [a] Anthracene	EPA 8270	<2.0	ug/L	CMG	06/28/2007
3,3'-Dichlorobenzidine	EPA 8270	<20	ug/L	CMG	06/28/2007
Chrysene	EPA 8270	<2.0	ug/L	CMG	06/28/2007
bis(2-Ethylhexyl)Phthalate	EPA 8270	<10	ug/L	CMG	06/28/2007
di-n-Octylphthalate	EPA 8270	<10	ug/L	CMG	06/28/2007
Benzo [b] Fluoranthene	EPA 8270	<2.0	ug/L	CMG	06/28/2007
Benzo [k] Fluoranthene	EPA 8270	<2.0	ug/L	CMG	06/28/2007
Benzo [a] Pyrene	EPA 8270	<2.0	ug/L	CMG	06/28/2007
Indeno [1,2,3-cd] Pyrene	EPA 8270	<2.0	ug/L	CMG	06/28/2007
Dibenzo [a,h] Anthracene	EPA 8270	<2.0	ug/L	CMG	06/28/2007
Benzo [g,h,i] Perylene	EPA 8270	<2.0	ug/L	CMG	06/28/2007
Surrogates:	EPA 8270				
***2-Fluorophenol	EPA 8270	28.9	% R	CMG	06/28/2007
***Phenol-D6	EPA 8270	20.2	% R	CMG	06/28/2007
***Nitrobenzene-D5	EPA 8270	58.4	% R	CMG	06/28/2007
***2-Fluorobiphenyl	EPA 8270	60.7	% R	CMG	06/28/2007
***2,4,6-Tribromophenol	EPA 8270	63.3	% R	CMG	06/28/2007

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Sample ID: **ML - 1A** Sample No.: **001**

Sample Date: **06/21/2007**

Test Performed	Method	Results	Units	Tech	Analysis Date
***P-Terphenyl-D14	EPA 8270	63.5	% R	CMG	06/28/2007
Extraction	EPA 3510C	1.0	DF	CMG	06/26/2007
TOTAL PETROLEUM HYDROCARBON	D3328/EPA 8100/			RJD	06/28/2007
Hydrocarbon Content		3200	ug/L	RJD	06/28/2007
Surrogate:	D3328/EPA 8100				
***p-Terphenyl		140	% R	RJD	06/28/2007
Extraction	EPA 3510C	1.0	DF	DAB	06/28/2007
PRIORITY POLLUTANT METALS				LLZ	06/25/2007
Silver	EPA 6010B	<0.0050	mg/L	LLZ	06/25/2007
Arsenic	EPA 6010B	<0.010	mg/L	LLZ	06/25/2007
Beryllium	EPA 6010B	<0.0040	mg/L	LLZ	06/25/2007
Cadmium	EPA 6010B	<0.0050	mg/L	LLZ	06/25/2007
Chromium	EPA 6010B	<0.0050	mg/L	LLZ	06/25/2007
Copper	EPA 6010B	0.018	mg/L	LLZ	06/25/2007
Mercury	EPA 7470A	<0.00040	mg/L	TGG	06/27/2007
Nickel	EPA 6010B	<0.010	mg/L	LLZ	06/25/2007
Lead	EPA 6010B	<0.010	mg/L	LLZ	06/25/2007
Antimony	EPA 6010B	<0.025	mg/L	LLZ	06/25/2007
Selenium	EPA 6010B	<0.025	mg/L	LLZ	06/25/2007
Thallium	EPA 6010B	<0.025	mg/L	LLZ	06/25/2007
Zinc	EPA 6010B	0.011	mg/L	LLZ	06/25/2007
Iron	EPA 6010B	0.082	mg/L	LLZ	06/25/2007
Manganese	EPA 6010B	<0.0050	mg/L	LLZ	06/25/2007

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Date Received: **06/22/2007**
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Sample ID: **ML - 1B** Sample No.: **002**

Sample Date: **06/21/2007**

Test Performed	Method	Results	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260			MQS	06/28/2007
Dichlorodifluoromethane	EPA 8260	<2.0	ug/L	MQS	06/28/2007
Chloromethane	EPA 8260	<2.0	ug/L	MQS	06/28/2007
Vinyl Chloride	EPA 8260	<1.0	ug/L	MQS	06/28/2007
Bromomethane	EPA 8260	<2.0	ug/L	MQS	06/28/2007
Chloroethane	EPA 8260	<1.0	ug/L	MQS	06/28/2007
Trichlorofluoromethane	EPA 8260	<2.0	ug/L	MQS	06/28/2007
Diethylether	EPA 8260	<5.0	ug/L	MQS	06/28/2007
Acetone	EPA 8260	<25	ug/L	MQS	06/28/2007
1,1-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
Dichloromethane	EPA 8260	<1.0	ug/L	MQS	06/28/2007
Methyl-Tert-Butyl-Ether	EPA 8260	<1.0	ug/L	MQS	06/28/2007
trans-1,2-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
1,1-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	06/28/2007
2-Butanone	EPA 8260	<25	ug/L	MQS	06/28/2007
2,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	06/28/2007
cis-1,2-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
Chloroform	EPA 8260	9.3	ug/L	MQS	06/28/2007
Bromochloromethane	EPA 8260	<1.0	ug/L	MQS	06/28/2007
Tetrahydrofuran	EPA 8260	<10	ug/L	MQS	06/28/2007
1,1,1-Trichloroethane	EPA 8260	<1.0	ug/L	MQS	06/28/2007
1,1-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
Carbon Tetrachloride	EPA 8260	<1.0	ug/L	MQS	06/28/2007
1,2-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	06/28/2007
Benzene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
Trichloroethene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
1,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	06/28/2007
Bromodichloromethane	EPA 8260	1.0	ug/L	MQS	06/28/2007
Dibromomethane	EPA 8260	<1.0	ug/L	MQS	06/28/2007
4-Methyl-2-Pentanone	EPA 8260	<25	ug/L	MQS	06/28/2007
cis-1,3-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
Toluene	EPA 8260	5.6	ug/L	MQS	06/28/2007
trans-1,3-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
1,1,2-Trichloroethane	EPA 8260	<1.0	ug/L	MQS	06/28/2007
2-Hexanone	EPA 8260	<2.0	ug/L	MQS	06/28/2007
1,3-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	06/28/2007
Tetrachloroethene	EPA 8260	<1.0	ug/L	MQS	06/28/2007

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ANALYTICAL REPORT

GZA GeoEnvironmental, Inc.
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Ed Summerly

Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **06/22/2007**
Date Reported: **07/03/2007**
Work Order No.: **0706-00154**

Sample ID: **ML - 1B** Sample No.: **002**

Sample Date: **06/21/2007**

Test Performed	Method	Results	Units	Tech	Analysis Date
Dibromochloromethane	EPA 8260	<1.0	ug/L	MQS	06/28/2007
1,2-Dibromoethane (EDB)	EPA 8260	<2.0	ug/L	MQS	06/28/2007
Chlorobenzene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
1,1,1,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	06/28/2007
Ethylbenzene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
m&p-Xylene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
o-Xylene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
Styrene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
Bromoform	EPA 8260	<2.0	ug/L	MQS	06/28/2007
Isopropylbenzene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
1,1,2,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	06/28/2007
1,2,3-Trichloropropane	EPA 8260	<1.0	ug/L	MQS	06/28/2007
Bromobenzene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
N-Propylbenzene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
2-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
1,3,5-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
4-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
tert-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
1,2,4-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
sec-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
p-Isopropyltoluene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
1,3-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
1,4-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
n-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
1,2-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
1,2-Dibromo-3-Chloropropane	EPA 8260	<5.0	ug/L	MQS	06/28/2007
1,2,4-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
Hexachlorobutadiene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
Naphthalene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
1,2,3-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
Surrogates:	EPA 8260				
***1,2-Dichloroethane-D4	EPA 8260	89.5	% R	MQS	06/28/2007
***Toluene-D8	EPA 8260	93.0	% R	MQS	06/28/2007
***4-Bromofluorobenzene	EPA 8260	98.2	% R	MQS	06/28/2007
Preparation	EPA 5030B	1.0	DF	MQS	06/28/2007
SEMI-VOLATILE ORGANICS	EPA 8270			CMG	06/28/2007
ACID FRACTION:	EPA 8270				

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ANALYTICAL REPORT

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Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **06/22/2007**
Date Reported: **07/03/2007**
Work Order No.: **0706-00154**

Sample ID: **ML - 1B** Sample No.: **002**

Sample Date: **06/21/2007**

Test Performed	Method	Results	Units	Tech	Analysis Date
Phenol	EPA 8270	<10	ug/L	CMG	06/28/2007
2-Chlorophenol	EPA 8270	<10	ug/L	CMG	06/28/2007
2-Methylphenol	EPA 8270	<10	ug/L	CMG	06/28/2007
3&4-Methylphenol	EPA 8270	<10	ug/L	CMG	06/28/2007
2-Nitrophenol	EPA 8270	<10	ug/L	CMG	06/28/2007
2,4-Dimethylphenol	EPA 8270	<10	ug/L	CMG	06/28/2007
Benzoic Acid	EPA 8270	<10	ug/L	CMG	06/28/2007
2,4-Dichlorophenol	EPA 8270	<10	ug/L	CMG	06/28/2007
4-Chloro-3-Methylphenol	EPA 8270	<20	ug/L	CMG	06/28/2007
2,4,6-Trichlorophenol	EPA 8270	<10	ug/L	CMG	06/28/2007
2,4,5-Trichlorophenol	EPA 8270	<10	ug/L	CMG	06/28/2007
2,4-Dinitrophenol	EPA 8270	<100	ug/L	CMG	06/28/2007
4-Nitrophenol	EPA 8270	<50	ug/L	CMG	06/28/2007
4,6-Dinitro-2-Methylphenol	EPA 8270	<50	ug/L	CMG	06/28/2007
Pentachlorophenol	EPA 8270	<50	ug/L	CMG	06/28/2007
BASE-NEUTRAL FRACTION:					
n-Nitrosodimethylamine	EPA 8270	<10	ug/L	CMG	06/28/2007
bis(2-Chloroethyl)Ether	EPA 8270	<10	ug/L	CMG	06/28/2007
1,3-Dichlorobenzene	EPA 8270	<10	ug/L	CMG	06/28/2007
1,4-Dichlorobenzene	EPA 8270	<10	ug/L	CMG	06/28/2007
Benzyl Alcohol	EPA 8270	<20	ug/L	CMG	06/28/2007
1,2-Dichlorobenzene	EPA 8270	<10	ug/L	CMG	06/28/2007
bis(2-Chloroisopropyl)Ether	EPA 8270	<10	ug/L	CMG	06/28/2007
n-Nitrosodi-n-Propylamine	EPA 8270	<10	ug/L	CMG	06/28/2007
Hexachloroethane	EPA 8270	<10	ug/L	CMG	06/28/2007
Nitrobenzene	EPA 8270	<10	ug/L	CMG	06/28/2007
Isophorone	EPA 8270	<10	ug/L	CMG	06/28/2007
bis(2-Chloroethoxy)Methane	EPA 8270	<10	ug/L	CMG	06/28/2007
1,2,4-Trichlorobenzene	EPA 8270	<10	ug/L	CMG	06/28/2007
Naphthalene	EPA 8270	<2.0	ug/L	CMG	06/28/2007
4-Chloroaniline	EPA 8270	<20	ug/L	CMG	06/28/2007
Hexachlorobutadiene	EPA 8270	<10	ug/L	CMG	06/28/2007
2-Methylnaphthalene	EPA 8270	<2.0	ug/L	CMG	06/28/2007
Hexachlorocyclopentadiene	EPA 8270	<50	ug/L	CMG	06/28/2007
2-Chloronaphthalene	EPA 8270	<10	ug/L	CMG	06/28/2007
2-Nitroaniline	EPA 8270	<50	ug/L	CMG	06/28/2007
Dimethylphthalate	EPA 8270	<10	ug/L	CMG	06/28/2007

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Date Reported: **07/03/2007**
Work Order No.: **0706-00154**

Sample ID: **ML - 1B** Sample No.: **002**

Sample Date: **06/21/2007**

Test Performed	Method	Results	Units	Tech	Analysis Date
Acenaphthylene	EPA 8270	<2.0	ug/L	CMG	06/28/2007
2,6-Dinitrotoluene	EPA 8270	<10	ug/L	CMG	06/28/2007
3-Nitroaniline	EPA 8270	<50	ug/L	CMG	06/28/2007
Acenaphthene	EPA 8270	<2.0	ug/L	CMG	06/28/2007
Dibenzofuran	EPA 8270	<10	ug/L	CMG	06/28/2007
2,4-Dinitrotoluene	EPA 8270	<10	ug/L	CMG	06/28/2007
Diethylphthalate	EPA 8270	<10	ug/L	CMG	06/28/2007
Fluorene	EPA 8270	<2.0	ug/L	CMG	06/28/2007
4-Chlorophenyl Phenyl Ether	EPA 8270	<10	ug/L	CMG	06/28/2007
4-Nitroaniline	EPA 8270	<20	ug/L	CMG	06/28/2007
n-Nitrosodiphenylamine	EPA 8270	<10	ug/L	CMG	06/28/2007
4-Bromophenyl Phenyl Ether	EPA 8270	<10	ug/L	CMG	06/28/2007
Hexachlorobenzene	EPA 8270	<10	ug/L	CMG	06/28/2007
Phenanthrene	EPA 8270	<2.0	ug/L	CMG	06/28/2007
Anthracene	EPA 8270	<2.0	ug/L	CMG	06/28/2007
Carbazole	EPA 8270	<10	ug/L	CMG	06/28/2007
di-n-Butylphthalate	EPA 8270	<15	ug/L	CMG	06/28/2007
Fluoranthene	EPA 8270	<2.0	ug/L	CMG	06/28/2007
Pyrene	EPA 8270	<2.0	ug/L	CMG	06/28/2007
Butylbenzylphthalate	EPA 8270	<10	ug/L	CMG	06/28/2007
Benzo [a] Anthracene	EPA 8270	<2.0	ug/L	CMG	06/28/2007
3,3'-Dichlorobenzidine	EPA 8270	<20	ug/L	CMG	06/28/2007
Chrysene	EPA 8270	<2.0	ug/L	CMG	06/28/2007
bis(2-Ethylhexyl)Phthalate	EPA 8270	<10	ug/L	CMG	06/28/2007
di-n-Octylphthalate	EPA 8270	<10	ug/L	CMG	06/28/2007
Benzo [b] Fluoranthene	EPA 8270	<2.0	ug/L	CMG	06/28/2007
Benzo [k] Fluoranthene	EPA 8270	<2.0	ug/L	CMG	06/28/2007
Benzo [a] Pyrene	EPA 8270	<2.0	ug/L	CMG	06/28/2007
Indeno [1,2,3-cd] Pyrene	EPA 8270	<2.0	ug/L	CMG	06/28/2007
Dibenzo [a,h] Anthracene	EPA 8270	<2.0	ug/L	CMG	06/28/2007
Benzo [g,h,i] Perylene	EPA 8270	<2.0	ug/L	CMG	06/28/2007
Surrogates:	EPA 8270				
***2-Fluorophenol	EPA 8270	25.5	% R	CMG	06/28/2007
***Phenol-D6	EPA 8270	16.7	% R	CMG	06/28/2007
***Nitrobenzene-D5	EPA 8270	45.6	% R	CMG	06/28/2007
***2-Fluorobiphenyl	EPA 8270	47.3	% R	CMG	06/28/2007
***2,4,6-Tribromophenol	EPA 8270	52.7	% R	CMG	06/28/2007

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Work Order No.: **0706-00154**

Sample ID: **ML - 1B** Sample No.: **002**

Sample Date: **06/21/2007**

Test Performed	Method	Results	Units	Tech	Analysis Date
***P-Terphenyl-D14	EPA 8270	65.0	% R	CMG	06/28/2007
Extraction	EPA 3510C	1.0	DF	CMG	06/26/2007
TOTAL PETROLEUM HYDROCARBON	D3328/EPA 8100/			RJD	06/28/2007
Hydrocarbon Content		5300	ug/L	RJD	06/28/2007
Surrogate:	D3328/EPA 8100				
***p-Terphenyl		130	% R	RJD	06/28/2007
Extraction	EPA 3510C	1.0	DF	DAB	06/28/2007
PRIORITY POLLUTANT METALS				LLZ	06/25/2007
Silver	EPA 6010B	<0.0050	mg/L	LLZ	06/25/2007
Arsenic	EPA 6010B	<0.010	mg/L	LLZ	06/25/2007
Beryllium	EPA 6010B	<0.0040	mg/L	LLZ	06/25/2007
Cadmium	EPA 6010B	<0.0050	mg/L	LLZ	06/25/2007
Chromium	EPA 6010B	<0.0050	mg/L	LLZ	06/25/2007
Copper	EPA 6010B	0.017	mg/L	LLZ	06/25/2007
Mercury	EPA 7470A	<0.00040	mg/L	TGG	06/27/2007
Nickel	EPA 6010B	<0.010	mg/L	LLZ	06/25/2007
Lead	EPA 6010B	<0.010	mg/L	LLZ	06/25/2007
Antimony	EPA 6010B	<0.025	mg/L	LLZ	06/25/2007
Selenium	EPA 6010B	<0.025	mg/L	LLZ	06/25/2007
Thallium	EPA 6010B	<0.025	mg/L	LLZ	06/25/2007
Zinc	EPA 6010B	0.015	mg/L	LLZ	06/25/2007
Iron	EPA 6010B	0.42	mg/L	LLZ	06/25/2007
Manganese	EPA 6010B	0.0080	mg/L	LLZ	06/25/2007

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Date Received: **06/22/2007**
Date Reported: **07/03/2007**
Work Order No.: **0706-00154**

Sample ID: **ML - 1C** Sample No.: **003**

Sample Date: **06/21/2007**

Test Performed	Method	Results	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260			MQS	06/28/2007
Dichlorodifluoromethane	EPA 8260	<2.0	ug/L	MQS	06/28/2007
Chloromethane	EPA 8260	<2.0	ug/L	MQS	06/28/2007
Vinyl Chloride	EPA 8260	<1.0	ug/L	MQS	06/28/2007
Bromomethane	EPA 8260	<2.0	ug/L	MQS	06/28/2007
Chloroethane	EPA 8260	<1.0	ug/L	MQS	06/28/2007
Trichlorofluoromethane	EPA 8260	<2.0	ug/L	MQS	06/28/2007
Diethylether	EPA 8260	<5.0	ug/L	MQS	06/28/2007
Acetone	EPA 8260	<25	ug/L	MQS	06/28/2007
1,1-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
Dichloromethane	EPA 8260	<1.0	ug/L	MQS	06/28/2007
Methyl-Tert-Butyl-Ether	EPA 8260	<1.0	ug/L	MQS	06/28/2007
trans-1,2-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
1,1-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	06/28/2007
2-Butanone	EPA 8260	<25	ug/L	MQS	06/28/2007
2,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	06/28/2007
cis-1,2-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
Chloroform	EPA 8260	6.6	ug/L	MQS	06/28/2007
Bromochloromethane	EPA 8260	<1.0	ug/L	MQS	06/28/2007
Tetrahydrofuran	EPA 8260	<10	ug/L	MQS	06/28/2007
1,1,1-Trichloroethane	EPA 8260	<1.0	ug/L	MQS	06/28/2007
1,1-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
Carbon Tetrachloride	EPA 8260	<1.0	ug/L	MQS	06/28/2007
1,2-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	06/28/2007
Benzene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
Trichloroethene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
1,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	06/28/2007
Bromodichloromethane	EPA 8260	<1.0	ug/L	MQS	06/28/2007
Dibromomethane	EPA 8260	<1.0	ug/L	MQS	06/28/2007
4-Methyl-2-Pentanone	EPA 8260	<25	ug/L	MQS	06/28/2007
cis-1,3-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
Toluene	EPA 8260	3.9	ug/L	MQS	06/28/2007
trans-1,3-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
1,1,2-Trichloroethane	EPA 8260	<1.0	ug/L	MQS	06/28/2007
2-Hexanone	EPA 8260	<2.0	ug/L	MQS	06/28/2007
1,3-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	06/28/2007
Tetrachloroethene	EPA 8260	<1.0	ug/L	MQS	06/28/2007

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Date Reported: **07/03/2007**
Work Order No.: **0706-00154**

Sample ID: **ML - 1C** Sample No.: **003**

Sample Date: **06/21/2007**

Test Performed	Method	Results	Units	Tech	Analysis Date
Dibromochloromethane	EPA 8260	<1.0	ug/L	MQS	06/28/2007
1,2-Dibromoethane (EDB)	EPA 8260	<2.0	ug/L	MQS	06/28/2007
Chlorobenzene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
1,1,1,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	06/28/2007
Ethylbenzene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
m&p-Xylene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
o-Xylene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
Styrene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
Bromoform	EPA 8260	<2.0	ug/L	MQS	06/28/2007
Isopropylbenzene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
1,1,2,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	06/28/2007
1,2,3-Trichloropropane	EPA 8260	<1.0	ug/L	MQS	06/28/2007
Bromobenzene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
N-Propylbenzene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
2-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
1,3,5-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
4-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
tert-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
1,2,4-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
sec-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
p-Isopropyltoluene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
1,3-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
1,4-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
n-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
1,2-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
1,2-Dibromo-3-Chloropropane	EPA 8260	<5.0	ug/L	MQS	06/28/2007
1,2,4-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
Hexachlorobutadiene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
Naphthalene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
1,2,3-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
Surrogates:	EPA 8260				
***1,2-Dichloroethane-D4	EPA 8260	87.5	% R	MQS	06/28/2007
***Toluene-D8	EPA 8260	95.8	% R	MQS	06/28/2007
***4-Bromofluorobenzene	EPA 8260	93.8	% R	MQS	06/28/2007
Preparation	EPA 5030B	1.0	DF	MQS	06/28/2007
SEMI-VOLATILE ORGANICS	EPA 8270			CMG	06/28/2007
ACID FRACTION:	EPA 8270				

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Date Received: **06/22/2007**
Date Reported: **07/03/2007**
Work Order No.: **0706-00154**

Sample ID: **ML - 1C** Sample No.: **003**

Sample Date: **06/21/2007**

Test Performed	Method	Results	Units	Tech	Analysis Date
Phenol	EPA 8270	<10	ug/L	CMG	06/28/2007
2-Chlorophenol	EPA 8270	<10	ug/L	CMG	06/28/2007
2-Methylphenol	EPA 8270	<10	ug/L	CMG	06/28/2007
3&4-Methylphenol	EPA 8270	<10	ug/L	CMG	06/28/2007
2-Nitrophenol	EPA 8270	<10	ug/L	CMG	06/28/2007
2,4-Dimethylphenol	EPA 8270	<10	ug/L	CMG	06/28/2007
Benzoic Acid	EPA 8270	<10	ug/L	CMG	06/28/2007
2,4-Dichlorophenol	EPA 8270	<10	ug/L	CMG	06/28/2007
4-Chloro-3-Methylphenol	EPA 8270	<20	ug/L	CMG	06/28/2007
2,4,6-Trichlorophenol	EPA 8270	<10	ug/L	CMG	06/28/2007
2,4,5-Trichlorophenol	EPA 8270	<10	ug/L	CMG	06/28/2007
2,4-Dinitrophenol	EPA 8270	<100	ug/L	CMG	06/28/2007
4-Nitrophenol	EPA 8270	<50	ug/L	CMG	06/28/2007
4,6-Dinitro-2-Methylphenol	EPA 8270	<50	ug/L	CMG	06/28/2007
Pentachlorophenol	EPA 8270	<50	ug/L	CMG	06/28/2007
BASE-NEUTRAL FRACTION:					
n-Nitrosodimethylamine	EPA 8270	<10	ug/L	CMG	06/28/2007
bis(2-Chloroethyl)Ether	EPA 8270	<10	ug/L	CMG	06/28/2007
1,3-Dichlorobenzene	EPA 8270	<10	ug/L	CMG	06/28/2007
1,4-Dichlorobenzene	EPA 8270	<10	ug/L	CMG	06/28/2007
Benzyl Alcohol	EPA 8270	<20	ug/L	CMG	06/28/2007
1,2-Dichlorobenzene	EPA 8270	<10	ug/L	CMG	06/28/2007
bis(2-Chloroisopropyl)Ether	EPA 8270	<10	ug/L	CMG	06/28/2007
n-Nitrosodi-n-Propylamine	EPA 8270	<10	ug/L	CMG	06/28/2007
Hexachloroethane	EPA 8270	<10	ug/L	CMG	06/28/2007
Nitrobenzene	EPA 8270	<10	ug/L	CMG	06/28/2007
Isophorone	EPA 8270	<10	ug/L	CMG	06/28/2007
bis(2-Chloroethoxy)Methane	EPA 8270	<10	ug/L	CMG	06/28/2007
1,2,4-Trichlorobenzene	EPA 8270	<10	ug/L	CMG	06/28/2007
Naphthalene	EPA 8270	<2.0	ug/L	CMG	06/28/2007
4-Chloroaniline	EPA 8270	<20	ug/L	CMG	06/28/2007
Hexachlorobutadiene	EPA 8270	<10	ug/L	CMG	06/28/2007
2-Methylnaphthalene	EPA 8270	<2.0	ug/L	CMG	06/28/2007
Hexachlorocyclopentadiene	EPA 8270	<50	ug/L	CMG	06/28/2007
2-Chloronaphthalene	EPA 8270	<10	ug/L	CMG	06/28/2007
2-Nitroaniline	EPA 8270	<50	ug/L	CMG	06/28/2007
Dimethylphthalate	EPA 8270	<10	ug/L	CMG	06/28/2007

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ANALYTICAL REPORT

GZA GeoEnvironmental, Inc.
140 Broadway
Providence, RI 02903

Ed Summerly

Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **06/22/2007**
Date Reported: **07/03/2007**
Work Order No.: **0706-00154**

Sample ID: **ML - 1C** Sample No.: **003**

Sample Date: **06/21/2007**

Test Performed	Method	Results	Units	Tech	Analysis Date
Acenaphthylene	EPA 8270	<2.0	ug/L	CMG	06/28/2007
2,6-Dinitrotoluene	EPA 8270	<10	ug/L	CMG	06/28/2007
3-Nitroaniline	EPA 8270	<50	ug/L	CMG	06/28/2007
Acenaphthene	EPA 8270	<2.0	ug/L	CMG	06/28/2007
Dibenzofuran	EPA 8270	<10	ug/L	CMG	06/28/2007
2,4-Dinitrotoluene	EPA 8270	<10	ug/L	CMG	06/28/2007
Diethylphthalate	EPA 8270	<10	ug/L	CMG	06/28/2007
Fluorene	EPA 8270	<2.0	ug/L	CMG	06/28/2007
4-Chlorophenyl Phenyl Ether	EPA 8270	<10	ug/L	CMG	06/28/2007
4-Nitroaniline	EPA 8270	<20	ug/L	CMG	06/28/2007
n-Nitrosodiphenylamine	EPA 8270	<10	ug/L	CMG	06/28/2007
4-Bromophenyl Phenyl Ether	EPA 8270	<10	ug/L	CMG	06/28/2007
Hexachlorobenzene	EPA 8270	<10	ug/L	CMG	06/28/2007
Phenanthrene	EPA 8270	<2.0	ug/L	CMG	06/28/2007
Anthracene	EPA 8270	<2.0	ug/L	CMG	06/28/2007
Carbazole	EPA 8270	<10	ug/L	CMG	06/28/2007
di-n-Butylphthalate	EPA 8270	<15	ug/L	CMG	06/28/2007
Fluoranthene	EPA 8270	<2.0	ug/L	CMG	06/28/2007
Pyrene	EPA 8270	<2.0	ug/L	CMG	06/28/2007
Butylbenzylphthalate	EPA 8270	<10	ug/L	CMG	06/28/2007
Benzo [a] Anthracene	EPA 8270	<2.0	ug/L	CMG	06/28/2007
3,3'-Dichlorobenzidine	EPA 8270	<20	ug/L	CMG	06/28/2007
Chrysene	EPA 8270	<2.0	ug/L	CMG	06/28/2007
bis(2-Ethylhexyl)Phthalate	EPA 8270	<10	ug/L	CMG	06/28/2007
di-n-Octylphthalate	EPA 8270	<10	ug/L	CMG	06/28/2007
Benzo [b] Fluoranthene	EPA 8270	<2.0	ug/L	CMG	06/28/2007
Benzo [k] Fluoranthene	EPA 8270	<2.0	ug/L	CMG	06/28/2007
Benzo [a] Pyrene	EPA 8270	<2.0	ug/L	CMG	06/28/2007
Indeno [1,2,3-cd] Pyrene	EPA 8270	<2.0	ug/L	CMG	06/28/2007
Dibenzo [a,h] Anthracene	EPA 8270	<2.0	ug/L	CMG	06/28/2007
Benzo [g,h,i] Perylene	EPA 8270	<2.0	ug/L	CMG	06/28/2007
Surrogates:	EPA 8270				
***2-Fluorophenol	EPA 8270	34.6	% R	CMG	06/28/2007
***Phenol-D6	EPA 8270	22.6	% R	CMG	06/28/2007
***Nitrobenzene-D5	EPA 8270	59.6	% R	CMG	06/28/2007
***2-Fluorobiphenyl	EPA 8270	62.9	% R	CMG	06/28/2007
***2,4,6-Tribromophenol	EPA 8270	69.9	% R	CMG	06/28/2007

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Work Order No.: **0706-00154**

Sample ID: **ML - 1C** Sample No.: **003**

Sample Date: **06/21/2007**

Test Performed	Method	Results	Units	Tech	Analysis Date
***P-Terphenyl-D14	EPA 8270	80.5	% R	CMG	06/28/2007
Extraction	EPA 3510C	1.0	DF	CMG	06/26/2007
TOTAL PETROLEUM HYDROCARBON	D3328/EPA 8100/			RJD	06/28/2007
Hydrocarbon Content		5700	ug/L	RJD	06/28/2007
Surrogate:	D3328/EPA 8100				
***p-Terphenyl		148	% R	RJD	06/28/2007
Extraction	EPA 3510C	1.0	DF	DAB	06/28/2007
PRIORITY POLLUTANT METALS				LLZ	06/25/2007
Silver	EPA 6010B	<0.0050	mg/L	LLZ	06/25/2007
Arsenic	EPA 6010B	<0.010	mg/L	LLZ	06/25/2007
Beryllium	EPA 6010B	<0.0040	mg/L	LLZ	06/25/2007
Cadmium	EPA 6010B	<0.0050	mg/L	LLZ	06/25/2007
Chromium	EPA 6010B	<0.0050	mg/L	LLZ	06/25/2007
Copper	EPA 6010B	<0.015	mg/L	LLZ	06/25/2007
Mercury	EPA 7470A	<0.00040	mg/L	TGG	06/27/2007
Nickel	EPA 6010B	<0.010	mg/L	LLZ	06/25/2007
Lead	EPA 6010B	<0.010	mg/L	LLZ	06/25/2007
Antimony	EPA 6010B	<0.025	mg/L	LLZ	06/25/2007
Selenium	EPA 6010B	<0.025	mg/L	LLZ	06/25/2007
Thallium	EPA 6010B	<0.025	mg/L	LLZ	06/25/2007
Zinc	EPA 6010B	0.012	mg/L	LLZ	06/25/2007
Iron	EPA 6010B	0.13	mg/L	LLZ	06/25/2007
Manganese	EPA 6010B	0.0054	mg/L	LLZ	06/25/2007

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Work Order No.: **0706-00154**

Sample ID: **ML - 2A** Sample No.: **004**

Sample Date: **06/21/2007**

Test Performed	Method	Results	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260			MQS	06/28/2007
Dichlorodifluoromethane	EPA 8260	<2.0	ug/L	MQS	06/28/2007
Chloromethane	EPA 8260	<2.0	ug/L	MQS	06/28/2007
Vinyl Chloride	EPA 8260	<1.0	ug/L	MQS	06/28/2007
Bromomethane	EPA 8260	<2.0	ug/L	MQS	06/28/2007
Chloroethane	EPA 8260	<1.0	ug/L	MQS	06/28/2007
Trichlorofluoromethane	EPA 8260	<2.0	ug/L	MQS	06/28/2007
Diethylether	EPA 8260	<5.0	ug/L	MQS	06/28/2007
Acetone	EPA 8260	<25	ug/L	MQS	06/28/2007
1,1-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
Dichloromethane	EPA 8260	<1.0	ug/L	MQS	06/28/2007
Methyl-Tert-Butyl-Ether	EPA 8260	1.1	ug/L	MQS	06/28/2007
trans-1,2-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
1,1-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	06/28/2007
2-Butanone	EPA 8260	<25	ug/L	MQS	06/28/2007
2,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	06/28/2007
cis-1,2-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
Chloroform	EPA 8260	<1.0	ug/L	MQS	06/28/2007
Bromochloromethane	EPA 8260	<1.0	ug/L	MQS	06/28/2007
Tetrahydrofuran	EPA 8260	<10	ug/L	MQS	06/28/2007
1,1,1-Trichloroethane	EPA 8260	<1.0	ug/L	MQS	06/28/2007
1,1-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
Carbon Tetrachloride	EPA 8260	<1.0	ug/L	MQS	06/28/2007
1,2-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	06/28/2007
Benzene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
Trichloroethene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
1,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	06/28/2007
Bromodichloromethane	EPA 8260	<1.0	ug/L	MQS	06/28/2007
Dibromomethane	EPA 8260	<1.0	ug/L	MQS	06/28/2007
4-Methyl-2-Pentanone	EPA 8260	<25	ug/L	MQS	06/28/2007
cis-1,3-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
Toluene	EPA 8260	2.3	ug/L	MQS	06/28/2007
trans-1,3-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
1,1,2-Trichloroethane	EPA 8260	<1.0	ug/L	MQS	06/28/2007
2-Hexanone	EPA 8260	<2.0	ug/L	MQS	06/28/2007
1,3-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	06/28/2007
Tetrachloroethene	EPA 8260	<1.0	ug/L	MQS	06/28/2007

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Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **06/22/2007**
Date Reported: **07/03/2007**
Work Order No.: **0706-00154**

Sample ID: **ML - 2A** Sample No.: **004**

Sample Date: **06/21/2007**

Test Performed	Method	Results	Units	Tech	Analysis Date
Dibromochloromethane	EPA 8260	<1.0	ug/L	MQS	06/28/2007
1,2-Dibromoethane (EDB)	EPA 8260	<2.0	ug/L	MQS	06/28/2007
Chlorobenzene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
1,1,1,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	06/28/2007
Ethylbenzene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
m&p-Xylene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
o-Xylene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
Styrene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
Bromoform	EPA 8260	<2.0	ug/L	MQS	06/28/2007
Isopropylbenzene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
1,1,2,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	06/28/2007
1,2,3-Trichloropropane	EPA 8260	<1.0	ug/L	MQS	06/28/2007
Bromobenzene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
N-Propylbenzene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
2-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
1,3,5-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
4-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
tert-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
1,2,4-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
sec-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
p-Isopropyltoluene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
1,3-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
1,4-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
n-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
1,2-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
1,2-Dibromo-3-Chloropropane	EPA 8260	<5.0	ug/L	MQS	06/28/2007
1,2,4-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
Hexachlorobutadiene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
Naphthalene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
1,2,3-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
Surrogates:	EPA 8260				
***1,2-Dichloroethane-D4	EPA 8260	87.9	% R	MQS	06/28/2007
***Toluene-D8	EPA 8260	97.6	% R	MQS	06/28/2007
***4-Bromofluorobenzene	EPA 8260	92.6	% R	MQS	06/28/2007
Preparation	EPA 5030B	1.0	DF	MQS	06/28/2007
SEMI-VOLATILE ORGANICS	EPA 8270			CMG	06/28/2007
ACID FRACTION:	EPA 8270				

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Date Reported: **07/03/2007**
Work Order No.: **0706-00154**

Sample ID: **ML - 2A** Sample No.: **004**

Sample Date: **06/21/2007**

Test Performed	Method	Results	Units	Tech	Analysis Date
Phenol	EPA 8270	<10	ug/L	CMG	06/28/2007
2-Chlorophenol	EPA 8270	<10	ug/L	CMG	06/28/2007
2-Methylphenol	EPA 8270	<10	ug/L	CMG	06/28/2007
3&4-Methylphenol	EPA 8270	<10	ug/L	CMG	06/28/2007
2-Nitrophenol	EPA 8270	<10	ug/L	CMG	06/28/2007
2,4-Dimethylphenol	EPA 8270	<10	ug/L	CMG	06/28/2007
Benzoic Acid	EPA 8270	<10	ug/L	CMG	06/28/2007
2,4-Dichlorophenol	EPA 8270	<10	ug/L	CMG	06/28/2007
4-Chloro-3-Methylphenol	EPA 8270	<20	ug/L	CMG	06/28/2007
2,4,6-Trichlorophenol	EPA 8270	<10	ug/L	CMG	06/28/2007
2,4,5-Trichlorophenol	EPA 8270	<10	ug/L	CMG	06/28/2007
2,4-Dinitrophenol	EPA 8270	<100	ug/L	CMG	06/28/2007
4-Nitrophenol	EPA 8270	<50	ug/L	CMG	06/28/2007
4,6-Dinitro-2-Methylphenol	EPA 8270	<50	ug/L	CMG	06/28/2007
Pentachlorophenol	EPA 8270	<50	ug/L	CMG	06/28/2007
BASE-NEUTRAL FRACTION:					
n-Nitrosodimethylamine	EPA 8270	<10	ug/L	CMG	06/28/2007
bis(2-Chloroethyl)Ether	EPA 8270	<10	ug/L	CMG	06/28/2007
1,3-Dichlorobenzene	EPA 8270	<10	ug/L	CMG	06/28/2007
1,4-Dichlorobenzene	EPA 8270	<10	ug/L	CMG	06/28/2007
Benzyl Alcohol	EPA 8270	<20	ug/L	CMG	06/28/2007
1,2-Dichlorobenzene	EPA 8270	<10	ug/L	CMG	06/28/2007
bis(2-Chloroisopropyl)Ether	EPA 8270	<10	ug/L	CMG	06/28/2007
n-Nitrosodi-n-Propylamine	EPA 8270	<10	ug/L	CMG	06/28/2007
Hexachloroethane	EPA 8270	<10	ug/L	CMG	06/28/2007
Nitrobenzene	EPA 8270	<10	ug/L	CMG	06/28/2007
Isophorone	EPA 8270	<10	ug/L	CMG	06/28/2007
bis(2-Chloroethoxy)Methane	EPA 8270	<10	ug/L	CMG	06/28/2007
1,2,4-Trichlorobenzene	EPA 8270	<10	ug/L	CMG	06/28/2007
Naphthalene	EPA 8270	<2.0	ug/L	CMG	06/28/2007
4-Chloroaniline	EPA 8270	<20	ug/L	CMG	06/28/2007
Hexachlorobutadiene	EPA 8270	<10	ug/L	CMG	06/28/2007
2-Methylnaphthalene	EPA 8270	<2.0	ug/L	CMG	06/28/2007
Hexachlorocyclopentadiene	EPA 8270	<50	ug/L	CMG	06/28/2007
2-Chloronaphthalene	EPA 8270	<10	ug/L	CMG	06/28/2007
2-Nitroaniline	EPA 8270	<50	ug/L	CMG	06/28/2007
Dimethylphthalate	EPA 8270	<10	ug/L	CMG	06/28/2007

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Work Order No.: **0706-00154**

Sample ID: **ML - 2A** Sample No.: **004**

Sample Date: **06/21/2007**

Test Performed	Method	Results	Units	Tech	Analysis Date
Acenaphthylene	EPA 8270	<2.0	ug/L	CMG	06/28/2007
2,6-Dinitrotoluene	EPA 8270	<10	ug/L	CMG	06/28/2007
3-Nitroaniline	EPA 8270	<50	ug/L	CMG	06/28/2007
Acenaphthene	EPA 8270	<2.0	ug/L	CMG	06/28/2007
Dibenzofuran	EPA 8270	<10	ug/L	CMG	06/28/2007
2,4-Dinitrotoluene	EPA 8270	<10	ug/L	CMG	06/28/2007
Diethylphthalate	EPA 8270	<10	ug/L	CMG	06/28/2007
Fluorene	EPA 8270	<2.0	ug/L	CMG	06/28/2007
4-Chlorophenyl Phenyl Ether	EPA 8270	<10	ug/L	CMG	06/28/2007
4-Nitroaniline	EPA 8270	<20	ug/L	CMG	06/28/2007
n-Nitrosodiphenylamine	EPA 8270	<10	ug/L	CMG	06/28/2007
4-Bromophenyl Phenyl Ether	EPA 8270	<10	ug/L	CMG	06/28/2007
Hexachlorobenzene	EPA 8270	<10	ug/L	CMG	06/28/2007
Phenanthrene	EPA 8270	<2.0	ug/L	CMG	06/28/2007
Anthracene	EPA 8270	<2.0	ug/L	CMG	06/28/2007
Carbazole	EPA 8270	<10	ug/L	CMG	06/28/2007
di-n-Butylphthalate	EPA 8270	<15	ug/L	CMG	06/28/2007
Fluoranthene	EPA 8270	<2.0	ug/L	CMG	06/28/2007
Pyrene	EPA 8270	<2.0	ug/L	CMG	06/28/2007
Butylbenzylphthalate	EPA 8270	<10	ug/L	CMG	06/28/2007
Benzo [a] Anthracene	EPA 8270	<2.0	ug/L	CMG	06/28/2007
3,3'-Dichlorobenzidine	EPA 8270	<20	ug/L	CMG	06/28/2007
Chrysene	EPA 8270	<2.0	ug/L	CMG	06/28/2007
bis(2-Ethylhexyl)Phthalate	EPA 8270	<10	ug/L	CMG	06/28/2007
di-n-Octylphthalate	EPA 8270	<10	ug/L	CMG	06/28/2007
Benzo [b] Fluoranthene	EPA 8270	<2.0	ug/L	CMG	06/28/2007
Benzo [k] Fluoranthene	EPA 8270	<2.0	ug/L	CMG	06/28/2007
Benzo [a] Pyrene	EPA 8270	<2.0	ug/L	CMG	06/28/2007
Indeno [1,2,3-cd] Pyrene	EPA 8270	<2.0	ug/L	CMG	06/28/2007
Dibenzo [a,h] Anthracene	EPA 8270	<2.0	ug/L	CMG	06/28/2007
Benzo [g,h,i] Perylene	EPA 8270	<2.0	ug/L	CMG	06/28/2007
Surrogates:	EPA 8270				
***2-Fluorophenol	EPA 8270	35.1	% R	CMG	06/28/2007
***Phenol-D6	EPA 8270	24.2	% R	CMG	06/28/2007
***Nitrobenzene-D5	EPA 8270	62.6	% R	CMG	06/28/2007
***2-Fluorobiphenyl	EPA 8270	64.8	% R	CMG	06/28/2007
***2,4,6-Tribromophenol	EPA 8270	71.8	% R	CMG	06/28/2007

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ANALYTICAL REPORT

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Ed Summerly

Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **06/22/2007**
Date Reported: **07/03/2007**
Work Order No.: **0706-00154**

Sample ID: **ML - 2A** Sample No.: **004**

Sample Date: **06/21/2007**

Test Performed	Method	Results	Units	Tech	Analysis Date
***P-Terphenyl-D14	EPA 8270	88.7	% R	CMG	06/28/2007
Extraction	EPA 3510C	1.0	DF	CMG	06/26/2007
TOTAL PETROLEUM HYDROCARBON	D3328/EPA 8100/			RJD	06/29/2007
Hydrocarbon Content		1400	ug/L	RJD	06/29/2007
Surrogate:	D3328/EPA 8100				
***p-Terphenyl		94.8	% R	RJD	06/29/2007
Extraction	EPA 3510C	1.0	DF	DAB	06/28/2007
PRIORITY POLLUTANT METALS				LLZ	06/25/2007
Silver	EPA 6010B	<0.0050	mg/L	LLZ	06/25/2007
Arsenic	EPA 6010B	<0.010	mg/L	LLZ	06/25/2007
Beryllium	EPA 6010B	<0.0040	mg/L	LLZ	06/25/2007
Cadmium	EPA 6010B	<0.0050	mg/L	LLZ	06/25/2007
Chromium	EPA 6010B	<0.0050	mg/L	LLZ	06/25/2007
Copper	EPA 6010B	<0.015	mg/L	LLZ	06/25/2007
Mercury	EPA 7470A	<0.00040	mg/L	TGG	06/27/2007
Nickel	EPA 6010B	<0.010	mg/L	LLZ	06/25/2007
Lead	EPA 6010B	<0.010	mg/L	LLZ	06/25/2007
Antimony	EPA 6010B	<0.025	mg/L	LLZ	06/25/2007
Selenium	EPA 6010B	<0.025	mg/L	LLZ	06/25/2007
Thallium	EPA 6010B	<0.025	mg/L	LLZ	06/25/2007
Zinc	EPA 6010B	0.029	mg/L	LLZ	06/25/2007
Iron	EPA 6010B	0.27	mg/L	LLZ	06/25/2007
Manganese	EPA 6010B	0.050	mg/L	LLZ	06/25/2007

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Date Received: **06/22/2007**
Date Reported: **07/03/2007**
Work Order No.: **0706-00154**

Sample ID: **ML - 2B** Sample No.: **005**

Sample Date: **06/21/2007**

Test Performed	Method	Results	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260			MQS	06/28/2007
Dichlorodifluoromethane	EPA 8260	<2.0	ug/L	MQS	06/28/2007
Chloromethane	EPA 8260	<2.0	ug/L	MQS	06/28/2007
Vinyl Chloride	EPA 8260	<1.0	ug/L	MQS	06/28/2007
Bromomethane	EPA 8260	<2.0	ug/L	MQS	06/28/2007
Chloroethane	EPA 8260	<1.0	ug/L	MQS	06/28/2007
Trichlorofluoromethane	EPA 8260	<2.0	ug/L	MQS	06/28/2007
Diethylether	EPA 8260	<5.0	ug/L	MQS	06/28/2007
Acetone	EPA 8260	<25	ug/L	MQS	06/28/2007
1,1-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
Dichloromethane	EPA 8260	<1.0	ug/L	MQS	06/28/2007
Methyl-Tert-Butyl-Ether	EPA 8260	<1.0	ug/L	MQS	06/28/2007
trans-1,2-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
1,1-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	06/28/2007
2-Butanone	EPA 8260	<25	ug/L	MQS	06/28/2007
2,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	06/28/2007
cis-1,2-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
Chloroform	EPA 8260	<1.0	ug/L	MQS	06/28/2007
Bromochloromethane	EPA 8260	<1.0	ug/L	MQS	06/28/2007
Tetrahydrofuran	EPA 8260	<10	ug/L	MQS	06/28/2007
1,1,1-Trichloroethane	EPA 8260	<1.0	ug/L	MQS	06/28/2007
1,1-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
Carbon Tetrachloride	EPA 8260	<1.0	ug/L	MQS	06/28/2007
1,2-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	06/28/2007
Benzene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
Trichloroethene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
1,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	06/28/2007
Bromodichloromethane	EPA 8260	<1.0	ug/L	MQS	06/28/2007
Dibromomethane	EPA 8260	<1.0	ug/L	MQS	06/28/2007
4-Methyl-2-Pentanone	EPA 8260	<25	ug/L	MQS	06/28/2007
cis-1,3-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
Toluene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
trans-1,3-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
1,1,2-Trichloroethane	EPA 8260	<1.0	ug/L	MQS	06/28/2007
2-Hexanone	EPA 8260	<2.0	ug/L	MQS	06/28/2007
1,3-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	06/28/2007
Tetrachloroethene	EPA 8260	<1.0	ug/L	MQS	06/28/2007

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Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **06/22/2007**
Date Reported: **07/03/2007**
Work Order No.: **0706-00154**

Sample ID: **ML - 2B** Sample No.: **005**

Sample Date: **06/21/2007**

Test Performed	Method	Results	Units	Tech	Analysis Date
Dibromochloromethane	EPA 8260	<1.0	ug/L	MQS	06/28/2007
1,2-Dibromoethane (EDB)	EPA 8260	<2.0	ug/L	MQS	06/28/2007
Chlorobenzene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
1,1,1,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	06/28/2007
Ethylbenzene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
m&p-Xylene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
o-Xylene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
Styrene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
Bromoform	EPA 8260	<2.0	ug/L	MQS	06/28/2007
Isopropylbenzene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
1,1,2,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	06/28/2007
1,2,3-Trichloropropane	EPA 8260	<1.0	ug/L	MQS	06/28/2007
Bromobenzene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
N-Propylbenzene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
2-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
1,3,5-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
4-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
tert-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
1,2,4-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
sec-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
p-Isopropyltoluene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
1,3-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
1,4-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
n-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
1,2-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
1,2-Dibromo-3-Chloropropane	EPA 8260	<5.0	ug/L	MQS	06/28/2007
1,2,4-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
Hexachlorobutadiene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
Naphthalene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
1,2,3-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
Surrogates:	EPA 8260				
***1,2-Dichloroethane-D4	EPA 8260	89.7	% R	MQS	06/28/2007
***Toluene-D8	EPA 8260	101	% R	MQS	06/28/2007
***4-Bromofluorobenzene	EPA 8260	92.6	% R	MQS	06/28/2007
Preparation	EPA 5030B	1.0	DF	MQS	06/28/2007
SEMI-VOLATILE ORGANICS	EPA 8270			CMG	06/28/2007
ACID FRACTION:	EPA 8270				

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Date Received: **06/22/2007**
Date Reported: **07/03/2007**
Work Order No.: **0706-00154**

Sample ID: **ML - 2B** Sample No.: **005**

Sample Date: **06/21/2007**

Test Performed	Method	Results	Units	Tech	Analysis Date
Phenol	EPA 8270	<10	ug/L	CMG	06/28/2007
2-Chlorophenol	EPA 8270	<10	ug/L	CMG	06/28/2007
2-Methylphenol	EPA 8270	<10	ug/L	CMG	06/28/2007
3&4-Methylphenol	EPA 8270	<10	ug/L	CMG	06/28/2007
2-Nitrophenol	EPA 8270	<10	ug/L	CMG	06/28/2007
2,4-Dimethylphenol	EPA 8270	<10	ug/L	CMG	06/28/2007
Benzoic Acid	EPA 8270	<10	ug/L	CMG	06/28/2007
2,4-Dichlorophenol	EPA 8270	<10	ug/L	CMG	06/28/2007
4-Chloro-3-Methylphenol	EPA 8270	<20	ug/L	CMG	06/28/2007
2,4,6-Trichlorophenol	EPA 8270	<10	ug/L	CMG	06/28/2007
2,4,5-Trichlorophenol	EPA 8270	<10	ug/L	CMG	06/28/2007
2,4-Dinitrophenol	EPA 8270	<100	ug/L	CMG	06/28/2007
4-Nitrophenol	EPA 8270	<50	ug/L	CMG	06/28/2007
4,6-Dinitro-2-Methylphenol	EPA 8270	<50	ug/L	CMG	06/28/2007
Pentachlorophenol	EPA 8270	<50	ug/L	CMG	06/28/2007
BASE-NEUTRAL FRACTION:					
n-Nitrosodimethylamine	EPA 8270	<10	ug/L	CMG	06/28/2007
bis(2-Chloroethyl)Ether	EPA 8270	<10	ug/L	CMG	06/28/2007
1,3-Dichlorobenzene	EPA 8270	<10	ug/L	CMG	06/28/2007
1,4-Dichlorobenzene	EPA 8270	<10	ug/L	CMG	06/28/2007
Benzyl Alcohol	EPA 8270	<20	ug/L	CMG	06/28/2007
1,2-Dichlorobenzene	EPA 8270	<10	ug/L	CMG	06/28/2007
bis(2-Chloroisopropyl)Ether	EPA 8270	<10	ug/L	CMG	06/28/2007
n-Nitrosodi-n-Propylamine	EPA 8270	<10	ug/L	CMG	06/28/2007
Hexachloroethane	EPA 8270	<10	ug/L	CMG	06/28/2007
Nitrobenzene	EPA 8270	<10	ug/L	CMG	06/28/2007
Isophorone	EPA 8270	<10	ug/L	CMG	06/28/2007
bis(2-Chloroethoxy)Methane	EPA 8270	<10	ug/L	CMG	06/28/2007
1,2,4-Trichlorobenzene	EPA 8270	<10	ug/L	CMG	06/28/2007
Naphthalene	EPA 8270	<2.0	ug/L	CMG	06/28/2007
4-Chloroaniline	EPA 8270	<20	ug/L	CMG	06/28/2007
Hexachlorobutadiene	EPA 8270	<10	ug/L	CMG	06/28/2007
2-Methylnaphthalene	EPA 8270	<2.0	ug/L	CMG	06/28/2007
Hexachlorocyclopentadiene	EPA 8270	<50	ug/L	CMG	06/28/2007
2-Chloronaphthalene	EPA 8270	<10	ug/L	CMG	06/28/2007
2-Nitroaniline	EPA 8270	<50	ug/L	CMG	06/28/2007
Dimethylphthalate	EPA 8270	<10	ug/L	CMG	06/28/2007

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Work Order No.: **0706-00154**

Sample ID: **ML - 2B** Sample No.: **005**

Sample Date: **06/21/2007**

Test Performed	Method	Results	Units	Tech	Analysis Date
Acenaphthylene	EPA 8270	<2.0	ug/L	CMG	06/28/2007
2,6-Dinitrotoluene	EPA 8270	<10	ug/L	CMG	06/28/2007
3-Nitroaniline	EPA 8270	<50	ug/L	CMG	06/28/2007
Acenaphthene	EPA 8270	<2.0	ug/L	CMG	06/28/2007
Dibenzofuran	EPA 8270	<10	ug/L	CMG	06/28/2007
2,4-Dinitrotoluene	EPA 8270	<10	ug/L	CMG	06/28/2007
Diethylphthalate	EPA 8270	<10	ug/L	CMG	06/28/2007
Fluorene	EPA 8270	<2.0	ug/L	CMG	06/28/2007
4-Chlorophenyl Phenyl Ether	EPA 8270	<10	ug/L	CMG	06/28/2007
4-Nitroaniline	EPA 8270	<20	ug/L	CMG	06/28/2007
n-Nitrosodiphenylamine	EPA 8270	<10	ug/L	CMG	06/28/2007
4-Bromophenyl Phenyl Ether	EPA 8270	<10	ug/L	CMG	06/28/2007
Hexachlorobenzene	EPA 8270	<10	ug/L	CMG	06/28/2007
Phenanthrene	EPA 8270	<2.0	ug/L	CMG	06/28/2007
Anthracene	EPA 8270	<2.0	ug/L	CMG	06/28/2007
Carbazole	EPA 8270	<10	ug/L	CMG	06/28/2007
di-n-Butylphthalate	EPA 8270	<15	ug/L	CMG	06/28/2007
Fluoranthene	EPA 8270	<2.0	ug/L	CMG	06/28/2007
Pyrene	EPA 8270	<2.0	ug/L	CMG	06/28/2007
Butylbenzylphthalate	EPA 8270	<10	ug/L	CMG	06/28/2007
Benzo [a] Anthracene	EPA 8270	<2.0	ug/L	CMG	06/28/2007
3,3'-Dichlorobenzidine	EPA 8270	<20	ug/L	CMG	06/28/2007
Chrysene	EPA 8270	<2.0	ug/L	CMG	06/28/2007
bis(2-Ethylhexyl)Phthalate	EPA 8270	<10	ug/L	CMG	06/28/2007
di-n-Octylphthalate	EPA 8270	<10	ug/L	CMG	06/28/2007
Benzo [b] Fluoranthene	EPA 8270	<2.0	ug/L	CMG	06/28/2007
Benzo [k] Fluoranthene	EPA 8270	<2.0	ug/L	CMG	06/28/2007
Benzo [a] Pyrene	EPA 8270	<2.0	ug/L	CMG	06/28/2007
Indeno [1,2,3-cd] Pyrene	EPA 8270	<2.0	ug/L	CMG	06/28/2007
Dibenzo [a,h] Anthracene	EPA 8270	<2.0	ug/L	CMG	06/28/2007
Benzo [g,h,i] Perylene	EPA 8270	<2.0	ug/L	CMG	06/28/2007
Surrogates:	EPA 8270				
***2-Fluorophenol	EPA 8270	30.6	% R	CMG	06/28/2007
***Phenol-D6	EPA 8270	19.7	% R	CMG	06/28/2007
***Nitrobenzene-D5	EPA 8270	72.1	% R	CMG	06/28/2007
***2-Fluorobiphenyl	EPA 8270	75.5	% R	CMG	06/28/2007
***2,4,6-Tribromophenol	EPA 8270	78.4	% R	CMG	06/28/2007

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Work Order No.: **0706-00154**

Sample ID: **ML - 2B** Sample No.: **005**

Sample Date: **06/21/2007**

Test Performed	Method	Results	Units	Tech	Analysis Date
***P-Terphenyl-D14	EPA 8270	92.6	% R	CMG	06/28/2007
Extraction	EPA 3510C	1.0	DF	CMG	06/26/2007
TOTAL PETROLEUM HYDROCARBON	D3328/EPA 8100/			RJD	06/29/2007
Hydrocarbon Content		2000	ug/L	RJD	06/29/2007
Surrogate:	D3328/EPA 8100				
***p-Terphenyl		91.4	% R	RJD	06/29/2007
Extraction	EPA 3510C	1.0	DF	DAB	06/28/2007
PRIORITY POLLUTANT METALS				LLZ	06/25/2007
Silver	EPA 6010B	<0.0050	mg/L	LLZ	06/25/2007
Arsenic	EPA 6010B	<0.010	mg/L	LLZ	06/25/2007
Beryllium	EPA 6010B	<0.0040	mg/L	LLZ	06/25/2007
Cadmium	EPA 6010B	<0.0050	mg/L	LLZ	06/25/2007
Chromium	EPA 6010B	<0.0050	mg/L	LLZ	06/25/2007
Copper	EPA 6010B	<0.015	mg/L	LLZ	06/25/2007
Mercury	EPA 7470A	<0.00040	mg/L	TGG	06/27/2007
Nickel	EPA 6010B	<0.010	mg/L	LLZ	06/25/2007
Lead	EPA 6010B	<0.010	mg/L	LLZ	06/25/2007
Antimony	EPA 6010B	<0.025	mg/L	LLZ	06/25/2007
Selenium	EPA 6010B	<0.025	mg/L	LLZ	06/25/2007
Thallium	EPA 6010B	<0.025	mg/L	LLZ	06/25/2007
Zinc	EPA 6010B	<0.010	mg/L	LLZ	06/25/2007
Iron	EPA 6010B	0.92	mg/L	LLZ	06/25/2007
Manganese	EPA 6010B	0.11	mg/L	LLZ	06/25/2007

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Date Received: **06/22/2007**
Date Reported: **07/03/2007**
Work Order No.: **0706-00154**

Sample ID: **ML - 2C** Sample No.: **006**

Sample Date: **06/21/2007**

Test Performed	Method	Results	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260			MQS	06/28/2007
Dichlorodifluoromethane	EPA 8260	<2.0	ug/L	MQS	06/28/2007
Chloromethane	EPA 8260	<2.0	ug/L	MQS	06/28/2007
Vinyl Chloride	EPA 8260	<1.0	ug/L	MQS	06/28/2007
Bromomethane	EPA 8260	<2.0	ug/L	MQS	06/28/2007
Chloroethane	EPA 8260	<1.0	ug/L	MQS	06/28/2007
Trichlorofluoromethane	EPA 8260	<2.0	ug/L	MQS	06/28/2007
Diethylether	EPA 8260	<5.0	ug/L	MQS	06/28/2007
Acetone	EPA 8260	<25	ug/L	MQS	06/28/2007
1,1-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
Dichloromethane	EPA 8260	<1.0	ug/L	MQS	06/28/2007
Methyl-Tert-Butyl-Ether	EPA 8260	1.0	ug/L	MQS	06/28/2007
trans-1,2-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
1,1-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	06/28/2007
2-Butanone	EPA 8260	<25	ug/L	MQS	06/28/2007
2,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	06/28/2007
cis-1,2-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
Chloroform	EPA 8260	<1.0	ug/L	MQS	06/28/2007
Bromochloromethane	EPA 8260	<1.0	ug/L	MQS	06/28/2007
Tetrahydrofuran	EPA 8260	<10	ug/L	MQS	06/28/2007
1,1,1-Trichloroethane	EPA 8260	<1.0	ug/L	MQS	06/28/2007
1,1-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
Carbon Tetrachloride	EPA 8260	<1.0	ug/L	MQS	06/28/2007
1,2-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	06/28/2007
Benzene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
Trichloroethene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
1,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	06/28/2007
Bromodichloromethane	EPA 8260	<1.0	ug/L	MQS	06/28/2007
Dibromomethane	EPA 8260	<1.0	ug/L	MQS	06/28/2007
4-Methyl-2-Pentanone	EPA 8260	<25	ug/L	MQS	06/28/2007
cis-1,3-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
Toluene	EPA 8260	1.8	ug/L	MQS	06/28/2007
trans-1,3-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
1,1,2-Trichloroethane	EPA 8260	<1.0	ug/L	MQS	06/28/2007
2-Hexanone	EPA 8260	<2.0	ug/L	MQS	06/28/2007
1,3-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	06/28/2007
Tetrachloroethene	EPA 8260	<1.0	ug/L	MQS	06/28/2007

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ANALYTICAL REPORT

GZA GeoEnvironmental, Inc.
140 Broadway
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Ed Summerly

Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **06/22/2007**
Date Reported: **07/03/2007**
Work Order No.: **0706-00154**

Sample ID: **ML - 2C** Sample No.: **006**

Sample Date: **06/21/2007**

Test Performed	Method	Results	Units	Tech	Analysis Date
Dibromochloromethane	EPA 8260	<1.0	ug/L	MQS	06/28/2007
1,2-Dibromoethane (EDB)	EPA 8260	<2.0	ug/L	MQS	06/28/2007
Chlorobenzene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
1,1,1,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	06/28/2007
Ethylbenzene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
m&p-Xylene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
o-Xylene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
Styrene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
Bromoform	EPA 8260	<2.0	ug/L	MQS	06/28/2007
Isopropylbenzene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
1,1,2,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	06/28/2007
1,2,3-Trichloropropane	EPA 8260	<1.0	ug/L	MQS	06/28/2007
Bromobenzene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
N-Propylbenzene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
2-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
1,3,5-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
4-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
tert-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
1,2,4-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
sec-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
p-Isopropyltoluene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
1,3-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
1,4-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
n-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
1,2-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
1,2-Dibromo-3-Chloropropane	EPA 8260	<5.0	ug/L	MQS	06/28/2007
1,2,4-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
Hexachlorobutadiene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
Naphthalene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
1,2,3-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
Surrogates:	EPA 8260				
***1,2-Dichlorobenzene-D4	EPA 8260	106	% R	MQS	06/28/2007
***Toluene-D8	EPA 8260	107	% R	MQS	06/28/2007
***4-Bromofluorobenzene	EPA 8260	99.2	% R	MQS	06/28/2007
Preparation	EPA 5030B	1.0	DF	MQS	06/28/2007
SEMI-VOLATILE ORGANICS	EPA 8270			CMG	06/28/2007
ACID FRACTION:	EPA 8270				

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Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **06/22/2007**
Date Reported: **07/03/2007**
Work Order No.: **0706-00154**

Sample ID: **ML - 2C** Sample No.: **006**

Sample Date: **06/21/2007**

Test Performed	Method	Results	Units	Tech	Analysis Date
Phenol	EPA 8270	<10	ug/L	CMG	06/28/2007
2-Chlorophenol	EPA 8270	<10	ug/L	CMG	06/28/2007
2-Methylphenol	EPA 8270	<10	ug/L	CMG	06/28/2007
3&4-Methylphenol	EPA 8270	<10	ug/L	CMG	06/28/2007
2-Nitrophenol	EPA 8270	<10	ug/L	CMG	06/28/2007
2,4-Dimethylphenol	EPA 8270	<10	ug/L	CMG	06/28/2007
Benzoic Acid	EPA 8270	<10	ug/L	CMG	06/28/2007
2,4-Dichlorophenol	EPA 8270	<10	ug/L	CMG	06/28/2007
4-Chloro-3-Methylphenol	EPA 8270	<20	ug/L	CMG	06/28/2007
2,4,6-Trichlorophenol	EPA 8270	<10	ug/L	CMG	06/28/2007
2,4,5-Trichlorophenol	EPA 8270	<10	ug/L	CMG	06/28/2007
2,4-Dinitrophenol	EPA 8270	<100	ug/L	CMG	06/28/2007
4-Nitrophenol	EPA 8270	<50	ug/L	CMG	06/28/2007
4,6-Dinitro-2-Methylphenol	EPA 8270	<50	ug/L	CMG	06/28/2007
Pentachlorophenol	EPA 8270	<50	ug/L	CMG	06/28/2007
BASE-NEUTRAL FRACTION:					
n-Nitrosodimethylamine	EPA 8270	<10	ug/L	CMG	06/28/2007
bis(2-Chloroethyl)Ether	EPA 8270	<10	ug/L	CMG	06/28/2007
1,3-Dichlorobenzene	EPA 8270	<10	ug/L	CMG	06/28/2007
1,4-Dichlorobenzene	EPA 8270	<10	ug/L	CMG	06/28/2007
Benzyl Alcohol	EPA 8270	<20	ug/L	CMG	06/28/2007
1,2-Dichlorobenzene	EPA 8270	<10	ug/L	CMG	06/28/2007
bis(2-Chloroisopropyl)Ether	EPA 8270	<10	ug/L	CMG	06/28/2007
n-Nitrosodi-n-Propylamine	EPA 8270	<10	ug/L	CMG	06/28/2007
Hexachloroethane	EPA 8270	<10	ug/L	CMG	06/28/2007
Nitrobenzene	EPA 8270	<10	ug/L	CMG	06/28/2007
Isophorone	EPA 8270	<10	ug/L	CMG	06/28/2007
bis(2-Chloroethoxy)Methane	EPA 8270	<10	ug/L	CMG	06/28/2007
1,2,4-Trichlorobenzene	EPA 8270	<10	ug/L	CMG	06/28/2007
Naphthalene	EPA 8270	<2.0	ug/L	CMG	06/28/2007
4-Chloroaniline	EPA 8270	<20	ug/L	CMG	06/28/2007
Hexachlorobutadiene	EPA 8270	<10	ug/L	CMG	06/28/2007
2-Methylnaphthalene	EPA 8270	<2.0	ug/L	CMG	06/28/2007
Hexachlorocyclopentadiene	EPA 8270	<50	ug/L	CMG	06/28/2007
2-Chloronaphthalene	EPA 8270	<10	ug/L	CMG	06/28/2007
2-Nitroaniline	EPA 8270	<50	ug/L	CMG	06/28/2007
Dimethylphthalate	EPA 8270	<10	ug/L	CMG	06/28/2007

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Sample ID: **ML - 2C** Sample No.: **006**

Sample Date: **06/21/2007**

Test Performed	Method	Results	Units	Tech	Analysis Date
Acenaphthylene	EPA 8270	<2.0	ug/L	CMG	06/28/2007
2,6-Dinitrotoluene	EPA 8270	<10	ug/L	CMG	06/28/2007
3-Nitroaniline	EPA 8270	<50	ug/L	CMG	06/28/2007
Acenaphthene	EPA 8270	<2.0	ug/L	CMG	06/28/2007
Dibenzofuran	EPA 8270	<10	ug/L	CMG	06/28/2007
2,4-Dinitrotoluene	EPA 8270	<10	ug/L	CMG	06/28/2007
Diethylphthalate	EPA 8270	<10	ug/L	CMG	06/28/2007
Fluorene	EPA 8270	<2.0	ug/L	CMG	06/28/2007
4-Chlorophenyl Phenyl Ether	EPA 8270	<10	ug/L	CMG	06/28/2007
4-Nitroaniline	EPA 8270	<20	ug/L	CMG	06/28/2007
n-Nitrosodiphenylamine	EPA 8270	<10	ug/L	CMG	06/28/2007
4-Bromophenyl Phenyl Ether	EPA 8270	<10	ug/L	CMG	06/28/2007
Hexachlorobenzene	EPA 8270	<10	ug/L	CMG	06/28/2007
Phenanthrene	EPA 8270	<2.0	ug/L	CMG	06/28/2007
Anthracene	EPA 8270	<2.0	ug/L	CMG	06/28/2007
Carbazole	EPA 8270	<10	ug/L	CMG	06/28/2007
di-n-Butylphthalate	EPA 8270	<15	ug/L	CMG	06/28/2007
Fluoranthene	EPA 8270	<2.0	ug/L	CMG	06/28/2007
Pyrene	EPA 8270	<2.0	ug/L	CMG	06/28/2007
Butylbenzylphthalate	EPA 8270	<10	ug/L	CMG	06/28/2007
Benzo [a] Anthracene	EPA 8270	<2.0	ug/L	CMG	06/28/2007
3,3'-Dichlorobenzidine	EPA 8270	<20	ug/L	CMG	06/28/2007
Chrysene	EPA 8270	<2.0	ug/L	CMG	06/28/2007
bis(2-Ethylhexyl)Phthalate	EPA 8270	<10	ug/L	CMG	06/28/2007
di-n-Octylphthalate	EPA 8270	<10	ug/L	CMG	06/28/2007
Benzo [b] Fluoranthene	EPA 8270	<2.0	ug/L	CMG	06/28/2007
Benzo [k] Fluoranthene	EPA 8270	<2.0	ug/L	CMG	06/28/2007
Benzo [a] Pyrene	EPA 8270	<2.0	ug/L	CMG	06/28/2007
Indeno [1,2,3-cd] Pyrene	EPA 8270	<2.0	ug/L	CMG	06/28/2007
Dibenzo [a,h] Anthracene	EPA 8270	<2.0	ug/L	CMG	06/28/2007
Benzo [g,h,i] Perylene	EPA 8270	<2.0	ug/L	CMG	06/28/2007
Surrogates:	EPA 8270				
***2-Fluorophenol	EPA 8270	37.4	% R	CMG	06/28/2007
***Phenol-D6	EPA 8270	26.0	% R	CMG	06/28/2007
***Nitrobenzene-D5	EPA 8270	81.6	% R	CMG	06/28/2007
***2-Fluorobiphenyl	EPA 8270	85.8	% R	CMG	06/28/2007
***2,4,6-Tribromophenol	EPA 8270	89.6	% R	CMG	06/28/2007

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Date Reported: **07/03/2007**
Work Order No.: **0706-00154**

Sample ID: **ML - 2C** Sample No.: **006**

Sample Date: **06/21/2007**

Test Performed	Method	Results	Units	Tech	Analysis Date
***P-Terphenyl-D14	EPA 8270	99.6	% R	CMG	06/28/2007
Extraction	EPA 3510C	1.0	DF	CMG	06/26/2007
TOTAL PETROLEUM HYDROCARBON	D3328/EPA 8100/			RJD	06/29/2007
Hydrocarbon Content		2500	ug/L	RJD	06/29/2007
Surrogate:	D3328/EPA 8100				
***p-Terphenyl		94.1	% R	RJD	06/29/2007
Extraction	EPA 3510C	1.0	DF	DAB	06/28/2007
PRIORITY POLLUTANT METALS				LLZ	06/25/2007
Silver	EPA 6010B	<0.0050	mg/L	LLZ	06/25/2007
Arsenic	EPA 6010B	<0.010	mg/L	LLZ	06/25/2007
Beryllium	EPA 6010B	<0.0040	mg/L	LLZ	06/25/2007
Cadmium	EPA 6010B	<0.0050	mg/L	LLZ	06/25/2007
Chromium	EPA 6010B	<0.0050	mg/L	LLZ	06/25/2007
Copper	EPA 6010B	<0.015	mg/L	LLZ	06/25/2007
Mercury	EPA 7470A	<0.00040	mg/L	TGG	06/27/2007
Nickel	EPA 6010B	<0.010	mg/L	LLZ	06/25/2007
Lead	EPA 6010B	<0.010	mg/L	LLZ	06/25/2007
Antimony	EPA 6010B	<0.025	mg/L	LLZ	06/25/2007
Selenium	EPA 6010B	<0.025	mg/L	LLZ	06/25/2007
Thallium	EPA 6010B	<0.025	mg/L	LLZ	06/25/2007
Zinc	EPA 6010B	0.17	mg/L	LLZ	06/25/2007
Iron	EPA 6010B	1.8	mg/L	LLZ	06/25/2007
Manganese	EPA 6010B	0.093	mg/L	LLZ	06/25/2007

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Project No.: **03.0032795.12**

Date Received: **06/22/2007**
Date Reported: **07/03/2007**
Work Order No.: **0706-00154**

Sample ID: **Trip Blank 1** Sample No.: **007**

Sample Date: **06/21/2007**

Test Performed	Method	Results	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260			MQS	06/28/2007
Dichlorodifluoromethane	EPA 8260	<2.0	ug/L	MQS	06/28/2007
Chloromethane	EPA 8260	<2.0	ug/L	MQS	06/28/2007
Vinyl Chloride	EPA 8260	<1.0	ug/L	MQS	06/28/2007
Bromomethane	EPA 8260	<2.0	ug/L	MQS	06/28/2007
Chloroethane	EPA 8260	<1.0	ug/L	MQS	06/28/2007
Trichlorofluoromethane	EPA 8260	<2.0	ug/L	MQS	06/28/2007
Diethylether	EPA 8260	<5.0	ug/L	MQS	06/28/2007
Acetone	EPA 8260	<25	ug/L	MQS	06/28/2007
1,1-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
Dichloromethane	EPA 8260	<1.0	ug/L	MQS	06/28/2007
Methyl-Tert-Butyl-Ether	EPA 8260	<1.0	ug/L	MQS	06/28/2007
trans-1,2-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
1,1-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	06/28/2007
2-Butanone	EPA 8260	<25	ug/L	MQS	06/28/2007
2,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	06/28/2007
cis-1,2-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
Chloroform	EPA 8260	<1.0	ug/L	MQS	06/28/2007
Bromochloromethane	EPA 8260	<1.0	ug/L	MQS	06/28/2007
Tetrahydrofuran	EPA 8260	<10	ug/L	MQS	06/28/2007
1,1,1-Trichloroethane	EPA 8260	<1.0	ug/L	MQS	06/28/2007
1,1-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
Carbon Tetrachloride	EPA 8260	<1.0	ug/L	MQS	06/28/2007
1,2-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	06/28/2007
Benzene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
Trichloroethene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
1,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	06/28/2007
Bromodichloromethane	EPA 8260	<1.0	ug/L	MQS	06/28/2007
Dibromomethane	EPA 8260	<1.0	ug/L	MQS	06/28/2007
4-Methyl-2-Pentanone	EPA 8260	<25	ug/L	MQS	06/28/2007
cis-1,3-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
Toluene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
trans-1,3-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
1,1,2-Trichloroethane	EPA 8260	<1.0	ug/L	MQS	06/28/2007
2-Hexanone	EPA 8260	<2.0	ug/L	MQS	06/28/2007
1,3-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	06/28/2007
Tetrachloroethene	EPA 8260	<1.0	ug/L	MQS	06/28/2007

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Work Order No.: **0706-00154**

Sample ID: **Trip Blank 1**
Sample No.: **007**
Sample Date: **06/21/2007**

Test Performed	Method	Results	Units	Tech	Analysis Date
Dibromochloromethane	EPA 8260	<1.0	ug/L	MQS	06/28/2007
1,2-Dibromoethane (EDB)	EPA 8260	<2.0	ug/L	MQS	06/28/2007
Chlorobenzene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
1,1,1,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	06/28/2007
Ethylbenzene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
m&p-Xylene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
o-Xylene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
Styrene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
Bromoform	EPA 8260	<2.0	ug/L	MQS	06/28/2007
Isopropylbenzene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
1,1,2,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	06/28/2007
1,2,3-Trichloropropane	EPA 8260	<1.0	ug/L	MQS	06/28/2007
Bromobenzene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
N-Propylbenzene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
2-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
1,3,5-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
4-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
tert-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
1,2,4-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
sec-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
p-Isopropyltoluene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
1,3-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
1,4-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
n-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
1,2-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
1,2-Dibromo-3-Chloropropane	EPA 8260	<5.0	ug/L	MQS	06/28/2007
1,2,4-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
Hexachlorobutadiene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
Naphthalene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
1,2,3-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	06/28/2007
Surrogates:	EPA 8260				
***1,2-Dichlorobenzene-D4	EPA 8260	104	% R	MQS	06/28/2007
***Toluene-D8	EPA 8260	109	% R	MQS	06/28/2007
***4-Bromofluorobenzene	EPA 8260	99.5	% R	MQS	06/28/2007
Preparation	EPA 5030B	1.0	DF	MQS	06/28/2007

ENVIRONMENTAL CHEMISTRY LABORATORY
106 SOUTH ST, HOPKINTON, MA 01748
MASSACHUSETTS LABORATORY I.D. NO. MA092

EPA METHOD 6010B ANALYSIS
Metals by ICP

QUALITY CONTROL - AQUEOUS

DATE PREPARED: 6/25/2007

QC Sample	Method Blank	Lab Control Sample
Units	mg/L	% Recovery
Acceptance Limits	Results	80-120
Analyte		
Silver (Ag)	<0.0050	90.6
Aluminum (Al)	NA	NA
Arsenic (As)	<0.010	101
Boron (B)	NA	NA
Barium (Ba)	NA	NA
Beryllium (Be)	<0.0040	101
Calcium (Ca)	NA	NA
Cadmium (Cd)	<0.0050	99.0
Cobalt (Co)	NA	NA
Chromium (Cr)	<0.0050	99.2
Copper (Cu)	<0.015	109
Iron (Fe)	<0.025	104
Magnesium (Mg)	NA	NA
Manganese (Mn)	<0.0050	101
Molybdenum (Mo)	NA	NA
Nickel (Ni)	<0.010	101
Lead (Pb)	<0.010	98.7
Antimony (Sb)	<0.025	100
Selenium (Se)	<0.025	99.3
Strontium (Sr)	NA	NA
Titanium (Ti)	NA	NA
Thallium (Tl)	<0.025	94.5
Vanadium (V)	NA	NA
Zinc (Zn)	<0.010	105

Matrix Spike / Duplicate Spike performed as per method and reported if assigned on Chain of Custody.

GZA GEOENVIRONMENTAL, INC.
ENVIRONMENTAL CHEMISTRY LABORATORY
106 SOUTH ST, HOPKINTON, MA 01748
MASSACHUSETTS LABORATORY I.D. NO. MA092

EPA METHOD 7470A ANALYSIS
Mercury by Cold Vapor Atomic Absorption

QUALITY CONTROL - AQUEOUS

Date Prepared: 06/26/07 B

QC Sample	Method Blank	Lab Control Sample
Units	mg/L	% Recovery
Acceptance Limits	Results	85-115
Analyte		
Mercury (Hg)	<0.00040	106

Matrix Spike / Duplicate Spike performed as per method and reported if assigned on Chain of Custody.

GZA GeoEnvironmental, Inc.
106 South Street
Hopkinton, MA 01748
MA092

EPA Method 8270/625 Aqueous Method Blank (MB) and Laboratory Control Sample (LCS) Data

Method Blank

Date Extracted:	**06/26/07**
Date Analyzed:	**06/27/07**
File Name:	**L3727**

Semi-Volatile Organics	**Result**	**Reporting Limit (ug/L)**
n-nitrosodimethylamine	ND	10
pyridine	ND	100
phenol	ND	10
bis(2-chloroethyl)ether	ND	10
2-chlorophenol	ND	10
1,3-dichlorobenzene	ND	10
1,4-dichlorobenzene	ND	10
benzyl alchohol	ND	20
1,2-dichlorobenzene	ND	10
2-methylphenol	ND	10
bis(2-chloroisopropyl)ether	ND	10
3&4-methylphenol	ND	10
n-nitrosodi-n-propylamine	ND	10
hexachloroethane	ND	10
nitrobenzene	ND	10
isophrone	ND	10
2-nitrophenol	ND	10
2,4-dimethylphenol	ND	10
benzoic acid	ND	10
bis(2-chloroethoxy)methane	ND	10
2,4-dichlorophenol	ND	10
1,2,4-trichlorobenzene	ND	10
naphthalene	ND	2.0
4-chloroaniline	ND	10
hexachlorobutadiene	ND	10
4-chloro-3-methylphenol	ND	20
2-methylnaphthalene	ND	2.0
aniline	ND	10
hexachlorocyclopentadiene	ND	50
2,4,6-trichlorophenol	ND	10
2,4,5-trichlorophenol	ND	10
2-chloronaphthalene	ND	10
2-nitroaniline	ND	50
dimethylphthalate	ND	10
acenaphthylene	ND	2.0
2,6-dinitrotoluene	ND	10
3-nitroaniline	ND	50
acenaphthene	ND	2.0
2,4-dinitrophenol	ND	100
dibenzofuran	ND	10
4-nitrophenol	ND	50
2,4-dinitrotoluene	ND	10
diethylphthalate	ND	10
fluorene	ND	2.0
4-chlorophenyl phenyl ether	ND	10
4-nitroaniline	ND	20
4,6-dinitro-2-methylphenol	ND	50
n-nitrosodiphenylamine	ND	10
4-bromophenyl phenyl ether	ND	10
hexachlorobenzene	ND	10
pentachlorophenol	ND	50
phenanthrene	ND	2.0
anthracene	ND	2.0
carbazole	ND	10
di-n-butylphthalate	ND	15
fluoranthene	ND	2.0
benzidine	ND	10
pyrene	ND	2.0
butylbenzylphthalate	ND	10
benz [a] anthracene	ND	2.0
3,3'-dichlorobenzidine	ND	20
chrysene	ND	2.0
bis(2-ethylhexyl)phthalate	ND	10
di-n-octylphthalate	ND	10
benzo [b] fluoranthene	ND	2.0
benzo [k] fluoranthene	ND	2.0
benzo [a] pyrene	ND	2.0
indeno [1,2,3-cd] pyrene	ND	2.0
dibenz [a,h] anthracene	ND	2.0
benzo [ghi] perylene	ND	2.0

Surrogates:	**Recovery (%)**	**Acceptance Limits**
2-FLUOROPHENOL	25.4	15-110
PHENOL-D6	15.7	15-110
NITROBENZENE-D5	64.0	30-130
2-FLUOROBIPHENYL	63.8	30-130
2,4,6-TRIBROMOPHENOL	62.8	15-110
p-TERPHENYL-D14	73.0	30-130

GZA GeoEnvironmental, Inc.
106 South Street
Hopkinton, MA 01748
MA092

EPA Method 8270/625 Aqueous Method Blank (MB) and Laboratory Control Sample (LCS) Data

Laboratory Control Sample

Date Extracted:	**06/26/07**
Date Analyzed:	**06/27/07**
File Name:	**L3728**

Spike Concentration = 20ug/L	% Recovery	Acceptance Limits	Verdict
n-nitrosodimethylamine	45.7	40-140	ok
pyridine	33.3	40-140	out
phenol	21.3	30-130	out
bis(2-chloroethyl)ether	84.7	40-140	ok
2-chlorophenol	70.6	30-130	ok
1,3-dichlorobenzene	63.3	40-140	ok
1,4-dichlorobenzene	62.9	40-140	ok
benzyl alchohol	66.6	40-140	ok
1,2-dichlorobenzene	66.6	40-140	ok
2-methylphenol	60.4	30-130	ok
bis(2-chloroisopropyl)ether	72.2	40-140	ok
3&4-methylphenol	92.3	30-130	ok
n-nitrosodi-n-propylamine	80.7	40-140	ok
hexachloroethane	63.7	40-140	ok
nitrobenzene	78.6	40-140	ok
isophrone	86.7	40-140	ok
2-nitrophenol	84.9	30-130	ok
2,4-dimethylphenol	68.3	30-130	ok
benzoic acid	17.9	30-130	out
bis(2-chloroethoxy)methane	78.3	40-140	ok
2,4-dichlorophenol	86.2	30-130	ok
1,2,4-trichlorobenzene	70.4	40-140	ok
naphthalene	74.4	40-140	ok
4-chloroaniline	78.8	40-140	ok
hexachlorobutadiene	65.7	40-140	ok
4-chloro-3-methylphenol	81.6	30-130	ok
2-methylnaphthalene	74.5	40-140	ok
aniline	58.7	40-140	ok
hexachlorocyclopentadiene	64.1	40-140	ok
2,4,6-trichlorophenol	80.9	30-130	ok
2,4,5-trichlorophenol	89.6	30-130	ok
2-chloronaphthalene	76.9	40-140	ok
2-nitroaniline	84.4	40-140	ok
dimethylphthalate	88.2	40-140	ok
acenaphthylene	82.5	40-140	ok
2,6-dinitrotoluene	93.8	40-140	ok
3-nitroaniline	90.0	40-140	ok
acenaphthene	78.8	40-140	ok
2,4-dinitrophenol	71.7	30-130	ok
dibenzofuran	81.2	40-140	ok
4-nitrophenol	22.6	30-130	out
2,4-dinitrotoluene	87.6	40-140	ok
diethylphthalate	86.2	40-140	ok
fluorene	83.8	40-140	ok
4-chlorophenyl phenyl ether	78.5	40-140	ok
4-nitroaniline	77.6	40-140	ok
4,6-dinitro-2-methylphenol	78.3	30-130	ok
n-nitrosodiphenylamine	85.2	40-140	ok
4-bromophenyl phenyl ether	83.8	40-140	ok
hexachlorobenzene	80.9	40-140	ok
pentachlorophenol	79.2	30-130	ok
phenanthrene	82.7	40-140	ok
anthracene	85.8	40-140	ok
carbazole	84.2	40-140	ok
di-n-butylphthalate	86.2	40-140	ok
fluoranthene	88.7	40-140	ok
benzidine	0.00	40-140	out
pyrene	82.5	40-140	ok
butylbenzylphthalate	83.0	40-140	ok
benz [a] anthracene	74.3	40-140	ok
3,3'-dichlorobenzidine	65.7	40-140	ok
chrysene	83.8	40-140	ok
bis(2-ethylhexyl)phthalate	94.1	40-140	ok
di-n-octylphthalate	94.8	40-140	ok
benzo [b] fluoranthene	92.4	40-140	ok
benzo [k] fluoranthene	77.7	40-140	ok
benzo [a] pyrene	85.2	40-140	ok
indeno [1,2,3-cd] pyrene	84.0	40-140	ok
dibenz [a,h] anthracene	77.0	40-140	ok
benzo [ghi] perylene	83.0	40-140	ok

CAM criteria allows 15% of analytes to exceed criteria.

Surrogates:	Recovery (%)	Acceptance Limits	Verdict
2-FLUOROPHENOL	31.7	15-110	ok
PHENOL-D6	18.9	15-110	ok
NITROBENZENE-D5	79.7	30-130	ok
2-FLUOROBIPHENYL	79.0	30-130	ok
2,4,6-TRIBROMOPHENOL	77.5	15-110	ok
p-TERPHENYL-D14	78.2	30-130	ok

GZA GeoEnvironmental, Inc.
106 South Street
Hopkinton, MA 01748

EPA Method 8260 / 524.2 Aqueous Method Blank (MB) and Laboratory Control Sample (LCS) Data

Method Blank

Date Analyzed:	6/28/2007	
Volatile Organics	**Conc. ug/L**	**Acceptance Limit**
dichlorodifluoromethane	< 1.0	< 1.0
chloromethane	< 1.0	< 1.0
vinyl chloride	< 1.0	< 1.0
bromomethane	< 1.0	< 1.0
chloroethane	< 1.0	< 1.0
trichlorofluoromethane	< 1.0	< 1.0
diethyl ether	< 0.5	< 0.5
acrolein	< 25	< 25
acetone	< 25	< 25
1,1-dichloroethene	< 0.5	< 0.5
FREON-113	< 1.0	< 1.0
Iodomethane	< 0.5	< 0.5
carbon disulfide	< 0.5	< 0.5
dichloromethane	< 1.0	< 1.0
tert-butyl alcohol (TBA)	< 12	< 12
acrylonitrile	< 0.5	< 0.5
methyl-tert-butyl-ether	< 0.5	< 0.5
trans-1,2-dichloroethene	< 0.5	< 0.5
1,1-dichloroethane	< 0.5	< 0.5
di-isopropyl ether (DIPE)	< 0.5	< 0.5
ethyl tert-butyl ether (EtBE)	< 0.5	< 0.5
vinyl acetate	< 0.5	< 0.5
2-butanone	< 25	< 25
2,2-dichloropropane	< 0.5	< 0.5
cis-1,2-dichloroethene	< 0.5	< 0.5
chloroform	< 1.0	< 1.0
bromochloromethane	< 0.5	< 0.5
tetrahydrafuran	< 2.0	< 2.0
1,1,1-trichloroethane	< 0.5	< 0.5
1,1-dichloropropene	< 0.5	< 0.5
carbon tetrachloride	< 0.5	< 0.5
1,2-dichloroethane	< 0.5	< 0.5
benzene	< 0.5	< 0.5
tert-amyl methyl ether (TAME)	< 0.5	< 0.5
trichloroethene	< 0.5	< 0.5
1,2-dichloropropane	< 0.5	< 0.5
bromodichloromethane	< 0.5	< 0.5
2-chloroethyl vinyl ether	< 0.5	< 0.5
1,4-Dioxane	< 100	< 100
dibromomethane	< 0.5	< 0.5
4-methyl-2-pentanone	< 25	< 25
cis-1,3-dichloropropene	< 0.5	< 0.5
toluene	< 0.5	< 0.5
trans-1,3-dichloropropene	< 1.0	< 1.0
1,1,2-trichloroethane	< 0.5	< 0.5
2-hexanone	< 25	< 25
1,3-dichloropropane	< 0.5	< 0.5
tetrachloroethene	< 0.5	< 0.5
dibromochloromethane	< 0.5	< 0.5
1,2-dibromoethane (EDB)	< 0.5	< 0.5
chlorobenzene	< 0.5	< 0.5
1,1,1,2-tetrachloroethane	< 0.5	< 0.5
ethylbenzene	< 0.5	< 0.5
1,1,2,2-tetrachloroethane	< 0.5	< 0.5
m&p-xylene	< 1.0	< 1.0
o-xylene	< 0.5	< 0.5
styrene	< 0.5	< 0.5
bromoform	< 0.5	< 0.5
isopropylbenzene	< 0.5	< 0.5
1,2,3-trichloropropane	< 0.5	< 0.5
bromobenzene	< 0.5	< 0.5
n-propylbenzene	< 0.5	< 0.5
2-chlorotoluene	< 0.5	< 0.5
1,3,5-trimethylbenzene	< 0.5	< 0.5
trans-1,4-dichloro-2-butene	< 0.5	< 0.5
4-chlorotoluene	< 0.5	< 0.5
tert-butyl-benzene	< 0.5	< 0.5
1,2,4-trimethylbenzene	< 0.5	< 0.5
sec-butyl-benzene	< 0.5	< 0.5
p-isopropyltoluene	< 0.5	< 0.5
1,3-dichlorobenzene	< 0.5	< 0.5
1,4-dichlorobenzene	< 0.5	< 0.5
n-butylbenzene	< 0.5	< 0.5
1,2-dichlorobenzene	< 0.5	< 0.5
1,2-dibromo-3-chloropropane	< 1.0	< 1.0
1,2,4-trichlorobenzene	< 0.5	< 0.5
hexachlorobutadiene	< 0.5	< 0.5
naphthalene	< 1.5	< 1.5
1,2,3-trichlorobenzene	< 0.5	< 0.5

Laboratory Control Sample

Date Analyzed:	6/28/2007		
Spike Concentration = 20ug/L	**% Recovery**	**Acceptance Limits**	**Verdict**
dichlorodifluoromethane	104	70-130	ok
chloromethane	94.9	70-130	ok
vinyl chloride	99.5	70-130	ok
bromomethane	92.7	70-130	ok
chloroethane	98.4	70-130	ok
trichlorofluoromethane	109	70-130	ok
diethyl ether	91.7	70-130	ok
acrolein	88.0	70-130	ok
acetone	95.0	70-130	ok
1,1-dichloroethene	95.4	70-130	ok
FREON-113	97.0	70-130	ok
Iodomethane	93.1	70-130	ok
carbon disulfide	97.7	70-130	ok
dichloromethane	88.1	70-130	ok
tert-butyl alcohol (TBA)	99.5	70-130	ok
acrylonitrile	101	70-130	ok
methyl-tert-butyl-ether	93.6	70-130	ok
trans-1,2-dichloroethene	97.5	70-130	ok
1,1-dichloroethane	98.0	70-130	ok
di-isopropyl ether (DIPE)	96.8	70-130	ok
ethyl tert-butyl ether (EtBE)	98.7	70-130	ok
vinyl acetate	98.6	70-130	ok
2-butanone	92.4	70-130	ok
2,2-dichloropropane	106	70-130	ok
cis-1,2-dichloroethene	95.4	70-130	ok
chloroform	97.9	70-130	ok
bromochloromethane	94.5	70-130	ok
tetrahydrafuran	103	70-130	ok
1,1,1-trichloroethane	107	70-130	ok
1,1-dichloropropene	99.3	70-130	ok
carbon tetrachloride	107	70-130	ok
1,2-dichloroethane	97.2	70-130	ok
benzene	93.9	70-130	ok
tert-amyl methyl ether (TAME)	90.1	70-130	ok
trichloroethene	97.4	70-130	ok
1,2-dichloropropane	97.5	70-130	ok
bromodichloromethane	101	70-130	ok
2-chloroethyl vinyl ether	97.5	70-130	ok
1,4-Dioxane	91.3	70-130	ok
dibromomethane	98.0	70-130	ok
4-methyl-2-pentanone	96.5	70-130	ok
cis-1,3-dichloropropene	99.0	70-130	ok
toluene	104	70-130	ok
trans-1,3-dichloropropene	91.3	70-130	ok
1,1,2-trichloroethane	99.5	70-130	ok
2-hexanone	98.2	70-130	ok
1,3-dichloropropane	98.3	70-130	ok
tetrachloroethene	94.9	70-130	ok
dibromochloromethane	103	70-130	ok
1,2-dibromoethane (EDB)	104	70-130	ok
chlorobenzene	106	70-130	ok
1,1,1,2-tetrachloroethane	103	70-130	ok
ethylbenzene	106	70-130	ok
1,1,2,2-tetrachloroethane	113	70-130	ok
m&p-xylene	107	70-130	ok
o-xylene	101	70-130	ok
styrene	104	70-130	ok
bromoform	103	70-130	ok
isopropylbenzene	105	70-130	ok
1,2,3-trichloropropane	101	70-130	ok
bromobenzene	103	70-130	ok
n-propylbenzene	105	70-130	ok
2-chlorotoluene	99.2	70-130	ok
1,3,5-trimethylbenzene	104	70-130	ok
trans-1,4-dichloro-2-butene	101	70-130	ok
4-chlorotoluene	102	70-130	ok
tert-butyl-benzene	106	70-130	ok
1,2,4-trimethylbenzene	103	70-130	ok
sec-butyl-benzene	104	70-130	ok
p-isopropyltoluene	105	70-130	ok
1,3-dichlorobenzene	102	70-130	ok
1,4-dichlorobenzene	103	70-130	ok
n-butylbenzene	107	70-130	ok
1,2-dichlorobenzene	101	70-130	ok
1,2-dibromo-3-chloropropane	101	70-130	ok
1,2,4-trichlorobenzene	107	70-130	ok
hexachlorobutadiene	104	70-130	ok
naphthalene	105	70-130	ok
1,2,3-trichlorobenzene	107	70-130	ok

SMF criteria allows 5 compounds to be outside acceptance limits

Surrogates:	Recovery (%)	Acceptance Limits
DIBROMOFLUOROMETHANE	112	70-130
1,2-DICHLOROETHANE-D4	103	70-130
TOLUENE-D8	107	70-130
4-BROMOFLUOROBENZENE	99.2	70-130
1,2-DICHLOROBENZENE-D4	98.2	70-130

Surrogates:	Recovery (%)	Acceptance Limits	Verdict
DIBROMOFLUOROMETHANE	101	70-130	ok
1,2-DICHLOROETHANE-D4	93.4	70-130	ok
TOLUENE-D8	100	70-130	ok
4-BROMOFLUOROBENZENE	99.6	70-130	ok
1,2-DICHLOROBENZENE-D4	99.5	70-130	ok

Instrument: HP GC/MS "S"

WHITE COPY - Original YELLOW COPY - Lab Files PINK COPY - Project Manager

W.O. # 0706-00154 (for lab use only)

CHAIN-OF-CUSTODY RECORD

Sample I.D.	Date/Time Sampled (Very Important)	Matrix (A=Air, S=Soil, GW=Ground W., SW=Surface W., WW=Waste W., DW=Drinking W., Other (specify))	WW ONLY: pH, Cond.	GC Screen (VOA)	524.2 502.2	624	601 602	625	Formaldehyde	8260	8021	8021 - "8010" List	8021 "8020" List	8270 Full DPAH BN	8082-PCBs Only	8081 - Pest Only	TPH-GC (Mod. 8100)	TPH-GC w/FING	EPH (MA DEP)	VPH (MA DEP)	TCLP (Spec. Below)	Filtering (✓ if requested)	Metals PPM-13 R-8	Metals (List Below)	Total # of Cont.	Note #
ML-1A	6/21/07	GW								X				X				X					X			6	
ML-1B										X				X				X					X			6	
ML-1C										X				X				X					X			6	
ML-2A										X				X				X					X			6	
ML-2B										X				X				X					X			6	
ML-2C										X				X				X					X			6	
Trip Blank 1										X																1	
PRESERVATIVE (Cl - HCl, M=MeOH, N - HNO3, S - H2SO4, Na - NaOH, O - Other)*										Cl													N				
CONTAINER TYPE (P-Plastic, G-Glass, V-Vial, O-Other)*										V				G				G					P				

RELINQUISHED BY: DATE/TIME: 6/21/07 7:00PM RECEIVED BY: BioBiocon 6/22/07 1100

RELINQUISHED BY: BioBiocon 6/22/07 1145 DATE/TIME RECEIVED BY: 6/22/07 1245

RELINQUISHED BY: DATE/TIME RECEIVED BY:

NOTES: Preservatives, special reporting limits, known contamination, additional testing parameters, etc.:

1) TPH Fingerprint with Organo-siloxanes

2) Iron, Manganese and PPM-13

TB 0702

PROJECT MANAGER: Ed Summerly EXT: 3133

DATA REPORT ☑ PDF (Adobe) ☐ ASCII ☐ EXCEL Specify State

LAB USE:

TURNAROUND TIME: Standard Rush ___ Days, Approved by: ___ TEMP. OF COOLER 3.0 °C

6/21 03.0032795-12 GZA FILE NO: P.O. NO.

6/22/07 1245 LG

PROJECT Charlt Bedrock Work Plan

LOCATION Alton, RI

COLLECTOR(S) RAC, EAS SHEET 1 OF 1

GZA GeoEnvironmental, Inc.
Engineers and Scientists
106 South Street
Hopkinton, MA 01748
(508) 435-9244
FAX (508) 435-9912

ACCREDITED IN ACCORDANCE WITH

GZAP003

GZA GeoEnvironmental, Inc.
106 South Street
Hopkinton, MA 01748
(781) 278-4700

Laboratory Identification Numbers:
MA and ME: **MA092** NH: **2028**
CT: **PH0579** RI: **LAO00236**
NELAC - NYS DOH: **11063**

ANALYTICAL REPORT

GZA GeoEnvironmental, Inc.
140 Broadway
Providence, RI 02903

Ed Summerly

Project No.: **03.0032795.12**
Work Order No.: **0706-00155**
Date Received: **06/22/2007**
Date Reported: **07/03/2007**

SAMPLE INFORMATION

Date Sampled	Matrix	Laboratory ID	Sample ID
06/21/2007	Aqueous	0706-00155 001	ML - 3A
06/21/2007	Aqueous	0706-00155 002	ML - 3B
06/21/2007	Aqueous	0706-00155 003	ML - 3C
06/21/2007	Aqueous	0706-00155 004	ML - 3D
06/21/2007	Aqueous	0706-00155 005	Trip Blank 2

GZA GeoEnvironmental, Inc.
106 South Street
Hopkinton, MA 01748
(781) 278-4700

ANALYTICAL REPORT

GZA GeoEnvironmental, Inc.
140 Broadway
Providence, RI 02903

Ed Summerly

Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **06/22/2007**
Date Reported: **07/03/2007**
Work Order No.: **0706-00155**

PROJECT NARRATIVE:

1. Sample Receipt

The samples were received on 06/22/07 via _x_GZA courier, __EC, __FEDEX, or ___hand delivered. The temperature of the __temperature blank/_x_cooler air, was 3.8 degrees C. The temperature requirement for most analyses is above freezing to 6 degrees C. The samples were received intact for all requested analyses.

The chain of custody indicates that the samples, when required, were chemically preserved in accordance with the method they reference.

2. EPA Method 6010B/7470A - Metals

Attach QC 6010B 06/25/07 - Aqueous
Attach QC 7470A 06/26/07 B - Aqueous

3. EPA Method 8270 - SVOCs

* The low surrogate recoveries for sample ML-3A were due to the need to re-filter the extract to remove water during the concentration process. The sample was not re-digested and rerun as the entire sample was used during the extraction process.

Attach QC 8270 06/27/07 - Aqueous

4. EPA Method 8260 - VOCs

Attach QC 8260 06/28/07 S - Aqueous
Attach QC 8260 06/29/06 S - MB#2 - Aqueous

5. Total Petroleum Hydrocarbons

* Most of the reported value for TPH is due to high levels of sulfonamide compounds. The largest constituent peak was tentatively identified by GC/MS as N-butyl-benzenesulfonamide. The "Q" value for this MS identification is <50%, therefore identification is tentative and the analyte may be a similar compound from the general class of sulfonamides.

The percent of TPH due to sulfonamide compounds for each sample is listed below:

ML-3A, ML-3B, ML-3C, ML-3D: all >90% sulfonamides

* The diluted out surrogate recoveries are due to interference from the type and concentration of interferences present in the sample.

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106 South Street
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ANALYTICAL REPORT

GZA GeoEnvironmental, Inc.
140 Broadway
Providence, RI 02903

Ed Summerly

Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **06/22/2007**
Date Reported: **07/03/2007**
Work Order No.: **0706-00155**

Data Authorized By: _____

NELAC certification, as indicated by the NELAC Lab ID Number, is per analyte. For a complete list of NELAC validated analytes, please contact the laboratory.

Abbreviations:
% R = % Recovery
DF = Dilution Factor
DFS = Dilution Factor Solids
DO = Diluted Out

Method Key:
Method 8260: The current version of the method is 8260B.
Method 8021: The current version of the method is 8021B.
Method 8270: The current version of the method is 8270C.
Method 6010: The current version of the method is 6010B.

Please note that the laboratory signed copy of the chain of custody record is an integral part of the data report.

Soil data is reported on a dry weight basis unless otherwise specified.

Matrix Spike / Matrix Spike Duplicate sets are performed as per method and are reported at the end of the analytical report if assigned on the Chain of Custody.

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Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **06/22/2007**
Date Reported: **07/03/2007**
Work Order No.: **0706-00155**

Sample ID: **ML - 3A** Sample No.: **001**

Sample Date: **06/21/2007**

Test Performed	Method	Results	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260			MQS	06/29/2007
Dichlorodifluoromethane	EPA 8260	<200	ug/L	MQS	06/29/2007
Chloromethane	EPA 8260	<200	ug/L	MQS	06/29/2007
Vinyl Chloride	EPA 8260	<100	ug/L	MQS	06/29/2007
Bromomethane	EPA 8260	<200	ug/L	MQS	06/29/2007
Chloroethane	EPA 8260	<100	ug/L	MQS	06/29/2007
Trichlorofluoromethane	EPA 8260	<200	ug/L	MQS	06/29/2007
Diethylether	EPA 8260	<500	ug/L	MQS	06/29/2007
Acetone	EPA 8260	<2500	ug/L	MQS	06/29/2007
1,1-Dichloroethene	EPA 8260	<100	ug/L	MQS	06/29/2007
Dichloromethane	EPA 8260	<100	ug/L	MQS	06/29/2007
Methyl-Tert-Butyl-Ether	EPA 8260	<100	ug/L	MQS	06/29/2007
trans-1,2-Dichloroethene	EPA 8260	<100	ug/L	MQS	06/29/2007
1,1-Dichloroethane	EPA 8260	<100	ug/L	MQS	06/29/2007
2-Butanone	EPA 8260	<2500	ug/L	MQS	06/29/2007
2,2-Dichloropropane	EPA 8260	<100	ug/L	MQS	06/29/2007
cis-1,2-Dichloroethene	EPA 8260	110	ug/L	MQS	06/29/2007
Chloroform	EPA 8260	<100	ug/L	MQS	06/29/2007
Bromochloromethane	EPA 8260	<100	ug/L	MQS	06/29/2007
Tetrahydrofuran	EPA 8260	<1000	ug/L	MQS	06/29/2007
1,1,1-Trichloroethane	EPA 8260	<100	ug/L	MQS	06/29/2007
1,1-Dichloropropene	EPA 8260	<100	ug/L	MQS	06/29/2007
Carbon Tetrachloride	EPA 8260	<100	ug/L	MQS	06/29/2007
1,2-Dichloroethane	EPA 8260	<100	ug/L	MQS	06/29/2007
Benzene	EPA 8260	<100	ug/L	MQS	06/29/2007
Trichloroethene	EPA 8260	<100	ug/L	MQS	06/29/2007
1,2-Dichloropropane	EPA 8260	<100	ug/L	MQS	06/29/2007
Bromodichloromethane	EPA 8260	<100	ug/L	MQS	06/29/2007
Dibromomethane	EPA 8260	<100	ug/L	MQS	06/29/2007
4-Methyl-2-Pentanone	EPA 8260	<2500	ug/L	MQS	06/29/2007
cis-1,3-Dichloropropene	EPA 8260	<100	ug/L	MQS	06/29/2007
Toluene	EPA 8260	<100	ug/L	MQS	06/29/2007
trans-1,3-Dichloropropene	EPA 8260	<100	ug/L	MQS	06/29/2007
1,1,2-Trichloroethane	EPA 8260	<100	ug/L	MQS	06/29/2007
2-Hexanone	EPA 8260	<200	ug/L	MQS	06/29/2007
1,3-Dichloropropane	EPA 8260	<100	ug/L	MQS	06/29/2007
Tetrachloroethene	EPA 8260	3700	ug/L	MQS	06/29/2007

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Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **06/22/2007**
Date Reported: **07/03/2007**
Work Order No.: **0706-00155**

Sample ID: **ML - 3A** Sample No.: **001**

Sample Date: **06/21/2007**

Test Performed	Method	Results	Units	Tech	Analysis Date
Dibromochloromethane	EPA 8260	<100	ug/L	MQS	06/29/2007
1,2-Dibromoethane (EDB)	EPA 8260	<200	ug/L	MQS	06/29/2007
Chlorobenzene	EPA 8260	<100	ug/L	MQS	06/29/2007
1,1,1,2-Tetrachloroethane	EPA 8260	<100	ug/L	MQS	06/29/2007
Ethylbenzene	EPA 8260	<100	ug/L	MQS	06/29/2007
m&p-Xylene	EPA 8260	<100	ug/L	MQS	06/29/2007
o-Xylene	EPA 8260	<100	ug/L	MQS	06/29/2007
Styrene	EPA 8260	<100	ug/L	MQS	06/29/2007
Bromoform	EPA 8260	<200	ug/L	MQS	06/29/2007
Isopropylbenzene	EPA 8260	<100	ug/L	MQS	06/29/2007
1,1,2,2-Tetrachloroethane	EPA 8260	<100	ug/L	MQS	06/29/2007
1,2,3-Trichloropropane	EPA 8260	<100	ug/L	MQS	06/29/2007
Bromobenzene	EPA 8260	<100	ug/L	MQS	06/29/2007
N-Propylbenzene	EPA 8260	<100	ug/L	MQS	06/29/2007
2-Chlorotoluene	EPA 8260	<100	ug/L	MQS	06/29/2007
1,3,5-Trimethylbenzene	EPA 8260	<100	ug/L	MQS	06/29/2007
4-Chlorotoluene	EPA 8260	<100	ug/L	MQS	06/29/2007
tert-Butylbenzene	EPA 8260	<100	ug/L	MQS	06/29/2007
1,2,4-Trimethylbenzene	EPA 8260	<100	ug/L	MQS	06/29/2007
sec-Butylbenzene	EPA 8260	<100	ug/L	MQS	06/29/2007
p-Isopropyltoluene	EPA 8260	<100	ug/L	MQS	06/29/2007
1,3-Dichlorobenzene	EPA 8260	<100	ug/L	MQS	06/29/2007
1,4-Dichlorobenzene	EPA 8260	<100	ug/L	MQS	06/29/2007
n-Butylbenzene	EPA 8260	<100	ug/L	MQS	06/29/2007
1,2-Dichlorobenzene	EPA 8260	<100	ug/L	MQS	06/29/2007
1,2-Dibromo-3-Chloropropane	EPA 8260	<500	ug/L	MQS	06/29/2007
1,2,4-Trichlorobenzene	EPA 8260	<100	ug/L	MQS	06/29/2007
Hexachlorobutadiene	EPA 8260	<100	ug/L	MQS	06/29/2007
Naphthalene	EPA 8260	<100	ug/L	MQS	06/29/2007
1,2,3-Trichlorobenzene	EPA 8260	<100	ug/L	MQS	06/29/2007
Surrogates:	EPA 8260				
***1,2-Dichloroethane-D4	EPA 8260	117	% R	MQS	06/29/2007
***Toluene-D8	EPA 8260	106	% R	MQS	06/29/2007
***4-Bromofluorobenzene	EPA 8260	101	% R	MQS	06/29/2007
Preparation	EPA 5030B	100	DF	MQS	06/28/2007
SEMI-VOLATILE ORGANICS	EPA 8270			CMG	06/29/2007
ACID FRACTION:	EPA 8270				

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Work Order No.: **0706-00155**

Sample ID: **ML - 3A** Sample No.: **001**

Sample Date: **06/21/2007**

Test Performed	Method	Results	Units	Tech	Analysis Date
Phenol	EPA 8270	<10	ug/L	CMG	06/29/2007
2-Chlorophenol	EPA 8270	<10	ug/L	CMG	06/29/2007
2-Methylphenol	EPA 8270	<10	ug/L	CMG	06/29/2007
3&4-Methylphenol	EPA 8270	<10	ug/L	CMG	06/29/2007
2-Nitrophenol	EPA 8270	<10	ug/L	CMG	06/29/2007
2,4-Dimethylphenol	EPA 8270	<10	ug/L	CMG	06/29/2007
Benzoic Acid	EPA 8270	<10	ug/L	CMG	06/29/2007
2,4-Dichlorophenol	EPA 8270	<10	ug/L	CMG	06/29/2007
4-Chloro-3-Methylphenol	EPA 8270	<20	ug/L	CMG	06/29/2007
2,4,6-Trichlorophenol	EPA 8270	<10	ug/L	CMG	06/29/2007
2,4,5-Trichlorophenol	EPA 8270	<10	ug/L	CMG	06/29/2007
2,4-Dinitrophenol	EPA 8270	<100	ug/L	CMG	06/29/2007
4-Nitrophenol	EPA 8270	<50	ug/L	CMG	06/29/2007
4,6-Dinitro-2-Methylphenol	EPA 8270	<50	ug/L	CMG	06/29/2007
Pentachlorophenol	EPA 8270	<50	ug/L	CMG	06/29/2007
BASE-NEUTRAL FRACTION:					
n-Nitrosodimethylamine	EPA 8270	<10	ug/L	CMG	06/29/2007
bis(2-Chloroethyl)Ether	EPA 8270	<10	ug/L	CMG	06/29/2007
1,3-Dichlorobenzene	EPA 8270	<10	ug/L	CMG	06/29/2007
1,4-Dichlorobenzene	EPA 8270	<10	ug/L	CMG	06/29/2007
Benzyl Alcohol	EPA 8270	<20	ug/L	CMG	06/29/2007
1,2-Dichlorobenzene	EPA 8270	<10	ug/L	CMG	06/29/2007
bis(2-Chloroisopropyl)Ether	EPA 8270	<10	ug/L	CMG	06/29/2007
n-Nitrosodi-n-Propylamine	EPA 8270	<10	ug/L	CMG	06/29/2007
Hexachloroethane	EPA 8270	<10	ug/L	CMG	06/29/2007
Nitrobenzene	EPA 8270	<10	ug/L	CMG	06/29/2007
Isophorone	EPA 8270	<10	ug/L	CMG	06/29/2007
bis(2-Chloroethoxy)Methane	EPA 8270	<10	ug/L	CMG	06/29/2007
1,2,4-Trichlorobenzene	EPA 8270	<10	ug/L	CMG	06/29/2007
Naphthalene	EPA 8270	<2.0	ug/L	CMG	06/29/2007
4-Chloroaniline	EPA 8270	<20	ug/L	CMG	06/29/2007
Hexachlorobutadiene	EPA 8270	<10	ug/L	CMG	06/29/2007
2-Methylnaphthalene	EPA 8270	<2.0	ug/L	CMG	06/29/2007
Hexachlorocyclopentadiene	EPA 8270	<50	ug/L	CMG	06/29/2007
2-Chloronaphthalene	EPA 8270	<10	ug/L	CMG	06/29/2007
2-Nitroaniline	EPA 8270	<50	ug/L	CMG	06/29/2007
Dimethylphthalate	EPA 8270	<10	ug/L	CMG	06/29/2007

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Date Received: **06/22/2007**
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Work Order No.: **0706-00155**

Sample ID: **ML - 3A** Sample No.: **001**

Sample Date: **06/21/2007**

Test Performed	Method	Results		Units	Tech	Analysis Date
Acenaphthylene	EPA 8270	<2.0		ug/L	CMG	06/29/2007
2,6-Dinitrotoluene	EPA 8270	<10		ug/L	CMG	06/29/2007
3-Nitroaniline	EPA 8270	<50		ug/L	CMG	06/29/2007
Acenaphthene	EPA 8270	<2.0		ug/L	CMG	06/29/2007
Dibenzofuran	EPA 8270	<10		ug/L	CMG	06/29/2007
2,4-Dinitrotoluene	EPA 8270	<10		ug/L	CMG	06/29/2007
Diethylphthalate	EPA 8270	<10		ug/L	CMG	06/29/2007
Fluorene	EPA 8270	<2.0		ug/L	CMG	06/29/2007
4-Chlorophenyl Phenyl Ether	EPA 8270	<10		ug/L	CMG	06/29/2007
4-Nitroaniline	EPA 8270	<20		ug/L	CMG	06/29/2007
n-Nitrosodiphenylamine	EPA 8270	<10		ug/L	CMG	06/29/2007
4-Bromophenyl Phenyl Ether	EPA 8270	<10		ug/L	CMG	06/29/2007
Hexachlorobenzene	EPA 8270	<10		ug/L	CMG	06/29/2007
Phenanthrene	EPA 8270	<2.0		ug/L	CMG	06/29/2007
Anthracene	EPA 8270	<2.0		ug/L	CMG	06/29/2007
Carbazole	EPA 8270	<10		ug/L	CMG	06/29/2007
di-n-Butylphthalate	EPA 8270	<15		ug/L	CMG	06/29/2007
Fluoranthene	EPA 8270	<2.0		ug/L	CMG	06/29/2007
Pyrene	EPA 8270	<2.0		ug/L	CMG	06/29/2007
Butylbenzylphthalate	EPA 8270	<10		ug/L	CMG	06/29/2007
Benzo [a] Anthracene	EPA 8270	<2.0		ug/L	CMG	06/29/2007
3,3'-Dichlorobenzidine	EPA 8270	<20		ug/L	CMG	06/29/2007
Chrysene	EPA 8270	<2.0		ug/L	CMG	06/29/2007
bis(2-Ethylhexyl)Phthalate	EPA 8270	<10		ug/L	CMG	06/29/2007
di-n-Octylphthalate	EPA 8270	<10		ug/L	CMG	06/29/2007
Benzo [b] Fluoranthene	EPA 8270	<2.0		ug/L	CMG	06/29/2007
Benzo [k] Fluoranthene	EPA 8270	<2.0		ug/L	CMG	06/29/2007
Benzo [a] Pyrene	EPA 8270	<2.0		ug/L	CMG	06/29/2007
Indeno [1,2,3-cd] Pyrene	EPA 8270	<2.0		ug/L	CMG	06/29/2007
Dibenzo [a,h] Anthracene	EPA 8270	<2.0		ug/L	CMG	06/29/2007
Benzo [g,h,i] Perylene	EPA 8270	<2.0		ug/L	CMG	06/29/2007
Surrogates:	EPA 8270					
***2-Fluorophenol	EPA 8270	7.4	*	% R	CMG	06/29/2007
***2-Chlorophenol-D4	EPA 8270	18.0		% R	CMG	06/29/2007
***Nitrobenzene-D5	EPA 8270	19.8	*	% R	CMG	06/29/2007
***2-Fluorobiphenyl	EPA 8270	24.5	*	% R	CMG	06/29/2007
***2,4,6-Tribromophenol	EPA 8270	38.9		% R	CMG	06/29/2007

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Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **06/22/2007**
Date Reported: **07/03/2007**
Work Order No.: **0706-00155**

Sample ID: **ML - 3A** Sample No.: **001**

Sample Date: **06/21/2007**

Test Performed	Method	Results	Units	Tech	Analysis Date
***P-Terphenyl-D14	EPA 8270	47.7	% R	CMG	06/29/2007
Extraction	EPA 3510C	1.0	DF	DAB	06/27/2007
TOTAL PETROLEUM HYDROCARBON	D3328/EPA 8100/			RJD	06/29/2007
Hydrocarbon Content		400	ug/L	RJD	06/29/2007
Surrogate:	D3328/EPA 8100				
***p-Terphenyl		78.0	% R	RJD	06/29/2007
Extraction	EPA 3510C	1.0	DF	DAB	06/28/2007
PRIORITY POLLUTANT METALS				LLZ	06/25/2007
Silver	EPA 6010B	<0.0050	mg/L	LLZ	06/25/2007
Arsenic	EPA 6010B	<0.010	mg/L	LLZ	06/25/2007
Beryllium	EPA 6010B	<0.0040	mg/L	LLZ	06/25/2007
Cadmium	EPA 6010B	<0.0050	mg/L	LLZ	06/25/2007
Chromium	EPA 6010B	<0.0050	mg/L	LLZ	06/25/2007
Copper	EPA 6010B	<0.015	mg/L	LLZ	06/25/2007
Mercury	EPA 7470A	<0.00040	mg/L	TGG	06/27/2007
Nickel	EPA 6010B	<0.010	mg/L	LLZ	06/25/2007
Lead	EPA 6010B	<0.010	mg/L	LLZ	06/25/2007
Antimony	EPA 6010B	<0.025	mg/L	LLZ	06/25/2007
Selenium	EPA 6010B	<0.025	mg/L	LLZ	06/25/2007
Thallium	EPA 6010B	<0.025	mg/L	LLZ	06/25/2007
Zinc	EPA 6010B	0.014	mg/L	LLZ	06/25/2007
Iron	EPA 6010B	4.2	mg/L	LLZ	06/25/2007
Manganese	EPA 6010B	1.1	mg/L	LLZ	06/25/2007

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Date Received: **06/22/2007**
Date Reported: **07/03/2007**
Work Order No.: **0706-00155**

Sample ID: **ML - 3B** Sample No.: **002**

Sample Date: **06/21/2007**

Test Performed	Method	Results	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260			MQS	06/30/2007
Dichlorodifluoromethane	EPA 8260	<2.0	ug/L	MQS	06/30/2007
Chloromethane	EPA 8260	<2.0	ug/L	MQS	06/30/2007
Vinyl Chloride	EPA 8260	<1.0	ug/L	MQS	06/30/2007
Bromomethane	EPA 8260	<2.0	ug/L	MQS	06/30/2007
Chloroethane	EPA 8260	<1.0	ug/L	MQS	06/30/2007
Trichlorofluoromethane	EPA 8260	<2.0	ug/L	MQS	06/30/2007
Diethylether	EPA 8260	<5.0	ug/L	MQS	06/30/2007
Acetone	EPA 8260	<25	ug/L	MQS	06/30/2007
1,1-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	06/30/2007
Dichloromethane	EPA 8260	<1.0	ug/L	MQS	06/30/2007
Methyl-Tert-Butyl-Ether	EPA 8260	<1.0	ug/L	MQS	06/30/2007
trans-1,2-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	06/30/2007
1,1-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	06/30/2007
2-Butanone	EPA 8260	<25	ug/L	MQS	06/30/2007
2,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	06/30/2007
cis-1,2-Dichloroethene	EPA 8260	3.2	ug/L	MQS	06/30/2007
Chloroform	EPA 8260	<1.0	ug/L	MQS	06/30/2007
Bromochloromethane	EPA 8260	<1.0	ug/L	MQS	06/30/2007
Tetrahydrofuran	EPA 8260	<10	ug/L	MQS	06/30/2007
1,1,1-Trichloroethane	EPA 8260	<1.0	ug/L	MQS	06/30/2007
1,1-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	06/30/2007
Carbon Tetrachloride	EPA 8260	<1.0	ug/L	MQS	06/30/2007
1,2-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	06/30/2007
Benzene	EPA 8260	<1.0	ug/L	MQS	06/30/2007
Trichloroethene	EPA 8260	<1.0	ug/L	MQS	06/30/2007
1,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	06/30/2007
Bromodichloromethane	EPA 8260	<1.0	ug/L	MQS	06/30/2007
Dibromomethane	EPA 8260	<1.0	ug/L	MQS	06/30/2007
4-Methyl-2-Pentanone	EPA 8260	<25	ug/L	MQS	06/30/2007
cis-1,3-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	06/30/2007
Toluene	EPA 8260	3.2	ug/L	MQS	06/30/2007
trans-1,3-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	06/30/2007
1,1,2-Trichloroethane	EPA 8260	<1.0	ug/L	MQS	06/30/2007
2-Hexanone	EPA 8260	<2.0	ug/L	MQS	06/30/2007
1,3-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	06/30/2007
Tetrachloroethene	EPA 8260	11	ug/L	MQS	06/30/2007

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Ed Summerly

Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **06/22/2007**
Date Reported: **07/03/2007**
Work Order No.: **0706-00155**

Sample ID: **ML - 3B** Sample No.: **002**

Sample Date: **06/21/2007**

Test Performed	Method	Results	Units	Tech	Analysis Date
Dibromochloromethane	EPA 8260	<1.0	ug/L	MQS	06/30/2007
1,2-Dibromoethane (EDB)	EPA 8260	<2.0	ug/L	MQS	06/30/2007
Chlorobenzene	EPA 8260	<1.0	ug/L	MQS	06/30/2007
1,1,1,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	06/30/2007
Ethylbenzene	EPA 8260	<1.0	ug/L	MQS	06/30/2007
m&p-Xylene	EPA 8260	<1.0	ug/L	MQS	06/30/2007
o-Xylene	EPA 8260	<1.0	ug/L	MQS	06/30/2007
Styrene	EPA 8260	<1.0	ug/L	MQS	06/30/2007
Bromoform	EPA 8260	<2.0	ug/L	MQS	06/30/2007
Isopropylbenzene	EPA 8260	<1.0	ug/L	MQS	06/30/2007
1,1,2,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	06/30/2007
1,2,3-Trichloropropane	EPA 8260	<1.0	ug/L	MQS	06/30/2007
Bromobenzene	EPA 8260	<1.0	ug/L	MQS	06/30/2007
N-Propylbenzene	EPA 8260	<1.0	ug/L	MQS	06/30/2007
2-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	06/30/2007
1,3,5-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	06/30/2007
4-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	06/30/2007
tert-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	06/30/2007
1,2,4-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	06/30/2007
sec-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	06/30/2007
p-Isopropyltoluene	EPA 8260	<1.0	ug/L	MQS	06/30/2007
1,3-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	06/30/2007
1,4-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	06/30/2007
n-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	06/30/2007
1,2-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	06/30/2007
1,2-Dibromo-3-Chloropropane	EPA 8260	<5.0	ug/L	MQS	06/30/2007
1,2,4-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	06/30/2007
Hexachlorobutadiene	EPA 8260	<1.0	ug/L	MQS	06/30/2007
Naphthalene	EPA 8260	<1.0	ug/L	MQS	06/30/2007
1,2,3-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	06/30/2007
Surrogates:	EPA 8260				
***1,2-Dichloroethane-D4	EPA 8260	81.7	% R	MQS	06/30/2007
***Toluene-D8	EPA 8260	90.3	% R	MQS	06/30/2007
***4-Bromofluorobenzene	EPA 8260	97.6	% R	MQS	06/30/2007
Preparation	EPA 5030B	1.0	DF	MQS	06/29/2007
SEMI-VOLATILE ORGANICS	EPA 8270			CMG	06/29/2007
ACID FRACTION:	EPA 8270				

GZA GeoEnvironmental, Inc.
106 South Street
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ANALYTICAL REPORT

GZA GeoEnvironmental, Inc.
140 Broadway
Providence, RI 02903

Ed Summerly

Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **06/22/2007**
Date Reported: **07/03/2007**
Work Order No.: **0706-00155**

Sample ID: **ML - 3B** Sample No.: **002**

Sample Date: **06/21/2007**

Test Performed	Method	Results	Units	Tech	Analysis Date
Phenol	EPA 8270	<10	ug/L	CMG	06/29/2007
2-Chlorophenol	EPA 8270	<10	ug/L	CMG	06/29/2007
2-Methylphenol	EPA 8270	<10	ug/L	CMG	06/29/2007
3&4-Methylphenol	EPA 8270	<10	ug/L	CMG	06/29/2007
2-Nitrophenol	EPA 8270	<10	ug/L	CMG	06/29/2007
2,4-Dimethylphenol	EPA 8270	<10	ug/L	CMG	06/29/2007
Benzoic Acid	EPA 8270	<10	ug/L	CMG	06/29/2007
2,4-Dichlorophenol	EPA 8270	<10	ug/L	CMG	06/29/2007
4-Chloro-3-Methylphenol	EPA 8270	<20	ug/L	CMG	06/29/2007
2,4,6-Trichlorophenol	EPA 8270	<10	ug/L	CMG	06/29/2007
2,4,5-Trichlorophenol	EPA 8270	<10	ug/L	CMG	06/29/2007
2,4-Dinitrophenol	EPA 8270	<100	ug/L	CMG	06/29/2007
4-Nitrophenol	EPA 8270	<50	ug/L	CMG	06/29/2007
4,6-Dinitro-2-Methylphenol	EPA 8270	<50	ug/L	CMG	06/29/2007
Pentachlorophenol	EPA 8270	<50	ug/L	CMG	06/29/2007
BASE-NEUTRAL FRACTION:					
n-Nitrosodimethylamine	EPA 8270	<10	ug/L	CMG	06/29/2007
bis(2-Chloroethyl)Ether	EPA 8270	<10	ug/L	CMG	06/29/2007
1,3-Dichlorobenzene	EPA 8270	<10	ug/L	CMG	06/29/2007
1,4-Dichlorobenzene	EPA 8270	<10	ug/L	CMG	06/29/2007
Benzyl Alcohol	EPA 8270	<20	ug/L	CMG	06/29/2007
1,2-Dichlorobenzene	EPA 8270	<10	ug/L	CMG	06/29/2007
bis(2-Chloroisopropyl)Ether	EPA 8270	<10	ug/L	CMG	06/29/2007
n-Nitrosodi-n-Propylamine	EPA 8270	<10	ug/L	CMG	06/29/2007
Hexachloroethane	EPA 8270	<10	ug/L	CMG	06/29/2007
Nitrobenzene	EPA 8270	<10	ug/L	CMG	06/29/2007
Isophorone	EPA 8270	<10	ug/L	CMG	06/29/2007
bis(2-Chloroethoxy)Methane	EPA 8270	<10	ug/L	CMG	06/29/2007
1,2,4-Trichlorobenzene	EPA 8270	<10	ug/L	CMG	06/29/2007
Naphthalene	EPA 8270	<2.0	ug/L	CMG	06/29/2007
4-Chloroaniline	EPA 8270	<20	ug/L	CMG	06/29/2007
Hexachlorobutadiene	EPA 8270	<10	ug/L	CMG	06/29/2007
2-Methylnaphthalene	EPA 8270	<2.0	ug/L	CMG	06/29/2007
Hexachlorocyclopentadiene	EPA 8270	<50	ug/L	CMG	06/29/2007
2-Chloronaphthalene	EPA 8270	<10	ug/L	CMG	06/29/2007
2-Nitroaniline	EPA 8270	<50	ug/L	CMG	06/29/2007
Dimethylphthalate	EPA 8270	<10	ug/L	CMG	06/29/2007

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Date Received: **06/22/2007**
Date Reported: **07/03/2007**
Work Order No.: **0706-00155**

Sample ID: **ML - 3B** Sample No.: **002**

Sample Date: **06/21/2007**

Test Performed	Method	Results	Units	Tech	Analysis Date
Acenaphthylene	EPA 8270	<2.0	ug/L	CMG	06/29/2007
2,6-Dinitrotoluene	EPA 8270	<10	ug/L	CMG	06/29/2007
3-Nitroaniline	EPA 8270	<50	ug/L	CMG	06/29/2007
Acenaphthene	EPA 8270	<2.0	ug/L	CMG	06/29/2007
Dibenzofuran	EPA 8270	<10	ug/L	CMG	06/29/2007
2,4-Dinitrotoluene	EPA 8270	<10	ug/L	CMG	06/29/2007
Diethylphthalate	EPA 8270	<10	ug/L	CMG	06/29/2007
Fluorene	EPA 8270	<2.0	ug/L	CMG	06/29/2007
4-Chlorophenyl Phenyl Ether	EPA 8270	<10	ug/L	CMG	06/29/2007
4-Nitroaniline	EPA 8270	<20	ug/L	CMG	06/29/2007
n-Nitrosodiphenylamine	EPA 8270	<10	ug/L	CMG	06/29/2007
4-Bromophenyl Phenyl Ether	EPA 8270	<10	ug/L	CMG	06/29/2007
Hexachlorobenzene	EPA 8270	<10	ug/L	CMG	06/29/2007
Phenanthrene	EPA 8270	<2.0	ug/L	CMG	06/29/2007
Anthracene	EPA 8270	<2.0	ug/L	CMG	06/29/2007
Carbazole	EPA 8270	<10	ug/L	CMG	06/29/2007
di-n-Butylphthalate	EPA 8270	<15	ug/L	CMG	06/29/2007
Fluoranthene	EPA 8270	<2.0	ug/L	CMG	06/29/2007
Pyrene	EPA 8270	<2.0	ug/L	CMG	06/29/2007
Butylbenzylphthalate	EPA 8270	<10	ug/L	CMG	06/29/2007
Benzo [a] Anthracene	EPA 8270	<2.0	ug/L	CMG	06/29/2007
3,3'-Dichlorobenzidine	EPA 8270	<20	ug/L	CMG	06/29/2007
Chrysene	EPA 8270	<2.0	ug/L	CMG	06/29/2007
bis(2-Ethylhexyl)Phthalate	EPA 8270	<10	ug/L	CMG	06/29/2007
di-n-Octylphthalate	EPA 8270	<10	ug/L	CMG	06/29/2007
Benzo [b] Fluoranthene	EPA 8270	<2.0	ug/L	CMG	06/29/2007
Benzo [k] Fluoranthene	EPA 8270	<2.0	ug/L	CMG	06/29/2007
Benzo [a] Pyrene	EPA 8270	<2.0	ug/L	CMG	06/29/2007
Indeno [1,2,3-cd] Pyrene	EPA 8270	<2.0	ug/L	CMG	06/29/2007
Dibenzo [a,h] Anthracene	EPA 8270	<2.0	ug/L	CMG	06/29/2007
Benzo [g,h,i] Perylene	EPA 8270	<2.0	ug/L	CMG	06/29/2007
Surrogates:	EPA 8270				
***2-Fluorophenol	EPA 8270	25.9	% R	CMG	06/29/2007
***Phenol-D6	EPA 8270	15.8	% R	CMG	06/29/2007
***Nitrobenzene-D5	EPA 8270	65.4	% R	CMG	06/29/2007
***2-Fluorobiphenyl	EPA 8270	67.8	% R	CMG	06/29/2007
***2,4,6-Tribromophenol	EPA 8270	69.7	% R	CMG	06/29/2007

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Date Reported: **07/03/2007**
Work Order No.: **0706-00155**

Sample ID: **ML - 3B** Sample No.: **002**

Sample Date: **06/21/2007**

Test Performed	Method	Results	Units	Tech	Analysis Date
***P-Terphenyl-D14	EPA 8270	81.3	% R	CMG	06/29/2007
Extraction	EPA 3510C	1.0	DF	DAB	06/27/2007
TOTAL PETROLEUM HYDROCARBON	D3328/EPA 8100/			RJD	06/29/2007
Hydrocarbon Content		1500	ug/L	RJD	06/29/2007
Surrogate:	D3328/EPA 8100				
***p-Terphenyl		72.2	% R	RJD	06/29/2007
Extraction	EPA 3510C	1.0	DF	DAB	06/28/2007
PRIORITY POLLUTANT METALS				LLZ	06/25/2007
Silver	EPA 6010B	<0.0050	mg/L	LLZ	06/25/2007
Arsenic	EPA 6010B	<0.010	mg/L	LLZ	06/25/2007
Beryllium	EPA 6010B	<0.0040	mg/L	LLZ	06/25/2007
Cadmium	EPA 6010B	<0.0050	mg/L	LLZ	06/25/2007
Chromium	EPA 6010B	<0.0050	mg/L	LLZ	06/25/2007
Copper	EPA 6010B	<0.015	mg/L	LLZ	06/25/2007
Mercury	EPA 7470A	<0.00040	mg/L	TGG	06/27/2007
Nickel	EPA 6010B	<0.010	mg/L	LLZ	06/25/2007
Lead	EPA 6010B	<0.010	mg/L	LLZ	06/25/2007
Antimony	EPA 6010B	<0.025	mg/L	LLZ	06/25/2007
Selenium	EPA 6010B	<0.025	mg/L	LLZ	06/25/2007
Thallium	EPA 6010B	<0.025	mg/L	LLZ	06/25/2007
Zinc	EPA 6010B	<0.010	mg/L	LLZ	06/25/2007
Iron	EPA 6010B	4.6	mg/L	LLZ	06/25/2007
Manganese	EPA 6010B	0.37	mg/L	LLZ	06/25/2007

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Date Received: **06/22/2007**
Date Reported: **07/03/2007**
Work Order No.: **0706-00155**

Sample ID: **ML - 3C** Sample No.: **003**

Sample Date: **06/21/2007**

Test Performed	Method	Results	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260			MQS	06/30/2007
Dichlorodifluoromethane	EPA 8260	<2.0	ug/L	MQS	06/30/2007
Chloromethane	EPA 8260	<2.0	ug/L	MQS	06/30/2007
Vinyl Chloride	EPA 8260	<1.0	ug/L	MQS	06/30/2007
Bromomethane	EPA 8260	<2.0	ug/L	MQS	06/30/2007
Chloroethane	EPA 8260	<1.0	ug/L	MQS	06/30/2007
Trichlorofluoromethane	EPA 8260	<2.0	ug/L	MQS	06/30/2007
Diethylether	EPA 8260	<5.0	ug/L	MQS	06/30/2007
Acetone	EPA 8260	<25	ug/L	MQS	06/30/2007
1,1-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	06/30/2007
Dichloromethane	EPA 8260	<1.0	ug/L	MQS	06/30/2007
Methyl-Tert-Butyl-Ether	EPA 8260	<1.0	ug/L	MQS	06/30/2007
trans-1,2-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	06/30/2007
1,1-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	06/30/2007
2-Butanone	EPA 8260	<25	ug/L	MQS	06/30/2007
2,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	06/30/2007
cis-1,2-Dichloroethene	EPA 8260	2.5	ug/L	MQS	06/30/2007
Chloroform	EPA 8260	<1.0	ug/L	MQS	06/30/2007
Bromochloromethane	EPA 8260	<1.0	ug/L	MQS	06/30/2007
Tetrahydrofuran	EPA 8260	<10	ug/L	MQS	06/30/2007
1,1,1-Trichloroethane	EPA 8260	<1.0	ug/L	MQS	06/30/2007
1,1-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	06/30/2007
Carbon Tetrachloride	EPA 8260	<1.0	ug/L	MQS	06/30/2007
1,2-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	06/30/2007
Benzene	EPA 8260	1.1	ug/L	MQS	06/30/2007
Trichloroethene	EPA 8260	<1.0	ug/L	MQS	06/30/2007
1,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	06/30/2007
Bromodichloromethane	EPA 8260	<1.0	ug/L	MQS	06/30/2007
Dibromomethane	EPA 8260	<1.0	ug/L	MQS	06/30/2007
4-Methyl-2-Pentanone	EPA 8260	<25	ug/L	MQS	06/30/2007
cis-1,3-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	06/30/2007
Toluene	EPA 8260	3.6	ug/L	MQS	06/30/2007
trans-1,3-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	06/30/2007
1,1,2-Trichloroethane	EPA 8260	<1.0	ug/L	MQS	06/30/2007
2-Hexanone	EPA 8260	<2.0	ug/L	MQS	06/30/2007
1,3-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	06/30/2007
Tetrachloroethene	EPA 8260	<1.0	ug/L	MQS	06/30/2007

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Project No.: **03.0032795.12**

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Date Reported: **07/03/2007**
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Sample ID: **ML - 3C** Sample No.: **003**

Sample Date: **06/21/2007**

Test Performed	Method	Results	Units	Tech	Analysis Date
Dibromochloromethane	EPA 8260	<1.0	ug/L	MQS	06/30/2007
1,2-Dibromoethane (EDB)	EPA 8260	<2.0	ug/L	MQS	06/30/2007
Chlorobenzene	EPA 8260	<1.0	ug/L	MQS	06/30/2007
1,1,1,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	06/30/2007
Ethylbenzene	EPA 8260	<1.0	ug/L	MQS	06/30/2007
m&p-Xylene	EPA 8260	<1.0	ug/L	MQS	06/30/2007
o-Xylene	EPA 8260	<1.0	ug/L	MQS	06/30/2007
Styrene	EPA 8260	<1.0	ug/L	MQS	06/30/2007
Bromoform	EPA 8260	<2.0	ug/L	MQS	06/30/2007
Isopropylbenzene	EPA 8260	<1.0	ug/L	MQS	06/30/2007
1,1,2,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	06/30/2007
1,2,3-Trichloropropane	EPA 8260	<1.0	ug/L	MQS	06/30/2007
Bromobenzene	EPA 8260	<1.0	ug/L	MQS	06/30/2007
N-Propylbenzene	EPA 8260	<1.0	ug/L	MQS	06/30/2007
2-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	06/30/2007
1,3,5-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	06/30/2007
4-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	06/30/2007
tert-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	06/30/2007
1,2,4-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	06/30/2007
sec-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	06/30/2007
p-Isopropyltoluene	EPA 8260	<1.0	ug/L	MQS	06/30/2007
1,3-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	06/30/2007
1,4-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	06/30/2007
n-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	06/30/2007
1,2-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	06/30/2007
1,2-Dibromo-3-Chloropropane	EPA 8260	<5.0	ug/L	MQS	06/30/2007
1,2,4-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	06/30/2007
Hexachlorobutadiene	EPA 8260	<1.0	ug/L	MQS	06/30/2007
Naphthalene	EPA 8260	<1.0	ug/L	MQS	06/30/2007
1,2,3-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	06/30/2007
Surrogates:	EPA 8260				
***Dibromofluoromethane	EPA 8260	85.8	% R	MQS	06/30/2007
***Toluene-D8	EPA 8260	88.1	% R	MQS	06/30/2007
***4-Bromofluorobenzene	EPA 8260	96.4	% R	MQS	06/30/2007
Preparation	EPA 5030B	1.0	DF	MQS	06/29/2007
SEMI-VOLATILE ORGANICS	EPA 8270			CMG	06/29/2007
ACID FRACTION:	EPA 8270				

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Sample ID: **ML - 3C** Sample No.: **003**

Sample Date: **06/21/2007**

Test Performed	Method	Results	Units	Tech	Analysis Date
Phenol	EPA 8270	<10	ug/L	CMG	06/29/2007
2-Chlorophenol	EPA 8270	<10	ug/L	CMG	06/29/2007
2-Methylphenol	EPA 8270	<10	ug/L	CMG	06/29/2007
3&4-Methylphenol	EPA 8270	<10	ug/L	CMG	06/29/2007
2-Nitrophenol	EPA 8270	<10	ug/L	CMG	06/29/2007
2,4-Dimethylphenol	EPA 8270	<10	ug/L	CMG	06/29/2007
Benzoic Acid	EPA 8270	<10	ug/L	CMG	06/29/2007
2,4-Dichlorophenol	EPA 8270	<10	ug/L	CMG	06/29/2007
4-Chloro-3-Methylphenol	EPA 8270	<20	ug/L	CMG	06/29/2007
2,4,6-Trichlorophenol	EPA 8270	<10	ug/L	CMG	06/29/2007
2,4,5-Trichlorophenol	EPA 8270	<10	ug/L	CMG	06/29/2007
2,4-Dinitrophenol	EPA 8270	<100	ug/L	CMG	06/29/2007
4-Nitrophenol	EPA 8270	<50	ug/L	CMG	06/29/2007
4,6-Dinitro-2-Methylphenol	EPA 8270	<50	ug/L	CMG	06/29/2007
Pentachlorophenol	EPA 8270	<50	ug/L	CMG	06/29/2007
BASE-NEUTRAL FRACTION:					
n-Nitrosodimethylamine	EPA 8270	<10	ug/L	CMG	06/29/2007
bis(2-Chloroethyl)Ether	EPA 8270	<10	ug/L	CMG	06/29/2007
1,3-Dichlorobenzene	EPA 8270	<10	ug/L	CMG	06/29/2007
1,4-Dichlorobenzene	EPA 8270	<10	ug/L	CMG	06/29/2007
Benzyl Alcohol	EPA 8270	<20	ug/L	CMG	06/29/2007
1,2-Dichlorobenzene	EPA 8270	<10	ug/L	CMG	06/29/2007
bis(2-Chloroisopropyl)Ether	EPA 8270	<10	ug/L	CMG	06/29/2007
n-Nitrosodi-n-Propylamine	EPA 8270	<10	ug/L	CMG	06/29/2007
Hexachloroethane	EPA 8270	<10	ug/L	CMG	06/29/2007
Nitrobenzene	EPA 8270	<10	ug/L	CMG	06/29/2007
Isophorone	EPA 8270	<10	ug/L	CMG	06/29/2007
bis(2-Chloroethoxy)Methane	EPA 8270	<10	ug/L	CMG	06/29/2007
1,2,4-Trichlorobenzene	EPA 8270	<10	ug/L	CMG	06/29/2007
Naphthalene	EPA 8270	<2.0	ug/L	CMG	06/29/2007
4-Chloroaniline	EPA 8270	<20	ug/L	CMG	06/29/2007
Hexachlorobutadiene	EPA 8270	<10	ug/L	CMG	06/29/2007
2-Methylnaphthalene	EPA 8270	<2.0	ug/L	CMG	06/29/2007
Hexachlorocyclopentadiene	EPA 8270	<50	ug/L	CMG	06/29/2007
2-Chloronaphthalene	EPA 8270	<10	ug/L	CMG	06/29/2007
2-Nitroaniline	EPA 8270	<50	ug/L	CMG	06/29/2007
Dimethylphthalate	EPA 8270	<10	ug/L	CMG	06/29/2007

GZA GeoEnvironmental, Inc.
106 South Street
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ANALYTICAL REPORT

GZA GeoEnvironmental, Inc.
140 Broadway
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Ed Summerly

Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **06/22/2007**
Date Reported: **07/03/2007**
Work Order No.: **0706-00155**

Sample ID: **ML - 3C** Sample No.: **003**

Sample Date: **06/21/2007**

Test Performed	Method	Results	Units	Tech	Analysis Date
Acenaphthylene	EPA 8270	<2.0	ug/L	CMG	06/29/2007
2,6-Dinitrotoluene	EPA 8270	<10	ug/L	CMG	06/29/2007
3-Nitroaniline	EPA 8270	<50	ug/L	CMG	06/29/2007
Acenaphthene	EPA 8270	<2.0	ug/L	CMG	06/29/2007
Dibenzofuran	EPA 8270	<10	ug/L	CMG	06/29/2007
2,4-Dinitrotoluene	EPA 8270	<10	ug/L	CMG	06/29/2007
Diethylphthalate	EPA 8270	<10	ug/L	CMG	06/29/2007
Fluorene	EPA 8270	<2.0	ug/L	CMG	06/29/2007
4-Chlorophenyl Phenyl Ether	EPA 8270	<10	ug/L	CMG	06/29/2007
4-Nitroaniline	EPA 8270	<20	ug/L	CMG	06/29/2007
n-Nitrosodiphenylamine	EPA 8270	<10	ug/L	CMG	06/29/2007
4-Bromophenyl Phenyl Ether	EPA 8270	<10	ug/L	CMG	06/29/2007
Hexachlorobenzene	EPA 8270	<10	ug/L	CMG	06/29/2007
Phenanthrene	EPA 8270	<2.0	ug/L	CMG	06/29/2007
Anthracene	EPA 8270	<2.0	ug/L	CMG	06/29/2007
Carbazole	EPA 8270	<10	ug/L	CMG	06/29/2007
di-n-Butylphthalate	EPA 8270	<15	ug/L	CMG	06/29/2007
Fluoranthene	EPA 8270	<2.0	ug/L	CMG	06/29/2007
Pyrene	EPA 8270	<2.0	ug/L	CMG	06/29/2007
Butylbenzylphthalate	EPA 8270	<10	ug/L	CMG	06/29/2007
Benzo [a] Anthracene	EPA 8270	<2.0	ug/L	CMG	06/29/2007
3,3'-Dichlorobenzidine	EPA 8270	<20	ug/L	CMG	06/29/2007
Chrysene	EPA 8270	<2.0	ug/L	CMG	06/29/2007
bis(2-Ethylhexyl)Phthalate	EPA 8270	<10	ug/L	CMG	06/29/2007
di-n-Octylphthalate	EPA 8270	<10	ug/L	CMG	06/29/2007
Benzo [b] Fluoranthene	EPA 8270	<2.0	ug/L	CMG	06/29/2007
Benzo [k] Fluoranthene	EPA 8270	<2.0	ug/L	CMG	06/29/2007
Benzo [a] Pyrene	EPA 8270	<2.0	ug/L	CMG	06/29/2007
Indeno [1,2,3-cd] Pyrene	EPA 8270	<2.0	ug/L	CMG	06/29/2007
Dibenzo [a,h] Anthracene	EPA 8270	<2.0	ug/L	CMG	06/29/2007
Benzo [g,h,i] Perylene	EPA 8270	<2.0	ug/L	CMG	06/29/2007
Surrogates:	EPA 8270				
***2-Fluorophenol	EPA 8270	26.1	% R	CMG	06/29/2007
***Phenol-D6	EPA 8270	16.1	% R	CMG	06/29/2007
***Nitrobenzene-D5	EPA 8270	63.4	% R	CMG	06/29/2007
***2-Fluorobiphenyl	EPA 8270	65.3	% R	CMG	06/29/2007
***2,4,6-Tribromophenol	EPA 8270	67.5	% R	CMG	06/29/2007

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Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **06/22/2007**
Date Reported: **07/03/2007**
Work Order No.: **0706-00155**

Sample ID: **ML - 3C** Sample No.: **003**

Sample Date: **06/21/2007**

Test Performed	Method	Results		Units	Tech	Analysis Date
***P-Terphenyl-D14	EPA 8270	76.3		% R	CMG	06/29/2007
Extraction	EPA 3510C	1.0		DF	DAB	06/27/2007
TOTAL PETROLEUM HYDROCARBON	D3328/EPA 8100/				RJD	07/03/2007
Hydrocarbon Content		3000		ug/L	RJD	07/03/2007
Surrogate:	D3328/EPA 8100					
***p-Terphenyl		DO	*	% R	RJD	07/03/2007
Extraction	EPA 3510C	1.0		DF	DAB	06/28/2007
PRIORITY POLLUTANT METALS					LLZ	06/25/2007
Silver	EPA 6010B	<0.0050		mg/L	LLZ	06/25/2007
Arsenic	EPA 6010B	<0.010		mg/L	LLZ	06/25/2007
Beryllium	EPA 6010B	<0.0040		mg/L	LLZ	06/25/2007
Cadmium	EPA 6010B	<0.0050		mg/L	LLZ	06/25/2007
Chromium	EPA 6010B	<0.0050		mg/L	LLZ	06/25/2007
Copper	EPA 6010B	<0.015		mg/L	LLZ	06/25/2007
Mercury	EPA 7470A	<0.00040		mg/L	TGG	06/27/2007
Nickel	EPA 6010B	<0.010		mg/L	LLZ	06/25/2007
Lead	EPA 6010B	<0.010		mg/L	LLZ	06/25/2007
Antimony	EPA 6010B	<0.025		mg/L	LLZ	06/25/2007
Selenium	EPA 6010B	<0.025		mg/L	LLZ	06/25/2007
Thallium	EPA 6010B	<0.025		mg/L	LLZ	06/25/2007
Zinc	EPA 6010B	<0.010		mg/L	LLZ	06/25/2007
Iron	EPA 6010B	1.3		mg/L	LLZ	06/25/2007
Manganese	EPA 6010B	0.084		mg/L	LLZ	06/25/2007

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Date Received: **06/22/2007**
Date Reported: **07/03/2007**
Work Order No.: **0706-00155**

Sample ID: **ML - 3D**
Sample No.: **004**
Sample Date: **06/21/2007**

Test Performed	Method	Results	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260			MQS	06/30/2007
Dichlorodifluoromethane	EPA 8260	<2.0	ug/L	MQS	06/30/2007
Chloromethane	EPA 8260	<2.0	ug/L	MQS	06/30/2007
Vinyl Chloride	EPA 8260	<1.0	ug/L	MQS	06/30/2007
Bromomethane	EPA 8260	<2.0	ug/L	MQS	06/30/2007
Chloroethane	EPA 8260	<1.0	ug/L	MQS	06/30/2007
Trichlorofluoromethane	EPA 8260	<2.0	ug/L	MQS	06/30/2007
Diethylether	EPA 8260	<5.0	ug/L	MQS	06/30/2007
Acetone	EPA 8260	<25	ug/L	MQS	06/30/2007
1,1-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	06/30/2007
Dichloromethane	EPA 8260	<1.0	ug/L	MQS	06/30/2007
Methyl-Tert-Butyl-Ether	EPA 8260	<1.0	ug/L	MQS	06/30/2007
trans-1,2-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	06/30/2007
1,1-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	06/30/2007
2-Butanone	EPA 8260	<25	ug/L	MQS	06/30/2007
2,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	06/30/2007
cis-1,2-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	06/30/2007
Chloroform	EPA 8260	<1.0	ug/L	MQS	06/30/2007
Bromochloromethane	EPA 8260	<1.0	ug/L	MQS	06/30/2007
Tetrahydrofuran	EPA 8260	<10	ug/L	MQS	06/30/2007
1,1,1-Trichloroethane	EPA 8260	<1.0	ug/L	MQS	06/30/2007
1,1-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	06/30/2007
Carbon Tetrachloride	EPA 8260	<1.0	ug/L	MQS	06/30/2007
1,2-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	06/30/2007
Benzene	EPA 8260	<1.0	ug/L	MQS	06/30/2007
Trichloroethene	EPA 8260	<1.0	ug/L	MQS	06/30/2007
1,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	06/30/2007
Bromodichloromethane	EPA 8260	<1.0	ug/L	MQS	06/30/2007
Dibromomethane	EPA 8260	<1.0	ug/L	MQS	06/30/2007
4-Methyl-2-Pentanone	EPA 8260	<25	ug/L	MQS	06/30/2007
cis-1,3-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	06/30/2007
Toluene	EPA 8260	<1.0	ug/L	MQS	06/30/2007
trans-1,3-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	06/30/2007
1,1,2-Trichloroethane	EPA 8260	<1.0	ug/L	MQS	06/30/2007
2-Hexanone	EPA 8260	<2.0	ug/L	MQS	06/30/2007
1,3-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	06/30/2007
Tetrachloroethene	EPA 8260	<1.0	ug/L	MQS	06/30/2007

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Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **06/22/2007**
Date Reported: **07/03/2007**
Work Order No.: **0706-00155**

Sample ID: **ML - 3D**
Sample No.: **004**
Sample Date: **06/21/2007**

Test Performed	Method	Results	Units	Tech	Analysis Date
Dibromochloromethane	EPA 8260	<1.0	ug/L	MQS	06/30/2007
1,2-Dibromoethane (EDB)	EPA 8260	<2.0	ug/L	MQS	06/30/2007
Chlorobenzene	EPA 8260	<1.0	ug/L	MQS	06/30/2007
1,1,1,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	06/30/2007
Ethylbenzene	EPA 8260	<1.0	ug/L	MQS	06/30/2007
m&p-Xylene	EPA 8260	<1.0	ug/L	MQS	06/30/2007
o-Xylene	EPA 8260	<1.0	ug/L	MQS	06/30/2007
Styrene	EPA 8260	<1.0	ug/L	MQS	06/30/2007
Bromoform	EPA 8260	<2.0	ug/L	MQS	06/30/2007
Isopropylbenzene	EPA 8260	<1.0	ug/L	MQS	06/30/2007
1,1,2,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	06/30/2007
1,2,3-Trichloropropane	EPA 8260	<1.0	ug/L	MQS	06/30/2007
Bromobenzene	EPA 8260	<1.0	ug/L	MQS	06/30/2007
N-Propylbenzene	EPA 8260	<1.0	ug/L	MQS	06/30/2007
2-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	06/30/2007
1,3,5-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	06/30/2007
4-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	06/30/2007
tert-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	06/30/2007
1,2,4-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	06/30/2007
sec-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	06/30/2007
p-Isopropyltoluene	EPA 8260	<1.0	ug/L	MQS	06/30/2007
1,3-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	06/30/2007
1,4-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	06/30/2007
n-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	06/30/2007
1,2-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	06/30/2007
1,2-Dibromo-3-Chloropropane	EPA 8260	<5.0	ug/L	MQS	06/30/2007
1,2,4-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	06/30/2007
Hexachlorobutadiene	EPA 8260	<1.0	ug/L	MQS	06/30/2007
Naphthalene	EPA 8260	<1.0	ug/L	MQS	06/30/2007
1,2,3-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	06/30/2007
Surrogates:	EPA 8260				
***Dibromofluoromethane	EPA 8260	87.4	% R	MQS	06/30/2007
***Toluene-D8	EPA 8260	90.7	% R	MQS	06/30/2007
***4-Bromofluorobenzene	EPA 8260	94.7	% R	MQS	06/30/2007
Preparation	EPA 5030B	1.0	DF	MQS	06/29/2007
SEMI-VOLATILE ORGANICS	EPA 8270			CMG	06/29/2007
ACID FRACTION:	EPA 8270				

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Work Order No.: **0706-00155**

Sample ID: **ML - 3D** Sample No.: **004**

Sample Date: **06/21/2007**

Test Performed	Method	Results	Units	Tech	Analysis Date
Phenol	EPA 8270	<10	ug/L	CMG	06/29/2007
2-Chlorophenol	EPA 8270	<10	ug/L	CMG	06/29/2007
2-Methylphenol	EPA 8270	<10	ug/L	CMG	06/29/2007
3&4-Methylphenol	EPA 8270	<10	ug/L	CMG	06/29/2007
2-Nitrophenol	EPA 8270	<10	ug/L	CMG	06/29/2007
2,4-Dimethylphenol	EPA 8270	<10	ug/L	CMG	06/29/2007
Benzoic Acid	EPA 8270	<10	ug/L	CMG	06/29/2007
2,4-Dichlorophenol	EPA 8270	<10	ug/L	CMG	06/29/2007
4-Chloro-3-Methylphenol	EPA 8270	<20	ug/L	CMG	06/29/2007
2,4,6-Trichlorophenol	EPA 8270	<10	ug/L	CMG	06/29/2007
2,4,5-Trichlorophenol	EPA 8270	<10	ug/L	CMG	06/29/2007
2,4-Dinitrophenol	EPA 8270	<100	ug/L	CMG	06/29/2007
4-Nitrophenol	EPA 8270	<50	ug/L	CMG	06/29/2007
4,6-Dinitro-2-Methylphenol	EPA 8270	<50	ug/L	CMG	06/29/2007
Pentachlorophenol	EPA 8270	<50	ug/L	CMG	06/29/2007
BASE-NEUTRAL FRACTION:					
n-Nitrosodimethylamine	EPA 8270	<10	ug/L	CMG	06/29/2007
bis(2-Chloroethyl)Ether	EPA 8270	<10	ug/L	CMG	06/29/2007
1,3-Dichlorobenzene	EPA 8270	<10	ug/L	CMG	06/29/2007
1,4-Dichlorobenzene	EPA 8270	<10	ug/L	CMG	06/29/2007
Benzyl Alcohol	EPA 8270	<20	ug/L	CMG	06/29/2007
1,2-Dichlorobenzene	EPA 8270	<10	ug/L	CMG	06/29/2007
bis(2-Chloroisopropyl)Ether	EPA 8270	<10	ug/L	CMG	06/29/2007
n-Nitrosodi-n-Propylamine	EPA 8270	<10	ug/L	CMG	06/29/2007
Hexachloroethane	EPA 8270	<10	ug/L	CMG	06/29/2007
Nitrobenzene	EPA 8270	<10	ug/L	CMG	06/29/2007
Isophorone	EPA 8270	<10	ug/L	CMG	06/29/2007
bis(2-Chloroethoxy)Methane	EPA 8270	<10	ug/L	CMG	06/29/2007
1,2,4-Trichlorobenzene	EPA 8270	<10	ug/L	CMG	06/29/2007
Naphthalene	EPA 8270	<2.0	ug/L	CMG	06/29/2007
4-Chloroaniline	EPA 8270	<20	ug/L	CMG	06/29/2007
Hexachlorobutadiene	EPA 8270	<10	ug/L	CMG	06/29/2007
2-Methylnaphthalene	EPA 8270	<2.0	ug/L	CMG	06/29/2007
Hexachlorocyclopentadiene	EPA 8270	<50	ug/L	CMG	06/29/2007
2-Chloronaphthalene	EPA 8270	<10	ug/L	CMG	06/29/2007
2-Nitroaniline	EPA 8270	<50	ug/L	CMG	06/29/2007
Dimethylphthalate	EPA 8270	<10	ug/L	CMG	06/29/2007

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Sample ID: **ML - 3D** Sample No.: **004**

Sample Date: **06/21/2007**

Test Performed	Method	Results	Units	Tech	Analysis Date
Acenaphthylene	EPA 8270	<2.0	ug/L	CMG	06/29/2007
2,6-Dinitrotoluene	EPA 8270	<10	ug/L	CMG	06/29/2007
3-Nitroaniline	EPA 8270	<50	ug/L	CMG	06/29/2007
Acenaphthene	EPA 8270	<2.0	ug/L	CMG	06/29/2007
Dibenzofuran	EPA 8270	<10	ug/L	CMG	06/29/2007
2,4-Dinitrotoluene	EPA 8270	<10	ug/L	CMG	06/29/2007
Diethylphthalate	EPA 8270	<10	ug/L	CMG	06/29/2007
Fluorene	EPA 8270	<2.0	ug/L	CMG	06/29/2007
4-Chlorophenyl Phenyl Ether	EPA 8270	<10	ug/L	CMG	06/29/2007
4-Nitroaniline	EPA 8270	<20	ug/L	CMG	06/29/2007
n-Nitrosodiphenylamine	EPA 8270	<10	ug/L	CMG	06/29/2007
4-Bromophenyl Phenyl Ether	EPA 8270	<10	ug/L	CMG	06/29/2007
Hexachlorobenzene	EPA 8270	<10	ug/L	CMG	06/29/2007
Phenanthrene	EPA 8270	<2.0	ug/L	CMG	06/29/2007
Anthracene	EPA 8270	<2.0	ug/L	CMG	06/29/2007
Carbazole	EPA 8270	<10	ug/L	CMG	06/29/2007
di-n-Butylphthalate	EPA 8270	<15	ug/L	CMG	06/29/2007
Fluoranthene	EPA 8270	<2.0	ug/L	CMG	06/29/2007
Pyrene	EPA 8270	<2.0	ug/L	CMG	06/29/2007
Butylbenzylphthalate	EPA 8270	<10	ug/L	CMG	06/29/2007
Benzo [a] Anthracene	EPA 8270	<2.0	ug/L	CMG	06/29/2007
3,3'-Dichlorobenzidine	EPA 8270	<20	ug/L	CMG	06/29/2007
Chrysene	EPA 8270	<2.0	ug/L	CMG	06/29/2007
bis(2-Ethylhexyl)Phthalate	EPA 8270	<10	ug/L	CMG	06/29/2007
di-n-Octylphthalate	EPA 8270	<10	ug/L	CMG	06/29/2007
Benzo [b] Fluoranthene	EPA 8270	<2.0	ug/L	CMG	06/29/2007
Benzo [k] Fluoranthene	EPA 8270	<2.0	ug/L	CMG	06/29/2007
Benzo [a] Pyrene	EPA 8270	<2.0	ug/L	CMG	06/29/2007
Indeno [1,2,3-cd] Pyrene	EPA 8270	<2.0	ug/L	CMG	06/29/2007
Dibenzo [a,h] Anthracene	EPA 8270	<2.0	ug/L	CMG	06/29/2007
Benzo [g,h,i] Perylene	EPA 8270	<2.0	ug/L	CMG	06/29/2007
Surrogates:	EPA 8270				
***2-Fluorophenol	EPA 8270	45.7	% R	CMG	06/29/2007
***Phenol-D6	EPA 8270	33.1	% R	CMG	06/29/2007
***Nitrobenzene-D5	EPA 8270	82.3	% R	CMG	06/29/2007
***2-Fluorobiphenyl	EPA 8270	85.2	% R	CMG	06/29/2007
***2,4,6-Tribromophenol	EPA 8270	82.8	% R	CMG	06/29/2007

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Date Reported: **07/03/2007**
Work Order No.: **0706-00155**

Sample ID: **ML - 3D** Sample No.: **004**

Sample Date: **06/21/2007**

Test Performed	Method	Results		Units	Tech	Analysis Date
***P-Terphenyl-D14	EPA 8270	101		% R	CMG	06/29/2007
Extraction	EPA 3510C	1.0		DF	DAB	06/27/2007
TOTAL PETROLEUM HYDROCARBON	D3328/EPA 8100/				RJD	07/03/2007
Hydrocarbon Content		3800		ug/L	RJD	07/03/2007
Surrogate:	D3328/EPA 8100					
***p-Terphenyl		DO	*	% R	RJD	06/29/2007
Extraction	EPA 3510C	1.0		DF	DAB	06/28/2007
PRIORITY POLLUTANT METALS					LLZ	06/25/2007
Silver	EPA 6010B	<0.0050		mg/L	LLZ	06/25/2007
Arsenic	EPA 6010B	<0.010		mg/L	LLZ	06/25/2007
Beryllium	EPA 6010B	<0.0040		mg/L	LLZ	06/25/2007
Cadmium	EPA 6010B	<0.0050		mg/L	LLZ	06/25/2007
Chromium	EPA 6010B	<0.0050		mg/L	LLZ	06/25/2007
Copper	EPA 6010B	<0.015		mg/L	LLZ	06/25/2007
Mercury	EPA 7470A	<0.00040		mg/L	TGG	06/27/2007
Nickel	EPA 6010B	<0.010		mg/L	LLZ	06/25/2007
Lead	EPA 6010B	<0.010		mg/L	LLZ	06/25/2007
Antimony	EPA 6010B	<0.025		mg/L	LLZ	06/25/2007
Selenium	EPA 6010B	<0.025		mg/L	LLZ	06/25/2007
Thallium	EPA 6010B	<0.025		mg/L	LLZ	06/25/2007
Zinc	EPA 6010B	<0.010		mg/L	LLZ	06/25/2007
Iron	EPA 6010B	1.3		mg/L	LLZ	06/25/2007
Manganese	EPA 6010B	0.084		mg/L	LLZ	06/25/2007

GZA GeoEnvironmental, Inc.
106 South Street
Hopkinton, MA 01748
(781) 278-4700

ANALYTICAL REPORT

GZA GeoEnvironmental, Inc.
140 Broadway
Providence, RI 02903

Ed Summerly

Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **06/22/2007**
Date Reported: **07/03/2007**
Work Order No.: **0706-00155**

Sample ID: **Trip Blank 2**
Sample No.: **005**
Sample Date: **06/21/2007**

Test Performed	Method	Results	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260			MQS	06/29/2007
Dichlorodifluoromethane	EPA 8260	<2.0	ug/L	MQS	06/29/2007
Chloromethane	EPA 8260	<2.0	ug/L	MQS	06/29/2007
Vinyl Chloride	EPA 8260	<1.0	ug/L	MQS	06/29/2007
Bromomethane	EPA 8260	<2.0	ug/L	MQS	06/29/2007
Chloroethane	EPA 8260	<1.0	ug/L	MQS	06/29/2007
Trichlorofluoromethane	EPA 8260	<2.0	ug/L	MQS	06/29/2007
Diethylether	EPA 8260	<5.0	ug/L	MQS	06/29/2007
Acetone	EPA 8260	<25	ug/L	MQS	06/29/2007
1,1-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	06/29/2007
Dichloromethane	EPA 8260	<1.0	ug/L	MQS	06/29/2007
Methyl-Tert-Butyl-Ether	EPA 8260	<1.0	ug/L	MQS	06/29/2007
trans-1,2-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	06/29/2007
1,1-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	06/29/2007
2-Butanone	EPA 8260	<25	ug/L	MQS	06/29/2007
2,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	06/29/2007
cis-1,2-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	06/29/2007
Chloroform	EPA 8260	<1.0	ug/L	MQS	06/29/2007
Bromochloromethane	EPA 8260	<1.0	ug/L	MQS	06/29/2007
Tetrahydrofuran	EPA 8260	<10	ug/L	MQS	06/29/2007
1,1,1-Trichloroethane	EPA 8260	<1.0	ug/L	MQS	06/29/2007
1,1-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	06/29/2007
Carbon Tetrachloride	EPA 8260	<1.0	ug/L	MQS	06/29/2007
1,2-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	06/29/2007
Benzene	EPA 8260	<1.0	ug/L	MQS	06/29/2007
Trichloroethene	EPA 8260	<1.0	ug/L	MQS	06/29/2007
1,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	06/29/2007
Bromodichloromethane	EPA 8260	<1.0	ug/L	MQS	06/29/2007
Dibromomethane	EPA 8260	<1.0	ug/L	MQS	06/29/2007
4-Methyl-2-Pentanone	EPA 8260	<25	ug/L	MQS	06/29/2007
cis-1,3-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	06/29/2007
Toluene	EPA 8260	<1.0	ug/L	MQS	06/29/2007
trans-1,3-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	06/29/2007
1,1,2-Trichloroethane	EPA 8260	<1.0	ug/L	MQS	06/29/2007
2-Hexanone	EPA 8260	<2.0	ug/L	MQS	06/29/2007
1,3-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	06/29/2007
Tetrachloroethene	EPA 8260	<1.0	ug/L	MQS	06/29/2007

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ANALYTICAL REPORT

GZA GeoEnvironmental, Inc.
140 Broadway
Providence, RI 02903

Ed Summerly

Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **06/22/2007**
Date Reported: **07/03/2007**
Work Order No.: **0706-00155**

Sample ID: **Trip Blank 2** Sample No.: **005**

Sample Date: **06/21/2007**

Test Performed	Method	Results	Units	Tech	Analysis Date
Dibromochloromethane	EPA 8260	<1.0	ug/L	MQS	06/29/2007
1,2-Dibromoethane (EDB)	EPA 8260	<2.0	ug/L	MQS	06/29/2007
Chlorobenzene	EPA 8260	<1.0	ug/L	MQS	06/29/2007
1,1,1,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	06/29/2007
Ethylbenzene	EPA 8260	<1.0	ug/L	MQS	06/29/2007
m&p-Xylene	EPA 8260	<1.0	ug/L	MQS	06/29/2007
o-Xylene	EPA 8260	<1.0	ug/L	MQS	06/29/2007
Styrene	EPA 8260	<1.0	ug/L	MQS	06/29/2007
Bromoform	EPA 8260	<2.0	ug/L	MQS	06/29/2007
Isopropylbenzene	EPA 8260	<1.0	ug/L	MQS	06/29/2007
1,1,2,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	06/29/2007
1,2,3-Trichloropropane	EPA 8260	<1.0	ug/L	MQS	06/29/2007
Bromobenzene	EPA 8260	<1.0	ug/L	MQS	06/29/2007
N-Propylbenzene	EPA 8260	<1.0	ug/L	MQS	06/29/2007
2-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	06/29/2007
1,3,5-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	06/29/2007
4-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	06/29/2007
tert-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	06/29/2007
1,2,4-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	06/29/2007
sec-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	06/29/2007
p-Isopropyltoluene	EPA 8260	<1.0	ug/L	MQS	06/29/2007
1,3-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	06/29/2007
1,4-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	06/29/2007
n-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	06/29/2007
1,2-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	06/29/2007
1,2-Dibromo-3-Chloropropane	EPA 8260	<5.0	ug/L	MQS	06/29/2007
1,2,4-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	06/29/2007
Hexachlorobutadiene	EPA 8260	<1.0	ug/L	MQS	06/29/2007
Naphthalene	EPA 8260	<1.0	ug/L	MQS	06/29/2007
1,2,3-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	06/29/2007
Surrogates:	EPA 8260				
***1,2-Dichlorobenzene-D4	EPA 8260	100	% R	MQS	06/29/2007
***Toluene-D8	EPA 8260	110	% R	MQS	06/29/2007
***4-Bromofluorobenzene	EPA 8260	99.3	% R	MQS	06/29/2007
Preparation	EPA 5030B	1.0	DF	MQS	06/28/2007

ENVIRONMENTAL CHEMISTRY LABORATORY
106 SOUTH ST, HOPKINTON, MA 01748
MASSACHUSETTS LABORATORY I.D. NO. MA092

EPA METHOD 6010B ANALYSIS
Metals by ICP

QUALITY CONTROL - AQUEOUS

DATE PREPARED: 6/25/2007

QC Sample	Method Blank	Lab Control Sample
Units	mg/L	% Recovery
Acceptance Limits	Results	80-120
Analyte		
Silver (Ag)	<0.0050	90.6
Aluminum (Al)	NA	NA
Arsenic (As)	<0.010	101
Boron (B)	NA	NA
Barium (Ba)	NA	NA
Beryllium (Be)	<0.0040	101
Calcium (Ca)	NA	NA
Cadmium (Cd)	<0.0050	99.0
Cobalt (Co)	NA	NA
Chromium (Cr)	<0.0050	99.2
Copper (Cu)	<0.015	109
Iron (Fe)	<0.025	104
Magnesium (Mg)	NA	NA
Manganese (Mn)	<0.0050	101
Molybdenum (Mo)	NA	NA
Nickel (Ni)	<0.010	101
Lead (Pb)	<0.010	98.7
Antimony (Sb)	<0.025	100
Selenium (Se)	<0.025	99.3
Strontium (Sr)	NA	NA
Titanium (Ti)	NA	NA
Thallium (Tl)	<0.025	94.5
Vanadium (V)	NA	NA
Zinc (Zn)	<0.010	105

Matrix Spike / Duplicate Spike performed as per method and reported if assigned on Chain of Custody.

GZA GEOENVIRONMENTAL, INC.
ENVIRONMENTAL CHEMISTRY LABORATORY
106 SOUTH ST, HOPKINTON, MA 01748
MASSACHUSETTS LABORATORY I.D. NO. MA092

EPA METHOD 7470A ANALYSIS
Mercury by Cold Vapor Atomic Absorption

QUALITY CONTROL - AQUEOUS

Date Prepared: 06/26/07 B

QC Sample	Method Blank	Lab Control Sample
Units	mg/L	% Recovery
Acceptance Limits	Results	85-115
Analyte		
Mercury (Hg)	<0.00040	106

Matrix Spike / Duplicate Spike performed as per method and reported if assigned on Chain of Custody.

GZA GeoEnvironmental, Inc.
106 South Street
Hopkinton, MA 01748
MA092

EPA Method 8270/625 Aqueous Method Blank (MB) and Laboratory Control Sample (LCS) Data

Method Blank

Date Extracted:	**06/27/07**
Date Analyzed:	**6/29/2007**
File Name:	**L3750**

Semi-Volatile Organics	**Result**	**Reporting Limit (ug/L)**
n-nitrosodimethylamine	ND	10
pyridine	ND	100
phenol	ND	10
bis(2-chloroethyl)ether	ND	10
2-chlorophenol	ND	10
1,3-dichlorobenzene	ND	10
1,4-dichlorobenzene	ND	10
benzyl alchohol	ND	20
1,2-dichlorobenzene	ND	10
2-methylphenol	ND	10
bis(2-chloroisopropyl)ether	ND	10
3&4-methylphenol	ND	10
n-nitrosodi-n-propylamine	ND	10
hexachloroethane	ND	10
nitrobenzene	ND	10
isophrone	ND	10
2-nitrophenol	ND	10
2,4-dimethylphenol	ND	10
benzoic acid	ND	10
bis(2-chloroethoxy)methane	ND	10
2,4-dichlorophenol	ND	10
1,2,4-trichlorobenzene	ND	10
naphthalene	ND	2.0
4-chloroaniline	ND	10
hexachlorobutadiene	ND	10
4-chloro-3-methylphenol	ND	20
2-methylnaphthalene	ND	2.0
aniline	ND	10
hexachlorocyclopentadiene	ND	50
2,4,6-trichlorophenol	ND	10
2,4,5-trichlorophenol	ND	10
2-chloronaphthalene	ND	10
2-nitroaniline	ND	50
dimethylphthalate	ND	10
acenaphthylene	ND	2.0
2,6-dinitrotoluene	ND	10
3-nitroaniline	ND	50
acenaphthene	ND	2.0
2,4-dinitrophenol	ND	100
dibenzofuran	ND	10
4-nitrophenol	ND	50
2,4-dinitrotoluene	ND	10
diethylphthalate	ND	10
fluorene	ND	2.0
4-chlorophenyl phenyl ether	ND	10
4-nitroaniline	ND	20
4,6-dinitro-2-methylphenol	ND	50
n-nitrosodiphenylamine	ND	10
4-bromophenyl phenyl ether	ND	10
hexachlorobenzene	ND	10
pentachlorophenol	ND	50
phenanthrene	ND	2.0
anthracene	ND	2.0
carbazole	ND	10
di-n-butylphthalate	ND	15
fluoranthene	ND	2.0
benzidine	ND	10
pyrene	ND	2.0
butylbenzylphthalate	ND	10
benz [a] anthracene	ND	2.0
3,3'-dichlorobenzidine	ND	20
chrysene	ND	2.0
bis(2-ethylhexyl)phthalate	ND	10
di-n-octylphthalate	ND	10
benzo [b] fluoranthene	ND	2.0
benzo [k] fluoranthene	ND	2.0
benzo [a] pyrene	ND	2.0
indeno [1,2,3-cd] pyrene	ND	2.0
dibenz [a,h] anthracene	ND	2.0
benzo [ghi] perylene	ND	2.0

Surrogates:	**Recovery (%)**	**Acceptance Limits**
2-FLUOROPHENOL	29.7	15-110
PHENOL-D6	18.8	15-110
NITROBENZENE-D5	57.4	30-130
2-FLUOROBIPHENYL	59.9	30-130
2,4,6-TRIBROMOPHENOL	59.9	15-110
p-TERPHENYL-D14	66.0	30-130

GZA GeoEnvironmental, Inc.
106 South Street
Hopkinton, MA 01748
MA092

EPA Method 8270/625 Aqueous Method Blank (MB) and Laboratory Control Sample (LCS) Data

Laboratory Control Sample

Date Extracted:	**06/27/07**
Date Analyzed:	**6/29/2007**
File Name:	**L3751**

Spike Concentration = 20ug/L	**% Recovery**	**Acceptance Limits**	**Verdict**
n-nitrosodimethylamine	38.9	40-140	out
pyridine	1.58	40-140	out
phenol	32.8	30-130	ok
bis(2-chloroethyl)ether	87.5	40-140	ok
2-chlorophenol	90.2	30-130	ok
1,3-dichlorobenzene	60.0	40-140	ok
1,4-dichlorobenzene	59.4	40-140	ok
benzyl alchohol	63.8	40-140	ok
1,2-dichlorobenzene	62.9	40-140	ok
2-methylphenol	85.1	30-130	ok
bis(2-chloroisopropyl)ether	67.7	40-140	ok
3&4-methylphenol	133	30-130	out
n-nitrosodi-n-propylamine	74.5	40-140	ok
hexachloroethane	60.3	40-140	ok
nitrobenzene	73.2	40-140	ok
isophrone	81.6	40-140	ok
2-nitrophenol	80.7	30-130	ok
2,4-dimethylphenol	77.3	30-130	ok
benzoic acid	25.8	30-130	out
bis(2-chloroethoxy)methane	75.7	40-140	ok
2,4-dichlorophenol	90.5	30-130	ok
1,2,4-trichlorobenzene	64.7	40-140	ok
naphthalene	70.7	40-140	ok
4-chloroaniline	47.8	40-140	ok
hexachlorobutadiene	64.0	40-140	ok
4-chloro-3-methylphenol	99.2	30-130	ok
2-methylnaphthalene	71.4	40-140	ok
aniline	7.33	40-140	out
hexachlorocyclopentadiene	62.8	40-140	ok
2,4,6-trichlorophenol	82.8	30-130	ok
2,4,5-trichlorophenol	77.7	30-130	ok
2-chloronaphthalene	72.1	40-140	ok
2-nitroaniline	86.7	40-140	ok
dimethylphthalate	82.3	40-140	ok
acenaphthylene	76.1	40-140	ok
2,6-dinitrotoluene	83.4	40-140	ok
3-nitroaniline	65.4	40-140	ok
acenaphthene	74.4	40-140	ok
2,4-dinitrophenol	76.9	30-130	ok
dibenzofuran	76.7	40-140	ok
4-nitrophenol	33.9	30-130	ok
2,4-dinitrotoluene	80.5	40-140	ok
diethylphthalate	80.6	40-140	ok
fluorene	77.9	40-140	ok
4-chlorophenyl phenyl ether	74.2	40-140	ok
4-nitroaniline	84.8	40-140	ok
4,6-dinitro-2-methylphenol	72.9	30-130	ok
n-nitrosodiphenylamine	78.4	40-140	ok
4-bromophenyl phenyl ether	76.0	40-140	ok
hexachlorobenzene	72.4	40-140	ok
pentachlorophenol	74.8	30-130	ok
phenanthrene	77.7	40-140	ok
anthracene	80.0	40-140	ok
carbazole	78.3	40-140	ok
di-n-butylphthalate	82.1	40-140	ok
fluoranthene	79.7	40-140	ok
benzidine	0.24	40-140	out
pyrene	74.1	40-140	ok
butylbenzylphthalate	79.7	40-140	ok
benz [a] anthracene	67.3	40-140	ok
3,3'-dichlorobenzidine	78.8	40-140	ok
chrysene	81.4	40-140	ok
bis(2-ethylhexyl)phthalate	92.9	40-140	ok
di-n-octylphthalate	94.7	40-140	ok
benzo [b] fluoranthene	86.0	40-140	ok
benzo [k] fluoranthene	81.6	40-140	ok
benzo [a] pyrene	85.0	40-140	ok
indeno [1,2,3-cd] pyrene	81.7	40-140	ok
dibenz [a,h] anthracene	81.5	40-140	ok
benzo [ghi] perylene	81.6	40-140	ok

CAM criteria allows 15% of analytes to exceed criteria.

Surrogates:	**Recovery (%)**	**Acceptance Limits**	**Verdict**
2-FLUOROPHENOL	51.2	15-110	ok
PHENOL-D6	31.2	15-110	ok
NITROBENZENE-D5	81.4	30-130	ok
2-FLUOROBIPHENYL	80.8	30-130	ok
2,4,6-TRIBROMOPHENOL	71.2	15-110	ok
p-TERPHENYL-D14	87.4	30-130	ok

GZA GeoEnvironmental, Inc.
106 South Street
Hopkinton, MA 01748

EPA Method 8260 / 524.2 Aqueous Method Blank (MB) and Laboratory Control Sample (LCS) Data

Method Blank

Date Analyzed:	6/28/2007	
Volatile Organics	Conc. ug/L	Acceptance Limit
dichlorodifluoromethane	< 1.0	< 1.0
chloromethane	< 1.0	< 1.0
vinyl chloride	< 1.0	< 1.0
bromomethane	< 1.0	< 1.0
chloroethane	< 1.0	< 1.0
trichlorofluoromethane	< 1.0	< 1.0
diethyl ether	< 0.5	< 0.5
acrolein	< 25	< 25
acetone	< 25	< 25
1,1-dichloroethene	< 0.5	< 0.5
FREON-113	< 1.0	< 1.0
iodomethane	< 0.5	< 0.5
carbon disulfide	< 0.5	< 0.5
dichloromethane	< 1.0	< 1.0
tert-butyl alcohol (TBA)	< 12	< 12
acrylonitrile	< 0.5	< 0.5
methyl-tert-butyl-ether	< 0.5	< 0.5
trans-1,2-dichloroethene	< 0.5	< 0.5
1,1-dichloroethane	< 0.5	< 0.5
di-isopropyl ether (DIPE)	< 0.5	< 0.5
ethyl tert-butyl ether (EtBE)	< 0.5	< 0.5
vinyl acetate	< 0.5	< 0.5
2-butanone	< 25	< 25
2,2-dichloropropane	< 0.5	< 0.5
cis-1,2-dichloroethene	< 0.5	< 0.5
chloroform	< 1.0	< 1.0
bromochloromethane	< 0.5	< 0.5
tetrahydrafuran	< 2.0	< 2.0
1,1,1-trichloroethane	< 0.5	< 0.5
1,1-dichloropropene	< 0.5	< 0.5
carbon tetrachloride	< 0.5	< 0.5
1,2-dichloroethane	< 0.5	< 0.5
benzene	< 0.5	< 0.5
tert-amyl methyl ether (TAME)	< 0.5	< 0.5
trichloroethene	< 0.5	< 0.5
1,2-dichloropropane	< 0.5	< 0.5
bromodichloromethane	< 0.5	< 0.5
2-chloroethyl vinyl ether	< 0.5	< 0.5
1,4-Dioxane	< 100	< 100
dibromomethane	< 0.5	< 0.5
4-methyl-2-pentanone	< 25	< 25
cis-1,3-dichloropropene	< 0.5	< 0.5
toluene	< 0.5	< 0.5
trans-1,3-dichloropropene	< 1.0	< 1.0
1,1,2-trichloroethane	< 0.5	< 0.5
2-hexanone	< 25	< 25
1,3-dichloropropane	< 0.5	< 0.5
tetrachloroethene	< 0.5	< 0.5
dibromochloromethane	< 0.5	< 0.5
1,2-dibromoethane (EDB)	< 0.5	< 0.5
chlorobenzene	< 0.5	< 0.5
1,1,1,2-tetrachloroethane	< 0.5	< 0.5
ethylbenzene	< 0.5	< 0.5
1,1,2,2-tetrachloroethane	< 0.5	< 0.5
m&p-xylene	< 1.0	< 1.0
o-xylene	< 0.5	< 0.5
styrene	< 0.5	< 0.5
bromoform	< 0.5	< 0.5
isopropylbenzene	< 0.5	< 0.5
1,2,3-trichloropropane	< 0.5	< 0.5
bromobenzene	< 0.5	< 0.5
n-propylbenzene	< 0.5	< 0.5
2-chlorotoluene	< 0.5	< 0.5
1,3,5-trimethylbenzene	< 0.5	< 0.5
trans-1,4-dichloro-2-butene	< 0.5	< 0.5
4-chlorotoluene	< 0.5	< 0.5
tert-butyl-benzene	< 0.5	< 0.5
1,2,4-trimethylbenzene	< 0.5	< 0.5
sec-butyl-benzene	< 0.5	< 0.5
p-isopropyltoluene	< 0.5	< 0.5
1,3-dichlorobenzene	< 0.5	< 0.5
1,4-dichlorobenzene	< 0.5	< 0.5
n-butylbenzene	< 0.5	< 0.5
1,2-dichlorobenzene	< 0.5	< 0.5
1,2-dibromo-3-chloropropane	< 1.0	< 1.0
1,2,4-trichlorobenzene	< 0.5	< 0.5
hexachlorobutadiene	< 0.5	< 0.5
naphthalene	< 1.5	< 1.5
1,2,3-trichlorobenzene	< 0.5	< 0.5

Laboratory Control Sample

Date Analyzed:	6/28/2007		
Spike Concentration = 20ug/L	% Recovery	Acceptance Limits	Verdict
dichlorodifluoromethane	104	70-130	ok
chloromethane	94.9	70-130	ok
vinyl chloride	99.5	70-130	ok
bromomethane	92.7	70-130	ok
chloroethane	98.4	70-130	ok
trichlorofluoromethane	109	70-130	ok
diethyl ether	91.7	70-130	ok
acrolein	88.0	70-130	ok
acetone	95.0	70-130	ok
1,1-dichloroethene	95.4	70-130	ok
FREON-113	97.0	70-130	ok
iodomethane	93.1	70-130	ok
carbon disulfide	97.7	70-130	ok
dichloromethane	88.1	70-130	ok
tert-butyl alcohol (TBA)	99.5	70-130	ok
acrylonitrile	101	70-130	ok
methyl-tert-butyl-ether	93.6	70-130	ok
trans-1,2-dichloroethene	97.5	70-130	ok
1,1-dichloroethane	98.0	70-130	ok
di-isopropyl ether (DIPE)	96.8	70-130	ok
ethyl tert-butyl ether (EtBE)	98.7	70-130	ok
vinyl acetate	98.6	70-130	ok
2-butanone	92.4	70-130	ok
2,2-dichloropropane	106	70-130	ok
cis-1,2-dichloroethene	95.4	70-130	ok
chloroform	97.9	70-130	ok
bromochloromethane	94.5	70-130	ok
tetrahydrafuran	103	70-130	ok
1,1,1-trichloroethane	107	70-130	ok
1,1-dichloropropene	99.3	70-130	ok
carbon tetrachloride	107	70-130	ok
1,2-dichloroethane	97.2	70-130	ok
benzene	93.9	70-130	ok
tert-amyl methyl ether (TAME)	90.1	70-130	ok
trichloroethene	97.4	70-130	ok
1,2-dichloropropane	97.5	70-130	ok
bromodichloromethane	101	70-130	ok
2-chloroethyl vinyl ether	97.5	70-130	ok
1,4-Dioxane	91.3	70-130	ok
dibromomethane	98.0	70-130	ok
4-methyl-2-pentanone	96.5	70-130	ok
cis-1,3-dichloropropene	99.0	70-130	ok
toluene	104	70-130	ok
trans-1,3-dichloropropene	91.3	70-130	ok
1,1,2-trichloroethane	99.5	70-130	ok
2-hexanone	98.2	70-130	ok
1,3-dichloropropane	98.3	70-130	ok
tetrachloroethene	94.9	70-130	ok
dibromochloromethane	103	70-130	ok
1,2-dibromoethane (EDB)	104	70-130	ok
chlorobenzene	106	70-130	ok
1,1,1,2-tetrachloroethane	103	70-130	ok
ethylbenzene	106	70-130	ok
1,1,2,2-tetrachloroethane	113	70-130	ok
m&p-xylene	107	70-130	ok
o-xylene	101	70-130	ok
styrene	104	70-130	ok
bromoform	103	70-130	ok
isopropylbenzene	105	70-130	ok
1,2,3-trichloropropane	101	70-130	ok
bromobenzene	103	70-130	ok
n-propylbenzene	105	70-130	ok
2-chlorotoluene	99.2	70-130	ok
1,3,5-trimethylbenzene	104	70-130	ok
trans-1,4-dichloro-2-butene	101	70-130	ok
4-chlorotoluene	102	70-130	ok
tert-butyl-benzene	106	70-130	ok
1,2,4-trimethylbenzene	103	70-130	ok
sec-butyl-benzene	104	70-130	ok
p-isopropyltoluene	105	70-130	ok
1,3-dichlorobenzene	102	70-130	ok
1,4-dichlorobenzene	103	70-130	ok
n-butylbenzene	107	70-130	ok
1,2-dichlorobenzene	101	70-130	ok
1,2-dibromo-3-chloropropane	101	70-130	ok
1,2,4-trichlorobenzene	107	70-130	ok
hexachlorobutadiene	104	70-130	ok
naphthalene	105	70-130	ok
1,2,3-trichlorobenzene	107	70-130	ok

SMF criteria allows 5 compounds to be outside acceptance limits

Surrogates:	Recovery (%)	Acceptance Limits
DIBROMOFLUOROMETHANE	112	70-130
1,2-DICHLOROETHANE-D4	103	70-130
TOLUENE-D8	107	70-130
4-BROMOFLUOROBENZENE	99.2	70-130
1,2-DICHLOROBENZENE-D4	98.2	70-130

Surrogates:	Recovery (%)	Acceptance Limits	Verdict
DIBROMOFLUOROMETHANE	101	70-130	ok
1,2-DICHLOROETHANE-D4	93.4	70-130	ok
TOLUENE-D8	100	70-130	ok
4-BROMOFLUOROBENZENE	99.6	70-130	ok
1,2-DICHLOROBENZENE-D4	99.5	70-130	ok

Instrument: HP GC/MS "S"

GZA GeoEnvironmental, Inc.
106 South Street
Hopkinton, MA 01748

EPA Method 8260 / 524.2 Aqueous Method Blank (MB) and Laboratory Control Sample (LCS) Data

Method Blank #2

Date Analyzed:	6/29/2007	
Volatile Organics	Conc. ug/L	Acceptance Limit
dichlorodifluoromethane	< 1.0	< 1.0
chloromethane	< 1.0	< 1.0
vinyl chloride	< 1.0	< 1.0
bromomethane	< 1.0	< 1.0
chloroethane	< 1.0	< 1.0
trichlorofluoromethane	< 1.0	< 1.0
diethyl ether	< 0.5	< 0.5
acrolein	< 25	< 25
acetone	< 25	< 25
1,1-dichloroethene	< 0.5	< 0.5
FREON-113	< 1.0	< 1.0
iodomethane	< 0.5	< 0.5
carbon disulfide	< 0.5	< 0.5
dichloromethane	< 1.0	< 1.0
tert-butyl alcohol (TBA)	< 12	< 12
acrylonitrile	< 0.5	< 0.5
methyl-tert-butyl-ether	< 0.5	< 0.5
trans-1,2-dichloroethene	< 0.5	< 0.5
1,1-dichloroethane	< 0.5	< 0.5
di-isopropyl ether (DIPE)	< 0.5	< 0.5
ethyl tert-butyl ether (EtBE)	< 0.5	< 0.5
vinyl acetate	< 0.5	< 0.5
2-butanone	< 25	< 25
2,2-dichloropropane	< 0.5	< 0.5
cis-1,2-dichloroethene	< 0.5	< 0.5
chloroform	< 1.0	< 1.0
bromochloromethane	< 0.5	< 0.5
tetrahydrafuran	< 2.0	< 2.0
1,1,1-trichloroethane	< 0.5	< 0.5
1,1-dichloropropene	< 0.5	< 0.5
carbon tetrachloride	< 0.5	< 0.5
1,2-dichloroethane	< 0.5	< 0.5
benzene	< 0.5	< 0.5
tert-amyl methyl ether (TAME)	< 0.5	< 0.5
trichloroethene	< 0.5	< 0.5
1,2-dichloropropane	< 0.5	< 0.5
bromodichloromethane	< 0.5	< 0.5
2-chloroethyl vinyl ether	< 0.5	< 0.5
1,4-Dioxane	< 100	< 100
dibromomethane	< 0.5	< 0.5
4-methyl-2-pentanone	< 25	< 25
cis-1,3-dichloropropene	< 0.5	< 0.5
toluene	< 0.5	< 0.5
trans-1,3-dichloropropene	< 1.0	< 1.0
1,1,2-trichloroethane	< 0.5	< 0.5
2-hexanone	< 25	< 25
1,3-dichloropropane	< 0.5	< 0.5
tetrachloroethene	< 0.5	< 0.5
dibromochloromethane	< 0.5	< 0.5
1,2-dibromoethane (EDB)	< 0.5	< 0.5
chlorobenzene	< 0.5	< 0.5
1,1,1,2-tetrachloroethane	< 0.5	< 0.5
ethylbenzene	< 0.5	< 0.5
1,1,2,2-tetrachloroethane	< 0.5	< 0.5
m&p-xylene	< 1.0	< 1.0
o-xylene	< 0.5	< 0.5
styrene	< 0.5	< 0.5
bromoform	< 0.5	< 0.5
isopropylbenzene	< 0.5	< 0.5
1,2,3-trichloropropane	< 0.5	< 0.5
bromobenzene	< 0.5	< 0.5
n-propylbenzene	< 0.5	< 0.5
2-chlorotoluene	< 0.5	< 0.5
1,3,5-trimethylbenzene	< 0.5	< 0.5
trans-1,4-dichloro-2-butene	< 0.5	< 0.5
4-chlorotoluene	< 0.5	< 0.5
tert-butyl-benzene	< 0.5	< 0.5
1,2,4-trimethylbenzene	< 0.5	< 0.5
sec-butyl-benzene	< 0.5	< 0.5
p-isopropyltoluene	< 0.5	< 0.5
1,3-dichlorobenzene	< 0.5	< 0.5
1,4-dichlorobenzene	< 0.5	< 0.5
n-butylbenzene	< 0.5	< 0.5
1,2-dichlorobenzene	< 0.5	< 0.5
1,2-dibromo-3-chloropropane	< 1.0	< 1.0
1,2,4-trichlorobenzene	< 0.5	< 0.5
hexachlorobutadiene	< 0.5	< 0.5
naphthalene	< 1.5	< 1.5
1,2,3-trichlorobenzene	< 0.5	< 0.5

Laboratory Control Sample #2

Date Analyzed:	6/29/2007		
Spike Concentration = 20ug/L	% Recovery	Acceptance Limits	Verdict
dichlorodifluoromethane	96.9	70-130	ok
chloromethane	93.0	70-130	ok
vinyl chloride	95.3	70-130	ok
bromomethane	98.8	70-130	ok
chloroethane	97.6	70-130	ok
trichlorofluoromethane	97.9	70-130	ok
diethyl ether	122	70-130	ok
acrolein	114	70-130	ok
acetone	128	70-130	ok
1,1-dichloroethene	97.6	70-130	ok
FREON-113	97.7	70-130	ok
iodomethane	102	70-130	ok
carbon disulfide	114	70-130	ok
dichloromethane	110	70-130	ok
tert-butyl alcohol (TBA)	128	70-130	ok
acrylonitrile	101	70-130	ok
methyl-tert-butyl-ether	116	70-130	ok
trans-1,2-dichloroethene	101	70-130	ok
1,1-dichloroethane	106	70-130	ok
di-isopropyl ether (DIPE)	117	70-130	ok
ethyl tert-butyl ether (EtBE)	113	70-130	ok
vinyl acetate	123	70-130	ok
2-butanone	128	70-130	ok
2,2-dichloropropane	87.6	70-130	ok
cis-1,2-dichloroethene	108	70-130	ok
chloroform	111	70-130	ok
bromochloromethane	119	70-130	ok
tetrahydrafuran	109	70-130	ok
1,1,1-trichloroethane	104	70-130	ok
1,1-dichloropropene	98.2	70-130	ok
carbon tetrachloride	106	70-130	ok
1,2-dichloroethane	127	70-130	ok
benzene	102	70-130	ok
tert-amyl methyl ether (TAME)	115	70-130	ok
trichloroethene	82.8	70-130	ok
1,2-dichloropropane	88.0	70-130	ok
bromodichloromethane	117	70-130	ok
2-chloroethyl vinyl ether	88.0	70-130	ok
1,4-Dioxane	116	70-130	ok
dibromomethane	116	70-130	ok
4-methyl-2-pentanone	139	70-130	out
cis-1,3-dichloropropene	121	70-130	ok
toluene	115	70-130	ok
trans-1,3-dichloropropene	116	70-130	ok
1,1,2-trichloroethane	108	70-130	ok
2-hexanone	114	70-130	ok
1,3-dichloropropane	105	70-130	ok
tetrachloroethene	79.1	70-130	ok
dibromochloromethane	104	70-130	ok
1,2-dibromoethane (EDB)	115	70-130	ok
chlorobenzene	97.7	70-130	ok
1,1,1,2-tetrachloroethane	98.3	70-130	ok
ethylbenzene	92.4	70-130	ok
1,1,2,2-tetrachloroethane	125	70-130	ok
m&p-xylene	92.6	70-130	ok
o-xylene	100	70-130	ok
styrene	109	70-130	ok
bromoform	125	70-130	ok
isopropylbenzene	97.9	70-130	ok
1,2,3-trichloropropane	127	70-130	ok
bromobenzene	112	70-130	ok
n-propylbenzene	98.7	70-130	ok
2-chlorotoluene	96.2	70-130	ok
1,3,5-trimethylbenzene	99.8	70-130	ok
trans-1,4-dichloro-2-butene	117	70-130	ok
4-chlorotoluene	100	70-130	ok
tert-butyl-benzene	98.6	70-130	ok
1,2,4-trimethylbenzene	101	70-130	ok
sec-butyl-benzene	95.8	70-130	ok
p-isopropyltoluene	95.5	70-130	ok
1,3-dichlorobenzene	106	70-130	ok
1,4-dichlorobenzene	108	70-130	ok
n-butylbenzene	97.4	70-130	ok
1,2-dichlorobenzene	112	70-130	ok
1,2-dibromo-3-chloropropane	116	70-130	ok
1,2,4-trichlorobenzene	122	70-130	ok
hexachlorobutadiene	94.7	70-130	ok
naphthalene	133	70-130	out
1,2,3-trichlorobenzene	128	70-130	ok

SMF criteria allows 5 compounds to be outside acceptance limits

Surrogates:	Recovery (%)	Acceptance Limits
DIBROMOFLUOROMETHANE	121	70-130
1,2-DICHLOROETHANE-D4	118	70-130
TOLUENE-D8	108	70-130
4-BROMOFLUOROBENZENE	102	70-130
1,2-DICHLOROBENZENE-D4	104	70-130

Surrogates:	Recovery (%)	Acceptance Limits	Verdict
DIBROMOFLUOROMETHANE	118	70-130	ok
1,2-DICHLOROETHANE-D4	125	70-130	ok
TOLUENE-D8	108	70-130	ok
4-BROMOFLUOROBENZENE	105	70-130	ok
1,2-DICHLOROBENZENE-D4	108	70-130	ok

Instrument: HP GC/MS "S"

WHITE COPY - Original YELLOW COPY - Lab Files PINK COPY - Project Manager

W.O. # 0706-00155 (for lab use only)

CHAIN-OF-CUSTODY RECORD

Sample I.D.	Date/Time Sampled (Very Important)	Matrix (A=Air, S=Soil, GW=Ground W., SW=Surface W., WW=Waste W., DW=Drinking W., Other (specify))	WW ONLY: □pH □Cond.	GC Screen (VOA)	□524.2 □502.2	WW ONLY: 624	□601 □602	625	Formaldehyde	8260	8021	8021 - "8010" List	8021 "8020" List	8270 □Full □PAH □BN	8082-PCBs Only	8081 - Pest Only	TPH-GC (Mod. 8100)	TPH-GC w/FING	EPH (MA DEP)	VPH (MA DEP)	TCLP (Spec. Below)	Filtering (✓ if requested)	Metals □PPM-13 □R-8	Metals (List Below)	Total # of Cont.	Note #
ML-3A	6/21/07	GW								X				X			X	X					X		6	
ML-3B										X				X			X	X					X		6	
ML-3C										X				X			X	X					X		6	
ML-3D										X				X			X	X					X		6	
Trip Blank 2										X															1	
PRESERVATIVE (Cl - HCl, M=MeOH, N - HNO3, S - H2SO4, Na - NaOH, O - Other)*										Q													N			
CONTAINER TYPE (P-Plastic, G-Glass, V-Vial, O-Other)*										V				G			G	G					P			

RELINQUISHED BY: DATE/TIME: 6/21/07 7:00PM RECEIVED BY: Bill Burcon 6/22/07 1100

RELINQUISHED BY: Bill Burcon 6/22/07 1145 DATE/TIME RECEIVED BY: Jen Fabik 6/22/07 1245

RELINQUISHED BY: DATE/TIME RECEIVED BY:

NOTES: Preservatives, special reporting limits, known contamination, additional testing parameters, etc.:
1) TPH Fingerprint with organo-siloxanes
2) metals → PPM-13 and Iron and Manganese

PROJECT MANAGER: Ed Summers EXT: 3133

DATA REPORT ☑ PDF (Adobe) ☐ ASCII ☐ EXCEL Specify State

LAB USE: TB 0701

TURNAROUND TIME: Standard Rush___ Days, Approved by:___ TEMP. OF COOLER 3.8 °C

6/22/07 LG

GZA FILE NO: 03.0032795-12 P.O. NO. 1245 LG

PROJECT Chanbert Bedrock work plan

LOCATION Alton RI

COLLECTOR(S) RAC, EAS SHEET 1 OF 1

GZA GEOENVIRONMENTAL, INC.
ENGINEERS AND SCIENTISTS
106 South Street
Hopkinton, MA 01748
(508) 435-9244
FAX (508) 435-9912

ACCREDITED IN ACCORDANCE WITH

GZAP003

GZA GeoEnvironmental, Inc.
106 South Street
Hopkinton, MA 01748
(781) 278-4700

Laboratory Identification Numbers:
MA and ME: **MA092** NH: **2028**
CT: **PH0579** RI: **LAO00236**
NELAC - NYS DOH: **11063**

ANALYTICAL REPORT

GZA GeoEnvironmental, Inc.
140 Broadway
Providence, RI 02903

Ed Summerly

Project No.: **03.0032795.12**
Work Order No.: **0708-00083**
Date Received: **08/10/2007**
Date Reported: **08/24/2007**

SAMPLE INFORMATION

Date Sampled	Matrix	Laboratory ID	Sample ID
08/09/2007	Aqueous	0708-00083 001	ML - 1A
08/09/2007	Aqueous	0708-00083 002	ML - 1B
08/09/2007	Aqueous	0708-00083 003	ML - 1C
08/09/2007	Aqueous	0708-00083 004	ML - 2A
08/09/2007	Aqueous	0708-00083 005	ML - 2B
08/09/2007	Aqueous	0708-00083 006	ML - 2C
08/09/2007	Aqueous	0708-00083 007	ML - 3A
08/09/2007	Aqueous	0708-00083 008	ML - 3B
08/09/2007	Aqueous	0708-00083 009	ML - 3C
08/09/2007	Aqueous	0708-00083 010	ML - 3D
08/09/2007	Aqueous	0708-00083 011	Trip Blank 1
08/09/2007	Aqueous	0708-00083 012	Trip Blank 2
08/09/2007	Aqueous	0708-00083 013	D Blank

GZA GeoEnvironmental, Inc.
106 South Street
Hopkinton, MA 01748
(781) 278-4700

ANALYTICAL REPORT

GZA GeoEnvironmental, Inc.
140 Broadway
Providence, RI 02903

Ed Summerly

Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **08/10/2007**
Date Reported: **08/24/2007**
Work Order No.: **0708-00083**

PROJECT NARRATIVE:

1. Sample Receipt

The samples were received on 08/10/07 via _x_GZA courier, __EC, __FEDEX, or ___hand delivered. The temperature of the __temperature blank/_x_cooler air, was 3.2 and 4.1 degrees C. The temperature requirement for most analyses is above freezing to 6 degrees C. The samples were received intact for all requested analyses.

The chain of custody indicates that the samples, when required, were chemically preserved in accordance with the method they reference.

2. EPA Method 6010B/7470A - Metals

Attach QC 6010B 08/13/07 B - Aqueous
Attach QC 7470A 08/16/07 - Aqueous

3. EPA Method 8260 - VOCs

The percent recoveries for the surrogates in the diluted runs are as follows:

ML-3D: 1,2- Dichloroethane-D4 - 100%, Toluene-D8 - 104%, 4-Bromofluorobenzene - 106%
ML-3D: 1,2- Dichloroethane-D4 - 98.1%, Toluene-D8 - 103%, 4-Bromofluorobenzene - 105%

Attach QC 8260 08/13/07 S - Aqueous
Attach QC 8260 08/14/07 S - Aqueous
Attach QC 8260 08/15/07 S - Aqueous
Attach QC 8260 08/16/07 S - Aqueous

4. EPA Method 8270 - SVOCs

Attach QC 8270 08/15/07 - Aqueous

5. Total Petroleum Hydrocarbons

*** Most of the reported value for TPH is due to high levels of sulfonamide compounds. The largest constituent peak was tentatively identified by GC/MS as N-butyl-benzenesulfonamide. The "Q" value for this MS identification is 96%.

The percent of TPH due to sulfonamide compounds for each sample is listed below:

ML-1A, ML-1B, ML-1C, ML-2A, ML-2B, ML-2C, ML-3A, ML-3B, ML-3C, ML-3D: all >90% sulfonamides

*The low surrogate recovery in sample ML-2B was not confirmed by re-extraction and re-analysis as the entire sample was consumed during the extraction process.

*The diluted out surrogate recoveries are due to interference from the type and concentration of interferences present in the sample.

GZA GeoEnvironmental, Inc.
106 South Street
Hopkinton, MA 01748
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ANALYTICAL REPORT

GZA GeoEnvironmental, Inc.
140 Broadway
Providence, RI 02903

Ed Summerly

Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **08/10/2007**
Date Reported: **08/24/2007**
Work Order No.: **0708-00083**

Data Authorized By: _____

NELAC certification, as indicated by the NELAC Lab ID Number, is per analyte. For a complete list of NELAC validated analytes, please contact the laboratory.

Abbreviations:
% R = % Recovery
DF = Dilution Factor
DFS = Dilution Factor Solids
DO = Diluted Out

Method Key:
Method 8260: The current version of the method is 8260B.
Method 8021: The current version of the method is 8021B.
Method 8270: The current version of the method is 8270C.
Method 6010: The current version of the method is 6010B.

Please note that the laboratory signed copy of the chain of custody record is an integral part of the data report.

Soil data is reported on a dry weight basis unless otherwise specified.

Matrix Spike / Matrix Spike Duplicate sets are performed as per method and are reported at the end of the analytical report if assigned on the Chain of Custody.

GZA GeoEnvironmental, Inc.
106 South Street
Hopkinton, MA 01748
(781) 278-4700

ANALYTICAL REPORT

GZA GeoEnvironmental, Inc.
140 Broadway
Providence, RI 02903

Ed Summerly

Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **08/10/2007**
Date Reported: **08/24/2007**
Work Order No.: **0708-00083**

Sample ID: **ML - 1A** Sample No.: **001**

Sample Date: **08/09/2007**

Test Performed	Method	Results	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260			MQS	08/13/2007
Dichlorodifluoromethane	EPA 8260	<2.0	ug/L	MQS	08/13/2007
Chloromethane	EPA 8260	<2.0	ug/L	MQS	08/13/2007
Vinyl Chloride	EPA 8260	<1.0	ug/L	MQS	08/13/2007
Bromomethane	EPA 8260	<2.0	ug/L	MQS	08/13/2007
Chloroethane	EPA 8260	<1.0	ug/L	MQS	08/13/2007
Trichlorofluoromethane	EPA 8260	<2.0	ug/L	MQS	08/13/2007
Diethylether	EPA 8260	<5.0	ug/L	MQS	08/13/2007
Acetone	EPA 8260	<25	ug/L	MQS	08/13/2007
1,1-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	08/13/2007
Dichloromethane	EPA 8260	1.1	ug/L	MQS	08/13/2007
Methyl-Tert-Butyl-Ether	EPA 8260	<1.0	ug/L	MQS	08/13/2007
trans-1,2-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	08/13/2007
1,1-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	08/13/2007
2-Butanone	EPA 8260	<25	ug/L	MQS	08/13/2007
2,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	08/13/2007
cis-1,2-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	08/13/2007
Chloroform	EPA 8260	16	ug/L	MQS	08/13/2007
Bromochloromethane	EPA 8260	<1.0	ug/L	MQS	08/13/2007
Tetrahydrofuran	EPA 8260	<10	ug/L	MQS	08/13/2007
1,1,1-Trichloroethane	EPA 8260	<1.0	ug/L	MQS	08/13/2007
1,1-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	08/13/2007
Carbon Tetrachloride	EPA 8260	<1.0	ug/L	MQS	08/13/2007
1,2-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	08/13/2007
Benzene	EPA 8260	<1.0	ug/L	MQS	08/13/2007
Trichloroethene	EPA 8260	<1.0	ug/L	MQS	08/13/2007
1,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	08/13/2007
Bromodichloromethane	EPA 8260	<1.0	ug/L	MQS	08/13/2007
Dibromomethane	EPA 8260	<1.0	ug/L	MQS	08/13/2007
4-Methyl-2-Pentanone	EPA 8260	<25	ug/L	MQS	08/13/2007
cis-1,3-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	08/13/2007
Toluene	EPA 8260	2.5	ug/L	MQS	08/13/2007
trans-1,3-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	08/13/2007
1,1,2-Trichloroethane	EPA 8260	<1.0	ug/L	MQS	08/13/2007
2-Hexanone	EPA 8260	<2.0	ug/L	MQS	08/13/2007
1,3-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	08/13/2007
Tetrachloroethene	EPA 8260	<1.0	ug/L	MQS	08/13/2007

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ANALYTICAL REPORT

GZA GeoEnvironmental, Inc.
140 Broadway
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Ed Summerly

Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **08/10/2007**
Date Reported: **08/24/2007**
Work Order No.: **0708-00083**

Sample ID: **ML - 1A** Sample No.: **001**

Sample Date: **08/09/2007**

Test Performed	Method	Results	Units	Tech	Analysis Date
Dibromochloromethane	EPA 8260	<1.0	ug/L	MQS	08/13/2007
1,2-Dibromoethane (EDB)	EPA 8260	<2.0	ug/L	MQS	08/13/2007
Chlorobenzene	EPA 8260	<1.0	ug/L	MQS	08/13/2007
1,1,1,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	08/13/2007
Ethylbenzene	EPA 8260	<1.0	ug/L	MQS	08/13/2007
m&p-Xylene	EPA 8260	<1.0	ug/L	MQS	08/13/2007
o-Xylene	EPA 8260	<1.0	ug/L	MQS	08/13/2007
Styrene	EPA 8260	<1.0	ug/L	MQS	08/13/2007
Bromoform	EPA 8260	<2.0	ug/L	MQS	08/13/2007
Isopropylbenzene	EPA 8260	<1.0	ug/L	MQS	08/13/2007
1,1,2,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	08/13/2007
1,2,3-Trichloropropane	EPA 8260	<1.0	ug/L	MQS	08/13/2007
Bromobenzene	EPA 8260	<1.0	ug/L	MQS	08/13/2007
N-Propylbenzene	EPA 8260	<1.0	ug/L	MQS	08/13/2007
2-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	08/13/2007
1,3,5-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	08/13/2007
4-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	08/13/2007
tert-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	08/13/2007
1,2,4-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	08/13/2007
sec-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	08/13/2007
p-Isopropyltoluene	EPA 8260	<1.0	ug/L	MQS	08/13/2007
1,3-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	08/13/2007
1,4-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	08/13/2007
n-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	08/13/2007
1,2-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	08/13/2007
1,2-Dibromo-3-Chloropropane	EPA 8260	<5.0	ug/L	MQS	08/13/2007
1,2,4-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	08/13/2007
Hexachlorobutadiene	EPA 8260	<1.0	ug/L	MQS	08/13/2007
Naphthalene	EPA 8260	<1.0	ug/L	MQS	08/13/2007
1,2,3-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	08/13/2007
Surrogates:	EPA 8260				
***1,2-Dichloroethane-D4	EPA 8260	97.3	% R	MQS	08/13/2007
***Toluene-D8	EPA 8260	102	% R	MQS	08/13/2007
***4-Bromofluorobenzene	EPA 8260	106	% R	MQS	08/13/2007
Preparation	EPA 5030B	1.0	DF	MQS	08/13/2007
SEMI-VOLATILE ORGANICS	EPA 8270			CMG	08/21/2007
ACID FRACTION:	EPA 8270				

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ANALYTICAL REPORT

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Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **08/10/2007**
Date Reported: **08/24/2007**
Work Order No.: **0708-00083**

Sample ID: **ML - 1A** Sample No.: **001**

Sample Date: **08/09/2007**

Test Performed	Method	Results	Units	Tech	Analysis Date
Phenol	EPA 8270	<10	ug/L	CMG	08/21/2007
2-Chlorophenol	EPA 8270	<10	ug/L	CMG	08/21/2007
2-Methylphenol	EPA 8270	<10	ug/L	CMG	08/21/2007
3&4-Methylphenol	EPA 8270	<10	ug/L	CMG	08/21/2007
2-Nitrophenol	EPA 8270	<10	ug/L	CMG	08/21/2007
2,4-Dimethylphenol	EPA 8270	<10	ug/L	CMG	08/21/2007
Benzoic Acid	EPA 8270	<10	ug/L	CMG	08/21/2007
2,4-Dichlorophenol	EPA 8270	<10	ug/L	CMG	08/21/2007
4-Chloro-3-Methylphenol	EPA 8270	<20	ug/L	CMG	08/21/2007
2,4,6-Trichlorophenol	EPA 8270	<10	ug/L	CMG	08/21/2007
2,4,5-Trichlorophenol	EPA 8270	<10	ug/L	CMG	08/21/2007
2,4-Dinitrophenol	EPA 8270	<100	ug/L	CMG	08/21/2007
4-Nitrophenol	EPA 8270	<50	ug/L	CMG	08/21/2007
4,6-Dinitro-2-Methylphenol	EPA 8270	<50	ug/L	CMG	08/21/2007
Pentachlorophenol	EPA 8270	<50	ug/L	CMG	08/21/2007
BASE-NEUTRAL FRACTION:					
n-Nitrosodimethylamine	EPA 8270	<10	ug/L	CMG	08/21/2007
bis(2-Chloroethyl)Ether	EPA 8270	<10	ug/L	CMG	08/21/2007
1,3-Dichlorobenzene	EPA 8270	<10	ug/L	CMG	08/21/2007
1,4-Dichlorobenzene	EPA 8270	<10	ug/L	CMG	08/21/2007
Benzyl Alcohol	EPA 8270	<20	ug/L	CMG	08/21/2007
1,2-Dichlorobenzene	EPA 8270	<10	ug/L	CMG	08/21/2007
bis(2-Chloroisopropyl)Ether	EPA 8270	<10	ug/L	CMG	08/21/2007
n-Nitrosodi-n-Propylamine	EPA 8270	<10	ug/L	CMG	08/21/2007
Hexachloroethane	EPA 8270	<10	ug/L	CMG	08/21/2007
Nitrobenzene	EPA 8270	<10	ug/L	CMG	08/21/2007
Isophorone	EPA 8270	<10	ug/L	CMG	08/21/2007
bis(2-Chloroethoxy)Methane	EPA 8270	<10	ug/L	CMG	08/21/2007
1,2,4-Trichlorobenzene	EPA 8270	<10	ug/L	CMG	08/21/2007
Naphthalene	EPA 8270	<2.0	ug/L	CMG	08/21/2007
4-Chloroaniline	EPA 8270	<20	ug/L	CMG	08/21/2007
Hexachlorobutadiene	EPA 8270	<10	ug/L	CMG	08/21/2007
2-Methylnaphthalene	EPA 8270	<2.0	ug/L	CMG	08/21/2007
Hexachlorocyclopentadiene	EPA 8270	<50	ug/L	CMG	08/21/2007
2-Chloronaphthalene	EPA 8270	<10	ug/L	CMG	08/21/2007
2-Nitroaniline	EPA 8270	<50	ug/L	CMG	08/21/2007
Dimethylphthalate	EPA 8270	<10	ug/L	CMG	08/21/2007

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Date Received: **08/10/2007**
Date Reported: **08/24/2007**
Work Order No.: **0708-00083**

Sample ID: **ML - 1A** Sample No.: **001**

Sample Date: **08/09/2007**

Test Performed	Method	Results	Units	Tech	Analysis Date
Acenaphthylene	EPA 8270	<2.0	ug/L	CMG	08/21/2007
2,6-Dinitrotoluene	EPA 8270	<10	ug/L	CMG	08/21/2007
3-Nitroaniline	EPA 8270	<50	ug/L	CMG	08/21/2007
Acenaphthene	EPA 8270	<2.0	ug/L	CMG	08/21/2007
Dibenzofuran	EPA 8270	<10	ug/L	CMG	08/21/2007
2,4-Dinitrotoluene	EPA 8270	<10	ug/L	CMG	08/21/2007
Diethylphthalate	EPA 8270	<10	ug/L	CMG	08/21/2007
Fluorene	EPA 8270	<2.0	ug/L	CMG	08/21/2007
4-Chlorophenyl Phenyl Ether	EPA 8270	<10	ug/L	CMG	08/21/2007
4-Nitroaniline	EPA 8270	<20	ug/L	CMG	08/21/2007
n-Nitrosodiphenylamine	EPA 8270	<10	ug/L	CMG	08/21/2007
4-Bromophenyl Phenyl Ether	EPA 8270	<10	ug/L	CMG	08/21/2007
Hexachlorobenzene	EPA 8270	<10	ug/L	CMG	08/21/2007
Phenanthrene	EPA 8270	<2.0	ug/L	CMG	08/21/2007
Anthracene	EPA 8270	<2.0	ug/L	CMG	08/21/2007
Carbazole	EPA 8270	<10	ug/L	CMG	08/21/2007
di-n-Butylphthalate	EPA 8270	<15	ug/L	CMG	08/21/2007
Fluoranthene	EPA 8270	<2.0	ug/L	CMG	08/21/2007
Pyrene	EPA 8270	<2.0	ug/L	CMG	08/21/2007
Butylbenzylphthalate	EPA 8270	<10	ug/L	CMG	08/21/2007
Benzo [a] Anthracene	EPA 8270	<2.0	ug/L	CMG	08/21/2007
3,3'-Dichlorobenzidine	EPA 8270	<20	ug/L	CMG	08/21/2007
Chrysene	EPA 8270	<2.0	ug/L	CMG	08/21/2007
bis(2-Ethylhexyl)Phthalate	EPA 8270	<10	ug/L	CMG	08/21/2007
di-n-Octylphthalate	EPA 8270	<10	ug/L	CMG	08/21/2007
Benzo [b] Fluoranthene	EPA 8270	<2.0	ug/L	CMG	08/21/2007
Benzo [k] Fluoranthene	EPA 8270	<2.0	ug/L	CMG	08/21/2007
Benzo [a] Pyrene	EPA 8270	<2.0	ug/L	CMG	08/21/2007
Indeno [1,2,3-cd] Pyrene	EPA 8270	<2.0	ug/L	CMG	08/21/2007
Dibenzo [a,h] Anthracene	EPA 8270	<2.0	ug/L	CMG	08/21/2007
Benzo [g,h,i] Perylene	EPA 8270	<2.0	ug/L	CMG	08/21/2007
Surrogates:	EPA 8270				
***2-Fluorophenol	EPA 8270	26.7	% R	CMG	08/21/2007
***Phenol-D6	EPA 8270	18.7	% R	CMG	08/21/2007
***Nitrobenzene-D5	EPA 8270	54.0	% R	CMG	08/21/2007
***2-Fluorobiphenyl	EPA 8270	54.8	% R	CMG	08/21/2007
***2,4,6-Tribromophenol	EPA 8270	67.4	% R	CMG	08/21/2007

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Date Received: **08/10/2007**
Date Reported: **08/24/2007**
Work Order No.: **0708-00083**

Sample ID: **ML - 1A** Sample No.: **001**

Sample Date: **08/09/2007**

Test Performed	Method	Results	Units	Tech	Analysis Date
***P-Terphenyl-D14	EPA 8270	70.1	% R	CMG	08/21/2007
Extraction	EPA 3510C	1.0	DF	JCW	08/15/2007
TOTAL PETROLEUM HYDROCARBON	D3328/EPA 8100/			RJD	08/20/2007
Hydrocarbon Content		2200	ug/L	RJD	08/20/2007
Surrogate:	D3328/EPA 8100				
***p-Terphenyl		99.0	% R	RJD	08/20/2007
Extraction	EPA 3510C	5.0	DF	JCW	08/16/2007
PRIORITY POLLUTANT METALS				AJY	08/13/2007
Silver	EPA 6010B	<0.0050	mg/L	AJY	08/13/2007
Arsenic	EPA 6010B	<0.010	mg/L	AJY	08/13/2007
Beryllium	EPA 6010B	<0.0040	mg/L	AJY	08/13/2007
Cadmium	EPA 6010B	<0.0050	mg/L	AJY	08/13/2007
Chromium	EPA 6010B	<0.0050	mg/L	AJY	08/13/2007
Copper	EPA 6010B	<0.015	mg/L	AJY	08/13/2007
Mercury	EPA 7470A	<0.00040	mg/L	TGG	08/20/2007
Nickel	EPA 6010B	<0.010	mg/L	AJY	08/13/2007
Lead	EPA 6010B	<0.010	mg/L	AJY	08/13/2007
Antimony	EPA 6010B	<0.025	mg/L	AJY	08/13/2007
Selenium	EPA 6010B	<0.025	mg/L	AJY	08/13/2007
Thallium	EPA 6010B	<0.025	mg/L	AJY	08/13/2007
Zinc	EPA 6010B	<0.010	mg/L	AJY	08/13/2007
Iron	EPA 6010B	0.096	mg/L	AJY	08/13/2007
Manganese	EPA 6010B	<0.0050	mg/L	AJY	08/13/2007

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Date Received: **08/10/2007**
Date Reported: **08/24/2007**
Work Order No.: **0708-00083**

Sample ID: **ML - 1B** Sample No.: **002**

Sample Date: **08/09/2007**

Test Performed	Method	Results	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260			MQS	08/13/2007
Dichlorodifluoromethane	EPA 8260	<2.0	ug/L	MQS	08/13/2007
Chloromethane	EPA 8260	<2.0	ug/L	MQS	08/13/2007
Vinyl Chloride	EPA 8260	<1.0	ug/L	MQS	08/13/2007
Bromomethane	EPA 8260	<2.0	ug/L	MQS	08/13/2007
Chloroethane	EPA 8260	<1.0	ug/L	MQS	08/13/2007
Trichlorofluoromethane	EPA 8260	<2.0	ug/L	MQS	08/13/2007
Diethylether	EPA 8260	<5.0	ug/L	MQS	08/13/2007
Acetone	EPA 8260	<25	ug/L	MQS	08/13/2007
1,1-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	08/13/2007
Dichloromethane	EPA 8260	1.3	ug/L	MQS	08/13/2007
Methyl-Tert-Butyl-Ether	EPA 8260	<1.0	ug/L	MQS	08/13/2007
trans-1,2-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	08/13/2007
1,1-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	08/13/2007
2-Butanone	EPA 8260	<25	ug/L	MQS	08/13/2007
2,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	08/13/2007
cis-1,2-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	08/13/2007
Chloroform	EPA 8260	7.9	ug/L	MQS	08/13/2007
Bromochloromethane	EPA 8260	<1.0	ug/L	MQS	08/13/2007
Tetrahydrofuran	EPA 8260	<10	ug/L	MQS	08/13/2007
1,1,1-Trichloroethane	EPA 8260	<1.0	ug/L	MQS	08/13/2007
1,1-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	08/13/2007
Carbon Tetrachloride	EPA 8260	<1.0	ug/L	MQS	08/13/2007
1,2-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	08/13/2007
Benzene	EPA 8260	<1.0	ug/L	MQS	08/13/2007
Trichloroethene	EPA 8260	<1.0	ug/L	MQS	08/13/2007
1,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	08/13/2007
Bromodichloromethane	EPA 8260	<1.0	ug/L	MQS	08/13/2007
Dibromomethane	EPA 8260	<1.0	ug/L	MQS	08/13/2007
4-Methyl-2-Pentanone	EPA 8260	<25	ug/L	MQS	08/13/2007
cis-1,3-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	08/13/2007
Toluene	EPA 8260	5.5	ug/L	MQS	08/13/2007
trans-1,3-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	08/13/2007
1,1,2-Trichloroethane	EPA 8260	<1.0	ug/L	MQS	08/13/2007
2-Hexanone	EPA 8260	<2.0	ug/L	MQS	08/13/2007
1,3-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	08/13/2007
Tetrachloroethene	EPA 8260	<1.0	ug/L	MQS	08/13/2007

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Date Received: **08/10/2007**
Date Reported: **08/24/2007**
Work Order No.: **0708-00083**

Sample ID: **ML - 1B** Sample No.: **002**

Sample Date: **08/09/2007**

Test Performed	Method	Results	Units	Tech	Analysis Date
Dibromochloromethane	EPA 8260	<1.0	ug/L	MQS	08/13/2007
1,2-Dibromoethane (EDB)	EPA 8260	<2.0	ug/L	MQS	08/13/2007
Chlorobenzene	EPA 8260	<1.0	ug/L	MQS	08/13/2007
1,1,1,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	08/13/2007
Ethylbenzene	EPA 8260	<1.0	ug/L	MQS	08/13/2007
m&p-Xylene	EPA 8260	<1.0	ug/L	MQS	08/13/2007
o-Xylene	EPA 8260	<1.0	ug/L	MQS	08/13/2007
Styrene	EPA 8260	<1.0	ug/L	MQS	08/13/2007
Bromoform	EPA 8260	<2.0	ug/L	MQS	08/13/2007
Isopropylbenzene	EPA 8260	<1.0	ug/L	MQS	08/13/2007
1,1,2,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	08/13/2007
1,2,3-Trichloropropane	EPA 8260	<1.0	ug/L	MQS	08/13/2007
Bromobenzene	EPA 8260	<1.0	ug/L	MQS	08/13/2007
N-Propylbenzene	EPA 8260	<1.0	ug/L	MQS	08/13/2007
2-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	08/13/2007
1,3,5-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	08/13/2007
4-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	08/13/2007
tert-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	08/13/2007
1,2,4-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	08/13/2007
sec-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	08/13/2007
p-Isopropyltoluene	EPA 8260	<1.0	ug/L	MQS	08/13/2007
1,3-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	08/13/2007
1,4-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	08/13/2007
n-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	08/13/2007
1,2-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	08/13/2007
1,2-Dibromo-3-Chloropropane	EPA 8260	<5.0	ug/L	MQS	08/13/2007
1,2,4-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	08/13/2007
Hexachlorobutadiene	EPA 8260	<1.0	ug/L	MQS	08/13/2007
Naphthalene	EPA 8260	<1.0	ug/L	MQS	08/13/2007
1,2,3-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	08/13/2007
Surrogates:	EPA 8260				
***1,2-Dichloroethane-D4	EPA 8260	97.5	% R	MQS	08/13/2007
***Toluene-D8	EPA 8260	102	% R	MQS	08/13/2007
***4-Bromofluorobenzene	EPA 8260	104	% R	MQS	08/13/2007
Preparation	EPA 5030B	1.0	DF	MQS	08/13/2007
SEMI-VOLATILE ORGANICS	EPA 8270			CMG	08/22/2007
ACID FRACTION:	EPA 8270				

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Project No.: **03.0032795.12**

Date Received: **08/10/2007**
Date Reported: **08/24/2007**
Work Order No.: **0708-00083**

Sample ID: **ML - 1B** Sample No.: **002**

Sample Date: **08/09/2007**

Test Performed	Method	Results	Units	Tech	Analysis Date
Phenol	EPA 8270	<12	ug/L	CMG	08/22/2007
2-Chlorophenol	EPA 8270	<12	ug/L	CMG	08/22/2007
2-Methylphenol	EPA 8270	<12	ug/L	CMG	08/22/2007
3&4-Methylphenol	EPA 8270	<12	ug/L	CMG	08/22/2007
2-Nitrophenol	EPA 8270	<12	ug/L	CMG	08/22/2007
2,4-Dimethylphenol	EPA 8270	<12	ug/L	CMG	08/22/2007
Benzoic Acid	EPA 8270	<12	ug/L	CMG	08/22/2007
2,4-Dichlorophenol	EPA 8270	<12	ug/L	CMG	08/22/2007
4-Chloro-3-Methylphenol	EPA 8270	<23	ug/L	CMG	08/22/2007
2,4,6-Trichlorophenol	EPA 8270	<12	ug/L	CMG	08/22/2007
2,4,5-Trichlorophenol	EPA 8270	<12	ug/L	CMG	08/22/2007
2,4-Dinitrophenol	EPA 8270	<120	ug/L	CMG	08/22/2007
4-Nitrophenol	EPA 8270	<58	ug/L	CMG	08/22/2007
4,6-Dinitro-2-Methylphenol	EPA 8270	<58	ug/L	CMG	08/22/2007
Pentachlorophenol	EPA 8270	<58	ug/L	CMG	08/22/2007
BASE-NEUTRAL FRACTION:					
n-Nitrosodimethylamine	EPA 8270	<12	ug/L	CMG	08/22/2007
bis(2-Chloroethyl)Ether	EPA 8270	<12	ug/L	CMG	08/22/2007
1,3-Dichlorobenzene	EPA 8270	<12	ug/L	CMG	08/22/2007
1,4-Dichlorobenzene	EPA 8270	<12	ug/L	CMG	08/22/2007
Benzyl Alcohol	EPA 8270	<23	ug/L	CMG	08/22/2007
1,2-Dichlorobenzene	EPA 8270	<12	ug/L	CMG	08/22/2007
bis(2-Chloroisopropyl)Ether	EPA 8270	<12	ug/L	CMG	08/22/2007
n-Nitrosodi-n-Propylamine	EPA 8270	<12	ug/L	CMG	08/22/2007
Hexachloroethane	EPA 8270	<12	ug/L	CMG	08/22/2007
Nitrobenzene	EPA 8270	<12	ug/L	CMG	08/22/2007
Isophorone	EPA 8270	<12	ug/L	CMG	08/22/2007
bis(2-Chloroethoxy)Methane	EPA 8270	<12	ug/L	CMG	08/22/2007
1,2,4-Trichlorobenzene	EPA 8270	<12	ug/L	CMG	08/22/2007
Naphthalene	EPA 8270	<2.3	ug/L	CMG	08/22/2007
4-Chloroaniline	EPA 8270	<23	ug/L	CMG	08/22/2007
Hexachlorobutadiene	EPA 8270	<12	ug/L	CMG	08/22/2007
2-Methylnaphthalene	EPA 8270	<2.3	ug/L	CMG	08/22/2007
Hexachlorocyclopentadiene	EPA 8270	<58	ug/L	CMG	08/22/2007
2-Chloronaphthalene	EPA 8270	<12	ug/L	CMG	08/22/2007
2-Nitroaniline	EPA 8270	<58	ug/L	CMG	08/22/2007
Dimethylphthalate	EPA 8270	<12	ug/L	CMG	08/22/2007

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106 South Street
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ANALYTICAL REPORT

GZA GeoEnvironmental, Inc.
140 Broadway
Providence, RI 02903

Ed Summerly

Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **08/10/2007**
Date Reported: **08/24/2007**
Work Order No.: **0708-00083**

Sample ID: **ML - 1B** Sample No.: **002**

Sample Date: **08/09/2007**

Test Performed	Method	Results	Units	Tech	Analysis Date
Acenaphthylene	EPA 8270	<2.3	ug/L	CMG	08/22/2007
2,6-Dinitrotoluene	EPA 8270	<12	ug/L	CMG	08/22/2007
3-Nitroaniline	EPA 8270	<58	ug/L	CMG	08/22/2007
Acenaphthene	EPA 8270	<2.3	ug/L	CMG	08/22/2007
Dibenzofuran	EPA 8270	<12	ug/L	CMG	08/22/2007
2,4-Dinitrotoluene	EPA 8270	<12	ug/L	CMG	08/22/2007
Diethylphthalate	EPA 8270	<12	ug/L	CMG	08/22/2007
Fluorene	EPA 8270	<2.3	ug/L	CMG	08/22/2007
4-Chlorophenyl Phenyl Ether	EPA 8270	<12	ug/L	CMG	08/22/2007
4-Nitroaniline	EPA 8270	<23	ug/L	CMG	08/22/2007
n-Nitrosodiphenylamine	EPA 8270	<12	ug/L	CMG	08/22/2007
4-Bromophenyl Phenyl Ether	EPA 8270	<12	ug/L	CMG	08/22/2007
Hexachlorobenzene	EPA 8270	<12	ug/L	CMG	08/22/2007
Phenanthrene	EPA 8270	<2.3	ug/L	CMG	08/22/2007
Anthracene	EPA 8270	<2.3	ug/L	CMG	08/22/2007
Carbazole	EPA 8270	<12	ug/L	CMG	08/22/2007
di-n-Butylphthalate	EPA 8270	<17	ug/L	CMG	08/22/2007
Fluoranthene	EPA 8270	<2.3	ug/L	CMG	08/22/2007
Pyrene	EPA 8270	<2.3	ug/L	CMG	08/22/2007
Butylbenzylphthalate	EPA 8270	<12	ug/L	CMG	08/22/2007
Benzo [a] Anthracene	EPA 8270	<2.3	ug/L	CMG	08/22/2007
3,3'-Dichlorobenzidine	EPA 8270	<23	ug/L	CMG	08/22/2007
Chrysene	EPA 8270	<2.3	ug/L	CMG	08/22/2007
bis(2-Ethylhexyl)Phthalate	EPA 8270	<12	ug/L	CMG	08/22/2007
di-n-Octylphthalate	EPA 8270	<12	ug/L	CMG	08/22/2007
Benzo [b] Fluoranthene	EPA 8270	<2.3	ug/L	CMG	08/22/2007
Benzo [k] Fluoranthene	EPA 8270	<2.3	ug/L	CMG	08/22/2007
Benzo [a] Pyrene	EPA 8270	<2.3	ug/L	CMG	08/22/2007
Indeno [1,2,3-cd] Pyrene	EPA 8270	<2.3	ug/L	CMG	08/22/2007
Dibenzo [a,h] Anthracene	EPA 8270	<2.3	ug/L	CMG	08/22/2007
Benzo [g,h,i] Perylene	EPA 8270	<2.3	ug/L	CMG	08/22/2007
Surrogates:	EPA 8270				
***2-Fluorophenol	EPA 8270	23.7	% R	CMG	08/22/2007
***2-Chlorophenol-D4	EPA 8270	52.2	% R	CMG	08/22/2007
***Nitrobenzene-D5	EPA 8270	58.2	% R	CMG	08/22/2007
***2-Fluorobiphenyl	EPA 8270	58.7	% R	CMG	08/22/2007
***2,4,6-Tribromophenol	EPA 8270	66.2	% R	CMG	08/22/2007

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Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **08/10/2007**
Date Reported: **08/24/2007**
Work Order No.: **0708-00083**

Sample ID: **ML - 1B** Sample No.: **002**

Sample Date: **08/09/2007**

Test Performed	Method	Results	Units	Tech	Analysis Date
***1,2-Dichlorobenzene-D4	EPA 8270	50.8	% R	CMG	08/22/2007
Extraction	EPA 3510C	1.0	DF	JCW	08/15/2007
TOTAL PETROLEUM HYDROCARBON	D3328/EPA 8100/			RJD	08/20/2007
Hydrocarbon Content		5400	ug/L	RJD	08/20/2007
Surrogate:	D3328/EPA 8100				
***p-Terphenyl		99.6	% R	RJD	08/20/2007
Extraction	EPA 3510C	5.0	DF	JCW	08/16/2007
PRIORITY POLLUTANT METALS				AJY	08/13/2007
Silver	EPA 6010B	<0.0050	mg/L	AJY	08/13/2007
Arsenic	EPA 6010B	<0.010	mg/L	AJY	08/13/2007
Beryllium	EPA 6010B	<0.0040	mg/L	AJY	08/13/2007
Cadmium	EPA 6010B	<0.0050	mg/L	AJY	08/13/2007
Chromium	EPA 6010B	0.050	mg/L	AJY	08/13/2007
Copper	EPA 6010B	<0.015	mg/L	AJY	08/13/2007
Mercury	EPA 7470A	<0.00040	mg/L	TGG	08/20/2007
Nickel	EPA 6010B	<0.010	mg/L	AJY	08/13/2007
Lead	EPA 6010B	<0.010	mg/L	AJY	08/13/2007
Antimony	EPA 6010B	<0.025	mg/L	AJY	08/13/2007
Selenium	EPA 6010B	<0.025	mg/L	AJY	08/13/2007
Thallium	EPA 6010B	<0.025	mg/L	AJY	08/13/2007
Zinc	EPA 6010B	0.012	mg/L	AJY	08/13/2007
Iron	EPA 6010B	0.13	mg/L	AJY	08/13/2007
Manganese	EPA 6010B	0.020	mg/L	AJY	08/13/2007

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Date Received: **08/10/2007**
Date Reported: **08/24/2007**
Work Order No.: **0708-00083**

Sample ID: **ML - 1C** Sample No.: **003**

Sample Date: **08/09/2007**

Test Performed	Method	Results	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260			MQS	08/14/2007
Dichlorodifluoromethane	EPA 8260	<2.0	ug/L	MQS	08/14/2007
Chloromethane	EPA 8260	<2.0	ug/L	MQS	08/14/2007
Vinyl Chloride	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Bromomethane	EPA 8260	<2.0	ug/L	MQS	08/14/2007
Chloroethane	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Trichlorofluoromethane	EPA 8260	<2.0	ug/L	MQS	08/14/2007
Diethylether	EPA 8260	<5.0	ug/L	MQS	08/14/2007
Acetone	EPA 8260	<25	ug/L	MQS	08/14/2007
1,1-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Dichloromethane	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Methyl-Tert-Butyl-Ether	EPA 8260	<1.0	ug/L	MQS	08/14/2007
trans-1,2-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
1,1-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	08/14/2007
2-Butanone	EPA 8260	<25	ug/L	MQS	08/14/2007
2,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	08/14/2007
cis-1,2-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Chloroform	EPA 8260	3.7	ug/L	MQS	08/14/2007
Bromochloromethane	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Tetrahydrofuran	EPA 8260	<10	ug/L	MQS	08/14/2007
1,1,1-Trichloroethane	EPA 8260	<1.0	ug/L	MQS	08/14/2007
1,1-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Carbon Tetrachloride	EPA 8260	<1.0	ug/L	MQS	08/14/2007
1,2-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Benzene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Trichloroethene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
1,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Bromodichloromethane	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Dibromomethane	EPA 8260	<1.0	ug/L	MQS	08/14/2007
4-Methyl-2-Pentanone	EPA 8260	<25	ug/L	MQS	08/14/2007
cis-1,3-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Toluene	EPA 8260	3.8	ug/L	MQS	08/14/2007
trans-1,3-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
1,1,2-Trichloroethane	EPA 8260	<1.0	ug/L	MQS	08/14/2007
2-Hexanone	EPA 8260	<2.0	ug/L	MQS	08/14/2007
1,3-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Tetrachloroethene	EPA 8260	<1.0	ug/L	MQS	08/14/2007

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Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **08/10/2007**
Date Reported: **08/24/2007**
Work Order No.: **0708-00083**

Sample ID: **ML - 1C** Sample No.: **003**

Sample Date: **08/09/2007**

Test Performed	Method	Results	Units	Tech	Analysis Date
Dibromochloromethane	EPA 8260	<1.0	ug/L	MQS	08/14/2007
1,2-Dibromoethane (EDB)	EPA 8260	<2.0	ug/L	MQS	08/14/2007
Chlorobenzene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
1,1,1,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Ethylbenzene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
m&p-Xylene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
o-Xylene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Styrene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Bromoform	EPA 8260	<2.0	ug/L	MQS	08/14/2007
Isopropylbenzene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
1,1,2,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	08/14/2007
1,2,3-Trichloropropane	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Bromobenzene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
N-Propylbenzene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
2-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
1,3,5-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
4-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
tert-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
1,2,4-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
sec-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
p-Isopropyltoluene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
1,3-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
1,4-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
n-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
1,2-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
1,2-Dibromo-3-Chloropropane	EPA 8260	<5.0	ug/L	MQS	08/14/2007
1,2,4-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Hexachlorobutadiene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Naphthalene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
1,2,3-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Surrogates:	EPA 8260				
***1,2-Dichloroethane-D4	EPA 8260	99.2	% R	MQS	08/14/2007
***Toluene-D8	EPA 8260	103	% R	MQS	08/14/2007
***4-Bromofluorobenzene	EPA 8260	104	% R	MQS	08/14/2007
Preparation	EPA 5030B	1.0	DF	MQS	08/13/2007
SEMI-VOLATILE ORGANICS	EPA 8270			CMG	08/21/2007
ACID FRACTION:	EPA 8270				

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Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **08/10/2007**
Date Reported: **08/24/2007**
Work Order No.: **0708-00083**

Sample ID: **ML - 1C** Sample No.: **003**

Sample Date: **08/09/2007**

Test Performed	Method	Results	Units	Tech	Analysis Date
Phenol	EPA 8270	<11	ug/L	CMG	08/21/2007
2-Chlorophenol	EPA 8270	<11	ug/L	CMG	08/21/2007
2-Methylphenol	EPA 8270	<11	ug/L	CMG	08/21/2007
3&4-Methylphenol	EPA 8270	<11	ug/L	CMG	08/21/2007
2-Nitrophenol	EPA 8270	<11	ug/L	CMG	08/21/2007
2,4-Dimethylphenol	EPA 8270	<11	ug/L	CMG	08/21/2007
Benzoic Acid	EPA 8270	<11	ug/L	CMG	08/21/2007
2,4-Dichlorophenol	EPA 8270	<11	ug/L	CMG	08/21/2007
4-Chloro-3-Methylphenol	EPA 8270	<21	ug/L	CMG	08/21/2007
2,4,6-Trichlorophenol	EPA 8270	<11	ug/L	CMG	08/21/2007
2,4,5-Trichlorophenol	EPA 8270	<11	ug/L	CMG	08/21/2007
2,4-Dinitrophenol	EPA 8270	<110	ug/L	CMG	08/21/2007
4-Nitrophenol	EPA 8270	<53	ug/L	CMG	08/21/2007
4,6-Dinitro-2-Methylphenol	EPA 8270	<53	ug/L	CMG	08/21/2007
Pentachlorophenol	EPA 8270	<53	ug/L	CMG	08/21/2007
BASE-NEUTRAL FRACTION:					
n-Nitrosodimethylamine	EPA 8270	<11	ug/L	CMG	08/21/2007
bis(2-Chloroethyl)Ether	EPA 8270	<11	ug/L	CMG	08/21/2007
1,3-Dichlorobenzene	EPA 8270	<11	ug/L	CMG	08/21/2007
1,4-Dichlorobenzene	EPA 8270	<11	ug/L	CMG	08/21/2007
Benzyl Alcohol	EPA 8270	<21	ug/L	CMG	08/21/2007
1,2-Dichlorobenzene	EPA 8270	<11	ug/L	CMG	08/21/2007
bis(2-Chloroisopropyl)Ether	EPA 8270	<11	ug/L	CMG	08/21/2007
n-Nitrosodi-n-Propylamine	EPA 8270	<11	ug/L	CMG	08/21/2007
Hexachloroethane	EPA 8270	<11	ug/L	CMG	08/21/2007
Nitrobenzene	EPA 8270	<11	ug/L	CMG	08/21/2007
Isophorone	EPA 8270	<11	ug/L	CMG	08/21/2007
bis(2-Chloroethoxy)Methane	EPA 8270	<11	ug/L	CMG	08/21/2007
1,2,4-Trichlorobenzene	EPA 8270	<11	ug/L	CMG	08/21/2007
Naphthalene	EPA 8270	<2.1	ug/L	CMG	08/21/2007
4-Chloroaniline	EPA 8270	<21	ug/L	CMG	08/21/2007
Hexachlorobutadiene	EPA 8270	<11	ug/L	CMG	08/21/2007
2-Methylnaphthalene	EPA 8270	<2.1	ug/L	CMG	08/21/2007
Hexachlorocyclopentadiene	EPA 8270	<53	ug/L	CMG	08/21/2007
2-Chloronaphthalene	EPA 8270	<11	ug/L	CMG	08/21/2007
2-Nitroaniline	EPA 8270	<53	ug/L	CMG	08/21/2007
Dimethylphthalate	EPA 8270	<11	ug/L	CMG	08/21/2007

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Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **08/10/2007**
Date Reported: **08/24/2007**
Work Order No.: **0708-00083**

Sample ID: **ML - 1C** Sample No.: **003**

Sample Date: **08/09/2007**

Test Performed	Method	Results	Units	Tech	Analysis Date
Acenaphthylene	EPA 8270	<2.1	ug/L	CMG	08/21/2007
2,6-Dinitrotoluene	EPA 8270	<11	ug/L	CMG	08/21/2007
3-Nitroaniline	EPA 8270	<53	ug/L	CMG	08/21/2007
Acenaphthene	EPA 8270	<2.1	ug/L	CMG	08/21/2007
Dibenzofuran	EPA 8270	<11	ug/L	CMG	08/21/2007
2,4-Dinitrotoluene	EPA 8270	<11	ug/L	CMG	08/21/2007
Diethylphthalate	EPA 8270	<11	ug/L	CMG	08/21/2007
Fluorene	EPA 8270	<2.1	ug/L	CMG	08/21/2007
4-Chlorophenyl Phenyl Ether	EPA 8270	<11	ug/L	CMG	08/21/2007
4-Nitroaniline	EPA 8270	<21	ug/L	CMG	08/21/2007
n-Nitrosodiphenylamine	EPA 8270	<11	ug/L	CMG	08/21/2007
4-Bromophenyl Phenyl Ether	EPA 8270	<11	ug/L	CMG	08/21/2007
Hexachlorobenzene	EPA 8270	<11	ug/L	CMG	08/21/2007
Phenanthrene	EPA 8270	<2.1	ug/L	CMG	08/21/2007
Anthracene	EPA 8270	<2.1	ug/L	CMG	08/21/2007
Carbazole	EPA 8270	<11	ug/L	CMG	08/21/2007
di-n-Butylphthalate	EPA 8270	<16	ug/L	CMG	08/21/2007
Fluoranthene	EPA 8270	<2.1	ug/L	CMG	08/21/2007
Pyrene	EPA 8270	<2.1	ug/L	CMG	08/21/2007
Butylbenzylphthalate	EPA 8270	<11	ug/L	CMG	08/21/2007
Benzo [a] Anthracene	EPA 8270	<2.1	ug/L	CMG	08/21/2007
3,3'-Dichlorobenzidine	EPA 8270	<21	ug/L	CMG	08/21/2007
Chrysene	EPA 8270	<2.1	ug/L	CMG	08/21/2007
bis(2-Ethylhexyl)Phthalate	EPA 8270	<11	ug/L	CMG	08/21/2007
di-n-Octylphthalate	EPA 8270	<11	ug/L	CMG	08/21/2007
Benzo [b] Fluoranthene	EPA 8270	<2.1	ug/L	CMG	08/21/2007
Benzo [k] Fluoranthene	EPA 8270	<2.1	ug/L	CMG	08/21/2007
Benzo [a] Pyrene	EPA 8270	<2.1	ug/L	CMG	08/21/2007
Indeno [1,2,3-cd] Pyrene	EPA 8270	<2.1	ug/L	CMG	08/21/2007
Dibenzo [a,h] Anthracene	EPA 8270	<2.1	ug/L	CMG	08/21/2007
Benzo [g,h,i] Perylene	EPA 8270	<2.1	ug/L	CMG	08/21/2007
Surrogates:	EPA 8270				
***2-Fluorophenol	EPA 8270	37.8	% R	CMG	08/21/2007
***Phenol-D6	EPA 8270	27.1	% R	CMG	08/21/2007
***Nitrobenzene-D5	EPA 8270	43.7	% R	CMG	08/21/2007
***2-Fluorobiphenyl	EPA 8270	43.0	% R	CMG	08/21/2007
***2,4,6-Tribromophenol	EPA 8270	41.1	% R	CMG	08/21/2007

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ANALYTICAL REPORT

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Ed Summerly

Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **08/10/2007**
Date Reported: **08/24/2007**
Work Order No.: **0708-00083**

Sample ID: **ML - 1C** Sample No.: **003**

Sample Date: **08/09/2007**

Test Performed	Method	Results	Units	Tech	Analysis Date
***P-Terphenyl-D14	EPA 8270	47.0	% R	CMG	08/21/2007
Extraction	EPA 3510C	1.0	DF	JCW	08/15/2007
TOTAL PETROLEUM HYDROCARBON	D3328/EPA 8100/			RJD	08/20/2007
Hydrocarbon Content		4400	ug/L	RJD	08/20/2007
Surrogate:	D3328/EPA 8100				
***p-Terphenyl		78.0	% R	RJD	08/20/2007
Extraction	EPA 3510C	5.0	DF	JCW	08/16/2007
PRIORITY POLLUTANT METALS				AJY	08/13/2007
Silver	EPA 6010B	<0.0050	mg/L	AJY	08/13/2007
Arsenic	EPA 6010B	<0.010	mg/L	AJY	08/13/2007
Beryllium	EPA 6010B	<0.0040	mg/L	AJY	08/13/2007
Cadmium	EPA 6010B	<0.0050	mg/L	AJY	08/13/2007
Chromium	EPA 6010B	0.0080	mg/L	AJY	08/13/2007
Copper	EPA 6010B	<0.015	mg/L	AJY	08/13/2007
Mercury	EPA 7470A	<0.00040	mg/L	TGG	08/20/2007
Nickel	EPA 6010B	<0.010	mg/L	AJY	08/13/2007
Lead	EPA 6010B	<0.010	mg/L	AJY	08/13/2007
Antimony	EPA 6010B	<0.025	mg/L	AJY	08/13/2007
Selenium	EPA 6010B	<0.025	mg/L	AJY	08/13/2007
Thallium	EPA 6010B	<0.025	mg/L	AJY	08/13/2007
Zinc	EPA 6010B	0.016	mg/L	AJY	08/13/2007
Iron	EPA 6010B	0.19	mg/L	AJY	08/13/2007
Manganese	EPA 6010B	0.0070	mg/L	AJY	08/13/2007

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Project No.: **03.0032795.12**

Date Received: **08/10/2007**
Date Reported: **08/24/2007**
Work Order No.: **0708-00083**

Sample ID: **ML - 2A** Sample No.: **004**

Sample Date: **08/09/2007**

Test Performed	Method	Results	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260			MQS	08/14/2007
Dichlorodifluoromethane	EPA 8260	<2.0	ug/L	MQS	08/14/2007
Chloromethane	EPA 8260	<2.0	ug/L	MQS	08/14/2007
Vinyl Chloride	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Bromomethane	EPA 8260	<2.0	ug/L	MQS	08/14/2007
Chloroethane	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Trichlorofluoromethane	EPA 8260	<2.0	ug/L	MQS	08/14/2007
Diethylether	EPA 8260	<5.0	ug/L	MQS	08/14/2007
Acetone	EPA 8260	<25	ug/L	MQS	08/14/2007
1,1-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Dichloromethane	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Methyl-Tert-Butyl-Ether	EPA 8260	1.2	ug/L	MQS	08/14/2007
trans-1,2-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
1,1-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	08/14/2007
2-Butanone	EPA 8260	<25	ug/L	MQS	08/14/2007
2,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	08/14/2007
cis-1,2-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Chloroform	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Bromochloromethane	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Tetrahydrofuran	EPA 8260	<10	ug/L	MQS	08/14/2007
1,1,1-Trichloroethane	EPA 8260	<1.0	ug/L	MQS	08/14/2007
1,1-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Carbon Tetrachloride	EPA 8260	<1.0	ug/L	MQS	08/14/2007
1,2-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Benzene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Trichloroethene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
1,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Bromodichloromethane	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Dibromomethane	EPA 8260	<1.0	ug/L	MQS	08/14/2007
4-Methyl-2-Pentanone	EPA 8260	<25	ug/L	MQS	08/14/2007
cis-1,3-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Toluene	EPA 8260	3.1	ug/L	MQS	08/14/2007
trans-1,3-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
1,1,2-Trichloroethane	EPA 8260	<1.0	ug/L	MQS	08/14/2007
2-Hexanone	EPA 8260	<2.0	ug/L	MQS	08/14/2007
1,3-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Tetrachloroethene	EPA 8260	<1.0	ug/L	MQS	08/14/2007

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Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **08/10/2007**
Date Reported: **08/24/2007**
Work Order No.: **0708-00083**

Sample ID: **ML - 2A** Sample No.: **004**

Sample Date: **08/09/2007**

Test Performed	Method	Results	Units	Tech	Analysis Date
Dibromochloromethane	EPA 8260	<1.0	ug/L	MQS	08/14/2007
1,2-Dibromoethane (EDB)	EPA 8260	<2.0	ug/L	MQS	08/14/2007
Chlorobenzene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
1,1,1,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Ethylbenzene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
m&p-Xylene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
o-Xylene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Styrene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Bromoform	EPA 8260	<2.0	ug/L	MQS	08/14/2007
Isopropylbenzene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
1,1,2,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	08/14/2007
1,2,3-Trichloropropane	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Bromobenzene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
N-Propylbenzene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
2-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
1,3,5-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
4-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
tert-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
1,2,4-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
sec-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
p-Isopropyltoluene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
1,3-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
1,4-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
n-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
1,2-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
1,2-Dibromo-3-Chloropropane	EPA 8260	<5.0	ug/L	MQS	08/14/2007
1,2,4-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Hexachlorobutadiene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Naphthalene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
1,2,3-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Surrogates:	EPA 8260				
***1,2-Dichloroethane-D4	EPA 8260	98.5	% R	MQS	08/14/2007
***Toluene-D8	EPA 8260	103	% R	MQS	08/14/2007
***4-Bromofluorobenzene	EPA 8260	106	% R	MQS	08/14/2007
Preparation	EPA 5030B	1.0	DF	MQS	08/13/2007
SEMI-VOLATILE ORGANICS	EPA 8270			CMG	08/21/2007
ACID FRACTION:	EPA 8270				

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Date Received: **08/10/2007**
Date Reported: **08/24/2007**
Work Order No.: **0708-00083**

Sample ID: **ML - 2A** Sample No.: **004**

Sample Date: **08/09/2007**

Test Performed	Method	Results	Units	Tech	Analysis Date
Phenol	EPA 8270	<11	ug/L	CMG	08/21/2007
2-Chlorophenol	EPA 8270	<11	ug/L	CMG	08/21/2007
2-Methylphenol	EPA 8270	<11	ug/L	CMG	08/21/2007
3&4-Methylphenol	EPA 8270	<11	ug/L	CMG	08/21/2007
2-Nitrophenol	EPA 8270	<11	ug/L	CMG	08/21/2007
2,4-Dimethylphenol	EPA 8270	<11	ug/L	CMG	08/21/2007
Benzoic Acid	EPA 8270	<11	ug/L	CMG	08/21/2007
2,4-Dichlorophenol	EPA 8270	<11	ug/L	CMG	08/21/2007
4-Chloro-3-Methylphenol	EPA 8270	<22	ug/L	CMG	08/21/2007
2,4,6-Trichlorophenol	EPA 8270	<11	ug/L	CMG	08/21/2007
2,4,5-Trichlorophenol	EPA 8270	<11	ug/L	CMG	08/21/2007
2,4-Dinitrophenol	EPA 8270	<110	ug/L	CMG	08/21/2007
4-Nitrophenol	EPA 8270	<55	ug/L	CMG	08/21/2007
4,6-Dinitro-2-Methylphenol	EPA 8270	<55	ug/L	CMG	08/21/2007
Pentachlorophenol	EPA 8270	<55	ug/L	CMG	08/21/2007
BASE-NEUTRAL FRACTION:					
n-Nitrosodimethylamine	EPA 8270	<11	ug/L	CMG	08/21/2007
bis(2-Chloroethyl)Ether	EPA 8270	<11	ug/L	CMG	08/21/2007
1,3-Dichlorobenzene	EPA 8270	<11	ug/L	CMG	08/21/2007
1,4-Dichlorobenzene	EPA 8270	<11	ug/L	CMG	08/21/2007
Benzyl Alcohol	EPA 8270	<22	ug/L	CMG	08/21/2007
1,2-Dichlorobenzene	EPA 8270	<11	ug/L	CMG	08/21/2007
bis(2-Chloroisopropyl)Ether	EPA 8270	<11	ug/L	CMG	08/21/2007
n-Nitrosodi-n-Propylamine	EPA 8270	<11	ug/L	CMG	08/21/2007
Hexachloroethane	EPA 8270	<11	ug/L	CMG	08/21/2007
Nitrobenzene	EPA 8270	<11	ug/L	CMG	08/21/2007
Isophorone	EPA 8270	<11	ug/L	CMG	08/21/2007
bis(2-Chloroethoxy)Methane	EPA 8270	<11	ug/L	CMG	08/21/2007
1,2,4-Trichlorobenzene	EPA 8270	<11	ug/L	CMG	08/21/2007
Naphthalene	EPA 8270	<2.2	ug/L	CMG	08/21/2007
4-Chloroaniline	EPA 8270	<22	ug/L	CMG	08/21/2007
Hexachlorobutadiene	EPA 8270	<11	ug/L	CMG	08/21/2007
2-Methylnaphthalene	EPA 8270	<2.2	ug/L	CMG	08/21/2007
Hexachlorocyclopentadiene	EPA 8270	<55	ug/L	CMG	08/21/2007
2-Chloronaphthalene	EPA 8270	<11	ug/L	CMG	08/21/2007
2-Nitroaniline	EPA 8270	<55	ug/L	CMG	08/21/2007
Dimethylphthalate	EPA 8270	<11	ug/L	CMG	08/21/2007

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Work Order No.: **0708-00083**

Sample ID: **ML - 2A** Sample No.: **004**

Sample Date: **08/09/2007**

Test Performed	Method	Results	Units	Tech	Analysis Date
Acenaphthylene	EPA 8270	<2.2	ug/L	CMG	08/21/2007
2,6-Dinitrotoluene	EPA 8270	<11	ug/L	CMG	08/21/2007
3-Nitroaniline	EPA 8270	<55	ug/L	CMG	08/21/2007
Acenaphthene	EPA 8270	<2.2	ug/L	CMG	08/21/2007
Dibenzofuran	EPA 8270	<11	ug/L	CMG	08/21/2007
2,4-Dinitrotoluene	EPA 8270	<11	ug/L	CMG	08/21/2007
Diethylphthalate	EPA 8270	<11	ug/L	CMG	08/21/2007
Fluorene	EPA 8270	<2.2	ug/L	CMG	08/21/2007
4-Chlorophenyl Phenyl Ether	EPA 8270	<11	ug/L	CMG	08/21/2007
4-Nitroaniline	EPA 8270	<22	ug/L	CMG	08/21/2007
n-Nitrosodiphenylamine	EPA 8270	<11	ug/L	CMG	08/21/2007
4-Bromophenyl Phenyl Ether	EPA 8270	<11	ug/L	CMG	08/21/2007
Hexachlorobenzene	EPA 8270	<11	ug/L	CMG	08/21/2007
Phenanthrene	EPA 8270	<2.2	ug/L	CMG	08/21/2007
Anthracene	EPA 8270	<2.2	ug/L	CMG	08/21/2007
Carbazole	EPA 8270	<11	ug/L	CMG	08/21/2007
di-n-Butylphthalate	EPA 8270	35	ug/L	CMG	08/21/2007
Fluoranthene	EPA 8270	<2.2	ug/L	CMG	08/21/2007
Pyrene	EPA 8270	<2.2	ug/L	CMG	08/21/2007
Butylbenzylphthalate	EPA 8270	<11	ug/L	CMG	08/21/2007
Benzo [a] Anthracene	EPA 8270	<2.2	ug/L	CMG	08/21/2007
3,3'-Dichlorobenzidine	EPA 8270	<22	ug/L	CMG	08/21/2007
Chrysene	EPA 8270	<2.2	ug/L	CMG	08/21/2007
bis(2-Ethylhexyl)Phthalate	EPA 8270	<11	ug/L	CMG	08/21/2007
di-n-Octylphthalate	EPA 8270	<11	ug/L	CMG	08/21/2007
Benzo [b] Fluoranthene	EPA 8270	<2.2	ug/L	CMG	08/21/2007
Benzo [k] Fluoranthene	EPA 8270	<2.2	ug/L	CMG	08/21/2007
Benzo [a] Pyrene	EPA 8270	<2.2	ug/L	CMG	08/21/2007
Indeno [1,2,3-cd] Pyrene	EPA 8270	<2.2	ug/L	CMG	08/21/2007
Dibenzo [a,h] Anthracene	EPA 8270	<2.2	ug/L	CMG	08/21/2007
Benzo [g,h,i] Perylene	EPA 8270	<2.2	ug/L	CMG	08/21/2007
Surrogates:	EPA 8270				
***2-Fluorophenol	EPA 8270	28.4	% R	CMG	08/21/2007
***Phenol-D6	EPA 8270	18.0	% R	CMG	08/21/2007
***Nitrobenzene-D5	EPA 8270	75.7	% R	CMG	08/21/2007
***2-Fluorobiphenyl	EPA 8270	75.3	% R	CMG	08/21/2007
***2,4,6-Tribromophenol	EPA 8270	80.4	% R	CMG	08/21/2007

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Date Received: **08/10/2007**
Date Reported: **08/24/2007**
Work Order No.: **0708-00083**

Sample ID: **ML - 2A** Sample No.: **004**

Sample Date: **08/09/2007**

Test Performed	Method	Results	Units	Tech	Analysis Date
***1,2-Dichlorobenzene-D4	EPA 8270	64.4	% R	CMG	08/21/2007
Extraction	EPA 3510C	1.0	DF	JCW	08/15/2007
TOTAL PETROLEUM HYDROCARBON	D3328/EPA 8100/			RJD	08/21/2007
Hydrocarbon Content		390	ug/L	RJD	08/21/2007
Surrogate:	D3328/EPA 8100				
***p-Terphenyl		71.2	% R	RJD	08/20/2007
Extraction	EPA 3510C	1.0	DF	JCW	08/16/2007
PRIORITY POLLUTANT METALS				AJY	08/13/2007
Silver	EPA 6010B	<0.0050	mg/L	AJY	08/13/2007
Arsenic	EPA 6010B	<0.010	mg/L	AJY	08/13/2007
Beryllium	EPA 6010B	<0.0040	mg/L	AJY	08/13/2007
Cadmium	EPA 6010B	<0.0050	mg/L	AJY	08/13/2007
Chromium	EPA 6010B	<0.0050	mg/L	AJY	08/13/2007
Copper	EPA 6010B	<0.015	mg/L	AJY	08/13/2007
Mercury	EPA 7470A	<0.00040	mg/L	TGG	08/20/2007
Nickel	EPA 6010B	<0.010	mg/L	AJY	08/13/2007
Lead	EPA 6010B	<0.010	mg/L	AJY	08/13/2007
Antimony	EPA 6010B	<0.025	mg/L	AJY	08/13/2007
Selenium	EPA 6010B	<0.025	mg/L	AJY	08/13/2007
Thallium	EPA 6010B	<0.025	mg/L	AJY	08/13/2007
Zinc	EPA 6010B	0.021	mg/L	AJY	08/13/2007
Iron	EPA 6010B	0.12	mg/L	AJY	08/13/2007
Manganese	EPA 6010B	0.037	mg/L	AJY	08/13/2007

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Date Received: **08/10/2007**
Date Reported: **08/24/2007**
Work Order No.: **0708-00083**

Sample ID: **ML - 2B** Sample No.: **005**

Sample Date: **08/09/2007**

Test Performed	Method	Results	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260			MQS	08/14/2007
Dichlorodifluoromethane	EPA 8260	<2.0	ug/L	MQS	08/14/2007
Chloromethane	EPA 8260	<2.0	ug/L	MQS	08/14/2007
Vinyl Chloride	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Bromomethane	EPA 8260	<2.0	ug/L	MQS	08/14/2007
Chloroethane	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Trichlorofluoromethane	EPA 8260	<2.0	ug/L	MQS	08/14/2007
Diethylether	EPA 8260	<5.0	ug/L	MQS	08/14/2007
Acetone	EPA 8260	<25	ug/L	MQS	08/14/2007
1,1-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Dichloromethane	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Methyl-Tert-Butyl-Ether	EPA 8260	<1.0	ug/L	MQS	08/14/2007
trans-1,2-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
1,1-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	08/14/2007
2-Butanone	EPA 8260	<25	ug/L	MQS	08/14/2007
2,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	08/14/2007
cis-1,2-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Chloroform	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Bromochloromethane	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Tetrahydrofuran	EPA 8260	<10	ug/L	MQS	08/14/2007
1,1,1-Trichloroethane	EPA 8260	<1.0	ug/L	MQS	08/14/2007
1,1-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Carbon Tetrachloride	EPA 8260	<1.0	ug/L	MQS	08/14/2007
1,2-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Benzene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Trichloroethene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
1,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Bromodichloromethane	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Dibromomethane	EPA 8260	<1.0	ug/L	MQS	08/14/2007
4-Methyl-2-Pentanone	EPA 8260	<25	ug/L	MQS	08/14/2007
cis-1,3-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Toluene	EPA 8260	1.6	ug/L	MQS	08/14/2007
trans-1,3-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
1,1,2-Trichloroethane	EPA 8260	<1.0	ug/L	MQS	08/14/2007
2-Hexanone	EPA 8260	<2.0	ug/L	MQS	08/14/2007
1,3-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Tetrachloroethene	EPA 8260	<1.0	ug/L	MQS	08/14/2007

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ANALYTICAL REPORT

GZA GeoEnvironmental, Inc.
140 Broadway
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Ed Summerly

Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **08/10/2007**
Date Reported: **08/24/2007**
Work Order No.: **0708-00083**

Sample ID: **ML - 2B** Sample No.: **005**

Sample Date: **08/09/2007**

Test Performed	Method	Results	Units	Tech	Analysis Date
Dibromochloromethane	EPA 8260	<1.0	ug/L	MQS	08/14/2007
1,2-Dibromoethane (EDB)	EPA 8260	<2.0	ug/L	MQS	08/14/2007
Chlorobenzene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
1,1,1,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Ethylbenzene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
m&p-Xylene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
o-Xylene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Styrene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Bromoform	EPA 8260	<2.0	ug/L	MQS	08/14/2007
Isopropylbenzene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
1,1,2,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	08/14/2007
1,2,3-Trichloropropane	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Bromobenzene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
N-Propylbenzene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
2-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
1,3,5-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
4-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
tert-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
1,2,4-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
sec-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
p-Isopropyltoluene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
1,3-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
1,4-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
n-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
1,2-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
1,2-Dibromo-3-Chloropropane	EPA 8260	<5.0	ug/L	MQS	08/14/2007
1,2,4-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Hexachlorobutadiene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Naphthalene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
1,2,3-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Surrogates:	EPA 8260				
***1,2-Dichloroethane-D4	EPA 8260	97.1	% R	MQS	08/14/2007
***Toluene-D8	EPA 8260	102	% R	MQS	08/14/2007
***4-Bromofluorobenzene	EPA 8260	104	% R	MQS	08/14/2007
Preparation	EPA 5030B	1.0	DF	MQS	08/13/2007
SEMI-VOLATILE ORGANICS	EPA 8270			CMG	08/21/2007
ACID FRACTION:	EPA 8270				

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ANALYTICAL REPORT

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Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **08/10/2007**
Date Reported: **08/24/2007**
Work Order No.: **0708-00083**

Sample ID: **ML - 2B** Sample No.: **005**

Sample Date: **08/09/2007**

Test Performed	Method	Results	Units	Tech	Analysis Date
Phenol	EPA 8270	<11	ug/L	CMG	08/21/2007
2-Chlorophenol	EPA 8270	<11	ug/L	CMG	08/21/2007
2-Methylphenol	EPA 8270	<11	ug/L	CMG	08/21/2007
3&4-Methylphenol	EPA 8270	<11	ug/L	CMG	08/21/2007
2-Nitrophenol	EPA 8270	<11	ug/L	CMG	08/21/2007
2,4-Dimethylphenol	EPA 8270	<11	ug/L	CMG	08/21/2007
Benzoic Acid	EPA 8270	<11	ug/L	CMG	08/21/2007
2,4-Dichlorophenol	EPA 8270	<11	ug/L	CMG	08/21/2007
4-Chloro-3-Methylphenol	EPA 8270	<22	ug/L	CMG	08/21/2007
2,4,6-Trichlorophenol	EPA 8270	<11	ug/L	CMG	08/21/2007
2,4,5-Trichlorophenol	EPA 8270	<11	ug/L	CMG	08/21/2007
2,4-Dinitrophenol	EPA 8270	<110	ug/L	CMG	08/21/2007
4-Nitrophenol	EPA 8270	<55	ug/L	CMG	08/21/2007
4,6-Dinitro-2-Methylphenol	EPA 8270	<55	ug/L	CMG	08/21/2007
Pentachlorophenol	EPA 8270	<55	ug/L	CMG	08/21/2007
BASE-NEUTRAL FRACTION:					
n-Nitrosodimethylamine	EPA 8270	<11	ug/L	CMG	08/21/2007
bis(2-Chloroethyl)Ether	EPA 8270	<11	ug/L	CMG	08/21/2007
1,3-Dichlorobenzene	EPA 8270	<11	ug/L	CMG	08/21/2007
1,4-Dichlorobenzene	EPA 8270	<11	ug/L	CMG	08/21/2007
Benzyl Alcohol	EPA 8270	<22	ug/L	CMG	08/21/2007
1,2-Dichlorobenzene	EPA 8270	<11	ug/L	CMG	08/21/2007
bis(2-Chloroisopropyl)Ether	EPA 8270	<11	ug/L	CMG	08/21/2007
n-Nitrosodi-n-Propylamine	EPA 8270	<11	ug/L	CMG	08/21/2007
Hexachloroethane	EPA 8270	<11	ug/L	CMG	08/21/2007
Nitrobenzene	EPA 8270	<11	ug/L	CMG	08/21/2007
Isophorone	EPA 8270	<11	ug/L	CMG	08/21/2007
bis(2-Chloroethoxy)Methane	EPA 8270	<11	ug/L	CMG	08/21/2007
1,2,4-Trichlorobenzene	EPA 8270	<11	ug/L	CMG	08/21/2007
Naphthalene	EPA 8270	<2.2	ug/L	CMG	08/21/2007
4-Chloroaniline	EPA 8270	<22	ug/L	CMG	08/21/2007
Hexachlorobutadiene	EPA 8270	<11	ug/L	CMG	08/21/2007
2-Methylnaphthalene	EPA 8270	<2.2	ug/L	CMG	08/21/2007
Hexachlorocyclopentadiene	EPA 8270	<55	ug/L	CMG	08/21/2007
2-Chloronaphthalene	EPA 8270	<11	ug/L	CMG	08/21/2007
2-Nitroaniline	EPA 8270	<55	ug/L	CMG	08/21/2007
Dimethylphthalate	EPA 8270	<11	ug/L	CMG	08/21/2007

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Date Received: **08/10/2007**
Date Reported: **08/24/2007**
Work Order No.: **0708-00083**

Sample ID: **ML - 2B** Sample No.: **005**

Sample Date: **08/09/2007**

Test Performed	Method	Results	Units	Tech	Analysis Date
Acenaphthylene	EPA 8270	<2.2	ug/L	CMG	08/21/2007
2,6-Dinitrotoluene	EPA 8270	<11	ug/L	CMG	08/21/2007
3-Nitroaniline	EPA 8270	<55	ug/L	CMG	08/21/2007
Acenaphthene	EPA 8270	<2.2	ug/L	CMG	08/21/2007
Dibenzofuran	EPA 8270	<11	ug/L	CMG	08/21/2007
2,4-Dinitrotoluene	EPA 8270	<11	ug/L	CMG	08/21/2007
Diethylphthalate	EPA 8270	<11	ug/L	CMG	08/21/2007
Fluorene	EPA 8270	<2.2	ug/L	CMG	08/21/2007
4-Chlorophenyl Phenyl Ether	EPA 8270	<11	ug/L	CMG	08/21/2007
4-Nitroaniline	EPA 8270	<22	ug/L	CMG	08/21/2007
n-Nitrosodiphenylamine	EPA 8270	<11	ug/L	CMG	08/21/2007
4-Bromophenyl Phenyl Ether	EPA 8270	<11	ug/L	CMG	08/21/2007
Hexachlorobenzene	EPA 8270	<11	ug/L	CMG	08/21/2007
Phenanthrene	EPA 8270	<2.2	ug/L	CMG	08/21/2007
Anthracene	EPA 8270	<2.2	ug/L	CMG	08/21/2007
Carbazole	EPA 8270	<11	ug/L	CMG	08/21/2007
di-n-Butylphthalate	EPA 8270	<17	ug/L	CMG	08/21/2007
Fluoranthene	EPA 8270	<2.2	ug/L	CMG	08/21/2007
Pyrene	EPA 8270	<2.2	ug/L	CMG	08/21/2007
Butylbenzylphthalate	EPA 8270	<11	ug/L	CMG	08/21/2007
Benzo [a] Anthracene	EPA 8270	<2.2	ug/L	CMG	08/21/2007
3,3'-Dichlorobenzidine	EPA 8270	<22	ug/L	CMG	08/21/2007
Chrysene	EPA 8270	<2.2	ug/L	CMG	08/21/2007
bis(2-Ethylhexyl)Phthalate	EPA 8270	<11	ug/L	CMG	08/21/2007
di-n-Octylphthalate	EPA 8270	<11	ug/L	CMG	08/21/2007
Benzo [b] Fluoranthene	EPA 8270	<2.2	ug/L	CMG	08/21/2007
Benzo [k] Fluoranthene	EPA 8270	<2.2	ug/L	CMG	08/21/2007
Benzo [a] Pyrene	EPA 8270	<2.2	ug/L	CMG	08/21/2007
Indeno [1,2,3-cd] Pyrene	EPA 8270	<2.2	ug/L	CMG	08/21/2007
Dibenzo [a,h] Anthracene	EPA 8270	<2.2	ug/L	CMG	08/21/2007
Benzo [g,h,i] Perylene	EPA 8270	<2.2	ug/L	CMG	08/21/2007
Surrogates:	EPA 8270				
***2-Fluorophenol	EPA 8270	37.2	% R	CMG	08/21/2007
***Phenol-D6	EPA 8270	25.4	% R	CMG	08/21/2007
***Nitrobenzene-D5	EPA 8270	59.7	% R	CMG	08/21/2007
***2-Fluorobiphenyl	EPA 8270	56.0	% R	CMG	08/21/2007
***2,4,6-Tribromophenol	EPA 8270	59.1	% R	CMG	08/21/2007

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Date Received: **08/10/2007**
Date Reported: **08/24/2007**
Work Order No.: **0708-00083**

Sample ID: **ML - 2B** Sample No.: **005**

Sample Date: **08/09/2007**

Test Performed	Method	Results		Units	Tech	Analysis Date
***P-Terphenyl-D14	EPA 8270	64.2		% R	CMG	08/21/2007
Extraction	EPA 3510C	1.0		DF	JCW	08/15/2007
TOTAL PETROLEUM HYDROCARBON	D3328/EPA 8100/				RJD	08/20/2007
Hydrocarbon Content		2100		ug/L	RJD	08/20/2007
Surrogate:	D3328/EPA 8100					
***p-Terphenyl		34.8	*	% R	RJD	08/20/2007
Extraction	EPA 3510C	5.0		DF	JCW	08/16/2007
PRIORITY POLLUTANT METALS					AJY	08/13/2007
Silver	EPA 6010B	<0.0050		mg/L	AJY	08/13/2007
Arsenic	EPA 6010B	<0.010		mg/L	AJY	08/13/2007
Beryllium	EPA 6010B	<0.0040		mg/L	AJY	08/13/2007
Cadmium	EPA 6010B	<0.0050		mg/L	AJY	08/13/2007
Chromium	EPA 6010B	0.018		mg/L	AJY	08/13/2007
Copper	EPA 6010B	<0.015		mg/L	AJY	08/13/2007
Mercury	EPA 7470A	<0.00040		mg/L	TGG	08/20/2007
Nickel	EPA 6010B	<0.010		mg/L	AJY	08/13/2007
Lead	EPA 6010B	<0.010		mg/L	AJY	08/13/2007
Antimony	EPA 6010B	<0.025		mg/L	AJY	08/13/2007
Selenium	EPA 6010B	<0.025		mg/L	AJY	08/13/2007
Thallium	EPA 6010B	<0.025		mg/L	AJY	08/13/2007
Zinc	EPA 6010B	0.017		mg/L	AJY	08/13/2007
Iron	EPA 6010B	0.42		mg/L	AJY	08/13/2007
Manganese	EPA 6010B	0.13		mg/L	AJY	08/13/2007

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Date Received: **08/10/2007**
Date Reported: **08/24/2007**
Work Order No.: **0708-00083**

Sample ID: **ML - 2C** Sample No.: **006**

Sample Date: **08/09/2007**

Test Performed	Method	Results	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260			MQS	08/14/2007
Dichlorodifluoromethane	EPA 8260	<2.0	ug/L	MQS	08/14/2007
Chloromethane	EPA 8260	<2.0	ug/L	MQS	08/14/2007
Vinyl Chloride	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Bromomethane	EPA 8260	<2.0	ug/L	MQS	08/14/2007
Chloroethane	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Trichlorofluoromethane	EPA 8260	<2.0	ug/L	MQS	08/14/2007
Diethylether	EPA 8260	<5.0	ug/L	MQS	08/14/2007
Acetone	EPA 8260	<25	ug/L	MQS	08/14/2007
1,1-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Dichloromethane	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Methyl-Tert-Butyl-Ether	EPA 8260	<1.0	ug/L	MQS	08/14/2007
trans-1,2-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
1,1-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	08/14/2007
2-Butanone	EPA 8260	33	ug/L	MQS	08/14/2007
2,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	08/14/2007
cis-1,2-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Chloroform	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Bromochloromethane	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Tetrahydrofuran	EPA 8260	<10	ug/L	MQS	08/14/2007
1,1,1-Trichloroethane	EPA 8260	<1.0	ug/L	MQS	08/14/2007
1,1-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Carbon Tetrachloride	EPA 8260	<1.0	ug/L	MQS	08/14/2007
1,2-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Benzene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Trichloroethene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
1,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Bromodichloromethane	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Dibromomethane	EPA 8260	<1.0	ug/L	MQS	08/14/2007
4-Methyl-2-Pentanone	EPA 8260	<25	ug/L	MQS	08/14/2007
cis-1,3-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Toluene	EPA 8260	6.4	ug/L	MQS	08/14/2007
trans-1,3-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
1,1,2-Trichloroethane	EPA 8260	<1.0	ug/L	MQS	08/14/2007
2-Hexanone	EPA 8260	<2.0	ug/L	MQS	08/14/2007
1,3-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Tetrachloroethene	EPA 8260	<1.0	ug/L	MQS	08/14/2007

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Date Received: **08/10/2007**
Date Reported: **08/24/2007**
Work Order No.: **0708-00083**

Sample ID: **ML - 2C** Sample No.: **006**

Sample Date: **08/09/2007**

Test Performed	Method	Results	Units	Tech	Analysis Date
Dibromochloromethane	EPA 8260	<1.0	ug/L	MQS	08/14/2007
1,2-Dibromoethane (EDB)	EPA 8260	<2.0	ug/L	MQS	08/14/2007
Chlorobenzene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
1,1,1,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Ethylbenzene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
m&p-Xylene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
o-Xylene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Styrene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Bromoform	EPA 8260	<2.0	ug/L	MQS	08/14/2007
Isopropylbenzene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
1,1,2,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	08/14/2007
1,2,3-Trichloropropane	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Bromobenzene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
N-Propylbenzene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
2-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
1,3,5-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
4-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
tert-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
1,2,4-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
sec-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
p-Isopropyltoluene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
1,3-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
1,4-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
n-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
1,2-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
1,2-Dibromo-3-Chloropropane	EPA 8260	<5.0	ug/L	MQS	08/14/2007
1,2,4-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Hexachlorobutadiene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Naphthalene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
1,2,3-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Surrogates:	EPA 8260				
***1,2-Dichlorobenzene-D4	EPA 8260	93.7	% R	MQS	08/14/2007
***Toluene-D8	EPA 8260	103	% R	MQS	08/14/2007
***4-Bromofluorobenzene	EPA 8260	102	% R	MQS	08/14/2007
Preparation	EPA 5030B	1.0	DF	MQS	08/13/2007
SEMI-VOLATILE ORGANICS	EPA 8270			CMG	08/21/2007
ACID FRACTION:	EPA 8270				

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Date Received: **08/10/2007**
Date Reported: **08/24/2007**
Work Order No.: **0708-00083**

Sample ID: **ML - 2C** Sample No.: **006**

Sample Date: **08/09/2007**

Test Performed	Method	Results	Units	Tech	Analysis Date
Phenol	EPA 8270	<12	ug/L	CMG	08/21/2007
2-Chlorophenol	EPA 8270	<12	ug/L	CMG	08/21/2007
2-Methylphenol	EPA 8270	<12	ug/L	CMG	08/21/2007
3&4-Methylphenol	EPA 8270	<12	ug/L	CMG	08/21/2007
2-Nitrophenol	EPA 8270	<12	ug/L	CMG	08/21/2007
2,4-Dimethylphenol	EPA 8270	<12	ug/L	CMG	08/21/2007
Benzoic Acid	EPA 8270	<12	ug/L	CMG	08/21/2007
2,4-Dichlorophenol	EPA 8270	<12	ug/L	CMG	08/21/2007
4-Chloro-3-Methylphenol	EPA 8270	<24	ug/L	CMG	08/21/2007
2,4,6-Trichlorophenol	EPA 8270	<12	ug/L	CMG	08/21/2007
2,4,5-Trichlorophenol	EPA 8270	<12	ug/L	CMG	08/21/2007
2,4-Dinitrophenol	EPA 8270	<120	ug/L	CMG	08/21/2007
4-Nitrophenol	EPA 8270	<60	ug/L	CMG	08/21/2007
4,6-Dinitro-2-Methylphenol	EPA 8270	<60	ug/L	CMG	08/21/2007
Pentachlorophenol	EPA 8270	<60	ug/L	CMG	08/21/2007
BASE-NEUTRAL FRACTION:					
n-Nitrosodimethylamine	EPA 8270	<12	ug/L	CMG	08/21/2007
bis(2-Chloroethyl)Ether	EPA 8270	<12	ug/L	CMG	08/21/2007
1,3-Dichlorobenzene	EPA 8270	<12	ug/L	CMG	08/21/2007
1,4-Dichlorobenzene	EPA 8270	<12	ug/L	CMG	08/21/2007
Benzyl Alcohol	EPA 8270	<24	ug/L	CMG	08/21/2007
1,2-Dichlorobenzene	EPA 8270	<12	ug/L	CMG	08/21/2007
bis(2-Chloroisopropyl)Ether	EPA 8270	<12	ug/L	CMG	08/21/2007
n-Nitrosodi-n-Propylamine	EPA 8270	<12	ug/L	CMG	08/21/2007
Hexachloroethane	EPA 8270	<12	ug/L	CMG	08/21/2007
Nitrobenzene	EPA 8270	<12	ug/L	CMG	08/21/2007
Isophorone	EPA 8270	<12	ug/L	CMG	08/21/2007
bis(2-Chloroethoxy)Methane	EPA 8270	<12	ug/L	CMG	08/21/2007
1,2,4-Trichlorobenzene	EPA 8270	<12	ug/L	CMG	08/21/2007
Naphthalene	EPA 8270	<2.4	ug/L	CMG	08/21/2007
4-Chloroaniline	EPA 8270	<24	ug/L	CMG	08/21/2007
Hexachlorobutadiene	EPA 8270	<12	ug/L	CMG	08/21/2007
2-Methylnaphthalene	EPA 8270	<2.4	ug/L	CMG	08/21/2007
Hexachlorocyclopentadiene	EPA 8270	<60	ug/L	CMG	08/21/2007
2-Chloronaphthalene	EPA 8270	<12	ug/L	CMG	08/21/2007
2-Nitroaniline	EPA 8270	<60	ug/L	CMG	08/21/2007
Dimethylphthalate	EPA 8270	<12	ug/L	CMG	08/21/2007

GZA GeoEnvironmental, Inc.
106 South Street
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ANALYTICAL REPORT

GZA GeoEnvironmental, Inc.
140 Broadway
Providence, RI 02903

Ed Summerly

Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **08/10/2007**
Date Reported: **08/24/2007**
Work Order No.: **0708-00083**

Sample ID: **ML - 2C** Sample No.: **006**

Sample Date: **08/09/2007**

Test Performed	Method	Results	Units	Tech	Analysis Date
Acenaphthylene	EPA 8270	<2.4	ug/L	CMG	08/21/2007
2,6-Dinitrotoluene	EPA 8270	<12	ug/L	CMG	08/21/2007
3-Nitroaniline	EPA 8270	<60	ug/L	CMG	08/21/2007
Acenaphthene	EPA 8270	<2.4	ug/L	CMG	08/21/2007
Dibenzofuran	EPA 8270	<12	ug/L	CMG	08/21/2007
2,4-Dinitrotoluene	EPA 8270	<12	ug/L	CMG	08/21/2007
Diethylphthalate	EPA 8270	<12	ug/L	CMG	08/21/2007
Fluorene	EPA 8270	<2.4	ug/L	CMG	08/21/2007
4-Chlorophenyl Phenyl Ether	EPA 8270	<12	ug/L	CMG	08/21/2007
4-Nitroaniline	EPA 8270	<24	ug/L	CMG	08/21/2007
n-Nitrosodiphenylamine	EPA 8270	<12	ug/L	CMG	08/21/2007
4-Bromophenyl Phenyl Ether	EPA 8270	<12	ug/L	CMG	08/21/2007
Hexachlorobenzene	EPA 8270	<12	ug/L	CMG	08/21/2007
Phenanthrene	EPA 8270	<2.4	ug/L	CMG	08/21/2007
Anthracene	EPA 8270	<2.4	ug/L	CMG	08/21/2007
Carbazole	EPA 8270	<12	ug/L	CMG	08/21/2007
di-n-Butylphthalate	EPA 8270	<18	ug/L	CMG	08/21/2007
Fluoranthene	EPA 8270	<2.4	ug/L	CMG	08/21/2007
Pyrene	EPA 8270	<2.4	ug/L	CMG	08/21/2007
Butylbenzylphthalate	EPA 8270	<12	ug/L	CMG	08/21/2007
Benzo [a] Anthracene	EPA 8270	<2.4	ug/L	CMG	08/21/2007
3,3'-Dichlorobenzidine	EPA 8270	<24	ug/L	CMG	08/21/2007
Chrysene	EPA 8270	<2.4	ug/L	CMG	08/21/2007
bis(2-Ethylhexyl)Phthalate	EPA 8270	<12	ug/L	CMG	08/21/2007
di-n-Octylphthalate	EPA 8270	<12	ug/L	CMG	08/21/2007
Benzo [b] Fluoranthene	EPA 8270	<2.4	ug/L	CMG	08/21/2007
Benzo [k] Fluoranthene	EPA 8270	<2.4	ug/L	CMG	08/21/2007
Benzo [a] Pyrene	EPA 8270	<2.4	ug/L	CMG	08/21/2007
Indeno [1,2,3-cd] Pyrene	EPA 8270	<2.4	ug/L	CMG	08/21/2007
Dibenzo [a,h] Anthracene	EPA 8270	<2.4	ug/L	CMG	08/21/2007
Benzo [g,h,i] Perylene	EPA 8270	<2.4	ug/L	CMG	08/21/2007
Surrogates:	EPA 8270				
***2-Fluorophenol	EPA 8270	30.3	% R	CMG	08/21/2007
***Phenol-D6	EPA 8270	19.6	% R	CMG	08/21/2007
***Nitrobenzene-D5	EPA 8270	66.8	% R	CMG	08/21/2007
***2-Fluorobiphenyl	EPA 8270	65.1	% R	CMG	08/21/2007
***2,4,6-Tribromophenol	EPA 8270	65.0	% R	CMG	08/21/2007

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Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **08/10/2007**
Date Reported: **08/24/2007**
Work Order No.: **0708-00083**

Sample ID: **ML - 2C** Sample No.: **006**

Sample Date: **08/09/2007**

Test Performed	Method	Results		Units	Tech	Analysis Date
***1,2-Dichlorobenzene-D4	EPA 8270	57.8		% R	CMG	08/21/2007
Extraction	EPA 3510C	1.0		DF	JCW	08/15/2007
TOTAL PETROLEUM HYDROCARBON	D3328/EPA 8100/				RJD	08/21/2007
Hydrocarbon Content		22000		ug/L	RJD	08/21/2007
Surrogate:	D3328/EPA 8100					
***p-Terphenyl		DO	*	% R	RJD	08/20/2007
Extraction	EPA 3510C	100		DF	JCW	08/16/2007
PRIORITY POLLUTANT METALS					AJY	08/13/2007
Silver	EPA 6010B	<0.0050		mg/L	AJY	08/13/2007
Arsenic	EPA 6010B	<0.010		mg/L	AJY	08/13/2007
Beryllium	EPA 6010B	<0.0040		mg/L	AJY	08/13/2007
Cadmium	EPA 6010B	<0.0050		mg/L	AJY	08/13/2007
Chromium	EPA 6010B	0.041		mg/L	AJY	08/13/2007
Copper	EPA 6010B	<0.015		mg/L	AJY	08/13/2007
Mercury	EPA 7470A	<0.00040		mg/L	TGG	08/20/2007
Nickel	EPA 6010B	<0.010		mg/L	AJY	08/13/2007
Lead	EPA 6010B	<0.010		mg/L	AJY	08/13/2007
Antimony	EPA 6010B	<0.025		mg/L	AJY	08/13/2007
Selenium	EPA 6010B	<0.025		mg/L	AJY	08/13/2007
Thallium	EPA 6010B	<0.025		mg/L	AJY	08/13/2007
Zinc	EPA 6010B	0.20		mg/L	AJY	08/13/2007
Iron	EPA 6010B	2.2		mg/L	AJY	08/13/2007
Manganese	EPA 6010B	0.21		mg/L	AJY	08/13/2007

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Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **08/10/2007**
Date Reported: **08/24/2007**
Work Order No.: **0708-00083**

Sample ID: **ML - 3A** Sample No.: **007**

Sample Date: **08/09/2007**

Test Performed	Method	Results	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260			MQS	08/14/2007
Dichlorodifluoromethane	EPA 8260	<100	ug/L	MQS	08/14/2007
Chloromethane	EPA 8260	<100	ug/L	MQS	08/14/2007
Vinyl Chloride	EPA 8260	<50	ug/L	MQS	08/14/2007
Bromomethane	EPA 8260	<100	ug/L	MQS	08/14/2007
Chloroethane	EPA 8260	<50	ug/L	MQS	08/14/2007
Trichlorofluoromethane	EPA 8260	<100	ug/L	MQS	08/14/2007
Diethylether	EPA 8260	<250	ug/L	MQS	08/14/2007
Acetone	EPA 8260	<1300	ug/L	MQS	08/14/2007
1,1-Dichloroethene	EPA 8260	<50	ug/L	MQS	08/14/2007
Dichloromethane	EPA 8260	<50	ug/L	MQS	08/14/2007
Methyl-Tert-Butyl-Ether	EPA 8260	<50	ug/L	MQS	08/14/2007
trans-1,2-Dichloroethene	EPA 8260	<50	ug/L	MQS	08/14/2007
1,1-Dichloroethane	EPA 8260	<50	ug/L	MQS	08/14/2007
2-Butanone	EPA 8260	<1300	ug/L	MQS	08/14/2007
2,2-Dichloropropane	EPA 8260	<50	ug/L	MQS	08/14/2007
cis-1,2-Dichloroethene	EPA 8260	260	ug/L	MQS	08/14/2007
Chloroform	EPA 8260	<50	ug/L	MQS	08/14/2007
Bromochloromethane	EPA 8260	<50	ug/L	MQS	08/14/2007
Tetrahydrofuran	EPA 8260	<500	ug/L	MQS	08/14/2007
1,1,1-Trichloroethane	EPA 8260	<50	ug/L	MQS	08/14/2007
1,1-Dichloropropene	EPA 8260	<50	ug/L	MQS	08/14/2007
Carbon Tetrachloride	EPA 8260	<50	ug/L	MQS	08/14/2007
1,2-Dichloroethane	EPA 8260	<50	ug/L	MQS	08/14/2007
Benzene	EPA 8260	<50	ug/L	MQS	08/14/2007
Trichloroethene	EPA 8260	190	ug/L	MQS	08/14/2007
1,2-Dichloropropane	EPA 8260	<50	ug/L	MQS	08/14/2007
Bromodichloromethane	EPA 8260	<50	ug/L	MQS	08/14/2007
Dibromomethane	EPA 8260	<50	ug/L	MQS	08/14/2007
4-Methyl-2-Pentanone	EPA 8260	<1300	ug/L	MQS	08/14/2007
cis-1,3-Dichloropropene	EPA 8260	<50	ug/L	MQS	08/14/2007
Toluene	EPA 8260	<50	ug/L	MQS	08/14/2007
trans-1,3-Dichloropropene	EPA 8260	<50	ug/L	MQS	08/14/2007
1,1,2-Trichloroethane	EPA 8260	<50	ug/L	MQS	08/14/2007
2-Hexanone	EPA 8260	<100	ug/L	MQS	08/14/2007
1,3-Dichloropropane	EPA 8260	<50	ug/L	MQS	08/14/2007
Tetrachloroethene	EPA 8260	3400	ug/L	MQS	08/14/2007

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Date Received: **08/10/2007**
Date Reported: **08/24/2007**
Work Order No.: **0708-00083**

Sample ID: **ML - 3A** Sample No.: **007**

Sample Date: **08/09/2007**

Test Performed	Method	Results	Units	Tech	Analysis Date
Dibromochloromethane	EPA 8260	<50	ug/L	MQS	08/14/2007
1,2-Dibromoethane (EDB)	EPA 8260	<100	ug/L	MQS	08/14/2007
Chlorobenzene	EPA 8260	<50	ug/L	MQS	08/14/2007
1,1,1,2-Tetrachloroethane	EPA 8260	<50	ug/L	MQS	08/14/2007
Ethylbenzene	EPA 8260	<50	ug/L	MQS	08/14/2007
m&p-Xylene	EPA 8260	<50	ug/L	MQS	08/14/2007
o-Xylene	EPA 8260	<50	ug/L	MQS	08/14/2007
Styrene	EPA 8260	<50	ug/L	MQS	08/14/2007
Bromoform	EPA 8260	<100	ug/L	MQS	08/14/2007
Isopropylbenzene	EPA 8260	<50	ug/L	MQS	08/14/2007
1,1,2,2-Tetrachloroethane	EPA 8260	<50	ug/L	MQS	08/14/2007
1,2,3-Trichloropropane	EPA 8260	<50	ug/L	MQS	08/14/2007
Bromobenzene	EPA 8260	<50	ug/L	MQS	08/14/2007
N-Propylbenzene	EPA 8260	<50	ug/L	MQS	08/14/2007
2-Chlorotoluene	EPA 8260	<50	ug/L	MQS	08/14/2007
1,3,5-Trimethylbenzene	EPA 8260	<50	ug/L	MQS	08/14/2007
4-Chlorotoluene	EPA 8260	<50	ug/L	MQS	08/14/2007
tert-Butylbenzene	EPA 8260	<50	ug/L	MQS	08/14/2007
1,2,4-Trimethylbenzene	EPA 8260	<50	ug/L	MQS	08/14/2007
sec-Butylbenzene	EPA 8260	<50	ug/L	MQS	08/14/2007
p-Isopropyltoluene	EPA 8260	<50	ug/L	MQS	08/14/2007
1,3-Dichlorobenzene	EPA 8260	<50	ug/L	MQS	08/14/2007
1,4-Dichlorobenzene	EPA 8260	<50	ug/L	MQS	08/14/2007
n-Butylbenzene	EPA 8260	<50	ug/L	MQS	08/14/2007
1,2-Dichlorobenzene	EPA 8260	<50	ug/L	MQS	08/14/2007
1,2-Dibromo-3-Chloropropane	EPA 8260	<250	ug/L	MQS	08/14/2007
1,2,4-Trichlorobenzene	EPA 8260	<50	ug/L	MQS	08/14/2007
Hexachlorobutadiene	EPA 8260	<50	ug/L	MQS	08/14/2007
Naphthalene	EPA 8260	<50	ug/L	MQS	08/14/2007
1,2,3-Trichlorobenzene	EPA 8260	<50	ug/L	MQS	08/14/2007
Surrogates:	EPA 8260				
***1,2-Dichlorobenzene-D4	EPA 8260	96.9	% R	MQS	08/14/2007
***Toluene-D8	EPA 8260	103	% R	MQS	08/14/2007
***4-Bromofluorobenzene	EPA 8260	104	% R	MQS	08/14/2007
Preparation	EPA 5030B	50	DF	MQS	08/13/2007
SEMI-VOLATILE ORGANICS	EPA 8270			CMG	08/21/2007
ACID FRACTION:	EPA 8270				

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Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **08/10/2007**
Date Reported: **08/24/2007**
Work Order No.: **0708-00083**

Sample ID: **ML - 3A** Sample No.: **007**

Sample Date: **08/09/2007**

Test Performed	Method	Results	Units	Tech	Analysis Date
Phenol	EPA 8270	<10	ug/L	CMG	08/21/2007
2-Chlorophenol	EPA 8270	<10	ug/L	CMG	08/21/2007
2-Methylphenol	EPA 8270	<10	ug/L	CMG	08/21/2007
3&4-Methylphenol	EPA 8270	<10	ug/L	CMG	08/21/2007
2-Nitrophenol	EPA 8270	<10	ug/L	CMG	08/21/2007
2,4-Dimethylphenol	EPA 8270	<10	ug/L	CMG	08/21/2007
Benzoic Acid	EPA 8270	<10	ug/L	CMG	08/21/2007
2,4-Dichlorophenol	EPA 8270	<10	ug/L	CMG	08/21/2007
4-Chloro-3-Methylphenol	EPA 8270	<20	ug/L	CMG	08/21/2007
2,4,6-Trichlorophenol	EPA 8270	<10	ug/L	CMG	08/21/2007
2,4,5-Trichlorophenol	EPA 8270	<10	ug/L	CMG	08/21/2007
2,4-Dinitrophenol	EPA 8270	<100	ug/L	CMG	08/21/2007
4-Nitrophenol	EPA 8270	<50	ug/L	CMG	08/21/2007
4,6-Dinitro-2-Methylphenol	EPA 8270	<50	ug/L	CMG	08/21/2007
Pentachlorophenol	EPA 8270	<50	ug/L	CMG	08/21/2007
BASE-NEUTRAL FRACTION:					
n-Nitrosodimethylamine	EPA 8270	<10	ug/L	CMG	08/21/2007
bis(2-Chloroethyl)Ether	EPA 8270	<10	ug/L	CMG	08/21/2007
1,3-Dichlorobenzene	EPA 8270	<10	ug/L	CMG	08/21/2007
1,4-Dichlorobenzene	EPA 8270	<10	ug/L	CMG	08/21/2007
Benzyl Alcohol	EPA 8270	<20	ug/L	CMG	08/21/2007
1,2-Dichlorobenzene	EPA 8270	<10	ug/L	CMG	08/21/2007
bis(2-Chloroisopropyl)Ether	EPA 8270	<10	ug/L	CMG	08/21/2007
n-Nitrosodi-n-Propylamine	EPA 8270	<10	ug/L	CMG	08/21/2007
Hexachloroethane	EPA 8270	<10	ug/L	CMG	08/21/2007
Nitrobenzene	EPA 8270	<10	ug/L	CMG	08/21/2007
Isophorone	EPA 8270	<10	ug/L	CMG	08/21/2007
bis(2-Chloroethoxy)Methane	EPA 8270	<10	ug/L	CMG	08/21/2007
1,2,4-Trichlorobenzene	EPA 8270	<10	ug/L	CMG	08/21/2007
Naphthalene	EPA 8270	<2.0	ug/L	CMG	08/21/2007
4-Chloroaniline	EPA 8270	<20	ug/L	CMG	08/21/2007
Hexachlorobutadiene	EPA 8270	<10	ug/L	CMG	08/21/2007
2-Methylnaphthalene	EPA 8270	<2.0	ug/L	CMG	08/21/2007
Hexachlorocyclopentadiene	EPA 8270	<50	ug/L	CMG	08/21/2007
2-Chloronaphthalene	EPA 8270	<10	ug/L	CMG	08/21/2007
2-Nitroaniline	EPA 8270	<50	ug/L	CMG	08/21/2007
Dimethylphthalate	EPA 8270	<10	ug/L	CMG	08/21/2007

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Ed Summerly

Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **08/10/2007**
Date Reported: **08/24/2007**
Work Order No.: **0708-00083**

Sample ID: **ML - 3A** Sample No.: **007**

Sample Date: **08/09/2007**

Test Performed	Method	Results	Units	Tech	Analysis Date
Acenaphthylene	EPA 8270	<2.0	ug/L	CMG	08/21/2007
2,6-Dinitrotoluene	EPA 8270	<10	ug/L	CMG	08/21/2007
3-Nitroaniline	EPA 8270	<50	ug/L	CMG	08/21/2007
Acenaphthene	EPA 8270	<2.0	ug/L	CMG	08/21/2007
Dibenzofuran	EPA 8270	<10	ug/L	CMG	08/21/2007
2,4-Dinitrotoluene	EPA 8270	<10	ug/L	CMG	08/21/2007
Diethylphthalate	EPA 8270	<10	ug/L	CMG	08/21/2007
Fluorene	EPA 8270	<2.0	ug/L	CMG	08/21/2007
4-Chlorophenyl Phenyl Ether	EPA 8270	<10	ug/L	CMG	08/21/2007
4-Nitroaniline	EPA 8270	<20	ug/L	CMG	08/21/2007
n-Nitrosodiphenylamine	EPA 8270	<10	ug/L	CMG	08/21/2007
4-Bromophenyl Phenyl Ether	EPA 8270	<10	ug/L	CMG	08/21/2007
Hexachlorobenzene	EPA 8270	<10	ug/L	CMG	08/21/2007
Phenanthrene	EPA 8270	<2.0	ug/L	CMG	08/21/2007
Anthracene	EPA 8270	<2.0	ug/L	CMG	08/21/2007
Carbazole	EPA 8270	<10	ug/L	CMG	08/21/2007
di-n-Butylphthalate	EPA 8270	<15	ug/L	CMG	08/21/2007
Fluoranthene	EPA 8270	<2.0	ug/L	CMG	08/21/2007
Pyrene	EPA 8270	<2.0	ug/L	CMG	08/21/2007
Butylbenzylphthalate	EPA 8270	<10	ug/L	CMG	08/21/2007
Benzo [a] Anthracene	EPA 8270	<2.0	ug/L	CMG	08/21/2007
3,3'-Dichlorobenzidine	EPA 8270	<20	ug/L	CMG	08/21/2007
Chrysene	EPA 8270	<2.0	ug/L	CMG	08/21/2007
bis(2-Ethylhexyl)Phthalate	EPA 8270	<10	ug/L	CMG	08/21/2007
di-n-Octylphthalate	EPA 8270	<10	ug/L	CMG	08/21/2007
Benzo [b] Fluoranthene	EPA 8270	<2.0	ug/L	CMG	08/21/2007
Benzo [k] Fluoranthene	EPA 8270	<2.0	ug/L	CMG	08/21/2007
Benzo [a] Pyrene	EPA 8270	<2.0	ug/L	CMG	08/21/2007
Indeno [1,2,3-cd] Pyrene	EPA 8270	<2.0	ug/L	CMG	08/21/2007
Dibenzo [a,h] Anthracene	EPA 8270	<2.0	ug/L	CMG	08/21/2007
Benzo [g,h,i] Perylene	EPA 8270	<2.0	ug/L	CMG	08/21/2007
Surrogates:	EPA 8270				
***2-Fluorophenol	EPA 8270	23.4	% R	CMG	08/21/2007
***2-Chlorophenol-D4	EPA 8270	54.3	% R	CMG	08/21/2007
***Nitrobenzene-D5	EPA 8270	71.8	% R	CMG	08/21/2007
***2-Fluorobiphenyl	EPA 8270	70.5	% R	CMG	08/21/2007
***2,4,6-Tribromophenol	EPA 8270	60.0	% R	CMG	08/21/2007

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ANALYTICAL REPORT

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140 Broadway
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Ed Summerly

Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **08/10/2007**
Date Reported: **08/24/2007**
Work Order No.: **0708-00083**

Sample ID: **ML - 3A** Sample No.: **007**

Sample Date: **08/09/2007**

Test Performed	Method	Results	Units	Tech	Analysis Date
***P-Terphenyl-D14	EPA 8270	75.8	% R	CMG	08/21/2007
Extraction	EPA 3510C	1.0	DF	JCW	08/15/2007
TOTAL PETROLEUM HYDROCARBON	D3328/EPA 8100/			RJD	08/21/2007
Hydrocarbon Content		260	ug/L	RJD	08/21/2007
Surrogate:	D3328/EPA 8100				
***p-Terphenyl		95.1	% R	RJD	08/20/2007
Extraction	EPA 3510C	1.0	DF	JCW	08/16/2007
PRIORITY POLLUTANT METALS				AJY	08/13/2007
Silver	EPA 6010B	<0.0050	mg/L	AJY	08/13/2007
Arsenic	EPA 6010B	<0.010	mg/L	AJY	08/13/2007
Beryllium	EPA 6010B	<0.0040	mg/L	AJY	08/13/2007
Cadmium	EPA 6010B	<0.0050	mg/L	AJY	08/13/2007
Chromium	EPA 6010B	<0.0050	mg/L	AJY	08/13/2007
Copper	EPA 6010B	<0.015	mg/L	AJY	08/13/2007
Mercury	EPA 7470A	<0.00040	mg/L	TGG	08/20/2007
Nickel	EPA 6010B	<0.010	mg/L	AJY	08/13/2007
Lead	EPA 6010B	<0.010	mg/L	AJY	08/13/2007
Antimony	EPA 6010B	<0.025	mg/L	AJY	08/13/2007
Selenium	EPA 6010B	<0.025	mg/L	AJY	08/13/2007
Thallium	EPA 6010B	<0.025	mg/L	AJY	08/13/2007
Zinc	EPA 6010B	0.020	mg/L	AJY	08/13/2007
Iron	EPA 6010B	3.1	mg/L	AJY	08/13/2007
Manganese	EPA 6010B	1.0	mg/L	AJY	08/13/2007

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Date Received: **08/10/2007**
Date Reported: **08/24/2007**
Work Order No.: **0708-00083**

Sample ID: **ML - 3B** Sample No.: **008**

Sample Date: **08/09/2007**

Test Performed	Method	Results	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260			MQS	08/14/2007
Dichlorodifluoromethane	EPA 8260	<2.0	ug/L	MQS	08/14/2007
Chloromethane	EPA 8260	<2.0	ug/L	MQS	08/14/2007
Vinyl Chloride	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Bromomethane	EPA 8260	<2.0	ug/L	MQS	08/14/2007
Chloroethane	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Trichlorofluoromethane	EPA 8260	<2.0	ug/L	MQS	08/14/2007
Diethylether	EPA 8260	<5.0	ug/L	MQS	08/14/2007
Acetone	EPA 8260	<25	ug/L	MQS	08/14/2007
1,1-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Dichloromethane	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Methyl-Tert-Butyl-Ether	EPA 8260	<1.0	ug/L	MQS	08/14/2007
trans-1,2-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
1,1-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	08/14/2007
2-Butanone	EPA 8260	<25	ug/L	MQS	08/14/2007
2,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	08/14/2007
cis-1,2-Dichloroethene	EPA 8260	12	ug/L	MQS	08/14/2007
Chloroform	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Bromochloromethane	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Tetrahydrofuran	EPA 8260	<10	ug/L	MQS	08/14/2007
1,1,1-Trichloroethane	EPA 8260	<1.0	ug/L	MQS	08/14/2007
1,1-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Carbon Tetrachloride	EPA 8260	<1.0	ug/L	MQS	08/14/2007
1,2-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Benzene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Trichloroethene	EPA 8260	1.4	ug/L	MQS	08/14/2007
1,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Bromodichloromethane	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Dibromomethane	EPA 8260	<1.0	ug/L	MQS	08/14/2007
4-Methyl-2-Pentanone	EPA 8260	<25	ug/L	MQS	08/14/2007
cis-1,3-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Toluene	EPA 8260	2.4	ug/L	MQS	08/14/2007
trans-1,3-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
1,1,2-Trichloroethane	EPA 8260	<1.0	ug/L	MQS	08/14/2007
2-Hexanone	EPA 8260	<2.0	ug/L	MQS	08/14/2007
1,3-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Tetrachloroethene	EPA 8260	6.0	ug/L	MQS	08/14/2007

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Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **08/10/2007**
Date Reported: **08/24/2007**
Work Order No.: **0708-00083**

Sample ID: **ML - 3B** Sample No.: **008**

Sample Date: **08/09/2007**

Test Performed	Method	Results	Units	Tech	Analysis Date
Dibromochloromethane	EPA 8260	<1.0	ug/L	MQS	08/14/2007
1,2-Dibromoethane (EDB)	EPA 8260	<2.0	ug/L	MQS	08/14/2007
Chlorobenzene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
1,1,1,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Ethylbenzene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
m&p-Xylene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
o-Xylene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Styrene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Bromoform	EPA 8260	<2.0	ug/L	MQS	08/14/2007
Isopropylbenzene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
1,1,2,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	08/14/2007
1,2,3-Trichloropropane	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Bromobenzene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
N-Propylbenzene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
2-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
1,3,5-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
4-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
tert-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
1,2,4-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
sec-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
p-Isopropyltoluene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
1,3-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
1,4-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
n-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
1,2-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
1,2-Dibromo-3-Chloropropane	EPA 8260	<5.0	ug/L	MQS	08/14/2007
1,2,4-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Hexachlorobutadiene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Naphthalene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
1,2,3-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Surrogates:	EPA 8260				
***1,2-Dichlorobenzene-D4	EPA 8260	92.9	% R	MQS	08/14/2007
***Toluene-D8	EPA 8260	102	% R	MQS	08/14/2007
***4-Bromofluorobenzene	EPA 8260	106	% R	MQS	08/14/2007
Preparation	EPA 5030B	1.0	DF	MQS	08/14/2007
SEMI-VOLATILE ORGANICS	EPA 8270			CMG	08/21/2007
ACID FRACTION:	EPA 8270				

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Date Received: **08/10/2007**
Date Reported: **08/24/2007**
Work Order No.: **0708-00083**

Sample ID: **ML - 3B** Sample No.: **008**

Sample Date: **08/09/2007**

Test Performed	Method	Results	Units	Tech	Analysis Date
Phenol	EPA 8270	<11	ug/L	CMG	08/21/2007
2-Chlorophenol	EPA 8270	<11	ug/L	CMG	08/21/2007
2-Methylphenol	EPA 8270	<11	ug/L	CMG	08/21/2007
3&4-Methylphenol	EPA 8270	<11	ug/L	CMG	08/21/2007
2-Nitrophenol	EPA 8270	<11	ug/L	CMG	08/21/2007
2,4-Dimethylphenol	EPA 8270	<11	ug/L	CMG	08/21/2007
Benzoic Acid	EPA 8270	<11	ug/L	CMG	08/21/2007
2,4-Dichlorophenol	EPA 8270	<11	ug/L	CMG	08/21/2007
4-Chloro-3-Methylphenol	EPA 8270	<21	ug/L	CMG	08/21/2007
2,4,6-Trichlorophenol	EPA 8270	<11	ug/L	CMG	08/21/2007
2,4,5-Trichlorophenol	EPA 8270	<11	ug/L	CMG	08/21/2007
2,4-Dinitrophenol	EPA 8270	<110	ug/L	CMG	08/21/2007
4-Nitrophenol	EPA 8270	<53	ug/L	CMG	08/21/2007
4,6-Dinitro-2-Methylphenol	EPA 8270	<53	ug/L	CMG	08/21/2007
Pentachlorophenol	EPA 8270	<53	ug/L	CMG	08/21/2007
BASE-NEUTRAL FRACTION:					
n-Nitrosodimethylamine	EPA 8270	<11	ug/L	CMG	08/21/2007
bis(2-Chloroethyl)Ether	EPA 8270	<11	ug/L	CMG	08/21/2007
1,3-Dichlorobenzene	EPA 8270	<11	ug/L	CMG	08/21/2007
1,4-Dichlorobenzene	EPA 8270	<11	ug/L	CMG	08/21/2007
Benzyl Alcohol	EPA 8270	<21	ug/L	CMG	08/21/2007
1,2-Dichlorobenzene	EPA 8270	<11	ug/L	CMG	08/21/2007
bis(2-Chloroisopropyl)Ether	EPA 8270	<11	ug/L	CMG	08/21/2007
n-Nitrosodi-n-Propylamine	EPA 8270	<11	ug/L	CMG	08/21/2007
Hexachloroethane	EPA 8270	<11	ug/L	CMG	08/21/2007
Nitrobenzene	EPA 8270	<11	ug/L	CMG	08/21/2007
Isophorone	EPA 8270	<11	ug/L	CMG	08/21/2007
bis(2-Chloroethoxy)Methane	EPA 8270	<11	ug/L	CMG	08/21/2007
1,2,4-Trichlorobenzene	EPA 8270	<11	ug/L	CMG	08/21/2007
Naphthalene	EPA 8270	<2.1	ug/L	CMG	08/21/2007
4-Chloroaniline	EPA 8270	<21	ug/L	CMG	08/21/2007
Hexachlorobutadiene	EPA 8270	<11	ug/L	CMG	08/21/2007
2-Methylnaphthalene	EPA 8270	<2.1	ug/L	CMG	08/21/2007
Hexachlorocyclopentadiene	EPA 8270	<53	ug/L	CMG	08/21/2007
2-Chloronaphthalene	EPA 8270	<11	ug/L	CMG	08/21/2007
2-Nitroaniline	EPA 8270	<53	ug/L	CMG	08/21/2007
Dimethylphthalate	EPA 8270	<11	ug/L	CMG	08/21/2007

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Date Reported: **08/24/2007**
Work Order No.: **0708-00083**

Sample ID: **ML - 3B** Sample No.: **008**

Sample Date: **08/09/2007**

Test Performed	Method	Results	Units	Tech	Analysis Date
Acenaphthylene	EPA 8270	<2.1	ug/L	CMG	08/21/2007
2,6-Dinitrotoluene	EPA 8270	<11	ug/L	CMG	08/21/2007
3-Nitroaniline	EPA 8270	<53	ug/L	CMG	08/21/2007
Acenaphthene	EPA 8270	<2.1	ug/L	CMG	08/21/2007
Dibenzofuran	EPA 8270	<11	ug/L	CMG	08/21/2007
2,4-Dinitrotoluene	EPA 8270	<11	ug/L	CMG	08/21/2007
Diethylphthalate	EPA 8270	<11	ug/L	CMG	08/21/2007
Fluorene	EPA 8270	<2.1	ug/L	CMG	08/21/2007
4-Chlorophenyl Phenyl Ether	EPA 8270	<11	ug/L	CMG	08/21/2007
4-Nitroaniline	EPA 8270	<21	ug/L	CMG	08/21/2007
n-Nitrosodiphenylamine	EPA 8270	<11	ug/L	CMG	08/21/2007
4-Bromophenyl Phenyl Ether	EPA 8270	<11	ug/L	CMG	08/21/2007
Hexachlorobenzene	EPA 8270	<11	ug/L	CMG	08/21/2007
Phenanthrene	EPA 8270	<2.1	ug/L	CMG	08/21/2007
Anthracene	EPA 8270	<2.1	ug/L	CMG	08/21/2007
Carbazole	EPA 8270	<11	ug/L	CMG	08/21/2007
di-n-Butylphthalate	EPA 8270	<16	ug/L	CMG	08/21/2007
Fluoranthene	EPA 8270	<2.1	ug/L	CMG	08/21/2007
Pyrene	EPA 8270	<2.1	ug/L	CMG	08/21/2007
Butylbenzylphthalate	EPA 8270	<11	ug/L	CMG	08/21/2007
Benzo [a] Anthracene	EPA 8270	<2.1	ug/L	CMG	08/21/2007
3,3'-Dichlorobenzidine	EPA 8270	<21	ug/L	CMG	08/21/2007
Chrysene	EPA 8270	<2.1	ug/L	CMG	08/21/2007
bis(2-Ethylhexyl)Phthalate	EPA 8270	<11	ug/L	CMG	08/21/2007
di-n-Octylphthalate	EPA 8270	<11	ug/L	CMG	08/21/2007
Benzo [b] Fluoranthene	EPA 8270	<2.1	ug/L	CMG	08/21/2007
Benzo [k] Fluoranthene	EPA 8270	<2.1	ug/L	CMG	08/21/2007
Benzo [a] Pyrene	EPA 8270	<2.1	ug/L	CMG	08/21/2007
Indeno [1,2,3-cd] Pyrene	EPA 8270	<2.1	ug/L	CMG	08/21/2007
Dibenzo [a,h] Anthracene	EPA 8270	<2.1	ug/L	CMG	08/21/2007
Benzo [g,h,i] Perylene	EPA 8270	<2.1	ug/L	CMG	08/21/2007
Surrogates:	EPA 8270				
***2-Fluorophenol	EPA 8270	26.3	% R	CMG	08/21/2007
***Phenol-D6	EPA 8270	17.1	% R	CMG	08/21/2007
***Nitrobenzene-D5	EPA 8270	56.3	% R	CMG	08/21/2007
***2-Fluorobiphenyl	EPA 8270	56.9	% R	CMG	08/21/2007
***2,4,6-Tribromophenol	EPA 8270	48.0	% R	CMG	08/21/2007

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Date Reported: **08/24/2007**
Work Order No.: **0708-00083**

Sample ID: **ML - 3B** Sample No.: **008**

Sample Date: **08/09/2007**

Test Performed	Method	Results	Units	Tech	Analysis Date
***1,2-Dichlorobenzene-D4	EPA 8270	50.2	% R	CMG	08/21/2007
Extraction	EPA 3510C	1.0	DF	JCW	08/15/2007
TOTAL PETROLEUM HYDROCARBON	D3328/EPA 8100/			RJD	08/20/2007
Hydrocarbon Content		1000	ug/L	RJD	08/20/2007
Surrogate:	D3328/EPA 8100				
***p-Terphenyl		68.1	% R	RJD	08/20/2007
Extraction	EPA 3510C	1.0	DF	JCW	08/16/2007
PRIORITY POLLUTANT METALS				AJY	08/13/2007
Silver	EPA 6010B	<0.0050	mg/L	AJY	08/13/2007
Arsenic	EPA 6010B	<0.010	mg/L	AJY	08/13/2007
Beryllium	EPA 6010B	<0.0040	mg/L	AJY	08/13/2007
Cadmium	EPA 6010B	<0.0050	mg/L	AJY	08/13/2007
Chromium	EPA 6010B	<0.0050	mg/L	AJY	08/13/2007
Copper	EPA 6010B	<0.015	mg/L	AJY	08/13/2007
Mercury	EPA 7470A	<0.00040	mg/L	TGG	08/20/2007
Nickel	EPA 6010B	<0.010	mg/L	AJY	08/13/2007
Lead	EPA 6010B	<0.010	mg/L	AJY	08/13/2007
Antimony	EPA 6010B	<0.025	mg/L	AJY	08/13/2007
Selenium	EPA 6010B	<0.025	mg/L	AJY	08/13/2007
Thallium	EPA 6010B	<0.025	mg/L	AJY	08/13/2007
Zinc	EPA 6010B	0.051	mg/L	AJY	08/13/2007
Iron	EPA 6010B	5.4	mg/L	AJY	08/13/2007
Manganese	EPA 6010B	0.47	mg/L	AJY	08/13/2007

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Date Received: **08/10/2007**
Date Reported: **08/24/2007**
Work Order No.: **0708-00083**

Sample ID: **ML - 3C** Sample No.: **009**

Sample Date: **08/09/2007**

Test Performed	Method	Results	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260			MQS	08/14/2007
Dichlorodifluoromethane	EPA 8260	<2.0	ug/L	MQS	08/14/2007
Chloromethane	EPA 8260	<2.0	ug/L	MQS	08/14/2007
Vinyl Chloride	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Bromomethane	EPA 8260	<2.0	ug/L	MQS	08/14/2007
Chloroethane	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Trichlorofluoromethane	EPA 8260	<2.0	ug/L	MQS	08/14/2007
Diethylether	EPA 8260	<5.0	ug/L	MQS	08/14/2007
Acetone	EPA 8260	<25	ug/L	MQS	08/14/2007
1,1-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Dichloromethane	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Methyl-Tert-Butyl-Ether	EPA 8260	<1.0	ug/L	MQS	08/14/2007
trans-1,2-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
1,1-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	08/14/2007
2-Butanone	EPA 8260	<25	ug/L	MQS	08/14/2007
2,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	08/14/2007
cis-1,2-Dichloroethene	EPA 8260	1.1	ug/L	MQS	08/14/2007
Chloroform	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Bromochloromethane	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Tetrahydrofuran	EPA 8260	<10	ug/L	MQS	08/14/2007
1,1,1-Trichloroethane	EPA 8260	<1.0	ug/L	MQS	08/14/2007
1,1-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Carbon Tetrachloride	EPA 8260	<1.0	ug/L	MQS	08/14/2007
1,2-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Benzene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Trichloroethene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
1,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Bromodichloromethane	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Dibromomethane	EPA 8260	<1.0	ug/L	MQS	08/14/2007
4-Methyl-2-Pentanone	EPA 8260	<25	ug/L	MQS	08/14/2007
cis-1,3-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Toluene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
trans-1,3-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
1,1,2-Trichloroethane	EPA 8260	<1.0	ug/L	MQS	08/14/2007
2-Hexanone	EPA 8260	<2.0	ug/L	MQS	08/14/2007
1,3-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Tetrachloroethene	EPA 8260	<1.0	ug/L	MQS	08/14/2007

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ANALYTICAL REPORT

GZA GeoEnvironmental, Inc.
140 Broadway
Providence, RI 02903

Ed Summerly

Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **08/10/2007**
Date Reported: **08/24/2007**
Work Order No.: **0708-00083**

Sample ID: **ML - 3C** Sample No.: **009**

Sample Date: **08/09/2007**

Test Performed	Method	Results	Units	Tech	Analysis Date
Dibromochloromethane	EPA 8260	<1.0	ug/L	MQS	08/14/2007
1,2-Dibromoethane (EDB)	EPA 8260	<2.0	ug/L	MQS	08/14/2007
Chlorobenzene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
1,1,1,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Ethylbenzene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
m&p-Xylene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
o-Xylene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Styrene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Bromoform	EPA 8260	<2.0	ug/L	MQS	08/14/2007
Isopropylbenzene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
1,1,2,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	08/14/2007
1,2,3-Trichloropropane	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Bromobenzene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
N-Propylbenzene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
2-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
1,3,5-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
4-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
tert-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
1,2,4-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
sec-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
p-Isopropyltoluene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
1,3-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
1,4-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
n-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
1,2-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
1,2-Dibromo-3-Chloropropane	EPA 8260	<5.0	ug/L	MQS	08/14/2007
1,2,4-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Hexachlorobutadiene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Naphthalene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
1,2,3-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Surrogates:	EPA 8260				
***1,2-Dichlorobenzene-D4	EPA 8260	97.5	% R	MQS	08/14/2007
***Toluene-D8	EPA 8260	104	% R	MQS	08/14/2007
***4-Bromofluorobenzene	EPA 8260	109	% R	MQS	08/14/2007
Preparation	EPA 5030B	1.0	DF	MQS	08/14/2007
SEMI-VOLATILE ORGANICS	EPA 8270			CMG	08/21/2007
ACID FRACTION:	EPA 8270				

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Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **08/10/2007**
Date Reported: **08/24/2007**
Work Order No.: **0708-00083**

Sample ID: **ML - 3C** Sample No.: **009**

Sample Date: **08/09/2007**

Test Performed	Method	Results	Units	Tech	Analysis Date
Phenol	EPA 8270	<12	ug/L	CMG	08/21/2007
2-Chlorophenol	EPA 8270	<12	ug/L	CMG	08/21/2007
2-Methylphenol	EPA 8270	<12	ug/L	CMG	08/21/2007
3&4-Methylphenol	EPA 8270	<12	ug/L	CMG	08/21/2007
2-Nitrophenol	EPA 8270	<12	ug/L	CMG	08/21/2007
2,4-Dimethylphenol	EPA 8270	<12	ug/L	CMG	08/21/2007
Benzoic Acid	EPA 8270	<12	ug/L	CMG	08/21/2007
2,4-Dichlorophenol	EPA 8270	<12	ug/L	CMG	08/21/2007
4-Chloro-3-Methylphenol	EPA 8270	<24	ug/L	CMG	08/21/2007
2,4,6-Trichlorophenol	EPA 8270	<12	ug/L	CMG	08/21/2007
2,4,5-Trichlorophenol	EPA 8270	<12	ug/L	CMG	08/21/2007
2,4-Dinitrophenol	EPA 8270	<120	ug/L	CMG	08/21/2007
4-Nitrophenol	EPA 8270	<60	ug/L	CMG	08/21/2007
4,6-Dinitro-2-Methylphenol	EPA 8270	<60	ug/L	CMG	08/21/2007
Pentachlorophenol	EPA 8270	<60	ug/L	CMG	08/21/2007
BASE-NEUTRAL FRACTION:					
n-Nitrosodimethylamine	EPA 8270	<12	ug/L	CMG	08/21/2007
bis(2-Chloroethyl)Ether	EPA 8270	<12	ug/L	CMG	08/21/2007
1,3-Dichlorobenzene	EPA 8270	<12	ug/L	CMG	08/21/2007
1,4-Dichlorobenzene	EPA 8270	<12	ug/L	CMG	08/21/2007
Benzyl Alcohol	EPA 8270	<24	ug/L	CMG	08/21/2007
1,2-Dichlorobenzene	EPA 8270	<12	ug/L	CMG	08/21/2007
bis(2-Chloroisopropyl)Ether	EPA 8270	<12	ug/L	CMG	08/21/2007
n-Nitrosodi-n-Propylamine	EPA 8270	<12	ug/L	CMG	08/21/2007
Hexachloroethane	EPA 8270	<12	ug/L	CMG	08/21/2007
Nitrobenzene	EPA 8270	<12	ug/L	CMG	08/21/2007
Isophorone	EPA 8270	<12	ug/L	CMG	08/21/2007
bis(2-Chloroethoxy)Methane	EPA 8270	<12	ug/L	CMG	08/21/2007
1,2,4-Trichlorobenzene	EPA 8270	<12	ug/L	CMG	08/21/2007
Naphthalene	EPA 8270	<2.4	ug/L	CMG	08/21/2007
4-Chloroaniline	EPA 8270	<24	ug/L	CMG	08/21/2007
Hexachlorobutadiene	EPA 8270	<12	ug/L	CMG	08/21/2007
2-Methylnaphthalene	EPA 8270	<2.4	ug/L	CMG	08/21/2007
Hexachlorocyclopentadiene	EPA 8270	<60	ug/L	CMG	08/21/2007
2-Chloronaphthalene	EPA 8270	<12	ug/L	CMG	08/21/2007
2-Nitroaniline	EPA 8270	<60	ug/L	CMG	08/21/2007
Dimethylphthalate	EPA 8270	<12	ug/L	CMG	08/21/2007

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Date Received: **08/10/2007**
Date Reported: **08/24/2007**
Work Order No.: **0708-00083**

Sample ID: **ML - 3C** Sample No.: **009**

Sample Date: **08/09/2007**

Test Performed	Method	Results	Units	Tech	Analysis Date
Acenaphthylene	EPA 8270	<2.4	ug/L	CMG	08/21/2007
2,6-Dinitrotoluene	EPA 8270	<12	ug/L	CMG	08/21/2007
3-Nitroaniline	EPA 8270	<60	ug/L	CMG	08/21/2007
Acenaphthene	EPA 8270	<2.4	ug/L	CMG	08/21/2007
Dibenzofuran	EPA 8270	<12	ug/L	CMG	08/21/2007
2,4-Dinitrotoluene	EPA 8270	<12	ug/L	CMG	08/21/2007
Diethylphthalate	EPA 8270	<12	ug/L	CMG	08/21/2007
Fluorene	EPA 8270	<2.4	ug/L	CMG	08/21/2007
4-Chlorophenyl Phenyl Ether	EPA 8270	<12	ug/L	CMG	08/21/2007
4-Nitroaniline	EPA 8270	<24	ug/L	CMG	08/21/2007
n-Nitrosodiphenylamine	EPA 8270	<12	ug/L	CMG	08/21/2007
4-Bromophenyl Phenyl Ether	EPA 8270	<12	ug/L	CMG	08/21/2007
Hexachlorobenzene	EPA 8270	<12	ug/L	CMG	08/21/2007
Phenanthrene	EPA 8270	<2.4	ug/L	CMG	08/21/2007
Anthracene	EPA 8270	<2.4	ug/L	CMG	08/21/2007
Carbazole	EPA 8270	<12	ug/L	CMG	08/21/2007
di-n-Butylphthalate	EPA 8270	<18	ug/L	CMG	08/21/2007
Fluoranthene	EPA 8270	<2.4	ug/L	CMG	08/21/2007
Pyrene	EPA 8270	<2.4	ug/L	CMG	08/21/2007
Butylbenzylphthalate	EPA 8270	<12	ug/L	CMG	08/21/2007
Benzo [a] Anthracene	EPA 8270	<2.4	ug/L	CMG	08/21/2007
3,3'-Dichlorobenzidine	EPA 8270	<24	ug/L	CMG	08/21/2007
Chrysene	EPA 8270	<2.4	ug/L	CMG	08/21/2007
bis(2-Ethylhexyl)Phthalate	EPA 8270	<12	ug/L	CMG	08/21/2007
di-n-Octylphthalate	EPA 8270	<12	ug/L	CMG	08/21/2007
Benzo [b] Fluoranthene	EPA 8270	<2.4	ug/L	CMG	08/21/2007
Benzo [k] Fluoranthene	EPA 8270	<2.4	ug/L	CMG	08/21/2007
Benzo [a] Pyrene	EPA 8270	<2.4	ug/L	CMG	08/21/2007
Indeno [1,2,3-cd] Pyrene	EPA 8270	<2.4	ug/L	CMG	08/21/2007
Dibenzo [a,h] Anthracene	EPA 8270	<2.4	ug/L	CMG	08/21/2007
Benzo [g,h,i] Perylene	EPA 8270	<2.4	ug/L	CMG	08/21/2007
Surrogates:	EPA 8270				
***2-Fluorophenol	EPA 8270	48.4	% R	CMG	08/21/2007
***Phenol-D6	EPA 8270	35.5	% R	CMG	08/21/2007
***Nitrobenzene-D5	EPA 8270	79.4	% R	CMG	08/21/2007
***2-Fluorobiphenyl	EPA 8270	77.4	% R	CMG	08/21/2007
***2,4,6-Tribromophenol	EPA 8270	65.4	% R	CMG	08/21/2007

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Project No.: **03.0032795.12**

Date Received: **08/10/2007**
Date Reported: **08/24/2007**
Work Order No.: **0708-00083**

Sample ID: **ML - 3C** Sample No.: **009**

Sample Date: **08/09/2007**

Test Performed	Method	Results	Units	Tech	Analysis Date
***1,2-Dichlorobenzene-D4	EPA 8270	65.2	% R	CMG	08/21/2007
Extraction	EPA 3510C	1.0	DF	JCW	08/15/2007
TOTAL PETROLEUM HYDROCARBON	D3328/EPA 8100/			RJD	08/20/2007
Hydrocarbon Content		1600	ug/L	RJD	08/20/2007
Surrogate:	D3328/EPA 8100				
***p-Terphenyl		71.0	% R	RJD	08/20/2007
Extraction	EPA 3510C	5.0	DF	JCW	08/16/2007
PRIORITY POLLUTANT METALS				AJY	08/13/2007
Silver	EPA 6010B	<0.0050	mg/L	AJY	08/13/2007
Arsenic	EPA 6010B	<0.010	mg/L	AJY	08/13/2007
Beryllium	EPA 6010B	<0.0040	mg/L	AJY	08/13/2007
Cadmium	EPA 6010B	<0.0050	mg/L	AJY	08/13/2007
Chromium	EPA 6010B	<0.0050	mg/L	AJY	08/13/2007
Copper	EPA 6010B	<0.015	mg/L	AJY	08/13/2007
Mercury	EPA 7470A	<0.00040	mg/L	TGG	08/20/2007
Nickel	EPA 6010B	<0.010	mg/L	AJY	08/13/2007
Lead	EPA 6010B	<0.010	mg/L	AJY	08/13/2007
Antimony	EPA 6010B	<0.025	mg/L	AJY	08/13/2007
Selenium	EPA 6010B	<0.025	mg/L	AJY	08/13/2007
Thallium	EPA 6010B	<0.025	mg/L	AJY	08/13/2007
Zinc	EPA 6010B	0.012	mg/L	AJY	08/13/2007
Iron	EPA 6010B	1.1	mg/L	AJY	08/13/2007
Manganese	EPA 6010B	0.085	mg/L	AJY	08/13/2007

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Date Received: **08/10/2007**
Date Reported: **08/24/2007**
Work Order No.: **0708-00083**

Sample ID: **ML - 3D** Sample No.: **010**

Sample Date: **08/09/2007**

Test Performed	Method	Results	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260			MQS	08/14/2007
Dichlorodifluoromethane	EPA 8260	<2.0	ug/L	MQS	08/14/2007
Chloromethane	EPA 8260	<2.0	ug/L	MQS	08/14/2007
Vinyl Chloride	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Bromomethane	EPA 8260	<2.0	ug/L	MQS	08/14/2007
Chloroethane	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Trichlorofluoromethane	EPA 8260	<2.0	ug/L	MQS	08/14/2007
Diethylether	EPA 8260	<5.0	ug/L	MQS	08/14/2007
Acetone	EPA 8260	<25	ug/L	MQS	08/14/2007
1,1-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Dichloromethane	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Methyl-Tert-Butyl-Ether	EPA 8260	<1.0	ug/L	MQS	08/14/2007
trans-1,2-Dichloroethene	EPA 8260	2.5	ug/L	MQS	08/14/2007
1,1-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	08/14/2007
2-Butanone	EPA 8260	<25	ug/L	MQS	08/14/2007
2,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	08/14/2007
cis-1,2-Dichloroethene	EPA 8260	270	ug/L	MQS	08/15/2007
Chloroform	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Bromochloromethane	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Tetrahydrofuran	EPA 8260	<10	ug/L	MQS	08/14/2007
1,1,1-Trichloroethane	EPA 8260	<1.0	ug/L	MQS	08/14/2007
1,1-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Carbon Tetrachloride	EPA 8260	<1.0	ug/L	MQS	08/14/2007
1,2-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Benzene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Trichloroethene	EPA 8260	200	ug/L	MQS	08/15/2007
1,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Bromodichloromethane	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Dibromomethane	EPA 8260	<1.0	ug/L	MQS	08/14/2007
4-Methyl-2-Pentanone	EPA 8260	<25	ug/L	MQS	08/14/2007
cis-1,3-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Toluene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
trans-1,3-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
1,1,2-Trichloroethane	EPA 8260	<1.0	ug/L	MQS	08/14/2007
2-Hexanone	EPA 8260	<2.0	ug/L	MQS	08/14/2007
1,3-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Tetrachloroethene	EPA 8260	3400	ug/L	MQS	08/16/2007

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Project Name.: **Charbert - NFA**
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Date Received: **08/10/2007**
Date Reported: **08/24/2007**
Work Order No.: **0708-00083**

Sample ID: **ML - 3D** Sample No.: **010**

Sample Date: **08/09/2007**

Test Performed	Method	Results	Units	Tech	Analysis Date
Dibromochloromethane	EPA 8260	<1.0	ug/L	MQS	08/14/2007
1,2-Dibromoethane (EDB)	EPA 8260	<2.0	ug/L	MQS	08/14/2007
Chlorobenzene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
1,1,1,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Ethylbenzene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
m&p-Xylene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
o-Xylene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Styrene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Bromoform	EPA 8260	<2.0	ug/L	MQS	08/14/2007
Isopropylbenzene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
1,1,2,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	08/14/2007
1,2,3-Trichloropropane	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Bromobenzene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
N-Propylbenzene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
2-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
1,3,5-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
4-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
tert-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
1,2,4-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
sec-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
p-Isopropyltoluene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
1,3-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
1,4-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
n-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
1,2-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
1,2-Dibromo-3-Chloropropane	EPA 8260	<5.0	ug/L	MQS	08/14/2007
1,2,4-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Hexachlorobutadiene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Naphthalene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
1,2,3-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Surrogates:	EPA 8260				
***1,2-Dichlorobenzene-D4	EPA 8260	97.4	% R	MQS	08/14/2007
***Toluene-D8	EPA 8260	103	% R	MQS	08/14/2007
***4-Bromofluorobenzene	EPA 8260	111	% R	MQS	08/14/2007
Preparation	EPA 5030B	1.0	DF	MQS	08/14/2007
SEMI-VOLATILE ORGANICS	EPA 8270			CMG	08/21/2007
ACID FRACTION:	EPA 8270				

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Date Received: **08/10/2007**
Date Reported: **08/24/2007**
Work Order No.: **0708-00083**

Sample ID: **ML - 3D** Sample No.: **010**

Sample Date: **08/09/2007**

Test Performed	Method	Results	Units	Tech	Analysis Date
Phenol	EPA 8270	<13	ug/L	CMG	08/21/2007
2-Chlorophenol	EPA 8270	<13	ug/L	CMG	08/21/2007
2-Methylphenol	EPA 8270	<13	ug/L	CMG	08/21/2007
3&4-Methylphenol	EPA 8270	<13	ug/L	CMG	08/21/2007
2-Nitrophenol	EPA 8270	<13	ug/L	CMG	08/21/2007
2,4-Dimethylphenol	EPA 8270	<13	ug/L	CMG	08/21/2007
Benzoic Acid	EPA 8270	<13	ug/L	CMG	08/21/2007
2,4-Dichlorophenol	EPA 8270	<13	ug/L	CMG	08/21/2007
4-Chloro-3-Methylphenol	EPA 8270	<25	ug/L	CMG	08/21/2007
2,4,6-Trichlorophenol	EPA 8270	<13	ug/L	CMG	08/21/2007
2,4,5-Trichlorophenol	EPA 8270	<13	ug/L	CMG	08/21/2007
2,4-Dinitrophenol	EPA 8270	<130	ug/L	CMG	08/21/2007
4-Nitrophenol	EPA 8270	<63	ug/L	CMG	08/21/2007
4,6-Dinitro-2-Methylphenol	EPA 8270	<63	ug/L	CMG	08/21/2007
Pentachlorophenol	EPA 8270	<63	ug/L	CMG	08/21/2007
BASE-NEUTRAL FRACTION:					
n-Nitrosodimethylamine	EPA 8270	<13	ug/L	CMG	08/21/2007
bis(2-Chloroethyl)Ether	EPA 8270	<13	ug/L	CMG	08/21/2007
1,3-Dichlorobenzene	EPA 8270	<13	ug/L	CMG	08/21/2007
1,4-Dichlorobenzene	EPA 8270	<13	ug/L	CMG	08/21/2007
Benzyl Alcohol	EPA 8270	<25	ug/L	CMG	08/21/2007
1,2-Dichlorobenzene	EPA 8270	<13	ug/L	CMG	08/21/2007
bis(2-Chloroisopropyl)Ether	EPA 8270	<13	ug/L	CMG	08/21/2007
n-Nitrosodi-n-Propylamine	EPA 8270	<13	ug/L	CMG	08/21/2007
Hexachloroethane	EPA 8270	<13	ug/L	CMG	08/21/2007
Nitrobenzene	EPA 8270	<13	ug/L	CMG	08/21/2007
Isophorone	EPA 8270	<13	ug/L	CMG	08/21/2007
bis(2-Chloroethoxy)Methane	EPA 8270	<13	ug/L	CMG	08/21/2007
1,2,4-Trichlorobenzene	EPA 8270	<13	ug/L	CMG	08/21/2007
Naphthalene	EPA 8270	<2.5	ug/L	CMG	08/21/2007
4-Chloroaniline	EPA 8270	<25	ug/L	CMG	08/21/2007
Hexachlorobutadiene	EPA 8270	<13	ug/L	CMG	08/21/2007
2-Methylnaphthalene	EPA 8270	<2.5	ug/L	CMG	08/21/2007
Hexachlorocyclopentadiene	EPA 8270	<63	ug/L	CMG	08/21/2007
2-Chloronaphthalene	EPA 8270	<13	ug/L	CMG	08/21/2007
2-Nitroaniline	EPA 8270	<63	ug/L	CMG	08/21/2007
Dimethylphthalate	EPA 8270	<13	ug/L	CMG	08/21/2007

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ANALYTICAL REPORT

GZA GeoEnvironmental, Inc.
140 Broadway
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Ed Summerly

Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **08/10/2007**
Date Reported: **08/24/2007**
Work Order No.: **0708-00083**

Sample ID: **ML - 3D** Sample No.: **010**

Sample Date: **08/09/2007**

Test Performed	Method	Results	Units	Tech	Analysis Date
Acenaphthylene	EPA 8270	<2.5	ug/L	CMG	08/21/2007
2,6-Dinitrotoluene	EPA 8270	<13	ug/L	CMG	08/21/2007
3-Nitroaniline	EPA 8270	<63	ug/L	CMG	08/21/2007
Acenaphthene	EPA 8270	<2.5	ug/L	CMG	08/21/2007
Dibenzofuran	EPA 8270	<13	ug/L	CMG	08/21/2007
2,4-Dinitrotoluene	EPA 8270	<13	ug/L	CMG	08/21/2007
Diethylphthalate	EPA 8270	<13	ug/L	CMG	08/21/2007
Fluorene	EPA 8270	<2.5	ug/L	CMG	08/21/2007
4-Chlorophenyl Phenyl Ether	EPA 8270	<13	ug/L	CMG	08/21/2007
4-Nitroaniline	EPA 8270	<25	ug/L	CMG	08/21/2007
n-Nitrosodiphenylamine	EPA 8270	<13	ug/L	CMG	08/21/2007
4-Bromophenyl Phenyl Ether	EPA 8270	<13	ug/L	CMG	08/21/2007
Hexachlorobenzene	EPA 8270	<13	ug/L	CMG	08/21/2007
Phenanthrene	EPA 8270	<2.5	ug/L	CMG	08/21/2007
Anthracene	EPA 8270	<2.5	ug/L	CMG	08/21/2007
Carbazole	EPA 8270	<13	ug/L	CMG	08/21/2007
di-n-Butylphthalate	EPA 8270	<19	ug/L	CMG	08/21/2007
Fluoranthene	EPA 8270	<2.5	ug/L	CMG	08/21/2007
Pyrene	EPA 8270	<2.5	ug/L	CMG	08/21/2007
Butylbenzylphthalate	EPA 8270	<13	ug/L	CMG	08/21/2007
Benzo [a] Anthracene	EPA 8270	<2.5	ug/L	CMG	08/21/2007
3,3'-Dichlorobenzidine	EPA 8270	<25	ug/L	CMG	08/21/2007
Chrysene	EPA 8270	<2.5	ug/L	CMG	08/21/2007
bis(2-Ethylhexyl)Phthalate	EPA 8270	<13	ug/L	CMG	08/21/2007
di-n-Octylphthalate	EPA 8270	<13	ug/L	CMG	08/21/2007
Benzo [b] Fluoranthene	EPA 8270	<2.5	ug/L	CMG	08/21/2007
Benzo [k] Fluoranthene	EPA 8270	<2.5	ug/L	CMG	08/21/2007
Benzo [a] Pyrene	EPA 8270	<2.5	ug/L	CMG	08/21/2007
Indeno [1,2,3-cd] Pyrene	EPA 8270	<2.5	ug/L	CMG	08/21/2007
Dibenzo [a,h] Anthracene	EPA 8270	<2.5	ug/L	CMG	08/21/2007
Benzo [g,h,i] Perylene	EPA 8270	<2.5	ug/L	CMG	08/21/2007
Surrogates:	EPA 8270				
***2-Fluorophenol	EPA 8270	22.7	% R	CMG	08/21/2007
***2-Chlorophenol-D4	EPA 8270	49.0	% R	CMG	08/21/2007
***Nitrobenzene-D5	EPA 8270	54.0	% R	CMG	08/21/2007
***2-Fluorobiphenyl	EPA 8270	50.6	% R	CMG	08/21/2007
***2,4,6-Tribromophenol	EPA 8270	44.7	% R	CMG	08/21/2007

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Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **08/10/2007**
Date Reported: **08/24/2007**
Work Order No.: **0708-00083**

Sample ID: **ML - 3D** Sample No.: **010**

Sample Date: **08/09/2007**

Test Performed	Method	Results	Units	Tech	Analysis Date
***P-Terphenyl-D14	EPA 8270	67.1	% R	CMG	08/21/2007
Extraction	EPA 3510C	1.0	DF	JCW	08/15/2007
TOTAL PETROLEUM HYDROCARBON	D3328/EPA 8100/			RJD	08/21/2007
Hydrocarbon Content		3300	ug/L	RJD	08/21/2007
Surrogate:	D3328/EPA 8100				
***p-Terphenyl		90.8	% R	RJD	08/21/2007
Extraction	EPA 3510C	5.0	DF	JCW	08/16/2007
PRIORITY POLLUTANT METALS				AJY	08/13/2007
Silver	EPA 6010B	<0.0050	mg/L	AJY	08/13/2007
Arsenic	EPA 6010B	<0.010	mg/L	AJY	08/13/2007
Beryllium	EPA 6010B	<0.0040	mg/L	AJY	08/13/2007
Cadmium	EPA 6010B	<0.0050	mg/L	AJY	08/13/2007
Chromium	EPA 6010B	0.0057	mg/L	AJY	08/13/2007
Copper	EPA 6010B	<0.015	mg/L	AJY	08/13/2007
Mercury	EPA 7470A	<0.00040	mg/L	TGG	08/20/2007
Nickel	EPA 6010B	<0.010	mg/L	AJY	08/13/2007
Lead	EPA 6010B	<0.010	mg/L	AJY	08/13/2007
Antimony	EPA 6010B	<0.025	mg/L	AJY	08/13/2007
Selenium	EPA 6010B	<0.025	mg/L	AJY	08/13/2007
Thallium	EPA 6010B	<0.025	mg/L	AJY	08/13/2007
Zinc	EPA 6010B	0.012	mg/L	AJY	08/13/2007
Iron	EPA 6010B	3.2	mg/L	AJY	08/13/2007
Manganese	EPA 6010B	1.0	mg/L	AJY	08/13/2007

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Date Received: **08/10/2007**
Date Reported: **08/24/2007**
Work Order No.: **0708-00083**

Sample ID: **Trip Blank 1** Sample No.: **011**

Sample Date: **08/09/2007**

Test Performed	Method	Results	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260			MQS	08/14/2007
Dichlorodifluoromethane	EPA 8260	<2.0	ug/L	MQS	08/14/2007
Chloromethane	EPA 8260	<2.0	ug/L	MQS	08/14/2007
Vinyl Chloride	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Bromomethane	EPA 8260	<2.0	ug/L	MQS	08/14/2007
Chloroethane	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Trichlorofluoromethane	EPA 8260	<2.0	ug/L	MQS	08/14/2007
Diethylether	EPA 8260	<5.0	ug/L	MQS	08/14/2007
Acetone	EPA 8260	<25	ug/L	MQS	08/14/2007
1,1-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Dichloromethane	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Methyl-Tert-Butyl-Ether	EPA 8260	<1.0	ug/L	MQS	08/14/2007
trans-1,2-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
1,1-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	08/14/2007
2-Butanone	EPA 8260	<25	ug/L	MQS	08/14/2007
2,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	08/14/2007
cis-1,2-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Chloroform	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Bromochloromethane	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Tetrahydrofuran	EPA 8260	<10	ug/L	MQS	08/14/2007
1,1,1-Trichloroethane	EPA 8260	<1.0	ug/L	MQS	08/14/2007
1,1-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Carbon Tetrachloride	EPA 8260	<1.0	ug/L	MQS	08/14/2007
1,2-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Benzene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Trichloroethene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
1,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Bromodichloromethane	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Dibromomethane	EPA 8260	<1.0	ug/L	MQS	08/14/2007
4-Methyl-2-Pentanone	EPA 8260	<25	ug/L	MQS	08/14/2007
cis-1,3-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Toluene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
trans-1,3-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
1,1,2-Trichloroethane	EPA 8260	<1.0	ug/L	MQS	08/14/2007
2-Hexanone	EPA 8260	<2.0	ug/L	MQS	08/14/2007
1,3-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Tetrachloroethene	EPA 8260	<1.0	ug/L	MQS	08/14/2007

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Ed Summerly

Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **08/10/2007**
Date Reported: **08/24/2007**
Work Order No.: **0708-00083**

Sample ID: **Trip Blank 1** Sample No.: **011**

Sample Date: **08/09/2007**

Test Performed	Method	Results	Units	Tech	Analysis Date
Dibromochloromethane	EPA 8260	<1.0	ug/L	MQS	08/14/2007
1,2-Dibromoethane (EDB)	EPA 8260	<2.0	ug/L	MQS	08/14/2007
Chlorobenzene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
1,1,1,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Ethylbenzene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
m&p-Xylene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
o-Xylene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Styrene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Bromoform	EPA 8260	<2.0	ug/L	MQS	08/14/2007
Isopropylbenzene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
1,1,2,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	08/14/2007
1,2,3-Trichloropropane	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Bromobenzene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
N-Propylbenzene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
2-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
1,3,5-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
4-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
tert-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
1,2,4-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
sec-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
p-Isopropyltoluene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
1,3-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
1,4-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
n-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
1,2-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
1,2-Dibromo-3-Chloropropane	EPA 8260	<5.0	ug/L	MQS	08/14/2007
1,2,4-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Hexachlorobutadiene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Naphthalene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
1,2,3-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Surrogates:	EPA 8260				
***1,2-Dichlorobenzene-D4	EPA 8260	97.4	% R	MQS	08/14/2007
***Toluene-D8	EPA 8260	103	% R	MQS	08/14/2007
***4-Bromofluorobenzene	EPA 8260	105	% R	MQS	08/14/2007
Preparation	EPA 5030B	1.0	DF	MQS	08/14/2007

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Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **08/10/2007**
Date Reported: **08/24/2007**
Work Order No.: **0708-00083**

Sample ID: **Trip Blank 2** Sample No.: **012**

Sample Date: **08/09/2007**

Test Performed	Method	Results	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260			MQS	08/14/2007
Dichlorodifluoromethane	EPA 8260	<2.0	ug/L	MQS	08/14/2007
Chloromethane	EPA 8260	<2.0	ug/L	MQS	08/14/2007
Vinyl Chloride	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Bromomethane	EPA 8260	<2.0	ug/L	MQS	08/14/2007
Chloroethane	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Trichlorofluoromethane	EPA 8260	<2.0	ug/L	MQS	08/14/2007
Diethylether	EPA 8260	<5.0	ug/L	MQS	08/14/2007
Acetone	EPA 8260	<25	ug/L	MQS	08/14/2007
1,1-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Dichloromethane	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Methyl-Tert-Butyl-Ether	EPA 8260	<1.0	ug/L	MQS	08/14/2007
trans-1,2-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
1,1-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	08/14/2007
2-Butanone	EPA 8260	<25	ug/L	MQS	08/14/2007
2,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	08/14/2007
cis-1,2-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Chloroform	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Bromochloromethane	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Tetrahydrofuran	EPA 8260	<10	ug/L	MQS	08/14/2007
1,1,1-Trichloroethane	EPA 8260	<1.0	ug/L	MQS	08/14/2007
1,1-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Carbon Tetrachloride	EPA 8260	<1.0	ug/L	MQS	08/14/2007
1,2-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Benzene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Trichloroethene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
1,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Bromodichloromethane	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Dibromomethane	EPA 8260	<1.0	ug/L	MQS	08/14/2007
4-Methyl-2-Pentanone	EPA 8260	<25	ug/L	MQS	08/14/2007
cis-1,3-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Toluene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
trans-1,3-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
1,1,2-Trichloroethane	EPA 8260	<1.0	ug/L	MQS	08/14/2007
2-Hexanone	EPA 8260	<2.0	ug/L	MQS	08/14/2007
1,3-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Tetrachloroethene	EPA 8260	<1.0	ug/L	MQS	08/14/2007

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Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **08/10/2007**
Date Reported: **08/24/2007**
Work Order No.: **0708-00083**

Sample ID: **Trip Blank 2**
Sample No.: **012**
Sample Date: **08/09/2007**

Test Performed	Method	Results	Units	Tech	Analysis Date
Dibromochloromethane	EPA 8260	<1.0	ug/L	MQS	08/14/2007
1,2-Dibromoethane (EDB)	EPA 8260	<2.0	ug/L	MQS	08/14/2007
Chlorobenzene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
1,1,1,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Ethylbenzene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
m&p-Xylene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
o-Xylene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Styrene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Bromoform	EPA 8260	<2.0	ug/L	MQS	08/14/2007
Isopropylbenzene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
1,1,2,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	08/14/2007
1,2,3-Trichloropropane	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Bromobenzene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
N-Propylbenzene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
2-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
1,3,5-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
4-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
tert-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
1,2,4-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
sec-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
p-Isopropyltoluene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
1,3-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
1,4-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
n-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
1,2-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
1,2-Dibromo-3-Chloropropane	EPA 8260	<5.0	ug/L	MQS	08/14/2007
1,2,4-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Hexachlorobutadiene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Naphthalene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
1,2,3-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Surrogates:	EPA 8260				
***1,2-Dichlorobenzene-D4	EPA 8260	102	% R	MQS	08/14/2007
***Toluene-D8	EPA 8260	103	% R	MQS	08/14/2007
***4-Bromofluorobenzene	EPA 8260	106	% R	MQS	08/14/2007
Preparation	EPA 5030B	1.0	DF	MQS	08/14/2007

GZA GeoEnvironmental, Inc.
106 South Street
Hopkinton, MA 01748
(781) 278-4700

ANALYTICAL REPORT

GZA GeoEnvironmental, Inc.
140 Broadway
Providence, RI 02903

Ed Summerly

Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **08/10/2007**
Date Reported: **08/24/2007**
Work Order No.: **0708-00083**

Sample ID: **D Blank** Sample No.: **013**

Sample Date: **08/09/2007**

Test Performed	Method	Results	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260			MQS	08/14/2007
Dichlorodifluoromethane	EPA 8260	<2.0	ug/L	MQS	08/14/2007
Chloromethane	EPA 8260	<2.0	ug/L	MQS	08/14/2007
Vinyl Chloride	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Bromomethane	EPA 8260	<2.0	ug/L	MQS	08/14/2007
Chloroethane	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Trichlorofluoromethane	EPA 8260	<2.0	ug/L	MQS	08/14/2007
Diethylether	EPA 8260	<5.0	ug/L	MQS	08/14/2007
Acetone	EPA 8260	<25	ug/L	MQS	08/14/2007
1,1-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Dichloromethane	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Methyl-Tert-Butyl-Ether	EPA 8260	<1.0	ug/L	MQS	08/14/2007
trans-1,2-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
1,1-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	08/14/2007
2-Butanone	EPA 8260	<25	ug/L	MQS	08/14/2007
2,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	08/14/2007
cis-1,2-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Chloroform	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Bromochloromethane	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Tetrahydrofuran	EPA 8260	<10	ug/L	MQS	08/14/2007
1,1,1-Trichloroethane	EPA 8260	<1.0	ug/L	MQS	08/14/2007
1,1-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Carbon Tetrachloride	EPA 8260	<1.0	ug/L	MQS	08/14/2007
1,2-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Benzene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Trichloroethene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
1,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Bromodichloromethane	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Dibromomethane	EPA 8260	<1.0	ug/L	MQS	08/14/2007
4-Methyl-2-Pentanone	EPA 8260	<25	ug/L	MQS	08/14/2007
cis-1,3-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Toluene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
trans-1,3-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
1,1,2-Trichloroethane	EPA 8260	<1.0	ug/L	MQS	08/14/2007
2-Hexanone	EPA 8260	<2.0	ug/L	MQS	08/14/2007
1,3-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Tetrachloroethene	EPA 8260	<1.0	ug/L	MQS	08/14/2007

GZA GeoEnvironmental, Inc.
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ANALYTICAL REPORT

GZA GeoEnvironmental, Inc.
140 Broadway
Providence, RI 02903

Ed Summerly

Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **08/10/2007**
Date Reported: **08/24/2007**
Work Order No.: **0708-00083**

Sample ID: **D Blank** Sample No.: **013**

Sample Date: **08/09/2007**

Test Performed	Method	Results	Units	Tech	Analysis Date
Dibromochloromethane	EPA 8260	<1.0	ug/L	MQS	08/14/2007
1,2-Dibromoethane (EDB)	EPA 8260	<2.0	ug/L	MQS	08/14/2007
Chlorobenzene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
1,1,1,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Ethylbenzene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
m&p-Xylene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
o-Xylene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Styrene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Bromoform	EPA 8260	<2.0	ug/L	MQS	08/14/2007
Isopropylbenzene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
1,1,2,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	08/14/2007
1,2,3-Trichloropropane	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Bromobenzene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
N-Propylbenzene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
2-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
1,3,5-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
4-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
tert-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
1,2,4-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
sec-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
p-Isopropyltoluene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
1,3-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
1,4-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
n-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
1,2-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
1,2-Dibromo-3-Chloropropane	EPA 8260	<5.0	ug/L	MQS	08/14/2007
1,2,4-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Hexachlorobutadiene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Naphthalene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
1,2,3-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	08/14/2007
Surrogates:	EPA 8260				
***1,2-Dichlorobenzene-D4	EPA 8260	102	% R	MQS	08/14/2007
***Toluene-D8	EPA 8260	102	% R	MQS	08/14/2007
***4-Bromofluorobenzene	EPA 8260	104	% R	MQS	08/14/2007
Preparation	EPA 5030B	1.0	DF	MQS	08/14/2007

ENVIRONMENTAL CHEMISTRY LABORATORY
106 SOUTH ST, HOPKINTON, MA 01748
MASSACHUSETTS LABORATORY I.D. NO. MA092

EPA METHOD 6010B ANALYSIS
Metals by ICP

QUALITY CONTROL - AQUEOUS

DATE PREPARED: 8/13/2007 B

QC Sample	Method Blank	Lab Control Sample
Units	mg/L	% Recovery
Acceptance Limits	Results	80-120
Analyte		
Silver (Ag)	<0.0050	85.3
Aluminum (Al)	NA	NA
Arsenic (As)	<0.010	94.2
Boron (B)	NA	NA
Barium (Ba)	NA	NA
Beryllium (Be)	<0.0040	95.0
Calcium (Ca)	NA	NA
Cadmium (Cd)	<0.0050	94.9
Cobalt (Co)	NA	NA
Chromium (Cr)	<0.0050	94.8
Copper (Cu)	<0.015	97.4
Iron (Fe)	<0.025	100
Magnesium (Mg)	NA	NA
Manganese (Mn)	<0.0050	99.2
Molybdenum (Mo)	NA	NA
Nickel (Ni)	<0.010	95.9
Lead (Pb)	<0.010	94.8
Antimony (Sb)	<0.025	101
Selenium (Se)	<0.025	90.9
Strontium (Sr)	NA	NA
Titanium (Ti)	NA	NA
Thallium (Tl)	<0.025	93.4
Vanadium (V)	NA	NA
Zinc (Zn)	<0.010	101

Matrix Spike / Duplicate Spike performed as per method and reported if assigned on Chain of Custody.

GZA GEOENVIRONMENTAL, INC.
ENVIRONMENTAL CHEMISTRY LABORATORY
106 SOUTH ST, HOPKINTON, MA 01748
MASSACHUSETTS LABORATORY I.D. NO. MA092

EPA METHOD 7470A ANALYSIS
Mercury by Cold Vapor Atomic Absorption

QUALITY CONTROL - AQUEOUS

Date Prepared: 08/16/07

QC Sample	Method Blank	Lab Control Sample
Units	mg/L	% Recovery
Acceptance Limits	Results	85-115
Analyte		
Mercury (Hg)	<0.00040	95.4

Matrix Spike / Duplicate Spike performed as per method and reported if assigned on Chain of Custody.

GZA GeoEnvironmental, Inc.
106 South Street
Hopkinton, MA 01748

EPA Method 8260 / 524.2 Aqueous Method Blank (MB) and Laboratory Control Sample (LCS) Data

Method Blank

Date Analyzed:	8/13/2007	
Volatile Organics	**Conc. ug/L**	**Acceptance Limit**
dichlorodifluoromethane	< 1.0	< 1.0
chloromethane	< 1.0	< 1.0
vinyl chloride	< 1.0	< 1.0
bromomethane	< 1.0	< 1.0
chloroethane	< 1.0	< 1.0
trichlorofluoromethane	< 1.0	< 1.0
diethyl ether	< 0.5	< 0.5
acrolein	< 25	< 25
acetone	< 25	< 25
1,1-dichloroethene	< 0.5	< 0.5
FREON-113	< 1.0	< 1.0
iodomethane	< 0.5	< 0.5
carbon disulfide	< 0.5	< 0.5
dichloromethane	< 1.0	< 1.0
tert-butyl alcohol (TBA)	< 12	< 12
acrylonitrile	< 0.5	< 0.5
methyl-tert-butyl-ether	< 0.5	< 0.5
trans-1,2-dichloroethene	< 0.5	< 0.5
1,1-dichloroethane	< 0.5	< 0.5
di-isopropyl ether (DIPE)	< 0.5	< 0.5
ethyl tert-butyl ether (EtBE)	< 0.5	< 0.5
vinyl acetate	< 0.5	< 0.5
2-butanone	< 25	< 25
2,2-dichloropropane	< 0.5	< 0.5
cis-1,2-dichloroethene	< 0.5	< 0.5
chloroform	< 1.0	< 1.0
bromochloromethane	< 0.5	< 0.5
tetrahydrafuran	< 2.0	< 2.0
1,1,1-trichloroethane	< 0.5	< 0.5
1,1-dichloropropene	< 0.5	< 0.5
carbon tetrachloride	< 0.5	< 0.5
1,2-dichloroethane	< 0.5	< 0.5
benzene	< 0.5	< 0.5
tert-amyl methyl ether (TAME)	< 0.5	< 0.5
trichloroethene	< 0.5	< 0.5
1,2-dichloropropane	< 0.5	< 0.5
bromodichloromethane	< 0.5	< 0.5
2-chloroethyl vinyl ether	< 0.5	< 0.5
1,4-Dioxane	< 100	< 100
dibromomethane	< 0.5	< 0.5
4-methyl-2-pentanone	< 25	< 25
cis-1,3-dichloropropene	< 0.5	< 0.5
toluene	< 0.5	< 0.5
trans-1,3-dichloropropene	< 1.0	< 1.0
1,1,2-trichloroethane	< 0.5	< 0.5
2-hexanone	< 25	< 25
1,3-dichloropropane	< 0.5	< 0.5
tetrachloroethene	< 0.5	< 0.5
dibromochloromethane	< 0.5	< 0.5
1,2-dibromoethane (EDB)	< 0.5	< 0.5
chlorobenzene	< 0.5	< 0.5
1,1,1,2-tetrachloroethane	< 0.5	< 0.5
ethylbenzene	< 0.5	< 0.5
1,1,2,2-tetrachloroethane	< 0.5	< 0.5
m&p-xylene	< 1.0	< 1.0
o-xylene	< 0.5	< 0.5
styrene	< 0.5	< 0.5
bromoform	< 0.5	< 0.5
isopropylbenzene	< 0.5	< 0.5
1,2,3-trichloropropane	< 0.5	< 0.5
bromobenzene	< 0.5	< 0.5
n-propylbenzene	< 0.5	< 0.5
2-chlorotoluene	< 0.5	< 0.5
1,3,5-trimethylbenzene	< 0.5	< 0.5
trans-1,4-dichloro-2-butene	< 0.5	< 0.5
4-chlorotoluene	< 0.5	< 0.5
tert-butyl-benzene	< 0.5	< 0.5
1,2,4-trimethylbenzene	< 0.5	< 0.5
sec-butyl-benzene	< 0.5	< 0.5
p-isopropyltoluene	< 0.5	< 0.5
1,3-dichlorobenzene	< 0.5	< 0.5
1,4-dichlorobenzene	< 0.5	< 0.5
n-butylbenzene	< 0.5	< 0.5
1,2-dichlorobenzene	< 0.5	< 0.5
1,2-dibromo-3-chloropropane	< 1.0	< 1.0
1,2,4-trichlorobenzene	< 0.5	< 0.5
hexachlorobutadiene	< 0.5	< 0.5
naphthalene	< 1.5	< 1.5
1,2,3-trichlorobenzene	< 0.5	< 0.5

Laboratory Control Sample

Date Analyzed:	8/13/2007		
Spike Concentration = 20ug/L	**% Recovery**	**Acceptance Limits**	**Verdict**
dichlorodifluoromethane	163	70-130	out
chloromethane	152	70-130	out
vinyl chloride	144	70-130	out
bromomethane	129	70-130	ok
chloroethane	127	70-130	ok
trichlorofluoromethane	137	70-130	out
diethyl ether	108	70-130	ok
acrolein	100	70-130	ok
acetone	109	70-130	ok
1,1-dichloroethene	117	70-130	ok
FREON-113	110	70-130	ok
iodomethane	107	70-130	ok
carbon disulfide	125	70-130	ok
dichloromethane	110	70-130	ok
tert-butyl alcohol (TBA)	99.3	70-130	ok
acrylonitrile	119	70-130	ok
methyl-tert-butyl-ether	101	70-130	ok
trans-1,2-dichloroethene	113	70-130	ok
1,1-dichloroethane	115	70-130	ok
di-isopropyl ether (DIPE)	112	70-130	ok
ethyl tert-butyl ether (EtBE)	106	70-130	ok
vinyl acetate	108	70-130	ok
2-butanone	95.6	70-130	ok
2,2-dichloropropane	115	70-130	ok
cis-1,2-dichloroethene	108	70-130	ok
chloroform	112	70-130	ok
bromochloromethane	96.5	70-130	ok
tetrahydrafuran	98.8	70-130	ok
1,1,1-trichloroethane	114	70-130	ok
1,1-dichloropropene	117	70-130	ok
carbon tetrachloride	98.5	70-130	ok
1,2-dichloroethane	104	70-130	ok
benzene	113	70-130	ok
tert-amyl methyl ether (TAME)	99.6	70-130	ok
trichloroethene	98.2	70-130	ok
1,2-dichloropropane	107	70-130	ok
bromodichloromethane	119	70-130	ok
2-chloroethyl vinyl ether	107	70-130	ok
1,4-Dioxane	100.0	70-130	ok
dibromomethane	104	70-130	ok
4-methyl-2-pentanone	100	70-130	ok
cis-1,3-dichloropropene	112	70-130	ok
toluene	113	70-130	ok
trans-1,3-dichloropropene	102	70-130	ok
1,1,2-trichloroethane	93.6	70-130	ok
2-hexanone	97.4	70-130	ok
1,3-dichloropropane	100	70-130	ok
tetrachloroethene	100.0	70-130	ok
dibromochloromethane	90.3	70-130	ok
1,2-dibromoethane (EDB)	95.8	70-130	ok
chlorobenzene	98.3	70-130	ok
1,1,1,2-tetrachloroethane	91.8	70-130	ok
ethylbenzene	102	70-130	ok
1,1,2,2-tetrachloroethane	98.4	70-130	ok
m&p-xylene	101	70-130	ok
o-xylene	115	70-130	ok
styrene	113	70-130	ok
bromoform	109	70-130	ok
isopropylbenzene	113	70-130	ok
1,2,3-trichloropropane	103	70-130	ok
bromobenzene	109	70-130	ok
n-propylbenzene	121	70-130	ok
2-chlorotoluene	118	70-130	ok
1,3,5-trimethylbenzene	116	70-130	ok
trans-1,4-dichloro-2-butene	104	70-130	ok
4-chlorotoluene	118	70-130	ok
tert-butyl-benzene	108	70-130	ok
1,2,4-trimethylbenzene	116	70-130	ok
sec-butyl-benzene	117	70-130	ok
p-isopropyltoluene	113	70-130	ok
1,3-dichlorobenzene	110	70-130	ok
1,4-dichlorobenzene	108	70-130	ok
n-butylbenzene	120	70-130	ok
1,2-dichlorobenzene	105	70-130	ok
1,2-dibromo-3-chloropropane	92.9	70-130	ok
1,2,4-trichlorobenzene	112	70-130	ok
hexachlorobutadiene	128	70-130	ok
naphthalene	96.2	70-130	ok
1,2,3-trichlorobenzene	107	70-130	ok

SMF criteria allows 5 compounds to be outside acceptance limits

Surrogates:	Recovery (%)	Acceptance Limits
DIBROMOFLUOROMETHANE	102	70-130
1,2-DICHLOROETHANE-D4	101	70-130
TOLUENE-D8	103	70-130
4-BROMOFLUOROBENZENE	104	70-130
1,2-DICHLOROBENZENE-D4	97.7	70-130

Surrogates:	Recovery (%)	Acceptance Limits	Verdict
DIBROMOFLUOROMETHANE	97.1	70-130	ok
1,2-DICHLOROETHANE-D4	106	70-130	ok
TOLUENE-D8	101	70-130	ok
4-BROMOFLUOROBENZENE	105	70-130	ok
1,2-DICHLOROBENZENE-D4	103	70-130	ok

Instrument: HP GC/MS "S"

GZA GeoEnvironmental, Inc.
106 South Street
Hopkinton, MA 01748

EPA Method 8260 / 524.2 Aqueous Method Blank (MB) and Laboratory Control Sample (LCS) Data

Method Blank

Date Analyzed:	8/14/2007	
Volatile Organics	**Conc. ug/L**	**Acceptance Limit**
dichlorodifluoromethane	< 1.0	< 1.0
chloromethane	< 1.0	< 1.0
vinyl chloride	< 1.0	< 1.0
bromomethane	< 1.0	< 1.0
chloroethane	< 1.0	< 1.0
trichlorofluoromethane	< 1.0	< 1.0
diethyl ether	< 0.5	< 0.5
acrolein	< 25	< 25
acetone	< 25	< 25
1,1-dichloroethene	< 0.5	< 0.5
FREON-113	< 1.0	< 1.0
iodomethane	< 0.5	< 0.5
carbon disulfide	< 0.5	< 0.5
dichloromethane	< 1.0	< 1.0
tert-butyl alcohol (TBA)	< 12	< 12
acrylonitrile	< 0.5	< 0.5
methyl-tert-butyl-ether	< 0.5	< 0.5
trans-1,2-dichloroethene	< 0.5	< 0.5
1,1-dichloroethane	< 0.5	< 0.5
di-isopropyl ether (DIPE)	< 0.5	< 0.5
ethyl tert-butyl ether (EtBE)	< 0.5	< 0.5
vinyl acetate	< 0.5	< 0.5
2-butanone	< 25	< 25
2,2-dichloropropane	< 0.5	< 0.5
cis-1,2-dichloroethene	< 0.5	< 0.5
chloroform	< 1.0	< 1.0
bromochloromethane	< 0.5	< 0.5
tetrahydrafuran	< 2.0	< 2.0
1,1,1-trichloroethane	< 0.5	< 0.5
1,1-dichloropropene	< 0.5	< 0.5
carbon tetrachloride	< 0.5	< 0.5
1,2-dichloroethane	< 0.5	< 0.5
benzene	< 0.5	< 0.5
tert-amyl methyl ether (TAME)	< 0.5	< 0.5
trichloroethene	< 0.5	< 0.5
1,2-dichloropropane	< 0.5	< 0.5
bromodichloromethane	< 0.5	< 0.5
2-chloroethyl vinyl ether	< 0.5	< 0.5
1,4-Dioxane	< 100	< 100
dibromomethane	< 0.5	< 0.5
4-methyl-2-pentanone	< 25	< 25
cis-1,3-dichloropropene	< 0.5	< 0.5
toluene	< 0.5	< 0.5
trans-1,3-dichloropropene	< 1.0	< 1.0
1,1,2-trichloroethane	< 0.5	< 0.5
2-hexanone	< 25	< 25
1,3-dichloropropane	< 0.5	< 0.5
tetrachloroethene	< 0.5	< 0.5
dibromochloromethane	< 0.5	< 0.5
1,2-dibromoethane (EDB)	< 0.5	< 0.5
chlorobenzene	< 0.5	< 0.5
1,1,1,2-tetrachloroethane	< 0.5	< 0.5
ethylbenzene	< 0.5	< 0.5
1,1,2,2-tetrachloroethane	< 0.5	< 0.5
m&p-xylene	< 1.0	< 1.0
o-xylene	< 0.5	< 0.5
styrene	< 0.5	< 0.5
bromoform	< 0.5	< 0.5
isopropylbenzene	< 0.5	< 0.5
1,2,3-trichloropropane	< 0.5	< 0.5
bromobenzene	< 0.5	< 0.5
n-propylbenzene	< 0.5	< 0.5
2-chlorotoluene	< 0.5	< 0.5
1,3,5-trimethylbenzene	< 0.5	< 0.5
trans-1,4-dichloro-2-butene	< 0.5	< 0.5
4-chlorotoluene	< 0.5	< 0.5
tert-butyl-benzene	< 0.5	< 0.5
1,2,4-trimethylbenzene	< 0.5	< 0.5
sec-butyl-benzene	< 0.5	< 0.5
p-isopropyltoluene	< 0.5	< 0.5
1,3-dichlorobenzene	< 0.5	< 0.5
1,4-dichlorobenzene	< 0.5	< 0.5
n-butylbenzene	< 0.5	< 0.5
1,2-dichlorobenzene	< 0.5	< 0.5
1,2-dibromo-3-chloropropane	< 1.0	< 1.0
1,2,4-trichlorobenzene	< 0.5	< 0.5
hexachlorobutadiene	< 0.5	< 0.5
naphthalene	< 1.5	< 1.5
1,2,3-trichlorobenzene	< 0.5	< 0.5

Laboratory Control Sample

Date Analyzed:	8/14/2007		
Spike Concentration = 20ug/L	**% Recovery**	**Acceptance Limits**	**Verdict**
dichlorodifluoromethane	162	70-130	out
chloromethane	149	70-130	out
vinyl chloride	140	70-130	out
bromomethane	122	70-130	ok
chloroethane	122	70-130	ok
trichlorofluoromethane	138	70-130	out
diethyl ether	106	70-130	ok
acrolein	95.7	70-130	ok
acetone	111	70-130	ok
1,1-dichloroethene	113	70-130	ok
FREON-113	107	70-130	ok
iodomethane	104	70-130	ok
carbon disulfide	121	70-130	ok
dichloromethane	105	70-130	ok
tert-butyl alcohol (TBA)	96.6	70-130	ok
acrylonitrile	118	70-130	ok
methyl-tert-butyl-ether	100	70-130	ok
trans-1,2-dichloroethene	109	70-130	ok
1,1-dichloroethane	113	70-130	ok
di-isopropyl ether (DIPE)	109	70-130	ok
ethyl tert-butyl ether (EtBE)	103	70-130	ok
vinyl acetate	104	70-130	ok
2-butanone	89.2	70-130	ok
2,2-dichloropropane	124	70-130	ok
cis-1,2-dichloroethene	103	70-130	ok
chloroform	108	70-130	ok
bromochloromethane	91.2	70-130	ok
tetrahydrafuran	115	70-130	ok
1,1,1-trichloroethane	112	70-130	ok
1,1-dichloropropene	114	70-130	ok
carbon tetrachloride	106	70-130	ok
1,2-dichloroethane	102	70-130	ok
benzene	107	70-130	ok
tert-amyl methyl ether (TAME)	95.7	70-130	ok
trichloroethene	92.9	70-130	ok
1,2-dichloropropane	103	70-130	ok
bromodichloromethane	117	70-130	ok
2-chloroethyl vinyl ether	103	70-130	ok
1,4-Dioxane	91.2	70-130	ok
dibromomethane	98.7	70-130	ok
4-methyl-2-pentanone	98.0	70-130	ok
cis-1,3-dichloropropene	109	70-130	ok
toluene	109	70-130	ok
trans-1,3-dichloropropene	101	70-130	ok
1,1,2-trichloroethane	91.0	70-130	ok
2-hexanone	96.5	70-130	ok
1,3-dichloropropane	98.3	70-130	ok
tetrachloroethene	97.0	70-130	ok
dibromochloromethane	88.4	70-130	ok
1,2-dibromoethane (EDB)	94.0	70-130	ok
chlorobenzene	95.1	70-130	ok
1,1,1,2-tetrachloroethane	88.8	70-130	ok
ethylbenzene	99.1	70-130	ok
1,1,2,2-tetrachloroethane	94.7	70-130	ok
m&p-xylene	98.9	70-130	ok
o-xylene	113	70-130	ok
styrene	111	70-130	ok
bromoform	107	70-130	ok
isopropylbenzene	111	70-130	ok
1,2,3-trichloropropane	101	70-130	ok
bromobenzene	105	70-130	ok
n-propylbenzene	121	70-130	ok
2-chlorotoluene	115	70-130	ok
1,3,5-trimethylbenzene	114	70-130	ok
trans-1,4-dichloro-2-butene	105	70-130	ok
4-chlorotoluene	115	70-130	ok
tert-butyl-benzene	106	70-130	ok
1,2,4-trimethylbenzene	114	70-130	ok
sec-butyl-benzene	116	70-130	ok
p-isopropyltoluene	111	70-130	ok
1,3-dichlorobenzene	106	70-130	ok
1,4-dichlorobenzene	104	70-130	ok
n-butylbenzene	118	70-130	ok
1,2-dichlorobenzene	101	70-130	ok
1,2-dibromo-3-chloropropane	99.9	70-130	ok
1,2,4-trichlorobenzene	107	70-130	ok
hexachlorobutadiene	124	70-130	ok
naphthalene	91.4	70-130	ok
1,2,3-trichlorobenzene	103	70-130	ok

SMF criteria allows 5 compounds to be outside acceptance limits

Surrogates:	Recovery (%)	Acceptance Limits
DIBROMOFLUOROMETHANE	100	70-130
1,2-DICHLOROETHANE-D4	98.4	70-130
TOLUENE-D8	105	70-130
4-BROMOFLUOROBENZENE	105	70-130
1,2-DICHLOROBENZENE-D4	98.7	70-130

Surrogates:	Recovery (%)	Acceptance Limits	Verdict
DIBROMOFLUOROMETHANE	96.4	70-130	ok
1,2-DICHLOROETHANE-D4	103	70-130	ok
TOLUENE-D8	104	70-130	ok
4-BROMOFLUOROBENZENE	105	70-130	ok
1,2-DICHLOROBENZENE-D4	100	70-130	ok

Instrument: HP GC/MS "S"

GZA GeoEnvironmental, Inc.
106 South Street
Hopkinton, MA 01748

EPA Method 8260 / 524.2 Aqueous Method Blank (MB) and Laboratory Control Sample (LCS) Data

Method Blank

Date Analyzed:	8/15/2007	
Volatile Organics	**Conc. ug/L**	**Acceptance Limit**
dichlorodifluoromethane	< 1.0	< 1.0
chloromethane	< 1.0	< 1.0
vinyl chloride	< 1.0	< 1.0
bromomethane	< 1.0	< 1.0
chloroethane	< 1.0	< 1.0
trichlorofluoromethane	< 1.0	< 1.0
diethyl ether	< 0.5	< 0.5
acrolein	< 25	< 25
acetone	< 25	< 25
1,1-dichloroethene	< 0.5	< 0.5
FREON-113	< 1.0	< 1.0
iodomethane	< 0.5	< 0.5
carbon disulfide	< 0.5	< 0.5
dichloromethane	< 1.0	< 1.0
tert-butyl alcohol (TBA)	< 12	< 12
acrylonitrile	< 0.5	< 0.5
methyl-tert-butyl-ether	< 0.5	< 0.5
trans-1,2-dichloroethene	< 0.5	< 0.5
1,1-dichloroethane	< 0.5	< 0.5
di-isopropyl ether (DIPE)	< 0.5	< 0.5
ethyl tert-butyl ether (EtBE)	< 0.5	< 0.5
vinyl acetate	< 0.5	< 0.5
2-butanone	< 25	< 25
2,2-dichloropropane	< 0.5	< 0.5
cis-1,2-dichloroethene	< 0.5	< 0.5
chloroform	< 1.0	< 1.0
bromochloromethane	< 0.5	< 0.5
tetrahydrafuran	< 2.0	< 2.0
1,1,1-trichloroethane	< 0.5	< 0.5
1,1-dichloropropene	< 0.5	< 0.5
carbon tetrachloride	< 0.5	< 0.5
1,2-dichloroethane	< 0.5	< 0.5
benzene	< 0.5	< 0.5
tert-amyl methyl ether (TAME)	< 0.5	< 0.5
trichloroethene	< 0.5	< 0.5
1,2-dichloropropane	< 0.5	< 0.5
bromodichloromethane	< 0.5	< 0.5
2-chloroethyl vinyl ether	< 0.5	< 0.5
1,4-Dioxane	< 100	< 100
dibromomethane	< 0.5	< 0.5
4-methyl-2-pentanone	< 25	< 25
cis-1,3-dichloropropene	< 0.5	< 0.5
toluene	< 0.5	< 0.5
trans-1,3-dichloropropene	< 1.0	< 1.0
1,1,2-trichloroethane	< 0.5	< 0.5
2-hexanone	< 25	< 25
1,3-dichloropropane	< 0.5	< 0.5
tetrachloroethene	< 0.5	< 0.5
dibromochloromethane	< 0.5	< 0.5
1,2-dibromoethane (EDB)	< 0.5	< 0.5
chlorobenzene	< 0.5	< 0.5
1,1,1,2-tetrachloroethane	< 0.5	< 0.5
ethylbenzene	< 0.5	< 0.5
1,1,2,2-tetrachloroethane	< 0.5	< 0.5
m&p-xylene	< 1.0	< 1.0
o-xylene	< 0.5	< 0.5
styrene	< 0.5	< 0.5
bromoform	< 0.5	< 0.5
isopropylbenzene	< 0.5	< 0.5
1,2,3-trichloropropane	< 0.5	< 0.5
bromobenzene	< 0.5	< 0.5
n-propylbenzene	< 0.5	< 0.5
2-chlorotoluene	< 0.5	< 0.5
1,3,5-trimethylbenzene	< 0.5	< 0.5
trans-1,4-dichloro-2-butene	< 0.5	< 0.5
4-chlorotoluene	< 0.5	< 0.5
tert-butyl-benzene	< 0.5	< 0.5
1,2,4-trimethylbenzene	< 0.5	< 0.5
sec-butyl-benzene	< 0.5	< 0.5
p-isopropyltoluene	< 0.5	< 0.5
1,3-dichlorobenzene	< 0.5	< 0.5
1,4-dichlorobenzene	< 0.5	< 0.5
n-butylbenzene	< 0.5	< 0.5
1,2-dichlorobenzene	< 0.5	< 0.5
1,2-dibromo-3-chloropropane	< 1.0	< 1.0
1,2,4-trichlorobenzene	< 0.5	< 0.5
hexachlorobutadiene	< 0.5	< 0.5
naphthalene	< 1.5	< 1.5
1,2,3-trichlorobenzene	< 0.5	< 0.5

Laboratory Control Sample

Date Analyzed:	8/15/2007		
Spike Concentration = 20ug/L	**% Recovery**	**Acceptance Limits**	**Verdict**
dichlorodifluoromethane	162	70-130	out
chloromethane	154	70-130	out
vinyl chloride	144	70-130	out
bromomethane	127	70-130	ok
chloroethane	127	70-130	ok
trichlorofluoromethane	138	70-130	out
diethyl ether	114	70-130	ok
acrolein	101	70-130	ok
acetone	120	70-130	ok
1,1-dichloroethene	116	70-130	ok
FREON-113	108	70-130	ok
iodomethane	105	70-130	ok
carbon disulfide	127	70-130	ok
dichloromethane	112	70-130	ok
tert-butyl alcohol (TBA)	105	70-130	ok
acrylonitrile	119	70-130	ok
methyl-tert-butyl-ether	107	70-130	ok
trans-1,2-dichloroethene	112	70-130	ok
1,1-dichloroethane	116	70-130	ok
di-isopropyl ether (DIPE)	116	70-130	ok
ethyl tert-butyl ether (EtBE)	110	70-130	ok
vinyl acetate	110	70-130	ok
2-butanone	98.0	70-130	ok
2,2-dichloropropane	126	70-130	ok
cis-1,2-dichloroethene	108	70-130	ok
chloroform	112	70-130	ok
bromochloromethane	95.3	70-130	ok
tetrahydrafuran	104	70-130	ok
1,1,1-trichloroethane	113	70-130	ok
1,1-dichloropropene	116	70-130	ok
carbon tetrachloride	105	70-130	ok
1,2-dichloroethane	108	70-130	ok
benzene	112	70-130	ok
tert-amyl methyl ether (TAME)	108	70-130	ok
trichloroethene	94.4	70-130	ok
1,2-dichloropropane	109	70-130	ok
bromodichloromethane	124	70-130	ok
2-chloroethyl vinyl ether	109	70-130	ok
1,4-Dioxane	107	70-130	ok
dibromomethane	110	70-130	ok
4-methyl-2-pentanone	108	70-130	ok
cis-1,3-dichloropropene	115	70-130	ok
toluene	113	70-130	ok
trans-1,3-dichloropropene	108	70-130	ok
1,1,2-trichloroethane	94.1	70-130	ok
2-hexanone	104	70-130	ok
1,3-dichloropropane	101	70-130	ok
tetrachloroethene	95.6	70-130	ok
dibromochloromethane	90.1	70-130	ok
1,2-dibromoethane (EDB)	96.4	70-130	ok
chlorobenzene	93.8	70-130	ok
1,1,1,2-tetrachloroethane	88.4	70-130	ok
ethylbenzene	97.1	70-130	ok
1,1,2,2-tetrachloroethane	97.8	70-130	ok
m&p-xylene	98.2	70-130	ok
o-xylene	118	70-130	ok
styrene	116	70-130	ok
bromoform	114	70-130	ok
isopropylbenzene	114	70-130	ok
1,2,3-trichloropropane	108	70-130	ok
bromobenzene	108	70-130	ok
n-propylbenzene	118	70-130	ok
2-chlorotoluene	119	70-130	ok
1,3,5-trimethylbenzene	114	70-130	ok
trans-1,4-dichloro-2-butene	112	70-130	ok
4-chlorotoluene	117	70-130	ok
tert-butyl-benzene	108	70-130	ok
1,2,4-trimethylbenzene	117	70-130	ok
sec-butyl-benzene	119	70-130	ok
p-isopropyltoluene	113	70-130	ok
1,3-dichlorobenzene	112	70-130	ok
1,4-dichlorobenzene	110	70-130	ok
n-butylbenzene	124	70-130	ok
1,2-dichlorobenzene	106	70-130	ok
1,2-dibromo-3-chloropropane	112	70-130	ok
1,2,4-trichlorobenzene	112	70-130	ok
hexachlorobutadiene	128	70-130	ok
naphthalene	101	70-130	ok
1,2,3-trichlorobenzene	110	70-130	ok

SMF criteria allows 5 compounds to be outside acceptance limits

Surrogates:	Recovery (%)	Acceptance Limits
DIBROMOFLUOROMETHANE	104	70-130
1,2-DICHLOROETHANE-D4	106	70-130
TOLUENE-D8	104	70-130
4-BROMOFLUOROBENZENE	108	70-130
1,2-DICHLOROBENZENE-D4	104	70-130

Surrogates:	Recovery (%)	Acceptance Limits	Verdict
DIBROMOFLUOROMETHANE	98.5	70-130	ok
1,2-DICHLOROETHANE-D4	110	70-130	ok
TOLUENE-D8	102	70-130	ok
4-BROMOFLUOROBENZENE	106	70-130	ok
1,2-DICHLOROBENZENE-D4	106	70-130	ok

Instrument: HP GC/MS "S"

GZA GeoEnvironmental, Inc.
106 South Street
Hopkinton, MA 01748

EPA Method 8260 / 524.2 Aqueous Method Blank (MB) and Laboratory Control Sample (LCS) Data

Method Blank

Date Analyzed:	8/16/2007	
Volatile Organics	**Conc. ug/L**	**Acceptance Limit**
dichlorodifluoromethane	< 1.0	< 1.0
chloromethane	< 1.0	< 1.0
vinyl chloride	< 1.0	< 1.0
bromomethane	< 1.0	< 1.0
chloroethane	< 1.0	< 1.0
trichlorofluoromethane	< 1.0	< 1.0
diethyl ether	< 0.5	< 0.5
acrolein	< 25	< 25
acetone	< 25	< 25
1,1-dichloroethene	< 0.5	< 0.5
FREON-113	< 1.0	< 1.0
iodomethane	< 0.5	< 0.5
carbon disulfide	< 0.5	< 0.5
dichloromethane	< 1.0	< 1.0
tert-butyl alcohol (TBA)	< 12	< 12
acrylonitrile	< 0.5	< 0.5
methyl-tert-butyl-ether	< 0.5	< 0.5
trans-1,2-dichloroethene	< 0.5	< 0.5
1,1-dichloroethane	< 0.5	< 0.5
di-isopropyl ether (DIPE)	< 0.5	< 0.5
ethyl tert-butyl ether (EtBE)	< 0.5	< 0.5
vinyl acetate	< 0.5	< 0.5
2-butanone	< 25	< 25
2,2-dichloropropane	< 0.5	< 0.5
cis-1,2-dichloroethene	< 0.5	< 0.5
chloroform	< 1.0	< 1.0
bromochloromethane	< 0.5	< 0.5
tetrahydrafuran	< 2.0	< 2.0
1,1,1-trichloroethane	< 0.5	< 0.5
1,1-dichloropropene	< 0.5	< 0.5
carbon tetrachloride	< 0.5	< 0.5
1,2-dichloroethane	< 0.5	< 0.5
benzene	< 0.5	< 0.5
tert-amyl methyl ether (TAME)	< 0.5	< 0.5
trichloroethene	< 0.5	< 0.5
1,2-dichloropropane	< 0.5	< 0.5
bromodichloromethane	< 0.5	< 0.5
2-chloroethyl vinyl ether	< 0.5	< 0.5
1,4-Dioxane	< 100	< 100
dibromomethane	< 0.5	< 0.5
4-methyl-2-pentanone	< 25	< 25
cis-1,3-dichloropropene	< 0.5	< 0.5
toluene	< 0.5	< 0.5
trans-1,3-dichloropropene	< 1.0	< 1.0
1,1,2-trichloroethane	< 0.5	< 0.5
2-hexanone	< 25	< 25
1,3-dichloropropane	< 0.5	< 0.5
tetrachloroethene	< 0.5	< 0.5
dibromochloromethane	< 0.5	< 0.5
1,2-dibromoethane (EDB)	< 0.5	< 0.5
chlorobenzene	< 0.5	< 0.5
1,1,1,2-tetrachloroethane	< 0.5	< 0.5
ethylbenzene	< 0.5	< 0.5
1,1,2,2-tetrachloroethane	< 0.5	< 0.5
m&p-xylene	< 1.0	< 1.0
o-xylene	< 0.5	< 0.5
styrene	< 0.5	< 0.5
bromoform	< 0.5	< 0.5
isopropylbenzene	< 0.5	< 0.5
1,2,3-trichloropropane	< 0.5	< 0.5
bromobenzene	< 0.5	< 0.5
n-propylbenzene	< 0.5	< 0.5
2-chlorotoluene	< 0.5	< 0.5
1,3,5-trimethylbenzene	< 0.5	< 0.5
trans-1,4-dichloro-2-butene	< 0.5	< 0.5
4-chlorotoluene	< 0.5	< 0.5
tert-butyl-benzene	< 0.5	< 0.5
1,2,4-trimethylbenzene	< 0.5	< 0.5
sec-butyl-benzene	< 0.5	< 0.5
p-isopropyltoluene	< 0.5	< 0.5
1,3-dichlorobenzene	< 0.5	< 0.5
1,4-dichlorobenzene	< 0.5	< 0.5
n-butylbenzene	< 0.5	< 0.5
1,2-dichlorobenzene	< 0.5	< 0.5
1,2-dibromo-3-chloropropane	< 1.0	< 1.0
1,2,4-trichlorobenzene	< 0.5	< 0.5
hexachlorobutadiene	< 0.5	< 0.5
naphthalene	< 1.5	< 1.5
1,2,3-trichlorobenzene	< 0.5	< 0.5

Laboratory Control Sample

Date Analyzed:	8/16/2007		
Spike Concentration = 20ug/L	**% Recovery**	**Acceptance Limits**	**Verdict**
dichlorodifluoromethane	154	70-130	out
chloromethane	145	70-130	out
vinyl chloride	134	70-130	out
bromomethane	119	70-130	ok
chloroethane	118	70-130	ok
trichlorofluoromethane	131	70-130	out
diethyl ether	105	70-130	ok
acrolein	93.0	70-130	ok
acetone	113	70-130	ok
1,1-dichloroethene	109	70-130	ok
FREON-113	102	70-130	ok
iodomethane	97.5	70-130	ok
carbon disulfide	118	70-130	ok
dichloromethane	104	70-130	ok
tert-butyl alcohol (TBA)	97.1	70-130	ok
acrylonitrile	114	70-130	ok
methyl-tert-butyl-ether	98.4	70-130	ok
trans-1,2-dichloroethene	105	70-130	ok
1,1-dichloroethane	109	70-130	ok
di-isopropyl ether (DIPE)	108	70-130	ok
ethyl tert-butyl ether (EtBE)	101	70-130	ok
vinyl acetate	102	70-130	ok
2-butanone	91.4	70-130	ok
2,2-dichloropropane	118	70-130	ok
cis-1,2-dichloroethene	100	70-130	ok
chloroform	106	70-130	ok
bromochloromethane	87.3	70-130	ok
tetrahydrafuran	118	70-130	ok
1,1,1-trichloroethane	107	70-130	ok
1,1-dichloropropene	109	70-130	ok
carbon tetrachloride	99.7	70-130	ok
1,2-dichloroethane	100	70-130	ok
benzene	104	70-130	ok
tert-amyl methyl ether (TAME)	95.2	70-130	ok
trichloroethene	87.3	70-130	ok
1,2-dichloropropane	101	70-130	ok
bromodichloromethane	114	70-130	ok
2-chloroethyl vinyl ether	101	70-130	ok
1,4-Dioxane	104	70-130	ok
dibromomethane	91.5	70-130	ok
4-methyl-2-pentanone	102	70-130	ok
cis-1,3-dichloropropene	107	70-130	ok
toluene	105	70-130	ok
trans-1,3-dichloropropene	101	70-130	ok
1,1,2-trichloroethane	87.9	70-130	ok
2-hexanone	97.4	70-130	ok
1,3-dichloropropane	95.4	70-130	ok
tetrachloroethene	91.6	70-130	ok
dibromochloromethane	83.3	70-130	ok
1,2-dibromoethane (EDB)	89.7	70-130	ok
chlorobenzene	88.1	70-130	ok
1,1,1,2-tetrachloroethane	82.4	70-130	ok
ethylbenzene	91.4	70-130	ok
1,1,2,2-tetrachloroethane	92.6	70-130	ok
m&p-xylene	93.7	70-130	ok
o-xylene	112	70-130	ok
styrene	108	70-130	ok
bromoform	106	70-130	ok
isopropylbenzene	108	70-130	ok
1,2,3-trichloropropane	100	70-130	ok
bromobenzene	101	70-130	ok
n-propylbenzene	113	70-130	ok
2-chlorotoluene	116	70-130	ok
1,3,5-trimethylbenzene	112	70-130	ok
trans-1,4-dichloro-2-butene	108	70-130	ok
4-chlorotoluene	114	70-130	ok
tert-butyl-benzene	102	70-130	ok
1,2,4-trimethylbenzene	112	70-130	ok
sec-butyl-benzene	116	70-130	ok
p-isopropyltoluene	107	70-130	ok
1,3-dichlorobenzene	105	70-130	ok
1,4-dichlorobenzene	103	70-130	ok
n-butylbenzene	118	70-130	ok
1,2-dichlorobenzene	102	70-130	ok
1,2-dibromo-3-chloropropane	108	70-130	ok
1,2,4-trichlorobenzene	105	70-130	ok
hexachlorobutadiene	122	70-130	ok
naphthalene	90.1	70-130	ok
1,2,3-trichlorobenzene	101	70-130	ok

SMF criteria allows 5 compounds to be outside acceptance limits

Surrogates:	Recovery (%)	Acceptance Limits
DIBROMOFLUOROMETHANE	101	70-130
1,2-DICHLOROETHANE-D4	105	70-130
TOLUENE-D8	105	70-130
4-BROMOFLUOROBENZENE	103	70-130
1,2-DICHLOROBENZENE-D4	103	70-130

Surrogates:	Recovery (%)	Acceptance Limits	Verdict
DIBROMOFLUOROMETHANE	97.5	70-130	ok
1,2-DICHLOROETHANE-D4	106	70-130	ok
TOLUENE-D8	104	70-130	ok
4-BROMOFLUOROBENZENE	106	70-130	ok
1,2-DICHLOROBENZENE-D4	105	70-130	ok

Instrument: HP GC/MS "S"

GZA GeoEnvironmental, Inc.
106 South Street
Hopkinton, MA 01748
MA092

EPA Method 8270/625 Aqueous Method Blank (MB) and Laboratory Control Sample (LCS) Data

Method Blank

Date Extracted:	**08/15/07**
Date Analyzed:	**8/20/2007**
File Name:	**L4443**

Semi-Volatile Organics	**Result**	**Reporting Limit (ug/L)**
n-nitrosodimethylamine	ND	10
pyridine	ND	100
phenol	ND	10
bis(2-chloroethyl)ether	ND	10
2-chlorophenol	ND	10
1,3-dichlorobenzene	ND	10
1,4-dichlorobenzene	ND	10
benzyl aichohol	ND	20
1,2-dichlorobenzene	ND	10
2-methylphenol	ND	10
bis(2-chloroisopropyl)ether	ND	10
3&4-methylphenol	ND	10
n-nitrosodi-n-propylamine	ND	10
hexachloroethane	ND	10
nitrobenzene	ND	10
isophrone	ND	10
2-nitrophenol	ND	10
2,4-dimethylphenol	ND	10
benzoic acid	ND	10
bis(2-chloroethoxy)methane	ND	10
2,4-dichlorophenol	ND	10
1,2,4-trichlorobenzene	ND	10
naphthalene	ND	2.0
4-chloroaniline	ND	10
hexachlorobutadiene	ND	10
4-chloro-3-methylphenol	ND	20
2-methylnaphthalene	ND	2.0
aniline	ND	10
hexachlorocyclopentadiene	ND	50
2,4,6-trichlorophenol	ND	10
2,4,5-trichlorophenol	ND	10
2-chloronaphthalene	ND	10
2-nitroaniline	ND	50
dimethylphthalate	ND	10
acenaphthylene	ND	2.0
2,6-dinitrotoluene	ND	10
3-nitroaniline	ND	50
acenaphthene	ND	2.0
2,4-dinitrophenol	ND	100
dibenzofuran	ND	10
4-nitrophenol	ND	50
2,4-dinitrotoluene	ND	10
diethylphthalate	ND	10
fluorene	ND	2.0
4-chlorophenyl phenyl ether	ND	10
4-nitroaniline	ND	20
4,6-dinitro-2-methylphenol	ND	50
n-nitrosodiphenylamine	ND	10
4-bromophenyl phenyl ether	ND	10
hexachlorobenzene	ND	10
pentachlorophenol	ND	50
phenanthrene	ND	2.0
anthracene	ND	2.0
carbazole	ND	10
di-n-butylphthalate	ND	15
fluoranthene	ND	2.0
benzidine	ND	10
pyrene	ND	2.0
butylbenzylphthalate	ND	10
benz [a] anthracene	ND	2.0
3,3'-dichlorobenzidine	ND	20
chrysene	ND	2.0
bis(2-ethylhexyl)phthalate	ND	10
di-n-octylphthalate	ND	10
benzo [b] fluoranthene	ND	2.0
benzo [k] fluoranthene	ND	2.0
benzo [a] pyrene	ND	2.0
indeno [1,2,3-cd] pyrene	ND	2.0
dibenz [a,h] anthracene	ND	2.0
benzo [ghi] perylene	ND	2.0

Surrogates:	**Recovery (%)**	**Acceptance Limits**
2-FLUOROPHENOL	30.9	15-110
2-CHLOROPHENOL-D4	60.6	15-110
NITROBENZENE-D5	55.2	30-130
2-FLUOROBIPHENYL	52.0	30-130
2,4,6-TRIBROMOPHENOL	59.1	15-110
p-TERPHENYL-D14	63.5	30-130

GZA GeoEnvironmental, Inc.
106 South Street
Hopkinton, MA 01748
MA092

EPA Method 8270/625 Aqueous Method Blank (MB) and Laboratory Control Sample (LCS) Data

Laboratory Control Sample

Date Extracted:	08/15/07
Date Analyzed:	8/20/2007
File Name:	L4444

Spike Concentration = 20ug/L	% Recovery	Acceptance Limits	Verdict
n-nitrosodimethylamine	17.6	40-140	out
pyridine	5.10	40-140	out
phenol	14.5	30-130	out
bis(2-chloroethyl)ether	70.4	40-140	ok
2-chlorophenol	58.2	30-130	ok
1,3-dichlorobenzene	54.9	40-140	ok
1,4-dichlorobenzene	54.2	40-140	ok
benzyl alchohol	36.1	40-140	out
1,2-dichlorobenzene	56.9	40-140	ok
2-methylphenol	43.6	30-130	ok
bis(2-chloroisopropyl)ether	62.9	40-140	ok
3&4-methylphenol	64.5	30-130	ok
n-nitrosodi-n-propylamine	67.3	40-140	ok
hexachloroethane	51.5	40-140	ok
nitrobenzene	69.6	40-140	ok
isophrone	78.8	40-140	ok
2-nitrophenol	71.8	30-130	ok
2,4-dimethylphenol	50.9	30-130	ok
benzoic acid	0.96	30-130	out
bis(2-chloroethoxy)methane	71.3	40-140	ok
2,4-dichlorophenol	70.7	30-130	ok
1,2,4-trichlorobenzene	58.6	40-140	ok
naphthalene	63.2	40-140	ok
4-chloroaniline	44.1	40-140	ok
hexachlorobutadiene	59.0	40-140	ok
4-chloro-3-methylphenol	69.4	30-130	ok
2-methylnaphthalene	67.6	40-140	ok
aniline	11.9	40-140	out
hexachlorocyclopentadiene	52.2	40-140	ok
2,4,6-trichlorophenol	68.8	30-130	ok
2,4,5-trichlorophenol	81.1	30-130	ok
2-chloronaphthalene	66.9	40-140	ok
2-nitroaniline	78.3	40-140	ok
dimethylphthalate	75.1	40-140	ok
acenaphthylene	68.9	40-140	ok
2,6-dinitrotoluene	82.0	40-140	ok
3-nitroaniline	54.7	40-140	ok
acenaphthene	73.0	40-140	ok
2,4-dinitrophenol	59.3	30-130	ok
dibenzofuran	75.1	40-140	ok
4-nitrophenol	14.0	30-130	out
2,4-dinitrotoluene	82.9	40-140	ok
diethylphthalate	78.3	40-140	ok
fluorene	74.7	40-140	ok
4-chlorophenyl phenyl ether	74.1	40-140	ok
4-nitroaniline	58.9	40-140	ok
4,6-dinitro-2-methylphenol	78.9	30-130	ok
n-nitrosodiphenylamine	78.8	40-140	ok
4-bromophenyl phenyl ether	75.5	40-140	ok
hexachlorobenzene	77.6	40-140	ok
pentachlorophenol	78.0	30-130	ok
phenanthrene	77.2	40-140	ok
anthracene	75.5	40-140	ok
carbazole	78.2	40-140	ok
di-n-butylphthalate	79.0	40-140	ok
fluoranthene	81.8	40-140	ok
benzidine	0.06	40-140	out
pyrene	79.3	40-140	ok
butylbenzylphthalate	77.0	40-140	ok
benz [a] anthracene	77.0	40-140	ok
3,3'-dichlorobenzidine	51.3	40-140	ok
chrysene	80.6	40-140	ok
bis(2-ethylhexyl)phthalate	79.8	40-140	ok
di-n-octylphthalate	82.7	40-140	ok
benzo [b] fluoranthene	77.5	40-140	ok
benzo [k] fluoranthene	78.5	40-140	ok
benzo [a] pyrene	78.5	40-140	ok
indeno [1,2,3-cd] pyrene	79.3	40-140	ok
dibenz [a,h] anthracene	74.7	40-140	ok
benzo [ghi] perylene	76.7	40-140	ok

CAM criteria allows 15% of analytes to exceed criteria.

Surrogates:	Recovery (%)	Acceptance Limits	Verdict
2-FLUOROPHENOL	25.6	15-110	ok
2-CHLOROPHENOL-D4	62.2	15-110	ok
NITROBENZENE-D5	76.3	30-130	ok
2-FLUOROBIPHENYL	73.3	30-130	ok
2,4,6-TRIBROMOPHENOL	84.2	15-110	ok
p-TERPHENYL-D14	80.7	30-130	ok

WHITE COPY - Original YELLOW COPY - Lab Files PINK COPY - Project Manager

CHAIN-OF-CUSTODY RECORD

W.O. # 0708-00085 *(for lab use only)*

Sample I.D.	Date/Time Sampled	Matrix (A=Air, S=Soil, GW=Ground W., SW=Surface W., WW=Waste W., DW=Drinking W., P=Product, Other (specify))	ANALYSIS REQUIRED: (3) pH, Cond.	GC Methane, Ethane, Ethene	EPA 8260	EPA 8260 - Landfill List	EPA 8021 - Full List	EPA 8021 - 8010 List (Chlor.)	EPA 8021 - 8020 List (BTEX)	EPA 254.2 DW VOCs	EPA 624 WW VOCs	601 or 602 WW VOCs	EPA 8270 SVOCs	EPA 8270 PAH or BN	EPA 625 WW SVOCs	EPA 8082-PCBs	EPA 8081-Pest	TPH-GC (Mod. 8100)	TPH-GC w/FING. (7)	EPH (MA DEP)	VPH (MA DEP)	Metals (PPM-13 or R-8) (2)	MCP 14 Metals (MA)	METALS LF-15 (RI)	Metals (List Below)**	TCLP - Specify Below	SPLP - Specify Below	EPA 300 Cl or NO3 or SO4	Total No. of Cont.	Note #
ML-1A	8/9/07	6W	X		X								X						X			X							6	(3)
ML-1B			X		X								X						X			X							6	
ML-1C			X		X								X						X			X							6	
ML-2A			X		X								X						X			X							6	
ML-2B			X		X								X						X			X							6	
ML-2C			X		X								X						X			X							6	
ML-3A			X		X								X						X			X							6	
ML-3B			X		X								X						X			X							6	
ML-3C			X		X								X						X			X							6	
ML-3D			X		X								X						X			X							6	
TripBlank 1					X								*						*			*							3	
TripBlank 2					X								*						*			*							3	
DBlank					X								*						*			*							3	
PRESERVATIVE (Cl - HCl, M=Methanol, N - HNO3, S - H2SO4, Na - NaOH, O - Other)*					Cl								*																	
CONTAINER TYPE (P-Plastic, G-Glass, V-Vial, T-Teflon, O-Other)*					V								G						G			T								

RELINQUISHED BY: DATE/TIME: 8/9/07 5:30pm RECEIVED BY: Bill Beacon 8/10/07 0920

RELINQUISHED BY: Bill Beacon 8/10/07 1050 DATE/TIME: RECEIVED BY: 9/10/07 1100

RELINQUISHED BY: DATE/TIME: RECEIVED BY:

NOTES: (Unless otherwise noted, all samples have been refrigerated to 4 +/- 2° C)
*Specify "Other" preservatives and containers types in this space.
1.) TPH Fingerprint with organo-silo xanes (3) No containers for Conductivity 8/13/07 (LG)
2.) PPM-13 and Iron and Manganese
IN 2 Coolers

PROJECT MANAGER: Edward Summerly

GZA GeoEnvironmental, Inc.

140 Broadway
Providence, RI 02903
(401) 421-4140
FAX (401) 751-8613

LAB USE:
TURNAROUND TIME: (Standard) Rush___ Days, Approved by _____ TEMP. OF COOLER 3.2 (0702) Temp Blank ____ Cooler Air ✓
4.1 (0702) 8/10/07 1100 (LG)

8/10 03.00 GZA FILE NO: 32795-12 TASK NO. _____ P.O. NO. _____

PROJECT Chesbrt Bedrock SIR

LOCATION Alton RI

COLLECTOR(S) EAS/RAC SHEET 1 OF 1

GZAP033

GZA GeoEnvironmental, Inc.
106 South Street
Hopkinton, MA 01748
(781) 278-4700

Laboratory Identification Numbers:
MA and ME: **MA092** NH: **2028**
CT: **PH0579** RI: **LAO00236**
NELAC - NYS DOH: **11063**

ANALYTICAL REPORT

GZA GeoEnvironmental, Inc.
140 Broadway
Providence, RI 02903

Stephen Andrus

Project No.: **03.0032795.12**
Work Order No.: **0810-00070**
Date Received: **10/09/2008**
Date Reported: **10/22/2008**

SAMPLE INFORMATION

Date Sampled	Matrix	Laboratory ID	Sample ID
10/08/2008	Aqueous	0810-00070 001	ML - 1A
10/08/2008	Aqueous	0810-00070 002	ML - 1B
10/08/2008	Aqueous	0810-00070 003	ML - 1C
10/08/2008	Aqueous	0810-00070 004	ML - 2A
10/08/2008	Aqueous	0810-00070 005	ML - 2B
10/08/2008	Aqueous	0810-00070 006	ML - 2C
10/08/2008	Aqueous	0810-00070 007	Trip Blank

GZA GeoEnvironmental, Inc.
106 South Street
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(781) 278-4700

ANALYTICAL REPORT

GZA GeoEnvironmental, Inc.
140 Broadway
Providence, RI 02903

Stephen Andrus

Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **10/09/2008**
Date Reported: **10/22/2008**
Work Order No.: **0810-00070**

PROJECT NARRATIVE:

1. Sample Receipt

The samples were received on 10/09/08 via _x_GZA courier, __EC, __FEDEX, or ___hand delivered. The temperature of the _x_temperature blank/__cooler air, was 2.9 degrees C. The temperature requirement for most analyses is above freezing to 6 degrees C. The samples were received intact for all requested analyses.

The chain of custody indicates that the samples, when required, were chemically preserved in accordance with the method they reference.

2. EPA Method 8260 - VOCs

Attach QC 8260 10/17/08 #2 S - Aqueous

GZA GeoEnvironmental, Inc.
106 South Street
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ANALYTICAL REPORT

GZA GeoEnvironmental, Inc.
140 Broadway
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Stephen Andrus

Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **10/09/2008**
Date Reported: **10/22/2008**
Work Order No.: **0810-00070**

Data Authorized By: _____

NELAC certification, as indicated by the NELAC Lab ID Number, is per analyte. For a complete list of NELAC validated analytes, please contact the laboratory.

Abbreviations:
% R = % Recovery
DF = Dilution Factor
DFS = Dilution Factor Solids
CF = Calculation Factor
DO = Diluted Out

Method Key:
Method 8260: The current version of the method is 8260B.
Method 8270: The current version of the method is 8270D.
Method 6010: The current version of the method is 6010B.

Please note that the laboratory signed copy of the chain of custody record is an integral part of the data report.

Soil data is reported on a dry weight basis unless otherwise specified.
Matrix Spike / Matrix Spike Duplicate sets are performed as per method and are reported at the end of the analytical report if assigned on the Chain of Custody.

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ANALYTICAL REPORT

GZA GeoEnvironmental, Inc.
140 Broadway
Providence, RI 02903

Stephen Andrus

Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **10/09/2008**
Date Reported: **10/22/2008**
Work Order No.: **0810-00070**

Sample ID: **ML - 1A** Sample No.: **001**

Sample Date: **10/08/2008**

Test Performed	Method	Results	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260			MQS	10/17/2008
Dichlorodifluoromethane	EPA 8260	<2.0	ug/L	MQS	10/17/2008
Chloromethane	EPA 8260	<2.0	ug/L	MQS	10/17/2008
Vinyl Chloride	EPA 8260	<1.0	ug/L	MQS	10/17/2008
Bromomethane	EPA 8260	<2.0	ug/L	MQS	10/17/2008
Chloroethane	EPA 8260	<1.0	ug/L	MQS	10/17/2008
Trichlorofluoromethane	EPA 8260	<2.0	ug/L	MQS	10/17/2008
Diethylether	EPA 8260	<5.0	ug/L	MQS	10/17/2008
Acetone	EPA 8260	<25	ug/L	MQS	10/17/2008
1,1-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
Dichloromethane	EPA 8260	<2.0	ug/L	MQS	10/17/2008
Methyl-Tert-Butyl-Ether	EPA 8260	<1.0	ug/L	MQS	10/17/2008
trans-1,2-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
1,1-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	10/17/2008
2-Butanone	EPA 8260	<25	ug/L	MQS	10/17/2008
2,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	10/17/2008
cis-1,2-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
Chloroform	EPA 8260	1.6	ug/L	MQS	10/17/2008
Bromochloromethane	EPA 8260	<1.0	ug/L	MQS	10/17/2008
Tetrahydrofuran	EPA 8260	<10	ug/L	MQS	10/17/2008
1,1,1-Trichloroethane	EPA 8260	<1.0	ug/L	MQS	10/17/2008
1,1-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
Carbon Tetrachloride	EPA 8260	<1.0	ug/L	MQS	10/17/2008
1,2-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	10/17/2008
Benzene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
Trichloroethene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
1,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	10/17/2008
Bromodichloromethane	EPA 8260	<1.0	ug/L	MQS	10/17/2008
Dibromomethane	EPA 8260	<1.0	ug/L	MQS	10/17/2008
4-Methyl-2-Pentanone	EPA 8260	<25	ug/L	MQS	10/17/2008
cis-1,3-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
Toluene	EPA 8260	1.6	ug/L	MQS	10/17/2008
trans-1,3-Dichloropropene	EPA 8260	<2.0	ug/L	MQS	10/17/2008
1,1,2-Trichloroethane	EPA 8260	<1.0	ug/L	MQS	10/17/2008
2-Hexanone	EPA 8260	<25	ug/L	MQS	10/17/2008
1,3-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	10/17/2008
Tetrachloroethene	EPA 8260	<1.0	ug/L	MQS	10/17/2008

GZA GeoEnvironmental, Inc.
106 South Street
Hopkinton, MA 01748
(781) 278-4700

ANALYTICAL REPORT

GZA GeoEnvironmental, Inc.
140 Broadway
Providence, RI 02903

Stephen Andrus

Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **10/09/2008**
Date Reported: **10/22/2008**
Work Order No.: **0810-00070**

Sample ID: **ML - 1A** Sample No.: **001**

Sample Date: **10/08/2008**

Test Performed	Method	Results	Units	Tech	Analysis Date
Dibromochloromethane	EPA 8260	<1.0	ug/L	MQS	10/17/2008
1,2-Dibromoethane (EDB)	EPA 8260	<2.0	ug/L	MQS	10/17/2008
Chlorobenzene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
1,1,1,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	10/17/2008
Ethylbenzene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
m&p-Xylene	EPA 8260	<2.0	ug/L	MQS	10/17/2008
o-Xylene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
Styrene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
Bromoform	EPA 8260	<2.0	ug/L	MQS	10/17/2008
Isopropylbenzene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
1,1,2,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	10/17/2008
1,2,3-Trichloropropane	EPA 8260	<1.0	ug/L	MQS	10/17/2008
Bromobenzene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
N-Propylbenzene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
2-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
1,3,5-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
4-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
tert-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
1,2,4-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
sec-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
p-Isopropyltoluene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
1,3-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
1,4-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
n-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
1,2-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
1,2-Dibromo-3-Chloropropane	EPA 8260	<5.0	ug/L	MQS	10/17/2008
1,2,4-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
Hexachlorobutadiene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
Naphthalene	EPA 8260	<2.0	ug/L	MQS	10/17/2008
1,2,3-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
Surrogates:	EPA 8260				
***1,2-Dichloroethane-D4	EPA 8260	87.9	% R	MQS	10/17/2008
***Toluene-D8	EPA 8260	99.5	% R	MQS	10/17/2008
***4-Bromofluorobenzene	EPA 8260	98.2	% R	MQS	10/17/2008
Preparation	EPA 5030B	1.0	CF	MQS	10/16/2008

GZA GeoEnvironmental, Inc.
106 South Street
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(781) 278-4700

ANALYTICAL REPORT

GZA GeoEnvironmental, Inc.
140 Broadway
Providence, RI 02903

Stephen Andrus

Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **10/09/2008**
Date Reported: **10/22/2008**
Work Order No.: **0810-00070**

Sample ID: **ML - 1B** Sample No.: **002**

Sample Date: **10/08/2008**

Test Performed	Method	Results	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260			MQS	10/17/2008
Dichlorodifluoromethane	EPA 8260	<2.0	ug/L	MQS	10/17/2008
Chloromethane	EPA 8260	<2.0	ug/L	MQS	10/17/2008
Vinyl Chloride	EPA 8260	<1.0	ug/L	MQS	10/17/2008
Bromomethane	EPA 8260	<2.0	ug/L	MQS	10/17/2008
Chloroethane	EPA 8260	<1.0	ug/L	MQS	10/17/2008
Trichlorofluoromethane	EPA 8260	<2.0	ug/L	MQS	10/17/2008
Diethylether	EPA 8260	<5.0	ug/L	MQS	10/17/2008
Acetone	EPA 8260	<25	ug/L	MQS	10/17/2008
1,1-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
Dichloromethane	EPA 8260	<2.0	ug/L	MQS	10/17/2008
Methyl-Tert-Butyl-Ether	EPA 8260	<1.0	ug/L	MQS	10/17/2008
trans-1,2-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
1,1-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	10/17/2008
2-Butanone	EPA 8260	57	ug/L	MQS	10/17/2008
2,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	10/17/2008
cis-1,2-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
Chloroform	EPA 8260	<1.0	ug/L	MQS	10/17/2008
Bromochloromethane	EPA 8260	<1.0	ug/L	MQS	10/17/2008
Tetrahydrofuran	EPA 8260	<10	ug/L	MQS	10/17/2008
1,1,1-Trichloroethane	EPA 8260	<1.0	ug/L	MQS	10/17/2008
1,1-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
Carbon Tetrachloride	EPA 8260	<1.0	ug/L	MQS	10/17/2008
1,2-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	10/17/2008
Benzene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
Trichloroethene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
1,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	10/17/2008
Bromodichloromethane	EPA 8260	<1.0	ug/L	MQS	10/17/2008
Dibromomethane	EPA 8260	<1.0	ug/L	MQS	10/17/2008
4-Methyl-2-Pentanone	EPA 8260	<25	ug/L	MQS	10/17/2008
cis-1,3-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
Toluene	EPA 8260	1.4	ug/L	MQS	10/17/2008
trans-1,3-Dichloropropene	EPA 8260	<2.0	ug/L	MQS	10/17/2008
1,1,2-Trichloroethane	EPA 8260	<1.0	ug/L	MQS	10/17/2008
2-Hexanone	EPA 8260	<25	ug/L	MQS	10/17/2008
1,3-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	10/17/2008
Tetrachloroethene	EPA 8260	<1.0	ug/L	MQS	10/17/2008

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ANALYTICAL REPORT

GZA GeoEnvironmental, Inc.
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Stephen Andrus

Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **10/09/2008**
Date Reported: **10/22/2008**
Work Order No.: **0810-00070**

Sample ID: **ML - 1B** Sample No.: **002**

Sample Date: **10/08/2008**

Test Performed	Method	Results	Units	Tech	Analysis Date
Dibromochloromethane	EPA 8260	<1.0	ug/L	MQS	10/17/2008
1,2-Dibromoethane (EDB)	EPA 8260	<2.0	ug/L	MQS	10/17/2008
Chlorobenzene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
1,1,1,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	10/17/2008
Ethylbenzene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
m&p-Xylene	EPA 8260	<2.0	ug/L	MQS	10/17/2008
o-Xylene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
Styrene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
Bromoform	EPA 8260	<2.0	ug/L	MQS	10/17/2008
Isopropylbenzene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
1,1,2,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	10/17/2008
1,2,3-Trichloropropane	EPA 8260	<1.0	ug/L	MQS	10/17/2008
Bromobenzene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
N-Propylbenzene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
2-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
1,3,5-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
4-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
tert-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
1,2,4-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
sec-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
p-Isopropyltoluene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
1,3-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
1,4-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
n-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
1,2-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
1,2-Dibromo-3-Chloropropane	EPA 8260	<5.0	ug/L	MQS	10/17/2008
1,2,4-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
Hexachlorobutadiene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
Naphthalene	EPA 8260	<2.0	ug/L	MQS	10/17/2008
1,2,3-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
Surrogates:	EPA 8260				
***1,2-Dichloroethane-D4	EPA 8260	85.2	% R	MQS	10/17/2008
***Toluene-D8	EPA 8260	100	% R	MQS	10/17/2008
***4-Bromofluorobenzene	EPA 8260	97.5	% R	MQS	10/17/2008
Preparation	EPA 5030B	1.0	CF	MQS	10/16/2008

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Stephen Andrus

Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **10/09/2008**
Date Reported: **10/22/2008**
Work Order No.: **0810-00070**

Sample ID: **ML - 1C** Sample No.: **003**

Sample Date: **10/08/2008**

Test Performed	Method	Results	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260			MQS	10/17/2008
Dichlorodifluoromethane	EPA 8260	<2.0	ug/L	MQS	10/17/2008
Chloromethane	EPA 8260	<2.0	ug/L	MQS	10/17/2008
Vinyl Chloride	EPA 8260	<1.0	ug/L	MQS	10/17/2008
Bromomethane	EPA 8260	<2.0	ug/L	MQS	10/17/2008
Chloroethane	EPA 8260	<1.0	ug/L	MQS	10/17/2008
Trichlorofluoromethane	EPA 8260	<2.0	ug/L	MQS	10/17/2008
Diethylether	EPA 8260	<5.0	ug/L	MQS	10/17/2008
Acetone	EPA 8260	52	ug/L	MQS	10/17/2008
1,1-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
Dichloromethane	EPA 8260	<2.0	ug/L	MQS	10/17/2008
Methyl-Tert-Butyl-Ether	EPA 8260	<1.0	ug/L	MQS	10/17/2008
trans-1,2-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
1,1-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	10/17/2008
2-Butanone	EPA 8260	460	ug/L	MQS	10/17/2008
2,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	10/17/2008
cis-1,2-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
Chloroform	EPA 8260	<1.0	ug/L	MQS	10/17/2008
Bromochloromethane	EPA 8260	<1.0	ug/L	MQS	10/17/2008
Tetrahydrofuran	EPA 8260	<10	ug/L	MQS	10/17/2008
1,1,1-Trichloroethane	EPA 8260	<1.0	ug/L	MQS	10/17/2008
1,1-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
Carbon Tetrachloride	EPA 8260	<1.0	ug/L	MQS	10/17/2008
1,2-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	10/17/2008
Benzene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
Trichloroethene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
1,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	10/17/2008
Bromodichloromethane	EPA 8260	<1.0	ug/L	MQS	10/17/2008
Dibromomethane	EPA 8260	<1.0	ug/L	MQS	10/17/2008
4-Methyl-2-Pentanone	EPA 8260	<25	ug/L	MQS	10/17/2008
cis-1,3-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
Toluene	EPA 8260	2.9	ug/L	MQS	10/17/2008
trans-1,3-Dichloropropene	EPA 8260	<2.0	ug/L	MQS	10/17/2008
1,1,2-Trichloroethane	EPA 8260	<1.0	ug/L	MQS	10/17/2008
2-Hexanone	EPA 8260	<25	ug/L	MQS	10/17/2008
1,3-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	10/17/2008
Tetrachloroethene	EPA 8260	<1.0	ug/L	MQS	10/17/2008

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ANALYTICAL REPORT

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Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **10/09/2008**
Date Reported: **10/22/2008**
Work Order No.: **0810-00070**

Sample ID: **ML - 1C** Sample No.: **003**

Sample Date: **10/08/2008**

Test Performed	Method	Results	Units	Tech	Analysis Date
Dibromochloromethane	EPA 8260	<1.0	ug/L	MQS	10/17/2008
1,2-Dibromoethane (EDB)	EPA 8260	<2.0	ug/L	MQS	10/17/2008
Chlorobenzene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
1,1,1,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	10/17/2008
Ethylbenzene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
m&p-Xylene	EPA 8260	<2.0	ug/L	MQS	10/17/2008
o-Xylene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
Styrene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
Bromoform	EPA 8260	<2.0	ug/L	MQS	10/17/2008
Isopropylbenzene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
1,1,2,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	10/17/2008
1,2,3-Trichloropropane	EPA 8260	<1.0	ug/L	MQS	10/17/2008
Bromobenzene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
N-Propylbenzene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
2-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
1,3,5-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
4-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
tert-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
1,2,4-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
sec-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
p-Isopropyltoluene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
1,3-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
1,4-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
n-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
1,2-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
1,2-Dibromo-3-Chloropropane	EPA 8260	<5.0	ug/L	MQS	10/17/2008
1,2,4-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
Hexachlorobutadiene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
Naphthalene	EPA 8260	<2.0	ug/L	MQS	10/17/2008
1,2,3-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
Surrogates:	EPA 8260				
***1,2-Dichloroethane-D4	EPA 8260	94.9	% R	MQS	10/17/2008
***Toluene-D8	EPA 8260	98.5	% R	MQS	10/17/2008
***4-Bromofluorobenzene	EPA 8260	99.6	% R	MQS	10/17/2008
Preparation	EPA 5030B	1.0	CF	MQS	10/16/2008

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Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **10/09/2008**
Date Reported: **10/22/2008**
Work Order No.: **0810-00070**

Sample ID: **ML - 2A** Sample No.: **004**

Sample Date: **10/08/2008**

Test Performed	Method	Results	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260			MQS	10/17/2008
Dichlorodifluoromethane	EPA 8260	<2.0	ug/L	MQS	10/17/2008
Chloromethane	EPA 8260	<2.0	ug/L	MQS	10/17/2008
Vinyl Chloride	EPA 8260	<1.0	ug/L	MQS	10/17/2008
Bromomethane	EPA 8260	<2.0	ug/L	MQS	10/17/2008
Chloroethane	EPA 8260	<1.0	ug/L	MQS	10/17/2008
Trichlorofluoromethane	EPA 8260	<2.0	ug/L	MQS	10/17/2008
Diethylether	EPA 8260	<5.0	ug/L	MQS	10/17/2008
Acetone	EPA 8260	<25	ug/L	MQS	10/17/2008
1,1-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
Dichloromethane	EPA 8260	<2.0	ug/L	MQS	10/17/2008
Methyl-Tert-Butyl-Ether	EPA 8260	<1.0	ug/L	MQS	10/17/2008
trans-1,2-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
1,1-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	10/17/2008
2-Butanone	EPA 8260	<25	ug/L	MQS	10/17/2008
2,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	10/17/2008
cis-1,2-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
Chloroform	EPA 8260	<1.0	ug/L	MQS	10/17/2008
Bromochloromethane	EPA 8260	<1.0	ug/L	MQS	10/17/2008
Tetrahydrofuran	EPA 8260	<10	ug/L	MQS	10/17/2008
1,1,1-Trichloroethane	EPA 8260	<1.0	ug/L	MQS	10/17/2008
1,1-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
Carbon Tetrachloride	EPA 8260	<1.0	ug/L	MQS	10/17/2008
1,2-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	10/17/2008
Benzene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
Trichloroethene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
1,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	10/17/2008
Bromodichloromethane	EPA 8260	<1.0	ug/L	MQS	10/17/2008
Dibromomethane	EPA 8260	<1.0	ug/L	MQS	10/17/2008
4-Methyl-2-Pentanone	EPA 8260	<25	ug/L	MQS	10/17/2008
cis-1,3-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
Toluene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
trans-1,3-Dichloropropene	EPA 8260	<2.0	ug/L	MQS	10/17/2008
1,1,2-Trichloroethane	EPA 8260	<1.0	ug/L	MQS	10/17/2008
2-Hexanone	EPA 8260	<25	ug/L	MQS	10/17/2008
1,3-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	10/17/2008
Tetrachloroethene	EPA 8260	<1.0	ug/L	MQS	10/17/2008

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ANALYTICAL REPORT

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Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **10/09/2008**
Date Reported: **10/22/2008**
Work Order No.: **0810-00070**

Sample ID: **ML - 2A** Sample No.: **004**

Sample Date: **10/08/2008**

Test Performed	Method	Results	Units	Tech	Analysis Date
Dibromochloromethane	EPA 8260	<1.0	ug/L	MQS	10/17/2008
1,2-Dibromoethane (EDB)	EPA 8260	<2.0	ug/L	MQS	10/17/2008
Chlorobenzene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
1,1,1,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	10/17/2008
Ethylbenzene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
m&p-Xylene	EPA 8260	<2.0	ug/L	MQS	10/17/2008
o-Xylene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
Styrene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
Bromoform	EPA 8260	<2.0	ug/L	MQS	10/17/2008
Isopropylbenzene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
1,1,2,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	10/17/2008
1,2,3-Trichloropropane	EPA 8260	<1.0	ug/L	MQS	10/17/2008
Bromobenzene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
N-Propylbenzene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
2-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
1,3,5-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
4-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
tert-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
1,2,4-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
sec-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
p-Isopropyltoluene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
1,3-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
1,4-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
n-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
1,2-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
1,2-Dibromo-3-Chloropropane	EPA 8260	<5.0	ug/L	MQS	10/17/2008
1,2,4-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
Hexachlorobutadiene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
Naphthalene	EPA 8260	<2.0	ug/L	MQS	10/17/2008
1,2,3-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
Surrogates:	EPA 8260				
***1,2-Dichloroethane-D4	EPA 8260	87.6	% R	MQS	10/17/2008
***Toluene-D8	EPA 8260	98.6	% R	MQS	10/17/2008
***4-Bromofluorobenzene	EPA 8260	98.4	% R	MQS	10/17/2008
Preparation	EPA 5030B	1.0	CF	MQS	10/16/2008

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Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **10/09/2008**
Date Reported: **10/22/2008**
Work Order No.: **0810-00070**

Sample ID: **ML - 2B** Sample No.: **005**

Sample Date: **10/08/2008**

Test Performed	Method	Results	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260			MQS	10/17/2008
Dichlorodifluoromethane	EPA 8260	<2.0	ug/L	MQS	10/17/2008
Chloromethane	EPA 8260	<2.0	ug/L	MQS	10/17/2008
Vinyl Chloride	EPA 8260	<1.0	ug/L	MQS	10/17/2008
Bromomethane	EPA 8260	<2.0	ug/L	MQS	10/17/2008
Chloroethane	EPA 8260	<1.0	ug/L	MQS	10/17/2008
Trichlorofluoromethane	EPA 8260	<2.0	ug/L	MQS	10/17/2008
Diethylether	EPA 8260	<5.0	ug/L	MQS	10/17/2008
Acetone	EPA 8260	<25	ug/L	MQS	10/17/2008
1,1-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
Dichloromethane	EPA 8260	<2.0	ug/L	MQS	10/17/2008
Methyl-Tert-Butyl-Ether	EPA 8260	<1.0	ug/L	MQS	10/17/2008
trans-1,2-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
1,1-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	10/17/2008
2-Butanone	EPA 8260	<25	ug/L	MQS	10/17/2008
2,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	10/17/2008
cis-1,2-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
Chloroform	EPA 8260	<1.0	ug/L	MQS	10/17/2008
Bromochloromethane	EPA 8260	<1.0	ug/L	MQS	10/17/2008
Tetrahydrofuran	EPA 8260	<10	ug/L	MQS	10/17/2008
1,1,1-Trichloroethane	EPA 8260	<1.0	ug/L	MQS	10/17/2008
1,1-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
Carbon Tetrachloride	EPA 8260	<1.0	ug/L	MQS	10/17/2008
1,2-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	10/17/2008
Benzene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
Trichloroethene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
1,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	10/17/2008
Bromodichloromethane	EPA 8260	<1.0	ug/L	MQS	10/17/2008
Dibromomethane	EPA 8260	<1.0	ug/L	MQS	10/17/2008
4-Methyl-2-Pentanone	EPA 8260	<25	ug/L	MQS	10/17/2008
cis-1,3-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
Toluene	EPA 8260	1.9	ug/L	MQS	10/17/2008
trans-1,3-Dichloropropene	EPA 8260	<2.0	ug/L	MQS	10/17/2008
1,1,2-Trichloroethane	EPA 8260	<1.0	ug/L	MQS	10/17/2008
2-Hexanone	EPA 8260	<25	ug/L	MQS	10/17/2008
1,3-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	10/17/2008
Tetrachloroethene	EPA 8260	<1.0	ug/L	MQS	10/17/2008

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ANALYTICAL REPORT

GZA GeoEnvironmental, Inc.
140 Broadway
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Stephen Andrus

Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **10/09/2008**
Date Reported: **10/22/2008**
Work Order No.: **0810-00070**

Sample ID: **ML - 2B** Sample No.: **005**

Sample Date: **10/08/2008**

Test Performed	Method	Results	Units	Tech	Analysis Date
Dibromochloromethane	EPA 8260	<1.0	ug/L	MQS	10/17/2008
1,2-Dibromoethane (EDB)	EPA 8260	<2.0	ug/L	MQS	10/17/2008
Chlorobenzene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
1,1,1,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	10/17/2008
Ethylbenzene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
m&p-Xylene	EPA 8260	<2.0	ug/L	MQS	10/17/2008
o-Xylene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
Styrene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
Bromoform	EPA 8260	<2.0	ug/L	MQS	10/17/2008
Isopropylbenzene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
1,1,2,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	10/17/2008
1,2,3-Trichloropropane	EPA 8260	<1.0	ug/L	MQS	10/17/2008
Bromobenzene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
N-Propylbenzene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
2-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
1,3,5-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
4-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
tert-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
1,2,4-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
sec-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
p-Isopropyltoluene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
1,3-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
1,4-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
n-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
1,2-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
1,2-Dibromo-3-Chloropropane	EPA 8260	<5.0	ug/L	MQS	10/17/2008
1,2,4-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
Hexachlorobutadiene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
Naphthalene	EPA 8260	<2.0	ug/L	MQS	10/17/2008
1,2,3-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
Surrogates:	EPA 8260				
***1,2-Dichloroethane-D4	EPA 8260	88.1	% R	MQS	10/17/2008
***Toluene-D8	EPA 8260	99.7	% R	MQS	10/17/2008
***4-Bromofluorobenzene	EPA 8260	99.2	% R	MQS	10/17/2008
Preparation	EPA 5030B	1.0	CF	MQS	10/16/2008

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ANALYTICAL REPORT

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Stephen Andrus

Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **10/09/2008**
Date Reported: **10/22/2008**
Work Order No.: **0810-00070**

Sample ID: **ML - 2C** Sample No.: **006**

Sample Date: **10/08/2008**

Test Performed	Method	Results	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260			MQS	10/17/2008
Dichlorodifluoromethane	EPA 8260	<2.0	ug/L	MQS	10/17/2008
Chloromethane	EPA 8260	<2.0	ug/L	MQS	10/17/2008
Vinyl Chloride	EPA 8260	<1.0	ug/L	MQS	10/17/2008
Bromomethane	EPA 8260	<2.0	ug/L	MQS	10/17/2008
Chloroethane	EPA 8260	<1.0	ug/L	MQS	10/17/2008
Trichlorofluoromethane	EPA 8260	<2.0	ug/L	MQS	10/17/2008
Diethylether	EPA 8260	<5.0	ug/L	MQS	10/17/2008
Acetone	EPA 8260	<25	ug/L	MQS	10/17/2008
1,1-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
Dichloromethane	EPA 8260	<2.0	ug/L	MQS	10/17/2008
Methyl-Tert-Butyl-Ether	EPA 8260	<1.0	ug/L	MQS	10/17/2008
trans-1,2-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
1,1-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	10/17/2008
2-Butanone	EPA 8260	<25	ug/L	MQS	10/17/2008
2,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	10/17/2008
cis-1,2-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
Chloroform	EPA 8260	<1.0	ug/L	MQS	10/17/2008
Bromochloromethane	EPA 8260	<1.0	ug/L	MQS	10/17/2008
Tetrahydrofuran	EPA 8260	<10	ug/L	MQS	10/17/2008
1,1,1-Trichloroethane	EPA 8260	<1.0	ug/L	MQS	10/17/2008
1,1-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
Carbon Tetrachloride	EPA 8260	<1.0	ug/L	MQS	10/17/2008
1,2-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	10/17/2008
Benzene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
Trichloroethene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
1,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	10/17/2008
Bromodichloromethane	EPA 8260	<1.0	ug/L	MQS	10/17/2008
Dibromomethane	EPA 8260	<1.0	ug/L	MQS	10/17/2008
4-Methyl-2-Pentanone	EPA 8260	<25	ug/L	MQS	10/17/2008
cis-1,3-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
Toluene	EPA 8260	5.0	ug/L	MQS	10/17/2008
trans-1,3-Dichloropropene	EPA 8260	<2.0	ug/L	MQS	10/17/2008
1,1,2-Trichloroethane	EPA 8260	<1.0	ug/L	MQS	10/17/2008
2-Hexanone	EPA 8260	<25	ug/L	MQS	10/17/2008
1,3-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	10/17/2008
Tetrachloroethene	EPA 8260	<1.0	ug/L	MQS	10/17/2008

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ANALYTICAL REPORT

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Stephen Andrus

Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **10/09/2008**
Date Reported: **10/22/2008**
Work Order No.: **0810-00070**

Sample ID: **ML - 2C** Sample No.: **006**

Sample Date: **10/08/2008**

Test Performed	Method	Results	Units	Tech	Analysis Date
Dibromochloromethane	EPA 8260	<1.0	ug/L	MQS	10/17/2008
1,2-Dibromoethane (EDB)	EPA 8260	<2.0	ug/L	MQS	10/17/2008
Chlorobenzene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
1,1,1,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	10/17/2008
Ethylbenzene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
m&p-Xylene	EPA 8260	<2.0	ug/L	MQS	10/17/2008
o-Xylene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
Styrene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
Bromoform	EPA 8260	<2.0	ug/L	MQS	10/17/2008
Isopropylbenzene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
1,1,2,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	10/17/2008
1,2,3-Trichloropropane	EPA 8260	<1.0	ug/L	MQS	10/17/2008
Bromobenzene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
N-Propylbenzene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
2-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
1,3,5-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
4-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
tert-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
1,2,4-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
sec-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
p-Isopropyltoluene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
1,3-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
1,4-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
n-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
1,2-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
1,2-Dibromo-3-Chloropropane	EPA 8260	<5.0	ug/L	MQS	10/17/2008
1,2,4-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
Hexachlorobutadiene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
Naphthalene	EPA 8260	<2.0	ug/L	MQS	10/17/2008
1,2,3-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
Surrogates:	EPA 8260				
***1,2-Dichloroethane-D4	EPA 8260	85.0	% R	MQS	10/17/2008
***Toluene-D8	EPA 8260	99.1	% R	MQS	10/17/2008
***4-Bromofluorobenzene	EPA 8260	97.1	% R	MQS	10/17/2008
Preparation	EPA 5030B	1.0	CF	MQS	10/16/2008

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Stephen Andrus

Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **10/09/2008**
Date Reported: **10/22/2008**
Work Order No.: **0810-00070**

Sample ID: **Trip Blank** Sample No.: **007**

Sample Date: **10/08/2008**

Test Performed	Method	Results	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260			MQS	10/17/2008
Dichlorodifluoromethane	EPA 8260	<2.0	ug/L	MQS	10/17/2008
Chloromethane	EPA 8260	<2.0	ug/L	MQS	10/17/2008
Vinyl Chloride	EPA 8260	<1.0	ug/L	MQS	10/17/2008
Bromomethane	EPA 8260	<2.0	ug/L	MQS	10/17/2008
Chloroethane	EPA 8260	<1.0	ug/L	MQS	10/17/2008
Trichlorofluoromethane	EPA 8260	<2.0	ug/L	MQS	10/17/2008
Diethylether	EPA 8260	<5.0	ug/L	MQS	10/17/2008
Acetone	EPA 8260	<25	ug/L	MQS	10/17/2008
1,1-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
Dichloromethane	EPA 8260	<2.0	ug/L	MQS	10/17/2008
Methyl-Tert-Butyl-Ether	EPA 8260	<1.0	ug/L	MQS	10/17/2008
trans-1,2-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
1,1-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	10/17/2008
2-Butanone	EPA 8260	<25	ug/L	MQS	10/17/2008
2,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	10/17/2008
cis-1,2-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
Chloroform	EPA 8260	<1.0	ug/L	MQS	10/17/2008
Bromochloromethane	EPA 8260	<1.0	ug/L	MQS	10/17/2008
Tetrahydrofuran	EPA 8260	<10	ug/L	MQS	10/17/2008
1,1,1-Trichloroethane	EPA 8260	<1.0	ug/L	MQS	10/17/2008
1,1-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
Carbon Tetrachloride	EPA 8260	<1.0	ug/L	MQS	10/17/2008
1,2-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	10/17/2008
Benzene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
Trichloroethene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
1,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	10/17/2008
Bromodichloromethane	EPA 8260	<1.0	ug/L	MQS	10/17/2008
Dibromomethane	EPA 8260	<1.0	ug/L	MQS	10/17/2008
4-Methyl-2-Pentanone	EPA 8260	<25	ug/L	MQS	10/17/2008
cis-1,3-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
Toluene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
trans-1,3-Dichloropropene	EPA 8260	<2.0	ug/L	MQS	10/17/2008
1,1,2-Trichloroethane	EPA 8260	<1.0	ug/L	MQS	10/17/2008
2-Hexanone	EPA 8260	<25	ug/L	MQS	10/17/2008
1,3-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	10/17/2008
Tetrachloroethene	EPA 8260	<1.0	ug/L	MQS	10/17/2008

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Stephen Andrus

Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **10/09/2008**
Date Reported: **10/22/2008**
Work Order No.: **0810-00070**

Sample ID: **Trip Blank** Sample No.: **007**

Sample Date: **10/08/2008**

Test Performed	Method	Results	Units	Tech	Analysis Date
Dibromochloromethane	EPA 8260	<1.0	ug/L	MQS	10/17/2008
1,2-Dibromoethane (EDB)	EPA 8260	<2.0	ug/L	MQS	10/17/2008
Chlorobenzene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
1,1,1,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	10/17/2008
Ethylbenzene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
m&p-Xylene	EPA 8260	<2.0	ug/L	MQS	10/17/2008
o-Xylene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
Styrene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
Bromoform	EPA 8260	<2.0	ug/L	MQS	10/17/2008
Isopropylbenzene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
1,1,2,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	10/17/2008
1,2,3-Trichloropropane	EPA 8260	<1.0	ug/L	MQS	10/17/2008
Bromobenzene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
N-Propylbenzene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
2-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
1,3,5-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
4-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
tert-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
1,2,4-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
sec-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
p-Isopropyltoluene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
1,3-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
1,4-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
n-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
1,2-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
1,2-Dibromo-3-Chloropropane	EPA 8260	<5.0	ug/L	MQS	10/17/2008
1,2,4-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
Hexachlorobutadiene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
Naphthalene	EPA 8260	<2.0	ug/L	MQS	10/17/2008
1,2,3-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	10/17/2008
Surrogates:	EPA 8260				
***1,2-Dichloroethane-D4	EPA 8260	86.5	% R	MQS	10/17/2008
***Toluene-D8	EPA 8260	99.4	% R	MQS	10/17/2008
***4-Bromofluorobenzene	EPA 8260	98.0	% R	MQS	10/17/2008
Preparation	EPA 5030B	1.0	CF	MQS	10/16/2008

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EPA Method 8260 / 524.2 Aqueous Method Blank (MB) and Laboratory Control Sample/Duplicate (LCS/LCSD) Data

Method Blank			Laboratory Control Sample	#2			Laboratory Control Sample Duplicate					
Date Analyzed:	10/17/08		Date Analyzed:	10/17/08			10/17/08					
Volatile Organics	Conc. ug/L	Acceptance Limit	Spike Concentration = 20ug/L	% Recovery	Acceptance Limits	Verdict	% Recovery	Acceptance Limits	Verdict	RPD	Limit	Verdict
dichlorodifluoromethane	< 1.0	< 1.0	dichlorodifluoromethane	128	70-130	ok	130	70-130	out	1.81	<25	ok
chloromethane	< 1.0	< 1.0	chloromethane	114	70-130	ok	114	70-130	ok	0.12	<25	ok
vinyl chloride	< 0.5	< 0.5	vinyl chloride	106	70-130	ok	103	70-130	ok	2.17	<25	ok
bromomethane	< 1.0	< 1.0	bromomethane	103	70-130	ok	102	70-130	ok	0.61	<25	ok
chloroethane	< 0.5	< 0.5	chloroethane	96.0	70-130	ok	96.0	70-130	ok	0.01	<25	ok
trichlorofluoromethane	< 1.0	< 1.0	trichlorofluoromethane	107	70-130	ok	107	70-130	ok	0.76	<25	ok
diethyl ether	< 2.5	< 2.5	diethyl ether	86.9	70-130	ok	87.8	70-130	ok	1.01	<25	ok
acetone	< 13	< 13	acetone	90.5	70-130	ok	91.7	70-130	ok	1.31	<25	ok
1,1-dichloroethene	< 0.5	< 0.5	1,1-dichloroethene	102	70-130	ok	101	70-130	ok	0.51	<25	ok
FREON-113	< 1.0	< 1.0	FREON-113	108	70-130	ok	110	70-130	ok	1.95	<25	ok
iodomethane	< 0.5	< 0.5	iodomethane	98.6	70-130	ok	99.6	70-130	ok	0.97	<25	ok
carbon disulfide	< 5.0	< 5.0	carbon disulfide	128	70-130	ok	128	70-130	ok	0.05	<25	ok
dichloromethane	< 1.0	< 1.0	dichloromethane	87.5	70-130	ok	87.4	70-130	ok	0.14	<25	ok
tert-butyl alcohol (TBA)	< 13	< 13	tert-butyl alcohol (TBA)	114	70-130	ok	126	70-130	ok	9.44	<25	ok
acrylonitrile	< 0.5	< 0.5	acrylonitrile	89.2	70-130	ok	85.2	70-130	ok	4.63	<25	ok
methyl-tert-butyl-ether	< 0.5	< 0.5	methyl-tert-butyl-ether	79.5	70-130	ok	82.6	70-130	ok	3.76	<25	ok
trans-1,2-dichloroethene	< 0.5	< 0.5	trans-1,2-dichloroethene	104	70-130	ok	103	70-130	ok	0.81	<25	ok
1,1-dichloroethane	< 0.5	< 0.5	1,1-dichloroethane	102	70-130	ok	103	70-130	ok	0.55	<25	ok
di-isopropyl ether (DIPE)	< 1.0	< 1.0	di-isopropyl ether (DIPE)	89.9	70-130	ok	91.0	70-130	ok	1.19	<25	ok
ethyl tert-butyl ether (EtBE)	< 1.0	< 1.0	ethyl tert-butyl ether (EtBE)	85.0	70-130	ok	87.0	70-130	ok	2.30	<25	ok
vinyl acetate	< 13	< 13	vinyl acetate	88.2	70-130	ok	89.9	70-130	ok	1.94	<25	ok
2-butanone	< 13	< 13	2-butanone	88.3	70-130	ok	90.7	70-130	ok	2.68	<25	ok
2,2-dichloropropane	< 0.5	< 0.5	2,2-dichloropropane	71.9	70-130	ok	74.2	70-130	ok	3.20	<25	ok
cis-1,2-dichloroethene	< 0.5	< 0.5	cis-1,2-dichloroethene	97.5	70-130	ok	98.4	70-130	ok	1.14	<25	ok
chloroform	< 0.5	< 0.5	chloroform	90.0	70-130	ok	91.6	70-130	ok	1.83	<25	ok
bromochloromethane	< 0.5	< 0.5	bromochloromethane	95.5	70-130	ok	97.1	70-130	ok	1.67	<25	ok
tetrahydrafuran	< 5.0	< 5.0	tetrahydrafuran	101	70-130	ok	107	70-130	ok	6.11	<25	ok
1,1,1-trichloroethane	< 0.5	< 0.5	1,1,1-trichloroethane	99.9	70-130	ok	101	70-130	ok	0.59	<25	ok
1,1-dichloropropene	< 0.5	< 0.5	1,1-dichloropropene	98.8	70-130	ok	99.8	70-130	ok	0.92	<25	ok
carbon tetrachloride	< 0.5	< 0.5	carbon tetrachloride	102	70-130	ok	102	70-130	ok	0.64	<25	ok
1,2-dichloroethane	< 0.5	< 0.5	1,2-dichloroethane	89.1	70-130	ok	94.6	70-130	ok	6.00	<25	ok
benzene	< 0.5	< 0.5	benzene	99.2	70-130	ok	98.7	70-130	ok	0.54	<25	ok
tert-amyl methyl ether (TAME)	< 1.0	< 1.0	tert-amyl methyl ether (TAME)	81.0	70-130	ok	85.4	70-130	ok	5.31	<25	ok
trichloroethene	< 0.5	< 0.5	trichloroethene	95.8	70-130	ok	96.7	70-130	ok	0.95	<25	ok
1,2-dichloropropane	< 0.5	< 0.5	1,2-dichloropropane	94.5	70-130	ok	94.0	70-130	ok	0.48	<25	ok
bromodichloromethane	< 0.5	< 0.5	bromodichloromethane	93.1	70-130	ok	95.0	70-130	ok	2.01	<25	ok
1,4-Dioxane	< 50	< 50	1,4-Dioxane	90.6	70-130	ok	96.4	70-130	ok	6.19	<25	ok
dibromomethane	< 0.5	< 0.5	dibromomethane	93.4	70-130	ok	97.2	70-130	ok	4.05	<25	ok
4-methyl-2-pentanone	< 13	< 13	4-methyl-2-pentanone	83.9	70-130	ok	86.7	70-130	ok	3.23	<25	ok
cis-1,3-dichloropropene	< 0.5	< 0.5	cis-1,3-dichloropropene	88.5	70-130	ok	90.7	70-130	ok	2.44	<25	ok
toluene	< 0.5	< 0.5	toluene	98.6	70-130	ok	98.2	70-130	ok	0.39	<25	ok
trans-1,3-dichloropropene	< 1.0	< 1.0	trans-1,3-dichloropropene	80.6	70-130	ok	82.9	70-130	ok	2.83	<25	ok
1,1,2-trichloroethane	< 0.5	< 0.5	1,1,2-trichloroethane	93.5	70-130	ok	90.2	70-130	ok	3.54	<25	ok
2-hexanone	< 13	< 13	2-hexanone	89.9	70-130	ok	91.2	70-130	ok	1.43	<25	ok
1,3-dichloropropane	< 0.5	< 0.5	1,3-dichloropropane	94.3	70-130	ok	96.5	70-130	ok	2.35	<25	ok
tetrachloroethene	< 0.5	< 0.5	tetrachloroethene	111	70-130	ok	109	70-130	ok	1.31	<25	ok
dibromochloromethane	< 0.5	< 0.5	dibromochloromethane	98.1	70-130	ok	99.1	70-130	ok	1.01	<25	ok
1,2-dibromoethane (EDB)	< 1.0	< 1.0	1,2-dibromoethane (EDB)	99.1	70-130	ok	99.2	70-130	ok	0.11	<25	ok
chlorobenzene	< 0.5	< 0.5	chlorobenzene	107	70-130	ok	105	70-130	ok	1.50	<25	ok
1,1,1,2-tetrachloroethane	< 0.5	< 0.5	1,1,1,2-tetrachloroethane	102	70-130	ok	102	70-130	ok	0.61	<25	ok
ethylbenzene	< 0.5	< 0.5	ethylbenzene	109	70-130	ok	105	70-130	ok	3.91	<25	ok
1,1,2,2-tetrachloroethane	< 0.5	< 0.5	1,1,2,2-tetrachloroethane	93.7	70-130	ok	88.9	70-130	ok	5.26	<25	ok
m&p-xylene	< 1.0	< 1.0	m&p-xylene	105	70-130	ok	102	70-130	ok	2.66	<25	ok
o-xylene	< 0.5	< 0.5	o-xylene	98.3	70-130	ok	97.6	70-130	ok	0.71	<25	ok
styrene	< 0.5	< 0.5	styrene	100	70-130	ok	101	70-130	ok	0.62	<25	ok
bromoform	< 1.0	< 1.0	bromoform	92.2	70-130	ok	94.2	70-130	ok	2.19	<25	ok
isopropylbenzene	< 0.5	< 0.5	isopropylbenzene	126	70-130	ok	118	70-130	ok	6.05	<25	ok
1,2,3-trichloropropane	< 0.5	< 0.5	1,2,3-trichloropropane	89.9	70-130	ok	88.8	70-130	ok	1.22	<25	ok
bromobenzene	< 0.5	< 0.5	bromobenzene	102	70-130	ok	98.3	70-130	ok	4.10	<25	ok
n-propylbenzene	< 0.5	< 0.5	n-propylbenzene	107	70-130	ok	104	70-130	ok	2.54	<25	ok
2-chlorotoluene	< 0.5	< 0.5	2-chlorotoluene	108	70-130	ok	95.6	70-130	ok	12.0	<25	ok
1,3,5-trimethylbenzene	< 0.5	< 0.5	1,3,5-trimethylbenzene	106	70-130	ok	103	70-130	ok	2.85	<25	ok
trans-1,4-dichloro-2-butene	< 1.0	< 1.0	trans-1,4-dichloro-2-butene	85.0	70-130	ok	79.2	70-130	ok	6.98	<25	ok
4-chlorotoluene	< 0.5	< 0.5	4-chlorotoluene	104	70-130	ok	99.6	70-130	ok	4.75	<25	ok
tert-butyl-benzene	< 0.5	< 0.5	tert-butyl-benzene	125	70-130	ok	121	70-130	ok	3.22	<25	ok
1,2,4-trimethylbenzene	< 0.5	< 0.5	1,2,4-trimethylbenzene	102	70-130	ok	97.5	70-130	ok	4.76	<25	ok
sec-butyl-benzene	< 0.5	< 0.5	sec-butyl-benzene	101	70-130	ok	98.3	70-130	ok	2.44	<25	ok
p-isopropyltoluene	< 0.5	< 0.5	p-isopropyltoluene	104	70-130	ok	100	70-130	ok	3.39	<25	ok
1,3-dichlorobenzene	< 0.5	< 0.5	1,3-dichlorobenzene	97.9	70-130	ok	95.9	70-130	ok	2.13	<25	ok
1,4-dichlorobenzene	< 0.5	< 0.5	1,4-dichlorobenzene	101	70-130	ok	100	70-130	ok	1.25	<25	ok
n-butylbenzene	< 0.5	< 0.5	n-butylbenzene	97.8	70-130	ok	94.8	70-130	ok	3.10	<25	ok
1,2-dichlorobenzene	< 0.5	< 0.5	1,2-dichlorobenzene	96.0	70-130	ok	96.7	70-130	ok	0.71	<25	ok
1,2-dibromo-3-chloropropane	< 2.5	< 2.5	1,2-dibromo-3-chloropropane	85.5	70-130	ok	88.2	70-130	ok	3.09	<25	ok
1,2,4-trichlorobenzene	< 0.5	< 0.5	1,2,4-trichlorobenzene	95.9	70-130	ok	97.3	70-130	ok	1.52	<25	ok
hexachlorobutadiene	< 0.5	< 0.5	hexachlorobutadiene	97.0	70-130	ok	98.4	70-130	ok	1.38	<25	ok
naphthalene	< 1.0	< 1.0	naphthalene	89.3	70-130	ok	92.6	70-130	ok	3.65	<25	ok
1,2,3-trichlorobenzene	< 0.5	< 0.5	1,2,3-trichlorobenzene	92.5	70-130	ok	95.8	70-130	ok	3.51	<25	ok

Surrogates:	Recovery (%)	Acceptance Limits	Surrogates:	Recovery (%)	Acceptance Limits	Verdict	Recovery (%)	Acceptance Limits	Verdict	RPD	Limit	Verdict
DIBROMOFLUOROMETHANE	98.2	70-130	DIBROMOFLUOROMETHANE	98.0	70-130	ok	97.9	70-130	ok	0.17	<25	ok
1,2-DICHLOROETHANE-D4	88.2	70-130	1,2-DICHLOROETHANE-D4	88.5	70-130	ok	91.2	70-130	ok	2.93	<25	ok
TOLUENE-D8	99.3	70-130	TOLUENE-D8	99.2	70-130	ok	100	70-130	ok	0.86	<25	ok
4-BROMOFLUOROBENZENE	95.9	70-130	4-BROMOFLUOROBENZENE	106	70-130	ok	100	70-130	ok	5.78	<25	ok
1,2-DICHLOROBENZENE-D4	93.4	70-130	1,2-DICHLOROBENZENE-D4	94.7	70-130	ok	93.2	70-130	ok	1.59	<25	ok

Instrument: HP GC/MS "S"

CHAIN-OF-CUSTODY RECORD

W.O. # 0810-00070
(for lab use only)

Sample I.D.	Date/Time Sampled	Matrix (A=Air, S=Soil, GW=Ground W., SW=Surface W., WW=Waste W., DW=Drinking W., P=Product, Other (specify))	ANALYSIS REQUIRED: ☐ pH ☐ Cond.	GC Methane, Ethane, Ethene	EPA 8260	EPA 8260 – 8010 List (Chlor.)	EPA 8260 – 8021 list	EPA 8021 – 8020 List (BTEX)	EPA 524.2 DW VOCs	EPA 624 WW VOCs	☐ 601 ☐ 602 WW VOCs	EPA 8270 FULL SVOCs	EPA 8270 ☐ PAH ☐ A ☐ BN	EPA 625 WW SVOCs	EPA 8082–PCBs	EPA 8081–Pest	TPH–GC (Mod. 8100)	TPH–GC w/FING.	EPH (MA DEP)	VPH (MA DEP)	Metals ☐ PPM-13 ☐ R-8	MCP 14 Metals (MA)	Metals (List Below)**	TCLP – Specify Below	SPLP – Specify Below	EPA 300 ☐ Cl ☐ SO4	EPA 300 ☐ NO2 ☐ NO3	Total # of Cont.	Note #
ML-1A	10/08/08	GW			X																							3	
ML-1B					X																							3	
ML-1C					X																							3	
ML-2A					X																							3	
ML-2B					X																							3	
ML-2C					X																							3	
Trip Blank 1					X																							3	
PRESERVATIVE (Cl - HCl, M=Methanol, N - HNO3, S - H2SO4, Na - NaOH, O - Other)*					C																								
CONTAINER TYPE (P-Plastic, G-Glass, V-Vial, T-Teflon, O-Other)*					V																								

RELINQUISHED BY: (AFFILIATION) DATE/TIME: 10/08/08 15:45 — RECEIVED BY: (AFFILIATION): Mid 10/9/08

RELINQUISHED BY: (AFFILIATION) DATE/TIME: Mid 10/9/08 1205 — RECEIVED BY: (AFFILIATION): 10/9/08 1855

RELINQUISHED BY: (AFFILIATION) DATE/TIME — RECEIVED BY: (AFFILIATION)

NOTES: (Unless otherwise noted, all samples have been refrigerated to 4° C)
*Specify "Other" preservatives and containers types in this space.

PROJECT MANAGER: Steve Andrus EXT: 2740

TURNAROUND TIME: (Standard) Rush___ Days, Approved by _____

LAB USE: TEMP. OF COOLER 2.9 °C Temp Blank 0812 Cooler Air____

GZA GeoEnvironmental, Inc.
Labaratory Division

106 South Street
Hopkinton, MA 01748
(781) 278-4700
FAX (508) 435-9912

GZA FILE NO: 03.0032795-12 TASK NO: _____ P.O. NO. _____

PROJECT Charles Bedrock Work Plan

LOCATION Alton RI

COLLECTOR(S) RAC SHEET 1 OF 1

GZA GeoEnvironmental, Inc.
106 South Street
Hopkinton, MA 01748
(781) 278-4700

Laboratory Identification Numbers:
MA and ME: **MA092** NH: **2028**
CT: **PH0579** RI: **LAO00236**
NELAC - NYS DOH: **11063**

ANALYTICAL REPORT

GZA GeoEnvironmental, Inc.
140 Broadway
Providence, RI 02903

Stephen Andrus

Project No.: **03.0032795.12**
Work Order No.: **0810-00072**
Date Received: **10/09/2008**
Date Reported: **10/22/2008**

SAMPLE INFORMATION

Date Sampled	Matrix	Laboratory ID	Sample ID
10/08/2008	Aqueous	0810-00072 001	ML - 3A
10/08/2008	Aqueous	0810-00072 002	ML - 3B
10/08/2008	Aqueous	0810-00072 003	ML - 3C
10/08/2008	Aqueous	0810-00072 004	ML - 3D
10/08/2008	Aqueous	0810-00072 005	Trip Blank 2

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ANALYTICAL REPORT

GZA GeoEnvironmental, Inc.
140 Broadway
Providence, RI 02903

Stephen Andrus

Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **10/09/2008**
Date Reported: **10/22/2008**
Work Order No.: **0810-00072**

PROJECT NARRATIVE:

1. Sample Receipt

The samples were received on 10/09/08 via _x_GZA courier, __EC, __FEDEX, or ___hand delivered. The temperature of the _x_temperature blank/__cooler air, was 2.9 degrees C. The temperature requirement for most analyses is above freezing to 6 degrees C. The samples were received intact for all requested analyses.

The chain of custody indicates that the samples, when required, were chemically preserved in accordance with the method they reference.

2. EPA Method 8260 - VOCs

The Laboratory Control Spike (LCS) (10/20/08) had method 8260 analytes outside of the 70-130% QC acceptance limits. The outliers include dichlorodifluoromethane (132%) and chloromethane (138%). These analytes were not detected in the associated samples.

The elevated reporting limits for samples ML-3A (0810-72-001) and ML-3D (0810-72-004) are due to initial dilution of the samples in order to get target compounds within the calibration range of the instrument. The dilutions were based upon historical data for the samples.

Attach QC 8260 10/20/08 S - Aqueous

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ANALYTICAL REPORT

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Stephen Andrus

Project Name.:	**Charbert - NFA**	Date Received:	**10/09/2008**
Project No.:	**03.0032795.12**	Date Reported:	**10/22/2008**
		Work Order No.:	**0810-00072**

Data Authorized By: _____

NELAC certification, as indicated by the NELAC Lab ID Number, is per analyte. For a complete list of NELAC validated analytes, please contact the laboratory.

Abbreviations:
% R = % Recovery
DF = Dilution Factor
DFS = Dilution Factor Solids
CF = Calculation Factor
DO = Diluted Out

Method Key:
Method 8260: The current version of the method is 8260B.
Method 8270: The current version of the method is 8270D.
Method 6010: The current version of the method is 6010B.

Please note that the laboratory signed copy of the chain of custody record is an integral part of the data report.

Soil data is reported on a dry weight basis unless otherwise specified.
Matrix Spike / Matrix Spike Duplicate sets are performed as per method and are reported at the end of the analytical report if assigned on the Chain of Custody.

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ANALYTICAL REPORT

GZA GeoEnvironmental, Inc.
140 Broadway
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Stephen Andrus

Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **10/09/2008**
Date Reported: **10/22/2008**
Work Order No.: **0810-00072**

Sample ID: **ML - 3A** Sample No.: **001**

Sample Date: **10/08/2008**

Test Performed	Method	Results	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260			MQS	10/20/2008
Dichlorodifluoromethane	EPA 8260	<100	ug/L	MQS	10/20/2008
Chloromethane	EPA 8260	<100	ug/L	MQS	10/20/2008
Vinyl Chloride	EPA 8260	<50	ug/L	MQS	10/20/2008
Bromomethane	EPA 8260	<100	ug/L	MQS	10/20/2008
Chloroethane	EPA 8260	<50	ug/L	MQS	10/20/2008
Trichlorofluoromethane	EPA 8260	<100	ug/L	MQS	10/20/2008
Diethylether	EPA 8260	<250	ug/L	MQS	10/20/2008
Acetone	EPA 8260	<1300	ug/L	MQS	10/20/2008
1,1-Dichloroethene	EPA 8260	<50	ug/L	MQS	10/20/2008
Dichloromethane	EPA 8260	<100	ug/L	MQS	10/20/2008
Methyl-Tert-Butyl-Ether	EPA 8260	<50	ug/L	MQS	10/20/2008
trans-1,2-Dichloroethene	EPA 8260	<50	ug/L	MQS	10/20/2008
1,1-Dichloroethane	EPA 8260	<50	ug/L	MQS	10/20/2008
2-Butanone	EPA 8260	<1300	ug/L	MQS	10/20/2008
2,2-Dichloropropane	EPA 8260	<50	ug/L	MQS	10/20/2008
cis-1,2-Dichloroethene	EPA 8260	87	ug/L	MQS	10/20/2008
Chloroform	EPA 8260	<50	ug/L	MQS	10/20/2008
Bromochloromethane	EPA 8260	<50	ug/L	MQS	10/20/2008
Tetrahydrofuran	EPA 8260	<500	ug/L	MQS	10/20/2008
1,1,1-Trichloroethane	EPA 8260	<50	ug/L	MQS	10/20/2008
1,1-Dichloropropene	EPA 8260	<50	ug/L	MQS	10/20/2008
Carbon Tetrachloride	EPA 8260	<50	ug/L	MQS	10/20/2008
1,2-Dichloroethane	EPA 8260	<50	ug/L	MQS	10/20/2008
Benzene	EPA 8260	<50	ug/L	MQS	10/20/2008
Trichloroethene	EPA 8260	<50	ug/L	MQS	10/20/2008
1,2-Dichloropropane	EPA 8260	<50	ug/L	MQS	10/20/2008
Bromodichloromethane	EPA 8260	<50	ug/L	MQS	10/20/2008
Dibromomethane	EPA 8260	<50	ug/L	MQS	10/20/2008
4-Methyl-2-Pentanone	EPA 8260	<1300	ug/L	MQS	10/20/2008
cis-1,3-Dichloropropene	EPA 8260	<50	ug/L	MQS	10/20/2008
Toluene	EPA 8260	<50	ug/L	MQS	10/20/2008
trans-1,3-Dichloropropene	EPA 8260	<100	ug/L	MQS	10/20/2008
1,1,2-Trichloroethane	EPA 8260	<50	ug/L	MQS	10/20/2008
2-Hexanone	EPA 8260	<1300	ug/L	MQS	10/20/2008
1,3-Dichloropropane	EPA 8260	<50	ug/L	MQS	10/20/2008
Tetrachloroethene	EPA 8260	1300	ug/L	MQS	10/20/2008

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ANALYTICAL REPORT

GZA GeoEnvironmental, Inc.
140 Broadway
Providence, RI 02903

Stephen Andrus

Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **10/09/2008**
Date Reported: **10/22/2008**
Work Order No.: **0810-00072**

Sample ID: **ML - 3A** Sample No.: **001**

Sample Date: **10/08/2008**

Test Performed	Method	Results	Units	Tech	Analysis Date
Dibromochloromethane	EPA 8260	<50	ug/L	MQS	10/20/2008
1,2-Dibromoethane (EDB)	EPA 8260	<100	ug/L	MQS	10/20/2008
Chlorobenzene	EPA 8260	<50	ug/L	MQS	10/20/2008
1,1,1,2-Tetrachloroethane	EPA 8260	<50	ug/L	MQS	10/20/2008
Ethylbenzene	EPA 8260	<50	ug/L	MQS	10/20/2008
m&p-Xylene	EPA 8260	<100	ug/L	MQS	10/20/2008
o-Xylene	EPA 8260	<50	ug/L	MQS	10/20/2008
Styrene	EPA 8260	<50	ug/L	MQS	10/20/2008
Bromoform	EPA 8260	<100	ug/L	MQS	10/20/2008
Isopropylbenzene	EPA 8260	<50	ug/L	MQS	10/20/2008
1,1,2,2-Tetrachloroethane	EPA 8260	<50	ug/L	MQS	10/20/2008
1,2,3-Trichloropropane	EPA 8260	<50	ug/L	MQS	10/20/2008
Bromobenzene	EPA 8260	<50	ug/L	MQS	10/20/2008
N-Propylbenzene	EPA 8260	<50	ug/L	MQS	10/20/2008
2-Chlorotoluene	EPA 8260	<50	ug/L	MQS	10/20/2008
1,3,5-Trimethylbenzene	EPA 8260	<50	ug/L	MQS	10/20/2008
4-Chlorotoluene	EPA 8260	<50	ug/L	MQS	10/20/2008
tert-Butylbenzene	EPA 8260	<50	ug/L	MQS	10/20/2008
1,2,4-Trimethylbenzene	EPA 8260	<50	ug/L	MQS	10/20/2008
sec-Butylbenzene	EPA 8260	<50	ug/L	MQS	10/20/2008
p-Isopropyltoluene	EPA 8260	<50	ug/L	MQS	10/20/2008
1,3-Dichlorobenzene	EPA 8260	<50	ug/L	MQS	10/20/2008
1,4-Dichlorobenzene	EPA 8260	<50	ug/L	MQS	10/20/2008
n-Butylbenzene	EPA 8260	<50	ug/L	MQS	10/20/2008
1,2-Dichlorobenzene	EPA 8260	<50	ug/L	MQS	10/20/2008
1,2-Dibromo-3-Chloropropane	EPA 8260	<250	ug/L	MQS	10/20/2008
1,2,4-Trichlorobenzene	EPA 8260	<50	ug/L	MQS	10/20/2008
Hexachlorobutadiene	EPA 8260	<50	ug/L	MQS	10/20/2008
Naphthalene	EPA 8260	<100	ug/L	MQS	10/20/2008
1,2,3-Trichlorobenzene	EPA 8260	<50	ug/L	MQS	10/20/2008
Surrogates:	EPA 8260				
***1,2-Dichloroethane-D4	EPA 8260	83.1	% R	MQS	10/20/2008
***Toluene-D8	EPA 8260	98.1	% R	MQS	10/20/2008
***4-Bromofluorobenzene	EPA 8260	95.3	% R	MQS	10/20/2008
Preparation	EPA 5030B	50	CF	MQS	10/20/2008

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106 South Street
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ANALYTICAL REPORT

GZA GeoEnvironmental, Inc.
140 Broadway
Providence, RI 02903

Stephen Andrus

Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **10/09/2008**
Date Reported: **10/22/2008**
Work Order No.: **0810-00072**

Sample ID: **ML - 3B** Sample No.: **002**

Sample Date: **10/08/2008**

Test Performed	Method	Results	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260			MQS	10/20/2008
Dichlorodifluoromethane	EPA 8260	<2.0	ug/L	MQS	10/20/2008
Chloromethane	EPA 8260	<2.0	ug/L	MQS	10/20/2008
Vinyl Chloride	EPA 8260	<1.0	ug/L	MQS	10/20/2008
Bromomethane	EPA 8260	<2.0	ug/L	MQS	10/20/2008
Chloroethane	EPA 8260	<1.0	ug/L	MQS	10/20/2008
Trichlorofluoromethane	EPA 8260	<2.0	ug/L	MQS	10/20/2008
Diethylether	EPA 8260	<5.0	ug/L	MQS	10/20/2008
Acetone	EPA 8260	<25	ug/L	MQS	10/20/2008
1,1-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	10/20/2008
Dichloromethane	EPA 8260	<2.0	ug/L	MQS	10/20/2008
Methyl-Tert-Butyl-Ether	EPA 8260	<1.0	ug/L	MQS	10/20/2008
trans-1,2-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	10/20/2008
1,1-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	10/20/2008
2-Butanone	EPA 8260	<25	ug/L	MQS	10/20/2008
2,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	10/20/2008
cis-1,2-Dichloroethene	EPA 8260	6.2	ug/L	MQS	10/20/2008
Chloroform	EPA 8260	<1.0	ug/L	MQS	10/20/2008
Bromochloromethane	EPA 8260	<1.0	ug/L	MQS	10/20/2008
Tetrahydrofuran	EPA 8260	<10	ug/L	MQS	10/20/2008
1,1,1-Trichloroethane	EPA 8260	<1.0	ug/L	MQS	10/20/2008
1,1-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	10/20/2008
Carbon Tetrachloride	EPA 8260	<1.0	ug/L	MQS	10/20/2008
1,2-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	10/20/2008
Benzene	EPA 8260	<1.0	ug/L	MQS	10/20/2008
Trichloroethene	EPA 8260	<1.0	ug/L	MQS	10/20/2008
1,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	10/20/2008
Bromodichloromethane	EPA 8260	<1.0	ug/L	MQS	10/20/2008
Dibromomethane	EPA 8260	<1.0	ug/L	MQS	10/20/2008
4-Methyl-2-Pentanone	EPA 8260	<25	ug/L	MQS	10/20/2008
cis-1,3-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	10/20/2008
Toluene	EPA 8260	2.6	ug/L	MQS	10/20/2008
trans-1,3-Dichloropropene	EPA 8260	<2.0	ug/L	MQS	10/20/2008
1,1,2-Trichloroethane	EPA 8260	<1.0	ug/L	MQS	10/20/2008
2-Hexanone	EPA 8260	<25	ug/L	MQS	10/20/2008
1,3-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	10/20/2008
Tetrachloroethene	EPA 8260	<1.0	ug/L	MQS	10/20/2008

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Stephen Andrus

Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **10/09/2008**
Date Reported: **10/22/2008**
Work Order No.: **0810-00072**

Sample ID: **ML - 3B** Sample No.: **002**

Sample Date: **10/08/2008**

Test Performed	Method	Results	Units	Tech	Analysis Date
Dibromochloromethane	EPA 8260	<1.0	ug/L	MQS	10/20/2008
1,2-Dibromoethane (EDB)	EPA 8260	<2.0	ug/L	MQS	10/20/2008
Chlorobenzene	EPA 8260	<1.0	ug/L	MQS	10/20/2008
1,1,1,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	10/20/2008
Ethylbenzene	EPA 8260	<1.0	ug/L	MQS	10/20/2008
m&p-Xylene	EPA 8260	<2.0	ug/L	MQS	10/20/2008
o-Xylene	EPA 8260	<1.0	ug/L	MQS	10/20/2008
Styrene	EPA 8260	<1.0	ug/L	MQS	10/20/2008
Bromoform	EPA 8260	<2.0	ug/L	MQS	10/20/2008
Isopropylbenzene	EPA 8260	<1.0	ug/L	MQS	10/20/2008
1,1,2,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	10/20/2008
1,2,3-Trichloropropane	EPA 8260	<1.0	ug/L	MQS	10/20/2008
Bromobenzene	EPA 8260	<1.0	ug/L	MQS	10/20/2008
N-Propylbenzene	EPA 8260	<1.0	ug/L	MQS	10/20/2008
2-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	10/20/2008
1,3,5-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	10/20/2008
4-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	10/20/2008
tert-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	10/20/2008
1,2,4-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	10/20/2008
sec-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	10/20/2008
p-Isopropyltoluene	EPA 8260	<1.0	ug/L	MQS	10/20/2008
1,3-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	10/20/2008
1,4-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	10/20/2008
n-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	10/20/2008
1,2-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	10/20/2008
1,2-Dibromo-3-Chloropropane	EPA 8260	<5.0	ug/L	MQS	10/20/2008
1,2,4-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	10/20/2008
Hexachlorobutadiene	EPA 8260	<1.0	ug/L	MQS	10/20/2008
Naphthalene	EPA 8260	<2.0	ug/L	MQS	10/20/2008
1,2,3-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	10/20/2008
Surrogates:	EPA 8260				
***1,2-Dichloroethane-D4	EPA 8260	83.1	% R	MQS	10/20/2008
***Toluene-D8	EPA 8260	97.4	% R	MQS	10/20/2008
***4-Bromofluorobenzene	EPA 8260	96.3	% R	MQS	10/20/2008
Preparation	EPA 5030B	1.0	CF	MQS	10/20/2008

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Date Received: **10/09/2008**
Date Reported: **10/22/2008**
Work Order No.: **0810-00072**

Sample ID: **ML - 3C** Sample No.: **003**

Sample Date: **10/08/2008**

Test Performed	Method	Results	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260			MQS	10/20/2008
Dichlorodifluoromethane	EPA 8260	<2.0	ug/L	MQS	10/20/2008
Chloromethane	EPA 8260	<2.0	ug/L	MQS	10/20/2008
Vinyl Chloride	EPA 8260	<1.0	ug/L	MQS	10/20/2008
Bromomethane	EPA 8260	<2.0	ug/L	MQS	10/20/2008
Chloroethane	EPA 8260	<1.0	ug/L	MQS	10/20/2008
Trichlorofluoromethane	EPA 8260	<2.0	ug/L	MQS	10/20/2008
Diethylether	EPA 8260	<5.0	ug/L	MQS	10/20/2008
Acetone	EPA 8260	<25	ug/L	MQS	10/20/2008
1,1-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	10/20/2008
Dichloromethane	EPA 8260	<2.0	ug/L	MQS	10/20/2008
Methyl-Tert-Butyl-Ether	EPA 8260	<1.0	ug/L	MQS	10/20/2008
trans-1,2-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	10/20/2008
1,1-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	10/20/2008
2-Butanone	EPA 8260	<25	ug/L	MQS	10/20/2008
2,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	10/20/2008
cis-1,2-Dichloroethene	EPA 8260	1.0	ug/L	MQS	10/20/2008
Chloroform	EPA 8260	<1.0	ug/L	MQS	10/20/2008
Bromochloromethane	EPA 8260	<1.0	ug/L	MQS	10/20/2008
Tetrahydrofuran	EPA 8260	<10	ug/L	MQS	10/20/2008
1,1,1-Trichloroethane	EPA 8260	<1.0	ug/L	MQS	10/20/2008
1,1-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	10/20/2008
Carbon Tetrachloride	EPA 8260	<1.0	ug/L	MQS	10/20/2008
1,2-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	10/20/2008
Benzene	EPA 8260	<1.0	ug/L	MQS	10/20/2008
Trichloroethene	EPA 8260	<1.0	ug/L	MQS	10/20/2008
1,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	10/20/2008
Bromodichloromethane	EPA 8260	<1.0	ug/L	MQS	10/20/2008
Dibromomethane	EPA 8260	<1.0	ug/L	MQS	10/20/2008
4-Methyl-2-Pentanone	EPA 8260	<25	ug/L	MQS	10/20/2008
cis-1,3-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	10/20/2008
Toluene	EPA 8260	3.1	ug/L	MQS	10/20/2008
trans-1,3-Dichloropropene	EPA 8260	<2.0	ug/L	MQS	10/20/2008
1,1,2-Trichloroethane	EPA 8260	<1.0	ug/L	MQS	10/20/2008
2-Hexanone	EPA 8260	<25	ug/L	MQS	10/20/2008
1,3-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	10/20/2008
Tetrachloroethene	EPA 8260	<1.0	ug/L	MQS	10/20/2008

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ANALYTICAL REPORT

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Stephen Andrus

Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **10/09/2008**
Date Reported: **10/22/2008**
Work Order No.: **0810-00072**

Sample ID: **ML - 3C** Sample No.: **003**

Sample Date: **10/08/2008**

Test Performed	Method	Results	Units	Tech	Analysis Date
Dibromochloromethane	EPA 8260	<1.0	ug/L	MQS	10/20/2008
1,2-Dibromoethane (EDB)	EPA 8260	<2.0	ug/L	MQS	10/20/2008
Chlorobenzene	EPA 8260	<1.0	ug/L	MQS	10/20/2008
1,1,1,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	10/20/2008
Ethylbenzene	EPA 8260	<1.0	ug/L	MQS	10/20/2008
m&p-Xylene	EPA 8260	<2.0	ug/L	MQS	10/20/2008
o-Xylene	EPA 8260	<1.0	ug/L	MQS	10/20/2008
Styrene	EPA 8260	<1.0	ug/L	MQS	10/20/2008
Bromoform	EPA 8260	<2.0	ug/L	MQS	10/20/2008
Isopropylbenzene	EPA 8260	<1.0	ug/L	MQS	10/20/2008
1,1,2,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	10/20/2008
1,2,3-Trichloropropane	EPA 8260	<1.0	ug/L	MQS	10/20/2008
Bromobenzene	EPA 8260	<1.0	ug/L	MQS	10/20/2008
N-Propylbenzene	EPA 8260	<1.0	ug/L	MQS	10/20/2008
2-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	10/20/2008
1,3,5-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	10/20/2008
4-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	10/20/2008
tert-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	10/20/2008
1,2,4-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	10/20/2008
sec-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	10/20/2008
p-Isopropyltoluene	EPA 8260	<1.0	ug/L	MQS	10/20/2008
1,3-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	10/20/2008
1,4-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	10/20/2008
n-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	10/20/2008
1,2-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	10/20/2008
1,2-Dibromo-3-Chloropropane	EPA 8260	<5.0	ug/L	MQS	10/20/2008
1,2,4-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	10/20/2008
Hexachlorobutadiene	EPA 8260	<1.0	ug/L	MQS	10/20/2008
Naphthalene	EPA 8260	<2.0	ug/L	MQS	10/20/2008
1,2,3-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	10/20/2008
Surrogates:	EPA 8260				
***1,2-Dichloroethane-D4	EPA 8260	86.2	% R	MQS	10/20/2008
***Toluene-D8	EPA 8260	98.3	% R	MQS	10/20/2008
***4-Bromofluorobenzene	EPA 8260	94.6	% R	MQS	10/20/2008
Preparation	EPA 5030B	1.0	CF	MQS	10/20/2008

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Project Name.: **Charbert - NFA**
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Date Received: **10/09/2008**
Date Reported: **10/22/2008**
Work Order No.: **0810-00072**

Sample ID: **ML - 3D** Sample No.: **004**

Sample Date: **10/08/2008**

Test Performed	Method	Results	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260			MQS	10/20/2008
Dichlorodifluoromethane	EPA 8260	<100	ug/L	MQS	10/20/2008
Chloromethane	EPA 8260	<100	ug/L	MQS	10/20/2008
Vinyl Chloride	EPA 8260	<50	ug/L	MQS	10/20/2008
Bromomethane	EPA 8260	<100	ug/L	MQS	10/20/2008
Chloroethane	EPA 8260	<50	ug/L	MQS	10/20/2008
Trichlorofluoromethane	EPA 8260	<100	ug/L	MQS	10/20/2008
Diethylether	EPA 8260	<250	ug/L	MQS	10/20/2008
Acetone	EPA 8260	<1300	ug/L	MQS	10/20/2008
1,1-Dichloroethene	EPA 8260	<50	ug/L	MQS	10/20/2008
Dichloromethane	EPA 8260	<100	ug/L	MQS	10/20/2008
Methyl-Tert-Butyl-Ether	EPA 8260	<50	ug/L	MQS	10/20/2008
trans-1,2-Dichloroethene	EPA 8260	<50	ug/L	MQS	10/20/2008
1,1-Dichloroethane	EPA 8260	<50	ug/L	MQS	10/20/2008
2-Butanone	EPA 8260	<1300	ug/L	MQS	10/20/2008
2,2-Dichloropropane	EPA 8260	<50	ug/L	MQS	10/20/2008
cis-1,2-Dichloroethene	EPA 8260	82	ug/L	MQS	10/20/2008
Chloroform	EPA 8260	<50	ug/L	MQS	10/20/2008
Bromochloromethane	EPA 8260	<50	ug/L	MQS	10/20/2008
Tetrahydrofuran	EPA 8260	<500	ug/L	MQS	10/20/2008
1,1,1-Trichloroethane	EPA 8260	<50	ug/L	MQS	10/20/2008
1,1-Dichloropropene	EPA 8260	<50	ug/L	MQS	10/20/2008
Carbon Tetrachloride	EPA 8260	<50	ug/L	MQS	10/20/2008
1,2-Dichloroethane	EPA 8260	<50	ug/L	MQS	10/20/2008
Benzene	EPA 8260	<50	ug/L	MQS	10/20/2008
Trichloroethene	EPA 8260	<50	ug/L	MQS	10/20/2008
1,2-Dichloropropane	EPA 8260	<50	ug/L	MQS	10/20/2008
Bromodichloromethane	EPA 8260	<50	ug/L	MQS	10/20/2008
Dibromomethane	EPA 8260	<50	ug/L	MQS	10/20/2008
4-Methyl-2-Pentanone	EPA 8260	<1300	ug/L	MQS	10/20/2008
cis-1,3-Dichloropropene	EPA 8260	<50	ug/L	MQS	10/20/2008
Toluene	EPA 8260	<50	ug/L	MQS	10/20/2008
trans-1,3-Dichloropropene	EPA 8260	<100	ug/L	MQS	10/20/2008
1,1,2-Trichloroethane	EPA 8260	<50	ug/L	MQS	10/20/2008
2-Hexanone	EPA 8260	<1300	ug/L	MQS	10/20/2008
1,3-Dichloropropane	EPA 8260	<50	ug/L	MQS	10/20/2008
Tetrachloroethene	EPA 8260	1400	ug/L	MQS	10/20/2008

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Project Name.: **Charbert - NFA**
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Date Received: **10/09/2008**
Date Reported: **10/22/2008**
Work Order No.: **0810-00072**

Sample ID: **ML - 3D** Sample No.: **004**

Sample Date: **10/08/2008**

Test Performed	Method	Results	Units	Tech	Analysis Date
Dibromochloromethane	EPA 8260	<50	ug/L	MQS	10/20/2008
1,2-Dibromoethane (EDB)	EPA 8260	<100	ug/L	MQS	10/20/2008
Chlorobenzene	EPA 8260	<50	ug/L	MQS	10/20/2008
1,1,1,2-Tetrachloroethane	EPA 8260	<50	ug/L	MQS	10/20/2008
Ethylbenzene	EPA 8260	<50	ug/L	MQS	10/20/2008
m&p-Xylene	EPA 8260	<100	ug/L	MQS	10/20/2008
o-Xylene	EPA 8260	<50	ug/L	MQS	10/20/2008
Styrene	EPA 8260	<50	ug/L	MQS	10/20/2008
Bromoform	EPA 8260	<100	ug/L	MQS	10/20/2008
Isopropylbenzene	EPA 8260	<50	ug/L	MQS	10/20/2008
1,1,2,2-Tetrachloroethane	EPA 8260	<50	ug/L	MQS	10/20/2008
1,2,3-Trichloropropane	EPA 8260	<50	ug/L	MQS	10/20/2008
Bromobenzene	EPA 8260	<50	ug/L	MQS	10/20/2008
N-Propylbenzene	EPA 8260	<50	ug/L	MQS	10/20/2008
2-Chlorotoluene	EPA 8260	<50	ug/L	MQS	10/20/2008
1,3,5-Trimethylbenzene	EPA 8260	<50	ug/L	MQS	10/20/2008
4-Chlorotoluene	EPA 8260	<50	ug/L	MQS	10/20/2008
tert-Butylbenzene	EPA 8260	<50	ug/L	MQS	10/20/2008
1,2,4-Trimethylbenzene	EPA 8260	<50	ug/L	MQS	10/20/2008
sec-Butylbenzene	EPA 8260	<50	ug/L	MQS	10/20/2008
p-Isopropyltoluene	EPA 8260	<50	ug/L	MQS	10/20/2008
1,3-Dichlorobenzene	EPA 8260	<50	ug/L	MQS	10/20/2008
1,4-Dichlorobenzene	EPA 8260	<50	ug/L	MQS	10/20/2008
n-Butylbenzene	EPA 8260	<50	ug/L	MQS	10/20/2008
1,2-Dichlorobenzene	EPA 8260	<50	ug/L	MQS	10/20/2008
1,2-Dibromo-3-Chloropropane	EPA 8260	<250	ug/L	MQS	10/20/2008
1,2,4-Trichlorobenzene	EPA 8260	<50	ug/L	MQS	10/20/2008
Hexachlorobutadiene	EPA 8260	<50	ug/L	MQS	10/20/2008
Naphthalene	EPA 8260	<100	ug/L	MQS	10/20/2008
1,2,3-Trichlorobenzene	EPA 8260	<50	ug/L	MQS	10/20/2008
Surrogates:	EPA 8260				
***1,2-Dichloroethane-D4	EPA 8260	82.9	% R	MQS	10/20/2008
***Toluene-D8	EPA 8260	97.2	% R	MQS	10/20/2008
***4-Bromofluorobenzene	EPA 8260	94.2	% R	MQS	10/20/2008
Preparation	EPA 5030B	50	CF	MQS	10/20/2008

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106 South Street
Hopkinton, MA 01748
(781) 278-4700

ANALYTICAL REPORT

GZA GeoEnvironmental, Inc.
140 Broadway
Providence, RI 02903

Stephen Andrus

Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **10/09/2008**
Date Reported: **10/22/2008**
Work Order No.: **0810-00072**

Sample ID: **Trip Blank 2** Sample No.: **005**

Sample Date: **10/08/2008**

Test Performed	Method	Results	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260			MQS	10/20/2008
Dichlorodifluoromethane	EPA 8260	<2.0	ug/L	MQS	10/20/2008
Chloromethane	EPA 8260	<2.0	ug/L	MQS	10/20/2008
Vinyl Chloride	EPA 8260	<1.0	ug/L	MQS	10/20/2008
Bromomethane	EPA 8260	<2.0	ug/L	MQS	10/20/2008
Chloroethane	EPA 8260	<1.0	ug/L	MQS	10/20/2008
Trichlorofluoromethane	EPA 8260	<2.0	ug/L	MQS	10/20/2008
Diethylether	EPA 8260	<5.0	ug/L	MQS	10/20/2008
Acetone	EPA 8260	<25	ug/L	MQS	10/20/2008
1,1-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	10/20/2008
Dichloromethane	EPA 8260	<2.0	ug/L	MQS	10/20/2008
Methyl-Tert-Butyl-Ether	EPA 8260	<1.0	ug/L	MQS	10/20/2008
trans-1,2-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	10/20/2008
1,1-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	10/20/2008
2-Butanone	EPA 8260	<25	ug/L	MQS	10/20/2008
2,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	10/20/2008
cis-1,2-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	10/20/2008
Chloroform	EPA 8260	<1.0	ug/L	MQS	10/20/2008
Bromochloromethane	EPA 8260	<1.0	ug/L	MQS	10/20/2008
Tetrahydrofuran	EPA 8260	<10	ug/L	MQS	10/20/2008
1,1,1-Trichloroethane	EPA 8260	<1.0	ug/L	MQS	10/20/2008
1,1-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	10/20/2008
Carbon Tetrachloride	EPA 8260	<1.0	ug/L	MQS	10/20/2008
1,2-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	10/20/2008
Benzene	EPA 8260	<1.0	ug/L	MQS	10/20/2008
Trichloroethene	EPA 8260	<1.0	ug/L	MQS	10/20/2008
1,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	10/20/2008
Bromodichloromethane	EPA 8260	<1.0	ug/L	MQS	10/20/2008
Dibromomethane	EPA 8260	<1.0	ug/L	MQS	10/20/2008
4-Methyl-2-Pentanone	EPA 8260	<25	ug/L	MQS	10/20/2008
cis-1,3-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	10/20/2008
Toluene	EPA 8260	<1.0	ug/L	MQS	10/20/2008
trans-1,3-Dichloropropene	EPA 8260	<2.0	ug/L	MQS	10/20/2008
1,1,2-Trichloroethane	EPA 8260	<1.0	ug/L	MQS	10/20/2008
2-Hexanone	EPA 8260	<25	ug/L	MQS	10/20/2008
1,3-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	10/20/2008
Tetrachloroethene	EPA 8260	<1.0	ug/L	MQS	10/20/2008

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Date Received: **10/09/2008**
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Work Order No.: **0810-00072**

Sample ID: **Trip Blank 2**
Sample No.: **005**
Sample Date: **10/08/2008**

Test Performed	Method	Results	Units	Tech	Analysis Date
Dibromochloromethane	EPA 8260	<1.0	ug/L	MQS	10/20/2008
1,2-Dibromoethane (EDB)	EPA 8260	<2.0	ug/L	MQS	10/20/2008
Chlorobenzene	EPA 8260	<1.0	ug/L	MQS	10/20/2008
1,1,1,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	10/20/2008
Ethylbenzene	EPA 8260	<1.0	ug/L	MQS	10/20/2008
m&p-Xylene	EPA 8260	<2.0	ug/L	MQS	10/20/2008
o-Xylene	EPA 8260	<1.0	ug/L	MQS	10/20/2008
Styrene	EPA 8260	<1.0	ug/L	MQS	10/20/2008
Bromoform	EPA 8260	<2.0	ug/L	MQS	10/20/2008
Isopropylbenzene	EPA 8260	<1.0	ug/L	MQS	10/20/2008
1,1,2,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	10/20/2008
1,2,3-Trichloropropane	EPA 8260	<1.0	ug/L	MQS	10/20/2008
Bromobenzene	EPA 8260	<1.0	ug/L	MQS	10/20/2008
N-Propylbenzene	EPA 8260	<1.0	ug/L	MQS	10/20/2008
2-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	10/20/2008
1,3,5-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	10/20/2008
4-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	10/20/2008
tert-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	10/20/2008
1,2,4-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	10/20/2008
sec-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	10/20/2008
p-Isopropyltoluene	EPA 8260	<1.0	ug/L	MQS	10/20/2008
1,3-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	10/20/2008
1,4-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	10/20/2008
n-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	10/20/2008
1,2-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	10/20/2008
1,2-Dibromo-3-Chloropropane	EPA 8260	<5.0	ug/L	MQS	10/20/2008
1,2,4-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	10/20/2008
Hexachlorobutadiene	EPA 8260	<1.0	ug/L	MQS	10/20/2008
Naphthalene	EPA 8260	<2.0	ug/L	MQS	10/20/2008
1,2,3-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	10/20/2008
Surrogates:	EPA 8260				
***1,2-Dichloroethane-D4	EPA 8260	82.2	% R	MQS	10/20/2008
***Toluene-D8	EPA 8260	97.4	% R	MQS	10/20/2008
***4-Bromofluorobenzene	EPA 8260	94.8	% R	MQS	10/20/2008
Preparation	EPA 5030B	1.0	CF	MQS	10/20/2008

GZA GeoEnvironmental, Inc.
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Hopkinton, MA 01748

EPA Method 8260 / 524.2 Aqueous Method Blank (MB) and Laboratory Control Sample/Duplicate (LCS/LCSD) Data

Method Blank			Laboratory Control Sample				Laboratory Control Sample Duplicate					
Date Analyzed:	10/20/08		Date Analyzed:	10/20/08			10/20/08					
Volatile Organics	Conc. ug/L	Acceptance Limit	Spike Concentration = 20ug/L	% Recovery	Acceptance Limits	Verdict	% Recovery	Acceptance Limits	Verdict	RPD	Limit	Verdict
dichlorodifluoromethane	< 1.0	< 1.0	dichlorodifluoromethane	170	70-130	out	152	70-130	out	11.7	<25	ok
chloromethane	< 1.0	< 1.0	chloromethane	138	70-130	out	125	70-130	ok	9.72	<25	ok
vinyl chloride	< 0.5	< 0.5	vinyl chloride	120	70-120	ok	110	70-130	ok	8.35	<25	ok
bromomethane	< 1.0	< 1.0	bromomethane	113	70-130	ok	107	70-130	ok	6.17	<25	ok
chloroethane	< 0.5	< 0.5	chloroethane	107	70-130	ok	99.4	70-130	ok	7.52	<25	ok
trichlorofluoromethane	< 1.0	< 1.0	trichlorofluoromethane	116	70-130	ok	109	70-130	ok	6.57	<25	ok
diethyl ether	< 2.5	< 2.5	diethyl ether	93.9	70-130	ok	89.3	70-130	ok	5.05	<25	ok
acetone	< 13	< 13	acetone	98.0	70-130	ok	95.8	70-130	ok	2.31	<25	ok
1,1-dichloroethene	< 0.5	< 0.5	1,1-dichloroethene	105	70-130	ok	101	70-130	ok	4.22	<25	ok
FREON-113	< 1.0	< 1.0	FREON-113	114	70-130	ok	110	70-130	ok	3.91	<25	ok
iodomethane	< 0.5	< 0.5	iodomethane	104	70-130	ok	99.6	70-130	ok	4.18	<25	ok
carbon disulfide	< 5.0	< 5.0	carbon disulfide	108	70-130	ok	111	70-130	ok	2.33	<25	ok
dichloromethane	< 1.0	< 1.0	dichloromethane	88.6	70-130	ok	86.2	70-130	ok	2.76	<25	ok
tert-butyl alcohol (TBA)	< 13	< 13	tert-butyl alcohol (TBA)	118	70-130	ok	127	70-130	ok	7.76	<25	ok
acrylonitrile	< 0.5	< 0.5	acrylonitrile	94.7	70-130	ok	83.0	70-130	ok	13.2	<25	ok
methyl-tert-butyl-ether	< 0.5	< 0.5	methyl-tert-butyl-ether	91.3	70-130	ok	83.3	70-130	ok	9.17	<25	ok
trans-1,2-dichloroethene	< 0.5	< 0.5	trans-1,2-dichloroethene	105	70-130	ok	100	70-130	ok	4.75	<25	ok
1,1-dichloroethane	< 0.5	< 0.5	1,1-dichloroethane	104	70-130	ok	98.8	70-130	ok	4.92	<25	ok
di-isopropyl ether (DIPE)	< 1.0	< 1.0	di-isopropyl ether (DIPE)	92.7	70-130	ok	88.0	70-130	ok	5.22	<25	ok
ethyl tert-butyl ether (EtBE)	< 1.0	< 1.0	ethyl tert-butyl ether (EtBE)	89.5	70-130	ok	87.0	70-130	ok	2.81	<25	ok
vinyl acetate	< 13	< 13	vinyl acetate	94.0	70-130	ok	92.4	70-130	ok	1.69	<25	ok
2-butanone	< 13	< 13	2-butanone	92.4	70-130	ok	90.8	70-130	ok	1.77	<25	ok
2,2-dichloropropane	< 0.5	< 0.5	2,2-dichloropropane	108	70-130	ok	99.6	70-130	ok	7.82	<25	ok
cis-1,2-dichloroethene	< 0.5	< 0.5	cis-1,2-dichloroethene	96.2	70-130	ok	93.0	70-130	ok	3.39	<25	ok
chloroform	< 0.5	< 0.5	chloroform	90.9	70-130	ok	88.2	70-130	ok	3.06	<25	ok
bromochloromethane	< 0.5	< 0.5	bromochloromethane	103	70-130	ok	98.2	70-130	ok	4.40	<25	ok
tetrahydrafuran	< 5.0	< 5.0	tetrahydrafuran	121	70-130	ok	119	70-130	ok	2.32	<25	ok
1,1,1-trichloroethane	< 0.5	< 0.5	1,1,1-trichloroethane	100	70-130	ok	96.6	70-130	ok	3.85	<25	ok
1,1-dichloropropene	< 0.5	< 0.5	1,1-dichloropropene	102	70-130	ok	97.1	70-130	ok	4.75	<25	ok
carbon tetrachloride	< 0.5	< 0.5	carbon tetrachloride	102	70-130	ok	98.6	70-130	ok	3.85	<25	ok
1,2-dichloroethane	< 0.5	< 0.5	1,2-dichloroethane	94.0	70-130	ok	93.0	70-130	ok	1.17	<25	ok
benzene	< 0.5	< 0.5	benzene	98.6	70-130	ok	94.8	70-130	ok	3.92	<25	ok
tert-amyl methyl ether (TAME)	< 1.0	< 1.0	tert-amyl methyl ether (TAME)	87.9	70-130	ok	86.5	70-130	ok	1.62	<25	ok
trichloroethene	< 0.5	< 0.5	trichloroethene	96.6	70-130	ok	93.2	70-130	ok	3.58	<25	ok
1,2-dichloropropane	< 0.5	< 0.5	1,2-dichloropropane	93.9	70-130	ok	92.9	70-130	ok	1.08	<25	ok
bromodichloromethane	< 0.5	< 0.5	bromodichloromethane	95.6	70-130	ok	92.9	70-130	ok	2.85	<25	ok
1,4-Dioxane	< 50	< 50	1,4-Dioxane	97.8	70-130	ok	103	70-130	ok	5.13	<25	ok
dibromomethane	< 0.5	< 0.5	dibromomethane	97.5	70-130	ok	95.7	70-130	ok	1.85	<25	ok
4-methyl-2-pentanone	< 13	< 13	4-methyl-2-pentanone	88.4	70-130	ok	87.1	70-130	ok	1.52	<25	ok
cis-1,3-dichloropropene	< 0.5	< 0.5	cis-1,3-dichloropropene	96.7	70-130	ok	94.8	70-130	ok	2.06	<25	ok
toluene	< 0.5	< 0.5	toluene	97.9	70-130	ok	94.2	70-130	ok	3.86	<25	ok
trans-1,3-dichloropropene	< 1.0	< 1.0	trans-1,3-dichloropropene	89.4	70-130	ok	88.2	70-130	ok	1.44	<25	ok
1,1,2-trichloroethane	< 0.5	< 0.5	1,1,2-trichloroethane	92.6	70-130	ok	92.5	70-130	ok	0.12	<25	ok
2-hexanone	< 13	< 13	2-hexanone	94.8	70-130	ok	93.3	70-130	ok	1.68	<25	ok
1,3-dichloropropane	< 0.5	< 0.5	1,3-dichloropropane	100	70-130	ok	96.8	70-130	ok	3.51	<25	ok
tetrachloroethene	< 0.5	< 0.5	tetrachloroethene	108	70-130	ok	105	70-130	ok	2.70	<25	ok
dibromochloromethane	< 0.5	< 0.5	dibromochloromethane	104	70-130	ok	101	70-130	ok	2.53	<25	ok
1,2-dibromoethane (EDB)	< 1.0	< 1.0	1,2-dibromoethane (EDB)	104	70-130	ok	100	70-130	ok	3.37	<25	ok
chlorobenzene	< 0.5	< 0.5	chlorobenzene	106	70-130	ok	102	70-130	ok	3.64	<25	ok
1,1,1,2-tetrachloroethane	< 0.5	< 0.5	1,1,1,2-tetrachloroethane	102	70-130	ok	99.8	70-130	ok	2.48	<25	ok
ethylbenzene	< 0.5	< 0.5	ethylbenzene	103	70-130	ok	100	70-130	ok	2.86	<25	ok
1,1,2,2-tetrachloroethane	< 0.5	< 0.5	1,1,2,2-tetrachloroethane	92.4	70-130	ok	91.3	70-130	ok	1.14	<25	ok
m&p-xylene	< 1.0	< 1.0	m&p-xylene	102	70-130	ok	99.9	70-130	ok	1.76	<25	ok
o-xylene	< 0.5	< 0.5	o-xylene	95.4	70-130	ok	93.5	70-130	ok	2.06	<25	ok
styrene	< 0.5	< 0.5	styrene	99.1	70-130	ok	96.4	70-130	ok	2.76	<25	ok
bromoform	< 1.0	< 1.0	bromoform	97.9	70-130	ok	95.8	70-130	ok	2.19	<25	ok
isopropylbenzene	< 0.5	< 0.5	isopropylbenzene	115	70-130	ok	112	70-130	ok	3.35	<25	ok
1,2,3-trichloropropane	< 0.5	< 0.5	1,2,3-trichloropropane	89.5	70-130	ok	86.3	70-130	ok	3.69	<25	ok
bromobenzene	< 0.5	< 0.5	bromobenzene	97.0	70-130	ok	95.4	70-130	ok	1.67	<25	ok
n-propylbenzene	< 0.5	< 0.5	n-propylbenzene	103	70-130	ok	96.8	70-130	ok	6.08	<25	ok
2-chlorotoluene	< 0.5	< 0.5	2-chlorotoluene	95.3	70-130	ok	97.0	70-130	ok	1.80	<25	ok
1,3,5-trimethylbenzene	< 0.5	< 0.5	1,3,5-trimethylbenzene	99.0	70-130	ok	97.2	70-130	ok	1.83	<25	ok
trans-1,4-dichloro-2-butene	< 1.0	< 1.0	trans-1,4-dichloro-2-butene	86.4	70-130	ok	90.9	70-130	ok	5.11	<25	ok
4-chlorotoluene	< 0.5	< 0.5	4-chlorotoluene	100.0	70-130	ok	95.3	70-130	ok	4.82	<25	ok
tert-butyl-benzene	< 0.5	< 0.5	tert-butyl-benzene	120	70-130	ok	116	70-130	ok	2.85	<25	ok
1,2,4-trimethylbenzene	< 0.5	< 0.5	1,2,4-trimethylbenzene	96.4	70-130	ok	93.2	70-130	ok	3.44	<25	ok
sec-butyl-benzene	< 0.5	< 0.5	sec-butyl-benzene	99.7	70-130	ok	93.1	70-130	ok	6.92	<25	ok
p-isopropyltoluene	< 0.5	< 0.5	p-isopropyltoluene	100	70-130	ok	96.8	70-130	ok	3.27	<25	ok
1,3-dichlorobenzene	< 0.5	< 0.5	1,3-dichlorobenzene	98.3	70-130	ok	96.1	70-130	ok	2.32	<25	ok
1,4-dichlorobenzene	< 0.5	< 0.5	1,4-dichlorobenzene	99.0	70-130	ok	95.9	70-130	ok	3.20	<25	ok
n-butylbenzene	< 0.5	< 0.5	n-butylbenzene	95.7	70-130	ok	92.1	70-130	ok	3.83	<25	ok
1,2-dichlorobenzene	< 0.5	< 0.5	1,2-dichlorobenzene	95.5	70-130	ok	97.0	70-130	ok	1.56	<25	ok
1,2-dibromo-3-chloropropane	< 2.5	< 2.5	1,2-dibromo-3-chloropropane	89.7	70-130	ok	90.1	70-130	ok	0.46	<25	ok
1,2,4-trichlorobenzene	< 0.5	< 0.5	1,2,4-trichlorobenzene	96.6	70-130	ok	95.7	70-130	ok	0.94	<25	ok
hexachlorobutadiene	< 0.5	< 0.5	hexachlorobutadiene	98.5	70-130	ok	96.3	70-130	ok	2.34	<25	ok
naphthalene	< 1.0	< 1.0	naphthalene	91.1	70-130	ok	92.3	70-130	ok	1.28	<25	ok
1,2,3-trichlorobenzene	< 0.5	< 0.5	1,2,3-trichlorobenzene	93.2	70-130	ok	93.5	70-130	ok	0.32	<25	ok

Surrogates:	Recovery (%)	Acceptance Limits	Surrogates:	Recovery (%)	Acceptance Limits	Verdict	Recovery (%)	Acceptance Limits	Verdict	RPD	Limit	Verdict
DIBROMOFLUOROMETHANE	96.2	70-130	DIBROMOFLUOROMETHANE	99.2	70-130	ok	96.2	70-130	ok	3.08	<25	ok
1,2-DICHLOROETHANE-D4	83.6	70-130	1,2-DICHLOROETHANE-D4	93.3	70-130	ok	92.5	70-130	ok	0.88	<25	ok
TOLUENE-D8	97.7	70-130	TOLUENE-D8	97.4	70-130	ok	96.6	70-130	ok	0.74	<25	ok
4-BROMOFLUOROBENZENE	94.1	70-130	4-BROMOFLUOROBENZENE	97.1	70-130	ok	97.9	70-130	ok	0.80	<25	ok
1,2-DICHLOROBENZENE-D4	92.8	70-130	1,2-DICHLOROBENZENE-D4	92.6	70-130	ok	94.6	70-130	ok	2.16	<25	ok

Instrument: HP GC/MS "S"

CHAIN-OF-CUSTODY RECORD

W.O. # 810-00072 (for lab use only)

Sample I.D.	Date/Time Sampled	Matrix (A=Air, S=Soil, GW=Ground W., SW=Surface W., WW=Waste W., DW=Drinking W., P=Product, Other (specify))	ANALYSIS REQUIRED: ❑ pH ❑ Cond.	GC Methane, Ethane, Ethene	EPA 8260	EPA 8260 – 8010 List (Chlor.)	EPA 8260 – 8021 list	EPA 8021 – 8020 List (BTEX)	EPA 524.2 DW VOCs	EPA 624 WW VOCs	❑ 601 ❑ 602 WW VOCs	EPA 8270 FULL SVOCs	EPA 8270 ❑ PAH ❑ A ❑ BN	EPA 625 WW SVOCs	EPA 8082–PCBs	EPA 8081–Pest	TPH–GC (Mod. 8100)	TPH–GC w/FING.	EPH (MA DEP)	VPH (MA DEP)	Metals ❑ PPM–13 ❑ R–8	MCP 14 Metals (MA)	Metals (List Below)**	TCLP – Specify Below	SPLP – Specify Below	EPA 300 ❑ Cl ❑ SO4	EPA 300 ❑ NO2 ❑ NO3	Total # of Cont.	Note #
ML-3A	10/08/08	GW			X																							3	
ML-3B					X																							3	
ML-3C					X																							3	
ML-3D					X																							3	
Trip Blank 2					X																							3	
PRESERVATIVE (Cl - HCl, M=Methanol, N - HNO3, S - H2SO4, Na - NaOH, O - Other)*					Cl																								
CONTAINER TYPE (P-Plastic, G-Glass, V-Vial, T-Teflon, O-Other)*					V																								

RELINQUISHED BY: (AFFILIATION) DATE/TIME RECEIVED BY: (AFFILIATION)
10/8/08 15:45 10/9/08

RELINQUISHED BY: (AFFILIATION) DATE/TIME RECEIVED BY: (AFFILIATION)
10/9/08 1205 10/9/08

RELINQUISHED BY: (AFFILIATION) DATE/TIME RECEIVED BY: (AFFILIATION)
1905

NOTES: (Unless otherwise noted, all samples have been refrigerated to 4° C)
*Specify "Other" preservatives and containers types in this space.

PROJECT MANAGER: Steve Andras EXT: 2790

TURNAROUND TIME: (Standard) Rush ___ Days, Approved by ___ LAB USE: TEMP. OF COOLER 2.9 °C Temp Blank 08(2 Cooler Air ___

10/9 LG 03.00 GZA FILE NO: 31795-12 TASK NO: ___ P.O. NO. ___

PROJECT Charfert Bedrock Workplan

LOCATION Alton RI

COLLECTOR(S) RAC SHEET 1 OF 1

GZA GeoEnvironmental, Inc.
Labaratory Division

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(781) 278-4700
FAX (508) 435-9912

GZA GeoEnvironmental, Inc.
106 South Street
Hopkinton, MA 01748
(781) 278-4700

Laboratory Identification Numbers:
MA and ME: **MA092** NH: **2028**
CT: **PH0579** RI: **LAO00236**
NELAC - NYS DOH: **11063**

Revised 5/17/10

ANALYTICAL REPORT

GZA GeoEnvironmental, Inc.
530 Broadway
Providence, RI 02909

Richard Carlone

Project No.: **03.0032795.35**
Work Order No.: **1004-00230**
Date Received: **04/27/2010**
Date Reported: **05/07/2010**

SAMPLE INFORMATION

Date Sampled	Matrix	Laboratory ID	Sample ID
04/26/2010	Aqueous	1004-00230 001	GZ-ML-1-1
04/26/2010	Aqueous	1004-00230 002	GZ-ML-1-2
04/26/2010	Aqueous	1004-00230 003	GZ-ML-1-3
04/26/2010	Aqueous	1004-00230 004	GZ-ML-2-1
04/26/2010	Aqueous	1004-00230 005	GZ-ML-2-2
04/26/2010	Aqueous	1004-00230 006	GZ-ML-2-3
04/26/2010	Aqueous	1004-00230 007	GZ-ML-3-1
04/26/2010	Aqueous	1004-00230 008	GZ-ML-3-2
04/26/2010	Aqueous	1004-00230 009	GZ-ML-3-3
04/26/2010	Aqueous	1004-00230 010	TBLK 042610
04/26/2010	Aqueous	1004-00230 011	TBLK 2 042610

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A N A L Y T I C A L R E P O R T

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Project Name.: **Phase II Bedrock - Charbert**
Project No.: **03.0032795.35**

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PROJECT NARRATIVE:

1. Sample Receipt

The samples were received on 04/27/10 via _x_GZA courier, __EC, __FEDEX, or ___hand delivered. The temperature of the __temperature blank/_x_cooler air, was 1.7 & 3.9 degrees C. The temperature requirement for most analyses is above freezing to 6 degrees C. The samples were received intact for all requested analyses.

The chain of custody indicates that the samples, when required, were chemically preserved in accordance with the method they reference.

Sample GZ-ML-1-3 was received in the laboratory with a pH of approximately 5, which is above the method requirement of pH less than 2. The samples were acidified to a pH of less than 2 by the addition of 1.0 mL of nitric acid by LLZ on 04/29/10 at 10 am. A period of time greater than 24 hours elapsed prior to digestion.

2. EPA Method 6010B/7470A - Metals

Attach QC 6010B 05/03/10 - Aqueous
Attach QC 7470A 04/29/10 - Aqueous

3. EPA Method 8270 - SVOCs

The Laboratory Control Spike (LCS) (05/03/10) had method 8270 list acid analytes outside of the 30-130% QC acceptance limits and base/neutral analytes outside of the 40-140% QC acceptance limits. Specific outliers include pyridine (26.2%) and benzoic acid (20.3%).

*The surrogate P-Terphenyl-D14 in samples GZ-ML-1-1 (148%), GZ-ML-2-1 (150%), GZ-ML-2-2 (140%), GZ-ML-2-3 (143%), and GZ-ML-3-3 (149%) exceeded the acceptance criteria of 39-120% . EPA Method 8270 permits one surrogate to be outside of acceptance criteria as long as the recovery is greater than 10%.

Attach QC 8270 04/30/10 - Aqueous
Attach QC 8270 05/03/10 - Aqueous

4. Total Petroleum Hydrocarbons / Hydrocarbon Fingerprint

Samples GZ-ML-1-1 (1004-00230-001), GZ-ML-2-1 (1004-00230-004) and GZ-ML-3-3 (1004-00230-009): greater than 90% of hydrocarbon content non-petroleum based; consisting primarily of an analyte tentatively identified by GC/MS as n-butylbenzenesulfonamide.

Sample GZ-ML-1-2 (1004-00230-002): greater than 75% of hydrocarbon content non-petroleum based.

Samples GZ-ML-1-3 (1004-00230-003), GZ-ML-2-2 (1004-00230-005), GZ-ML-2-3 (1004-00230-006), and GZ-ML-
(1004-00230-008) : greater than 90% of hydrocarbon content non-petroleum based; mutiple analyte peaks present tentatively identified by GC/MS as n-butylbenzenesulfonamide and carboxylic acids.

Sample GZ-ML-3-1 (1004-00230-007): no hydrocarbons detected above the reporting limit.

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5. EPA Method 8260 - VOCs

The elevated reporting limits for sample GZ-ML-3-1 (1004-00230-007) are due to initial dilution of the sample in order to get target compounds within the calibration range of the instrument. The dilution was based upon screening data for the sample.

Attach QC 8260 5/3/10 "S" - Aqueous

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Data Authorized By: _____

NELAC certification, as indicated by the NELAC Lab ID Number, is per analyte. For a complete list of NELAC validated analytes, please contact the laboratory.

Abbreviations:
% R = % Recovery
DF = Dilution Factor
DFS = Dilution Factor Solids
CF = Calculation Factor
DO = Diluted Out

Method Key:
Method 8260: The current version of the method is 8260B.
Method 8270: The current version of the method is 8270D.
Method 6010: The current version of the method is 6010B.

Please note that the laboratory signed copy of the chain of custody record is an integral part of the data report.

Soil data is reported on a dry weight basis unless otherwise specified.
Matrix Spike / Matrix Spike Duplicate sets are performed as per method and are reported at the end of the analytical report if assigned on the Chain of Custody.

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Date Received: **04/27/2010**
Date Reported: **05/07/2010**
Work Order No.: **1004-00230**

Sample ID: **GZ-ML-1-1** Sample No.: **001**
Sample Date: **04/26/2010**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260				MQS	05/04/2010
Dichlorodifluoromethane	EPA 8260	<2.0	2.0	ug/L	MQS	05/04/2010
Chloromethane	EPA 8260	<2.0	2.0	ug/L	MQS	05/04/2010
Vinyl Chloride	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Bromomethane	EPA 8260	<2.0	2.0	ug/L	MQS	05/04/2010
Chloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Trichlorofluoromethane	EPA 8260	<2.0	2.0	ug/L	MQS	05/04/2010
Diethylether	EPA 8260	<2.0	2.0	ug/L	MQS	05/04/2010
Acetone	EPA 8260	<25	25	ug/L	MQS	05/04/2010
1,1-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Dichloromethane	EPA 8260	<2.0	2.0	ug/L	MQS	05/04/2010
Methyl-Tert-Butyl-Ether	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
trans-1,2-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
1,1-Dichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
2-Butanone	EPA 8260	<25	25	ug/L	MQS	05/04/2010
2,2-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
cis-1,2-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Chloroform	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Bromochloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Tetrahydrofuran	EPA 8260	<10	10	ug/L	MQS	05/04/2010
1,1,1-Trichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
1,1-Dichloropropene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Carbon Tetrachloride	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
1,2-Dichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Benzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Trichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
1,2-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Bromodichloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Dibromomethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
4-Methyl-2-Pentanone	EPA 8260	<25	25	ug/L	MQS	05/04/2010
cis-1,3-Dichloropropene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Toluene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
trans-1,3-Dichloropropene	EPA 8260	<2.0	2.0	ug/L	MQS	05/04/2010
1,1,2-Trichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
2-Hexanone	EPA 8260	<25	25	ug/L	MQS	05/04/2010

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Project No.: **03.0032795.35**

Date Received: **04/27/2010**
Date Reported: **05/07/2010**
Work Order No.: **1004-00230**

Sample ID: **GZ-ML-1-1** Sample No.: **001**
Sample Date: **04/26/2010**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
1,3-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Tetrachloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Dibromochloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
1,2-Dibromoethane (EDB)	EPA 8260	<2.0	2.0	ug/L	MQS	05/04/2010
Chlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
1,1,1,2-Tetrachloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Ethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
m&p-Xylene	EPA 8260	<2.0	2.0	ug/L	MQS	05/04/2010
o-Xylene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Styrene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Bromoform	EPA 8260	<2.0	2.0	ug/L	MQS	05/04/2010
Isopropylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
1,1,2,2-Tetrachloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
1,2,3-Trichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Bromobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
N-Propylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
2-Chlorotoluene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
1,3,5-Trimethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
4-Chlorotoluene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
tert-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
1,2,4-Trimethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
sec-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
p-Isopropyltoluene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
1,3-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
1,4-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
n-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
1,2-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
1,2-Dibromo-3-Chloropropane	EPA 8260	<2.0	2.0	ug/L	MQS	05/04/2010
1,2,4-Trichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Hexachlorobutadiene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Naphthalene	EPA 8260	<2.0	2.0	ug/L	MQS	05/04/2010
1,2,3-Trichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Surrogates:	EPA 8260					
***1,2-Dichloroethane-D4	EPA 8260	95.9	70-130	% R	MQS	05/04/2010
***Toluene-D8	EPA 8260	104	70-130	% R	MQS	05/04/2010

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Sample ID: **GZ-ML-1-1** Sample No.: **001**
Sample Date: **04/26/2010**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
***4-Bromofluorobenzene	EPA 8260	98.8	70-130	% R	MQS	05/04/2010
Preparation	EPA 5030B	1.0		CF	MQS	05/03/2010
SEMI-VOLATILE ORGANICS	EPA 8270				CMG	05/03/2010
ACID FRACTION:	EPA 8270					
Phenol	EPA 8270	<10	10	ug/L	CMG	05/03/2010
2-Chlorophenol	EPA 8270	<10	10	ug/L	CMG	05/03/2010
2-Methylphenol	EPA 8270	<10	10	ug/L	CMG	05/03/2010
3&4-Methylphenol	EPA 8270	<10	10	ug/L	CMG	05/03/2010
2-Nitrophenol	EPA 8270	<10	10	ug/L	CMG	05/03/2010
2,4-Dimethylphenol	EPA 8270	<10	10	ug/L	CMG	05/03/2010
Benzoic Acid	EPA 8270	<10	10	ug/L	CMG	05/03/2010
2,4-Dichlorophenol	EPA 8270	<10	10	ug/L	CMG	05/03/2010
4-Chloro-3-Methylphenol	EPA 8270	<20	20	ug/L	CMG	05/03/2010
2,4,6-Trichlorophenol	EPA 8270	<10	10	ug/L	CMG	05/03/2010
2,4,5-Trichlorophenol	EPA 8270	<10	10	ug/L	CMG	05/03/2010
2,4-Dinitrophenol	EPA 8270	<100	100	ug/L	CMG	05/03/2010
4-Nitrophenol	EPA 8270	<50	50	ug/L	CMG	05/03/2010
4,6-Dinitro-2-Methylphenol	EPA 8270	<50	50	ug/L	CMG	05/03/2010
Pentachlorophenol	EPA 8270	<50	50	ug/L	CMG	05/03/2010
BASE-NEUTRAL FRACTION:						
n-Nitrosodimethylamine	EPA 8270	<10	10	ug/L	CMG	05/03/2010
bis(2-Chloroethyl)Ether	EPA 8270	<10	10	ug/L	CMG	05/03/2010
1,3-Dichlorobenzene	EPA 8270	<10	10	ug/L	CMG	05/03/2010
1,4-Dichlorobenzene	EPA 8270	<10	10	ug/L	CMG	05/03/2010
Benzyl Alcohol	EPA 8270	<20	20	ug/L	CMG	05/03/2010
1,2-Dichlorobenzene	EPA 8270	<10	10	ug/L	CMG	05/03/2010
bis(2-Chloroisopropyl)Ether	EPA 8270	<10	10	ug/L	CMG	05/03/2010
n-Nitrosodi-n-Propylamine	EPA 8270	<10	10	ug/L	CMG	05/03/2010
Hexachloroethane	EPA 8270	<10	10	ug/L	CMG	05/03/2010
Nitrobenzene	EPA 8270	<10	10	ug/L	CMG	05/03/2010
Isophorone	EPA 8270	<10	10	ug/L	CMG	05/03/2010
bis(2-Chloroethoxy)Methane	EPA 8270	<10	10	ug/L	CMG	05/03/2010
1,2,4-Trichlorobenzene	EPA 8270	<10	10	ug/L	CMG	05/03/2010
Naphthalene	EPA 8270	<2.0	2.0	ug/L	CMG	05/03/2010
4-Chloroaniline	EPA 8270	<20	20	ug/L	CMG	05/03/2010

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Sample Date: **04/26/2010**

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Hexachlorobutadiene	EPA 8270	<10	10	ug/L	CMG	05/03/2010
2-Methylnaphthalene	EPA 8270	<2.0	2.0	ug/L	CMG	05/03/2010
Hexachlorocyclopentadiene	EPA 8270	<50	50	ug/L	CMG	05/03/2010
2-Chloronaphthalene	EPA 8270	<10	10	ug/L	CMG	05/03/2010
2-Nitroaniline	EPA 8270	<50	50	ug/L	CMG	05/03/2010
Dimethylphthalate	EPA 8270	<10	10	ug/L	CMG	05/03/2010
Acenaphthylene	EPA 8270	<2.0	2.0	ug/L	CMG	05/03/2010
2,6-Dinitrotoluene	EPA 8270	<10	10	ug/L	CMG	05/03/2010
3-Nitroaniline	EPA 8270	<50	50	ug/L	CMG	05/03/2010
Acenaphthene	EPA 8270	<2.0	2.0	ug/L	CMG	05/03/2010
Dibenzofuran	EPA 8270	<10	10	ug/L	CMG	05/03/2010
2,4-Dinitrotoluene	EPA 8270	<10	10	ug/L	CMG	05/03/2010
Diethylphthalate	EPA 8270	<10	10	ug/L	CMG	05/03/2010
Fluorene	EPA 8270	<2.0	2.0	ug/L	CMG	05/03/2010
4-Chlorophenyl Phenyl Ether	EPA 8270	<10	10	ug/L	CMG	05/03/2010
4-Nitroaniline	EPA 8270	<20	20	ug/L	CMG	05/03/2010
n-Nitrosodiphenylamine	EPA 8270	<10	10	ug/L	CMG	05/03/2010
4-Bromophenyl Phenyl Ether	EPA 8270	<10	10	ug/L	CMG	05/03/2010
Hexachlorobenzene	EPA 8270	<10	10	ug/L	CMG	05/03/2010
Phenanthrene	EPA 8270	<2.0	2.0	ug/L	CMG	05/03/2010
Anthracene	EPA 8270	<2.0	2.0	ug/L	CMG	05/03/2010
Carbazole	EPA 8270	<10	10	ug/L	CMG	05/03/2010
di-n-Butylphthalate	EPA 8270	<10	10	ug/L	CMG	05/03/2010
Fluoranthene	EPA 8270	<2.0	2.0	ug/L	CMG	05/03/2010
Pyrene	EPA 8270	<2.0	2.0	ug/L	CMG	05/03/2010
Butylbenzylphthalate	EPA 8270	<10	10	ug/L	CMG	05/03/2010
Benzo [a] Anthracene	EPA 8270	<2.0	2.0	ug/L	CMG	05/03/2010
3,3'-Dichlorobenzidine	EPA 8270	<10	10	ug/L	CMG	05/03/2010
Chrysene	EPA 8270	<2.0	2.0	ug/L	CMG	05/03/2010
bis(2-Ethylhexyl)Phthalate	EPA 8270	<10	10	ug/L	CMG	05/03/2010
di-n-Octylphthalate	EPA 8270	<10	10	ug/L	CMG	05/03/2010
Benzo [b] Fluoranthene	EPA 8270	<2.0	2.0	ug/L	CMG	05/03/2010
Benzo [k] Fluoranthene	EPA 8270	<2.0	2.0	ug/L	CMG	05/03/2010
Benzo [a] Pyrene	EPA 8270	<2.0	2.0	ug/L	CMG	05/03/2010
Indeno [1,2,3-cd] Pyrene	EPA 8270	<2.0	2.0	ug/L	CMG	05/03/2010

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Date Received: **04/27/2010**
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Sample ID: **GZ-ML-1-1** Sample No.: **001**
Sample Date: **04/26/2010**

Test Performed	Method	Results		Reporting Limit	Units	Tech	Analysis Date
Dibenzo [a,h] Anthracene	EPA 8270	<2.0		2.0	ug/L	CMG	05/03/2010
Benzo [g,h,i] Perylene	EPA 8270	<2.0		2.0	ug/L	CMG	05/03/2010
Surrogates:	EPA 8270						
***2-Fluorophenol	EPA 8270	47.3		15-110	% R	CMG	05/03/2010
***Phenol-D6	EPA 8270	37.7		15-110	% R	CMG	05/03/2010
***Nitrobenzene-D5	EPA 8270	67.6		30-130	% R	CMG	05/03/2010
***2-Fluorobiphenyl	EPA 8270	71.6		30-130	% R	CMG	05/03/2010
***2,4,6-Tribromophenol	EPA 8270	70.5		15-110	% R	CMG	05/03/2010
***P-Terphenyl-D14	EPA 8270	148	*	39-120	% R	CMG	05/03/2010
Extraction	EPA 3510C	1.0			DF	JKC	04/30/2010
TOTAL PETROLEUM HYDROCARBON	D3328/EPA 8100/					KEF	05/03/2010
Hydrocarbon Content		920		900	ug/L	KEF	05/03/2010
Surrogate:	D3328/EPA 8100						
***p-Terphenyl		66.4		40-140	% R	KEF	05/03/2010
Extraction	EPA 3510C	10			DF	JKC	04/28/2010
PRIORITY POLLUTANT METALS						LLZ	05/04/2010
Silver	EPA 6010B	<0.0050		0.0050	mg/L	LLZ	05/04/2010
Arsenic	EPA 6010B	<0.010		0.010	mg/L	LLZ	05/04/2010
Beryllium	EPA 6010B	<0.0040		0.0040	mg/L	LLZ	05/04/2010
Cadmium	EPA 6010B	<0.0050		0.0050	mg/L	LLZ	05/04/2010
Chromium	EPA 6010B	<0.0050		0.0050	mg/L	LLZ	05/04/2010
Copper	EPA 6010B	0.037		0.030	mg/L	LLZ	05/04/2010
Mercury	EPA 7470A	<0.00020		0.00020	mg/L	GDD	04/30/2010
Nickel	EPA 6010B	<0.010		0.010	mg/L	LLZ	05/04/2010
Lead	EPA 6010B	<0.010		0.010	mg/L	LLZ	05/04/2010
Antimony	EPA 6010B	<0.025		0.025	mg/L	LLZ	05/04/2010
Selenium	EPA 6010B	<0.025		0.025	mg/L	LLZ	05/04/2010
Thallium	EPA 6010B	<0.025		0.025	mg/L	LLZ	05/04/2010
Zinc	EPA 6010B	0.013		0.010	mg/L	LLZ	05/04/2010
Iron	EPA 6010B	1.1		0.025	mg/L	LLZ	05/04/2010
Manganese	EPA 6010B	0.10		0.0050	mg/L	LLZ	05/04/2010

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ANALYTICAL REPORT

GZA GeoEnvironmental, Inc.
530 Broadway
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Richard Carlone

Project Name.: **Phase II Bedrock - Charbert**
Project No.: **03.0032795.35**

Date Received: **04/27/2010**
Date Reported: **05/07/2010**
Work Order No.: **1004-00230**

Sample ID: **GZ-ML-1-2** Sample No.: **002**
Sample Date: **04/26/2010**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260				MQS	05/04/2010
Dichlorodifluoromethane	EPA 8260	<2.0	2.0	ug/L	MQS	05/04/2010
Chloromethane	EPA 8260	<2.0	2.0	ug/L	MQS	05/04/2010
Vinyl Chloride	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Bromomethane	EPA 8260	<2.0	2.0	ug/L	MQS	05/04/2010
Chloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Trichlorofluoromethane	EPA 8260	<2.0	2.0	ug/L	MQS	05/04/2010
Diethylether	EPA 8260	<2.0	2.0	ug/L	MQS	05/04/2010
Acetone	EPA 8260	<25	25	ug/L	MQS	05/04/2010
1,1-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Dichloromethane	EPA 8260	<2.0	2.0	ug/L	MQS	05/04/2010
Methyl-Tert-Butyl-Ether	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
trans-1,2-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
1,1-Dichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
2-Butanone	EPA 8260	<25	25	ug/L	MQS	05/04/2010
2,2-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
cis-1,2-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Chloroform	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Bromochloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Tetrahydrofuran	EPA 8260	<10	10	ug/L	MQS	05/04/2010
1,1,1-Trichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
1,1-Dichloropropene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Carbon Tetrachloride	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
1,2-Dichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Benzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Trichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
1,2-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Bromodichloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Dibromomethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
4-Methyl-2-Pentanone	EPA 8260	<25	25	ug/L	MQS	05/04/2010
cis-1,3-Dichloropropene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Toluene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
trans-1,3-Dichloropropene	EPA 8260	<2.0	2.0	ug/L	MQS	05/04/2010
1,1,2-Trichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
2-Hexanone	EPA 8260	<25	25	ug/L	MQS	05/04/2010

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A N A L Y T I C A L R E P O R T

GZA GeoEnvironmental, Inc.
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Providence, RI 02909

Richard Carlone

Project Name.: **Phase II Bedrock - Charbert**
Project No.: **03.0032795.35**

Date Received: **04/27/2010**
Date Reported: **05/07/2010**
Work Order No.: **1004-00230**

Sample ID: **GZ-ML-1-2** Sample No.: **002**
Sample Date: **04/26/2010**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
1,3-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Tetrachloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Dibromochloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
1,2-Dibromoethane (EDB)	EPA 8260	<2.0	2.0	ug/L	MQS	05/04/2010
Chlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
1,1,1,2-Tetrachloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Ethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
m&p-Xylene	EPA 8260	<2.0	2.0	ug/L	MQS	05/04/2010
o-Xylene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Styrene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Bromoform	EPA 8260	<2.0	2.0	ug/L	MQS	05/04/2010
Isopropylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
1,1,2,2-Tetrachloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
1,2,3-Trichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Bromobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
N-Propylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
2-Chlorotoluene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
1,3,5-Trimethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
4-Chlorotoluene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
tert-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
1,2,4-Trimethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
sec-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
p-Isopropyltoluene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
1,3-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
1,4-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
n-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
1,2-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
1,2-Dibromo-3-Chloropropane	EPA 8260	<2.0	2.0	ug/L	MQS	05/04/2010
1,2,4-Trichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Hexachlorobutadiene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Naphthalene	EPA 8260	<2.0	2.0	ug/L	MQS	05/04/2010
1,2,3-Trichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Surrogates:	EPA 8260					
***1,2-Dichloroethane-D4	EPA 8260	94.1	70-130	% R	MQS	05/04/2010
***Toluene-D8	EPA 8260	106	70-130	% R	MQS	05/04/2010

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Project Name.: **Phase II Bedrock - Charbert**
Project No.: **03.0032795.35**

Date Received: **04/27/2010**
Date Reported: **05/07/2010**
Work Order No.: **1004-00230**

Sample ID: **GZ-ML-1-2** Sample No.: **002**
Sample Date: **04/26/2010**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
***4-Bromofluorobenzene	EPA 8260	94.5	70-130	% R	MQS	05/04/2010
Preparation	EPA 5030B	1.0		CF	MQS	05/03/2010
SEMI-VOLATILE ORGANICS	EPA 8270				CMG	05/03/2010
ACID FRACTION:	EPA 8270					
Phenol	EPA 8270	<10	10	ug/L	CMG	05/03/2010
2-Chlorophenol	EPA 8270	<10	10	ug/L	CMG	05/03/2010
2-Methylphenol	EPA 8270	<10	10	ug/L	CMG	05/03/2010
3&4-Methylphenol	EPA 8270	<10	10	ug/L	CMG	05/03/2010
2-Nitrophenol	EPA 8270	<10	10	ug/L	CMG	05/03/2010
2,4-Dimethylphenol	EPA 8270	<10	10	ug/L	CMG	05/03/2010
Benzoic Acid	EPA 8270	<10	10	ug/L	CMG	05/03/2010
2,4-Dichlorophenol	EPA 8270	<10	10	ug/L	CMG	05/03/2010
4-Chloro-3-Methylphenol	EPA 8270	<20	20	ug/L	CMG	05/03/2010
2,4,6-Trichlorophenol	EPA 8270	<10	10	ug/L	CMG	05/03/2010
2,4,5-Trichlorophenol	EPA 8270	<10	10	ug/L	CMG	05/03/2010
2,4-Dinitrophenol	EPA 8270	<100	100	ug/L	CMG	05/03/2010
4-Nitrophenol	EPA 8270	<50	50	ug/L	CMG	05/03/2010
4,6-Dinitro-2-Methylphenol	EPA 8270	<50	50	ug/L	CMG	05/03/2010
Pentachlorophenol	EPA 8270	<50	50	ug/L	CMG	05/03/2010
BASE-NEUTRAL FRACTION:						
n-Nitrosodimethylamine	EPA 8270	<10	10	ug/L	CMG	05/03/2010
bis(2-Chloroethyl)Ether	EPA 8270	<10	10	ug/L	CMG	05/03/2010
1,3-Dichlorobenzene	EPA 8270	<10	10	ug/L	CMG	05/03/2010
1,4-Dichlorobenzene	EPA 8270	<10	10	ug/L	CMG	05/03/2010
Benzyl Alcohol	EPA 8270	<20	20	ug/L	CMG	05/03/2010
1,2-Dichlorobenzene	EPA 8270	<10	10	ug/L	CMG	05/03/2010
bis(2-Chloroisopropyl)Ether	EPA 8270	<10	10	ug/L	CMG	05/03/2010
n-Nitrosodi-n-Propylamine	EPA 8270	<10	10	ug/L	CMG	05/03/2010
Hexachloroethane	EPA 8270	<10	10	ug/L	CMG	05/03/2010
Nitrobenzene	EPA 8270	<10	10	ug/L	CMG	05/03/2010
Isophorone	EPA 8270	<10	10	ug/L	CMG	05/03/2010
bis(2-Chloroethoxy)Methane	EPA 8270	<10	10	ug/L	CMG	05/03/2010
1,2,4-Trichlorobenzene	EPA 8270	<10	10	ug/L	CMG	05/03/2010
Naphthalene	EPA 8270	<2.0	2.0	ug/L	CMG	05/03/2010
4-Chloroaniline	EPA 8270	<20	20	ug/L	CMG	05/03/2010

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Project No.: **03.0032795.35**

Date Received: **04/27/2010**
Date Reported: **05/07/2010**
Work Order No.: **1004-00230**

Sample ID: **GZ-ML-1-2** Sample No.: **002**
Sample Date: **04/26/2010**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
Hexachlorobutadiene	EPA 8270	<10	10	ug/L	CMG	05/03/2010
2-Methylnaphthalene	EPA 8270	<2.0	2.0	ug/L	CMG	05/03/2010
Hexachlorocyclopentadiene	EPA 8270	<50	50	ug/L	CMG	05/03/2010
2-Chloronaphthalene	EPA 8270	<10	10	ug/L	CMG	05/03/2010
2-Nitroaniline	EPA 8270	<50	50	ug/L	CMG	05/03/2010
Dimethylphthalate	EPA 8270	<10	10	ug/L	CMG	05/03/2010
Acenaphthylene	EPA 8270	<2.0	2.0	ug/L	CMG	05/03/2010
2,6-Dinitrotoluene	EPA 8270	<10	10	ug/L	CMG	05/03/2010
3-Nitroaniline	EPA 8270	<50	50	ug/L	CMG	05/03/2010
Acenaphthene	EPA 8270	<2.0	2.0	ug/L	CMG	05/03/2010
Dibenzofuran	EPA 8270	<10	10	ug/L	CMG	05/03/2010
2,4-Dinitrotoluene	EPA 8270	<10	10	ug/L	CMG	05/03/2010
Diethylphthalate	EPA 8270	<10	10	ug/L	CMG	05/03/2010
Fluorene	EPA 8270	<2.0	2.0	ug/L	CMG	05/03/2010
4-Chlorophenyl Phenyl Ether	EPA 8270	<10	10	ug/L	CMG	05/03/2010
4-Nitroaniline	EPA 8270	<20	20	ug/L	CMG	05/03/2010
n-Nitrosodiphenylamine	EPA 8270	<10	10	ug/L	CMG	05/03/2010
4-Bromophenyl Phenyl Ether	EPA 8270	<10	10	ug/L	CMG	05/03/2010
Hexachlorobenzene	EPA 8270	<10	10	ug/L	CMG	05/03/2010
Phenanthrene	EPA 8270	<2.0	2.0	ug/L	CMG	05/03/2010
Anthracene	EPA 8270	<2.0	2.0	ug/L	CMG	05/03/2010
Carbazole	EPA 8270	<10	10	ug/L	CMG	05/03/2010
di-n-Butylphthalate	EPA 8270	<10	10	ug/L	CMG	05/03/2010
Fluoranthene	EPA 8270	<2.0	2.0	ug/L	CMG	05/03/2010
Pyrene	EPA 8270	<2.0	2.0	ug/L	CMG	05/03/2010
Butylbenzylphthalate	EPA 8270	<10	10	ug/L	CMG	05/03/2010
Benzo [a] Anthracene	EPA 8270	<2.0	2.0	ug/L	CMG	05/03/2010
3,3'-Dichlorobenzidine	EPA 8270	<10	10	ug/L	CMG	05/03/2010
Chrysene	EPA 8270	<2.0	2.0	ug/L	CMG	05/03/2010
bis(2-Ethylhexyl)Phthalate	EPA 8270	<10	10	ug/L	CMG	05/03/2010
di-n-Octylphthalate	EPA 8270	<10	10	ug/L	CMG	05/03/2010
Benzo [b] Fluoranthene	EPA 8270	<2.0	2.0	ug/L	CMG	05/03/2010
Benzo [k] Fluoranthene	EPA 8270	<2.0	2.0	ug/L	CMG	05/03/2010
Benzo [a] Pyrene	EPA 8270	<2.0	2.0	ug/L	CMG	05/03/2010
Indeno [1,2,3-cd] Pyrene	EPA 8270	<2.0	2.0	ug/L	CMG	05/03/2010

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Project Name.: **Phase II Bedrock - Charbert**
Project No.: **03.0032795.35**

Date Received: **04/27/2010**
Date Reported: **05/07/2010**
Work Order No.: **1004-00230**

Sample ID: **GZ-ML-1-2** Sample No.: **002**
Sample Date: **04/26/2010**

Test Performed	Method	Results		Reporting Limit	Units	Tech	Analysis Date
Dibenzo [a,h] Anthracene	EPA 8270	<2.0		2.0	ug/L	CMG	05/03/2010
Benzo [g,h,i] Perylene	EPA 8270	<2.0		2.0	ug/L	CMG	05/03/2010
Surrogates:	EPA 8270						
***2-Fluorophenol	EPA 8270	45.4		15-110	% R	CMG	05/03/2010
***Phenol-D6	EPA 8270	31.3		15-110	% R	CMG	05/03/2010
***Nitrobenzene-D5	EPA 8270	69.8		30-130	% R	CMG	05/03/2010
***2-Fluorobiphenyl	EPA 8270	69.7		30-130	% R	CMG	05/03/2010
***2,4,6-Tribromophenol	EPA 8270	71.9		15-110	% R	CMG	05/03/2010
***P-Terphenyl-D14	EPA 8270	88.7		39-120	% R	CMG	05/03/2010
Extraction	EPA 3510C	1.0			DF	JKC	04/30/2010
TOTAL PETROLEUM HYDROCARBON	D3328/EPA 8100/					KEF	04/29/2010
Hydrocarbon Content		710		200	ug/L	KEF	04/29/2010
Surrogate:	D3328/EPA 8100						
***p-Terphenyl		41.7	*	40-140	% R	KEF	04/29/2010
Extraction	EPA 3510C	1.0			DF	JKC	04/28/2010
PRIORITY POLLUTANT METALS						LLZ	05/04/2010
Silver	EPA 6010B	<0.0050		0.0050	mg/L	LLZ	05/04/2010
Arsenic	EPA 6010B	<0.010		0.010	mg/L	LLZ	05/04/2010
Beryllium	EPA 6010B	<0.0040		0.0040	mg/L	LLZ	05/04/2010
Cadmium	EPA 6010B	<0.0050		0.0050	mg/L	LLZ	05/04/2010
Chromium	EPA 6010B	0.048		0.0050	mg/L	LLZ	05/04/2010
Copper	EPA 6010B	0.039		0.030	mg/L	LLZ	05/04/2010
Mercury	EPA 7470A	<0.00020		0.00020	mg/L	GDD	04/30/2010
Nickel	EPA 6010B	<0.010		0.010	mg/L	LLZ	05/04/2010
Lead	EPA 6010B	<0.010		0.010	mg/L	LLZ	05/04/2010
Antimony	EPA 6010B	<0.025		0.025	mg/L	LLZ	05/04/2010
Selenium	EPA 6010B	<0.025		0.025	mg/L	LLZ	05/04/2010
Thallium	EPA 6010B	<0.025		0.025	mg/L	LLZ	05/04/2010
Zinc	EPA 6010B	0.026		0.010	mg/L	LLZ	05/04/2010
Iron	EPA 6010B	3.3		0.025	mg/L	LLZ	05/04/2010
Manganese	EPA 6010B	0.29		0.0050	mg/L	LLZ	05/04/2010

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Richard Carlone

Project Name.: **Phase II Bedrock - Charbert**
Project No.: **03.0032795.35**

Date Received: **04/27/2010**
Date Reported: **05/07/2010**
Work Order No.: **1004-00230**

Sample ID: **GZ-ML-1-3** Sample No.: **003**
Sample Date: **04/26/2010**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260				MQS	05/04/2010
Dichlorodifluoromethane	EPA 8260	<2.0	2.0	ug/L	MQS	05/04/2010
Chloromethane	EPA 8260	<2.0	2.0	ug/L	MQS	05/04/2010
Vinyl Chloride	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Bromomethane	EPA 8260	<2.0	2.0	ug/L	MQS	05/04/2010
Chloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Trichlorofluoromethane	EPA 8260	<2.0	2.0	ug/L	MQS	05/04/2010
Diethylether	EPA 8260	<2.0	2.0	ug/L	MQS	05/04/2010
Acetone	EPA 8260	110	25	ug/L	MQS	05/04/2010
1,1-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Dichloromethane	EPA 8260	<2.0	2.0	ug/L	MQS	05/04/2010
Methyl-Tert-Butyl-Ether	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
trans-1,2-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
1,1-Dichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
2-Butanone	EPA 8260	820	25	ug/L	MQS	05/04/2010
2,2-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
cis-1,2-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Chloroform	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Bromochloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Tetrahydrofuran	EPA 8260	<10	10	ug/L	MQS	05/04/2010
1,1,1-Trichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
1,1-Dichloropropene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Carbon Tetrachloride	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
1,2-Dichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Benzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Trichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
1,2-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Bromodichloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Dibromomethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
4-Methyl-2-Pentanone	EPA 8260	<25	25	ug/L	MQS	05/04/2010
cis-1,3-Dichloropropene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Toluene	EPA 8260	1.7	1.0	ug/L	MQS	05/04/2010
trans-1,3-Dichloropropene	EPA 8260	<2.0	2.0	ug/L	MQS	05/04/2010
1,1,2-Trichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
2-Hexanone	EPA 8260	<25	25	ug/L	MQS	05/04/2010

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A N A L Y T I C A L R E P O R T

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Richard Carlone

Project Name.: **Phase II Bedrock - Charbert**
Project No.: **03.0032795.35**

Date Received: **04/27/2010**
Date Reported: **05/07/2010**
Work Order No.: **1004-00230**

Sample ID: **GZ-ML-1-3** Sample No.: **003**
Sample Date: **04/26/2010**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
1,3-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Tetrachloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Dibromochloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
1,2-Dibromoethane (EDB)	EPA 8260	<2.0	2.0	ug/L	MQS	05/04/2010
Chlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
1,1,1,2-Tetrachloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Ethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
m&p-Xylene	EPA 8260	<2.0	2.0	ug/L	MQS	05/04/2010
o-Xylene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Styrene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Bromoform	EPA 8260	<2.0	2.0	ug/L	MQS	05/04/2010
Isopropylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
1,1,2,2-Tetrachloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
1,2,3-Trichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Bromobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
N-Propylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
2-Chlorotoluene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
1,3,5-Trimethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
4-Chlorotoluene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
tert-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
1,2,4-Trimethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
sec-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
p-Isopropyltoluene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
1,3-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
1,4-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
n-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
1,2-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
1,2-Dibromo-3-Chloropropane	EPA 8260	<2.0	2.0	ug/L	MQS	05/04/2010
1,2,4-Trichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Hexachlorobutadiene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Naphthalene	EPA 8260	<2.0	2.0	ug/L	MQS	05/04/2010
1,2,3-Trichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Surrogates:	EPA 8260					
***1,2-Dichloroethane-D4	EPA 8260	101	70-130	% R	MQS	05/04/2010
***Toluene-D8	EPA 8260	109	70-130	% R	MQS	05/04/2010

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ANALYTICAL REPORT

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Richard Carlone

Project Name.: **Phase II Bedrock - Charbert**
Project No.: **03.0032795.35**

Date Received: **04/27/2010**
Date Reported: **05/07/2010**
Work Order No.: **1004-00230**

Sample ID: **GZ-ML-1-3** Sample No.: **003**
Sample Date: **04/26/2010**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
***4-Bromofluorobenzene	EPA 8260	96.3	70-130	% R	MQS	05/04/2010
Preparation	EPA 5030B	1.0		CF	MQS	05/03/2010
SEMI-VOLATILE ORGANICS	EPA 8270				CMG	05/03/2010
ACID FRACTION:	EPA 8270					
Phenol	EPA 8270	<100	100	ug/L	CMG	05/03/2010
2-Chlorophenol	EPA 8270	<100	100	ug/L	CMG	05/03/2010
2-Methylphenol	EPA 8270	<100	100	ug/L	CMG	05/03/2010
3&4-Methylphenol	EPA 8270	<100	100	ug/L	CMG	05/03/2010
2-Nitrophenol	EPA 8270	<100	100	ug/L	CMG	05/03/2010
2,4-Dimethylphenol	EPA 8270	<100	100	ug/L	CMG	05/03/2010
Benzoic Acid	EPA 8270	<100	100	ug/L	CMG	05/03/2010
2,4-Dichlorophenol	EPA 8270	<100	100	ug/L	CMG	05/03/2010
4-Chloro-3-Methylphenol	EPA 8270	<200	200	ug/L	CMG	05/03/2010
2,4,6-Trichlorophenol	EPA 8270	<100	100	ug/L	CMG	05/03/2010
2,4,5-Trichlorophenol	EPA 8270	<100	100	ug/L	CMG	05/03/2010
2,4-Dinitrophenol	EPA 8270	<1000	1000	ug/L	CMG	05/03/2010
4-Nitrophenol	EPA 8270	<500	500	ug/L	CMG	05/03/2010
4,6-Dinitro-2-Methylphenol	EPA 8270	<500	500	ug/L	CMG	05/03/2010
Pentachlorophenol	EPA 8270	<500	500	ug/L	CMG	05/03/2010
BASE-NEUTRAL FRACTION:						
n-Nitrosodimethylamine	EPA 8270	<100	100	ug/L	CMG	05/03/2010
bis(2-Chloroethyl)Ether	EPA 8270	<100	100	ug/L	CMG	05/03/2010
1,3-Dichlorobenzene	EPA 8270	<100	100	ug/L	CMG	05/03/2010
1,4-Dichlorobenzene	EPA 8270	<100	100	ug/L	CMG	05/03/2010
Benzyl Alcohol	EPA 8270	<200	200	ug/L	CMG	05/03/2010
1,2-Dichlorobenzene	EPA 8270	<100	100	ug/L	CMG	05/03/2010
bis(2-Chloroisopropyl)Ether	EPA 8270	<100	100	ug/L	CMG	05/03/2010
n-Nitrosodi-n-Propylamine	EPA 8270	120	100	ug/L	CMG	05/03/2010
Hexachloroethane	EPA 8270	<100	100	ug/L	CMG	05/03/2010
Nitrobenzene	EPA 8270	<100	100	ug/L	CMG	05/03/2010
Isophorone	EPA 8270	<100	100	ug/L	CMG	05/03/2010
bis(2-Chloroethoxy)Methane	EPA 8270	<100	100	ug/L	CMG	05/03/2010
1,2,4-Trichlorobenzene	EPA 8270	<100	100	ug/L	CMG	05/03/2010
Naphthalene	EPA 8270	<20	20	ug/L	CMG	05/03/2010
4-Chloroaniline	EPA 8270	<200	200	ug/L	CMG	05/03/2010

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Date Reported: **05/07/2010**
Work Order No.: **1004-00230**

Sample ID: **GZ-ML-1-3** Sample No.: **003**
Sample Date: **04/26/2010**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
Hexachlorobutadiene	EPA 8270	<100	100	ug/L	CMG	05/03/2010
2-Methylnaphthalene	EPA 8270	<20	20	ug/L	CMG	05/03/2010
Hexachlorocyclopentadiene	EPA 8270	<500	500	ug/L	CMG	05/03/2010
2-Chloronaphthalene	EPA 8270	<100	100	ug/L	CMG	05/03/2010
2-Nitroaniline	EPA 8270	<500	500	ug/L	CMG	05/03/2010
Dimethylphthalate	EPA 8270	<100	100	ug/L	CMG	05/03/2010
Acenaphthylene	EPA 8270	<20	20	ug/L	CMG	05/03/2010
2,6-Dinitrotoluene	EPA 8270	<100	100	ug/L	CMG	05/03/2010
3-Nitroaniline	EPA 8270	<500	500	ug/L	CMG	05/03/2010
Acenaphthene	EPA 8270	<20	20	ug/L	CMG	05/03/2010
Dibenzofuran	EPA 8270	<100	100	ug/L	CMG	05/03/2010
2,4-Dinitrotoluene	EPA 8270	<100	100	ug/L	CMG	05/03/2010
Diethylphthalate	EPA 8270	<100	100	ug/L	CMG	05/03/2010
Fluorene	EPA 8270	<20	20	ug/L	CMG	05/03/2010
4-Chlorophenyl Phenyl Ether	EPA 8270	<100	100	ug/L	CMG	05/03/2010
4-Nitroaniline	EPA 8270	<200	200	ug/L	CMG	05/03/2010
n-Nitrosodiphenylamine	EPA 8270	<100	100	ug/L	CMG	05/03/2010
4-Bromophenyl Phenyl Ether	EPA 8270	<100	100	ug/L	CMG	05/03/2010
Hexachlorobenzene	EPA 8270	<100	100	ug/L	CMG	05/03/2010
Phenanthrene	EPA 8270	<20	20	ug/L	CMG	05/03/2010
Anthracene	EPA 8270	<20	20	ug/L	CMG	05/03/2010
Carbazole	EPA 8270	<100	100	ug/L	CMG	05/03/2010
di-n-Butylphthalate	EPA 8270	<100	100	ug/L	CMG	05/03/2010
Fluoranthene	EPA 8270	<20	20	ug/L	CMG	05/03/2010
Pyrene	EPA 8270	<20	20	ug/L	CMG	05/03/2010
Butylbenzylphthalate	EPA 8270	<100	100	ug/L	CMG	05/03/2010
Benzo [a] Anthracene	EPA 8270	<20	20	ug/L	CMG	05/03/2010
3,3'-Dichlorobenzidine	EPA 8270	<100	100	ug/L	CMG	05/03/2010
Chrysene	EPA 8270	<20	20	ug/L	CMG	05/03/2010
bis(2-Ethylhexyl)Phthalate	EPA 8270	<100	100	ug/L	CMG	05/03/2010
di-n-Octylphthalate	EPA 8270	<100	100	ug/L	CMG	05/03/2010
Benzo [b] Fluoranthene	EPA 8270	<20	20	ug/L	CMG	05/03/2010
Benzo [k] Fluoranthene	EPA 8270	<20	20	ug/L	CMG	05/03/2010
Benzo [a] Pyrene	EPA 8270	<20	20	ug/L	CMG	05/03/2010
Indeno [1,2,3-cd] Pyrene	EPA 8270	<20	20	ug/L	CMG	05/03/2010

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Date Received: **04/27/2010**
Date Reported: **05/07/2010**
Work Order No.: **1004-00230**

Sample ID: **GZ-ML-1-3** Sample No.: **003**
Sample Date: **04/26/2010**

Test Performed	Method	Results		Reporting Limit	Units	Tech	Analysis Date
Dibenzo [a,h] Anthracene	EPA 8270	<20		20	ug/L	CMG	05/03/2010
Benzo [g,h,i] Perylene	EPA 8270	<20		20	ug/L	CMG	05/03/2010
Surrogates:	EPA 8270						
***2-Fluorophenol	EPA 8270	66.3		15-110	% R	CMG	05/03/2010
***Phenol-D6	EPA 8270	50.6		15-110	% R	CMG	05/03/2010
***Nitrobenzene-D5	EPA 8270	104		30-130	% R	CMG	05/03/2010
***2-Fluorobiphenyl	EPA 8270	95.7		30-130	% R	CMG	05/03/2010
***2,4,6-Tribromophenol	EPA 8270	89.6		15-110	% R	CMG	05/03/2010
***P-Terphenyl-D14	EPA 8270	104		39-120	% R	CMG	05/03/2010
Extraction	EPA 3510C	1.0			DF	JKC	04/30/2010
TOTAL PETROLEUM HYDROCARBON	D3328/EPA 8100/					KEF	05/03/2010
Hydrocarbon Content		2000		1000	ug/L	KEF	05/03/2010
Surrogate:	D3328/EPA 8100						
***p-Terphenyl		48.8	*	40-140	% R	KEF	05/03/2010
Extraction	EPA 3510C	10			DF	JKC	04/28/2010
PRIORITY POLLUTANT METALS						LLZ	05/04/2010
Silver	EPA 6010B	<0.0050		0.0050	mg/L	LLZ	05/04/2010
Arsenic	EPA 6010B	<0.010		0.010	mg/L	LLZ	05/04/2010
Beryllium	EPA 6010B	0.010		0.0040	mg/L	LLZ	05/04/2010
Cadmium	EPA 6010B	<0.0050		0.0050	mg/L	LLZ	05/04/2010
Chromium	EPA 6010B	0.29		0.0050	mg/L	LLZ	05/04/2010
Copper	EPA 6010B	<0.030		0.030	mg/L	LLZ	05/04/2010
Mercury	EPA 7470A	<0.00020		0.00020	mg/L	GDD	04/30/2010
Nickel	EPA 6010B	<0.010		0.010	mg/L	LLZ	05/04/2010
Lead	EPA 6010B	<0.010		0.010	mg/L	LLZ	05/04/2010
Antimony	EPA 6010B	<0.025		0.025	mg/L	LLZ	05/04/2010
Selenium	EPA 6010B	<0.025		0.025	mg/L	LLZ	05/04/2010
Thallium	EPA 6010B	0.028		0.025	mg/L	LLZ	05/04/2010
Zinc	EPA 6010B	0.59		0.010	mg/L	LLZ	05/04/2010
Iron	EPA 6010B	120		0.025	mg/L	LLZ	05/04/2010
Manganese	EPA 6010B	9.5		0.0050	mg/L	LLZ	05/04/2010

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Date Received: **04/27/2010**
Date Reported: **05/07/2010**
Work Order No.: **1004-00230**

Sample ID: **GZ-ML-2-1** Sample No.: **004**
Sample Date: **04/26/2010**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260				MQS	05/04/2010
Dichlorodifluoromethane	EPA 8260	<2.0	2.0	ug/L	MQS	05/04/2010
Chloromethane	EPA 8260	<2.0	2.0	ug/L	MQS	05/04/2010
Vinyl Chloride	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Bromomethane	EPA 8260	<2.0	2.0	ug/L	MQS	05/04/2010
Chloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Trichlorofluoromethane	EPA 8260	<2.0	2.0	ug/L	MQS	05/04/2010
Diethylether	EPA 8260	<2.0	2.0	ug/L	MQS	05/04/2010
Acetone	EPA 8260	<25	25	ug/L	MQS	05/04/2010
1,1-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Dichloromethane	EPA 8260	<2.0	2.0	ug/L	MQS	05/04/2010
Methyl-Tert-Butyl-Ether	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
trans-1,2-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
1,1-Dichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
2-Butanone	EPA 8260	<25	25	ug/L	MQS	05/04/2010
2,2-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
cis-1,2-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Chloroform	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Bromochloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Tetrahydrofuran	EPA 8260	<10	10	ug/L	MQS	05/04/2010
1,1,1-Trichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
1,1-Dichloropropene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Carbon Tetrachloride	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
1,2-Dichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Benzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Trichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
1,2-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Bromodichloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Dibromomethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
4-Methyl-2-Pentanone	EPA 8260	<25	25	ug/L	MQS	05/04/2010
cis-1,3-Dichloropropene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Toluene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
trans-1,3-Dichloropropene	EPA 8260	<2.0	2.0	ug/L	MQS	05/04/2010
1,1,2-Trichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
2-Hexanone	EPA 8260	<25	25	ug/L	MQS	05/04/2010

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Richard Carlone

Project Name.: **Phase II Bedrock - Charbert**
Project No.: **03.0032795.35**

Date Received: **04/27/2010**
Date Reported: **05/07/2010**
Work Order No.: **1004-00230**

Sample ID: **GZ-ML-2-1** Sample No.: **004**
Sample Date: **04/26/2010**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
1,3-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Tetrachloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Dibromochloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
1,2-Dibromoethane (EDB)	EPA 8260	<2.0	2.0	ug/L	MQS	05/04/2010
Chlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
1,1,1,2-Tetrachloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Ethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
m&p-Xylene	EPA 8260	<2.0	2.0	ug/L	MQS	05/04/2010
o-Xylene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Styrene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Bromoform	EPA 8260	<2.0	2.0	ug/L	MQS	05/04/2010
Isopropylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
1,1,2,2-Tetrachloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
1,2,3-Trichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Bromobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
N-Propylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
2-Chlorotoluene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
1,3,5-Trimethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
4-Chlorotoluene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
tert-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
1,2,4-Trimethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
sec-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
p-Isopropyltoluene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
1,3-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
1,4-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
n-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
1,2-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
1,2-Dibromo-3-Chloropropane	EPA 8260	<2.0	2.0	ug/L	MQS	05/04/2010
1,2,4-Trichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Hexachlorobutadiene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Naphthalene	EPA 8260	<2.0	2.0	ug/L	MQS	05/04/2010
1,2,3-Trichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Surrogates:	EPA 8260					
***1,2-Dichloroethane-D4	EPA 8260	101	70-130	% R	MQS	05/04/2010
***Toluene-D8	EPA 8260	108	70-130	% R	MQS	05/04/2010

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ANALYTICAL REPORT

GZA GeoEnvironmental, Inc.
530 Broadway
Providence, RI 02909

Richard Carlone

Project Name.: **Phase II Bedrock - Charbert**
Project No.: **03.0032795.35**

Date Received: **04/27/2010**
Date Reported: **05/07/2010**
Work Order No.: **1004-00230**

Sample ID: **GZ-ML-2-1** Sample No.: **004**
Sample Date: **04/26/2010**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
***4-Bromofluorobenzene	EPA 8260	97.5	70-130	% R	MQS	05/04/2010
Preparation	EPA 5030B	1.0		CF	MQS	05/03/2010
SEMI-VOLATILE ORGANICS	EPA 8270				CMG	05/03/2010
ACID FRACTION:	EPA 8270					
Phenol	EPA 8270	<10	10	ug/L	CMG	05/03/2010
2-Chlorophenol	EPA 8270	<10	10	ug/L	CMG	05/03/2010
2-Methylphenol	EPA 8270	<10	10	ug/L	CMG	05/03/2010
3&4-Methylphenol	EPA 8270	<10	10	ug/L	CMG	05/03/2010
2-Nitrophenol	EPA 8270	<10	10	ug/L	CMG	05/03/2010
2,4-Dimethylphenol	EPA 8270	<10	10	ug/L	CMG	05/03/2010
Benzoic Acid	EPA 8270	<10	10	ug/L	CMG	05/03/2010
2,4-Dichlorophenol	EPA 8270	<10	10	ug/L	CMG	05/03/2010
4-Chloro-3-Methylphenol	EPA 8270	<20	20	ug/L	CMG	05/03/2010
2,4,6-Trichlorophenol	EPA 8270	<10	10	ug/L	CMG	05/03/2010
2,4,5-Trichlorophenol	EPA 8270	<10	10	ug/L	CMG	05/03/2010
2,4-Dinitrophenol	EPA 8270	<100	100	ug/L	CMG	05/03/2010
4-Nitrophenol	EPA 8270	<50	50	ug/L	CMG	05/03/2010
4,6-Dinitro-2-Methylphenol	EPA 8270	<50	50	ug/L	CMG	05/03/2010
Pentachlorophenol	EPA 8270	<50	50	ug/L	CMG	05/03/2010
BASE-NEUTRAL FRACTION:						
n-Nitrosodimethylamine	EPA 8270	<10	10	ug/L	CMG	05/03/2010
bis(2-Chloroethyl)Ether	EPA 8270	<10	10	ug/L	CMG	05/03/2010
1,3-Dichlorobenzene	EPA 8270	<10	10	ug/L	CMG	05/03/2010
1,4-Dichlorobenzene	EPA 8270	<10	10	ug/L	CMG	05/03/2010
Benzyl Alcohol	EPA 8270	<20	20	ug/L	CMG	05/03/2010
1,2-Dichlorobenzene	EPA 8270	<10	10	ug/L	CMG	05/03/2010
bis(2-Chloroisopropyl)Ether	EPA 8270	<10	10	ug/L	CMG	05/03/2010
n-Nitrosodi-n-Propylamine	EPA 8270	<10	10	ug/L	CMG	05/03/2010
Hexachloroethane	EPA 8270	<10	10	ug/L	CMG	05/03/2010
Nitrobenzene	EPA 8270	<10	10	ug/L	CMG	05/03/2010
Isophorone	EPA 8270	<10	10	ug/L	CMG	05/03/2010
bis(2-Chloroethoxy)Methane	EPA 8270	<10	10	ug/L	CMG	05/03/2010
1,2,4-Trichlorobenzene	EPA 8270	<10	10	ug/L	CMG	05/03/2010
Naphthalene	EPA 8270	<2.0	2.0	ug/L	CMG	05/03/2010
4-Chloroaniline	EPA 8270	<20	20	ug/L	CMG	05/03/2010

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Richard Carlone

Project Name.: **Phase II Bedrock - Charbert**
Project No.: **03.0032795.35**

Date Received: **04/27/2010**
Date Reported: **05/07/2010**
Work Order No.: **1004-00230**

Sample ID: **GZ-ML-2-1** Sample No.: **004**

Sample Date: **04/26/2010**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
Hexachlorobutadiene	EPA 8270	<10	10	ug/L	CMG	05/03/2010
2-Methylnaphthalene	EPA 8270	<2.0	2.0	ug/L	CMG	05/03/2010
Hexachlorocyclopentadiene	EPA 8270	<50	50	ug/L	CMG	05/03/2010
2-Chloronaphthalene	EPA 8270	<10	10	ug/L	CMG	05/03/2010
2-Nitroaniline	EPA 8270	<50	50	ug/L	CMG	05/03/2010
Dimethylphthalate	EPA 8270	<10	10	ug/L	CMG	05/03/2010
Acenaphthylene	EPA 8270	<2.0	2.0	ug/L	CMG	05/03/2010
2,6-Dinitrotoluene	EPA 8270	<10	10	ug/L	CMG	05/03/2010
3-Nitroaniline	EPA 8270	<50	50	ug/L	CMG	05/03/2010
Acenaphthene	EPA 8270	<2.0	2.0	ug/L	CMG	05/03/2010
Dibenzofuran	EPA 8270	<10	10	ug/L	CMG	05/03/2010
2,4-Dinitrotoluene	EPA 8270	<10	10	ug/L	CMG	05/03/2010
Diethylphthalate	EPA 8270	<10	10	ug/L	CMG	05/03/2010
Fluorene	EPA 8270	<2.0	2.0	ug/L	CMG	05/03/2010
4-Chlorophenyl Phenyl Ether	EPA 8270	<10	10	ug/L	CMG	05/03/2010
4-Nitroaniline	EPA 8270	<20	20	ug/L	CMG	05/03/2010
n-Nitrosodiphenylamine	EPA 8270	<10	10	ug/L	CMG	05/03/2010
4-Bromophenyl Phenyl Ether	EPA 8270	<10	10	ug/L	CMG	05/03/2010
Hexachlorobenzene	EPA 8270	<10	10	ug/L	CMG	05/03/2010
Phenanthrene	EPA 8270	<2.0	2.0	ug/L	CMG	05/03/2010
Anthracene	EPA 8270	<2.0	2.0	ug/L	CMG	05/03/2010
Carbazole	EPA 8270	<10	10	ug/L	CMG	05/03/2010
di-n-Butylphthalate	EPA 8270	<10	10	ug/L	CMG	05/03/2010
Fluoranthene	EPA 8270	<2.0	2.0	ug/L	CMG	05/03/2010
Pyrene	EPA 8270	<2.0	2.0	ug/L	CMG	05/03/2010
Butylbenzylphthalate	EPA 8270	<10	10	ug/L	CMG	05/03/2010
Benzo [a] Anthracene	EPA 8270	<2.0	2.0	ug/L	CMG	05/03/2010
3,3'-Dichlorobenzidine	EPA 8270	<10	10	ug/L	CMG	05/03/2010
Chrysene	EPA 8270	<2.0	2.0	ug/L	CMG	05/03/2010
bis(2-Ethylhexyl)Phthalate	EPA 8270	<10	10	ug/L	CMG	05/03/2010
di-n-Octylphthalate	EPA 8270	<10	10	ug/L	CMG	05/03/2010
Benzo [b] Fluoranthene	EPA 8270	<2.0	2.0	ug/L	CMG	05/03/2010
Benzo [k] Fluoranthene	EPA 8270	<2.0	2.0	ug/L	CMG	05/03/2010
Benzo [a] Pyrene	EPA 8270	<2.0	2.0	ug/L	CMG	05/03/2010
Indeno [1,2,3-cd] Pyrene	EPA 8270	<2.0	2.0	ug/L	CMG	05/03/2010

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ANALYTICAL REPORT

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Richard Carlone

Project Name.: **Phase II Bedrock - Charbert**
Project No.: **03.0032795.35**

Date Received: **04/27/2010**
Date Reported: **05/07/2010**
Work Order No.: **1004-00230**

Sample ID: **GZ-ML-2-1** Sample No.: **004**
Sample Date: **04/26/2010**

Test Performed	Method	Results		Reporting Limit	Units	Tech	Analysis Date
Dibenzo [a,h] Anthracene	EPA 8270	<2.0		2.0	ug/L	CMG	05/03/2010
Benzo [g,h,i] Perylene	EPA 8270	<2.0		2.0	ug/L	CMG	05/03/2010
Surrogates:	EPA 8270						
***2-Fluorophenol	EPA 8270	48.9		15-110	% R	CMG	05/03/2010
***Phenol-D6	EPA 8270	38.1		15-110	% R	CMG	05/03/2010
***Nitrobenzene-D5	EPA 8270	72.7		30-130	% R	CMG	05/03/2010
***2-Fluorobiphenyl	EPA 8270	74.5		30-130	% R	CMG	05/03/2010
***2,4,6-Tribromophenol	EPA 8270	67.6		15-110	% R	CMG	05/03/2010
***P-Terphenyl-D14	EPA 8270	150	*	39-120	% R	CMG	05/03/2010
Extraction	EPA 3510C	1.0			DF	JKC	04/30/2010
TOTAL PETROLEUM HYDROCARBON	D3328/EPA 8100/					KEF	05/03/2010
Hydrocarbon Content		1200		1000	ug/L	KEF	05/03/2010
Surrogate:	D3328/EPA 8100						
***p-Terphenyl		69.3		40-140	% R	KEF	05/03/2010
Extraction	EPA 3510C	10			DF	JKC	04/28/2010
PRIORITY POLLUTANT METALS						LLZ	05/04/2010
Silver	EPA 6010B	<0.0050		0.0050	mg/L	LLZ	05/04/2010
Arsenic	EPA 6010B	<0.010		0.010	mg/L	LLZ	05/04/2010
Beryllium	EPA 6010B	<0.0040		0.0040	mg/L	LLZ	05/04/2010
Cadmium	EPA 6010B	<0.0050		0.0050	mg/L	LLZ	05/04/2010
Chromium	EPA 6010B	<0.0050		0.0050	mg/L	LLZ	05/04/2010
Copper	EPA 6010B	0.047		0.030	mg/L	LLZ	05/04/2010
Mercury	EPA 7470A	<0.00020		0.00020	mg/L	GDD	04/30/2010
Nickel	EPA 6010B	<0.010		0.010	mg/L	LLZ	05/04/2010
Lead	EPA 6010B	<0.010		0.010	mg/L	LLZ	05/04/2010
Antimony	EPA 6010B	<0.025		0.025	mg/L	LLZ	05/04/2010
Selenium	EPA 6010B	<0.025		0.025	mg/L	LLZ	05/04/2010
Thallium	EPA 6010B	<0.025		0.025	mg/L	LLZ	05/04/2010
Zinc	EPA 6010B	0.021		0.010	mg/L	LLZ	05/04/2010
Iron	EPA 6010B	0.53		0.025	mg/L	LLZ	05/04/2010
Manganese	EPA 6010B	0.14		0.0050	mg/L	LLZ	05/04/2010

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Project Name.: **Phase II Bedrock - Charbert**
Project No.: **03.0032795.35**

Date Received: **04/27/2010**
Date Reported: **05/07/2010**
Work Order No.: **1004-00230**

Sample ID: **GZ-ML-2-2** Sample No.: **005**
Sample Date: **04/26/2010**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260				MQS	05/04/2010
Dichlorodifluoromethane	EPA 8260	<2.0	2.0	ug/L	MQS	05/04/2010
Chloromethane	EPA 8260	<2.0	2.0	ug/L	MQS	05/04/2010
Vinyl Chloride	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Bromomethane	EPA 8260	<2.0	2.0	ug/L	MQS	05/04/2010
Chloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Trichlorofluoromethane	EPA 8260	<2.0	2.0	ug/L	MQS	05/04/2010
Diethylether	EPA 8260	<2.0	2.0	ug/L	MQS	05/04/2010
Acetone	EPA 8260	<25	25	ug/L	MQS	05/04/2010
1,1-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Dichloromethane	EPA 8260	<2.0	2.0	ug/L	MQS	05/04/2010
Methyl-Tert-Butyl-Ether	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
trans-1,2-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
1,1-Dichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
2-Butanone	EPA 8260	<25	25	ug/L	MQS	05/04/2010
2,2-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
cis-1,2-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Chloroform	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Bromochloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Tetrahydrofuran	EPA 8260	<10	10	ug/L	MQS	05/04/2010
1,1,1-Trichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
1,1-Dichloropropene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Carbon Tetrachloride	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
1,2-Dichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Benzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Trichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
1,2-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Bromodichloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Dibromomethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
4-Methyl-2-Pentanone	EPA 8260	<25	25	ug/L	MQS	05/04/2010
cis-1,3-Dichloropropene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Toluene	EPA 8260	1.1	1.0	ug/L	MQS	05/04/2010
trans-1,3-Dichloropropene	EPA 8260	<2.0	2.0	ug/L	MQS	05/04/2010
1,1,2-Trichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
2-Hexanone	EPA 8260	<25	25	ug/L	MQS	05/04/2010

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A N A L Y T I C A L R E P O R T

GZA GeoEnvironmental, Inc.
530 Broadway
Providence, RI 02909

Richard Carlone

Project Name.: **Phase II Bedrock - Charbert**
Project No.: **03.0032795.35**

Date Received: **04/27/2010**
Date Reported: **05/07/2010**
Work Order No.: **1004-00230**

Sample ID: **GZ-ML-2-2** Sample No.: **005**
Sample Date: **04/26/2010**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
1,3-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Tetrachloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Dibromochloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
1,2-Dibromoethane (EDB)	EPA 8260	<2.0	2.0	ug/L	MQS	05/04/2010
Chlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
1,1,1,2-Tetrachloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Ethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
m&p-Xylene	EPA 8260	<2.0	2.0	ug/L	MQS	05/04/2010
o-Xylene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Styrene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Bromoform	EPA 8260	<2.0	2.0	ug/L	MQS	05/04/2010
Isopropylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
1,1,2,2-Tetrachloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
1,2,3-Trichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Bromobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
N-Propylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
2-Chlorotoluene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
1,3,5-Trimethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
4-Chlorotoluene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
tert-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
1,2,4-Trimethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
sec-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
p-Isopropyltoluene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
1,3-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
1,4-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
n-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
1,2-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
1,2-Dibromo-3-Chloropropane	EPA 8260	<2.0	2.0	ug/L	MQS	05/04/2010
1,2,4-Trichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Hexachlorobutadiene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Naphthalene	EPA 8260	<2.0	2.0	ug/L	MQS	05/04/2010
1,2,3-Trichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Surrogates:	EPA 8260					
***1,2-Dichloroethane-D4	EPA 8260	101	70-130	% R	MQS	05/04/2010
***Toluene-D8	EPA 8260	105	70-130	% R	MQS	05/04/2010

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Project Name.: **Phase II Bedrock - Charbert**
Project No.: **03.0032795.35**

Date Received: **04/27/2010**
Date Reported: **05/07/2010**
Work Order No.: **1004-00230**

Sample ID: **GZ-ML-2-2** Sample No.: **005**
Sample Date: **04/26/2010**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
***4-Bromofluorobenzene	EPA 8260	95.4	70-130	% R	MQS	05/04/2010
Preparation	EPA 5030B	1.0		CF	MQS	05/03/2010
SEMI-VOLATILE ORGANICS	EPA 8270				CMG	05/03/2010
ACID FRACTION:	EPA 8270					
Phenol	EPA 8270	<10	10	ug/L	CMG	05/03/2010
2-Chlorophenol	EPA 8270	<10	10	ug/L	CMG	05/03/2010
2-Methylphenol	EPA 8270	<10	10	ug/L	CMG	05/03/2010
3&4-Methylphenol	EPA 8270	<10	10	ug/L	CMG	05/03/2010
2-Nitrophenol	EPA 8270	<10	10	ug/L	CMG	05/03/2010
2,4-Dimethylphenol	EPA 8270	<10	10	ug/L	CMG	05/03/2010
Benzoic Acid	EPA 8270	<10	10	ug/L	CMG	05/03/2010
2,4-Dichlorophenol	EPA 8270	<10	10	ug/L	CMG	05/03/2010
4-Chloro-3-Methylphenol	EPA 8270	<20	20	ug/L	CMG	05/03/2010
2,4,6-Trichlorophenol	EPA 8270	<10	10	ug/L	CMG	05/03/2010
2,4,5-Trichlorophenol	EPA 8270	<10	10	ug/L	CMG	05/03/2010
2,4-Dinitrophenol	EPA 8270	<100	100	ug/L	CMG	05/03/2010
4-Nitrophenol	EPA 8270	<50	50	ug/L	CMG	05/03/2010
4,6-Dinitro-2-Methylphenol	EPA 8270	<50	50	ug/L	CMG	05/03/2010
Pentachlorophenol	EPA 8270	<50	50	ug/L	CMG	05/03/2010
BASE-NEUTRAL FRACTION:						
n-Nitrosodimethylamine	EPA 8270	<10	10	ug/L	CMG	05/03/2010
bis(2-Chloroethyl)Ether	EPA 8270	<10	10	ug/L	CMG	05/03/2010
1,3-Dichlorobenzene	EPA 8270	<10	10	ug/L	CMG	05/03/2010
1,4-Dichlorobenzene	EPA 8270	<10	10	ug/L	CMG	05/03/2010
Benzyl Alcohol	EPA 8270	<20	20	ug/L	CMG	05/03/2010
1,2-Dichlorobenzene	EPA 8270	<10	10	ug/L	CMG	05/03/2010
bis(2-Chloroisopropyl)Ether	EPA 8270	<10	10	ug/L	CMG	05/03/2010
n-Nitrosodi-n-Propylamine	EPA 8270	<10	10	ug/L	CMG	05/03/2010
Hexachloroethane	EPA 8270	<10	10	ug/L	CMG	05/03/2010
Nitrobenzene	EPA 8270	<10	10	ug/L	CMG	05/03/2010
Isophorone	EPA 8270	<10	10	ug/L	CMG	05/03/2010
bis(2-Chloroethoxy)Methane	EPA 8270	<10	10	ug/L	CMG	05/03/2010
1,2,4-Trichlorobenzene	EPA 8270	<10	10	ug/L	CMG	05/03/2010
Naphthalene	EPA 8270	<2.0	2.0	ug/L	CMG	05/03/2010
4-Chloroaniline	EPA 8270	<20	20	ug/L	CMG	05/03/2010

GZA GeoEnvironmental, Inc.
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ANALYTICAL REPORT

GZA GeoEnvironmental, Inc.
530 Broadway
Providence, RI 02909

Richard Carlone

Project Name.: **Phase II Bedrock - Charbert**
Project No.: **03.0032795.35**

Date Received: **04/27/2010**
Date Reported: **05/07/2010**
Work Order No.: **1004-00230**

Sample ID: **GZ-ML-2-2** Sample No.: **005**
Sample Date: **04/26/2010**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
Hexachlorobutadiene	EPA 8270	<10	10	ug/L	CMG	05/03/2010
2-Methylnaphthalene	EPA 8270	<2.0	2.0	ug/L	CMG	05/03/2010
Hexachlorocyclopentadiene	EPA 8270	<50	50	ug/L	CMG	05/03/2010
2-Chloronaphthalene	EPA 8270	<10	10	ug/L	CMG	05/03/2010
2-Nitroaniline	EPA 8270	<50	50	ug/L	CMG	05/03/2010
Dimethylphthalate	EPA 8270	<10	10	ug/L	CMG	05/03/2010
Acenaphthylene	EPA 8270	<2.0	2.0	ug/L	CMG	05/03/2010
2,6-Dinitrotoluene	EPA 8270	<10	10	ug/L	CMG	05/03/2010
3-Nitroaniline	EPA 8270	<50	50	ug/L	CMG	05/03/2010
Acenaphthene	EPA 8270	<2.0	2.0	ug/L	CMG	05/03/2010
Dibenzofuran	EPA 8270	<10	10	ug/L	CMG	05/03/2010
2,4-Dinitrotoluene	EPA 8270	<10	10	ug/L	CMG	05/03/2010
Diethylphthalate	EPA 8270	<10	10	ug/L	CMG	05/03/2010
Fluorene	EPA 8270	<2.0	2.0	ug/L	CMG	05/03/2010
4-Chlorophenyl Phenyl Ether	EPA 8270	<10	10	ug/L	CMG	05/03/2010
4-Nitroaniline	EPA 8270	<20	20	ug/L	CMG	05/03/2010
n-Nitrosodiphenylamine	EPA 8270	<10	10	ug/L	CMG	05/03/2010
4-Bromophenyl Phenyl Ether	EPA 8270	<10	10	ug/L	CMG	05/03/2010
Hexachlorobenzene	EPA 8270	<10	10	ug/L	CMG	05/03/2010
Phenanthrene	EPA 8270	<2.0	2.0	ug/L	CMG	05/03/2010
Anthracene	EPA 8270	<2.0	2.0	ug/L	CMG	05/03/2010
Carbazole	EPA 8270	<10	10	ug/L	CMG	05/03/2010
di-n-Butylphthalate	EPA 8270	21	10	ug/L	CMG	05/03/2010
Fluoranthene	EPA 8270	<2.0	2.0	ug/L	CMG	05/03/2010
Pyrene	EPA 8270	<2.0	2.0	ug/L	CMG	05/03/2010
Butylbenzylphthalate	EPA 8270	<10	10	ug/L	CMG	05/03/2010
Benzo [a] Anthracene	EPA 8270	<2.0	2.0	ug/L	CMG	05/03/2010
3,3'-Dichlorobenzidine	EPA 8270	<10	10	ug/L	CMG	05/03/2010
Chrysene	EPA 8270	<2.0	2.0	ug/L	CMG	05/03/2010
bis(2-Ethylhexyl)Phthalate	EPA 8270	<10	10	ug/L	CMG	05/03/2010
di-n-Octylphthalate	EPA 8270	<10	10	ug/L	CMG	05/03/2010
Benzo [b] Fluoranthene	EPA 8270	<2.0	2.0	ug/L	CMG	05/03/2010
Benzo [k] Fluoranthene	EPA 8270	<2.0	2.0	ug/L	CMG	05/03/2010
Benzo [a] Pyrene	EPA 8270	<2.0	2.0	ug/L	CMG	05/03/2010
Indeno [1,2,3-cd] Pyrene	EPA 8270	<2.0	2.0	ug/L	CMG	05/03/2010

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Richard Carlone

Project Name.: **Phase II Bedrock - Charbert**
Project No.: **03.0032795.35**

Date Received: **04/27/2010**
Date Reported: **05/07/2010**
Work Order No.: **1004-00230**

Sample ID: **GZ-ML-2-2** Sample No.: **005**
Sample Date: **04/26/2010**

Test Performed	Method	Results		Reporting Limit	Units	Tech	Analysis Date
Dibenzo [a,h] Anthracene	EPA 8270	<2.0		2.0	ug/L	CMG	05/03/2010
Benzo [g,h,i] Perylene	EPA 8270	<2.0		2.0	ug/L	CMG	05/03/2010
Surrogates:	EPA 8270						
***2-Fluorophenol	EPA 8270	45.6		15-110	% R	CMG	05/03/2010
***Phenol-D6	EPA 8270	35.8		15-110	% R	CMG	05/03/2010
***Nitrobenzene-D5	EPA 8270	70.8		30-130	% R	CMG	05/03/2010
***2-Fluorobiphenyl	EPA 8270	70.6		30-130	% R	CMG	05/03/2010
***2,4,6-Tribromophenol	EPA 8270	67.9		15-110	% R	CMG	05/03/2010
***P-Terphenyl-D14	EPA 8270	140	*	39-120	% R	CMG	05/03/2010
Extraction	EPA 3510C	1.0			DF	JKC	04/30/2010
TOTAL PETROLEUM HYDROCARBON	D3328/EPA 8100/					KEF	05/03/2010
Hydrocarbon Content		2800		1000	ug/L	KEF	05/03/2010
Surrogate:	D3328/EPA 8100						
***p-Terphenyl		57.0		40-140	% R	KEF	05/03/2010
Extraction	EPA 3510C	10			DF	JKC	04/29/2010
PRIORITY POLLUTANT METALS						LLZ	05/04/2010
Silver	EPA 6010B	<0.0050		0.0050	mg/L	LLZ	05/04/2010
Arsenic	EPA 6010B	<0.010		0.010	mg/L	LLZ	05/04/2010
Beryllium	EPA 6010B	<0.0040		0.0040	mg/L	LLZ	05/04/2010
Cadmium	EPA 6010B	<0.0050		0.0050	mg/L	LLZ	05/04/2010
Chromium	EPA 6010B	<0.0050		0.0050	mg/L	LLZ	05/04/2010
Copper	EPA 6010B	<0.030		0.030	mg/L	LLZ	05/04/2010
Mercury	EPA 7470A	<0.00020		0.00020	mg/L	GDD	04/30/2010
Nickel	EPA 6010B	<0.010		0.010	mg/L	LLZ	05/04/2010
Lead	EPA 6010B	<0.010		0.010	mg/L	LLZ	05/04/2010
Antimony	EPA 6010B	<0.025		0.025	mg/L	LLZ	05/04/2010
Selenium	EPA 6010B	<0.025		0.025	mg/L	LLZ	05/04/2010
Thallium	EPA 6010B	<0.025		0.025	mg/L	LLZ	05/04/2010
Zinc	EPA 6010B	0.011		0.010	mg/L	LLZ	05/04/2010
Iron	EPA 6010B	0.26		0.025	mg/L	LLZ	05/04/2010
Manganese	EPA 6010B	0.19		0.0050	mg/L	LLZ	05/04/2010

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Date Received: **04/27/2010**
Date Reported: **05/07/2010**
Work Order No.: **1004-00230**

Sample ID: **GZ-ML-2-3** Sample No.: **006**
Sample Date: **04/26/2010**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260				MQS	05/04/2010
Dichlorodifluoromethane	EPA 8260	<2.0	2.0	ug/L	MQS	05/04/2010
Chloromethane	EPA 8260	<2.0	2.0	ug/L	MQS	05/04/2010
Vinyl Chloride	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Bromomethane	EPA 8260	<2.0	2.0	ug/L	MQS	05/04/2010
Chloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Trichlorofluoromethane	EPA 8260	<2.0	2.0	ug/L	MQS	05/04/2010
Diethylether	EPA 8260	<2.0	2.0	ug/L	MQS	05/04/2010
Acetone	EPA 8260	<25	25	ug/L	MQS	05/04/2010
1,1-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Dichloromethane	EPA 8260	<2.0	2.0	ug/L	MQS	05/04/2010
Methyl-Tert-Butyl-Ether	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
trans-1,2-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
1,1-Dichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
2-Butanone	EPA 8260	<25	25	ug/L	MQS	05/04/2010
2,2-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
cis-1,2-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Chloroform	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Bromochloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Tetrahydrofuran	EPA 8260	<10	10	ug/L	MQS	05/04/2010
1,1,1-Trichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
1,1-Dichloropropene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Carbon Tetrachloride	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
1,2-Dichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Benzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Trichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
1,2-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Bromodichloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Dibromomethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
4-Methyl-2-Pentanone	EPA 8260	<25	25	ug/L	MQS	05/04/2010
cis-1,3-Dichloropropene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Toluene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
trans-1,3-Dichloropropene	EPA 8260	<2.0	2.0	ug/L	MQS	05/04/2010
1,1,2-Trichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
2-Hexanone	EPA 8260	<25	25	ug/L	MQS	05/04/2010

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A N A L Y T I C A L R E P O R T

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530 Broadway
Providence, RI 02909

Richard Carlone

Project Name.: **Phase II Bedrock - Charbert**
Project No.: **03.0032795.35**

Date Received: **04/27/2010**
Date Reported: **05/07/2010**
Work Order No.: **1004-00230**

Sample ID: **GZ-ML-2-3** Sample No.: **006**
Sample Date: **04/26/2010**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
1,3-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Tetrachloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Dibromochloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
1,2-Dibromoethane (EDB)	EPA 8260	<2.0	2.0	ug/L	MQS	05/04/2010
Chlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
1,1,1,2-Tetrachloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Ethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
m&p-Xylene	EPA 8260	<2.0	2.0	ug/L	MQS	05/04/2010
o-Xylene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Styrene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Bromoform	EPA 8260	<2.0	2.0	ug/L	MQS	05/04/2010
Isopropylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
1,1,2,2-Tetrachloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
1,2,3-Trichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Bromobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
N-Propylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
2-Chlorotoluene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
1,3,5-Trimethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
4-Chlorotoluene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
tert-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
1,2,4-Trimethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
sec-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
p-Isopropyltoluene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
1,3-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
1,4-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
n-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
1,2-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
1,2-Dibromo-3-Chloropropane	EPA 8260	<2.0	2.0	ug/L	MQS	05/04/2010
1,2,4-Trichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Hexachlorobutadiene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Naphthalene	EPA 8260	<2.0	2.0	ug/L	MQS	05/04/2010
1,2,3-Trichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Surrogates:	EPA 8260					
***1,2-Dichloroethane-D4	EPA 8260	104	70-130	% R	MQS	05/04/2010
***Toluene-D8	EPA 8260	109	70-130	% R	MQS	05/04/2010

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Project Name.: **Phase II Bedrock - Charbert**
Project No.: **03.0032795.35**

Date Received: **04/27/2010**
Date Reported: **05/07/2010**
Work Order No.: **1004-00230**

Sample ID: **GZ-ML-2-3** Sample No.: **006**
Sample Date: **04/26/2010**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
***4-Bromofluorobenzene	EPA 8260	96.1	70-130	% R	MQS	05/04/2010
Preparation	EPA 5030B	1.0		CF	MQS	05/03/2010
SEMI-VOLATILE ORGANICS	EPA 8270				CMG	05/03/2010
ACID FRACTION:	EPA 8270					
Phenol	EPA 8270	<10	10	ug/L	CMG	05/03/2010
2-Chlorophenol	EPA 8270	<10	10	ug/L	CMG	05/03/2010
2-Methylphenol	EPA 8270	<10	10	ug/L	CMG	05/03/2010
3&4-Methylphenol	EPA 8270	<10	10	ug/L	CMG	05/03/2010
2-Nitrophenol	EPA 8270	<10	10	ug/L	CMG	05/03/2010
2,4-Dimethylphenol	EPA 8270	<10	10	ug/L	CMG	05/03/2010
Benzoic Acid	EPA 8270	<10	10	ug/L	CMG	05/03/2010
2,4-Dichlorophenol	EPA 8270	<10	10	ug/L	CMG	05/03/2010
4-Chloro-3-Methylphenol	EPA 8270	<20	20	ug/L	CMG	05/03/2010
2,4,6-Trichlorophenol	EPA 8270	<10	10	ug/L	CMG	05/03/2010
2,4,5-Trichlorophenol	EPA 8270	<10	10	ug/L	CMG	05/03/2010
2,4-Dinitrophenol	EPA 8270	<100	100	ug/L	CMG	05/03/2010
4-Nitrophenol	EPA 8270	<50	50	ug/L	CMG	05/03/2010
4,6-Dinitro-2-Methylphenol	EPA 8270	<50	50	ug/L	CMG	05/03/2010
Pentachlorophenol	EPA 8270	<50	50	ug/L	CMG	05/03/2010
BASE-NEUTRAL FRACTION:						
n-Nitrosodimethylamine	EPA 8270	<10	10	ug/L	CMG	05/03/2010
bis(2-Chloroethyl)Ether	EPA 8270	<10	10	ug/L	CMG	05/03/2010
1,3-Dichlorobenzene	EPA 8270	<10	10	ug/L	CMG	05/03/2010
1,4-Dichlorobenzene	EPA 8270	<10	10	ug/L	CMG	05/03/2010
Benzyl Alcohol	EPA 8270	<20	20	ug/L	CMG	05/03/2010
1,2-Dichlorobenzene	EPA 8270	<10	10	ug/L	CMG	05/03/2010
bis(2-Chloroisopropyl)Ether	EPA 8270	<10	10	ug/L	CMG	05/03/2010
n-Nitrosodi-n-Propylamine	EPA 8270	<10	10	ug/L	CMG	05/03/2010
Hexachloroethane	EPA 8270	<10	10	ug/L	CMG	05/03/2010
Nitrobenzene	EPA 8270	<10	10	ug/L	CMG	05/03/2010
Isophorone	EPA 8270	<10	10	ug/L	CMG	05/03/2010
bis(2-Chloroethoxy)Methane	EPA 8270	<10	10	ug/L	CMG	05/03/2010
1,2,4-Trichlorobenzene	EPA 8270	<10	10	ug/L	CMG	05/03/2010
Naphthalene	EPA 8270	<2.0	2.0	ug/L	CMG	05/03/2010
4-Chloroaniline	EPA 8270	<20	20	ug/L	CMG	05/03/2010

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Project Name.: **Phase II Bedrock - Charbert**
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Date Received: **04/27/2010**
Date Reported: **05/07/2010**
Work Order No.: **1004-00230**

Sample ID: **GZ-ML-2-3** Sample No.: **006**
Sample Date: **04/26/2010**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
Hexachlorobutadiene	EPA 8270	<10	10	ug/L	CMG	05/03/2010
2-Methylnaphthalene	EPA 8270	<2.0	2.0	ug/L	CMG	05/03/2010
Hexachlorocyclopentadiene	EPA 8270	<50	50	ug/L	CMG	05/03/2010
2-Chloronaphthalene	EPA 8270	<10	10	ug/L	CMG	05/03/2010
2-Nitroaniline	EPA 8270	<50	50	ug/L	CMG	05/03/2010
Dimethylphthalate	EPA 8270	<10	10	ug/L	CMG	05/03/2010
Acenaphthylene	EPA 8270	<2.0	2.0	ug/L	CMG	05/03/2010
2,6-Dinitrotoluene	EPA 8270	<10	10	ug/L	CMG	05/03/2010
3-Nitroaniline	EPA 8270	<50	50	ug/L	CMG	05/03/2010
Acenaphthene	EPA 8270	<2.0	2.0	ug/L	CMG	05/03/2010
Dibenzofuran	EPA 8270	<10	10	ug/L	CMG	05/03/2010
2,4-Dinitrotoluene	EPA 8270	<10	10	ug/L	CMG	05/03/2010
Diethylphthalate	EPA 8270	<10	10	ug/L	CMG	05/03/2010
Fluorene	EPA 8270	<2.0	2.0	ug/L	CMG	05/03/2010
4-Chlorophenyl Phenyl Ether	EPA 8270	<10	10	ug/L	CMG	05/03/2010
4-Nitroaniline	EPA 8270	<20	20	ug/L	CMG	05/03/2010
n-Nitrosodiphenylamine	EPA 8270	<10	10	ug/L	CMG	05/03/2010
4-Bromophenyl Phenyl Ether	EPA 8270	<10	10	ug/L	CMG	05/03/2010
Hexachlorobenzene	EPA 8270	<10	10	ug/L	CMG	05/03/2010
Phenanthrene	EPA 8270	<2.0	2.0	ug/L	CMG	05/03/2010
Anthracene	EPA 8270	<2.0	2.0	ug/L	CMG	05/03/2010
Carbazole	EPA 8270	<10	10	ug/L	CMG	05/03/2010
di-n-Butylphthalate	EPA 8270	10	10	ug/L	CMG	05/03/2010
Fluoranthene	EPA 8270	<2.0	2.0	ug/L	CMG	05/03/2010
Pyrene	EPA 8270	<2.0	2.0	ug/L	CMG	05/03/2010
Butylbenzylphthalate	EPA 8270	<10	10	ug/L	CMG	05/03/2010
Benzo [a] Anthracene	EPA 8270	<2.0	2.0	ug/L	CMG	05/03/2010
3,3'-Dichlorobenzidine	EPA 8270	<10	10	ug/L	CMG	05/03/2010
Chrysene	EPA 8270	<2.0	2.0	ug/L	CMG	05/03/2010
bis(2-Ethylhexyl)Phthalate	EPA 8270	<10	10	ug/L	CMG	05/03/2010
di-n-Octylphthalate	EPA 8270	<10	10	ug/L	CMG	05/03/2010
Benzo [b] Fluoranthene	EPA 8270	<2.0	2.0	ug/L	CMG	05/03/2010
Benzo [k] Fluoranthene	EPA 8270	<2.0	2.0	ug/L	CMG	05/03/2010
Benzo [a] Pyrene	EPA 8270	<2.0	2.0	ug/L	CMG	05/03/2010
Indeno [1,2,3-cd] Pyrene	EPA 8270	<2.0	2.0	ug/L	CMG	05/03/2010

GZA GeoEnvironmental, Inc.
106 South Street
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ANALYTICAL REPORT

GZA GeoEnvironmental, Inc.
530 Broadway
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Richard Carlone

Project Name.: **Phase II Bedrock - Charbert**
Project No.: **03.0032795.35**

Date Received: **04/27/2010**
Date Reported: **05/07/2010**
Work Order No.: **1004-00230**

Sample ID: **GZ-ML-2-3** Sample No.: **006**
Sample Date: **04/26/2010**

Test Performed	Method	Results		Reporting Limit	Units	Tech	Analysis Date
Dibenzo [a,h] Anthracene	EPA 8270	<2.0		2.0	ug/L	CMG	05/03/2010
Benzo [g,h,i] Perylene	EPA 8270	<2.0		2.0	ug/L	CMG	05/03/2010
Surrogates:	EPA 8270						
***2-Fluorophenol	EPA 8270	46.5		15-110	% R	CMG	05/03/2010
***Phenol-D6	EPA 8270	34.2		15-110	% R	CMG	05/03/2010
***Nitrobenzene-D5	EPA 8270	70.8		30-130	% R	CMG	05/03/2010
***2-Fluorobiphenyl	EPA 8270	71.3		30-130	% R	CMG	05/03/2010
***2,4,6-Tribromophenol	EPA 8270	70.5		15-110	% R	CMG	05/03/2010
***P-Terphenyl-D14	EPA 8270	143	*	39-120	% R	CMG	05/03/2010
Extraction	EPA 3510C	1.0			DF	JKC	04/30/2010
TOTAL PETROLEUM HYDROCARBON	D3328/EPA 8100/					KEF	05/03/2010
Hydrocarbon Content		7100		1000	ug/L	KEF	05/03/2010
Surrogate:	D3328/EPA 8100						
***p-Terphenyl		98.0		40-140	% R	KEF	05/03/2010
Extraction	EPA 3510C	10			DF	JKC	04/29/2010
PRIORITY POLLUTANT METALS						LLZ	05/04/2010
Silver	EPA 6010B	<0.0050		0.0050	mg/L	LLZ	05/04/2010
Arsenic	EPA 6010B	<0.010		0.010	mg/L	LLZ	05/04/2010
Beryllium	EPA 6010B	<0.0040		0.0040	mg/L	LLZ	05/04/2010
Cadmium	EPA 6010B	<0.0050		0.0050	mg/L	LLZ	05/04/2010
Chromium	EPA 6010B	0.0073		0.0050	mg/L	LLZ	05/04/2010
Copper	EPA 6010B	0.032		0.030	mg/L	LLZ	05/04/2010
Mercury	EPA 7470A	<0.00020		0.00020	mg/L	GDD	04/30/2010
Nickel	EPA 6010B	<0.010		0.010	mg/L	LLZ	05/04/2010
Lead	EPA 6010B	<0.010		0.010	mg/L	LLZ	05/04/2010
Antimony	EPA 6010B	<0.025		0.025	mg/L	LLZ	05/04/2010
Selenium	EPA 6010B	<0.025		0.025	mg/L	LLZ	05/04/2010
Thallium	EPA 6010B	<0.025		0.025	mg/L	LLZ	05/04/2010
Zinc	EPA 6010B	0.12		0.010	mg/L	LLZ	05/04/2010
Iron	EPA 6010B	0.74		0.025	mg/L	LLZ	05/04/2010
Manganese	EPA 6010B	0.10		0.0050	mg/L	LLZ	05/04/2010

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Project Name.: **Phase II Bedrock - Charbert**
Project No.: **03.0032795.35**

Date Received: **04/27/2010**
Date Reported: **05/07/2010**
Work Order No.: **1004-00230**

Sample ID: **GZ-ML-3-1** Sample No.: **007**
Sample Date: **04/26/2010**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260				MQS	05/04/2010
Dichlorodifluoromethane	EPA 8260	<100	100	ug/L	MQS	05/04/2010
Chloromethane	EPA 8260	<100	100	ug/L	MQS	05/04/2010
Vinyl Chloride	EPA 8260	<50	50	ug/L	MQS	05/04/2010
Bromomethane	EPA 8260	<100	100	ug/L	MQS	05/04/2010
Chloroethane	EPA 8260	<50	50	ug/L	MQS	05/04/2010
Trichlorofluoromethane	EPA 8260	<100	100	ug/L	MQS	05/04/2010
Diethylether	EPA 8260	<100	100	ug/L	MQS	05/04/2010
Acetone	EPA 8260	<1300	1300	ug/L	MQS	05/04/2010
1,1-Dichloroethene	EPA 8260	<50	50	ug/L	MQS	05/04/2010
Dichloromethane	EPA 8260	<100	100	ug/L	MQS	05/04/2010
Methyl-Tert-Butyl-Ether	EPA 8260	<50	50	ug/L	MQS	05/04/2010
trans-1,2-Dichloroethene	EPA 8260	<50	50	ug/L	MQS	05/04/2010
1,1-Dichloroethane	EPA 8260	<50	50	ug/L	MQS	05/04/2010
2-Butanone	EPA 8260	<1300	1300	ug/L	MQS	05/04/2010
2,2-Dichloropropane	EPA 8260	<50	50	ug/L	MQS	05/04/2010
cis-1,2-Dichloroethene	EPA 8260	<50	50	ug/L	MQS	05/04/2010
Chloroform	EPA 8260	<50	50	ug/L	MQS	05/04/2010
Bromochloromethane	EPA 8260	<50	50	ug/L	MQS	05/04/2010
Tetrahydrofuran	EPA 8260	<500	500	ug/L	MQS	05/04/2010
1,1,1-Trichloroethane	EPA 8260	<50	50	ug/L	MQS	05/04/2010
1,1-Dichloropropene	EPA 8260	<50	50	ug/L	MQS	05/04/2010
Carbon Tetrachloride	EPA 8260	<50	50	ug/L	MQS	05/04/2010
1,2-Dichloroethane	EPA 8260	<50	50	ug/L	MQS	05/04/2010
Benzene	EPA 8260	<50	50	ug/L	MQS	05/04/2010
Trichloroethene	EPA 8260	<50	50	ug/L	MQS	05/04/2010
1,2-Dichloropropane	EPA 8260	<50	50	ug/L	MQS	05/04/2010
Bromodichloromethane	EPA 8260	<50	50	ug/L	MQS	05/04/2010
Dibromomethane	EPA 8260	<50	50	ug/L	MQS	05/04/2010
4-Methyl-2-Pentanone	EPA 8260	<1300	1300	ug/L	MQS	05/04/2010
cis-1,3-Dichloropropene	EPA 8260	<50	50	ug/L	MQS	05/04/2010
Toluene	EPA 8260	<50	50	ug/L	MQS	05/04/2010
trans-1,3-Dichloropropene	EPA 8260	<100	100	ug/L	MQS	05/04/2010
1,1,2-Trichloroethane	EPA 8260	<50	50	ug/L	MQS	05/04/2010
2-Hexanone	EPA 8260	<1300	1300	ug/L	MQS	05/04/2010

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Date Received: **04/27/2010**
Date Reported: **05/07/2010**
Work Order No.: **1004-00230**

Sample ID: **GZ-ML-3-1** Sample No.: **007**
Sample Date: **04/26/2010**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
1,3-Dichloropropane	EPA 8260	<50	50	ug/L	MQS	05/04/2010
Tetrachloroethene	EPA 8260	5500	50	ug/L	MQS	05/04/2010
Dibromochloromethane	EPA 8260	<50	50	ug/L	MQS	05/04/2010
1,2-Dibromoethane (EDB)	EPA 8260	<100	100	ug/L	MQS	05/04/2010
Chlorobenzene	EPA 8260	<50	50	ug/L	MQS	05/04/2010
1,1,1,2-Tetrachloroethane	EPA 8260	<50	50	ug/L	MQS	05/04/2010
Ethylbenzene	EPA 8260	<50	50	ug/L	MQS	05/04/2010
m&p-Xylene	EPA 8260	<100	100	ug/L	MQS	05/04/2010
o-Xylene	EPA 8260	<50	50	ug/L	MQS	05/04/2010
Styrene	EPA 8260	<50	50	ug/L	MQS	05/04/2010
Bromoform	EPA 8260	<100	100	ug/L	MQS	05/04/2010
Isopropylbenzene	EPA 8260	<50	50	ug/L	MQS	05/04/2010
1,1,2,2-Tetrachloroethane	EPA 8260	<50	50	ug/L	MQS	05/04/2010
1,2,3-Trichloropropane	EPA 8260	<50	50	ug/L	MQS	05/04/2010
Bromobenzene	EPA 8260	<50	50	ug/L	MQS	05/04/2010
N-Propylbenzene	EPA 8260	<50	50	ug/L	MQS	05/04/2010
2-Chlorotoluene	EPA 8260	<50	50	ug/L	MQS	05/04/2010
1,3,5-Trimethylbenzene	EPA 8260	<50	50	ug/L	MQS	05/04/2010
4-Chlorotoluene	EPA 8260	<50	50	ug/L	MQS	05/04/2010
tert-Butylbenzene	EPA 8260	<50	50	ug/L	MQS	05/04/2010
1,2,4-Trimethylbenzene	EPA 8260	<50	50	ug/L	MQS	05/04/2010
sec-Butylbenzene	EPA 8260	<50	50	ug/L	MQS	05/04/2010
p-Isopropyltoluene	EPA 8260	<50	50	ug/L	MQS	05/04/2010
1,3-Dichlorobenzene	EPA 8260	<50	50	ug/L	MQS	05/04/2010
1,4-Dichlorobenzene	EPA 8260	<50	50	ug/L	MQS	05/04/2010
n-Butylbenzene	EPA 8260	<50	50	ug/L	MQS	05/04/2010
1,2-Dichlorobenzene	EPA 8260	<50	50	ug/L	MQS	05/04/2010
1,2-Dibromo-3-Chloropropane	EPA 8260	<100	100	ug/L	MQS	05/04/2010
1,2,4-Trichlorobenzene	EPA 8260	<50	50	ug/L	MQS	05/04/2010
Hexachlorobutadiene	EPA 8260	<50	50	ug/L	MQS	05/04/2010
Naphthalene	EPA 8260	<100	100	ug/L	MQS	05/04/2010
1,2,3-Trichlorobenzene	EPA 8260	<50	50	ug/L	MQS	05/04/2010
Surrogates:	EPA 8260					
***1,2-Dichloroethane-D4	EPA 8260	106	70-130	% R	MQS	05/04/2010
***Toluene-D8	EPA 8260	108	70-130	% R	MQS	05/04/2010

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Project Name.: **Phase II Bedrock - Charbert**
Project No.: **03.0032795.35**

Date Received: **04/27/2010**
Date Reported: **05/07/2010**
Work Order No.: **1004-00230**

Sample ID: **GZ-ML-3-1** Sample No.: **007**
Sample Date: **04/26/2010**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
***4-Bromofluorobenzene	EPA 8260	96.9	70-130	% R	MQS	05/04/2010
Preparation	EPA 5030B	50		CF	MQS	05/03/2010
SEMI-VOLATILE ORGANICS	EPA 8270				CMG	05/04/2010
ACID FRACTION:	EPA 8270					
Phenol	EPA 8270	<10	10	ug/L	CMG	05/04/2010
2-Chlorophenol	EPA 8270	<10	10	ug/L	CMG	05/04/2010
2-Methylphenol	EPA 8270	<10	10	ug/L	CMG	05/04/2010
3&4-Methylphenol	EPA 8270	<10	10	ug/L	CMG	05/04/2010
2-Nitrophenol	EPA 8270	<10	10	ug/L	CMG	05/04/2010
2,4-Dimethylphenol	EPA 8270	<10	10	ug/L	CMG	05/04/2010
Benzoic Acid	EPA 8270	<10	10	ug/L	CMG	05/04/2010
2,4-Dichlorophenol	EPA 8270	<10	10	ug/L	CMG	05/04/2010
4-Chloro-3-Methylphenol	EPA 8270	<20	20	ug/L	CMG	05/04/2010
2,4,6-Trichlorophenol	EPA 8270	<10	10	ug/L	CMG	05/04/2010
2,4,5-Trichlorophenol	EPA 8270	<10	10	ug/L	CMG	05/04/2010
2,4-Dinitrophenol	EPA 8270	<100	100	ug/L	CMG	05/04/2010
4-Nitrophenol	EPA 8270	<50	50	ug/L	CMG	05/04/2010
4,6-Dinitro-2-Methylphenol	EPA 8270	<50	50	ug/L	CMG	05/04/2010
Pentachlorophenol	EPA 8270	<50	50	ug/L	CMG	05/04/2010
BASE-NEUTRAL FRACTION:						
n-Nitrosodimethylamine	EPA 8270	<10	10	ug/L	CMG	05/04/2010
bis(2-Chloroethyl)Ether	EPA 8270	<10	10	ug/L	CMG	05/04/2010
1,3-Dichlorobenzene	EPA 8270	<10	10	ug/L	CMG	05/04/2010
1,4-Dichlorobenzene	EPA 8270	<10	10	ug/L	CMG	05/04/2010
Benzyl Alcohol	EPA 8270	<20	20	ug/L	CMG	05/04/2010
1,2-Dichlorobenzene	EPA 8270	<10	10	ug/L	CMG	05/04/2010
bis(2-Chloroisopropyl)Ether	EPA 8270	<10	10	ug/L	CMG	05/04/2010
n-Nitrosodi-n-Propylamine	EPA 8270	<10	10	ug/L	CMG	05/04/2010
Hexachloroethane	EPA 8270	<10	10	ug/L	CMG	05/04/2010
Nitrobenzene	EPA 8270	<10	10	ug/L	CMG	05/04/2010
Isophorone	EPA 8270	<10	10	ug/L	CMG	05/04/2010
bis(2-Chloroethoxy)Methane	EPA 8270	<10	10	ug/L	CMG	05/04/2010
1,2,4-Trichlorobenzene	EPA 8270	<10	10	ug/L	CMG	05/04/2010
Naphthalene	EPA 8270	<2.0	2.0	ug/L	CMG	05/04/2010
4-Chloroaniline	EPA 8270	<20	20	ug/L	CMG	05/04/2010

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Date Received: **04/27/2010**
Date Reported: **05/07/2010**
Work Order No.: **1004-00230**

Sample ID: **GZ-ML-3-1** Sample No.: **007**
Sample Date: **04/26/2010**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
Hexachlorobutadiene	EPA 8270	<10	10	ug/L	CMG	05/04/2010
2-Methylnaphthalene	EPA 8270	<2.0	2.0	ug/L	CMG	05/04/2010
Hexachlorocyclopentadiene	EPA 8270	<50	50	ug/L	CMG	05/04/2010
2-Chloronaphthalene	EPA 8270	<10	10	ug/L	CMG	05/04/2010
2-Nitroaniline	EPA 8270	<50	50	ug/L	CMG	05/04/2010
Dimethylphthalate	EPA 8270	<10	10	ug/L	CMG	05/04/2010
Acenaphthylene	EPA 8270	<2.0	2.0	ug/L	CMG	05/04/2010
2,6-Dinitrotoluene	EPA 8270	<10	10	ug/L	CMG	05/04/2010
3-Nitroaniline	EPA 8270	<50	50	ug/L	CMG	05/04/2010
Acenaphthene	EPA 8270	<2.0	2.0	ug/L	CMG	05/04/2010
Dibenzofuran	EPA 8270	<10	10	ug/L	CMG	05/04/2010
2,4-Dinitrotoluene	EPA 8270	<10	10	ug/L	CMG	05/04/2010
Diethylphthalate	EPA 8270	<10	10	ug/L	CMG	05/04/2010
Fluorene	EPA 8270	<2.0	2.0	ug/L	CMG	05/04/2010
4-Chlorophenyl Phenyl Ether	EPA 8270	<10	10	ug/L	CMG	05/04/2010
4-Nitroaniline	EPA 8270	<20	20	ug/L	CMG	05/04/2010
n-Nitrosodiphenylamine	EPA 8270	<10	10	ug/L	CMG	05/04/2010
4-Bromophenyl Phenyl Ether	EPA 8270	<10	10	ug/L	CMG	05/04/2010
Hexachlorobenzene	EPA 8270	<10	10	ug/L	CMG	05/04/2010
Phenanthrene	EPA 8270	<2.0	2.0	ug/L	CMG	05/04/2010
Anthracene	EPA 8270	<2.0	2.0	ug/L	CMG	05/04/2010
Carbazole	EPA 8270	<10	10	ug/L	CMG	05/04/2010
di-n-Butylphthalate	EPA 8270	<10	10	ug/L	CMG	05/04/2010
Fluoranthene	EPA 8270	<2.0	2.0	ug/L	CMG	05/04/2010
Pyrene	EPA 8270	<2.0	2.0	ug/L	CMG	05/04/2010
Butylbenzylphthalate	EPA 8270	<10	10	ug/L	CMG	05/04/2010
Benzo [a] Anthracene	EPA 8270	<2.0	2.0	ug/L	CMG	05/04/2010
3,3'-Dichlorobenzidine	EPA 8270	<10	10	ug/L	CMG	05/04/2010
Chrysene	EPA 8270	<2.0	2.0	ug/L	CMG	05/04/2010
bis(2-Ethylhexyl)Phthalate	EPA 8270	<10	10	ug/L	CMG	05/04/2010
di-n-Octylphthalate	EPA 8270	<10	10	ug/L	CMG	05/04/2010
Benzo [b] Fluoranthene	EPA 8270	<2.0	2.0	ug/L	CMG	05/04/2010
Benzo [k] Fluoranthene	EPA 8270	<2.0	2.0	ug/L	CMG	05/04/2010
Benzo [a] Pyrene	EPA 8270	<2.0	2.0	ug/L	CMG	05/04/2010
Indeno [1,2,3-cd] Pyrene	EPA 8270	<2.0	2.0	ug/L	CMG	05/04/2010

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Project Name.: **Phase II Bedrock - Charbert**
Project No.: **03.0032795.35**

Date Received: **04/27/2010**
Date Reported: **05/07/2010**
Work Order No.: **1004-00230**

Sample ID: **GZ-ML-3-1** Sample No.: **007**
Sample Date: **04/26/2010**

Test Performed	Method	Results		Reporting Limit	Units	Tech	Analysis Date
Dibenzo [a,h] Anthracene	EPA 8270	<2.0		2.0	ug/L	CMG	05/04/2010
Benzo [g,h,i] Perylene	EPA 8270	<2.0		2.0	ug/L	CMG	05/04/2010
Surrogates:	EPA 8270						
***2-Fluorophenol	EPA 8270	43.0		15-110	% R	CMG	05/04/2010
***Phenol-D6	EPA 8270	31.0		15-110	% R	CMG	05/04/2010
***Nitrobenzene-D5	EPA 8270	69.9		30-130	% R	CMG	05/04/2010
***2-Fluorobiphenyl	EPA 8270	68.3		30-130	% R	CMG	05/04/2010
***2,4,6-Tribromophenol	EPA 8270	61.1		15-110	% R	CMG	05/04/2010
***P-Terphenyl-D14	EPA 8270	84.5		39-120	% R	CMG	05/04/2010
Extraction	EPA 3510C	1.0			DF	JKC	05/03/2010
TOTAL PETROLEUM HYDROCARBON	D3328/EPA 8100/					KEF	04/29/2010
Hydrocarbon Content		<200		200	ug/L	KEF	04/29/2010
Surrogate:	D3328/EPA 8100						
***p-Terphenyl		48.0	*	40-140	% R	KEF	04/29/2010
Extraction	EPA 3510C	1			DF	JKC	04/29/2010
PRIORITY POLLUTANT METALS						LLZ	05/04/2010
Silver	EPA 6010B	<0.0050		0.0050	mg/L	LLZ	05/04/2010
Arsenic	EPA 6010B	<0.010		0.010	mg/L	LLZ	05/04/2010
Beryllium	EPA 6010B	<0.0040		0.0040	mg/L	LLZ	05/04/2010
Cadmium	EPA 6010B	<0.0050		0.0050	mg/L	LLZ	05/04/2010
Chromium	EPA 6010B	<0.0050		0.0050	mg/L	LLZ	05/04/2010
Copper	EPA 6010B	0.031		0.030	mg/L	LLZ	05/04/2010
Mercury	EPA 7470A	<0.00020		0.00020	mg/L	GDD	04/30/2010
Nickel	EPA 6010B	<0.010		0.010	mg/L	LLZ	05/04/2010
Lead	EPA 6010B	<0.010		0.010	mg/L	LLZ	05/04/2010
Antimony	EPA 6010B	<0.025		0.025	mg/L	LLZ	05/04/2010
Selenium	EPA 6010B	<0.025		0.025	mg/L	LLZ	05/04/2010
Thallium	EPA 6010B	<0.025		0.025	mg/L	LLZ	05/04/2010
Zinc	EPA 6010B	0.018		0.010	mg/L	LLZ	05/04/2010
Iron	EPA 6010B	12		0.025	mg/L	LLZ	05/04/2010
Manganese	EPA 6010B	0.19		0.0050	mg/L	LLZ	05/04/2010

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Project Name.: **Phase II Bedrock - Charbert**
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Date Received: **04/27/2010**
Date Reported: **05/07/2010**
Work Order No.: **1004-00230**

Sample ID: **GZ-ML-3-2** Sample No.: **008**
Sample Date: **04/26/2010**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260				MQS	05/04/2010
Dichlorodifluoromethane	EPA 8260	<2.0	2.0	ug/L	MQS	05/04/2010
Chloromethane	EPA 8260	<2.0	2.0	ug/L	MQS	05/04/2010
Vinyl Chloride	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Bromomethane	EPA 8260	<2.0	2.0	ug/L	MQS	05/04/2010
Chloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Trichlorofluoromethane	EPA 8260	<2.0	2.0	ug/L	MQS	05/04/2010
Diethylether	EPA 8260	<2.0	2.0	ug/L	MQS	05/04/2010
Acetone	EPA 8260	<25	25	ug/L	MQS	05/04/2010
1,1-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Dichloromethane	EPA 8260	<2.0	2.0	ug/L	MQS	05/04/2010
Methyl-Tert-Butyl-Ether	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
trans-1,2-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
1,1-Dichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
2-Butanone	EPA 8260	<25	25	ug/L	MQS	05/04/2010
2,2-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
cis-1,2-Dichloroethene	EPA 8260	4.4	1.0	ug/L	MQS	05/04/2010
Chloroform	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Bromochloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Tetrahydrofuran	EPA 8260	<10	10	ug/L	MQS	05/04/2010
1,1,1-Trichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
1,1-Dichloropropene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Carbon Tetrachloride	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
1,2-Dichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Benzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Trichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
1,2-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Bromodichloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Dibromomethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
4-Methyl-2-Pentanone	EPA 8260	<25	25	ug/L	MQS	05/04/2010
cis-1,3-Dichloropropene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Toluene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
trans-1,3-Dichloropropene	EPA 8260	<2.0	2.0	ug/L	MQS	05/04/2010
1,1,2-Trichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
2-Hexanone	EPA 8260	<25	25	ug/L	MQS	05/04/2010

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ANALYTICAL REPORT

GZA GeoEnvironmental, Inc.
530 Broadway
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Richard Carlone

Project Name.: **Phase II Bedrock - Charbert**
Project No.: **03.0032795.35**

Date Received: **04/27/2010**
Date Reported: **05/07/2010**
Work Order No.: **1004-00230**

Sample ID: **GZ-ML-3-2** Sample No.: **008**
Sample Date: **04/26/2010**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
1,3-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Tetrachloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Dibromochloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
1,2-Dibromoethane (EDB)	EPA 8260	<2.0	2.0	ug/L	MQS	05/04/2010
Chlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
1,1,1,2-Tetrachloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Ethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
m&p-Xylene	EPA 8260	<2.0	2.0	ug/L	MQS	05/04/2010
o-Xylene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Styrene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Bromoform	EPA 8260	<2.0	2.0	ug/L	MQS	05/04/2010
Isopropylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
1,1,2,2-Tetrachloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
1,2,3-Trichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Bromobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
N-Propylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
2-Chlorotoluene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
1,3,5-Trimethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
4-Chlorotoluene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
tert-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
1,2,4-Trimethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
sec-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
p-Isopropyltoluene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
1,3-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
1,4-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
n-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
1,2-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
1,2-Dibromo-3-Chloropropane	EPA 8260	<2.0	2.0	ug/L	MQS	05/04/2010
1,2,4-Trichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Hexachlorobutadiene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Naphthalene	EPA 8260	<2.0	2.0	ug/L	MQS	05/04/2010
1,2,3-Trichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Surrogates:	EPA 8260					
***1,2-Dichloroethane-D4	EPA 8260	108	70-130	% R	MQS	05/04/2010
***Toluene-D8	EPA 8260	108	70-130	% R	MQS	05/04/2010

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A N A L Y T I C A L R E P O R T

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Richard Carlone

Project Name.: **Phase II Bedrock - Charbert**
Project No.: **03.0032795.35**

Date Received: **04/27/2010**
Date Reported: **05/07/2010**
Work Order No.: **1004-00230**

Sample ID: **GZ-ML-3-2** Sample No.: **008**
Sample Date: **04/26/2010**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
***4-Bromofluorobenzene	EPA 8260	97.2	70-130	% R	MQS	05/04/2010
Preparation	EPA 5030B	1.0		CF	MQS	05/03/2010
SEMI-VOLATILE ORGANICS	EPA 8270				CMG	05/04/2010
ACID FRACTION:	EPA 8270					
Phenol	EPA 8270	<10	10	ug/L	CMG	05/04/2010
2-Chlorophenol	EPA 8270	<10	10	ug/L	CMG	05/04/2010
2-Methylphenol	EPA 8270	<10	10	ug/L	CMG	05/04/2010
3&4-Methylphenol	EPA 8270	<10	10	ug/L	CMG	05/04/2010
2-Nitrophenol	EPA 8270	<10	10	ug/L	CMG	05/04/2010
2,4-Dimethylphenol	EPA 8270	<10	10	ug/L	CMG	05/04/2010
Benzoic Acid	EPA 8270	<10	10	ug/L	CMG	05/04/2010
2,4-Dichlorophenol	EPA 8270	<10	10	ug/L	CMG	05/04/2010
4-Chloro-3-Methylphenol	EPA 8270	<20	20	ug/L	CMG	05/04/2010
2,4,6-Trichlorophenol	EPA 8270	<10	10	ug/L	CMG	05/04/2010
2,4,5-Trichlorophenol	EPA 8270	<10	10	ug/L	CMG	05/04/2010
2,4-Dinitrophenol	EPA 8270	<100	100	ug/L	CMG	05/04/2010
4-Nitrophenol	EPA 8270	<50	50	ug/L	CMG	05/04/2010
4,6-Dinitro-2-Methylphenol	EPA 8270	<50	50	ug/L	CMG	05/04/2010
Pentachlorophenol	EPA 8270	<50	50	ug/L	CMG	05/04/2010
BASE-NEUTRAL FRACTION:						
n-Nitrosodimethylamine	EPA 8270	<10	10	ug/L	CMG	05/04/2010
bis(2-Chloroethyl)Ether	EPA 8270	<10	10	ug/L	CMG	05/04/2010
1,3-Dichlorobenzene	EPA 8270	<10	10	ug/L	CMG	05/04/2010
1,4-Dichlorobenzene	EPA 8270	<10	10	ug/L	CMG	05/04/2010
Benzyl Alcohol	EPA 8270	<20	20	ug/L	CMG	05/04/2010
1,2-Dichlorobenzene	EPA 8270	<10	10	ug/L	CMG	05/04/2010
bis(2-Chloroisopropyl)Ether	EPA 8270	<10	10	ug/L	CMG	05/04/2010
n-Nitrosodi-n-Propylamine	EPA 8270	<10	10	ug/L	CMG	05/04/2010
Hexachloroethane	EPA 8270	<10	10	ug/L	CMG	05/04/2010
Nitrobenzene	EPA 8270	<10	10	ug/L	CMG	05/04/2010
Isophorone	EPA 8270	<10	10	ug/L	CMG	05/04/2010
bis(2-Chloroethoxy)Methane	EPA 8270	<10	10	ug/L	CMG	05/04/2010
1,2,4-Trichlorobenzene	EPA 8270	<10	10	ug/L	CMG	05/04/2010
Naphthalene	EPA 8270	<2.0	2.0	ug/L	CMG	05/04/2010
4-Chloroaniline	EPA 8270	<20	20	ug/L	CMG	05/04/2010

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Project Name.: **Phase II Bedrock - Charbert**
Project No.: **03.0032795.35**

Date Received: **04/27/2010**
Date Reported: **05/07/2010**
Work Order No.: **1004-00230**

Sample ID: **GZ-ML-3-2** Sample No.: **008**
Sample Date: **04/26/2010**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
Hexachlorobutadiene	EPA 8270	<10	10	ug/L	CMG	05/04/2010
2-Methylnaphthalene	EPA 8270	<2.0	2.0	ug/L	CMG	05/04/2010
Hexachlorocyclopentadiene	EPA 8270	<50	50	ug/L	CMG	05/04/2010
2-Chloronaphthalene	EPA 8270	<10	10	ug/L	CMG	05/04/2010
2-Nitroaniline	EPA 8270	<50	50	ug/L	CMG	05/04/2010
Dimethylphthalate	EPA 8270	<10	10	ug/L	CMG	05/04/2010
Acenaphthylene	EPA 8270	<2.0	2.0	ug/L	CMG	05/04/2010
2,6-Dinitrotoluene	EPA 8270	<10	10	ug/L	CMG	05/04/2010
3-Nitroaniline	EPA 8270	<50	50	ug/L	CMG	05/04/2010
Acenaphthene	EPA 8270	<2.0	2.0	ug/L	CMG	05/04/2010
Dibenzofuran	EPA 8270	<10	10	ug/L	CMG	05/04/2010
2,4-Dinitrotoluene	EPA 8270	<10	10	ug/L	CMG	05/04/2010
Diethylphthalate	EPA 8270	<10	10	ug/L	CMG	05/04/2010
Fluorene	EPA 8270	<2.0	2.0	ug/L	CMG	05/04/2010
4-Chlorophenyl Phenyl Ether	EPA 8270	<10	10	ug/L	CMG	05/04/2010
4-Nitroaniline	EPA 8270	<20	20	ug/L	CMG	05/04/2010
n-Nitrosodiphenylamine	EPA 8270	<10	10	ug/L	CMG	05/04/2010
4-Bromophenyl Phenyl Ether	EPA 8270	<10	10	ug/L	CMG	05/04/2010
Hexachlorobenzene	EPA 8270	<10	10	ug/L	CMG	05/04/2010
Phenanthrene	EPA 8270	<2.0	2.0	ug/L	CMG	05/04/2010
Anthracene	EPA 8270	<2.0	2.0	ug/L	CMG	05/04/2010
Carbazole	EPA 8270	<10	10	ug/L	CMG	05/04/2010
di-n-Butylphthalate	EPA 8270	<10	10	ug/L	CMG	05/04/2010
Fluoranthene	EPA 8270	<2.0	2.0	ug/L	CMG	05/04/2010
Pyrene	EPA 8270	<2.0	2.0	ug/L	CMG	05/04/2010
Butylbenzylphthalate	EPA 8270	<10	10	ug/L	CMG	05/04/2010
Benzo [a] Anthracene	EPA 8270	<2.0	2.0	ug/L	CMG	05/04/2010
3,3'-Dichlorobenzidine	EPA 8270	<10	10	ug/L	CMG	05/04/2010
Chrysene	EPA 8270	<2.0	2.0	ug/L	CMG	05/04/2010
bis(2-Ethylhexyl)Phthalate	EPA 8270	<10	10	ug/L	CMG	05/04/2010
di-n-Octylphthalate	EPA 8270	<10	10	ug/L	CMG	05/04/2010
Benzo [b] Fluoranthene	EPA 8270	<2.0	2.0	ug/L	CMG	05/04/2010
Benzo [k] Fluoranthene	EPA 8270	<2.0	2.0	ug/L	CMG	05/04/2010
Benzo [a] Pyrene	EPA 8270	<2.0	2.0	ug/L	CMG	05/04/2010
Indeno [1,2,3-cd] Pyrene	EPA 8270	<2.0	2.0	ug/L	CMG	05/04/2010

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ANALYTICAL REPORT

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Project Name.: **Phase II Bedrock - Charbert**
Project No.: **03.0032795.35**

Date Received: **04/27/2010**
Date Reported: **05/07/2010**
Work Order No.: **1004-00230**

Sample ID: **GZ-ML-3-2** Sample No.: **008**
Sample Date: **04/26/2010**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
Dibenzo [a,h] Anthracene	EPA 8270	<2.0	2.0	ug/L	CMG	05/04/2010
Benzo [g,h,i] Perylene	EPA 8270	<2.0	2.0	ug/L	CMG	05/04/2010
Surrogates:	EPA 8270					
***2-Fluorophenol	EPA 8270	43.0	15-110	% R	CMG	05/04/2010
***Phenol-D6	EPA 8270	31.1	15-110	% R	CMG	05/04/2010
***Nitrobenzene-D5	EPA 8270	71.0	30-130	% R	CMG	05/04/2010
***2-Fluorobiphenyl	EPA 8270	68.5	30-130	% R	CMG	05/04/2010
***2,4,6-Tribromophenol	EPA 8270	62.5	15-110	% R	CMG	05/04/2010
***P-Terphenyl-D14	EPA 8270	86.0	39-120	% R	CMG	05/04/2010
Extraction	EPA 3510C	1.0		DF	JKC	05/03/2010
TOTAL PETROLEUM HYDROCARBON	D3328/EPA 8100/				KEF	04/29/2010
Hydrocarbon Content		760	200	ug/L	KEF	04/29/2010
Surrogate:	D3328/EPA 8100					
***p-Terphenyl		52.9	40-140	% R	KEF	04/29/2010
Extraction	EPA 3510C	1		DF	JKC	04/29/2010
PRIORITY POLLUTANT METALS					LLZ	05/04/2010
Silver	EPA 6010B	<0.0050	0.0050	mg/L	LLZ	05/04/2010
Arsenic	EPA 6010B	<0.010	0.010	mg/L	LLZ	05/04/2010
Beryllium	EPA 6010B	<0.0040	0.0040	mg/L	LLZ	05/04/2010
Cadmium	EPA 6010B	<0.0050	0.0050	mg/L	LLZ	05/04/2010
Chromium	EPA 6010B	<0.0050	0.0050	mg/L	LLZ	05/04/2010
Copper	EPA 6010B	<0.030	0.030	mg/L	LLZ	05/04/2010
Mercury	EPA 7470A	<0.00020	0.00020	mg/L	GDD	04/30/2010
Nickel	EPA 6010B	<0.010	0.010	mg/L	LLZ	05/04/2010
Lead	EPA 6010B	<0.010	0.010	mg/L	LLZ	05/04/2010
Antimony	EPA 6010B	<0.025	0.025	mg/L	LLZ	05/04/2010
Selenium	EPA 6010B	<0.025	0.025	mg/L	LLZ	05/04/2010
Thallium	EPA 6010B	<0.025	0.025	mg/L	LLZ	05/04/2010
Zinc	EPA 6010B	0.015	0.010	mg/L	LLZ	05/04/2010
Iron	EPA 6010B	5.1	0.025	mg/L	LLZ	05/04/2010
Manganese	EPA 6010B	0.52	0.0050	mg/L	LLZ	05/04/2010

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Richard Carlone

Project Name.: **Phase II Bedrock - Charbert**
Project No.: **03.0032795.35**

Date Received: **04/27/2010**
Date Reported: **05/07/2010**
Work Order No.: **1004-00230**

Sample ID: **GZ-ML-3-3** Sample No.: **009**
Sample Date: **04/26/2010**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260				MQS	05/04/2010
Dichlorodifluoromethane	EPA 8260	<2.0	2.0	ug/L	MQS	05/04/2010
Chloromethane	EPA 8260	<2.0	2.0	ug/L	MQS	05/04/2010
Vinyl Chloride	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Bromomethane	EPA 8260	<2.0	2.0	ug/L	MQS	05/04/2010
Chloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Trichlorofluoromethane	EPA 8260	<2.0	2.0	ug/L	MQS	05/04/2010
Diethylether	EPA 8260	<2.0	2.0	ug/L	MQS	05/04/2010
Acetone	EPA 8260	<25	25	ug/L	MQS	05/04/2010
1,1-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Dichloromethane	EPA 8260	<2.0	2.0	ug/L	MQS	05/04/2010
Methyl-Tert-Butyl-Ether	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
trans-1,2-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
1,1-Dichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
2-Butanone	EPA 8260	<25	25	ug/L	MQS	05/04/2010
2,2-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
cis-1,2-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Chloroform	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Bromochloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Tetrahydrofuran	EPA 8260	<10	10	ug/L	MQS	05/04/2010
1,1,1-Trichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
1,1-Dichloropropene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Carbon Tetrachloride	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
1,2-Dichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Benzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Trichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
1,2-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Bromodichloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Dibromomethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
4-Methyl-2-Pentanone	EPA 8260	<25	25	ug/L	MQS	05/04/2010
cis-1,3-Dichloropropene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Toluene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
trans-1,3-Dichloropropene	EPA 8260	<2.0	2.0	ug/L	MQS	05/04/2010
1,1,2-Trichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
2-Hexanone	EPA 8260	<25	25	ug/L	MQS	05/04/2010

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Richard Carlone

Project Name.: **Phase II Bedrock - Charbert**
Project No.: **03.0032795.35**

Date Received: **04/27/2010**
Date Reported: **05/07/2010**
Work Order No.: **1004-00230**

Sample ID: **GZ-ML-3-3** Sample No.: **009**
Sample Date: **04/26/2010**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
1,3-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Tetrachloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Dibromochloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
1,2-Dibromoethane (EDB)	EPA 8260	<2.0	2.0	ug/L	MQS	05/04/2010
Chlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
1,1,1,2-Tetrachloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Ethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
m&p-Xylene	EPA 8260	<2.0	2.0	ug/L	MQS	05/04/2010
o-Xylene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Styrene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Bromoform	EPA 8260	<2.0	2.0	ug/L	MQS	05/04/2010
Isopropylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
1,1,2,2-Tetrachloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
1,2,3-Trichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Bromobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
N-Propylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
2-Chlorotoluene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
1,3,5-Trimethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
4-Chlorotoluene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
tert-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
1,2,4-Trimethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
sec-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
p-Isopropyltoluene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
1,3-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
1,4-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
n-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
1,2-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
1,2-Dibromo-3-Chloropropane	EPA 8260	<2.0	2.0	ug/L	MQS	05/04/2010
1,2,4-Trichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Hexachlorobutadiene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Naphthalene	EPA 8260	<2.0	2.0	ug/L	MQS	05/04/2010
1,2,3-Trichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Surrogates:	EPA 8260					
***1,2-Dichloroethane-D4	EPA 8260	98.5	70-130	% R	MQS	05/04/2010
***Toluene-D8	EPA 8260	108	70-130	% R	MQS	05/04/2010

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ANALYTICAL REPORT

GZA GeoEnvironmental, Inc.
530 Broadway
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Richard Carlone

Project Name.: **Phase II Bedrock - Charbert**
Project No.: **03.0032795.35**

Date Received: **04/27/2010**
Date Reported: **05/07/2010**
Work Order No.: **1004-00230**

Sample ID: **GZ-ML-3-3** Sample No.: **009**
Sample Date: **04/26/2010**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
***4-Bromofluorobenzene	EPA 8260	92.0	70-130	% R	MQS	05/04/2010
Preparation	EPA 5030B	1.0		CF	MQS	05/03/2010
SEMI-VOLATILE ORGANICS	EPA 8270				CMG	05/04/2010
ACID FRACTION:	EPA 8270					
Phenol	EPA 8270	<10	10	ug/L	CMG	05/04/2010
2-Chlorophenol	EPA 8270	<10	10	ug/L	CMG	05/04/2010
2-Methylphenol	EPA 8270	<10	10	ug/L	CMG	05/04/2010
3&4-Methylphenol	EPA 8270	<10	10	ug/L	CMG	05/04/2010
2-Nitrophenol	EPA 8270	<10	10	ug/L	CMG	05/04/2010
2,4-Dimethylphenol	EPA 8270	<10	10	ug/L	CMG	05/04/2010
Benzoic Acid	EPA 8270	<10	10	ug/L	CMG	05/04/2010
2,4-Dichlorophenol	EPA 8270	<10	10	ug/L	CMG	05/04/2010
4-Chloro-3-Methylphenol	EPA 8270	<20	20	ug/L	CMG	05/04/2010
2,4,6-Trichlorophenol	EPA 8270	<10	10	ug/L	CMG	05/04/2010
2,4,5-Trichlorophenol	EPA 8270	<10	10	ug/L	CMG	05/04/2010
2,4-Dinitrophenol	EPA 8270	<100	100	ug/L	CMG	05/04/2010
4-Nitrophenol	EPA 8270	<50	50	ug/L	CMG	05/04/2010
4,6-Dinitro-2-Methylphenol	EPA 8270	<50	50	ug/L	CMG	05/04/2010
Pentachlorophenol	EPA 8270	<50	50	ug/L	CMG	05/04/2010
BASE-NEUTRAL FRACTION:						
n-Nitrosodimethylamine	EPA 8270	<10	10	ug/L	CMG	05/04/2010
bis(2-Chloroethyl)Ether	EPA 8270	<10	10	ug/L	CMG	05/04/2010
1,3-Dichlorobenzene	EPA 8270	<10	10	ug/L	CMG	05/04/2010
1,4-Dichlorobenzene	EPA 8270	<10	10	ug/L	CMG	05/04/2010
Benzyl Alcohol	EPA 8270	<20	20	ug/L	CMG	05/04/2010
1,2-Dichlorobenzene	EPA 8270	<10	10	ug/L	CMG	05/04/2010
bis(2-Chloroisopropyl)Ether	EPA 8270	<10	10	ug/L	CMG	05/04/2010
n-Nitrosodi-n-Propylamine	EPA 8270	<10	10	ug/L	CMG	05/04/2010
Hexachloroethane	EPA 8270	<10	10	ug/L	CMG	05/04/2010
Nitrobenzene	EPA 8270	<10	10	ug/L	CMG	05/04/2010
Isophorone	EPA 8270	<10	10	ug/L	CMG	05/04/2010
bis(2-Chloroethoxy)Methane	EPA 8270	<10	10	ug/L	CMG	05/04/2010
1,2,4-Trichlorobenzene	EPA 8270	<10	10	ug/L	CMG	05/04/2010
Naphthalene	EPA 8270	<2.0	2.0	ug/L	CMG	05/04/2010
4-Chloroaniline	EPA 8270	<20	20	ug/L	CMG	05/04/2010

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Richard Carlone

Project Name.: **Phase II Bedrock - Charbert**
Project No.: **03.0032795.35**

Date Received: **04/27/2010**
Date Reported: **05/07/2010**
Work Order No.: **1004-00230**

Sample ID: **GZ-ML-3-3** Sample No.: **009**
Sample Date: **04/26/2010**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
Hexachlorobutadiene	EPA 8270	<10	10	ug/L	CMG	05/04/2010
2-Methylnaphthalene	EPA 8270	<2.0	2.0	ug/L	CMG	05/04/2010
Hexachlorocyclopentadiene	EPA 8270	<50	50	ug/L	CMG	05/04/2010
2-Chloronaphthalene	EPA 8270	<10	10	ug/L	CMG	05/04/2010
2-Nitroaniline	EPA 8270	<50	50	ug/L	CMG	05/04/2010
Dimethylphthalate	EPA 8270	<10	10	ug/L	CMG	05/04/2010
Acenaphthylene	EPA 8270	<2.0	2.0	ug/L	CMG	05/04/2010
2,6-Dinitrotoluene	EPA 8270	<10	10	ug/L	CMG	05/04/2010
3-Nitroaniline	EPA 8270	<50	50	ug/L	CMG	05/04/2010
Acenaphthene	EPA 8270	<2.0	2.0	ug/L	CMG	05/04/2010
Dibenzofuran	EPA 8270	<10	10	ug/L	CMG	05/04/2010
2,4-Dinitrotoluene	EPA 8270	<10	10	ug/L	CMG	05/04/2010
Diethylphthalate	EPA 8270	<10	10	ug/L	CMG	05/04/2010
Fluorene	EPA 8270	<2.0	2.0	ug/L	CMG	05/04/2010
4-Chlorophenyl Phenyl Ether	EPA 8270	<10	10	ug/L	CMG	05/04/2010
4-Nitroaniline	EPA 8270	<20	20	ug/L	CMG	05/04/2010
n-Nitrosodiphenylamine	EPA 8270	<10	10	ug/L	CMG	05/04/2010
4-Bromophenyl Phenyl Ether	EPA 8270	<10	10	ug/L	CMG	05/04/2010
Hexachlorobenzene	EPA 8270	<10	10	ug/L	CMG	05/04/2010
Phenanthrene	EPA 8270	<2.0	2.0	ug/L	CMG	05/04/2010
Anthracene	EPA 8270	<2.0	2.0	ug/L	CMG	05/04/2010
Carbazole	EPA 8270	<10	10	ug/L	CMG	05/04/2010
di-n-Butylphthalate	EPA 8270	<10	10	ug/L	CMG	05/04/2010
Fluoranthene	EPA 8270	<2.0	2.0	ug/L	CMG	05/04/2010
Pyrene	EPA 8270	<2.0	2.0	ug/L	CMG	05/04/2010
Butylbenzylphthalate	EPA 8270	<10	10	ug/L	CMG	05/04/2010
Benzo [a] Anthracene	EPA 8270	<2.0	2.0	ug/L	CMG	05/04/2010
3,3'-Dichlorobenzidine	EPA 8270	<10	10	ug/L	CMG	05/04/2010
Chrysene	EPA 8270	<2.0	2.0	ug/L	CMG	05/04/2010
bis(2-Ethylhexyl)Phthalate	EPA 8270	<10	10	ug/L	CMG	05/04/2010
di-n-Octylphthalate	EPA 8270	<10	10	ug/L	CMG	05/04/2010
Benzo [b] Fluoranthene	EPA 8270	<2.0	2.0	ug/L	CMG	05/04/2010
Benzo [k] Fluoranthene	EPA 8270	<2.0	2.0	ug/L	CMG	05/04/2010
Benzo [a] Pyrene	EPA 8270	<2.0	2.0	ug/L	CMG	05/04/2010
Indeno [1,2,3-cd] Pyrene	EPA 8270	<2.0	2.0	ug/L	CMG	05/04/2010

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ANALYTICAL REPORT

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Project Name.: **Phase II Bedrock - Charbert**
Project No.: **03.0032795.35**

Date Received: **04/27/2010**
Date Reported: **05/07/2010**
Work Order No.: **1004-00230**

Sample ID: **GZ-ML-3-3** Sample No.: **009**
Sample Date: **04/26/2010**

Test Performed	Method	Results		Reporting Limit	Units	Tech	Analysis Date
Dibenzo [a,h] Anthracene	EPA 8270	<2.0		2.0	ug/L	CMG	05/04/2010
Benzo [g,h,i] Perylene	EPA 8270	<2.0		2.0	ug/L	CMG	05/04/2010
Surrogates:	EPA 8270						
***2-Fluorophenol	EPA 8270	40.4		15-110	% R	CMG	05/04/2010
***Phenol-D6	EPA 8270	28.6		15-110	% R	CMG	05/04/2010
***Nitrobenzene-D5	EPA 8270	66.8		30-130	% R	CMG	05/04/2010
***2-Fluorobiphenyl	EPA 8270	68.6		30-130	% R	CMG	05/04/2010
***2,4,6-Tribromophenol	EPA 8270	62.1		15-110	% R	CMG	05/04/2010
***P-Terphenyl-D14	EPA 8270	149	*	39-120	% R	CMG	05/04/2010
Extraction	EPA 3510C	1.0			DF	JKC	05/03/2010
TOTAL PETROLEUM HYDROCARBON	D3328/EPA 8100/					KEF	05/03/2010
Hydrocarbon Content		2200		1000	ug/L	KEF	05/03/2010
Surrogate:	D3328/EPA 8100						
***p-Terphenyl		66.4		40-140	% R	KEF	05/03/2010
Extraction	EPA 3510C	10			DF	JKC	04/29/2010
PRIORITY POLLUTANT METALS						LLZ	05/04/2010
Silver	EPA 6010B	<0.0050		0.0050	mg/L	LLZ	05/04/2010
Arsenic	EPA 6010B	<0.010		0.010	mg/L	LLZ	05/04/2010
Beryllium	EPA 6010B	<0.0040		0.0040	mg/L	LLZ	05/04/2010
Cadmium	EPA 6010B	<0.0050		0.0050	mg/L	LLZ	05/04/2010
Chromium	EPA 6010B	<0.0050		0.0050	mg/L	LLZ	05/04/2010
Copper	EPA 6010B	<0.030		0.030	mg/L	LLZ	05/04/2010
Mercury	EPA 7470A	<0.00020		0.00020	mg/L	GDD	04/30/2010
Nickel	EPA 6010B	<0.010		0.010	mg/L	LLZ	05/04/2010
Lead	EPA 6010B	<0.010		0.010	mg/L	LLZ	05/04/2010
Antimony	EPA 6010B	<0.025		0.025	mg/L	LLZ	05/04/2010
Selenium	EPA 6010B	<0.025		0.025	mg/L	LLZ	05/04/2010
Thallium	EPA 6010B	<0.025		0.025	mg/L	LLZ	05/04/2010
Zinc	EPA 6010B	0.013		0.010	mg/L	LLZ	05/04/2010
Iron	EPA 6010B	0.91		0.025	mg/L	LLZ	05/04/2010
Manganese	EPA 6010B	0.086		0.0050	mg/L	LLZ	05/04/2010

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Project Name.: **Phase II Bedrock - Charbert**
Project No.: **03.0032795.35**

Date Received: **04/27/2010**
Date Reported: **05/07/2010**
Work Order No.: **1004-00230**

Sample ID: **TBLK 042610** Sample No.: **010**
Sample Date: **04/26/2010**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260				MQS	05/04/2010
Dichlorodifluoromethane	EPA 8260	<2.0	2.0	ug/L	MQS	05/04/2010
Chloromethane	EPA 8260	<2.0	2.0	ug/L	MQS	05/04/2010
Vinyl Chloride	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Bromomethane	EPA 8260	<2.0	2.0	ug/L	MQS	05/04/2010
Chloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Trichlorofluoromethane	EPA 8260	<2.0	2.0	ug/L	MQS	05/04/2010
Diethylether	EPA 8260	<2.0	2.0	ug/L	MQS	05/04/2010
Acetone	EPA 8260	<25	25	ug/L	MQS	05/04/2010
1,1-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Dichloromethane	EPA 8260	<2.0	2.0	ug/L	MQS	05/04/2010
Methyl-Tert-Butyl-Ether	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
trans-1,2-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
1,1-Dichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
2-Butanone	EPA 8260	<25	25	ug/L	MQS	05/04/2010
2,2-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
cis-1,2-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Chloroform	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Bromochloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Tetrahydrofuran	EPA 8260	<10	10	ug/L	MQS	05/04/2010
1,1,1-Trichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
1,1-Dichloropropene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Carbon Tetrachloride	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
1,2-Dichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Benzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Trichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
1,2-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Bromodichloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Dibromomethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
4-Methyl-2-Pentanone	EPA 8260	<25	25	ug/L	MQS	05/04/2010
cis-1,3-Dichloropropene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Toluene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
trans-1,3-Dichloropropene	EPA 8260	<2.0	2.0	ug/L	MQS	05/04/2010
1,1,2-Trichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
2-Hexanone	EPA 8260	<25	25	ug/L	MQS	05/04/2010

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A N A L Y T I C A L R E P O R T

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Richard Carlone

Project Name.: **Phase II Bedrock - Charbert**
Project No.: **03.0032795.35**

Date Received: **04/27/2010**
Date Reported: **05/07/2010**
Work Order No.: **1004-00230**

Sample ID: **TBLK 042610** Sample No.: **010**
Sample Date: **04/26/2010**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
1,3-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Tetrachloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Dibromochloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
1,2-Dibromoethane (EDB)	EPA 8260	<2.0	2.0	ug/L	MQS	05/04/2010
Chlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
1,1,1,2-Tetrachloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Ethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
m&p-Xylene	EPA 8260	<2.0	2.0	ug/L	MQS	05/04/2010
o-Xylene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Styrene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Bromoform	EPA 8260	<2.0	2.0	ug/L	MQS	05/04/2010
Isopropylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
1,1,2,2-Tetrachloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
1,2,3-Trichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Bromobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
N-Propylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
2-Chlorotoluene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
1,3,5-Trimethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
4-Chlorotoluene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
tert-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
1,2,4-Trimethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
sec-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
p-Isopropyltoluene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
1,3-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
1,4-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
n-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
1,2-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
1,2-Dibromo-3-Chloropropane	EPA 8260	<2.0	2.0	ug/L	MQS	05/04/2010
1,2,4-Trichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Hexachlorobutadiene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Naphthalene	EPA 8260	<2.0	2.0	ug/L	MQS	05/04/2010
1,2,3-Trichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Surrogates:	EPA 8260					
***1,2-Dichloroethane-D4	EPA 8260	104	70-130	% R	MQS	05/04/2010
***Toluene-D8	EPA 8260	106	70-130	% R	MQS	05/04/2010

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Project Name.: **Phase II Bedrock - Charbert**
Project No.: **03.0032795.35**

Date Received: **04/27/2010**
Date Reported: **05/07/2010**
Work Order No.: **1004-00230**

Sample ID: **TBLK 042610** Sample No.: **010**
Sample Date: **04/26/2010**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
***4-Bromofluorobenzene	EPA 8260	95.0	70-130	% R	MQS	05/04/2010
Preparation	EPA 5030B	1.0		CF	MQS	05/03/2010

GZA GeoEnvironmental, Inc.
106 South Street
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(781) 278-4700

ANALYTICAL REPORT

GZA GeoEnvironmental, Inc.
530 Broadway
Providence, RI 02909

Richard Carlone

Project Name.: **Phase II Bedrock - Charbert**
Project No.: **03.0032795.35**

Date Received: **04/27/2010**
Date Reported: **05/07/2010**
Work Order No.: **1004-00230**

Sample ID: **TBLK 2 042610** Sample No.: **011**

Sample Date: **04/26/2010**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260				MQS	05/04/2010
Dichlorodifluoromethane	EPA 8260	<2.0	2.0	ug/L	MQS	05/04/2010
Chloromethane	EPA 8260	<2.0	2.0	ug/L	MQS	05/04/2010
Vinyl Chloride	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Bromomethane	EPA 8260	<2.0	2.0	ug/L	MQS	05/04/2010
Chloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Trichlorofluoromethane	EPA 8260	<2.0	2.0	ug/L	MQS	05/04/2010
Diethylether	EPA 8260	<2.0	2.0	ug/L	MQS	05/04/2010
Acetone	EPA 8260	<25	25	ug/L	MQS	05/04/2010
1,1-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Dichloromethane	EPA 8260	<2.0	2.0	ug/L	MQS	05/04/2010
Methyl-Tert-Butyl-Ether	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
trans-1,2-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
1,1-Dichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
2-Butanone	EPA 8260	<25	25	ug/L	MQS	05/04/2010
2,2-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
cis-1,2-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Chloroform	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Bromochloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Tetrahydrofuran	EPA 8260	<10	10	ug/L	MQS	05/04/2010
1,1,1-Trichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
1,1-Dichloropropene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Carbon Tetrachloride	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
1,2-Dichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Benzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Trichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
1,2-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Bromodichloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Dibromomethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
4-Methyl-2-Pentanone	EPA 8260	<25	25	ug/L	MQS	05/04/2010
cis-1,3-Dichloropropene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Toluene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
trans-1,3-Dichloropropene	EPA 8260	<2.0	2.0	ug/L	MQS	05/04/2010
1,1,2-Trichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
2-Hexanone	EPA 8260	<25	25	ug/L	MQS	05/04/2010

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A N A L Y T I C A L R E P O R T

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Richard Carlone

Project Name.: **Phase II Bedrock - Charbert**
Project No.: **03.0032795.35**

Date Received: **04/27/2010**
Date Reported: **05/07/2010**
Work Order No.: **1004-00230**

Sample ID: **TBLK 2 042610** Sample No.: **011**

Sample Date: **04/26/2010**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
1,3-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Tetrachloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Dibromochloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
1,2-Dibromoethane (EDB)	EPA 8260	<2.0	2.0	ug/L	MQS	05/04/2010
Chlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
1,1,1,2-Tetrachloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Ethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
m&p-Xylene	EPA 8260	<2.0	2.0	ug/L	MQS	05/04/2010
o-Xylene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Styrene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Bromoform	EPA 8260	<2.0	2.0	ug/L	MQS	05/04/2010
Isopropylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
1,1,2,2-Tetrachloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
1,2,3-Trichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Bromobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
N-Propylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
2-Chlorotoluene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
1,3,5-Trimethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
4-Chlorotoluene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
tert-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
1,2,4-Trimethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
sec-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
p-Isopropyltoluene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
1,3-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
1,4-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
n-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
1,2-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
1,2-Dibromo-3-Chloropropane	EPA 8260	<2.0	2.0	ug/L	MQS	05/04/2010
1,2,4-Trichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Hexachlorobutadiene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Naphthalene	EPA 8260	<2.0	2.0	ug/L	MQS	05/04/2010
1,2,3-Trichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/04/2010
Surrogates:	EPA 8260					
***1,2-Dichloroethane-D4	EPA 8260	103	70-130	% R	MQS	05/04/2010
***Toluene-D8	EPA 8260	104	70-130	% R	MQS	05/04/2010

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Richard Carlone

Project Name.: **Phase II Bedrock - Charbert**
Project No.: **03.0032795.35**

Date Received: **04/27/2010**
Date Reported: **05/07/2010**
Work Order No.: **1004-00230**

Sample ID: **TBLK 2 042610**
Sample No.: **011**
Sample Date: **04/26/2010**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
***4-Bromofluorobenzene	EPA 8260	97.6	70-130	% R	MQS	05/04/2010
Preparation	EPA 5030B	1.0		CF	MQS	05/03/2010

GZA GEOENVIRONMENTAL, INC.
ENVIRONMENTAL CHEMISTRY LABORATORY
106 SOUTH ST, HOPKINTON, MA 01748
MASSACHUSETTS LABORATORY I.D. NO. MA092

EPA METHOD 6010B ANALYSIS
Metals by ICP

QUALITY CONTROL - AQUEOUS

DATE PREPARED: 5/3/2010

QC Sample	Method Blank	Lab Control Sample
Units	mg/L	% Recovery
Acceptance Limits	Results	80-120
Analyte		
Silver (Ag)	<0.0050	94.2
Aluminum (Al)	NA	NA
Arsenic (As)	<0.010	101
Boron (B)	NA	NA
Barium (Ba)	NA	NA
Beryllium (Be)	<0.0040	103
Calcium (Ca)	NA	NA
Cadmium (Cd)	<0.0050	106
Cobalt (Co)	NA	NA
Chromium (Cr)	<0.0050	99.5
Copper (Cu)	<0.030	107
Iron (Fe)	<0.025	99.5
Magnesium (Mg)	NA	NA
Manganese (Mn)	<0.010	107
Molybdenum (Mo)	NA	NA
Nickel (Ni)	<0.010	102
Lead (Pb)	<0.010	98.7
Antimony (Sb)	<0.025	101
Selenium (Se)	<0.025	108
Tin (Sn)	NA	NA
Titanium (Ti)	NA	NA
Thallium (Tl)	<0.025	102
Vanadium (V)	NA	NA
Zinc (Zn)	<0.010	109
Zirconium (Zr)	NA	NA

RPD = Relative Percent Difference
NA = Not Applicable
NC = Not Calculated
CRM = Certified Reference Material

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ENVIRONMENTAL CHEMISTRY LABORATORY
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MASSACHUSETTS LABORATORY I.D. NO. MA092

EPA METHOD 7470A ANALYSIS
Mercury by Cold Vapor Atomic Absorption

QUALITY CONTROL - AQUEOUS

Date Prepared : 04/29/10

QC Sample	Method Blank	Lab Control Sample	Lab Control Sample Duplicate	LC/LCD Difference
Units	mg/L	% Recovery	% Recovery	RPD
Acceptance Limits	Results	80-120	80-120	20%
Analyte				
Mercury (Hg)	<0.00020	81.8	88.0	7.30

RPD = Relative Percent Difference
LC concentration = 0.005 mg/L

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EPA Method 8270/625 Aqueous Method Blank (MB) and Laboratory Control Sample (LCS) Data

Method Blank

Date Extracted:	**04/30/10**	
Date Analyzed:	**5/3/2010**	
File Name:	**M5147**	
Semi-Volatile Organics	**Result**	**(ug/L)**
n-nitrosodimethylamine	ND	10
pyridine	ND	100
phenol	ND	10
bis(2-chloroethyl)ether	ND	10
2-chlorophenol	ND	10
1,3-dichlorobenzene	ND	10
1,4-dichlorobenzene	ND	10
benzyl alchohol	ND	20
1,2-dichlorobenzene	ND	10
2-methylphenol	ND	10
bis(2-chloroisopropyl)ether	ND	10
3&4-methylphenol	ND	10
n-nitrosodi-n-propylamine	ND	10
hexachloroethane	ND	10
nitrobenzene	ND	10
isophrone	ND	10
2-nitrophenol	ND	10
2,4-dimethylphenol	ND	10
benzoic acid	ND	10
bis(2-chloroethoxy)methane	ND	10
2,4-dichlorophenol	ND	10
1,2,4-trichlorobenzene	ND	10
naphthalene	ND	2.0
4-chloroaniline	ND	10
hexachlorobutadiene	ND	10
4-chloro-3-methylphenol	ND	20
2-methylnaphthalene	ND	2.0
hexachlorocyclopentadiene	ND	50
2,4,6-trichlorophenol	ND	10
2,4,5-trichlorophenol	ND	10
2-chloronaphthalene	ND	10
2-nitroaniline	ND	50
dimethylphthalate	ND	10
acenaphthylene	ND	2.0
2,6-dinitrotoluene	ND	10
3-nitroaniline	ND	50
acenaphthene	ND	2.0
2,4-dinitrophenol	ND	100
dibenzofuran	ND	10
4-nitrophenol	ND	50
2,4-dinitrotoluene	ND	10
diethylphthalate	ND	10
fluorene	ND	2.0
4-chlorophenyl phenyl ether	ND	10
4-nitroaniline	ND	20
4,6-dinitro-2-methylphenol	ND	50
n-nitrosodiphenylamine	ND	10
4-bromophenyl phenyl ether	ND	10
hexachlorobenzene	ND	10
pentachlorophenol	ND	50
phenanthrene	ND	2.0
anthracene	ND	2.0
carbazole	ND	10
di-n-butylphthalate	ND	15
fluoranthene	ND	2.0
pyrene	ND	2.0
butylbenzylphthalate	ND	10
benz [a] anthracene	ND	2.0
3,3'-dichlorobenzidine	ND	20
chrysene	ND	2.0
bis(2-ethylhexyl)phthalate	ND	10
di-n-octylphthalate	ND	10
benzo [b] fluoranthene	ND	2.0
benzo [k] fluoranthene	ND	2.0
benzo [a] pyrene	ND	2.0
indeno [1,2,3-cd] pyrene	ND	2.0
dibenz [a,h] anthracene	ND	2.0
benzo [ghi] perylene	ND	2.0

Surrogates:	**Recovery (%)**	**Acceptance Limits**
2-FLUOROPHENOL	38.7	15-110
PHENOL-D6	31.8	15-110
NITROBENZENE-D5	51.1	30-130
2-FLUOROBIPHENYL	50.8	30-130
2,4,6-TRIBROMOPHENOL	38.6	15-100
p-TERPHENYL-D14	55.1	30-130

GZA GeoEnvironmental, Inc.
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EPA Method 8270/625 Aqueous Method Blank (MB) and Laboratory Control Sample (LCS) Data

Laboratory Control Sample

Date Extracted:	**04/30/10**		
Date Analyzed:	**5/3/2010**		
File Name:	**M5148**		
Spike Concentration = 20ug/L	**% Recovery**	**Acceptance Limits**	**Verdict**
n-nitrosodimethylamine	66.3	40-140	ok
pyridine	41.2	40-140	ok
phenol	50.2	30-130	ok
bis(2-chloroethyl)ether	79.9	40-140	ok
2-chlorophenol	70.6	30-130	ok
1,3-dichlorobenzene	61.9	40-140	ok
1,4-dichlorobenzene	59.9	40-140	ok
benzyl alchohol	72.0	30-130	ok
1,2-dichlorobenzene	60.7	40-140	ok
2-methylphenol	74.3	30-130	ok
bis(2-chloroisopropyl)ether	77.1	40-140	ok
3&4-methylphenol	69.6	30-130	ok
n-nitrosodi-n-propylamine	71.9	40-140	ok
hexachloroethane	59.5	40-140	ok
nitrobenzene	72.3	40-140	ok
isophrone	74.2	40-140	ok
2-nitrophenol	77.9	30-130	ok
2,4-dimethylphenol	73.4	30-130	ok
benzoic acid	32.8	30-130	ok
bis(2-chloroethoxy)methane	78.4	40-140	ok
2,4-dichlorophenol	75.0	30-130	ok
1,2,4-trichlorobenzene	65.2	40-140	ok
naphthalene	74.8	40-140	ok
4-chloroaniline	72.2	40-140	ok
hexachlorobutadiene	63.0	40-140	ok
4-chloro-3-methylphenol	83.4	30-130	ok
2-methylnaphthalene	73.0	40-140	ok
hexachlorocyclopentadiene	55.6	40-140	ok
2,4,6-trichlorophenol	83.2	30-130	ok
2,4,5-trichlorophenol	89.3	30-130	ok
2-chloronaphthalene	76.8	40-140	ok
2-nitroaniline	86.2	40-140	ok
dimethylphthalate	86.3	40-140	ok
acenaphthylene	83.1	40-140	ok
2,6-dinitrotoluene	90.1	40-140	ok
3-nitroaniline	77.5	40-140	ok
acenaphthene	74.3	40-140	ok
2,4-dinitrophenol	70.5	30-130	ok
dibenzofuran	75.3	40-140	ok
4-nitrophenol	46.1	30-130	ok
2,4-dinitrotoluene	83.4	40-140	ok
diethylphthalate	80.5	40-140	ok
fluorene	79.4	40-140	ok
4-chlorophenyl phenyl ether	80.2	40-140	ok
4-nitroaniline	73.8	30-130	ok
4,6-dinitro-2-methylphenol	80.2	30-130	ok
n-nitrosodiphenylamine	78.3	40-140	ok
4-bromophenyl phenyl ether	81.1	40-140	ok
hexachlorobenzene	82.8	40-140	ok
pentachlorophenol	74.4	30-130	ok
phenanthrene	80.9	40-140	ok
anthracene	83.9	40-140	ok
carbazole	77.6	40-140	ok
di-n-butylphthalate	84.5	40-140	ok
fluoranthene	85.4	40-140	ok
pyrene	84.8	40-140	ok
butylbenzylphthalate	87.2	40-140	ok
benz [a] anthracene	80.0	40-140	ok
3,3'-dichlorobenzidine	87.5	40-140	ok
chrysene	78.9	40-140	ok
bis(2-ethylhexyl)phthalate	82.7	40-140	ok
di-n-octylphthalate	82.5	40-140	ok
benzo [b] fluoranthene	76.7	40-140	ok
benzo [k] fluoranthene	80.8	40-140	ok
benzo [a] pyrene	76.5	40-140	ok
indeno [1,2,3-cd] pyrene	71.7	40-140	ok
dibenz [a,h] anthracene	71.4	40-140	ok
benzo [ghi] perylene	68.4	40-140	ok

Surrogates:	**Recovery (%)**	**Acceptance Limits**	**Verdict**
2-FLUOROPHENOL	58.1	15-110	ok
PHENOL-D6	45.0	15-110	ok
NITROBENZENE-D5	75.3	30-130	ok
2-FLUOROBIPHENYL	74.6	30-130	ok
2,4,6-TRIBROMOPHENOL	76.0	15-110	ok
p-TERPHENYL-D14	83.4	30-130	ok

GZA GeoEnvironmental, Inc.
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Hopkinton, MA 01748
MA092

EPA Method 8270/625 Aqueous Method Blank (MB) and Laboratory Control Sample (LCS) Data

Method Blank

Date Extracted:	**05/03/10**	
Date Analyzed:	**5/4/2010**	
File Name:	**M5165**	
Semi-Volatile Organics	**Result**	**(ug/L)**
n-nitrosodimethylamine	ND	10
pyridine	ND	100
phenol	ND	10
bis(2-chloroethyl)ether	ND	10
2-chlorophenol	ND	10
1,3-dichlorobenzene	ND	10
1,4-dichlorobenzene	ND	10
benzyl alchohol	ND	20
1,2-dichlorobenzene	ND	10
2-methylphenol	ND	10
bis(2-chloroisopropyl)ether	ND	10
3&4-methylphenol	ND	10
n-nitrosodi-n-propylamine	ND	10
hexachloroethane	ND	10
nitrobenzene	ND	10
isophrone	ND	10
2-nitrophenol	ND	10
2,4-dimethylphenol	ND	10
benzoic acid	ND	10
bis(2-chloroethoxy)methane	ND	10
2,4-dichlorophenol	ND	10
1,2,4-trichlorobenzene	ND	10
naphthalene	ND	2.0
4-chloroaniline	ND	10
hexachlorobutadiene	ND	10
4-chloro-3-methylphenol	ND	20
2-methylnaphthalene	ND	2.0
hexachlorocyclopentadiene	ND	50
2,4,6-trichlorophenol	ND	10
2,4,5-trichlorophenol	ND	10
2-chloronaphthalene	ND	10
2-nitroaniline	ND	50
dimethylphthalate	ND	10
acenaphthylene	ND	2.0
2,6-dinitrotoluene	ND	10
3-nitroaniline	ND	50
acenaphthene	ND	2.0
2,4-dinitrophenol	ND	100
dibenzofuran	ND	10
4-nitrophenol	ND	50
2,4-dinitrotoluene	ND	10
diethylphthalate	ND	10
fluorene	ND	2.0
4-chlorophenyl phenyl ether	ND	10
4-nitroaniline	ND	20
4,6-dinitro-2-methylphenol	ND	50
n-nitrosodiphenylamine	ND	10
4-bromophenyl phenyl ether	ND	10
hexachlorobenzene	ND	10
pentachlorophenol	ND	50
phenanthrene	ND	2.0
anthracene	ND	2.0
carbazole	ND	10
di-n-butylphthalate	ND	15
fluoranthene	ND	2.0
pyrene	ND	2.0
butylbenzylphthalate	ND	10
benz [a] anthracene	ND	2.0
3,3'-dichlorobenzidine	ND	20
chrysene	ND	2.0
bis(2-ethylhexyl)phthalate	ND	10
di-n-octylphthalate	ND	10
benzo [b] fluoranthene	ND	2.0
benzo [k] fluoranthene	ND	2.0
benzo [a] pyrene	ND	2.0
indeno [1,2,3-cd] pyrene	ND	2.0
dibenz [a,h] anthracene	ND	2.0
benzo [ghi] perylene	ND	2.0

Surrogates:	**Recovery (%)**	**Acceptance Limits**
2-FLUOROPHENOL	37.1	15-110
PHENOL-D6	28.4	15-110
NITROBENZENE-D5	56.1	30-130
2-FLUOROBIPHENYL	54.1	30-130
2,4,6-TRIBROMOPHENOL	49.7	15-100
p-TERPHENYL-D14	68.6	30-130

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MA092

EPA Method 8270/625 Aqueous Method Blank (MB) and Laboratory Control Sample (LCS) Data

Laboratory Control Sample

Date Extracted:	**05/03/10**		
Date Analyzed:	**5/4/2010**		
File Name:	**M5166**		
Spike Concentration = 20ug/L	**% Recovery**	**Acceptance Limits**	**Verdict**
n-nitrosodimethylamine	52.3	40-140	ok
pyridine	26.2	40-140	out
phenol	34.9	30-130	ok
bis(2-chloroethyl)ether	63.7	40-140	ok
2-chlorophenol	61.3	30-130	ok
1,3-dichlorobenzene	53.6	40-140	ok
1,4-dichlorobenzene	52.2	40-140	ok
benzyl alchohol	61.1	30-130	ok
1,2-dichlorobenzene	54.0	40-140	ok
2-methylphenol	60.6	30-130	ok
bis(2-chloroisopropyl)ether	67.6	40-140	ok
3&4-methylphenol	58.7	30-130	ok
n-nitrosodi-n-propylamine	64.6	40-140	ok
hexachloroethane	53.1	40-140	ok
nitrobenzene	63.4	40-140	ok
isophrone	71.8	40-140	ok
2-nitrophenol	64.1	30-130	ok
2,4-dimethylphenol	64.8	30-130	ok
benzoic acid	20.3	30-130	out
bis(2-chloroethoxy)methane	70.1	40-140	ok
2,4-dichlorophenol	67.3	30-130	ok
1,2,4-trichlorobenzene	56.7	40-140	ok
naphthalene	63.9	40-140	ok
4-chloroaniline	68.9	40-140	ok
hexachlorobutadiene	56.1	40-140	ok
4-chloro-3-methylphenol	74.4	30-130	ok
2-methylnaphthalene	62.3	40-140	ok
hexachlorocyclopentadiene	48.4	40-140	ok
2,4,6-trichlorophenol	69.4	30-130	ok
2,4,5-trichlorophenol	76.7	30-130	ok
2-chloronaphthalene	66.1	40-140	ok
2-nitroaniline	77.7	40-140	ok
dimethylphthalate	84.6	40-140	ok
acenaphthylene	74.6	40-140	ok
2,6-dinitrotoluene	82.1	40-140	ok
3-nitroaniline	72.4	40-140	ok
acenaphthene	65.3	40-140	ok
2,4-dinitrophenol	47.3	30-130	ok
dibenzofuran	65.7	40-140	ok
4-nitrophenol	32.0	30-130	ok
2,4-dinitrotoluene	75.5	40-140	ok
diethylphthalate	77.2	40-140	ok
fluorene	70.9	40-140	ok
4-chlorophenyl phenyl ether	71.4	40-140	ok
4-nitroaniline	66.0	30-130	ok
4,6-dinitro-2-methylphenol	70.6	30-130	ok
n-nitrosodiphenylamine	71.3	40-140	ok
4-bromophenyl phenyl ether	74.7	40-140	ok
hexachlorobenzene	75.0	40-140	ok
pentachlorophenol	63.5	30-130	ok
phenanthrene	72.9	40-140	ok
anthracene	75.7	40-140	ok
carbazole	70.2	40-140	ok
di-n-butylphthalate	84.5	40-140	ok
fluoranthene	80.4	40-140	ok
pyrene	77.3	40-140	ok
butylbenzylphthalate	86.2	40-140	ok
benz [a] anthracene	75.2	40-140	ok
3,3'-dichlorobenzidine	67.5	40-140	ok
chrysene	73.3	40-140	ok
bis(2-ethylhexyl)phthalate	86.3	40-140	ok
di-n-octylphthalate	85.3	40-140	ok
benzo [b] fluoranthene	72.8	40-140	ok
benzo [k] fluoranthene	71.3	40-140	ok
benzo [a] pyrene	69.5	40-140	ok
indeno [1,2,3-cd] pyrene	65.9	40-140	ok
dibenz [a,h] anthracene	65.9	40-140	ok
benzo [ghi] perylene	61.6	40-140	ok

Surrogates:	**Recovery (%)**	**Acceptance Limits**	**Verdict**
2-FLUOROPHENOL	42.9	15-110	ok
PHENOL-D6	31.2	15-110	ok
NITROBENZENE-D5	66.8	30-130	ok
2-FLUOROBIPHENYL	67.4	30-130	ok
2,4,6-TRIBROMOPHENOL	67.7	15-110	ok
p-TERPHENYL-D14	80.8	30-130	ok

GZA GeoEnvironmental, Inc.
106 South Street
Hopkinton, MA 01748

EPA Method 8260 / 524.2 Aqueous Method Blank (MB) and Laboratory Control Sample/Duplicate (LCS/LCSD) Data

Method Blank			Laboratory Control Sample				Laboratory Control Sample Duplicate					
Date Analyzed:	**5/3/2010**		**Date Analyzed:**	**5/3/2010**			**5/3/2010**					
Volatile Organics	**Conc. ug/L**	**Acceptance Limit**	**Spike Concentration = 20ug/L**	**% Recovery**	**Acceptance Limits**	**Verdict**	**% Recovery**	**Acceptance Limits**	**Verdict**	**RPD**	**Limit**	**Verdict**
dichlorodifluoromethane	< 1.0	< 1.0	dichlorodifluoromethane	85.3	70-130	ok	83.1	70-130	ok	2.61	<25	ok
chloromethane	< 1.0	< 1.0	chloromethane	115	70-130	ok	111	70-130	ok	3.96	<25	ok
vinyl chloride	< 0.5	< 0.5	vinyl chloride	111	80-120	ok	107	70-130	ok	3.92	<25	ok
bromomethane	< 1.0	< 1.0	bromomethane	116	70-130	ok	110	70-130	ok	5.70	<25	ok
chloroethane	< 0.5	< 0.5	chloroethane	108	70-130	ok	105	70-130	ok	2.89	<25	ok
trichlorofluoromethane	< 1.0	< 1.0	trichlorofluoromethane	111	70-130	ok	108	70-130	ok	3.40	<25	ok
diethyl ether	< 2.5	< 2.5	diethyl ether	98.3	70-130	ok	88.4	70-130	ok	10.6	<25	ok
acetone	< 13	< 13	acetone	99.5	70-130	ok	92.6	70-130	ok	7.14	<25	ok
1,1-dichloroethene	< 0.5	< 0.5	1,1-dichloroethene	109	80-120	ok	108	70-130	ok	0.32	<25	ok
FREON-113	< 1.0	< 1.0	FREON-113	117	70-130	ok	115	70-130	ok	1.81	<25	ok
iodomethane	< 0.5	< 0.5	iodomethane	112	70-130	ok	112	70-130	ok	0.04	<25	ok
carbon disulfide	< 5.0	< 5.0	carbon disulfide	104	70-130	ok	103	70-130	ok	1.36	<25	ok
dichloromethane	< 1.0	< 1.0	dichloromethane	110	70-130	ok	104	70-130	ok	5.42	<25	ok
tert-butyl alcohol (TBA)	< 13	< 13	tert-butyl alcohol (TBA)	81.8	70-130	ok	75.8	70-130	ok	7.67	<25	ok
acrylonitrile	< 0.5	< 0.5	acrylonitrile	99.6	70-130	ok	95.8	70-130	ok	3.89	<25	ok
methyl-tert-butyl-ether	< 0.5	< 0.5	methyl-tert-butyl-ether	95.1	70-130	ok	91.4	70-130	ok	3.93	<25	ok
trans-1,2-dichloroethene	< 0.5	< 0.5	trans-1,2-dichloroethene	114	70-130	ok	110	70-130	ok	3.43	<25	ok
1,1-dichloroethane	< 0.5	< 0.5	1,1-dichloroethane	112	70-130	ok	111	70-130	ok	1.47	<25	ok
di-isopropyl ether (DIPE)	< 1.0	< 1.0	di-isopropyl ether (DIPE)	112	70-130	ok	111	70-130	ok	1.42	<25	ok
ethyl tert-butyl ether (EtBE)	< 1.0	< 1.0	ethyl tert-butyl ether (EtBE)	103	70-130	ok	101	70-130	ok	2.04	<25	ok
vinyl acetate	< 13	< 13	vinyl acetate	90.6	70-130	ok	87.1	70-130	ok	4.00	<25	ok
2-butanone	< 13	< 13	2-butanone	97.2	70-130	ok	95.4	70-130	ok	1.90	<25	ok
2,2-dichloropropane	< 0.5	< 0.5	2,2-dichloropropane	87.6	70-130	ok	88.5	70-130	ok	1.03	<25	ok
cis-1,2-dichloroethene	< 0.5	< 0.5	cis-1,2-dichloroethene	111	70-130	ok	110	70-130	ok	0.65	<25	ok
chloroform	< 0.5	< 0.5	chloroform	104	80-120	ok	102	70-130	ok	2.29	<25	ok
bromochloromethane	< 0.5	< 0.5	bromochloromethane	108	70-130	ok	103	70-130	ok	5.03	<25	ok
tetrahydrofuran	< 5.0	< 5.0	tetrahydrofuran	98.8	70-130	ok	97.5	70-130	ok	1.32	<25	ok
1,1,1-trichloroethane	< 0.5	< 0.5	1,1,1-trichloroethane	105	70-130	ok	105	70-130	ok	0.47	<25	ok
1,1-dichloropropene	< 0.5	< 0.5	1,1-dichloropropene	107	70-130	ok	107	70-130	ok	0.76	<25	ok
carbon tetrachloride	< 0.5	< 0.5	carbon tetrachloride	107	70-130	ok	104	70-130	ok	2.94	<25	ok
1,2-dichloroethane	< 0.5	< 0.5	1,2-dichloroethane	102	70-130	ok	103	70-130	ok	0.71	<25	ok
benzene	< 0.5	< 0.5	benzene	112	70-130	ok	110	70-130	ok	1.52	<25	ok
tert-amyl methyl ether (TAME)	< 1.0	< 1.0	tert-amyl methyl ether (TAME)	97.0	70-130	ok	93.2	70-130	ok	3.94	<25	ok
trichloroethene	< 0.5	< 0.5	trichloroethene	114	70-130	ok	112	70-130	ok	1.62	<25	ok
1,2-dichloropropane	< 0.5	< 0.5	1,2-dichloropropane	111	80-120	ok	110	70-130	ok	1.39	<25	ok
bromodichloromethane	< 0.5	< 0.5	bromodichloromethane	101	70-130	ok	97.8	70-130	ok	3.55	<25	ok
1,4-Dioxane	< 50	< 50	1,4-Dioxane	105	70-130	ok	88.8	70-130	ok	16.7	<25	ok
dibromomethane	< 0.5	< 0.5	dibromomethane	107	70-130	ok	103	70-130	ok	4.15	<25	ok
4-methyl-2-pentanone	< 13	< 13	4-methyl-2-pentanone	103	70-130	ok	99.1	70-130	ok	4.07	<25	ok
cis-1,3-dichloropropene	< 0.5	< 0.5	cis-1,3-dichloropropene	97.7	70-130	ok	95.3	70-130	ok	2.54	<25	ok
toluene	< 0.5	< 0.5	toluene	111	80-120	ok	109	70-130	ok	1.23	<25	ok
trans-1,3-dichloropropene	< 1.0	< 1.0	trans-1,3-dichloropropene	88.1	70-130	ok	84.3	70-130	ok	4.41	<25	ok
1,1,2-trichloroethane	< 0.5	< 0.5	1,1,2-trichloroethane	102	70-130	ok	104	70-130	ok	1.84	<25	ok
2-hexanone	< 13	< 13	2-hexanone	99.8	70-130	ok	99.5	70-130	ok	0.26	<25	ok
1,3-dichloropropane	< 0.5	< 0.5	1,3-dichloropropane	96.3	70-130	ok	95.4	70-130	ok	0.93	<25	ok
tetrachloroethene	< 0.5	< 0.5	tetrachloroethene	110	70-130	ok	112	70-130	ok	1.79	<25	ok
dibromochloromethane	< 0.5	< 0.5	dibromochloromethane	97.3	70-130	ok	98.0	70-130	ok	0.70	<25	ok
1,2-dibromoethane (EDB)	< 1.0	< 1.0	1,2-dibromoethane (EDB)	101	70-130	ok	103	70-130	ok	1.34	<25	ok
chlorobenzene	< 0.5	< 0.5	chlorobenzene	110	70-130	ok	112	70-130	ok	1.68	<25	ok
1,1,1,2-tetrachloroethane	< 0.5	< 0.5	1,1,1,2-tetrachloroethane	99.9	70-130	ok	100	70-130	ok	0.61	<25	ok
ethylbenzene	< 0.5	< 0.5	ethylbenzene	111	80-120	ok	112	70-130	ok	1.45	<25	ok
1,1,2,2-tetrachloroethane	< 0.5	< 0.5	1,1,2,2-tetrachloroethane	98.7	70-130	ok	99.6	70-130	ok	0.87	<25	ok
m&p-xylene	< 1.0	< 1.0	m&p-xylene	106	70-130	ok	107	70-130	ok	1.57	<25	ok
o-xylene	< 0.5	< 0.5	o-xylene	105	70-130	ok	103	70-130	ok	1.87	<25	ok
styrene	< 0.5	< 0.5	styrene	111	70-130	ok	108	70-130	ok	3.01	<25	ok
bromoform	< 1.0	< 1.0	bromoform	94.4	70-130	ok	90.7	70-130	ok	3.99	<25	ok
isopropylbenzene	< 0.5	< 0.5	isopropylbenzene	112	70-130	ok	109	70-130	ok	2.57	<25	ok
1,2,3-trichloropropane	< 0.5	< 0.5	1,2,3-trichloropropane	95.6	70-130	ok	91.4	70-130	ok	4.46	<25	ok
bromobenzene	< 0.5	< 0.5	bromobenzene	105	70-130	ok	101	70-130	ok	3.17	<25	ok
n-propylbenzene	< 0.5	< 0.5	n-propylbenzene	110	70-130	ok	110	70-130	ok	0.02	<25	ok
2-chlorotoluene	< 0.5	< 0.5	2-chlorotoluene	104	70-130	ok	103	70-130	ok	0.80	<25	ok
1,3,5-trimethylbenzene	< 0.5	< 0.5	1,3,5-trimethylbenzene	109	70-130	ok	108	70-130	ok	0.82	<25	ok
trans-1,4-dichloro-2-butene	< 1.0	< 1.0	trans-1,4-dichloro-2-butene	90.7	70-130	ok	92.3	70-130	ok	1.80	<25	ok
4-chlorotoluene	< 0.5	< 0.5	4-chlorotoluene	105	70-130	ok	103	70-130	ok	1.18	<25	ok
tert-butyl-benzene	< 0.5	< 0.5	tert-butyl-benzene	107	70-130	ok	106	70-130	ok	1.06	<25	ok
1,2,4-trimethylbenzene	< 0.5	< 0.5	1,2,4-trimethylbenzene	109	70-130	ok	107	70-130	ok	2.03	<25	ok
sec-butyl-benzene	< 0.5	< 0.5	sec-butyl-benzene	114	70-130	ok	113	70-130	ok	1.02	<25	ok
p-isopropyltoluene	< 0.5	< 0.5	p-isopropyltoluene	112	70-130	ok	111	70-130	ok	0.18	<25	ok
1,3-dichlorobenzene	< 0.5	< 0.5	1,3-dichlorobenzene	104	70-130	ok	103	70-130	ok	0.78	<25	ok
1,4-dichlorobenzene	< 0.5	< 0.5	1,4-dichlorobenzene	105	70-130	ok	102	70-130	ok	2.88	<25	ok
n-butylbenzene	< 0.5	< 0.5	n-butylbenzene	112	70-130	ok	111	70-130	ok	1.61	<25	ok
1,2-dichlorobenzene	< 0.5	< 0.5	1,2-dichlorobenzene	102	70-130	ok	99.3	70-130	ok	2.52	<25	ok
1,2-dibromo-3-chloropropane	< 2.5	< 2.5	1,2-dibromo-3-chloropropane	89.2	70-130	ok	82.8	70-130	ok	7.43	<25	ok
1,3,5-trichlorobenzene	< 0.5	< 0.5	1,3,5-trichlorobenzene	107	70-130	ok	105	70-130	ok	1.98	<25	ok
1,2,4-trichlorobenzene	< 0.5	< 0.5	1,2,4-trichlorobenzene	104	70-130	ok	102	70-130	ok	1.69	<25	ok
hexachlorobutadiene	< 0.5	< 0.5	hexachlorobutadiene	99.9	70-130	ok	96.8	70-130	ok	3.16	<25	ok
naphthalene	< 1.0	< 1.0	naphthalene	94.9	70-130	ok	95.2	70-130	ok	0.28	<25	ok
1,2,3-trichlorobenzene	< 0.5	< 0.5	1,2,3-trichlorobenzene	107	70-130	ok	104	70-130	ok	2.66	<25	ok

											Acceptance	
Surrogates:	**Recovery (%)**	**Acceptance Limits**	**Surrogates:**	**Recovery (%)**	**Acceptance Limits**	**Verdict**	**Recovery (%)**	**Acceptance Limits**	**Verdict**	**RPD**	**Limits**	**Verdict**
DIBROMOFLUOROMETHANE	108	70-130	DIBROMOFLUOROMETHANE	108	70-130	ok	107	70-130	ok	1.39	<25	ok
1,2-DICHLOROETHANE-D4	107	70-130	1,2-DICHLOROETHANE-D4	99.4	70-130	ok	106	70-130	ok	6.64	<25	ok
TOLUENE-D8	110	70-130	TOLUENE-D8	114	70-130	ok	111	70-130	ok	2.58	<25	ok
4-BROMOFLUOROBENZENE	96.4	70-130	4-BROMOFLUOROBENZENE	102	70-130	ok	100	70-130	ok	1.98	<25	ok
1,2-DICHLOROBENZENE-D4	91.1	70-130	1,2-DICHLOROBENZENE-D4	95.6	70-130	ok	94.0	70-130	ok	1.61	<25	ok

Instrument: HP GC/MS "S"

CHAIN-OF-CUSTODY RECORD

W.O. # 1004-00230 *(for lab use only)*

Sample I.D.	Date/Time Sampled	Matrix (A=Air, S=Soil, GW=Ground W., SW=Surface W., WW=Waste W., DW=Drinking W., P=Product, Other (specify))	ANALYSIS REQUIRED: pH, Cond.	Gc Methane, Ethane, Ethene	EPA 8260	EPA 8260 – 8010 List (Chlor.)	EPA 8260 – 8021 list	EPA 8260 – 8020 List	EPA 524.2 DW VOCs	EPA 624 WW VOCs	601, 602 WW VOCs	EPA 8270 FULL SVOCs	EPA 8270 PAH, A, BN	EPA 625 WW SVOCs	EPA 8082–PCBs	EPA 8081–Pest	TPH–GC (Mod. 8100)	TPH–GC w/FING. (1.)	EPH (MA DEP)	VPH (MA DEP)	Metals PPM-13 (2.)	MCP 14 Metals (MA)	Metals (List Below)**	TCLP – Specify Below	SPLP – Specify Below	EPA 300 Cl, SO4	EPA 300 NO2, NO3	Total # of Cont.	Note #
GZML-1-1	4/26/10 1200	GW			X							X						X			X							6	
GZML-1-2	4/26/10 1310				X							X						X			X							6	
GZML-1-3	4/26/10 ~~1400~~ 1330				X							X						X			X							6	
GZML-2-1	4/26/10 1445				X							X						X			X							6	
GZML-2-2	4/26/10 1500				X							X						X			X							6	
GZML-2-3	4/26/10 1515				X							X						X			X							6	
GZML-3-1	4/26/10 1630				X							X						X			X							6	
GZML-3-2	4/26/10 1650				X							X						X			X							6	
GZML-3-3	4/26/10 1600				X							X						X			X							6	
TBLK042610	4/26/10	H_2O			X																							~~2~~	3
TBLK2042610	4/26/10	H_2O			X																							~~2~~	3
PRESERVATIVE (Cl - HCl, M=Methanol, N - HNO_3, S - H_2SO_4, Na - NaOH, O - Other)*																													
CONTAINER TYPE (P-Plastic, G-Glass, V-Vial, T-Teflon, O-Other)*																													

4/29 LC

RELINQUISHED BY: (AFFILIATION) DATE/TIME RECEIVED BY: (AFFILIATION)

~~4/27/10 0900~~

4/27/10 Bill Brecon

RELINQUISHED BY: (AFFILIATION) DATE/TIME RECEIVED BY: (AFFILIATION)

Bill Brecon 4/27/10 1100

RELINQUISHED BY: (AFFILIATION) DATE/TIME RECEIVED BY: (AFFILIATION)

NOTES: (Unless otherwise noted, all samples have been refrigerated to 4° C)
*Specify "Other" preservatives and containers types in this space.

1.) TPH FINGER PRINT w/ ORGANOSILOXANES
2.) PP-13 METALS
3) add Fe & Mn per M Dalpe 4/29/10

PROJECT MANAGER: RICK CARLONE EXT:

TURNAROUND TIME: (Standard) Rush___ Days, Approved by _____

LAB USE: TEMP. OF COOLER 1.7 / 3.9 °C

Temp Blank ~~Cooler Air~~ 1004

4/27 LC

GZA FILE NO: 03.0032795.35 TASK NO: P.O. NO.

4/27/10 1134 LC

PROJECT CHARBERT, NFA GW SAMPLING

LOCATION ALTON, R.I.

COLLECTOR(S) MARK DALPE

SHEET 1 OF 1

GZA GeoEnvironmental, Inc.
Laboratory Division

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Laboratory Identification Numbers:
MA and ME: **MA092** NH: **2028**
CT: **PH0579** RI: **LAO00236**
NELAC - NYS DOH: **11063**

ANALYTICAL REPORT

GZA GeoEnvironmental, Inc.
530 Broadway
Providence, RI 02909

Richard Carlone

Project No.: **03.0032795.35**
Work Order No.: **1004-00243**
Date Received: **04/29/2010**
Date Reported: **05/11/2010**

SAMPLE INFORMATION

Date Sampled	Matrix	Laboratory ID	Sample ID
04/27/2010	Aqueous	1004-00243 001	GZ-ML-4-1
04/27/2010	Aqueous	1004-00243 002	GZ-ML-5-2
04/27/2010	Aqueous	1004-00243 003	GZ-ML-4-2
04/27/2010	Aqueous	1004-00243 004	GZ-ML-4-3
04/27/2010	Aqueous	1004-00243 005	GZ-ML-5-3
04/27/2010	Aqueous	1004-00243 006	TBLK 042710
04/27/2010	Aqueous	1004-00243 007	TBLK2 042710

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A N A L Y T I C A L R E P O R T

GZA GeoEnvironmental, Inc.
530 Broadway
Providence, RI 02909

Richard Carlone

Project Name.: **Phase II Bedrock - Charbert**
Project No.: **03.0032795.35**

Date Received: **04/29/2010**
Date Reported: **05/11/2010**
Work Order No.: **1004-00243**

PROJECT NARRATIVE:

1. Sample Receipt

The samples were received on 04/28/10 via _x_GZA courier, __EC, __FEDEX, or ___hand delivered. The temperature of the __temperature blank/_x_cooler air, was 4.2 & 3.1 degrees C. The temperature requirement for most analyses is above freezing to 6 degrees C. The samples were received intact for all requested analyses.

The chain of custody indicates that the samples, when required, were chemically preserved in accordance with the method they reference.

2. EPA Method 8270 - SVOCs

The Laboratory Control Spike (LCS) (05/03/10) had method 8270 list acid analytes outside of the 30-130% QC acceptance limits and base/neutral analytes outside of the 40-140% QC acceptance limits. Specific outliers include pyridine (26.2%) and benzoic acid (20.3%).

Attach QC 8270 05/03/10 - Aqueous

3. Total Petroleum Hydrocarbons / Hydrocarbon Fingerprint

GZ-ML-4-1: Greater than 90% of hydrocarbon is non-petroleum based.
GZ-ML-4-2: Greater than 90% of hydrocarbon is non-petroleum based.

The surrogate recoveries for samples GZ-ML-4-1 (1004-00243-001) and GZ-ML-5-2 (1004-00243-002) were below the laboratory acceptance criteria of 40-140% at 27.1% and 28.9% respectively. The 40-140% criterion is a laboratory guideline only and not specified by the method.

4. EPA Method 6010B/7470A - Metals

Attach QC 6010B 05/04/10 - Aqueous
Attach QC 7470A 05/04/10 - Aqueous

5. EPA Method 8260 - VOCs

The Laboratory Control Sample (LCS) (5/6/10 S) had a(n) 8260 List analyte outside of the 70-130% acceptance criteria. Specific outlier includes: chloromethane (131%).

The Laboratory Control Sample Duplicate (LCSD) (5/6/10 S) had a(n) 8260 List analyte outside of the 70-130% acceptance criteria. Specific outlier includes: chloromethane (139%).

Attach QC 8260 5/6/10 "S" - Aqueous

GZA GeoEnvironmental, Inc.
106 South Street
Hopkinton, MA 01748
(781) 278-4700

A N A L Y T I C A L R E P O R T

GZA GeoEnvironmental, Inc.
530 Broadway
Providence, RI 02909

Richard Carlone

Project Name.: **Phase II Bedrock - Charbert**
Project No.: **03.0032795.35**

Date Received: **04/29/2010**
Date Reported: **05/11/2010**
Work Order No.: **1004-00243**

Data Authorized By: _____

NELAC certification, as indicated by the NELAC Lab ID Number, is per analyte. For a complete list of NELAC validated analytes, please contact the laboratory.

Abbreviations:
% R = % Recovery
DF = Dilution Factor
DFS = Dilution Factor Solids
CF = Calculation Factor
DO = Diluted Out

Method Key:
Method 8260: The current version of the method is 8260B.
Method 8270: The current version of the method is 8270D.
Method 6010: The current version of the method is 6010B.

Please note that the laboratory signed copy of the chain of custody record is an integral part of the data report.

Soil data is reported on a dry weight basis unless otherwise specified.
Matrix Spike / Matrix Spike Duplicate sets are performed as per method and are reported at the end of the analytical report if assigned on the Chain of Custody.

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ANALYTICAL REPORT

GZA GeoEnvironmental, Inc.
530 Broadway
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Richard Carlone

Project Name.: **Phase II Bedrock - Charbert**
Project No.: **03.0032795.35**

Date Received: **04/29/2010**
Date Reported: **05/11/2010**
Work Order No.: **1004-00243**

Sample ID: **GZ-ML-4-1** Sample No.: **001**
Sample Date: **04/27/2010**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260				MQS	05/06/2010
Dichlorodifluoromethane	EPA 8260	<2.0	2.0	ug/L	MQS	05/06/2010
Chloromethane	EPA 8260	<2.0	2.0	ug/L	MQS	05/06/2010
Vinyl Chloride	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
Bromomethane	EPA 8260	<2.0	2.0	ug/L	MQS	05/06/2010
Chloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
Trichlorofluoromethane	EPA 8260	<2.0	2.0	ug/L	MQS	05/06/2010
Diethylether	EPA 8260	<2.0	2.0	ug/L	MQS	05/06/2010
Acetone	EPA 8260	59	25	ug/L	MQS	05/06/2010
1,1-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
Dichloromethane	EPA 8260	<2.0	2.0	ug/L	MQS	05/06/2010
Methyl-Tert-Butyl-Ether	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
trans-1,2-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
1,1-Dichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
2-Butanone	EPA 8260	<25	25	ug/L	MQS	05/06/2010
2,2-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
cis-1,2-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
Chloroform	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
Bromochloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
Tetrahydrofuran	EPA 8260	<10	10	ug/L	MQS	05/06/2010
1,1,1-Trichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
1,1-Dichloropropene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
Carbon Tetrachloride	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
1,2-Dichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
Benzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
Trichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
1,2-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
Bromodichloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
Dibromomethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
4-Methyl-2-Pentanone	EPA 8260	<25	25	ug/L	MQS	05/06/2010
cis-1,3-Dichloropropene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
Toluene	EPA 8260	1.8	1.0	ug/L	MQS	05/06/2010
trans-1,3-Dichloropropene	EPA 8260	<2.0	2.0	ug/L	MQS	05/06/2010
1,1,2-Trichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
2-Hexanone	EPA 8260	<25	25	ug/L	MQS	05/06/2010

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Richard Carlone

Project Name.: **Phase II Bedrock - Charbert**
Project No.: **03.0032795.35**

Date Received: **04/29/2010**
Date Reported: **05/11/2010**
Work Order No.: **1004-00243**

Sample ID: **GZ-ML-4-1** Sample No.: **001**
Sample Date: **04/27/2010**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
1,3-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
Tetrachloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
Dibromochloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
1,2-Dibromoethane (EDB)	EPA 8260	<2.0	2.0	ug/L	MQS	05/06/2010
Chlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
1,1,1,2-Tetrachloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
Ethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
m&p-Xylene	EPA 8260	<2.0	2.0	ug/L	MQS	05/06/2010
o-Xylene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
Styrene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
Bromoform	EPA 8260	<2.0	2.0	ug/L	MQS	05/06/2010
Isopropylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
1,1,2,2-Tetrachloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
1,2,3-Trichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
Bromobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
N-Propylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
2-Chlorotoluene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
1,3,5-Trimethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
4-Chlorotoluene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
tert-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
1,2,4-Trimethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
sec-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
p-Isopropyltoluene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
1,3-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
1,4-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
n-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
1,2-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
1,2-Dibromo-3-Chloropropane	EPA 8260	<2.0	2.0	ug/L	MQS	05/06/2010
1,2,4-Trichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
Hexachlorobutadiene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
Naphthalene	EPA 8260	<2.0	2.0	ug/L	MQS	05/06/2010
1,2,3-Trichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
Surrogates:	EPA 8260					
***1,2-Dichloroethane-D4	EPA 8260	98.6	70-130	% R	MQS	05/06/2010
***Toluene-D8	EPA 8260	104	70-130	% R	MQS	05/06/2010

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Project Name.: **Phase II Bedrock - Charbert**
Project No.: **03.0032795.35**

Date Received: **04/29/2010**
Date Reported: **05/11/2010**
Work Order No.: **1004-00243**

Sample ID: **GZ-ML-4-1** Sample No.: **001**
Sample Date: **04/27/2010**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
***4-Bromofluorobenzene	EPA 8260	93.2	70-130	% R	MQS	05/06/2010
Preparation	EPA 5030B	1.0		CF	MQS	05/05/2010
SEMI-VOLATILE ORGANICS	EPA 8270				CMG	05/04/2010
ACID FRACTION:	EPA 8270					
Phenol	EPA 8270	<10	10	ug/L	CMG	05/04/2010
2-Chlorophenol	EPA 8270	<10	10	ug/L	CMG	05/04/2010
2-Methylphenol	EPA 8270	<10	10	ug/L	CMG	05/04/2010
3&4-Methylphenol	EPA 8270	<10	10	ug/L	CMG	05/04/2010
2-Nitrophenol	EPA 8270	<10	10	ug/L	CMG	05/04/2010
2,4-Dimethylphenol	EPA 8270	<10	10	ug/L	CMG	05/04/2010
Benzoic Acid	EPA 8270	<10	10	ug/L	CMG	05/04/2010
2,4-Dichlorophenol	EPA 8270	<10	10	ug/L	CMG	05/04/2010
4-Chloro-3-Methylphenol	EPA 8270	<20	20	ug/L	CMG	05/04/2010
2,4,6-Trichlorophenol	EPA 8270	<10	10	ug/L	CMG	05/04/2010
2,4,5-Trichlorophenol	EPA 8270	<10	10	ug/L	CMG	05/04/2010
2,4-Dinitrophenol	EPA 8270	<100	100	ug/L	CMG	05/04/2010
4-Nitrophenol	EPA 8270	<50	50	ug/L	CMG	05/04/2010
4,6-Dinitro-2-Methylphenol	EPA 8270	<50	50	ug/L	CMG	05/04/2010
Pentachlorophenol	EPA 8270	<50	50	ug/L	CMG	05/04/2010
BASE-NEUTRAL FRACTION:						
n-Nitrosodimethylamine	EPA 8270	<10	10	ug/L	CMG	05/04/2010
bis(2-Chloroethyl)Ether	EPA 8270	<10	10	ug/L	CMG	05/04/2010
1,3-Dichlorobenzene	EPA 8270	<10	10	ug/L	CMG	05/04/2010
1,4-Dichlorobenzene	EPA 8270	<10	10	ug/L	CMG	05/04/2010
Benzyl Alcohol	EPA 8270	<20	20	ug/L	CMG	05/04/2010
1,2-Dichlorobenzene	EPA 8270	<10	10	ug/L	CMG	05/04/2010
bis(2-Chloroisopropyl)Ether	EPA 8270	<10	10	ug/L	CMG	05/04/2010
n-Nitrosodi-n-Propylamine	EPA 8270	<10	10	ug/L	CMG	05/04/2010
Hexachloroethane	EPA 8270	<10	10	ug/L	CMG	05/04/2010
Nitrobenzene	EPA 8270	<10	10	ug/L	CMG	05/04/2010
Isophorone	EPA 8270	<10	10	ug/L	CMG	05/04/2010
bis(2-Chloroethoxy)Methane	EPA 8270	<10	10	ug/L	CMG	05/04/2010
1,2,4-Trichlorobenzene	EPA 8270	<10	10	ug/L	CMG	05/04/2010
Naphthalene	EPA 8270	<2.0	2.0	ug/L	CMG	05/04/2010
4-Chloroaniline	EPA 8270	<20	20	ug/L	CMG	05/04/2010

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Work Order No.: **1004-00243**

Sample ID: **GZ-ML-4-1** Sample No.: **001**
Sample Date: **04/27/2010**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
Hexachlorobutadiene	EPA 8270	<10	10	ug/L	CMG	05/04/2010
2-Methylnaphthalene	EPA 8270	<2.0	2.0	ug/L	CMG	05/04/2010
Hexachlorocyclopentadiene	EPA 8270	<50	50	ug/L	CMG	05/04/2010
2-Chloronaphthalene	EPA 8270	<10	10	ug/L	CMG	05/04/2010
2-Nitroaniline	EPA 8270	<50	50	ug/L	CMG	05/04/2010
Dimethylphthalate	EPA 8270	<10	10	ug/L	CMG	05/04/2010
Acenaphthylene	EPA 8270	<2.0	2.0	ug/L	CMG	05/04/2010
2,6-Dinitrotoluene	EPA 8270	<10	10	ug/L	CMG	05/04/2010
3-Nitroaniline	EPA 8270	<50	50	ug/L	CMG	05/04/2010
Acenaphthene	EPA 8270	<2.0	2.0	ug/L	CMG	05/04/2010
Dibenzofuran	EPA 8270	<10	10	ug/L	CMG	05/04/2010
2,4-Dinitrotoluene	EPA 8270	<10	10	ug/L	CMG	05/04/2010
Diethylphthalate	EPA 8270	<10	10	ug/L	CMG	05/04/2010
Fluorene	EPA 8270	<2.0	2.0	ug/L	CMG	05/04/2010
4-Chlorophenyl Phenyl Ether	EPA 8270	<10	10	ug/L	CMG	05/04/2010
4-Nitroaniline	EPA 8270	<20	20	ug/L	CMG	05/04/2010
n-Nitrosodiphenylamine	EPA 8270	<10	10	ug/L	CMG	05/04/2010
4-Bromophenyl Phenyl Ether	EPA 8270	<10	10	ug/L	CMG	05/04/2010
Hexachlorobenzene	EPA 8270	<10	10	ug/L	CMG	05/04/2010
Phenanthrene	EPA 8270	<2.0	2.0	ug/L	CMG	05/04/2010
Anthracene	EPA 8270	<2.0	2.0	ug/L	CMG	05/04/2010
Carbazole	EPA 8270	<10	10	ug/L	CMG	05/04/2010
di-n-Butylphthalate	EPA 8270	<10	10	ug/L	CMG	05/04/2010
Fluoranthene	EPA 8270	<2.0	2.0	ug/L	CMG	05/04/2010
Pyrene	EPA 8270	<2.0	2.0	ug/L	CMG	05/04/2010
Butylbenzylphthalate	EPA 8270	<10	10	ug/L	CMG	05/04/2010
Benzo [a] Anthracene	EPA 8270	<2.0	2.0	ug/L	CMG	05/04/2010
3,3'-Dichlorobenzidine	EPA 8270	<10	10	ug/L	CMG	05/04/2010
Chrysene	EPA 8270	<2.0	2.0	ug/L	CMG	05/04/2010
bis(2-Ethylhexyl)Phthalate	EPA 8270	<10	10	ug/L	CMG	05/04/2010
di-n-Octylphthalate	EPA 8270	<10	10	ug/L	CMG	05/04/2010
Benzo [b] Fluoranthene	EPA 8270	<2.0	2.0	ug/L	CMG	05/04/2010
Benzo [k] Fluoranthene	EPA 8270	<2.0	2.0	ug/L	CMG	05/04/2010
Benzo [a] Pyrene	EPA 8270	<2.0	2.0	ug/L	CMG	05/04/2010
Indeno [1,2,3-cd] Pyrene	EPA 8270	<2.0	2.0	ug/L	CMG	05/04/2010

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Project Name.: **Phase II Bedrock - Charbert**
Project No.: **03.0032795.35**

Date Received: **04/29/2010**
Date Reported: **05/11/2010**
Work Order No.: **1004-00243**

Sample ID: **GZ-ML-4-1** Sample No.: **001**
Sample Date: **04/27/2010**

Test Performed	Method	Results		Reporting Limit	Units	Tech	Analysis Date
Dibenzo [a,h] Anthracene	EPA 8270	<2.0		2.0	ug/L	CMG	05/04/2010
Benzo [g,h,i] Perylene	EPA 8270	<2.0		2.0	ug/L	CMG	05/04/2010
Surrogates:	EPA 8270						
***2-Fluorophenol	EPA 8270	28.8		15-110	% R	CMG	05/04/2010
***Phenol-D6	EPA 8270	20.3		15-110	% R	CMG	05/04/2010
***Nitrobenzene-D5	EPA 8270	48.2		30-130	% R	CMG	05/04/2010
***2-Fluorobiphenyl	EPA 8270	48.2		30-130	% R	CMG	05/04/2010
***2,4,6-Tribromophenol	EPA 8270	48.5		15-110	% R	CMG	05/04/2010
***P-Terphenyl-D14	EPA 8270	60.8		39-120	% R	CMG	05/04/2010
Extraction	EPA 3510C	1.0			DF	JKC	05/03/2010
TOTAL PETROLEUM HYDROCARBON	D3328/EPA 8100/					KEF	05/05/2010
Hydrocarbon Content		620		200	ug/L	KEF	05/05/2010
Surrogate:	D3328/EPA 8100						
***p-Terphenyl		27.1	*		% R	KEF	05/05/2010
Extraction	EPA 3510C	1.0			DF	JKC	05/10/2010
PRIORITY POLLUTANT METALS						LLZ	05/08/2010
Silver	EPA 6010B	<0.0050		0.0050	mg/L	LLZ	05/08/2010
Arsenic	EPA 6010B	<0.010		0.010	mg/L	LLZ	05/08/2010
Beryllium	EPA 6010B	<0.0040		0.0040	mg/L	LLZ	05/08/2010
Cadmium	EPA 6010B	<0.0050		0.0050	mg/L	LLZ	05/08/2010
Chromium	EPA 6010B	<0.0050		0.0050	mg/L	LLZ	05/08/2010
Copper	EPA 6010B	0.023		0.015	mg/L	LLZ	05/08/2010
Mercury	EPA 7470A	<0.00020		0.00020	mg/L	GDD	05/05/2010
Nickel	EPA 6010B	<0.010		0.010	mg/L	LLZ	05/08/2010
Lead	EPA 6010B	<0.010		0.010	mg/L	LLZ	05/08/2010
Antimony	EPA 6010B	<0.025		0.025	mg/L	LLZ	05/08/2010
Selenium	EPA 6010B	<0.025		0.025	mg/L	LLZ	05/08/2010
Thallium	EPA 6010B	<0.025		0.025	mg/L	LLZ	05/08/2010
Zinc	EPA 6010B	0.021		0.010	mg/L	LLZ	05/08/2010
Iron	EPA 6010B	4.8		0.025	mg/L	LLZ	05/08/2010
Manganese	EPA 6010B	0.58		0.0050	mg/L	LLZ	05/08/2010

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Project No.: **03.0032795.35**

Date Received: **04/29/2010**
Date Reported: **05/11/2010**
Work Order No.: **1004-00243**

Sample ID: **GZ-ML-5-2** Sample No.: **002**
Sample Date: **04/27/2010**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260				MQS	05/06/2010
Dichlorodifluoromethane	EPA 8260	<2.0	2.0	ug/L	MQS	05/06/2010
Chloromethane	EPA 8260	<2.0	2.0	ug/L	MQS	05/06/2010
Vinyl Chloride	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
Bromomethane	EPA 8260	<2.0	2.0	ug/L	MQS	05/06/2010
Chloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
Trichlorofluoromethane	EPA 8260	<2.0	2.0	ug/L	MQS	05/06/2010
Diethylether	EPA 8260	<2.0	2.0	ug/L	MQS	05/06/2010
Acetone	EPA 8260	<25	25	ug/L	MQS	05/06/2010
1,1-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
Dichloromethane	EPA 8260	<2.0	2.0	ug/L	MQS	05/06/2010
Methyl-Tert-Butyl-Ether	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
trans-1,2-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
1,1-Dichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
2-Butanone	EPA 8260	<25	25	ug/L	MQS	05/06/2010
2,2-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
cis-1,2-Dichloroethene	EPA 8260	19	1.0	ug/L	MQS	05/06/2010
Chloroform	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
Bromochloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
Tetrahydrofuran	EPA 8260	<10	10	ug/L	MQS	05/06/2010
1,1,1-Trichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
1,1-Dichloropropene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
Carbon Tetrachloride	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
1,2-Dichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
Benzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
Trichloroethene	EPA 8260	2.6	1.0	ug/L	MQS	05/06/2010
1,2-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
Bromodichloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
Dibromomethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
4-Methyl-2-Pentanone	EPA 8260	<25	25	ug/L	MQS	05/06/2010
cis-1,3-Dichloropropene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
Toluene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
trans-1,3-Dichloropropene	EPA 8260	<2.0	2.0	ug/L	MQS	05/06/2010
1,1,2-Trichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
2-Hexanone	EPA 8260	<25	25	ug/L	MQS	05/06/2010

GZA GeoEnvironmental, Inc.
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A N A L Y T I C A L R E P O R T

GZA GeoEnvironmental, Inc.
530 Broadway
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Richard Carlone

Project Name.: **Phase II Bedrock - Charbert**
Project No.: **03.0032795.35**

Date Received: **04/29/2010**
Date Reported: **05/11/2010**
Work Order No.: **1004-00243**

Sample ID: **GZ-ML-5-2** Sample No.: **002**
Sample Date: **04/27/2010**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
1,3-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
Tetrachloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
Dibromochloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
1,2-Dibromoethane (EDB)	EPA 8260	<2.0	2.0	ug/L	MQS	05/06/2010
Chlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
1,1,1,2-Tetrachloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
Ethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
m&p-Xylene	EPA 8260	<2.0	2.0	ug/L	MQS	05/06/2010
o-Xylene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
Styrene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
Bromoform	EPA 8260	<2.0	2.0	ug/L	MQS	05/06/2010
Isopropylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
1,1,2,2-Tetrachloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
1,2,3-Trichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
Bromobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
N-Propylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
2-Chlorotoluene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
1,3,5-Trimethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
4-Chlorotoluene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
tert-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
1,2,4-Trimethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
sec-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
p-Isopropyltoluene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
1,3-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
1,4-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
n-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
1,2-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
1,2-Dibromo-3-Chloropropane	EPA 8260	<2.0	2.0	ug/L	MQS	05/06/2010
1,2,4-Trichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
Hexachlorobutadiene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
Naphthalene	EPA 8260	<2.0	2.0	ug/L	MQS	05/06/2010
1,2,3-Trichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
Surrogates:	EPA 8260					
***1,2-Dichloroethane-D4	EPA 8260	98.6	70-130	% R	MQS	05/06/2010
***Toluene-D8	EPA 8260	107	70-130	% R	MQS	05/06/2010

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ANALYTICAL REPORT

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Richard Carlone

Project Name.: **Phase II Bedrock - Charbert**
Project No.: **03.0032795.35**

Date Received: **04/29/2010**
Date Reported: **05/11/2010**
Work Order No.: **1004-00243**

Sample ID: **GZ-ML-5-2** Sample No.: **002**
Sample Date: **04/27/2010**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
***4-Bromofluorobenzene	EPA 8260	92.2	70-130	% R	MQS	05/06/2010
Preparation	EPA 5030B	1.0		CF	MQS	05/05/2010
SEMI-VOLATILE ORGANICS	EPA 8270				CMG	05/04/2010
ACID FRACTION:	EPA 8270					
Phenol	EPA 8270	<10	10	ug/L	CMG	05/04/2010
2-Chlorophenol	EPA 8270	<10	10	ug/L	CMG	05/04/2010
2-Methylphenol	EPA 8270	<10	10	ug/L	CMG	05/04/2010
3&4-Methylphenol	EPA 8270	<10	10	ug/L	CMG	05/04/2010
2-Nitrophenol	EPA 8270	<10	10	ug/L	CMG	05/04/2010
2,4-Dimethylphenol	EPA 8270	<10	10	ug/L	CMG	05/04/2010
Benzoic Acid	EPA 8270	<10	10	ug/L	CMG	05/04/2010
2,4-Dichlorophenol	EPA 8270	<10	10	ug/L	CMG	05/04/2010
4-Chloro-3-Methylphenol	EPA 8270	<20	20	ug/L	CMG	05/04/2010
2,4,6-Trichlorophenol	EPA 8270	<10	10	ug/L	CMG	05/04/2010
2,4,5-Trichlorophenol	EPA 8270	<10	10	ug/L	CMG	05/04/2010
2,4-Dinitrophenol	EPA 8270	<100	100	ug/L	CMG	05/04/2010
4-Nitrophenol	EPA 8270	<50	50	ug/L	CMG	05/04/2010
4,6-Dinitro-2-Methylphenol	EPA 8270	<50	50	ug/L	CMG	05/04/2010
Pentachlorophenol	EPA 8270	<50	50	ug/L	CMG	05/04/2010
BASE-NEUTRAL FRACTION:						
n-Nitrosodimethylamine	EPA 8270	<10	10	ug/L	CMG	05/04/2010
bis(2-Chloroethyl)Ether	EPA 8270	<10	10	ug/L	CMG	05/04/2010
1,3-Dichlorobenzene	EPA 8270	<10	10	ug/L	CMG	05/04/2010
1,4-Dichlorobenzene	EPA 8270	<10	10	ug/L	CMG	05/04/2010
Benzyl Alcohol	EPA 8270	<20	20	ug/L	CMG	05/04/2010
1,2-Dichlorobenzene	EPA 8270	<10	10	ug/L	CMG	05/04/2010
bis(2-Chloroisopropyl)Ether	EPA 8270	<10	10	ug/L	CMG	05/04/2010
n-Nitrosodi-n-Propylamine	EPA 8270	<10	10	ug/L	CMG	05/04/2010
Hexachloroethane	EPA 8270	<10	10	ug/L	CMG	05/04/2010
Nitrobenzene	EPA 8270	<10	10	ug/L	CMG	05/04/2010
Isophorone	EPA 8270	<10	10	ug/L	CMG	05/04/2010
bis(2-Chloroethoxy)Methane	EPA 8270	<10	10	ug/L	CMG	05/04/2010
1,2,4-Trichlorobenzene	EPA 8270	<10	10	ug/L	CMG	05/04/2010
Naphthalene	EPA 8270	<2.0	2.0	ug/L	CMG	05/04/2010
4-Chloroaniline	EPA 8270	<20	20	ug/L	CMG	05/04/2010

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Project Name.: **Phase II Bedrock - Charbert**
Project No.: **03.0032795.35**

Date Received: **04/29/2010**
Date Reported: **05/11/2010**
Work Order No.: **1004-00243**

Sample ID: **GZ-ML-5-2** Sample No.: **002**
Sample Date: **04/27/2010**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
Hexachlorobutadiene	EPA 8270	<10	10	ug/L	CMG	05/04/2010
2-Methylnaphthalene	EPA 8270	<2.0	2.0	ug/L	CMG	05/04/2010
Hexachlorocyclopentadiene	EPA 8270	<50	50	ug/L	CMG	05/04/2010
2-Chloronaphthalene	EPA 8270	<10	10	ug/L	CMG	05/04/2010
2-Nitroaniline	EPA 8270	<50	50	ug/L	CMG	05/04/2010
Dimethylphthalate	EPA 8270	<10	10	ug/L	CMG	05/04/2010
Acenaphthylene	EPA 8270	<2.0	2.0	ug/L	CMG	05/04/2010
2,6-Dinitrotoluene	EPA 8270	<10	10	ug/L	CMG	05/04/2010
3-Nitroaniline	EPA 8270	<50	50	ug/L	CMG	05/04/2010
Acenaphthene	EPA 8270	<2.0	2.0	ug/L	CMG	05/04/2010
Dibenzofuran	EPA 8270	<10	10	ug/L	CMG	05/04/2010
2,4-Dinitrotoluene	EPA 8270	<10	10	ug/L	CMG	05/04/2010
Diethylphthalate	EPA 8270	<10	10	ug/L	CMG	05/04/2010
Fluorene	EPA 8270	<2.0	2.0	ug/L	CMG	05/04/2010
4-Chlorophenyl Phenyl Ether	EPA 8270	<10	10	ug/L	CMG	05/04/2010
4-Nitroaniline	EPA 8270	<20	20	ug/L	CMG	05/04/2010
n-Nitrosodiphenylamine	EPA 8270	<10	10	ug/L	CMG	05/04/2010
4-Bromophenyl Phenyl Ether	EPA 8270	<10	10	ug/L	CMG	05/04/2010
Hexachlorobenzene	EPA 8270	<10	10	ug/L	CMG	05/04/2010
Phenanthrene	EPA 8270	<2.0	2.0	ug/L	CMG	05/04/2010
Anthracene	EPA 8270	<2.0	2.0	ug/L	CMG	05/04/2010
Carbazole	EPA 8270	<10	10	ug/L	CMG	05/04/2010
di-n-Butylphthalate	EPA 8270	<10	10	ug/L	CMG	05/04/2010
Fluoranthene	EPA 8270	<2.0	2.0	ug/L	CMG	05/04/2010
Pyrene	EPA 8270	<2.0	2.0	ug/L	CMG	05/04/2010
Butylbenzylphthalate	EPA 8270	<10	10	ug/L	CMG	05/04/2010
Benzo [a] Anthracene	EPA 8270	<2.0	2.0	ug/L	CMG	05/04/2010
3,3'-Dichlorobenzidine	EPA 8270	<10	10	ug/L	CMG	05/04/2010
Chrysene	EPA 8270	<2.0	2.0	ug/L	CMG	05/04/2010
bis(2-Ethylhexyl)Phthalate	EPA 8270	<10	10	ug/L	CMG	05/04/2010
di-n-Octylphthalate	EPA 8270	<10	10	ug/L	CMG	05/04/2010
Benzo [b] Fluoranthene	EPA 8270	<2.0	2.0	ug/L	CMG	05/04/2010
Benzo [k] Fluoranthene	EPA 8270	<2.0	2.0	ug/L	CMG	05/04/2010
Benzo [a] Pyrene	EPA 8270	<2.0	2.0	ug/L	CMG	05/04/2010
Indeno [1,2,3-cd] Pyrene	EPA 8270	<2.0	2.0	ug/L	CMG	05/04/2010

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ANALYTICAL REPORT

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Richard Carlone

Project Name.: **Phase II Bedrock - Charbert**
Project No.: **03.0032795.35**

Date Received: **04/29/2010**
Date Reported: **05/11/2010**
Work Order No.: **1004-00243**

Sample ID: **GZ-ML-5-2** Sample No.: **002**
Sample Date: **04/27/2010**

Test Performed	Method	Results		Reporting Limit	Units	Tech	Analysis Date
Dibenzo [a,h] Anthracene	EPA 8270	<2.0		2.0	ug/L	CMG	05/04/2010
Benzo [g,h,i] Perylene	EPA 8270	<2.0		2.0	ug/L	CMG	05/04/2010
Surrogates:	EPA 8270						
***2-Fluorophenol	EPA 8270	30.0		15-110	% R	CMG	05/04/2010
***Phenol-D6	EPA 8270	23.3		15-110	% R	CMG	05/04/2010
***Nitrobenzene-D5	EPA 8270	48.4		30-130	% R	CMG	05/04/2010
***2-Fluorobiphenyl	EPA 8270	48.4		30-130	% R	CMG	05/04/2010
***2,4,6-Tribromophenol	EPA 8270	44.2		15-110	% R	CMG	05/04/2010
***P-Terphenyl-D14	EPA 8270	60.6		39-120	% R	CMG	05/04/2010
Extraction	EPA 3510C	1.0			DF	JKC	05/03/2010
TOTAL PETROLEUM HYDROCARBON	D3328/EPA 8100/					KEF	05/05/2010
Hydrocarbon Content		<200		200	ug/L	KEF	05/05/2010
Surrogate:	D3328/EPA 8100						
***p-Terphenyl		28.9	*		% R	KEF	05/05/2010
Extraction	EPA 3510C	1.0			DF	JKC	05/10/2010
PRIORITY POLLUTANT METALS						LLZ	05/08/2010
Silver	EPA 6010B	<0.0050		0.0050	mg/L	LLZ	05/08/2010
Arsenic	EPA 6010B	<0.010		0.010	mg/L	LLZ	05/08/2010
Beryllium	EPA 6010B	<0.0040		0.0040	mg/L	LLZ	05/08/2010
Cadmium	EPA 6010B	<0.0050		0.0050	mg/L	LLZ	05/08/2010
Chromium	EPA 6010B	<0.0050		0.0050	mg/L	LLZ	05/08/2010
Copper	EPA 6010B	0.018		0.015	mg/L	LLZ	05/08/2010
Mercury	EPA 7470A	<0.00020		0.00020	mg/L	GDD	05/05/2010
Nickel	EPA 6010B	<0.010		0.010	mg/L	LLZ	05/08/2010
Lead	EPA 6010B	<0.010		0.010	mg/L	LLZ	05/08/2010
Antimony	EPA 6010B	<0.025		0.025	mg/L	LLZ	05/08/2010
Selenium	EPA 6010B	<0.025		0.025	mg/L	LLZ	05/08/2010
Thallium	EPA 6010B	<0.025		0.025	mg/L	LLZ	05/08/2010
Zinc	EPA 6010B	0.014		0.010	mg/L	LLZ	05/08/2010
Iron	EPA 6010B	2.7		0.025	mg/L	LLZ	05/08/2010
Manganese	EPA 6010B	1.1		0.0050	mg/L	LLZ	05/08/2010

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Project Name.: **Phase II Bedrock - Charbert**
Project No.: **03.0032795.35**

Date Received: **04/29/2010**
Date Reported: **05/11/2010**
Work Order No.: **1004-00243**

Sample ID: **GZ-ML-4-2** Sample No.: **003**
Sample Date: **04/27/2010**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260				MQS	05/06/2010
Dichlorodifluoromethane	EPA 8260	<2.0	2.0	ug/L	MQS	05/06/2010
Chloromethane	EPA 8260	<2.0	2.0	ug/L	MQS	05/06/2010
Vinyl Chloride	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
Bromomethane	EPA 8260	<2.0	2.0	ug/L	MQS	05/06/2010
Chloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
Trichlorofluoromethane	EPA 8260	<2.0	2.0	ug/L	MQS	05/06/2010
Diethylether	EPA 8260	<2.0	2.0	ug/L	MQS	05/06/2010
Acetone	EPA 8260	<25	25	ug/L	MQS	05/06/2010
1,1-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
Dichloromethane	EPA 8260	<2.0	2.0	ug/L	MQS	05/06/2010
Methyl-Tert-Butyl-Ether	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
trans-1,2-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
1,1-Dichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
2-Butanone	EPA 8260	<25	25	ug/L	MQS	05/06/2010
2,2-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
cis-1,2-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
Chloroform	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
Bromochloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
Tetrahydrofuran	EPA 8260	<10	10	ug/L	MQS	05/06/2010
1,1,1-Trichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
1,1-Dichloropropene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
Carbon Tetrachloride	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
1,2-Dichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
Benzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
Trichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
1,2-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
Bromodichloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
Dibromomethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
4-Methyl-2-Pentanone	EPA 8260	<25	25	ug/L	MQS	05/06/2010
cis-1,3-Dichloropropene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
Toluene	EPA 8260	1.2	1.0	ug/L	MQS	05/06/2010
trans-1,3-Dichloropropene	EPA 8260	<2.0	2.0	ug/L	MQS	05/06/2010
1,1,2-Trichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
2-Hexanone	EPA 8260	<25	25	ug/L	MQS	05/06/2010

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A N A L Y T I C A L R E P O R T

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Richard Carlone

Project Name.: **Phase II Bedrock - Charbert**
Project No.: **03.0032795.35**

Date Received: **04/29/2010**
Date Reported: **05/11/2010**
Work Order No.: **1004-00243**

Sample ID: **GZ-ML-4-2** Sample No.: **003**
Sample Date: **04/27/2010**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
1,3-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
Tetrachloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
Dibromochloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
1,2-Dibromoethane (EDB)	EPA 8260	<2.0	2.0	ug/L	MQS	05/06/2010
Chlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
1,1,1,2-Tetrachloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
Ethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
m&p-Xylene	EPA 8260	<2.0	2.0	ug/L	MQS	05/06/2010
o-Xylene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
Styrene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
Bromoform	EPA 8260	<2.0	2.0	ug/L	MQS	05/06/2010
Isopropylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
1,1,2,2-Tetrachloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
1,2,3-Trichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
Bromobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
N-Propylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
2-Chlorotoluene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
1,3,5-Trimethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
4-Chlorotoluene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
tert-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
1,2,4-Trimethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
sec-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
p-Isopropyltoluene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
1,3-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
1,4-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
n-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
1,2-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
1,2-Dibromo-3-Chloropropane	EPA 8260	<2.0	2.0	ug/L	MQS	05/06/2010
1,2,4-Trichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
Hexachlorobutadiene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
Naphthalene	EPA 8260	<2.0	2.0	ug/L	MQS	05/06/2010
1,2,3-Trichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
Surrogates:	EPA 8260					
***1,2-Dichloroethane-D4	EPA 8260	99.6	70-130	% R	MQS	05/06/2010
***Toluene-D8	EPA 8260	104	70-130	% R	MQS	05/06/2010

GZA GeoEnvironmental, Inc.
106 South Street
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ANALYTICAL REPORT

GZA GeoEnvironmental, Inc.
530 Broadway
Providence, RI 02909

Richard Carlone

Project Name.: **Phase II Bedrock - Charbert**
Project No.: **03.0032795.35**

Date Received: **04/29/2010**
Date Reported: **05/11/2010**
Work Order No.: **1004-00243**

Sample ID: **GZ-ML-4-2** Sample No.: **003**
Sample Date: **04/27/2010**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
***4-Bromofluorobenzene	EPA 8260	92.0	70-130	% R	MQS	05/06/2010
Preparation	EPA 5030B	1.0		CF	MQS	05/05/2010
SEMI-VOLATILE ORGANICS	EPA 8270				CMG	05/04/2010
ACID FRACTION:	EPA 8270					
Phenol	EPA 8270	<10	10	ug/L	CMG	05/04/2010
2-Chlorophenol	EPA 8270	<10	10	ug/L	CMG	05/04/2010
2-Methylphenol	EPA 8270	<10	10	ug/L	CMG	05/04/2010
3&4-Methylphenol	EPA 8270	<10	10	ug/L	CMG	05/04/2010
2-Nitrophenol	EPA 8270	<10	10	ug/L	CMG	05/04/2010
2,4-Dimethylphenol	EPA 8270	<10	10	ug/L	CMG	05/04/2010
Benzoic Acid	EPA 8270	<10	10	ug/L	CMG	05/04/2010
2,4-Dichlorophenol	EPA 8270	<10	10	ug/L	CMG	05/04/2010
4-Chloro-3-Methylphenol	EPA 8270	<20	20	ug/L	CMG	05/04/2010
2,4,6-Trichlorophenol	EPA 8270	<10	10	ug/L	CMG	05/04/2010
2,4,5-Trichlorophenol	EPA 8270	<10	10	ug/L	CMG	05/04/2010
2,4-Dinitrophenol	EPA 8270	<100	100	ug/L	CMG	05/04/2010
4-Nitrophenol	EPA 8270	<50	50	ug/L	CMG	05/04/2010
4,6-Dinitro-2-Methylphenol	EPA 8270	<50	50	ug/L	CMG	05/04/2010
Pentachlorophenol	EPA 8270	<50	50	ug/L	CMG	05/04/2010
BASE-NEUTRAL FRACTION:						
n-Nitrosodimethylamine	EPA 8270	<10	10	ug/L	CMG	05/04/2010
bis(2-Chloroethyl)Ether	EPA 8270	<10	10	ug/L	CMG	05/04/2010
1,3-Dichlorobenzene	EPA 8270	<10	10	ug/L	CMG	05/04/2010
1,4-Dichlorobenzene	EPA 8270	<10	10	ug/L	CMG	05/04/2010
Benzyl Alcohol	EPA 8270	<20	20	ug/L	CMG	05/04/2010
1,2-Dichlorobenzene	EPA 8270	<10	10	ug/L	CMG	05/04/2010
bis(2-Chloroisopropyl)Ether	EPA 8270	<10	10	ug/L	CMG	05/04/2010
n-Nitrosodi-n-Propylamine	EPA 8270	<10	10	ug/L	CMG	05/04/2010
Hexachloroethane	EPA 8270	<10	10	ug/L	CMG	05/04/2010
Nitrobenzene	EPA 8270	<10	10	ug/L	CMG	05/04/2010
Isophorone	EPA 8270	<10	10	ug/L	CMG	05/04/2010
bis(2-Chloroethoxy)Methane	EPA 8270	<10	10	ug/L	CMG	05/04/2010
1,2,4-Trichlorobenzene	EPA 8270	<10	10	ug/L	CMG	05/04/2010
Naphthalene	EPA 8270	<2.0	2.0	ug/L	CMG	05/04/2010
4-Chloroaniline	EPA 8270	<20	20	ug/L	CMG	05/04/2010

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Richard Carlone

Project Name.: **Phase II Bedrock - Charbert**
Project No.: **03.0032795.35**

Date Received: **04/29/2010**
Date Reported: **05/11/2010**
Work Order No.: **1004-00243**

Sample ID: **GZ-ML-4-2** Sample No.: **003**
Sample Date: **04/27/2010**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
Hexachlorobutadiene	EPA 8270	<10	10	ug/L	CMG	05/04/2010
2-Methylnaphthalene	EPA 8270	<2.0	2.0	ug/L	CMG	05/04/2010
Hexachlorocyclopentadiene	EPA 8270	<50	50	ug/L	CMG	05/04/2010
2-Chloronaphthalene	EPA 8270	<10	10	ug/L	CMG	05/04/2010
2-Nitroaniline	EPA 8270	<50	50	ug/L	CMG	05/04/2010
Dimethylphthalate	EPA 8270	<10	10	ug/L	CMG	05/04/2010
Acenaphthylene	EPA 8270	<2.0	2.0	ug/L	CMG	05/04/2010
2,6-Dinitrotoluene	EPA 8270	<10	10	ug/L	CMG	05/04/2010
3-Nitroaniline	EPA 8270	<50	50	ug/L	CMG	05/04/2010
Acenaphthene	EPA 8270	<2.0	2.0	ug/L	CMG	05/04/2010
Dibenzofuran	EPA 8270	<10	10	ug/L	CMG	05/04/2010
2,4-Dinitrotoluene	EPA 8270	<10	10	ug/L	CMG	05/04/2010
Diethylphthalate	EPA 8270	<10	10	ug/L	CMG	05/04/2010
Fluorene	EPA 8270	<2.0	2.0	ug/L	CMG	05/04/2010
4-Chlorophenyl Phenyl Ether	EPA 8270	<10	10	ug/L	CMG	05/04/2010
4-Nitroaniline	EPA 8270	<20	20	ug/L	CMG	05/04/2010
n-Nitrosodiphenylamine	EPA 8270	<10	10	ug/L	CMG	05/04/2010
4-Bromophenyl Phenyl Ether	EPA 8270	<10	10	ug/L	CMG	05/04/2010
Hexachlorobenzene	EPA 8270	<10	10	ug/L	CMG	05/04/2010
Phenanthrene	EPA 8270	<2.0	2.0	ug/L	CMG	05/04/2010
Anthracene	EPA 8270	<2.0	2.0	ug/L	CMG	05/04/2010
Carbazole	EPA 8270	<10	10	ug/L	CMG	05/04/2010
di-n-Butylphthalate	EPA 8270	<10	10	ug/L	CMG	05/04/2010
Fluoranthene	EPA 8270	<2.0	2.0	ug/L	CMG	05/04/2010
Pyrene	EPA 8270	<2.0	2.0	ug/L	CMG	05/04/2010
Butylbenzylphthalate	EPA 8270	<10	10	ug/L	CMG	05/04/2010
Benzo [a] Anthracene	EPA 8270	<2.0	2.0	ug/L	CMG	05/04/2010
3,3'-Dichlorobenzidine	EPA 8270	<10	10	ug/L	CMG	05/04/2010
Chrysene	EPA 8270	<2.0	2.0	ug/L	CMG	05/04/2010
bis(2-Ethylhexyl)Phthalate	EPA 8270	<10	10	ug/L	CMG	05/04/2010
di-n-Octylphthalate	EPA 8270	<10	10	ug/L	CMG	05/04/2010
Benzo [b] Fluoranthene	EPA 8270	<2.0	2.0	ug/L	CMG	05/04/2010
Benzo [k] Fluoranthene	EPA 8270	<2.0	2.0	ug/L	CMG	05/04/2010
Benzo [a] Pyrene	EPA 8270	<2.0	2.0	ug/L	CMG	05/04/2010
Indeno [1,2,3-cd] Pyrene	EPA 8270	<2.0	2.0	ug/L	CMG	05/04/2010

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Richard Carlone

Project Name.: **Phase II Bedrock - Charbert**
Project No.: **03.0032795.35**

Date Received: **04/29/2010**
Date Reported: **05/11/2010**
Work Order No.: **1004-00243**

Sample ID: **GZ-ML-4-2** Sample No.: **003**
Sample Date: **04/27/2010**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
Dibenzo [a,h] Anthracene	EPA 8270	<2.0	2.0	ug/L	CMG	05/04/2010
Benzo [g,h,i] Perylene	EPA 8270	<2.0	2.0	ug/L	CMG	05/04/2010
Surrogates:	EPA 8270					
***2-Fluorophenol	EPA 8270	40.8	15-110	% R	CMG	05/04/2010
***Phenol-D6	EPA 8270	30.5	15-110	% R	CMG	05/04/2010
***Nitrobenzene-D5	EPA 8270	65.6	30-130	% R	CMG	05/04/2010
***2-Fluorobiphenyl	EPA 8270	65.6	30-130	% R	CMG	05/04/2010
***2,4,6-Tribromophenol	EPA 8270	62.3	15-110	% R	CMG	05/04/2010
***P-Terphenyl-D14	EPA 8270	80.4	39-120	% R	CMG	05/04/2010
Extraction	EPA 3510C	1.0		DF	JKC	05/03/2010
TOTAL PETROLEUM HYDROCARBON	D3328/EPA 8100/				KEF	05/05/2010
Hydrocarbon Content		360	200	ug/L	KEF	05/05/2010
Surrogate:	D3328/EPA 8100					
***p-Terphenyl		65.2		% R	KEF	05/05/2010
Extraction	EPA 3510C	1.0		DF	KEF	05/04/2010
PRIORITY POLLUTANT METALS					LLZ	05/08/2010
Silver	EPA 6010B	<0.0050	0.0050	mg/L	LLZ	05/08/2010
Arsenic	EPA 6010B	<0.010	0.010	mg/L	LLZ	05/08/2010
Beryllium	EPA 6010B	<0.0040	0.0040	mg/L	LLZ	05/08/2010
Cadmium	EPA 6010B	<0.0050	0.0050	mg/L	LLZ	05/08/2010
Chromium	EPA 6010B	<0.0050	0.0050	mg/L	LLZ	05/08/2010
Copper	EPA 6010B	0.025	0.015	mg/L	LLZ	05/08/2010
Mercury	EPA 7470A	<0.00020	0.00020	mg/L	GDD	05/05/2010
Nickel	EPA 6010B	<0.010	0.010	mg/L	LLZ	05/08/2010
Lead	EPA 6010B	<0.010	0.010	mg/L	LLZ	05/08/2010
Antimony	EPA 6010B	<0.025	0.025	mg/L	LLZ	05/08/2010
Selenium	EPA 6010B	<0.025	0.025	mg/L	LLZ	05/08/2010
Thallium	EPA 6010B	<0.025	0.025	mg/L	LLZ	05/08/2010
Zinc	EPA 6010B	<0.010	0.010	mg/L	LLZ	05/08/2010
Iron	EPA 6010B	3.1	0.025	mg/L	LLZ	05/08/2010
Manganese	EPA 6010B	0.27	0.0050	mg/L	LLZ	05/08/2010

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Project Name.: **Phase II Bedrock - Charbert**
Project No.: **03.0032795.35**

Date Received: **04/29/2010**
Date Reported: **05/11/2010**
Work Order No.: **1004-00243**

Sample ID: **GZ-ML-4-3** Sample No.: **004**
Sample Date: **04/27/2010**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260				MQS	05/06/2010
Dichlorodifluoromethane	EPA 8260	<2.0	2.0	ug/L	MQS	05/06/2010
Chloromethane	EPA 8260	<2.0	2.0	ug/L	MQS	05/06/2010
Vinyl Chloride	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
Bromomethane	EPA 8260	<2.0	2.0	ug/L	MQS	05/06/2010
Chloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
Trichlorofluoromethane	EPA 8260	<2.0	2.0	ug/L	MQS	05/06/2010
Diethylether	EPA 8260	<2.0	2.0	ug/L	MQS	05/06/2010
Acetone	EPA 8260	<25	25	ug/L	MQS	05/06/2010
1,1-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
Dichloromethane	EPA 8260	<2.0	2.0	ug/L	MQS	05/06/2010
Methyl-Tert-Butyl-Ether	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
trans-1,2-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
1,1-Dichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
2-Butanone	EPA 8260	<25	25	ug/L	MQS	05/06/2010
2,2-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
cis-1,2-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
Chloroform	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
Bromochloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
Tetrahydrofuran	EPA 8260	<10	10	ug/L	MQS	05/06/2010
1,1,1-Trichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
1,1-Dichloropropene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
Carbon Tetrachloride	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
1,2-Dichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
Benzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
Trichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
1,2-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
Bromodichloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
Dibromomethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
4-Methyl-2-Pentanone	EPA 8260	<25	25	ug/L	MQS	05/06/2010
cis-1,3-Dichloropropene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
Toluene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
trans-1,3-Dichloropropene	EPA 8260	<2.0	2.0	ug/L	MQS	05/06/2010
1,1,2-Trichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
2-Hexanone	EPA 8260	<25	25	ug/L	MQS	05/06/2010

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A N A L Y T I C A L R E P O R T

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530 Broadway
Providence, RI 02909

Richard Carlone

Project Name.: **Phase II Bedrock - Charbert**
Project No.: **03.0032795.35**

Date Received: **04/29/2010**
Date Reported: **05/11/2010**
Work Order No.: **1004-00243**

Sample ID: **GZ-ML-4-3** Sample No.: **004**
Sample Date: **04/27/2010**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
1,3-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
Tetrachloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
Dibromochloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
1,2-Dibromoethane (EDB)	EPA 8260	<2.0	2.0	ug/L	MQS	05/06/2010
Chlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
1,1,1,2-Tetrachloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
Ethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
m&p-Xylene	EPA 8260	<2.0	2.0	ug/L	MQS	05/06/2010
o-Xylene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
Styrene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
Bromoform	EPA 8260	<2.0	2.0	ug/L	MQS	05/06/2010
Isopropylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
1,1,2,2-Tetrachloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
1,2,3-Trichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
Bromobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
N-Propylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
2-Chlorotoluene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
1,3,5-Trimethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
4-Chlorotoluene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
tert-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
1,2,4-Trimethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
sec-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
p-Isopropyltoluene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
1,3-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
1,4-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
n-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
1,2-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
1,2-Dibromo-3-Chloropropane	EPA 8260	<2.0	2.0	ug/L	MQS	05/06/2010
1,2,4-Trichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
Hexachlorobutadiene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
Naphthalene	EPA 8260	<2.0	2.0	ug/L	MQS	05/06/2010
1,2,3-Trichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
Surrogates:	EPA 8260					
***1,2-Dichloroethane-D4	EPA 8260	95.8	70-130	% R	MQS	05/06/2010
***Toluene-D8	EPA 8260	105	70-130	% R	MQS	05/06/2010

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Project Name.: **Phase II Bedrock - Charbert**
Project No.: **03.0032795.35**

Date Received: **04/29/2010**
Date Reported: **05/11/2010**
Work Order No.: **1004-00243**

Sample ID: **GZ-ML-4-3** Sample No.: **004**
Sample Date: **04/27/2010**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
***4-Bromofluorobenzene	EPA 8260	91.0	70-130	% R	MQS	05/06/2010
Preparation	EPA 5030B	1.0		CF	MQS	05/05/2010
SEMI-VOLATILE ORGANICS	EPA 8270				CMG	05/04/2010
ACID FRACTION:	EPA 8270					
Phenol	EPA 8270	<10	10	ug/L	CMG	05/04/2010
2-Chlorophenol	EPA 8270	<10	10	ug/L	CMG	05/04/2010
2-Methylphenol	EPA 8270	<10	10	ug/L	CMG	05/04/2010
3&4-Methylphenol	EPA 8270	<10	10	ug/L	CMG	05/04/2010
2-Nitrophenol	EPA 8270	<10	10	ug/L	CMG	05/04/2010
2,4-Dimethylphenol	EPA 8270	<10	10	ug/L	CMG	05/04/2010
Benzoic Acid	EPA 8270	<10	10	ug/L	CMG	05/04/2010
2,4-Dichlorophenol	EPA 8270	<10	10	ug/L	CMG	05/04/2010
4-Chloro-3-Methylphenol	EPA 8270	<20	20	ug/L	CMG	05/04/2010
2,4,6-Trichlorophenol	EPA 8270	<10	10	ug/L	CMG	05/04/2010
2,4,5-Trichlorophenol	EPA 8270	<10	10	ug/L	CMG	05/04/2010
2,4-Dinitrophenol	EPA 8270	<100	100	ug/L	CMG	05/04/2010
4-Nitrophenol	EPA 8270	<50	50	ug/L	CMG	05/04/2010
4,6-Dinitro-2-Methylphenol	EPA 8270	<50	50	ug/L	CMG	05/04/2010
Pentachlorophenol	EPA 8270	<50	50	ug/L	CMG	05/04/2010
BASE-NEUTRAL FRACTION:						
n-Nitrosodimethylamine	EPA 8270	<10	10	ug/L	CMG	05/04/2010
bis(2-Chloroethyl)Ether	EPA 8270	<10	10	ug/L	CMG	05/04/2010
1,3-Dichlorobenzene	EPA 8270	<10	10	ug/L	CMG	05/04/2010
1,4-Dichlorobenzene	EPA 8270	<10	10	ug/L	CMG	05/04/2010
Benzyl Alcohol	EPA 8270	<20	20	ug/L	CMG	05/04/2010
1,2-Dichlorobenzene	EPA 8270	<10	10	ug/L	CMG	05/04/2010
bis(2-Chloroisopropyl)Ether	EPA 8270	<10	10	ug/L	CMG	05/04/2010
n-Nitrosodi-n-Propylamine	EPA 8270	<10	10	ug/L	CMG	05/04/2010
Hexachloroethane	EPA 8270	<10	10	ug/L	CMG	05/04/2010
Nitrobenzene	EPA 8270	<10	10	ug/L	CMG	05/04/2010
Isophorone	EPA 8270	<10	10	ug/L	CMG	05/04/2010
bis(2-Chloroethoxy)Methane	EPA 8270	<10	10	ug/L	CMG	05/04/2010
1,2,4-Trichlorobenzene	EPA 8270	<10	10	ug/L	CMG	05/04/2010
Naphthalene	EPA 8270	<2.0	2.0	ug/L	CMG	05/04/2010
4-Chloroaniline	EPA 8270	<20	20	ug/L	CMG	05/04/2010

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ANALYTICAL REPORT

GZA GeoEnvironmental, Inc.
530 Broadway
Providence, RI 02909

Richard Carlone

Project Name.: **Phase II Bedrock - Charbert**
Project No.: **03.0032795.35**

Date Received: **04/29/2010**
Date Reported: **05/11/2010**
Work Order No.: **1004-00243**

Sample ID: **GZ-ML-4-3** Sample No.: **004**
Sample Date: **04/27/2010**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
Hexachlorobutadiene	EPA 8270	<10	10	ug/L	CMG	05/04/2010
2-Methylnaphthalene	EPA 8270	<2.0	2.0	ug/L	CMG	05/04/2010
Hexachlorocyclopentadiene	EPA 8270	<50	50	ug/L	CMG	05/04/2010
2-Chloronaphthalene	EPA 8270	<10	10	ug/L	CMG	05/04/2010
2-Nitroaniline	EPA 8270	<50	50	ug/L	CMG	05/04/2010
Dimethylphthalate	EPA 8270	<10	10	ug/L	CMG	05/04/2010
Acenaphthylene	EPA 8270	<2.0	2.0	ug/L	CMG	05/04/2010
2,6-Dinitrotoluene	EPA 8270	<10	10	ug/L	CMG	05/04/2010
3-Nitroaniline	EPA 8270	<50	50	ug/L	CMG	05/04/2010
Acenaphthene	EPA 8270	<2.0	2.0	ug/L	CMG	05/04/2010
Dibenzofuran	EPA 8270	<10	10	ug/L	CMG	05/04/2010
2,4-Dinitrotoluene	EPA 8270	<10	10	ug/L	CMG	05/04/2010
Diethylphthalate	EPA 8270	<10	10	ug/L	CMG	05/04/2010
Fluorene	EPA 8270	<2.0	2.0	ug/L	CMG	05/04/2010
4-Chlorophenyl Phenyl Ether	EPA 8270	<10	10	ug/L	CMG	05/04/2010
4-Nitroaniline	EPA 8270	<20	20	ug/L	CMG	05/04/2010
n-Nitrosodiphenylamine	EPA 8270	<10	10	ug/L	CMG	05/04/2010
4-Bromophenyl Phenyl Ether	EPA 8270	<10	10	ug/L	CMG	05/04/2010
Hexachlorobenzene	EPA 8270	<10	10	ug/L	CMG	05/04/2010
Phenanthrene	EPA 8270	<2.0	2.0	ug/L	CMG	05/04/2010
Anthracene	EPA 8270	<2.0	2.0	ug/L	CMG	05/04/2010
Carbazole	EPA 8270	<10	10	ug/L	CMG	05/04/2010
di-n-Butylphthalate	EPA 8270	<10	10	ug/L	CMG	05/04/2010
Fluoranthene	EPA 8270	<2.0	2.0	ug/L	CMG	05/04/2010
Pyrene	EPA 8270	<2.0	2.0	ug/L	CMG	05/04/2010
Butylbenzylphthalate	EPA 8270	<10	10	ug/L	CMG	05/04/2010
Benzo [a] Anthracene	EPA 8270	<2.0	2.0	ug/L	CMG	05/04/2010
3,3'-Dichlorobenzidine	EPA 8270	<10	10	ug/L	CMG	05/04/2010
Chrysene	EPA 8270	<2.0	2.0	ug/L	CMG	05/04/2010
bis(2-Ethylhexyl)Phthalate	EPA 8270	<10	10	ug/L	CMG	05/04/2010
di-n-Octylphthalate	EPA 8270	<10	10	ug/L	CMG	05/04/2010
Benzo [b] Fluoranthene	EPA 8270	<2.0	2.0	ug/L	CMG	05/04/2010
Benzo [k] Fluoranthene	EPA 8270	<2.0	2.0	ug/L	CMG	05/04/2010
Benzo [a] Pyrene	EPA 8270	<2.0	2.0	ug/L	CMG	05/04/2010
Indeno [1,2,3-cd] Pyrene	EPA 8270	<2.0	2.0	ug/L	CMG	05/04/2010

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Richard Carlone

Project Name.: **Phase II Bedrock - Charbert**
Project No.: **03.0032795.35**

Date Received: **04/29/2010**
Date Reported: **05/11/2010**
Work Order No.: **1004-00243**

Sample ID: **GZ-ML-4-3** Sample No.: **004**
Sample Date: **04/27/2010**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
Dibenzo [a,h] Anthracene	EPA 8270	<2.0	2.0	ug/L	CMG	05/04/2010
Benzo [g,h,i] Perylene	EPA 8270	<2.0	2.0	ug/L	CMG	05/04/2010
Surrogates:	EPA 8270					
***2-Fluorophenol	EPA 8270	37.6	15-110	% R	CMG	05/04/2010
***Phenol-D6	EPA 8270	27.9	15-110	% R	CMG	05/04/2010
***Nitrobenzene-D5	EPA 8270	60.6	30-130	% R	CMG	05/04/2010
***2-Fluorobiphenyl	EPA 8270	60.3	30-130	% R	CMG	05/04/2010
***2,4,6-Tribromophenol	EPA 8270	57.8	15-110	% R	CMG	05/04/2010
***P-Terphenyl-D14	EPA 8270	74.2	39-120	% R	CMG	05/04/2010
Extraction	EPA 3510C	1.0		DF	JKC	05/03/2010
TOTAL PETROLEUM HYDROCARBON	D3328/EPA 8100/				KEF	05/05/2010
Hydrocarbon Content		<200	200	ug/L	KEF	05/05/2010
Surrogate:	D3328/EPA 8100					
***p-Terphenyl		85.1		% R	KEF	05/05/2010
Extraction	EPA 3510C	1.0		DF	KEF	05/04/2010
PRIORITY POLLUTANT METALS					LLZ	05/08/2010
Silver	EPA 6010B	<0.0050	0.0050	mg/L	LLZ	05/08/2010
Arsenic	EPA 6010B	<0.010	0.010	mg/L	LLZ	05/08/2010
Beryllium	EPA 6010B	<0.0040	0.0040	mg/L	LLZ	05/08/2010
Cadmium	EPA 6010B	<0.0050	0.0050	mg/L	LLZ	05/08/2010
Chromium	EPA 6010B	0.012	0.0050	mg/L	LLZ	05/08/2010
Copper	EPA 6010B	0.021	0.015	mg/L	LLZ	05/08/2010
Mercury	EPA 7470A	<0.00020	0.00020	mg/L	GDD	05/05/2010
Nickel	EPA 6010B	<0.010	0.010	mg/L	LLZ	05/08/2010
Lead	EPA 6010B	<0.010	0.010	mg/L	LLZ	05/08/2010
Antimony	EPA 6010B	<0.025	0.025	mg/L	LLZ	05/08/2010
Selenium	EPA 6010B	<0.025	0.025	mg/L	LLZ	05/08/2010
Thallium	EPA 6010B	<0.025	0.025	mg/L	LLZ	05/08/2010
Zinc	EPA 6010B	0.035	0.010	mg/L	LLZ	05/08/2010
Iron	EPA 6010B	3.8	0.025	mg/L	LLZ	05/08/2010
Manganese	EPA 6010B	0.15	0.0050	mg/L	LLZ	05/08/2010

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Date Received: **04/29/2010**
Date Reported: **05/11/2010**
Work Order No.: **1004-00243**

Sample ID: **GZ-ML-5-3** Sample No.: **005**
Sample Date: **04/27/2010**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260				MQS	05/06/2010
Dichlorodifluoromethane	EPA 8260	<2.0	2.0	ug/L	MQS	05/06/2010
Chloromethane	EPA 8260	<2.0	2.0	ug/L	MQS	05/06/2010
Vinyl Chloride	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
Bromomethane	EPA 8260	<2.0	2.0	ug/L	MQS	05/06/2010
Chloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
Trichlorofluoromethane	EPA 8260	<2.0	2.0	ug/L	MQS	05/06/2010
Diethylether	EPA 8260	<2.0	2.0	ug/L	MQS	05/06/2010
Acetone	EPA 8260	<25	25	ug/L	MQS	05/06/2010
1,1-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
Dichloromethane	EPA 8260	<2.0	2.0	ug/L	MQS	05/06/2010
Methyl-Tert-Butyl-Ether	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
trans-1,2-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
1,1-Dichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
2-Butanone	EPA 8260	<25	25	ug/L	MQS	05/06/2010
2,2-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
cis-1,2-Dichloroethene	EPA 8260	6.1	1.0	ug/L	MQS	05/06/2010
Chloroform	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
Bromochloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
Tetrahydrofuran	EPA 8260	<10	10	ug/L	MQS	05/06/2010
1,1,1-Trichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
1,1-Dichloropropene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
Carbon Tetrachloride	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
1,2-Dichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
Benzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
Trichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
1,2-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
Bromodichloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
Dibromomethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
4-Methyl-2-Pentanone	EPA 8260	<25	25	ug/L	MQS	05/06/2010
cis-1,3-Dichloropropene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
Toluene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
trans-1,3-Dichloropropene	EPA 8260	<2.0	2.0	ug/L	MQS	05/06/2010
1,1,2-Trichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
2-Hexanone	EPA 8260	<25	25	ug/L	MQS	05/06/2010

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Richard Carlone

Project Name.: **Phase II Bedrock - Charbert**
Project No.: **03.0032795.35**

Date Received: **04/29/2010**
Date Reported: **05/11/2010**
Work Order No.: **1004-00243**

Sample ID: **GZ-ML-5-3** Sample No.: **005**
Sample Date: **04/27/2010**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
1,3-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
Tetrachloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
Dibromochloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
1,2-Dibromoethane (EDB)	EPA 8260	<2.0	2.0	ug/L	MQS	05/06/2010
Chlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
1,1,1,2-Tetrachloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
Ethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
m&p-Xylene	EPA 8260	<2.0	2.0	ug/L	MQS	05/06/2010
o-Xylene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
Styrene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
Bromoform	EPA 8260	<2.0	2.0	ug/L	MQS	05/06/2010
Isopropylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
1,1,2,2-Tetrachloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
1,2,3-Trichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
Bromobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
N-Propylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
2-Chlorotoluene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
1,3,5-Trimethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
4-Chlorotoluene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
tert-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
1,2,4-Trimethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
sec-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
p-Isopropyltoluene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
1,3-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
1,4-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
n-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
1,2-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
1,2-Dibromo-3-Chloropropane	EPA 8260	<2.0	2.0	ug/L	MQS	05/06/2010
1,2,4-Trichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
Hexachlorobutadiene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
Naphthalene	EPA 8260	<2.0	2.0	ug/L	MQS	05/06/2010
1,2,3-Trichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
Surrogates:	EPA 8260					
***1,2-Dichloroethane-D4	EPA 8260	97.3	70-130	% R	MQS	05/06/2010
***Toluene-D8	EPA 8260	106	70-130	% R	MQS	05/06/2010

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Project Name.: **Phase II Bedrock - Charbert**
Project No.: **03.0032795.35**

Date Received: **04/29/2010**
Date Reported: **05/11/2010**
Work Order No.: **1004-00243**

Sample ID: **GZ-ML-5-3** Sample No.: **005**
Sample Date: **04/27/2010**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
***4-Bromofluorobenzene	EPA 8260	89.4	70-130	% R	MQS	05/06/2010
Preparation	EPA 5030B	1.0		CF	MQS	05/05/2010
SEMI-VOLATILE ORGANICS	EPA 8270				CMG	05/04/2010
ACID FRACTION:	EPA 8270					
Phenol	EPA 8270	<10	10	ug/L	CMG	05/04/2010
2-Chlorophenol	EPA 8270	<10	10	ug/L	CMG	05/04/2010
2-Methylphenol	EPA 8270	<10	10	ug/L	CMG	05/04/2010
3&4-Methylphenol	EPA 8270	<10	10	ug/L	CMG	05/04/2010
2-Nitrophenol	EPA 8270	<10	10	ug/L	CMG	05/04/2010
2,4-Dimethylphenol	EPA 8270	<10	10	ug/L	CMG	05/04/2010
Benzoic Acid	EPA 8270	<10	10	ug/L	CMG	05/04/2010
2,4-Dichlorophenol	EPA 8270	<10	10	ug/L	CMG	05/04/2010
4-Chloro-3-Methylphenol	EPA 8270	<20	20	ug/L	CMG	05/04/2010
2,4,6-Trichlorophenol	EPA 8270	<10	10	ug/L	CMG	05/04/2010
2,4,5-Trichlorophenol	EPA 8270	<10	10	ug/L	CMG	05/04/2010
2,4-Dinitrophenol	EPA 8270	<100	100	ug/L	CMG	05/04/2010
4-Nitrophenol	EPA 8270	<50	50	ug/L	CMG	05/04/2010
4,6-Dinitro-2-Methylphenol	EPA 8270	<50	50	ug/L	CMG	05/04/2010
Pentachlorophenol	EPA 8270	<50	50	ug/L	CMG	05/04/2010
BASE-NEUTRAL FRACTION:						
n-Nitrosodimethylamine	EPA 8270	<10	10	ug/L	CMG	05/04/2010
bis(2-Chloroethyl)Ether	EPA 8270	<10	10	ug/L	CMG	05/04/2010
1,3-Dichlorobenzene	EPA 8270	<10	10	ug/L	CMG	05/04/2010
1,4-Dichlorobenzene	EPA 8270	<10	10	ug/L	CMG	05/04/2010
Benzyl Alcohol	EPA 8270	<20	20	ug/L	CMG	05/04/2010
1,2-Dichlorobenzene	EPA 8270	<10	10	ug/L	CMG	05/04/2010
bis(2-Chloroisopropyl)Ether	EPA 8270	<10	10	ug/L	CMG	05/04/2010
n-Nitrosodi-n-Propylamine	EPA 8270	<10	10	ug/L	CMG	05/04/2010
Hexachloroethane	EPA 8270	<10	10	ug/L	CMG	05/04/2010
Nitrobenzene	EPA 8270	<10	10	ug/L	CMG	05/04/2010
Isophorone	EPA 8270	<10	10	ug/L	CMG	05/04/2010
bis(2-Chloroethoxy)Methane	EPA 8270	<10	10	ug/L	CMG	05/04/2010
1,2,4-Trichlorobenzene	EPA 8270	<10	10	ug/L	CMG	05/04/2010
Naphthalene	EPA 8270	<2.0	2.0	ug/L	CMG	05/04/2010
4-Chloroaniline	EPA 8270	<20	20	ug/L	CMG	05/04/2010

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Date Received: **04/29/2010**
Date Reported: **05/11/2010**
Work Order No.: **1004-00243**

Sample ID: **GZ-ML-5-3** Sample No.: **005**
Sample Date: **04/27/2010**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
Hexachlorobutadiene	EPA 8270	<10	10	ug/L	CMG	05/04/2010
2-Methylnaphthalene	EPA 8270	<2.0	2.0	ug/L	CMG	05/04/2010
Hexachlorocyclopentadiene	EPA 8270	<50	50	ug/L	CMG	05/04/2010
2-Chloronaphthalene	EPA 8270	<10	10	ug/L	CMG	05/04/2010
2-Nitroaniline	EPA 8270	<50	50	ug/L	CMG	05/04/2010
Dimethylphthalate	EPA 8270	<10	10	ug/L	CMG	05/04/2010
Acenaphthylene	EPA 8270	<2.0	2.0	ug/L	CMG	05/04/2010
2,6-Dinitrotoluene	EPA 8270	<10	10	ug/L	CMG	05/04/2010
3-Nitroaniline	EPA 8270	<50	50	ug/L	CMG	05/04/2010
Acenaphthene	EPA 8270	<2.0	2.0	ug/L	CMG	05/04/2010
Dibenzofuran	EPA 8270	<10	10	ug/L	CMG	05/04/2010
2,4-Dinitrotoluene	EPA 8270	<10	10	ug/L	CMG	05/04/2010
Diethylphthalate	EPA 8270	<10	10	ug/L	CMG	05/04/2010
Fluorene	EPA 8270	<2.0	2.0	ug/L	CMG	05/04/2010
4-Chlorophenyl Phenyl Ether	EPA 8270	<10	10	ug/L	CMG	05/04/2010
4-Nitroaniline	EPA 8270	<20	20	ug/L	CMG	05/04/2010
n-Nitrosodiphenylamine	EPA 8270	<10	10	ug/L	CMG	05/04/2010
4-Bromophenyl Phenyl Ether	EPA 8270	<10	10	ug/L	CMG	05/04/2010
Hexachlorobenzene	EPA 8270	<10	10	ug/L	CMG	05/04/2010
Phenanthrene	EPA 8270	<2.0	2.0	ug/L	CMG	05/04/2010
Anthracene	EPA 8270	<2.0	2.0	ug/L	CMG	05/04/2010
Carbazole	EPA 8270	<10	10	ug/L	CMG	05/04/2010
di-n-Butylphthalate	EPA 8270	<10	10	ug/L	CMG	05/04/2010
Fluoranthene	EPA 8270	<2.0	2.0	ug/L	CMG	05/04/2010
Pyrene	EPA 8270	<2.0	2.0	ug/L	CMG	05/04/2010
Butylbenzylphthalate	EPA 8270	<10	10	ug/L	CMG	05/04/2010
Benzo [a] Anthracene	EPA 8270	<2.0	2.0	ug/L	CMG	05/04/2010
3,3'-Dichlorobenzidine	EPA 8270	<10	10	ug/L	CMG	05/04/2010
Chrysene	EPA 8270	<2.0	2.0	ug/L	CMG	05/04/2010
bis(2-Ethylhexyl)Phthalate	EPA 8270	<10	10	ug/L	CMG	05/04/2010
di-n-Octylphthalate	EPA 8270	<10	10	ug/L	CMG	05/04/2010
Benzo [b] Fluoranthene	EPA 8270	<2.0	2.0	ug/L	CMG	05/04/2010
Benzo [k] Fluoranthene	EPA 8270	<2.0	2.0	ug/L	CMG	05/04/2010
Benzo [a] Pyrene	EPA 8270	<2.0	2.0	ug/L	CMG	05/04/2010
Indeno [1,2,3-cd] Pyrene	EPA 8270	<2.0	2.0	ug/L	CMG	05/04/2010

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ANALYTICAL REPORT

GZA GeoEnvironmental, Inc.
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Richard Carlone

Project Name.: **Phase II Bedrock - Charbert**
Project No.: **03.0032795.35**

Date Received: **04/29/2010**
Date Reported: **05/11/2010**
Work Order No.: **1004-00243**

Sample ID: **GZ-ML-5-3** Sample No.: **005**
Sample Date: **04/27/2010**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
Dibenzo [a,h] Anthracene	EPA 8270	<2.0	2.0	ug/L	CMG	05/04/2010
Benzo [g,h,i] Perylene	EPA 8270	<2.0	2.0	ug/L	CMG	05/04/2010
Surrogates:	EPA 8270					
***2-Fluorophenol	EPA 8270	42.0	15-110	% R	CMG	05/04/2010
***Phenol-D6	EPA 8270	31.2	15-110	% R	CMG	05/04/2010
***Nitrobenzene-D5	EPA 8270	67.3	30-130	% R	CMG	05/04/2010
***2-Fluorobiphenyl	EPA 8270	64.8	30-130	% R	CMG	05/04/2010
***2,4,6-Tribromophenol	EPA 8270	58.2	15-110	% R	CMG	05/04/2010
***P-Terphenyl-D14	EPA 8270	73.4	39-120	% R	CMG	05/04/2010
Extraction	EPA 3510C	1.0		DF	JKC	05/03/2010
TOTAL PETROLEUM HYDROCARBON	D3328/EPA 8100/				KEF	05/05/2010
Hydrocarbon Content		<200	200	ug/L	KEF	05/05/2010
Surrogate:	D3328/EPA 8100					
***p-Terphenyl		68.6		% R	KEF	05/05/2010
Extraction	EPA 3510C	1.0		DF	KEF	05/04/2010
PRIORITY POLLUTANT METALS					LLZ	05/08/2010
Silver	EPA 6010B	<0.0050	0.0050	mg/L	LLZ	05/08/2010
Arsenic	EPA 6010B	<0.010	0.010	mg/L	LLZ	05/08/2010
Beryllium	EPA 6010B	<0.0040	0.0040	mg/L	LLZ	05/08/2010
Cadmium	EPA 6010B	<0.0050	0.0050	mg/L	LLZ	05/08/2010
Chromium	EPA 6010B	<0.0050	0.0050	mg/L	LLZ	05/08/2010
Copper	EPA 6010B	0.019	0.015	mg/L	LLZ	05/08/2010
Mercury	EPA 7470A	<0.00020	0.00020	mg/L	GDD	05/05/2010
Nickel	EPA 6010B	<0.010	0.010	mg/L	LLZ	05/08/2010
Lead	EPA 6010B	<0.010	0.010	mg/L	LLZ	05/08/2010
Antimony	EPA 6010B	<0.025	0.025	mg/L	LLZ	05/08/2010
Selenium	EPA 6010B	<0.025	0.025	mg/L	LLZ	05/08/2010
Thallium	EPA 6010B	<0.025	0.025	mg/L	LLZ	05/08/2010
Zinc	EPA 6010B	0.015	0.010	mg/L	LLZ	05/08/2010
Iron	EPA 6010B	1.8	0.025	mg/L	LLZ	05/08/2010
Manganese	EPA 6010B	0.41	0.0050	mg/L	LLZ	05/08/2010

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Project No.: **03.0032795.35**

Date Received: **04/29/2010**
Date Reported: **05/11/2010**
Work Order No.: **1004-00243**

Sample ID: **TBLK 042710** Sample No.: **006**

Sample Date: **04/27/2010**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260				MQS	05/06/2010
Dichlorodifluoromethane	EPA 8260	<2.0	2.0	ug/L	MQS	05/06/2010
Chloromethane	EPA 8260	<2.0	2.0	ug/L	MQS	05/06/2010
Vinyl Chloride	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
Bromomethane	EPA 8260	<2.0	2.0	ug/L	MQS	05/06/2010
Chloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
Trichlorofluoromethane	EPA 8260	<2.0	2.0	ug/L	MQS	05/06/2010
Diethylether	EPA 8260	<2.0	2.0	ug/L	MQS	05/06/2010
Acetone	EPA 8260	<25	25	ug/L	MQS	05/06/2010
1,1-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
Dichloromethane	EPA 8260	<2.0	2.0	ug/L	MQS	05/06/2010
Methyl-Tert-Butyl-Ether	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
trans-1,2-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
1,1-Dichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
2-Butanone	EPA 8260	<25	25	ug/L	MQS	05/06/2010
2,2-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
cis-1,2-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
Chloroform	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
Bromochloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
Tetrahydrofuran	EPA 8260	<10	10	ug/L	MQS	05/06/2010
1,1,1-Trichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
1,1-Dichloropropene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
Carbon Tetrachloride	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
1,2-Dichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
Benzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
Trichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
1,2-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
Bromodichloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
Dibromomethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
4-Methyl-2-Pentanone	EPA 8260	<25	25	ug/L	MQS	05/06/2010
cis-1,3-Dichloropropene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
Toluene	EPA 8260	6.3	1.0	ug/L	MQS	05/06/2010
trans-1,3-Dichloropropene	EPA 8260	<2.0	2.0	ug/L	MQS	05/06/2010
1,1,2-Trichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
2-Hexanone	EPA 8260	<25	25	ug/L	MQS	05/06/2010

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Project Name.: **Phase II Bedrock - Charbert**
Project No.: **03.0032795.35**

Date Received: **04/29/2010**
Date Reported: **05/11/2010**
Work Order No.: **1004-00243**

Sample ID: **TBLK 042710** Sample No.: **006**
Sample Date: **04/27/2010**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
1,3-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
Tetrachloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
Dibromochloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
1,2-Dibromoethane (EDB)	EPA 8260	<2.0	2.0	ug/L	MQS	05/06/2010
Chlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
1,1,1,2-Tetrachloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
Ethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
m&p-Xylene	EPA 8260	<2.0	2.0	ug/L	MQS	05/06/2010
o-Xylene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
Styrene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
Bromoform	EPA 8260	<2.0	2.0	ug/L	MQS	05/06/2010
Isopropylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
1,1,2,2-Tetrachloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
1,2,3-Trichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
Bromobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
N-Propylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
2-Chlorotoluene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
1,3,5-Trimethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
4-Chlorotoluene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
tert-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
1,2,4-Trimethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
sec-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
p-Isopropyltoluene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
1,3-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
1,4-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
n-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
1,2-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
1,2-Dibromo-3-Chloropropane	EPA 8260	<2.0	2.0	ug/L	MQS	05/06/2010
1,2,4-Trichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
Hexachlorobutadiene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
Naphthalene	EPA 8260	<2.0	2.0	ug/L	MQS	05/06/2010
1,2,3-Trichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
Surrogates:	EPA 8260					
***1,2-Dichloroethane-D4	EPA 8260	98.0	70-130	% R	MQS	05/06/2010
***Toluene-D8	EPA 8260	102	70-130	% R	MQS	05/06/2010

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Project Name.: **Phase II Bedrock - Charbert**
Project No.: **03.0032795.35**

Date Received: **04/29/2010**
Date Reported: **05/11/2010**
Work Order No.: **1004-00243**

Sample ID: **TBLK 042710** Sample No.: **006**
Sample Date: **04/27/2010**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
***4-Bromofluorobenzene	EPA 8260	90.6	70-130	% R	MQS	05/06/2010
Preparation	EPA 5030B	1.0		CF	MQS	05/05/2010

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Project No.: **03.0032795.35**

Date Received: **04/29/2010**
Date Reported: **05/11/2010**
Work Order No.: **1004-00243**

Sample ID: **TBLK2 042710** Sample No.: **007**
Sample Date: **04/27/2010**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260				MQS	05/06/2010
Dichlorodifluoromethane	EPA 8260	<2.0	2.0	ug/L	MQS	05/06/2010
Chloromethane	EPA 8260	<2.0	2.0	ug/L	MQS	05/06/2010
Vinyl Chloride	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
Bromomethane	EPA 8260	<2.0	2.0	ug/L	MQS	05/06/2010
Chloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
Trichlorofluoromethane	EPA 8260	<2.0	2.0	ug/L	MQS	05/06/2010
Diethylether	EPA 8260	<2.0	2.0	ug/L	MQS	05/06/2010
Acetone	EPA 8260	<25	25	ug/L	MQS	05/06/2010
1,1-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
Dichloromethane	EPA 8260	<2.0	2.0	ug/L	MQS	05/06/2010
Methyl-Tert-Butyl-Ether	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
trans-1,2-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
1,1-Dichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
2-Butanone	EPA 8260	<25	25	ug/L	MQS	05/06/2010
2,2-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
cis-1,2-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
Chloroform	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
Bromochloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
Tetrahydrofuran	EPA 8260	<10	10	ug/L	MQS	05/06/2010
1,1,1-Trichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
1,1-Dichloropropene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
Carbon Tetrachloride	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
1,2-Dichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
Benzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
Trichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
1,2-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
Bromodichloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
Dibromomethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
4-Methyl-2-Pentanone	EPA 8260	<25	25	ug/L	MQS	05/06/2010
cis-1,3-Dichloropropene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
Toluene	EPA 8260	6.6	1.0	ug/L	MQS	05/06/2010
trans-1,3-Dichloropropene	EPA 8260	<2.0	2.0	ug/L	MQS	05/06/2010
1,1,2-Trichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
2-Hexanone	EPA 8260	<25	25	ug/L	MQS	05/06/2010

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Project Name.: **Phase II Bedrock - Charbert**
Project No.: **03.0032795.35**

Date Received: **04/29/2010**
Date Reported: **05/11/2010**
Work Order No.: **1004-00243**

Sample ID: **TBLK2 042710** Sample No.: **007**
Sample Date: **04/27/2010**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
1,3-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
Tetrachloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
Dibromochloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
1,2-Dibromoethane (EDB)	EPA 8260	<2.0	2.0	ug/L	MQS	05/06/2010
Chlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
1,1,1,2-Tetrachloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
Ethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
m&p-Xylene	EPA 8260	<2.0	2.0	ug/L	MQS	05/06/2010
o-Xylene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
Styrene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
Bromoform	EPA 8260	<2.0	2.0	ug/L	MQS	05/06/2010
Isopropylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
1,1,2,2-Tetrachloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
1,2,3-Trichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
Bromobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
N-Propylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
2-Chlorotoluene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
1,3,5-Trimethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
4-Chlorotoluene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
tert-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
1,2,4-Trimethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
sec-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
p-Isopropyltoluene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
1,3-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
1,4-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
n-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
1,2-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
1,2-Dibromo-3-Chloropropane	EPA 8260	<2.0	2.0	ug/L	MQS	05/06/2010
1,2,4-Trichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
Hexachlorobutadiene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
Naphthalene	EPA 8260	<2.0	2.0	ug/L	MQS	05/06/2010
1,2,3-Trichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	05/06/2010
Surrogates:	EPA 8260					
***1,2-Dichloroethane-D4	EPA 8260	113	70-130	% R	MQS	05/06/2010
***Toluene-D8	EPA 8260	106	70-130	% R	MQS	05/06/2010

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Project Name.: **Phase II Bedrock - Charbert**
Project No.: **03.0032795.35**

Date Received: **04/29/2010**
Date Reported: **05/11/2010**
Work Order No.: **1004-00243**

Sample ID: **TBLK2 042710** Sample No.: **007**
Sample Date: **04/27/2010**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
***4-Bromofluorobenzene	EPA 8260	92.0	70-130	% R	MQS	05/06/2010
Preparation	EPA 5030B	1.0		CF	MQS	05/05/2010

GZA GeoEnvironmental, Inc.
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MA092

EPA Method 8270/625 Aqueous Method Blank (MB) and Laboratory Control Sample (LCS) Data

Method Blank

Date Extracted:	**05/03/10**	
Date Analyzed:	**5/4/2010**	
File Name:	**M5165**	
Semi-Volatile Organics	**Result**	**(ug/L)**
n-nitrosodimethylamine	ND	10
pyridine	ND	100
phenol	ND	10
bis(2-chloroethyl)ether	ND	10
2-chlorophenol	ND	10
1,3-dichlorobenzene	ND	10
1,4-dichlorobenzene	ND	10
benzyl alchohol	ND	20
1,2-dichlorobenzene	ND	10
2-methylphenol	ND	10
bis(2-chloroisopropyl)ether	ND	10
3&4-methylphenol	ND	10
n-nitrosodi-n-propylamine	ND	10
hexachloroethane	ND	10
nitrobenzene	ND	10
isophrone	ND	10
2-nitrophenol	ND	10
2,4-dimethylphenol	ND	10
benzoic acid	ND	10
bis(2-chloroethoxy)methane	ND	10
2,4-dichlorophenol	ND	10
1,2,4-trichlorobenzene	ND	10
naphthalene	ND	2.0
4-chloroaniline	ND	10
hexachlorobutadiene	ND	10
4-chloro-3-methylphenol	ND	20
2-methylnaphthalene	ND	2.0
hexachlorocyclopentadiene	ND	50
2,4,6-trichlorophenol	ND	10
2,4,5-trichlorophenol	ND	10
2-chloronaphthalene	ND	10
2-nitroaniline	ND	50
dimethylphthalate	ND	10
acenaphthylene	ND	2.0
2,6-dinitrotoluene	ND	10
3-nitroaniline	ND	50
acenaphthene	ND	2.0
2,4-dinitrophenol	ND	100
dibenzofuran	ND	10
4-nitrophenol	ND	50
2,4-dinitrotoluene	ND	10
diethylphthalate	ND	10
fluorene	ND	2.0
4-chlorophenyl phenyl ether	ND	10
4-nitroaniline	ND	20
4,6-dinitro-2-methylphenol	ND	50
n-nitrosodiphenylamine	ND	10
4-bromophenyl phenyl ether	ND	10
hexachlorobenzene	ND	10
pentachlorophenol	ND	50
phenanthrene	ND	2.0
anthracene	ND	2.0
carbazole	ND	10
di-n-butylphthalate	ND	15
fluoranthene	ND	2.0
pyrene	ND	2.0
butylbenzylphthalate	ND	10
benz [a] anthracene	ND	2.0
3,3'-dichlorobenzidine	ND	20
chrysene	ND	2.0
bis(2-ethylhexyl)phthalate	ND	10
di-n-octylphthalate	ND	10
benzo [b] fluoranthene	ND	2.0
benzo [k] fluoranthene	ND	2.0
benzo [a] pyrene	ND	2.0
indeno [1,2,3-cd] pyrene	ND	2.0
dibenz [a,h] anthracene	ND	2.0
benzo [ghi] perylene	ND	2.0

Surrogates:	**Recovery (%)**	**Acceptance Limits**
2-FLUOROPHENOL	37.1	15-110
PHENOL-D6	28.4	15-110
NITROBENZENE-D5	56.1	30-130
2-FLUOROBIPHENYL	54.1	30-130
2,4,6-TRIBROMOPHENOL	49.7	15-100
p-TERPHENYL-D14	68.6	30-130

GZA GeoEnvironmental, Inc.
106 South Street
Hopkinton, MA 01748
MA092

EPA Method 8270/625 Aqueous Method Blank (MB) and Laboratory Control Sample (LCS) Data

Laboratory Control Sample

Date Extracted:	**05/03/10**		
Date Analyzed:	**5/4/2010**		
File Name:	**M5166**		
Spike Concentration = 20ug/L	**% Recovery**	**Acceptance Limits**	**Verdict**
n-nitrosodimethylamine	52.3	40-140	ok
pyridine	26.2	40-140	out
phenol	34.9	30-130	ok
bis(2-chloroethyl)ether	63.7	40-140	ok
2-chlorophenol	61.3	30-130	ok
1,3-dichlorobenzene	53.6	40-140	ok
1,4-dichlorobenzene	52.2	40-140	ok
benzyl alchohol	61.1	30-130	ok
1,2-dichlorobenzene	54.0	40-140	ok
2-methylphenol	60.6	30-130	ok
bis(2-chloroisopropyl)ether	67.6	40-140	ok
3&4-methylphenol	58.7	30-130	ok
n-nitrosodi-n-propylamine	64.6	40-140	ok
hexachloroethane	53.1	40-140	ok
nitrobenzene	63.4	40-140	ok
isophrone	71.8	40-140	ok
2-nitrophenol	64.1	30-130	ok
2,4-dimethylphenol	64.8	30-130	ok
benzoic acid	20.3	30-130	out
bis(2-chloroethoxy)methane	70.1	40-140	ok
2,4-dichlorophenol	67.3	30-130	ok
1,2,4-trichlorobenzene	56.7	40-140	ok
naphthalene	63.9	40-140	ok
4-chloroaniline	68.9	40-140	ok
hexachlorobutadiene	56.1	40-140	ok
4-chloro-3-methylphenol	74.4	30-130	ok
2-methylnaphthalene	62.3	40-140	ok
hexachlorocyclopentadiene	48.4	40-140	ok
2,4,6-trichlorophenol	69.4	30-130	ok
2,4,5-trichlorophenol	76.7	30-130	ok
2-chloronaphthalene	66.1	40-140	ok
2-nitroaniline	77.7	40-140	ok
dimethylphthalate	84.6	40-140	ok
acenaphthylene	74.6	40-140	ok
2,6-dinitrotoluene	82.1	40-140	ok
3-nitroaniline	72.4	40-140	ok
acenaphthene	65.3	40-140	ok
2,4-dinitrophenol	47.3	30-130	ok
dibenzofuran	65.7	40-140	ok
4-nitrophenol	32.0	30-130	ok
2,4-dinitrotoluene	75.5	40-140	ok
diethylphthalate	77.2	40-140	ok
fluorene	70.9	40-140	ok
4-chlorophenyl phenyl ether	71.4	40-140	ok
4-nitroaniline	66.0	30-130	ok
4,6-dinitro-2-methylphenol	70.6	30-130	ok
n-nitrosodiphenylamine	71.3	40-140	ok
4-bromophenyl phenyl ether	74.7	40-140	ok
hexachlorobenzene	75.0	40-140	ok
pentachlorophenol	63.5	30-130	ok
phenanthrene	72.9	40-140	ok
anthracene	75.7	40-140	ok
carbazole	70.2	40-140	ok
di-n-butylphthalate	84.5	40-140	ok
fluoranthene	80.4	40-140	ok
pyrene	77.3	40-140	ok
butylbenzylphthalate	86.2	40-140	ok
benz [a] anthracene	75.2	40-140	ok
3,3'-dichlorobenzidine	67.5	40-140	ok
chrysene	73.3	40-140	ok
bis(2-ethylhexyl)phthalate	86.3	40-140	ok
di-n-octylphthalate	85.3	40-140	ok
benzo [b] fluoranthene	72.8	40-140	ok
benzo [k] fluoranthene	71.3	40-140	ok
benzo [a] pyrene	69.5	40-140	ok
indeno [1,2,3-cd] pyrene	65.9	40-140	ok
dibenz [a,h] anthracene	65.9	40-140	ok
benzo [ghi] perylene	61.6	40-140	ok

Surrogates:	**Recovery (%)**	**Acceptance Limits**	**Verdict**
2-FLUOROPHENOL	42.9	15-110	ok
PHENOL-D6	31.2	15-110	ok
NITROBENZENE-D5	66.8	30-130	ok
2-FLUOROBIPHENYL	67.4	30-130	ok
2,4,6-TRIBROMOPHENOL	67.7	15-110	ok
p-TERPHENYL-D14	80.8	30-130	ok

GZA GEOENVIRONMENTAL, INC.
ENVIRONMENTAL CHEMISTRY LABORATORY
106 SOUTH ST, HOPKINTON, MA 01748
MASSACHUSETTS LABORATORY I.D. NO. MA092

EPA METHOD 6010B ANALYSIS
Metals by ICP

QUALITY CONTROL - AQUEOUS

DATE PREPARED: 5/4/2010

QC Sample	Method Blank	Lab Control Sample
Units	mg/L	% Recovery
Acceptance Limits	Results	80-120
Analyte		
Silver (Ag)	<0.0050	92.9
Aluminum (Al)	NA	NA
Arsenic (As)	<0.010	103
Boron (B)	NA	NA
Barium (Ba)	<0.0050	106
Beryllium (Be)	<0.0040	106
Calcium (Ca)	NA	NA
Cadmium (Cd)	<0.0050	111
Cobalt (Co)	NA	NA
Chromium (Cr)	<0.0050	100
Copper (Cu)	<0.015	113
Iron (Fe)	<0.025	98.9
Magnesium (Mg)	NA	NA
Manganese (Mn)	<0.010	111
Molybdenum (Mo)	NA	NA
Nickel (Ni)	<0.010	101
Lead (Pb)	<0.010	95.9
Antimony (Sb)	<0.025	102
Selenium (Se)	<0.025	111
Tin (Sn)	NA	NA
Titanium (Ti)	NA	NA
Thallium (Tl)	<0.025	107
Vanadium (V)	<0.0050	97.8
Zinc (Zn)	<0.010	109
Zirconium (Zr)	NA	NA

RPD = Relative Percent Difference
NA = Not Applicable
NC = Not Calculated
CRM = Certified Reference Material

GZA GEOENVIRONMENTAL, INC.
ENVIRONMENTAL CHEMISTRY LABORATORY
106 SOUTH ST, HOPKINTON, MA 01748
MASSACHUSETTS LABORATORY I.D. NO. MA092

EPA METHOD 7470A ANALYSIS
Mercury by Cold Vapor Atomic Absorption

QUALITY CONTROL - AQUEOUS

Date Prepared : 05/04/10

QC Sample	Method Blank	Lab Control Sample	Lab Control Sample Duplicate	LC/LCD Difference
Units	mg/L	% Recovery	% Recovery	RPD
Acceptance Limits	Results	80-120	80-120	20%
Analyte				
Mercury (Hg)	<0.00020	93.0	88.8	4.62

RPD = Relative Percent Difference
LC concentration = 0.005 mg/L

GZA GeoEnvironmental, Inc.
106 South Street
Hopkinton, MA 01748

EPA Method 8260 / 524.2 Aqueous Method Blank (MB) and Laboratory Control Sample/Duplicate (LCS/LCSD) Data

Method Blank			Laboratory Control Sample				Laboratory Control Sample Duplicate					
Date Analyzed:	5/6/2010		Date Analyzed:	5/6/2010			5/6/2010					
Volatile Organics	Conc. ug/L	Acceptance Limit	Spike Concentration = 20ug/L	% Recovery	Acceptance Limits	Verdict	% Recovery	Acceptance Limits	Verdict	RPD	Limit	Verdict
dichlorodifluoromethane	< 1.0	< 1.0	dichlorodifluoromethane	104	70-130	ok	114	70-130	ok	8.99	<25	ok
chloromethane	< 1.0	< 1.0	chloromethane	131	70-130	out	139	70-130	out	5.77	<25	ok
vinyl chloride	< 0.5	< 0.5	vinyl chloride	117	80-120	ok	124	70-130	ok	6.41	<25	ok
bromomethane	< 1.0	< 1.0	bromomethane	115	70-130	ok	129	70-130	ok	11.4	<25	ok
chloroethane	< 0.5	< 0.5	chloroethane	111	70-130	ok	117	70-130	ok	4.99	<25	ok
trichlorofluoromethane	< 1.0	< 1.0	trichlorofluoromethane	118	70-130	ok	121	70-130	ok	2.79	<25	ok
diethyl ether	< 2.5	< 2.5	diethyl ether	92.6	70-130	ok	96.0	70-130	ok	3.54	<25	ok
acetone	< 13	< 13	acetone	105	70-130	ok	103	70-130	ok	2.00	<25	ok
1,1-dichloroethene	< 0.5	< 0.5	1,1-dichloroethene	108	80-120	ok	118	70-130	ok	8.35	<25	ok
dichloromethane	< 1.0	< 1.0	dichloromethane	89.8	70-130	ok	98.3	70-130	ok	8.94	<25	ok
methyl-tert-butyl-ether	< 0.5	< 0.5	methyl-tert-butyl-ether	79.7	70-130	ok	84.8	70-130	ok	6.20	<25	ok
trans-1,2-dichloroethene	< 0.5	< 0.5	trans-1,2-dichloroethene	95.3	70-130	ok	104	70-130	ok	9.18	<25	ok
1,1-dichloroethane	< 0.5	< 0.5	1,1-dichloroethane	103	70-130	ok	108	70-130	ok	5.33	<25	ok
2-butanone	< 13	< 13	2-butanone	93.3	70-130	ok	92.1	70-130	ok	1.31	<25	ok
2,2-dichloropropane	< 0.5	< 0.5	2,2-dichloropropane	80.5	70-130	ok	87.7	70-130	ok	8.55	<25	ok
cis-1,2-dichloroethene	< 0.5	< 0.5	cis-1,2-dichloroethene	94.5	70-130	ok	103	70-130	ok	8.17	<25	ok
chloroform	< 0.5	< 0.5	chloroform	92.7	80-120	ok	95.4	70-130	ok	2.84	<25	ok
bromochloromethane	< 0.5	< 0.5	bromochloromethane	85.5	70-130	ok	93.0	70-130	ok	8.41	<25	ok
tetrahydrofuran	< 5.0	< 5.0	tetrahydrofuran	91.4	70-130	ok	89.9	70-130	ok	1.72	<25	ok
1,1,1-trichloroethane	< 0.5	< 0.5	1,1,1-trichloroethane	97.9	70-130	ok	104	70-130	ok	5.68	<25	ok
1,1-dichloropropene	< 0.5	< 0.5	1,1-dichloropropene	94.3	70-130	ok	102	70-130	ok	7.98	<25	ok
carbon tetrachloride	< 0.5	< 0.5	carbon tetrachloride	98.0	70-130	ok	105	70-130	ok	6.76	<25	ok
1,2-dichloroethane	< 0.5	< 0.5	1,2-dichloroethane	98.4	70-130	ok	98.9	70-130	ok	0.48	<25	ok
benzene	< 0.5	< 0.5	benzene	96.2	70-130	ok	103	70-130	ok	6.48	<25	ok
trichloroethene	< 0.5	< 0.5	trichloroethene	92.9	70-130	ok	102	70-130	ok	9.41	<25	ok
1,2-dichloropropane	< 0.5	< 0.5	1,2-dichloropropane	98.4	80-120	ok	102	70-130	ok	3.79	<25	ok
bromodichloromethane	< 0.5	< 0.5	bromodichloromethane	88.2	70-130	ok	91.8	70-130	ok	3.98	<25	ok
dibromomethane	< 0.5	< 0.5	dibromomethane	83.0	70-130	ok	87.7	70-130	ok	5.47	<25	ok
4-methyl-2-pentanone	< 13	< 13	4-methyl-2-pentanone	98.4	70-130	ok	95.7	70-130	ok	2.76	<25	ok
cis-1,3-dichloropropene	< 0.5	< 0.5	cis-1,3-dichloropropene	83.8	70-130	ok	87.5	70-130	ok	4.38	<25	ok
toluene	< 0.5	< 0.5	toluene	93.6	80-120	ok	101	70-130	ok	7.43	<25	ok
trans-1,3-dichloropropene	< 1.0	< 1.0	trans-1,3-dichloropropene	75.9	70-130	ok	77.3	70-130	ok	1.79	<25	ok
1,1,2-trichloroethane	< 0.5	< 0.5	1,1,2-trichloroethane	106	70-130	ok	102	70-130	ok	3.26	<25	ok
2-hexanone	< 13	< 13	2-hexanone	114	70-130	ok	106	70-130	ok	7.73	<25	ok
1,3-dichloropropane	< 0.5	< 0.5	1,3-dichloropropane	97.9	70-130	ok	97.2	70-130	ok	0.73	<25	ok
tetrachloroethene	< 0.5	< 0.5	tetrachloroethene	102	70-130	ok	110	70-130	ok	7.62	<25	ok
dibromochloromethane	< 0.5	< 0.5	dibromochloromethane	100	70-130	ok	98.3	70-130	ok	1.94	<25	ok
1,2-dibromoethane (EDB)	< 1.0	< 1.0	1,2-dibromoethane (EDB)	102	70-130	ok	102	70-130	ok	0.11	<25	ok
chlorobenzene	< 0.5	< 0.5	chlorobenzene	111	70-130	ok	113	70-130	ok	1.99	<25	ok
1,1,1,2-tetrachloroethane	< 0.5	< 0.5	1,1,1,2-tetrachloroethane	100	70-130	ok	103	70-130	ok	2.83	<25	ok
ethylbenzene	< 0.5	< 0.5	ethylbenzene	112	80-120	ok	116	70-130	ok	3.79	<25	ok
1,1,2,2-tetrachloroethane	< 0.5	< 0.5	1,1,2,2-tetrachloroethane	101	70-130	ok	99.5	70-130	ok	1.63	<25	ok
m&p-xylene	< 1.0	< 1.0	m&p-xylene	111	70-130	ok	113	70-130	ok	1.33	<25	ok
o-xylene	< 0.5	< 0.5	o-xylene	109	70-130	ok	109	70-130	ok	0.51	<25	ok
styrene	< 0.5	< 0.5	styrene	112	70-130	ok	110	70-130	ok	1.64	<25	ok
bromoform	< 1.0	< 1.0	bromoform	95.9	70-130	ok	93.4	70-130	ok	2.67	<25	ok
isopropylbenzene	< 0.5	< 0.5	isopropylbenzene	116	70-130	ok	117	70-130	ok	0.68	<25	ok
1,2,3-trichloropropane	< 0.5	< 0.5	1,2,3-trichloropropane	105	70-130	ok	91.3	70-130	ok	13.6	<25	ok
bromobenzene	< 0.5	< 0.5	bromobenzene	99.6	70-130	ok	101	70-130	ok	1.63	<25	ok
n-propylbenzene	< 0.5	< 0.5	n-propylbenzene	118	70-130	ok	116	70-130	ok	1.02	<25	ok
2-chlorotoluene	< 0.5	< 0.5	2-chlorotoluene	111	70-130	ok	110	70-130	ok	0.32	<25	ok
1,3,5-trimethylbenzene	< 0.5	< 0.5	1,3,5-trimethylbenzene	117	70-130	ok	117	70-130	ok	0.15	<25	ok
4-chlorotoluene	< 0.5	< 0.5	4-chlorotoluene	112	70-130	ok	111	70-130	ok	0.97	<25	ok
tert-butyl-benzene	< 0.5	< 0.5	tert-butyl-benzene	114	70-130	ok	113	70-130	ok	0.85	<25	ok
1,2,4-trimethylbenzene	< 0.5	< 0.5	1,2,4-trimethylbenzene	116	70-130	ok	115	70-130	ok	1.14	<25	ok
sec-butyl-benzene	< 0.5	< 0.5	sec-butyl-benzene	124	70-130	ok	122	70-130	ok	1.57	<25	ok
p-isopropyltoluene	< 0.5	< 0.5	p-isopropyltoluene	120	70-130	ok	119	70-130	ok	0.51	<25	ok
1,3-dichlorobenzene	< 0.5	< 0.5	1,3-dichlorobenzene	106	70-130	ok	105	70-130	ok	0.58	<25	ok
1,4-dichlorobenzene	< 0.5	< 0.5	1,4-dichlorobenzene	107	70-130	ok	105	70-130	ok	2.05	<25	ok
n-butylbenzene	< 0.5	< 0.5	n-butylbenzene	124	70-130	ok	122	70-130	ok	1.44	<25	ok
1,2-dichlorobenzene	< 0.5	< 0.5	1,2-dichlorobenzene	105	70-130	ok	101	70-130	ok	3.51	<25	ok
1,2-dibromo-3-chloropropane	< 2.5	< 2.5	1,2-dibromo-3-chloropropane	84.1	70-130	ok	85.0	70-130	ok	0.96	<25	ok
1,2,4-trichlorobenzene	< 0.5	< 0.5	1,2,4-trichlorobenzene	106	70-130	ok	104	70-130	ok	2.38	<25	ok
hexachlorobutadiene	< 0.5	< 0.5	hexachlorobutadiene	105	70-130	ok	102	70-130	ok	2.91	<25	ok
naphthalene	< 1.0	< 1.0	naphthalene	99.3	70-130	ok	98.3	70-130	ok	1.00	<25	ok

Surrogates:	Recovery (%)	Acceptance Limits	Surrogates:	Recovery (%)	Acceptance Limits	Verdict	Recovery (%)	Acceptance Limits	Verdict	RPD	Acceptance Limits	Verdict
DIBROMOFLUOROMETHANE	111	70-130	DIBROMOFLUOROMETHANE	92.7	70-130	ok	93.9	70-130	ok	1.34	<25	ok
1,2-DICHLOROETHANE-D4	99.7	70-130	1,2-DICHLOROETHANE-D4	86.7	70-130	ok	88.7	70-130	ok	2.26	<25	ok
TOLUENE-D8	109	70-130	TOLUENE-D8	93.4	70-130	ok	98.9	70-130	ok	5.75	<25	ok
4-BROMOFLUOROBENZENE	90.3	70-130	4-BROMOFLUOROBENZENE	96.2	70-130	ok	98.8	70-130	ok	2.67	<25	ok
1,2-DICHLOROBENZENE-D4	86.7	70-130	1,2-DICHLOROBENZENE-D4	96.6	70-130	ok	95.0	70-130	ok	1.69	<25	ok

Instrument: HP GC/MS "S"

CHAIN-OF-CUSTODY RECORD

W.O. # 1004-CC243 (for lab use only)

Sample I.D.	Date/Time Sampled	Matrix (A=Air, S=Soil, GW=Ground W., SW=Surface W., WW=Waste W., DW=Drinking W., P=Product, Other (specify))	ANALYSIS REQUIRED: pH, Cond.	GC: Methane, Ethane, Ethene	EPA 8260	EPA 8260 – 8010 List (Chlor.)	EPA 8260 – 8021 list	EPA 8260 – 8020 List	EPA 524.2 DW VOCs	EPA 624 WW VOCs	601, 602 WW VOCs	EPA 8270 FULL SVOCs	EPA 8270 PAH, A, BN	EPA 625 WW SVOCs	EPA 8082–PCBs	EPA 8081–Pest	TPH–GC (Mod. 8100)	TPH-GC w/FING (1.)	EPH (MA DEP)	VPH (MA DEP)	Metals PPM-13 (2.)	MCP 14 Metals (MA)	Metals (List Below)**	TCLP – Specify Below	SPLP – Specify Below	EPA 300 Cl, SO4	EPA 300 NO2, NO3	Total # of Cont.	Note #
GZML-4-1	4/27/10 1200	GW			X							X						X			X							6	
GZML-5-2	4/27/10 1315				X							X						X			X							6	
GZML-4-2	4/27/10 1230				X							X						X			X							6	
GZML-4-3	4/27/10 1415				X							X						X			X							6	
GZML-5-3	4/27/10 1500	↓			X							X						X			X							6	
TBLK042710	4/27/10	H2O			X																							2	
TBLK2042710	4/27/10	H2O			X																							2	

PRESERVATIVE (Cl - HCl, M=Methanol, N - HNO3, S - H2SO4, Na - NaOH, O - Other)*

CONTAINER TYPE (P-Plastic, G-Glass, V-Vial, T-Teflon, O-Other)*

RELINQUISHED BY: (AFFILIATION) DATE/TIME RECEIVED BY: (AFFILIATION)

4/28/10 0900 Bill Burcon

RELINQUISHED BY: (AFFILIATION) DATE/TIME RECEIVED BY: (AFFILIATION)

Bill Burcon 4/28/10 1200 WALKIN

RELINQUISHED BY: (AFFILIATION) DATE/TIME RECEIVED BY: (AFFILIATION)

WALKIN 4/29/10 1030

NOTES: (Unless otherwise noted, all samples have been refrigerated to 4° C)
*Specify "Other" preservatives and containers types in this space.

1.) TPH FINGERPRINT W/ ORGANO SILOXANES

2.) PP-13 METALS + Iron + Manganese

PROJECT MANAGER: RICK CARLONE EXT:

TURNAROUND TIME: (Standard) Rush___ Days, Approved by _____

LAB USE: TEMP. OF COOLER 4.2/3.1 °C Temp Blank Cooler Air 1002

4/27/10 1315

GZA FILE NO: 32795.35 TASK NO: _____ P.O. NO. _____

PROJECT CHARBERT, NFA

LOCATION ALTON, RI

COLLECTOR(S) MARK DALPE SHEET 1 OF _____

GZA GeoEnvironmental, Inc.
Laboratory Division

106 South Street
Hopkinton, MA 01748
(781) 278-4700
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GZA GeoEnvironmental, Inc.
106 South Street
Hopkinton, MA 01748
(781) 278-4700

Laboratory Identification Numbers:
MA and ME: **MA092** NH: **2028**
CT: **PH0579** RI: **LAO00236**
NELAC - NYS DOH: **11063**

ANALYTICAL REPORT

GZA GeoEnvironmental, Inc.
530 Broadway
Providence, RI 02909

Richard Carlone

Project No.: **03.0032795.35**
Work Order No.: **1006-00006**
Date Received: **06/02/2010**
Date Reported: **06/14/2010**

SAMPLE INFORMATION

Date Sampled	Matrix	Laboratory ID	Sample ID
06/01/2010	Aqueous	1006-00006 001	ML-4-1
06/01/2010	Aqueous	1006-00006 002	ML-4-2
06/01/2010	Aqueous	1006-00006 003	ML-4-3
06/01/2010	Aqueous	1006-00006 004	ML-5-2
06/01/2010	Aqueous	1006-00006 005	ML-5-3
06/01/2010	Aqueous	1006-00006 006	TBLK 060110

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A N A L Y T I C A L R E P O R T

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Richard Carlone

Project Name.: **Phase II Bedrock - Charbert**
Project No.: **03.0032795.35**

Date Received: **06/02/2010**
Date Reported: **06/14/2010**
Work Order No.: **1006-00006**

PROJECT NARRATIVE:

1. Sample Receipt

The samples were received on 06/02/10 via _x_GZA courier, __EC, __FEDEX, or ___hand delivered. The temperature of the __temperature blank/_x_cooler air, was 3.4 degrees C. The temperature requirement for most analyses is above freezing to 6 degrees C. The samples were received intact for all requested analyses.

The chain of custody indicates that the samples, when required, were chemically preserved in accordance with the method they reference.

2. EPA Method 6010B/7470A - Metals

Attach QC 6010B 06/03/10 - Aqueous
Attach QC 7470A 06/09/10 - Aqueous

3. EPA Method 8270 - SVOCs

The Laboratory Control Sample (LCS) (06/03/2010) had a method 8270 List analyte outside of the 40-140% (Base/Neutral Extractables) acceptance criteria. Specific outlier includes: hexachlorocyclopentadiene (32.2%).

Attach QC 8270 06/03/2010 - Aqueous

4. Total Petroleum Hydrocarbons

The surrogate recoveries for samples ML-4-1 (1006-00006-001), ML-4-2 (1006-00006-002), ML-5-2 (1006-00006-004), and ML-5-3 (1006-00006-005) exceeded the acceptance criteria of 40-130%. This criteria is a laboratory-developed guideline only and not required by the method.

Hydrocarbon Fingerprint:

ML-4-1 (1006-00006-001) and ML-4-2 (1006-00006-002): >90% of hydrocarbon content is non-petroleum based.

5. EPA Method 8260 - VOCs

The Laboratory Control Sample Duplicate (LCSD) (6/8/10 2 S) had a(n) 8260 List analyte outside of the 70-130% acceptance criteria. Specific outlier includes: trans-1,3-dichloropropene (67.7%).

Attach QC 8260 6/8/10 "S" - Aqueous
Attach QC 8260 6/8/10 2 "S" - Aqueous

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Data Authorized By: ____ _____

NELAC certification, as indicated by the NELAC Lab ID Number, is per analyte. For a complete list of NELAC validated analytes, please contact the laboratory.

Abbreviations:
% R = % Recovery
DF = Dilution Factor
DFS = Dilution Factor Solids
CF = Calculation Factor
DO = Diluted Out

Method Key:
Method 8260: The current version of the method is 8260B.
Method 8270: The current version of the method is 8270D.
Method 6010: The current version of the method is 6010B.

Please note that the laboratory signed copy of the chain of custody record is an integral part of the data report.

Soil data is reported on a dry weight basis unless otherwise specified.
Matrix Spike / Matrix Spike Duplicate sets are performed as per method and are reported at the end of the analytical report if assigned on the Chain of Custody.

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Project No.: **03.0032795.35**

Date Received: **06/02/2010**
Date Reported: **06/14/2010**
Work Order No.: **1006-00006**

Sample ID: **ML-4-1** Sample No.: **001**
Sample Date: **06/01/2010**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260				MQS	06/08/2010
Dichlorodifluoromethane	EPA 8260	<2.0	2.0	ug/L	MQS	06/08/2010
Chloromethane	EPA 8260	<2.0	2.0	ug/L	MQS	06/08/2010
Vinyl Chloride	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
Bromomethane	EPA 8260	<2.0	2.0	ug/L	MQS	06/08/2010
Chloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
Trichlorofluoromethane	EPA 8260	<2.0	2.0	ug/L	MQS	06/08/2010
Diethylether	EPA 8260	<2.0	2.0	ug/L	MQS	06/08/2010
Acetone	EPA 8260	13	10	ug/L	MQS	06/08/2010
1,1-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
Dichloromethane	EPA 8260	<2.0	2.0	ug/L	MQS	06/08/2010
Methyl-Tert-Butyl-Ether	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
trans-1,2-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
1,1-Dichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
2-Butanone	EPA 8260	<10	10	ug/L	MQS	06/08/2010
2,2-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
cis-1,2-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
Chloroform	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
Bromochloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
Tetrahydrofuran	EPA 8260	<10	10	ug/L	MQS	06/08/2010
1,1,1-Trichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
1,1-Dichloropropene	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
Carbon Tetrachloride	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
1,2-Dichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
Benzene	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
Trichloroethene	EPA 8260	1.3	1.0	ug/L	MQS	06/08/2010
1,2-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
Bromodichloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
Dibromomethane	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
4-Methyl-2-Pentanone	EPA 8260	<10	10	ug/L	MQS	06/08/2010
cis-1,3-Dichloropropene	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
Toluene	EPA 8260	1.5	1.0	ug/L	MQS	06/08/2010
trans-1,3-Dichloropropene	EPA 8260	<2.0	2.0	ug/L	MQS	06/08/2010
1,1,2-Trichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
2-Hexanone	EPA 8260	<10	10	ug/L	MQS	06/08/2010

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Project No.: **03.0032795.35**

Date Received: **06/02/2010**
Date Reported: **06/14/2010**
Work Order No.: **1006-00006**

Sample ID: **ML-4-1** Sample No.: **001**
Sample Date: **06/01/2010**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
1,3-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
Tetrachloroethene	EPA 8260	77	1.0	ug/L	MQS	06/08/2010
Dibromochloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
1,2-Dibromoethane (EDB)	EPA 8260	<2.0	2.0	ug/L	MQS	06/08/2010
Chlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
1,1,1,2-Tetrachloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
Ethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
m&p-Xylene	EPA 8260	<2.0	2.0	ug/L	MQS	06/08/2010
o-Xylene	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
Styrene	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
Bromoform	EPA 8260	<2.0	2.0	ug/L	MQS	06/08/2010
Isopropylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
1,1,2,2-Tetrachloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
1,2,3-Trichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
Bromobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
N-Propylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
2-Chlorotoluene	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
1,3,5-Trimethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
4-Chlorotoluene	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
tert-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
1,2,4-Trimethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
sec-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
p-Isopropyltoluene	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
1,3-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
1,4-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
n-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
1,2-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
1,2-Dibromo-3-Chloropropane	EPA 8260	<2.0	2.0	ug/L	MQS	06/08/2010
1,2,4-Trichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
Hexachlorobutadiene	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
Naphthalene	EPA 8260	<2.0	2.0	ug/L	MQS	06/08/2010
1,2,3-Trichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
Surrogates:	EPA 8260					
***1,2-Dichloroethane-D4	EPA 8260	103	70-130	% R	MQS	06/08/2010
***Toluene-D8	EPA 8260	101	70-130	% R	MQS	06/08/2010

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Project No.: **03.0032795.35**

Date Received: **06/02/2010**
Date Reported: **06/14/2010**
Work Order No.: **1006-00006**

Sample ID: **ML-4-1** Sample No.: **001**
Sample Date: **06/01/2010**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
***4-Bromofluorobenzene	EPA 8260	86.5	70-130	% R	MQS	06/08/2010
Preparation	EPA 5030B	1.0		CF	MQS	06/08/2010
SEMI-VOLATILE ORGANICS	EPA 8270				CMG	06/03/2010
ACID FRACTION:	EPA 8270					
Phenol	EPA 8270	<10	10	ug/L	CMG	06/03/2010
2-Chlorophenol	EPA 8270	<10	10	ug/L	CMG	06/03/2010
2-Methylphenol	EPA 8270	<10	10	ug/L	CMG	06/03/2010
3&4-Methylphenol	EPA 8270	<10	10	ug/L	CMG	06/03/2010
2-Nitrophenol	EPA 8270	<10	10	ug/L	CMG	06/03/2010
2,4-Dimethylphenol	EPA 8270	<10	10	ug/L	CMG	06/03/2010
Benzoic Acid	EPA 8270	<10	10	ug/L	CMG	06/03/2010
2,4-Dichlorophenol	EPA 8270	<10	10	ug/L	CMG	06/03/2010
4-Chloro-3-Methylphenol	EPA 8270	<20	20	ug/L	CMG	06/03/2010
2,4,6-Trichlorophenol	EPA 8270	<10	10	ug/L	CMG	06/03/2010
2,4,5-Trichlorophenol	EPA 8270	<10	10	ug/L	CMG	06/03/2010
2,4-Dinitrophenol	EPA 8270	<100	100	ug/L	CMG	06/03/2010
4-Nitrophenol	EPA 8270	<50	50	ug/L	CMG	06/03/2010
4,6-Dinitro-2-Methylphenol	EPA 8270	<50	50	ug/L	CMG	06/03/2010
Pentachlorophenol	EPA 8270	<50	50	ug/L	CMG	06/03/2010
BASE-NEUTRAL FRACTION:						
n-Nitrosodimethylamine	EPA 8270	<10	10	ug/L	CMG	06/03/2010
bis(2-Chloroethyl)Ether	EPA 8270	<10	10	ug/L	CMG	06/03/2010
1,3-Dichlorobenzene	EPA 8270	<10	10	ug/L	CMG	06/03/2010
1,4-Dichlorobenzene	EPA 8270	<10	10	ug/L	CMG	06/03/2010
Benzyl Alcohol	EPA 8270	<20	20	ug/L	CMG	06/03/2010
1,2-Dichlorobenzene	EPA 8270	<10	10	ug/L	CMG	06/03/2010
bis(2-Chloroisopropyl)Ether	EPA 8270	<10	10	ug/L	CMG	06/03/2010
n-Nitrosodi-n-Propylamine	EPA 8270	<10	10	ug/L	CMG	06/03/2010
Hexachloroethane	EPA 8270	<10	10	ug/L	CMG	06/03/2010
Nitrobenzene	EPA 8270	<10	10	ug/L	CMG	06/03/2010
Isophorone	EPA 8270	<10	10	ug/L	CMG	06/03/2010
bis(2-Chloroethoxy)Methane	EPA 8270	<10	10	ug/L	CMG	06/03/2010
1,2,4-Trichlorobenzene	EPA 8270	<10	10	ug/L	CMG	06/03/2010
Naphthalene	EPA 8270	<2.0	2.0	ug/L	CMG	06/03/2010
4-Chloroaniline	EPA 8270	<20	20	ug/L	CMG	06/03/2010

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Date Received: **06/02/2010**
Date Reported: **06/14/2010**
Work Order No.: **1006-00006**

Sample ID: **ML-4-1** Sample No.: **001**
Sample Date: **06/01/2010**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
Hexachlorobutadiene	EPA 8270	<10	10	ug/L	CMG	06/03/2010
2-Methylnaphthalene	EPA 8270	<2.0	2.0	ug/L	CMG	06/03/2010
Hexachlorocyclopentadiene	EPA 8270	<50	50	ug/L	CMG	06/03/2010
2-Chloronaphthalene	EPA 8270	<10	10	ug/L	CMG	06/03/2010
2-Nitroaniline	EPA 8270	<50	50	ug/L	CMG	06/03/2010
Dimethylphthalate	EPA 8270	<10	10	ug/L	CMG	06/03/2010
Acenaphthylene	EPA 8270	<2.0	2.0	ug/L	CMG	06/03/2010
2,6-Dinitrotoluene	EPA 8270	<10	10	ug/L	CMG	06/03/2010
3-Nitroaniline	EPA 8270	<50	50	ug/L	CMG	06/03/2010
Acenaphthene	EPA 8270	<2.0	2.0	ug/L	CMG	06/03/2010
Dibenzofuran	EPA 8270	<10	10	ug/L	CMG	06/03/2010
2,4-Dinitrotoluene	EPA 8270	<10	10	ug/L	CMG	06/03/2010
Diethylphthalate	EPA 8270	<10	10	ug/L	CMG	06/03/2010
Fluorene	EPA 8270	<2.0	2.0	ug/L	CMG	06/03/2010
4-Chlorophenyl Phenyl Ether	EPA 8270	<10	10	ug/L	CMG	06/03/2010
4-Nitroaniline	EPA 8270	<20	20	ug/L	CMG	06/03/2010
n-Nitrosodiphenylamine	EPA 8270	<10	10	ug/L	CMG	06/03/2010
4-Bromophenyl Phenyl Ether	EPA 8270	<10	10	ug/L	CMG	06/03/2010
Hexachlorobenzene	EPA 8270	<10	10	ug/L	CMG	06/03/2010
Phenanthrene	EPA 8270	<2.0	2.0	ug/L	CMG	06/03/2010
Anthracene	EPA 8270	<2.0	2.0	ug/L	CMG	06/03/2010
Carbazole	EPA 8270	<10	10	ug/L	CMG	06/03/2010
di-n-Butylphthalate	EPA 8270	<10	10	ug/L	CMG	06/03/2010
Fluoranthene	EPA 8270	<2.0	2.0	ug/L	CMG	06/03/2010
Pyrene	EPA 8270	<2.0	2.0	ug/L	CMG	06/03/2010
Butylbenzylphthalate	EPA 8270	<10	10	ug/L	CMG	06/03/2010
Benzo [a] Anthracene	EPA 8270	<2.0	2.0	ug/L	CMG	06/03/2010
3,3'-Dichlorobenzidine	EPA 8270	<10	10	ug/L	CMG	06/03/2010
Chrysene	EPA 8270	<2.0	2.0	ug/L	CMG	06/03/2010
bis(2-Ethylhexyl)Phthalate	EPA 8270	<10	10	ug/L	CMG	06/03/2010
di-n-Octylphthalate	EPA 8270	<10	10	ug/L	CMG	06/03/2010
Benzo [b] Fluoranthene	EPA 8270	<2.0	2.0	ug/L	CMG	06/03/2010
Benzo [k] Fluoranthene	EPA 8270	<2.0	2.0	ug/L	CMG	06/03/2010
Benzo [a] Pyrene	EPA 8270	<2.0	2.0	ug/L	CMG	06/03/2010
Indeno [1,2,3-cd] Pyrene	EPA 8270	<2.0	2.0	ug/L	CMG	06/03/2010

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Date Received: **06/02/2010**
Date Reported: **06/14/2010**
Work Order No.: **1006-00006**

Sample ID: **ML-4-1** Sample No.: **001**
Sample Date: **06/01/2010**

Test Performed	Method	Results		Reporting Limit	Units	Tech	Analysis Date
Dibenzo [a,h] Anthracene	EPA 8270	<2.0		2.0	ug/L	CMG	06/03/2010
Benzo [g,h,i] Perylene	EPA 8270	<2.0		2.0	ug/L	CMG	06/03/2010
Surrogates:	EPA 8270						
***2-Fluorophenol	EPA 8270	26.8		15-110	% R	CMG	06/03/2010
***Phenol-D6	EPA 8270	18.6		15-110	% R	CMG	06/03/2010
***Nitrobenzene-D5	EPA 8270	43.4		30-130	% R	CMG	06/03/2010
***2-Fluorobiphenyl	EPA 8270	44.7		30-130	% R	CMG	06/03/2010
***2,4,6-Tribromophenol	EPA 8270	46.1		15-110	% R	CMG	06/03/2010
***P-Terphenyl-D14	EPA 8270	52.2		39-120	% R	CMG	06/03/2010
Extraction	EPA 3510C	1.0			DF	JKC	06/03/2010
TOTAL PETROLEUM HYDROCARBON	D3328/EPA 8100/					KEF	06/09/2010
Hydrocarbon Content		300		200	ug/L	KEF	06/09/2010
Surrogate:	D3328/EPA 8100						
***p-Terphenyl		31.1	*		% R	KEF	06/09/2010
Extraction	EPA 3510C	1.0			DF	JKC	06/07/2010
PRIORITY POLLUTANT METALS						LLZ	06/03/2010
Silver	EPA 6010B	<0.0050		0.0050	mg/L	LLZ	06/03/2010
Arsenic	EPA 6010B	<0.010		0.010	mg/L	LLZ	06/03/2010
Beryllium	EPA 6010B	<0.0040		0.0040	mg/L	LLZ	06/03/2010
Cadmium	EPA 6010B	<0.0050		0.0050	mg/L	LLZ	06/03/2010
Chromium	EPA 6010B	<0.0050		0.0050	mg/L	LLZ	06/03/2010
Copper	EPA 6010B	<0.015		0.015	mg/L	LLZ	06/03/2010
Mercury	EPA 7470A	<0.00020		0.00020	mg/L	GDD	06/09/2010
Nickel	EPA 6010B	<0.010		0.010	mg/L	LLZ	06/03/2010
Lead	EPA 6010B	<0.010		0.010	mg/L	LLZ	06/03/2010
Antimony	EPA 6010B	<0.025		0.025	mg/L	LLZ	06/03/2010
Selenium	EPA 6010B	<0.025		0.025	mg/L	LLZ	06/03/2010
Thallium	EPA 6010B	<0.025		0.025	mg/L	LLZ	06/03/2010
Zinc	EPA 6010B	0.042		0.010	mg/L	LLZ	06/03/2010
Iron	EPA 6010B	6.6		0.025	mg/L	LLZ	06/03/2010
Manganese	EPA 6010B	0.62		0.0050	mg/L	LLZ	06/03/2010

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Project Name.: **Phase II Bedrock - Charbert**
Project No.: **03.0032795.35**

Date Received: **06/02/2010**
Date Reported: **06/14/2010**
Work Order No.: **1006-00006**

Sample ID: **ML-4-2** Sample No.: **002**
Sample Date: **06/01/2010**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260				MQS	06/08/2010
Dichlorodifluoromethane	EPA 8260	<2.0	2.0	ug/L	MQS	06/08/2010
Chloromethane	EPA 8260	<2.0	2.0	ug/L	MQS	06/08/2010
Vinyl Chloride	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
Bromomethane	EPA 8260	<2.0	2.0	ug/L	MQS	06/08/2010
Chloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
Trichlorofluoromethane	EPA 8260	<2.0	2.0	ug/L	MQS	06/08/2010
Diethylether	EPA 8260	<2.0	2.0	ug/L	MQS	06/08/2010
Acetone	EPA 8260	<10	10	ug/L	MQS	06/08/2010
1,1-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
Dichloromethane	EPA 8260	<2.0	2.0	ug/L	MQS	06/08/2010
Methyl-Tert-Butyl-Ether	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
trans-1,2-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
1,1-Dichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
2-Butanone	EPA 8260	<10	10	ug/L	MQS	06/08/2010
2,2-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
cis-1,2-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
Chloroform	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
Bromochloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
Tetrahydrofuran	EPA 8260	<10	10	ug/L	MQS	06/08/2010
1,1,1-Trichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
1,1-Dichloropropene	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
Carbon Tetrachloride	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
1,2-Dichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
Benzene	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
Trichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
1,2-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
Bromodichloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
Dibromomethane	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
4-Methyl-2-Pentanone	EPA 8260	<10	10	ug/L	MQS	06/08/2010
cis-1,3-Dichloropropene	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
Toluene	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
trans-1,3-Dichloropropene	EPA 8260	<2.0	2.0	ug/L	MQS	06/08/2010
1,1,2-Trichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
2-Hexanone	EPA 8260	<10	10	ug/L	MQS	06/08/2010

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A N A L Y T I C A L R E P O R T

GZA GeoEnvironmental, Inc.
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Richard Carlone

Project Name.: **Phase II Bedrock - Charbert**
Project No.: **03.0032795.35**

Date Received: **06/02/2010**
Date Reported: **06/14/2010**
Work Order No.: **1006-00006**

Sample ID: **ML-4-2** Sample No.: **002**
Sample Date: **06/01/2010**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
1,3-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
Tetrachloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
Dibromochloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
1,2-Dibromoethane (EDB)	EPA 8260	<2.0	2.0	ug/L	MQS	06/08/2010
Chlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
1,1,1,2-Tetrachloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
Ethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
m&p-Xylene	EPA 8260	<2.0	2.0	ug/L	MQS	06/08/2010
o-Xylene	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
Styrene	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
Bromoform	EPA 8260	<2.0	2.0	ug/L	MQS	06/08/2010
Isopropylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
1,1,2,2-Tetrachloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
1,2,3-Trichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
Bromobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
N-Propylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
2-Chlorotoluene	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
1,3,5-Trimethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
4-Chlorotoluene	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
tert-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
1,2,4-Trimethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
sec-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
p-Isopropyltoluene	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
1,3-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
1,4-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
n-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
1,2-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
1,2-Dibromo-3-Chloropropane	EPA 8260	<2.0	2.0	ug/L	MQS	06/08/2010
1,2,4-Trichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
Hexachlorobutadiene	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
Naphthalene	EPA 8260	<2.0	2.0	ug/L	MQS	06/08/2010
1,2,3-Trichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
Surrogates:	EPA 8260					
***1,2-Dichloroethane-D4	EPA 8260	96.6	70-130	% R	MQS	06/08/2010
***Toluene-D8	EPA 8260	102	70-130	% R	MQS	06/08/2010

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A N A L Y T I C A L R E P O R T

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Richard Carlone

Project Name.: **Phase II Bedrock - Charbert**
Project No.: **03.0032795.35**

Date Received: **06/02/2010**
Date Reported: **06/14/2010**
Work Order No.: **1006-00006**

Sample ID: **ML-4-2** Sample No.: **002**
Sample Date: **06/01/2010**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
***4-Bromofluorobenzene	EPA 8260	87.6	70-130	% R	MQS	06/08/2010
Preparation	EPA 5030B	1.0		CF	MQS	06/08/2010
SEMI-VOLATILE ORGANICS	EPA 8270				CMG	06/03/2010
ACID FRACTION:	EPA 8270					
Phenol	EPA 8270	<10	10	ug/L	CMG	06/03/2010
2-Chlorophenol	EPA 8270	<10	10	ug/L	CMG	06/03/2010
2-Methylphenol	EPA 8270	<10	10	ug/L	CMG	06/03/2010
3&4-Methylphenol	EPA 8270	<10	10	ug/L	CMG	06/03/2010
2-Nitrophenol	EPA 8270	<10	10	ug/L	CMG	06/03/2010
2,4-Dimethylphenol	EPA 8270	<10	10	ug/L	CMG	06/03/2010
Benzoic Acid	EPA 8270	<10	10	ug/L	CMG	06/03/2010
2,4-Dichlorophenol	EPA 8270	<10	10	ug/L	CMG	06/03/2010
4-Chloro-3-Methylphenol	EPA 8270	<20	20	ug/L	CMG	06/03/2010
2,4,6-Trichlorophenol	EPA 8270	<10	10	ug/L	CMG	06/03/2010
2,4,5-Trichlorophenol	EPA 8270	<10	10	ug/L	CMG	06/03/2010
2,4-Dinitrophenol	EPA 8270	<100	100	ug/L	CMG	06/03/2010
4-Nitrophenol	EPA 8270	<50	50	ug/L	CMG	06/03/2010
4,6-Dinitro-2-Methylphenol	EPA 8270	<50	50	ug/L	CMG	06/03/2010
Pentachlorophenol	EPA 8270	<50	50	ug/L	CMG	06/03/2010
BASE-NEUTRAL FRACTION:						
n-Nitrosodimethylamine	EPA 8270	<10	10	ug/L	CMG	06/03/2010
bis(2-Chloroethyl)Ether	EPA 8270	<10	10	ug/L	CMG	06/03/2010
1,3-Dichlorobenzene	EPA 8270	<10	10	ug/L	CMG	06/03/2010
1,4-Dichlorobenzene	EPA 8270	<10	10	ug/L	CMG	06/03/2010
Benzyl Alcohol	EPA 8270	<20	20	ug/L	CMG	06/03/2010
1,2-Dichlorobenzene	EPA 8270	<10	10	ug/L	CMG	06/03/2010
bis(2-Chloroisopropyl)Ether	EPA 8270	<10	10	ug/L	CMG	06/03/2010
n-Nitrosodi-n-Propylamine	EPA 8270	<10	10	ug/L	CMG	06/03/2010
Hexachloroethane	EPA 8270	<10	10	ug/L	CMG	06/03/2010
Nitrobenzene	EPA 8270	<10	10	ug/L	CMG	06/03/2010
Isophorone	EPA 8270	<10	10	ug/L	CMG	06/03/2010
bis(2-Chloroethoxy)Methane	EPA 8270	<10	10	ug/L	CMG	06/03/2010
1,2,4-Trichlorobenzene	EPA 8270	<10	10	ug/L	CMG	06/03/2010
Naphthalene	EPA 8270	<2.0	2.0	ug/L	CMG	06/03/2010
4-Chloroaniline	EPA 8270	<20	20	ug/L	CMG	06/03/2010

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ANALYTICAL REPORT

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Project Name.: **Phase II Bedrock - Charbert**
Project No.: **03.0032795.35**

Date Received: **06/02/2010**
Date Reported: **06/14/2010**
Work Order No.: **1006-00006**

Sample ID: **ML-4-2** Sample No.: **002**
Sample Date: **06/01/2010**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
Hexachlorobutadiene	EPA 8270	<10	10	ug/L	CMG	06/03/2010
2-Methylnaphthalene	EPA 8270	<2.0	2.0	ug/L	CMG	06/03/2010
Hexachlorocyclopentadiene	EPA 8270	<50	50	ug/L	CMG	06/03/2010
2-Chloronaphthalene	EPA 8270	<10	10	ug/L	CMG	06/03/2010
2-Nitroaniline	EPA 8270	<50	50	ug/L	CMG	06/03/2010
Dimethylphthalate	EPA 8270	<10	10	ug/L	CMG	06/03/2010
Acenaphthylene	EPA 8270	<2.0	2.0	ug/L	CMG	06/03/2010
2,6-Dinitrotoluene	EPA 8270	<10	10	ug/L	CMG	06/03/2010
3-Nitroaniline	EPA 8270	<50	50	ug/L	CMG	06/03/2010
Acenaphthene	EPA 8270	<2.0	2.0	ug/L	CMG	06/03/2010
Dibenzofuran	EPA 8270	<10	10	ug/L	CMG	06/03/2010
2,4-Dinitrotoluene	EPA 8270	<10	10	ug/L	CMG	06/03/2010
Diethylphthalate	EPA 8270	<10	10	ug/L	CMG	06/03/2010
Fluorene	EPA 8270	<2.0	2.0	ug/L	CMG	06/03/2010
4-Chlorophenyl Phenyl Ether	EPA 8270	<10	10	ug/L	CMG	06/03/2010
4-Nitroaniline	EPA 8270	<20	20	ug/L	CMG	06/03/2010
n-Nitrosodiphenylamine	EPA 8270	<10	10	ug/L	CMG	06/03/2010
4-Bromophenyl Phenyl Ether	EPA 8270	<10	10	ug/L	CMG	06/03/2010
Hexachlorobenzene	EPA 8270	<10	10	ug/L	CMG	06/03/2010
Phenanthrene	EPA 8270	<2.0	2.0	ug/L	CMG	06/03/2010
Anthracene	EPA 8270	<2.0	2.0	ug/L	CMG	06/03/2010
Carbazole	EPA 8270	<10	10	ug/L	CMG	06/03/2010
di-n-Butylphthalate	EPA 8270	<10	10	ug/L	CMG	06/03/2010
Fluoranthene	EPA 8270	<2.0	2.0	ug/L	CMG	06/03/2010
Pyrene	EPA 8270	<2.0	2.0	ug/L	CMG	06/03/2010
Butylbenzylphthalate	EPA 8270	<10	10	ug/L	CMG	06/03/2010
Benzo [a] Anthracene	EPA 8270	<2.0	2.0	ug/L	CMG	06/03/2010
3,3'-Dichlorobenzidine	EPA 8270	<10	10	ug/L	CMG	06/03/2010
Chrysene	EPA 8270	<2.0	2.0	ug/L	CMG	06/03/2010
bis(2-Ethylhexyl)Phthalate	EPA 8270	<10	10	ug/L	CMG	06/03/2010
di-n-Octylphthalate	EPA 8270	<10	10	ug/L	CMG	06/03/2010
Benzo [b] Fluoranthene	EPA 8270	<2.0	2.0	ug/L	CMG	06/03/2010
Benzo [k] Fluoranthene	EPA 8270	<2.0	2.0	ug/L	CMG	06/03/2010
Benzo [a] Pyrene	EPA 8270	<2.0	2.0	ug/L	CMG	06/03/2010
Indeno [1,2,3-cd] Pyrene	EPA 8270	<2.0	2.0	ug/L	CMG	06/03/2010

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ANALYTICAL REPORT

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Project Name.: **Phase II Bedrock - Charbert**
Project No.: **03.0032795.35**

Date Received: **06/02/2010**
Date Reported: **06/14/2010**
Work Order No.: **1006-00006**

Sample ID: **ML-4-2** Sample No.: **002**
Sample Date: **06/01/2010**

Test Performed	Method	Results		Reporting Limit	Units	Tech	Analysis Date
Dibenzo [a,h] Anthracene	EPA 8270	<2.0		2.0	ug/L	CMG	06/03/2010
Benzo [g,h,i] Perylene	EPA 8270	<2.0		2.0	ug/L	CMG	06/03/2010
Surrogates:	EPA 8270						
***2-Fluorophenol	EPA 8270	45.1		15-110	% R	CMG	06/03/2010
***Phenol-D6	EPA 8270	31.8		15-110	% R	CMG	06/03/2010
***Nitrobenzene-D5	EPA 8270	70.9		30-130	% R	CMG	06/03/2010
***2-Fluorobiphenyl	EPA 8270	71.8		30-130	% R	CMG	06/03/2010
***2,4,6-Tribromophenol	EPA 8270	74.1		15-110	% R	CMG	06/03/2010
***P-Terphenyl-D14	EPA 8270	82.6		39-120	% R	CMG	06/03/2010
Extraction	EPA 3510C	1.0			DF	JKC	06/03/2010
TOTAL PETROLEUM HYDROCARBON	D3328/EPA 8100/					KEF	06/09/2010
Hydrocarbon Content		340		200	ug/L	KEF	06/09/2010
Surrogate:	D3328/EPA 8100						
***p-Terphenyl		39.2	*		% R	KEF	06/09/2010
Extraction	EPA 3510C	1.0			DF	JKC	06/07/2010
PRIORITY POLLUTANT METALS						LLZ	06/03/2010
Silver	EPA 6010B	<0.0050		0.0050	mg/L	LLZ	06/03/2010
Arsenic	EPA 6010B	<0.010		0.010	mg/L	LLZ	06/03/2010
Beryllium	EPA 6010B	<0.0040		0.0040	mg/L	LLZ	06/03/2010
Cadmium	EPA 6010B	<0.0050		0.0050	mg/L	LLZ	06/03/2010
Chromium	EPA 6010B	<0.0050		0.0050	mg/L	LLZ	06/03/2010
Copper	EPA 6010B	<0.015		0.015	mg/L	LLZ	06/03/2010
Mercury	EPA 7470A	<0.00020		0.00020	mg/L	GDD	06/09/2010
Nickel	EPA 6010B	<0.010		0.010	mg/L	LLZ	06/03/2010
Lead	EPA 6010B	<0.010		0.010	mg/L	LLZ	06/03/2010
Antimony	EPA 6010B	<0.025		0.025	mg/L	LLZ	06/03/2010
Selenium	EPA 6010B	<0.025		0.025	mg/L	LLZ	06/03/2010
Thallium	EPA 6010B	<0.025		0.025	mg/L	LLZ	06/03/2010
Zinc	EPA 6010B	<0.010		0.010	mg/L	LLZ	06/03/2010
Iron	EPA 6010B	4.1		0.025	mg/L	LLZ	06/03/2010
Manganese	EPA 6010B	0.36		0.0050	mg/L	LLZ	06/03/2010

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Project Name.: **Phase II Bedrock - Charbert**
Project No.: **03.0032795.35**

Date Received: **06/02/2010**
Date Reported: **06/14/2010**
Work Order No.: **1006-00006**

Sample ID: **ML-4-3** Sample No.: **003**
Sample Date: **06/01/2010**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260				MQS	06/08/2010
Dichlorodifluoromethane	EPA 8260	<2.0	2.0	ug/L	MQS	06/08/2010
Chloromethane	EPA 8260	<2.0	2.0	ug/L	MQS	06/08/2010
Vinyl Chloride	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
Bromomethane	EPA 8260	<2.0	2.0	ug/L	MQS	06/08/2010
Chloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
Trichlorofluoromethane	EPA 8260	<2.0	2.0	ug/L	MQS	06/08/2010
Diethylether	EPA 8260	<2.0	2.0	ug/L	MQS	06/08/2010
Acetone	EPA 8260	<10	10	ug/L	MQS	06/08/2010
1,1-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
Dichloromethane	EPA 8260	<2.0	2.0	ug/L	MQS	06/08/2010
Methyl-Tert-Butyl-Ether	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
trans-1,2-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
1,1-Dichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
2-Butanone	EPA 8260	<10	10	ug/L	MQS	06/08/2010
2,2-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
cis-1,2-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
Chloroform	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
Bromochloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
Tetrahydrofuran	EPA 8260	<10	10	ug/L	MQS	06/08/2010
1,1,1-Trichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
1,1-Dichloropropene	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
Carbon Tetrachloride	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
1,2-Dichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
Benzene	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
Trichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
1,2-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
Bromodichloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
Dibromomethane	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
4-Methyl-2-Pentanone	EPA 8260	<10	10	ug/L	MQS	06/08/2010
cis-1,3-Dichloropropene	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
Toluene	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
trans-1,3-Dichloropropene	EPA 8260	<2.0	2.0	ug/L	MQS	06/08/2010
1,1,2-Trichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
2-Hexanone	EPA 8260	<10	10	ug/L	MQS	06/08/2010

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ANALYTICAL REPORT

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Richard Carlone

Project Name.: **Phase II Bedrock - Charbert**
Project No.: **03.0032795.35**

Date Received: **06/02/2010**
Date Reported: **06/14/2010**
Work Order No.: **1006-00006**

Sample ID: **ML-4-3** Sample No.: **003**
Sample Date: **06/01/2010**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
1,3-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
Tetrachloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
Dibromochloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
1,2-Dibromoethane (EDB)	EPA 8260	<2.0	2.0	ug/L	MQS	06/08/2010
Chlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
1,1,1,2-Tetrachloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
Ethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
m&p-Xylene	EPA 8260	<2.0	2.0	ug/L	MQS	06/08/2010
o-Xylene	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
Styrene	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
Bromoform	EPA 8260	<2.0	2.0	ug/L	MQS	06/08/2010
Isopropylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
1,1,2,2-Tetrachloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
1,2,3-Trichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
Bromobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
N-Propylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
2-Chlorotoluene	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
1,3,5-Trimethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
4-Chlorotoluene	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
tert-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
1,2,4-Trimethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
sec-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
p-Isopropyltoluene	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
1,3-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
1,4-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
n-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
1,2-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
1,2-Dibromo-3-Chloropropane	EPA 8260	<2.0	2.0	ug/L	MQS	06/08/2010
1,2,4-Trichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
Hexachlorobutadiene	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
Naphthalene	EPA 8260	<2.0	2.0	ug/L	MQS	06/08/2010
1,2,3-Trichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
Surrogates:	EPA 8260					
***1,2-Dichloroethane-D4	EPA 8260	101	70-130	% R	MQS	06/08/2010
***Toluene-D8	EPA 8260	101	70-130	% R	MQS	06/08/2010

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ANALYTICAL REPORT

GZA GeoEnvironmental, Inc.
530 Broadway
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Richard Carlone

Project Name.: **Phase II Bedrock - Charbert**
Project No.: **03.0032795.35**

Date Received: **06/02/2010**
Date Reported: **06/14/2010**
Work Order No.: **1006-00006**

Sample ID: **ML-4-3** Sample No.: **003**
Sample Date: **06/01/2010**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
***4-Bromofluorobenzene	EPA 8260	87.3	70-130	% R	MQS	06/08/2010
Preparation	EPA 5030B	1.0		CF	MQS	06/08/2010
SEMI-VOLATILE ORGANICS	EPA 8270				CMG	06/03/2010
ACID FRACTION:	EPA 8270					
Phenol	EPA 8270	<10	10	ug/L	CMG	06/03/2010
2-Chlorophenol	EPA 8270	<10	10	ug/L	CMG	06/03/2010
2-Methylphenol	EPA 8270	<10	10	ug/L	CMG	06/03/2010
3&4-Methylphenol	EPA 8270	<10	10	ug/L	CMG	06/03/2010
2-Nitrophenol	EPA 8270	<10	10	ug/L	CMG	06/03/2010
2,4-Dimethylphenol	EPA 8270	<10	10	ug/L	CMG	06/03/2010
Benzoic Acid	EPA 8270	<10	10	ug/L	CMG	06/03/2010
2,4-Dichlorophenol	EPA 8270	<10	10	ug/L	CMG	06/03/2010
4-Chloro-3-Methylphenol	EPA 8270	<20	20	ug/L	CMG	06/03/2010
2,4,6-Trichlorophenol	EPA 8270	<10	10	ug/L	CMG	06/03/2010
2,4,5-Trichlorophenol	EPA 8270	<10	10	ug/L	CMG	06/03/2010
2,4-Dinitrophenol	EPA 8270	<100	100	ug/L	CMG	06/03/2010
4-Nitrophenol	EPA 8270	<50	50	ug/L	CMG	06/03/2010
4,6-Dinitro-2-Methylphenol	EPA 8270	<50	50	ug/L	CMG	06/03/2010
Pentachlorophenol	EPA 8270	<50	50	ug/L	CMG	06/03/2010
BASE-NEUTRAL FRACTION:						
n-Nitrosodimethylamine	EPA 8270	<10	10	ug/L	CMG	06/03/2010
bis(2-Chloroethyl)Ether	EPA 8270	<10	10	ug/L	CMG	06/03/2010
1,3-Dichlorobenzene	EPA 8270	<10	10	ug/L	CMG	06/03/2010
1,4-Dichlorobenzene	EPA 8270	<10	10	ug/L	CMG	06/03/2010
Benzyl Alcohol	EPA 8270	<20	20	ug/L	CMG	06/03/2010
1,2-Dichlorobenzene	EPA 8270	<10	10	ug/L	CMG	06/03/2010
bis(2-Chloroisopropyl)Ether	EPA 8270	<10	10	ug/L	CMG	06/03/2010
n-Nitrosodi-n-Propylamine	EPA 8270	<10	10	ug/L	CMG	06/03/2010
Hexachloroethane	EPA 8270	<10	10	ug/L	CMG	06/03/2010
Nitrobenzene	EPA 8270	<10	10	ug/L	CMG	06/03/2010
Isophorone	EPA 8270	<10	10	ug/L	CMG	06/03/2010
bis(2-Chloroethoxy)Methane	EPA 8270	<10	10	ug/L	CMG	06/03/2010
1,2,4-Trichlorobenzene	EPA 8270	<10	10	ug/L	CMG	06/03/2010
Naphthalene	EPA 8270	<2.0	2.0	ug/L	CMG	06/03/2010
4-Chloroaniline	EPA 8270	<20	20	ug/L	CMG	06/03/2010

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Richard Carlone

Project Name.: **Phase II Bedrock - Charbert**
Project No.: **03.0032795.35**

Date Received: **06/02/2010**
Date Reported: **06/14/2010**
Work Order No.: **1006-00006**

Sample ID: **ML-4-3** Sample No.: **003**
Sample Date: **06/01/2010**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
Hexachlorobutadiene	EPA 8270	<10	10	ug/L	CMG	06/03/2010
2-Methylnaphthalene	EPA 8270	<2.0	2.0	ug/L	CMG	06/03/2010
Hexachlorocyclopentadiene	EPA 8270	<50	50	ug/L	CMG	06/03/2010
2-Chloronaphthalene	EPA 8270	<10	10	ug/L	CMG	06/03/2010
2-Nitroaniline	EPA 8270	<50	50	ug/L	CMG	06/03/2010
Dimethylphthalate	EPA 8270	<10	10	ug/L	CMG	06/03/2010
Acenaphthylene	EPA 8270	<2.0	2.0	ug/L	CMG	06/03/2010
2,6-Dinitrotoluene	EPA 8270	<10	10	ug/L	CMG	06/03/2010
3-Nitroaniline	EPA 8270	<50	50	ug/L	CMG	06/03/2010
Acenaphthene	EPA 8270	<2.0	2.0	ug/L	CMG	06/03/2010
Dibenzofuran	EPA 8270	<10	10	ug/L	CMG	06/03/2010
2,4-Dinitrotoluene	EPA 8270	<10	10	ug/L	CMG	06/03/2010
Diethylphthalate	EPA 8270	<10	10	ug/L	CMG	06/03/2010
Fluorene	EPA 8270	<2.0	2.0	ug/L	CMG	06/03/2010
4-Chlorophenyl Phenyl Ether	EPA 8270	<10	10	ug/L	CMG	06/03/2010
4-Nitroaniline	EPA 8270	<20	20	ug/L	CMG	06/03/2010
n-Nitrosodiphenylamine	EPA 8270	<10	10	ug/L	CMG	06/03/2010
4-Bromophenyl Phenyl Ether	EPA 8270	<10	10	ug/L	CMG	06/03/2010
Hexachlorobenzene	EPA 8270	<10	10	ug/L	CMG	06/03/2010
Phenanthrene	EPA 8270	<2.0	2.0	ug/L	CMG	06/03/2010
Anthracene	EPA 8270	<2.0	2.0	ug/L	CMG	06/03/2010
Carbazole	EPA 8270	<10	10	ug/L	CMG	06/03/2010
di-n-Butylphthalate	EPA 8270	<10	10	ug/L	CMG	06/03/2010
Fluoranthene	EPA 8270	<2.0	2.0	ug/L	CMG	06/03/2010
Pyrene	EPA 8270	<2.0	2.0	ug/L	CMG	06/03/2010
Butylbenzylphthalate	EPA 8270	<10	10	ug/L	CMG	06/03/2010
Benzo [a] Anthracene	EPA 8270	<2.0	2.0	ug/L	CMG	06/03/2010
3,3'-Dichlorobenzidine	EPA 8270	<10	10	ug/L	CMG	06/03/2010
Chrysene	EPA 8270	<2.0	2.0	ug/L	CMG	06/03/2010
bis(2-Ethylhexyl)Phthalate	EPA 8270	<10	10	ug/L	CMG	06/03/2010
di-n-Octylphthalate	EPA 8270	<10	10	ug/L	CMG	06/03/2010
Benzo [b] Fluoranthene	EPA 8270	<2.0	2.0	ug/L	CMG	06/03/2010
Benzo [k] Fluoranthene	EPA 8270	<2.0	2.0	ug/L	CMG	06/03/2010
Benzo [a] Pyrene	EPA 8270	<2.0	2.0	ug/L	CMG	06/03/2010
Indeno [1,2,3-cd] Pyrene	EPA 8270	<2.0	2.0	ug/L	CMG	06/03/2010

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ANALYTICAL REPORT

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Project Name.: **Phase II Bedrock - Charbert**
Project No.: **03.0032795.35**

Date Received: **06/02/2010**
Date Reported: **06/14/2010**
Work Order No.: **1006-00006**

Sample ID: **ML-4-3** Sample No.: **003**
Sample Date: **06/01/2010**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
Dibenzo [a,h] Anthracene	EPA 8270	<2.0	2.0	ug/L	CMG	06/03/2010
Benzo [g,h,i] Perylene	EPA 8270	<2.0	2.0	ug/L	CMG	06/03/2010
Surrogates:	EPA 8270					
***2-Fluorophenol	EPA 8270	37.9	15-110	% R	CMG	06/03/2010
***Phenol-D6	EPA 8270	27.2	15-110	% R	CMG	06/03/2010
***Nitrobenzene-D5	EPA 8270	66.6	30-130	% R	CMG	06/03/2010
***2-Fluorobiphenyl	EPA 8270	69.6	30-130	% R	CMG	06/03/2010
***2,4,6-Tribromophenol	EPA 8270	69.2	15-110	% R	CMG	06/03/2010
***P-Terphenyl-D14	EPA 8270	76.3	39-120	% R	CMG	06/03/2010
Extraction	EPA 3510C	1.0		DF	JKC	06/03/2010
TOTAL PETROLEUM HYDROCARBON	D3328/EPA 8100/				KEF	06/09/2010
Hydrocarbon Content		<200	200	ug/L	KEF	06/09/2010
Surrogate:	D3328/EPA 8100					
***p-Terphenyl		40.2		% R	KEF	06/09/2010
Extraction	EPA 3510C	1.0		DF	JKC	06/07/2010
PRIORITY POLLUTANT METALS					LLZ	06/03/2010
Silver	EPA 6010B	<0.0050	0.0050	mg/L	LLZ	06/03/2010
Arsenic	EPA 6010B	<0.010	0.010	mg/L	LLZ	06/03/2010
Beryllium	EPA 6010B	<0.0040	0.0040	mg/L	LLZ	06/03/2010
Cadmium	EPA 6010B	<0.0050	0.0050	mg/L	LLZ	06/03/2010
Chromium	EPA 6010B	<0.0050	0.0050	mg/L	LLZ	06/03/2010
Copper	EPA 6010B	<0.015	0.015	mg/L	LLZ	06/03/2010
Mercury	EPA 7470A	<0.00020	0.00020	mg/L	GDD	06/09/2010
Nickel	EPA 6010B	<0.010	0.010	mg/L	LLZ	06/03/2010
Lead	EPA 6010B	<0.010	0.010	mg/L	LLZ	06/03/2010
Antimony	EPA 6010B	<0.025	0.025	mg/L	LLZ	06/03/2010
Selenium	EPA 6010B	<0.025	0.025	mg/L	LLZ	06/03/2010
Thallium	EPA 6010B	<0.025	0.025	mg/L	LLZ	06/03/2010
Zinc	EPA 6010B	<0.010	0.010	mg/L	LLZ	06/03/2010
Iron	EPA 6010B	1.7	0.025	mg/L	LLZ	06/03/2010
Manganese	EPA 6010B	0.10	0.0050	mg/L	LLZ	06/03/2010

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Project Name.: **Phase II Bedrock - Charbert**
Project No.: **03.0032795.35**

Date Received: **06/02/2010**
Date Reported: **06/14/2010**
Work Order No.: **1006-00006**

Sample ID: **ML-5-2** Sample No.: **004**
Sample Date: **06/01/2010**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260				MQS	06/08/2010
Dichlorodifluoromethane	EPA 8260	<2.0	2.0	ug/L	MQS	06/08/2010
Chloromethane	EPA 8260	<2.0	2.0	ug/L	MQS	06/08/2010
Vinyl Chloride	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
Bromomethane	EPA 8260	<2.0	2.0	ug/L	MQS	06/08/2010
Chloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
Trichlorofluoromethane	EPA 8260	<2.0	2.0	ug/L	MQS	06/08/2010
Diethylether	EPA 8260	<2.0	2.0	ug/L	MQS	06/08/2010
Acetone	EPA 8260	<10	10	ug/L	MQS	06/08/2010
1,1-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
Dichloromethane	EPA 8260	<2.0	2.0	ug/L	MQS	06/08/2010
Methyl-Tert-Butyl-Ether	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
trans-1,2-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
1,1-Dichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
2-Butanone	EPA 8260	<10	10	ug/L	MQS	06/08/2010
2,2-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
cis-1,2-Dichloroethene	EPA 8260	19	1.0	ug/L	MQS	06/08/2010
Chloroform	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
Bromochloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
Tetrahydrofuran	EPA 8260	<10	10	ug/L	MQS	06/08/2010
1,1,1-Trichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
1,1-Dichloropropene	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
Carbon Tetrachloride	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
1,2-Dichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
Benzene	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
Trichloroethene	EPA 8260	2.4	1.0	ug/L	MQS	06/08/2010
1,2-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
Bromodichloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
Dibromomethane	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
4-Methyl-2-Pentanone	EPA 8260	<10	10	ug/L	MQS	06/08/2010
cis-1,3-Dichloropropene	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
Toluene	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
trans-1,3-Dichloropropene	EPA 8260	<2.0	2.0	ug/L	MQS	06/08/2010
1,1,2-Trichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
2-Hexanone	EPA 8260	<10	10	ug/L	MQS	06/08/2010

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A N A L Y T I C A L R E P O R T

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Richard Carlone

Project Name.: **Phase II Bedrock - Charbert**
Project No.: **03.0032795.35**

Date Received: **06/02/2010**
Date Reported: **06/14/2010**
Work Order No.: **1006-00006**

Sample ID: **ML-5-2** Sample No.: **004**
Sample Date: **06/01/2010**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
1,3-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
Tetrachloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
Dibromochloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
1,2-Dibromoethane (EDB)	EPA 8260	<2.0	2.0	ug/L	MQS	06/08/2010
Chlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
1,1,1,2-Tetrachloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
Ethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
m&p-Xylene	EPA 8260	<2.0	2.0	ug/L	MQS	06/08/2010
o-Xylene	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
Styrene	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
Bromoform	EPA 8260	<2.0	2.0	ug/L	MQS	06/08/2010
Isopropylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
1,1,2,2-Tetrachloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
1,2,3-Trichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
Bromobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
N-Propylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
2-Chlorotoluene	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
1,3,5-Trimethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
4-Chlorotoluene	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
tert-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
1,2,4-Trimethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
sec-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
p-Isopropyltoluene	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
1,3-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
1,4-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
n-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
1,2-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
1,2-Dibromo-3-Chloropropane	EPA 8260	<2.0	2.0	ug/L	MQS	06/08/2010
1,2,4-Trichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
Hexachlorobutadiene	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
Naphthalene	EPA 8260	<2.0	2.0	ug/L	MQS	06/08/2010
1,2,3-Trichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
Surrogates:	EPA 8260					
***1,2-Dichloroethane-D4	EPA 8260	106	70-130	% R	MQS	06/08/2010
***Toluene-D8	EPA 8260	103	70-130	% R	MQS	06/08/2010

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Richard Carlone

Project Name.: **Phase II Bedrock - Charbert**
Project No.: **03.0032795.35**

Date Received: **06/02/2010**
Date Reported: **06/14/2010**
Work Order No.: **1006-00006**

Sample ID: **ML-5-2** Sample No.: **004**
Sample Date: **06/01/2010**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
***4-Bromofluorobenzene	EPA 8260	89.8	70-130	% R	MQS	06/08/2010
Preparation	EPA 5030B	1.0		CF	MQS	06/08/2010
SEMI-VOLATILE ORGANICS	EPA 8270				CMG	06/03/2010
ACID FRACTION:	EPA 8270					
Phenol	EPA 8270	<10	10	ug/L	CMG	06/03/2010
2-Chlorophenol	EPA 8270	<10	10	ug/L	CMG	06/03/2010
2-Methylphenol	EPA 8270	<10	10	ug/L	CMG	06/03/2010
3&4-Methylphenol	EPA 8270	<10	10	ug/L	CMG	06/03/2010
2-Nitrophenol	EPA 8270	<10	10	ug/L	CMG	06/03/2010
2,4-Dimethylphenol	EPA 8270	<10	10	ug/L	CMG	06/03/2010
Benzoic Acid	EPA 8270	<10	10	ug/L	CMG	06/03/2010
2,4-Dichlorophenol	EPA 8270	<10	10	ug/L	CMG	06/03/2010
4-Chloro-3-Methylphenol	EPA 8270	<20	20	ug/L	CMG	06/03/2010
2,4,6-Trichlorophenol	EPA 8270	<10	10	ug/L	CMG	06/03/2010
2,4,5-Trichlorophenol	EPA 8270	<10	10	ug/L	CMG	06/03/2010
2,4-Dinitrophenol	EPA 8270	<100	100	ug/L	CMG	06/03/2010
4-Nitrophenol	EPA 8270	<50	50	ug/L	CMG	06/03/2010
4,6-Dinitro-2-Methylphenol	EPA 8270	<50	50	ug/L	CMG	06/03/2010
Pentachlorophenol	EPA 8270	<50	50	ug/L	CMG	06/03/2010
BASE-NEUTRAL FRACTION:						
n-Nitrosodimethylamine	EPA 8270	<10	10	ug/L	CMG	06/03/2010
bis(2-Chloroethyl)Ether	EPA 8270	<10	10	ug/L	CMG	06/03/2010
1,3-Dichlorobenzene	EPA 8270	<10	10	ug/L	CMG	06/03/2010
1,4-Dichlorobenzene	EPA 8270	<10	10	ug/L	CMG	06/03/2010
Benzyl Alcohol	EPA 8270	<20	20	ug/L	CMG	06/03/2010
1,2-Dichlorobenzene	EPA 8270	<10	10	ug/L	CMG	06/03/2010
bis(2-Chloroisopropyl)Ether	EPA 8270	<10	10	ug/L	CMG	06/03/2010
n-Nitrosodi-n-Propylamine	EPA 8270	<10	10	ug/L	CMG	06/03/2010
Hexachloroethane	EPA 8270	<10	10	ug/L	CMG	06/03/2010
Nitrobenzene	EPA 8270	<10	10	ug/L	CMG	06/03/2010
Isophorone	EPA 8270	<10	10	ug/L	CMG	06/03/2010
bis(2-Chloroethoxy)Methane	EPA 8270	<10	10	ug/L	CMG	06/03/2010
1,2,4-Trichlorobenzene	EPA 8270	<10	10	ug/L	CMG	06/03/2010
Naphthalene	EPA 8270	<2.0	2.0	ug/L	CMG	06/03/2010
4-Chloroaniline	EPA 8270	<20	20	ug/L	CMG	06/03/2010

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ANALYTICAL REPORT

GZA GeoEnvironmental, Inc.
530 Broadway
Providence, RI 02909

Richard Carlone

Project Name.: **Phase II Bedrock - Charbert**
Project No.: **03.0032795.35**

Date Received: **06/02/2010**
Date Reported: **06/14/2010**
Work Order No.: **1006-00006**

Sample ID: **ML-5-2** Sample No.: **004**
Sample Date: **06/01/2010**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
Hexachlorobutadiene	EPA 8270	<10	10	ug/L	CMG	06/03/2010
2-Methylnaphthalene	EPA 8270	<2.0	2.0	ug/L	CMG	06/03/2010
Hexachlorocyclopentadiene	EPA 8270	<50	50	ug/L	CMG	06/03/2010
2-Chloronaphthalene	EPA 8270	<10	10	ug/L	CMG	06/03/2010
2-Nitroaniline	EPA 8270	<50	50	ug/L	CMG	06/03/2010
Dimethylphthalate	EPA 8270	<10	10	ug/L	CMG	06/03/2010
Acenaphthylene	EPA 8270	<2.0	2.0	ug/L	CMG	06/03/2010
2,6-Dinitrotoluene	EPA 8270	<10	10	ug/L	CMG	06/03/2010
3-Nitroaniline	EPA 8270	<50	50	ug/L	CMG	06/03/2010
Acenaphthene	EPA 8270	<2.0	2.0	ug/L	CMG	06/03/2010
Dibenzofuran	EPA 8270	<10	10	ug/L	CMG	06/03/2010
2,4-Dinitrotoluene	EPA 8270	<10	10	ug/L	CMG	06/03/2010
Diethylphthalate	EPA 8270	<10	10	ug/L	CMG	06/03/2010
Fluorene	EPA 8270	<2.0	2.0	ug/L	CMG	06/03/2010
4-Chlorophenyl Phenyl Ether	EPA 8270	<10	10	ug/L	CMG	06/03/2010
4-Nitroaniline	EPA 8270	<20	20	ug/L	CMG	06/03/2010
n-Nitrosodiphenylamine	EPA 8270	<10	10	ug/L	CMG	06/03/2010
4-Bromophenyl Phenyl Ether	EPA 8270	<10	10	ug/L	CMG	06/03/2010
Hexachlorobenzene	EPA 8270	<10	10	ug/L	CMG	06/03/2010
Phenanthrene	EPA 8270	<2.0	2.0	ug/L	CMG	06/03/2010
Anthracene	EPA 8270	<2.0	2.0	ug/L	CMG	06/03/2010
Carbazole	EPA 8270	<10	10	ug/L	CMG	06/03/2010
di-n-Butylphthalate	EPA 8270	<10	10	ug/L	CMG	06/03/2010
Fluoranthene	EPA 8270	<2.0	2.0	ug/L	CMG	06/03/2010
Pyrene	EPA 8270	<2.0	2.0	ug/L	CMG	06/03/2010
Butylbenzylphthalate	EPA 8270	<10	10	ug/L	CMG	06/03/2010
Benzo [a] Anthracene	EPA 8270	<2.0	2.0	ug/L	CMG	06/03/2010
3,3'-Dichlorobenzidine	EPA 8270	<10	10	ug/L	CMG	06/03/2010
Chrysene	EPA 8270	<2.0	2.0	ug/L	CMG	06/03/2010
bis(2-Ethylhexyl)Phthalate	EPA 8270	<10	10	ug/L	CMG	06/03/2010
di-n-Octylphthalate	EPA 8270	<10	10	ug/L	CMG	06/03/2010
Benzo [b] Fluoranthene	EPA 8270	<2.0	2.0	ug/L	CMG	06/03/2010
Benzo [k] Fluoranthene	EPA 8270	<2.0	2.0	ug/L	CMG	06/03/2010
Benzo [a] Pyrene	EPA 8270	<2.0	2.0	ug/L	CMG	06/03/2010
Indeno [1,2,3-cd] Pyrene	EPA 8270	<2.0	2.0	ug/L	CMG	06/03/2010

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Richard Carlone

Project Name.: **Phase II Bedrock - Charbert**
Project No.: **03.0032795.35**

Date Received: **06/02/2010**
Date Reported: **06/14/2010**
Work Order No.: **1006-00006**

Sample ID: **ML-5-2** Sample No.: **004**
Sample Date: **06/01/2010**

Test Performed	Method	Results		Reporting Limit	Units	Tech	Analysis Date
Dibenzo [a,h] Anthracene	EPA 8270	<2.0		2.0	ug/L	CMG	06/03/2010
Benzo [g,h,i] Perylene	EPA 8270	<2.0		2.0	ug/L	CMG	06/03/2010
Surrogates:	EPA 8270						
***2-Fluorophenol	EPA 8270	23.3		15-110	% R	CMG	06/03/2010
***Phenol-D6	EPA 8270	16.8		15-110	% R	CMG	06/03/2010
***Nitrobenzene-D5	EPA 8270	37.1		30-130	% R	CMG	06/03/2010
***2-Fluorobiphenyl	EPA 8270	37.3		30-130	% R	CMG	06/03/2010
***2,4,6-Tribromophenol	EPA 8270	37.2		15-110	% R	CMG	06/03/2010
***P-Terphenyl-D14	EPA 8270	63.4		39-120	% R	CMG	06/03/2010
Extraction	EPA 3510C	1.0			DF	JKC	06/03/2010
TOTAL PETROLEUM HYDROCARBON	D3328/EPA 8100/					KEF	06/10/2010
Hydrocarbon Content		<200		200	ug/L	KEF	06/10/2010
Surrogate:	D3328/EPA 8100						
***p-Terphenyl		32.7	*		% R	KEF	06/10/2010
Extraction	EPA 3510C	1.0			DF	JKC	06/07/2010
PRIORITY POLLUTANT METALS						LLZ	06/03/2010
Silver	EPA 6010B	<0.0050		0.0050	mg/L	LLZ	06/03/2010
Arsenic	EPA 6010B	<0.010		0.010	mg/L	LLZ	06/03/2010
Beryllium	EPA 6010B	<0.0040		0.0040	mg/L	LLZ	06/03/2010
Cadmium	EPA 6010B	<0.0050		0.0050	mg/L	LLZ	06/03/2010
Chromium	EPA 6010B	<0.0050		0.0050	mg/L	LLZ	06/03/2010
Copper	EPA 6010B	<0.015		0.015	mg/L	LLZ	06/03/2010
Mercury	EPA 7470A	<0.00020		0.00020	mg/L	GDD	06/09/2010
Nickel	EPA 6010B	<0.010		0.010	mg/L	LLZ	06/03/2010
Lead	EPA 6010B	<0.010		0.010	mg/L	LLZ	06/03/2010
Antimony	EPA 6010B	<0.025		0.025	mg/L	LLZ	06/03/2010
Selenium	EPA 6010B	<0.025		0.025	mg/L	LLZ	06/03/2010
Thallium	EPA 6010B	<0.025		0.025	mg/L	LLZ	06/03/2010
Zinc	EPA 6010B	0.012		0.010	mg/L	LLZ	06/03/2010
Iron	EPA 6010B	2.8		0.025	mg/L	LLZ	06/03/2010
Manganese	EPA 6010B	1.0		0.0050	mg/L	LLZ	06/03/2010

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Project Name.: **Phase II Bedrock - Charbert**
Project No.: **03.0032795.35**

Date Received: **06/02/2010**
Date Reported: **06/14/2010**
Work Order No.: **1006-00006**

Sample ID: **ML-5-3** Sample No.: **005**
Sample Date: **06/01/2010**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260				MQS	06/08/2010
Dichlorodifluoromethane	EPA 8260	<2.0	2.0	ug/L	MQS	06/08/2010
Chloromethane	EPA 8260	<2.0	2.0	ug/L	MQS	06/08/2010
Vinyl Chloride	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
Bromomethane	EPA 8260	<2.0	2.0	ug/L	MQS	06/08/2010
Chloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
Trichlorofluoromethane	EPA 8260	<2.0	2.0	ug/L	MQS	06/08/2010
Diethylether	EPA 8260	<2.0	2.0	ug/L	MQS	06/08/2010
Acetone	EPA 8260	<10	10	ug/L	MQS	06/08/2010
1,1-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
Dichloromethane	EPA 8260	<2.0	2.0	ug/L	MQS	06/08/2010
Methyl-Tert-Butyl-Ether	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
trans-1,2-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
1,1-Dichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
2-Butanone	EPA 8260	<10	10	ug/L	MQS	06/08/2010
2,2-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
cis-1,2-Dichloroethene	EPA 8260	3.3	1.0	ug/L	MQS	06/08/2010
Chloroform	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
Bromochloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
Tetrahydrofuran	EPA 8260	<10	10	ug/L	MQS	06/08/2010
1,1,1-Trichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
1,1-Dichloropropene	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
Carbon Tetrachloride	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
1,2-Dichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
Benzene	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
Trichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
1,2-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
Bromodichloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
Dibromomethane	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
4-Methyl-2-Pentanone	EPA 8260	<10	10	ug/L	MQS	06/08/2010
cis-1,3-Dichloropropene	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
Toluene	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
trans-1,3-Dichloropropene	EPA 8260	<2.0	2.0	ug/L	MQS	06/08/2010
1,1,2-Trichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
2-Hexanone	EPA 8260	<10	10	ug/L	MQS	06/08/2010

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ANALYTICAL REPORT

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530 Broadway
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Richard Carlone

Project Name.: **Phase II Bedrock - Charbert**
Project No.: **03.0032795.35**

Date Received: **06/02/2010**
Date Reported: **06/14/2010**
Work Order No.: **1006-00006**

Sample ID: **ML-5-3** Sample No.: **005**
Sample Date: **06/01/2010**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
1,3-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
Tetrachloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
Dibromochloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
1,2-Dibromoethane (EDB)	EPA 8260	<2.0	2.0	ug/L	MQS	06/08/2010
Chlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
1,1,1,2-Tetrachloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
Ethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
m&p-Xylene	EPA 8260	<2.0	2.0	ug/L	MQS	06/08/2010
o-Xylene	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
Styrene	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
Bromoform	EPA 8260	<2.0	2.0	ug/L	MQS	06/08/2010
Isopropylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
1,1,2,2-Tetrachloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
1,2,3-Trichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
Bromobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
N-Propylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
2-Chlorotoluene	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
1,3,5-Trimethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
4-Chlorotoluene	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
tert-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
1,2,4-Trimethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
sec-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
p-Isopropyltoluene	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
1,3-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
1,4-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
n-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
1,2-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
1,2-Dibromo-3-Chloropropane	EPA 8260	<2.0	2.0	ug/L	MQS	06/08/2010
1,2,4-Trichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
Hexachlorobutadiene	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
Naphthalene	EPA 8260	<2.0	2.0	ug/L	MQS	06/08/2010
1,2,3-Trichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	06/08/2010
Surrogates:	EPA 8260					
***1,2-Dichloroethane-D4	EPA 8260	104	70-130	% R	MQS	06/08/2010
***Toluene-D8	EPA 8260	104	70-130	% R	MQS	06/08/2010

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Project Name.: **Phase II Bedrock - Charbert**
Project No.: **03.0032795.35**

Date Received: **06/02/2010**
Date Reported: **06/14/2010**
Work Order No.: **1006-00006**

Sample ID: **ML-5-3** Sample No.: **005**
Sample Date: **06/01/2010**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
***4-Bromofluorobenzene	EPA 8260	87.4	70-130	% R	MQS	06/08/2010
Preparation	EPA 5030B	1.0		CF	MQS	06/08/2010
SEMI-VOLATILE ORGANICS	EPA 8270				CMG	06/03/2010
ACID FRACTION:	EPA 8270					
Phenol	EPA 8270	<10	10	ug/L	CMG	06/03/2010
2-Chlorophenol	EPA 8270	<10	10	ug/L	CMG	06/03/2010
2-Methylphenol	EPA 8270	<10	10	ug/L	CMG	06/03/2010
3&4-Methylphenol	EPA 8270	<10	10	ug/L	CMG	06/03/2010
2-Nitrophenol	EPA 8270	<10	10	ug/L	CMG	06/03/2010
2,4-Dimethylphenol	EPA 8270	<10	10	ug/L	CMG	06/03/2010
Benzoic Acid	EPA 8270	<10	10	ug/L	CMG	06/03/2010
2,4-Dichlorophenol	EPA 8270	<10	10	ug/L	CMG	06/03/2010
4-Chloro-3-Methylphenol	EPA 8270	<20	20	ug/L	CMG	06/03/2010
2,4,6-Trichlorophenol	EPA 8270	<10	10	ug/L	CMG	06/03/2010
2,4,5-Trichlorophenol	EPA 8270	<10	10	ug/L	CMG	06/03/2010
2,4-Dinitrophenol	EPA 8270	<100	100	ug/L	CMG	06/03/2010
4-Nitrophenol	EPA 8270	<50	50	ug/L	CMG	06/03/2010
4,6-Dinitro-2-Methylphenol	EPA 8270	<50	50	ug/L	CMG	06/03/2010
Pentachlorophenol	EPA 8270	<50	50	ug/L	CMG	06/03/2010
BASE-NEUTRAL FRACTION:						
n-Nitrosodimethylamine	EPA 8270	<10	10	ug/L	CMG	06/03/2010
bis(2-Chloroethyl)Ether	EPA 8270	<10	10	ug/L	CMG	06/03/2010
1,3-Dichlorobenzene	EPA 8270	<10	10	ug/L	CMG	06/03/2010
1,4-Dichlorobenzene	EPA 8270	<10	10	ug/L	CMG	06/03/2010
Benzyl Alcohol	EPA 8270	<20	20	ug/L	CMG	06/03/2010
1,2-Dichlorobenzene	EPA 8270	<10	10	ug/L	CMG	06/03/2010
bis(2-Chloroisopropyl)Ether	EPA 8270	<10	10	ug/L	CMG	06/03/2010
n-Nitrosodi-n-Propylamine	EPA 8270	<10	10	ug/L	CMG	06/03/2010
Hexachloroethane	EPA 8270	<10	10	ug/L	CMG	06/03/2010
Nitrobenzene	EPA 8270	<10	10	ug/L	CMG	06/03/2010
Isophorone	EPA 8270	<10	10	ug/L	CMG	06/03/2010
bis(2-Chloroethoxy)Methane	EPA 8270	<10	10	ug/L	CMG	06/03/2010
1,2,4-Trichlorobenzene	EPA 8270	<10	10	ug/L	CMG	06/03/2010
Naphthalene	EPA 8270	<2.0	2.0	ug/L	CMG	06/03/2010
4-Chloroaniline	EPA 8270	<20	20	ug/L	CMG	06/03/2010

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Project Name.: **Phase II Bedrock - Charbert**
Project No.: **03.0032795.35**

Date Received: **06/02/2010**
Date Reported: **06/14/2010**
Work Order No.: **1006-00006**

Sample ID: **ML-5-3** Sample No.: **005**
Sample Date: **06/01/2010**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
Hexachlorobutadiene	EPA 8270	<10	10	ug/L	CMG	06/03/2010
2-Methylnaphthalene	EPA 8270	<2.0	2.0	ug/L	CMG	06/03/2010
Hexachlorocyclopentadiene	EPA 8270	<50	50	ug/L	CMG	06/03/2010
2-Chloronaphthalene	EPA 8270	<10	10	ug/L	CMG	06/03/2010
2-Nitroaniline	EPA 8270	<50	50	ug/L	CMG	06/03/2010
Dimethylphthalate	EPA 8270	<10	10	ug/L	CMG	06/03/2010
Acenaphthylene	EPA 8270	<2.0	2.0	ug/L	CMG	06/03/2010
2,6-Dinitrotoluene	EPA 8270	<10	10	ug/L	CMG	06/03/2010
3-Nitroaniline	EPA 8270	<50	50	ug/L	CMG	06/03/2010
Acenaphthene	EPA 8270	<2.0	2.0	ug/L	CMG	06/03/2010
Dibenzofuran	EPA 8270	<10	10	ug/L	CMG	06/03/2010
2,4-Dinitrotoluene	EPA 8270	<10	10	ug/L	CMG	06/03/2010
Diethylphthalate	EPA 8270	<10	10	ug/L	CMG	06/03/2010
Fluorene	EPA 8270	<2.0	2.0	ug/L	CMG	06/03/2010
4-Chlorophenyl Phenyl Ether	EPA 8270	<10	10	ug/L	CMG	06/03/2010
4-Nitroaniline	EPA 8270	<20	20	ug/L	CMG	06/03/2010
n-Nitrosodiphenylamine	EPA 8270	<10	10	ug/L	CMG	06/03/2010
4-Bromophenyl Phenyl Ether	EPA 8270	<10	10	ug/L	CMG	06/03/2010
Hexachlorobenzene	EPA 8270	<10	10	ug/L	CMG	06/03/2010
Phenanthrene	EPA 8270	<2.0	2.0	ug/L	CMG	06/03/2010
Anthracene	EPA 8270	<2.0	2.0	ug/L	CMG	06/03/2010
Carbazole	EPA 8270	<10	10	ug/L	CMG	06/03/2010
di-n-Butylphthalate	EPA 8270	<10	10	ug/L	CMG	06/03/2010
Fluoranthene	EPA 8270	<2.0	2.0	ug/L	CMG	06/03/2010
Pyrene	EPA 8270	<2.0	2.0	ug/L	CMG	06/03/2010
Butylbenzylphthalate	EPA 8270	<10	10	ug/L	CMG	06/03/2010
Benzo [a] Anthracene	EPA 8270	<2.0	2.0	ug/L	CMG	06/03/2010
3,3'-Dichlorobenzidine	EPA 8270	<10	10	ug/L	CMG	06/03/2010
Chrysene	EPA 8270	<2.0	2.0	ug/L	CMG	06/03/2010
bis(2-Ethylhexyl)Phthalate	EPA 8270	<10	10	ug/L	CMG	06/03/2010
di-n-Octylphthalate	EPA 8270	<10	10	ug/L	CMG	06/03/2010
Benzo [b] Fluoranthene	EPA 8270	<2.0	2.0	ug/L	CMG	06/03/2010
Benzo [k] Fluoranthene	EPA 8270	<2.0	2.0	ug/L	CMG	06/03/2010
Benzo [a] Pyrene	EPA 8270	<2.0	2.0	ug/L	CMG	06/03/2010
Indeno [1,2,3-cd] Pyrene	EPA 8270	<2.0	2.0	ug/L	CMG	06/03/2010

GZA GeoEnvironmental, Inc.
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ANALYTICAL REPORT

GZA GeoEnvironmental, Inc.
530 Broadway
Providence, RI 02909

Richard Carlone

Project Name.: **Phase II Bedrock - Charbert**
Project No.: **03.0032795.35**

Date Received: **06/02/2010**
Date Reported: **06/14/2010**
Work Order No.: **1006-00006**

Sample ID: **ML-5-3** Sample No.: **005**
Sample Date: **06/01/2010**

Test Performed	Method	Results		Reporting Limit	Units	Tech	Analysis Date
Dibenzo [a,h] Anthracene	EPA 8270	<2.0		2.0	ug/L	CMG	06/03/2010
Benzo [g,h,i] Perylene	EPA 8270	<2.0		2.0	ug/L	CMG	06/03/2010
Surrogates:	EPA 8270						
***2-Fluorophenol	EPA 8270	29.8		15-110	% R	CMG	06/03/2010
***Phenol-D6	EPA 8270	21.7		15-110	% R	CMG	06/03/2010
***Nitrobenzene-D5	EPA 8270	47.9		30-130	% R	CMG	06/03/2010
***2-Fluorobiphenyl	EPA 8270	49.5		30-130	% R	CMG	06/03/2010
***2,4,6-Tribromophenol	EPA 8270	48.2		15-110	% R	CMG	06/03/2010
***P-Terphenyl-D14	EPA 8270	72.3		39-120	% R	CMG	06/03/2010
Extraction	EPA 3510C	1.0			DF	JKC	06/03/2010
TOTAL PETROLEUM HYDROCARBON	D3328/EPA 8100/					KEF	06/10/2010
Hydrocarbon Content		<200		200	ug/L	KEF	06/10/2010
Surrogate:	D3328/EPA 8100						
***p-Terphenyl		30.4	*		% R	KEF	06/10/2010
Extraction	EPA 3510C	1.0			DF	JKC	06/07/2010
PRIORITY POLLUTANT METALS						LLZ	06/03/2010
Silver	EPA 6010B	<0.0050		0.0050	mg/L	LLZ	06/03/2010
Arsenic	EPA 6010B	<0.010		0.010	mg/L	LLZ	06/03/2010
Beryllium	EPA 6010B	<0.0040		0.0040	mg/L	LLZ	06/03/2010
Cadmium	EPA 6010B	<0.0050		0.0050	mg/L	LLZ	06/03/2010
Chromium	EPA 6010B	<0.0050		0.0050	mg/L	LLZ	06/03/2010
Copper	EPA 6010B	<0.015		0.015	mg/L	LLZ	06/03/2010
Mercury	EPA 7470A	<0.00020		0.00020	mg/L	GDD	06/09/2010
Nickel	EPA 6010B	<0.010		0.010	mg/L	LLZ	06/03/2010
Lead	EPA 6010B	<0.010		0.010	mg/L	LLZ	06/03/2010
Antimony	EPA 6010B	<0.025		0.025	mg/L	LLZ	06/03/2010
Selenium	EPA 6010B	<0.025		0.025	mg/L	LLZ	06/03/2010
Thallium	EPA 6010B	<0.025		0.025	mg/L	LLZ	06/03/2010
Zinc	EPA 6010B	<0.010		0.010	mg/L	LLZ	06/03/2010
Iron	EPA 6010B	1.4		0.025	mg/L	LLZ	06/03/2010
Manganese	EPA 6010B	0.29		0.0050	mg/L	LLZ	06/03/2010

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Richard Carlone

Project Name.: **Phase II Bedrock - Charbert**
Project No.: **03.0032795.35**

Date Received: **06/02/2010**
Date Reported: **06/14/2010**
Work Order No.: **1006-00006**

Sample ID: **TBLK 060110** Sample No.: **006**
Sample Date: **06/01/2010**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260				MQS	06/09/2010
Dichlorodifluoromethane	EPA 8260	<2.0	2.0	ug/L	MQS	06/09/2010
Chloromethane	EPA 8260	<2.0	2.0	ug/L	MQS	06/09/2010
Vinyl Chloride	EPA 8260	<1.0	1.0	ug/L	MQS	06/09/2010
Bromomethane	EPA 8260	<2.0	2.0	ug/L	MQS	06/09/2010
Chloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	06/09/2010
Trichlorofluoromethane	EPA 8260	<2.0	2.0	ug/L	MQS	06/09/2010
Diethylether	EPA 8260	<2.0	2.0	ug/L	MQS	06/09/2010
Acetone	EPA 8260	<10	10	ug/L	MQS	06/09/2010
1,1-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	06/09/2010
Dichloromethane	EPA 8260	<2.0	2.0	ug/L	MQS	06/09/2010
Methyl-Tert-Butyl-Ether	EPA 8260	<1.0	1.0	ug/L	MQS	06/09/2010
trans-1,2-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	06/09/2010
1,1-Dichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	06/09/2010
2-Butanone	EPA 8260	<10	10	ug/L	MQS	06/09/2010
2,2-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	06/09/2010
cis-1,2-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	06/09/2010
Chloroform	EPA 8260	<1.0	1.0	ug/L	MQS	06/09/2010
Bromochloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	06/09/2010
Tetrahydrofuran	EPA 8260	<10	10	ug/L	MQS	06/09/2010
1,1,1-Trichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	06/09/2010
1,1-Dichloropropene	EPA 8260	<1.0	1.0	ug/L	MQS	06/09/2010
Carbon Tetrachloride	EPA 8260	<1.0	1.0	ug/L	MQS	06/09/2010
1,2-Dichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	06/09/2010
Benzene	EPA 8260	<1.0	1.0	ug/L	MQS	06/09/2010
Trichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	06/09/2010
1,2-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	06/09/2010
Bromodichloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	06/09/2010
Dibromomethane	EPA 8260	<1.0	1.0	ug/L	MQS	06/09/2010
4-Methyl-2-Pentanone	EPA 8260	<10	10	ug/L	MQS	06/09/2010
cis-1,3-Dichloropropene	EPA 8260	<1.0	1.0	ug/L	MQS	06/09/2010
Toluene	EPA 8260	<1.0	1.0	ug/L	MQS	06/09/2010
trans-1,3-Dichloropropene	EPA 8260	<2.0	2.0	ug/L	MQS	06/09/2010
1,1,2-Trichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	06/09/2010
2-Hexanone	EPA 8260	<10	10	ug/L	MQS	06/09/2010

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Richard Carlone

Project Name.: **Phase II Bedrock - Charbert**
Project No.: **03.0032795.35**

Date Received: **06/02/2010**
Date Reported: **06/14/2010**
Work Order No.: **1006-00006**

Sample ID: **TBLK 060110**
Sample No.: **006**
Sample Date: **06/01/2010**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
1,3-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	06/09/2010
Tetrachloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	06/09/2010
Dibromochloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	06/09/2010
1,2-Dibromoethane (EDB)	EPA 8260	<2.0	2.0	ug/L	MQS	06/09/2010
Chlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	06/09/2010
1,1,1,2-Tetrachloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	06/09/2010
Ethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	06/09/2010
m&p-Xylene	EPA 8260	<2.0	2.0	ug/L	MQS	06/09/2010
o-Xylene	EPA 8260	<1.0	1.0	ug/L	MQS	06/09/2010
Styrene	EPA 8260	<1.0	1.0	ug/L	MQS	06/09/2010
Bromoform	EPA 8260	<2.0	2.0	ug/L	MQS	06/09/2010
Isopropylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	06/09/2010
1,1,2,2-Tetrachloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	06/09/2010
1,2,3-Trichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	06/09/2010
Bromobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	06/09/2010
N-Propylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	06/09/2010
2-Chlorotoluene	EPA 8260	<1.0	1.0	ug/L	MQS	06/09/2010
1,3,5-Trimethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	06/09/2010
4-Chlorotoluene	EPA 8260	<1.0	1.0	ug/L	MQS	06/09/2010
tert-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	06/09/2010
1,2,4-Trimethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	06/09/2010
sec-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	06/09/2010
p-Isopropyltoluene	EPA 8260	<1.0	1.0	ug/L	MQS	06/09/2010
1,3-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	06/09/2010
1,4-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	06/09/2010
n-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	06/09/2010
1,2-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	06/09/2010
1,2-Dibromo-3-Chloropropane	EPA 8260	<2.0	2.0	ug/L	MQS	06/09/2010
1,2,4-Trichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	06/09/2010
Hexachlorobutadiene	EPA 8260	<1.0	1.0	ug/L	MQS	06/09/2010
Naphthalene	EPA 8260	<2.0	2.0	ug/L	MQS	06/09/2010
1,2,3-Trichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	06/09/2010
Surrogates:	EPA 8260					
***1,2-Dichloroethane-D4	EPA 8260	92.0	70-130	% R	MQS	06/09/2010
***Toluene-D8	EPA 8260	98.9	70-130	% R	MQS	06/09/2010

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A N A L Y T I C A L R E P O R T

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Richard Carlone

Project Name.: **Phase II Bedrock - Charbert**
Project No.: **03.0032795.35**

Date Received: **06/02/2010**
Date Reported: **06/14/2010**
Work Order No.: **1006-00006**

Sample ID: **TBLK 060110**
Sample No.: **006**
Sample Date: **06/01/2010**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
***4-Bromofluorobenzene	EPA 8260	85.3	70-130	% R	MQS	06/09/2010
Preparation	EPA 5030B	1.0		CF	MQS	06/08/2010

GZA GEOENVIRONMENTAL, INC.
ENVIRONMENTAL CHEMISTRY LABORATORY
106 SOUTH ST, HOPKINTON, MA 01748
MASSACHUSETTS LABORATORY I.D. NO. MA092

EPA METHOD 6010B ANALYSIS
Metals by ICP

QUALITY CONTROL - AQUEOUS

DATE PREPARED: 6/3/2010

QC Sample	Method Blank	Lab Control Sample
Units	mg/L	% Recovery
Acceptance Limits	Results	80-120
Analyte		
Silver (Ag)	<0.0050	96.7
Aluminum (Al)	NA	NA
Arsenic (As)	<0.010	105
Boron (B)	NA	NA
Barium (Ba)	<0.0050	106
Beryllium (Be)	<0.0040	103
Calcium (Ca)	NA	NA
Cadmium (Cd)	<0.0050	108
Cobalt (Co)	<0.010	107
Chromium (Cr)	<0.0050	102
Copper (Cu)	<0.015	110
Iron (Fe)	<0.025	102
Magnesium (Mg)	NA	NA
Manganese (Mn)	<0.0050	110
Molybdenum (Mo)	NA	NA
Nickel (Ni)	<0.010	105
Lead (Pb)	<0.010	103
Antimony (Sb)	<0.025	104
Selenium (Se)	<0.025	109
Tin (Sn)	NA	NA
Titanium (Ti)	NA	NA
Thallium (Tl)	<0.025	106
Vanadium (V)	<0.0050	101
Zinc (Zn)	<0.010	110
Zirconium (Zr)	NA	NA

RPD = Relative Percent Difference
NA = Not Applicable
NC = Not Calculated
CRM = Certified Reference Material

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ENVIRONMENTAL CHEMISTRY LABORATORY
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MASSACHUSETTS LABORATORY I.D. NO. MA092

EPA METHOD 7470A ANALYSIS
Mercury by Cold Vapor Atomic Absorption

QUALITY CONTROL - AQUEOUS

Date Prepared : 06/09/10

QC Sample	Method Blank	Lab Control Sample	Lab Control Sample Duplicate	LC/LCD Difference
Units	mg/L	% Recovery	% Recovery	RPD
Acceptance Limits	Results	80-120	80-120	20%
Analyte				
Mercury (Hg)	<0.00020	92.8	94.4	1.71

RPD = Relative Percent Difference
LC concentration = 0.005 mg/L

GZA GeoEnvironmental, Inc.
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EPA Method 8270/625 Aqueous Method Blank (MB) and Laboratory Control Sample (LCS) Data

Date Extracted:	**06/03/10**	
Date Analyzed:	**6/3/2010**	
File Name:	**M5442**	
Semi-Volatile Organics	**Result**	**(ug/L)**
n-nitrosodimethylamine	ND	10
pyridine	ND	100
phenol	ND	10
bis(2-chloroethyl)ether	ND	10
2-chlorophenol	ND	10
1,3-dichlorobenzene	ND	10
1,4-dichlorobenzene	ND	10
benzyl alchohol	ND	20
1,2-dichlorobenzene	ND	10
2-methylphenol	ND	10
bis(2-chloroisopropyl)ether	ND	10
3&4-methylphenol	ND	10
n-nitrosodi-n-propylamine	ND	10
hexachloroethane	ND	10
nitrobenzene	ND	10
isophrone	ND	10
2-nitrophenol	ND	10
2,4-dimethylphenol	ND	10
benzoic acid	ND	10
bis(2-chloroethoxy)methane	ND	10
2,4-dichlorophenol	ND	10
1,2,4-trichlorobenzene	ND	10
naphthalene	ND	2.0
4-chloroaniline	ND	10
hexachlorobutadiene	ND	10
4-chloro-3-methylphenol	ND	20
2-methylnaphthalene	ND	2.0
hexachlorocyclopentadiene	ND	50
2,4,6-trichlorophenol	ND	10
2,4,5-trichlorophenol	ND	10
2-chloronaphthalene	ND	10
2-nitroaniline	ND	50
dimethylphthalate	ND	10
acenaphthylene	ND	2.0
2,6-dinitrotoluene	ND	10
3-nitroaniline	ND	50
acenaphthene	ND	2.0
2,4-dinitrophenol	ND	100
dibenzofuran	ND	10
4-nitrophenol	ND	50
2,4-dinitrotoluene	ND	10
diethylphthalate	ND	10
fluorene	ND	2.0
4-chlorophenyl phenyl ether	ND	10
4-nitroaniline	ND	20
4,6-dinitro-2-methylphenol	ND	50
n-nitrosodiphenylamine	ND	10
4-bromophenyl phenyl ether	ND	10
hexachlorobenzene	ND	10
pentachlorophenol	ND	50
phenanthrene	ND	2.0
anthracene	ND	2.0
carbazole	ND	10
di-n-butylphthalate	ND	15
fluoranthene	ND	2.0
pyrene	ND	2.0
butylbenzylphthalate	ND	10
benz [a] anthracene	ND	2.0
3,3'-dichlorobenzidine	ND	20
chrysene	ND	2.0
bis(2-ethylhexyl)phthalate	ND	10
di-n-octylphthalate	ND	10
benzo [b] fluoranthene	ND	2.0
benzo [k] fluoranthene	ND	2.0
benzo [a] pyrene	ND	2.0
indeno [1,2,3-cd] pyrene	ND	2.0
dibenz [a,h] anthracene	ND	2.0
benzo [ghi] perylene	ND	2.0

Surrogates:	**Recovery (%)**	**Acceptance Limits**
2-FLUOROPHENOL	44.1	15-110
PHENOL-D6	31.7	15-110
NITROBENZENE-D5	67.0	30-130
2-FLUOROBIPHENYL	71.1	30-130
2,4,6-TRIBROMOPHENOL	68.2	15-100
p-TERPHENYL-D14	77.2	30-130

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MA092

EPA Method 8270/625 Aqueous Method Blank (MB) and Laboratory Control Sample (LCS) Data

Laboratory Control Sample

Date Extracted:	**06/03/10**		
Date Analyzed:	**6/3/2010**		
File Name:	**M5443**		
Spike Concentration = 20ug/L	**% Recovery**	**Acceptance Limits**	**Verdict**
n-nitrosodimethylamine	56.9	40-140	ok
pyridine	42.2	40-140	ok
phenol	38.0	30-130	ok
bis(2-chloroethyl)ether	74.7	40-140	ok
2-chlorophenol	67.7	30-130	ok
1,3-dichlorobenzene	51.1	40-140	ok
1,4-dichlorobenzene	49.2	40-140	ok
benzyl alchohol	69.1	30-130	ok
1,2-dichlorobenzene	53.4	40-140	ok
2-methylphenol	75.3	30-130	ok
bis(2-chloroisopropyl)ether	79.1	40-140	ok
3&4-methylphenol	65.5	30-130	ok
n-nitrosodi-n-propylamine	72.8	40-140	ok
hexachloroethane	45.8	40-140	ok
nitrobenzene	72.1	40-140	ok
isophrone	76.9	40-140	ok
2-nitrophenol	76.0	30-130	ok
2,4-dimethylphenol	71.1	30-130	ok
benzoic acid	40.8	30-130	ok
bis(2-chloroethoxy)methane	79.7	40-140	ok
2,4-dichlorophenol	77.7	30-130	ok
1,2,4-trichlorobenzene	60.0	40-140	ok
naphthalene	71.1	40-140	ok
4-chloroaniline	79.3	40-140	ok
hexachlorobutadiene	50.1	40-140	ok
4-chloro-3-methylphenol	86.3	30-130	ok
2-methylnaphthalene	69.3	40-140	ok
hexachlorocyclopentadiene	32.3	40-140	out
2,4,6-trichlorophenol	84.5	30-130	ok
2,4,5-trichlorophenol	91.3	30-130	ok
2-chloronaphthalene	75.9	40-140	ok
2-nitroaniline	88.5	40-140	ok
dimethylphthalate	92.8	40-140	ok
acenaphthylene	83.6	40-140	ok
2,6-dinitrotoluene	91.8	40-140	ok
3-nitroaniline	81.4	40-140	ok
acenaphthene	70.8	40-140	ok
2,4-dinitrophenol	76.3	30-130	ok
dibenzofuran	73.9	40-140	ok
4-nitrophenol	31.0	30-130	ok
2,4-dinitrotoluene	81.9	40-140	ok
diethylphthalate	78.8	40-140	ok
fluorene	74.7	40-140	ok
4-chlorophenyl phenyl ether	76.7	40-140	ok
4-nitroaniline	71.2	30-130	ok
4,6-dinitro-2-methylphenol	80.7	30-130	ok
n-nitrosodiphenylamine	78.0	40-140	ok
4-bromophenyl phenyl ether	83.0	40-140	ok
hexachlorobenzene	84.2	40-140	ok
pentachlorophenol	72.4	30-130	ok
phenanthrene	76.2	40-140	ok
anthracene	78.6	40-140	ok
carbazole	72.8	40-140	ok
di-n-butylphthalate	83.3	40-140	ok
fluoranthene	83.4	40-140	ok
pyrene	81.1	40-140	ok
butylbenzylphthalate	87.7	40-140	ok
benz [a] anthracene	80.5	40-140	ok
3,3'-dichlorobenzidine	88.4	40-140	ok
chrysene	70.8	40-140	ok
bis(2-ethylhexyl)phthalate	81.0	40-140	ok
di-n-octylphthalate	83.4	40-140	ok
benzo [b] fluoranthene	71.9	40-140	ok
benzo [k] fluoranthene	75.4	40-140	ok
benzo [a] pyrene	72.0	40-140	ok
indeno [1,2,3-cd] pyrene	70.3	40-140	ok
dibenz [a,h] anthracene	70.1	40-140	ok
benzo [ghi] perylene	62.9	40-140	ok

CAM criteria allows 15% of analytes to exceed criteria.

Surrogates:	**Recovery (%)**	**Acceptance Limits**	**Verdict**
2-FLUOROPHENOL	50.1	15-110	ok
PHENOL-D6	36.0	15-110	ok
NITROBENZENE-D5	74.8	30-130	ok
2-FLUOROBIPHENYL	80.0	30-130	ok
2,4,6-TRIBROMOPHENOL	79.5	15-110	ok
p-TERPHENYL-D14	85.3	30-130	ok

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EPA Method 8260 / 524.2 Aqueous Method Blank (MB) and Laboratory Control Sample/Duplicate (LCS/LCSD) Data

Method Blank			Laboratory Control Sample				Laboratory Control Sample Duplicate					
Date Analyzed:	6/8/2010		Date Analyzed:	6/8/2010			6/8/2010					
Volatile Organics	Conc. ug/L	Acceptance Limit	Spike Concentration = 20ug/L	% Recovery	Acceptance Limits	Verdict	% Recovery	Acceptance Limits	Verdict	RPD	Limit	Verdict
dichlorodifluoromethane	< 1.0	< 1.0	dichlorodifluoromethane	110	70-130	ok	115	70-130	ok	4.05	<25	ok
chloromethane	< 1.0	< 1.0	chloromethane	118	70-130	ok	119	70-130	ok	0.80	<25	ok
vinyl chloride	< 0.5	< 0.5	vinyl chloride	110	80-120	ok	111	70-130	ok	0.28	<25	ok
bromomethane	< 1.0	< 1.0	bromomethane	113	70-130	ok	114	70-130	ok	0.79	<25	ok
chloroethane	< 0.5	< 0.5	chloroethane	102	70-130	ok	103	70-130	ok	0.42	<25	ok
trichlorofluoromethane	< 1.0	< 1.0	trichlorofluoromethane	113	70-130	ok	112	70-130	ok	0.99	<25	ok
diethyl ether	< 2.5	< 2.5	diethyl ether	90.0	70-130	ok	89.9	70-130	ok	0.11	<25	ok
acetone	< 10	< 10	acetone	97.5	70-130	ok	96.2	70-130	ok	1.28	<25	ok
1,1-dichloroethene	< 0.5	< 0.5	1,1-dichloroethene	107	80-120	ok	106	70-130	ok	1.13	<25	ok
dichloromethane	3.3	< 1.0	dichloromethane	105	70-130	ok	105	70-130	ok	0.22	<25	ok
methyl-tert-butyl-ether	< 0.5	< 0.5	methyl-tert-butyl-ether	82.0	70-130	ok	83.3	70-130	ok	1.56	<25	ok
trans-1,2-dichloroethene	< 0.5	< 0.5	trans-1,2-dichloroethene	94.1	70-130	ok	97.2	70-130	ok	3.20	<25	ok
1,1-dichloroethane	< 0.5	< 0.5	1,1-dichloroethane	102	70-130	ok	102	70-130	ok	0.08	<25	ok
2-butanone	< 10	< 10	2-butanone	92.1	70-130	ok	90.8	70-130	ok	1.41	<25	ok
2,2-dichloropropane	< 0.5	< 0.5	2,2-dichloropropane	94.9	70-130	ok	96.2	70-130	ok	1.29	<25	ok
cis-1,2-dichloroethene	< 0.5	< 0.5	cis-1,2-dichloroethene	91.8	70-130	ok	93.7	70-130	ok	2.13	<25	ok
chloroform	< 0.5	< 0.5	chloroform	89.6	80-120	ok	91.6	70-130	ok	2.20	<25	ok
bromochloromethane	< 0.5	< 0.5	bromochloromethane	91.1	70-130	ok	93.0	70-130	ok	2.03	<25	ok
tetrahydrofuran	< 5.0	< 5.0	tetrahydrofuran	97.8	70-130	ok	123	70-130	ok	22.4	<25	ok
1,1,1-trichloroethane	< 0.5	< 0.5	1,1,1-trichloroethane	94.8	70-130	ok	95.7	70-130	ok	0.90	<25	ok
1,1-dichloropropene	< 0.5	< 0.5	1,1-dichloropropene	93.5	70-130	ok	96.0	70-130	ok	2.65	<25	ok
carbon tetrachloride	< 0.5	< 0.5	carbon tetrachloride	95.6	70-130	ok	98.5	70-130	ok	2.93	<25	ok
1,2-dichloroethane	< 0.5	< 0.5	1,2-dichloroethane	97.1	70-130	ok	97.2	70-130	ok	0.06	<25	ok
benzene	< 0.5	< 0.5	benzene	93.5	70-130	ok	94.6	70-130	ok	1.14	<25	ok
trichloroethene	< 0.5	< 0.5	trichloroethene	92.1	70-130	ok	94.4	70-130	ok	2.44	<25	ok
1,2-dichloropropane	< 0.5	< 0.5	1,2-dichloropropane	96.5	80-120	ok	96.6	70-130	ok	0.12	<25	ok
bromodichloromethane	< 0.5	< 0.5	bromodichloromethane	87.3	70-130	ok	86.7	70-130	ok	0.72	<25	ok
dibromomethane	< 0.5	< 0.5	dibromomethane	86.7	70-130	ok	90.2	70-130	ok	4.04	<25	ok
4-methyl-2-pentanone	< 10	< 10	4-methyl-2-pentanone	96.5	70-130	ok	95.3	70-130	ok	1.31	<25	ok
cis-1,3-dichloropropene	< 0.5	< 0.5	cis-1,3-dichloropropene	86.9	70-130	ok	88.1	70-130	ok	1.38	<25	ok
toluene	< 0.5	< 0.5	toluene	88.9	80-120	ok	91.6	70-130	ok	3.01	<25	ok
trans-1,3-dichloropropene	< 1.0	< 1.0	trans-1,3-dichloropropene	82.2	70-130	ok	80.4	70-130	ok	2.23	<25	ok
1,1,2-trichloroethane	< 0.5	< 0.5	1,1,2-trichloroethane	106	70-130	ok	96.3	70-130	ok	9.33	<25	ok
2-hexanone	< 10	< 10	2-hexanone	110	70-130	ok	103	70-130	ok	6.48	<25	ok
1,3-dichloropropane	< 0.5	< 0.5	1,3-dichloropropane	100	70-130	ok	94.0	70-130	ok	6.72	<25	ok
tetrachloroethene	< 0.5	< 0.5	tetrachloroethene	100	70-130	ok	97.0	70-130	ok	3.12	<25	ok
dibromochloromethane	< 0.5	< 0.5	dibromochloromethane	98.1	70-130	ok	95.9	70-130	ok	2.30	<25	ok
1,2-dibromoethane (EDB)	< 1.0	< 1.0	1,2-dibromoethane (EDB)	103	70-130	ok	101	70-130	ok	2.63	<25	ok
chlorobenzene	< 0.5	< 0.5	chlorobenzene	106	70-130	ok	103	70-130	ok	3.32	<25	ok
1,1,1,2-tetrachloroethane	< 0.5	< 0.5	1,1,1,2-tetrachloroethane	98.6	70-130	ok	95.4	70-130	ok	3.28	<25	ok
ethylbenzene	< 0.5	< 0.5	ethylbenzene	107	80-120	ok	102	70-130	ok	5.03	<25	ok
1,1,2,2-tetrachloroethane	< 0.5	< 0.5	1,1,2,2-tetrachloroethane	102	70-130	ok	96.7	70-130	ok	5.40	<25	ok
m&p-xylene	< 1.0	< 1.0	m&p-xylene	104	70-130	ok	100	70-130	ok	3.91	<25	ok
o-xylene	< 0.5	< 0.5	o-xylene	100	70-130	ok	103	70-130	ok	3.14	<25	ok
styrene	< 0.5	< 0.5	styrene	106	70-130	ok	110	70-130	ok	4.19	<25	ok
bromoform	< 1.0	< 1.0	bromoform	95.5	70-130	ok	99.9	70-130	ok	4.46	<25	ok
isopropylbenzene	< 0.5	< 0.5	isopropylbenzene	106	70-130	ok	111	70-130	ok	4.41	<25	ok
1,2,3-trichloropropane	< 0.5	< 0.5	1,2,3-trichloropropane	101	70-130	ok	103	70-130	ok	1.78	<25	ok
bromobenzene	< 0.5	< 0.5	bromobenzene	98.1	70-130	ok	104	70-130	ok	6.02	<25	ok
n-propylbenzene	< 0.5	< 0.5	n-propylbenzene	107	70-130	ok	111	70-130	ok	3.55	<25	ok
2-chlorotoluene	< 0.5	< 0.5	2-chlorotoluene	102	70-130	ok	105	70-130	ok	2.48	<25	ok
1,3,5-trimethylbenzene	< 0.5	< 0.5	1,3,5-trimethylbenzene	107	70-130	ok	111	70-130	ok	4.31	<25	ok
4-chlorotoluene	< 0.5	< 0.5	4-chlorotoluene	104	70-130	ok	107	70-130	ok	2.39	<25	ok
tert-butyl-benzene	< 0.5	< 0.5	tert-butyl-benzene	107	70-130	ok	111	70-130	ok	3.64	<25	ok
1,2,4-trimethylbenzene	< 0.5	< 0.5	1,2,4-trimethylbenzene	108	70-130	ok	111	70-130	ok	2.68	<25	ok
sec-butyl-benzene	< 0.5	< 0.5	sec-butyl-benzene	112	70-130	ok	115	70-130	ok	3.01	<25	ok
p-isopropyltoluene	< 0.5	< 0.5	p-isopropyltoluene	112	70-130	ok	116	70-130	ok	2.99	<25	ok
1,3-dichlorobenzene	< 0.5	< 0.5	1,3-dichlorobenzene	102	70-130	ok	105	70-130	ok	2.26	<25	ok
1,4-dichlorobenzene	< 0.5	< 0.5	1,4-dichlorobenzene	104	70-130	ok	109	70-130	ok	4.37	<25	ok
n-butylbenzene	< 0.5	< 0.5	n-butylbenzene	113	70-130	ok	116	70-130	ok	1.97	<25	ok
1,2-dichlorobenzene	< 0.5	< 0.5	1,2-dichlorobenzene	101	70-130	ok	103	70-130	ok	2.66	<25	ok
1,2-dibromo-3-chloropropane	< 2.5	< 2.5	1,2-dibromo-3-chloropropane	89.1	70-130	ok	95.9	70-130	ok	7.27	<25	ok
1,2,4-trichlorobenzene	< 0.5	< 0.5	1,2,4-trichlorobenzene	104	70-130	ok	109	70-130	ok	5.01	<25	ok
hexachlorobutadiene	< 0.5	< 0.5	hexachlorobutadiene	104	70-130	ok	109	70-130	ok	4.28	<25	ok
naphthalene	< 1.0	< 1.0	naphthalene	99.0	70-130	ok	102	70-130	ok	3.42	<25	ok

Surrogates:	Recovery (%)	Acceptance Limits	Surrogates:	Recovery (%)	Acceptance Limits	Verdict	Recovery (%)	Acceptance Limits	Verdict	RPD	Acceptance Limits	Verdict
DIBROMOFLUOROMETHANE	106	70-130	DIBROMOFLUOROMETHANE	92.3	70-130	ok	91.2	70-130	ok	1.23	<25	ok
1,2-DICHLOROETHANE-D4	99.2	70-130	1,2-DICHLOROETHANE-D4	85.0	70-130	ok	92.2	70-130	ok	8.05	<25	ok
TOLUENE-D8	105	70-130	TOLUENE-D8	91.7	70-130	ok	94.2	70-130	ok	2.75	<25	ok
4-BROMOFLUOROBENZENE	92.1	70-130	4-BROMOFLUOROBENZENE	96.1	70-130	ok	101	70-130	ok	5.35	<25	ok
1,2-DICHLOROBENZENE-D4	86.9	70-130	1,2-DICHLOROBENZENE-D4	97.8	70-130	ok	99.2	70-130	ok	1.40	<25	ok

Instrument: HP GC/MS "S"

GZA GeoEnvironmental, Inc.
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EPA Method 8260 / 524.2 Aqueous Method Blank (MB) and Laboratory Control Sample/Duplicate (LCS/LCSD) Data

	Method Blank		Laboratory Control Sample				Laboratory Control Sample Duplicate					
Date Analyzed:	6/8/2010 2		Date Analyzed:	6/8/2010 2			6/8/2010 2					
Volatile Organics	Conc. ug/L	Acceptance Limit	Spike Concentration = 20ug/L	% Recovery	Acceptance Limits	Verdict	% Recovery	Acceptance Limits	Verdict	RPD	Limit	Verdict
dichlorodifluoromethane	< 1.0	< 1.0	dichlorodifluoromethane	104	70-130	ok	103	70-130	ok	1.02	<25	ok
chloromethane	< 1.0	< 1.0	chloromethane	126	70-130	ok	120	70-130	ok	5.02	<25	ok
vinyl chloride	< 0.5	< 0.5	vinyl chloride	115	80-120	ok	113	70-130	ok	1.97	<25	ok
bromomethane	< 1.0	< 1.0	bromomethane	118	70-130	ok	113	70-130	ok	4.68	<25	ok
chloroethane	< 0.5	< 0.5	chloroethane	110	70-130	ok	106	70-130	ok	4.34	<25	ok
trichlorofluoromethane	< 1.0	< 1.0	trichlorofluoromethane	121	70-130	ok	113	70-130	ok	6.94	<25	ok
diethyl ether	< 2.5	< 2.5	diethyl ether	91.9	70-130	ok	90.1	70-130	ok	1.96	<25	ok
acetone	< 10	< 10	acetone	103	70-130	ok	93.9	70-130	ok	9.16	<25	ok
1,1-dichloroethene	< 0.5	< 0.5	1,1-dichloroethene	117	80-120	ok	111	70-130	ok	5.62	<25	ok
dichloromethane	< 1.0	< 1.0	dichloromethane	92.8	70-130	ok	88.8	70-130	ok	4.38	<25	ok
methyl-tert-butyl-ether	< 0.5	< 0.5	methyl-tert-butyl-ether	75.5	70-130	ok	73.0	70-130	ok	3.44	<25	ok
trans-1,2-dichloroethene	< 0.5	< 0.5	trans-1,2-dichloroethene	94.7	70-130	ok	95.5	70-130	ok	0.82	<25	ok
1,1-dichloroethane	< 0.5	< 0.5	1,1-dichloroethane	104	70-130	ok	102	70-130	ok	1.75	<25	ok
2-butanone	< 10	< 10	2-butanone	89.8	70-130	ok	80.7	70-130	ok	10.6	<25	ok
2,2-dichloropropane	< 0.5	< 0.5	2,2-dichloropropane	78.1	70-130	ok	79.5	70-130	ok	1.78	<25	ok
cis-1,2-dichloroethene	< 0.5	< 0.5	cis-1,2-dichloroethene	93.7	70-130	ok	92.2	70-130	ok	1.66	<25	ok
chloroform	< 0.5	< 0.5	chloroform	91.9	80-120	ok	89.4	70-130	ok	2.78	<25	ok
bromochloromethane	< 0.5	< 0.5	bromochloromethane	87.4	70-130	ok	85.8	70-130	ok	1.91	<25	ok
tetrahydrofuran	< 5.0	< 5.0	tetrahydrofuran	99.3	70-130	ok	87.9	70-130	ok	12.3	<25	ok
1,1,1-trichloroethane	< 0.5	< 0.5	1,1,1-trichloroethane	94.8	70-130	ok	93.2	70-130	ok	1.71	<25	ok
1,1-dichloropropene	< 0.5	< 0.5	1,1-dichloropropene	96.2	70-130	ok	94.5	70-130	ok	1.79	<25	ok
carbon tetrachloride	< 0.5	< 0.5	carbon tetrachloride	99.6	70-130	ok	91.9	70-130	ok	7.97	<25	ok
1,2-dichloroethane	< 0.5	< 0.5	1,2-dichloroethane	101	70-130	ok	92.6	70-130	ok	8.85	<25	ok
benzene	< 0.5	< 0.5	benzene	94.8	70-130	ok	92.8	70-130	ok	2.13	<25	ok
trichloroethene	< 0.5	< 0.5	trichloroethene	91.3	70-130	ok	90.9	70-130	ok	0.45	<25	ok
1,2-dichloropropane	< 0.5	< 0.5	1,2-dichloropropane	96.4	80-120	ok	94.2	70-130	ok	2.35	<25	ok
bromodichloromethane	< 0.5	< 0.5	bromodichloromethane	85.7	70-130	ok	82.1	70-130	ok	4.22	<25	ok
dibromomethane	< 0.5	< 0.5	dibromomethane	78.6	70-130	ok	75.4	70-130	ok	4.04	<25	ok
4-methyl-2-pentanone	< 10	< 10	4-methyl-2-pentanone	94.6	70-130	ok	83.8	70-130	ok	12.1	<25	ok
cis-1,3-dichloropropene	< 0.5	< 0.5	cis-1,3-dichloropropene	81.2	70-130	ok	77.3	70-130	ok	4.92	<25	ok
toluene	< 0.5	< 0.5	toluene	90.6	80-120	ok	88.7	70-130	ok	2.11	<25	ok
trans-1,3-dichloropropene	< 1.0	< 1.0	trans-1,3-dichloropropene	73.7	70-130	ok	67.7	70-130	out	8.49	<25	ok
1,1,2-trichloroethane	< 0.5	< 0.5	1,1,2-trichloroethane	102	70-130	ok	96.8	70-130	ok	5.48	<25	ok
2-hexanone	< 10	< 10	2-hexanone	111	70-130	ok	101	70-130	ok	9.62	<25	ok
1,3-dichloropropane	< 0.5	< 0.5	1,3-dichloropropane	98.1	70-130	ok	94.2	70-130	ok	4.10	<25	ok
tetrachloroethene	< 0.5	< 0.5	tetrachloroethene	102	70-130	ok	105	70-130	ok	2.90	<25	ok
dibromochloromethane	< 0.5	< 0.5	dibromochloromethane	97.3	70-130	ok	93.5	70-130	ok	3.97	<25	ok
1,2-dibromoethane (EDB)	< 1.0	< 1.0	1,2-dibromoethane (EDB)	105	70-130	ok	100	70-130	ok	4.39	<25	ok
chlorobenzene	< 0.5	< 0.5	chlorobenzene	108	70-130	ok	108	70-130	ok	0.42	<25	ok
1,1,1,2-tetrachloroethane	< 0.5	< 0.5	1,1,1,2-tetrachloroethane	98.6	70-130	ok	98.4	70-130	ok	0.25	<25	ok
ethylbenzene	< 0.5	< 0.5	ethylbenzene	111	80-120	ok	110	70-130	ok	0.94	<25	ok
1,1,2,2-tetrachloroethane	< 0.5	< 0.5	1,1,2,2-tetrachloroethane	99.9	70-130	ok	94.8	70-130	ok	5.26	<25	ok
m&p-xylene	< 1.0	< 1.0	m&p-xylene	109	70-130	ok	108	70-130	ok	0.87	<25	ok
o-xylene	< 0.5	< 0.5	o-xylene	104	70-130	ok	104	70-130	ok	0.32	<25	ok
styrene	< 0.5	< 0.5	styrene	107	70-130	ok	109	70-130	ok	1.95	<25	ok
bromoform	< 1.0	< 1.0	bromoform	89.6	70-130	ok	85.7	70-130	ok	4.46	<25	ok
isopropylbenzene	< 0.5	< 0.5	isopropylbenzene	111	70-130	ok	111	70-130	ok	0.22	<25	ok
1,2,3-trichloropropane	< 0.5	< 0.5	1,2,3-trichloropropane	94.4	70-130	ok	91.7	70-130	ok	2.90	<25	ok
bromobenzene	< 0.5	< 0.5	bromobenzene	98.4	70-130	ok	96.2	70-130	ok	2.19	<25	ok
n-propylbenzene	< 0.5	< 0.5	n-propylbenzene	112	70-130	ok	113	70-130	ok	0.62	<25	ok
2-chlorotoluene	< 0.5	< 0.5	2-chlorotoluene	106	70-130	ok	106	70-130	ok	0.23	<25	ok
1,3,5-trimethylbenzene	< 0.5	< 0.5	1,3,5-trimethylbenzene	113	70-130	ok	114	70-130	ok	1.00	<25	ok
4-chlorotoluene	< 0.5	< 0.5	4-chlorotoluene	109	70-130	ok	108	70-130	ok	1.00	<25	ok
tert-butyl-benzene	< 0.5	< 0.5	tert-butyl-benzene	111	70-130	ok	112	70-130	ok	1.01	<25	ok
1,2,4-trimethylbenzene	< 0.5	< 0.5	1,2,4-trimethylbenzene	112	70-130	ok	112	70-130	ok	0.56	<25	ok
sec-butyl-benzene	< 0.5	< 0.5	sec-butyl-benzene	119	70-130	ok	119	70-130	ok	0.29	<25	ok
p-isopropyltoluene	< 0.5	< 0.5	p-isopropyltoluene	117	70-130	ok	118	70-130	ok	0.49	<25	ok
1,3-dichlorobenzene	< 0.5	< 0.5	1,3-dichlorobenzene	104	70-130	ok	102	70-130	ok	2.10	<25	ok
1,4-dichlorobenzene	< 0.5	< 0.5	1,4-dichlorobenzene	104	70-130	ok	102	70-130	ok	2.50	<25	ok
n-butylbenzene	< 0.5	< 0.5	n-butylbenzene	118	70-130	ok	118	70-130	ok	0.10	<25	ok
1,2-dichlorobenzene	< 0.5	< 0.5	1,2-dichlorobenzene	101	70-130	ok	97.6	70-130	ok	3.61	<25	ok
1,2-dibromo-3-chloropropane	< 2.5	< 2.5	1,2-dibromo-3-chloropropane	84.9	70-130	ok	80.7	70-130	ok	5.12	<25	ok
1,2,4-trichlorobenzene	< 0.5	< 0.5	1,2,4-trichlorobenzene	103	70-130	ok	98.6	70-130	ok	4.34	<25	ok
hexachlorobutadiene	< 0.5	< 0.5	hexachlorobutadiene	105	70-130	ok	107	70-130	ok	2.40	<25	ok
naphthalene	< 1.0	< 1.0	naphthalene	94.4	70-130	ok	90.4	70-130	ok	4.30	<25	ok

Surrogates:	Recovery (%)	Acceptance Limits	Surrogates:	Recovery (%)	Acceptance Limits	Verdict	Recovery (%)	Acceptance Limits	Verdict	RPD	Acceptance Limits	Verdict
DIBROMOFLUOROMETHANE	106	70-130	DIBROMOFLUOROMETHANE	91.4	70-130	ok	88.4	70-130	ok	3.28	<25	ok
1,2-DICHLOROETHANE-D4	90.7	70-130	1,2-DICHLOROETHANE-D4	88.1	70-130	ok	75.7	70-130	ok	15.2	<25	ok
TOLUENE-D8	102	70-130	TOLUENE-D8	87.0	70-130	ok	88.0	70-130	ok	1.14	<25	ok
4-BROMOFLUOROBENZENE	89.2	70-130	4-BROMOFLUOROBENZENE	91.1	70-130	ok	95.8	70-130	ok	5.07	<25	ok
1,2-DICHLOROBENZENE-D4	84.9	70-130	1,2-DICHLOROBENZENE-D4	93.7	70-130	ok	93.1	70-130	ok	0.65	<25	ok

Instrument: HP GC/MS "S"

CHAIN-OF-CUSTODY RECORD

W.O. # 1006 - 00006
(for lab use only)

Sample I.D.	Date/Time Sampled	Matrix (A=Air, S=Soil, GW=Ground W., SW=Surface W., WW=Waste W., DW=Drinking W., P=Product, Other (specify))	ANALYSIS REQUIRED: pH ⌟ Cond.	GC: Methane, Ethane, Ethene	EPA 8260	EPA 8260 – 8010 List (Chlor.)	EPA 8260 – 8021 list	EPA 8260 – 8020 List	EPA 524.2 DW VOCs	EPA 624 WW VOCs	601 ⌟ 602 WW VOCs	EPA 8270 FULL SVOCs	EPA 8270 ⌟ PAH ⌟ A ⌟ BN	EPA 625 WW SVOCs	EPA 8082–PCBs	EPA 8081–Pest	TPH–GC (Mod. 8100)	TPH–GC w/FING.	EPH (MA DEP)	VPH (MA DEP)	Metals ⌟ PPM-13 ⌟ R-8	MCP 14 Metals (MA)	Metals (List Below)**	TCLP – Specify Below	SPLP – Specify Below	EPA 300 ⌟ Cl ⌟ SO4	EPA 300 ⌟ NO2 ⌟ NO3	Total # of Cont.	Note #
ML-4-1	6/1/10 1155	GW			X							X						X			X							6	1.
ML-4-2	1305				X							X						X			X							6	2.
ML-4-3	1130				X							X						X			X							~~6~~ 5	
ML-5-2	1220				X							X						X			X							6	
ML-5-3	1530				X							X						X			X							6	
TBLK060110		H_2O			X																							3	
PRESERVATIVE (Cl - HCl, M=Methanol, N - HNO3, S - H2SO4, Na - NaOH, O - Other)*																													
CONTAINER TYPE (P-Plastic, G-Glass, V-Vial, T-Teflon, O-Other)*																													

RELINQUISHED BY: (AFFILIATION) DATE/TIME RECEIVED BY: (AFFILIATION)
6/1/10 CUSTODY SEAL

RELINQUISHED BY: (AFFILIATION) DATE/TIME RECEIVED BY: (AFFILIATION)
CS 6/2/10 0900 Bill Brecan

RELINQUISHED BY: (AFFILIATION) DATE/TIME RECEIVED BY: (AFFILIATION)
Bill Brecan 6/2/10 1025

NOTES: (Unless otherwise noted, all samples have been refrigerated to 4° C)
*Specify "Other" preservatives and containers types in this space.
1. PP-13 Metals + Fe + Mn
2. PHC FINGERPRINT + ORGANOSILOXANE

PROJECT MANAGER: RICK CARLOME EXT: PROV.

GZA GeoEnvironmental, Inc.
Laboratory Division
106 South Street
Hopkinton, MA 01748
(781) 278-4700
FAX (508) 435-9912

TURNAROUND TIME: (Standard) Rush___ Days, Approved by _____ LAB USE: TEMP. OF COOLER 3.4 °C Temp Blank___ (Cooler Air) IR#1

GZA FILE NO: 03.0032795.35 TASK NO: _____ P.O. NO. _____ 6/2/10 1030

PROJECT CHARBERT, NFA

LOCATION ALTON, RI.

COLLECTOR(S) MARK DALPE SHEET 1 OF 1

R.I. ANALYTICAL
Specialists in Environmental Services

CERTIFICATE OF ANALYSIS

GZA GeoEnvironmental Labs
Attn: Ms. Michelle Mirenda
Engineers and Scientists
106 South Street
Hopkinton, MA 01748

Date Received: 8/31/07
Date Reported: 9/5/07
P.O. #:
Work Order #: 0708-15000

DESCRIPTION: GZA FILE# 32795.12 CHARBERT BEDROCK SI - RICHMOND, RI

Subject sample(s) has/have been analyzed by our Warwick, R.I. laboratory with the attached results.

Reference: All parameters were analyzed by U.S. EPA approved methodologies.
The specific methodologies are listed in the methods column of the Certificate Of Analysis.

Data qualifiers (if present) are explained in full at the end of a given sample's analytical results.

Certification #: RI-033, MA-RI015, CT-PH-0508, ME-RI015
NH-253700 A & B, USDA S-41844

If you have any questions regarding this work, or if we may be of further assistance, please contact our customer service department.

Approved by:

Mike Hobin
Data Reporting

enc: Chain of Custody

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

GZA GeoEnvironmental Labs
Date Received: 8/31/07
Work Order #: 0708-15000

Approved by: _____
Data Reporting

Sample # 001
SAMPLE DESCRIPTION: DB-1
SAMPLE TYPE: GRAB **SAMPLE DATE/TIME:** 8/31/2007 @ 14:10

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
Volatile Organic Compounds						
Benzene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Bromobenzene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Bromochloromethane	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Bromodichloromethane	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Bromoform	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Bromomethane	<10	10	ug/l	SW-846 8260B	9/4/07	MLC
n-Butylbenzene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Sec-butylbenzene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
tert-Butylbenzene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Carbon Tetrachloride	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Chlorobenzene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Chloroethane	<5	5	ug/l	SW-846 8260B	9/4/07	MLC
Chloroform	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Chloromethane	<5	5	ug/l	SW-846 8260B	9/4/07	MLC
2-Chlorotoluene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
4-Chlorotoluene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Dibromochloromethane	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,2-Dibromo-3-Chloropropane	<2	2	ug/l	SW-846 8260B	9/4/07	MLC
1,2-Dibromoethane(EDB)	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Dibromomethane	<2	2	ug/l	SW-846 8260B	9/4/07	MLC
1,2-Dichlorobenzene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,3-Dichlorobenzene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,4-Dichlorobenzene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Dichlorodifluoromethane	<5	5	ug/l	SW-846 8260B	9/4/07	MLC
1,1-Dichloroethane	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,2-Dichloroethane	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,1-Dichloroethene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
cis-1,2-Dichloroethene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
trans-1,2-Dichloroethylene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,2-Dichloropropane	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,3-Dichloropropane	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
2,2-Dichloropropane	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,1-Dichloropropene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Ethylbenzene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Hexachlorobutadiene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Isopropylbenzene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
p-Isopropyltoluene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Methylene Chloride	<5	5	ug/l	SW-846 8260B	9/4/07	MLC
Naphthalene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
n-Propylbenzene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

GZA GeoEnvironmental Labs
Date Received: 8/31/07
Work Order #: 0708-15000

Approved by: _____
Data Reporting

Sample # 001
SAMPLE DESCRIPTION: DB-1
SAMPLE TYPE: GRAB **SAMPLE DATE/TIME:** 8/31/2007 @ 14:10

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
Styrene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,1,1,2-Tetrachloroethane	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,1,2,2-Tetrachloroethane	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Tetrachloroethene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Toluene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,2,3-Trichlorobenzene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,2,4-Trichlorobenzene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,1,1-Trichloroethane	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,1,2-Trichloroethane	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Trichloroethene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Trichlorofluoromethane	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,2,3-Trichloropropane	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,2,4-Trimethylbenzene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,3,5-Trimethylbenzene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Vinyl Chloride	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
o-Xylene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
m,p-Xylene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Total Xylene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Methyl Tertiary Butyl Ether (MTBE)	<2	2	ug/l	SW-846 8260B	9/4/07	MLC
Surrogates			RANGE	SW-846 8260B	9/4/07	MLC
Dibromofluoromethane	102		86-118%	SW-846 8260B	9/4/07	MLC
Toluene-d8	100		88-110%	SW-846 8260B	9/4/07	MLC
4-Bromofluorobenzene	102		86-115%	SW-846 8260B	9/4/07	MLC
1,2 Dichloroethane-d4	103		80-120%	SW-846 8260B	9/4/07	MLC

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

GZA GeoEnvironmental Labs
Date Received: 8/31/07
Work Order #: 0708-15000

Approved by: _____
Data Reporting

Sample # 002
SAMPLE DESCRIPTION: DB-2
SAMPLE TYPE: GRAB **SAMPLE DATE/TIME:** 8/31/2007 @ 14:15

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
Volatile Organic Compounds						
Benzene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Bromobenzene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Bromochloromethane	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Bromodichloromethane	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Bromoform	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Bromomethane	<10	10	ug/l	SW-846 8260B	9/4/07	MLC
n-Butylbenzene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Sec-butylbenzene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
tert-Butylbenzene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Carbon Tetrachloride	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Chlorobenzene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Chloroethane	<5	5	ug/l	SW-846 8260B	9/4/07	MLC
Chloroform	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Chloromethane	<5	5	ug/l	SW-846 8260B	9/4/07	MLC
2-Chlorotoluene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
4-Chlorotoluene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Dibromochloromethane	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,2-Dibromo-3-Chloropropane	<2	2	ug/l	SW-846 8260B	9/4/07	MLC
1,2-Dibromoethane(EDB)	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Dibromomethane	<2	2	ug/l	SW-846 8260B	9/4/07	MLC
1,2-Dichlorobenzene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,3-Dichlorobenzene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,4-Dichlorobenzene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Dichlorodifluoromethane	<5	5	ug/l	SW-846 8260B	9/4/07	MLC
1,1-Dichloroethane	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,2-Dichloroethane	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,1-Dichloroethene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
cis-1,2-Dichloroethene	1	1	ug/l	SW-846 8260B	9/4/07	MLC
trans-1,2-Dichloroethylene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,2-Dichloropropane	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,3-Dichloropropane	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
2,2-Dichloropropane	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,1-Dichloropropene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Ethylbenzene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Hexachlorobutadiene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Isopropylbenzene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
p-Isopropyltoluene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Methylene Chloride	<5	5	ug/l	SW-846 8260B	9/4/07	MLC
Naphthalene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
n-Propylbenzene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

GZA GeoEnvironmental Labs
Date Received: 8/31/07
Work Order #: 0708-15000

Approved by: _____
Data Reporting

Sample # 002
SAMPLE DESCRIPTION: DB-2
SAMPLE TYPE: GRAB **SAMPLE DATE/TIME:** 8/31/2007 @ 14:15

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
Styrene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,1,1,2-Tetrachloroethane	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,1,2,2-Tetrachloroethane	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Tetrachloroethene	3	1	ug/l	SW-846 8260B	9/4/07	MLC
Toluene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,2,3-Trichlorobenzene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,2,4-Trichlorobenzene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,1,1-Trichloroethane	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,1,2-Trichloroethane	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Trichloroethene	2	1	ug/l	SW-846 8260B	9/4/07	MLC
Trichlorofluoromethane	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,2,3-Trichloropropane	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,2,4-Trimethylbenzene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,3,5-Trimethylbenzene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Vinyl Chloride	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
o-Xylene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
m,p-Xylene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Total Xylene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Methyl Tertiary Butyl Ether (MTBE)	<2	2	ug/l	SW-846 8260B	9/4/07	MLC
Surrogates			RANGE	SW-846 8260B	9/4/07	MLC
Dibromofluoromethane	101		86-118%	SW-846 8260B	9/4/07	MLC
Toluene-d8	102		88-110%	SW-846 8260B	9/4/07	MLC
4-Bromofluorobenzene	101		86-115%	SW-846 8260B	9/4/07	MLC
1,2 Dichloroethane-d4	96		80-120%	SW-846 8260B	9/4/07	MLC

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

GZA GeoEnvironmental Labs
Date Received: 8/31/07
Work Order #: 0708-15000

Approved by: _____
Data Reporting

Sample # 003
SAMPLE DESCRIPTION: DB-3
SAMPLE TYPE: GRAB **SAMPLE DATE/TIME:** 8/31/2007 @ 14:20

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
Volatile Organic Compounds						
Benzene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Bromobenzene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Bromochloromethane	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Bromodichloromethane	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Bromoform	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Bromomethane	<10	10	ug/l	SW-846 8260B	9/4/07	MLC
n-Butylbenzene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Sec-butylbenzene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
tert-Butylbenzene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Carbon Tetrachloride	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Chlorobenzene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Chloroethane	<5	5	ug/l	SW-846 8260B	9/4/07	MLC
Chloroform	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Chloromethane	<5	5	ug/l	SW-846 8260B	9/4/07	MLC
2-Chlorotoluene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
4-Chlorotoluene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Dibromochloromethane	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,2-Dibromo-3-Chloropropane	<2	2	ug/l	SW-846 8260B	9/4/07	MLC
1,2-Dibromoethane(EDB)	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Dibromomethane	<2	2	ug/l	SW-846 8260B	9/4/07	MLC
1,2-Dichlorobenzene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,3-Dichlorobenzene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,4-Dichlorobenzene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Dichlorodifluoromethane	<5	5	ug/l	SW-846 8260B	9/4/07	MLC
1,1-Dichloroethane	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,2-Dichloroethane	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,1-Dichloroethene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
cis-1,2-Dichloroethene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
trans-1,2-Dichloroethylene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,2-Dichloropropane	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,3-Dichloropropane	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
2,2-Dichloropropane	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,1-Dichloropropene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Ethylbenzene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Hexachlorobutadiene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Isopropylbenzene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
p-Isopropyltoluene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Methylene Chloride	<5	5	ug/l	SW-846 8260B	9/4/07	MLC
Naphthalene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
n-Propylbenzene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

GZA GeoEnvironmental Labs
Date Received: 8/31/07
Work Order #: 0708-15000

Approved by: _____
Data Reporting

Sample # 003
SAMPLE DESCRIPTION: DB-3
SAMPLE TYPE: GRAB **SAMPLE DATE/TIME:** 8/31/2007 @ 14:20

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
Styrene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,1,1,2-Tetrachloroethane	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,1,2,2-Tetrachloroethane	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Tetrachloroethene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Toluene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,2,3-Trichlorobenzene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,2,4-Trichlorobenzene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,1,1-Trichloroethane	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,1,2-Trichloroethane	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Trichloroethene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Trichlorofluoromethane	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,2,3-Trichloropropane	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,2,4-Trimethylbenzene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,3,5-Trimethylbenzene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Vinyl Chloride	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
o-Xylene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
m,p-Xylene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Total Xylene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Methyl Tertiary Butyl Ether (MTBE)	<2	2	ug/l	SW-846 8260B	9/4/07	MLC
Surrogates			RANGE	SW-846 8260B	9/4/07	MLC
Dibromofluoromethane	102		86-118%	SW-846 8260B	9/4/07	MLC
Toluene-d8	100		88-110%	SW-846 8260B	9/4/07	MLC
4-Bromofluorobenzene	101		86-115%	SW-846 8260B	9/4/07	MLC
1,2 Dichloroethane-d4	98		80-120%	SW-846 8260B	9/4/07	MLC

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

GZA GeoEnvironmental Labs
Date Received: 8/31/07
Work Order #: 0708-15000

Approved by: _____
Data Reporting

Sample # 004
SAMPLE DESCRIPTION: DB-4
SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 8/31/2007 @ 14:25

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
Volatile Organic Compounds						
Benzene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Bromobenzene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Bromochloromethane	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Bromodichloromethane	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Bromoform	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Bromomethane	<10	10	ug/l	SW-846 8260B	9/4/07	MLC
n-Butylbenzene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Sec-butylbenzene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
tert-Butylbenzene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Carbon Tetrachloride	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Chlorobenzene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Chloroethane	<5	5	ug/l	SW-846 8260B	9/4/07	MLC
Chloroform	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Chloromethane	<5	5	ug/l	SW-846 8260B	9/4/07	MLC
2-Chlorotoluene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
4-Chlorotoluene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Dibromochloromethane	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,2-Dibromo-3-Chloropropane	<2	2	ug/l	SW-846 8260B	9/4/07	MLC
1,2-Dibromoethane(EDB)	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Dibromomethane	<2	2	ug/l	SW-846 8260B	9/4/07	MLC
1,2-Dichlorobenzene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,3-Dichlorobenzene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,4-Dichlorobenzene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Dichlorodifluoromethane	<5	5	ug/l	SW-846 8260B	9/4/07	MLC
1,1-Dichloroethane	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,2-Dichloroethane	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,1-Dichloroethene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
cis-1,2-Dichloroethene	5	1	ug/l	SW-846 8260B	9/4/07	MLC
trans-1,2-Dichloroethylene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,2-Dichloropropane	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,3-Dichloropropane	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
2,2-Dichloropropane	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,1-Dichloropropene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Ethylbenzene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Hexachlorobutadiene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Isopropylbenzene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
p-Isopropyltoluene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Methylene Chloride	<5	5	ug/l	SW-846 8260B	9/4/07	MLC
Naphthalene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
n-Propylbenzene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

GZA GeoEnvironmental Labs
Date Received: 8/31/07
Work Order #: 0708-15000

Approved by: _____
Data Reporting

Sample # 004
SAMPLE DESCRIPTION: DB-4
SAMPLE TYPE: GRAB **SAMPLE DATE/TIME:** 8/31/2007 @ 14:25

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
Styrene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,1,1,2-Tetrachloroethane	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,1,2,2-Tetrachloroethane	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Tetrachloroethene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Toluene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,2,3-Trichlorobenzene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,2,4-Trichlorobenzene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,1,1-Trichloroethane	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,1,2-Trichloroethane	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Trichloroethene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Trichlorofluoromethane	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,2,3-Trichloropropane	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,2,4-Trimethylbenzene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,3,5-Trimethylbenzene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Vinyl Chloride	21	1	ug/l	SW-846 8260B	9/4/07	MLC
o-Xylene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
m,p-Xylene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Total Xylene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Methyl Tertiary Butyl Ether (MTBE)	<2	2	ug/l	SW-846 8260B	9/4/07	MLC
Surrogates			RANGE	SW-846 8260B	9/4/07	MLC
Dibromofluoromethane	87		86-118%	SW-846 8260B	9/4/07	MLC
Toluene-d8	101		88-110%	SW-846 8260B	9/4/07	MLC
4-Bromofluorobenzene	102		86-115%	SW-846 8260B	9/4/07	MLC
1,2 Dichloroethane-d4	102		80-120%	SW-846 8260B	9/4/07	MLC

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

GZA GeoEnvironmental Labs
Date Received: 8/31/07
Work Order #: 0708-15000

Approved by: _____
Data Reporting

Sample # 005
SAMPLE DESCRIPTION: DB-5
SAMPLE TYPE: GRAB **SAMPLE DATE/TIME:** 8/31/2007 @ 14:30

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
Volatile Organic Compounds						
Benzene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Bromobenzene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Bromochloromethane	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Bromodichloromethane	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Bromoform	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Bromomethane	<10	10	ug/l	SW-846 8260B	9/4/07	MLC
n-Butylbenzene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Sec-butylbenzene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
tert-Butylbenzene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Carbon Tetrachloride	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Chlorobenzene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Chloroethane	<5	5	ug/l	SW-846 8260B	9/4/07	MLC
Chloroform	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Chloromethane	<5	5	ug/l	SW-846 8260B	9/4/07	MLC
2-Chlorotoluene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
4-Chlorotoluene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Dibromochloromethane	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,2-Dibromo-3-Chloropropane	<2	2	ug/l	SW-846 8260B	9/4/07	MLC
1,2-Dibromoethane(EDB)	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Dibromomethane	<2	2	ug/l	SW-846 8260B	9/4/07	MLC
1,2-Dichlorobenzene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,3-Dichlorobenzene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,4-Dichlorobenzene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Dichlorodifluoromethane	<5	5	ug/l	SW-846 8260B	9/4/07	MLC
1,1-Dichloroethane	1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,2-Dichloroethane	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,1-Dichloroethene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
cis-1,2-Dichloroethene	58	1	ug/l	SW-846 8260B	9/4/07	MLC
trans-1,2-Dichloroethylene	1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,2-Dichloropropane	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,3-Dichloropropane	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
2,2-Dichloropropane	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,1-Dichloropropene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Ethylbenzene	1	1	ug/l	SW-846 8260B	9/4/07	MLC
Hexachlorobutadiene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Isopropylbenzene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
p-Isopropyltoluene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Methylene Chloride	<5	5	ug/l	SW-846 8260B	9/4/07	MLC
Naphthalene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
n-Propylbenzene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

GZA GeoEnvironmental Labs
Date Received: 8/31/07
Work Order #: 0708-15000

Approved by: _____
Data Reporting

Sample # 005
SAMPLE DESCRIPTION: DB-5
SAMPLE TYPE: GRAB **SAMPLE DATE/TIME:** 8/31/2007 @ 14:30

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
Styrene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,1,1,2-Tetrachloroethane	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,1,2,2-Tetrachloroethane	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Tetrachloroethene	6	1	ug/l	SW-846 8260B	9/4/07	MLC
Toluene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,2,3-Trichlorobenzene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,2,4-Trichlorobenzene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,1,1-Trichloroethane	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,1,2-Trichloroethane	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Trichloroethene	3	1	ug/l	SW-846 8260B	9/4/07	MLC
Trichlorofluoromethane	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,2,3-Trichloropropane	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,2,4-Trimethylbenzene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,3,5-Trimethylbenzene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Vinyl Chloride	49	1	ug/l	SW-846 8260B	9/4/07	MLC
o-Xylene	1	1	ug/l	SW-846 8260B	9/4/07	MLC
m,p-Xylene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Total Xylene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Methyl Tertiary Butyl Ether (MTBE)	<2	2	ug/l	SW-846 8260B	9/4/07	MLC
Surrogates			RANGE	SW-846 8260B	9/4/07	MLC
Dibromofluoromethane	105		86-118%	SW-846 8260B	9/4/07	MLC
Toluene-d8	103		88-110%	SW-846 8260B	9/4/07	MLC
4-Bromofluorobenzene	103		86-115%	SW-846 8260B	9/4/07	MLC
1,2 Dichloroethane-d4	103		80-120%	SW-846 8260B	9/4/07	MLC

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

GZA GeoEnvironmental Labs
Date Received: 8/31/07
Work Order #: 0708-15000

Approved by: _____
Data Reporting

Sample # 006
SAMPLE DESCRIPTION: DB-6
SAMPLE TYPE: GRAB **SAMPLE DATE/TIME:** 8/31/2007 @ 14:35

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
Volatile Organic Compounds						
Benzene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Bromobenzene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Bromochloromethane	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Bromodichloromethane	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Bromoform	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Bromomethane	<10	10	ug/l	SW-846 8260B	9/4/07	MLC
n-Butylbenzene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Sec-butylbenzene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
tert-Butylbenzene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Carbon Tetrachloride	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Chlorobenzene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Chloroethane	<5	5	ug/l	SW-846 8260B	9/4/07	MLC
Chloroform	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Chloromethane	<5	5	ug/l	SW-846 8260B	9/4/07	MLC
2-Chlorotoluene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
4-Chlorotoluene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Dibromochloromethane	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,2-Dibromo-3-Chloropropane	<2	2	ug/l	SW-846 8260B	9/4/07	MLC
1,2-Dibromoethane(EDB)	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Dibromomethane	<2	2	ug/l	SW-846 8260B	9/4/07	MLC
1,2-Dichlorobenzene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,3-Dichlorobenzene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,4-Dichlorobenzene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Dichlorodifluoromethane	<5	5	ug/l	SW-846 8260B	9/4/07	MLC
1,1-Dichloroethane	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,2-Dichloroethane	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,1-Dichloroethene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
cis-1,2-Dichloroethene	9	1	ug/l	SW-846 8260B	9/4/07	MLC
trans-1,2-Dichloroethylene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,2-Dichloropropane	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,3-Dichloropropane	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
2,2-Dichloropropane	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,1-Dichloropropene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Ethylbenzene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Hexachlorobutadiene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Isopropylbenzene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
p-Isopropyltoluene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Methylene Chloride	<5	5	ug/l	SW-846 8260B	9/4/07	MLC
Naphthalene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
n-Propylbenzene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

GZA GeoEnvironmental Labs
Date Received: 8/31/07
Work Order #: 0708-15000

Approved by: _____
Data Reporting

Sample # 006
SAMPLE DESCRIPTION: DB-6
SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 8/31/2007 @ 14:35

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
Styrene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,1,1,2-Tetrachloroethane	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,1,2,2-Tetrachloroethane	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Tetrachloroethene	1	1	ug/l	SW-846 8260B	9/4/07	MLC
Toluene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,2,3-Trichlorobenzene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,2,4-Trichlorobenzene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,1,1-Trichloroethane	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,1,2-Trichloroethane	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Trichloroethene	11	1	ug/l	SW-846 8260B	9/4/07	MLC
Trichlorofluoromethane	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,2,3-Trichloropropane	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,2,4-Trimethylbenzene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,3,5-Trimethylbenzene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Vinyl Chloride	19	1	ug/l	SW-846 8260B	9/4/07	MLC
o-Xylene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
m,p-Xylene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Total Xylene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Methyl Tertiary Butyl Ether (MTBE)	<2	2	ug/l	SW-846 8260B	9/4/07	MLC
Surrogates			RANGE	SW-846 8260B	9/4/07	MLC
Dibromofluoromethane	102		86-118%	SW-846 8260B	9/4/07	MLC
Toluene-d8	101		88-110%	SW-846 8260B	9/4/07	MLC
4-Bromofluorobenzene	103		86-115%	SW-846 8260B	9/4/07	MLC
1,2 Dichloroethane-d4	98		80-120%	SW-846 8260B	9/4/07	MLC

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

GZA GeoEnvironmental Labs
Date Received: 8/31/07
Work Order #: 0708-15000

Approved by: _____
Data Reporting

Sample # 007
SAMPLE DESCRIPTION: DB-7
SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 8/31/2007 @ 15:15

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
Volatile Organic Compounds						
Benzene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Bromobenzene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Bromochloromethane	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Bromodichloromethane	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Bromoform	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Bromomethane	<10	10	ug/l	SW-846 8260B	9/4/07	MLC
n-Butylbenzene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Sec-butylbenzene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
tert-Butylbenzene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Carbon Tetrachloride	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Chlorobenzene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Chloroethane	<5	5	ug/l	SW-846 8260B	9/4/07	MLC
Chloroform	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Chloromethane	<5	5	ug/l	SW-846 8260B	9/4/07	MLC
2-Chlorotoluene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
4-Chlorotoluene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Dibromochloromethane	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,2-Dibromo-3-Chloropropane	<2	2	ug/l	SW-846 8260B	9/4/07	MLC
1,2-Dibromoethane(EDB)	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Dibromomethane	<2	2	ug/l	SW-846 8260B	9/4/07	MLC
1,2-Dichlorobenzene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,3-Dichlorobenzene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,4-Dichlorobenzene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Dichlorodifluoromethane	<5	5	ug/l	SW-846 8260B	9/4/07	MLC
1,1-Dichloroethane	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,2-Dichloroethane	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,1-Dichloroethene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
cis-1,2-Dichloroethene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
trans-1,2-Dichloroethylene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,2-Dichloropropane	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,3-Dichloropropane	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
2,2-Dichloropropane	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,1-Dichloropropene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Ethylbenzene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Hexachlorobutadiene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Isopropylbenzene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
p-Isopropyltoluene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Methylene Chloride	<5	5	ug/l	SW-846 8260B	9/4/07	MLC
Naphthalene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
n-Propylbenzene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

GZA GeoEnvironmental Labs
Date Received: 8/31/07
Work Order #: 0708-15000

Approved by: _____
Data Reporting

Sample # 007
SAMPLE DESCRIPTION: DB-7
SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 8/31/2007 @ 15:15

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
Styrene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,1,1,2-Tetrachloroethane	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,1,2,2-Tetrachloroethane	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Tetrachloroethene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Toluene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,2,3-Trichlorobenzene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,2,4-Trichlorobenzene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,1,1-Trichloroethane	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,1,2-Trichloroethane	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Trichloroethene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Trichlorofluoromethane	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,2,3-Trichloropropane	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,2,4-Trimethylbenzene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,3,5-Trimethylbenzene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Vinyl Chloride	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
o-Xylene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
m,p-Xylene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Total Xylene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Methyl Tertiary Butyl Ether (MTBE)	<2	2	ug/l	SW-846 8260B	9/4/07	MLC
Surrogates			RANGE	SW-846 8260B	9/4/07	MLC
Dibromofluoromethane	104		86-118%	SW-846 8260B	9/4/07	MLC
Toluene-d8	102		88-110%	SW-846 8260B	9/4/07	MLC
4-Bromofluorobenzene	101		86-115%	SW-846 8260B	9/4/07	MLC
1,2 Dichloroethane-d4	101		80-120%	SW-846 8260B	9/4/07	MLC

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

GZA GeoEnvironmental Labs
Date Received: 8/31/07
Work Order #: 0708-15000

Approved by: _____
Data Reporting

Sample # 008
SAMPLE DESCRIPTION: DB-8
SAMPLE TYPE: GRAB **SAMPLE DATE/TIME:** 8/31/2007 @ 14:45

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
Volatile Organic Compounds						
Benzene	1	1	ug/l	SW-846 8260B	9/4/07	MLC
Bromobenzene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Bromochloromethane	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Bromodichloromethane	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Bromoform	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Bromomethane	<10	10	ug/l	SW-846 8260B	9/4/07	MLC
n-Butylbenzene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Sec-butylbenzene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
tert-Butylbenzene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Carbon Tetrachloride	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Chlorobenzene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Chloroethane	<5	5	ug/l	SW-846 8260B	9/4/07	MLC
Chloroform	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Chloromethane	<5	5	ug/l	SW-846 8260B	9/4/07	MLC
2-Chlorotoluene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
4-Chlorotoluene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Dibromochloromethane	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,2-Dibromo-3-Chloropropane	<2	2	ug/l	SW-846 8260B	9/4/07	MLC
1,2-Dibromoethane(EDB)	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Dibromomethane	<2	2	ug/l	SW-846 8260B	9/4/07	MLC
1,2-Dichlorobenzene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,3-Dichlorobenzene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,4-Dichlorobenzene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Dichlorodifluoromethane	<5	5	ug/l	SW-846 8260B	9/4/07	MLC
1,1-Dichloroethane	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,2-Dichloroethane	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,1-Dichloroethene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
cis-1,2-Dichloroethene	1	1	ug/l	SW-846 8260B	9/4/07	MLC
trans-1,2-Dichloroethylene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,2-Dichloropropane	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,3-Dichloropropane	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
2,2-Dichloropropane	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,1-Dichloropropene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Ethylbenzene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Hexachlorobutadiene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Isopropylbenzene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
p-Isopropyltoluene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Methylene Chloride	<5	5	ug/l	SW-846 8260B	9/4/07	MLC
Naphthalene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
n-Propylbenzene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

GZA GeoEnvironmental Labs
Date Received: 8/31/07
Work Order #: 0708-15000

Approved by: _____
Data Reporting

Sample # 008
SAMPLE DESCRIPTION: DB-8
SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 8/31/2007 @ 14:45

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
Styrene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,1,1,2-Tetrachloroethane	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,1,2,2-Tetrachloroethane	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Tetrachloroethene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Toluene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,2,3-Trichlorobenzene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,2,4-Trichlorobenzene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,1,1-Trichloroethane	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,1,2-Trichloroethane	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Trichloroethene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Trichlorofluoromethane	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,2,3-Trichloropropane	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,2,4-Trimethylbenzene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,3,5-Trimethylbenzene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Vinyl Chloride	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
o-Xylene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
m,p-Xylene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Total Xylene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Methyl Tertiary Butyl Ether (MTBE)	<2	2	ug/l	SW-846 8260B	9/4/07	MLC
Surrogates			RANGE	SW-846 8260B	9/4/07	MLC
Dibromofluoromethane	102		86-118%	SW-846 8260B	9/4/07	MLC
Toluene-d8	101		88-110%	SW-846 8260B	9/4/07	MLC
4-Bromofluorobenzene	102		86-115%	SW-846 8260B	9/4/07	MLC
1,2 Dichloroethane-d4	102		80-120%	SW-846 8260B	9/4/07	MLC

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

GZA GeoEnvironmental Labs
Date Received: 8/31/07
Work Order #: 0708-15000

Approved by: _____
Data Reporting

Sample # 009
SAMPLE DESCRIPTION: DB-9
SAMPLE TYPE: GRAB **SAMPLE DATE/TIME:** 8/31/2007 @ 14:45

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
Volatile Organic Compounds						
Benzene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Bromobenzene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Bromochloromethane	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Bromodichloromethane	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Bromoform	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Bromomethane	<10	10	ug/l	SW-846 8260B	9/4/07	MLC
n-Butylbenzene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Sec-butylbenzene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
tert-Butylbenzene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Carbon Tetrachloride	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Chlorobenzene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Chloroethane	<5	5	ug/l	SW-846 8260B	9/4/07	MLC
Chloroform	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Chloromethane	<5	5	ug/l	SW-846 8260B	9/4/07	MLC
2-Chlorotoluene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
4-Chlorotoluene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Dibromochloromethane	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,2-Dibromo-3-Chloropropane	<2	2	ug/l	SW-846 8260B	9/4/07	MLC
1,2-Dibromoethane(EDB)	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Dibromomethane	<2	2	ug/l	SW-846 8260B	9/4/07	MLC
1,2-Dichlorobenzene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,3-Dichlorobenzene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,4-Dichlorobenzene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Dichlorodifluoromethane	<5	5	ug/l	SW-846 8260B	9/4/07	MLC
1,1-Dichloroethane	1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,2-Dichloroethane	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,1-Dichloroethene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
cis-1,2-Dichloroethene	63	1	ug/l	SW-846 8260B	9/4/07	MLC
trans-1,2-Dichloroethylene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,2-Dichloropropane	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,3-Dichloropropane	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
2,2-Dichloropropane	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,1-Dichloropropene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Ethylbenzene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Hexachlorobutadiene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Isopropylbenzene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
p-Isopropyltoluene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Methylene Chloride	<5	5	ug/l	SW-846 8260B	9/4/07	MLC
Naphthalene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
n-Propylbenzene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

GZA GeoEnvironmental Labs
Date Received: 8/31/07
Work Order #: 0708-15000

Approved by: _____
Data Reporting

Sample # 009
SAMPLE DESCRIPTION: DB-9
SAMPLE TYPE: GRAB **SAMPLE DATE/TIME:** 8/31/2007 @ 14:45

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
Styrene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,1,1,2-Tetrachloroethane	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,1,2,2-Tetrachloroethane	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Tetrachloroethene	8	1	ug/l	SW-846 8260B	9/4/07	MLC
Toluene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,2,3-Trichlorobenzene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,2,4-Trichlorobenzene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,1,1-Trichloroethane	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,1,2-Trichloroethane	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Trichloroethene	3	1	ug/l	SW-846 8260B	9/4/07	MLC
Trichlorofluoromethane	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,2,3-Trichloropropane	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,2,4-Trimethylbenzene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,3,5-Trimethylbenzene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Vinyl Chloride	35	1	ug/l	SW-846 8260B	9/4/07	MLC
o-Xylene	1	1	ug/l	SW-846 8260B	9/4/07	MLC
m,p-Xylene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Total Xylene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Methyl Tertiary Butyl Ether (MTBE)	<2	2	ug/l	SW-846 8260B	9/4/07	MLC
Surrogates			RANGE	SW-846 8260B	9/4/07	MLC
Dibromofluoromethane	104		86-118%	SW-846 8260B	9/4/07	MLC
Toluene-d8	103		88-110%	SW-846 8260B	9/4/07	MLC
4-Bromofluorobenzene	106		86-115%	SW-846 8260B	9/4/07	MLC
1,2 Dichloroethane-d4	103		80-120%	SW-846 8260B	9/4/07	MLC

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

GZA GeoEnvironmental Labs
Date Received: 8/31/07
Work Order #: 0708-15000

Approved by: _____
Data Reporting

Sample # 010
SAMPLE DESCRIPTION: TB083107
SAMPLE TYPE: GRAB **SAMPLE DATE/TIME:** 8/31/2007

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
Volatile Organic Compounds						
Benzene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Bromobenzene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Bromochloromethane	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Bromodichloromethane	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Bromoform	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Bromomethane	<10	10	ug/l	SW-846 8260B	9/4/07	MLC
n-Butylbenzene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Sec-butylbenzene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
tert-Butylbenzene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Carbon Tetrachloride	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Chlorobenzene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Chloroethane	<5	5	ug/l	SW-846 8260B	9/4/07	MLC
Chloroform	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Chloromethane	<5	5	ug/l	SW-846 8260B	9/4/07	MLC
2-Chlorotoluene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
4-Chlorotoluene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Dibromochloromethane	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,2-Dibromo-3-Chloropropane	<2	2	ug/l	SW-846 8260B	9/4/07	MLC
1,2-Dibromoethane(EDB)	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Dibromomethane	<2	2	ug/l	SW-846 8260B	9/4/07	MLC
1,2-Dichlorobenzene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,3-Dichlorobenzene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,4-Dichlorobenzene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Dichlorodifluoromethane	<5	5	ug/l	SW-846 8260B	9/4/07	MLC
1,1-Dichloroethane	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,2-Dichloroethane	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,1-Dichloroethene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
cis-1,2-Dichloroethene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
trans-1,2-Dichloroethylene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,2-Dichloropropane	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,3-Dichloropropane	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
2,2-Dichloropropane	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,1-Dichloropropene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Ethylbenzene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Hexachlorobutadiene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Isopropylbenzene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
p-Isopropyltoluene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Methylene Chloride	<5	5	ug/l	SW-846 8260B	9/4/07	MLC
Naphthalene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
n-Propylbenzene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

GZA GeoEnvironmental Labs
Date Received: 8/31/07
Work Order #: 0708-15000

Approved by: _____
Data Reporting

Sample # 010
SAMPLE DESCRIPTION: TB083107
SAMPLE TYPE: GRAB **SAMPLE DATE/TIME:** 8/31/2007

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
Styrene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,1,1,2-Tetrachloroethane	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,1,2,2-Tetrachloroethane	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Tetrachloroethene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Toluene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,2,3-Trichlorobenzene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,2,4-Trichlorobenzene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,1,1-Trichloroethane	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,1,2-Trichloroethane	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Trichloroethene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Trichlorofluoromethane	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,2,3-Trichloropropane	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,2,4-Trimethylbenzene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
1,3,5-Trimethylbenzene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Vinyl Chloride	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
o-Xylene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
m,p-Xylene	<1	1	ug/l	SW-846 8260B	9/4/07	MLC
Methyl Tertiary Butyl Ether (MTBE)	<2	2	ug/l	SW-846 8260B	9/4/07	MLC
Surrogates			RANGE	SW-846 8260B	9/4/07	MLC
Dibromofluoromethane	103		86-118%	SW-846 8260B	9/4/07	MLC
Toluene-d8	100		88-110%	SW-846 8260B	9/4/07	MLC
4-Bromofluorobenzene	103		86-115%	SW-846 8260B	9/4/07	MLC
1,2 Dichloroethane-d4	100		80-120%	SW-846 8260B	9/4/07	MLC

CHAIN-OF-CUSTODY RECORD

W.O. # _____ (for lab use only)

Sample I.D.	Date/Time Sampled	Matrix (A=Air, S=Soil, GW=Ground W., SW=Surface W., WW=Waste W., DW=Drinking W., P=Product, Other (specify))	ANALYSIS REQUIRED: ☐ pH ☐ Cond.	GC Methane, Ethane, Ethene	EPA 8260	EPA 8260 – 8010 List (Chlor.)	EPA 8260 – 8021 list	EPA 8021 – 8020 List (BTE)	EPA 524.2 DW VOCs	EPA 624 WW VOCs	☐ 601 ☐ 602 WW VOCs	EPA 8270 FULL SVOCs	EPA 8270 ☐ PAH ☐ BN	EPA 625 WW SVOCs	EPA 8082–PCBs	EPA 8081–Pest	TPH–GC (Mod. 8100)	TPH–GC w/FING.	EPH (MA DEP)	VPH (MA DEP)	Metals ☐ PP14–13 ☐ R–8	MCP 14 Metals (MA)	Metals (List Below)**	TCLP – Specify Below	SPLP – Specify Below	EPA 300 ☐ Cl ☐ SO4	EPA 300 ☐ NO2 ☐ NO3	Total # of Cont.	Note #
DB-1	8-31-07/Hlohrs	GW			3																							3	
DB-2	8-31-07/1415hrs	GW			3																							3	
*DB-3	8-31-07/1420hrs	GW			3																							3	
DB-4	8-31-07/1425hrs	GW			3																							3	
DB-5	8-31-07	1430	GW			3																							3	
DB-6	8-31-07	1435	GW			3																							3	
DB-7	8-31-07	1515	GW			3																							3	
DB-8	8-31-07	1445	GW			3																							3	
DB-9	8-31-07	1520hrs	GW			3																							3	
TB083107	8-31-07/—	OI			3																							3	
PRESERVATIVE (Cl - HCl, M=Methanol, N - HNO3, S - H2SO4, Na - NaOH, O - Other)*																													
CONTAINER TYPE (P-Plastic, G-Glass, V-Vial, T-Teflon, O-Other)*																												30	

RELINQUISHED BY: (AFFILIATION) GZA 8/31/07 DATE/TIME RECEIVED BY: (AFFILIATION)

RELINQUISHED BY: (AFFILIATION) DATE/TIME 1210 RECEIVED BY: (AFFILIATION)

RELINQUISHED BY: (AFFILIATION) DATE/TIME RECEIVED BY: (AFFILIATION)

NOTES: (Unless otherwise noted, all samples have been refrigerated to 4° C)
*Specify "Other" preservatives and containers types in this space.

*. Sampler Found on top of sediment

PROJECT MANAGER: Ed Sommerby EXT: 353

TURNAROUND TIME: Standard Rush 7 days, Approved by _____ LAB USE: TEMP. OF COOLER 8 °C °C Temp Blank____ Cooler Air____

GZA GeoEnvironmental, Inc.
Labaratory Division

106 South Street
Hopkinton, MA 01748
(781) 278-4700
FAX (508) 435-9912

GZA FILE NO: 32795.12 TASK NO: — P.O. NO. _____

PROJECT Overset Bedrock SI

LOCATION Richmond, RI

COLLECTOR(S) Ed Sommerby SHEET 1 OF 1

GZA GeoEnvironmental, Inc.
106 South Street
Hopkinton, MA 01748
(781) 278-4700

Laboratory Identification Numbers:
MA and ME: **MA092** NH: **2028**
CT: **PH0579** RI: **LAO00236**
NELAC - NYS DOH: **11063**

ANALYTICAL REPORT

GZA GeoEnvironmental, Inc.
140 Broadway
Providence, RI 02903

Steve Andrus

Project No.: **03.0032795.32**
Work Order No.: **0808-00149**
Date Received: **08/25/2008**
Date Reported: **09/08/2008**

SAMPLE INFORMATION

Date Sampled	Matrix	Laboratory ID	Sample ID
08/22/2008	Aqueous	0808-00149 001	DB - 1
08/22/2008	Aqueous	0808-00149 002	DB - 2
08/22/2008	Aqueous	0808-00149 003	DB - 3
08/22/2008	Aqueous	0808-00149 004	DB - 4
08/22/2008	Aqueous	0808-00149 005	DB - 5
08/22/2008	Aqueous	0808-00149 006	Trip Blank

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ANALYTICAL REPORT

GZA GeoEnvironmental, Inc.
140 Broadway
Providence, RI 02903

Steve Andrus

Project Name.: **Charbert Diffusion Bass**
Project No.: **03.0032795.32**

Date Received: **08/25/2008**
Date Reported: **09/08/2008**
Work Order No.: **0808-00149**

PROJECT NARRATIVE:

1. Sample Receipt

The samples were received on 08/25/08 via _x_GZA courier, __EC, __FEDEX, or ___hand delivered. The temperature of the _x_temperature blank/__cooler air, was 2.7 degrees C. The temperature requirement for most analyses is above freezing to 6 degrees C. The samples were received intact for all requested analyses.

The chain of custody indicates that the samples, when required, were chemically preserved in accordance with the method they reference.

2. EPA Method 8260 - VOCs

Attach QC 8260 09/03/08 A - Aqueous
Attach QC 8260 09/05/08 A - Aqueous

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ANALYTICAL REPORT

GZA GeoEnvironmental, Inc.
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Steve Andrus

Project Name.:	**Charbert Diffusion Bass**	Date Received:	**08/25/2008**
Project No.:	**03.0032795.32**	Date Reported:	**09/08/2008**
		Work Order No.:	**0808-00149**

Data Authorized By: _____

NELAC certification, as indicated by the NELAC Lab ID Number, is per analyte. For a complete list of NELAC validated analytes, please contact the laboratory.

Abbreviations:
% R = % Recovery
DF = Dilution Factor
DFS = Dilution Factor Solids
CF = Calculation Factor
DO = Diluted Out

Method Key:
Method 8260: The current version of the method is 8260B.
Method 8270: The current version of the method is 8270D.
Method 6010: The current version of the method is 6010B.

Please note that the laboratory signed copy of the chain of custody record is an integral part of the data report.

Soil data is reported on a dry weight basis unless otherwise specified.
Matrix Spike / Matrix Spike Duplicate sets are performed as per method and are reported at the end of the analytical report if assigned on the Chain of Custody.

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ANALYTICAL REPORT

GZA GeoEnvironmental, Inc.
140 Broadway
Providence, RI 02903

Steve Andrus

Project Name.: **Charbert Diffusion Bass**
Project No.: **03.0032795.32**

Date Received: **08/25/2008**
Date Reported: **09/08/2008**
Work Order No.: **0808-00149**

Sample ID: **DB - 1** Sample No.: **001**

Sample Date: **08/22/2008**

Test Performed	Method	Results	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260			MQS	09/03/2008
Dichlorodifluoromethane	EPA 8260	<2.0	ug/L	MQS	09/03/2008
Chloromethane	EPA 8260	<2.0	ug/L	MQS	09/03/2008
Vinyl Chloride	EPA 8260	<1.0	ug/L	MQS	09/03/2008
Bromomethane	EPA 8260	<2.0	ug/L	MQS	09/03/2008
Chloroethane	EPA 8260	<1.0	ug/L	MQS	09/03/2008
Trichlorofluoromethane	EPA 8260	<2.0	ug/L	MQS	09/03/2008
Diethylether	EPA 8260	<5.0	ug/L	MQS	09/03/2008
Acetone	EPA 8260	<25	ug/L	MQS	09/03/2008
1,1-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	09/03/2008
Dichloromethane	EPA 8260	<2.0	ug/L	MQS	09/03/2008
Methyl-Tert-Butyl-Ether	EPA 8260	<1.0	ug/L	MQS	09/03/2008
trans-1,2-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	09/03/2008
1,1-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	09/03/2008
2-Butanone	EPA 8260	<25	ug/L	MQS	09/03/2008
2,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	09/03/2008
cis-1,2-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	09/03/2008
Chloroform	EPA 8260	<1.0	ug/L	MQS	09/03/2008
Bromochloromethane	EPA 8260	<1.0	ug/L	MQS	09/03/2008
Tetrahydrofuran	EPA 8260	<10	ug/L	MQS	09/03/2008
1,1,1-Trichloroethane	EPA 8260	<1.0	ug/L	MQS	09/03/2008
1,1-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	09/03/2008
Carbon Tetrachloride	EPA 8260	<1.0	ug/L	MQS	09/03/2008
1,2-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	09/03/2008
Benzene	EPA 8260	<1.0	ug/L	MQS	09/03/2008
Trichloroethene	EPA 8260	<1.0	ug/L	MQS	09/03/2008
1,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	09/03/2008
Bromodichloromethane	EPA 8260	<1.0	ug/L	MQS	09/03/2008
Dibromomethane	EPA 8260	<1.0	ug/L	MQS	09/03/2008
4-Methyl-2-Pentanone	EPA 8260	<25	ug/L	MQS	09/03/2008
cis-1,3-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	09/03/2008
Toluene	EPA 8260	<1.0	ug/L	MQS	09/03/2008
trans-1,3-Dichloropropene	EPA 8260	<2.0	ug/L	MQS	09/03/2008
1,1,2-Trichloroethane	EPA 8260	<1.0	ug/L	MQS	09/03/2008
2-Hexanone	EPA 8260	<25	ug/L	MQS	09/03/2008
1,3-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	09/03/2008
Tetrachloroethene	EPA 8260	<1.0	ug/L	MQS	09/03/2008

GZA GeoEnvironmental, Inc.
106 South Street
Hopkinton, MA 01748
(781) 278-4700

ANALYTICAL REPORT

GZA GeoEnvironmental, Inc.
140 Broadway
Providence, RI 02903

Steve Andrus

Project Name.: **Charbert Diffusion Bass**
Project No.: **03.0032795.32**

Date Received: **08/25/2008**
Date Reported: **09/08/2008**
Work Order No.: **0808-00149**

Sample ID: **DB - 1** Sample No.: **001**

Sample Date: **08/22/2008**

Test Performed	Method	Results	Units	Tech	Analysis Date
Dibromochloromethane	EPA 8260	<1.0	ug/L	MQS	09/03/2008
1,2-Dibromoethane (EDB)	EPA 8260	<2.0	ug/L	MQS	09/03/2008
Chlorobenzene	EPA 8260	<1.0	ug/L	MQS	09/03/2008
1,1,1,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	09/03/2008
Ethylbenzene	EPA 8260	<1.0	ug/L	MQS	09/03/2008
m&p-Xylene	EPA 8260	<2.0	ug/L	MQS	09/03/2008
o-Xylene	EPA 8260	<1.0	ug/L	MQS	09/03/2008
Styrene	EPA 8260	<1.0	ug/L	MQS	09/03/2008
Bromoform	EPA 8260	<2.0	ug/L	MQS	09/03/2008
Isopropylbenzene	EPA 8260	<1.0	ug/L	MQS	09/03/2008
1,1,2,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	09/03/2008
1,2,3-Trichloropropane	EPA 8260	<1.0	ug/L	MQS	09/03/2008
Bromobenzene	EPA 8260	<1.0	ug/L	MQS	09/03/2008
N-Propylbenzene	EPA 8260	<1.0	ug/L	MQS	09/03/2008
2-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	09/03/2008
1,3,5-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	09/03/2008
4-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	09/03/2008
tert-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	09/03/2008
1,2,4-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	09/03/2008
sec-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	09/03/2008
p-Isopropyltoluene	EPA 8260	<1.0	ug/L	MQS	09/03/2008
1,3-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	09/03/2008
1,4-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	09/03/2008
n-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	09/03/2008
1,2-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	09/03/2008
1,2-Dibromo-3-Chloropropane	EPA 8260	<5.0	ug/L	MQS	09/03/2008
1,2,4-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	09/03/2008
Hexachlorobutadiene	EPA 8260	<1.0	ug/L	MQS	09/03/2008
Naphthalene	EPA 8260	<2.0	ug/L	MQS	09/03/2008
1,2,3-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	09/03/2008
Surrogates:	EPA 8260				
***1,2-Dichloroethane-D4	EPA 8260	94.2	% R	MQS	09/03/2008
***Toluene-D8	EPA 8260	100	% R	MQS	09/03/2008
***4-Bromofluorobenzene	EPA 8260	93.3	% R	MQS	09/03/2008
Preparation	EPA 5030B	1.0	CF	MQS	09/03/2008

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106 South Street
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ANALYTICAL REPORT

GZA GeoEnvironmental, Inc.
140 Broadway
Providence, RI 02903

Steve Andrus

Project Name.: **Charbert Diffusion Bass**
Project No.: **03.0032795.32**

Date Received: **08/25/2008**
Date Reported: **09/08/2008**
Work Order No.: **0808-00149**

Sample ID: **DB - 2** Sample No.: **002**

Sample Date: **08/22/2008**

Test Performed	Method	Results	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260			MQS	09/03/2008
Dichlorodifluoromethane	EPA 8260	<2.0	ug/L	MQS	09/03/2008
Chloromethane	EPA 8260	<2.0	ug/L	MQS	09/03/2008
Vinyl Chloride	EPA 8260	<1.0	ug/L	MQS	09/03/2008
Bromomethane	EPA 8260	<2.0	ug/L	MQS	09/03/2008
Chloroethane	EPA 8260	<1.0	ug/L	MQS	09/03/2008
Trichlorofluoromethane	EPA 8260	<2.0	ug/L	MQS	09/03/2008
Diethylether	EPA 8260	<5.0	ug/L	MQS	09/03/2008
Acetone	EPA 8260	<25	ug/L	MQS	09/03/2008
1,1-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	09/03/2008
Dichloromethane	EPA 8260	<2.0	ug/L	MQS	09/03/2008
Methyl-Tert-Butyl-Ether	EPA 8260	<1.0	ug/L	MQS	09/03/2008
trans-1,2-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	09/03/2008
1,1-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	09/03/2008
2-Butanone	EPA 8260	<25	ug/L	MQS	09/03/2008
2,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	09/03/2008
cis-1,2-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	09/03/2008
Chloroform	EPA 8260	<1.0	ug/L	MQS	09/03/2008
Bromochloromethane	EPA 8260	<1.0	ug/L	MQS	09/03/2008
Tetrahydrofuran	EPA 8260	<10	ug/L	MQS	09/03/2008
1,1,1-Trichloroethane	EPA 8260	<1.0	ug/L	MQS	09/03/2008
1,1-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	09/03/2008
Carbon Tetrachloride	EPA 8260	<1.0	ug/L	MQS	09/03/2008
1,2-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	09/03/2008
Benzene	EPA 8260	<1.0	ug/L	MQS	09/03/2008
Trichloroethene	EPA 8260	<1.0	ug/L	MQS	09/03/2008
1,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	09/03/2008
Bromodichloromethane	EPA 8260	<1.0	ug/L	MQS	09/03/2008
Dibromomethane	EPA 8260	<1.0	ug/L	MQS	09/03/2008
4-Methyl-2-Pentanone	EPA 8260	<25	ug/L	MQS	09/03/2008
cis-1,3-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	09/03/2008
Toluene	EPA 8260	<1.0	ug/L	MQS	09/03/2008
trans-1,3-Dichloropropene	EPA 8260	<2.0	ug/L	MQS	09/03/2008
1,1,2-Trichloroethane	EPA 8260	<1.0	ug/L	MQS	09/03/2008
2-Hexanone	EPA 8260	<25	ug/L	MQS	09/03/2008
1,3-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	09/03/2008
Tetrachloroethene	EPA 8260	<1.0	ug/L	MQS	09/03/2008

GZA GeoEnvironmental, Inc.
106 South Street
Hopkinton, MA 01748
(781) 278-4700

ANALYTICAL REPORT

GZA GeoEnvironmental, Inc.
140 Broadway
Providence, RI 02903

Steve Andrus

Project Name.: **Charbert Diffusion Bass**
Project No.: **03.0032795.32**

Date Received: **08/25/2008**
Date Reported: **09/08/2008**
Work Order No.: **0808-00149**

Sample ID: **DB - 2** Sample No.: **002**

Sample Date: **08/22/2008**

Test Performed	Method	Results	Units	Tech	Analysis Date
Dibromochloromethane	EPA 8260	<1.0	ug/L	MQS	09/03/2008
1,2-Dibromoethane (EDB)	EPA 8260	<2.0	ug/L	MQS	09/03/2008
Chlorobenzene	EPA 8260	<1.0	ug/L	MQS	09/03/2008
1,1,1,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	09/03/2008
Ethylbenzene	EPA 8260	<1.0	ug/L	MQS	09/03/2008
m&p-Xylene	EPA 8260	<2.0	ug/L	MQS	09/03/2008
o-Xylene	EPA 8260	<1.0	ug/L	MQS	09/03/2008
Styrene	EPA 8260	<1.0	ug/L	MQS	09/03/2008
Bromoform	EPA 8260	<2.0	ug/L	MQS	09/03/2008
Isopropylbenzene	EPA 8260	<1.0	ug/L	MQS	09/03/2008
1,1,2,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	09/03/2008
1,2,3-Trichloropropane	EPA 8260	<1.0	ug/L	MQS	09/03/2008
Bromobenzene	EPA 8260	<1.0	ug/L	MQS	09/03/2008
N-Propylbenzene	EPA 8260	<1.0	ug/L	MQS	09/03/2008
2-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	09/03/2008
1,3,5-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	09/03/2008
4-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	09/03/2008
tert-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	09/03/2008
1,2,4-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	09/03/2008
sec-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	09/03/2008
p-Isopropyltoluene	EPA 8260	<1.0	ug/L	MQS	09/03/2008
1,3-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	09/03/2008
1,4-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	09/03/2008
n-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	09/03/2008
1,2-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	09/03/2008
1,2-Dibromo-3-Chloropropane	EPA 8260	<5.0	ug/L	MQS	09/03/2008
1,2,4-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	09/03/2008
Hexachlorobutadiene	EPA 8260	<1.0	ug/L	MQS	09/03/2008
Naphthalene	EPA 8260	<2.0	ug/L	MQS	09/03/2008
1,2,3-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	09/03/2008
Surrogates:	EPA 8260				
***1,2-Dichloroethane-D4	EPA 8260	92.4	% R	MQS	09/03/2008
***Toluene-D8	EPA 8260	99.3	% R	MQS	09/03/2008
***4-Bromofluorobenzene	EPA 8260	93.0	% R	MQS	09/03/2008
Preparation	EPA 5030B	1.0	CF	MQS	09/03/2008

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106 South Street
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ANALYTICAL REPORT

GZA GeoEnvironmental, Inc.
140 Broadway
Providence, RI 02903

Steve Andrus

Project Name.: **Charbert Diffusion Bass**
Project No.: **03.0032795.32**

Date Received: **08/25/2008**
Date Reported: **09/08/2008**
Work Order No.: **0808-00149**

Sample ID: **DB - 3** Sample No.: **003**

Sample Date: **08/22/2008**

Test Performed	Method	Results	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260			MQS	09/03/2008
Dichlorodifluoromethane	EPA 8260	<2.0	ug/L	MQS	09/03/2008
Chloromethane	EPA 8260	<2.0	ug/L	MQS	09/03/2008
Vinyl Chloride	EPA 8260	<1.0	ug/L	MQS	09/03/2008
Bromomethane	EPA 8260	<2.0	ug/L	MQS	09/03/2008
Chloroethane	EPA 8260	<1.0	ug/L	MQS	09/03/2008
Trichlorofluoromethane	EPA 8260	<2.0	ug/L	MQS	09/03/2008
Diethylether	EPA 8260	<5.0	ug/L	MQS	09/03/2008
Acetone	EPA 8260	<25	ug/L	MQS	09/03/2008
1,1-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	09/03/2008
Dichloromethane	EPA 8260	<2.0	ug/L	MQS	09/03/2008
Methyl-Tert-Butyl-Ether	EPA 8260	<1.0	ug/L	MQS	09/03/2008
trans-1,2-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	09/03/2008
1,1-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	09/03/2008
2-Butanone	EPA 8260	<25	ug/L	MQS	09/03/2008
2,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	09/03/2008
cis-1,2-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	09/03/2008
Chloroform	EPA 8260	<1.0	ug/L	MQS	09/03/2008
Bromochloromethane	EPA 8260	<1.0	ug/L	MQS	09/03/2008
Tetrahydrofuran	EPA 8260	<10	ug/L	MQS	09/03/2008
1,1,1-Trichloroethane	EPA 8260	<1.0	ug/L	MQS	09/03/2008
1,1-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	09/03/2008
Carbon Tetrachloride	EPA 8260	<1.0	ug/L	MQS	09/03/2008
1,2-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	09/03/2008
Benzene	EPA 8260	<1.0	ug/L	MQS	09/03/2008
Trichloroethene	EPA 8260	<1.0	ug/L	MQS	09/03/2008
1,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	09/03/2008
Bromodichloromethane	EPA 8260	<1.0	ug/L	MQS	09/03/2008
Dibromomethane	EPA 8260	<1.0	ug/L	MQS	09/03/2008
4-Methyl-2-Pentanone	EPA 8260	<25	ug/L	MQS	09/03/2008
cis-1,3-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	09/03/2008
Toluene	EPA 8260	<1.0	ug/L	MQS	09/03/2008
trans-1,3-Dichloropropene	EPA 8260	<2.0	ug/L	MQS	09/03/2008
1,1,2-Trichloroethane	EPA 8260	<1.0	ug/L	MQS	09/03/2008
2-Hexanone	EPA 8260	<25	ug/L	MQS	09/03/2008
1,3-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	09/03/2008
Tetrachloroethene	EPA 8260	<1.0	ug/L	MQS	09/03/2008

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ANALYTICAL REPORT

GZA GeoEnvironmental, Inc.
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Steve Andrus

Project Name.: **Charbert Diffusion Bass**
Project No.: **03.0032795.32**

Date Received: **08/25/2008**
Date Reported: **09/08/2008**
Work Order No.: **0808-00149**

Sample ID: **DB - 3** Sample No.: **003**

Sample Date: **08/22/2008**

Test Performed	Method	Results	Units	Tech	Analysis Date
Dibromochloromethane	EPA 8260	<1.0	ug/L	MQS	09/03/2008
1,2-Dibromoethane (EDB)	EPA 8260	<2.0	ug/L	MQS	09/03/2008
Chlorobenzene	EPA 8260	<1.0	ug/L	MQS	09/03/2008
1,1,1,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	09/03/2008
Ethylbenzene	EPA 8260	<1.0	ug/L	MQS	09/03/2008
m&p-Xylene	EPA 8260	<2.0	ug/L	MQS	09/03/2008
o-Xylene	EPA 8260	<1.0	ug/L	MQS	09/03/2008
Styrene	EPA 8260	<1.0	ug/L	MQS	09/03/2008
Bromoform	EPA 8260	<2.0	ug/L	MQS	09/03/2008
Isopropylbenzene	EPA 8260	<1.0	ug/L	MQS	09/03/2008
1,1,2,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	09/03/2008
1,2,3-Trichloropropane	EPA 8260	<1.0	ug/L	MQS	09/03/2008
Bromobenzene	EPA 8260	<1.0	ug/L	MQS	09/03/2008
N-Propylbenzene	EPA 8260	<1.0	ug/L	MQS	09/03/2008
2-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	09/03/2008
1,3,5-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	09/03/2008
4-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	09/03/2008
tert-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	09/03/2008
1,2,4-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	09/03/2008
sec-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	09/03/2008
p-Isopropyltoluene	EPA 8260	<1.0	ug/L	MQS	09/03/2008
1,3-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	09/03/2008
1,4-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	09/03/2008
n-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	09/03/2008
1,2-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	09/03/2008
1,2-Dibromo-3-Chloropropane	EPA 8260	<5.0	ug/L	MQS	09/03/2008
1,2,4-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	09/03/2008
Hexachlorobutadiene	EPA 8260	<1.0	ug/L	MQS	09/03/2008
Naphthalene	EPA 8260	<2.0	ug/L	MQS	09/03/2008
1,2,3-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	09/03/2008
Surrogates:	EPA 8260				
***1,2-Dichloroethane-D4	EPA 8260	90.8	% R	MQS	09/03/2008
***Toluene-D8	EPA 8260	99.9	% R	MQS	09/03/2008
***4-Bromofluorobenzene	EPA 8260	92.7	% R	MQS	09/03/2008
Preparation	EPA 5030B	1.0	CF	MQS	09/03/2008

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Steve Andrus

Project Name.: **Charbert Diffusion Bass**
Project No.: **03.0032795.32**

Date Received: **08/25/2008**
Date Reported: **09/08/2008**
Work Order No.: **0808-00149**

Sample ID: **DB - 4**
Sample No.: **004**
Sample Date: **08/22/2008**

Test Performed	Method	Results	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260			MQS	09/03/2008
Dichlorodifluoromethane	EPA 8260	<2.0	ug/L	MQS	09/03/2008
Chloromethane	EPA 8260	<2.0	ug/L	MQS	09/03/2008
Vinyl Chloride	EPA 8260	1.5	ug/L	MQS	09/03/2008
Bromomethane	EPA 8260	<2.0	ug/L	MQS	09/03/2008
Chloroethane	EPA 8260	<1.0	ug/L	MQS	09/03/2008
Trichlorofluoromethane	EPA 8260	<2.0	ug/L	MQS	09/03/2008
Diethylether	EPA 8260	<5.0	ug/L	MQS	09/03/2008
Acetone	EPA 8260	<25	ug/L	MQS	09/03/2008
1,1-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	09/03/2008
Dichloromethane	EPA 8260	<2.0	ug/L	MQS	09/03/2008
Methyl-Tert-Butyl-Ether	EPA 8260	<1.0	ug/L	MQS	09/03/2008
trans-1,2-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	09/03/2008
1,1-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	09/03/2008
2-Butanone	EPA 8260	<25	ug/L	MQS	09/03/2008
2,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	09/03/2008
cis-1,2-Dichloroethene	EPA 8260	7.5	ug/L	MQS	09/03/2008
Chloroform	EPA 8260	<1.0	ug/L	MQS	09/03/2008
Bromochloromethane	EPA 8260	<1.0	ug/L	MQS	09/03/2008
Tetrahydrofuran	EPA 8260	<10	ug/L	MQS	09/03/2008
1,1,1-Trichloroethane	EPA 8260	<1.0	ug/L	MQS	09/03/2008
1,1-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	09/03/2008
Carbon Tetrachloride	EPA 8260	<1.0	ug/L	MQS	09/03/2008
1,2-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	09/03/2008
Benzene	EPA 8260	<1.0	ug/L	MQS	09/03/2008
Trichloroethene	EPA 8260	28	ug/L	MQS	09/03/2008
1,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	09/03/2008
Bromodichloromethane	EPA 8260	<1.0	ug/L	MQS	09/03/2008
Dibromomethane	EPA 8260	<1.0	ug/L	MQS	09/03/2008
4-Methyl-2-Pentanone	EPA 8260	<25	ug/L	MQS	09/03/2008
cis-1,3-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	09/03/2008
Toluene	EPA 8260	<1.0	ug/L	MQS	09/03/2008
trans-1,3-Dichloropropene	EPA 8260	<2.0	ug/L	MQS	09/03/2008
1,1,2-Trichloroethane	EPA 8260	<1.0	ug/L	MQS	09/03/2008
2-Hexanone	EPA 8260	<25	ug/L	MQS	09/03/2008
1,3-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	09/03/2008
Tetrachloroethene	EPA 8260	26	ug/L	MQS	09/03/2008

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ANALYTICAL REPORT

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Steve Andrus

Project Name.: **Charbert Diffusion Bass**
Project No.: **03.0032795.32**

Date Received: **08/25/2008**
Date Reported: **09/08/2008**
Work Order No.: **0808-00149**

Sample ID: **DB - 4** Sample No.: **004**

Sample Date: **08/22/2008**

Test Performed	Method	Results	Units	Tech	Analysis Date
Dibromochloromethane	EPA 8260	<1.0	ug/L	MQS	09/03/2008
1,2-Dibromoethane (EDB)	EPA 8260	<2.0	ug/L	MQS	09/03/2008
Chlorobenzene	EPA 8260	<1.0	ug/L	MQS	09/03/2008
1,1,1,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	09/03/2008
Ethylbenzene	EPA 8260	<1.0	ug/L	MQS	09/03/2008
m&p-Xylene	EPA 8260	<2.0	ug/L	MQS	09/03/2008
o-Xylene	EPA 8260	<1.0	ug/L	MQS	09/03/2008
Styrene	EPA 8260	<1.0	ug/L	MQS	09/03/2008
Bromoform	EPA 8260	<2.0	ug/L	MQS	09/03/2008
Isopropylbenzene	EPA 8260	<1.0	ug/L	MQS	09/03/2008
1,1,2,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	09/03/2008
1,2,3-Trichloropropane	EPA 8260	<1.0	ug/L	MQS	09/03/2008
Bromobenzene	EPA 8260	<1.0	ug/L	MQS	09/03/2008
N-Propylbenzene	EPA 8260	<1.0	ug/L	MQS	09/03/2008
2-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	09/03/2008
1,3,5-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	09/03/2008
4-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	09/03/2008
tert-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	09/03/2008
1,2,4-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	09/03/2008
sec-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	09/03/2008
p-Isopropyltoluene	EPA 8260	<1.0	ug/L	MQS	09/03/2008
1,3-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	09/03/2008
1,4-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	09/03/2008
n-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	09/03/2008
1,2-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	09/03/2008
1,2-Dibromo-3-Chloropropane	EPA 8260	<5.0	ug/L	MQS	09/03/2008
1,2,4-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	09/03/2008
Hexachlorobutadiene	EPA 8260	<1.0	ug/L	MQS	09/03/2008
Naphthalene	EPA 8260	<2.0	ug/L	MQS	09/03/2008
1,2,3-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	09/03/2008
Surrogates:	EPA 8260				
***1,2-Dichloroethane-D4	EPA 8260	92.8	% R	MQS	09/03/2008
***Toluene-D8	EPA 8260	98.3	% R	MQS	09/03/2008
***4-Bromofluorobenzene	EPA 8260	93.8	% R	MQS	09/03/2008
Preparation	EPA 5030B	1.0	CF	MQS	09/03/2008

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ANALYTICAL REPORT

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Project Name.: **Charbert Diffusion Bass**
Project No.: **03.0032795.32**

Date Received: **08/25/2008**
Date Reported: **09/08/2008**
Work Order No.: **0808-00149**

Sample ID: **DB - 5**
Sample No.: **005**
Sample Date: **08/22/2008**

Test Performed	Method	Results	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260			MQS	09/03/2008
Dichlorodifluoromethane	EPA 8260	<2.0	ug/L	MQS	09/03/2008
Chloromethane	EPA 8260	<2.0	ug/L	MQS	09/03/2008
Vinyl Chloride	EPA 8260	<1.0	ug/L	MQS	09/03/2008
Bromomethane	EPA 8260	<2.0	ug/L	MQS	09/03/2008
Chloroethane	EPA 8260	<1.0	ug/L	MQS	09/03/2008
Trichlorofluoromethane	EPA 8260	<2.0	ug/L	MQS	09/03/2008
Diethylether	EPA 8260	<5.0	ug/L	MQS	09/03/2008
Acetone	EPA 8260	<25	ug/L	MQS	09/03/2008
1,1-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	09/03/2008
Dichloromethane	EPA 8260	<2.0	ug/L	MQS	09/03/2008
Methyl-Tert-Butyl-Ether	EPA 8260	<1.0	ug/L	MQS	09/03/2008
trans-1,2-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	09/03/2008
1,1-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	09/03/2008
2-Butanone	EPA 8260	<25	ug/L	MQS	09/03/2008
2,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	09/03/2008
cis-1,2-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	09/03/2008
Chloroform	EPA 8260	<1.0	ug/L	MQS	09/03/2008
Bromochloromethane	EPA 8260	<1.0	ug/L	MQS	09/03/2008
Tetrahydrofuran	EPA 8260	<10	ug/L	MQS	09/03/2008
1,1,1-Trichloroethane	EPA 8260	<1.0	ug/L	MQS	09/03/2008
1,1-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	09/03/2008
Carbon Tetrachloride	EPA 8260	<1.0	ug/L	MQS	09/03/2008
1,2-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	09/03/2008
Benzene	EPA 8260	<1.0	ug/L	MQS	09/03/2008
Trichloroethene	EPA 8260	<1.0	ug/L	MQS	09/03/2008
1,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	09/03/2008
Bromodichloromethane	EPA 8260	<1.0	ug/L	MQS	09/03/2008
Dibromomethane	EPA 8260	<1.0	ug/L	MQS	09/03/2008
4-Methyl-2-Pentanone	EPA 8260	<25	ug/L	MQS	09/03/2008
cis-1,3-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	09/03/2008
Toluene	EPA 8260	<1.0	ug/L	MQS	09/03/2008
trans-1,3-Dichloropropene	EPA 8260	<2.0	ug/L	MQS	09/03/2008
1,1,2-Trichloroethane	EPA 8260	<1.0	ug/L	MQS	09/03/2008
2-Hexanone	EPA 8260	<25	ug/L	MQS	09/03/2008
1,3-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	09/03/2008
Tetrachloroethene	EPA 8260	<1.0	ug/L	MQS	09/03/2008

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ANALYTICAL REPORT

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Project Name.: **Charbert Diffusion Bass**
Project No.: **03.0032795.32**

Date Received: **08/25/2008**
Date Reported: **09/08/2008**
Work Order No.: **0808-00149**

Sample ID: **DB - 5** Sample No.: **005**

Sample Date: **08/22/2008**

Test Performed	Method	Results	Units	Tech	Analysis Date
Dibromochloromethane	EPA 8260	<1.0	ug/L	MQS	09/03/2008
1,2-Dibromoethane (EDB)	EPA 8260	<2.0	ug/L	MQS	09/03/2008
Chlorobenzene	EPA 8260	<1.0	ug/L	MQS	09/03/2008
1,1,1,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	09/03/2008
Ethylbenzene	EPA 8260	<1.0	ug/L	MQS	09/03/2008
m&p-Xylene	EPA 8260	<2.0	ug/L	MQS	09/03/2008
o-Xylene	EPA 8260	<1.0	ug/L	MQS	09/03/2008
Styrene	EPA 8260	<1.0	ug/L	MQS	09/03/2008
Bromoform	EPA 8260	<2.0	ug/L	MQS	09/03/2008
Isopropylbenzene	EPA 8260	<1.0	ug/L	MQS	09/03/2008
1,1,2,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	09/03/2008
1,2,3-Trichloropropane	EPA 8260	<1.0	ug/L	MQS	09/03/2008
Bromobenzene	EPA 8260	<1.0	ug/L	MQS	09/03/2008
N-Propylbenzene	EPA 8260	<1.0	ug/L	MQS	09/03/2008
2-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	09/03/2008
1,3,5-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	09/03/2008
4-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	09/03/2008
tert-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	09/03/2008
1,2,4-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	09/03/2008
sec-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	09/03/2008
p-Isopropyltoluene	EPA 8260	<1.0	ug/L	MQS	09/03/2008
1,3-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	09/03/2008
1,4-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	09/03/2008
n-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	09/03/2008
1,2-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	09/03/2008
1,2-Dibromo-3-Chloropropane	EPA 8260	<5.0	ug/L	MQS	09/03/2008
1,2,4-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	09/03/2008
Hexachlorobutadiene	EPA 8260	<1.0	ug/L	MQS	09/03/2008
Naphthalene	EPA 8260	<2.0	ug/L	MQS	09/03/2008
1,2,3-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	09/03/2008
Surrogates:	EPA 8260				
***1,2-Dichloroethane-D4	EPA 8260	88.4	% R	MQS	09/03/2008
***Toluene-D8	EPA 8260	99.3	% R	MQS	09/03/2008
***4-Bromofluorobenzene	EPA 8260	93.9	% R	MQS	09/03/2008
Preparation	EPA 5030B	1.0	CF	MQS	09/03/2008

GZA GeoEnvironmental, Inc.
106 South Street
Hopkinton, MA 01748
(781) 278-4700

ANALYTICAL REPORT

GZA GeoEnvironmental, Inc.
140 Broadway
Providence, RI 02903

Steve Andrus

Project Name.: **Charbert Diffusion Bass**
Project No.: **03.0032795.32**

Date Received: **08/25/2008**
Date Reported: **09/08/2008**
Work Order No.: **0808-00149**

Sample ID: **Trip Blank** Sample No.: **006**

Sample Date: **08/22/2008**

Test Performed	Method	Results	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260			MQS	09/05/2008
Dichlorodifluoromethane	EPA 8260	<2.0	ug/L	MQS	09/05/2008
Chloromethane	EPA 8260	<2.0	ug/L	MQS	09/05/2008
Vinyl Chloride	EPA 8260	<1.0	ug/L	MQS	09/05/2008
Bromomethane	EPA 8260	<2.0	ug/L	MQS	09/05/2008
Chloroethane	EPA 8260	<1.0	ug/L	MQS	09/05/2008
Trichlorofluoromethane	EPA 8260	<2.0	ug/L	MQS	09/05/2008
Diethylether	EPA 8260	<5.0	ug/L	MQS	09/05/2008
Acetone	EPA 8260	<25	ug/L	MQS	09/05/2008
1,1-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	09/05/2008
Dichloromethane	EPA 8260	<2.0	ug/L	MQS	09/05/2008
Methyl-Tert-Butyl-Ether	EPA 8260	<1.0	ug/L	MQS	09/05/2008
trans-1,2-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	09/05/2008
1,1-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	09/05/2008
2-Butanone	EPA 8260	<25	ug/L	MQS	09/05/2008
2,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	09/05/2008
cis-1,2-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	09/05/2008
Chloroform	EPA 8260	<1.0	ug/L	MQS	09/05/2008
Bromochloromethane	EPA 8260	<1.0	ug/L	MQS	09/05/2008
Tetrahydrofuran	EPA 8260	<10	ug/L	MQS	09/05/2008
1,1,1-Trichloroethane	EPA 8260	<1.0	ug/L	MQS	09/05/2008
1,1-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	09/05/2008
Carbon Tetrachloride	EPA 8260	<1.0	ug/L	MQS	09/05/2008
1,2-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	09/05/2008
Benzene	EPA 8260	<1.0	ug/L	MQS	09/05/2008
Trichloroethene	EPA 8260	<1.0	ug/L	MQS	09/05/2008
1,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	09/05/2008
Bromodichloromethane	EPA 8260	<1.0	ug/L	MQS	09/05/2008
Dibromomethane	EPA 8260	<1.0	ug/L	MQS	09/05/2008
4-Methyl-2-Pentanone	EPA 8260	<25	ug/L	MQS	09/05/2008
cis-1,3-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	09/05/2008
Toluene	EPA 8260	<1.0	ug/L	MQS	09/05/2008
trans-1,3-Dichloropropene	EPA 8260	<2.0	ug/L	MQS	09/05/2008
1,1,2-Trichloroethane	EPA 8260	<1.0	ug/L	MQS	09/05/2008
2-Hexanone	EPA 8260	<25	ug/L	MQS	09/05/2008
1,3-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	09/05/2008
Tetrachloroethene	EPA 8260	<1.0	ug/L	MQS	09/05/2008

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ANALYTICAL REPORT

GZA GeoEnvironmental, Inc.
140 Broadway
Providence, RI 02903

Steve Andrus

Project Name.: **Charbert Diffusion Bass**
Project No.: **03.0032795.32**

Date Received: **08/25/2008**
Date Reported: **09/08/2008**
Work Order No.: **0808-00149**

Sample ID: **Trip Blank** Sample No.: **006**

Sample Date: **08/22/2008**

Test Performed	Method	Results	Units	Tech	Analysis Date
Dibromochloromethane	EPA 8260	<1.0	ug/L	MQS	09/05/2008
1,2-Dibromoethane (EDB)	EPA 8260	<2.0	ug/L	MQS	09/05/2008
Chlorobenzene	EPA 8260	<1.0	ug/L	MQS	09/05/2008
1,1,1,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	09/05/2008
Ethylbenzene	EPA 8260	<1.0	ug/L	MQS	09/05/2008
m&p-Xylene	EPA 8260	<2.0	ug/L	MQS	09/05/2008
o-Xylene	EPA 8260	<1.0	ug/L	MQS	09/05/2008
Styrene	EPA 8260	<1.0	ug/L	MQS	09/05/2008
Bromoform	EPA 8260	<2.0	ug/L	MQS	09/05/2008
Isopropylbenzene	EPA 8260	<1.0	ug/L	MQS	09/05/2008
1,1,2,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	09/05/2008
1,2,3-Trichloropropane	EPA 8260	<1.0	ug/L	MQS	09/05/2008
Bromobenzene	EPA 8260	<1.0	ug/L	MQS	09/05/2008
N-Propylbenzene	EPA 8260	<1.0	ug/L	MQS	09/05/2008
2-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	09/05/2008
1,3,5-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	09/05/2008
4-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	09/05/2008
tert-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	09/05/2008
1,2,4-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	09/05/2008
sec-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	09/05/2008
p-Isopropyltoluene	EPA 8260	<1.0	ug/L	MQS	09/05/2008
1,3-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	09/05/2008
1,4-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	09/05/2008
n-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	09/05/2008
1,2-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	09/05/2008
1,2-Dibromo-3-Chloropropane	EPA 8260	<5.0	ug/L	MQS	09/05/2008
1,2,4-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	09/05/2008
Hexachlorobutadiene	EPA 8260	<1.0	ug/L	MQS	09/05/2008
Naphthalene	EPA 8260	<2.0	ug/L	MQS	09/05/2008
1,2,3-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	09/05/2008
Surrogates:	EPA 8260				
***1,2-Dichloroethane-D4	EPA 8260	93.7	% R	MQS	09/05/2008
***Toluene-D8	EPA 8260	102	% R	MQS	09/05/2008
***4-Bromofluorobenzene	EPA 8260	96.0	% R	MQS	09/05/2008
Preparation	EPA 5030B	1.0	CF	MQS	09/05/2008

GZA GeoEnvironmental, Inc.
106 South Street
Hopkinton, MA 01748

EPA Method 8260 / 524.2 Aqueous Method Blank (MB) and Laboratory Control Sample/Duplicate (LCS/LCSD) Data

Method Blank			Laboratory Control Sample				Laboratory Control Sample Duplicate					
Date Analyzed:	9/3/2008		Date Analyzed:	9/3/2008			9/3/2008					
Volatile Organics	Conc. ug/L	Acceptance Limit	Spike Concentration = 20ug/L	% Recovery	Acceptance Limits	Verdict	% Recovery	Acceptance Limits	Verdict	RPD	Limit	Verdict
dichlorodifluoromethane	< 1.0	< 1.0	dichlorodifluoromethane	122	70-130	ok	116	70-130	ok	4.95	<25	ok
chloromethane	< 1.0	< 1.0	chloromethane	103	70-130	ok	96.6	70-130	ok	6.45	<25	ok
vinyl chloride	< 0.5	< 0.5	vinyl chloride	104	80-120	ok	100	80-120	ok	3.70	<25	ok
bromomethane	< 1.0	< 1.0	bromomethane	102	70-130	ok	99.1	70-130	ok	3.24	<25	ok
chloroethane	< 0.5	< 0.5	chloroethane	102	70-130	ok	99.0	70-130	ok	2.93	<25	ok
trichlorofluoromethane	< 1.0	< 1.0	trichlorofluoromethane	103	70-130	ok	101	70-130	ok	1.50	<25	ok
diethyl ether	< 2.5	< 2.5	diethyl ether	91.6	70-130	ok	92.2	70-130	ok	0.65	<25	ok
acetone	< 13	< 13	acetone	106	70-130	ok	104	70-130	ok	1.58	<25	ok
1,1-dichloroethene	< 0.5	< 0.5	1,1-dichloroethene	97.1	80-120	ok	97.4	80-120	ok	0.26	<25	ok
FREON-113	< 1.0	< 1.0	FREON-113	98.2	70-130	ok	98.3	70-130	ok	0.02	<25	ok
iodomethane	< 0.5	< 0.5	iodomethane	90.5	70-130	ok	91.3	70-130	ok	0.88	<25	ok
carbon disulfide	< 5.0	< 5.0	carbon disulfide	122	70-130	ok	121	70-130	ok	0.40	<25	ok
dichloromethane	< 1.0	< 1.0	dichloromethane	93.1	70-130	ok	90.8	70-130	ok	2.53	<25	ok
tert-butyl alcohol (TBA)	< 13	< 13	tert-butyl alcohol (TBA)	113	70-130	ok	112	70-130	ok	0.52	<25	ok
acrylonitrile	< 0.5	< 0.5	acrylonitrile	91.4	70-130	ok	97.0	70-130	ok	0.00	<25	ok
methyl-tert-butyl-ether	< 0.5	< 0.5	methyl-tert-butyl-ether	96.2	70-130	ok	92.6	70-130	ok	3.81	<25	ok
trans-1,2-dichloroethene	< 0.5	< 0.5	trans-1,2-dichloroethene	98.7	70-130	ok	97.6	70-130	ok	1.20	<25	ok
1,1-dichloroethane	< 0.5	< 0.5	1,1-dichloroethane	105	70-130	ok	104	70-130	ok	1.26	<25	ok
di-isopropyl ether (DIPE)	< 1.0	< 1.0	di-isopropyl ether (DIPE)	98.9	70-130	ok	97.4	70-130	ok	1.58	<25	ok
ethyl tert-butyl ether (EtBE)	< 1.0	< 1.0	ethyl tert-butyl ether (EtBE)	103	70-130	ok	102	70-130	ok	1.34	<25	ok
vinyl acetate	< 13	< 13	vinyl acetate	100	70-130	ok	98.9	70-130	ok	1.55	<25	ok
2-butanone	< 13	< 13	2-butanone	102	70-130	ok	101	70-130	ok	0.95	<25	ok
2,2-dichloropropane	< 0.5	< 0.5	2,2-dichloropropane	106	70-130	ok	102	70-130	ok	3.76	<25	ok
cis-1,2-dichloroethene	< 0.5	< 0.5	cis-1,2-dichloroethene	95.3	70-130	ok	94.0	70-130	ok	1.41	<25	ok
chloroform	< 0.5	< 0.5	chloroform	94.9	80-120	ok	93.9	80-120	ok	1.12	<25	ok
bromochloromethane	< 0.5	< 0.5	bromochloromethane	93.7	70-130	ok	94.6	70-130	ok	0.89	<25	ok
tetrahydrafuran	< 5.0	< 5.0	tetrahydrafuran	121	70-130	ok	118	70-130	ok	2.68	<25	ok
1,1,1-trichloroethane	< 0.5	< 0.5	1,1,1-trichloroethane	96.5	70-130	ok	95.9	70-130	ok	0.60	<25	ok
1,1-dichloropropene	< 0.5	< 0.5	1,1-dichloropropene	102	70-130	ok	101	70-130	ok	1.04	<25	ok
carbon tetrachloride	< 0.5	< 0.5	carbon tetrachloride	98.1	70-130	ok	97.8	70-130	ok	0.27	<25	ok
1,2-dichloroethane	< 0.5	< 0.5	1,2-dichloroethane	102	70-130	ok	101	70-130	ok	0.94	<25	ok
benzene	< 0.5	< 0.5	benzene	98.2	70-130	ok	97.0	70-130	ok	1.22	<25	ok
tert-amyl methyl ether (TAME)	< 1.0	< 1.0	tert-amyl methyl ether (TAME)	96.0	70-130	ok	95.3	70-130	ok	0.75	<25	ok
trichloroethene	< 0.5	< 0.5	trichloroethene	93.3	70-130	ok	95.3	70-130	ok	2.18	<25	ok
1,2-dichloropropane	< 0.5	< 0.5	1,2-dichloropropane	99.1	80-120	ok	99.1	80-120	ok	0.04	<25	ok
bromodichloromethane	< 0.5	< 0.5	bromodichloromethane	99.4	70-130	ok	99.1	70-130	ok	0.29	<25	ok
1,4-Dioxane	< 50	< 50	1,4-Dioxane	106	70-130	ok	98.9	70-130	ok	6.51	<25	ok
dibromomethane	< 0.5	< 0.5	dibromomethane	85.7	70-130	ok	87.6	70-130	ok	2.15	<25	ok
4-methyl-2-pentanone	< 13	< 13	4-methyl-2-pentanone	99.5	70-130	ok	98.5	70-130	ok	0.99	<25	ok
cis-1,3-dichloropropene	< 0.5	< 0.5	cis-1,3-dichloropropene	102	70-130	ok	102	70-130	ok	0.32	<25	ok
toluene	< 0.5	< 0.5	toluene	97.6	80-120	ok	97.8	80-120	ok	0.20	<25	ok
trans-1,3-dichloropropene	< 1.0	< 1.0	trans-1,3-dichloropropene	95.9	70-130	ok	96.2	70-130	ok	0.26	<25	ok
1,1,2-trichloroethane	< 0.5	< 0.5	1,1,2-trichloroethane	92.2	70-130	ok	95.2	70-130	ok	3.21	<25	ok
2-hexanone	< 13	< 13	2-hexanone	103	70-130	ok	103	70-130	ok	0.13	<25	ok
1,3-dichloropropane	< 0.5	< 0.5	1,3-dichloropropane	97.4	70-130	ok	98.6	70-130	ok	1.29	<25	ok
tetrachloroethene	< 0.5	< 0.5	tetrachloroethene	93.7	70-130	ok	97.9	70-130	ok	4.42	<25	ok
dibromochloromethane	< 0.5	< 0.5	dibromochloromethane	94.4	70-130	ok	97.2	70-130	ok	2.91	<25	ok
1,2-dibromoethane (EDB)	< 1.0	< 1.0	1,2-dibromoethane (EDB)	95.3	70-130	ok	97.3	70-130	ok	2.07	<25	ok
chlorobenzene	< 0.5	< 0.5	chlorobenzene	97.6	70-130	ok	98.7	70-130	ok	1.08	<25	ok
1,1,1,2-tetrachloroethane	< 0.5	< 0.5	1,1,1,2-tetrachloroethane	91.3	70-130	ok	93.6	70-130	ok	2.42	<25	ok
ethylbenzene	< 0.5	< 0.5	ethylbenzene	102	80-120	ok	102	80-120	ok	0.55	<25	ok
1,1,2,2-tetrachloroethane	< 0.5	< 0.5	1,1,2,2-tetrachloroethane	97.5	70-130	ok	97.4	70-130	ok	0.15	<25	ok
m&p-xylene	< 1.0	< 1.0	m&p-xylene	99.9	70-130	ok	100	70-130	ok	0.53	<25	ok
o-xylene	< 0.5	< 0.5	o-xylene	101	70-130	ok	103	70-130	ok	1.67	<25	ok
styrene	< 0.5	< 0.5	styrene	105	70-130	ok	107	70-130	ok	1.71	<25	ok
bromoform	< 1.0	< 1.0	bromoform	91.8	70-130	ok	94.9	70-130	ok	3.33	<25	ok
isopropylbenzene	< 0.5	< 0.5	isopropylbenzene	121	70-130	ok	121	70-130	ok	0.20	<25	ok
1,2,3-trichloropropane	< 0.5	< 0.5	1,2,3-trichloropropane	101	70-130	ok	103	70-130	ok	1.97	<25	ok
bromobenzene	< 0.5	< 0.5	bromobenzene	93.7	70-130	ok	94.7	70-130	ok	1.00	<25	ok
n-propylbenzene	< 0.5	< 0.5	n-propylbenzene	109	70-130	ok	110	70-130	ok	0.87	<25	ok
2-chlorotoluene	< 0.5	< 0.5	2-chlorotoluene	105	70-130	ok	105	70-130	ok	0.00	<25	ok
1,3,5-trimethylbenzene	< 0.5	< 0.5	1,3,5-trimethylbenzene	106	70-130	ok	107	70-130	ok	1.08	<25	ok
trans-1,4-dichloro-2-butene	< 1.0	< 1.0	trans-1,4-dichloro-2-butene	116	70-130	ok	114	70-130	ok	1.74	<25	ok
4-chlorotoluene	< 0.5	< 0.5	4-chlorotoluene	106	70-130	ok	106	70-130	ok	0.19	<25	ok
tert-butyl-benzene	< 0.5	< 0.5	tert-butyl-benzene	119	70-130	ok	119	70-130	ok	0.03	<25	ok
1,2,4-trimethylbenzene	< 0.5	< 0.5	1,2,4-trimethylbenzene	104	70-130	ok	103	70-130	ok	0.56	<25	ok
sec-butyl-benzene	< 0.5	< 0.5	sec-butyl-benzene	107	70-130	ok	105	70-130	ok	2.17	<25	ok
p-isopropyltoluene	< 0.5	< 0.5	p-isopropyltoluene	103	70-130	ok	103	70-130	ok	0.07	<25	ok
1,3-dichlorobenzene	< 0.5	< 0.5	1,3-dichlorobenzene	97.2	70-130	ok	95.7	70-130	ok	1.52	<25	ok
1,4-dichlorobenzene	< 0.5	< 0.5	1,4-dichlorobenzene	96.5	70-130	ok	98.4	70-130	ok	2.01	<25	ok
n-butylbenzene	< 0.5	< 0.5	n-butylbenzene	106	70-130	ok	105	70-130	ok	0.86	<25	ok
1,2-dichlorobenzene	< 0.5	< 0.5	1,2-dichlorobenzene	93.7	70-130	ok	93.5	70-130	ok	0.25	<25	ok
1,2-dibromo-3-chloropropane	< 2.5	< 2.5	1,2-dibromo-3-chloropropane	98.8	70-130	ok	99.7	70-130	ok	0.93	<25	ok
1,2,4-trichlorobenzene	< 0.5	< 0.5	1,2,4-trichlorobenzene	97.9	70-130	ok	98.2	70-130	ok	0.31	<25	ok
hexachlorobutadiene	< 0.5	< 0.5	hexachlorobutadiene	98.5	70-130	ok	99.2	70-130	ok	0.76	<25	ok
naphthalene	< 1.0	< 1.0	naphthalene	94.4	70-130	ok	96.2	70-130	ok	1.89	<25	ok
1,2,3-trichlorobenzene	< 0.5	< 0.5	1,2,3-trichlorobenzene	93.6	70-130	ok	95.1	70-130	ok	1.58	<25	ok

Surrogates:	Recovery (%)	Acceptance Limits	Surrogates:	Recovery (%)	Acceptance Limits	Verdict	Recovery (%)	Acceptance Limits	Verdict	RPD	Limit	Verdict
DIBROMOFLUOROMETHANE	97.2	70-130	DIBROMOFLUOROMETHANE	98.5	70-130	ok	97.1	70-130	ok	1.43	<25	ok
1,2-DICHLOROETHANE-D4	91.7	70-130	1,2-DICHLOROETHANE-D4	97.9	70-130	ok	98.4	70-130	ok	0.51	<25	ok
TOLUENE-D8	102	70-130	TOLUENE-D8	100	70-130	ok	99.5	70-130	ok	0.68	<25	ok
4-BROMOFLUOROBENZENE	93.7	70-130	4-BROMOFLUOROBENZENE	94.7	70-130	ok	94.0	70-130	ok	0.77	<25	ok
1,2-DICHLOROBENZENE-D4	91.4	70-130	1,2-DICHLOROBENZENE-D4	97.0	70-130	ok	94.5	70-130	ok	2.65	<25	ok

Instrument: HP GC/MS "A"

GZA GeoEnvironmental, Inc.
106 South Street
Hopkinton, MA 01748

EPA Method 8260 / 524.2 Aqueous Method Blank (MB) and Laboratory Control Sample/Duplicate (LCS/LCSD) Data

Method Blank			Laboratory Control Sample				Laboratory Control Sample Duplicate					
Date Analyzed:	9/5/2008		Date Analyzed:	9/5/2008			9/5/2008					
Volatile Organics	Conc. ug/L	Acceptance Limit	Spike Concentration = 20ug/L	% Recovery	Acceptance Limits	Verdict	% Recovery	Acceptance Limits	Verdict	RPD	Limit	Verdict
dichlorodifluoromethane	< 1.0	< 1.0	dichlorodifluoromethane	109	70-130	ok	108	70-130	ok	1.32	<25	ok
chloromethane	< 1.0	< 1.0	chloromethane	97.2	70-130	ok	95.4	70-130	ok	1.84	<25	ok
vinyl chloride	< 0.5	< 0.5	vinyl chloride	98.5	80-120	ok	98.5	80-120	ok	0.06	<25	ok
bromomethane	< 1.0	< 1.0	bromomethane	96.5	70-130	ok	94.3	70-130	ok	2.27	<25	ok
chloroethane	< 0.5	< 0.5	chloroethane	98.6	70-130	ok	96.6	70-130	ok	2.06	<25	ok
trichlorofluoromethane	< 1.0	< 1.0	trichlorofluoromethane	97.9	70-130	ok	96.9	70-130	ok	1.01	<25	ok
diethyl ether	< 2.5	< 2.5	diethyl ether	97.8	70-130	ok	96.3	70-130	ok	1.59	<25	ok
acetone	< 13	< 13	acetone	117	70-130	ok	113	70-130	ok	3.45	<25	ok
1,1-dichloroethene	< 0.5	< 0.5	1,1-dichloroethene	93.9	80-120	ok	92.5	80-120	ok	1.49	<25	ok
FREON-113	< 1.0	< 1.0	FREON-113	90.8	70-130	ok	90.5	70-130	ok	0.34	<25	ok
iodomethane	< 0.5	< 0.5	iodomethane	85.0	70-130	ok	86.8	70-130	ok	2.08	<25	ok
carbon disulfide	< 5.0	< 5.0	carbon disulfide	113	70-130	ok	113	70-130	ok	0.07	<25	ok
dichloromethane	< 1.0	< 1.0	dichloromethane	92.5	70-130	ok	93.8	70-130	ok	1.45	<25	ok
tert-butyl alcohol (TBA)	< 13	< 13	tert-butyl alcohol (TBA)	137	70-130	out	140	70-130	out	1.84	<25	ok
acrylonitrile	< 0.5	< 0.5	acrylonitrile	109	70-130	ok	99.5	70-130	ok	0.00	<25	ok
methyl-tert-butyl-ether	< 0.5	< 0.5	methyl-tert-butyl-ether	98.3	70-130	ok	105	70-130	ok	6.21	<25	ok
trans-1,2-dichloroethene	< 0.5	< 0.5	trans-1,2-dichloroethene	93.8	70-130	ok	95.3	70-130	ok	1.65	<25	ok
1,1-dichloroethane	< 0.5	< 0.5	1,1-dichloroethane	106	70-130	ok	106	70-130	ok	0.34	<25	ok
di-isopropyl ether (DIPE)	< 1.0	< 1.0	di-isopropyl ether (DIPE)	104	70-130	ok	101	70-130	ok	2.49	<25	ok
ethyl tert-butyl ether (EtBE)	< 1.0	< 1.0	ethyl tert-butyl ether (EtBE)	108	70-130	ok	111	70-130	ok	2.57	<25	ok
vinyl acetate	< 13	< 13	vinyl acetate	106	70-130	ok	102	70-130	ok	3.26	<25	ok
2-butanone	< 13	< 13	2-butanone	110	70-130	ok	118	70-130	ok	7.22	<25	ok
2,2-dichloropropane	< 0.5	< 0.5	2,2-dichloropropane	100	70-130	ok	97.7	70-130	ok	2.43	<25	ok
cis-1,2-dichloroethene	< 0.5	< 0.5	cis-1,2-dichloroethene	93.6	70-130	ok	95.6	70-130	ok	2.11	<25	ok
chloroform	< 0.5	< 0.5	chloroform	96.4	80-120	ok	98.3	80-120	ok	2.03	<25	ok
bromochloromethane	< 0.5	< 0.5	bromochloromethane	94.1	70-130	ok	98.5	70-130	ok	4.59	<25	ok
tetrahydrafuran	< 5.0	< 5.0	tetrahydrafuran	126	70-130	ok	125	70-130	ok	0.64	<25	ok
1,1,1-trichloroethane	< 0.5	< 0.5	1,1,1-trichloroethane	97.3	70-130	ok	99.8	70-130	ok	2.53	<25	ok
1,1-dichloropropene	< 0.5	< 0.5	1,1-dichloropropene	98.6	70-130	ok	101	70-130	ok	2.10	<25	ok
carbon tetrachloride	< 0.5	< 0.5	carbon tetrachloride	93.4	70-130	ok	97.6	70-130	ok	4.31	<25	ok
1,2-dichloroethane	< 0.5	< 0.5	1,2-dichloroethane	109	70-130	ok	111	70-130	ok	1.88	<25	ok
benzene	< 0.5	< 0.5	benzene	96.7	70-130	ok	98.4	70-130	ok	1.80	<25	ok
tert-amyl methyl ether (TAME)	< 1.0	< 1.0	tert-amyl methyl ether (TAME)	103	70-130	ok	106	70-130	ok	3.20	<25	ok
trichloroethene	< 0.5	< 0.5	trichloroethene	91.5	70-130	ok	94.4	70-130	ok	3.11	<25	ok
1,2-dichloropropane	< 0.5	< 0.5	1,2-dichloropropane	105	80-120	ok	107	80-120	ok	2.12	<25	ok
bromodichloromethane	< 0.5	< 0.5	bromodichloromethane	107	70-130	ok	109	70-130	ok	2.12	<25	ok
1,4-Dioxane	< 50	< 50	1,4-Dioxane	131	70-130	out	131	70-130	out	0.44	<25	ok
dibromomethane	< 0.5	< 0.5	dibromomethane	87.0	70-130	ok	91.9	70-130	ok	5.48	<25	ok
4-methyl-2-pentanone	< 13	< 13	4-methyl-2-pentanone	116	70-130	ok	120	70-130	ok	3.55	<25	ok
cis-1,3-dichloropropene	< 0.5	< 0.5	cis-1,3-dichloropropene	108	70-130	ok	108	70-130	ok	0.45	<25	ok
toluene	< 0.5	< 0.5	toluene	96.3	80-120	ok	96.9	80-120	ok	0.55	<25	ok
trans-1,3-dichloropropene	< 1.0	< 1.0	trans-1,3-dichloropropene	103	70-130	ok	105	70-130	ok	1.59	<25	ok
1,1,2-trichloroethane	< 0.5	< 0.5	1,1,2-trichloroethane	93.6	70-130	ok	97.1	70-130	ok	3.72	<25	ok
2-hexanone	< 13	< 13	2-hexanone	111	70-130	ok	120	70-130	ok	7.19	<25	ok
1,3-dichloropropane	< 0.5	< 0.5	1,3-dichloropropane	97.7	70-130	ok	98.9	70-130	ok	1.17	<25	ok
tetrachloroethene	< 0.5	< 0.5	tetrachloroethene	89.0	70-130	ok	92.4	70-130	ok	3.78	<25	ok
dibromochloromethane	< 0.5	< 0.5	dibromochloromethane	95.6	70-130	ok	97.8	70-130	ok	2.29	<25	ok
1,2-dibromoethane (EDB)	< 1.0	< 1.0	1,2-dibromoethane (EDB)	97.8	70-130	ok	101	70-130	ok	3.01	<25	ok
chlorobenzene	< 0.5	< 0.5	chlorobenzene	92.5	70-130	ok	94.3	70-130	ok	1.83	<25	ok
1,1,1,2-tetrachloroethane	< 0.5	< 0.5	1,1,1,2-tetrachloroethane	88.6	70-130	ok	91.4	70-130	ok	3.14	<25	ok
ethylbenzene	< 0.5	< 0.5	ethylbenzene	90.8	80-120	ok	91.8	80-120	ok	1.10	<25	ok
1,1,2,2-tetrachloroethane	< 0.5	< 0.5	1,1,2,2-tetrachloroethane	104	70-130	ok	109	70-130	ok	4.87	<25	ok
m&p-xylene	< 1.0	< 1.0	m&p-xylene	90.6	70-130	ok	91.3	70-130	ok	0.71	<25	ok
o-xylene	< 0.5	< 0.5	o-xylene	98.9	70-130	ok	97.7	70-130	ok	1.18	<25	ok
styrene	< 0.5	< 0.5	styrene	104	70-130	ok	104	70-130	ok	0.51	<25	ok
bromoform	< 1.0	< 1.0	bromoform	98.7	70-130	ok	103	70-130	ok	3.82	<25	ok
isopropylbenzene	< 0.5	< 0.5	isopropylbenzene	115	70-130	ok	114	70-130	ok	1.30	<25	ok
1,2,3-trichloropropane	< 0.5	< 0.5	1,2,3-trichloropropane	112	70-130	ok	112	70-130	ok	0.61	<25	ok
bromobenzene	< 0.5	< 0.5	bromobenzene	93.6	70-130	ok	93.8	70-130	ok	0.16	<25	ok
n-propylbenzene	< 0.5	< 0.5	n-propylbenzene	107	70-130	ok	105	70-130	ok	2.02	<25	ok
2-chlorotoluene	< 0.5	< 0.5	2-chlorotoluene	101	70-130	ok	99.1	70-130	ok	1.48	<25	ok
1,3,5-trimethylbenzene	< 0.5	< 0.5	1,3,5-trimethylbenzene	101	70-130	ok	101	70-130	ok	0.29	<25	ok
trans-1,4-dichloro-2-butene	< 1.0	< 1.0	trans-1,4-dichloro-2-butene	129	70-130	ok	126	70-130	ok	2.83	<25	ok
4-chlorotoluene	< 0.5	< 0.5	4-chlorotoluene	105	70-130	ok	103	70-130	ok	1.80	<25	ok
tert-butyl-benzene	< 0.5	< 0.5	tert-butyl-benzene	116	70-130	ok	113	70-130	ok	2.50	<25	ok
1,2,4-trimethylbenzene	< 0.5	< 0.5	1,2,4-trimethylbenzene	101	70-130	ok	100	70-130	ok	0.81	<25	ok
sec-butyl-benzene	< 0.5	< 0.5	sec-butyl-benzene	104	70-130	ok	102	70-130	ok	1.16	<25	ok
p-isopropyltoluene	< 0.5	< 0.5	p-isopropyltoluene	99.5	70-130	ok	98.0	70-130	ok	1.51	<25	ok
1,3-dichlorobenzene	< 0.5	< 0.5	1,3-dichlorobenzene	97.0	70-130	ok	96.7	70-130	ok	0.33	<25	ok
1,4-dichlorobenzene	< 0.5	< 0.5	1,4-dichlorobenzene	98.8	70-130	ok	98.8	70-130	ok	0.01	<25	ok
n-butylbenzene	< 0.5	< 0.5	n-butylbenzene	102	70-130	ok	101	70-130	ok	1.66	<25	ok
1,2-dichlorobenzene	< 0.5	< 0.5	1,2-dichlorobenzene	99.0	70-130	ok	99.8	70-130	ok	0.84	<25	ok
1,2-dibromo-3-chloropropane	< 2.5	< 2.5	1,2-dibromo-3-chloropropane	119	70-130	ok	125	70-130	ok	4.87	<25	ok
1,2,4-trichlorobenzene	< 0.5	< 0.5	1,2,4-trichlorobenzene	97.5	70-130	ok	99.3	70-130	ok	1.84	<25	ok
hexachlorobutadiene	< 0.5	< 0.5	hexachlorobutadiene	90.9	70-130	ok	86.9	70-130	ok	4.51	<25	ok
naphthalene	< 1.0	< 1.0	naphthalene	104	70-130	ok	112	70-130	ok	7.47	<25	ok
1,2,3-trichlorobenzene	< 0.5	< 0.5	1,2,3-trichlorobenzene	97.8	70-130	ok	100	70-130	ok	2.25	<25	ok

Surrogates:	Recovery (%)	Acceptance Limits	Surrogates:	Recovery (%)	Acceptance Limits	Verdict	Recovery (%)	Acceptance Limits	Verdict	RPD	Limit	Verdict
DIBROMOFLUOROMETHANE	98.6	70-130	DIBROMOFLUOROMETHANE	99.2	70-130	ok	104	70-130	ok	4.55	<25	ok
1,2-DICHLOROETHANE-D4	92.5	70-130	1,2-DICHLOROETHANE-D4	98.5	70-130	ok	106	70-130	ok	7.47	<25	ok
TOLUENE-D8	94.2	70-130	TOLUENE-D8	101	70-130	ok	102	70-130	ok	0.61	<25	ok
4-BROMOFLUOROBENZENE	88.7	70-130	4-BROMOFLUOROBENZENE	93.2	70-130	ok	93.9	70-130	ok	0.76	<25	ok
1,2-DICHLOROBENZENE-D4	96.8	70-130	1,2-DICHLOROBENZENE-D4	97.5	70-130	ok	97.2	70-130	ok	0.26	<25	ok

Instrument: HP GC/MS "A"

CHAIN-OF-CUSTODY RECORD

W.O. # 0808-00149 (for lab use only)

Sample I.D.	Date/Time Sampled	Matrix (A=Air, S=Soil, GW=Ground W., SW=Surface W., WW=Waste W., DW=Drinking W., P=Product, Other (specify))	ANALYSIS REQUIRED: pH ⌋ Cond.	GC Methane, Ethane, Ethene	EPA 8260	EPA 8260 – 8010 List (Chlor.)	EPA 8260 – 8021 list	EPA 8021 – 8020 List (BTEX)	EPA 524.2 DW VOCs	EPA 624 WW VOCs	⌋ 601 ⌋ 602 WW VOCs	EPA 8270 FULL SVOCs	EPA 8270 ⌋ PAH ⌋ A – ⌋ BN	EPA 625 WW SVOCs	EPA 8082–PCBs	EPA 8081–Pest	TPH–GC (Mod. 8100)	TPH–GC w/FING.	EPH (MA DEP)	VPH (MA DEP)	Metals ⌋ PPM–13 ⌋ R–8	MCP 14 Metals (MA)	Metals (List Below)**	TCLP – Specify Below	SPLP – Specify Below	EPA 300 ⌋ Cl ⌋ SO4	EPA 300 ⌋ NO2 ⌋ NO3	Total # of Cont.	Note #
DB-1	8/22/08	SW			X																							3	
DB-2					X																							3	
DB-3					X																							3	
DB-4					X																							3	
DB-5					X																							3	
Trip Blank					X																							3	
PRESERVATIVE (Cl - HCl, M=Methanol, N - HNO3, S - H2SO4, Na - NaOH, O - Other)*					C																								
CONTAINER TYPE (P-Plastic, G-Glass, V-Vial, T-Teflon, O-Other)*					V																								

RELINQUISHED BY: (AFFILIATION) DATE/TIME RECEIVED BY: (AFFILIATION)

8/22/08 12:45 Bill Brecan 8/25/08

RELINQUISHED BY: (AFFILIATION) DATE/TIME RECEIVED BY: (AFFILIATION)

Bill Brecan 8/25/08 1120 [illegible] 8/25/08 1500

RELINQUISHED BY: (AFFILIATION) DATE/TIME RECEIVED BY: (AFFILIATION)

NOTES: (Unless otherwise noted, all samples have been refrigerated to 4° C)
*Specify "Other" preservatives and containers types in this space.

PROJECT MANAGER: Steve Adams EXT: 2740

GZA GeoEnvironmental, Inc.
Labaratory Division

106 South Street
Hopkinton, MA 01748
(781) 278-4700
FAX (508) 435-9912

TURNAROUND TIME: (Standard) Rush ___ Days, Approved by ___

LAB USE: TEMP. OF COOLER 2.7 °C Temp Blank (8/22) Cooler Air ___

8/25/08 1130 LP

GZA FILE NO: 03.00 32795.32 TASK NO: P.O. NO.

PROJECT Charbert DIFFusion Bass

LOCATION Alton, RI

COLLECTOR(S) RAC, SMA SHEET 1 OF 1

R.I. ANALYTICAL
Specialists in Environmental Services

CERTIFICATE OF ANALYSIS

GZA / Geoenvironmental, Inc.
Attn: Mr. Rick Carlone
530 Broadway
Providence, RI 02909

Date Received: 9/9/09
Date Reported: 9/15/09
P.O. #:
Work Order #: 0909-16221

DESCRIPTION: PROJECT# 32795.32 CHARBERT

Subject sample(s) has/have been analyzed by our Warwick, R.I. laboratory with the attached results.

Reference: All parameters were analyzed by U.S. EPA approved methodologies.
The specific methodologies are listed in the methods column of the Certificate Of Analysis.

Data qualifiers (if present) are explained in full at the end of a given sample's analytical results.

Certification #: RI-033, MA-RI015, CT-PH-0508, ME-RI015
NH-253700 A & B, USDA S-41844

If you have any questions regarding this work, or if we may be of further assistance, please contact our customer service department.

Approved by:

Data Reporting

enc: Chain of Custody

41 Illinois Avenue, Warwick, RI 02888
Phone: 401.737.8500 Fax: 401.738.1970

nelac

131 Coolidge Street, Suite 105, Hudson, MA 01749
Phone: 978.568.0041 Fax: 978.568.0078

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

GZA / Geoenvironmental, Inc.
Date Received: 9/9/09
Work Order #: 0909-16221

Approved by: _____
Data Reporting

Sample # 001
SAMPLE DESCRIPTION: D-2
SAMPLE TYPE: GRAB **SAMPLE DATE/TIME:** 9/09/2009

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
Volatile Organic Compounds						
Benzene	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
Bromobenzene	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
Bromochloromethane	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
Bromodichloromethane	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
Bromoform	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
Bromomethane	<7	7	ug/l	SW-846 8260B	9/10/09	MMM
n-Butylbenzene	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
Sec-butylbenzene	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
tert-Butylbenzene	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
Carbon Tetrachloride	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
Chlorobenzene	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
Chloroethane	<5	5	ug/l	SW-846 8260B	9/10/09	MMM
Chloroform	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
Chloromethane	<5	5	ug/l	SW-846 8260B	9/10/09	MMM
2-Chlorotoluene	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
4-Chlorotoluene	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
Dibromochloromethane	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
1,2-Dibromo-3-Chloropropane	<2	2	ug/l	SW-846 8260B	9/10/09	MMM
1,2-Dibromoethane(EDB)	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
Dibromomethane	<2	2	ug/l	SW-846 8260B	9/10/09	MMM
1,2-Dichlorobenzene	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
1,3-Dichlorobenzene	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
1,4-Dichlorobenzene	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
Dichlorodifluoromethane	<5	5	ug/l	SW-846 8260B	9/10/09	MMM
1,1-Dichloroethane	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
1,2-Dichloroethane	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
1,1-Dichloroethene	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
cis-1,2-Dichloroethene	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
trans-1,2-Dichloroethylene	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
1,2-Dichloropropane	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
1,3-Dichloropropane	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
2,2-Dichloropropane	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
1,1-Dichloropropene	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
Ethylbenzene	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
Hexachlorobutadiene	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
Isopropylbenzene	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
p-Isopropyltoluene	<1	1	ug/l	SW-846 8260B	9/10/09	MMM

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

GZA / Geoenvironmental, Inc.
Date Received: 9/9/09
Work Order #: 0909-16221

Approved by: _____
Data Reporting

Sample # 001
SAMPLE DESCRIPTION: D-2
SAMPLE TYPE: GRAB **SAMPLE DATE/TIME:** 9/09/2009

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
Methylene Chloride	<5	5	ug/l	SW-846 8260B	9/10/09	MMM
Naphthalene	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
n-Propylbenzene	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
Styrene	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
1,1,1,2-Tetrachloroethane	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
1,1,2,2-Tetrachloroethane	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
Tetrachloroethene	34	1	ug/l	SW-846 8260B	9/10/09	MMM
Toluene	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
1,2,3-Trichlorobenzene	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
1,2,4-Trichlorobenzene	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
1,1,1-Trichloroethane	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
1,1,2-Trichloroethane	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
Trichloroethene	2	1	ug/l	SW-846 8260B	9/10/09	MMM
Trichlorofluoromethane	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
1,2,3-Trichloropropane	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
1,2,4-Trimethylbenzene	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
1,3,5-Trimethylbenzene	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
Vinyl Chloride	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
o-Xylene	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
m,p-Xylene	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
Total Xylene	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
Methyl Tertiary Butyl Ether (MTBE)	<2	2	ug/l	SW-846 8260B	9/10/09	MMM
Surrogates			RANGE	SW-846 8260B	9/10/09	MMM
Dibromofluoromethane	108		86-118%	SW-846 8260B	9/10/09	MMM
Toluene-d8	109		88-110%	SW-846 8260B	9/10/09	MMM
4-Bromofluorobenzene	98		86-115%	SW-846 8260B	9/10/09	MMM
1,2 Dichloroethane-d4	108		80-120%	SW-846 8260B	9/10/09	MMM

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

GZA / Geoenvironmental, Inc.
Date Received: 9/9/09
Work Order #: 0909-16221

Approved by: _____
Data Reporting

Sample # 002
SAMPLE DESCRIPTION: D-3
SAMPLE TYPE: GRAB **SAMPLE DATE/TIME:** 9/09/2009

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
Volatile Organic Compounds						
Benzene	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
Bromobenzene	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
Bromochloromethane	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
Bromodichloromethane	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
Bromoform	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
Bromomethane	<7	7	ug/l	SW-846 8260B	9/10/09	MMM
n-Butylbenzene	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
Sec-butylbenzene	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
tert-Butylbenzene	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
Carbon Tetrachloride	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
Chlorobenzene	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
Chloroethane	<5	5	ug/l	SW-846 8260B	9/10/09	MMM
Chloroform	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
Chloromethane	<5	5	ug/l	SW-846 8260B	9/10/09	MMM
2-Chlorotoluene	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
4-Chlorotoluene	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
Dibromochloromethane	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
1,2-Dibromo-3-Chloropropane	<2	2	ug/l	SW-846 8260B	9/10/09	MMM
1,2-Dibromoethane(EDB)	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
Dibromomethane	<2	2	ug/l	SW-846 8260B	9/10/09	MMM
1,2-Dichlorobenzene	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
1,3-Dichlorobenzene	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
1,4-Dichlorobenzene	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
Dichlorodifluoromethane	<5	5	ug/l	SW-846 8260B	9/10/09	MMM
1,1-Dichloroethane	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
1,2-Dichloroethane	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
1,1-Dichloroethene	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
cis-1,2-Dichloroethene	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
trans-1,2-Dichloroethylene	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
1,2-Dichloropropane	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
1,3-Dichloropropane	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
2,2-Dichloropropane	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
1,1-Dichloropropene	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
Ethylbenzene	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
Hexachlorobutadiene	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
Isopropylbenzene	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
p-Isopropyltoluene	<1	1	ug/l	SW-846 8260B	9/10/09	MMM

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

GZA / Geoenvironmental, Inc.
Date Received: 9/9/09
Work Order #: 0909-16221

Approved by: _____
Data Reporting

Sample # 002
SAMPLE DESCRIPTION: D-3
SAMPLE TYPE: GRAB **SAMPLE DATE/TIME:** 9/09/2009

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
Methylene Chloride	<5	5	ug/l	SW-846 8260B	9/10/09	MMM
Naphthalene	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
n-Propylbenzene	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
Styrene	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
1,1,1,2-Tetrachloroethane	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
1,1,2,2-Tetrachloroethane	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
Tetrachloroethene	3	1	ug/l	SW-846 8260B	9/10/09	MMM
Toluene	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
1,2,3-Trichlorobenzene	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
1,2,4-Trichlorobenzene	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
1,1,1-Trichloroethane	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
1,1,2-Trichloroethane	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
Trichloroethene	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
Trichlorofluoromethane	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
1,2,3-Trichloropropane	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
1,2,4-Trimethylbenzene	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
1,3,5-Trimethylbenzene	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
Vinyl Chloride	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
o-Xylene	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
m,p-Xylene	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
Total Xylene	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
Methyl Tertiary Butyl Ether (MTBE)	<2	2	ug/l	SW-846 8260B	9/10/09	MMM
Surrogates			RANGE	SW-846 8260B	9/10/09	MMM
Dibromofluoromethane	108		86-118%	SW-846 8260B	9/10/09	MMM
Toluene-d8	103		88-110%	SW-846 8260B	9/10/09	MMM
4-Bromofluorobenzene	98		86-115%	SW-846 8260B	9/10/09	MMM
1,2 Dichloroethane-d4	102		80-120%	SW-846 8260B	9/10/09	MMM

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

GZA / Geoenvironmental, Inc.
Date Received: 9/9/09
Work Order #: 0909-16221

Approved by: _____
Data Reporting

Sample # 003
SAMPLE DESCRIPTION: D-4
SAMPLE TYPE: GRAB **SAMPLE DATE/TIME:** 9/09/2009

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
Volatile Organic Compounds						
Benzene	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
Bromobenzene	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
Bromochloromethane	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
Bromodichloromethane	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
Bromoform	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
Bromomethane	<7	7	ug/l	SW-846 8260B	9/10/09	MMM
n-Butylbenzene	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
Sec-butylbenzene	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
tert-Butylbenzene	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
Carbon Tetrachloride	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
Chlorobenzene	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
Chloroethane	<5	5	ug/l	SW-846 8260B	9/10/09	MMM
Chloroform	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
Chloromethane	<5	5	ug/l	SW-846 8260B	9/10/09	MMM
2-Chlorotoluene	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
4-Chlorotoluene	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
Dibromochloromethane	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
1,2-Dibromo-3-Chloropropane	<2	2	ug/l	SW-846 8260B	9/10/09	MMM
1,2-Dibromoethane(EDB)	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
Dibromomethane	<2	2	ug/l	SW-846 8260B	9/10/09	MMM
1,2-Dichlorobenzene	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
1,3-Dichlorobenzene	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
1,4-Dichlorobenzene	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
Dichlorodifluoromethane	<5	5	ug/l	SW-846 8260B	9/10/09	MMM
1,1-Dichloroethane	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
1,2-Dichloroethane	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
1,1-Dichloroethene	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
cis-1,2-Dichloroethene	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
trans-1,2-Dichloroethylene	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
1,2-Dichloropropane	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
1,3-Dichloropropane	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
2,2-Dichloropropane	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
1,1-Dichloropropene	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
Ethylbenzene	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
Hexachlorobutadiene	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
Isopropylbenzene	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
p-Isopropyltoluene	<1	1	ug/l	SW-846 8260B	9/10/09	MMM

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

GZA / Geoenvironmental, Inc.
Date Received: 9/9/09
Work Order #: 0909-16221

Approved by: _____
Data Reporting

Sample # 003
SAMPLE DESCRIPTION: D-4
SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 9/09/2009

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
Methylene Chloride	<5	5	ug/l	SW-846 8260B	9/10/09	MMM
Naphthalene	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
n-Propylbenzene	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
Styrene	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
1,1,1,2-Tetrachloroethane	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
1,1,2,2-Tetrachloroethane	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
Tetrachloroethene	22	1	ug/l	SW-846 8260B	9/10/09	MMM
Toluene	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
1,2,3-Trichlorobenzene	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
1,2,4-Trichlorobenzene	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
1,1,1-Trichloroethane	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
1,1,2-Trichloroethane	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
Trichloroethene	2	1	ug/l	SW-846 8260B	9/10/09	MMM
Trichlorofluoromethane	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
1,2,3-Trichloropropane	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
1,2,4-Trimethylbenzene	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
1,3,5-Trimethylbenzene	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
Vinyl Chloride	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
o-Xylene	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
m,p-Xylene	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
Total Xylene	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
Methyl Tertiary Butyl Ether (MTBE)	<2	2	ug/l	SW-846 8260B	9/10/09	MMM
Surrogates			RANGE	SW-846 8260B	9/10/09	MMM
Dibromofluoromethane	109		86-118%	SW-846 8260B	9/10/09	MMM
Toluene-d8	109		88-110%	SW-846 8260B	9/10/09	MMM
4-Bromofluorobenzene	96		86-115%	SW-846 8260B	9/10/09	MMM
1,2 Dichloroethane-d4	105		80-120%	SW-846 8260B	9/10/09	MMM

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

GZA / Geoenvironmental, Inc.
Date Received: 9/9/09
Work Order #: 0909-16221

Approved by: Data Reporting

Sample # 004
SAMPLE DESCRIPTION: D-5
SAMPLE TYPE: GRAB **SAMPLE DATE/TIME:** 9/09/2009

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
Volatile Organic Compounds						
Benzene	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
Bromobenzene	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
Bromochloromethane	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
Bromodichloromethane	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
Bromoform	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
Bromomethane	<7	7	ug/l	SW-846 8260B	9/10/09	MMM
n-Butylbenzene	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
Sec-butylbenzene	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
tert-Butylbenzene	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
Carbon Tetrachloride	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
Chlorobenzene	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
Chloroethane	<5	5	ug/l	SW-846 8260B	9/10/09	MMM
Chloroform	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
Chloromethane	<5	5	ug/l	SW-846 8260B	9/10/09	MMM
2-Chlorotoluene	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
4-Chlorotoluene	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
Dibromochloromethane	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
1,2-Dibromo-3-Chloropropane	<2	2	ug/l	SW-846 8260B	9/10/09	MMM
1,2-Dibromoethane(EDB)	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
Dibromomethane	<2	2	ug/l	SW-846 8260B	9/10/09	MMM
1,2-Dichlorobenzene	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
1,3-Dichlorobenzene	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
1,4-Dichlorobenzene	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
Dichlorodifluoromethane	<5	5	ug/l	SW-846 8260B	9/10/09	MMM
1,1-Dichloroethane	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
1,2-Dichloroethane	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
1,1-Dichloroethene	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
cis-1,2-Dichloroethene	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
trans-1,2-Dichloroethylene	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
1,2-Dichloropropane	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
1,3-Dichloropropane	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
2,2-Dichloropropane	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
1,1-Dichloropropene	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
Ethylbenzene	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
Hexachlorobutadiene	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
Isopropylbenzene	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
p-Isopropyltoluene	<1	1	ug/l	SW-846 8260B	9/10/09	MMM

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

GZA / Geoenvironmental, Inc.
Date Received: 9/9/09
Work Order #: 0909-16221

Approved by: Data Reporting

Sample # 004
SAMPLE DESCRIPTION: D-5
SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 9/09/2009

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
Methylene Chloride	<5	5	ug/l	SW-846 8260B	9/10/09	MMM
Naphthalene	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
n-Propylbenzene	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
Styrene	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
1,1,1,2-Tetrachloroethane	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
1,1,2,2-Tetrachloroethane	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
Tetrachloroethene	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
Toluene	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
1,2,3-Trichlorobenzene	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
1,2,4-Trichlorobenzene	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
1,1,1-Trichloroethane	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
1,1,2-Trichloroethane	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
Trichloroethene	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
Trichlorofluoromethane	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
1,2,3-Trichloropropane	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
1,2,4-Trimethylbenzene	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
1,3,5-Trimethylbenzene	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
Vinyl Chloride	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
o-Xylene	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
m,p-Xylene	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
Total Xylene	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
Methyl Tertiary Butyl Ether (MTBE)	<2	2	ug/l	SW-846 8260B	9/10/09	MMM
Surrogates			RANGE	SW-846 8260B	9/10/09	MMM
Dibromofluoromethane	109		86-118%	SW-846 8260B	9/10/09	MMM
Toluene-d8	109		88-110%	SW-846 8260B	9/10/09	MMM
4-Bromofluorobenzene	100		86-115%	SW-846 8260B	9/10/09	MMM
1,2 Dichloroethane-d4	105		80-120%	SW-846 8260B	9/10/09	MMM

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

GZA / Geoenvironmental, Inc.
Date Received: 9/9/09
Work Order #: 0909-16221

Approved by: _____
Data Reporting

Sample # 005
SAMPLE DESCRIPTION: TRIP BLANK
SAMPLE TYPE: GRAB **SAMPLE DATE/TIME:** 9/09/2009

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
Volatile Organic Compounds						
Benzene	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
Bromobenzene	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
Bromochloromethane	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
Bromodichloromethane	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
Bromoform	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
Bromomethane	<7	7	ug/l	SW-846 8260B	9/10/09	MMM
n-Butylbenzene	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
Sec-butylbenzene	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
tert-Butylbenzene	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
Carbon Tetrachloride	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
Chlorobenzene	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
Chloroethane	<5	5	ug/l	SW-846 8260B	9/10/09	MMM
Chloroform	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
Chloromethane	<5	5	ug/l	SW-846 8260B	9/10/09	MMM
2-Chlorotoluene	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
4-Chlorotoluene	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
Dibromochloromethane	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
1,2-Dibromo-3-Chloropropane	<2	2	ug/l	SW-846 8260B	9/10/09	MMM
1,2-Dibromoethane(EDB)	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
Dibromomethane	<2	2	ug/l	SW-846 8260B	9/10/09	MMM
1,2-Dichlorobenzene	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
1,3-Dichlorobenzene	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
1,4-Dichlorobenzene	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
Dichlorodifluoromethane	<5	5	ug/l	SW-846 8260B	9/10/09	MMM
1,1-Dichloroethane	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
1,2-Dichloroethane	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
1,1-Dichloroethene	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
cis-1,2-Dichloroethene	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
trans-1,2-Dichloroethylene	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
1,2-Dichloropropane	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
1,3-Dichloropropane	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
2,2-Dichloropropane	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
1,1-Dichloropropene	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
Ethylbenzene	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
Hexachlorobutadiene	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
Isopropylbenzene	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
p-Isopropyltoluene	<1	1	ug/l	SW-846 8260B	9/10/09	MMM

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

GZA / Geoenvironmental, Inc.
Date Received: 9/9/09
Work Order #: 0909-16221

Approved by: _____
Data Reporting

Sample # 005
SAMPLE DESCRIPTION: TRIP BLANK
SAMPLE TYPE: GRAB **SAMPLE DATE/TIME:** 9/09/2009

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
Methylene Chloride	<5	5	ug/l	SW-846 8260B	9/10/09	MMM
Naphthalene	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
n-Propylbenzene	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
Styrene	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
1,1,1,2-Tetrachloroethane	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
1,1,2,2-Tetrachloroethane	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
Tetrachloroethene	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
Toluene	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
1,2,3-Trichlorobenzene	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
1,2,4-Trichlorobenzene	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
1,1,1-Trichloroethane	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
1,1,2-Trichloroethane	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
Trichloroethene	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
Trichlorofluoromethane	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
1,2,3-Trichloropropane	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
1,2,4-Trimethylbenzene	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
1,3,5-Trimethylbenzene	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
Vinyl Chloride	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
o-Xylene	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
m,p-Xylene	<1	1	ug/l	SW-846 8260B	9/10/09	MMM
Methyl Tertiary Butyl Ether (MTBE)	<2	2	ug/l	SW-846 8260B	9/10/09	MMM
Surrogates			RANGE	SW-846 8260B	9/10/09	MMM
Dibromofluoromethane	108		86-118%	SW-846 8260B	9/10/09	MMM
Toluene-d8	107		88-110%	SW-846 8260B	9/10/09	MMM
4-Bromofluorobenzene	100		86-115%	SW-846 8260B	9/10/09	MMM
1,2 Dichloroethane-d4	102		80-120%	SW-846 8260B	9/10/09	MMM

CHAIN OF CUSTODY RECORD

R.I. Analytical Laboratories, Inc.

41 Illinois Avenue
Warwick, RI 02888
Tel: 800-937-2580
Fax: 401-738-1970

131 Coolidge St, Bldg. 2
Hudson, MA 01749
Tel: 888-228-3334
Fax: 978-568-0078

Date Collected	Time Collected	Field Sample Identification	Grab or Composite	# of Containers & Type T	Preservation Code P	Matrix Code M	8260- VOCs
9/9		~~DB-1~~ D-1	G	2V	H	SW	X
		~~DB-2~~ D-2		2V			X
		~~DB-3~~ D-3		2V			X
		~~DB-4~~ D-4		2V			X
		~~DB-5~~ D-5		2V			X
		Trip Blank		2V			X
8 samples							
containers							
all 9/9							

Client Information

Company Name: GZA
Address: 530 Broadway
City / State / Zip: Providence RI 02909
Telephone: 401-421-4140 Fax:
Contact Person: Rick Carlone

Project Information

Project Name: Charbert — per 9/10/09 client
P.O. Number: Project Number: 32715-3.2
Report To: Rick Carlone Phone: 401-421-4140 Fax:
Sampled by: Rick Carlone
Quote No: Email address: rcarlone@gza.com

Relinquished By	Date	Time	Received By	Date	Time
	9/09/09			9/9/09	1pm

Turn Around Time

- [ ] Normal [ ] EMAIL Report
- [ ] 5 Business days. Possible surcharge.
- [ ] Rush ____ (business days)

Project Comments

Circle if applicable: GW-1, GW-2, GW-3, S-1, S-2, S-3 MCP Data Enhancement QC Package? Yes No

8.6°C

Lab Use Only

- [ ] Sample Pick Up Only
- [ ] RIAL sampled; attach field hours
- [ ] Shipped on ice

Workorder No: 09-09-1621

Container Types: P=Poly, G=Glass, AG=Amber Glass, V=Vial, St=Sterile
Preservation Codes: NP=None, N=HNO_3, H=HCl, S=H_2SO_4, SH=NaOH, SB=$NaHSO_4$, M=MeOH, T=Na_2S_2C Z=ZnOAc, I=Ice
Matrix Codes: GW=Groundwater, SW=Surface Water, WW=Wastewater, DW=Drinking Water, S=Soil, Sl=Sludge, A=Air, B=Bulk/Solid, O=_____

GZA GeoEnvironmental, Inc.
106 South Street
Hopkinton, MA 01748
(781) 278-4700

Laboratory Identification Numbers:
MA and ME: **MA092** NH: **2028**
CT: **PH0579** RI: **LAO00236**
NELAC - NYS DOH: **11063**

ANALYTICAL REPORT

GZA GeoEnvironmental, Inc.
140 Broadway
Providence, RI 02903

Steve Andrus

Project No.: **03.0032795.32**
Work Order No.: **0910-00002**
Date Received: **10/01/2009**
Date Reported: **10/05/2009**

SAMPLE INFORMATION

Date Sampled	Matrix	Laboratory ID	Sample ID
09/30/2009	Aqueous	0910-00002 001	DB-1
09/30/2009	Aqueous	0910-00002 002	Trip Blank

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A N A L Y T I C A L R E P O R T

GZA GeoEnvironmental, Inc.
140 Broadway
Providence, RI 02903

Steve Andrus

Project Name.: **Charbert Diffusion Bass**
Project No.: **03.0032795.32**

Date Received: **10/01/2009**
Date Reported: **10/05/2009**
Work Order No.: **0910-00002**

PROJECT NARRATIVE:

1. Sample Receipt

The samples were received on 10/1/09 via _x_GZA courier, __EC, __FEDEX, or ___hand delivered. The temperature of the __temperature blank/_x_cooler air, was 2.8 degrees C. The temperature requirement for most analyses is above freezing to 6 degrees C. The samples were received intact for all requested analyses.

The chain of custody indicates that the samples, when required, were chemically preserved in accordance with the method they reference.

2. EPA Method 8260 - VOCs

Attach QC 8260 10/01/09 S - Aqueous

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Steve Andrus

Project Name.: **Charbert Diffusion Bass**
Project No.: **03.0032795.32**

Date Received: **10/01/2009**
Date Reported: **10/05/2009**
Work Order No.: **0910-00002**

Data Authorized By: _____

NELAC certification, as indicated by the NELAC Lab ID Number, is per analyte. For a complete list of NELAC validated analytes, please contact the laboratory.

Abbreviations:
% R = % Recovery
DF = Dilution Factor
DFS = Dilution Factor Solids
CF = Calculation Factor
DO = Diluted Out

Method Key:
Method 8260: The current version of the method is 8260B.
Method 8270: The current version of the method is 8270D.
Method 6010: The current version of the method is 6010B.

Please note that the laboratory signed copy of the chain of custody record is an integral part of the data report.

Soil data is reported on a dry weight basis unless otherwise specified.
Matrix Spike / Matrix Spike Duplicate sets are performed as per method and are reported at the end of the analytical report if assigned on the Chain of Custody.

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ANALYTICAL REPORT

GZA GeoEnvironmental, Inc.
140 Broadway
Providence, RI 02903

Steve Andrus

Project Name.: **Charbert Diffusion Bass**
Project No.: **03.0032795.32**

Date Received: **10/01/2009**
Date Reported: **10/05/2009**
Work Order No.: **0910-00002**

Sample ID: **DB-1** Sample No.: **001**

Sample Date: **09/30/2009**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260				MQS	10/01/2009
Dichlorodifluoromethane	EPA 8260	<2.0	2.0	ug/L	MQS	10/01/2009
Chloromethane	EPA 8260	<2.0	2.0	ug/L	MQS	10/01/2009
Vinyl Chloride	EPA 8260	<1.0	1.0	ug/L	MQS	10/01/2009
Bromomethane	EPA 8260	<2.0	2.0	ug/L	MQS	10/01/2009
Chloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/01/2009
Trichlorofluoromethane	EPA 8260	<2.0	2.0	ug/L	MQS	10/01/2009
Diethylether	EPA 8260	<5.0	5.0	ug/L	MQS	10/01/2009
Acetone	EPA 8260	<25	25	ug/L	MQS	10/01/2009
1,1-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	10/01/2009
Dichloromethane	EPA 8260	<2.0	2.0	ug/L	MQS	10/01/2009
Methyl-Tert-Butyl-Ether	EPA 8260	<1.0	1.0	ug/L	MQS	10/01/2009
trans-1,2-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	10/01/2009
1,1-Dichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/01/2009
2-Butanone	EPA 8260	<25	25	ug/L	MQS	10/01/2009
2,2-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	10/01/2009
cis-1,2-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	10/01/2009
Chloroform	EPA 8260	<1.0	1.0	ug/L	MQS	10/01/2009
Bromochloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/01/2009
Tetrahydrofuran	EPA 8260	<10	10	ug/L	MQS	10/01/2009
1,1,1-Trichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/01/2009
1,1-Dichloropropene	EPA 8260	<1.0	1.0	ug/L	MQS	10/01/2009
Carbon Tetrachloride	EPA 8260	<1.0	1.0	ug/L	MQS	10/01/2009
1,2-Dichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/01/2009
Benzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/01/2009
Trichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	10/01/2009
1,2-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	10/01/2009
Bromodichloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/01/2009
Dibromomethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/01/2009
4-Methyl-2-Pentanone	EPA 8260	<25	25	ug/L	MQS	10/01/2009
cis-1,3-Dichloropropene	EPA 8260	<1.0	1.0	ug/L	MQS	10/01/2009
Toluene	EPA 8260	<1.0	1.0	ug/L	MQS	10/01/2009
trans-1,3-Dichloropropene	EPA 8260	<2.0	2.0	ug/L	MQS	10/01/2009
1,1,2-Trichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/01/2009
2-Hexanone	EPA 8260	<25	25	ug/L	MQS	10/01/2009

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A N A L Y T I C A L R E P O R T

GZA GeoEnvironmental, Inc.
140 Broadway
Providence, RI 02903

Steve Andrus

Project Name.: **Charbert Diffusion Bass**
Project No.: **03.0032795.32**

Date Received: **10/01/2009**
Date Reported: **10/05/2009**
Work Order No.: **0910-00002**

Sample ID: **DB-1** Sample No.: **001**

Sample Date: **09/30/2009**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
1,3-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	10/01/2009
Tetrachloroethene	EPA 8260	3.6	1.0	ug/L	MQS	10/01/2009
Dibromochloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/01/2009
1,2-Dibromoethane (EDB)	EPA 8260	<2.0	2.0	ug/L	MQS	10/01/2009
Chlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/01/2009
1,1,1,2-Tetrachloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/01/2009
Ethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/01/2009
m&p-Xylene	EPA 8260	<2.0	2.0	ug/L	MQS	10/01/2009
o-Xylene	EPA 8260	<1.0	1.0	ug/L	MQS	10/01/2009
Styrene	EPA 8260	<1.0	1.0	ug/L	MQS	10/01/2009
Bromoform	EPA 8260	<2.0	2.0	ug/L	MQS	10/01/2009
Isopropylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/01/2009
1,1,2,2-Tetrachloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/01/2009
1,2,3-Trichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	10/01/2009
Bromobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/01/2009
N-Propylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/01/2009
2-Chlorotoluene	EPA 8260	<1.0	1.0	ug/L	MQS	10/01/2009
1,3,5-Trimethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/01/2009
4-Chlorotoluene	EPA 8260	<1.0	1.0	ug/L	MQS	10/01/2009
tert-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/01/2009
1,2,4-Trimethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/01/2009
sec-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/01/2009
p-Isopropyltoluene	EPA 8260	<1.0	1.0	ug/L	MQS	10/01/2009
1,3-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/01/2009
1,4-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/01/2009
n-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/01/2009
1,2-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/01/2009
1,2-Dibromo-3-Chloropropane	EPA 8260	<5.0	5.0	ug/L	MQS	10/01/2009
1,2,4-Trichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/01/2009
Hexachlorobutadiene	EPA 8260	<1.0	1.0	ug/L	MQS	10/01/2009
Naphthalene	EPA 8260	<2.0	2.0	ug/L	MQS	10/01/2009
1,2,3-Trichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/01/2009
Surrogates:	EPA 8260					
***1,2-Dichloroethane-D4	EPA 8260	96.2	70-130	% R	MQS	10/01/2009
***Toluene-D8	EPA 8260	97.8	70-130	% R	MQS	10/01/2009

GZA GeoEnvironmental, Inc.
106 South Street
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A N A L Y T I C A L R E P O R T

GZA GeoEnvironmental, Inc.
140 Broadway
Providence, RI 02903

Steve Andrus

Project Name.: **Charbert Diffusion Bass**
Project No.: **03.0032795.32**

Date Received: **10/01/2009**
Date Reported: **10/05/2009**
Work Order No.: **0910-00002**

Sample ID: **DB-1** Sample No.: **001**

Sample Date: **09/30/2009**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
***4-Bromofluorobenzene	EPA 8260	99.6	70-130	% R	MQS	10/01/2009
Preparation	EPA 5030B	1.0		CF	MQS	10/01/2009

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Steve Andrus

Project Name.: **Charbert Diffusion Bass**
Project No.: **03.0032795.32**

Date Received: **10/01/2009**
Date Reported: **10/05/2009**
Work Order No.: **0910-00002**

Sample ID: **Trip Blank** Sample No.: **002**

Sample Date: **09/30/2009**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260				MQS	10/01/2009
Dichlorodifluoromethane	EPA 8260	<2.0	2.0	ug/L	MQS	10/01/2009
Chloromethane	EPA 8260	<2.0	2.0	ug/L	MQS	10/01/2009
Vinyl Chloride	EPA 8260	<1.0	1.0	ug/L	MQS	10/01/2009
Bromomethane	EPA 8260	<2.0	2.0	ug/L	MQS	10/01/2009
Chloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/01/2009
Trichlorofluoromethane	EPA 8260	<2.0	2.0	ug/L	MQS	10/01/2009
Diethylether	EPA 8260	<5.0	5.0	ug/L	MQS	10/01/2009
Acetone	EPA 8260	<25	25	ug/L	MQS	10/01/2009
1,1-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	10/01/2009
Dichloromethane	EPA 8260	<2.0	2.0	ug/L	MQS	10/01/2009
Methyl-Tert-Butyl-Ether	EPA 8260	<1.0	1.0	ug/L	MQS	10/01/2009
trans-1,2-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	10/01/2009
1,1-Dichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/01/2009
2-Butanone	EPA 8260	<25	25	ug/L	MQS	10/01/2009
2,2-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	10/01/2009
cis-1,2-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	10/01/2009
Chloroform	EPA 8260	<1.0	1.0	ug/L	MQS	10/01/2009
Bromochloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/01/2009
Tetrahydrofuran	EPA 8260	<10	10	ug/L	MQS	10/01/2009
1,1,1-Trichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/01/2009
1,1-Dichloropropene	EPA 8260	<1.0	1.0	ug/L	MQS	10/01/2009
Carbon Tetrachloride	EPA 8260	<1.0	1.0	ug/L	MQS	10/01/2009
1,2-Dichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/01/2009
Benzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/01/2009
Trichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	10/01/2009
1,2-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	10/01/2009
Bromodichloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/01/2009
Dibromomethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/01/2009
4-Methyl-2-Pentanone	EPA 8260	<25	25	ug/L	MQS	10/01/2009
cis-1,3-Dichloropropene	EPA 8260	<1.0	1.0	ug/L	MQS	10/01/2009
Toluene	EPA 8260	<1.0	1.0	ug/L	MQS	10/01/2009
trans-1,3-Dichloropropene	EPA 8260	<2.0	2.0	ug/L	MQS	10/01/2009
1,1,2-Trichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/01/2009
2-Hexanone	EPA 8260	<25	25	ug/L	MQS	10/01/2009

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A N A L Y T I C A L R E P O R T

GZA GeoEnvironmental, Inc.
140 Broadway
Providence, RI 02903

Steve Andrus
Project Name.: **Charbert Diffusion Bass**
Project No.: **03.0032795.32**

Date Received: **10/01/2009**
Date Reported: **10/05/2009**
Work Order No.: **0910-00002**

Sample ID: **Trip Blank** Sample No.: **002**
Sample Date: **09/30/2009**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
1,3-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	10/01/2009
Tetrachloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	10/01/2009
Dibromochloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/01/2009
1,2-Dibromoethane (EDB)	EPA 8260	<2.0	2.0	ug/L	MQS	10/01/2009
Chlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/01/2009
1,1,1,2-Tetrachloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/01/2009
Ethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/01/2009
m&p-Xylene	EPA 8260	<2.0	2.0	ug/L	MQS	10/01/2009
o-Xylene	EPA 8260	<1.0	1.0	ug/L	MQS	10/01/2009
Styrene	EPA 8260	<1.0	1.0	ug/L	MQS	10/01/2009
Bromoform	EPA 8260	<2.0	2.0	ug/L	MQS	10/01/2009
Isopropylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/01/2009
1,1,2,2-Tetrachloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/01/2009
1,2,3-Trichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	10/01/2009
Bromobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/01/2009
N-Propylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/01/2009
2-Chlorotoluene	EPA 8260	<1.0	1.0	ug/L	MQS	10/01/2009
1,3,5-Trimethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/01/2009
4-Chlorotoluene	EPA 8260	<1.0	1.0	ug/L	MQS	10/01/2009
tert-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/01/2009
1,2,4-Trimethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/01/2009
sec-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/01/2009
p-Isopropyltoluene	EPA 8260	<1.0	1.0	ug/L	MQS	10/01/2009
1,3-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/01/2009
1,4-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/01/2009
n-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/01/2009
1,2-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/01/2009
1,2-Dibromo-3-Chloropropane	EPA 8260	<5.0	5.0	ug/L	MQS	10/01/2009
1,2,4-Trichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/01/2009
Hexachlorobutadiene	EPA 8260	<1.0	1.0	ug/L	MQS	10/01/2009
Naphthalene	EPA 8260	<2.0	2.0	ug/L	MQS	10/01/2009
1,2,3-Trichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/01/2009
Surrogates:	EPA 8260					
***1,2-Dichloroethane-D4	EPA 8260	93.0	70-130	% R	MQS	10/01/2009
***Toluene-D8	EPA 8260	97.5	70-130	% R	MQS	10/01/2009

GZA GeoEnvironmental, Inc.
106 South Street
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(781) 278-4700

A N A L Y T I C A L R E P O R T

GZA GeoEnvironmental, Inc.
140 Broadway
Providence, RI 02903

Steve Andrus

Project Name.: **Charbert Diffusion Bass**
Project No.: **03.0032795.32**

Date Received: **10/01/2009**
Date Reported: **10/05/2009**
Work Order No.: **0910-00002**

Sample ID: **Trip Blank** Sample No.: **002**
Sample Date: **09/30/2009**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
***4-Bromofluorobenzene	EPA 8260	99.5	70-130	% R	MQS	10/01/2009
Preparation	EPA 5030B	1.0		CF	MQS	10/01/2009

GZA GeoEnvironmental, Inc.
106 South Street
Hopkinton, MA 01748

EPA Method 8260 / 524.2 Aqueous Method Blank (MB) and Laboratory Control Sample/Duplicate (LCS/LCSD) Data

Method Blank			Laboratory Control Sample				Laboratory Control Sample Duplicate					
Date Analyzed:	10/1/2009		Date Analyzed:	10/1/2009			10/1/2009					
Volatile Organics	Conc. ug/L	Acceptance Limit	Spike Concentration = 20ug/L	% Recovery	Acceptance Limits	Verdict	% Recovery	Acceptance Limits	Verdict	RPD	Limit	Verdict
dichlorodifluoromethane	< 1.0	< 1.0	dichlorodifluoromethane	120	70-130	ok	121	70-130	ok	1.06	<25	ok
chloromethane	< 1.0	< 1.0	chloromethane	114	70-130	ok	116	70-130	ok	1.59	<25	ok
vinyl chloride	< 0.5	< 0.5	vinyl chloride	118	80-120	ok	119	70-130	ok	0.32	<25	ok
bromomethane	< 1.0	< 1.0	bromomethane	104	70-130	ok	104	70-130	ok	0.84	<25	ok
chloroethane	< 0.5	< 0.5	chloroethane	107	70-130	ok	107	70-130	ok	0.59	<25	ok
trichlorofluoromethane	< 1.0	< 1.0	trichlorofluoromethane	101	70-130	ok	101	70-130	ok	0.34	<25	ok
diethyl ether	< 2.5	< 2.5	diethyl ether	98.3	70-130	ok	99.6	70-130	ok	1.31	<25	ok
acetone	< 13	< 13	acetone	101	70-130	ok	106	70-130	ok	5.14	<25	ok
1,1-dichloroethene	< 0.5	< 0.5	1,1-dichloroethene	101	80-120	ok	102	70-130	ok	1.25	<25	ok
FREON-113	< 1.0	< 1.0	FREON-113	110	70-130	ok	113	70-130	ok	2.88	<25	ok
iodomethane	< 0.5	< 0.5	iodomethane	101	70-130	ok	102	70-130	ok	1.52	<25	ok
carbon disulfide	< 5.0	< 5.0	carbon disulfide	120	70-130	ok	119	70-130	ok	0.73	<25	ok
dichloromethane	< 1.0	< 1.0	dichloromethane	99.1	70-130	ok	101	70-130	ok	2.29	<25	ok
tert-butyl alcohol (TBA)	< 13	< 13	tert-butyl alcohol (TBA)	88.7	70-130	ok	95.4	70-130	ok	7.31	<25	ok
acrylonitrile	< 0.5	< 0.5	acrylonitrile	104	70-130	ok	108	70-130	ok	3.93	<25	ok
methyl-tert-butyl-ether	< 0.5	< 0.5	methyl-tert-butyl-ether	99.7	70-130	ok	104	70-130	ok	4.12	<25	ok
trans-1,2-dichloroethene	< 0.5	< 0.5	trans-1,2-dichloroethene	113	70-130	ok	113	70-130	ok	0.30	<25	ok
1,1-dichloroethane	< 0.5	< 0.5	1,1-dichloroethane	98.8	70-130	ok	101	70-130	ok	2.18	<25	ok
di-isopropyl ether (DIPE)	< 1.0	< 1.0	di-isopropyl ether (DIPE)	100	70-130	ok	105	70-130	ok	4.70	<25	ok
ethyl tert-butyl ether (EtBE)	< 1.0	< 1.0	ethyl tert-butyl ether (EtBE)	97.8	70-130	ok	102	70-130	ok	4.61	<25	ok
vinyl acetate	< 13	< 13	vinyl acetate	93.6	70-130	ok	97.1	70-130	ok	3.62	<25	ok
2-butanone	< 13	< 13	2-butanone	107	70-130	ok	112	70-130	ok	4.02	<25	ok
2,2-dichloropropane	< 0.5	< 0.5	2,2-dichloropropane	101	70-130	ok	102	70-130	ok	0.71	<25	ok
cis-1,2-dichloroethene	< 0.5	< 0.5	cis-1,2-dichloroethene	95.7	70-130	ok	97.0	70-130	ok	1.35	<25	ok
chloroform	< 0.5	< 0.5	chloroform	90.1	80-120	ok	92.2	70-130	ok	2.27	<25	ok
bromochloromethane	< 0.5	< 0.5	bromochloromethane	97.5	70-130	ok	102	70-130	ok	4.96	<25	ok
tetrahydrofuran	< 5.0	< 5.0	tetrahydrofuran	98.6	70-130	ok	104	70-130	ok	5.09	<25	ok
1,1,1-trichloroethane	< 0.5	< 0.5	1,1,1-trichloroethane	90.2	70-130	ok	92.8	70-130	ok	2.87	<25	ok
1,1-dichloropropene	< 0.5	< 0.5	1,1-dichloropropene	97.8	70-130	ok	99.2	70-130	ok	1.51	<25	ok
carbon tetrachloride	< 0.5	< 0.5	carbon tetrachloride	92.2	70-130	ok	92.0	70-130	ok	0.21	<25	ok
1,2-dichloroethane	< 0.5	< 0.5	1,2-dichloroethane	84.9	70-130	ok	87.7	70-130	ok	3.16	<25	ok
benzene	< 0.5	< 0.5	benzene	106	70-130	ok	107	70-130	ok	1.19	<25	ok
tert-amyl methyl ether (TAME)	< 1.0	< 1.0	tert-amyl methyl ether (TAME)	98.6	70-130	ok	104	70-130	ok	5.60	<25	ok
trichloroethene	< 0.5	< 0.5	trichloroethene	99.6	70-130	ok	99.4	70-130	ok	0.21	<25	ok
1,2-dichloropropane	< 0.5	< 0.5	1,2-dichloropropane	101	80-120	ok	105	70-130	ok	3.94	<25	ok
bromodichloromethane	< 0.5	< 0.5	bromodichloromethane	88.3	70-130	ok	90.3	70-130	ok	2.21	<25	ok
1,4-Dioxane	< 50	< 50	1,4-Dioxane	95.3	70-130	ok	113	70-130	ok	16.9	<25	ok
dibromomethane	< 0.5	< 0.5	dibromomethane	96.6	70-130	ok	105	70-130	ok	7.93	<25	ok
4-methyl-2-pentanone	< 13	< 13	4-methyl-2-pentanone	94.5	70-130	ok	101	70-130	ok	6.74	<25	ok
cis-1,3-dichloropropene	< 0.5	< 0.5	cis-1,3-dichloropropene	97.5	70-130	ok	98.6	70-130	ok	1.13	<25	ok
toluene	< 0.5	< 0.5	toluene	99.3	80-120	ok	102	70-130	ok	2.22	<25	ok
trans-1,3-dichloropropene	< 1.0	< 1.0	trans-1,3-dichloropropene	90.5	70-130	ok	92.7	70-130	ok	2.35	<25	ok
1,1,2-trichloroethane	< 0.5	< 0.5	1,1,2-trichloroethane	95.2	70-130	ok	95.2	70-130	ok	0.01	<25	ok
2-hexanone	< 13	< 13	2-hexanone	94.8	70-130	ok	96.2	70-130	ok	1.40	<25	ok
1,3-dichloropropane	< 0.5	< 0.5	1,3-dichloropropane	97.7	70-130	ok	96.3	70-130	ok	1.44	<25	ok
tetrachloroethene	< 0.5	< 0.5	tetrachloroethene	99.7	70-130	ok	96.8	70-130	ok	2.97	<25	ok
dibromochloromethane	< 0.5	< 0.5	dibromochloromethane	90.1	70-130	ok	89.1	70-130	ok	1.09	<25	ok
1,2-dibromoethane (EDB)	< 1.0	< 1.0	1,2-dibromoethane (EDB)	96.8	70-130	ok	97.2	70-130	ok	0.48	<25	ok
chlorobenzene	< 0.5	< 0.5	chlorobenzene	95.7	70-130	ok	93.2	70-130	ok	2.64	<25	ok
1,1,1,2-tetrachloroethane	< 0.5	< 0.5	1,1,1,2-tetrachloroethane	94.4	70-130	ok	93.4	70-130	ok	1.12	<25	ok
ethylbenzene	< 0.5	< 0.5	ethylbenzene	97.8	80-120	ok	94.7	70-130	ok	3.20	<25	ok
1,1,2,2-tetrachloroethane	< 0.5	< 0.5	1,1,2,2-tetrachloroethane	100	70-130	ok	100	70-130	ok	0.06	<25	ok
m&p-xylene	< 1.0	< 1.0	m&p-xylene	95.4	70-130	ok	93.0	70-130	ok	2.56	<25	ok
o-xylene	< 0.5	< 0.5	o-xylene	99.9	70-130	ok	101	70-130	ok	1.59	<25	ok
styrene	< 0.5	< 0.5	styrene	102	70-130	ok	104	70-130	ok	2.04	<25	ok
bromoform	< 1.0	< 1.0	bromoform	99.5	70-130	ok	107	70-130	ok	7.43	<25	ok
isopropylbenzene	< 0.5	< 0.5	isopropylbenzene	121	70-130	ok	123	70-130	ok	1.75	<25	ok
1,2,3-trichloropropane	< 0.5	< 0.5	1,2,3-trichloropropane	95.9	70-130	ok	101	70-130	ok	4.98	<25	ok
bromobenzene	< 0.5	< 0.5	bromobenzene	102	70-130	ok	106	70-130	ok	2.99	<25	ok
n-propylbenzene	< 0.5	< 0.5	n-propylbenzene	110	70-130	ok	111	70-130	ok	0.96	<25	ok
2-chlorotoluene	< 0.5	< 0.5	2-chlorotoluene	101	70-130	ok	103	70-130	ok	1.22	<25	ok
1,3,5-trimethylbenzene	< 0.5	< 0.5	1,3,5-trimethylbenzene	106	70-130	ok	107	70-130	ok	0.98	<25	ok
trans-1,4-dichloro-2-butene	< 1.0	< 1.0	trans-1,4-dichloro-2-butene	97.5	70-130	ok	104	70-130	ok	6.14	<25	ok
4-chlorotoluene	< 0.5	< 0.5	4-chlorotoluene	103	70-130	ok	104	70-130	ok	1.14	<25	ok
tert-butyl-benzene	< 0.5	< 0.5	tert-butyl-benzene	104	70-130	ok	104	70-130	ok	0.31	<25	ok
1,2,4-trimethylbenzene	< 0.5	< 0.5	1,2,4-trimethylbenzene	103	70-130	ok	105	70-130	ok	1.74	<25	ok
sec-butyl-benzene	< 0.5	< 0.5	sec-butyl-benzene	105	70-130	ok	106	70-130	ok	1.13	<25	ok
p-isopropyltoluene	< 0.5	< 0.5	p-isopropyltoluene	105	70-130	ok	106	70-130	ok	1.13	<25	ok
1,3-dichlorobenzene	< 0.5	< 0.5	1,3-dichlorobenzene	102	70-130	ok	103	70-130	ok	1.71	<25	ok
1,4-dichlorobenzene	< 0.5	< 0.5	1,4-dichlorobenzene	102	70-130	ok	104	70-130	ok	1.75	<25	ok
n-butylbenzene	< 0.5	< 0.5	n-butylbenzene	106	70-130	ok	107	70-130	ok	0.64	<25	ok
1,2-dichlorobenzene	< 0.5	< 0.5	1,2-dichlorobenzene	101	70-130	ok	105	70-130	ok	3.76	<25	ok
1,2-dibromo-3-chloropropane	< 2.5	< 2.5	1,2-dibromo-3-chloropropane	102	70-130	ok	113	70-130	ok	9.82	<25	ok
1,3,5-trichlorobenzene	< 0.5	< 0.5	1,3,5-trichlorobenzene	111	70-130	ok	113	70-130	ok	2.26	<25	ok
1,2,4-trichlorobenzene	< 0.5	< 0.5	1,2,4-trichlorobenzene	112	70-130	ok	120	70-130	ok	7.21	<25	ok
hexachlorobutadiene	< 0.5	< 0.5	hexachlorobutadiene	113	70-130	ok	114	70-130	ok	0.73	<25	ok
naphthalene	< 1.0	< 1.0	naphthalene	101	70-130	ok	110	70-130	ok	8.81	<25	ok
1,2,3-trichlorobenzene	< 0.5	< 0.5	1,2,3-trichlorobenzene	112	70-130	ok	121	70-130	ok	7.72	<25	ok

Surrogates:	Recovery (%)	Acceptance Limits	Surrogates:	Recovery (%)	Acceptance Limits	Verdict	Recovery (%)	Acceptance Limits	Verdict	RPD	Acceptance Limits	Verdict
DIBROMOFLUOROMETHANE	95.7	70-130	DIBROMOFLUOROMETHANE	93.0	70-130	ok	94.9	70-130	ok	2.02	<25	ok
1,2-DICHLOROETHANE-D4	99.6	70-130	1,2-DICHLOROETHANE-D4	98.6	70-130	ok	98.1	70-130	ok	0.54	<25	ok
TOLUENE-D8	98.3	70-130	TOLUENE-D8	95.7	70-130	ok	98.5	70-130	ok	2.84	<25	ok
4-BROMOFLUOROBENZENE	97.6	70-130	4-BROMOFLUOROBENZENE	101	70-130	ok	104	70-130	ok	2.98	<25	ok
1,2-DICHLOROBENZENE-D4	99.4	70-130	1,2-DICHLOROBENZENE-D4	102	70-130	ok	103	70-130	ok	0.33	<25	ok

Instrument: HP GC/MS "S"

CHAIN-OF-CUSTODY RECORD

W.O. # 0910-00002
(for lab use only)

Sample I.D.	Date/Time Sampled	Matrix (A=Air, S=Soil, GW=Ground W., SW=Surface W., WW=Waste W., DW=Drinking W., P=Product, Other (specify))	ANALYSIS REQUIRED	Total # of Cont.	Note #
DB-1	9/30/09	SW	EPA 8260 X	3	
Trip Blank	9/30/09	↓	EPA 8260 X	3	

PRESERVATIVE (Cl - HCl, M=Methanol, N - HNO3, S - H2SO4, Na - NaOH, O - Other)*

CONTAINER TYPE (P-Plastic, G-Glass, V-Vial, T-Teflon, O-Other)*

RELINQUISHED BY: (AFFILIATION) DATE/TIME RECEIVED BY: (AFFILIATION)
9/30/09 10 am Bec Beecan 10/1/09 0910

RELINQUISHED BY: (AFFILIATION) DATE/TIME RECEIVED BY: (AFFILIATION)
Bec Beecan 10/1/09 1010 Jw 10/1/09 1140

RELINQUISHED BY: (AFFILIATION) DATE/TIME RECEIVED BY: (AFFILIATION)

NOTES: (Unless otherwise noted, all samples have been refrigerated to 4° C)
*Specify "Other" preservatives and containers types in this space.

PROJECT MANAGER: Steve Andrus EXT:

GZA GeoEnvironmental, Inc.
Labaratory Division

106 South Street
Hopkinton, MA 01748
(781) 278-4700
FAX (508) 435-9912

TURNAROUND TIME: Standard / Rush (X) Days, Approved by

LAB USE:
TEMP. OF COOLER 2-3 °C

Temp Blank
Cooler Air 09/3
10/1/09
1120
FD

10/1/10

GZA FILE NO: 03.0032795-32 TASK NO: P.O. NO.

PROJECT Chanbart

LOCATION Alton RI

COLLECTOR(S) RAC

SHEET 1 OF 1

GZA GeoEnvironmental, Inc.
106 South Street
Hopkinton, MA 01748
(781) 278-4700

Laboratory Identification Numbers:
MA and ME: **MA092** NH: **2028**
CT: **PH0579** RI: **LAO00236**
NELAC - NYS DOH: **11063**

ANALYTICAL REPORT

GZA GeoEnvironmental, Inc.
140 Broadway
Providence, RI 02903

Steve Andrus

Project No.: **03.0032795.32**
Work Order No.: **1010-00148**
Date Received: **10/20/2010**
Date Reported: **10/26/2010**

SAMPLE INFORMATION

Date Sampled	Matrix	Laboratory ID	Sample ID
10/19/2010	Aqueous	1010-00148 001	DB-1
10/19/2010	Aqueous	1010-00148 002	DB-2
10/19/2010	Aqueous	1010-00148 003	DB-3
10/19/2010	Aqueous	1010-00148 004	DB-4
10/19/2010	Aqueous	1010-00148 005	DB-5
10/19/2010	Aqueous	1010-00148 006	DB-Blank
10/19/2010	Aqueous	1010-00148 007	Trip Blank

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A N A L Y T I C A L R E P O R T

GZA GeoEnvironmental, Inc.
140 Broadway
Providence, RI 02903

Steve Andrus

Project Name.: **Charbert Diffusion Bass**
Project No.: **03.0032795.32**

Date Received: **10/20/2010**
Date Reported: **10/26/2010**
Work Order No.: **1010-00148**

PROJECT NARRATIVE:

1. Sample Receipt

The samples were received on 10/20/10 via _x_GZA courier, __EC, __FEDEX, or ___hand delivered. The temperature of the _x_temperature blank/__cooler air, was 1.3 degrees C. The temperature requirement for most analyses is above freezing to 6 degrees C. The samples were received intact for all requested analyses.

The chain of custody indicates that the samples, when required, were chemically preserved in accordance with the method they reference.

2. EPA Method 8260 - VOCs

The Laboratory Control Sample (LCS) (10/25/10 S) had a(n) 8260 List analyte outside of the 70-130% acceptance criteria. Specific outlier includes: dichlorodifluoromethane (137%).

The Laboratory Control Sample Duplicate (LCSD) (10/25/10 S) had a(n) 8260 List analyte outside of the 70-130% acceptance criteria. Specific outlier includes: dichlorodifluoromethane (136%).

Attach QC 8260 10/25/10 "S" - Aqueous

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A N A L Y T I C A L R E P O R T

GZA GeoEnvironmental, Inc.
140 Broadway
Providence, RI 02903

Steve Andrus

Project Name.: **Charbert Diffusion Bass**
Project No.: **03.0032795.32**

Date Received: **10/20/2010**
Date Reported: **10/26/2010**
Work Order No.: **1010-00148**

Data Authorized By: _____

NELAC certification, as indicated by the NELAC Lab ID Number, is per analyte. For a complete list of NELAC validated analytes, please contact the laboratory.

Abbreviations:
% R = % Recovery
DF = Dilution Factor
DFS = Dilution Factor Solids
CF = Calculation Factor
DO = Diluted Out

Method Key:
Method 8260: The current version of the method is 8260B.
Method 8270: The current version of the method is 8270D.
Method 6010: The current version of the method is 6010C.

Please note that the laboratory signed copy of the chain of custody record is an integral part of the data report.

Soil data is reported on a dry weight basis unless otherwise specified.
Matrix Spike / Matrix Spike Duplicate sets are performed as per method and are reported at the end of the analytical report if assigned on the Chain of Custody.

GZA GeoEnvironmental, Inc.
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ANALYTICAL REPORT

GZA GeoEnvironmental, Inc.
140 Broadway
Providence, RI 02903

Steve Andrus

Project Name.: **Charbert Diffusion Bass**
Project No.: **03.0032795.32**

Date Received: **10/20/2010**
Date Reported: **10/26/2010**
Work Order No.: **1010-00148**

Sample ID: **DB-1** Sample No.: **001**

Sample Date: **10/19/2010**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260				MQS	10/25/2010
Dichlorodifluoromethane	EPA 8260	<2.0	2.0	ug/L	MQS	10/25/2010
Chloromethane	EPA 8260	<2.0	2.0	ug/L	MQS	10/25/2010
Vinyl Chloride	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
Bromomethane	EPA 8260	<2.0	2.0	ug/L	MQS	10/25/2010
Chloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
Trichlorofluoromethane	EPA 8260	<2.0	2.0	ug/L	MQS	10/25/2010
Diethylether	EPA 8260	<2.0	2.0	ug/L	MQS	10/25/2010
Acetone	EPA 8260	15	10	ug/L	MQS	10/25/2010
1,1-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
Dichloromethane	EPA 8260	<2.0	2.0	ug/L	MQS	10/25/2010
Methyl-Tert-Butyl-Ether	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
trans-1,2-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
1,1-Dichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
2-Butanone	EPA 8260	<10	10	ug/L	MQS	10/25/2010
2,2-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
cis-1,2-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
Chloroform	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
Bromochloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
Tetrahydrofuran	EPA 8260	<10	10	ug/L	MQS	10/25/2010
1,1,1-Trichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
1,1-Dichloropropene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
Carbon Tetrachloride	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
1,2-Dichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
Benzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
Trichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
1,2-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
Bromodichloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
Dibromomethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
4-Methyl-2-Pentanone	EPA 8260	<10	10	ug/L	MQS	10/25/2010
cis-1,3-Dichloropropene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
Toluene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
trans-1,3-Dichloropropene	EPA 8260	<2.0	2.0	ug/L	MQS	10/25/2010
1,1,2-Trichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
2-Hexanone	EPA 8260	<10	10	ug/L	MQS	10/25/2010

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A N A L Y T I C A L R E P O R T

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Steve Andrus
Project Name.: **Charbert Diffusion Bass**
Project No.: **03.0032795.32**

Date Received: **10/20/2010**
Date Reported: **10/26/2010**
Work Order No.: **1010-00148**

Sample ID: **DB-1** Sample No.: **001**
Sample Date: **10/19/2010**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
1,3-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
Tetrachloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
Dibromochloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
1,2-Dibromoethane (EDB)	EPA 8260	<2.0	2.0	ug/L	MQS	10/25/2010
Chlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
1,1,1,2-Tetrachloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
Ethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
m&p-Xylene	EPA 8260	<2.0	2.0	ug/L	MQS	10/25/2010
o-Xylene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
Styrene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
Bromoform	EPA 8260	<2.0	2.0	ug/L	MQS	10/25/2010
Isopropylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
1,1,2,2-Tetrachloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
1,2,3-Trichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
Bromobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
N-Propylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
2-Chlorotoluene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
1,3,5-Trimethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
4-Chlorotoluene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
tert-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
1,2,4-Trimethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
sec-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
p-Isopropyltoluene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
1,3-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
1,4-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
n-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
1,2-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
1,2-Dibromo-3-Chloropropane	EPA 8260	<2.0	2.0	ug/L	MQS	10/25/2010
1,2,4-Trichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
Hexachlorobutadiene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
Naphthalene	EPA 8260	<2.0	2.0	ug/L	MQS	10/25/2010
1,2,3-Trichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
Surrogates:	EPA 8260					
***1,2-Dichloroethane-D4	EPA 8260	112	70-130	% R	MQS	10/25/2010
***Toluene-D8	EPA 8260	110	70-130	% R	MQS	10/25/2010

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A N A L Y T I C A L R E P O R T

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Steve Andrus

Project Name.: **Charbert Diffusion Bass**
Project No.: **03.0032795.32**

Date Received: **10/20/2010**
Date Reported: **10/26/2010**
Work Order No.: **1010-00148**

Sample ID: **DB-1** Sample No.: **001**

Sample Date: **10/19/2010**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
***4-Bromofluorobenzene	EPA 8260	108	70-130	% R	MQS	10/25/2010
Preparation	EPA 5030B	1.0		CF	MQS	10/25/2010

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ANALYTICAL REPORT

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Steve Andrus

Project Name.: **Charbert Diffusion Bass**
Project No.: **03.0032795.32**

Date Received: **10/20/2010**
Date Reported: **10/26/2010**
Work Order No.: **1010-00148**

Sample ID: **DB-2** Sample No.: **002**

Sample Date: **10/19/2010**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260				MQS	10/25/2010
Dichlorodifluoromethane	EPA 8260	<2.0	2.0	ug/L	MQS	10/25/2010
Chloromethane	EPA 8260	<2.0	2.0	ug/L	MQS	10/25/2010
Vinyl Chloride	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
Bromomethane	EPA 8260	<2.0	2.0	ug/L	MQS	10/25/2010
Chloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
Trichlorofluoromethane	EPA 8260	<2.0	2.0	ug/L	MQS	10/25/2010
Diethylether	EPA 8260	<2.0	2.0	ug/L	MQS	10/25/2010
Acetone	EPA 8260	11	10	ug/L	MQS	10/25/2010
1,1-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
Dichloromethane	EPA 8260	<2.0	2.0	ug/L	MQS	10/25/2010
Methyl-Tert-Butyl-Ether	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
trans-1,2-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
1,1-Dichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
2-Butanone	EPA 8260	<10	10	ug/L	MQS	10/25/2010
2,2-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
cis-1,2-Dichloroethene	EPA 8260	2.2	1.0	ug/L	MQS	10/25/2010
Chloroform	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
Bromochloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
Tetrahydrofuran	EPA 8260	<10	10	ug/L	MQS	10/25/2010
1,1,1-Trichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
1,1-Dichloropropene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
Carbon Tetrachloride	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
1,2-Dichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
Benzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
Trichloroethene	EPA 8260	2.6	1.0	ug/L	MQS	10/25/2010
1,2-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
Bromodichloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
Dibromomethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
4-Methyl-2-Pentanone	EPA 8260	<10	10	ug/L	MQS	10/25/2010
cis-1,3-Dichloropropene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
Toluene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
trans-1,3-Dichloropropene	EPA 8260	<2.0	2.0	ug/L	MQS	10/25/2010
1,1,2-Trichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
2-Hexanone	EPA 8260	<10	10	ug/L	MQS	10/25/2010

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Steve Andrus
Project Name.: **Charbert Diffusion Bass**
Project No.: **03.0032795.32**

Date Received: **10/20/2010**
Date Reported: **10/26/2010**
Work Order No.: **1010-00148**

Sample ID: **DB-2** Sample No.: **002**
Sample Date: **10/19/2010**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
1,3-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
Tetrachloroethene	EPA 8260	23	1.0	ug/L	MQS	10/25/2010
Dibromochloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
1,2-Dibromoethane (EDB)	EPA 8260	<2.0	2.0	ug/L	MQS	10/25/2010
Chlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
1,1,1,2-Tetrachloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
Ethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
m&p-Xylene	EPA 8260	<2.0	2.0	ug/L	MQS	10/25/2010
o-Xylene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
Styrene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
Bromoform	EPA 8260	<2.0	2.0	ug/L	MQS	10/25/2010
Isopropylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
1,1,2,2-Tetrachloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
1,2,3-Trichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
Bromobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
N-Propylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
2-Chlorotoluene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
1,3,5-Trimethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
4-Chlorotoluene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
tert-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
1,2,4-Trimethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
sec-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
p-Isopropyltoluene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
1,3-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
1,4-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
n-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
1,2-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
1,2-Dibromo-3-Chloropropane	EPA 8260	<2.0	2.0	ug/L	MQS	10/25/2010
1,2,4-Trichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
Hexachlorobutadiene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
Naphthalene	EPA 8260	<2.0	2.0	ug/L	MQS	10/25/2010
1,2,3-Trichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
Surrogates:	EPA 8260					
***1,2-Dichloroethane-D4	EPA 8260	107	70-130	% R	MQS	10/25/2010
***Toluene-D8	EPA 8260	109	70-130	% R	MQS	10/25/2010

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A N A L Y T I C A L R E P O R T

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Steve Andrus

Project Name.: **Charbert Diffusion Bass**
Project No.: **03.0032795.32**

Date Received: **10/20/2010**
Date Reported: **10/26/2010**
Work Order No.: **1010-00148**

Sample ID: **DB-2** Sample No.: **002**

Sample Date: **10/19/2010**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
***4-Bromofluorobenzene	EPA 8260	103	70-130	% R	MQS	10/25/2010
Preparation	EPA 5030B	1.0		CF	MQS	10/25/2010

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Steve Andrus

Project Name.: **Charbert Diffusion Bass**
Project No.: **03.0032795.32**

Date Received: **10/20/2010**
Date Reported: **10/26/2010**
Work Order No.: **1010-00148**

Sample ID: **DB-3** Sample No.: **003**

Sample Date: **10/19/2010**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260				MQS	10/25/2010
Dichlorodifluoromethane	EPA 8260	<2.0	2.0	ug/L	MQS	10/25/2010
Chloromethane	EPA 8260	<2.0	2.0	ug/L	MQS	10/25/2010
Vinyl Chloride	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
Bromomethane	EPA 8260	<2.0	2.0	ug/L	MQS	10/25/2010
Chloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
Trichlorofluoromethane	EPA 8260	<2.0	2.0	ug/L	MQS	10/25/2010
Diethylether	EPA 8260	<2.0	2.0	ug/L	MQS	10/25/2010
Acetone	EPA 8260	<10	10	ug/L	MQS	10/25/2010
1,1-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
Dichloromethane	EPA 8260	<2.0	2.0	ug/L	MQS	10/25/2010
Methyl-Tert-Butyl-Ether	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
trans-1,2-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
1,1-Dichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
2-Butanone	EPA 8260	<10	10	ug/L	MQS	10/25/2010
2,2-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
cis-1,2-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
Chloroform	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
Bromochloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
Tetrahydrofuran	EPA 8260	<10	10	ug/L	MQS	10/25/2010
1,1,1-Trichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
1,1-Dichloropropene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
Carbon Tetrachloride	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
1,2-Dichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
Benzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
Trichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
1,2-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
Bromodichloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
Dibromomethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
4-Methyl-2-Pentanone	EPA 8260	<10	10	ug/L	MQS	10/25/2010
cis-1,3-Dichloropropene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
Toluene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
trans-1,3-Dichloropropene	EPA 8260	<2.0	2.0	ug/L	MQS	10/25/2010
1,1,2-Trichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
2-Hexanone	EPA 8260	<10	10	ug/L	MQS	10/25/2010

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Steve Andrus
Project Name.: **Charbert Diffusion Bass**
Project No.: **03.0032795.32**

Date Received: **10/20/2010**
Date Reported: **10/26/2010**
Work Order No.: **1010-00148**

Sample ID: **DB-3** Sample No.: **003**
Sample Date: **10/19/2010**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
1,3-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
Tetrachloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
Dibromochloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
1,2-Dibromoethane (EDB)	EPA 8260	<2.0	2.0	ug/L	MQS	10/25/2010
Chlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
1,1,1,2-Tetrachloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
Ethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
m&p-Xylene	EPA 8260	<2.0	2.0	ug/L	MQS	10/25/2010
o-Xylene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
Styrene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
Bromoform	EPA 8260	<2.0	2.0	ug/L	MQS	10/25/2010
Isopropylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
1,1,2,2-Tetrachloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
1,2,3-Trichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
Bromobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
N-Propylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
2-Chlorotoluene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
1,3,5-Trimethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
4-Chlorotoluene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
tert-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
1,2,4-Trimethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
sec-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
p-Isopropyltoluene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
1,3-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
1,4-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
n-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
1,2-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
1,2-Dibromo-3-Chloropropane	EPA 8260	<2.0	2.0	ug/L	MQS	10/25/2010
1,2,4-Trichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
Hexachlorobutadiene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
Naphthalene	EPA 8260	<2.0	2.0	ug/L	MQS	10/25/2010
1,2,3-Trichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
Surrogates:	EPA 8260					
***1,2-Dichloroethane-D4	EPA 8260	108	70-130	% R	MQS	10/25/2010
***Toluene-D8	EPA 8260	110	70-130	% R	MQS	10/25/2010

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A N A L Y T I C A L R E P O R T

GZA GeoEnvironmental, Inc.
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Steve Andrus

Project Name.: **Charbert Diffusion Bass**
Project No.: **03.0032795.32**

Date Received: **10/20/2010**
Date Reported: **10/26/2010**
Work Order No.: **1010-00148**

Sample ID: **DB-3** Sample No.: **003**
Sample Date: **10/19/2010**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
***4-Bromofluorobenzene	EPA 8260	105	70-130	% R	MQS	10/25/2010
Preparation	EPA 5030B	1.0		CF	MQS	10/25/2010

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Steve Andrus

Project Name.: **Charbert Diffusion Bass**
Project No.: **03.0032795.32**

Date Received: **10/20/2010**
Date Reported: **10/26/2010**
Work Order No.: **1010-00148**

Sample ID: **DB-4** Sample No.: **004**

Sample Date: **10/19/2010**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260				MQS	10/25/2010
Dichlorodifluoromethane	EPA 8260	<2.0	2.0	ug/L	MQS	10/25/2010
Chloromethane	EPA 8260	<2.0	2.0	ug/L	MQS	10/25/2010
Vinyl Chloride	EPA 8260	1.2	1.0	ug/L	MQS	10/25/2010
Bromomethane	EPA 8260	<2.0	2.0	ug/L	MQS	10/25/2010
Chloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
Trichlorofluoromethane	EPA 8260	<2.0	2.0	ug/L	MQS	10/25/2010
Diethylether	EPA 8260	<2.0	2.0	ug/L	MQS	10/25/2010
Acetone	EPA 8260	<10	10	ug/L	MQS	10/25/2010
1,1-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
Dichloromethane	EPA 8260	<2.0	2.0	ug/L	MQS	10/25/2010
Methyl-Tert-Butyl-Ether	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
trans-1,2-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
1,1-Dichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
2-Butanone	EPA 8260	<10	10	ug/L	MQS	10/25/2010
2,2-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
cis-1,2-Dichloroethene	EPA 8260	4.2	1.0	ug/L	MQS	10/25/2010
Chloroform	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
Bromochloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
Tetrahydrofuran	EPA 8260	<10	10	ug/L	MQS	10/25/2010
1,1,1-Trichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
1,1-Dichloropropene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
Carbon Tetrachloride	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
1,2-Dichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
Benzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
Trichloroethene	EPA 8260	1.3	1.0	ug/L	MQS	10/25/2010
1,2-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
Bromodichloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
Dibromomethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
4-Methyl-2-Pentanone	EPA 8260	<10	10	ug/L	MQS	10/25/2010
cis-1,3-Dichloropropene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
Toluene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
trans-1,3-Dichloropropene	EPA 8260	<2.0	2.0	ug/L	MQS	10/25/2010
1,1,2-Trichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
2-Hexanone	EPA 8260	<10	10	ug/L	MQS	10/25/2010

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Steve Andrus
Project Name.: **Charbert Diffusion Bass**
Project No.: **03.0032795.32**

Date Received: **10/20/2010**
Date Reported: **10/26/2010**
Work Order No.: **1010-00148**

Sample ID: **DB-4** Sample No.: **004**
Sample Date: **10/19/2010**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
1,3-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
Tetrachloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
Dibromochloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
1,2-Dibromoethane (EDB)	EPA 8260	<2.0	2.0	ug/L	MQS	10/25/2010
Chlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
1,1,1,2-Tetrachloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
Ethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
m&p-Xylene	EPA 8260	<2.0	2.0	ug/L	MQS	10/25/2010
o-Xylene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
Styrene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
Bromoform	EPA 8260	<2.0	2.0	ug/L	MQS	10/25/2010
Isopropylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
1,1,2,2-Tetrachloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
1,2,3-Trichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
Bromobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
N-Propylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
2-Chlorotoluene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
1,3,5-Trimethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
4-Chlorotoluene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
tert-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
1,2,4-Trimethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
sec-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
p-Isopropyltoluene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
1,3-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
1,4-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
n-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
1,2-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
1,2-Dibromo-3-Chloropropane	EPA 8260	<2.0	2.0	ug/L	MQS	10/25/2010
1,2,4-Trichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
Hexachlorobutadiene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
Naphthalene	EPA 8260	<2.0	2.0	ug/L	MQS	10/25/2010
1,2,3-Trichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
Surrogates:	EPA 8260					
***1,2-Dichloroethane-D4	EPA 8260	101	70-130	% R	MQS	10/25/2010
***Toluene-D8	EPA 8260	111	70-130	% R	MQS	10/25/2010

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A N A L Y T I C A L R E P O R T

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Steve Andrus

Project Name.: **Charbert Diffusion Bass**
Project No.: **03.0032795.32**

Date Received: **10/20/2010**
Date Reported: **10/26/2010**
Work Order No.: **1010-00148**

Sample ID: **DB-4** Sample No.: **004**
Sample Date: **10/19/2010**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
***4-Bromofluorobenzene	EPA 8260	102	70-130	% R	MQS	10/25/2010
Preparation	EPA 5030B	1.0		CF	MQS	10/25/2010

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Steve Andrus

Project Name.: **Charbert Diffusion Bass**
Project No.: **03.0032795.32**

Date Received: **10/20/2010**
Date Reported: **10/26/2010**
Work Order No.: **1010-00148**

Sample ID: **DB-5** Sample No.: **005**

Sample Date: **10/19/2010**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260				MQS	10/25/2010
Dichlorodifluoromethane	EPA 8260	<2.0	2.0	ug/L	MQS	10/25/2010
Chloromethane	EPA 8260	<2.0	2.0	ug/L	MQS	10/25/2010
Vinyl Chloride	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
Bromomethane	EPA 8260	<2.0	2.0	ug/L	MQS	10/25/2010
Chloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
Trichlorofluoromethane	EPA 8260	<2.0	2.0	ug/L	MQS	10/25/2010
Diethylether	EPA 8260	<2.0	2.0	ug/L	MQS	10/25/2010
Acetone	EPA 8260	<10	10	ug/L	MQS	10/25/2010
1,1-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
Dichloromethane	EPA 8260	<2.0	2.0	ug/L	MQS	10/25/2010
Methyl-Tert-Butyl-Ether	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
trans-1,2-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
1,1-Dichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
2-Butanone	EPA 8260	<10	10	ug/L	MQS	10/25/2010
2,2-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
cis-1,2-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
Chloroform	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
Bromochloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
Tetrahydrofuran	EPA 8260	<10	10	ug/L	MQS	10/25/2010
1,1,1-Trichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
1,1-Dichloropropene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
Carbon Tetrachloride	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
1,2-Dichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
Benzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
Trichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
1,2-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
Bromodichloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
Dibromomethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
4-Methyl-2-Pentanone	EPA 8260	<10	10	ug/L	MQS	10/25/2010
cis-1,3-Dichloropropene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
Toluene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
trans-1,3-Dichloropropene	EPA 8260	<2.0	2.0	ug/L	MQS	10/25/2010
1,1,2-Trichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
2-Hexanone	EPA 8260	<10	10	ug/L	MQS	10/25/2010

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Steve Andrus
Project Name.: **Charbert Diffusion Bass**
Project No.: **03.0032795.32**

Date Received: **10/20/2010**
Date Reported: **10/26/2010**
Work Order No.: **1010-00148**

Sample ID: **DB-5** Sample No.: **005**
Sample Date: **10/19/2010**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
1,3-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
Tetrachloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
Dibromochloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
1,2-Dibromoethane (EDB)	EPA 8260	<2.0	2.0	ug/L	MQS	10/25/2010
Chlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
1,1,1,2-Tetrachloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
Ethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
m&p-Xylene	EPA 8260	<2.0	2.0	ug/L	MQS	10/25/2010
o-Xylene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
Styrene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
Bromoform	EPA 8260	<2.0	2.0	ug/L	MQS	10/25/2010
Isopropylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
1,1,2,2-Tetrachloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
1,2,3-Trichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
Bromobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
N-Propylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
2-Chlorotoluene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
1,3,5-Trimethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
4-Chlorotoluene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
tert-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
1,2,4-Trimethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
sec-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
p-Isopropyltoluene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
1,3-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
1,4-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
n-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
1,2-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
1,2-Dibromo-3-Chloropropane	EPA 8260	<2.0	2.0	ug/L	MQS	10/25/2010
1,2,4-Trichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
Hexachlorobutadiene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
Naphthalene	EPA 8260	<2.0	2.0	ug/L	MQS	10/25/2010
1,2,3-Trichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
Surrogates:	EPA 8260					
***1,2-Dichloroethane-D4	EPA 8260	107	70-130	% R	MQS	10/25/2010
***Toluene-D8	EPA 8260	111	70-130	% R	MQS	10/25/2010

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Project Name.: **Charbert Diffusion Bass**
Project No.: **03.0032795.32**

Date Received: **10/20/2010**
Date Reported: **10/26/2010**
Work Order No.: **1010-00148**

Sample ID: **DB-5** Sample No.: **005**

Sample Date: **10/19/2010**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
***4-Bromofluorobenzene	EPA 8260	100	70-130	% R	MQS	10/25/2010
Preparation	EPA 5030B	1.0		CF	MQS	10/25/2010

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Project Name.: **Charbert Diffusion Bass**
Project No.: **03.0032795.32**

Date Received: **10/20/2010**
Date Reported: **10/26/2010**
Work Order No.: **1010-00148**

Sample ID: **DB-Blank** Sample No.: **006**

Sample Date: **10/19/2010**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260				MQS	10/25/2010
Dichlorodifluoromethane	EPA 8260	<2.0	2.0	ug/L	MQS	10/25/2010
Chloromethane	EPA 8260	<2.0	2.0	ug/L	MQS	10/25/2010
Vinyl Chloride	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
Bromomethane	EPA 8260	<2.0	2.0	ug/L	MQS	10/25/2010
Chloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
Trichlorofluoromethane	EPA 8260	<2.0	2.0	ug/L	MQS	10/25/2010
Diethylether	EPA 8260	<2.0	2.0	ug/L	MQS	10/25/2010
Acetone	EPA 8260	<10	10	ug/L	MQS	10/25/2010
1,1-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
Dichloromethane	EPA 8260	<2.0	2.0	ug/L	MQS	10/25/2010
Methyl-Tert-Butyl-Ether	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
trans-1,2-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
1,1-Dichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
2-Butanone	EPA 8260	<10	10	ug/L	MQS	10/25/2010
2,2-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
cis-1,2-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
Chloroform	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
Bromochloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
Tetrahydrofuran	EPA 8260	<10	10	ug/L	MQS	10/25/2010
1,1,1-Trichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
1,1-Dichloropropene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
Carbon Tetrachloride	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
1,2-Dichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
Benzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
Trichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
1,2-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
Bromodichloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
Dibromomethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
4-Methyl-2-Pentanone	EPA 8260	<10	10	ug/L	MQS	10/25/2010
cis-1,3-Dichloropropene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
Toluene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
trans-1,3-Dichloropropene	EPA 8260	<2.0	2.0	ug/L	MQS	10/25/2010
1,1,2-Trichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
2-Hexanone	EPA 8260	<10	10	ug/L	MQS	10/25/2010

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ANALYTICAL REPORT

GZA GeoEnvironmental, Inc.
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Steve Andrus

Project Name.: **Charbert Diffusion Bass**
Project No.: **03.0032795.32**

Date Received: **10/20/2010**
Date Reported: **10/26/2010**
Work Order No.: **1010-00148**

Sample ID: **DB-Blank** Sample No.: **006**

Sample Date: **10/19/2010**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
1,3-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
Tetrachloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
Dibromochloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
1,2-Dibromoethane (EDB)	EPA 8260	<2.0	2.0	ug/L	MQS	10/25/2010
Chlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
1,1,1,2-Tetrachloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
Ethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
m&p-Xylene	EPA 8260	<2.0	2.0	ug/L	MQS	10/25/2010
o-Xylene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
Styrene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
Bromoform	EPA 8260	<2.0	2.0	ug/L	MQS	10/25/2010
Isopropylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
1,1,2,2-Tetrachloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
1,2,3-Trichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
Bromobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
N-Propylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
2-Chlorotoluene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
1,3,5-Trimethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
4-Chlorotoluene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
tert-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
1,2,4-Trimethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
sec-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
p-Isopropyltoluene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
1,3-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
1,4-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
n-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
1,2-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
1,2-Dibromo-3-Chloropropane	EPA 8260	<2.0	2.0	ug/L	MQS	10/25/2010
1,2,4-Trichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
Hexachlorobutadiene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
Naphthalene	EPA 8260	<2.0	2.0	ug/L	MQS	10/25/2010
1,2,3-Trichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
Surrogates:	EPA 8260					
***1,2-Dichloroethane-D4	EPA 8260	103	70-130	% R	MQS	10/25/2010
***Toluene-D8	EPA 8260	113	70-130	% R	MQS	10/25/2010

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A N A L Y T I C A L R E P O R T

GZA GeoEnvironmental, Inc.
140 Broadway
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Steve Andrus

Project Name.: **Charbert Diffusion Bass**
Project No.: **03.0032795.32**

Date Received: **10/20/2010**
Date Reported: **10/26/2010**
Work Order No.: **1010-00148**

Sample ID: **DB-Blank** Sample No.: **006**
Sample Date: **10/19/2010**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
***4-Bromofluorobenzene	EPA 8260	106	70-130	% R	MQS	10/25/2010
Preparation	EPA 5030B	1.0		CF	MQS	10/25/2010

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Steve Andrus

Project Name.: **Charbert Diffusion Bass**
Project No.: **03.0032795.32**

Date Received: **10/20/2010**
Date Reported: **10/26/2010**
Work Order No.: **1010-00148**

Sample ID: **Trip Blank** Sample No.: **007**
Sample Date: **10/19/2010**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260				MQS	10/25/2010
Dichlorodifluoromethane	EPA 8260	<2.0	2.0	ug/L	MQS	10/25/2010
Chloromethane	EPA 8260	<2.0	2.0	ug/L	MQS	10/25/2010
Vinyl Chloride	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
Bromomethane	EPA 8260	<2.0	2.0	ug/L	MQS	10/25/2010
Chloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
Trichlorofluoromethane	EPA 8260	<2.0	2.0	ug/L	MQS	10/25/2010
Diethylether	EPA 8260	<2.0	2.0	ug/L	MQS	10/25/2010
Acetone	EPA 8260	<10	10	ug/L	MQS	10/25/2010
1,1-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
Dichloromethane	EPA 8260	<2.0	2.0	ug/L	MQS	10/25/2010
Methyl-Tert-Butyl-Ether	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
trans-1,2-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
1,1-Dichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
2-Butanone	EPA 8260	<10	10	ug/L	MQS	10/25/2010
2,2-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
cis-1,2-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
Chloroform	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
Bromochloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
Tetrahydrofuran	EPA 8260	<10	10	ug/L	MQS	10/25/2010
1,1,1-Trichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
1,1-Dichloropropene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
Carbon Tetrachloride	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
1,2-Dichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
Benzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
Trichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
1,2-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
Bromodichloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
Dibromomethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
4-Methyl-2-Pentanone	EPA 8260	<10	10	ug/L	MQS	10/25/2010
cis-1,3-Dichloropropene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
Toluene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
trans-1,3-Dichloropropene	EPA 8260	<2.0	2.0	ug/L	MQS	10/25/2010
1,1,2-Trichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
2-Hexanone	EPA 8260	<10	10	ug/L	MQS	10/25/2010

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Steve Andrus
Project Name.: **Charbert Diffusion Bass**
Project No.: **03.0032795.32**

Date Received: **10/20/2010**
Date Reported: **10/26/2010**
Work Order No.: **1010-00148**

Sample ID: **Trip Blank** Sample No.: **007**
Sample Date: **10/19/2010**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
1,3-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
Tetrachloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
Dibromochloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
1,2-Dibromoethane (EDB)	EPA 8260	<2.0	2.0	ug/L	MQS	10/25/2010
Chlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
1,1,1,2-Tetrachloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
Ethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
m&p-Xylene	EPA 8260	<2.0	2.0	ug/L	MQS	10/25/2010
o-Xylene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
Styrene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
Bromoform	EPA 8260	<2.0	2.0	ug/L	MQS	10/25/2010
Isopropylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
1,1,2,2-Tetrachloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
1,2,3-Trichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
Bromobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
N-Propylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
2-Chlorotoluene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
1,3,5-Trimethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
4-Chlorotoluene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
tert-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
1,2,4-Trimethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
sec-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
p-Isopropyltoluene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
1,3-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
1,4-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
n-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
1,2-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
1,2-Dibromo-3-Chloropropane	EPA 8260	<2.0	2.0	ug/L	MQS	10/25/2010
1,2,4-Trichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
Hexachlorobutadiene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
Naphthalene	EPA 8260	<2.0	2.0	ug/L	MQS	10/25/2010
1,2,3-Trichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/25/2010
Surrogates:	EPA 8260					
***1,2-Dichloroethane-D4	EPA 8260	108	70-130	% R	MQS	10/25/2010
***Toluene-D8	EPA 8260	109	70-130	% R	MQS	10/25/2010

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Project Name.: **Charbert Diffusion Bass**
Project No.: **03.0032795.32**

Date Received: **10/20/2010**
Date Reported: **10/26/2010**
Work Order No.: **1010-00148**

Sample ID: **Trip Blank** Sample No.: **007**
Sample Date: **10/19/2010**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
***4-Bromofluorobenzene	EPA 8260	101	70-130	% R	MQS	10/25/2010
Preparation	EPA 5030B	1.0		CF	MQS	10/25/2010

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EPA Method 8260 / 524.2 Aqueous Method Blank (MB) and Laboratory Control Sample/Duplicate (LCS/LCSD) Data

	Method Blank		Laboratory Control Sample				Laboratory Control Sample Duplicate					
Date Analyzed:	10/25/10		Date Analyzed:	10/25/10			10/25/10					
Volatile Organics	Conc. ug/L	Acceptance Limit	Spike Concentration = 20ug/L	% Recovery	Acceptance Limits	Verdict	% Recovery	Acceptance Limits	Verdict	RPD	Limit	Verdict
dichlorodifluoromethane	< 1.0	< 1.0	dichlorodifluoromethane	137	70-130	out	136	70-130	out	1.10	<25	ok
chloromethane	< 1.0	< 1.0	chloromethane	123	70-130	ok	120	70-130	ok	2.73	<25	ok
vinyl chloride	< 0.5	< 0.5	vinyl chloride	117	80-120	ok	113	70-130	ok	3.90	<25	ok
bromomethane	< 1.0	< 1.0	bromomethane	107	70-130	ok	104	70-130	ok	3.50	<25	ok
chloroethane	< 0.5	< 0.5	chloroethane	104	70-130	ok	97.2	70-130	ok	6.74	<25	ok
trichlorofluoromethane	< 1.0	< 1.0	trichlorofluoromethane	116	70-130	ok	111	70-130	ok	4.77	<25	ok
diethyl ether	< 2.5	< 2.5	diethyl ether	79.1	70-130	ok	85.2	70-130	ok	7.43	<25	ok
acetone	< 10	< 10	acetone	86.7	70-130	ok	94.7	70-130	ok	8.77	<25	ok
1,1-dichloroethene	< 0.5	< 0.5	1,1-dichloroethene	99.3	80-120	ok	100	70-130	ok	0.99	<25	ok
dichloromethane	< 1.0	< 1.0	dichloromethane	94.3	70-130	ok	96.8	70-130	ok	2.66	<25	ok
methyl-tert-butyl-ether	< 0.5	< 0.5	methyl-tert-butyl-ether	94.3	70-130	ok	101	70-130	ok	7.27	<25	ok
trans-1,2-dichloroethene	< 0.5	< 0.5	trans-1,2-dichloroethene	92.7	70-130	ok	94.0	70-130	ok	1.41	<25	ok
1,1-dichloroethane	< 0.5	< 0.5	1,1-dichloroethane	93.6	70-130	ok	93.9	70-130	ok	0.33	<25	ok
2-butanone	< 10	< 10	2-butanone	82.8	70-130	ok	91.7	70-130	ok	10.2	<25	ok
2,2-dichloropropane	< 0.5	< 0.5	2,2-dichloropropane	105	70-130	ok	101	70-130	ok	4.57	<25	ok
cis-1,2-dichloroethene	< 0.5	< 0.5	cis-1,2-dichloroethene	91.5	70-130	ok	95.6	70-130	ok	4.41	<25	ok
chloroform	< 0.5	< 0.5	chloroform	91.0	80-120	ok	93.0	70-130	ok	2.08	<25	ok
bromochloromethane	< 0.5	< 0.5	bromochloromethane	92.8	70-130	ok	100	70-130	ok	7.91	<25	ok
tetrahydrofuran	< 5.0	< 5.0	tetrahydrofuran	96.5	70-130	ok	98.3	70-130	ok	1.89	<25	ok
1,1,1-trichloroethane	< 0.5	< 0.5	1,1,1-trichloroethane	97.2	70-130	ok	99.5	70-130	ok	2.33	<25	ok
1,1-dichloropropene	< 0.5	< 0.5	1,1-dichloropropene	94.7	70-130	ok	95.7	70-130	ok	1.09	<25	ok
carbon tetrachloride	< 0.5	< 0.5	carbon tetrachloride	100	70-130	ok	103	70-130	ok	2.75	<25	ok
1,2-dichloroethane	< 0.5	< 0.5	1,2-dichloroethane	91.5	70-130	ok	95.2	70-130	ok	4.04	<25	ok
benzene	< 0.5	< 0.5	benzene	94.3	70-130	ok	96.4	70-130	ok	2.15	<25	ok
trichloroethene	< 0.5	< 0.5	trichloroethene	99.4	70-130	ok	98.3	70-130	ok	1.04	<25	ok
1,2-dichloropropane	< 0.5	< 0.5	1,2-dichloropropane	95.3	80-120	ok	96.3	70-130	ok	0.98	<25	ok
bromodichloromethane	< 0.5	< 0.5	bromodichloromethane	93.1	70-130	ok	97.9	70-130	ok	5.00	<25	ok
dibromomethane	< 0.5	< 0.5	dibromomethane	93.6	70-130	ok	102	70-130	ok	8.91	<25	ok
4-methyl-2-pentanone	< 10	< 10	4-methyl-2-pentanone	94.3	70-130	ok	101	70-130	ok	6.96	<25	ok
cis-1,3-dichloropropene	< 0.5	< 0.5	cis-1,3-dichloropropene	95.9	70-130	ok	99.4	70-130	ok	3.60	<25	ok
toluene	< 0.5	< 0.5	toluene	99.3	80-120	ok	97.1	70-130	ok	2.27	<25	ok
trans-1,3-dichloropropene	< 1.0	< 1.0	trans-1,3-dichloropropene	92.2	70-130	ok	98.2	70-130	ok	6.31	<25	ok
1,1,2-trichloroethane	< 0.5	< 0.5	1,1,2-trichloroethane	94.8	70-130	ok	93.1	70-130	ok	1.77	<25	ok
2-hexanone	< 10	< 10	2-hexanone	95.9	70-130	ok	97.2	70-130	ok	1.36	<25	ok
1,3-dichloropropane	< 0.5	< 0.5	1,3-dichloropropane	94.4	70-130	ok	91.5	70-130	ok	3.16	<25	ok
tetrachloroethene	< 0.5	< 0.5	tetrachloroethene	102	70-130	ok	92.4	70-130	ok	10.0	<25	ok
dibromochloromethane	< 0.5	< 0.5	dibromochloromethane	101	70-130	ok	96.8	70-130	ok	4.38	<25	ok
1,2-dibromoethane (EDB)	< 1.0	< 1.0	1,2-dibromoethane (EDB)	100	70-130	ok	96.9	70-130	ok	3.29	<25	ok
chlorobenzene	< 0.5	< 0.5	chlorobenzene	104	70-130	ok	97.5	70-130	ok	6.15	<25	ok
1,1,1,2-tetrachloroethane	< 0.5	< 0.5	1,1,1,2-tetrachloroethane	104	70-130	ok	99.4	70-130	ok	4.99	<25	ok
ethylbenzene	< 0.5	< 0.5	ethylbenzene	103	80-120	ok	94.9	70-130	ok	8.45	<25	ok
1,1,2,2-tetrachloroethane	< 0.5	< 0.5	1,1,2,2-tetrachloroethane	101	70-130	ok	102	70-130	ok	1.65	<25	ok
m&p-xylene	< 1.0	< 1.0	m&p-xylene	103	70-130	ok	97.0	70-130	ok	5.64	<25	ok
o-xylene	< 0.5	< 0.5	o-xylene	94.7	70-130	ok	94.5	70-130	ok	0.26	<25	ok
styrene	< 0.5	< 0.5	styrene	95.9	70-130	ok	95.1	70-130	ok	0.81	<25	ok
bromoform	< 1.0	< 1.0	bromoform	96.9	70-130	ok	100	70-130	ok	3.42	<25	ok
isopropylbenzene	< 0.5	< 0.5	isopropylbenzene	99.7	70-130	ok	95.9	70-130	ok	3.90	<25	ok
1,2,3-trichloropropane	< 0.5	< 0.5	1,2,3-trichloropropane	90.5	70-130	ok	91.0	70-130	ok	0.57	<25	ok
bromobenzene	< 0.5	< 0.5	bromobenzene	96.9	70-130	ok	96.8	70-130	ok	0.12	<25	ok
n-propylbenzene	< 0.5	< 0.5	n-propylbenzene	98.1	70-130	ok	97.5	70-130	ok	0.62	<25	ok
2-chlorotoluene	< 0.5	< 0.5	2-chlorotoluene	97.7	70-130	ok	95.7	70-130	ok	2.03	<25	ok
1,3,5-trimethylbenzene	< 0.5	< 0.5	1,3,5-trimethylbenzene	99.9	70-130	ok	99.3	70-130	ok	0.62	<25	ok
4-chlorotoluene	< 0.5	< 0.5	4-chlorotoluene	97.0	70-130	ok	97.9	70-130	ok	0.90	<25	ok
tert-butyl-benzene	< 0.5	< 0.5	tert-butyl-benzene	101	70-130	ok	97.9	70-130	ok	3.06	<25	ok
1,2,4-trimethylbenzene	< 0.5	< 0.5	1,2,4-trimethylbenzene	102	70-130	ok	101	70-130	ok	1.16	<25	ok
sec-butyl-benzene	< 0.5	< 0.5	sec-butyl-benzene	102	70-130	ok	100	70-130	ok	1.80	<25	ok
p-isopropyltoluene	< 0.5	< 0.5	p-isopropyltoluene	103	70-130	ok	101	70-130	ok	1.73	<25	ok
1,3-dichlorobenzene	< 0.5	< 0.5	1,3-dichlorobenzene	100	70-130	ok	101	70-130	ok	1.10	<25	ok
1,4-dichlorobenzene	< 0.5	< 0.5	1,4-dichlorobenzene	101	70-130	ok	101	70-130	ok	0.03	<25	ok
n-butylbenzene	< 0.5	< 0.5	n-butylbenzene	105	70-130	ok	101	70-130	ok	3.45	<25	ok
1,2-dichlorobenzene	< 0.5	< 0.5	1,2-dichlorobenzene	101	70-130	ok	102	70-130	ok	1.27	<25	ok
1,2-dibromo-3-chloropropane	< 2.5	< 2.5	1,2-dibromo-3-chloropropane	101	70-130	ok	107	70-130	ok	5.54	<25	ok
1,2,4-trichlorobenzene	< 0.5	< 0.5	1,2,4-trichlorobenzene	107	70-130	ok	111	70-130	ok	3.53	<25	ok
hexachlorobutadiene	< 0.5	< 0.5	hexachlorobutadiene	106	70-130	ok	107	70-130	ok	0.53	<25	ok
naphthalene	< 1.0	< 1.0	naphthalene	103	70-130	ok	111	70-130	ok	7.63	<25	ok

Surrogates:	Recovery (%)	Acceptance Limits	Surrogates:	Recovery (%)	Acceptance Limits	Verdict	Recovery (%)	Acceptance Limits	Verdict	RPD	Acceptance Limits	Verdict
DIBROMOFLUOROMETHANE	103	70-130	DIBROMOFLUOROMETHANE	102	70-130	ok	105	70-130	ok	3.46	<25	ok
1,2-DICHLOROETHANE-D4	111	70-130	1,2-DICHLOROETHANE-D4	105	70-130	ok	105	70-130	ok	0.44	<25	ok
TOLUENE-D8	110	70-130	TOLUENE-D8	112	70-130	ok	112	70-130	ok	0.02	<25	ok
4-BROMOFLUOROBENZENE	100	70-130	4-BROMOFLUOROBENZENE	103	70-130	ok	107	70-130	ok	3.40	<25	ok
1,2-DICHLOROBENZENE-D4	101	70-130	1,2-DICHLOROBENZENE-D4	106	70-130	ok	111	70-130	ok	4.10	<25	ok

Instrument: HP GC/MS "S"

W.O. # 1010-00148
(for lab use only)

CHAIN-OF-CUSTODY RECORD

Sample I.D.	Date/Time Sampled	Matrix (A=Air, S=Soil, GW=Ground W., SW=Surface W., WW=Waste W., DW=Drinking W., P=Product, Other (specify))	ANALYSIS REQUIRED: ☐ pH ☐ Cond.	GC Methane, Ethane, Ethene	EPA 8260	EPA 8260-8010 List (Chlor.)	EPA 8260-8021 list	EPA 8021-8020 List (BTEX)	EPA 524.2 DW VOCs	EPA 624 WW VOCs	☐ 601 ☐ 602 WW VOCs	EPA 8270 SVOCs	EPA 8270 ☐ PAH ☐ A ☐ BN	EPA 625 WW SVOCs	EPA 8082-PCBs	EPA 8081-Pest	TPH-GC (Mod. 8100)	TPH-GC w/FING.	EPH (MA DEP)	VPH (MA DEP)	Metals ☐ PPM-13 ☐ R-8	MCP 14 Metals	Metals (List Below) **	TCLP - Specify Below	SPLP - Specify Below	EPA 300 ☐ Cl ☐ NO3 ☐ SO3	Total No. of Cont.	Note #
DB-1	10/19/10	SW			X																						3	
DB-2	↓	↓			X																						3	
DB-3					X																						3	
DB-4					X																						3	
DB-5					X																						3	
DB-Blank					X																						3	
Trip Blank	↓	↓			X																						3	

PRESERVATIVE (CI-HCI, M-Methanol, N-HNO3, S-H2SO4, Na-NaOH, O-Other) *

CONTAINER TYPE (P-Plastic, G-Glass, V-Vial, T-Teflon, O-Other)*

RELINQUISHED BY:	DATE/TIME	RECEIVED BY:
		10/19/10
10/19/10	Dropped	Bill Brecan 10/20/10
Bill Brecan	10/20/10 1145	Fed Ex 10/20/10 1700
RELINQUISHED BY:	DATE/TIME	RECEIVED BY:

NOTES: (Unless otherwise noted, all samples have been refrigerated to 4 +/- 2°C)
*Specify "Other" preservatives and container types in this space.

Project Manager: Steve Andrus

GZA GEOENVIRONMENTAL, INC.
Laboratory Division

106 South Street
Hopkinton, MA 01748
(781) 278-4700
FAX (508)435-9912

LAB USE:

TURNAROUND TIME: (Standard) / Rush _____ Days, Approved by: _____ TEMP. OF COOLER 1-3 °C Temp Blank 10.7 Cooler Air _____

GZA FILE NO: 03.0032795.32 TASK NO: _____ P.O. NO. _____ 10/20/10 verbal

PROJECT Charbert

LOCATION Alton RI

COLLECTOR(S) RAC, SMA SHEET 1 OF 1

GZA GeoEnvironmental, Inc.
106 South Street
Hopkinton, MA 01748
(781) 278-4700

Laboratory Identification Numbers:
MA and ME: **MA092** NH: **2028**
CT: **PH0579** RI: **LAO00236**
NELAC - NYS DOH: **11063**

ANALYTICAL REPORT

GZA GeoEnvironmental, Inc.
140 Broadway
Providence, RI 02903

Stephen Andrus

Project No.: **03.0032795.12**
Work Order No.: **0810-00047**
Date Received: **10/07/2008**
Date Reported: **10/14/2008**

SAMPLE INFORMATION

Date Sampled	Matrix	Laboratory ID	Sample ID
10/06/2008	Aqueous	0810-00047 001	TB
10/06/2008	Aqueous	0810-00047 002	GZ - 100
10/06/2008	Aqueous	0810-00047 003	RIZ - 18
10/06/2008	Aqueous	0810-00047 004	PT - 2
10/06/2008	Aqueous	0810-00047 005	RIZ - 19
10/06/2008	Aqueous	0810-00047 006	PT - 104(=PT4)
10/06/2008	Aqueous	0810-00047 007	GR - 15
10/06/2008	Aqueous	0810-00047 008	GZ - 6
10/06/2008	Aqueous	0810-00047 009	CB - 9
10/06/2008	Aqueous	0810-00047 010	GZ - 27B
10/06/2008	Aqueous	0810-00047 011	GZ - 8
10/06/2008	Aqueous	0810-00047 012	GZ - 27A
10/06/2008	Aqueous	0810-00047 013	PT - 1

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ANALYTICAL REPORT

GZA GeoEnvironmental, Inc.
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Stephen Andrus

Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **10/07/2008**
Date Reported: **10/14/2008**
Work Order No.: **0810-00047**

PROJECT NARRATIVE:

1. Sample Receipt

The samples were received on 10/07/08 via _x_GZA courier, __EC, __FEDEX, or ___hand delivered. The temperature of the _x_temperature blank/__cooler air, was 1.7 degrees C. The temperature requirement for most analyses is above freezing to 6 degrees C. The samples were received intact for all requested analyses.

The chain of custody indicates that the samples, when required, were chemically preserved in accordance with the method they reference.

2. EPA Method 8260 - VOCs

Attach QC 8260 10/08/08 S - Aqueous
Attach QC 8260 10/09/08 #2 S - Aqueous

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Stephen Andrus

Project Name.: **Charbert - NFA**
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Date Received: **10/07/2008**
Date Reported: **10/14/2008**
Work Order No.: **0810-00047**

Data Authorized By: _____

NELAC certification, as indicated by the NELAC Lab ID Number, is per analyte. For a complete list of NELAC validated analytes, please contact the laboratory.

Abbreviations:
% R = % Recovery
DF = Dilution Factor
DFS = Dilution Factor Solids
CF = Calculation Factor
DO = Diluted Out

Method Key:
Method 8260: The current version of the method is 8260B.
Method 8270: The current version of the method is 8270D.
Method 6010: The current version of the method is 6010B.

Please note that the laboratory signed copy of the chain of custody record is an integral part of the data report.

Soil data is reported on a dry weight basis unless otherwise specified.
Matrix Spike / Matrix Spike Duplicate sets are performed as per method and are reported at the end of the analytical report if assigned on the Chain of Custody.

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ANALYTICAL REPORT

GZA GeoEnvironmental, Inc.
140 Broadway
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Stephen Andrus

Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **10/07/2008**
Date Reported: **10/14/2008**
Work Order No.: **0810-00047**

Sample ID: **TB** Sample No.: **001**

Sample Date: **10/06/2008**

Test Performed	Method	Results	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260			MQS	10/09/2008
Dichlorodifluoromethane	EPA 8260	<2.0	ug/L	MQS	10/09/2008
Chloromethane	EPA 8260	<2.0	ug/L	MQS	10/09/2008
Vinyl Chloride	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Bromomethane	EPA 8260	<2.0	ug/L	MQS	10/09/2008
Chloroethane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Trichlorofluoromethane	EPA 8260	<2.0	ug/L	MQS	10/09/2008
Diethylether	EPA 8260	<5.0	ug/L	MQS	10/09/2008
Acetone	EPA 8260	<25	ug/L	MQS	10/09/2008
1,1-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Dichloromethane	EPA 8260	<2.0	ug/L	MQS	10/09/2008
Methyl-Tert-Butyl-Ether	EPA 8260	<1.0	ug/L	MQS	10/09/2008
trans-1,2-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,1-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
2-Butanone	EPA 8260	<25	ug/L	MQS	10/09/2008
2,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
cis-1,2-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Chloroform	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Bromochloromethane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Tetrahydrofuran	EPA 8260	<10	ug/L	MQS	10/09/2008
1,1,1-Trichloroethane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,1-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Carbon Tetrachloride	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,2-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Benzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Trichloroethene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Bromodichloromethane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Dibromomethane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
4-Methyl-2-Pentanone	EPA 8260	<25	ug/L	MQS	10/09/2008
cis-1,3-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Toluene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
trans-1,3-Dichloropropene	EPA 8260	<2.0	ug/L	MQS	10/09/2008
1,1,2-Trichloroethane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
2-Hexanone	EPA 8260	<25	ug/L	MQS	10/09/2008
1,3-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Tetrachloroethene	EPA 8260	1.5	ug/L	MQS	10/09/2008

GZA GeoEnvironmental, Inc.
106 South Street
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ANALYTICAL REPORT

GZA GeoEnvironmental, Inc.
140 Broadway
Providence, RI 02903

Stephen Andrus

Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **10/07/2008**
Date Reported: **10/14/2008**
Work Order No.: **0810-00047**

Sample ID: **TB** Sample No.: **001**

Sample Date: **10/06/2008**

Test Performed	Method	Results	Units	Tech	Analysis Date
Dibromochloromethane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,2-Dibromoethane (EDB)	EPA 8260	<2.0	ug/L	MQS	10/09/2008
Chlorobenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,1,1,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Ethylbenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
m&p-Xylene	EPA 8260	<2.0	ug/L	MQS	10/09/2008
o-Xylene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Styrene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Bromoform	EPA 8260	<2.0	ug/L	MQS	10/09/2008
Isopropylbenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,1,2,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,2,3-Trichloropropane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Bromobenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
N-Propylbenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
2-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,3,5-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
4-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
tert-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,2,4-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
sec-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
p-Isopropyltoluene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,3-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,4-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
n-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,2-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,2-Dibromo-3-Chloropropane	EPA 8260	<5.0	ug/L	MQS	10/09/2008
1,2,4-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Hexachlorobutadiene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Naphthalene	EPA 8260	<2.0	ug/L	MQS	10/09/2008
1,2,3-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Surrogates:	EPA 8260				
***1,2-Dichloroethane-D4	EPA 8260	84.2	% R	MQS	10/09/2008
***Toluene-D8	EPA 8260	99.3	% R	MQS	10/09/2008
***4-Bromofluorobenzene	EPA 8260	97.6	% R	MQS	10/09/2008
Preparation	EPA 5030B	1.0	CF	MQS	10/08/2008

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ANALYTICAL REPORT

GZA GeoEnvironmental, Inc.
140 Broadway
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Stephen Andrus

Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **10/07/2008**
Date Reported: **10/14/2008**
Work Order No.: **0810-00047**

Sample ID: **GZ - 100**
Sample No.: **002**
Sample Date: **10/06/2008**

Test Performed	Method	Results	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260			MQS	10/09/2008
Dichlorodifluoromethane	EPA 8260	<2.0	ug/L	MQS	10/09/2008
Chloromethane	EPA 8260	<2.0	ug/L	MQS	10/09/2008
Vinyl Chloride	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Bromomethane	EPA 8260	<2.0	ug/L	MQS	10/09/2008
Chloroethane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Trichlorofluoromethane	EPA 8260	<2.0	ug/L	MQS	10/09/2008
Diethylether	EPA 8260	<5.0	ug/L	MQS	10/09/2008
Acetone	EPA 8260	<25	ug/L	MQS	10/09/2008
1,1-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Dichloromethane	EPA 8260	<2.0	ug/L	MQS	10/09/2008
Methyl-Tert-Butyl-Ether	EPA 8260	<1.0	ug/L	MQS	10/09/2008
trans-1,2-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,1-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
2-Butanone	EPA 8260	<25	ug/L	MQS	10/09/2008
2,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
cis-1,2-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Chloroform	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Bromochloromethane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Tetrahydrofuran	EPA 8260	<10	ug/L	MQS	10/09/2008
1,1,1-Trichloroethane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,1-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Carbon Tetrachloride	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,2-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Benzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Trichloroethene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Bromodichloromethane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Dibromomethane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
4-Methyl-2-Pentanone	EPA 8260	<25	ug/L	MQS	10/09/2008
cis-1,3-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Toluene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
trans-1,3-Dichloropropene	EPA 8260	<2.0	ug/L	MQS	10/09/2008
1,1,2-Trichloroethane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
2-Hexanone	EPA 8260	<25	ug/L	MQS	10/09/2008
1,3-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Tetrachloroethene	EPA 8260	<1.0	ug/L	MQS	10/09/2008

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106 South Street
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ANALYTICAL REPORT

GZA GeoEnvironmental, Inc.
140 Broadway
Providence, RI 02903

Stephen Andrus

Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **10/07/2008**
Date Reported: **10/14/2008**
Work Order No.: **0810-00047**

Sample ID: **GZ - 100**
Sample No.: **002**
Sample Date: **10/06/2008**

Test Performed	Method	Results	Units	Tech	Analysis Date
Dibromochloromethane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,2-Dibromoethane (EDB)	EPA 8260	<2.0	ug/L	MQS	10/09/2008
Chlorobenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,1,1,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Ethylbenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
m&p-Xylene	EPA 8260	<2.0	ug/L	MQS	10/09/2008
o-Xylene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Styrene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Bromoform	EPA 8260	<2.0	ug/L	MQS	10/09/2008
Isopropylbenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,1,2,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,2,3-Trichloropropane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Bromobenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
N-Propylbenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
2-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,3,5-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
4-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
tert-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,2,4-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
sec-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
p-Isopropyltoluene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,3-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,4-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
n-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,2-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,2-Dibromo-3-Chloropropane	EPA 8260	<5.0	ug/L	MQS	10/09/2008
1,2,4-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Hexachlorobutadiene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Naphthalene	EPA 8260	<2.0	ug/L	MQS	10/09/2008
1,2,3-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Surrogates:	EPA 8260				
***1,2-Dichloroethane-D4	EPA 8260	83.2	% R	MQS	10/09/2008
***Toluene-D8	EPA 8260	97.9	% R	MQS	10/09/2008
***4-Bromofluorobenzene	EPA 8260	95.8	% R	MQS	10/09/2008
Preparation	EPA 5030B	1.0	CF	MQS	10/08/2008

GZA GeoEnvironmental, Inc.
106 South Street
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ANALYTICAL REPORT

GZA GeoEnvironmental, Inc.
140 Broadway
Providence, RI 02903

Stephen Andrus

Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **10/07/2008**
Date Reported: **10/14/2008**
Work Order No.: **0810-00047**

Sample ID: **RIZ - 18**
Sample No.: **003**

Sample Date: **10/06/2008**

Test Performed	Method	Results	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260			MQS	10/09/2008
Dichlorodifluoromethane	EPA 8260	<2.0	ug/L	MQS	10/09/2008
Chloromethane	EPA 8260	<2.0	ug/L	MQS	10/09/2008
Vinyl Chloride	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Bromomethane	EPA 8260	<2.0	ug/L	MQS	10/09/2008
Chloroethane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Trichlorofluoromethane	EPA 8260	<2.0	ug/L	MQS	10/09/2008
Diethylether	EPA 8260	<5.0	ug/L	MQS	10/09/2008
Acetone	EPA 8260	<25	ug/L	MQS	10/09/2008
1,1-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Dichloromethane	EPA 8260	<2.0	ug/L	MQS	10/09/2008
Methyl-Tert-Butyl-Ether	EPA 8260	<1.0	ug/L	MQS	10/09/2008
trans-1,2-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,1-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
2-Butanone	EPA 8260	<25	ug/L	MQS	10/09/2008
2,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
cis-1,2-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Chloroform	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Bromochloromethane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Tetrahydrofuran	EPA 8260	<10	ug/L	MQS	10/09/2008
1,1,1-Trichloroethane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,1-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Carbon Tetrachloride	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,2-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Benzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Trichloroethene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Bromodichloromethane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Dibromomethane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
4-Methyl-2-Pentanone	EPA 8260	<25	ug/L	MQS	10/09/2008
cis-1,3-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Toluene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
trans-1,3-Dichloropropene	EPA 8260	<2.0	ug/L	MQS	10/09/2008
1,1,2-Trichloroethane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
2-Hexanone	EPA 8260	<25	ug/L	MQS	10/09/2008
1,3-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Tetrachloroethene	EPA 8260	<1.0	ug/L	MQS	10/09/2008

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ANALYTICAL REPORT

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140 Broadway
Providence, RI 02903

Stephen Andrus

Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **10/07/2008**
Date Reported: **10/14/2008**
Work Order No.: **0810-00047**

Sample ID: **RIZ - 18** Sample No.: **003**

Sample Date: **10/06/2008**

Test Performed	Method	Results	Units	Tech	Analysis Date
Dibromochloromethane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,2-Dibromoethane (EDB)	EPA 8260	<2.0	ug/L	MQS	10/09/2008
Chlorobenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,1,1,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Ethylbenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
m&p-Xylene	EPA 8260	<2.0	ug/L	MQS	10/09/2008
o-Xylene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Styrene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Bromoform	EPA 8260	<2.0	ug/L	MQS	10/09/2008
Isopropylbenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,1,2,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,2,3-Trichloropropane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Bromobenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
N-Propylbenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
2-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,3,5-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
4-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
tert-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,2,4-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
sec-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
p-Isopropyltoluene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,3-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,4-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
n-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,2-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,2-Dibromo-3-Chloropropane	EPA 8260	<5.0	ug/L	MQS	10/09/2008
1,2,4-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Hexachlorobutadiene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Naphthalene	EPA 8260	<2.0	ug/L	MQS	10/09/2008
1,2,3-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Surrogates:	EPA 8260				
***1,2-Dichloroethane-D4	EPA 8260	86.3	% R	MQS	10/09/2008
***Toluene-D8	EPA 8260	98.9	% R	MQS	10/09/2008
***4-Bromofluorobenzene	EPA 8260	95.3	% R	MQS	10/09/2008
Preparation	EPA 5030B	1.0	CF	MQS	10/08/2008

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Stephen Andrus

Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **10/07/2008**
Date Reported: **10/14/2008**
Work Order No.: **0810-00047**

Sample ID: **PT - 2**
Sample No.: **004**

Sample Date: **10/06/2008**

Test Performed	Method	Results	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260			MQS	10/09/2008
Dichlorodifluoromethane	EPA 8260	<2.0	ug/L	MQS	10/09/2008
Chloromethane	EPA 8260	<2.0	ug/L	MQS	10/09/2008
Vinyl Chloride	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Bromomethane	EPA 8260	<2.0	ug/L	MQS	10/09/2008
Chloroethane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Trichlorofluoromethane	EPA 8260	<2.0	ug/L	MQS	10/09/2008
Diethylether	EPA 8260	<5.0	ug/L	MQS	10/09/2008
Acetone	EPA 8260	<25	ug/L	MQS	10/09/2008
1,1-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Dichloromethane	EPA 8260	<2.0	ug/L	MQS	10/09/2008
Methyl-Tert-Butyl-Ether	EPA 8260	<1.0	ug/L	MQS	10/09/2008
trans-1,2-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,1-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
2-Butanone	EPA 8260	<25	ug/L	MQS	10/09/2008
2,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
cis-1,2-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Chloroform	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Bromochloromethane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Tetrahydrofuran	EPA 8260	<10	ug/L	MQS	10/09/2008
1,1,1-Trichloroethane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,1-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Carbon Tetrachloride	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,2-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Benzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Trichloroethene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Bromodichloromethane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Dibromomethane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
4-Methyl-2-Pentanone	EPA 8260	<25	ug/L	MQS	10/09/2008
cis-1,3-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Toluene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
trans-1,3-Dichloropropene	EPA 8260	<2.0	ug/L	MQS	10/09/2008
1,1,2-Trichloroethane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
2-Hexanone	EPA 8260	<25	ug/L	MQS	10/09/2008
1,3-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Tetrachloroethene	EPA 8260	<1.0	ug/L	MQS	10/09/2008

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ANALYTICAL REPORT

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Stephen Andrus

Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **10/07/2008**
Date Reported: **10/14/2008**
Work Order No.: **0810-00047**

Sample ID: **PT - 2**
Sample No.: **004**

Sample Date: **10/06/2008**

Test Performed	Method	Results	Units	Tech	Analysis Date
Dibromochloromethane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,2-Dibromoethane (EDB)	EPA 8260	<2.0	ug/L	MQS	10/09/2008
Chlorobenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,1,1,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Ethylbenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
m&p-Xylene	EPA 8260	<2.0	ug/L	MQS	10/09/2008
o-Xylene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Styrene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Bromoform	EPA 8260	<2.0	ug/L	MQS	10/09/2008
Isopropylbenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,1,2,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,2,3-Trichloropropane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Bromobenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
N-Propylbenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
2-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,3,5-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
4-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
tert-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,2,4-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
sec-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
p-Isopropyltoluene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,3-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,4-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
n-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,2-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,2-Dibromo-3-Chloropropane	EPA 8260	<5.0	ug/L	MQS	10/09/2008
1,2,4-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Hexachlorobutadiene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Naphthalene	EPA 8260	<2.0	ug/L	MQS	10/09/2008
1,2,3-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Surrogates:	EPA 8260				
***1,2-Dichloroethane-D4	EPA 8260	83.8	% R	MQS	10/09/2008
***Toluene-D8	EPA 8260	98.8	% R	MQS	10/09/2008
***4-Bromofluorobenzene	EPA 8260	95.7	% R	MQS	10/09/2008
Preparation	EPA 5030B	1.0	CF	MQS	10/08/2008

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Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **10/07/2008**
Date Reported: **10/14/2008**
Work Order No.: **0810-00047**

Sample ID: **RIZ - 19**
Sample No.: **005**
Sample Date: **10/06/2008**

Test Performed	Method	Results	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260			MQS	10/09/2008
Dichlorodifluoromethane	EPA 8260	<2.0	ug/L	MQS	10/09/2008
Chloromethane	EPA 8260	<2.0	ug/L	MQS	10/09/2008
Vinyl Chloride	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Bromomethane	EPA 8260	<2.0	ug/L	MQS	10/09/2008
Chloroethane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Trichlorofluoromethane	EPA 8260	<2.0	ug/L	MQS	10/09/2008
Diethylether	EPA 8260	<5.0	ug/L	MQS	10/09/2008
Acetone	EPA 8260	<25	ug/L	MQS	10/09/2008
1,1-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Dichloromethane	EPA 8260	<2.0	ug/L	MQS	10/09/2008
Methyl-Tert-Butyl-Ether	EPA 8260	<1.0	ug/L	MQS	10/09/2008
trans-1,2-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,1-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
2-Butanone	EPA 8260	<25	ug/L	MQS	10/09/2008
2,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
cis-1,2-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Chloroform	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Bromochloromethane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Tetrahydrofuran	EPA 8260	<10	ug/L	MQS	10/09/2008
1,1,1-Trichloroethane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,1-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Carbon Tetrachloride	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,2-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Benzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Trichloroethene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Bromodichloromethane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Dibromomethane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
4-Methyl-2-Pentanone	EPA 8260	<25	ug/L	MQS	10/09/2008
cis-1,3-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Toluene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
trans-1,3-Dichloropropene	EPA 8260	<2.0	ug/L	MQS	10/09/2008
1,1,2-Trichloroethane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
2-Hexanone	EPA 8260	<25	ug/L	MQS	10/09/2008
1,3-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Tetrachloroethene	EPA 8260	<1.0	ug/L	MQS	10/09/2008

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ANALYTICAL REPORT

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Stephen Andrus

Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **10/07/2008**
Date Reported: **10/14/2008**
Work Order No.: **0810-00047**

Sample ID: **RIZ - 19**
Sample No.: **005**

Sample Date: **10/06/2008**

Test Performed	Method	Results	Units	Tech	Analysis Date
Dibromochloromethane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,2-Dibromoethane (EDB)	EPA 8260	<2.0	ug/L	MQS	10/09/2008
Chlorobenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,1,1,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Ethylbenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
m&p-Xylene	EPA 8260	<2.0	ug/L	MQS	10/09/2008
o-Xylene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Styrene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Bromoform	EPA 8260	<2.0	ug/L	MQS	10/09/2008
Isopropylbenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,1,2,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,2,3-Trichloropropane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Bromobenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
N-Propylbenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
2-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,3,5-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
4-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
tert-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,2,4-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
sec-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
p-Isopropyltoluene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,3-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,4-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
n-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,2-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,2-Dibromo-3-Chloropropane	EPA 8260	<5.0	ug/L	MQS	10/09/2008
1,2,4-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Hexachlorobutadiene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Naphthalene	EPA 8260	<2.0	ug/L	MQS	10/09/2008
1,2,3-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Surrogates:	EPA 8260				
***1,2-Dichloroethane-D4	EPA 8260	83.0	% R	MQS	10/09/2008
***Toluene-D8	EPA 8260	100	% R	MQS	10/09/2008
***4-Bromofluorobenzene	EPA 8260	97.3	% R	MQS	10/09/2008
Preparation	EPA 5030B	1.0	CF	MQS	10/08/2008

GZA GeoEnvironmental, Inc.
106 South Street
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ANALYTICAL REPORT

GZA GeoEnvironmental, Inc.
140 Broadway
Providence, RI 02903

Stephen Andrus

Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **10/07/2008**
Date Reported: **10/14/2008**
Work Order No.: **0810-00047**

Sample ID: **PT - 104(=PT4)**
Sample No.: **006**

Sample Date: **10/06/2008**

Test Performed	Method	Results	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260			MQS	10/09/2008
Dichlorodifluoromethane	EPA 8260	<2.0	ug/L	MQS	10/09/2008
Chloromethane	EPA 8260	<2.0	ug/L	MQS	10/09/2008
Vinyl Chloride	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Bromomethane	EPA 8260	<2.0	ug/L	MQS	10/09/2008
Chloroethane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Trichlorofluoromethane	EPA 8260	<2.0	ug/L	MQS	10/09/2008
Diethylether	EPA 8260	<5.0	ug/L	MQS	10/09/2008
Acetone	EPA 8260	<25	ug/L	MQS	10/09/2008
1,1-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Dichloromethane	EPA 8260	<2.0	ug/L	MQS	10/09/2008
Methyl-Tert-Butyl-Ether	EPA 8260	<1.0	ug/L	MQS	10/09/2008
trans-1,2-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,1-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
2-Butanone	EPA 8260	<25	ug/L	MQS	10/09/2008
2,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
cis-1,2-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Chloroform	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Bromochloromethane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Tetrahydrofuran	EPA 8260	<10	ug/L	MQS	10/09/2008
1,1,1-Trichloroethane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,1-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Carbon Tetrachloride	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,2-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Benzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Trichloroethene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Bromodichloromethane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Dibromomethane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
4-Methyl-2-Pentanone	EPA 8260	<25	ug/L	MQS	10/09/2008
cis-1,3-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Toluene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
trans-1,3-Dichloropropene	EPA 8260	<2.0	ug/L	MQS	10/09/2008
1,1,2-Trichloroethane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
2-Hexanone	EPA 8260	<25	ug/L	MQS	10/09/2008
1,3-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Tetrachloroethene	EPA 8260	<1.0	ug/L	MQS	10/09/2008

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ANALYTICAL REPORT

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140 Broadway
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Stephen Andrus

Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **10/07/2008**
Date Reported: **10/14/2008**
Work Order No.: **0810-00047**

Sample ID: **PT - 104(=PT4)**
Sample No.: **006**
Sample Date: **10/06/2008**

Test Performed	Method	Results	Units	Tech	Analysis Date
Dibromochloromethane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,2-Dibromoethane (EDB)	EPA 8260	<2.0	ug/L	MQS	10/09/2008
Chlorobenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,1,1,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Ethylbenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
m&p-Xylene	EPA 8260	<2.0	ug/L	MQS	10/09/2008
o-Xylene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Styrene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Bromoform	EPA 8260	<2.0	ug/L	MQS	10/09/2008
Isopropylbenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,1,2,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,2,3-Trichloropropane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Bromobenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
N-Propylbenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
2-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,3,5-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
4-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
tert-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,2,4-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
sec-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
p-Isopropyltoluene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,3-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,4-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
n-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,2-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,2-Dibromo-3-Chloropropane	EPA 8260	<5.0	ug/L	MQS	10/09/2008
1,2,4-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Hexachlorobutadiene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Naphthalene	EPA 8260	<2.0	ug/L	MQS	10/09/2008
1,2,3-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Surrogates:	EPA 8260				
***1,2-Dichloroethane-D4	EPA 8260	86.5	% R	MQS	10/09/2008
***Toluene-D8	EPA 8260	99.0	% R	MQS	10/09/2008
***4-Bromofluorobenzene	EPA 8260	97.3	% R	MQS	10/09/2008
Preparation	EPA 5030B	1.0	CF	MQS	10/08/2008

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Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **10/07/2008**
Date Reported: **10/14/2008**
Work Order No.: **0810-00047**

Sample ID: **GR - 15** Sample No.: **007**

Sample Date: **10/06/2008**

Test Performed	Method	Results	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260			MQS	10/09/2008
Dichlorodifluoromethane	EPA 8260	<2.0	ug/L	MQS	10/09/2008
Chloromethane	EPA 8260	<2.0	ug/L	MQS	10/09/2008
Vinyl Chloride	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Bromomethane	EPA 8260	<2.0	ug/L	MQS	10/09/2008
Chloroethane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Trichlorofluoromethane	EPA 8260	<2.0	ug/L	MQS	10/09/2008
Diethylether	EPA 8260	<5.0	ug/L	MQS	10/09/2008
Acetone	EPA 8260	<25	ug/L	MQS	10/09/2008
1,1-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Dichloromethane	EPA 8260	<2.0	ug/L	MQS	10/09/2008
Methyl-Tert-Butyl-Ether	EPA 8260	<1.0	ug/L	MQS	10/09/2008
trans-1,2-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,1-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
2-Butanone	EPA 8260	<25	ug/L	MQS	10/09/2008
2,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
cis-1,2-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Chloroform	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Bromochloromethane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Tetrahydrofuran	EPA 8260	<10	ug/L	MQS	10/09/2008
1,1,1-Trichloroethane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,1-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Carbon Tetrachloride	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,2-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Benzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Trichloroethene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Bromodichloromethane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Dibromomethane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
4-Methyl-2-Pentanone	EPA 8260	<25	ug/L	MQS	10/09/2008
cis-1,3-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Toluene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
trans-1,3-Dichloropropene	EPA 8260	<2.0	ug/L	MQS	10/09/2008
1,1,2-Trichloroethane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
2-Hexanone	EPA 8260	<25	ug/L	MQS	10/09/2008
1,3-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Tetrachloroethene	EPA 8260	<1.0	ug/L	MQS	10/09/2008

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ANALYTICAL REPORT

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Stephen Andrus

Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **10/07/2008**
Date Reported: **10/14/2008**
Work Order No.: **0810-00047**

Sample ID: **GR - 15**
Sample No.: **007**
Sample Date: **10/06/2008**

Test Performed	Method	Results	Units	Tech	Analysis Date
Dibromochloromethane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,2-Dibromoethane (EDB)	EPA 8260	<2.0	ug/L	MQS	10/09/2008
Chlorobenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,1,1,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Ethylbenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
m&p-Xylene	EPA 8260	<2.0	ug/L	MQS	10/09/2008
o-Xylene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Styrene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Bromoform	EPA 8260	<2.0	ug/L	MQS	10/09/2008
Isopropylbenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,1,2,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,2,3-Trichloropropane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Bromobenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
N-Propylbenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
2-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,3,5-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
4-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
tert-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,2,4-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
sec-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
p-Isopropyltoluene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,3-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,4-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
n-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,2-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,2-Dibromo-3-Chloropropane	EPA 8260	<5.0	ug/L	MQS	10/09/2008
1,2,4-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Hexachlorobutadiene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Naphthalene	EPA 8260	<2.0	ug/L	MQS	10/09/2008
1,2,3-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Surrogates:	EPA 8260				
***1,2-Dichloroethane-D4	EPA 8260	82.3	% R	MQS	10/09/2008
***Toluene-D8	EPA 8260	99.8	% R	MQS	10/09/2008
***4-Bromofluorobenzene	EPA 8260	95.6	% R	MQS	10/09/2008
Preparation	EPA 5030B	1.0	CF	MQS	10/08/2008

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Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **10/07/2008**
Date Reported: **10/14/2008**
Work Order No.: **0810-00047**

Sample ID: **GZ - 6** Sample No.: **008**

Sample Date: **10/06/2008**

Test Performed	Method	Results	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260			MQS	10/09/2008
Dichlorodifluoromethane	EPA 8260	<2.0	ug/L	MQS	10/09/2008
Chloromethane	EPA 8260	<2.0	ug/L	MQS	10/09/2008
Vinyl Chloride	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Bromomethane	EPA 8260	<2.0	ug/L	MQS	10/09/2008
Chloroethane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Trichlorofluoromethane	EPA 8260	<2.0	ug/L	MQS	10/09/2008
Diethylether	EPA 8260	<5.0	ug/L	MQS	10/09/2008
Acetone	EPA 8260	<25	ug/L	MQS	10/09/2008
1,1-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Dichloromethane	EPA 8260	<2.0	ug/L	MQS	10/09/2008
Methyl-Tert-Butyl-Ether	EPA 8260	<1.0	ug/L	MQS	10/09/2008
trans-1,2-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,1-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
2-Butanone	EPA 8260	<25	ug/L	MQS	10/09/2008
2,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
cis-1,2-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Chloroform	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Bromochloromethane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Tetrahydrofuran	EPA 8260	<10	ug/L	MQS	10/09/2008
1,1,1-Trichloroethane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,1-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Carbon Tetrachloride	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,2-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Benzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Trichloroethene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Bromodichloromethane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Dibromomethane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
4-Methyl-2-Pentanone	EPA 8260	<25	ug/L	MQS	10/09/2008
cis-1,3-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Toluene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
trans-1,3-Dichloropropene	EPA 8260	<2.0	ug/L	MQS	10/09/2008
1,1,2-Trichloroethane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
2-Hexanone	EPA 8260	<25	ug/L	MQS	10/09/2008
1,3-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Tetrachloroethene	EPA 8260	<1.0	ug/L	MQS	10/09/2008

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Stephen Andrus

Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **10/07/2008**
Date Reported: **10/14/2008**
Work Order No.: **0810-00047**

Sample ID: **GZ - 6**
Sample No.: **008**
Sample Date: **10/06/2008**

Test Performed	Method	Results	Units	Tech	Analysis Date
Dibromochloromethane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,2-Dibromoethane (EDB)	EPA 8260	<2.0	ug/L	MQS	10/09/2008
Chlorobenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,1,1,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Ethylbenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
m&p-Xylene	EPA 8260	<2.0	ug/L	MQS	10/09/2008
o-Xylene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Styrene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Bromoform	EPA 8260	<2.0	ug/L	MQS	10/09/2008
Isopropylbenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,1,2,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,2,3-Trichloropropane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Bromobenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
N-Propylbenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
2-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,3,5-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
4-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
tert-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,2,4-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
sec-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
p-Isopropyltoluene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,3-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,4-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
n-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,2-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,2-Dibromo-3-Chloropropane	EPA 8260	<5.0	ug/L	MQS	10/09/2008
1,2,4-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Hexachlorobutadiene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Naphthalene	EPA 8260	<2.0	ug/L	MQS	10/09/2008
1,2,3-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Surrogates:	EPA 8260				
***1,2-Dichloroethane-D4	EPA 8260	85.1	% R	MQS	10/09/2008
***Toluene-D8	EPA 8260	99.1	% R	MQS	10/09/2008
***4-Bromofluorobenzene	EPA 8260	95.9	% R	MQS	10/09/2008
Preparation	EPA 5030B	1.0	CF	MQS	10/08/2008

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ANALYTICAL REPORT

GZA GeoEnvironmental, Inc.
140 Broadway
Providence, RI 02903

Stephen Andrus

Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **10/07/2008**
Date Reported: **10/14/2008**
Work Order No.: **0810-00047**

Sample ID: **CB - 9**
Sample No.: **009**

Sample Date: **10/06/2008**

Test Performed	Method	Results	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260			MQS	10/09/2008
Dichlorodifluoromethane	EPA 8260	<2.0	ug/L	MQS	10/09/2008
Chloromethane	EPA 8260	<2.0	ug/L	MQS	10/09/2008
Vinyl Chloride	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Bromomethane	EPA 8260	<2.0	ug/L	MQS	10/09/2008
Chloroethane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Trichlorofluoromethane	EPA 8260	<2.0	ug/L	MQS	10/09/2008
Diethylether	EPA 8260	<5.0	ug/L	MQS	10/09/2008
Acetone	EPA 8260	<25	ug/L	MQS	10/09/2008
1,1-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Dichloromethane	EPA 8260	<2.0	ug/L	MQS	10/09/2008
Methyl-Tert-Butyl-Ether	EPA 8260	<1.0	ug/L	MQS	10/09/2008
trans-1,2-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,1-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
2-Butanone	EPA 8260	<25	ug/L	MQS	10/09/2008
2,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
cis-1,2-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Chloroform	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Bromochloromethane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Tetrahydrofuran	EPA 8260	<10	ug/L	MQS	10/09/2008
1,1,1-Trichloroethane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,1-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Carbon Tetrachloride	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,2-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Benzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Trichloroethene	EPA 8260	1.3	ug/L	MQS	10/09/2008
1,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Bromodichloromethane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Dibromomethane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
4-Methyl-2-Pentanone	EPA 8260	<25	ug/L	MQS	10/09/2008
cis-1,3-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Toluene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
trans-1,3-Dichloropropene	EPA 8260	<2.0	ug/L	MQS	10/09/2008
1,1,2-Trichloroethane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
2-Hexanone	EPA 8260	<25	ug/L	MQS	10/09/2008
1,3-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Tetrachloroethene	EPA 8260	16	ug/L	MQS	10/09/2008

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Stephen Andrus

Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **10/07/2008**
Date Reported: **10/14/2008**
Work Order No.: **0810-00047**

Sample ID: **CB - 9**
Sample No.: **009**

Sample Date: **10/06/2008**

Test Performed	Method	Results	Units	Tech	Analysis Date
Dibromochloromethane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,2-Dibromoethane (EDB)	EPA 8260	<2.0	ug/L	MQS	10/09/2008
Chlorobenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,1,1,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Ethylbenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
m&p-Xylene	EPA 8260	<2.0	ug/L	MQS	10/09/2008
o-Xylene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Styrene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Bromoform	EPA 8260	<2.0	ug/L	MQS	10/09/2008
Isopropylbenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,1,2,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,2,3-Trichloropropane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Bromobenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
N-Propylbenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
2-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,3,5-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
4-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
tert-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,2,4-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
sec-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
p-Isopropyltoluene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,3-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,4-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
n-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,2-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,2-Dibromo-3-Chloropropane	EPA 8260	<5.0	ug/L	MQS	10/09/2008
1,2,4-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Hexachlorobutadiene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Naphthalene	EPA 8260	<2.0	ug/L	MQS	10/09/2008
1,2,3-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Surrogates:	EPA 8260				
***1,2-Dichloroethane-D4	EPA 8260	87.0	% R	MQS	10/09/2008
***Toluene-D8	EPA 8260	99.2	% R	MQS	10/09/2008
***4-Bromofluorobenzene	EPA 8260	98.1	% R	MQS	10/09/2008
Preparation	EPA 5030B	1.0	CF	MQS	10/08/2008

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Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **10/07/2008**
Date Reported: **10/14/2008**
Work Order No.: **0810-00047**

Sample ID: **GZ - 27B** Sample No.: **010**

Sample Date: **10/06/2008**

Test Performed	Method	Results	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260			MQS	10/09/2008
Dichlorodifluoromethane	EPA 8260	<2.0	ug/L	MQS	10/09/2008
Chloromethane	EPA 8260	<2.0	ug/L	MQS	10/09/2008
Vinyl Chloride	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Bromomethane	EPA 8260	<2.0	ug/L	MQS	10/09/2008
Chloroethane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Trichlorofluoromethane	EPA 8260	<2.0	ug/L	MQS	10/09/2008
Diethylether	EPA 8260	<5.0	ug/L	MQS	10/09/2008
Acetone	EPA 8260	<25	ug/L	MQS	10/09/2008
1,1-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Dichloromethane	EPA 8260	<2.0	ug/L	MQS	10/09/2008
Methyl-Tert-Butyl-Ether	EPA 8260	<1.0	ug/L	MQS	10/09/2008
trans-1,2-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,1-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
2-Butanone	EPA 8260	<25	ug/L	MQS	10/09/2008
2,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
cis-1,2-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Chloroform	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Bromochloromethane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Tetrahydrofuran	EPA 8260	<10	ug/L	MQS	10/09/2008
1,1,1-Trichloroethane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,1-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Carbon Tetrachloride	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,2-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Benzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Trichloroethene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Bromodichloromethane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Dibromomethane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
4-Methyl-2-Pentanone	EPA 8260	<25	ug/L	MQS	10/09/2008
cis-1,3-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Toluene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
trans-1,3-Dichloropropene	EPA 8260	<2.0	ug/L	MQS	10/09/2008
1,1,2-Trichloroethane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
2-Hexanone	EPA 8260	<25	ug/L	MQS	10/09/2008
1,3-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Tetrachloroethene	EPA 8260	<1.0	ug/L	MQS	10/09/2008

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Project No.: **03.0032795.12**

Date Received: **10/07/2008**
Date Reported: **10/14/2008**
Work Order No.: **0810-00047**

Sample ID: **GZ - 27B** Sample No.: **010**

Sample Date: **10/06/2008**

Test Performed	Method	Results	Units	Tech	Analysis Date
Dibromochloromethane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,2-Dibromoethane (EDB)	EPA 8260	<2.0	ug/L	MQS	10/09/2008
Chlorobenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,1,1,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Ethylbenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
m&p-Xylene	EPA 8260	<2.0	ug/L	MQS	10/09/2008
o-Xylene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Styrene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Bromoform	EPA 8260	<2.0	ug/L	MQS	10/09/2008
Isopropylbenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,1,2,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,2,3-Trichloropropane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Bromobenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
N-Propylbenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
2-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,3,5-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
4-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
tert-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,2,4-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
sec-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
p-Isopropyltoluene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,3-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,4-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
n-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,2-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,2-Dibromo-3-Chloropropane	EPA 8260	<5.0	ug/L	MQS	10/09/2008
1,2,4-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Hexachlorobutadiene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Naphthalene	EPA 8260	<2.0	ug/L	MQS	10/09/2008
1,2,3-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Surrogates:	EPA 8260				
***1,2-Dichloroethane-D4	EPA 8260	85.8	% R	MQS	10/09/2008
***Toluene-D8	EPA 8260	98.4	% R	MQS	10/09/2008
***4-Bromofluorobenzene	EPA 8260	96.8	% R	MQS	10/09/2008
Preparation	EPA 5030B	1.0	CF	MQS	10/08/2008

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Date Received: **10/07/2008**
Date Reported: **10/14/2008**
Work Order No.: **0810-00047**

Sample ID: **GZ - 8** Sample No.: **011**

Sample Date: **10/06/2008**

Test Performed	Method	Results	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260			MQS	10/09/2008
Dichlorodifluoromethane	EPA 8260	<2.0	ug/L	MQS	10/09/2008
Chloromethane	EPA 8260	<2.0	ug/L	MQS	10/09/2008
Vinyl Chloride	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Bromomethane	EPA 8260	<2.0	ug/L	MQS	10/09/2008
Chloroethane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Trichlorofluoromethane	EPA 8260	<2.0	ug/L	MQS	10/09/2008
Diethylether	EPA 8260	<5.0	ug/L	MQS	10/09/2008
Acetone	EPA 8260	<25	ug/L	MQS	10/09/2008
1,1-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Dichloromethane	EPA 8260	<2.0	ug/L	MQS	10/09/2008
Methyl-Tert-Butyl-Ether	EPA 8260	<1.0	ug/L	MQS	10/09/2008
trans-1,2-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,1-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
2-Butanone	EPA 8260	<25	ug/L	MQS	10/09/2008
2,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
cis-1,2-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Chloroform	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Bromochloromethane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Tetrahydrofuran	EPA 8260	<10	ug/L	MQS	10/09/2008
1,1,1-Trichloroethane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,1-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Carbon Tetrachloride	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,2-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Benzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Trichloroethene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Bromodichloromethane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Dibromomethane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
4-Methyl-2-Pentanone	EPA 8260	<25	ug/L	MQS	10/09/2008
cis-1,3-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Toluene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
trans-1,3-Dichloropropene	EPA 8260	<2.0	ug/L	MQS	10/09/2008
1,1,2-Trichloroethane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
2-Hexanone	EPA 8260	<25	ug/L	MQS	10/09/2008
1,3-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Tetrachloroethene	EPA 8260	<1.0	ug/L	MQS	10/09/2008

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Work Order No.: **0810-00047**

Sample ID: **GZ - 8** Sample No.: **011**

Sample Date: **10/06/2008**

Test Performed	Method	Results	Units	Tech	Analysis Date
Dibromochloromethane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,2-Dibromoethane (EDB)	EPA 8260	<2.0	ug/L	MQS	10/09/2008
Chlorobenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,1,1,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Ethylbenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
m&p-Xylene	EPA 8260	<2.0	ug/L	MQS	10/09/2008
o-Xylene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Styrene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Bromoform	EPA 8260	<2.0	ug/L	MQS	10/09/2008
Isopropylbenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,1,2,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,2,3-Trichloropropane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Bromobenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
N-Propylbenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
2-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,3,5-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
4-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
tert-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,2,4-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
sec-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
p-Isopropyltoluene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,3-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,4-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
n-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,2-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,2-Dibromo-3-Chloropropane	EPA 8260	<5.0	ug/L	MQS	10/09/2008
1,2,4-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Hexachlorobutadiene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Naphthalene	EPA 8260	<2.0	ug/L	MQS	10/09/2008
1,2,3-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Surrogates:	EPA 8260				
***1,2-Dichloroethane-D4	EPA 8260	85.5	% R	MQS	10/09/2008
***Toluene-D8	EPA 8260	99.3	% R	MQS	10/09/2008
***4-Bromofluorobenzene	EPA 8260	96.6	% R	MQS	10/09/2008
Preparation	EPA 5030B	1.0	CF	MQS	10/08/2008

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Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **10/07/2008**
Date Reported: **10/14/2008**
Work Order No.: **0810-00047**

Sample ID: **GZ - 27A**
Sample No.: **012**
Sample Date: **10/06/2008**

Test Performed	Method	Results	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260			MQS	10/09/2008
Dichlorodifluoromethane	EPA 8260	<2.0	ug/L	MQS	10/09/2008
Chloromethane	EPA 8260	<2.0	ug/L	MQS	10/09/2008
Vinyl Chloride	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Bromomethane	EPA 8260	<2.0	ug/L	MQS	10/09/2008
Chloroethane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Trichlorofluoromethane	EPA 8260	<2.0	ug/L	MQS	10/09/2008
Diethylether	EPA 8260	<5.0	ug/L	MQS	10/09/2008
Acetone	EPA 8260	<25	ug/L	MQS	10/09/2008
1,1-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Dichloromethane	EPA 8260	<2.0	ug/L	MQS	10/09/2008
Methyl-Tert-Butyl-Ether	EPA 8260	<1.0	ug/L	MQS	10/09/2008
trans-1,2-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,1-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
2-Butanone	EPA 8260	<25	ug/L	MQS	10/09/2008
2,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
cis-1,2-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Chloroform	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Bromochloromethane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Tetrahydrofuran	EPA 8260	<10	ug/L	MQS	10/09/2008
1,1,1-Trichloroethane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,1-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Carbon Tetrachloride	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,2-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Benzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Trichloroethene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Bromodichloromethane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Dibromomethane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
4-Methyl-2-Pentanone	EPA 8260	<25	ug/L	MQS	10/09/2008
cis-1,3-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Toluene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
trans-1,3-Dichloropropene	EPA 8260	<2.0	ug/L	MQS	10/09/2008
1,1,2-Trichloroethane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
2-Hexanone	EPA 8260	<25	ug/L	MQS	10/09/2008
1,3-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Tetrachloroethene	EPA 8260	<1.0	ug/L	MQS	10/09/2008

GZA GeoEnvironmental, Inc.
106 South Street
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(781) 278-4700

ANALYTICAL REPORT

GZA GeoEnvironmental, Inc.
140 Broadway
Providence, RI 02903

Stephen Andrus

Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **10/07/2008**
Date Reported: **10/14/2008**
Work Order No.: **0810-00047**

Sample ID: **GZ - 27A**
Sample No.: **012**
Sample Date: **10/06/2008**

Test Performed	Method	Results	Units	Tech	Analysis Date
Dibromochloromethane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,2-Dibromoethane (EDB)	EPA 8260	<2.0	ug/L	MQS	10/09/2008
Chlorobenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,1,1,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Ethylbenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
m&p-Xylene	EPA 8260	<2.0	ug/L	MQS	10/09/2008
o-Xylene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Styrene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Bromoform	EPA 8260	<2.0	ug/L	MQS	10/09/2008
Isopropylbenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,1,2,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,2,3-Trichloropropane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Bromobenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
N-Propylbenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
2-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,3,5-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
4-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
tert-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,2,4-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
sec-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
p-Isopropyltoluene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,3-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,4-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
n-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,2-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,2-Dibromo-3-Chloropropane	EPA 8260	<5.0	ug/L	MQS	10/09/2008
1,2,4-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Hexachlorobutadiene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Naphthalene	EPA 8260	<2.0	ug/L	MQS	10/09/2008
1,2,3-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Surrogates:	EPA 8260				
***1,2-Dichloroethane-D4	EPA 8260	84.8	% R	MQS	10/09/2008
***Toluene-D8	EPA 8260	99.5	% R	MQS	10/09/2008
***4-Bromofluorobenzene	EPA 8260	97.6	% R	MQS	10/09/2008
Preparation	EPA 5030B	1.0	CF	MQS	10/09/2008

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ANALYTICAL REPORT

GZA GeoEnvironmental, Inc.
140 Broadway
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Stephen Andrus

Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **10/07/2008**
Date Reported: **10/14/2008**
Work Order No.: **0810-00047**

Sample ID: **PT - 1**
Sample No.: **013**
Sample Date: **10/06/2008**

Test Performed	Method	Results	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260			MQS	10/09/2008
Dichlorodifluoromethane	EPA 8260	<2.0	ug/L	MQS	10/09/2008
Chloromethane	EPA 8260	<2.0	ug/L	MQS	10/09/2008
Vinyl Chloride	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Bromomethane	EPA 8260	<2.0	ug/L	MQS	10/09/2008
Chloroethane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Trichlorofluoromethane	EPA 8260	<2.0	ug/L	MQS	10/09/2008
Diethylether	EPA 8260	<5.0	ug/L	MQS	10/09/2008
Acetone	EPA 8260	<25	ug/L	MQS	10/09/2008
1,1-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Dichloromethane	EPA 8260	<2.0	ug/L	MQS	10/09/2008
Methyl-Tert-Butyl-Ether	EPA 8260	<1.0	ug/L	MQS	10/09/2008
trans-1,2-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,1-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
2-Butanone	EPA 8260	<25	ug/L	MQS	10/09/2008
2,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
cis-1,2-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Chloroform	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Bromochloromethane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Tetrahydrofuran	EPA 8260	<10	ug/L	MQS	10/09/2008
1,1,1-Trichloroethane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,1-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Carbon Tetrachloride	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,2-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Benzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Trichloroethene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Bromodichloromethane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Dibromomethane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
4-Methyl-2-Pentanone	EPA 8260	<25	ug/L	MQS	10/09/2008
cis-1,3-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Toluene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
trans-1,3-Dichloropropene	EPA 8260	<2.0	ug/L	MQS	10/09/2008
1,1,2-Trichloroethane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
2-Hexanone	EPA 8260	<25	ug/L	MQS	10/09/2008
1,3-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Tetrachloroethene	EPA 8260	<1.0	ug/L	MQS	10/09/2008

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ANALYTICAL REPORT

GZA GeoEnvironmental, Inc.
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Stephen Andrus

Project Name.: **Charbert - NFA**
Project No.: **03.0032795.12**

Date Received: **10/07/2008**
Date Reported: **10/14/2008**
Work Order No.: **0810-00047**

Sample ID: **PT - 1**
Sample No.: **013**
Sample Date: **10/06/2008**

Test Performed	Method	Results	Units	Tech	Analysis Date
Dibromochloromethane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,2-Dibromoethane (EDB)	EPA 8260	<2.0	ug/L	MQS	10/09/2008
Chlorobenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,1,1,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Ethylbenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
m&p-Xylene	EPA 8260	<2.0	ug/L	MQS	10/09/2008
o-Xylene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Styrene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Bromoform	EPA 8260	<2.0	ug/L	MQS	10/09/2008
Isopropylbenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,1,2,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,2,3-Trichloropropane	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Bromobenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
N-Propylbenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
2-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,3,5-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
4-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
tert-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,2,4-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
sec-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
p-Isopropyltoluene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,3-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,4-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
n-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,2-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
1,2-Dibromo-3-Chloropropane	EPA 8260	<5.0	ug/L	MQS	10/09/2008
1,2,4-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Hexachlorobutadiene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Naphthalene	EPA 8260	<2.0	ug/L	MQS	10/09/2008
1,2,3-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	10/09/2008
Surrogates:	EPA 8260				
***1,2-Dichloroethane-D4	EPA 8260	83.9	% R	MQS	10/09/2008
***Toluene-D8	EPA 8260	98.4	% R	MQS	10/09/2008
***4-Bromofluorobenzene	EPA 8260	95.0	% R	MQS	10/09/2008
Preparation	EPA 5030B	1.0	CF	MQS	10/08/2008

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EPA Method 8260 / 524.2 Aqueous Method Blank (MB) and Laboratory Control Sample/Duplicate (LCS/LCSD) Data

Method Blank			Laboratory Control Sample				Laboratory Control Sample Duplicate					
Date Analyzed:	10/8/2008		Date Analyzed:	10/8/2008			10/8/2008					
Volatile Organics	Conc. ug/L	Acceptance Limit	Spike Concentration = 20ug/L	% Recovery	Acceptance Limits	Verdict	% Recovery	Acceptance Limits	Verdict	RPD	Limit	Verdict
dichlorodifluoromethane	< 1.0	< 1.0	dichlorodifluoromethane	80.0	70-130	ok	80.4	70-130	ok	0.56	<25	ok
chloromethane	< 1.0	< 1.0	chloromethane	79.1	70-130	ok	78.8	70-130	ok	0.37	<25	ok
vinyl chloride	< 0.5	< 0.5	vinyl chloride	80.9	70-130	ok	80.5	70-130	ok	0.53	<25	ok
bromomethane	< 1.0	< 1.0	bromomethane	84.7	70-130	ok	85.5	70-130	ok	0.92	<25	ok
chloroethane	< 0.5	< 0.5	chloroethane	79.5	70-130	ok	81.0	70-130	ok	1.98	<25	ok
trichlorofluoromethane	< 1.0	< 1.0	trichlorofluoromethane	89.5	70-130	ok	90.1	70-130	ok	0.63	<25	ok
diethyl ether	< 2.5	< 2.5	diethyl ether	84.8	70-130	ok	87.9	70-130	ok	3.59	<25	ok
acetone	< 13	< 13	acetone	93.1	70-130	ok	95.4	70-130	ok	2.44	<25	ok
1,1-dichloroethene	< 0.5	< 0.5	1,1-dichloroethene	89.5	70-130	ok	90.7	70-130	ok	1.33	<25	ok
FREON-113	< 1.0	< 1.0	FREON-113	98.1	70-130	ok	99.0	70-130	ok	0.93	<25	ok
iodomethane	< 0.5	< 0.5	iodomethane	89.7	70-130	ok	90.1	70-130	ok	0.51	<25	ok
carbon disulfide	< 5.0	< 5.0	carbon disulfide	111	70-130	ok	111	70-130	ok	0.32	<25	ok
dichloromethane	< 1.0	< 1.0	dichloromethane	83.5	70-130	ok	82.4	70-130	ok	1.22	<25	ok
tert-butyl alcohol (TBA)	< 13	< 13	tert-butyl alcohol (TBA)	112	70-130	ok	116	70-130	ok	3.69	<25	ok
acrylonitrile	< 0.5	< 0.5	acrylonitrile	89.5	70-130	ok	86.2	70-130	ok	3.65	<25	ok
methyl-tert-butyl-ether	< 0.5	< 0.5	methyl-tert-butyl-ether	90.0	70-130	ok	92.8	70-130	ok	3.05	<25	ok
trans-1,2-dichloroethene	< 0.5	< 0.5	trans-1,2-dichloroethene	95.1	70-130	ok	96.4	70-130	ok	1.33	<25	ok
1,1-dichloroethane	< 0.5	< 0.5	1,1-dichloroethane	96.0	70-130	ok	95.7	70-130	ok	0.23	<25	ok
di-isopropyl ether (DIPE)	< 1.0	< 1.0	di-isopropyl ether (DIPE)	89.4	70-130	ok	91.6	70-130	ok	2.39	<25	ok
ethyl tert-butyl ether (EtBE)	< 1.0	< 1.0	ethyl tert-butyl ether (EtBE)	90.3	70-130	ok	94.3	70-130	ok	4.27	<25	ok
vinyl acetate	< 13	< 13	vinyl acetate	88.2	70-130	ok	91.6	70-130	ok	3.69	<25	ok
2-butanone	< 13	< 13	2-butanone	95.1	70-130	ok	96.1	70-130	ok	1.05	<25	ok
2,2-dichloropropane	< 0.5	< 0.5	2,2-dichloropropane	96.9	70-130	ok	93.2	70-130	ok	3.84	<25	ok
cis-1,2-dichloroethene	< 0.5	< 0.5	cis-1,2-dichloroethene	92.4	70-130	ok	92.3	70-130	ok	0.15	<25	ok
chloroform	< 0.5	< 0.5	chloroform	87.0	70-130	ok	87.9	70-130	ok	0.97	<25	ok
bromochloromethane	< 0.5	< 0.5	bromochloromethane	98.8	70-130	ok	98.2	70-130	ok	0.70	<25	ok
tetrahydrafuran	< 5.0	< 5.0	tetrahydrafuran	107	70-130	ok	105	70-130	ok	1.48	<25	ok
1,1,1-trichloroethane	< 0.5	< 0.5	1,1,1-trichloroethane	93.4	70-130	ok	94.8	70-130	ok	1.50	<25	ok
1,1-dichloropropene	< 0.5	< 0.5	1,1-dichloropropene	93.9	70-130	ok	94.7	70-130	ok	0.87	<25	ok
carbon tetrachloride	< 0.5	< 0.5	carbon tetrachloride	95.6	70-130	ok	96.6	70-130	ok	0.98	<25	ok
1,2-dichloroethane	< 0.5	< 0.5	1,2-dichloroethane	92.4	70-130	ok	91.3	70-130	ok	1.10	<25	ok
benzene	< 0.5	< 0.5	benzene	94.0	70-130	ok	93.8	70-130	ok	0.18	<25	ok
tert-amyl methyl ether (TAME)	< 1.0	< 1.0	tert-amyl methyl ether (TAME)	91.9	70-130	ok	94.1	70-130	ok	2.29	<25	ok
trichloroethene	< 0.5	< 0.5	trichloroethene	93.3	70-130	ok	93.0	70-130	ok	0.38	<25	ok
1,2-dichloropropane	< 0.5	< 0.5	1,2-dichloropropane	92.6	70-130	ok	92.5	70-130	ok	0.11	<25	ok
bromodichloromethane	< 0.5	< 0.5	bromodichloromethane	93.7	70-130	ok	93.9	70-130	ok	0.23	<25	ok
1,4-Dioxane	< 50	< 50	1,4-Dioxane	104	70-130	ok	107	70-130	ok	3.12	<25	ok
dibromomethane	< 0.5	< 0.5	dibromomethane	96.9	70-130	ok	98.1	70-130	ok	1.19	<25	ok
4-methyl-2-pentanone	< 13	< 13	4-methyl-2-pentanone	91.8	70-130	ok	94.1	70-130	ok	2.44	<25	ok
cis-1,3-dichloropropene	< 0.5	< 0.5	cis-1,3-dichloropropene	96.1	70-130	ok	96.7	70-130	ok	0.65	<25	ok
toluene	< 0.5	< 0.5	toluene	95.5	70-130	ok	96.3	70-130	ok	0.85	<25	ok
trans-1,3-dichloropropene	< 1.0	< 1.0	trans-1,3-dichloropropene	89.3	70-130	ok	90.5	70-130	ok	1.26	<25	ok
1,1,2-trichloroethane	< 0.5	< 0.5	1,1,2-trichloroethane	90.5	70-130	ok	95.7	70-130	ok	5.67	<25	ok
2-hexanone	< 13	< 13	2-hexanone	95.4	70-130	ok	98.2	70-130	ok	2.89	<25	ok
1,3-dichloropropane	< 0.5	< 0.5	1,3-dichloropropane	98.1	70-130	ok	97.8	70-130	ok	0.29	<25	ok
tetrachloroethene	< 0.5	< 0.5	tetrachloroethene	104	70-130	ok	105	70-130	ok	0.56	<25	ok
dibromochloromethane	< 0.5	< 0.5	dibromochloromethane	102	70-130	ok	101	70-130	ok	0.18	<25	ok
1,2-dibromoethane (EDB)	< 1.0	< 1.0	1,2-dibromoethane (EDB)	99.9	70-130	ok	101	70-130	ok	0.92	<25	ok
chlorobenzene	< 0.5	< 0.5	chlorobenzene	102	70-130	ok	102	70-130	ok	0.31	<25	ok
1,1,1,2-tetrachloroethane	< 0.5	< 0.5	1,1,1,2-tetrachloroethane	99.8	70-130	ok	99.9	70-130	ok	0.10	<25	ok
ethylbenzene	< 0.5	< 0.5	ethylbenzene	101	70-130	ok	99.2	70-130	ok	1.51	<25	ok
1,1,2,2-tetrachloroethane	< 0.5	< 0.5	1,1,2,2-tetrachloroethane	91.0	70-130	ok	92.7	70-130	ok	1.94	<25	ok
m&p-xylene	< 1.0	< 1.0	m&p-xylene	97.7	70-130	ok	97.6	70-130	ok	0.13	<25	ok
o-xylene	< 0.5	< 0.5	o-xylene	91.9	70-130	ok	95.4	70-130	ok	3.77	<25	ok
styrene	< 0.5	< 0.5	styrene	96.1	70-130	ok	99.5	70-130	ok	3.51	<25	ok
bromoform	< 1.0	< 1.0	bromoform	95.6	70-130	ok	99.8	70-130	ok	4.29	<25	ok
isopropylbenzene	< 0.5	< 0.5	isopropylbenzene	111	70-130	ok	115	70-130	ok	3.54	<25	ok
1,2,3-trichloropropane	< 0.5	< 0.5	1,2,3-trichloropropane	90.6	70-130	ok	89.4	70-130	ok	1.39	<25	ok
bromobenzene	< 0.5	< 0.5	bromobenzene	94.1	70-130	ok	98.3	70-130	ok	4.34	<25	ok
n-propylbenzene	< 0.5	< 0.5	n-propylbenzene	96.2	70-130	ok	102	70-130	ok	5.63	<25	ok
2-chlorotoluene	< 0.5	< 0.5	2-chlorotoluene	93.8	70-130	ok	95.9	70-130	ok	2.21	<25	ok
1,3,5-trimethylbenzene	< 0.5	< 0.5	1,3,5-trimethylbenzene	93.9	70-130	ok	99.7	70-130	ok	5.96	<25	ok
trans-1,4-dichloro-2-butene	< 1.0	< 1.0	trans-1,4-dichloro-2-butene	89.6	70-130	ok	93.8	70-130	ok	4.51	<25	ok
4-chlorotoluene	< 0.5	< 0.5	4-chlorotoluene	93.8	70-130	ok	98.7	70-130	ok	5.10	<25	ok
tert-butyl-benzene	< 0.5	< 0.5	tert-butyl-benzene	114	70-130	ok	120	70-130	ok	5.01	<25	ok
1,2,4-trimethylbenzene	< 0.5	< 0.5	1,2,4-trimethylbenzene	91.6	70-130	ok	95.3	70-130	ok	3.95	<25	ok
sec-butyl-benzene	< 0.5	< 0.5	sec-butyl-benzene	94.4	70-130	ok	95.8	70-130	ok	1.53	<25	ok
p-isopropyltoluene	< 0.5	< 0.5	p-isopropyltoluene	94.1	70-130	ok	98.4	70-130	ok	4.56	<25	ok
1,3-dichlorobenzene	< 0.5	< 0.5	1,3-dichlorobenzene	91.5	70-130	ok	98.1	70-130	ok	6.97	<25	ok
1,4-dichlorobenzene	< 0.5	< 0.5	1,4-dichlorobenzene	94.2	70-130	ok	97.7	70-130	ok	3.65	<25	ok
n-butylbenzene	< 0.5	< 0.5	n-butylbenzene	89.9	70-130	ok	95.4	70-130	ok	5.99	<25	ok
1,2-dichlorobenzene	< 0.5	< 0.5	1,2-dichlorobenzene	91.8	70-130	ok	97.6	70-130	ok	6.11	<25	ok
1,2-dibromo-3-chloropropane	< 2.5	< 2.5	1,2-dibromo-3-chloropropane	88.0	70-130	ok	92.0	70-130	ok	4.40	<25	ok
1,2,4-trichlorobenzene	< 0.5	< 0.5	1,2,4-trichlorobenzene	93.5	70-130	ok	100	70-130	ok	6.91	<25	ok
hexachlorobutadiene	< 0.5	< 0.5	hexachlorobutadiene	95.6	70-130	ok	101	70-130	ok	5.70	<25	ok
naphthalene	< 1.0	< 1.0	naphthalene	89.2	70-130	ok	96.7	70-130	ok	8.07	<25	ok
1,2,3-trichlorobenzene	< 0.5	< 0.5	1,2,3-trichlorobenzene	91.2	70-130	ok	99.2	70-130	ok	8.39	<25	ok

Surrogates:	Recovery (%)	Acceptance Limits	Surrogates:	Recovery (%)	Acceptance Limits	Verdict	Recovery (%)	Acceptance Limits	Verdict	RPD	Limit	Verdict
DIBROMOFLUOROMETHANE	97.8	70-130	DIBROMOFLUOROMETHANE	102	70-130	ok	98.5	70-130	ok	3.58	<25	ok
1,2-DICHLOROETHANE-D4	88.7	70-130	1,2-DICHLOROETHANE-D4	92.3	70-130	ok	94.9	70-130	ok	2.81	<25	ok
TOLUENE-D8	98.4	70-130	TOLUENE-D8	99.1	70-130	ok	99.7	70-130	ok	0.58	<25	ok
4-BROMOFLUOROBENZENE	95.1	70-130	4-BROMOFLUOROBENZENE	97.5	70-130	ok	100	70-130	ok	2.62	<25	ok
1,2-DICHLOROBENZENE-D4	95.2	70-130	1,2-DICHLOROBENZENE-D4	90.8	70-130	ok	93.9	70-130	ok	3.37	<25	ok

Instrument: HP GC/MS "S"

GZA GeoEnvironmental, Inc.
106 South Street
Hopkinton, MA 01748

EPA Method 8260 / 524.2 Aqueous Method Blank (MB) and Laboratory Control Sample/Duplicate (LCS/LCSD) Data

Method Blank			Laboratory Control Sample	#2			Laboratory Control Sample Duplicate					
Date Analyzed:	10/9/2008		Date Analyzed:	10/9/2008			10/9/2008					
Volatile Organics	Conc. ug/L	Acceptance Limit	Spike Concentration = 20ug/L	% Recovery	Acceptance Limits	Verdict	% Recovery	Acceptance Limits	Verdict	RPD	Limit	Verdict
dichlorodifluoromethane	< 1.0	< 1.0	dichlorodifluoromethane	81.5	70-130	ok	79.9	70-130	ok	1.96	<25	ok
chloromethane	< 1.0	< 1.0	chloromethane	80.1	70-130	ok	78.3	70-130	ok	2.18	<25	ok
vinyl chloride	< 0.5	< 0.5	vinyl chloride	80.5	70-130	ok	80.5	70-130	ok	0.02	<25	ok
bromomethane	< 1.0	< 1.0	bromomethane	84.8	70-130	ok	83.2	70-130	ok	1.90	<25	ok
chloroethane	< 0.5	< 0.5	chloroethane	80.3	70-130	ok	78.3	70-130	ok	2.57	<25	ok
trichlorofluoromethane	< 1.0	< 1.0	trichlorofluoromethane	91.2	70-130	ok	90.5	70-130	ok	0.75	<25	ok
diethyl ether	< 2.5	< 2.5	diethyl ether	80.3	70-130	ok	79.8	70-130	ok	0.89	<25	ok
acetone	< 13	< 13	acetone	86.9	70-130	ok	90.1	70-130	ok	3.55	<25	ok
1,1-dichloroethene	< 0.5	< 0.5	1,1-dichloroethene	91.5	70-130	ok	90.2	70-130	ok	1.45	<25	ok
FREON-113	< 1.0	< 1.0	FREON-113	99.0	70-130	ok	97.9	70-130	ok	1.07	<25	ok
iodomethane	< 0.5	< 0.5	iodomethane	89.5	70-130	ok	88.0	70-130	ok	1.76	<25	ok
carbon disulfide	< 5.0	< 5.0	carbon disulfide	110	70-130	ok	108	70-130	ok	1.38	<25	ok
dichloromethane	< 1.0	< 1.0	dichloromethane	81.8	70-130	ok	80.9	70-130	ok	1.04	<25	ok
tert-butyl alcohol (TBA)	< 13	< 13	tert-butyl alcohol (TBA)	106	70-130	ok	102	70-130	ok	3.87	<25	ok
acrylonitrile	< 0.5	< 0.5	acrylonitrile	84.4	70-130	ok	87.4	70-130	ok	3.56	<25	ok
methyl-tert-butyl-ether	< 0.5	< 0.5	methyl-tert-butyl-ether	77.0	70-130	ok	82.4	70-130	ok	6.74	<25	ok
trans-1,2-dichloroethene	< 0.5	< 0.5	trans-1,2-dichloroethene	95.6	70-130	ok	94.4	70-130	ok	1.24	<25	ok
1,1-dichloroethane	< 0.5	< 0.5	1,1-dichloroethane	96.8	70-130	ok	94.6	70-130	ok	2.37	<25	ok
di-isopropyl ether (DIPE)	< 1.0	< 1.0	di-isopropyl ether (DIPE)	86.6	70-130	ok	86.3	70-130	ok	0.31	<25	ok
ethyl tert-butyl ether (EtBE)	< 1.0	< 1.0	ethyl tert-butyl ether (EtBE)	85.7	70-130	ok	86.4	70-130	ok	0.88	<25	ok
vinyl acetate	< 13	< 13	vinyl acetate	82.8	70-130	ok	84.3	70-130	ok	1.88	<25	ok
2-butanone	< 13	< 13	2-butanone	85.3	70-130	ok	85.2	70-130	ok	0.12	<25	ok
2,2-dichloropropane	< 0.5	< 0.5	2,2-dichloropropane	77.8	70-130	ok	76.7	70-130	ok	1.37	<25	ok
cis-1,2-dichloroethene	< 0.5	< 0.5	cis-1,2-dichloroethene	92.1	70-130	ok	90.4	70-130	ok	1.83	<25	ok
chloroform	< 0.5	< 0.5	chloroform	86.7	70-130	ok	86.3	70-130	ok	0.46	<25	ok
bromochloromethane	< 0.5	< 0.5	bromochloromethane	93.2	70-130	ok	92.5	70-130	ok	0.74	<25	ok
tetrahydrafuran	< 5.0	< 5.0	tetrahydrafuran	94.5	70-130	ok	99.7	70-130	ok	5.32	<25	ok
1,1,1-trichloroethane	< 0.5	< 0.5	1,1,1-trichloroethane	95.1	70-130	ok	94.5	70-130	ok	0.65	<25	ok
1,1-dichloropropene	< 0.5	< 0.5	1,1-dichloropropene	93.8	70-130	ok	92.9	70-130	ok	0.89	<25	ok
carbon tetrachloride	< 0.5	< 0.5	carbon tetrachloride	97.0	70-130	ok	96.1	70-130	ok	0.97	<25	ok
1,2-dichloroethane	< 0.5	< 0.5	1,2-dichloroethane	85.9	70-130	ok	90.2	70-130	ok	4.97	<25	ok
benzene	< 0.5	< 0.5	benzene	94.3	70-130	ok	92.5	70-130	ok	1.97	<25	ok
tert-amyl methyl ether (TAME)	< 1.0	< 1.0	tert-amyl methyl ether (TAME)	84.3	70-130	ok	86.4	70-130	ok	2.52	<25	ok
trichloroethene	< 0.5	< 0.5	trichloroethene	92.1	70-130	ok	91.2	70-130	ok	0.96	<25	ok
1,2-dichloropropane	< 0.5	< 0.5	1,2-dichloropropane	91.5	70-130	ok	90.3	70-130	ok	1.31	<25	ok
bromodichloromethane	< 0.5	< 0.5	bromodichloromethane	90.5	70-130	ok	90.8	70-130	ok	0.36	<25	ok
1,4-Dioxane	< 50	< 50	1,4-Dioxane	90.6	70-130	ok	98.7	70-130	ok	8.57	<25	ok
dibromomethane	< 0.5	< 0.5	dibromomethane	90.9	70-130	ok	91.7	70-130	ok	0.89	<25	ok
4-methyl-2-pentanone	< 13	< 13	4-methyl-2-pentanone	84.0	70-130	ok	83.3	70-130	ok	0.73	<25	ok
cis-1,3-dichloropropene	< 0.5	< 0.5	cis-1,3-dichloropropene	88.5	70-130	ok	87.2	70-130	ok	1.54	<25	ok
toluene	< 0.5	< 0.5	toluene	96.2	70-130	ok	93.9	70-130	ok	2.40	<25	ok
trans-1,3-dichloropropene	< 1.0	< 1.0	trans-1,3-dichloropropene	79.5	70-130	ok	79.9	70-130	ok	0.49	<25	ok
1,1,2-trichloroethane	< 0.5	< 0.5	1,1,2-trichloroethane	90.6	70-130	ok	90.7	70-130	ok	0.12	<25	ok
2-hexanone	< 13	< 13	2-hexanone	88.3	70-130	ok	89.4	70-130	ok	1.27	<25	ok
1,3-dichloropropane	< 0.5	< 0.5	1,3-dichloropropane	95.7	70-130	ok	93.5	70-130	ok	2.31	<25	ok
tetrachloroethene	< 0.5	< 0.5	tetrachloroethene	109	70-130	ok	107	70-130	ok	2.08	<25	ok
dibromochloromethane	< 0.5	< 0.5	dibromochloromethane	98.1	70-130	ok	98.0	70-130	ok	0.06	<25	ok
1,2-dibromoethane (EDB)	< 1.0	< 1.0	1,2-dibromoethane (EDB)	98.2	70-130	ok	96.6	70-130	ok	1.62	<25	ok
chlorobenzene	< 0.5	< 0.5	chlorobenzene	105	70-130	ok	102	70-130	ok	3.12	<25	ok
1,1,1,2-tetrachloroethane	< 0.5	< 0.5	1,1,1,2-tetrachloroethane	101	70-130	ok	99.1	70-130	ok	1.89	<25	ok
ethylbenzene	< 0.5	< 0.5	ethylbenzene	105	70-130	ok	101	70-130	ok	3.95	<25	ok
1,1,2,2-tetrachloroethane	< 0.5	< 0.5	1,1,2,2-tetrachloroethane	87.5	70-130	ok	87.5	70-130	ok	0.01	<25	ok
m&p-xylene	< 1.0	< 1.0	m&p-xylene	102	70-130	ok	99.3	70-130	ok	3.09	<25	ok
o-xylene	< 0.5	< 0.5	o-xylene	96.5	70-130	ok	94.4	70-130	ok	2.26	<25	ok
styrene	< 0.5	< 0.5	styrene	100	70-130	ok	97.9	70-130	ok	2.23	<25	ok
bromoform	< 1.0	< 1.0	bromoform	91.8	70-130	ok	93.3	70-130	ok	1.80	<25	ok
isopropylbenzene	< 0.5	< 0.5	isopropylbenzene	119	70-130	ok	115	70-130	ok	3.28	<25	ok
1,2,3-trichloropropane	< 0.5	< 0.5	1,2,3-trichloropropane	83.1	70-130	ok	86.9	70-130	ok	4.44	<25	ok
bromobenzene	< 0.5	< 0.5	bromobenzene	97.7	70-130	ok	96.1	70-130	ok	1.69	<25	ok
n-propylbenzene	< 0.5	< 0.5	n-propylbenzene	101	70-130	ok	102	70-130	ok	1.01	<25	ok
2-chlorotoluene	< 0.5	< 0.5	2-chlorotoluene	101	70-130	ok	97.7	70-130	ok	3.16	<25	ok
1,3,5-trimethylbenzene	< 0.5	< 0.5	1,3,5-trimethylbenzene	99.7	70-130	ok	97.8	70-130	ok	2.02	<25	ok
trans-1,4-dichloro-2-butene	< 1.0	< 1.0	trans-1,4-dichloro-2-butene	80.5	70-130	ok	80.3	70-130	ok	0.29	<25	ok
4-chlorotoluene	< 0.5	< 0.5	4-chlorotoluene	98.1	70-130	ok	96.3	70-130	ok	1.84	<25	ok
tert-butyl-benzene	< 0.5	< 0.5	tert-butyl-benzene	120	70-130	ok	118	70-130	ok	1.57	<25	ok
1,2,4-trimethylbenzene	< 0.5	< 0.5	1,2,4-trimethylbenzene	96.5	70-130	ok	94.6	70-130	ok	1.97	<25	ok
sec-butyl-benzene	< 0.5	< 0.5	sec-butyl-benzene	101	70-130	ok	98.9	70-130	ok	1.62	<25	ok
p-isopropyltoluene	< 0.5	< 0.5	p-isopropyltoluene	99.6	70-130	ok	97.6	70-130	ok	2.08	<25	ok
1,3-dichlorobenzene	< 0.5	< 0.5	1,3-dichlorobenzene	94.3	70-130	ok	93.5	70-130	ok	0.81	<25	ok
1,4-dichlorobenzene	< 0.5	< 0.5	1,4-dichlorobenzene	96.9	70-130	ok	95.4	70-130	ok	1.50	<25	ok
n-butylbenzene	< 0.5	< 0.5	n-butylbenzene	94.1	70-130	ok	93.5	70-130	ok	0.69	<25	ok
1,2-dichlorobenzene	< 0.5	< 0.5	1,2-dichlorobenzene	93.8	70-130	ok	93.4	70-130	ok	0.41	<25	ok
1,2-dibromo-3-chloropropane	< 2.5	< 2.5	1,2-dibromo-3-chloropropane	83.0	70-130	ok	85.4	70-130	ok	2.86	<25	ok
1,2,4-trichlorobenzene	< 0.5	< 0.5	1,2,4-trichlorobenzene	92.4	70-130	ok	94.4	70-130	ok	2.16	<25	ok
hexachlorobutadiene	< 0.5	< 0.5	hexachlorobutadiene	96.5	70-130	ok	98.3	70-130	ok	1.84	<25	ok
naphthalene	< 1.0	< 1.0	naphthalene	86.3	70-130	ok	91.7	70-130	ok	6.02	<25	ok
1,2,3-trichlorobenzene	< 0.5	< 0.5	1,2,3-trichlorobenzene	90.1	70-130	ok	92.9	70-130	ok	3.06	<25	ok

Surrogates:	Recovery (%)	Acceptance Limits	Surrogates:	Recovery (%)	Acceptance Limits	Verdict	Recovery (%)	Acceptance Limits	Verdict	RPD	Limit	Verdict
DIBROMOFLUOROMETHANE	96.3	70-130	DIBROMOFLUOROMETHANE	96.3	70-130	ok	97.3	70-130	ok	0.98	<25	ok
1,2-DICHLOROETHANE-D4	83.6	70-130	1,2-DICHLOROETHANE-D4	90.7	70-130	ok	89.3	70-130	ok	1.53	<25	ok
TOLUENE-D8	100	70-130	TOLUENE-D8	101	70-130	ok	99.6	70-130	ok	1.64	<25	ok
4-BROMOFLUOROBENZENE	95.8	70-130	4-BROMOFLUOROBENZENE	99.0	70-130	ok	100	70-130	ok	1.23	<25	ok
1,2-DICHLOROBENZENE-D4	92.3	70-130	1,2-DICHLOROBENZENE-D4	90.5	70-130	ok	91.8	70-130	ok	1.35	<25	ok

Instrument: HP GC/MS "S"

CHAIN-OF-CUSTODY RECORD

W.O. # 080-00047 (for lab use only)

Sample I.D.	Date/Time Sampled	Matrix (A=Air, S=Soil, GW=Ground W., SW=Surface W., WW=Waste W., DW=Drinking W., P=Product, Other (specify))	ANALYSIS REQUIRED: ☐ pH ☐ Cond.	GC Methane, Ethane, Ethene	EPA 8260	EPA 8260 – 8010 List (Chlor.)	EPA 8260 – 8021 list	EPA 8021 – 8020 List (BTEX)	EPA 524.2 DW VOCs	EPA 624 WW VOCs	☐ 601 ☐ 602 WW VOCs	EPA 8270 FULL SVOCs	EPA 8270 ☐ PAH ☐ A ☐ BN	EPA 625 WW SVOCs	EPA 8082–PCBs	EPA 8081–Pest	TPH–GC (Mod. 8100)	TPH–GC w/FING.	EPH (MA DEP)	VPH (MA DEP)	Metals ☐ PPM-13 ☐ R-8	MCP 14 Metals (MA)	Metals (List Below)**	TCLP – Specify Below	SPLP – Specify Below	EPA 300 ☐ Cl ☐ SO4	EPA 300 ☐ NO2 ☐ NO3	Total # of Cont.	Note #
TB	10/6/08 7:30	GW			X																							3	
GZ-100	10/6/08 9:50	GW			X																							3	
RIZ-18	10/6/08 9:50	GW			X																							3	
PT-2	10/6/08 10:30	GW			X																							3	
RIZ-19	10/6/08 10:50	GW			X																							3	
PT-104 (=PT4)	10/6/08 1120	GW			X																							3	
GR-15	10/6/08 11:50	GW			X																							3	
GZ-6	10/6/08 1242	GW			X																							3	
CB9	10/6/08 1159	GW			X																							3	
GZ-27B	10/6/08 1312	GW			X																							3	
GZ-8	10/6/08 1348	GW			X																							3	
GZ-27A	10/6/08 1415	GW			X																							3	
PRESERVATIVE (Cl - HCl, M=Methanol, N - HNO3, S - H2SO4, Na - NaOH, O - Other)*																													
CONTAINER TYPE (P-Plastic, G-Glass, V-Vial, T-Teflon, O-Other)*																													

RELINQUISHED BY: (AFFILIATION) DATE/TIME RECEIVED BY: (AFFILIATION)
10/7/08 0900 Bill Buecon

RELINQUISHED BY: (AFFILIATION) DATE/TIME RECEIVED BY: (AFFILIATION)
Bill Buecon 10/7/08 1020 10/7/08 1500

RELINQUISHED BY: (AFFILIATION) DATE/TIME RECEIVED BY: (AFFILIATION)

NOTES: (Unless otherwise noted, all samples have been refrigerated to 4° C)
*Specify "Other" preservatives and containers types in this space.
① 5-7 Days Turn Please -

PROJECT MANAGER: Steve Andes EXT: 2740

TURNAROUND TIME: (Standard) Rush ___ Days, Approved by ___

LAB USE: TEMP. OF COOLER 1.7 °C Temp Blank (OK) Cooler Air ___

10/7/08 1130

10/7 @ 0300

GZA FILE NO: 32795.12 TASK NO: ___ P.O. NO. ___

PROJECT Charlot Facility

LOCATION Alton, RI

COLLECTOR(S) SMA, ACH

SHEET 1 OF 2

GZA GeoEnvironmental, Inc.
Labaratory Division

106 South Street
Hopkinton, MA 01748
(781) 278-4700
FAX (508) 435-9912

CHAIN-OF-CUSTODY RECORD

W.O. # 0810-00047
(for lab use only)

Sample I.D.	Date/Time Sampled	Matrix (A=Air, S=Soil, GW=Ground W., SW=Surface W., WW=Waste W., DW=Drinking W., P=Product, Other (specify))	ANALYSIS REQUIRED: ❑ pH ❑ Cond.	GC Methane, Ethane, Ethene	EPA 8260	EPA 8260 – 8010 List (Chlor.)	EPA 8260 – 8021 list	EPA 8021 – 8020 List (BTEX)	EPA 524.2 DW VOCs	EPA 624 WW VOCs	❑ 601 ❑ 602 WW VOCs	EPA 8270 FULL SVOCs	EPA 8270 ❑ PAH ❑ A ❑ BN	EPA 625 WW SVOCs	EPA 8082–PCBs	EPA 8081–Pest	TPH–GC (Mod. 8100)	TPH–GC w/FING.	EPH (MA DEP)	VPH (MA DEP)	Metals ❑ PPM–13 ❑ R–8	MCP 14 Metals (MA)	Metals (List Below)**	TCLP – Specify Below	SPLP – Specify Below	EPA 300 ❑ Cl ❑ SO4	EPA 300 ❑ NO2 ❑ NO3	Total # of Cont.	Note #
~~3274~~																												3	
PT-1	10/6/08	GW			X																								
PRESERVATIVE (Cl - HCl, M=Methanol, N - HNO3, S - H2SO4, Na - NaOH, O - Other)*																													
CONTAINER TYPE (P-Plastic, G-Glass, V-Vial, T-Teflon, O-Other)*																													

RELINQUISHED BY: (AFFILIATION) DATE/TIME RECEIVED BY: (AFFILIATION)
10/7/08 0930 Bill Bresson

RELINQUISHED BY: (AFFILIATION) DATE/TIME RECEIVED BY: (AFFILIATION)
Bill Bresson 10/7/08 1020

RELINQUISHED BY: (AFFILIATION) DATE/TIME RECEIVED BY: (AFFILIATION)

NOTES: (Unless otherwise noted, all samples have been refrigerated to 4° C)
Specify "Other" preservatives and containers types in this space.

(1) 5-7 Day Turn

PROJECT MANAGER: Steve Andrus EXT. 2740

TURNAROUND TIME: (Standard) Rush___ Days, Approved by _____

LAB USE: TEMP. OF COOLER 1.7 °C

Temp Blank 0812
Cooler Air ____
10/7/08 1550

GZA GeoEnvironmental, Inc.
Labaratory Division

106 South Street
Hopkinton, MA 01748
(781) 278-4700
FAX (508) 435-9912

10/7 16

08:00

GZA FILE NO: 32795.12 TASK NO: P.O. NO.

PROJECT Charles Faculty

LOCATION Alton KI

COLLECTOR(S) SMA/ALH

SHEET 2 OF 2

Department of Health
Three Capitol Hill
Providence, RI 02908-5097
TTY: 711
www.health.ri.gov

December 12, 2007

Carol A. Drake
P.O. Box 85
Wood River Junction, RI 02894

Dear Ms. Drake:

Enclosed is a copy of the Rhode Island Analytical Laboratory report for Work Order number 0711-19527, showing the analytical results for three (3) water samples collected on November 8, 2007, by Joan Taylor of the RI Department of Environmental Management (RIDEM). The water samples were collected to evaluate the well water quality prior to treatment and the drinking water quality after treatment by your on-site water treatment system at 260A Alton Bradford Road in Wood River Junction, RI.

More specifically, the water sample designated DW-04 and a duplicate water sample designated DW-06 were collected prior to the on-site treatment system to evaluate the water quality from the well at 260A Alton Bradford Road. The water sample designated DW-05 was collected from the cold water tap located in the kitchen; it represents the treated drinking water quality at 260A Alton Bradford Road.

THE FOLLOWING IS AN EVALUATION OF THOSE RESULTS:

Each of the three (3) water samples were analyzed for the presence of 60 volatile organic compounds (VOCs) using EPA Method 524.2. None of the volatile organic compounds tested were detected in any of the four (4) samples. A trip blank sample was also submitted for analysis by EPA Method 524.2 to verify that no contamination had occurred during transport of the sample; no VOCs were found in the trip blank.

Based on a review of these results, the untreated well water and the treated drinking water at 260A Alton Bradford Road show no evidence of contamination from VOCs at this time.

The Department of Health recommends that private well owners perform routine monitoring for additional drinking water quality parameters to ensure their water is fit for drinking, cooking and bathing. I have enclosed a pamphlet entitled, "Protect Your Family- Test Your Well's Water Quality Today" for your review.

If you have any questions regarding drinking water quality monitoring and private wells, please feel free to contact me at (401) 222-6867.

Sincerely,

Richard L Amirault

Richard Amirault
Engineering Technician IV
Office of Drinking Water Quality

Enclosures: Lab Results

cc: Joan Taylor, RI Department of Environmental Management

R.I. ANALYTICAL
Specialists in Environmental Services

CERTIFICATE OF ANALYSIS

GZA / Geoenvironmental, Inc.
Attn: Mr. Steve Andrus
140 Broadway
Providence, RI 02903

Date Received: 11/8/07
Date Reported: 11/13/07
P.O. #:
Work Order #: 0711-19527

DESCRIPTION: PROJECT# 32795.12 - CHARBERT

Subject sample(s) has/have been analyzed by our Warwick, R.I. laboratory with the attached results.

Reference: All parameters were analyzed by U.S. EPA approved methodologies.
The specific methodologies are listed in the methods column of the Certificate Of Analysis.

Data qualifiers (if present) are explained in full at the end of a given sample's analytical results.

Certification #: RI-033, MA-RI015, CT-PH-0508, ME-RI015
NH-253700 A & B, USDA S-41844

If you have any questions regarding this work, or if we may be of further assistance, please contact our customer service department.

Approved by:

Data Reporting

enc: Chain of Custody

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

GZA / Geoenvironmental, Inc.
Date Received: 11/8/07
Work Order #: 0711-19527

Approved by: Adam Baker
Data Reporting

Sample # 001
SAMPLE DESCRIPTION: DW-04 260ABF
SAMPLE TYPE: GRAB
SAMPLE DATE/TIME: 11/08/2007 @ 12:25

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
Volatile Organic Compounds						
Bromodichloromethane	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Bromoform	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Dibromochloromethane	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Chloroform	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
1,2-Dibromoethane(EDB)	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Benzene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Carbon Tetrachloride	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
1,2-Dichloroethane	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Trichloroethene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
1,4-Dichlorobenzene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
1,1-Dichloroethane	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
1,1,1-Trichloroethane	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Vinyl Chloride	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Bromobenzene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Bromomethane	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Chlorobenzene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Chloroethane	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Chloromethane	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
2-Chlorotoluene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
4-Chlorotoluene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Dibromomethane	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
1,3-Dichlorobenzene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
1,2-Dichlorobenzene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
trans-1,2-Dichloroethene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
cis-1,2-Dichloroethene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Methylene Chloride	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
1,1-Dichloroethene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
1,1-Dichloropropene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
1,2-Dichloropropane	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
1,3-Dichloropropane	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
cis-1,3-Dichloropropene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
trans-1,3-Dichloropropylene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
2,2-Dichloropropane	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Ethylbenzene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Styrene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
1,1,2-Trichloroethane	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
1,1,1,2-Tetrachloroethane	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

GZA / Geoenvironmental, Inc.
Date Received: 11/8/07
Work Order #: 0711-19527

Approved by: _____
Data Reporting

Sample # 001
SAMPLE DESCRIPTION: DW-04 260ABF
SAMPLE TYPE: GRAB **SAMPLE DATE/TIME:** 11/08/2007 @ 12:25

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
1,1,2,2-Tetrachloroethane	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Tetrachloroethene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
1,2,3-Trichloropropane	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Toluene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Xylenes	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
1,2-Dibromo-3-Chloropropane	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Bromochloromethane	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
n-Butylbenzene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Dichlorodifluoromethane	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Trichlorofluoromethane	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Isopropylbenzene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Hexachlorobutadiene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
p-Isopropyltoluene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Naphthalene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
n-Propylbenzene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Sec-butylbenzene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
tert-Butylbenzene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
1,2,3-Trichlorobenzene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
1,2,4-Trichlorobenzene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
1,2,4-Trimethylbenzene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
1,3,5-Trimethylbenzene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Methyl Tertiary Butyl Ether (MTBE)	<1	1	ug/l	EPA 524.2	11/12/07	RAS
n-Hexane	<10	10	ug/l	EPA 524.2	11/12/07	RAS
Surrogates			RANGE	EPA 524.2	11/12/07	RAS
4-Bromofluorobenzene	112		80-120%	EPA 524.2	11/12/07	RAS
1,2-Dichlorobenzene-d4	97		80-120%	EPA 524.2	11/12/07	RAS

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

GZA / Geoenvironmental, Inc.
Date Received: 11/8/07
Work Order #: 0711-19527

Approved by: _____
Data Reporting

Sample # 002
SAMPLE DESCRIPTION: DW-05 260AKT
SAMPLE TYPE: GRAB
SAMPLE DATE/TIME: 11/08/2007 @ 12:30

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
Volatile Organic Compounds						
Bromodichloromethane	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Bromoform	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Dibromochloromethane	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Chloroform	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
1,2-Dibromoethane(EDB)	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Benzene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Carbon Tetrachloride	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
1,2-Dichloroethane	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Trichloroethene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
1,4-Dichlorobenzene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
1,1-Dichloroethane	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
1,1,1-Trichloroethane	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Vinyl Chloride	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Bromobenzene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Bromomethane	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Chlorobenzene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Chloroethane	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Chloromethane	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
2-Chlorotoluene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
4-Chlorotoluene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Dibromomethane	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
1,3-Dichlorobenzene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
1,2-Dichlorobenzene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
trans-1,2-Dichloroethene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
cis-1,2-Dichloroethene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Methylene Chloride	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
1,1-Dichloroethene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
1,1-Dichloropropene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
1,2-Dichloropropane	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
1,3-Dichloropropane	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
cis-1,3-Dichloropropene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
trans-1,3-Dichloropropylene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
2,2-Dichloropropane	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Ethylbenzene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Styrene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
1,1,2-Trichloroethane	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
1,1,1,2-Tetrachloroethane	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

GZA / Geoenvironmental, Inc.
Date Received: 11/8/07
Work Order #: 0711-19527

Approved by: _____
Data Reporting

Sample # 002
SAMPLE DESCRIPTION: DW-05 260AKT
SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 11/08/2007 @ 12:30

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
1,1,2,2-Tetrachloroethane	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Tetrachloroethene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
1,2,3-Trichloropropane	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Toluene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Xylenes	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
1,2-Dibromo-3-Chloropropane	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Bromochloromethane	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
n-Butylbenzene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Dichlorodifluoromethane	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Trichlorofluoromethane	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Isopropylbenzene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Hexachlorobutadiene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
p-Isopropyltoluene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Naphthalene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
n-Propylbenzene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Sec-butylbenzene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
tert-Butylbenzene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
1,2,3-Trichlorobenzene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
1,2,4-Trichlorobenzene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
1,2,4-Trimethylbenzene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
1,3,5-Trimethylbenzene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Methyl Tertiary Butyl Ether (MTBE)	<1	1	ug/l	EPA 524.2	11/12/07	RAS
n-Hexane	<10	10	ug/l	EPA 524.2	11/12/07	RAS
Surrogates			RANGE	EPA 524.2	11/12/07	RAS
4-Bromofluorobenzene	104		80-120%	EPA 524.2	11/12/07	RAS
1,2-Dichlorobenzene-d4	94		80-120%	EPA 524.2	11/12/07	RAS

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

GZA / Geoenvironmental, Inc.
Date Received: 11/8/07
Work Order #: 0711-19527

Approved by: Shawn Baker
Data Reporting

Sample # 003
SAMPLE DESCRIPTION: DW-06 260AD
SAMPLE TYPE: GRAB
SAMPLE DATE/TIME: 11/08/2007 @ 12:26

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
Volatile Organic Compounds						
Bromodichloromethane	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Bromoform	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Dibromochloromethane	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Chloroform	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
1,2-Dibromoethane(EDB)	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Benzene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Carbon Tetrachloride	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
1,2-Dichloroethane	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Trichloroethene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
1,4-Dichlorobenzene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
1,1-Dichloroethane	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
1,1,1-Trichloroethane	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Vinyl Chloride	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Bromobenzene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Bromomethane	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Chlorobenzene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Chloroethane	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Chloromethane	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
2-Chlorotoluene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
4-Chlorotoluene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Dibromomethane	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
1,3-Dichlorobenzene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
1,2-Dichlorobenzene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
trans-1,2-Dichloroethene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
cis-1,2-Dichloroethene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Methylene Chloride	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
1,1-Dichloroethene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
1,1-Dichloropropene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
1,2-Dichloropropane	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
1,3-Dichloropropane	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
cis-1,3-Dichloropropene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
trans-1,3-Dichloropropylene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
2,2-Dichloropropane	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Ethylbenzene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Styrene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
1,1,2-Trichloroethane	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
1,1,1,2-Tetrachloroethane	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

GZA / Geoenvironmental, Inc.
Date Received: 11/8/07
Work Order #: 0711-19527

Approved by: _____
Data Reporting

Sample # 003
SAMPLE DESCRIPTION: DW-06 260AD
SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 11/08/2007 @ 12:26

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
1,1,2,2-Tetrachloroethane	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Tetrachloroethene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
1,2,3-Trichloropropane	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Toluene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Xylenes	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
1,2-Dibromo-3-Chloropropane	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Bromochloromethane	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
n-Butylbenzene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Dichlorodifluoromethane	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Trichlorofluoromethane	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Isopropylbenzene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Hexachlorobutadiene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
p-Isopropyltoluene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Naphthalene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
n-Propylbenzene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Sec-butylbenzene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
tert-Butylbenzene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
1,2,3-Trichlorobenzene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
1,2,4-Trichlorobenzene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
1,2,4-Trimethylbenzene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
1,3,5-Trimethylbenzene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Methyl Tertiary Butyl Ether (MTBE)	<1	1	ug/l	EPA 524.2	11/12/07	RAS
n-Hexane	<10	10	ug/l	EPA 524.2	11/12/07	RAS
Surrogates			RANGE	EPA 524.2	11/12/07	RAS
4-Bromofluorobenzene	99		80-120%	EPA 524.2	11/12/07	RAS
1,2-Dichlorobenzene-d4	104		80-120%	EPA 524.2	11/12/07	RAS

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

GZA / Geoenvironmental, Inc.
Date Received: 11/8/07
Work Order #: 0711-19527

Approved by: _____
Data Reporting

Sample # 005
SAMPLE DESCRIPTION: TB-01 TRIP
SAMPLE TYPE: GRAB
SAMPLE DATE/TIME: 11/08/2007 @ 11:30

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
Volatile Organic Compounds						
Bromodichloromethane	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Bromoform	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Dibromochloromethane	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Chloroform	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
1,2-Dibromoethane(EDB)	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Benzene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Carbon Tetrachloride	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
1,2-Dichloroethane	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Trichloroethene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
1,4-Dichlorobenzene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
1,1-Dichloroethane	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
1,1,1-Trichloroethane	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Vinyl Chloride	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Bromobenzene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Bromomethane	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Chlorobenzene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Chloroethane	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Chloromethane	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
2-Chlorotoluene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
4-Chlorotoluene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Dibromomethane	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
1,3-Dichlorobenzene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
1,2-Dichlorobenzene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
trans-1,2-Dichloroethene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
cis-1,2-Dichloroethene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Methylene Chloride	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
1,1-Dichloroethene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
1,1-Dichloropropene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
1,2-Dichloropropane	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
1,3-Dichloropropane	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
cis-1,3-Dichloropropene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
trans-1,3-Dichloropropylene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
2,2-Dichloropropane	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Ethylbenzene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Styrene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
1,1,2-Trichloroethane	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
1,1,1,2-Tetrachloroethane	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

GZA / Geoenvironmental, Inc.
Date Received: 11/8/07
Work Order #: 0711-19527

Approved by: _____
Data Reporting

Sample # 005
SAMPLE DESCRIPTION: TB-01 TRIP
SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 11/08/2007 @ 11:30

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
1,1,2,2-Tetrachloroethane	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Tetrachloroethene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
1,2,3-Trichloropropane	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Toluene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Xylenes	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
1,2-Dibromo-3-Chloropropane	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Bromochloromethane	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
n-Butylbenzene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Dichlorodifluoromethane	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Trichlorofluoromethane	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Isopropylbenzene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Hexachlorobutadiene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
p-Isopropyltoluene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Naphthalene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
n-Propylbenzene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Sec-butylbenzene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
tert-Butylbenzene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
1,2,3-Trichlorobenzene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
1,2,4-Trichlorobenzene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
1,2,4-Trimethylbenzene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
1,3,5-Trimethylbenzene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Methyl Tertiary Butyl Ether (MTBE)	<1	1	ug/l	EPA 524.2	11/12/07	RAS
n-Hexane	<10	10	ug/l	EPA 524.2	11/12/07	RAS
Surrogates			RANGE	EPA 524.2	11/12/07	RAS
4-Bromofluorobenzene	95		80-120%	EPA 524.2	11/12/07	RAS
1,2-Dichlorobenzene-d4	93		80-120%	EPA 524.2	11/12/07	RAS

CHAIN OF CUSTODY RECORD

R.I. Analytical Laboratories, Inc.

41 Illinois Avenue
Warwick, RI 02888-3007
Tel: 800-937-2580
Fax: 401-738-1970

131 Coolidge St, Suite 105
Hudson, MA 01749-1331
Tel: 800-937-2580
Fax: 978-568-0078

02-16-06

Date Collected	Time Collected	Field Sample Identification	Grab or Composite	# of Containers & Type [C]	Preservation Code [P]	Matrix Code [M]	VOCs 524.2
11-08-07	12:25	DW-04 260ABF	G	2	H	DW	
11-08-07	12:30	DW-05 260AKT					
11-08-07	12:26	DW-06 260AD					
11-08-07	12:40	DW-07 260B					
11-08-07		DW-08 90L					
11-08-07	11:30	~~FIELD~~ TB-01 TRIP					

Client Information

Company Name: 6ZA
Address: 140 BROADWAY
City / State / Zip: PROVIDENCE
Telephone: 421-4140 Fax:
Contact Person: STEVE ANDRUS

Project Information

Project Name: 32795.12 - CHARBERT
P.O. Number: Project Number:
Report To: STEVE ANDRUS Phone: SAME Fax:
Sampled by: RIDEM - 6ZA
Quote No:
Email report to these addresses: sandrus@6za.com

Relinquished By	Date	Time	Received By	Date	Time
Joan Kaylor	11-08-07	14:15	TR Loomis	11/8/07	14:15

Turn Around Time

- ✓ Normal | EMAIL Report
- 5 Business days. Possible surcharge
- Rush _____ (business days)

Project Comments

Circle if applicable: GW-1, GW-2, GW-3, S-1, S-2, S-3 MCP Data Enhancement QC Package? Yes No

Temp. Upon Receipt 12.6 °C

Lab Use Only

- Sample Pick Up Only
- RIAL sampled; attach field hours
- Shipped on ice

Workorder No: 5111-19[illegible]

Containers: P=Poly, G=Glass, AG=Amber Glass, V=Vial, St=Sterile Preservatives: A=Ascorbic Acid, NH4=NH_4Cl, H=HCl, M=MeOH, N=HNO_3, NP=None, S=H_2SO_4, SB=$NaHSO_4$, SH=NaOH, T=$Na_2S_2O_3$, Z=ZnOAc
Matrix Codes: GW=Groundwater, SW=Surface Water, WW=Wastewater, DW=Drinking Water, S=Soil, SL=Sludge, A=Air, B=Bulk/Solid, O=_____

Department of Health
Three Capitol Hill
Providence, RI 02908-5097
TTY: 711
www.health.ri.gov

3279512

December 12, 2007

RECEIVED
JAN 14 2007
GZA

RECEIVED
2007 DEC 17 P 12:32
D.E.M./O.W.M.

Chris Drake
P.O. Box 85
Wood River Junction, RI 02894

Dear Mr. Drake:

Enclosed is a copy of the Rhode Island Analytical Laboratory report for Work Order number 0711-19527, showing the analytical results for a water sample collected on November 8, 2007, by Joan Taylor of the RI Department of Environmental Management (RIDEM). The water sample designated DW-07 was collected from the untreated, cold water tap located in the kitchen at 260B Alton Bradford Road.

THE FOLLOWING IS AN EVALUATION OF THOSE RESULTS:

Your water sample was analyzed for the presence of 60 volatile organic compounds (VOCs) using EPA Method 524.2. None of the volatile organic compounds tested were detected in the water sample. A trip blank sample was also submitted for analysis by EPA Method 524.2 to verify that no contamination had occurred during transport of the sample; no VOCs were found in the trip blank.

Based on a review of these results, your untreated drinking water (and thus, your well water) shows no evidence of contamination from VOCs at this time.

The Department of Health recommends that private well owners perform routine monitoring for additional drinking water quality parameters to ensure their water is fit for drinking, cooking and bathing. I have enclosed a pamphlet entitled, "Protect Your Family- Test Your Well's Water Quality Today" for your review.

If you have any questions regarding drinking water quality monitoring and private wells, please feel free to contact me at (401) 222-6867.

Sincerely,

Richard J. Amirault

Richard Amirault
Engineering Technician IV
Office of Drinking Water Quality

Enclosures: Lab Results

cc: Joan Taylor, RI Department of Environmental Management

December 12, 2007

Chris Drake
P.O. Box 85
Wood River Junction, RI 02894

Dear Mr. Drake:

Enclosed is a copy of the Rhode Island Analytical Laborator
number 0711-19527, showing the analytical results for a wat
November 8, 2007, by Joan Taylor of the RI Department of I
(RIDEM). The water sample designated DW-07 was collect
water tap located in the kitchen at 260B Alton Bradford Roa

THE FOLLOWING IS AN EVALUATION OF THOSE RE

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sample; no VOCs were found in the trip blank.

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The Department of Health recommends that private well own
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Family- Test Your Well's Water Quality Today" for your rev

If you have any questions regarding drinking water quality m
please feel free to contact me at (401) 222-6867.

Sincerely,

Richard J. Amirault

Richard Amirault
Engineering Technician IV
Office of Drinking Water Quality

Enclosures: Lab Results

cc: Joan Taylor, RI Department of Environmental Manage

R.I. ANALYTICAL
Specialists in Environmental Services

CERTIFICATE OF ANALYSIS

GZA / Geoenvironmental, Inc.
Attn: Mr. Steve Andrus
140 Broadway
Providence, RI 02903

Date Received: 11/8/07
Date Reported: 11/13/07
P.O. #:
Work Order #: 0711-19527

DESCRIPTION: PROJECT# 32795.12 - CHARBERT

Subject sample(s) has/have been analyzed by our Warwick, R.I. laboratory with the attached results.

Reference: All parameters were analyzed by U.S. EPA approved methodologies.
The specific methodologies are listed in the methods column of the Certificate Of Analysis.

Data qualifiers (if present) are explained in full at the end of a given sample's analytical results.

Certification #: RI-033, MA-RI015, CT-PH-0508, ME-RI015
NH-253700 A & B, USDA S-41844

If you have any questions regarding this work, or if we may be of further assistance, please contact our customer service department.

Approved by:

Data Reporting

enc: Chain of Custody

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

GZA / Geoenvironmental, Inc.
Date Received: 11/8/07
Work Order #: 0711-19527

Approved by: _____
Data Reporting

Sample # 004
SAMPLE DESCRIPTION: DW-07 260B
SAMPLE TYPE: GRAB **SAMPLE DATE/TIME:** 11/08/2007 @ 12:40

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
Volatile Organic Compounds						
Bromodichloromethane	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Bromoform	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Dibromochloromethane	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Chloroform	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
1,2-Dibromoethane(EDB)	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Benzene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Carbon Tetrachloride	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
1,2-Dichloroethane	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Trichloroethene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
1,4-Dichlorobenzene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
1,1-Dichloroethane	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
1,1,1-Trichloroethane	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Vinyl Chloride	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Bromobenzene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Bromomethane	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Chlorobenzene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Chloroethane	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Chloromethane	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
2-Chlorotoluene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
4-Chlorotoluene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Dibromomethane	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
1,3-Dichlorobenzene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
1,2-Dichlorobenzene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
trans-1,2-Dichloroethene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
cis-1,2-Dichloroethene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Methylene Chloride	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
1,1-Dichloroethene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
1,1-Dichloropropene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
1,2-Dichloropropane	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
1,3-Dichloropropane	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
cis-1,3-Dichloropropene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
trans-1,3-Dichloropropylene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
2,2-Dichloropropane	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Ethylbenzene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Styrene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
1,1,2-Trichloroethane	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
1,1,1,2-Tetrachloroethane	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

GZA / Geoenvironmental, Inc.
Date Received: 11/8/07
Work Order #: 0711-19527

Approved by: _____
Data Reporting

Sample # 004
SAMPLE DESCRIPTION: DW-07 260B
SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 11/08/2007 @ 12:40

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
1,1,2,2-Tetrachloroethane	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Tetrachloroethene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
1,2,3-Trichloropropane	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Toluene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Xylenes	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
1,2-Dibromo-3-Chloropropane	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Bromochloromethane	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
n-Butylbenzene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Dichlorodifluoromethane	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Trichlorofluoromethane	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Isopropylbenzene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Hexachlorobutadiene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
p-Isopropyltoluene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Naphthalene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
n-Propylbenzene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Sec-butylbenzene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
tert-Butylbenzene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
1,2,3-Trichlorobenzene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
1,2,4-Trichlorobenzene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
1,2,4-Trimethylbenzene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
1,3,5-Trimethylbenzene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Methyl Tertiary Butyl Ether (MTBE)	<1	1	ug/l	EPA 524.2	11/12/07	RAS
n-Hexane	<10	10	ug/l	EPA 524.2	11/12/07	RAS
Surrogates			RANGE	EPA 524.2	11/12/07	RAS
4-Bromofluorobenzene	100		80-120%	EPA 524.2	11/12/07	RAS
1,2-Dichlorobenzene-d4	95		80-120%	EPA 524.2	11/12/07	RAS

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

GZA / Geoenvironmental, Inc.
Date Received: 11/8/07
Work Order #: 0711-19527

Approved by: _____
Data Reporting

Sample # 005
SAMPLE DESCRIPTION: TB-01 TRIP
SAMPLE TYPE: GRAB
SAMPLE DATE/TIME: 11/08/2007 @ 11:30

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
Volatile Organic Compounds						
Bromodichloromethane	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Bromoform	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Dibromochloromethane	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Chloroform	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
1,2-Dibromoethane(EDB)	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Benzene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Carbon Tetrachloride	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
1,2-Dichloroethane	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Trichloroethene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
1,4-Dichlorobenzene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
1,1-Dichloroethane	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
1,1,1-Trichloroethane	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Vinyl Chloride	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Bromobenzene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Bromomethane	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Chlorobenzene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Chloroethane	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Chloromethane	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
2-Chlorotoluene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
4-Chlorotoluene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Dibromomethane	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
1,3-Dichlorobenzene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
1,2-Dichlorobenzene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
trans-1,2-Dichloroethene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
cis-1,2-Dichloroethene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Methylene Chloride	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
1,1-Dichloroethene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
1,1-Dichloropropene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
1,2-Dichloropropane	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
1,3-Dichloropropane	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
cis-1,3-Dichloropropene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
trans-1,3-Dichloropropylene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
2,2-Dichloropropane	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Ethylbenzene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Styrene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
1,1,2-Trichloroethane	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
1,1,1,2-Tetrachloroethane	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

GZA / Geoenvironmental, Inc.
Date Received: 11/8/07
Work Order #: 0711-19527

Approved by: _____
Data Reporting

Sample # 005
SAMPLE DESCRIPTION: TB-01 TRIP
SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 11/08/2007 @ 11:30

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
1,1,2,2-Tetrachloroethane	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Tetrachloroethene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
1,2,3-Trichloropropane	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Toluene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Xylenes	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
1,2-Dibromo-3-Chloropropane	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Bromochloromethane	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
n-Butylbenzene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Dichlorodifluoromethane	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Trichlorofluoromethane	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Isopropylbenzene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Hexachlorobutadiene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
p-Isopropyltoluene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Naphthalene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
n-Propylbenzene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Sec-butylbenzene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
tert-Butylbenzene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
1,2,3-Trichlorobenzene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
1,2,4-Trichlorobenzene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
1,2,4-Trimethylbenzene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
1,3,5-Trimethylbenzene	<0.5	0.5	ug/l	EPA 524.2	11/12/07	RAS
Methyl Tertiary Butyl Ether (MTBE)	<1	1	ug/l	EPA 524.2	11/12/07	RAS
n-Hexane	<10	10	ug/l	EPA 524.2	11/12/07	RAS
Surrogates			RANGE	EPA 524.2	11/12/07	RAS
4-Bromofluorobenzene	95		80-120%	EPA 524.2	11/12/07	RAS
1,2-Dichlorobenzene-d4	93		80-120%	EPA 524.2	11/12/07	RAS

CHAIN OF CUSTODY RECORD

R.I. Analytical Laboratories, Inc.

41 Illinois Avenue
Warwick, RI 02888-3007
Tel: 800-937-2580
Fax: 401-738-1970

131 Coolidge St, Suite 105
Hudson, MA 01749-1331
Tel: 800-937-2580
Fax: 978-568-0078

Date Collected	Time Collected	Field Sample Identification	Grab or Composite	# of Containers & Type [C]	Preservation Code [P]	Matrix Code [M]	VOCs 524.2
11-08-07	12:25	DW-04 260ABF	G	2	H	DW	
11-08-07	12:30	DW-05 260AKT					
11-08-07	12:26	DW-06 260AD					
11-08-07	12:40	DW-07 260B					
11-08-07		DW-08 900L					
11-08-07	11:30	~~DW-09~~ TB-01 TRIP					

02-16-06

Client Information

Company Name: GZA
Address: 140 BROADWAY
City / State / Zip: PROVIDENCE
Telephone: 421-4140 Fax:
Contact Person: STEVE ANDRUS

Project Information

Project Name: 32795.12 - CHARBERT
P.O. Number: Project Number:
Report To: STEVE ANDRUS Phone: SAME Fax:
Sampled by: RIDEM - GZA
Quote No:
Email report to these addresses: sandrus@GZA.COM

Relinquished By	Date	Time	Received By	Date	Time
Joan Taylor	11-08-07	14:15	TR Loomis	11/8/07	14:15

Turn Around Time

- ✓ Normal | EMAIL Report
- 5 Business days. Possible surcharge
- Rush _____ (business days)

Project Comments

Circle if applicable: GW-1, GW-2, GW-3, S-1, S-2, S-3 MCP Data Enhancement QC Package? Yes No

Temp. Upon Receipt 12.6 °C

Lab Use Only

- Sample Pick Up Only
- RIAL sampled; attach field hours
- Shipped on ice

Workorder No: 5111-19207

Containers: P=Poly, G=Glass, AG=Amber Glass, V=Vial, St=Sterile Preservatives: A=Ascorbic Acid, NH4=NH_4Cl, H=HCl, M=MeOH, N=HNO_3, NP=None, S=H_2SO_4, SB=$NaHSO_4$, SH=NaOH, T=$Na_2S_2O_3$, Z=ZnOAc
Matrix Codes: GW=Groundwater, SW=Surface Water, WW=Wastewater, DW=Drinking Water, S=Soil, SL=Sludge, A=Air, B=Bulk/Solid, O=_____

Department of Health
Three Capitol Hill
Providence, RI 02908-5097
TTY: 711
www.health.ri.gov

December 12, 2007

Amy and John Collins
266 Alton Bradford Road
Wood River Junction, RI 02894

Dear Mr. and Mrs. Collins:

Enclosed is a copy of the Rhode Island Analytical Laboratory report for Work Order number 0710-18931, containing the analytical results for a water sample collected on October 31, 2007, by Joan Taylor of the Department of Environmental Management (DEM). The water sample was collected from the untreated cold water kitchen tap located at 266 Alton Bradford Road in Wood River Junction, RI.

THE FOLLOWING IS AN EVALUATION OF THOSE RESULTS:

Your water sample was analyzed for the presence of 60 volatile organic compounds (VOCs) using EPA Method 524.2. None of the volatile organic compounds tested were detected in your sample. A trip blank sample was also submitted for analysis by EPA Method 524.2 to verify that no contamination had occurred during transport of the sample; no VOCs were found in the trip blank.

Based on a review of these results, your untreated drinking water (and thus, your well water) shows no evidence of contamination from VOCs at this time.

The Department of Health recommends that private well owners perform routine monitoring for additional drinking water quality parameters to ensure their water is fit for drinking, cooking and bathing. I have enclosed a pamphlet entitled, "Protect Your Family- Test Your Well's Water Quality Today" for your review.

If you have any questions regarding drinking water quality and private wells, please feel free to contact me at (401) 222-6867.

Sincerely,

Richard L. Amirault

Richard Amirault
Engineering Technician IV
Office of Drinking Water Quality

Enclosures: Lab Results

cc: Joan Taylor, RI Department of Environmental Management

R.I. ANALYTICAL
Specialists in Environmental Services

CERTIFICATE OF ANALYSIS

GZA / Geoenvironmental, Inc.
Attn: Mr. Ed Summerly
140 Broadway
Providence, RI 02903

Date Received: 10/31/07
Date Reported: 11/7/07
P.O. #:
Work Order #: 0710-18931

DESCRIPTION: ONE DRINKING WATER SAMPLE

Subject sample(s) has/have been analyzed by our Warwick, R.I. laboratory with the attached results.

Reference: All parameters were analyzed by U.S. EPA approved methodologies.
The specific methodologies are listed in the methods column of the Certificate Of Analysis.

Data qualifiers (if present) are explained in full at the end of a given sample's analytical results.

Certification #: RI-033, MA-RI015, CT-PH-0508, ME-RI015
NH-253700 A & B, USDA S-41844

If you have any questions regarding this work, or if we may be of further assistance, please contact our customer service department.

Approved by:

Data Reporting

enc: Chain of Custody

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

GZA / Geoenvironmental, Inc.
Date Received: 10/31/07
Work Order #: 0710-18931

Approved by: Adam Baker
Data Reporting

Sample # 001
SAMPLE DESCRIPTION: DW-01 (266ABR)
SAMPLE TYPE: GRAB **SAMPLE DATE/TIME:** 10/31/2007 @ 10:33

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
Volatile Organic Compounds						
Bromodichloromethane	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Bromoform	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Dibromochloromethane	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Chloroform	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
1,2-Dibromoethane(EDB)	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Benzene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Carbon Tetrachloride	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
1,2-Dichloroethane	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Trichloroethene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
1,4-Dichlorobenzene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
1,1-Dichloroethane	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
1,1,1-Trichloroethane	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Vinyl Chloride	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Bromobenzene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Bromomethane	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Chlorobenzene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Chloroethane	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Chloromethane	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
2-Chlorotoluene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
4-Chlorotoluene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Dibromomethane	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
1,3-Dichlorobenzene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
1,2-Dichlorobenzene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
trans-1,2-Dichloroethene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
cis-1,2-Dichloroethene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Methylene Chloride	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
1,1-Dichloroethene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
1,1-Dichloropropene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
1,2-Dichloropropane	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
1,3-Dichloropropane	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
cis-1,3-Dichloropropene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
trans-1,3-Dichloropropylene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
2,2-Dichloropropane	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Ethylbenzene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Styrene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
1,1,2-Trichloroethane	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
1,1,1,2-Tetrachloroethane	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

GZA / Geoenvironmental, Inc.
Date Received: 10/31/07
Work Order #: 0710-18931

Approved by: _____
Data Reporting

Sample # 001
SAMPLE DESCRIPTION: DW-01 (266ABR)
SAMPLE TYPE: GRAB **SAMPLE DATE/TIME:** 10/31/2007 @ 10:33

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
1,1,2,2-Tetrachloroethane	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Tetrachloroethene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
1,2,3-Trichloropropane	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Toluene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Xylenes	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
1,2-Dibromo-3-Chloropropane	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Bromochloromethane	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
n-Butylbenzene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Dichlorodifluoromethane	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Trichlorofluoromethane	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Isopropylbenzene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Hexachlorobutadiene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
p-Isopropyltoluene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Naphthalene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
n-Propylbenzene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Sec-butylbenzene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
tert-Butylbenzene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
1,2,3-Trichlorobenzene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
1,2,4-Trichlorobenzene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
1,2,4-Trimethylbenzene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
1,3,5-Trimethylbenzene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Methyl Tertiary Butyl Ether (MTBE)	<1	1	ug/l	EPA 524.2	11/6/07	RAS
n-Hexane	<10	10	ug/l	EPA 524.2	11/6/07	RAS
Surrogates			RANGE	EPA 524.2	11/6/07	RAS
4-Bromofluorobenzene	92		80-120%	EPA 524.2	11/6/07	RAS
1,2-Dichlorobenzene-d4	101		80-120%	EPA 524.2	11/6/07	RAS

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

GZA / Geoenvironmental, Inc.
Date Received: 10/31/07
Work Order #: 0710-18931

Approved by: Adam Baker
Data Reporting

Sample # 002
SAMPLE DESCRIPTION: TRIP BLANK
SAMPLE TYPE: GRAB **SAMPLE DATE/TIME:** 10/31/2007 @ 10:33

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
Volatile Organic Compounds						
Bromodichloromethane	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Bromoform	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Dibromochloromethane	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Chloroform	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
1,2-Dibromoethane(EDB)	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Benzene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Carbon Tetrachloride	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
1,2-Dichloroethane	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Trichloroethene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
1,4-Dichlorobenzene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
1,1-Dichloroethane	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
1,1,1-Trichloroethane	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Vinyl Chloride	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Bromobenzene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Bromomethane	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Chlorobenzene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Chloroethane	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Chloromethane	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
2-Chlorotoluene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
4-Chlorotoluene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Dibromomethane	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
1,3-Dichlorobenzene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
1,2-Dichlorobenzene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
trans-1,2-Dichloroethene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
cis-1,2-Dichloroethene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Methylene Chloride	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
1,1-Dichloroethene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
1,1-Dichloropropene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
1,2-Dichloropropane	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
1,3-Dichloropropane	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
cis-1,3-Dichloropropene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
trans-1,3-Dichloropropylene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
2,2-Dichloropropane	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Ethylbenzene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Styrene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
1,1,2-Trichloroethane	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
1,1,1,2-Tetrachloroethane	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

GZA / Geoenvironmental, Inc.
Date Received: 10/31/07
Work Order #: 0710-18931

Approved by: Shawn Baker
Data Reporting

Sample # 002
SAMPLE DESCRIPTION: TRIP BLANK
SAMPLE TYPE: GRAB **SAMPLE DATE/TIME:** 10/31/2007 @ 10:33

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
1,1,2,2-Tetrachloroethane	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Tetrachloroethene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
1,2,3-Trichloropropane	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Toluene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Xylenes	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
1,2-Dibromo-3-Chloropropane	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Bromochloromethane	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
n-Butylbenzene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Dichlorodifluoromethane	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Trichlorofluoromethane	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Isopropylbenzene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Hexachlorobutadiene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
p-Isopropyltoluene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Naphthalene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
n-Propylbenzene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Sec-butylbenzene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
tert-Butylbenzene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
1,2,3-Trichlorobenzene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
1,2,4-Trichlorobenzene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
1,2,4-Trimethylbenzene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
1,3,5-Trimethylbenzene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Methyl Tertiary Butyl Ether (MTBE)	<1	1	ug/l	EPA 524.2	11/6/07	RAS
n-Hexane	<10	10	ug/l	EPA 524.2	11/6/07	RAS
Surrogates			RANGE	EPA 524.2	11/6/07	RAS
4-Bromofluorobenzene	94		80-120%	EPA 524.2	11/6/07	RAS
1,2-Dichlorobenzene-d4	100		80-120%	EPA 524.2	11/6/07	RAS

CHAIN OF CUSTODY RECORD

R.I. Analytical Laboratories, Inc.

41 Illinois Avenue
Warwick, RI 02888
Tel: 800-937-2580
Fax: 401-738-1970

131 Coolidge St, Bldg. 2
Hudson, MA 01749
Tel: 888-228-3334
Fax: 978-568-0078

Date Collected	Time Collected	Field Sample Identification	Grab or Composite	# of Containers & Type [T]	Preservation Code [P]	Matrix Code [M]	VOCs 524.2
10/31/07	10:33	DW-01 (266 ABR)	G	2	H	DW	✓
		TRIP BLANK					✓

Client Information		Project Information		
Company Name:	GZA	Project Name:		
Address:	140 BROADWAY	P.O. Number:	Project Number:	
City / State / Zip:	PROVIDENCE, RI	Report To:	Phone:	Fax:
Telephone:	421-4140 Fax:	Sampled by:		
Contact Person:	ED SUMMERLY	Quote No:	Email address:	

Relinquished By	Date	Time	Received By	Date	Time
	10/31/07	11:30AM	TR Loomis	10/31/07	11:30

Turn Around Time		
✓	Normal	EMAIL Report
	5 Business days. Possible surcharge.	
	Rush _____ (business days)	

Project Comments

Circle if applicable: GW-1, GW-2, GW-3, S-1, S-2, S-3 MCP Data Enhancement QC Package? Yes No

16.4°C

Lab Use Only	
	Sample Pick Up Only
	RIAL sampled; attach field hours
	Shipped on ice
Workorder No:	5110-18931

Container Types: P=Poly, G=Glass, AG=Amber Glass, V=Vial, St=Sterile

Preservation Codes: NP=None, N=HNO_3, H=HCl, S=H_2SO_4, SH=NaOH, SB=$NaHSO_4$, M=MeOH, T=Na_2S_2C Z=ZnOAc, I=Ice

Matrix Codes: GW=Groundwater, SW=Surface Water, WW=Wastewater, DW=Drinking Water, S=Soil, Sl=Sludge, A=Air, B=Bulk/Solid, O=_____

Department of Health
Three Capitol Hill
Providence, RI 02908-5097
TTY: 711
www.health.ri.gov

December 12, 2007

Robert and Sarah Enos
270 Alton Bradford Road
Wood River Junction, RI 02894

Dear Mr. and Mrs. Enos:

Enclosed is a copy of the Rhode Island Analytical Laboratory report for Work Order number 0711-19090, showing the analytical results for three (3) water samples collected on November 2, 2007, by Joan Taylor of the RI Department of Environmental Management (RIDEM). The water samples were collected to evaluate the well water quality prior to treatment and the drinking water quality after treatment by your on-site water treatment system at 270 Alton Bradford Road in Wood River Junction, RI.

More specifically, the water sample designated DW-02 and a duplicate water sample designated DW-20 were collected prior to the on-site treatment system to evaluate the water quality from the well. The water sample designated DW-03 was collected from the cold water tap located in your kitchen and represents your treated drinking water quality.

THE FOLLOWING IS AN EVALUATION OF THOSE RESULTS:

Each of the three (3) water samples were analyzed for the presence of 60 volatile organic compounds (VOCs) using EPA Method 524.2. None of the volatile organic compounds tested were detected in any of the three (3) samples. A trip blank sample was also submitted for analysis by EPA Method 524.2 to verify that no contamination had occurred during transport of the sample; no VOCs were found in the trip blank.

Based on these results, your untreated well water and your drinking water show no evidence of contamination from VOCs at this time.

The Department of Health recommends that private well owners perform routine monitoring for additional drinking water quality parameters to ensure their water is fit for drinking, cooking and bathing. I have enclosed a pamphlet entitled, "Protect Your Family- Test Your Well's Water Quality Today" for your review.

If you have any questions regarding drinking water quality monitoring and private wells, please feel free to contact me at (401) 222-6867.

Sincerely,

Richard L. Amirault

Richard Amirault
Engineering Technician IV
Office of Drinking Water Quality

Enclosures: Lab Results

cc: Joan Taylor, RI Department of Environmental Management

R.I. ANALYTICAL
Specialists in Environmental Services

CERTIFICATE OF ANALYSIS

GZA / Geoenvironmental, Inc.
Attn: Mr. Steve Andrus
140 Broadway
Providence, RI 02903

Date Received: 11/2/07
Date Reported: 11/7/07
P.O. #:
Work Order #: 0711-19090

DESCRIPTION: GZA FILE# 32795.12 - CHARBERT

Subject sample(s) has/have been analyzed by our Warwick, R.I. laboratory with the attached results.

Reference: All parameters were analyzed by U.S. EPA approved methodologies.
The specific methodologies are listed in the methods column of the Certificate Of Analysis.

Data qualifiers (if present) are explained in full at the end of a given sample's analytical results.

Certification #: RI-033, MA-RI015, CT-PH-0508, ME-RI015
NH-253700 A & B, USDA S-41844

If you have any questions regarding this work, or if we may be of further assistance, please contact our customer service department.

Approved by:

Data Reporting

enc: Chain of Custody

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

GZA / Geoenvironmental, Inc.
Date Received: 11/2/07
Work Order #: 0711-19090

Approved by: _____
Data Reporting

Sample # 001
SAMPLE DESCRIPTION: DW-02 (270ABR)
SAMPLE TYPE: GRAB **SAMPLE DATE/TIME:** 11/02/2007 @ 10:40

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
Volatile Organic Compounds						
Bromodichloromethane	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Bromoform	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Dibromochloromethane	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Chloroform	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
1,2-Dibromoethane(EDB)	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Benzene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Carbon Tetrachloride	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
1,2-Dichloroethane	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Trichloroethene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
1,4-Dichlorobenzene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
1,1-Dichloroethane	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
1,1,1-Trichloroethane	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Vinyl Chloride	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Bromobenzene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Bromomethane	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Chlorobenzene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Chloroethane	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Chloromethane	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
2-Chlorotoluene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
4-Chlorotoluene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Dibromomethane	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
1,3-Dichlorobenzene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
1,2-Dichlorobenzene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
trans-1,2-Dichloroethene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
cis-1,2-Dichloroethene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Methylene Chloride	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
1,1-Dichloroethene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
1,1-Dichloropropene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
1,2-Dichloropropane	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
1,3-Dichloropropane	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
cis-1,3-Dichloropropene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
trans-1,3-Dichloropropylene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
2,2-Dichloropropane	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Ethylbenzene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Styrene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
1,1,2-Trichloroethane	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
1,1,1,2-Tetrachloroethane	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

GZA / Geoenvironmental, Inc.
Date Received: 11/2/07
Work Order #: 0711-19090

Approved by: Sherri Baker
Data Reporting

Sample # 001
SAMPLE DESCRIPTION: DW-02 (270ABR)
SAMPLE TYPE: GRAB
SAMPLE DATE/TIME: 11/02/2007 @ 10:40

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
1,1,2,2-Tetrachloroethane	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Tetrachloroethene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
1,2,3-Trichloropropane	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Toluene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Xylenes	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
1,2-Dibromo-3-Chloropropane	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Bromochloromethane	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
n-Butylbenzene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Dichlorodifluoromethane	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Trichlorofluoromethane	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Isopropylbenzene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Hexachlorobutadiene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
p-Isopropyltoluene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Naphthalene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
n-Propylbenzene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Sec-butylbenzene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
tert-Butylbenzene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
1,2,3-Trichlorobenzene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
1,2,4-Trichlorobenzene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
1,2,4-Trimethylbenzene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
1,3,5-Trimethylbenzene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Methyl Tertiary Butyl Ether (MTBE)	<1	1	ug/l	EPA 524.2	11/6/07	RAS
n-Hexane	<10	10	ug/l	EPA 524.2	11/6/07	RAS
Surrogates			RANGE	EPA 524.2	11/6/07	RAS
4-Bromofluorobenzene	97		80-120%	EPA 524.2	11/6/07	RAS
1,2-Dichlorobenzene-d4	104		80-120%	EPA 524.2	11/6/07	RAS

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

GZA / Geoenvironmental, Inc.
Date Received: 11/2/07
Work Order #: 0711-19090

Approved by: _____
Data Reporting

Sample # 002
SAMPLE DESCRIPTION: DW-20
SAMPLE TYPE: GRAB
SAMPLE DATE/TIME: 11/02/2007 @ 10:42

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
Volatile Organic Compounds						
Bromodichloromethane	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Bromoform	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Dibromochloromethane	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Chloroform	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
1,2-Dibromoethane(EDB)	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Benzene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Carbon Tetrachloride	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
1,2-Dichloroethane	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Trichloroethene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
1,4-Dichlorobenzene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
1,1-Dichloroethane	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
1,1,1-Trichloroethane	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Vinyl Chloride	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Bromobenzene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Bromomethane	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Chlorobenzene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Chloroethane	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Chloromethane	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
2-Chlorotoluene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
4-Chlorotoluene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Dibromomethane	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
1,3-Dichlorobenzene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
1,2-Dichlorobenzene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
trans-1,2-Dichloroethene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
cis-1,2-Dichloroethene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Methylene Chloride	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
1,1-Dichloroethene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
1,1-Dichloropropene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
1,2-Dichloropropane	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
1,3-Dichloropropane	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
cis-1,3-Dichloropropene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
trans-1,3-Dichloropropylene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
2,2-Dichloropropane	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Ethylbenzene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Styrene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
1,1,2-Trichloroethane	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
1,1,1,2-Tetrachloroethane	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

GZA / Geoenvironmental, Inc.
Date Received: 11/2/07
Work Order #: 0711-19090

Approved by: _____
Data Reporting

Sample # 002
SAMPLE DESCRIPTION: DW-20
SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 11/02/2007 @ 10:42

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
1,1,2,2-Tetrachloroethane	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Tetrachloroethene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
1,2,3-Trichloropropane	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Toluene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Xylenes	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
1,2-Dibromo-3-Chloropropane	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Bromochloromethane	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
n-Butylbenzene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Dichlorodifluoromethane	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Trichlorofluoromethane	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Isopropylbenzene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Hexachlorobutadiene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
p-Isopropyltoluene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Naphthalene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
n-Propylbenzene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Sec-butylbenzene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
tert-Butylbenzene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
1,2,3-Trichlorobenzene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
1,2,4-Trichlorobenzene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
1,2,4-Trimethylbenzene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
1,3,5-Trimethylbenzene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Methyl Tertiary Butyl Ether (MTBE)	<1	1	ug/l	EPA 524.2	11/6/07	RAS
n-Hexane	<10	10	ug/l	EPA 524.2	11/6/07	RAS
Surrogates			RANGE	EPA 524.2	11/6/07	RAS
4-Bromofluorobenzene	100		80-120%	EPA 524.2	11/6/07	RAS
1,2-Dichlorobenzene-d4	98		80-120%	EPA 524.2	11/6/07	RAS

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

GZA / Geoenvironmental, Inc.
Date Received: 11/2/07
Work Order #: 0711-19090

Approved by: _____
Data Reporting

Sample # 003
SAMPLE DESCRIPTION: DW-03
SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 11/02/2007 @ 10:45

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
Volatile Organic Compounds						
Bromodichloromethane	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Bromoform	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Dibromochloromethane	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Chloroform	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
1,2-Dibromoethane(EDB)	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Benzene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Carbon Tetrachloride	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
1,2-Dichloroethane	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Trichloroethene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
1,4-Dichlorobenzene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
1,1-Dichloroethane	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
1,1,1-Trichloroethane	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Vinyl Chloride	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Bromobenzene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Bromomethane	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Chlorobenzene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Chloroethane	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Chloromethane	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
2-Chlorotoluene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
4-Chlorotoluene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Dibromomethane	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
1,3-Dichlorobenzene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
1,2-Dichlorobenzene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
trans-1,2-Dichloroethene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
cis-1,2-Dichloroethene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Methylene Chloride	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
1,1-Dichloroethene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
1,1-Dichloropropene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
1,2-Dichloropropane	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
1,3-Dichloropropane	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
cis-1,3-Dichloropropene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
trans-1,3-Dichloropropylene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
2,2-Dichloropropane	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Ethylbenzene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Styrene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
1,1,2-Trichloroethane	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
1,1,1,2-Tetrachloroethane	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

GZA / Geoenvironmental, Inc.
Date Received: 11/2/07
Work Order #: 0711-19090

Approved by: Dawn Baker
Data Reporting

Sample # 003
SAMPLE DESCRIPTION: DW-03
SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 11/02/2007 @ 10:45

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
1,1,2,2-Tetrachloroethane	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Tetrachloroethene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
1,2,3-Trichloropropane	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Toluene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Xylenes	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
1,2-Dibromo-3-Chloropropane	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Bromochloromethane	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
n-Butylbenzene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Dichlorodifluoromethane	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Trichlorofluoromethane	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Isopropylbenzene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Hexachlorobutadiene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
p-Isopropyltoluene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Naphthalene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
n-Propylbenzene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Sec-butylbenzene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
tert-Butylbenzene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
1,2,3-Trichlorobenzene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
1,2,4-Trichlorobenzene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
1,2,4-Trimethylbenzene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
1,3,5-Trimethylbenzene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Methyl Tertiary Butyl Ether (MTBE)	<1	1	ug/l	EPA 524.2	11/6/07	RAS
n-Hexane	<10	10	ug/l	EPA 524.2	11/6/07	RAS
Surrogates			RANGE	EPA 524.2	11/6/07	RAS
4-Bromofluorobenzene	97		80-120%	EPA 524.2	11/6/07	RAS
1,2-Dichlorobenzene-d4	94		80-120%	EPA 524.2	11/6/07	RAS

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

GZA / Geoenvironmental, Inc.
Date Received: 11/2/07
Work Order #: 0711-19090

Approved by: _____
Data Reporting

Sample # 004
SAMPLE DESCRIPTION: TRIP BLANK
SAMPLE TYPE: GRAB
SAMPLE DATE/TIME: 11/02/2007 @ 09:45

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
Volatile Organic Compounds						
Bromodichloromethane	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Bromoform	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Dibromochloromethane	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Chloroform	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
1,2-Dibromoethane(EDB)	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Benzene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Carbon Tetrachloride	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
1,2-Dichloroethane	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Trichloroethene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
1,4-Dichlorobenzene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
1,1-Dichloroethane	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
1,1,1-Trichloroethane	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Vinyl Chloride	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Bromobenzene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Bromomethane	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Chlorobenzene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Chloroethane	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Chloromethane	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
2-Chlorotoluene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
4-Chlorotoluene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Dibromomethane	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
1,3-Dichlorobenzene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
1,2-Dichlorobenzene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
trans-1,2-Dichloroethene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
cis-1,2-Dichloroethene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Methylene Chloride	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
1,1-Dichloroethene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
1,1-Dichloropropene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
1,2-Dichloropropane	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
1,3-Dichloropropane	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
cis-1,3-Dichloropropene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
trans-1,3-Dichloropropylene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
2,2-Dichloropropane	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Ethylbenzene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Styrene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
1,1,2-Trichloroethane	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
1,1,1,2-Tetrachloroethane	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

GZA / Geoenvironmental, Inc.
Date Received: 11/2/07
Work Order #: 0711-19090

Approved by: Shawn Baker
Data Reporting

Sample # 004
SAMPLE DESCRIPTION: TRIP BLANK
SAMPLE TYPE: GRAB **SAMPLE DATE/TIME:** 11/02/2007 @ 09:45

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
1,1,2,2-Tetrachloroethane	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Tetrachloroethene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
1,2,3-Trichloropropane	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Toluene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Xylenes	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
1,2-Dibromo-3-Chloropropane	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Bromochloromethane	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
n-Butylbenzene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Dichlorodifluoromethane	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Trichlorofluoromethane	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Isopropylbenzene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Hexachlorobutadiene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
p-Isopropyltoluene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Naphthalene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
n-Propylbenzene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Sec-butylbenzene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
tert-Butylbenzene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
1,2,3-Trichlorobenzene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
1,2,4-Trichlorobenzene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
1,2,4-Trimethylbenzene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
1,3,5-Trimethylbenzene	<0.5	0.5	ug/l	EPA 524.2	11/6/07	RAS
Methyl Tertiary Butyl Ether (MTBE)	<1	1	ug/l	EPA 524.2	11/6/07	RAS
n-Hexane	<10	10	ug/l	EPA 524.2	11/6/07	RAS
Surrogates			RANGE	EPA 524.2	11/6/07	RAS
4-Bromofluorobenzene	95		80-120%	EPA 524.2	11/6/07	RAS
1,2-Dichlorobenzene-d4	100		80-120%	EPA 524.2	11/6/07	RAS

CHAIN OF CUSTODY RECORD

R.I. Analytical Laboratories, Inc.

41 Illinois Avenue
Warwick, RI 02888
Tel: 800-937-2580
Fax: 401-738-1970

131 Coolidge St, Bldg. 2
Hudson, MA 01749
Tel: 888-228-3334
Fax: 978-568-0078

Date Collected	Time Collected	Field Sample Identification	Grab or Composite	# of Containers & Type [T]	Preservation Code [P]	Matrix Code [M]	VOCs 524.2
11-02-07	10:40	DW-02 (270 ABR)	G	2	H	DW	✓
11-02-07	10:42	DW-20	↓	↓	↓	↓	↓
11-02-07	10:45	DW-03	↓	↓	↓	↓	↓
11-02-07	9:45	TRIP BLANK	↓	↓	↓	↓	↓

Client Information

Company Name: GZA
Address: 140 Broadway
City / State / Zip: Prov. RI
Telephone: 421 4140 Fax:
Contact Person: Steve Andrus

Project Information

Project Name: 32795.12 - Charbert
P.O. Number: Project Number:
Report To: S. Andrus, R. DeSisto Fax:
Sampled by: SMA - RIDEM
Quote No: Email address: sandrus@gza-corp

Relinquished By	Date	Time	Received By	Date	Time
John Leyden	11-2-07	12:30	TR Loomis	11/2/07	12:30

Turn Around Time

- ✓ Normal — EMAIL Report
- 5 Business days. Possible surcharge.
- Rush ____ (business days)

Project Comments

Circle if applicable: GW-1, GW-2, GW-3, S-1, S-2, S-3 MCP Data Enhancement QC Package? Yes No

INVOICE TO ~~CHARBERT~~ GZA

13.4

Lab Use Only

- Sample Pick Up Only
- RIAL sampled; attach field hours
- Shipped on ice

Workorder No: 0711-1909

Container Types: P=Poly, G=Glass, AG=Amber Glass, V=Vial, St=Sterile

Preservation Codes: NP=None, N=HNO_3, H=HCl, S=H_2SO_4, SH=NaOH, SB=$NaHSO_4$, M=MeOH, T=Na_2S_2C Z=ZnOAc, I=Ice

Matrix Codes: GW=Groundwater, SW=Surface Water, WW=Wastewater, DW=Drinking Water, S=Soil, Sl=Sludge, A=Air, B=Bulk/Solid, O=_____

APPENDIX D

GEOPHYSICAL INVESTIGATION REPORTS

GEOPHYSICAL INVESTIGATION FOR BEDROCK AQUIFER EVALUATION CHARBERT FACILITY ALTON, RHODE ISLAND

Prepared for:

Charbert, A Division of NFA Corporation
299 Church Street
Alton, Rhode Island 02832

Prepared by:

Hager GeoScience, Inc.
596 Main Street
Woburn, Massachusetts 01801

File 200633
July 2006

APPENDICES

APPENDIX A – PLATES
Plate 1. Geophysical Survey Locations
Plate 2. Bedrock Elevation Map
Plate 3. Till Elevation Map
Plate 4. Till Thickness Map

APPENDIX B – MODEL PROFILES (DRAFT)
Profile A-A' (south to north)
Profile B-B' (south to north)
Profile C-C' (west to east)
Profile D-D' (west to east)
Profile E-E' (west to east)
Profile F-F' (southwest to northeast)

APPENDIX C – SEISMIC PROFILES
SRR A1-A2
SRR A3
SRR A4
SRR A5
SRR A6
SRR B1
SRL B2
SRR B3
SRR B4
SRR B5
SRR C2
SRR D1
SRR D2
SRR E1
SRR F1

APPENDIX D – VLF PROFILES
Line C
Line D
Line F

EXECUTIVE SUMMARY

In April of 2006 Hager GeoScience, Inc. (HGI) was contracted by Charbert, A Division of NFA Corporation (Charbert) to perform a geophysical investigation at the Charbert Facility in Alton, Rhode Island. The objective of the investigation was to map bedrock and soil stratigraphy for an ongoing Bedrock Aquifer Evaluation, to assist Charbert in locating sites for three bedrock boreholes. The work was performed under the direction of GZA GeoEnvironmental, Inc. (GZA), Charbert's consultant for work at the site, for the Rhode Island Department of Environmental Management (RIDEM).

Geophysical data were collected from traverses at the Facility between May 8th and June 16th, 2006. These data were integrated with borehole information for the top of till to form a database that was used to create models of the bedrock and stratigraphy.

Conclusions from the study include:

- Bedrock elevation over the site ranges from 20 feet to –65 feet, with the elevation decreasing from west to east.
- Seismic low velocity zones attributed to bedrock fractures are present along portions of all the seismic lines (Plate 2 in Appendix A and profiles in Appendix C). VLF anomalies possibly caused by bedrock fractures are also present along Lines C2 and D (Appendix D).
- The till elevation follows the general trend of the bedrock, decreasing from west to east. The top of till ranges from +30 to –30 feet in elevation.
- The till is thinnest in the southern and northwest portions of the site, where the bedrock elevation is highest, as well as locally in the center of the survey area. Till appears to be absent in an area between grid profiles C and D.
- A locally thicker till area corresponds with lower bedrock elevation in the northeast.

1.0 INTRODUCTION

In April of 2006 Hager GeoScience, Inc. (HGI) was contracted by Charbert, A Division of NFA Corporation (Charbert) to perform a geophysical investigation at the Charbert Facility in Alton, Rhode Island. The objective of the investigation was to map bedrock and soil stratigraphy to assist Charbert in locating three sites for bedrock boreholes. The work was performed under the direction of GZA GeoEnvironmental, Inc. (GZA), Charbert's consultant for work at the site, as part of an ongoing Bedrock Aquifer Evaluation for the Rhode Island Department of Environmental Management (RIDEM).

Fieldwork was performed during the period May 8th through June 16th, 2006.

2.0 TECHNICAL APPROACH

The geophysical study at the Charbert Facility was designed to acquire a distribution of data suitable for mapping the stratigraphy and bedrock in order to install three bedrock extraction wells. A multidisciplinary approach using seismic refraction, ground penetrating radar (GPR), and very low frequency profiling (VLF) was used to meet these objectives. Brief descriptions of these methods are given in the next section; more detailed information about the techniques and their limitations is provided in Section 6.0.

The strategy for the exploration program and the traverse locations were developed by GZA in consultation with Charbert. Six lines were laid out on the Facility grounds (A-F) for bedrock investigation using seismic refraction. Low frequency GPR was specified as an additional task along Seismic Line F to obtain stratigraphic information. The initial program was modified as work progressed to include 1) a survey to locate utilities adjacent to the Mill Building, 2) a VLF survey to locate possible fractures along portions of lines C, D, and F, and 3) low and ultra low frequency GPR coverage along all the survey lines. The low-frequency radar systems allowed HGI to perform shallow and deep investigations along all the seismic lines, thereby increasing the spatial resolution for the data interpolation.

HGI provided a field crew of 3 to 4 people during the course of the field program. Charbert and GZA personnel, who cleared the lines and provided survey control, provided on-site assistance and support.

The multidisciplinary survey program produced two distinct data sets that yielded complementary constraints on subsurface structure. As such, these data sets required integration before affording more comprehensive results. One goal of such an integrated geophysical approach is to determine geologic interpretations consistent with all interpreted data. However, innate differences between geophysical survey types (i.e.

differing resolution abilities) and the uncertainty in the interpretation of geophysical data (i.e. imprecise knowledge of the radar velocity profile) produced inconsistency in the geological conclusions rendered from the different investigation types. Thus, to minimize the uncertainty present in this investigation, interpretations from individual data sets were iteratively updated to achieve a more globally consistent geologic section. Overall, the combination of borehole constraints and seismic and GPR data provided an effective means of bounding study area stratigraphy and establishing reliable stratigraphic trends.

3.0 DATA ACQUISITION

Plate 1 shows the locations of the geophysical survey lines. Data acquisition for each survey technique is described below.

3.1 GPR Survey

The GPR method is amenable to the interrogation and mapping of discontinuous subsurface interfaces, such as changes in stratigraphy. GPR data were collected as two-way travel time, in which the measurements are made of the time for the input radar wave pulse to travel to a subsurface discontinuity and reflect back to the antenna at the ground surface. Depths to discontinuous interfaces were recovered from the recorded travel-time data using radar propagation velocities estimated through calibration with borehole logs and from material specific velocity tables.

Ground penetrating radar data were collected using a Geophysical Survey Systems, Inc. (GSSI) SIR System 2/2000 digital ground penetrating radar system. The GPR data were displayed on a color monitor for immediate visual inspection and quality control and simultaneously recorded on the system's hard drive for later processing and interpretation.

The GPR stratigraphic investigation consisted of two components: a) a survey designed to resolve stratigraphy, and b) a survey to map bedrock. After testing several antenna frequencies and setups, HGI selected a 100-MHz bi-static antenna in survey wheel data collection mode and a Multiple Low Frequency (MLF) bi-static antenna system in both survey wheel and point modes for the survey. Table 1 summarizes the antenna frequency and data collection mode along each survey line.

The 100-MHZ data were used to derive stratigraphic information, while the MLF data were used both for stratigraphy and to supplement the seismic bedrock data. MLF data were collected using discrete, stacked measurements at 2-foot intervals and continuous acquisition regulated by a calibrated survey wheel. Stacking signals in the point collection mode increases the signal-to-noise ratio and produces much cleaner records than does the survey wheel mode; however, such a method requires more time for

collecting data. One hundred twenty-eight stacks per station were used for MLF point mode surveys along lines B and F. Surveys using the 100-MHz antenna system were conducted exclusively in the survey wheel collection mode. In all modes, transmission rates ranged from 16 to 32 scans per second. The lower time acquisition windows for 100-MHz and MLF data collection ranged from 500 ns to 1700 ns (for the 15-MHz antenna).

3.2 Seismic Refraction Survey

The seismic refraction survey was performed using a Geometrics Geode® 48-channel exploration seismograph. The 7 survey lines laid out by GZA were divided into 17 seismic refraction lines. A geophone spacing of 10 feet was used on all lines.

To acquire refraction data, HGI used 14-Hz Mark Products geophones (at ~70% damping) deployed along linear 48-channel geophone arrays. The geophone array was attached to our Geometrics Geode® 48-channel exploration seismograph unit via a seismic cable that relays the motion-induced electrical signals from individual sensors. The electrical signals were subsequently recorded in the seismograph unit as SEG-2 Rev 1, 32-bit integer data. Our acquisition software provided a number of Windows-based modules that permitted the on-site display and evaluation of data quality. Seismic energy was generated with a 90-pound Propelled Energy Generator (PEG) and Betsy seisgun.

After deployment of the geophone array and acquisition equipment, site-specific testing was undertaken to evaluate background noise levels, to demonstrate the recording of meaningful refraction data, and to estimate signal-to-noise (S-N) values. This phase of the operation also tested the appropriateness of important acquisition parameters, such as sampling rate (1 ms), the need for acquisition and real-time monitoring frequency filters, and total record duration (1 s).

For each refraction line, seismic energy was generated at a minimum of 7 locations. These included, but were not restricted to, off the ends of the geophone array (up to 387 feet at Line F), at the end geophones, at the quarter locations, and in the middle of the spread. The quality of the seismic signals was verified in the field at each shot location. For records exhibiting low S-N levels, additional shots were used to additively stack the coherent parts of the signal, which helps mitigate the detrimental effects of random environmental noise. Shot locations were also mirrored to enable examination of the reciprocity of refractor travel-times.

3.3 VLF Survey

The VLF survey was performed using a Geonics EM-16 VLF receiver and the Cutler, Maine, transmitting station. VLF traverses were made in an approximate east-west orientation along portions of geophysical survey lines C, D, and F. The traverses were 600 feet (lines D and F) and 900 feet (Line C) long. The station spacing along each line was 20 feet. The strength of the transmitted signal was generally weak due to a combination of cultural interference and line orientation.

4.0 DATA REDUCTION AND ANALYSIS

Following the field data collection, the geophysical data were downloaded to a PC at the HGI office. The data were archived, processed, and analyzed using the following proprietary software:

- GPR: GSSI's RADAN for Windows NT™ with Structural and Stratigraphic Interactive Interpretation Module®
- Seismic Refraction: SIPWin®
- VLF: ABEM's SECTOR software
- Grid Modeling: Surfer® 8.0
- Graphic Presentations: Surfer® 8.0, AutoCAD® 2000

The map plates and profiles in Appendices A through D were created from processing of the multidisciplinary data sets and the integrated database. Appendix E contains the plate for the utility survey previously submitted via email on June 11th.

GZA provided GPS coordinates and elevation for selective points along HGI's geophysical survey lines. HGI then calculated the X and Y values and interpolated elevations for calculated coordinates for each interpreted depth point based on the measured points. Plate 1 shows the locations of the geophysical survey lines.

4.1 GPR Survey

The primary use of the radar data was to enhance the spatial coverage of depth points for modeling stratigraphy and bedrock. Site stratigraphy along GPR traverses was determined using GPR reflections that arose due to the back-scattering of the input GPR wave from discontinuous stratigraphic interfaces. However, before the data could be analyzed, significant processing was required to reduce the detrimental effects of noise associated with radio frequency signals and reflections from surface structures and buried debris. High-pass and spatial filters, horizontal smoothing, background removal, gain adjustments, and wavelet deconvolution were performed as essential processing steps. Two-way travel times to the tops of GPR reflectors were then picked and entered into an

ASCII file according to file number and traverse offset. All generated ASCII files were then incorporated into a collective database.

Site- and unit-specific GPR propagation velocities were estimated using onsite borehole log constraints, migration techniques, and estimates based on experience. GPR travel-time data were then mapped into the depth domain using these velocity estimates. Maximum penetration depths were over 80 feet for the 100-MHz antenna system and over 120 feet for the MLF antenna system.

4.2 Seismic Refraction Survey

Refraction data reduction and analysis initiated with the determination of arrival times of the direct (where applicable) and refracted waves for each shot-receiver pair. These arrivals were identified and 'picked' on a trace-by-trace basis by examining individual seismograms for the break in phase leading the first coherent seismic wavelet arrival. Coherent arrivals were enhanced through the use of frequency filters that remove both coherent (e.g. electrical) and non-coherent (e.g. wind) noise from individual records.

Direct and refracted wave travel-times expressed as a function of source and receiver locations and elevations were used to generate the earth model most consistent with all observations. HGI analyzes seismic refraction data using Rimrock Geophysics' SIPWin®. In the SIPWin® program, picked arrival times are subdivided into individual refractor layers on the basis of refractor geometry. This is accomplished by examining the slope of the line connecting refractor arrival times plotted as a function of distance. Since the slope of the line depends on a layer's seismic velocity, slope changes may be used to discriminate between layers of differing velocity[1]. The SIPWin® program uses this layer information and, using the principles of travel-time reciprocity, constrains average layer velocities and interface depths (e.g. weathered and non-weathered bedrock surfaces) beneath source and receiver locations.

Regarding areas of step bedrock slopes, the program control parameters that allow the user to adjust the slope limit for the acoustic boundaries of the model and the allowed difference between the computed and measured arrival times are used to examine model results based on a variety of simulations. The program was also used to model layers using raw arrival times or datum corrected arrival times, depending on whether the buried horizon is thought to be parallel or not parallel to the surface. Another method used to address the steep slope issue was to limit the use of anomalous bedrock arrival times for

[1]Although this procedure is generally tractable, there are a number of cases where layers cannot be resolved, including situations where a low-velocity layer (LVL) exists beneath a layer of greater velocity, and where layers are too thin to be resolved.

each shot points. This affected the degree of reciprocity of bedrock shot points; however, it still allowed regression velocity analysis and a more accurate bedrock slope as defined by the "useable" arrivals from opposing shot points.

Modeled results were correlated with available known constraints. Modeled units were correlated with stratigraphy encountered in neighboring boreholes. Model velocities were correlated with averages velocities of the expected media types, and the correlation of model structure with other geophysical data.

Velocity information was used to semi-quantitatively elucidate the presence and degree of fracturing/jointing in bedrock. This was achieved by examining the velocity profiles for locations that exhibit prominent and localized low velocity zones.

Appendix C contains refraction profiles for each of the seismic lines. Low velocity zones are drawn along the portion of the profile with low velocity values. The low velocity zones are also plotted on Plate 3 as ovals (Appendix A). Note that the profiles illustrate the layer stratigraphy both under the geophone locations (shown as tick marks) and the intermittent and offset shot points (shown as asterisks with an associated letter). The seismic lines on the Plate 1 represent only the total length of the geophone spread and do not include shot offset distances.

4.3 VLF Survey

The VLF data were entered into a spreadsheet and processed (filtered) using SECTOR data reduction software. The program was used to produce electromagnetic field strength maps or profiles along each traverse at or near anticipated bedrock depths (80 and 120 feet depending on the location). The software was also used to prepare current density cross sections, which characterize relative current densities along the VLF profile as a function of depth. Profiles and current density cross sections for the VLF lines are included in Appendix D.

The quality of the VLF data suffered from cultural interference along the survey lines, including overhead power lines and surface metal. Therefore, the VLF data must be considered suspect without corroboration from other sources. An anomaly from approximately 200 to 400 feet along Line D (Appendix D) may indicate a bedrock fracture zone; however, the anomaly is not supported by other geophysical data and may be influenced by its proximity to a fence. A second anomaly from 0 to 200 feet along Line C does correlate with a seismic low velocity zone and thus may be caused by bedrock fractures.

5.0 DATA SYNTHESIS AND CONCLUSIONS

Data from the geophysical surveys and borehole information for the top of till were compiled to form an integrated database. These data were used to construct a best-fit 2-D grid model using Surfer® for Windows' kriging algorithm for the top of till and bedrock. Kriging algorithms incorporating anisotropy parameters were used to create the grids. Areas where data were not acquired or were insufficient to analyze surface trends have been accordingly blanked in the grid model. Final contour maps were then produced with Surfer® for Windows. A matrix smoothing function was applied to the grids to emphasize the surface trends. Contour maps representing the mapped horizons were created from the grids (Plates 2 and 3), as well as an isopach map of the till horizon (Plate 4). Slices made through the grid models (traverses A-A' through F-F' on Plate 3) are included as profiles in Appendix B.

The geophysical data collected at the Charbert Facility lead to the following conclusions:

- Bedrock elevation over the site ranges from 20 feet to –65 feet, with the elevation decreasing from west to east.
- Seismic low velocity zones attributed to bedrock fractures are present along portions of all the seismic lines (Plate 2 in Appendix A and profiles in Appendix C). VLF anomalies possibly caused by bedrock fractures are also present along Lines C2 and D (Appendix D).
- The till elevation follows the general trend of the bedrock, decreasing from west to east. The top of till ranges from +30 to –30 feet in elevation.
- The till is thinnest in the southern and northwest portions of the site, where the bedrock elevation is highest, as well as locally in the center of the survey area. Till appears to be absent in an area between grid profiles C and D.
- A locally thicker till area corresponds with lower bedrock elevation in the northeast.

6.0 THE GEOPHYSICAL TECHNIQUES

6.1 Ground Penetrating Radar

6.1.1 Description of the Method

The principle of ground penetrating radar (GPR) is the same as that of weather or police radar, except that GPR transmits electromagnetic energy into the ground, which is reflected back to the surface from interfaces between materials with contrasting electrical (dielectric and conductivity) properties. The greater the contrast between two materials in the subsurface, the stronger the reflection observed on the GPR record. The depth of GPR signal penetration depends on the properties of the subsurface materials and the

frequency of the antenna used to collect radar data. The lower the antenna frequency used, the deeper the signal penetration, but the lower the signal resolution.

We collect GPR data using a Geophysical Survey Systems SIR System 2 or 2000 digital ground penetrating radar unit, which consists of a computer connected to a transmit/receive antenna. Radar data are collected in point, continuous, or survey wheel mode while moving the antenna across the ground. Data are displayed in color on the computer monitor and simultaneously recorded on the unit's hard drive for later processing and interpretation using proprietary RADAN for Windows® software. Hard copies of the data may be printed in the field on a thermal printer.

6.1.2 Data Analysis and Interpretation

The horizontal scale of the GPR record shows distance along the survey traverse. In the continuous data collection mode, the horizontal scale on each GPR record is determined by the antenna speed. When a survey wheel is used, as at this site, the GPR record is automatically marked at specified intervals along the survey line. The vertical scale of the radar records is determined by the recording interval. The recording interval represents the maximum two-way travel time in which data are recorded. The conversion of two-way travel time to depth depends on the propagation velocity of the GPR signal, which is site specific. In the absence of site-specific subsurface information about stratigraphy, we estimate propagation velocities from handbook values and experience at similar sites.

The size, shape, and amplitude of GPR reflections are used to interpret GPR data. Metal objects such as USTs and utilities produce reflections with high amplitude and distinctive hyperbolic shapes in GPR records when traverses are made perpendicular to their long axes. Clay or concrete pipes and boulders may produce radar signatures of similar shape but lower amplitude. The boundaries between saturated and unsaturated materials, sand and clay, and bedrock and overburden, generally also produce strong reflections.

6.1.3 Limitations of the Method

GPR signal penetration is site specific, determined by the dielectric properties of local soil and fill materials. GPR signals propagate well in resistive materials such as sand and gravel; however, soils containing clay, ash- or cinder-laden fill, or fill saturated with brackish or otherwise conductive groundwater cause GPR signal attenuation and loss of target resolution (i.e., limited detection of small objects). Concrete containing rebar or mesh also inhibits signal penetration.

Interpreted depths of objects detected using GPR are based on on-site calibration, handbook values, and/or estimated GPR signal propagation velocities from similar sites.

GPR velocities and depth estimates may vary if the medium of investigation or soil water content is not uniform throughout the site. (Electromagnetic waves do not travel as fast through water as air, so the distance to a reflector below the water table may appear farther than in actuality.)

Utilities are interpreted on the basis of reflectors of similar size and depth that show a linear trend, but GPR cannot unambiguously determine that all such reflectors are related. Fiberglass USTs or utilities composed of plastic or clay may be difficult to detect, as well as objects underneath reinforced concrete pads.

Changes in the speed at which the GPR antenna is moved between stations causes slight variations in distance interpolations, and hence in interpreted object positions.

The GPR antenna produces a cone-shaped signal pattern that emanates approximately 45 degrees from horizontal fore and aft of the antenna. Therefore, buried objects may be detected before the antenna is located directly over them, and GPR anomalies may appear larger than actual target dimensions.

GPR is an interpretive method, based on the subjective identification of reflection patterns that may not uniquely identify a subsurface target. Borings, test pits, or site utility plans must verify the results.

6.2 Seismic Refraction

6.2.1. Description of the Method.

We collect seismic data using our Geometrics Geode® exploration seismograph system with 24- or 48-channel geophone arrays. Geophone spacing depends on the depth of investigation, but is between 5 to 20 feet. Shot points are located at a minimum off the ends of each spread, at the end geophones, and in the middle of the spread

6.2.2. Data Analysis and Interpretation.

The seismic data are analyzed using the SIPWin® iterative ray tracing technique. Data are input into the computer and a first-approximation model is created. The computer then compares the modeled arrival times along each ray trace from shot to geophone with the "picked" field arrival times and subsequently adjusts the model. After a number of iterations of this process, a reasonable fit between modeled and actual data is produced (i.e. the travel times along ray paths of modeled and calculated data are similar) which leads to the determination of layer depth beneath each geophone and shot point. The accuracy of the SIPWin® iterative method is contingent on a reasonable first-guess horizontally layered model.

6.2.3. Limitations of the Method.

Analysis of seismic refraction data requires an assumption of a model composed of a number of layers, such as bedrock overlain by overburden, or bedrock overlain by till and overburden. Other limiting assumptions are i) seismic refraction layers are continuous and extend from one end of the refraction line to the other; and ii) layer velocities increase with depth.

Seismic refraction requires a sufficiently strong source so that seismic energy is transmitted to refracting interfaces and returned to the surface to be recorded by each geophone in a seismic spread. When bedrock is deep and/or overburden velocities are low, explosives or seisgun sources may be required to produce sufficient seismic energy to reach most or all of the geophones in a spread. It is becoming increasingly difficult to use intrusive seismic sources, particularly explosives, at many sites.

Seismic refraction can only distinguish between materials if their seismic velocities are sufficiently different. Thus it may not be possible to distinguish between weathered bedrock and till, particularly if the bedrock is shale.

Electric lines with 60-cycle current (and/or greater harmonics) may create interference with seismic data collection along lines adjacent to or beneath them.

6.3 VLF Profiling

6.3.1 Description of the Method.

VLF (very low frequency) electromagnetic profiling is a technique used in many areas to locate water-filled bedrock fractures. Water-, clay-, or mineral-filled fractures create conductive zones in the bedrock and affect the direction and strength of the local field generated by distant VLF transmitters. A VLF receiver detects these effects as anomalies along profiles conducted perpendicular to the anticipated strike of the fracture zone. Locations of VLF traverses are generally used to confirm the existence of lineaments identified from geologic maps or fracture trace studies.

We perform VLF surveys using ABEM Wadi and Geonics EM-16 VLF receivers. These instruments measure the secondary electromagnetic field produced by an existing VLF transmitter, typically located at a large distance from the site. Both the in-phase and the quadrature-phase components of the secondary electromagnetic field are measured as a percentage of the primary electromagnetic field. The instruments are tuned to the VLF stations producing the strongest response in the direction of the survey traverses. For New England, HGI uses transmitters located in Cutler, Maine and Seattle, Washington. We make several parallel VLF traverses at least 600 feet long across inferred fractures,

preferably beginning and ending at least 300 feet from the inferred location. Station spacing along each traverse is 15 to 30 feet.

6.3.2 Data Analysis and Interpretation.

Data obtained with a VLF instrument must be reduced before interpretation can be performed. We generally use proprietary SECTOR data reduction software to produce electromagnetic field strength maps or profiles along each VLF traverse. The software can also be used to prepare current density cross sections, which characterize relative current densities along the VLF profile as a function of depth.

VLF anomalies detected along survey traverses and their likely dip directions are then identified from the profiles and cross sections.

6.3.3. Limitations of the Method.

VLF anomalies can be produced by several sources, including geologic contacts as well as water-bearing fractures. Most commonly, the occurrence of basalt/diabase dikes, quartz veins, and lithologic contacts in bedrock produces VLF anomalies. Although these features may also be sources of ground water, they are not as prolific producers as open fracture zones. Therefore, VLF results need to be integrated with a geologic study of the area be performed prior to drawing conclusions based on the VLF results. We also recommend that topographic lineaments be evaluated prior to applying the VLF results.

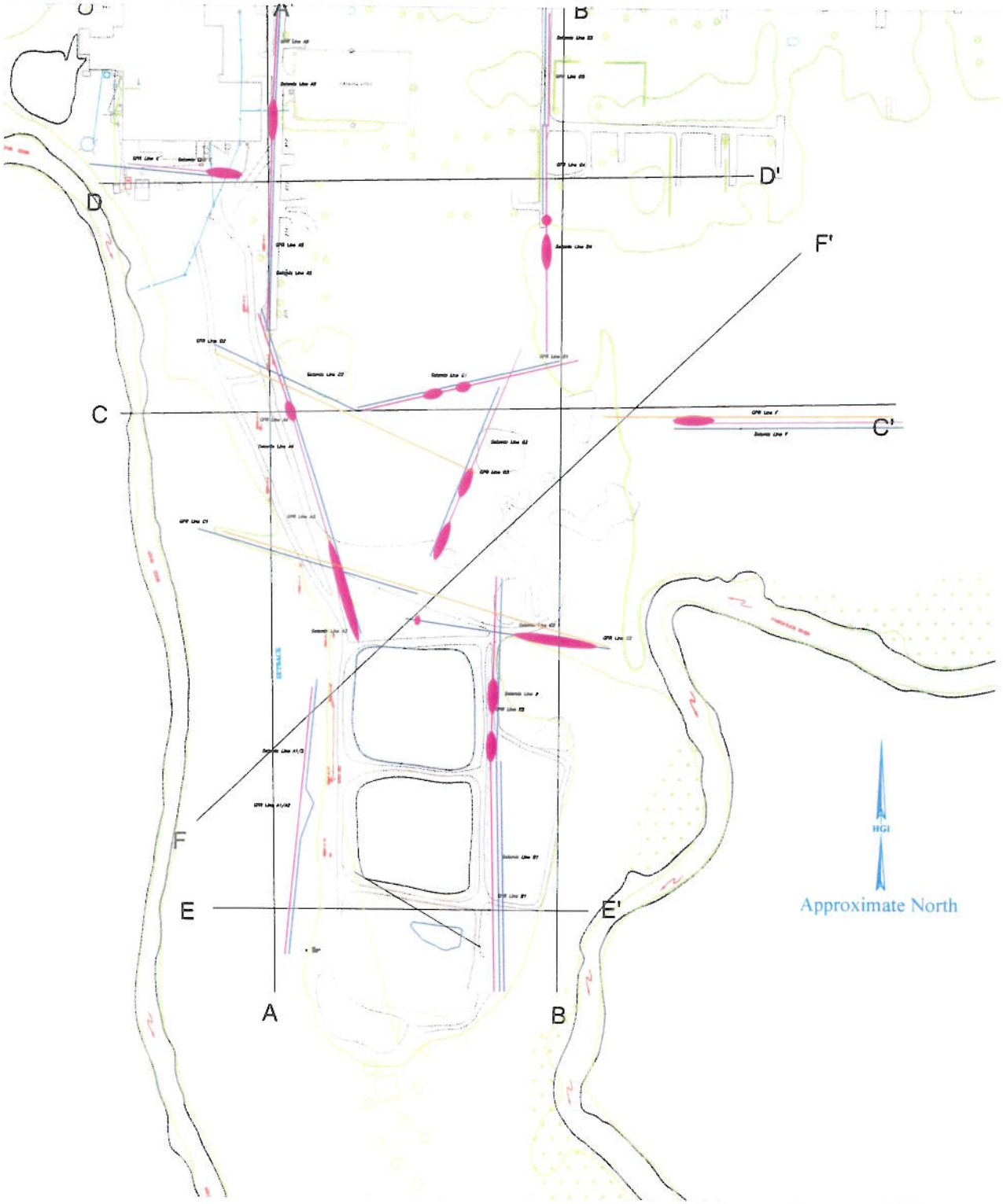
TABLE 1. The GPR Surveys performed at Charbert, A Division of NFA Corporation, Alton, RI

Survey Line Designation	Identified Sub-Sections	GPR Antenna Frequency	Comment
A	A1	100 MHz	Survey wheel mode
		40 MHz MLF	Survey wheel mode
	A2	100 MHz	Survey wheel mode
		40 MHz MLF	Survey wheel mode
	A3	40 MHz MLF	Survey wheel mode
	A4	40 MHz MLF	Survey wheel mode
	A5	100 MHz	Survey wheel mode
	A6	100 MHz	Survey wheel mode
B	B1	100 MHz	Survey wheel mode
		80 MHz MLF	Survey wheel mode
	B2	40 MHz MLF	Point mode
	B3	40 MHz MLF	Point mode
	B4	40 MHz MLF	Survey wheel mode
	B5	40 MHz MLF	Survey wheel mode
C	C1	100 MHz	Survey wheel mode
	C2	100 MHz	Survey wheel mode
		40 MHz MLF	Survey wheel mode
D	D1	80 MHz MLF	Survey wheel
	D2	100 MHz	Survey wheel mode
		40 MHz MLF	Survey wheel mode
E	E	100 MHz	Survey wheel mode
F	F	15 MHz MLF	Point mode

Note: Survey wheel and point modes for 100 MHz and MLF GPR antennas are differing GPR data collection techniques.

APPENDIX A – PLATES

Plate 1. Geophysical Survey Locations
Plate 2. Bedrock Elevation Map
Plate 3. Till Elevation Map
Plate 4. Till Thickness Map



LEGEND

- HGI GPR TRAVERSE
- HGI VLF TRAVERSE
- HGI SEISMIC LINE
- A' / A — Location of Model Slice Profile

0' 200 400 600

Scale: 1" = 100'

Plate 1

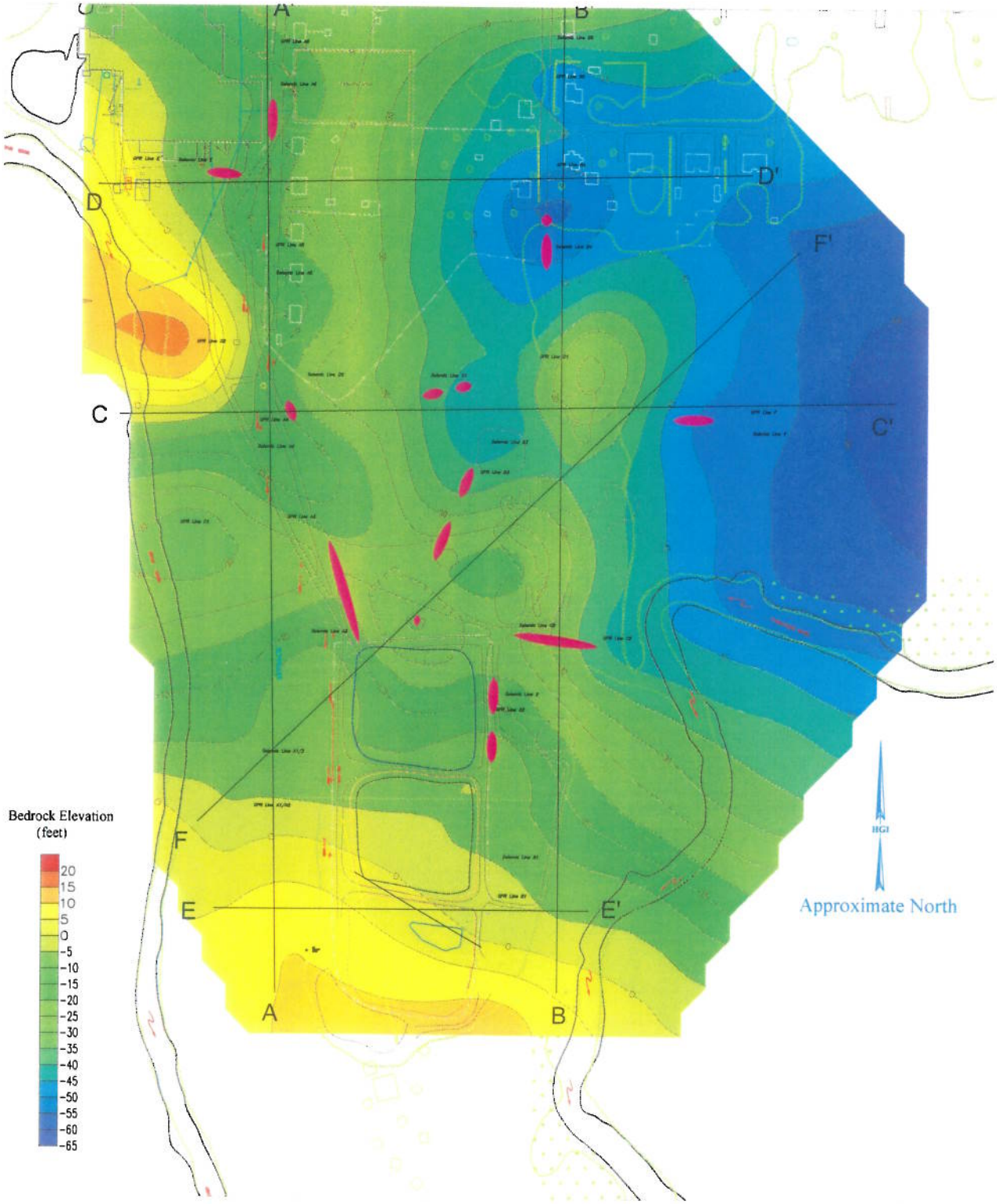
July 2006	FILE NO. 200633

GEOPHYSICAL SURVEY LOCATIONS

CHARBERT FACILITY

ALTON, RHODE ISLAND

Hager GeoScience, Inc
596 Main Street, Woburn, MA 01801
(781) 935-8111 hgi@hagergeoscience.com



Seismic Low Velocity Zones

0' 200 400 600

Scale: 1" = 100'

Plate 2

July 2006	FILE NO. 200633
BEDROCK ELEVATION MAP CHARBERT FACILITY ALTON, RHODE ISLAND	

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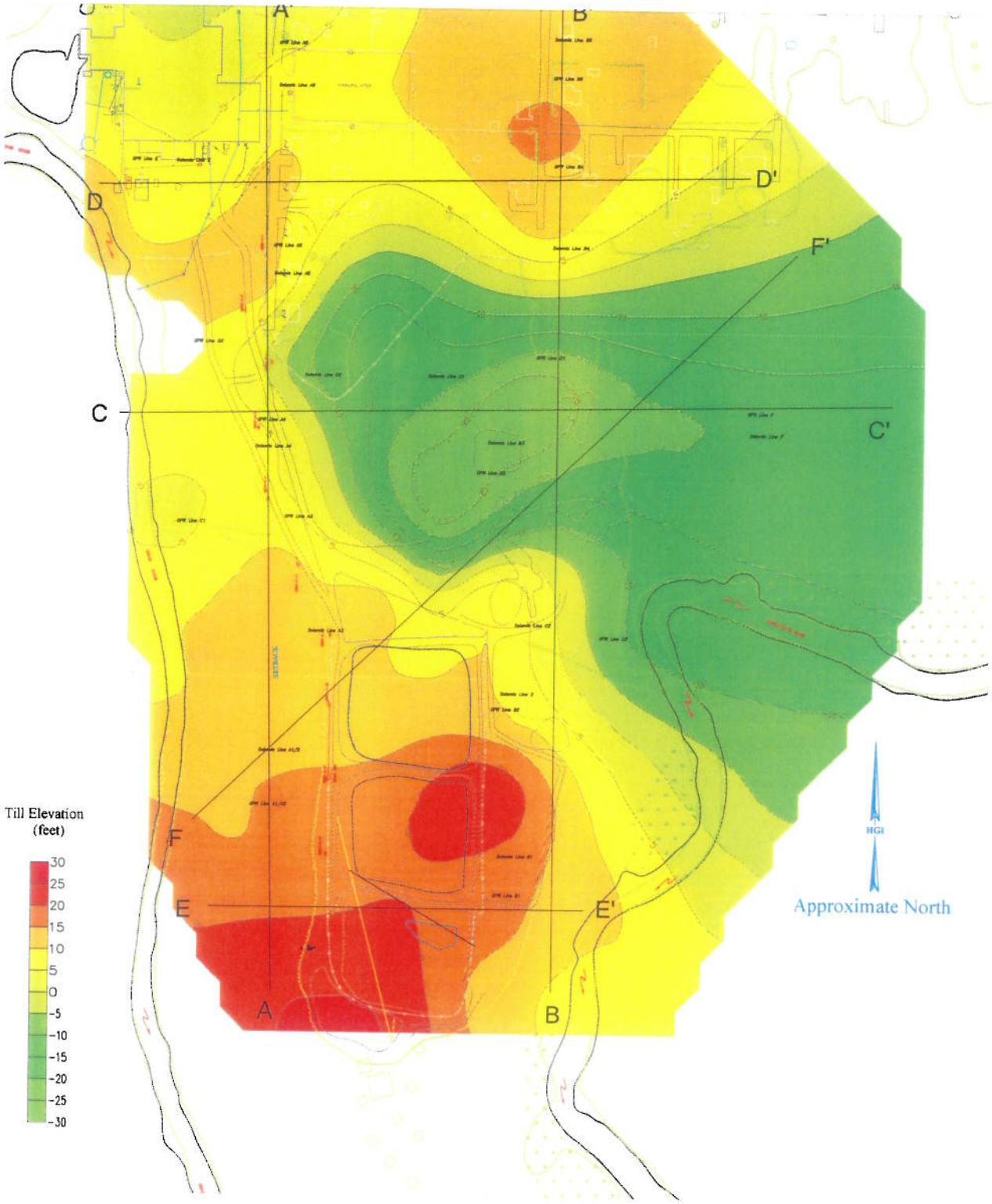
596 Main Street, Woburn, MA 01801
(781) 935-8111 hgi@hagergeoscience.com

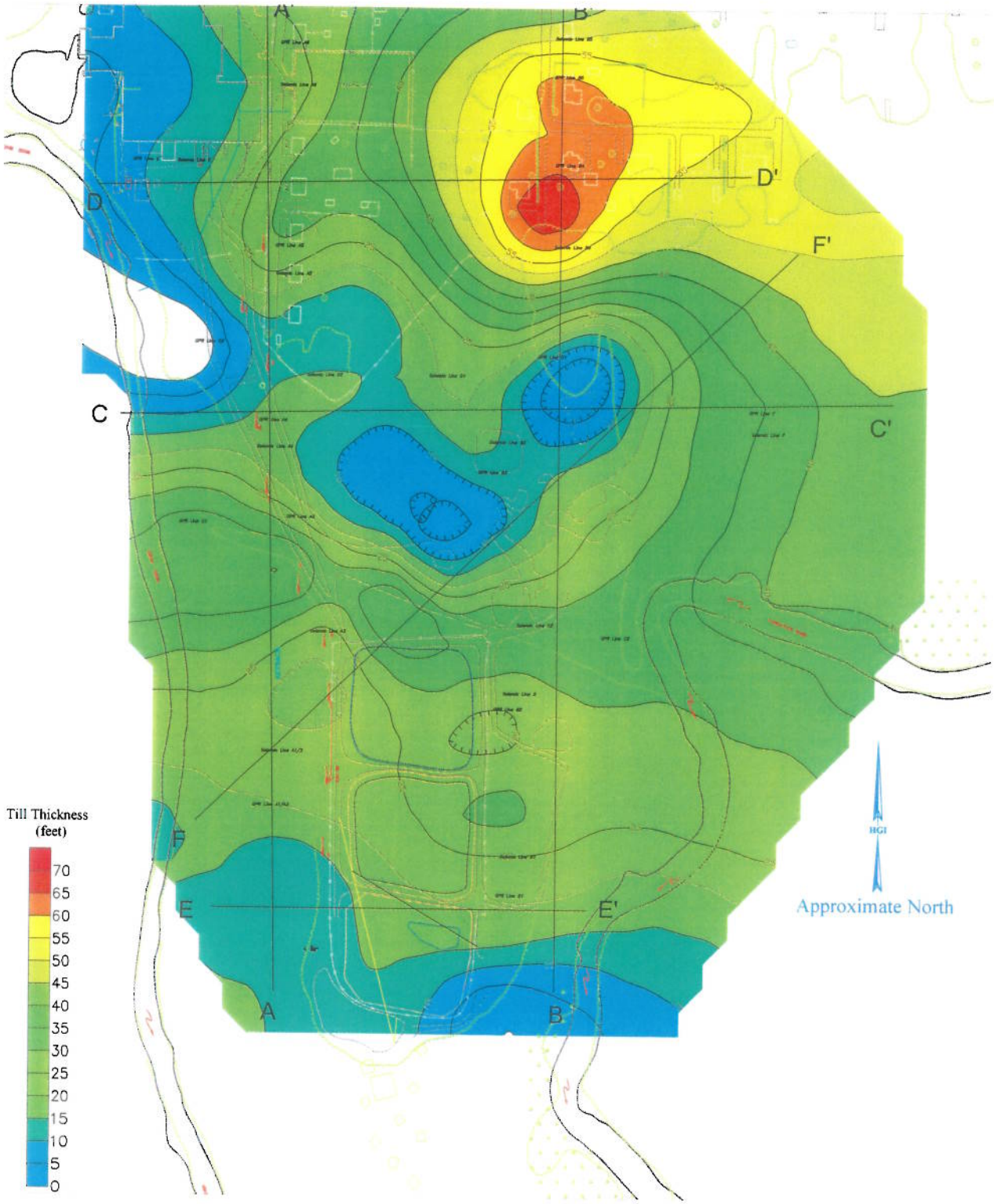


0' 200 400 600

Scale: 1" = 100'

Plate 3

July 2006	FILE NO. 200633
TILL ELEVATION MAP CHARBERT FACILITY ALTON, RHODE ISLAND	
Hager GeoScience, Inc. 596 Main Street, Woburn, MA 01801 (781) 935-8111 hgs@hagergeoscience.com	



0' 200 400 600

Scale: 1" = 100'

Plate 4

July 2006	FILE NO. 200633

TILL THICKNESS MAP
CHARBERT FACILITY
ALTON, RHODE ISLAND

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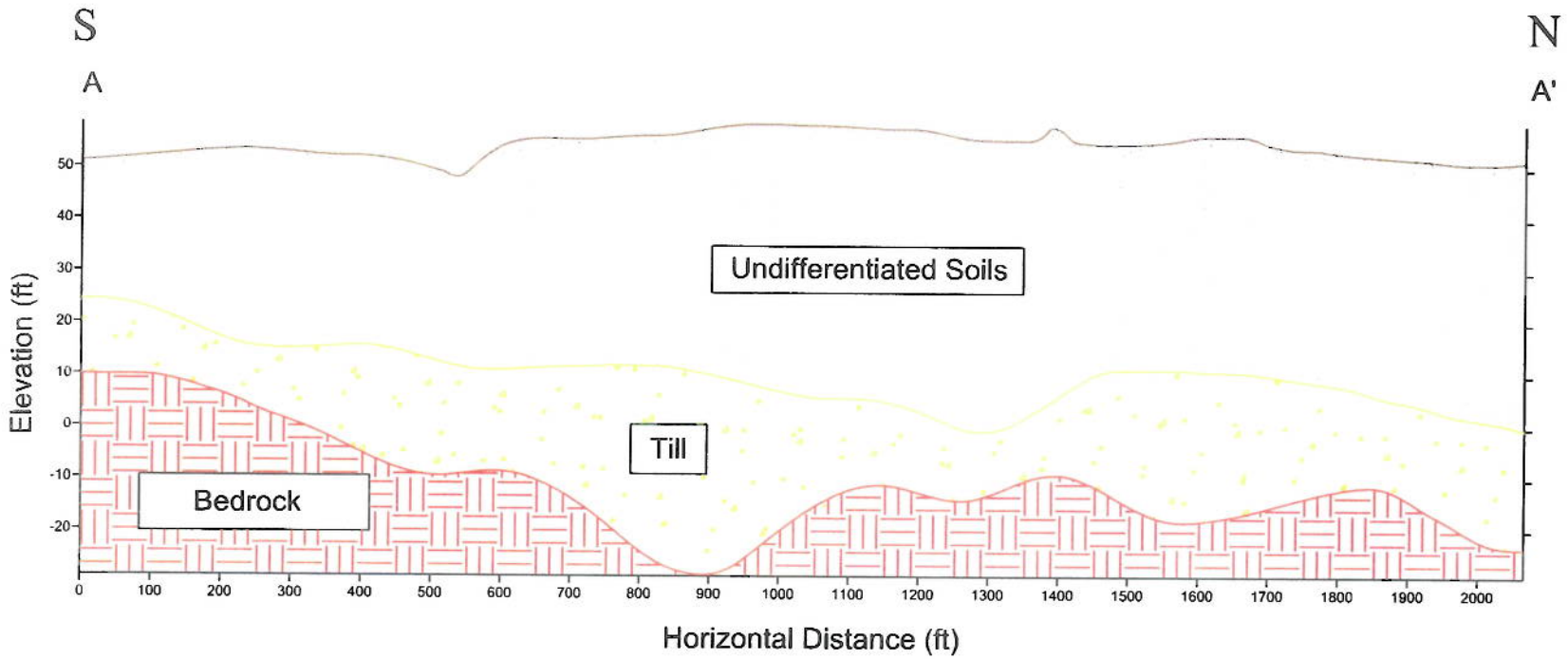
APPENDIX B – MODEL PROFILES

Profile A-A' (south to north)
Profile B-B' (south to north)
Profile C-C' (west to east)
Profile D-D' (west to east)
Profile E-E' (west to east)
Profile F-F' (southwest to northeast)

GRID MODEL SLICE A-A'



CHARBERT FACILITIES
GEOPHYSICAL INVESTIGATIONS
ALTON, RHODE ISLAND
JULY 2006 File No. 200633

Distance (feet)

0 125 250 375 500

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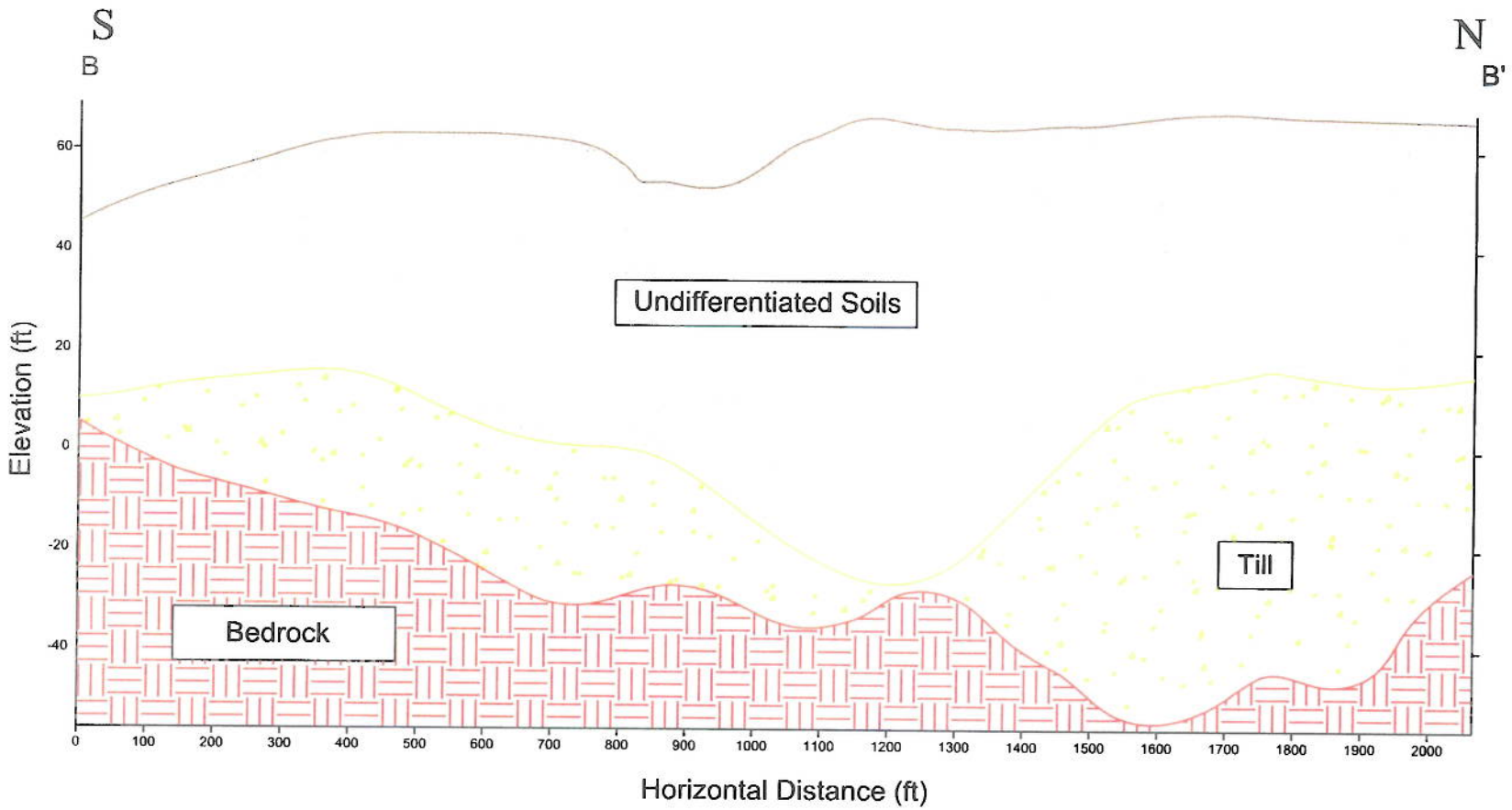
GRID MODEL SLICE B-B'



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Distance (feet)

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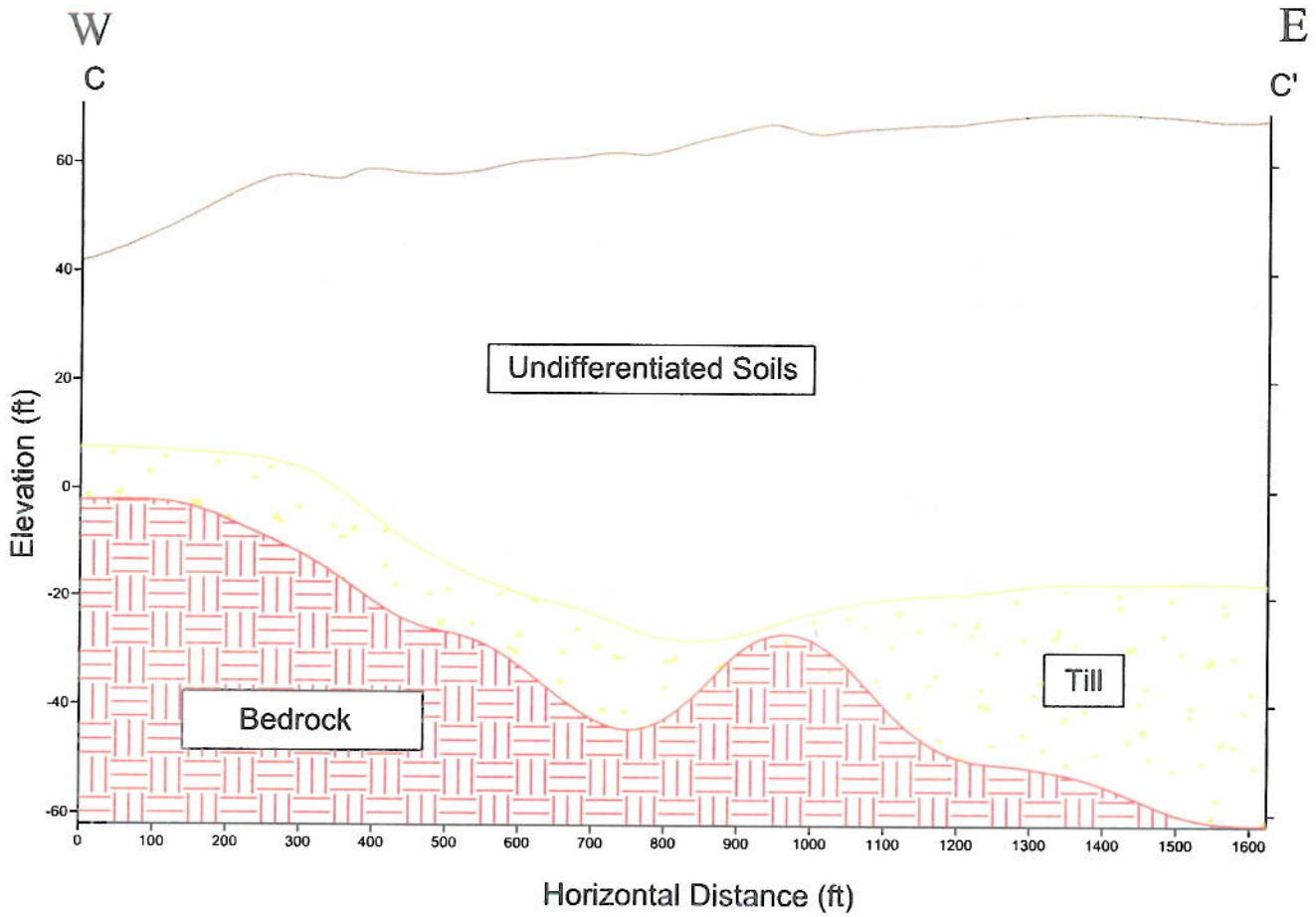
GRID MODEL SLICE C-C'



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Distance (feet)

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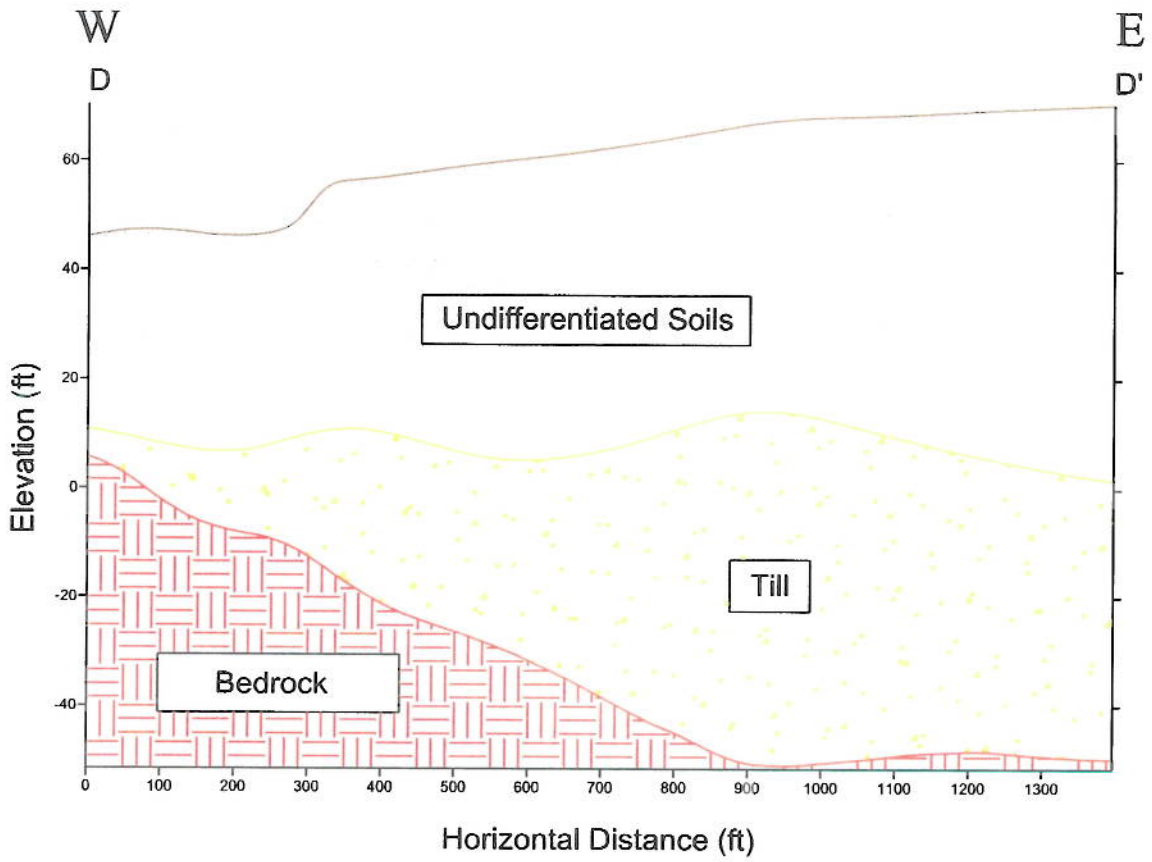
GRID MODEL SLICE D-D'



CHARBERT FACILITIES
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JULY 2006 File No. 200633

Distance (feet)

0 125 250 375 500

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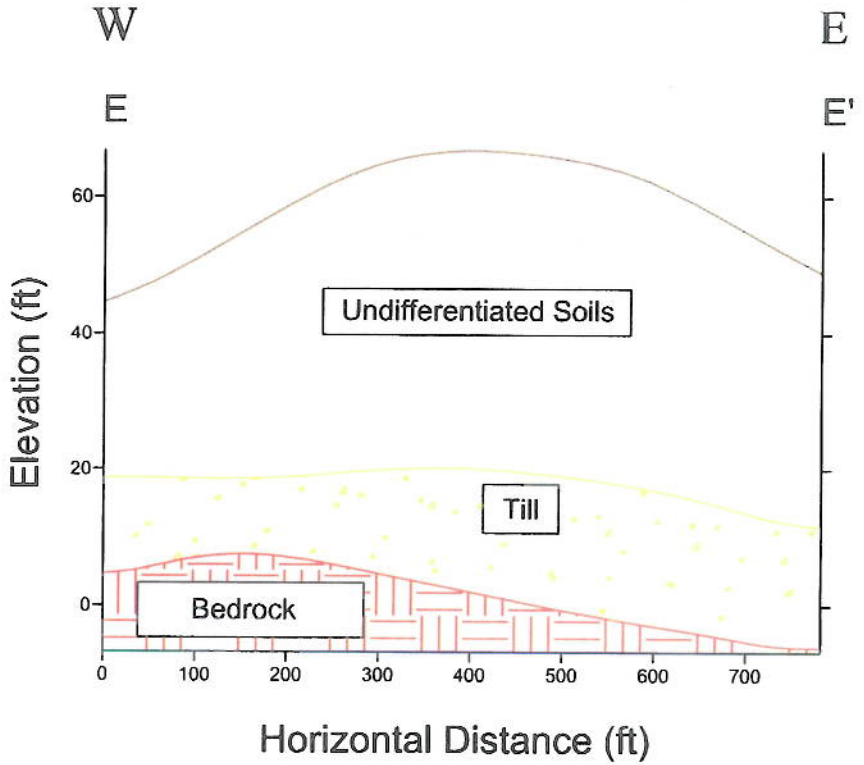
GRID MODEL SLICE E-E'



CHARBERT FACILITIES
GEOPHYSICAL INVESTIGATIONS
ALTON, RHODE ISLAND
JULY 2006 File No. 200633

Distance (feet)

0 100 200 300 400

Hager GeoScience, Inc.
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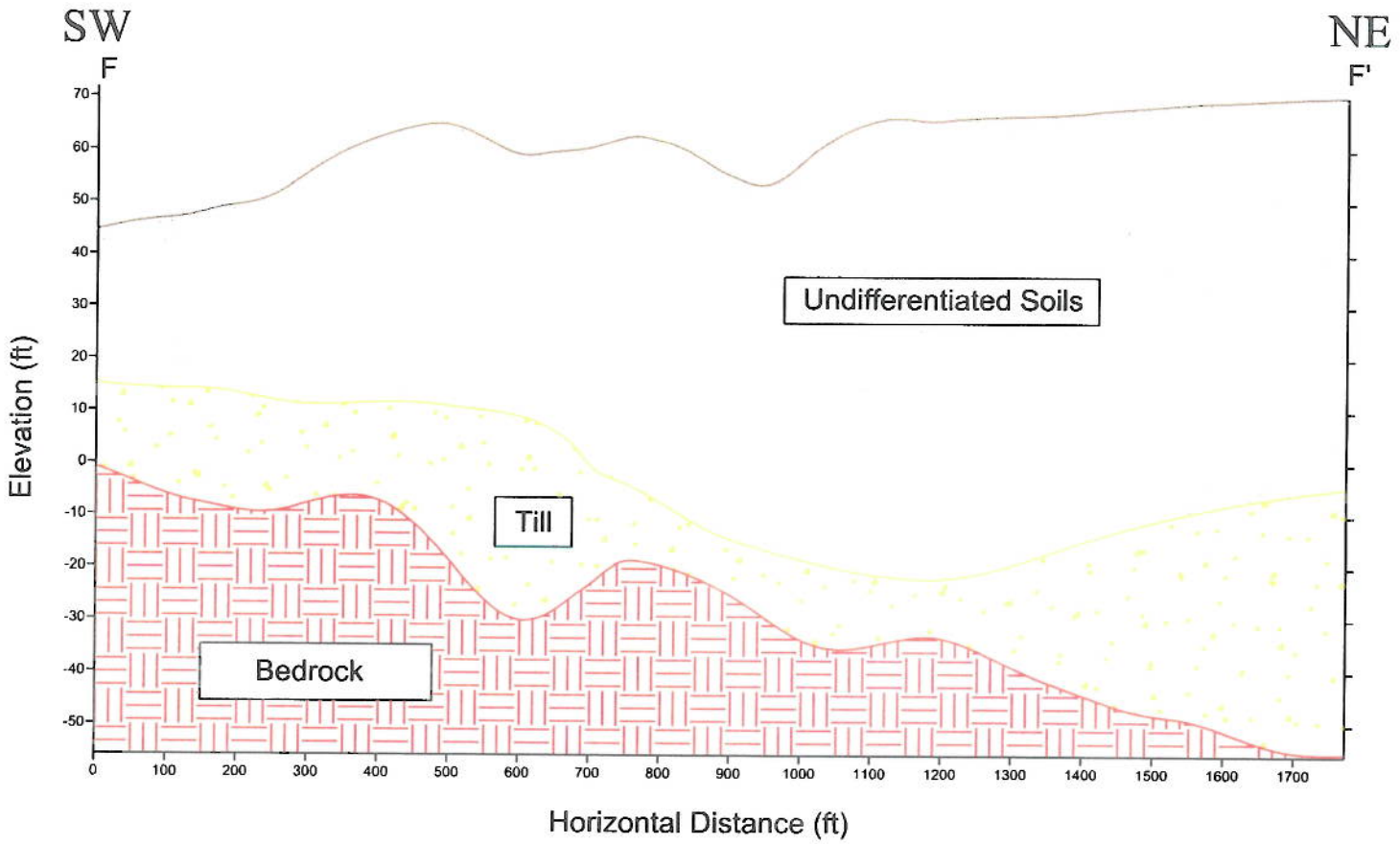
GRID MODEL SLICE F-F'



CHARBERT FACILITIES
GEOPHYSICAL INVESTIGATIONS
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Distance (feet)

0 125 250 375 500

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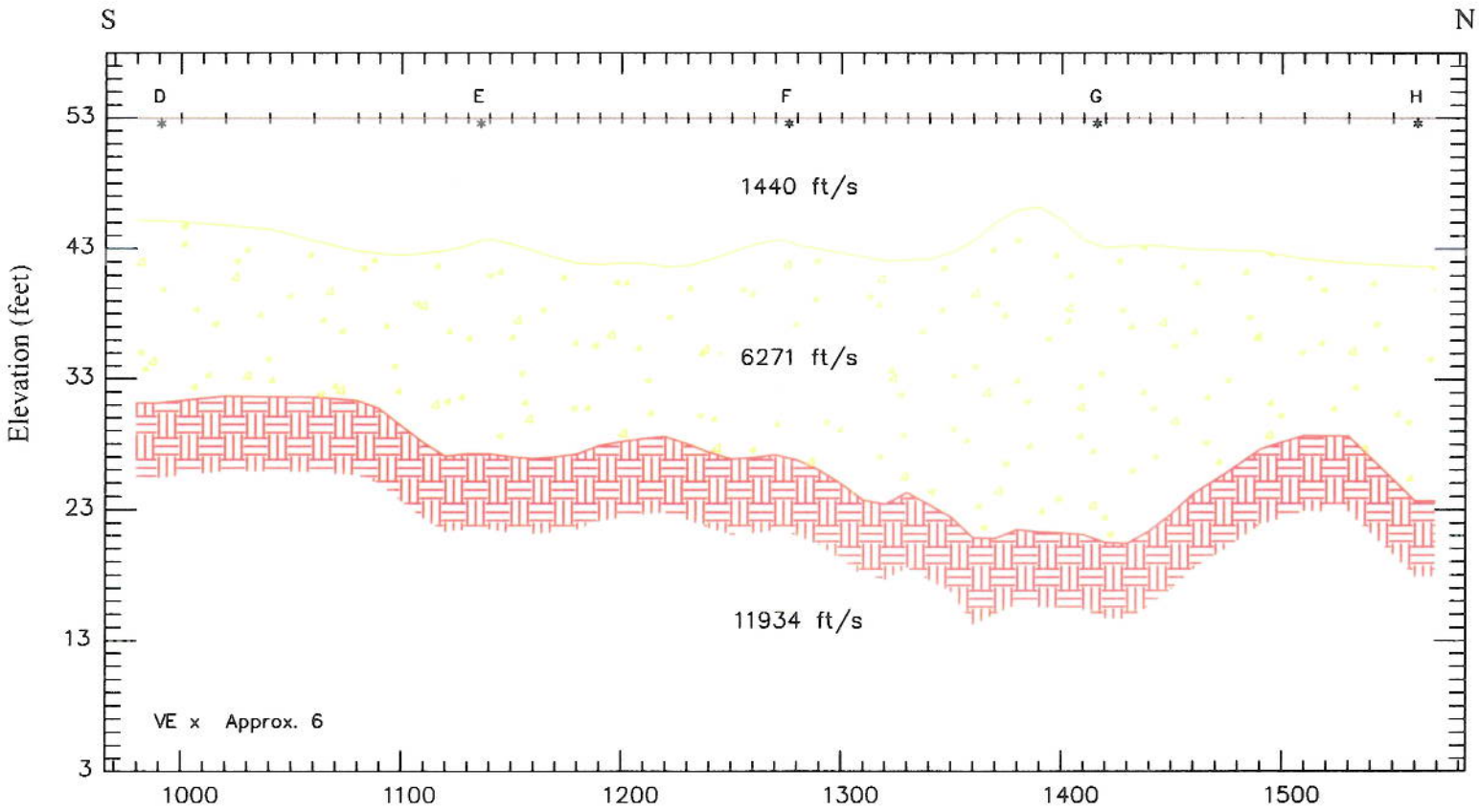
APPENDIX C – SEISMIC PROFILES

SRR A1-A2
SRR A3
SRR A4
SRR A5
SRR A6
SRR B1
SRR B2
SRR B3
SRR B4
SRR B5
SRR C2
SRR D1
SRR D2
SRR E1
SRR F1

SEISMIC REFRACTION LINE A1-A2

Unsaturated Sediment Saturated Sediment Bedrock Low Velocity Zone



Distance (feet)

0 40 80 120 160

CHARBERT FACILITY
GEOPHYSICAL INVESTIGATIONS
ALTON, RHODE ISLAND
JULY 2006 File No. 200633

Hager GeoScience, Inc.
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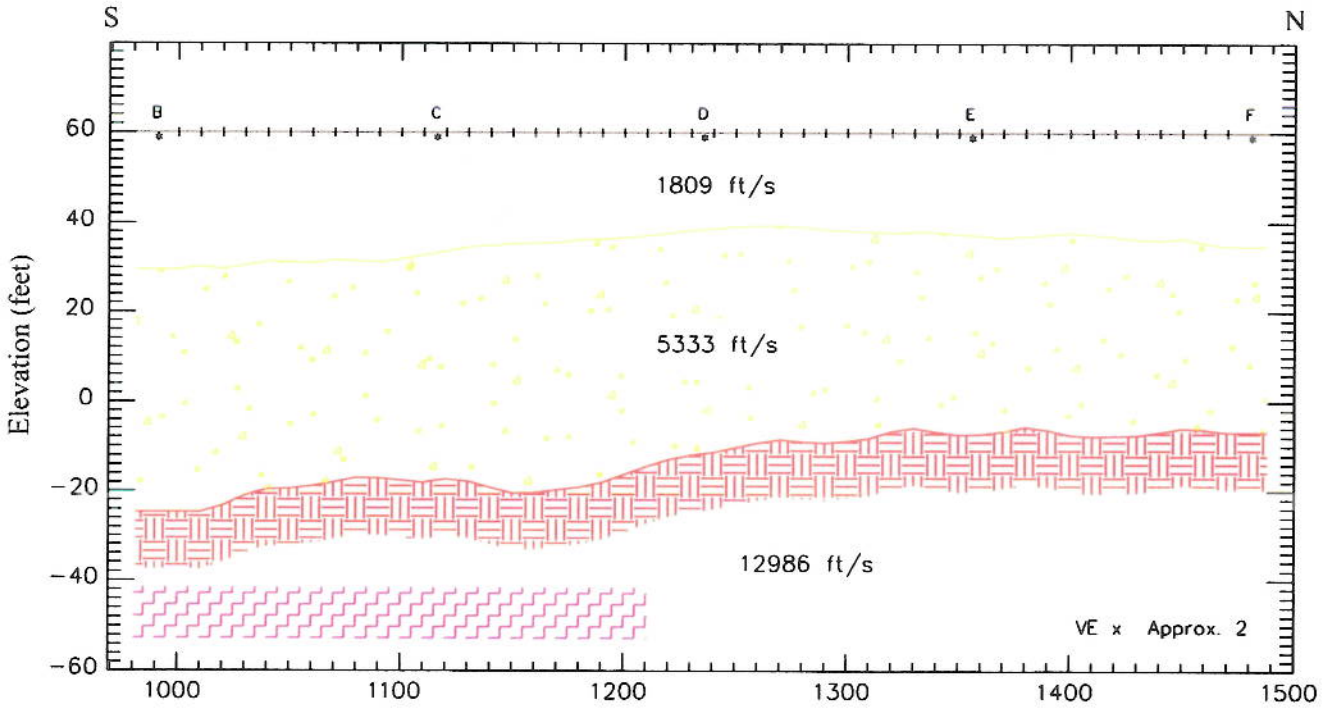
SEISMIC REFRACTION LINE A3

Unsaturated Sediment Saturated Sediment Bedrock Low Velocity Zone



Distance (feet)

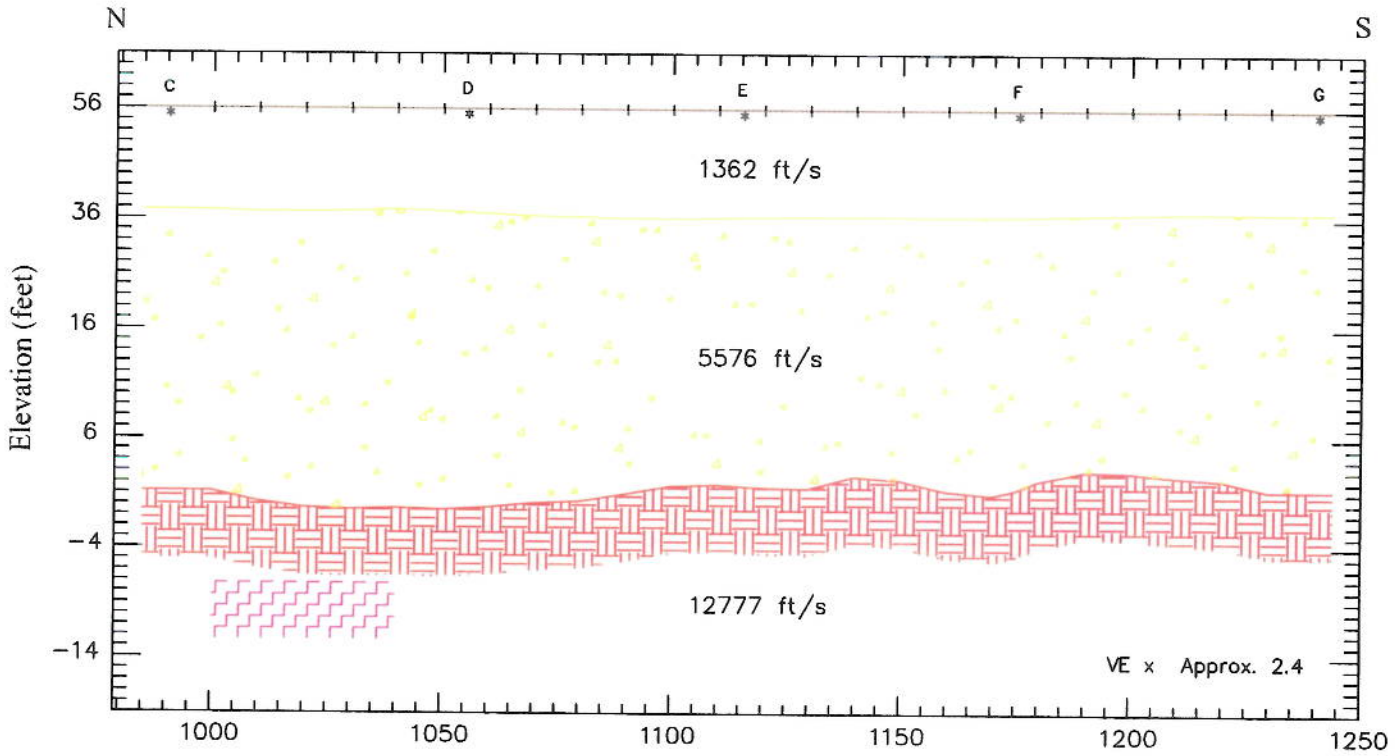
0 40 80 120 160

CHARBERT FACILITY
GEOPHYSICAL INVESTIGATIONS
ALTON, RHODE ISLAND
JULY 2006 File No. 200633

Hager GeoScience, Inc.
596 Main Street, Woburn, MA 01801
(781) 935-8111 hgi@hagergeoscience.com

SEISMIC REFRACTION LINE A4

Unsaturated Sediment Saturated Sediment Bedrock Low Velocity Zone



Distance (feet)

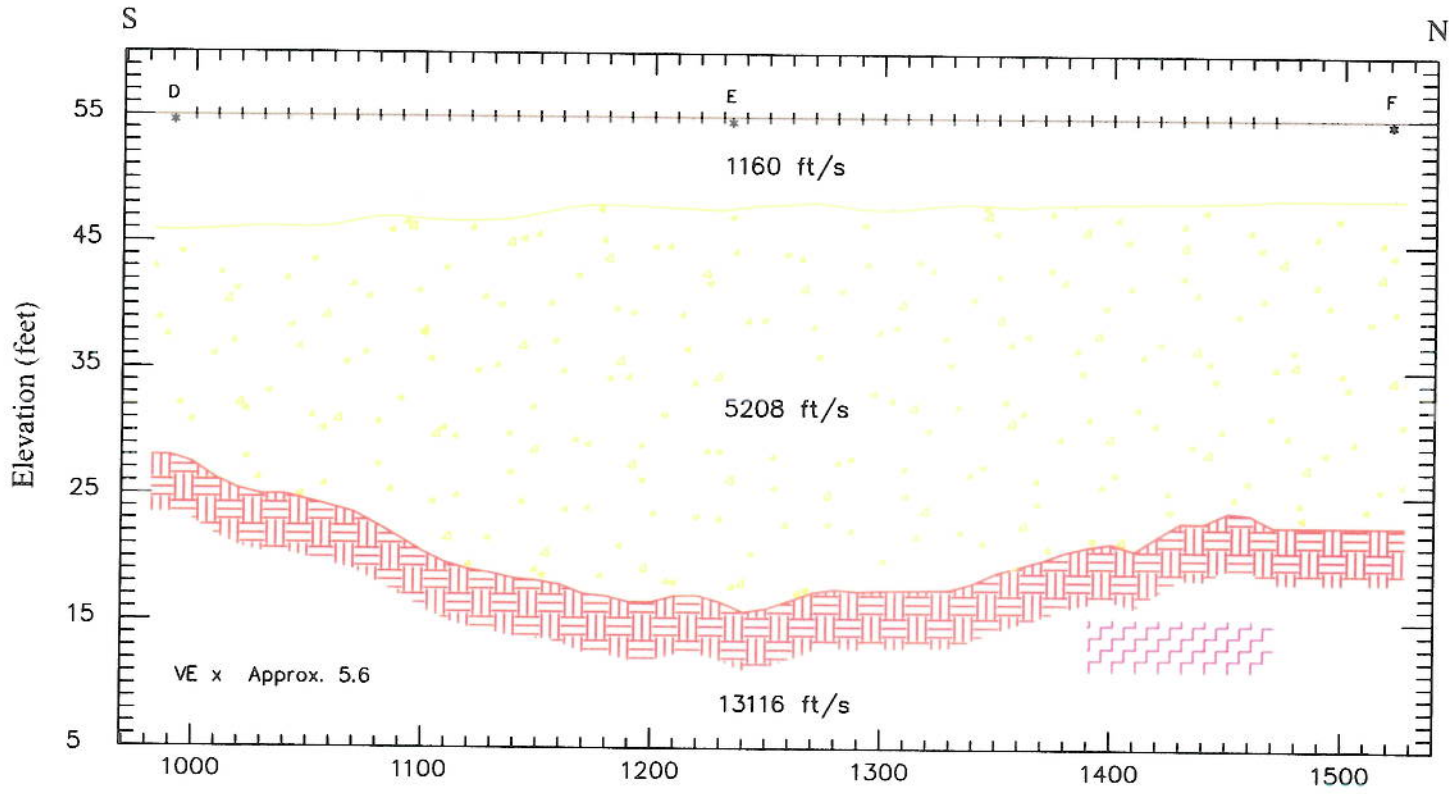
0 20 40 60 80

CHARBERT FACILITY
GEOPHYSICAL INVESTIGATIONS
ALTON, RHODE ISLAND
JULY 2006 File No. 200633

Hager GeoScience, Inc.
596 Main Street, Woburn, MA 01801
(781) 935-8111 hgi@hagergeoscience.com

SEISMIC REFRACTION LINE A5

Unsaturated Sediment Saturated Sediment Bedrock Low Velocity Zone



Distance (feet)

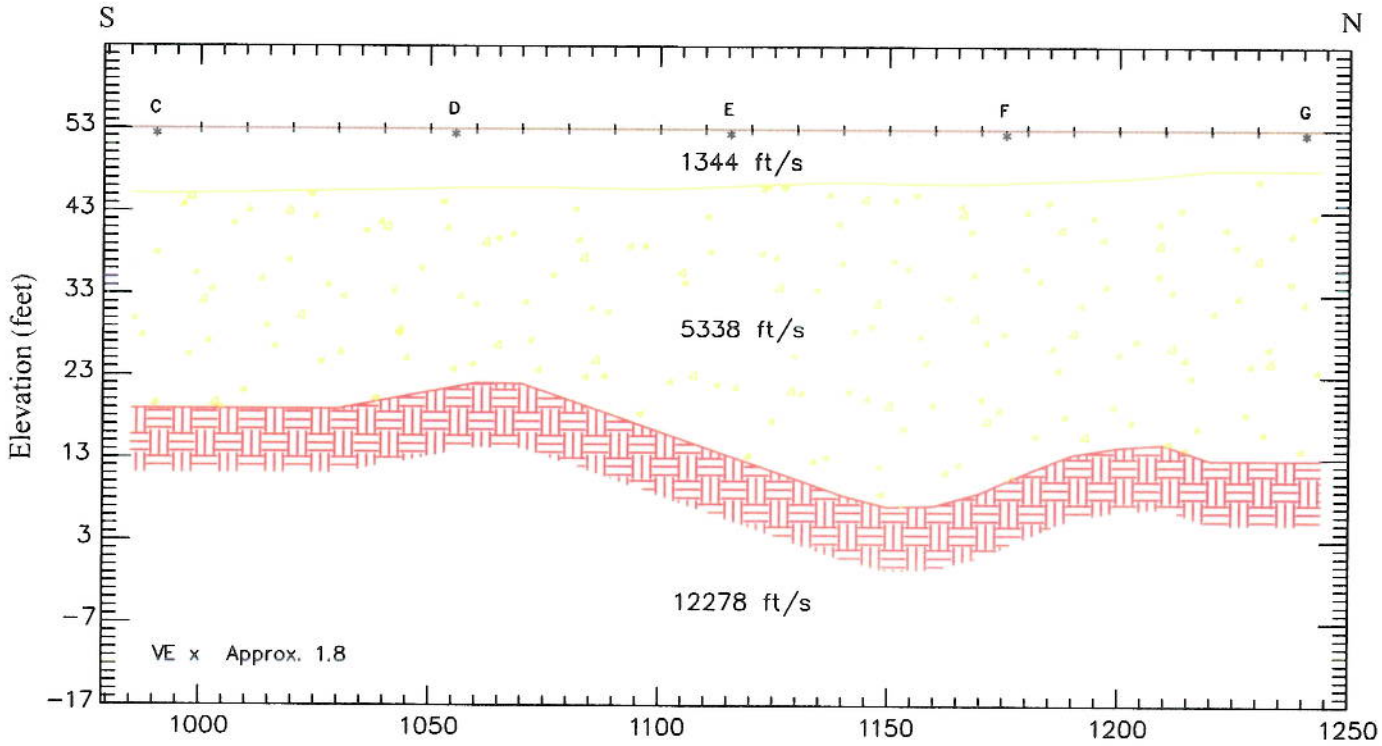
0 40 80 120 160

CHARBERT FACILITY
GEOPHYSICAL INVESTIGATIONS
ALTON, RHODE ISLAND
JULY 2006 File No. 200633

Hager GeoScience, Inc.
596 Main Street, Woburn, MA 01801
(781) 935-8111 hgi@hagergeoscience.com

SEISMIC REFRACTION LINE A6

Unsaturated Sediment Saturated Sediment Bedrock Low Velocity Zone



Distance (feet)

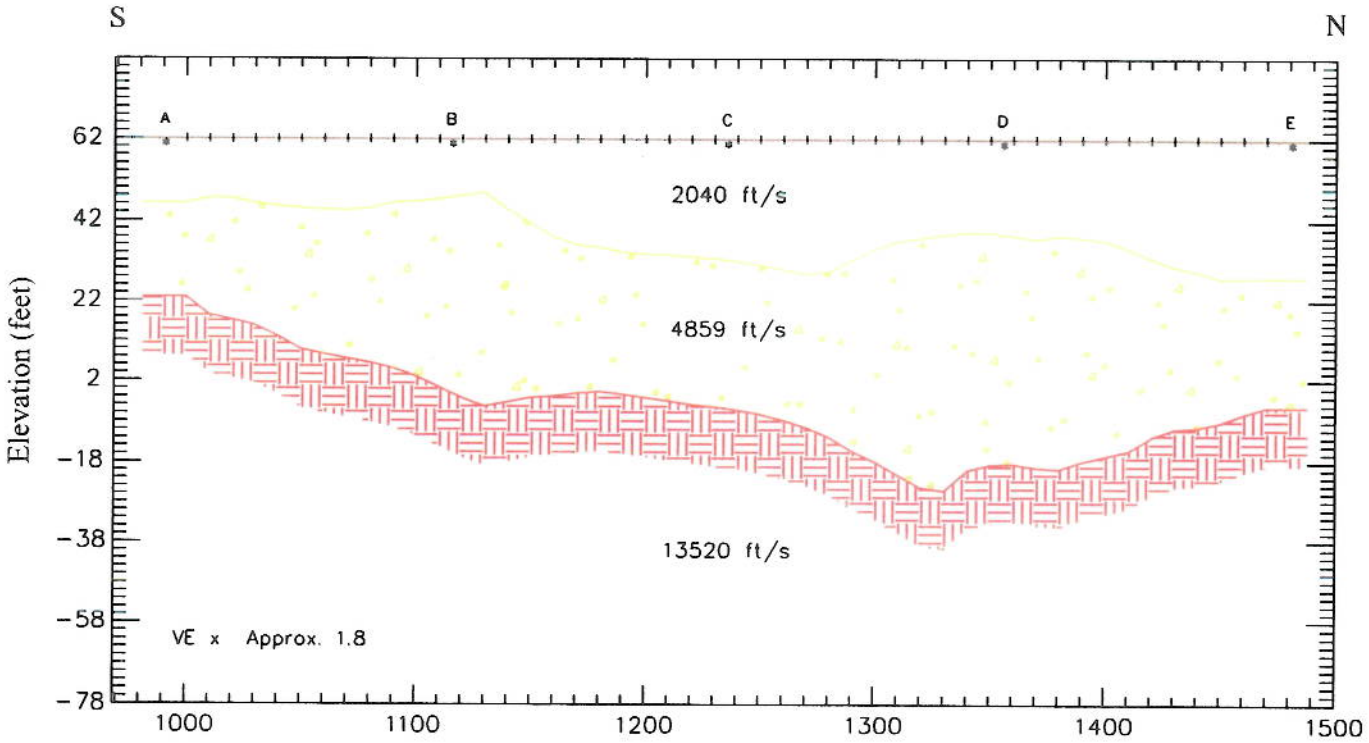
0 20 40 60 80

CHARBERT FACILITY
GEOPHYSICAL INVESTIGATIONS
ALTON, RHODE ISLAND
JULY 2006 File No. 200633

Hager GeoScience, Inc.
596 Main Street, Woburn, MA 01801
(781) 935-8111 hgi@hagergeoscience.com

SEISMIC REFRACTION LINE B1

Unsaturated Sediment Saturated Sediment Bedrock Low Velocity Zone



CHARBERT FACILITY
GEOPHYSICAL INVESTIGATIONS
ALTON, RHODE ISLAND
JULY 2006 File No. 200633

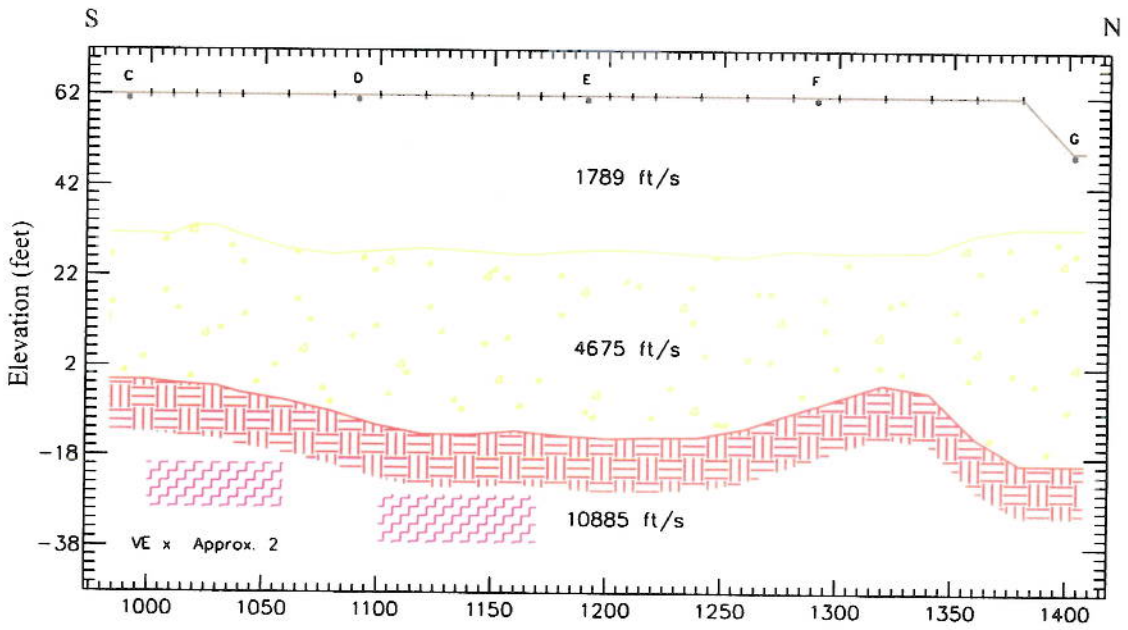
Distance (feet)

0 40 80 120 160

Hager GeoScience, Inc.
596 Main Street, Woburn, MA 01801
(781) 935-8111 hgi@hagergeoscience.com

SEISMIC REFRACTION LINE B2

Unsaturated Sediment Saturated Sediment Bedrock Low Velocity Zone



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CHARBERT FACILITY
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SEISMIC REFRACTION LINE B3

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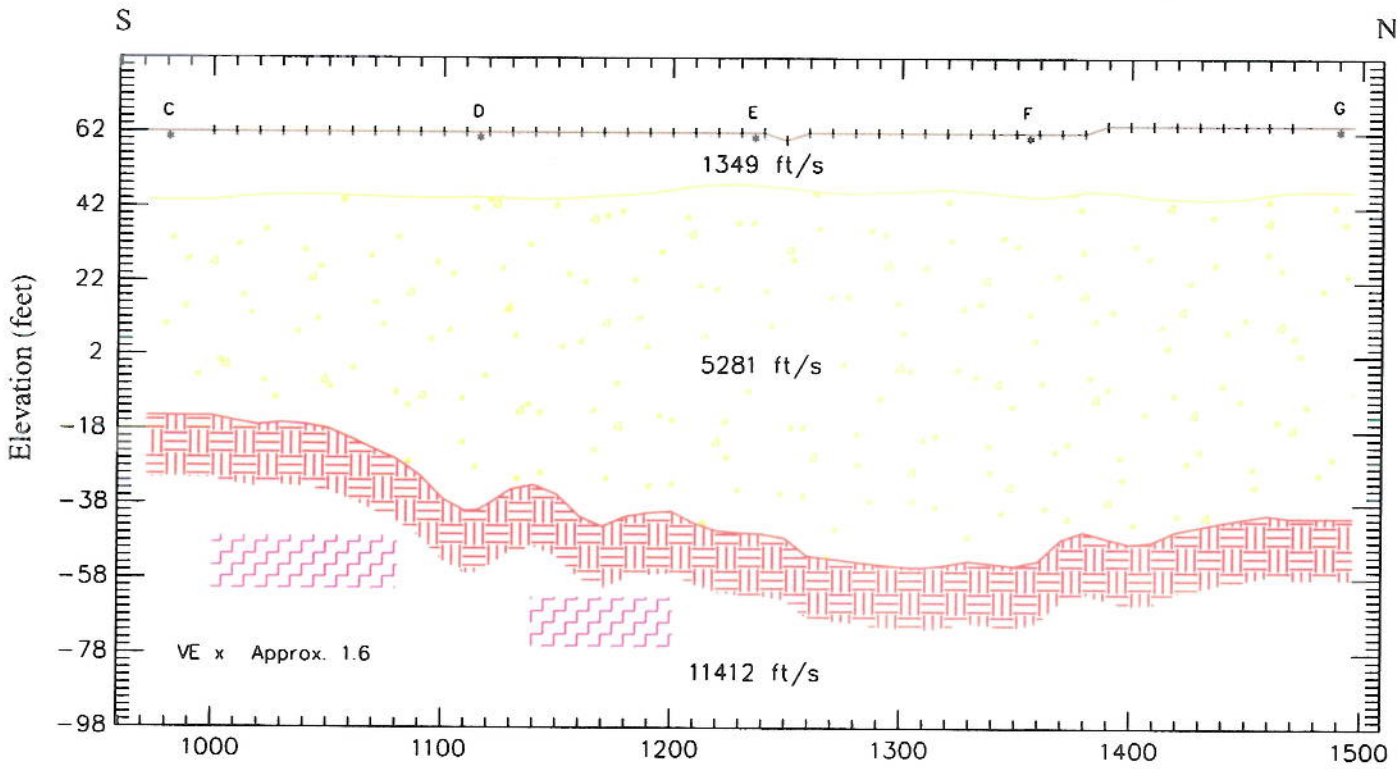

Distance (feet)

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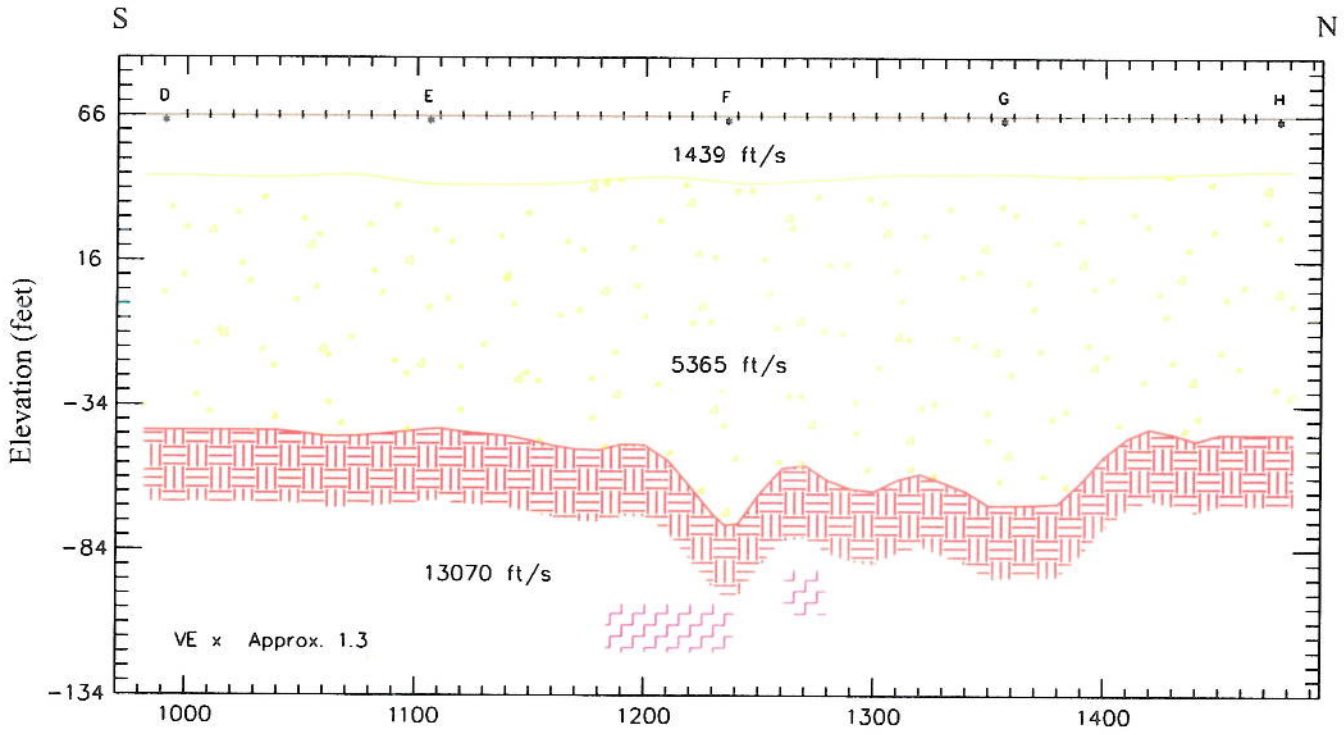
SEISMIC REFRACTION LINE B4

Unsaturated Sediment Saturated Sediment Bedrock Low Velocity Zone



Distance (feet)

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CHARBERT FACILITY
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ALTON, RHODE ISLAND
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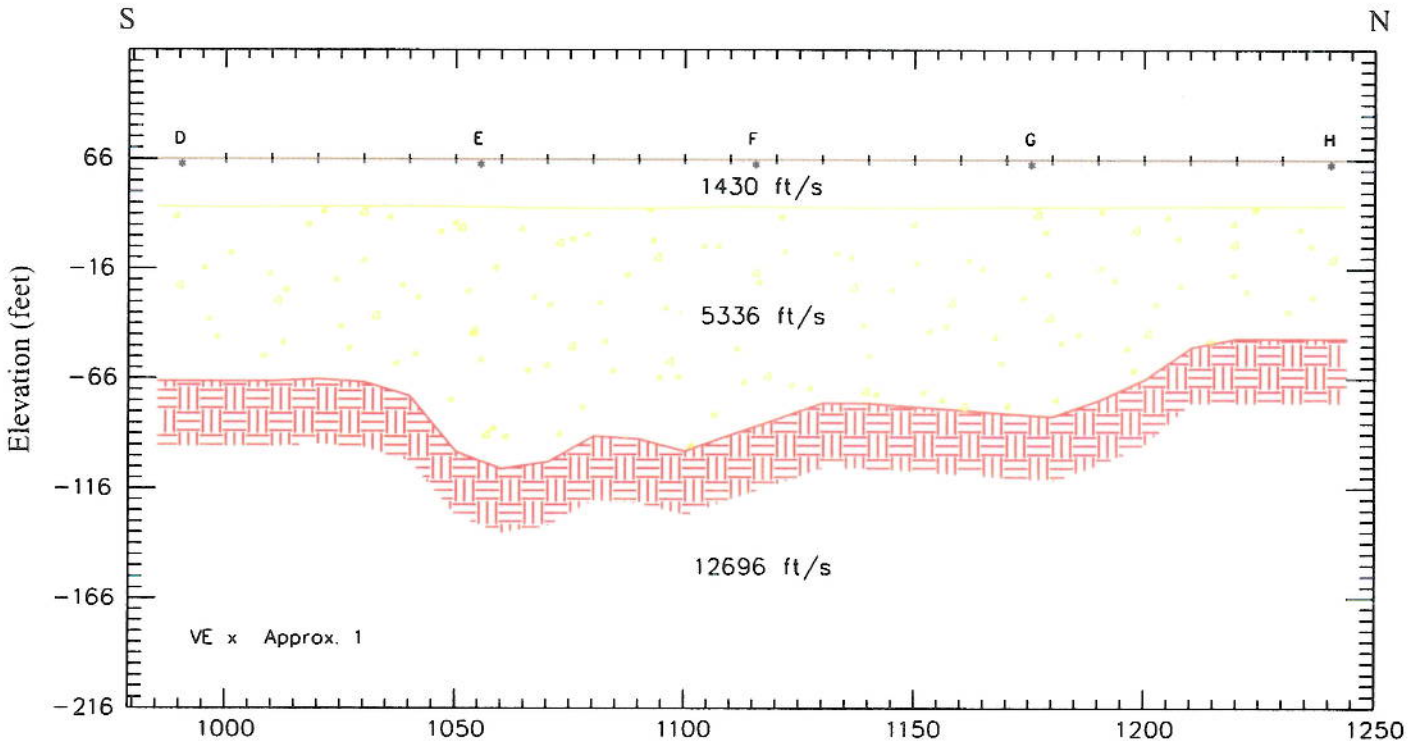
SEISMIC REFRACTION LINE B5

Unsaturated Sediment Saturated Sediment Bedrock Low Velocity Zone



Distance (feet)

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CHARBERT FACILITY
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ALTON, RHODE ISLAND
JULY 2006 File No. 200633

Hager GeoScience, Inc.
596 Main Street, Woburn, MA 01801
(781) 935-8111 hgi@hagergeoscience.com

SEISMIC REFRACTION LINE C2

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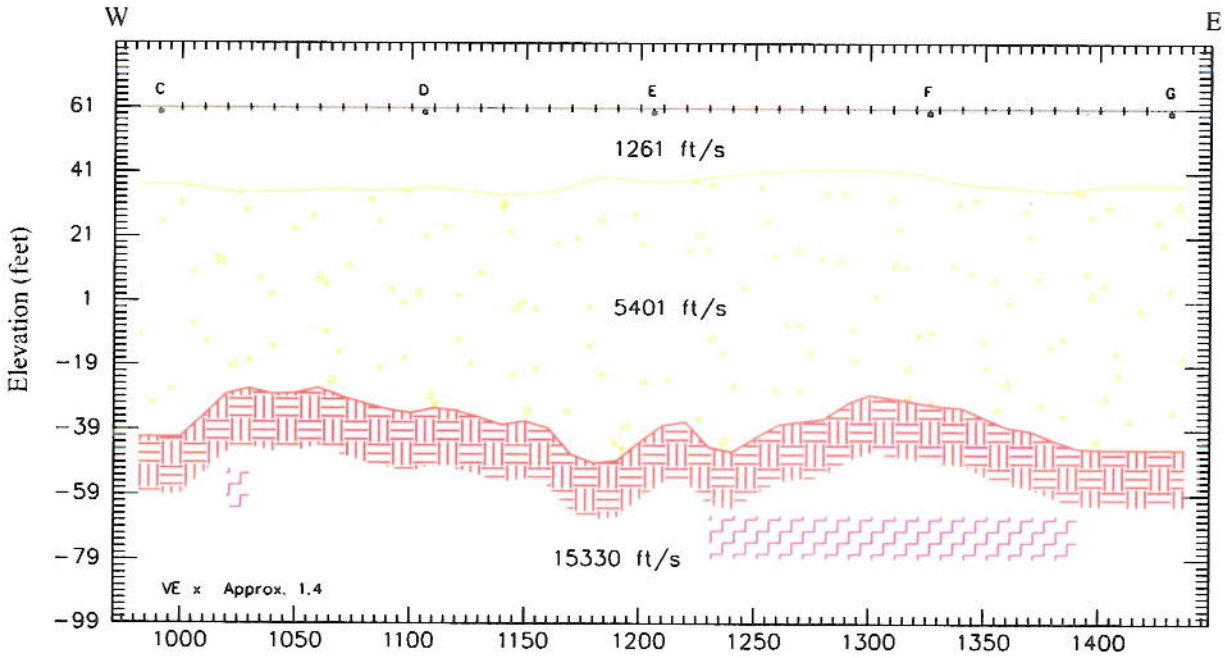

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CHARBERT FACILITY
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ALTON, RHODE ISLAND
JULY 2006 File No. 200633

Hager GeoScience, Inc.
596 Main Street, Woburn, MA 01801
(781) 935-8111 hgi@hagergeoscience.com

SEISMIC REFRACTION LINE D1

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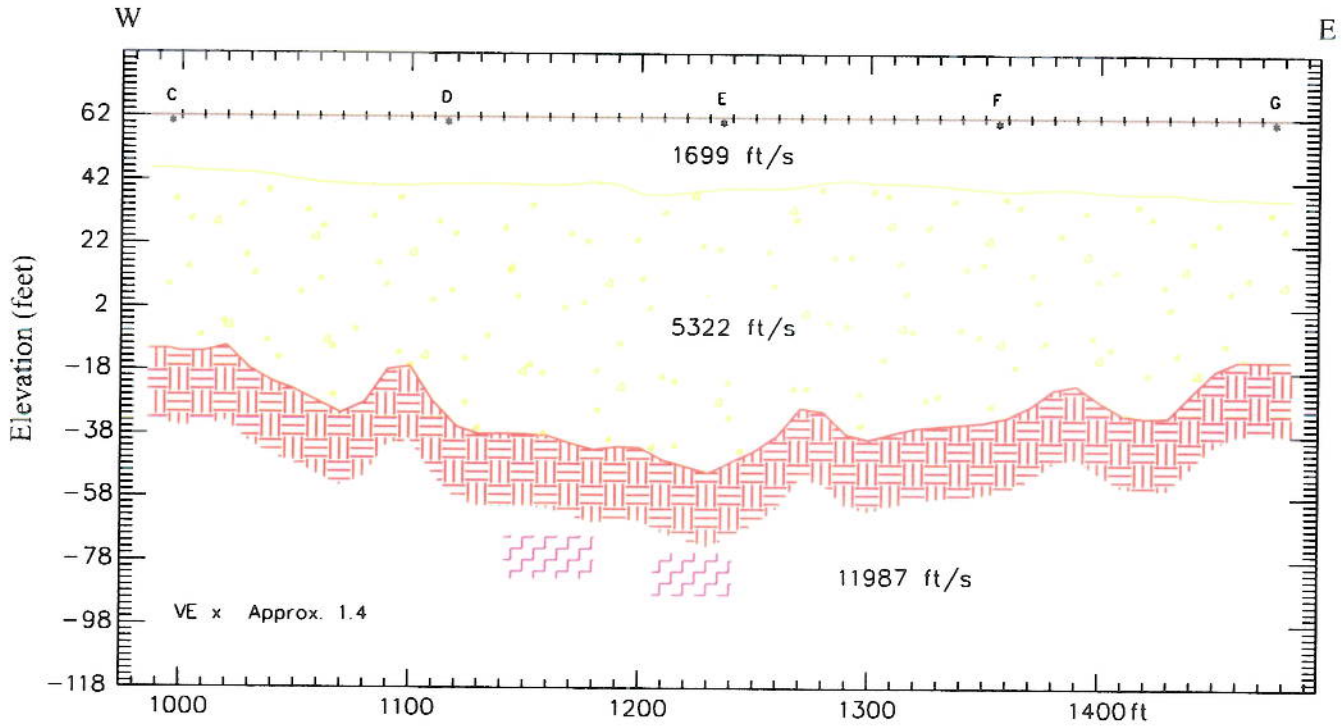

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CHARBERT FACILITY
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JULY 2006 File No. 200633

Hager GeoScience, Inc.
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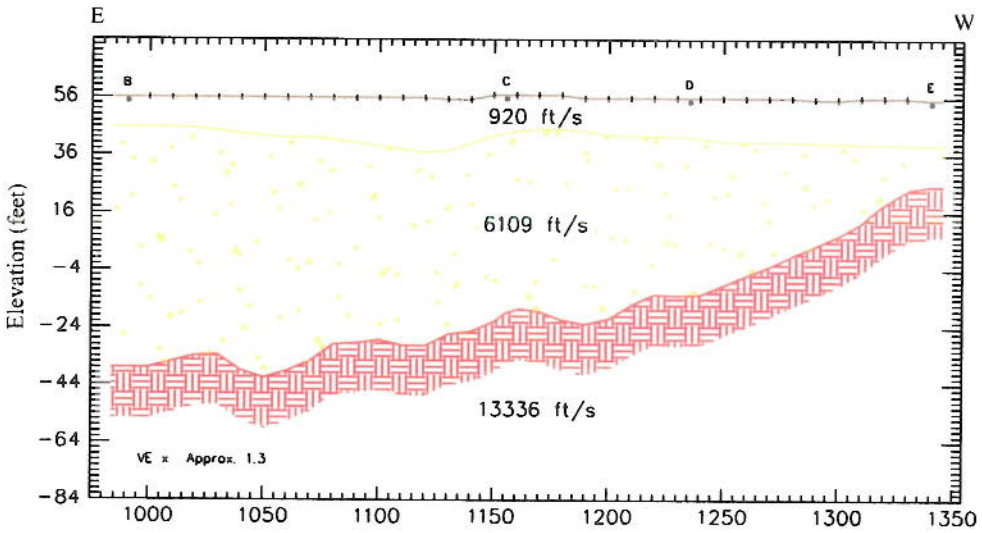
(781) 935-8111 hgi@hagergeoscience.com

SEISMIC REFRACTION LINE D2

Unsaturated Sediment Saturated Sediment Bedrock Low Velocity Zone



CHARBERT FACILITY
GEOPHYSICAL INVESTIGATIONS
ALTON, RHODE ISLAND
JULY 2006 File No. 200633

Distance (feet)

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Hager GeoScience, Inc.
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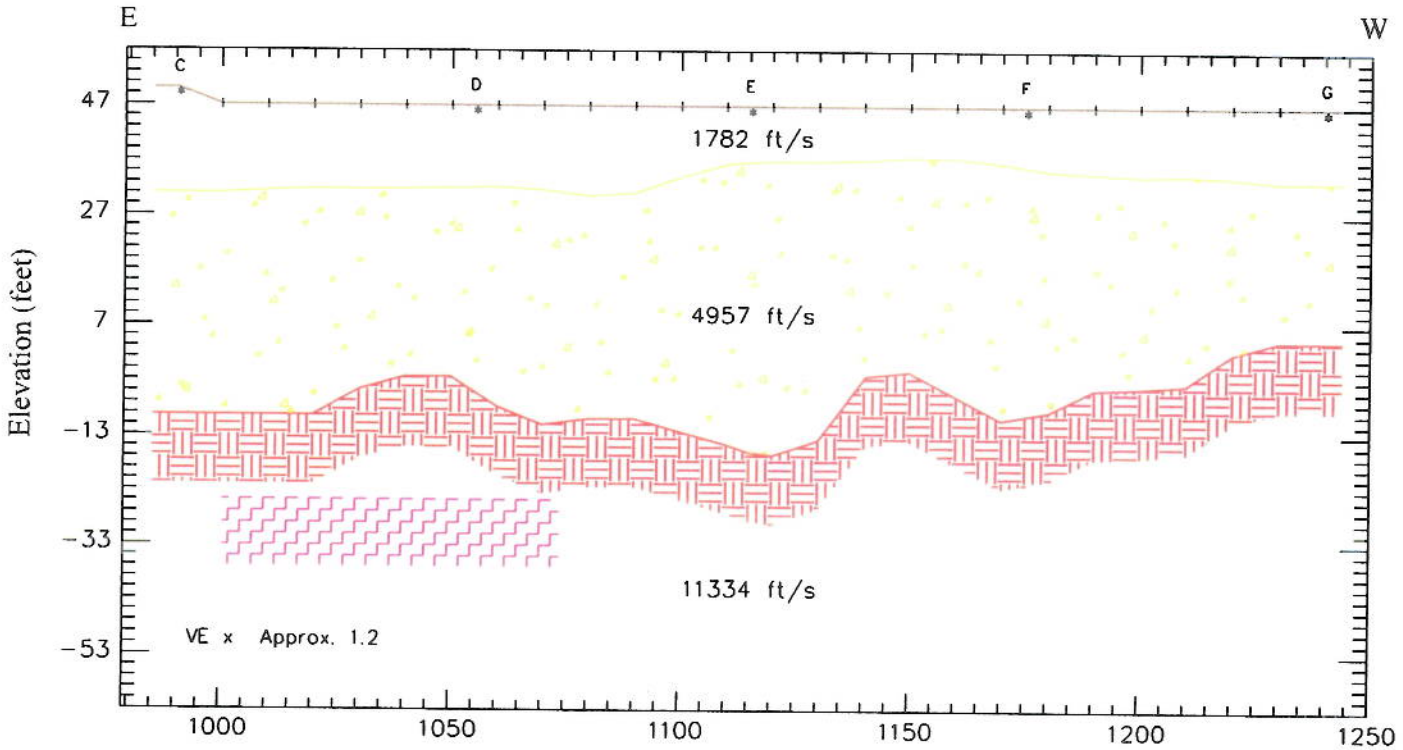
(781) 935-8111 hgi@hagergeoscience.com

SEISMIC REFRACTION LINE E

Unsaturated Sediment Saturated Sediment Bedrock Low Velocity Zone



Distance (feet)

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CHARBERT FACILITY
GEOPHYSICAL INVESTIGATIONS
ALTON, RHODE ISLAND
JULY 2006 File No. 200633

Hager GeoScience, Inc.
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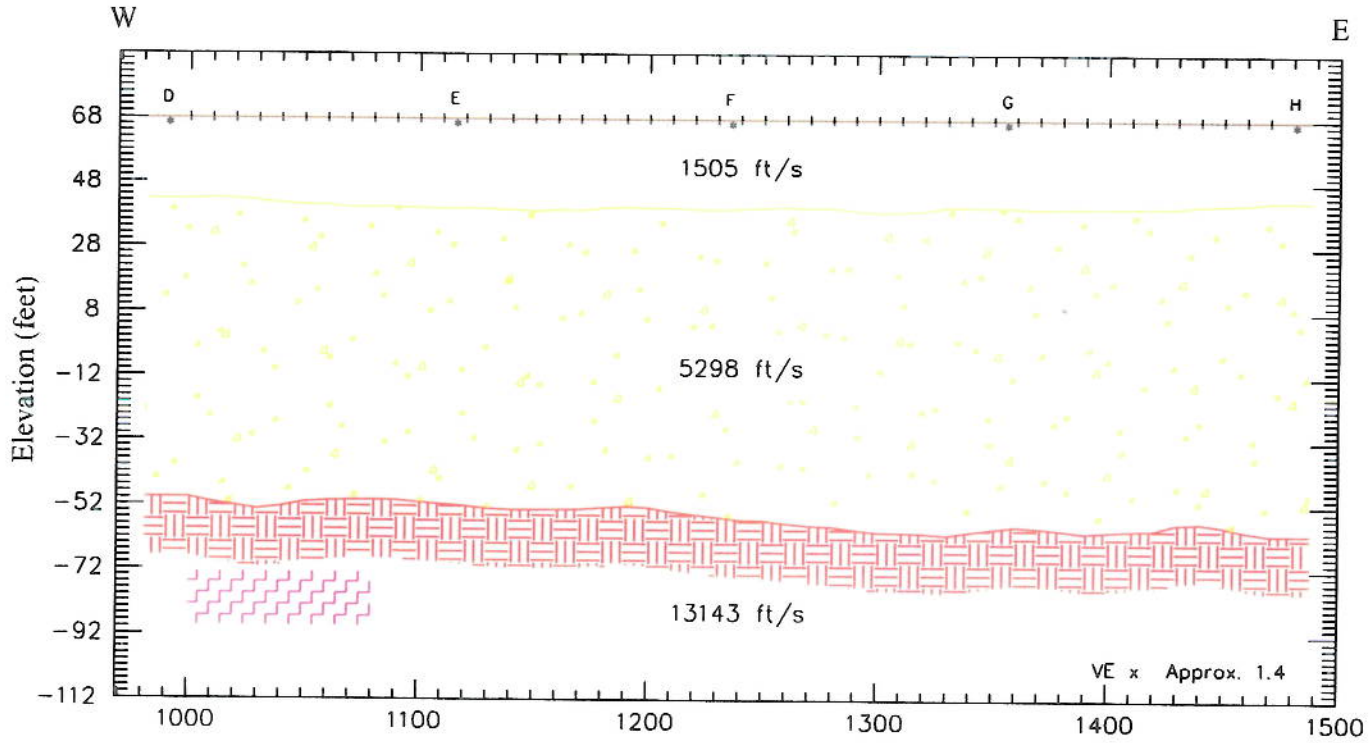
(781) 935-8111 hgi@hagergeoscience.com

SEISMIC REFRACTION LINE F

Unsaturated Sediment Saturated Sediment Bedrock Low Velocity Zone



Distance (feet)

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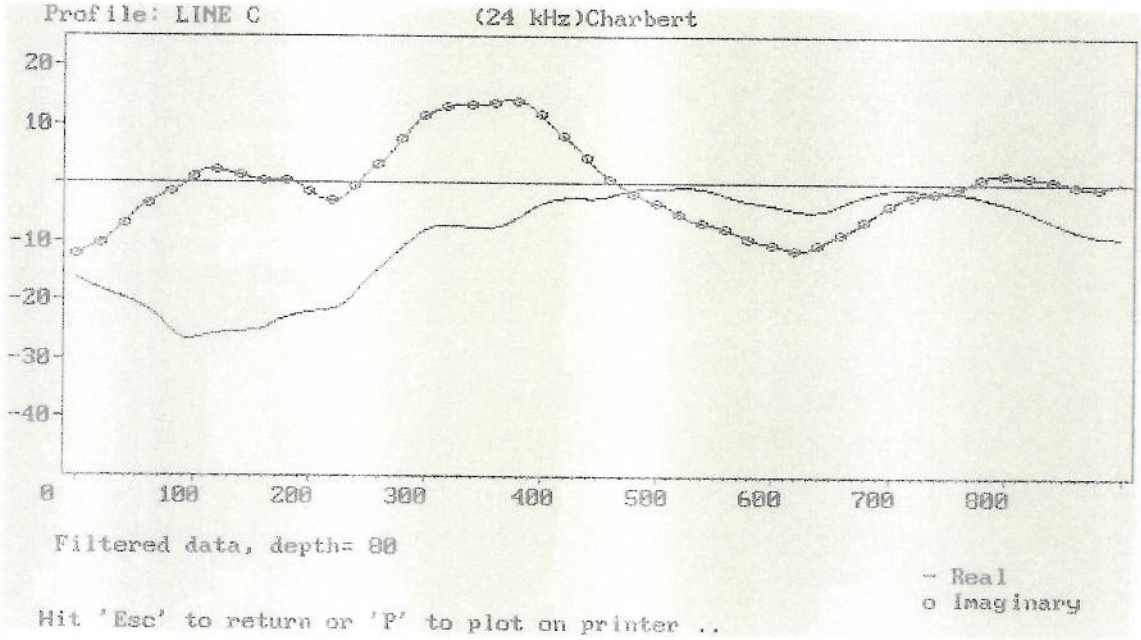
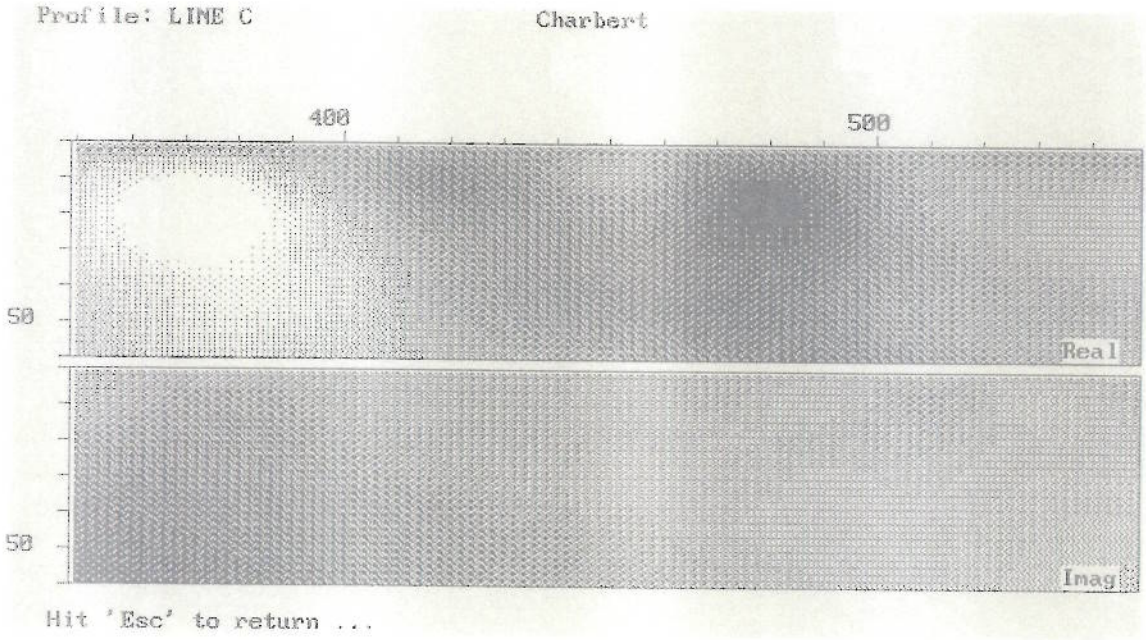
CHARBERT FACILITY
GEOPHYSICAL INVESTIGATIONS
ALTON, RHODE ISLAND
JULY 2006 File No. 200633

Hager GeoScience, Inc.
596 Main Street, Woburn, MA 01801
(781) 935-8111 hgi@hagergeoscience.com

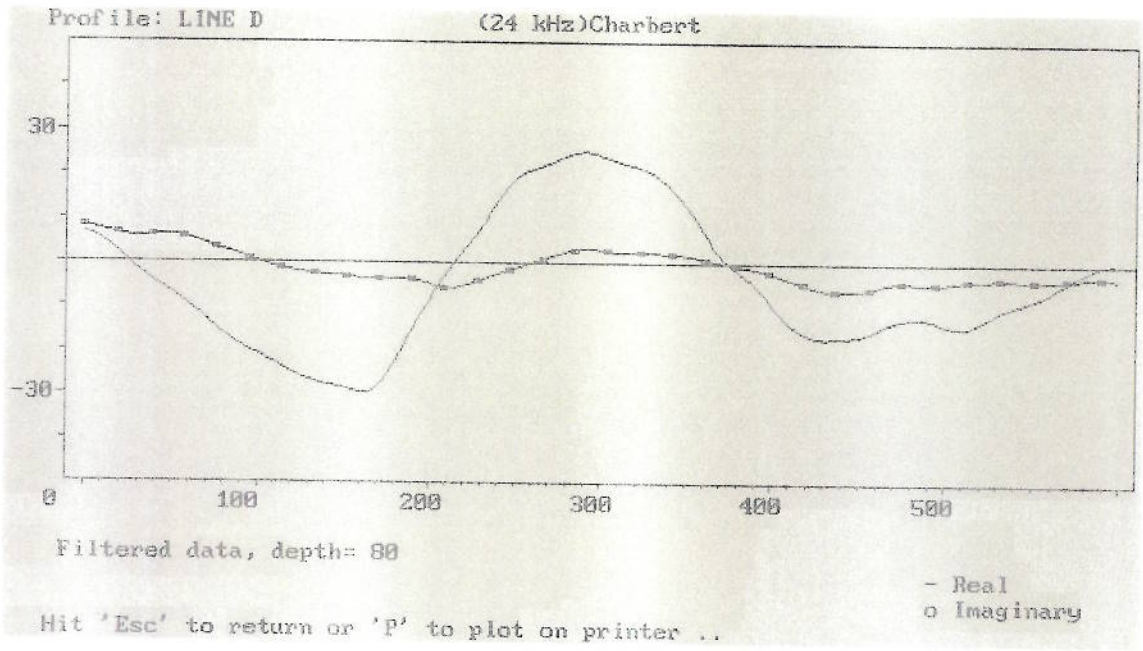
APPENDIX D – PROFILES OF FILTERED DATA, VLF TRAVERSES

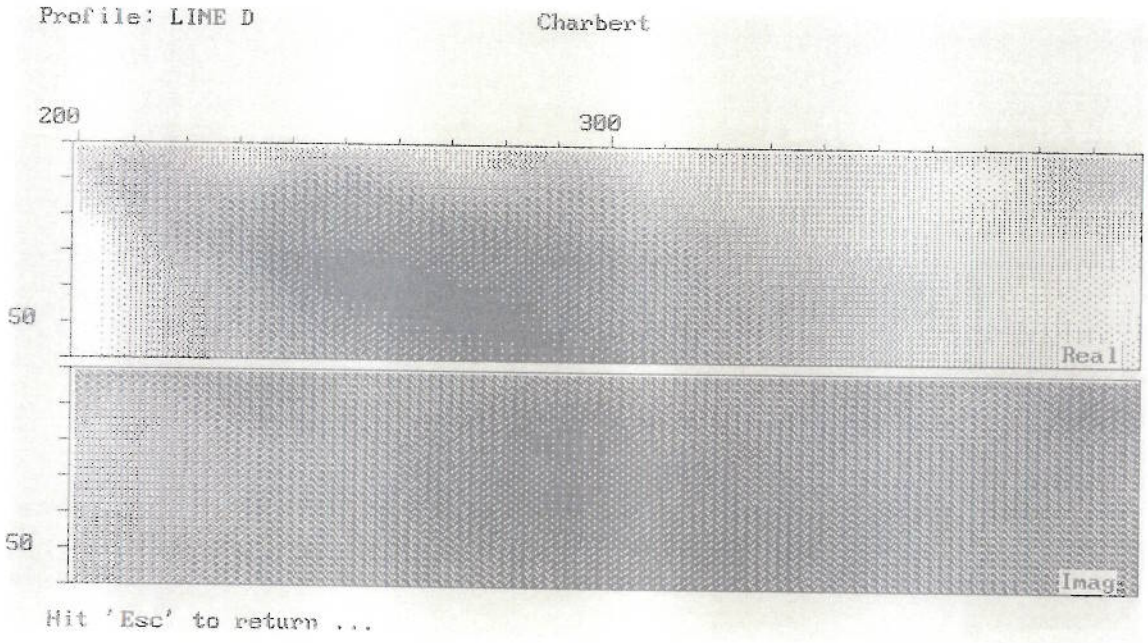
Line C
Line D
Line F



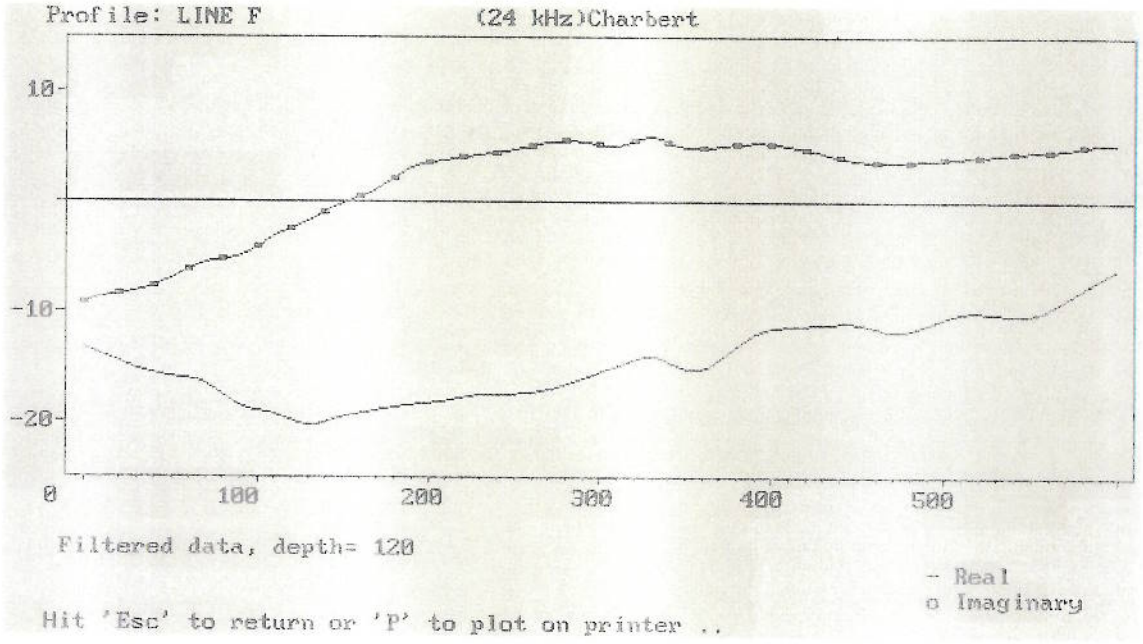


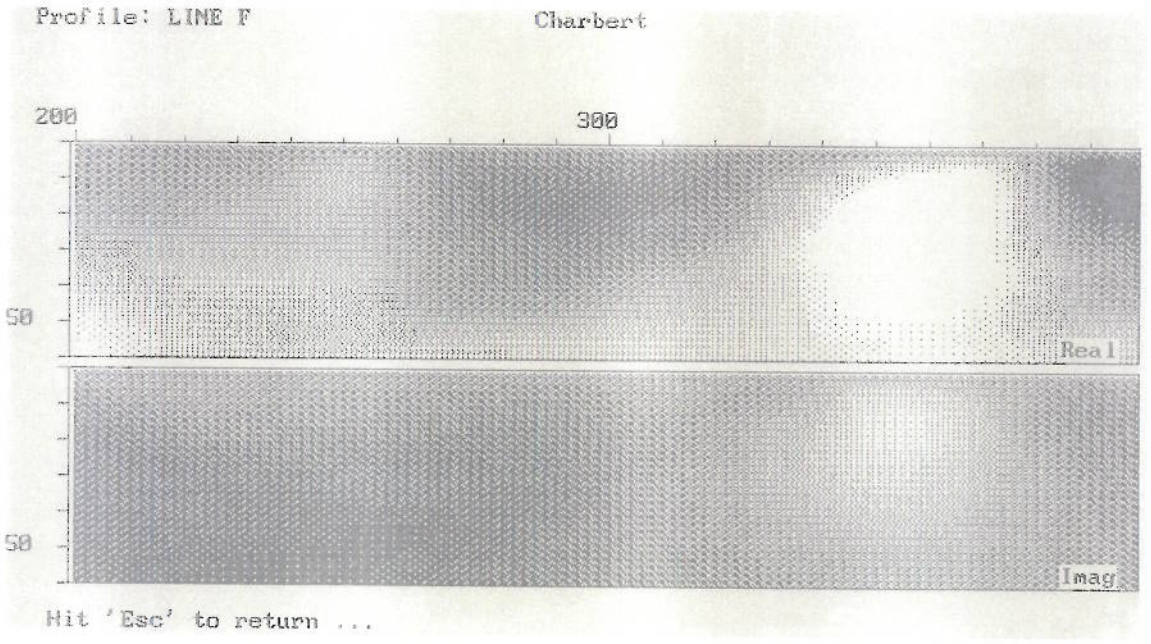
Line C. (Top) Filtered Profile at 80-foot depth. (Bottom) Current Density Diagram.





Line D. (Top) Filtered Profile at 80-foot depth. (Bottom) Current Density Diagram.





Line F. (Top) Filtered Profile at 120-foot depth. (Bottom) Current Density Diagram.

BOREHOLE GEOPHYSICAL LOGGING
BEDROCK AQUIFER EVALUATION
CHARBERT FACILITY
ALTON, RHODE ISLAND

Prepared for:

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140 Broadway
Providence, Rhode Island 02903

Prepared by:

Hager GeoScience, Inc.
596 Main Street
Woburn, Massachusetts 01801

File 2006115
December 2006

1.0 INTRODUCTION

In December 2006, Hager GeoScience, Inc. (HGI) was contracted by GZA GeoEnvironmental, Inc. (GZA) to perform geophysical borehole logging in three wells at the Charbert facility in Alton, Rhode Island. The borehole logging was part of an ongoing bedrock evaluation study. The objective of the logging was to characterize fractured bedrock in wells GZML-1, GZML-2A, and GZML-3. Fieldwork was performed on December 7th and 8th, 2006. The work was performed under the direction of GZA for the Rhode Island Department of Environmental Management (RIDEM).

2.0 DATA ACQUISITION

The HGI logging system consisted of a Mount Sopris Instruments 5MXA-1000 Matrix logger and MSI 4MXA-1000 winch; MSI 2CAA-1000 three-arm caliper probe; Advanced Logic Technologies FAC40 acoustic televiewer (ATV); and MSI HFP-2293 Heat Pulse Flow Meter (HPFM). Section 5 discusses the geophysical technique and its limitations.

A computer housed in the HGI logging truck controlled the system. An HGI geologist monitored the logs in real time during data acquisition and recorded hardware and software settings as well as data anomalies in a logbook and on forms developed for the project. Raw data from the logging runs were stored digitally on the computer for onsite and later processing, analysis, and plotting.

Four logging runs were made in each of wells GZAML-1, GZAML-2A, and GZAML-3. The suite consisted of the following logs (run in the order listed):

- Caliper
- Acoustic Televiewer (ATV)
- Heat-Pulse Flow Meter (HPFM) – Ambient well condition
- Heat-Pulse Flow Meter (HPFM) – Stressed well condition

Logging Procedure

The log suite used on this project and the sequence of logging are summarized below.

Logging Run 1: **Caliper Probe**

Caliper logs record borehole diameter using simple a three arm measuring system. Changes in borehole diameter are related to well construction, such as casing or drilling-bit size, and to fracturing or breakout along the borehole wall. Because borehole diameter commonly affects log response, the caliper log is useful in the analysis of other geophysical logs. Caliper data is also combined with ATV data to produce 3-D "virtual cores." The hearty caliper tool is usually run first in order to probe and assess the suitability of the borehole for running more sensitive and expensive tools. The sampling interval was 0.04 feet at a logging rate of approximately 15 feet per minute. The caliper probe calibration was checked on-site before each run and re-calibration

was performed as necessary.

Logging Run 2: **Acoustic Televiewer Probe**

The acoustic televiewer (ATV) uses high-frequency acoustic energy to measure the acoustic impedance of the borehole wall and the two-way travel time of the transmitted signals. Major differences in travel time and reflection amplitudes from background values are seen as anomalous features. Borehole deviation data, recorded from a three-component magnetometer and two accelerometers, are used to provide the corrected orientation and shape of the imaged features. As a result, it is possible to calculate the dip direction and dip angle of imaged planar features. Discontinuities imaged with the ATV include open or filled fractures, foliation, mineralization, weathered zones, and other rock fabric.

The sample interval used for ATV logging was 0.01-foot. A scan time of 1000 µsec was used with a sample rate of 144 and 288 measurements per revolution. The logging rate was approximately 6 feet per minute. Logging tools and cable were cleaned after each run with a clean water rinse.

Logging Runs 3 and 4: **Heat Pulse Flow Meter Probe**

Heat-Pulse Flow Meter (HPFM) logs are usually obtained under ambient and stressed conditions at depth intervals selected on site after a preliminary review of the logging data. The tool contains a thermistor, for generating a pulse of heat into the water, and two temperature sensors for measuring the direction and magnitude of the pulse of heated water in the borehole. Diverters are used to channel the heated water flow past the sensors for measurement. The HPFM measures the direction and rate of induced low vertical flow in the borehole. The HPFM probe is designed to resolve flow rates from 0.02 to 1.0 gal/min. Accurate measurements require sufficient time between readings for the area around the tool to stabilize. At least three readings, each lasting up to 25 seconds, are recorded per interval to obtain a reasonable average measurement. The HPFM log is run under ambient and stressed well conditions to provide data for quantitative flow analyses. In certain circumstances, such as with very small open-hole intervals or in wells with very low well recharge rates, reasonable pump rates cannot be maintained for measuring flow under stressed-well conditions. In these cases, testing can be performed to obtain the relative productivity of the exposed fractures.

Both ambient and stressed HPFM measurements were made in GZML-1, GZML-2A, and GZML-3. A pumping rate of approximately 1gpm was used for the stressed well HPFM measurements in all wells.

3.0 DATA REDUCTION

Borehole logging data were processed as graphical logs using WELLCAD for Windows© software system and Excel spreadsheets. Logs were compiled onto a one-sheet format to allow for more efficient graphical log analysis. Log scales were set to optimize the detection of

readings that depart from baseline and background values. *Field logging* depths were referenced to the top of casing. *Report logs* have been shifted and are referenced to the ground surface.

ATV deviation data are affected by metal casing. The probe's magnetometers are progressively affected starting from approximately 6 feet below the casing. Consequently, measurements of borehole structures made within this interval using unadjusted orientation data will be incorrect. HGI uses a procedure to correct the affected data to a value representing a good approximation of the true values of measured structures.

Structure logs identifying notable and representative discontinuities from ATV data were constructed using WELLCAD. Borehole image and deviation logs were rotated from the magnetic north reference markers to True North using a site-specific 14.67-degree west magnetic declination. Depths are relative to ground level and all structural data are relative to true north. The structure (discontinuity) data were used to calculate dip direction and dip angle. Tables 2 through 4 in the report appendix contain tabulated data for discontinuities interpreted from the ATV logs for all three wells. The stereonets shown at mid-depth on the logs are constructed using a southern hemisphere equal-area Schmidt polar projection showing ***dip direction and dip angle***. The structural data set has been color-coded to reflect the relative and apparent openness of the imaged discontinuities. The ranking system is based on caliper, acoustic amplitude, and acoustic travel time logs. The ranking index is subjective and attempts to qualitatively identify the potential weakness of the individual discontinuities. Red (code 105), green (code 106), blue (code 107), and magenta (code 110) colors represent wide-, moderate-, small-, and tight-fracture aperture, respectively.

ATV logs are presented as 2-D and 3-D images of the borehole in combination with the caliper and HPFM logs. The 3-D virtual core is constructed using the caliper log data to define the core shape, and the amplitude of signal reflections to show the borehole wall images. The 3-D Caliper virtual core log is a true physical representation of the borehole geometry. The 3-D view is useful for analyzing the physical characteristics of the structures/discontinuities shown as amplitude variations on the 2-D ATV log format.

Digital files of the logs for each well are on a CD in a pocket at the end of this report. The CD also contains a WELLCAD Reader that allows the user to view the log files. The reader functions in a Windows operating environment and is designed to facilitate log analysis performed by the reviewer. The WellCAD reader can be used to scroll logs, view and rotate 3-D logs, review digital log data, and print logs.

4.0 RESULTS

Preliminary results were provided to Charbert on December 12, 2006 via HGI's ftp drop box established for the project. These included combination logs (see below) for wells GZML-1, GZML-2A, and GZML-3. The logs were updated and uploaded to the ftp drop box as changes were effected. The report log suite (see Appendix) for each well consists of:

- Caliper Log

- HPFM Log (ambient & stressed)
- Combination Log (caliper, HPFM, ATV image, structure, 3-D core, 3-D borehole, rose plot, & polar plot)

The predominant features observed from the image logs are interpreted to be metamorphic textures and fracture discontinuities. Rock composition varies slightly with the change in mafic components and degree of weathering. The predominant sets of discontinuities and their characteristics are summarized in Table 1 below and shown in Figure 1 and the combination logs on the CD.

Table 1
Discontinuity Data Summary

Discontinuity Sets	Dip Azimuth (degrees)	Dip Angle (degrees)	Classification	Order of Well Predominance	Apparent Aperture
1-NW	310-320	30-70	Foliation/Cleavage	3-1-2A	Open in 1&2A
2-WNW	285-300	45-70	Foliation/Cleavage	2A-1-3	Tight/Small
3-SE	120-150	30-70	Foliation/Cleavage	2A-3-1	Tight/Small
4-ESE	90-120	45-75	Fractures	1-(2A&3)	Open in 1
5-NE	20-30	40-60	Fractures	3-1-2A	Open in 1

Table 1 suggests that multiple stages of deformation are represented in the rock. The variety of possible foliation/cleavage sets may indicate both a syntectonic origin of granite and subsequent late-stage or post-consolidation deformation. All sets are represented in all three boreholes.

Most of the discontinuities observed in the boreholes were tight or had small aperture. Common to wells GZML-1 and GZML-3 is a moderately weathered rock zone extending approximately 7 feet below the bottom of the casing. The rock interval immediately below the casing in GZML-2A is less weathered. These intervals contribute to the water in-flow in all three wells, but more so in GZML-2A.

Probable in-flow intervals were interpreted using primarily the characteristics of the mapped structures and HPFM data. These intervals were identified in the combination logs for each well. A general observation from these data is that the HPFM test results for wells GZML-1 and GZML-2A are similar. Under ambient test conditions, these wells showed no fracture flow and are, therefore, considered to be in equilibrium. The test results showed that, under stressed conditions, most of the measured in-flow came from shallow fractures, with minimal in-flow contributions from deeper fractures.

GZML-1 showed open fractures from the 175-180 ft, 140-143 ft, and 125-130 ft depth intervals. GZML-2A showed fewer zones of open fractures, but did contain a single open fracture at approximately 195.5 feet, and an interval of small open fractures from the bottom of casing at 95 feet to 110 feet.

Well GZML-3 showed active flow from deeper fractures under both ambient and stressed well conditions. Under stressed well conditions, the increase in flow rates from the HPFM test

intervals was only approximately two-fold. Most of the flow was from the interval between the 156 ft (hole bottom) and 130 ft test intervals. Within this interval are located 3 small open fractures from 153 to 154.5 feet. In addition to zones of smaller open discontinuities, notable open fractures are also found at 101 ft, 95 ft, 61 ft, and the weathered interval below casing from 48 to 55 feet. The measured flow in well GZML-3 under ambient conditions and the less-than-expected increase of flow measured under stressed conditions suggest active circulation in the well that could be caused by interference from a nearby production well or by a flow cell consisting of a producing fracture and a permeable receiving fracture.

5.0 GEOPHYSICAL BOREHOLE LOGGING

5.1. Description of the Method. HGI performs borehole logging using a fully equipped field vehicle that includes a lunchbox computer, heavy-duty generator, tools, and other necessary equipment and supplies to successfully complete the work. The HGI logging system consists of a Mount Sopris Instruments 5MXA-1000 Matrix logger and MSI 4MXA-1000 winch; MSI 2PEA/F_0-2500Ohm-m,T,F-R combination poly-electric probe (includes fluid temperature/resistivity and natural gamma probes); MSI 2CAA-1000 three-arm caliper probe; Advanced Logic Technologies FAC40 acoustic televiewer (ATV); and MSI HFP-2293 Heat Pulse Flow Meter (HPFM).

The Mount Sopris single-conductor system stores digitized log data on the hard drive of a portable computer. Logging speeds can range from 1.5 to 20 feet per minute depending on the resolution desired. All logging activities are performed in accordance with the equipment manufacturer's recommended procedures, as well as the appropriate ASTM standard. We normally clean the logging probes and wireline with non-phosphate soap and a tap water rinse during each upward run and/or after completing work on each well.

5.2. Data Analysis and Interpretation. Borehole logging data are processed as graphical logs using WELLCAD for Windows© and MS Heat© (for HPFM) software systems, Excel spreadsheets, and Rockworks©. Caliper and ATV logs are compiled onto a one-sheet format to allow for more efficient graphical log analysis. Data ranges will be set to optimize the detection of readings that depart from baseline and background readings.

We use WELLCAD to construct structure logs identifying notable and representative discontinuities from ATV data and superimpose them onto the ATV log. Numerical representation of the structural traces are used to calculate strike and dip values of discontinuities and subsequently used to construct rose diagrams and stereonet projections of the structural data. Apparent aperture values for discontinuities visible in the ATV log are tabulated. Acoustic images of the borehole (360 degrees) are graphically represented as false-color amplitude and travel-time logs in developed cylindrical view format on a strip log. 3-D core-like representation of the borehole can also be developed from the ATV data.

5.3. Limitations of the Method. The ATV must be properly centered in the borehole to provide clear images. Eccentricity of the ATV tool in the borehole will produce an asymmetrical pattern of the acoustic wave front emanating from the tool, thereby making it difficult to establish a

uniform background amplitude and travel-time log of the reflected energy against which the anomalous reflections can be discerned. Borehole tilt and small borehole diameters both degrade data quality.

ATV features or discontinuities may represent open or filled fractures, foliation, and mineralized or weathered zones. Interpreting the type of feature present from the ATV log requires using other logs or core data, if available. For open fractures imaged in the ATV log, the width of the feature does not represent the true aperture. A portion of the acoustic energy hitting the fracture surface is diffracted. The recorded arrivals of these diffractions will appear on the log above and below the normal position of the fracture edges as lower-amplitude arrivals with longer travel times. Subtle changes in amplitude within each discontinuity can be used to approximate the true aperture; however, the measurement is approximate and should be designated as "apparent aperture."

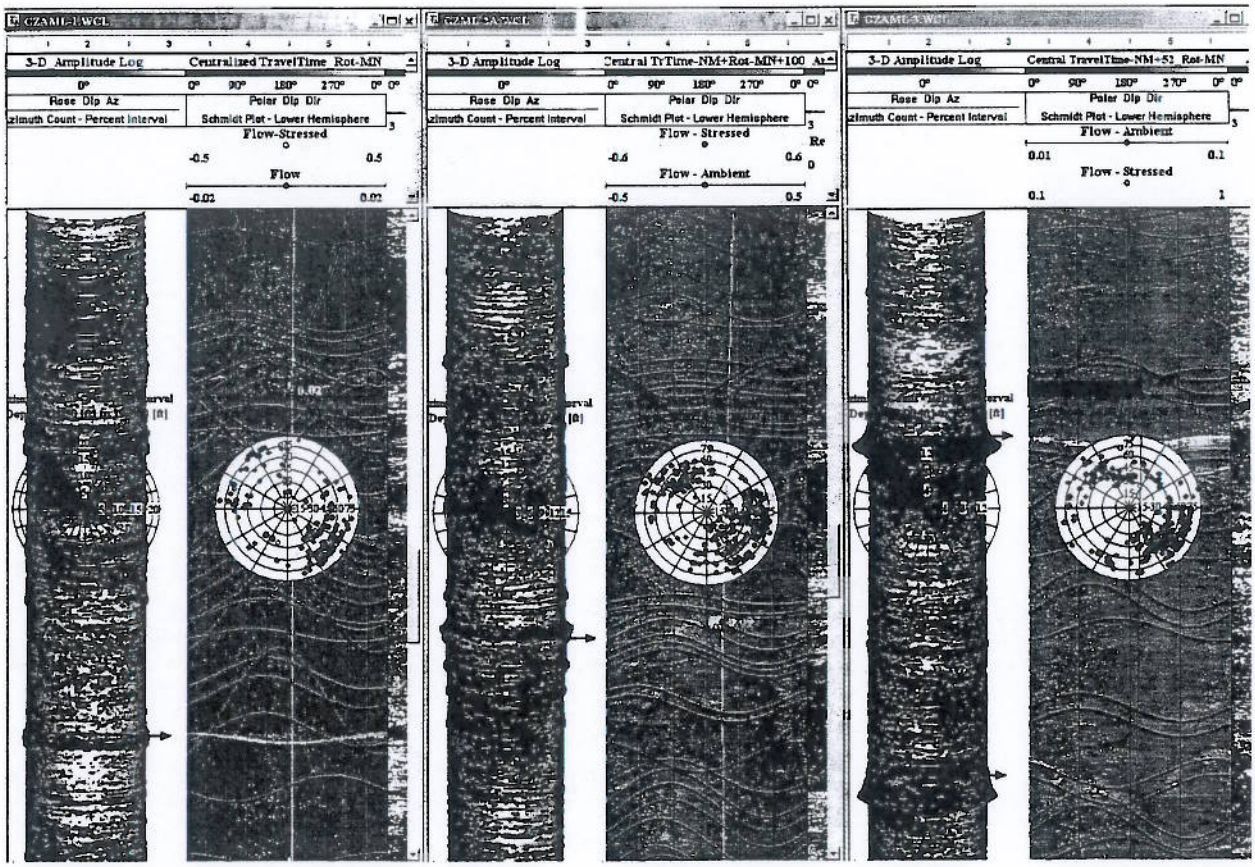


Figure 1. Rose diagram and polar plots for GZML-1, GZML-2A, and GZML-3.

Table 2
GZML-1 Structure Data

Depth	Dip Azimuth	Dip Angle	Apparent Aperture Code	Code Desc.
122.75	174.3	76.6	106	Moderate
122.86	174.6	76.7	106	Moderate
123.24	161.8	69.6	107	Small
123.80	160.4	78.4	107	Small
123.86	312.1	34.3	107	Small
123.98	309.1	33.4	107	Small
124.01	155.0	78.1	107	Small
124.29	157.7	78.1	107	Small
124.49	134.4	66.7	110	Tight
124.92	150.6	72.7	110	Tight
125.17	96.3	42.0	107	Small
125.34	152.2	70.2	110	Tight
125.67	108.9	48.5	107	Small
126.09	281.3	53.6	107	Small
126.21	281.5	53.6	107	Small
126.33	110.1	43.6	107	Small
126.75	135.0	44.4	110	Tight
126.92	293.2	52.3	110	Tight
127.73	222.7	57.5	107	Small
128.34	275.3	47.7	106	Moderate
128.48	282.3	47.2	106	Moderate
128.62	284.9	47.2	107	Small
128.94	293.2	46.8	107	Small
129.26	281.8	47.5	107	Small
129.92	311.4	45.6	110	Tight
130.54	300.9	46.3	107	Small
130.92	315.8	45.5	110	Tight
131.38	320.7	45.4	110	Tight
131.77	318.5	45.3	110	Tight
132.62	11.4	61.5	107	Small
132.88	339.3	48.0	107	Small
133.23	320.7	49.3	107	Small
133.92	318.7	45.8	107	Small
134.07	114.4	68.6	110	Tight
134.89	115.9	73.5	110	Tight
134.89	306.0	46.0	110	Tight
135.11	297.3	46.6	110	Tight
136.46	190.2	19.8	110	Tight
136.56	97.1	82.3	110	Tight
136.76	263.3	26.6	110	Tight
137.68	174.3	18.7	107	Small
139.09	165.9	39.0	107	Small
139.55	330.4	39.7	110	Tight
139.79	326.6	39.7	110	Tight
140.77	94.9	47.8	105	Large
140.90	92.8	48.0	105	Large
141.16	110.4	66.0	106	Moderate
141.38	38.9	38.0	105	Large
141.65	26.6	38.1	105	Large
141.73	326.7	16.1	110	Tight
141.77	311.8	57.8	110	Tight
142.64	326.7	62.1	107	Small
142.90	335.5	63.5	110	Tight
143.33	234.5	56.1	107	Small
144.07	238.1	56.6	107	Small
145.64	268.0	77.8	107	Small
145.76	358.6	66.9	107	Small

Table 2
GZML-1 Structure Data

Depth	Dip Azimuth	Dip Angle	Apparent Aperture Code	Code Desc.
146.14	250.1	72.1	107	Small
146.57	259.1	76.8	107	Small
146.85	250.0	66.0	107	Small
147.28	241.5	66.0	107	Small
148.49	140.3	58.3	110	Tight
148.79	322.6	77.0	110	Tight
149.18	326.1	77.8	110	Tight
149.48	315.8	64.9	107	Small
150.05	147.3	79.3	110	Tight
150.13	308.0	84.5	107	Small
150.18	144.0	79.2	110	Tight
152.51	278.6	79.0	110	Tight
152.79	174.1	31.7	106	Moderate
154.45	251.0	43.5	107	Small
154.46	190.1	85.0	107	Small
156.21	264.1	51.8	107	Small
156.40	264.3	52.1	107	Small
156.71	272.8	51.3	107	Small
157.26	326.5	61.7	107	Small
157.52	327.9	68.5	110	Tight
157.85	141.2	75.4	107	Small
157.85	336.4	70.0	110	Tight
158.08	313.0	38.6	107	Small
158.24	142.7	76.0	107	Small
158.29	340.9	74.7	110	Tight
158.52	250.5	23.5	107	Small
159.24	327.1	73.1	107	Small
160.19	327.3	78.9	110	Tight
160.43	329.4	78.4	110	Tight
160.80	43.0	54.8	107	Small
161.33	319.2	67.4	110	Tight
161.69	316.9	66.4	110	Tight
162.20	311.9	68.1	107	Small
162.21	339.4	78.9	110	Tight
162.23	314.4	56.5	107	Small
162.74	295.6	38.6	107	Small
163.54	322.7	62.2	107	Small
163.93	317.3	62.6	110	Tight
164.11	344.4	81.0	110	Tight
164.70	316.5	62.6	107	Small
164.86	182.6	29.7	106	Moderate
165.93	79.9	57.2	107	Small
167.41	167.9	37.5	107	Small
169.88	320.4	43.8	106	Moderate
170.76	316.9	44.0	107	Small
171.07	15.2	40.5	106	Moderate
171.53	309.3	46.8	110	Tight
171.86	305.2	47.4	110	Tight
172.23	44.4	63.0	110	Tight
172.80	310.0	71.8	107	Small
173.22	296.4	47.3	107	Small
175.06	95.5	60.2	110	Tight
175.84	318.6	68.6	106	Moderate
176.00	324.1	69.0	106	Moderate
176.43	313.4	71.6	107	Small
176.58	97.0	69.4	106	Moderate
176.88	320.5	71.3	106	Moderate

Table 2
GZML-1 Structure Data

Depth	Dip Azimuth	Dip Angle	Apparent Aperture Code	Code Desc.
177.13	323.1	71.0	107	Small
177.19	87.7	61.2	107	Small
178.60	130.2	72.0	107	Small
178.68	333.0	55.7	107	Small
179.06	105.3	68.8	107	Small
179.34	97.4	70.2	107	Small
180.65	308.2	41.4	106	Moderate
180.83	320.7	37.6	107	Small
181.35	309.4	68.3	110	Tight
181.85	311.8	72.3	110	Tight
182.17	320.8	73.1	107	Small
182.32	318.6	74.0	110	Tight
182.49	313.1	74.1	110	Tight
182.77	315.9	74.6	110	Tight
183.06	315.0	74.2	110	Tight
183.26	310.9	73.9	110	Tight
183.30	303.8	68.0	110	Tight
184.79	285.0	74.9	110	Tight
185.24	174.4	71.2	107	Small
186.16	180.7	69.8	107	Small
186.83	178.2	55.3	107	Small
187.01	173.5	51.1	110	Tight
189.92	302.0	71.2	110	Tight
190.05	99.6	59.7	110	Tight
190.12	300.5	71.3	110	Tight
190.35	299.4	71.7	110	Tight
190.52	293.7	71.2	110	Tight
190.62	293.4	71.6	110	Tight
190.84	94.5	63.2	110	Tight
191.62	287.6	77.5	107	Small
192.12	281.9	68.7	110	Tight
193.11	329.1	63.0	107	Small
193.56	302.0	61.5	110	Tight
193.75	294.0	61.5	110	Tight
193.94	288.3	62.0	110	Tight
194.16	297.9	60.9	110	Tight
194.25	293.9	62.3	110	Tight
194.46	305.6	61.5	110	Tight
194.62	299.5	61.4	110	Tight
194.79	300.6	64.9	110	Tight
195.05	313.6	60.5	110	Tight
195.20	315.6	60.5	110	Tight
195.30	312.4	60.7	110	Tight
195.46	323.8	63.3	110	Tight
195.73	152.0	57.2	110	Tight
196.06	313.0	63.7	107	Small
196.10	248.7	49.4	110	Tight
196.45	301.8	88.8	107	Small

Table 3
GZML-2A Structure Data

Depth (ft)	Dip Azimuth	Dip Angle	Apparent Aperture Code	Code Desc.
95.48	39.3	36.2	110	Tight
95.63	255.1	29.5	110	Tight
95.67	349.8	72.1	107	Small
95.82	134.2	53.4	110	Tight
96.03	184.2	78.3	110	Tight
96.37	4.4	36.4	110	Tight
96.42	339.6	71.0	110	Tight
96.50	326.9	65.6	110	Tight
96.64	324.7	65.4	107	Small
96.82	327.4	68.5	107	Small
96.96	326.3	65.4	107	Small
97.08	148.2	49.9	107	Small
97.27	334.2	65.5	107	Small
97.35	145.3	34.7	107	Small
97.43	153.4	49.7	110	Tight
97.48	331.4	67.7	110	Tight
97.94	84.2	63.4	107	Small
98.09	152.9	63.1	107	Small
98.19	350.7	59.8	107	Small
98.49	337.7	59.9	107	Small
98.51	158.6	62.9	107	Small
98.85	158.2	62.9	107	Small
98.89	258.2	52.3	110	Tight
99.26	178.8	57.9	110	Tight
99.41	92.5	57.7	110	Tight
99.45	263.8	48.6	107	Small
99.58	187.5	57.8	107	Small
99.65	184.6	57.8	107	Small
99.74	187.9	57.8	107	Small
99.91	322.8	45.0	110	Tight
100.09	338.2	39.3	107	Small
100.17	340.3	28.5	110	Tight
100.33	333.1	28.3	110	Tight
100.57	189.3	45.0	110	Tight
100.78	348.6	61.4	107	Small
101.58	141.8	43.9	107	Small
102.55	344.4	47.5	107	Small
102.75	156.5	41.7	107	Small
103.29	150.0	42.1	107	Small
103.29	1.0	42.2	107	Small
103.67	1.9	47.8	107	Small
103.99	285.2	42.4	107	Small
104.07	281.3	42.3	105	Large
104.17	279.8	40.1	105	Large
104.28	279.7	40.1	107	Small
104.28	286.2	54.2	107	Small
105.18	347.8	32.2	107	Small
105.83	7.4	46.9	107	Small
105.96	48.1	53.3	110	Tight
106.09	53.5	53.2	110	Tight
106.46	331.4	79.1	110	Tight
106.60	334.7	79.2	110	Tight
106.61	271.5	45.4	110	Tight
106.84	271.3	49.6	110	Tight
106.94	127.5	47.0	110	Tight
107.02	127.1	41.8	107	Small
107.02	254.1	26.4	106	Moderate
107.16	131.8	51.4	110	Tight
107.26	129.5	45.8	107	Small

Table 3
GZML-2A Structure Data

Depth (ft)	Dip Azimuth	Dip Angle	Apparent Aperture Code	Code Desc.
107.33	133.9	45.7	107	Small
107.69	116.7	45.2	110	Tight
108.02	126.7	45.8	107	Small
108.05	129.0	45.7	107	Small
108.64	135.5	46.6	110	Tight
109.05	127.0	52.5	110	Tight
109.36	127.1	55.3	110	Tight
109.44	125.7	55.3	110	Tight
109.89	116.9	55.5	110	Tight
110.54	127.4	65.5	110	Tight
110.69	303.3	54.0	110	Tight
110.95	103.5	31.8	110	Tight
111.07	128.6	65.8	107	Small
111.08	310.8	44.4	110	Tight
111.24	332.0	50.2	110	Tight
111.40	279.4	24.1	107	Small
112.00	316.9	32.6	107	Small
112.33	338.9	51.7	110	Tight
114.62	264.4	65.0	107	Small
114.82	271.8	65.4	110	Tight
114.89	271.2	65.4	110	Tight
115.03	266.7	65.4	110	Tight
116.37	339.2	33.6	107	Small
117.13	322.6	53.9	107	Small
117.37	298.2	53.7	107	Small
117.60	316.0	53.7	107	Small
117.76	313.2	53.5	107	Small
118.41	270.8	67.6	110	Tight
118.64	266.9	67.5	110	Tight
118.85	257.1	67.3	110	Tight
119.12	251.6	67.2	110	Tight
119.47	256.7	67.3	110	Tight
119.76	247.0	63.6	110	Tight
120.13	251.0	63.7	110	Tight
120.66	167.2	38.2	110	Tight
120.95	146.0	58.1	107	Small
120.97	162.4	38.1	110	Tight
121.03	0.2	56.9	110	Tight
121.49	287.9	40.3	107	Small
121.64	156.1	58.1	107	Small
121.69	283.4	30.1	110	Tight
122.24	320.8	44.6	110	Tight
123.36	308.8	53.8	110	Tight
124.40	309.3	53.6	110	Tight
124.77	120.4	76.1	110	Tight
124.78	242.7	24.6	107	Small
124.92	240.9	24.6	107	Small
125.34	113.6	53.4	110	Tight
126.04	157.2	39.4	110	Tight
127.10	278.0	72.6	107	Small
127.57	284.8	72.7	107	Small
127.64	286.6	72.7	107	Small
127.68	285.1	72.7	110	Tight
127.81	285.4	72.7	107	Small
128.03	292.2	72.8	107	Small
129.25	146.9	38.9	107	Small
129.61	142.0	39.2	107	Small
130.39	282.0	49.6	110	Tight
130.63	278.4	49.6	110	Tight

Table 3
GZML-2A Structure Data

Depth (ft)	Dip Azimuth	Dip Angle	Apparent Aperture Code	Code Desc.
130.82	275.2	47.6	110	Tight
130.92	276.3	47.6	110	Tight
131.04	142.0	45.3	107	Small
131.05	263.7	51.9	110	Tight
131.35	139.8	45.3	107	Small
132.38	259.3	44.4	110	Tight
132.85	169.8	35.7	110	Tight
134.02	160.7	47.9	107	Small
134.19	164.7	48.0	107	Small
134.43	164.8	48.0	107	Small
134.74	11.5	48.8	110	Tight
134.88	14.9	48.8	110	Tight
135.12	150.4	51.1	107	Small
135.57	315.1	49.4	107	Small
136.00	322.8	49.3	107	Small
136.15	322.0	49.6	110	Tight
136.28	320.2	49.3	107	Small
137.34	8.0	60.4	110	Tight
137.46	15.3	60.4	110	Tight
137.61	12.3	60.1	110	Tight
138.64	293.8	16.6	107	Small
138.77	301.9	16.6	107	Small
138.88	307.2	28.4	107	Small
139.95	297.8	78.5	110	Tight
140.14	295.1	16.8	107	Small
140.72	304.6	38.7	107	Small
141.11	329.9	49.5	110	Tight
141.20	313.9	75.9	110	Tight
141.85	291.1	58.3	110	Tight
142.53	260.3	62.9	110	Tight
143.07	278.8	61.1	107	Small
143.09	100.7	63.1	110	Tight
143.42	262.4	24.7	107	Small
144.24	326.6	28.2	110	Tight
144.49	321.0	30.4	107	Small
144.54	133.4	69.4	110	Tight
144.65	136.2	69.4	110	Tight
144.71	320.0	30.4	110	Tight
144.80	143.7	69.4	110	Tight
144.84	323.9	30.4	107	Small
144.98	327.9	17.8	110	Tight
145.08	133.8	34.6	110	Tight
145.11	336.2	17.7	110	Tight
145.40	308.6	35.8	110	Tight
145.52	320.7	35.8	110	Tight
145.76	343.5	16.3	110	Tight
146.10	243.5	56.3	110	Tight
146.47	250.7	55.9	110	Tight
146.88	252.6	56.2	110	Tight
147.92	143.9	61.6	107	Small
149.16	295.8	32.2	107	Small
149.36	275.7	32.1	107	Small
149.45	280.3	32.2	110	Tight
149.63	295.9	61.4	107	Small
149.88	289.3	61.6	107	Small
150.20	284.6	61.6	107	Small
150.33	284.6	59.9	107	Small
150.48	288.4	58.9	110	Tight
151.24	231.3	59.3	107	Small

Table 3
GZML-2A Structure Data

Depth (ft)	Dip Azimuth	Dip Angle	Apparent Aperture Code	Code Desc.
151.42	225.4	57.8	107	Small
152.42	167.7	61.2	110	Tight
152.82	294.0	64.4	107	Small
153.18	289.0	71.0	107	Small
153.47	291.8	70.9	107	Small
153.81	291.7	70.9	107	Small
154.21	273.1	71.3	107	Small
154.22	274.8	71.2	107	Small
154.77	267.8	71.0	107	Small
154.97	278.9	71.2	107	Small
155.48	247.3	56.1	110	Tight
155.66	110.9	67.7	110	Tight
155.81	121.7	68.2	110	Tight
155.95	123.6	68.2	110	Tight
156.24	247.9	49.2	110	Tight
156.42	249.9	49.1	110	Tight
156.61	244.1	49.1	110	Tight
156.93	145.8	21.6	110	Tight
157.47	263.6	64.0	110	Tight
157.77	273.7	64.8	107	Small
157.99	274.0	67.8	107	Small
158.15	280.5	67.8	107	Small
158.93	318.4	72.8	110	Tight
159.03	316.7	70.7	110	Tight
162.86	131.4	40.1	107	Small
162.94	134.1	40.1	107	Small
163.65	123.4	70.1	110	Tight
163.96	252.7	66.2	107	Small
164.67	255.8	72.5	110	Tight
164.73	273.9	43.9	110	Tight
165.14	256.6	49.9	110	Tight
166.42	123.1	83.3	110	Tight
166.89	116.2	83.1	107	Small
167.23	83.7	65.8	110	Tight
167.25	48.9	43.9	110	Tight
170.27	285.7	67.3	110	Tight
171.21	295.9	67.1	110	Tight
171.42	288.9	67.8	110	Tight
171.98	281.7	67.1	107	Small
172.14	280.2	67.1	110	Tight
172.36	277.8	67.0	110	Tight
172.65	273.2	66.9	107	Small
172.89	276.1	67.0	107	Small
173.83	267.7	67.0	107	Small
174.00	110.6	60.1	107	Small
174.36	272.2	67.0	107	Small
175.20	81.2	66.2	110	Tight
177.01	109.9	75.8	107	Small
177.24	266.6	27.8	107	Small
179.57	277.2	35.9	107	Small
179.73	347.3	20.8	107	Small
180.32	161.5	45.6	107	Small
181.36	142.6	46.4	107	Small
181.69	296.5	62.0	107	Small
182.27	165.6	52.5	107	Small
182.49	158.4	55.5	107	Small
182.65	107.4	79.1	110	Tight
182.68	165.8	37.3	107	Small
183.06	312.8	24.2	110	Tight

Table 3
GZML-2A Structure Data

Depth (ft)	Dip Azimuth	Dip Angle	Apparent Aperture Code	Code Desc.
183.77	189.5	49.6	110	Tight
184.03	173.4	49.3	110	Tight
184.22	167.8	49.3	110	Tight
184.45	3.5	16.3	110	Tight
185.26	209.8	61.6	110	Tight
187.63	338.2	53.4	107	Small
187.84	336.9	53.5	107	Small
187.99	330.1	53.3	107	Small
188.16	328.4	53.6	107	Small
188.53	15.3	69.4	110	Tight
190.28	283.5	62.9	110	Tight
190.50	280.9	56.6	107	Small
190.65	327.3	25.9	107	Small
190.70	143.4	55.5	110	Tight
190.87	141.7	57.5	110	Tight
191.02	288.3	80.7	107	Small
191.13	153.3	55.4	110	Tight
191.28	148.1	57.8	107	Small
191.43	309.9	56.6	110	Tight
191.48	148.8	57.7	107	Small
191.98	324.0	42.6	107	Small
192.08	323.8	41.7	107	Small
192.09	316.6	68.5	110	Tight
192.30	311.2	53.7	107	Small
192.34	312.9	68.3	107	Small
192.72	54.8	57.7	110	Tight
193.21	294.9	34.5	107	Small
193.34	298.4	34.4	107	Small
193.71	304.2	69.1	110	Tight
193.87	324.3	51.5	110	Tight
193.92	146.4	48.1	107	Small
193.98	142.2	47.9	107	Small
194.87	272.6	58.3	110	Tight
194.97	262.7	58.2	110	Tight
195.44	309.3	56.2	110	Tight
195.67	314.4	56.3	106	Moderate
195.73	318.4	45.1	106	Moderate
195.87	322.2	72.3	107	Small
196.98	96.3	63.7	110	Tight
197.28	284.7	74.2	107	Small
197.58	84.6	66.1	110	Tight
197.62	278.5	74.2	107	Small
197.71	285.2	49.1	107	Small
198.02	271.6	45.8	107	Small
198.15	278.4	76.2	107	Small
198.31	280.4	75.0	107	Small
198.31	269.8	60.3	107	Small
198.42	269.8	60.0	107	Small
198.50	270.1	59.5	107	Small
198.67	95.7	89.8	106	Moderate

Table 4
GZML-3 Structure Data

Depth (ft)	Dip Azimuth	Dip Angle	Apparent Aperture Code	Code Desc.
48.05	172.4	70.9	106	Moderate
48.69	191.8	36.1	105	Large
48.87	179.6	35.9	105	Large
49.15	181.3	36.0	105	Large
49.93	23.4	63.7	110	Tight
50.05	189.5	37.2	107	Small
50.11	22.0	63.6	110	Tight
50.25	20.9	63.6	110	Tight
50.67	104.3	50.2	107	Small
50.74	101.1	70.0	110	Tight
53.79	190.7	28.7	107	Small
54.30	200.2	52.8	110	Tight
54.52	188.5	53.1	110	Tight
54.68	198.9	53.2	110	Tight
55.05	209.7	14.7	106	Moderate
55.45	100.6	69.2	107	Small
57.18	76.7	78.5	110	Tight
57.40	183.4	32.2	107	Small
57.60	120.9	57.8	110	Tight
57.89	136.5	71.8	110	Tight
57.89	56.1	80.7	110	Tight
59.51	282.8	73.7	110	Tight
59.56	33.6	44.6	110	Tight
59.66	166.4	34.5	107	Small
59.67	285.1	73.6	110	Tight
60.17	165.1	33.8	110	Tight
60.46	171.0	34.4	110	Tight
61.07	163.6	36.4	105	Large
61.26	139.9	71.8	107	Small
61.32	153.8	28.9	105	Large
61.45	139.9	71.7	107	Small
61.57	154.5	40.3	107	Small
62.09	169.7	32.6	110	Tight
62.61	237.3	42.0	110	Tight
62.99	226.7	48.5	110	Tight
64.70	287.4	46.9	107	Small
65.00	151.1	44.6	107	Small
65.58	282.5	61.7	110	Tight
65.72	111.3	60.3	110	Tight
66.36	311.4	75.1	110	Tight
66.77	119.6	73.1	110	Tight
67.30	303.7	75.7	110	Tight
67.90	259.2	67.9	110	Tight
68.92	21.9	68.1	110	Tight
69.94	187.7	53.3	110	Tight
70.63	341.6	64.9	110	Tight
70.75	341.9	65.0	110	Tight
71.47	290.5	71.4	110	Tight
71.65	291.0	71.5	110	Tight
71.67	344.8	45.8	110	Tight
71.99	271.2	72.4	110	Tight
74.23	286.2	62.4	107	Small
75.20	282.8	66.8	110	Tight
75.78	286.9	66.6	110	Tight
75.94	293.8	66.5	110	Tight

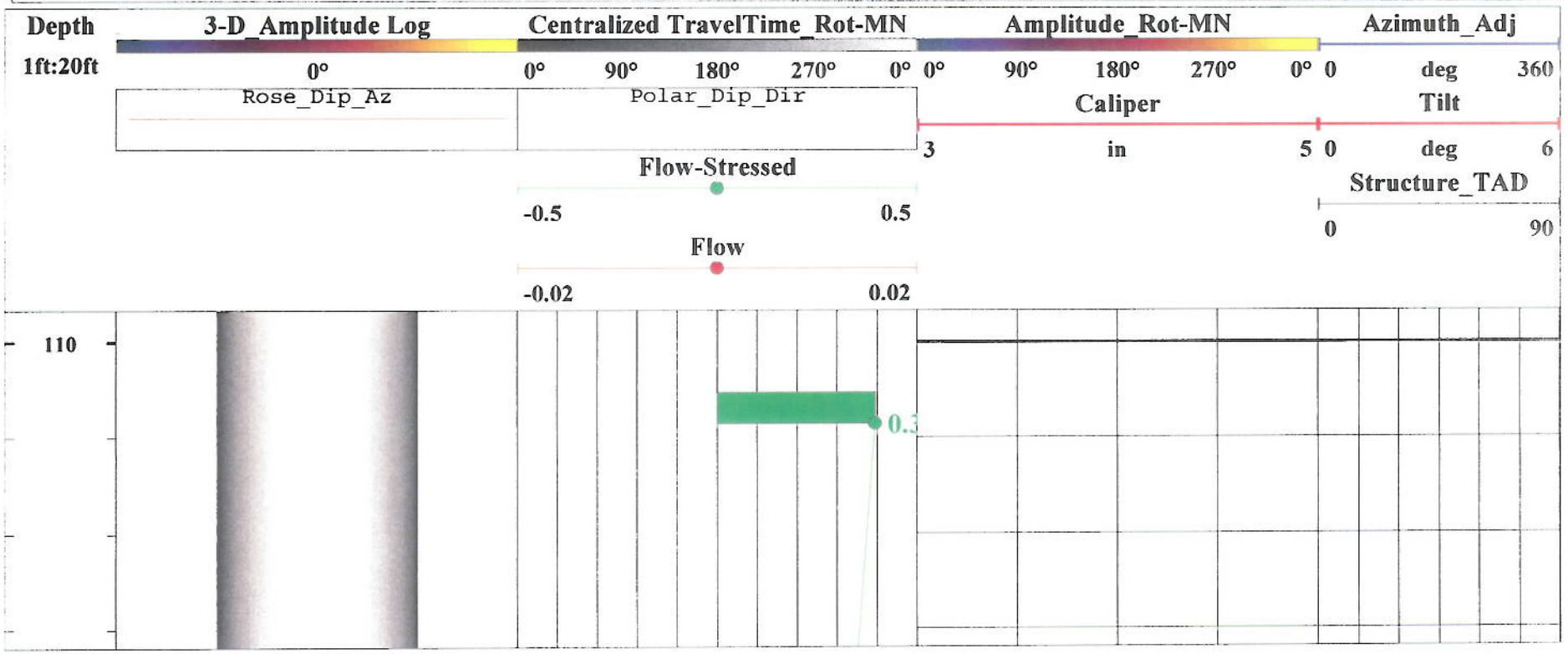
Table 4
GZML-3 Structure Data

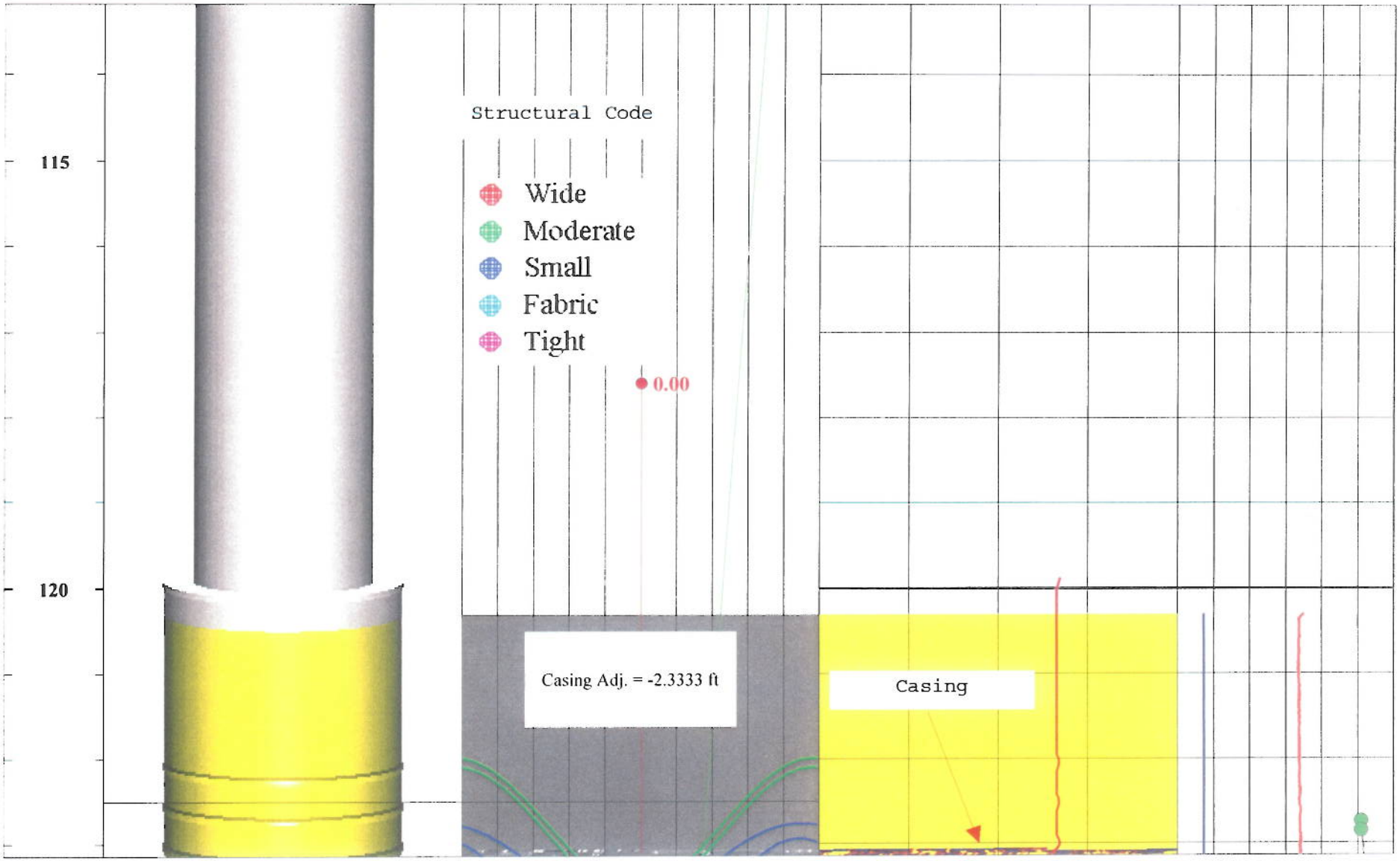
Depth (ft)	Dip Azimuth	Dip Angle	Apparent Aperture Code	Code Desc.
76.43	293.6	67.0	110	Tight
76.68	100.6	69.7	110	Tight
77.05	92.6	69.7	110	Tight
77.17	311.9	66.8	107	Small
77.87	329.3	58.9	110	Tight
78.06	338.1	59.0	110	Tight
78.39	315.7	60.6	110	Tight
78.78	320.5	63.3	110	Tight
79.76	341.2	57.6	110	Tight
80.21	77.0	65.2	110	Tight
80.29	347.4	47.6	110	Tight
80.62	284.1	42.4	110	Tight
81.20	284.5	61.4	110	Tight
81.51	285.1	61.3	110	Tight
82.06	14.3	75.4	107	Small
82.31	259.8	47.9	110	Tight
83.49	348.7	79.6	110	Tight
83.70	352.3	79.8	107	Small
84.78	338.0	61.9	110	Tight
86.64	302.5	52.5	110	Tight
86.75	303.9	52.3	110	Tight
87.49	218.4	43.2	107	Small
87.70	225.8	43.5	110	Tight
88.17	325.9	49.3	110	Tight
89.31	29.9	64.1	107	Small
89.45	33.8	64.2	110	Tight
89.66	40.2	67.1	110	Tight
90.13	17.4	68.9	110	Tight
90.41	19.0	70.0	110	Tight
91.19	296.0	49.0	107	Small
91.36	269.9	52.5	107	Small
91.75	327.9	46.0	110	Tight
93.55	208.5	47.2	110	Tight
93.63	205.0	46.1	110	Tight
94.58	279.8	32.6	110	Tight
94.76	278.5	32.9	107	Small
95.05	298.5	47.9	107	Small

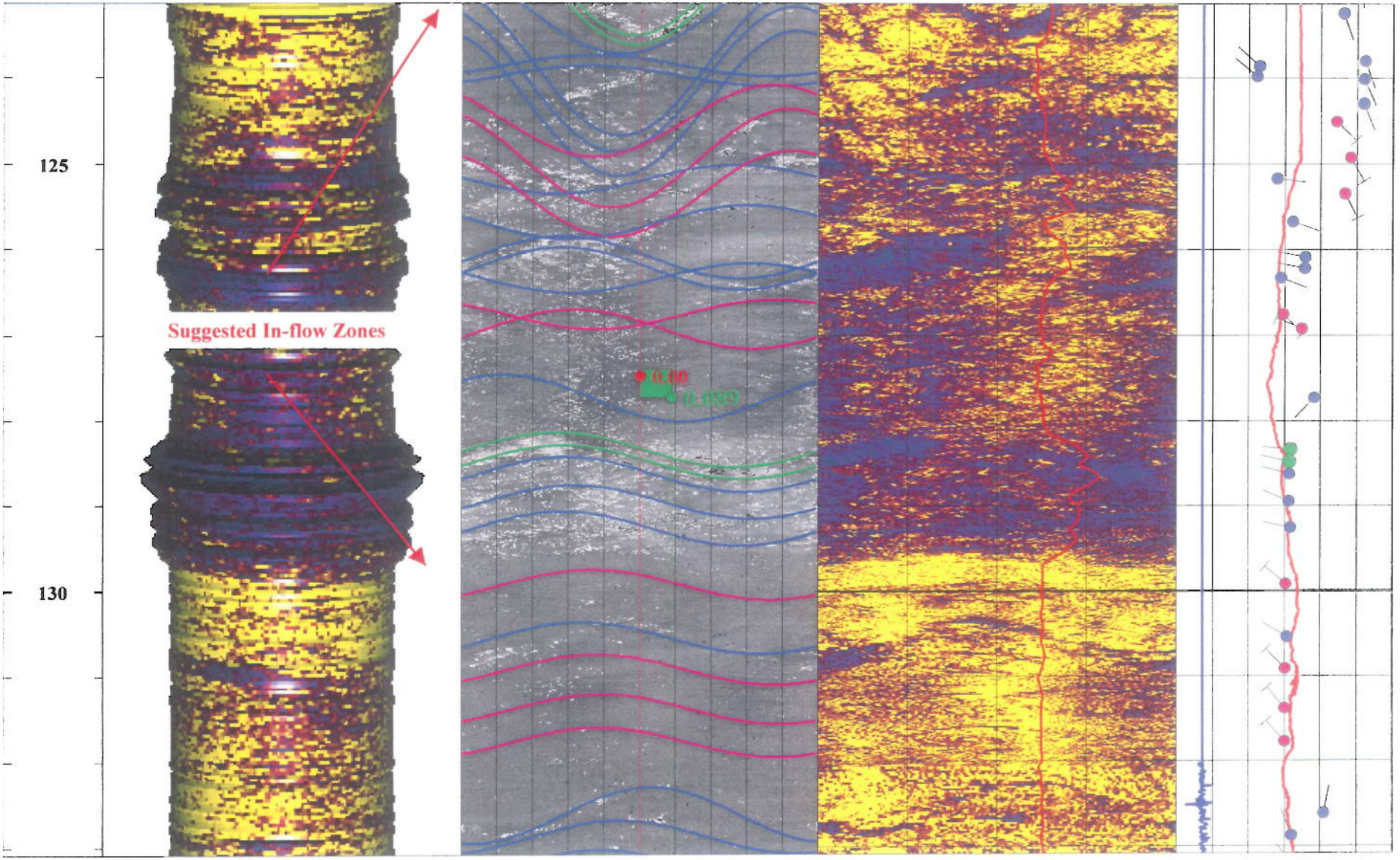
Hager GeoScience Inc.

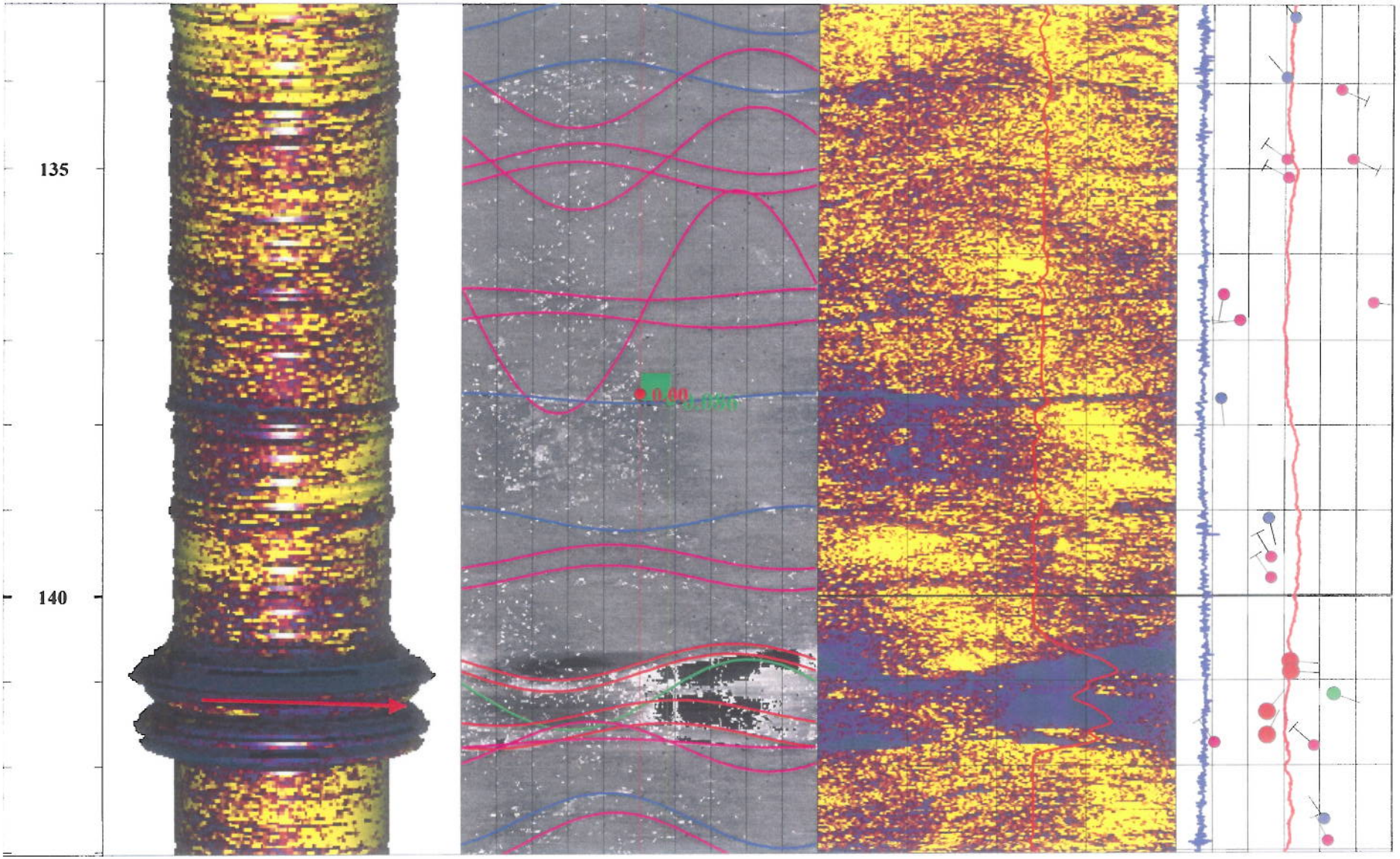
Geophysical Logging Record:
Image, Structure, HPFM, & Caliper Logs

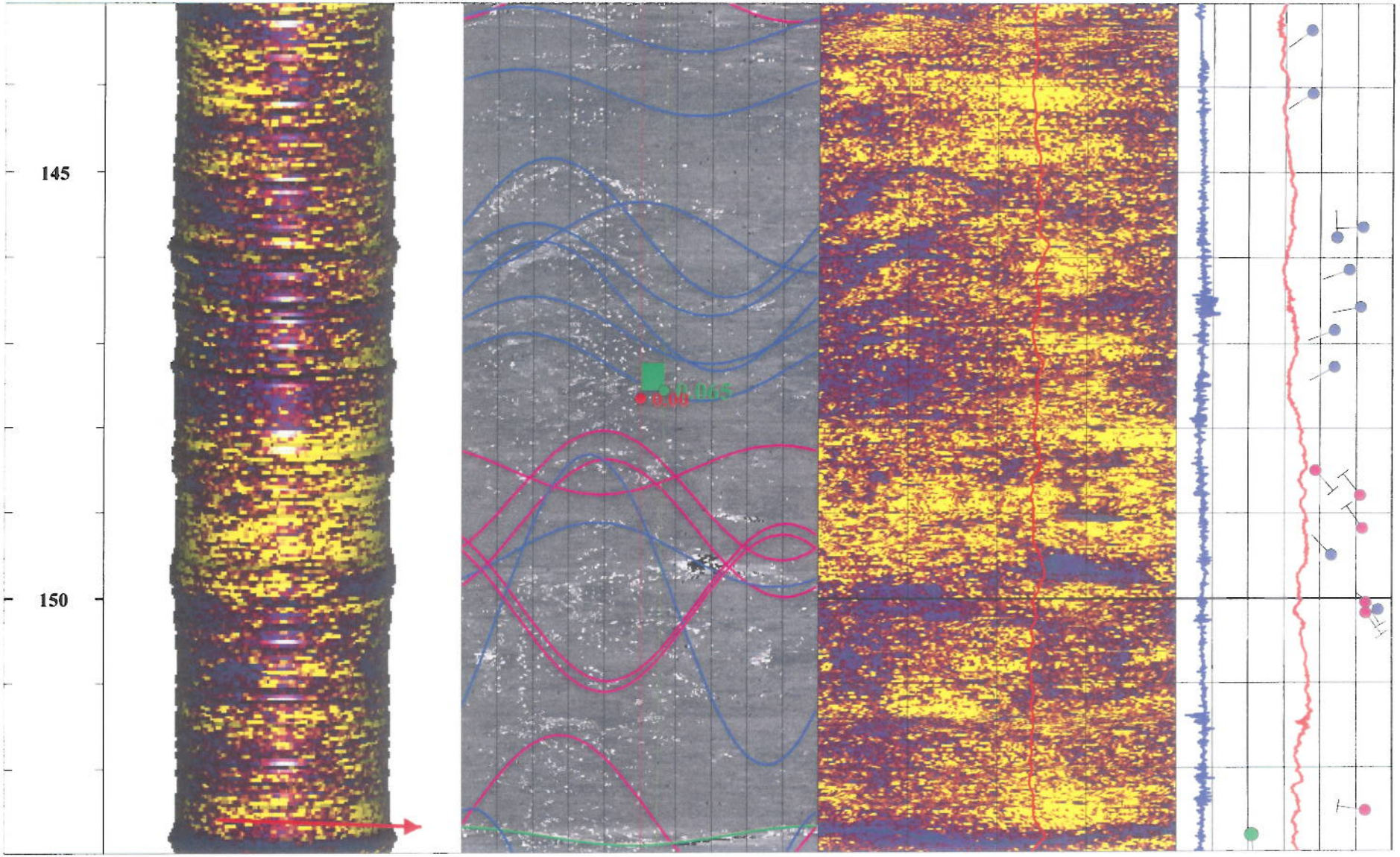
Site: Charbert	Client: GZA	Boring #: GZAML-1
Location: Alton, RI	Logged By: MC, JB	Date Logged: 12-08-06

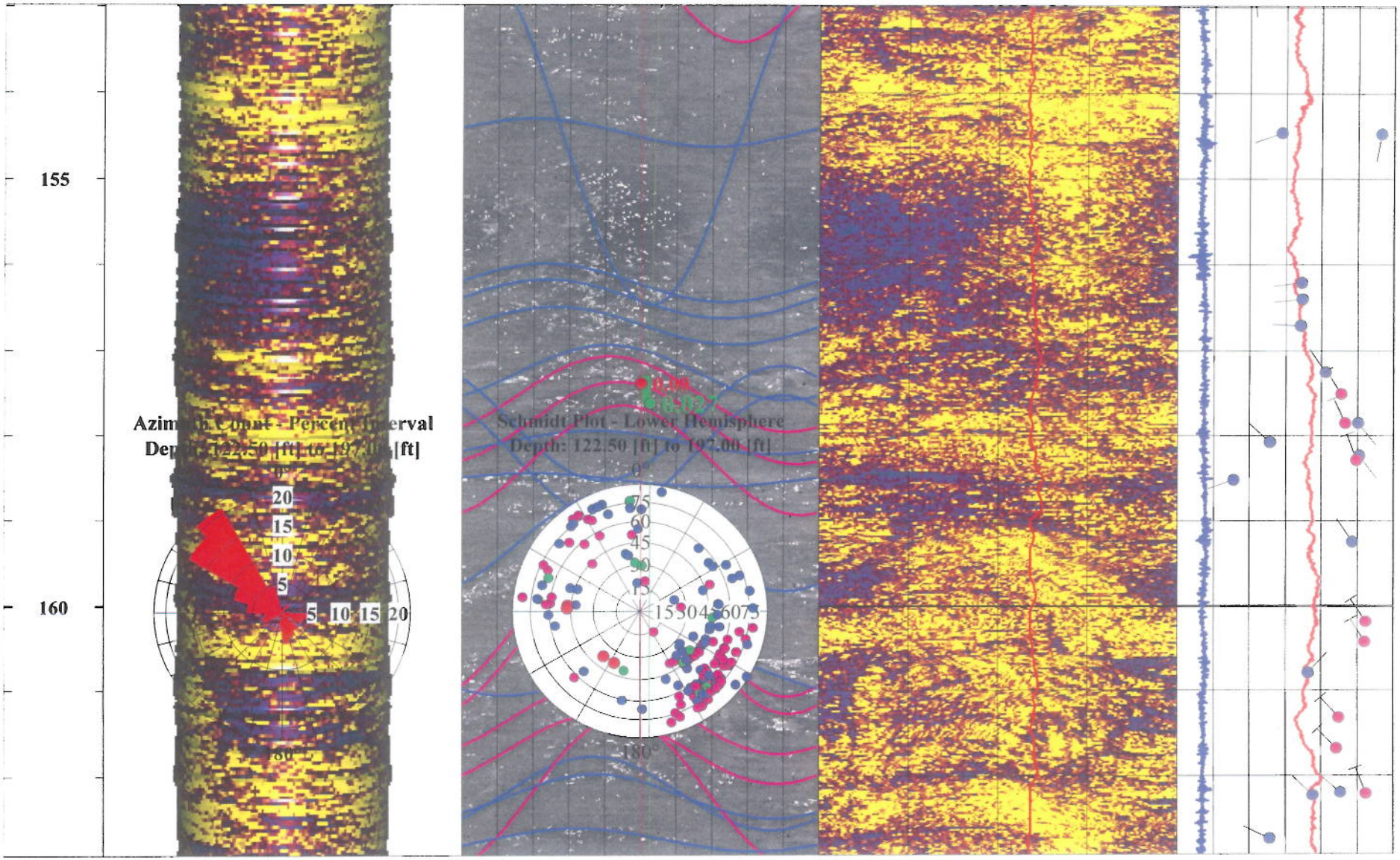


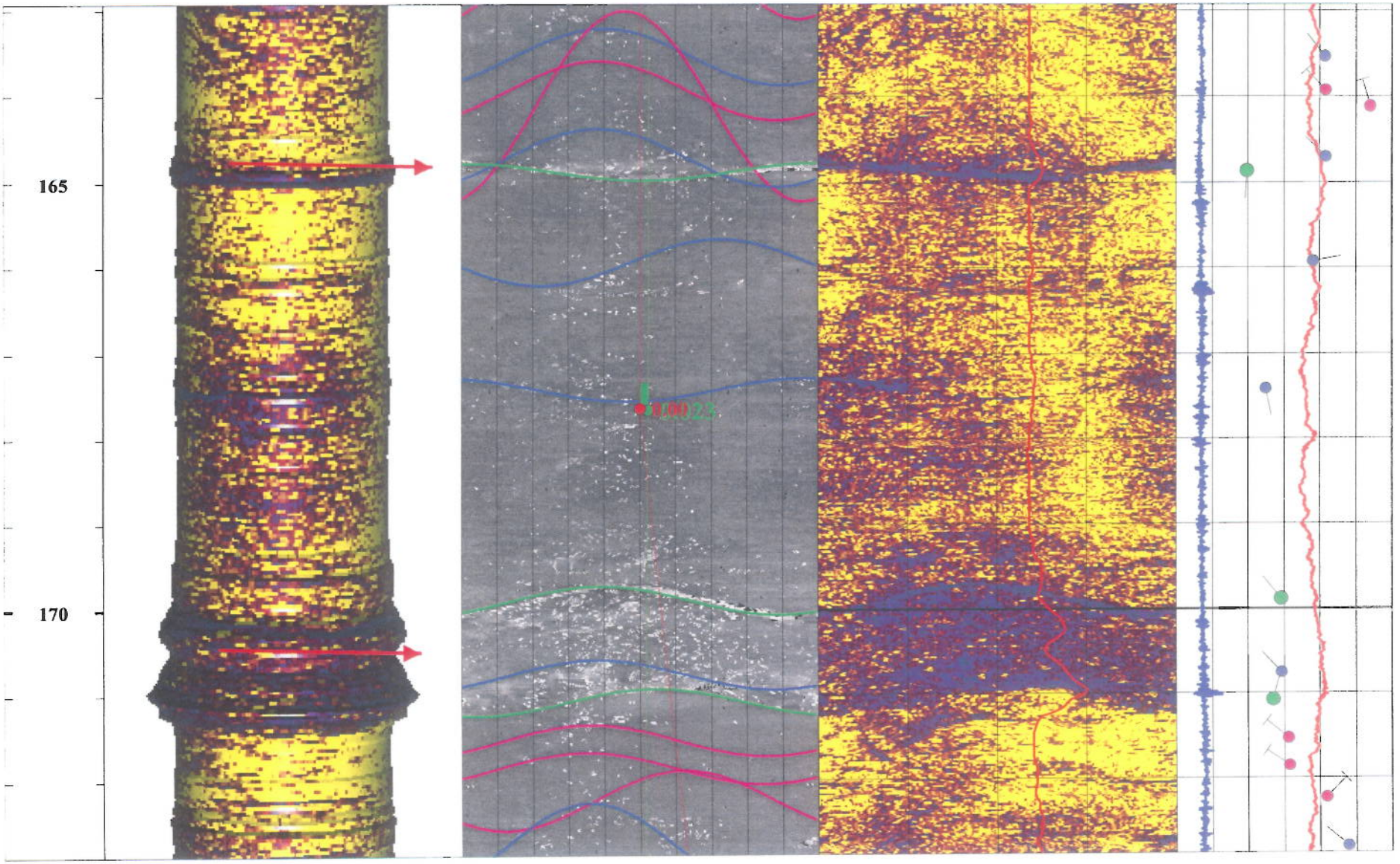

115
120
Structural Code
Wide
Moderate
Small
Fabric
Tight
0.00
Casing Adj. = -2.3333 ft
Casing

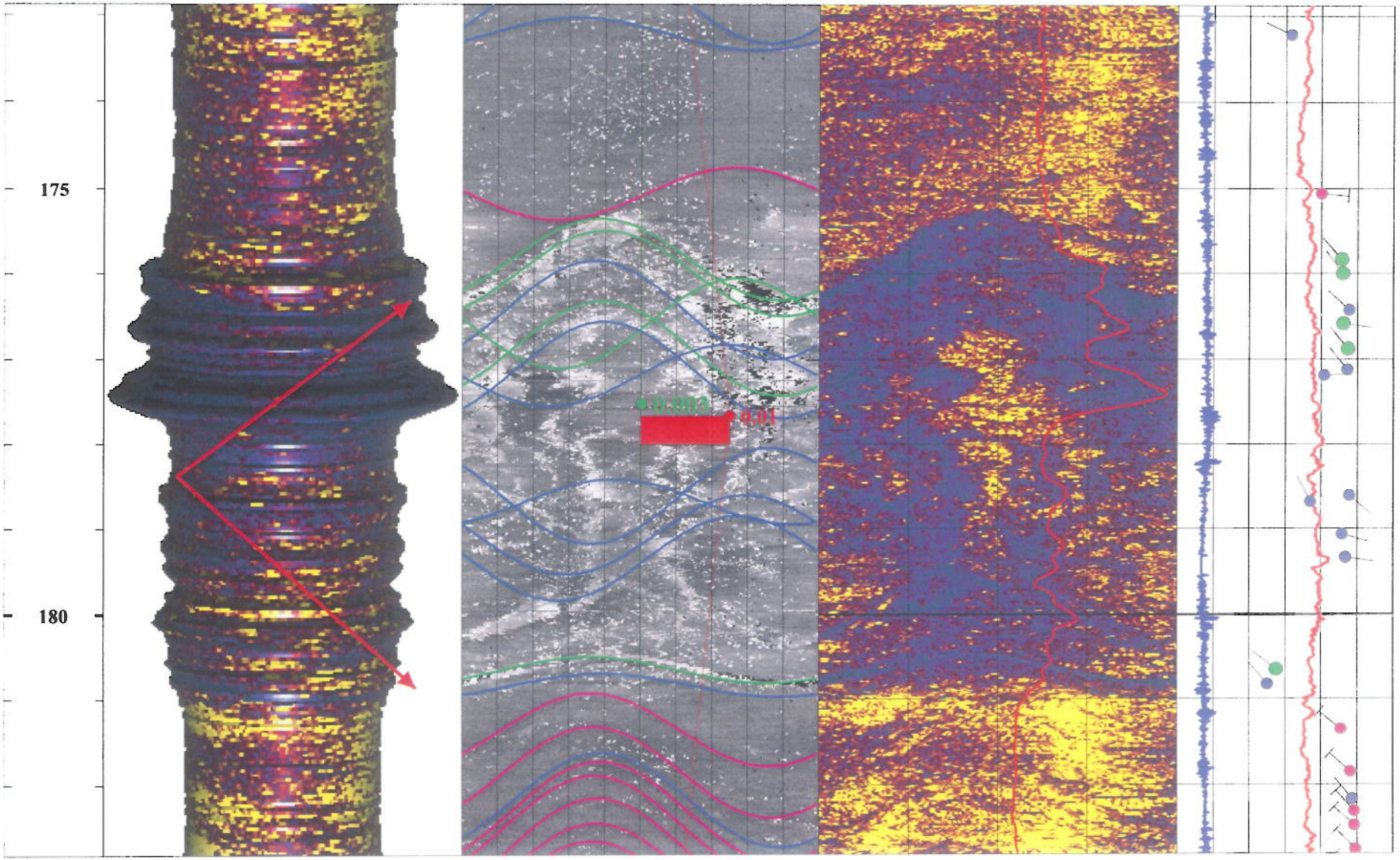

125
130
Suggested In-flow Zones
0.00
0.089

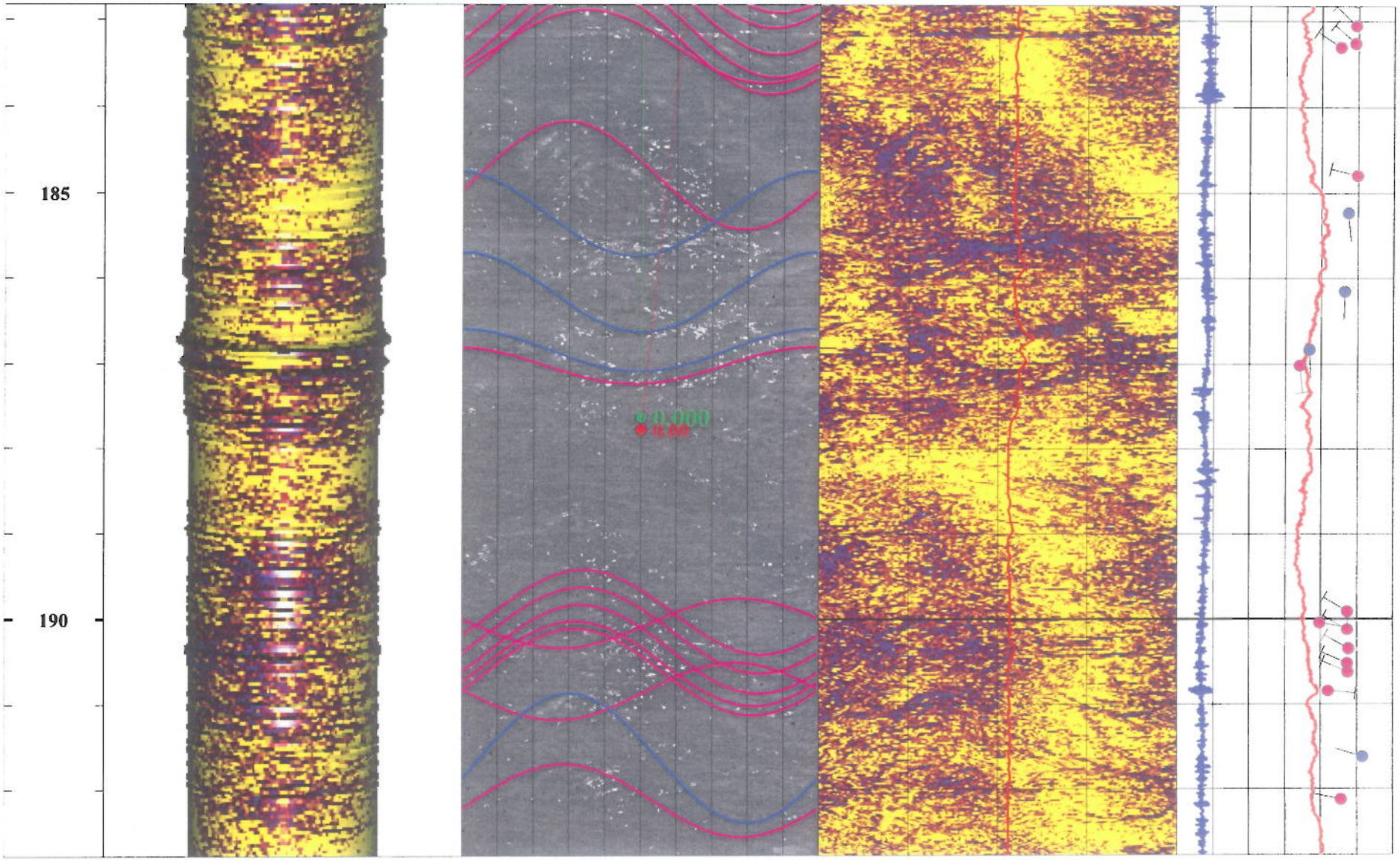

135
140

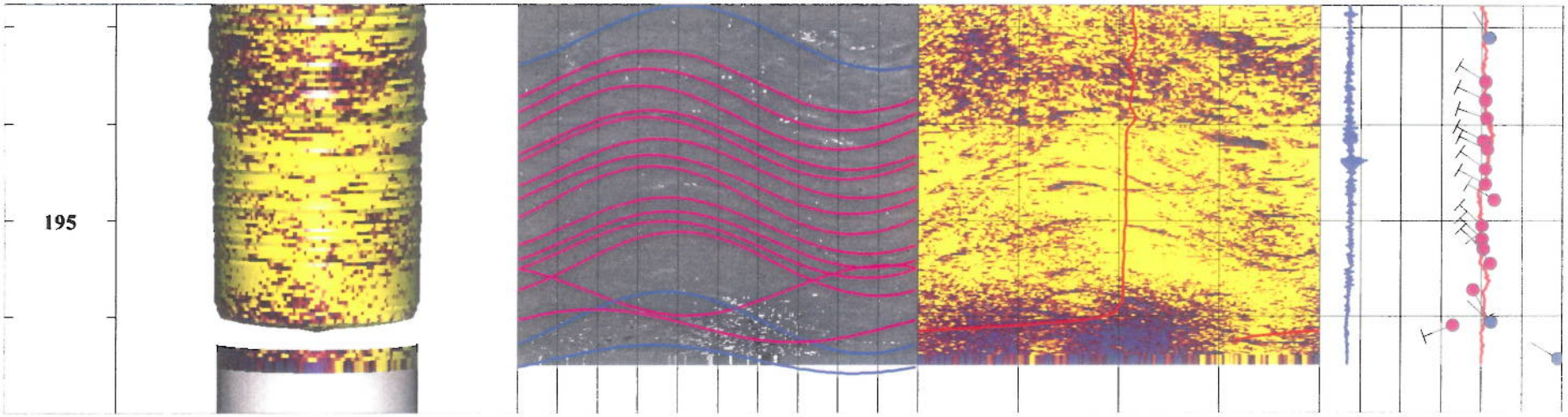

145
150
0.065
0.00


155
160
Azimuth Count - Percent Interval
Depth: 122.50 [ft] to 197.00 [ft]
0°
20
15
10
5
5 10 15 20
180°
Schmidt Plot - Lower Hemisphere
Depth: 122.50 [ft] to 197.00 [ft]
0°
75
60
45
30
15
15 30 45 60 75
180°


165
170


175
180
0.003
0.01


185
190
0.000
0.00

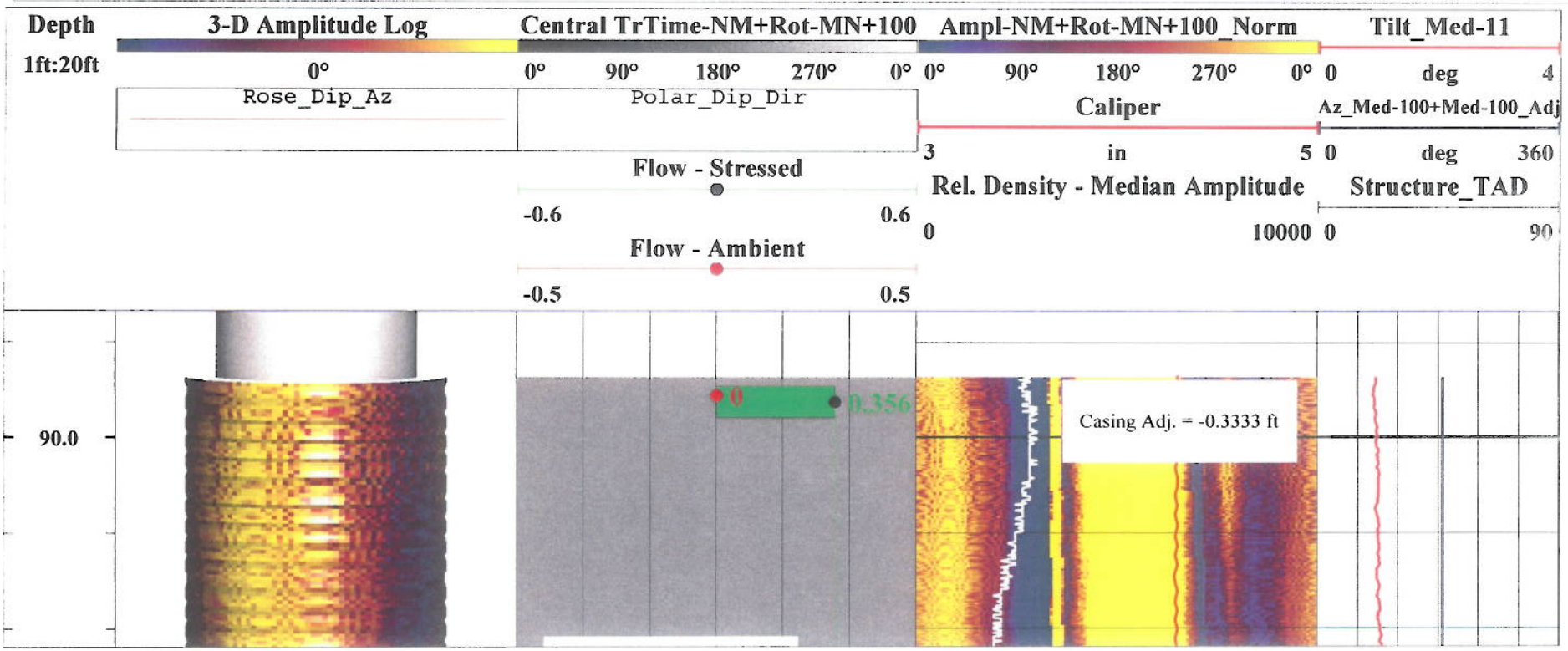

195

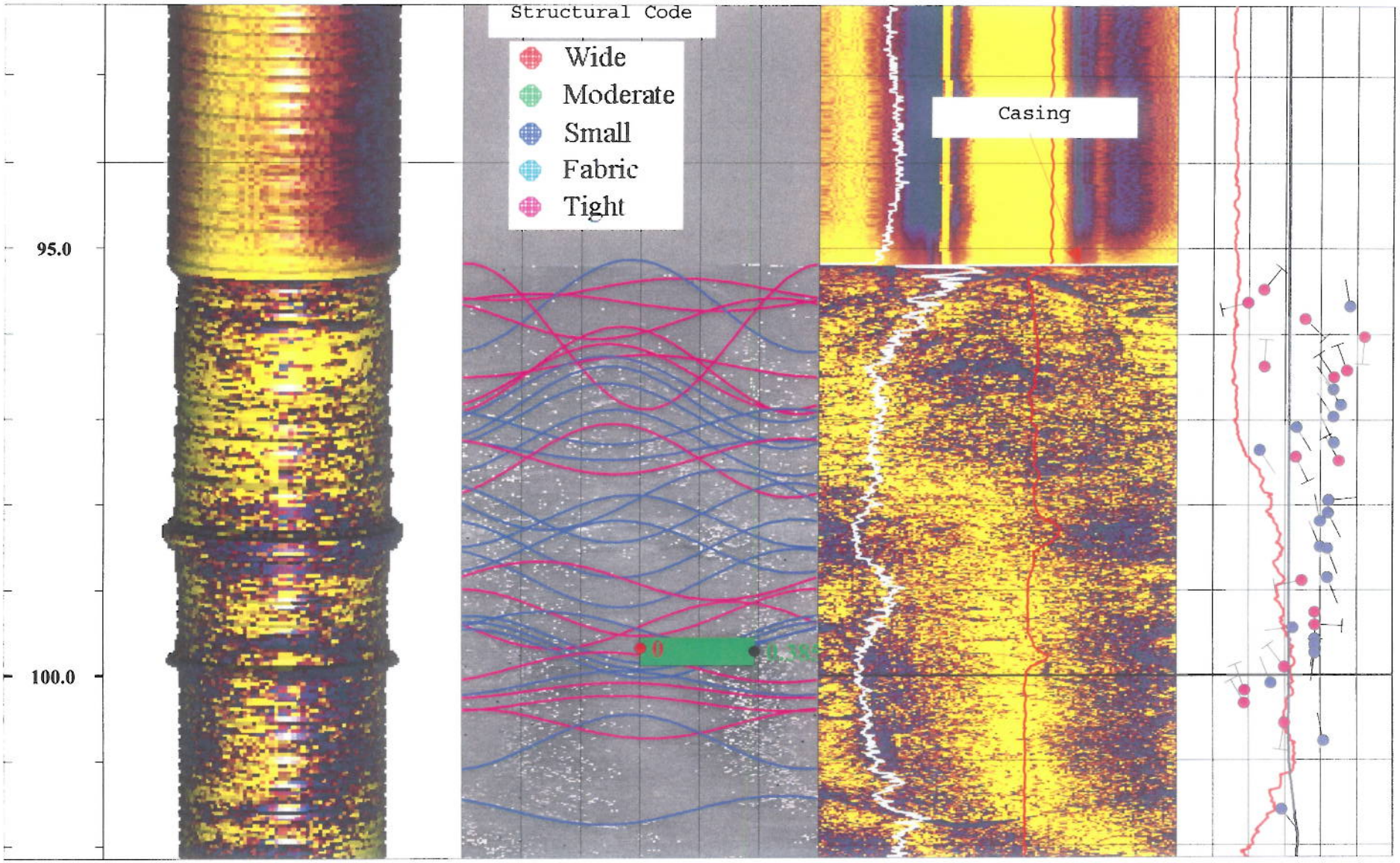
Hager GeoScience Inc.

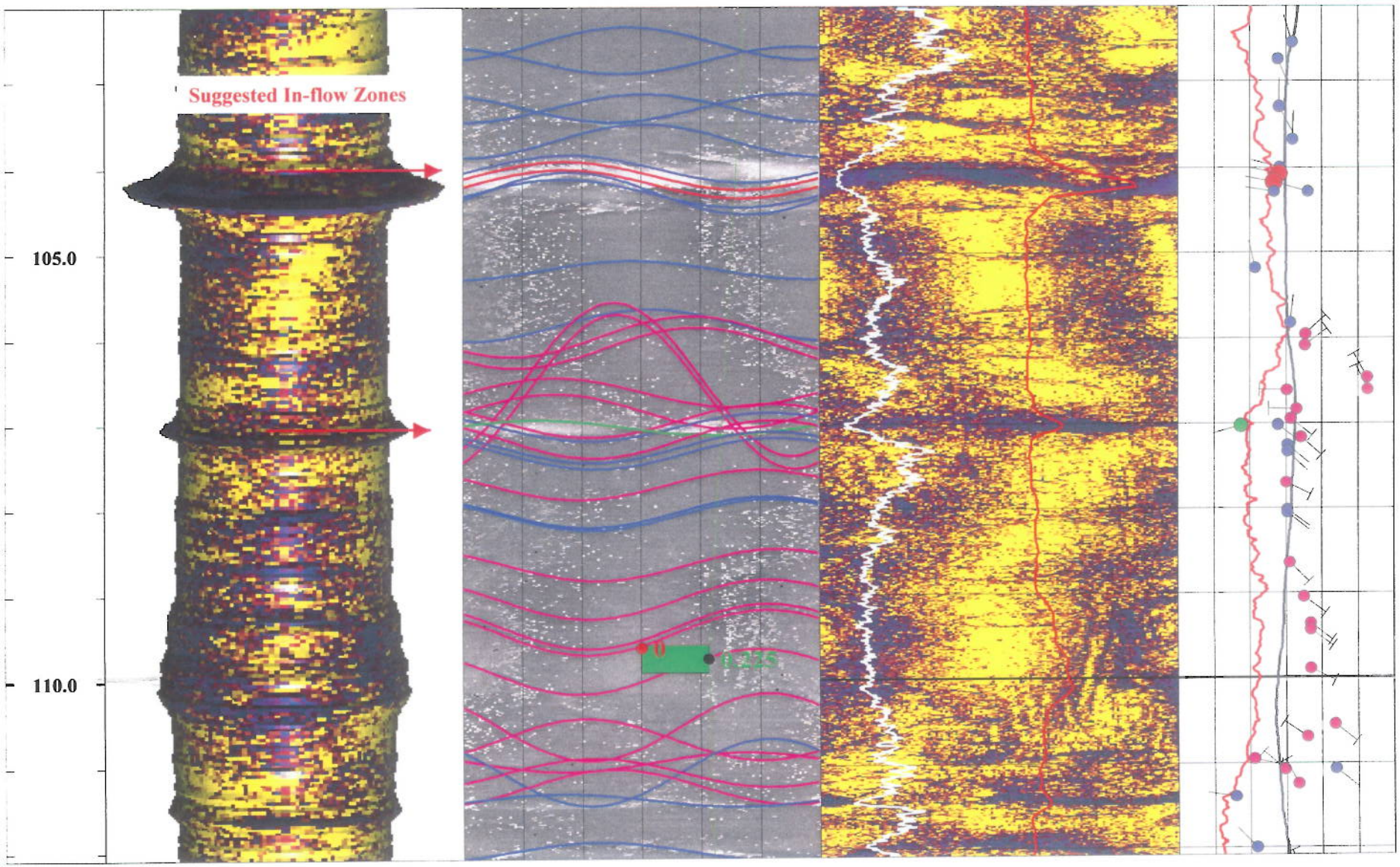
Geophysical Logging Record:

Caliper, Image, HPFM, & Structure Logs

Site: Charbert	Client: GZA	Boring #: GZAML-2A
Location: Alton, RI	Logged By: MC, JB	Date Logged: 12-07-06




Structural Code
Wide
Moderate
Small
Fabric
Tight
Casing
95.0
100.0


Suggested In-flow Zones
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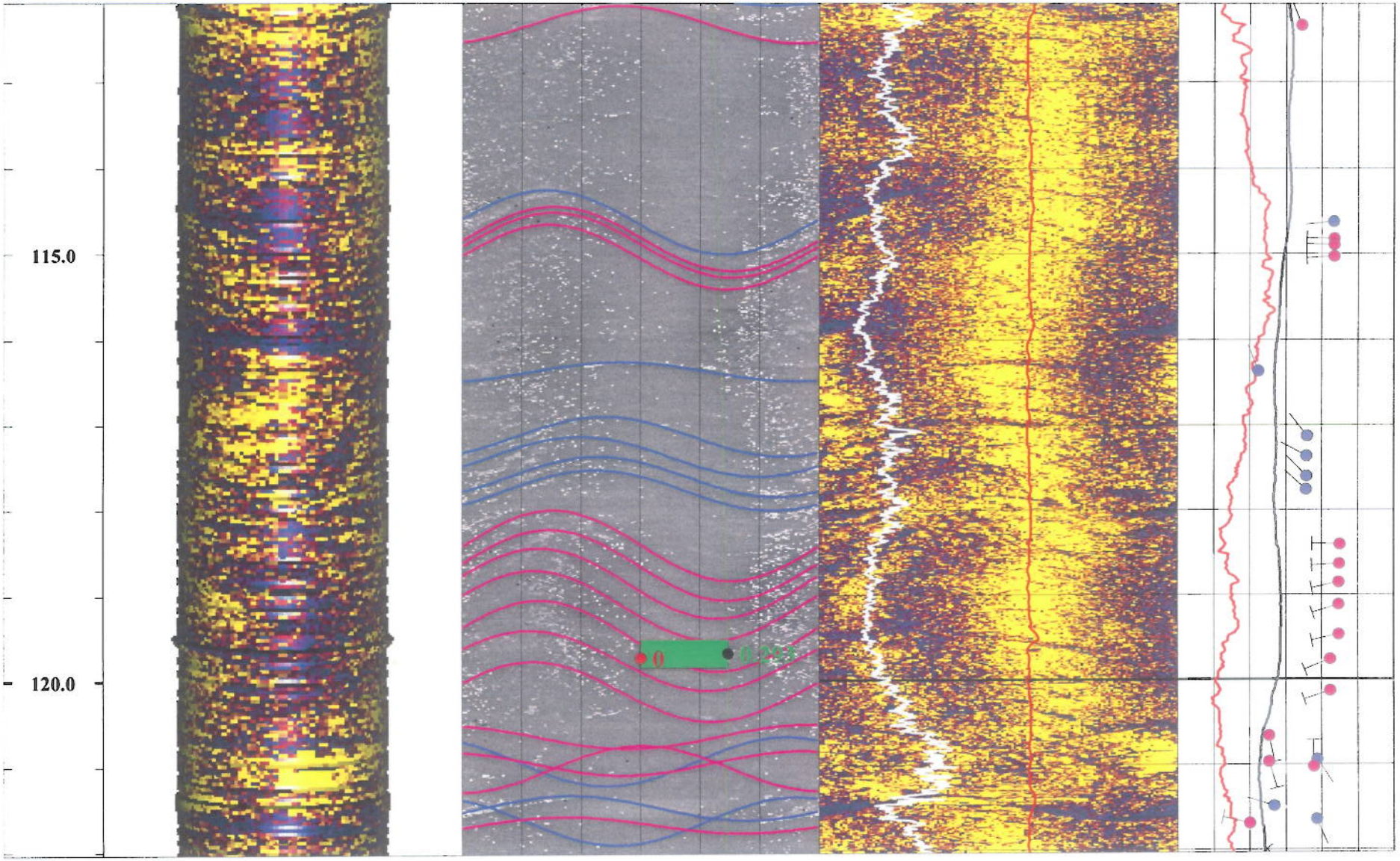
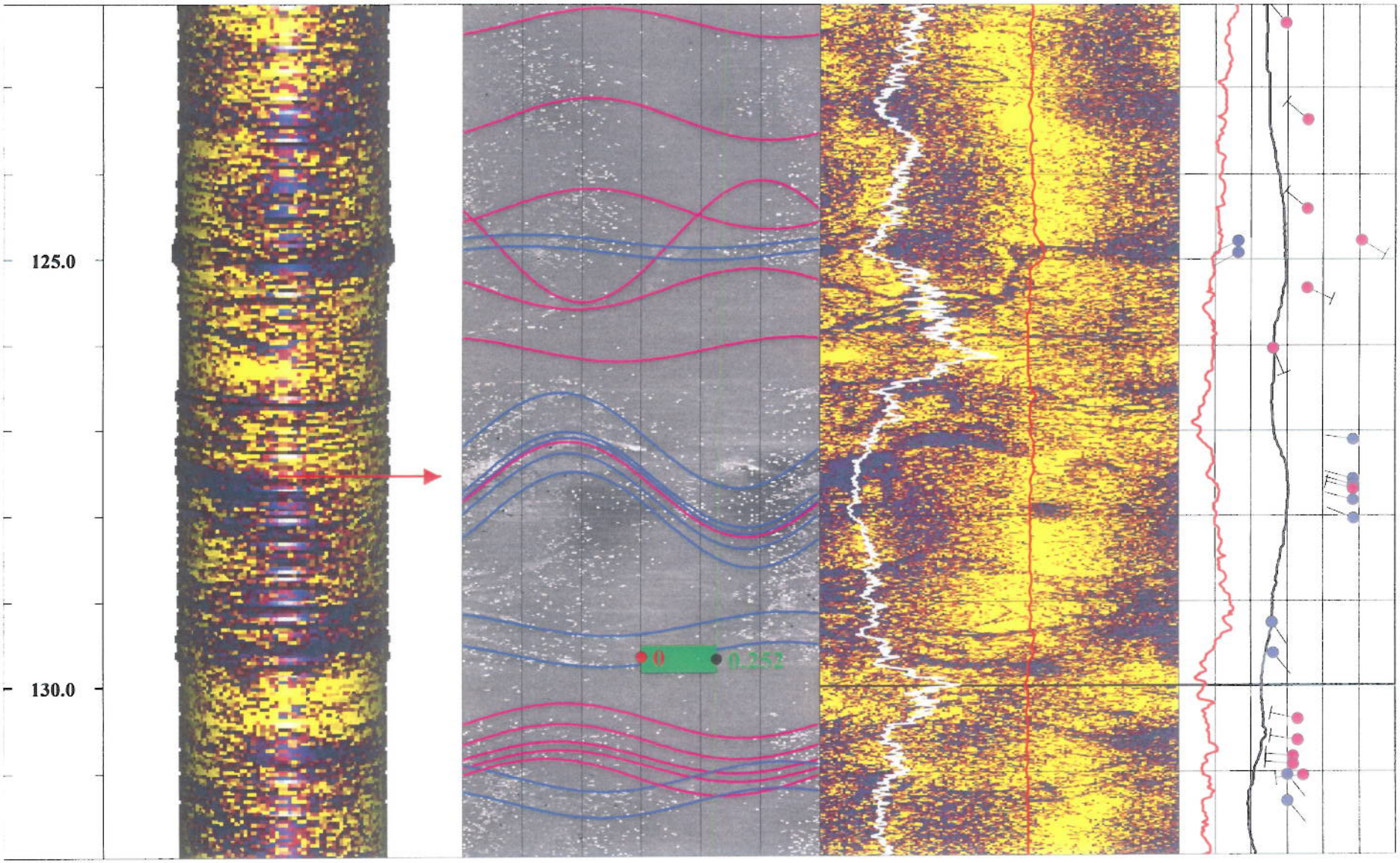
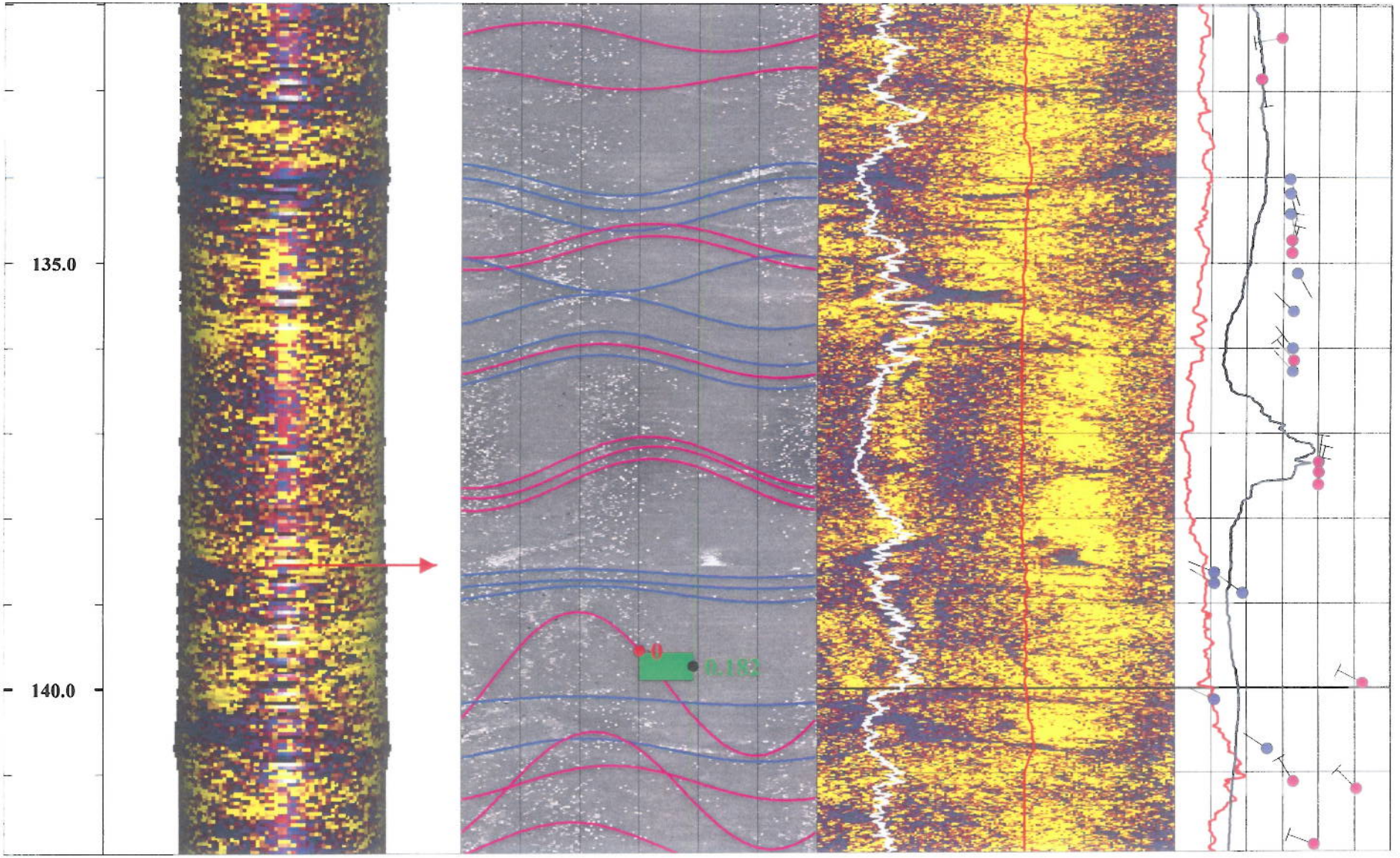
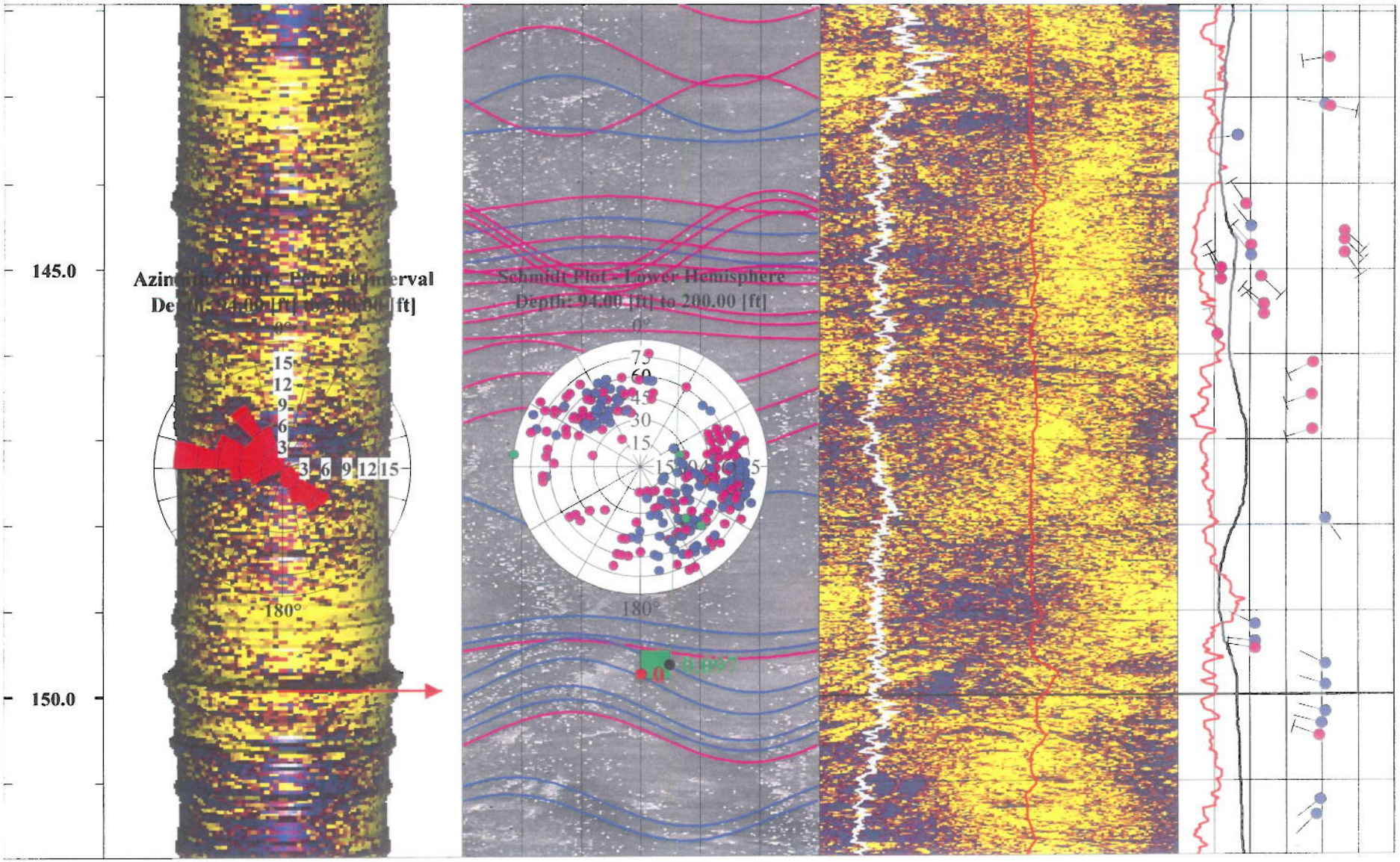
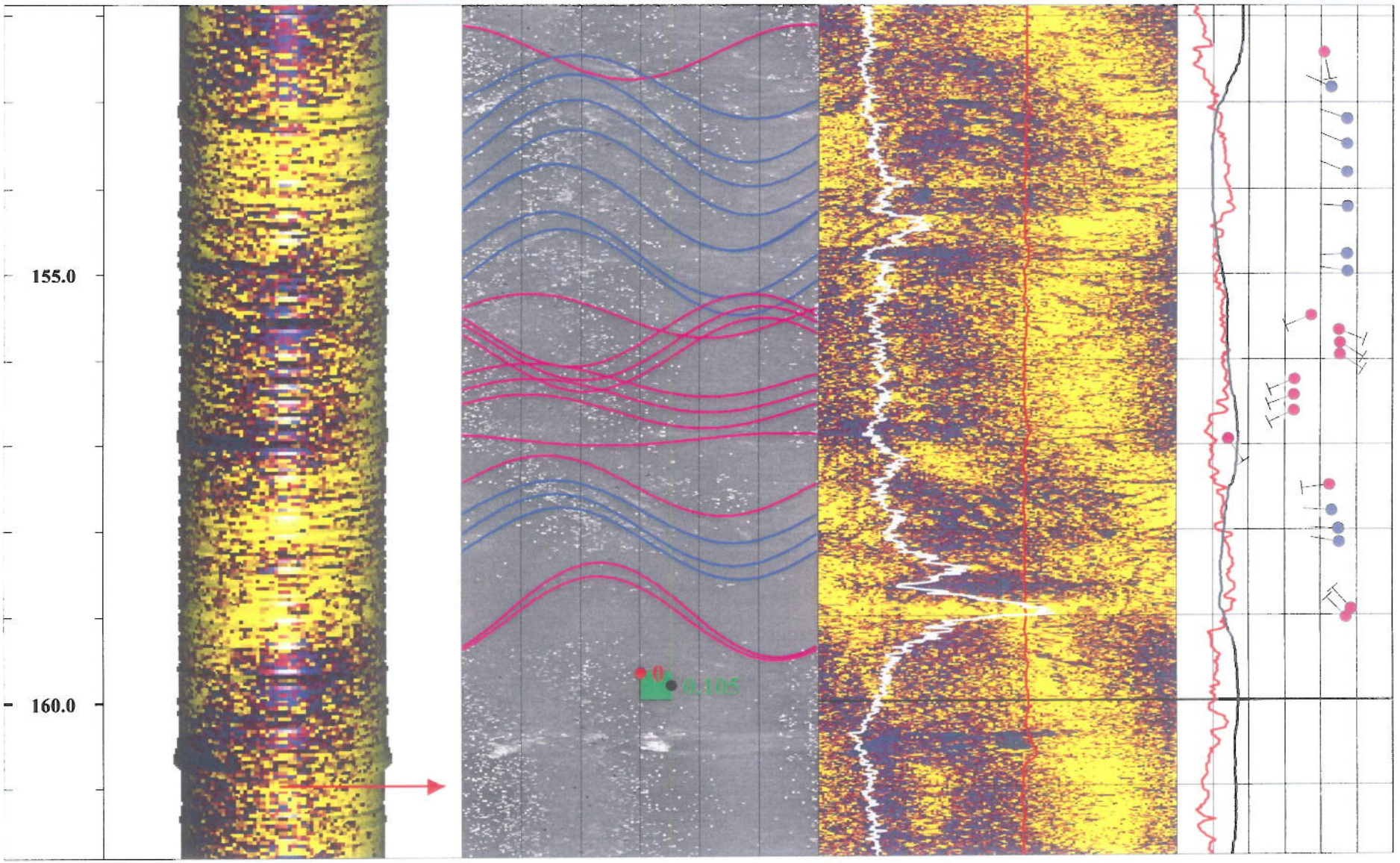
110.0
0
0.225


115.0
120.0


125.0
130.0
0
0.252


135.0
140.0
0
0.152


145.0
150.0
Schmidt Plot - Lower Hemisphere
Depth: 94.00 [ft] to 200.00 [ft]
0°
75
60
45
30
15
180°
0°
0.097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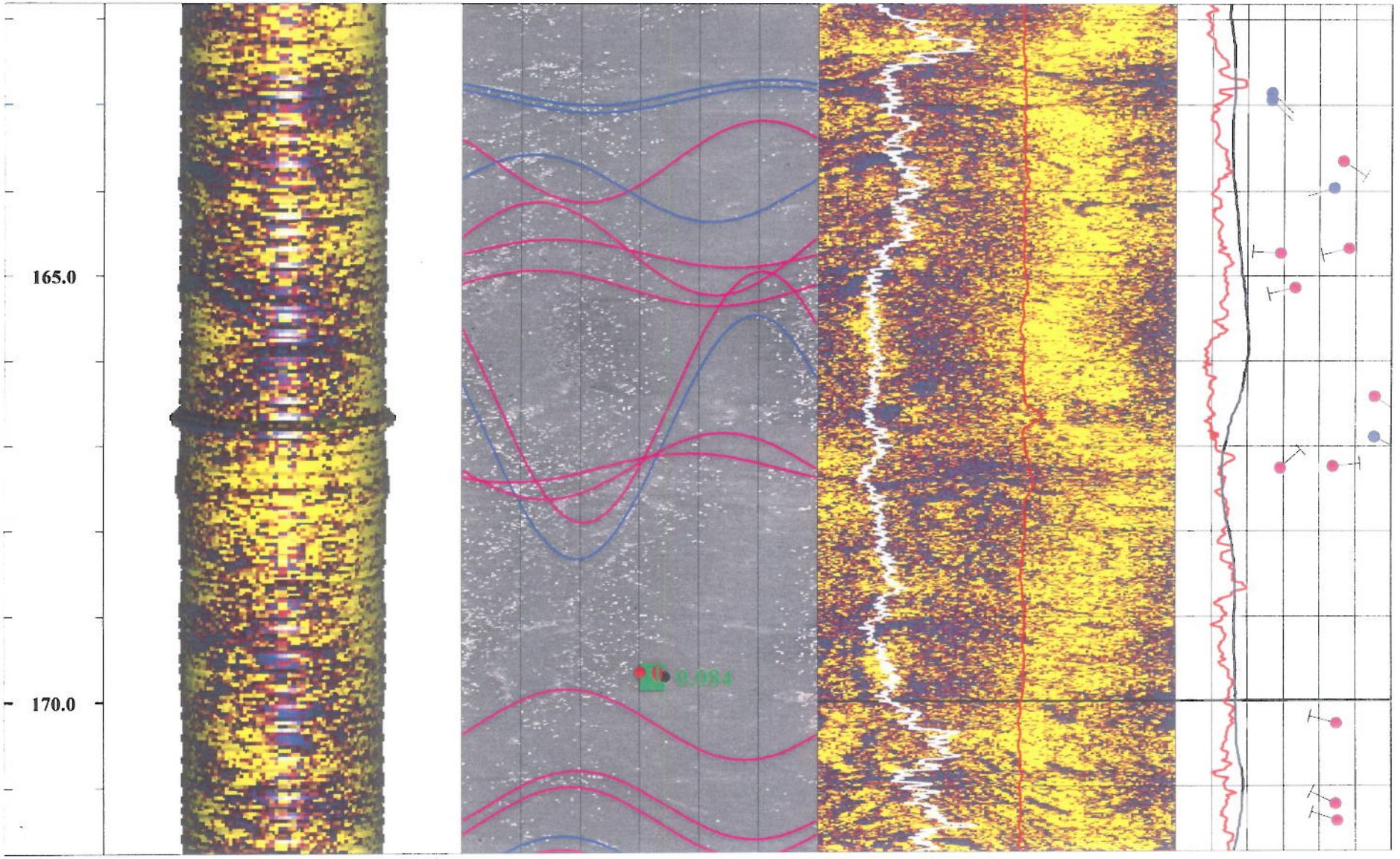
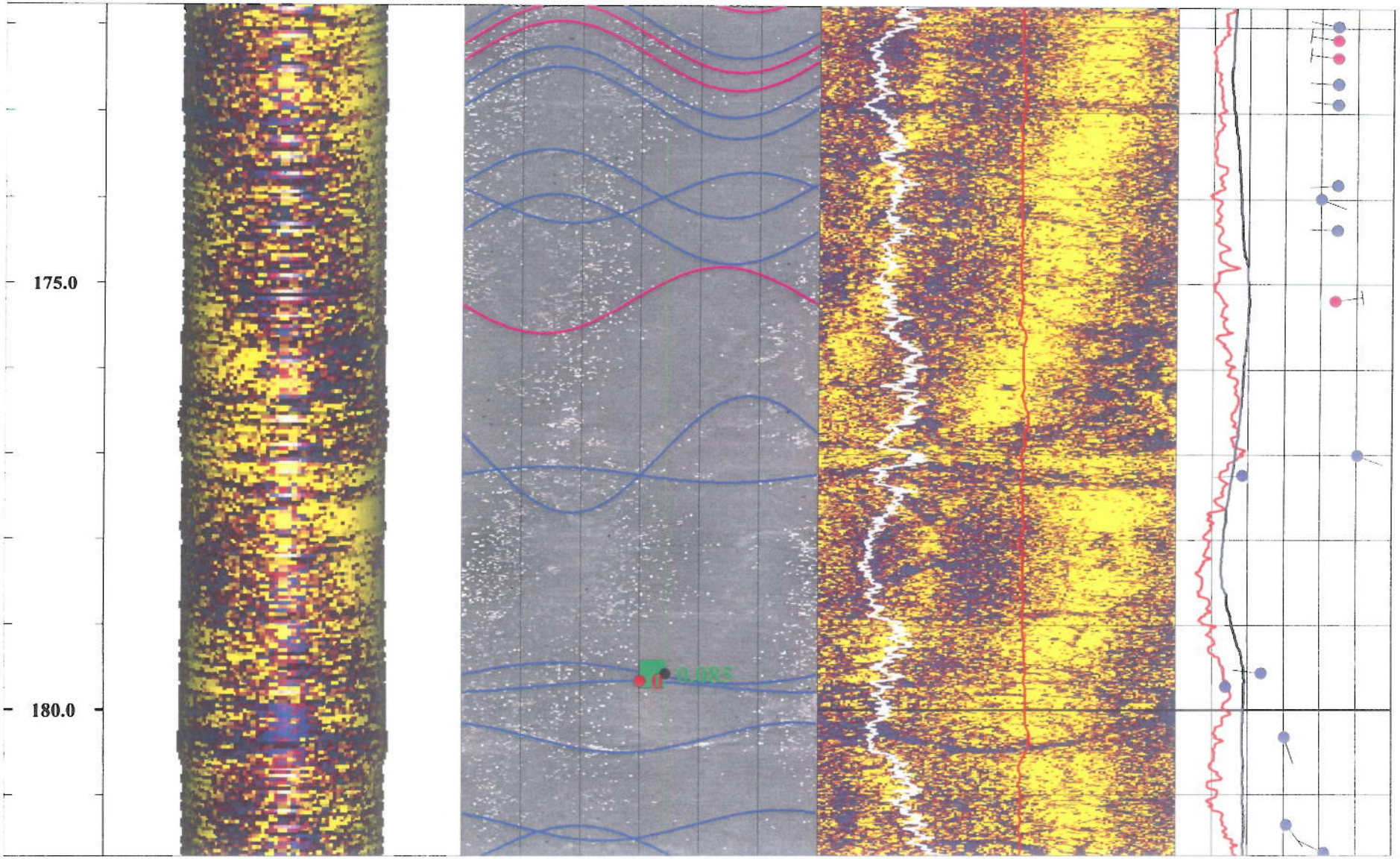
160.0
0
0.105


165.0
170.0
0.084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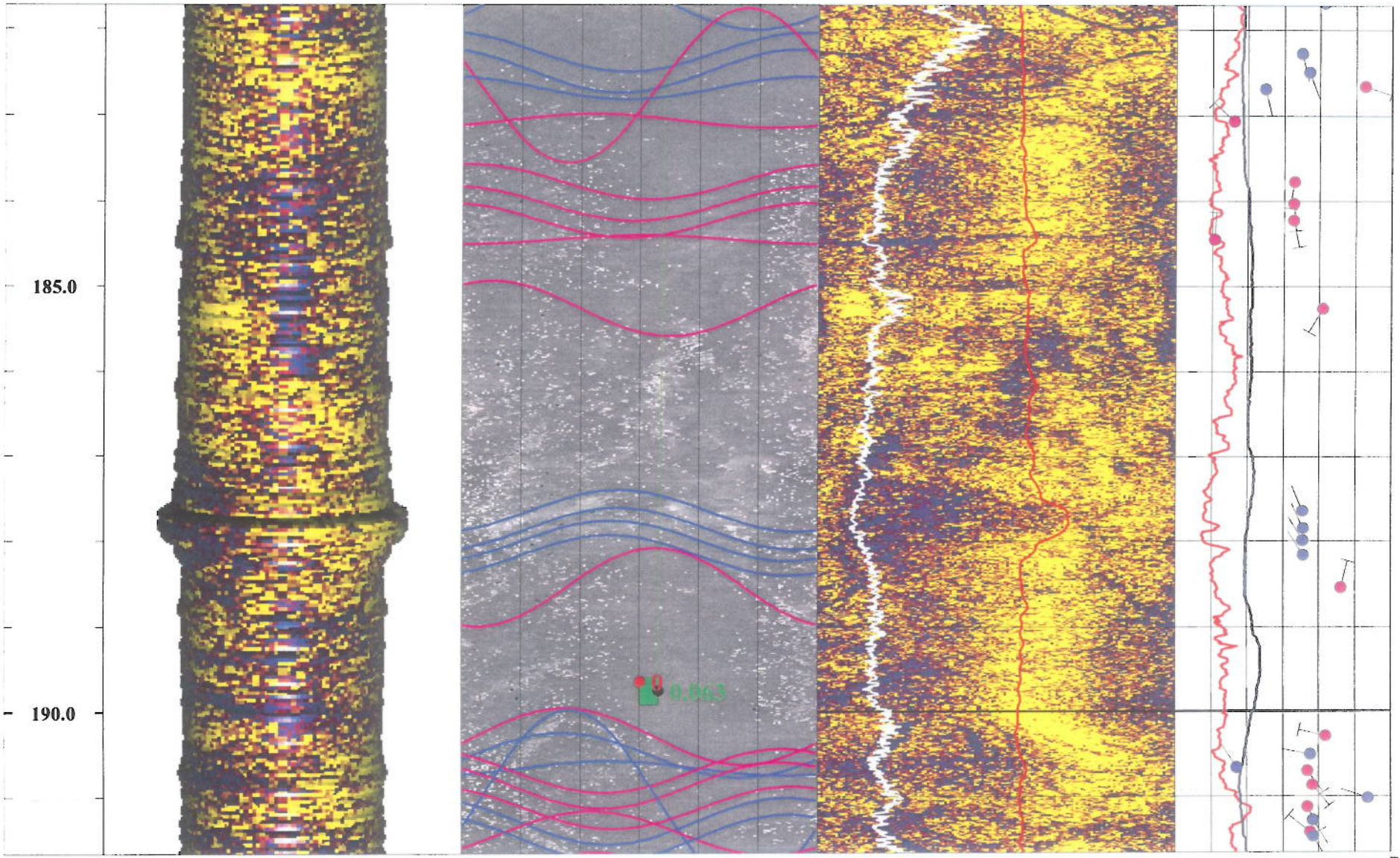
180.0
0.085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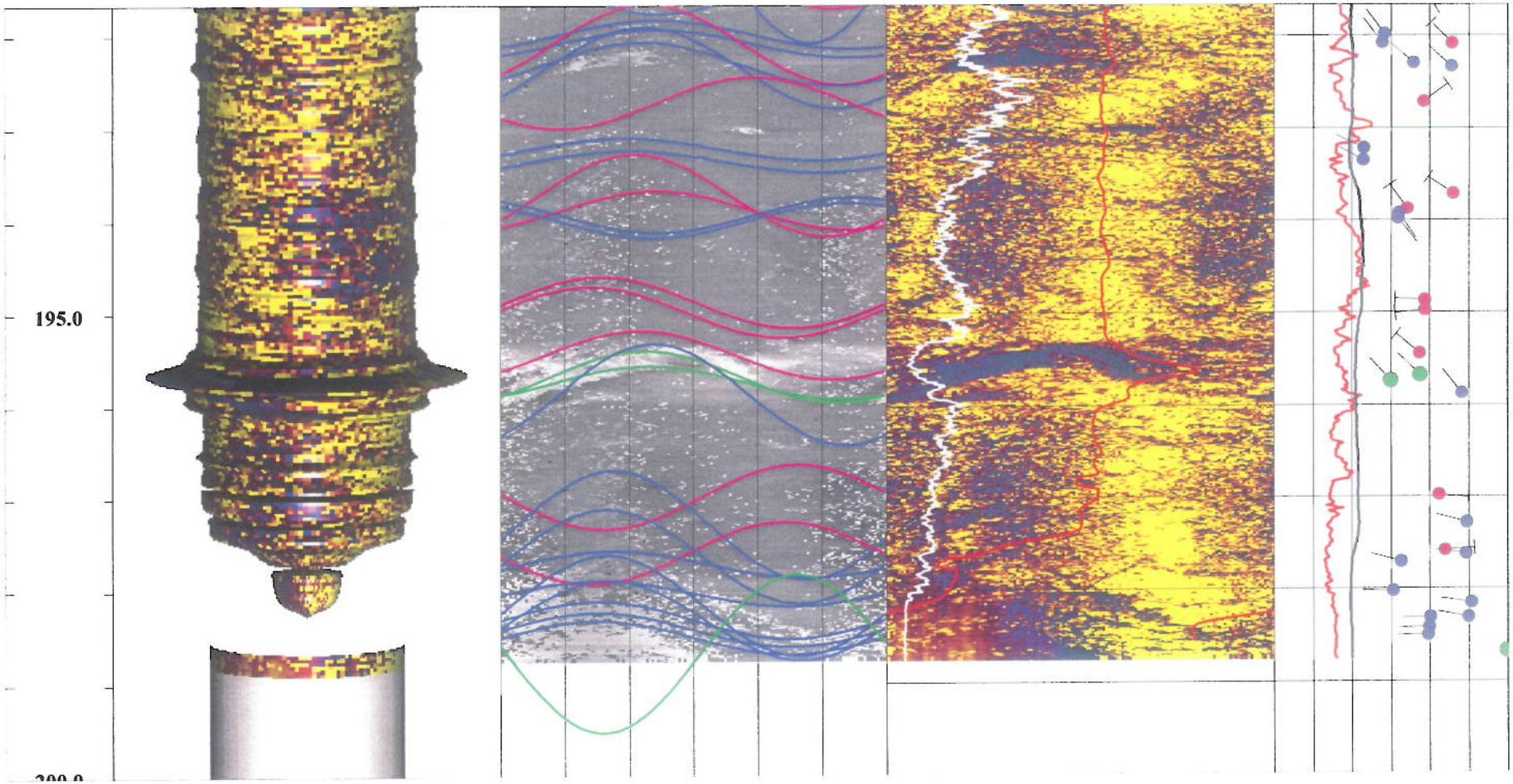
190.0
0.063


195.0

Hager GeoScience Inc.

Geophysical Logging Record:
Image, Structure, HPFM, & Caliper Logs

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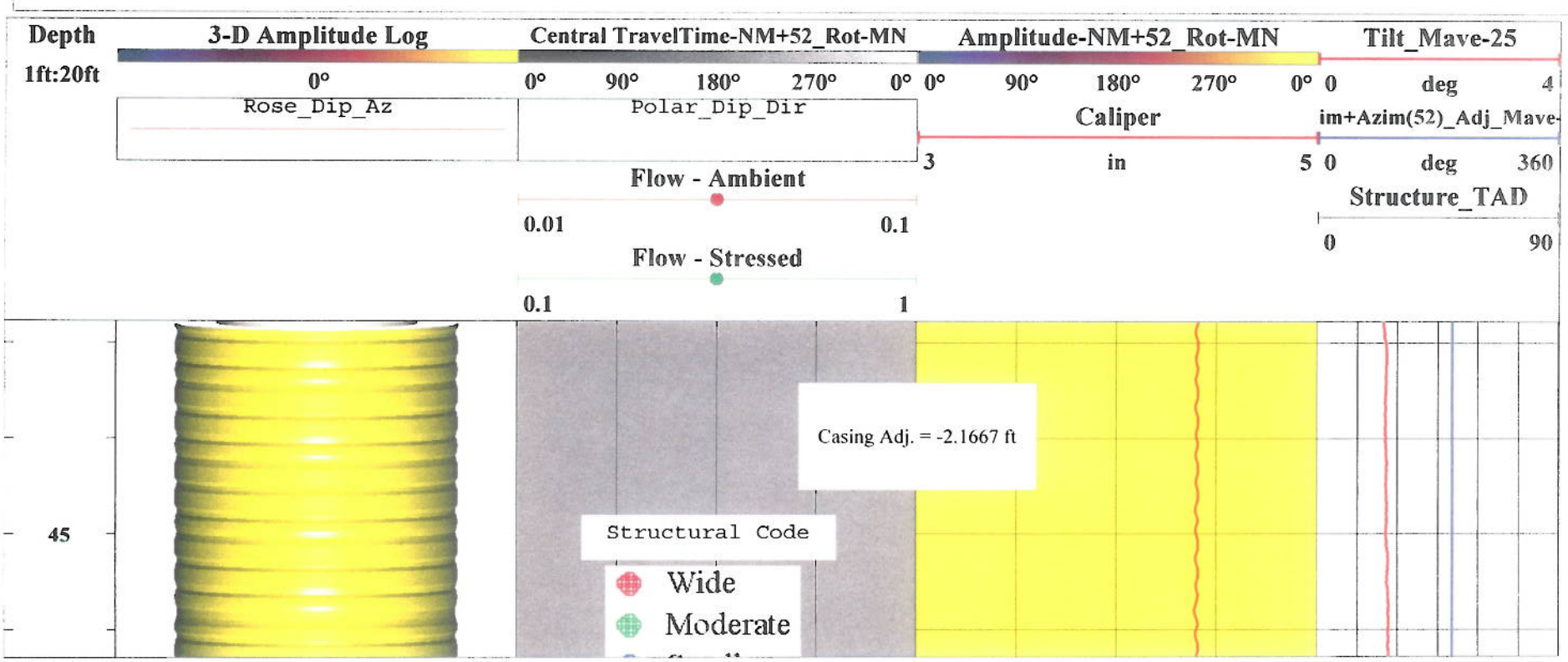
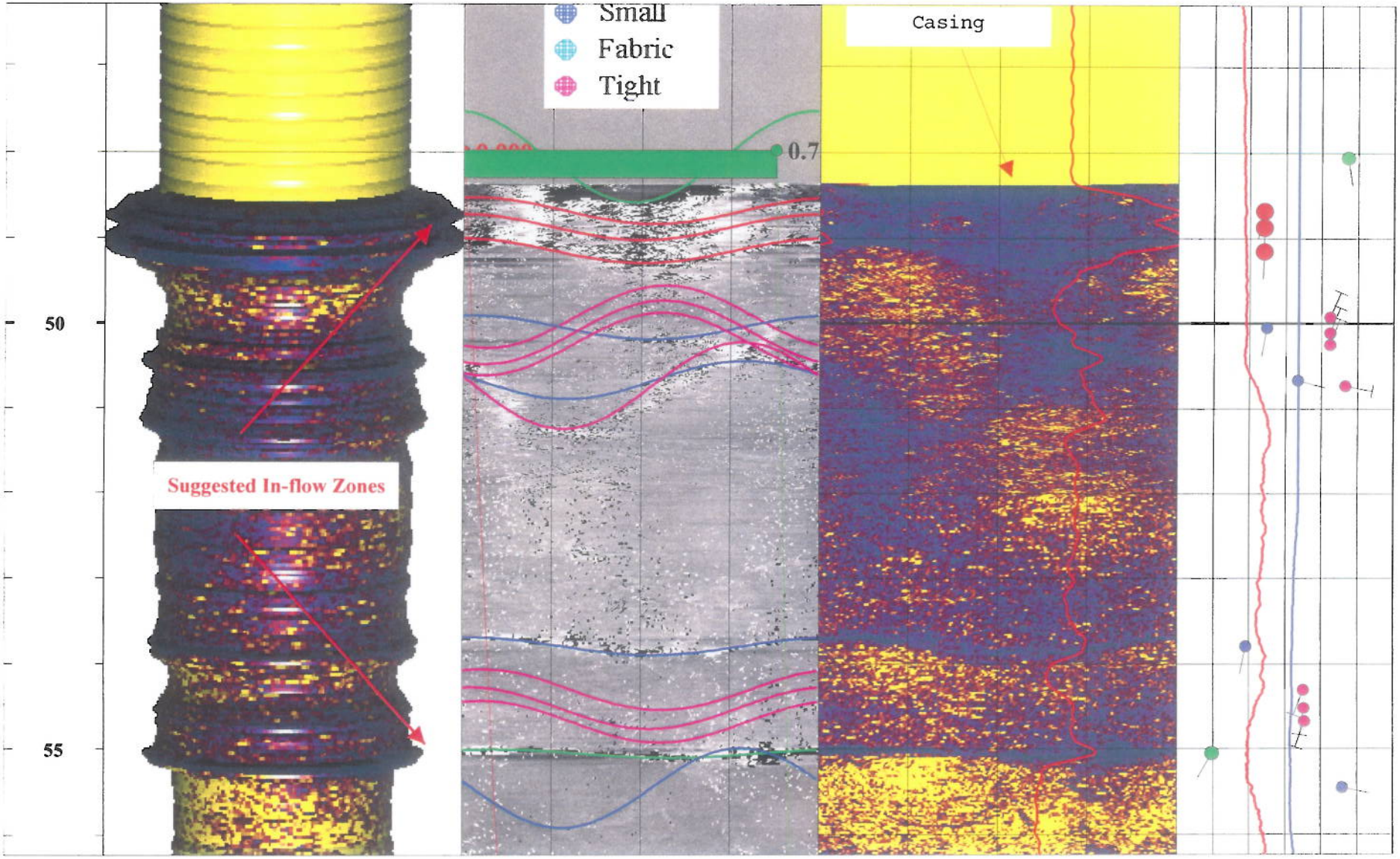
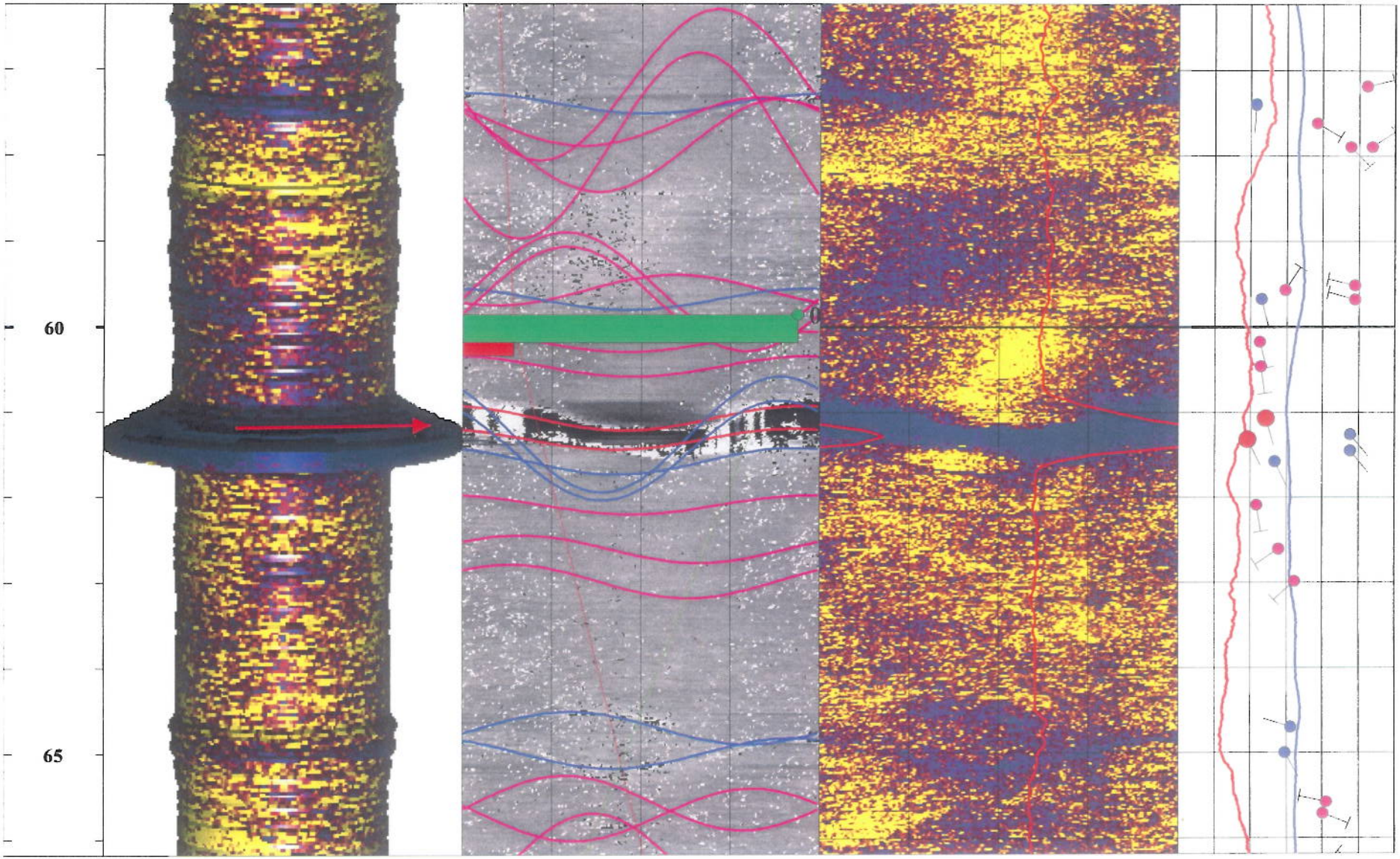
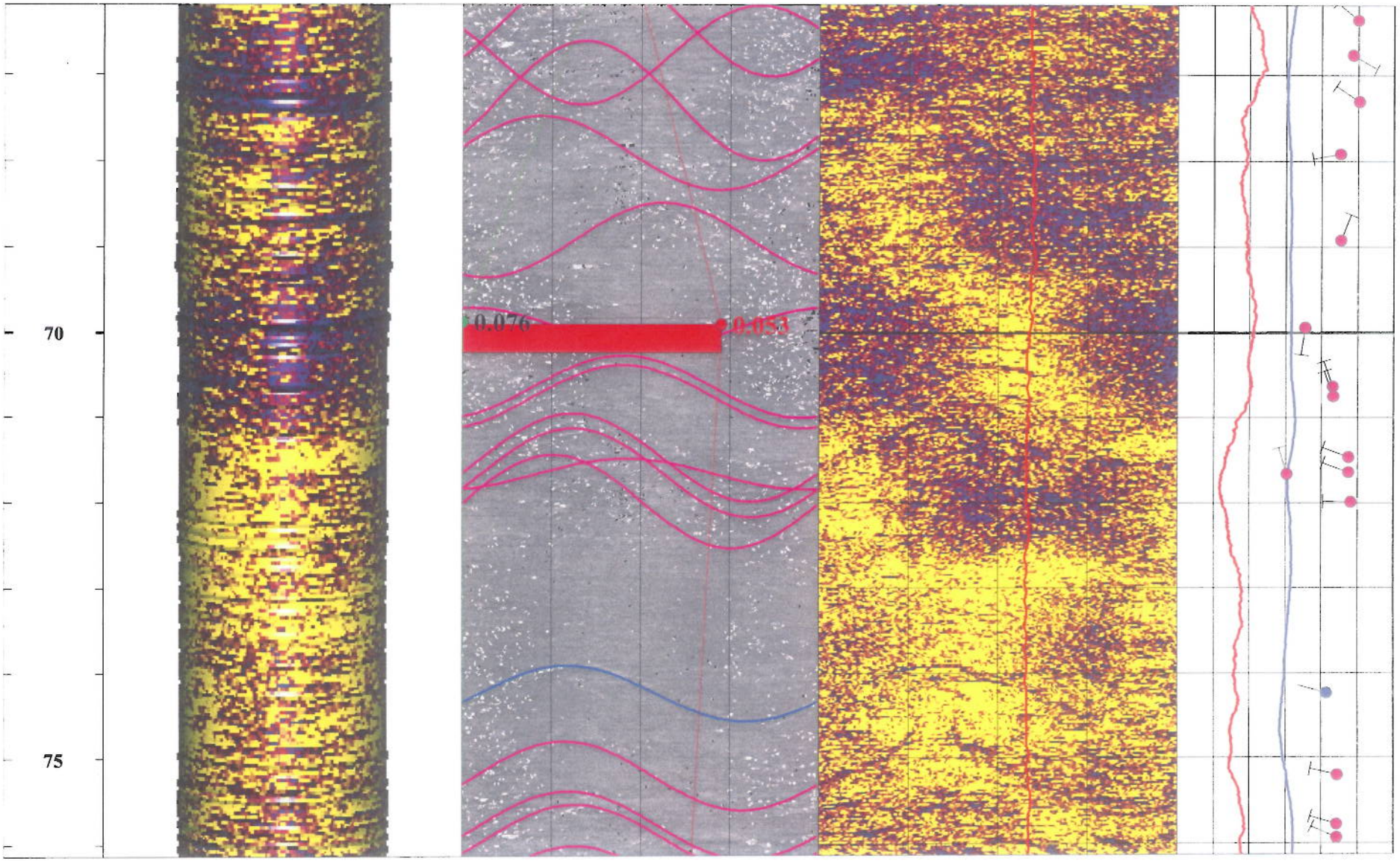
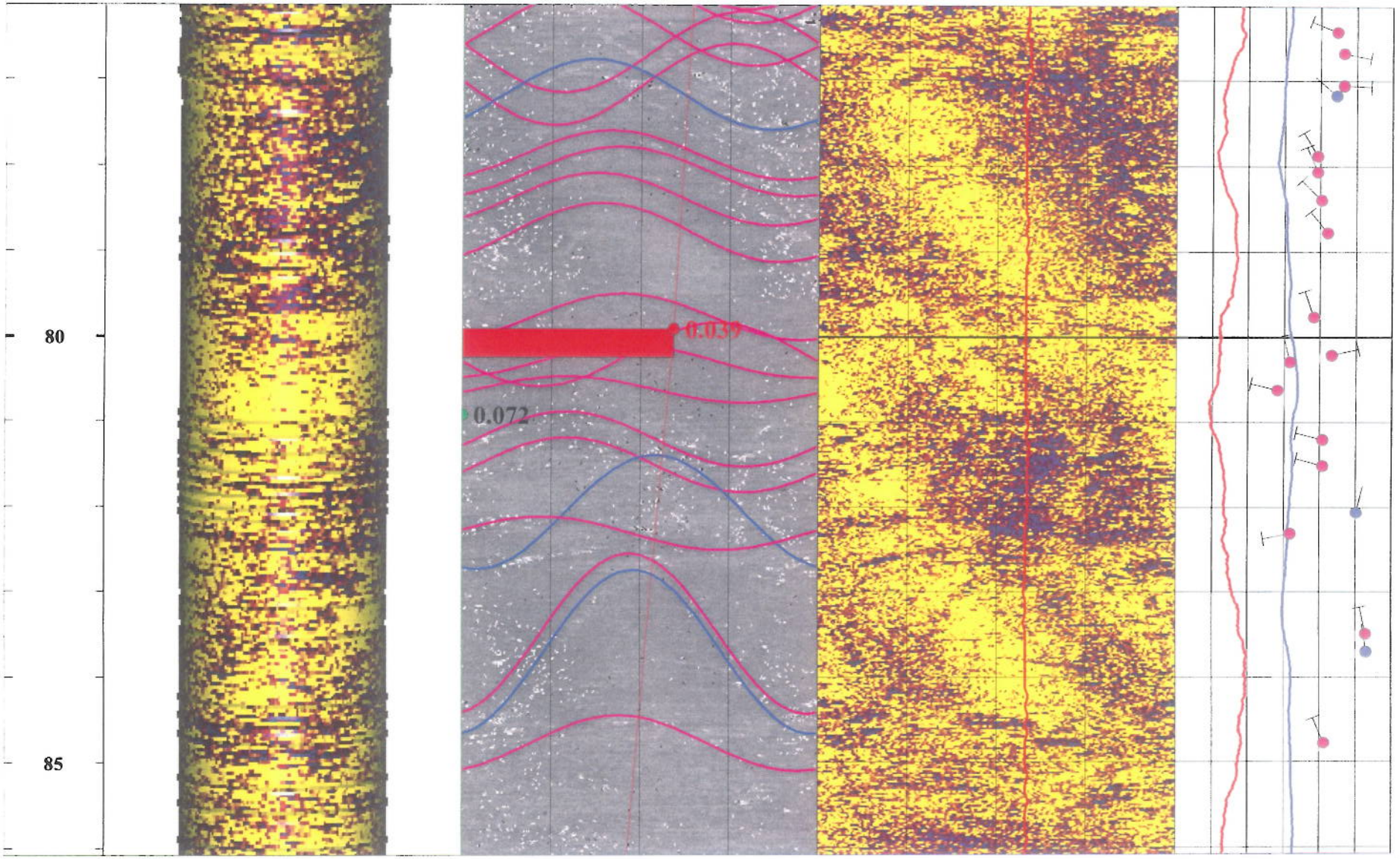
Location: Alton, RI	Logged By: MC, JB	Date Logged: 12-08-06

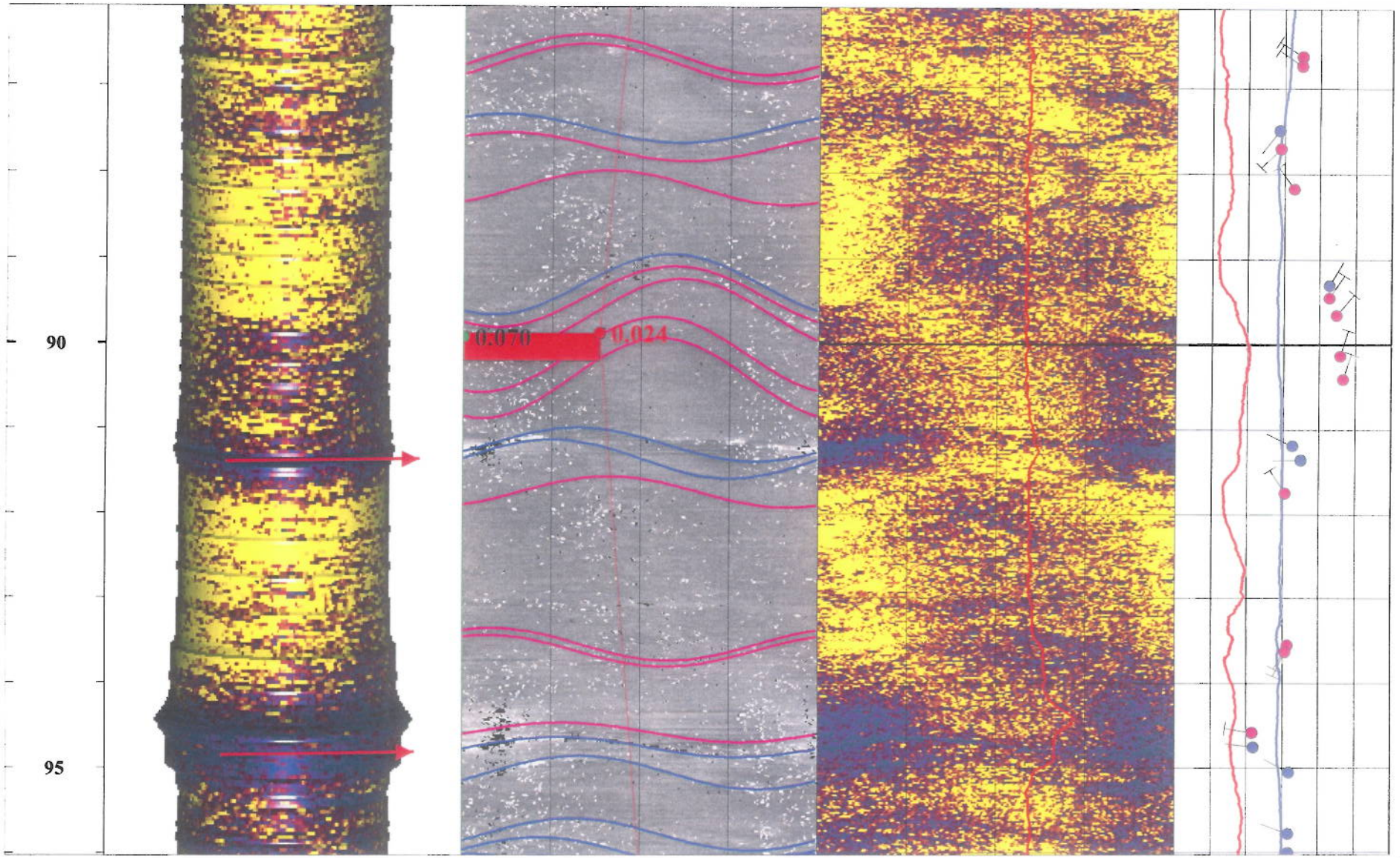


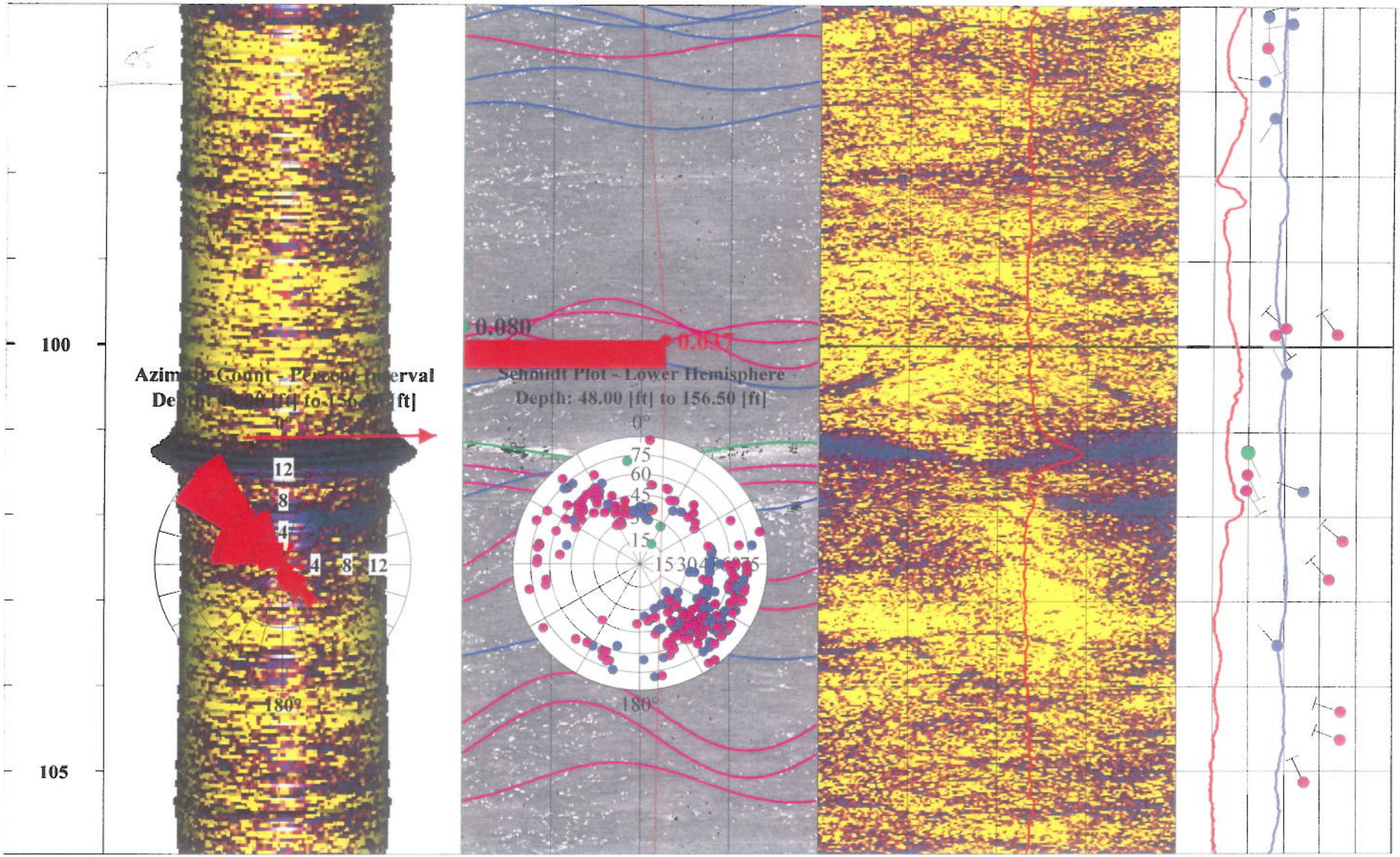

Small
Fabric
Tight
0.7
Casing
50
55
Suggested In-flow Zones

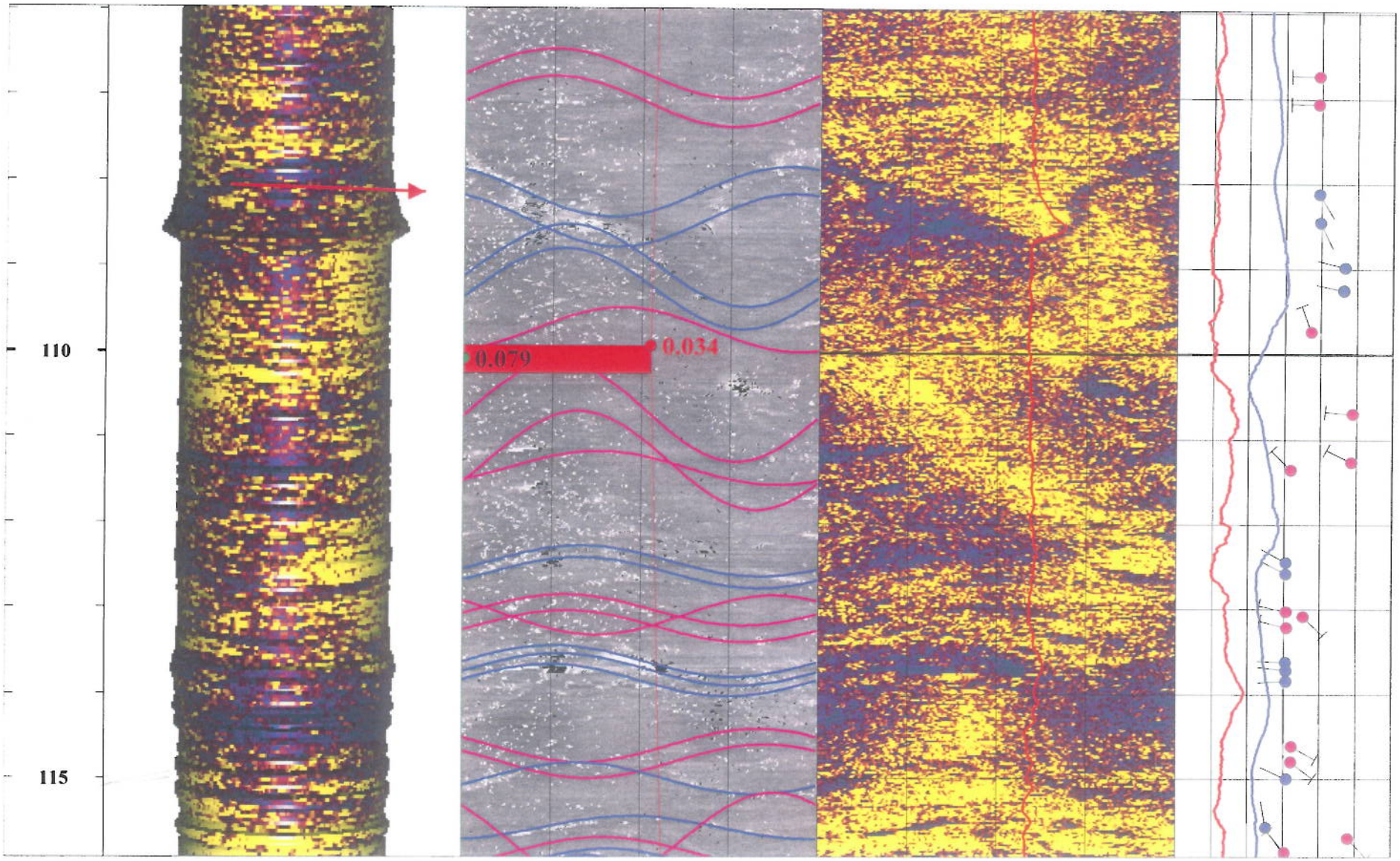

60
65

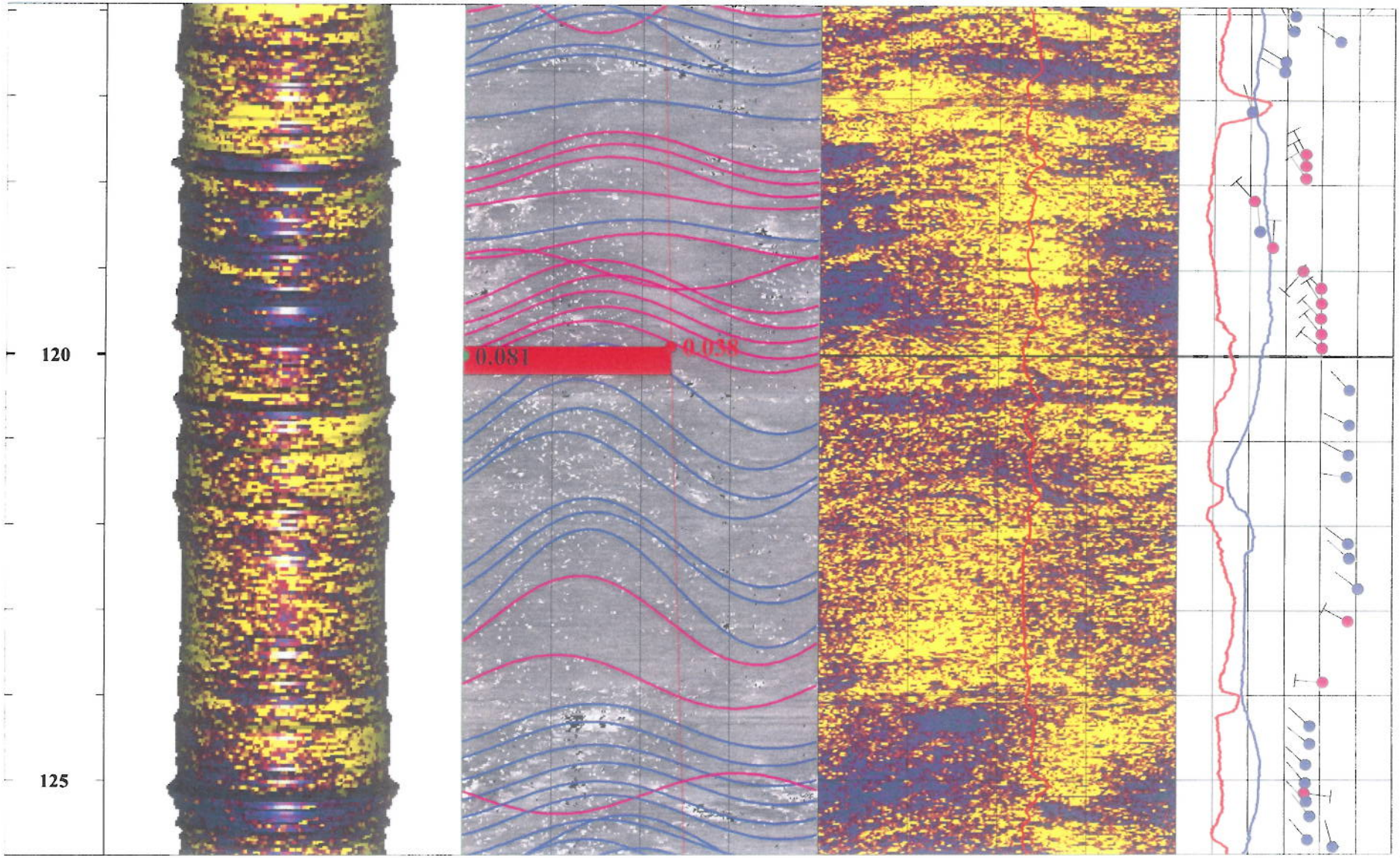

70
75
0.076
0.053

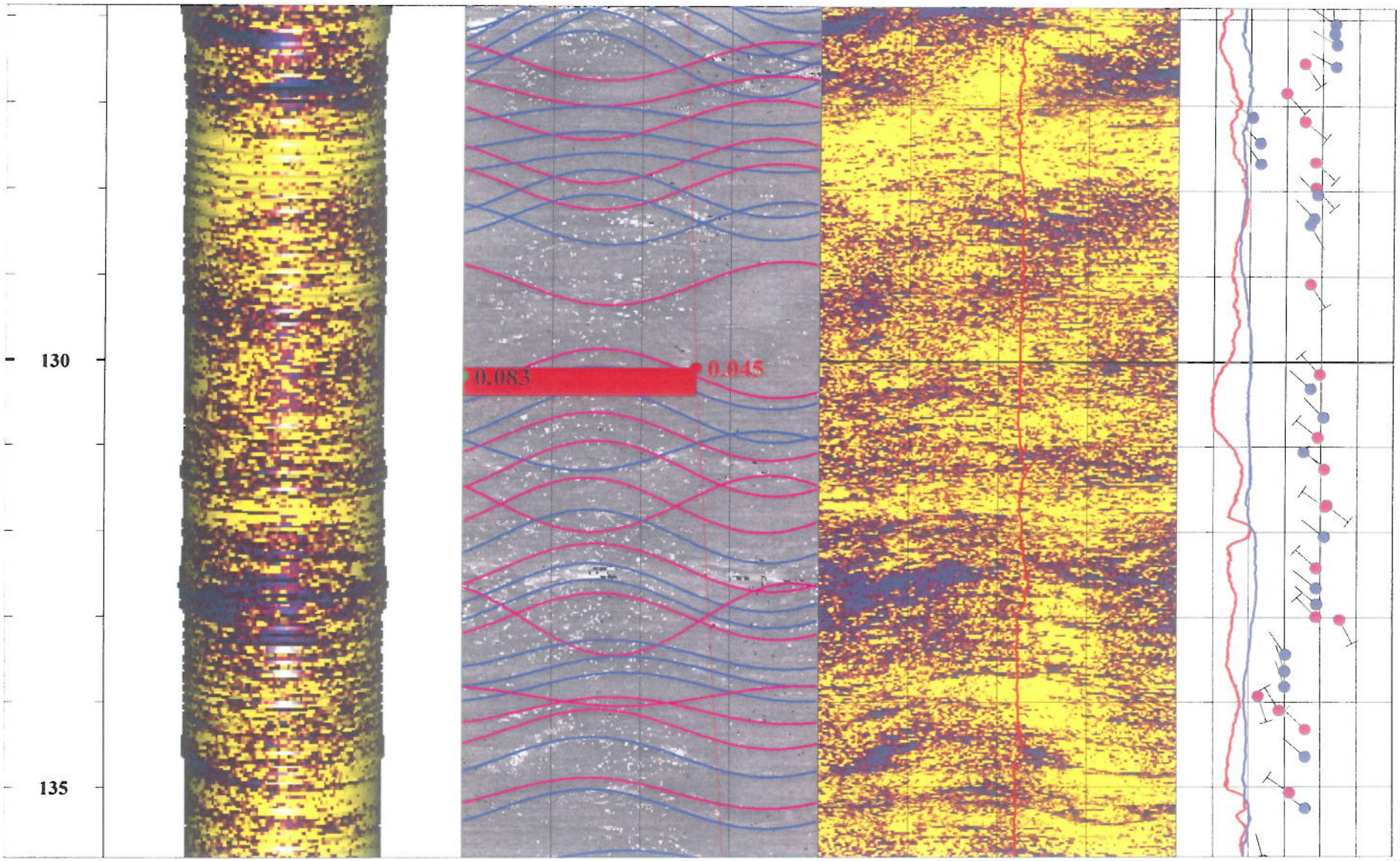

80
85
0.039
0.072

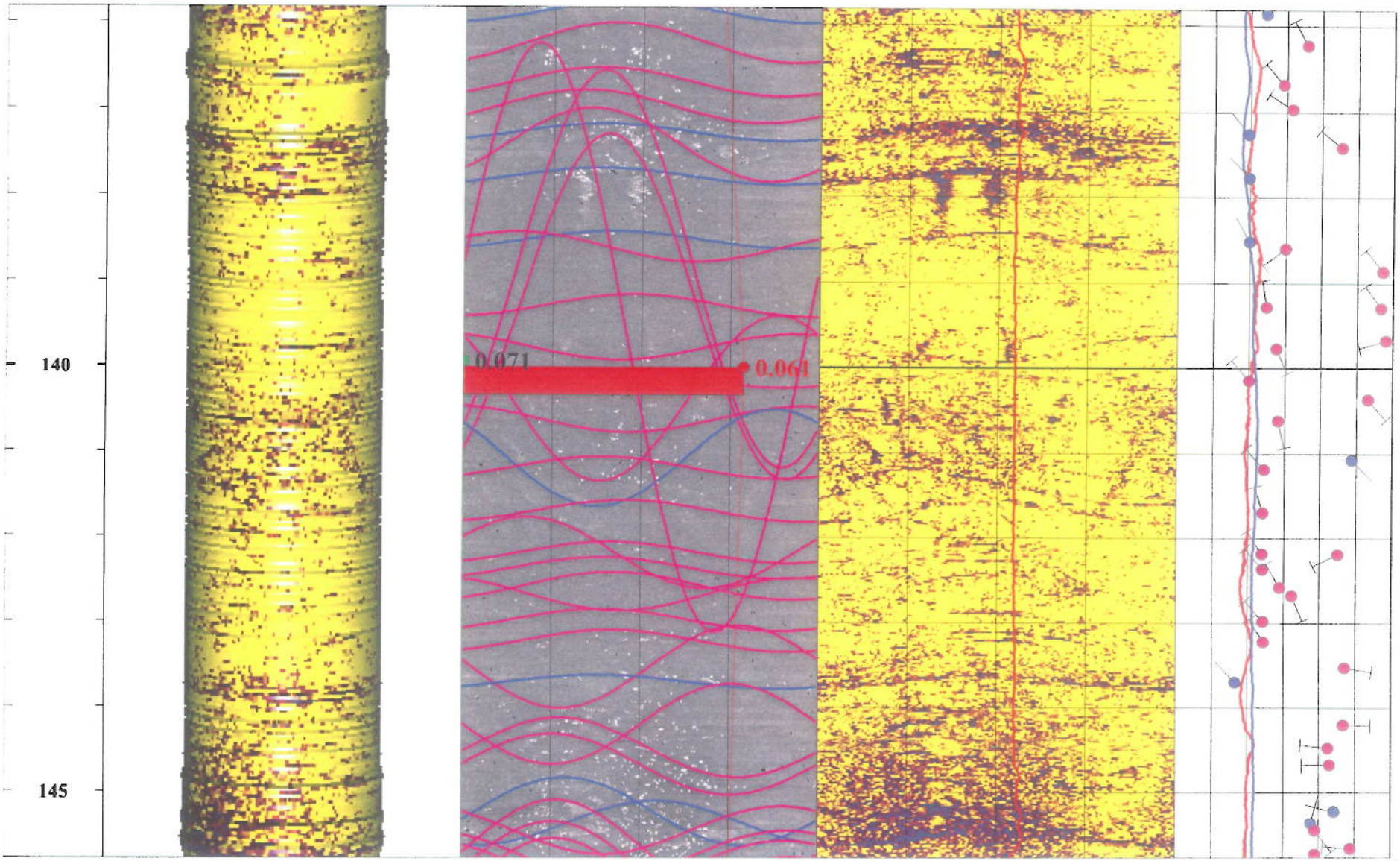

90
95
0.070
0.024

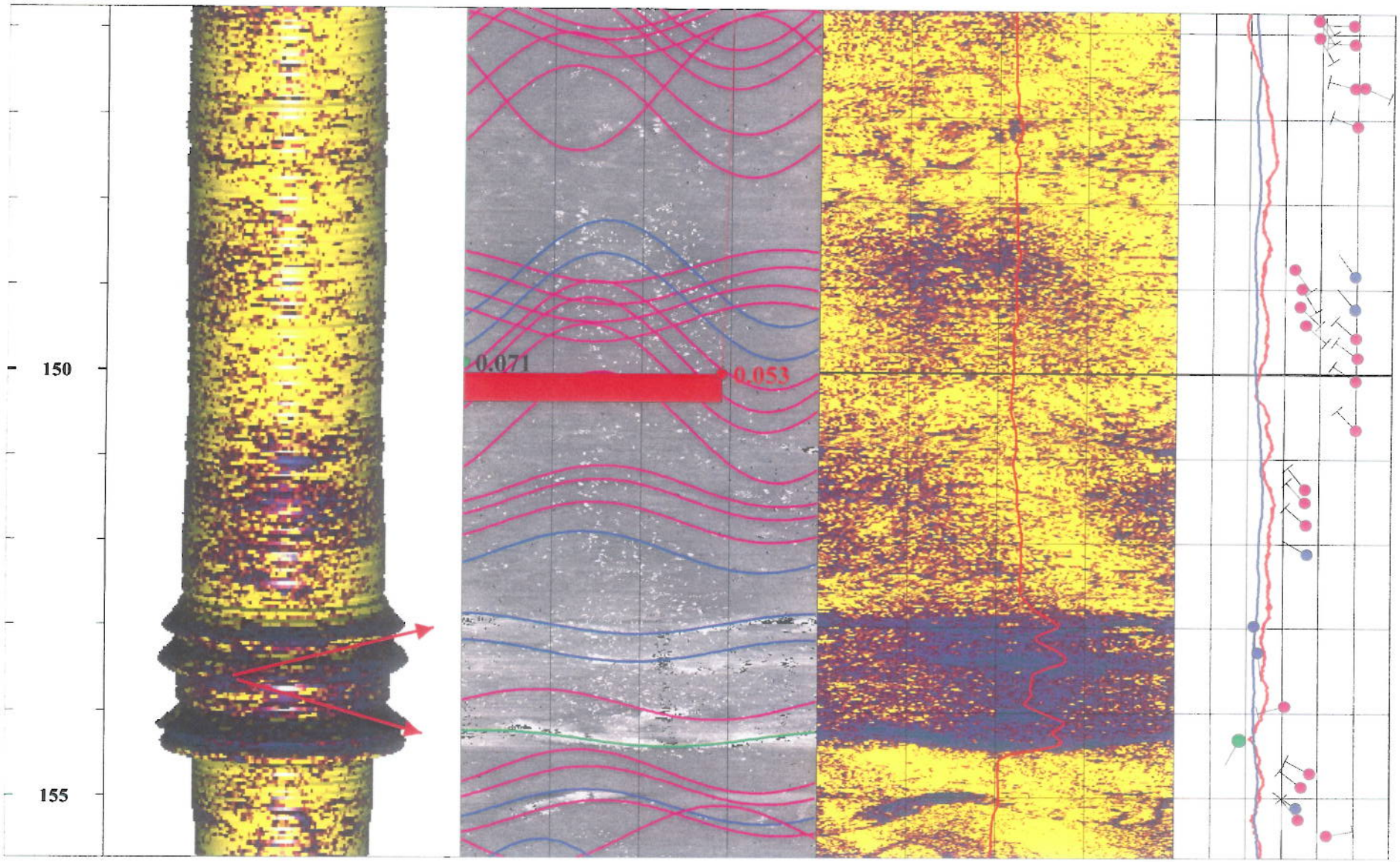

100
105
0.080
Schmidt Plot - Lower Hemisphere
Depth: 48.00 [ft] to 156.50 [ft]
0°
75
60
45
15
180°
12
8
4
4
8
12

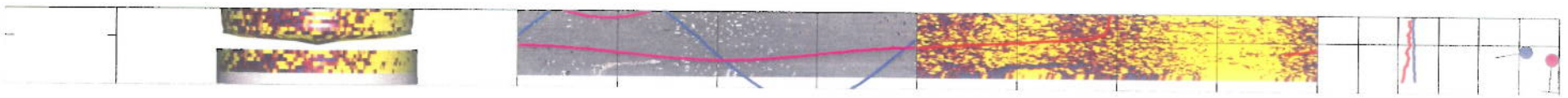

110
115
0.079
0.034


120
125
0.081
0.038


130
135
0.083
0.045


140
145
0.071
0.064


150
155
0.071
0.053



GZML-4 & GZML-5
BOREHOLE GEOPHYSICAL LOGGING
BEDROCK AQUIFER EVALUATION
CHARBERT FACILITY
ALTON, RHODE ISLAND

Prepared for:

GZA GeoEnvironmental, Inc.
140 Broadway
Providence, Rhode Island 02903

Prepared by:

Hager GeoScience, Inc.
596 Main Street
Woburn, Massachusetts 01801

File 2009047
July 2009

1.0 INTRODUCTION

In June 2009, Hager GeoScience, Inc. (HGI) was contracted by GZA GeoEnvironmental, Inc. (GZA) to perform geophysical borehole logging in two wells at the Charbert Facility in Alton, Rhode Island. The borehole logging was part of an ongoing bedrock evaluation study. The objective of the logging was to characterize fractured bedrock in wells GZML-4 and GZML-5. Fieldwork was performed on June 30th and July 1st, 2009. The work was performed under the direction of GZA for the Rhode Island Department of Environmental Management (RIDEM).

2.0 DATA ACQUISITION

The HGI logging system consisted of a Mount Sopris Instruments 5MXA-1000 Matrix logger and MSI 4MXA-1000 winch; MSI 2CAA-1000 three-arm caliper probe; Advanced Logic Technologies FAC40 acoustic televiewer (ATV); MSI 2PEA-1000 poly-electric with MSI 2SFA-1000 fluid temperature and resistivity; and MSI HFP-2293 Heat Pulse Flow Meter (HPFM). Section 5 discusses the geophysical technique and its limitations.

A computer housed in the HGI logging truck controlled the system. An HGI geologist monitored the logs in real time during data acquisition and recorded hardware and software settings as well as data anomalies in a logbook and on forms developed for the project. Raw data from the logging runs were stored digitally on the computer for on-site and later processing, analysis, and plotting.

Five logging runs were made in each of wells GZML-4 and GZML-5. The suite consisted of the following logs (run in the order listed):

- Caliper
- Acoustic Televiewer (ATV)
- Poly-Electric with Natural Gamma and Fluid logs
- Heat-Pulse Flow Meter (HPFM) – Ambient well condition
- Heat-Pulse Flow Meter (HPFM) – Stressed well condition

Rock fragments from breakout zones created obstructions in both wells, resulting in difficult borehole conditions. The obstructions were overcome in GZML-4, but required multiple attempts to complete caliper and HPFM logs. A major obstruction in GZML-5 located at approximately 126 feet could not be breeched, resulting in a reduced logging interval.

Logging Procedure

The log suite used on this project and the sequence of logging are summarized below.

1) Caliper Probe

Caliper logs record borehole diameter using a simple three-arm measuring system. Changes in borehole diameter are related to well construction, such as casing or drilling-bit size, and to

fracturing or breakout along the borehole wall. Because borehole diameter commonly affects log response, the caliper log is useful in the analysis of other geophysical logs. Caliper data are also combined with ATV data to produce 3-D "virtual cores." The hearty caliper tool is usually run first in order to probe and assess the suitability of the borehole for using more sensitive and expensive logging tools. The caliper sampling interval was 0.04 feet at a logging rate of approximately 15 feet per minute. The caliper probe calibration was checked on site before each run and re-calibration was performed as necessary.

2) Poly-electric Probe

The poly-electric probe is a combination tool that measures various electrical properties, temperature, and natural gamma content of the bedrock and borehole fluid. The measurements, made using a sampling interval of 0.1 feet, are described below.

Normal formation resistivity measures the electrical resistivity, in ohmmeters, of the rocks surrounding the borehole and interstitial water. Variably spaced potential electrodes on the logging probe provide resistivity measurements ranging from shallow to deep penetration into the borehole wall. Spacing of the potential electrodes is 8, 16, 32, and 64 inches.

Single point resistance measures the electrical resistance from points within the borehole to an electrical ground at the surface. In general, resistance increases with increasing grain size and decreases with increasing borehole diameter, fracture density, and concentration of dissolved solids in the water. When used in combination with other logs, single-point resistance logs are useful in determining lithology, water quality, and the location of fracture zones.

Spontaneous potential measures the electrical potential developed between the borehole fluid and the surrounding materials. Spontaneous potential logs can be used to help determine lithology and water quality.

Gamma Probe: **Natural gamma** is useful to determine the presence and location of clay-filled fractures. These logs record the amount of natural gamma radiation emitted by the rocks surrounding the borehole. The most significant naturally occurring sources of gamma radiation are potassium-40 and daughter products of the uranium- and thorium-decay series. Shale and clay-filled fractures commonly emit relatively high gamma radiation because they include weathering products of potassium feldspar and mica and tend to concentrate uranium and thorium by ion absorption and exchange. The natural gamma probe can be run independently or in combination as a poly-electric probe.

Fluid Temperature/Resistivity Probe: **Fluid temperature logs** record water temperature with depth in the borehole. These logs are useful for delineating water-bearing zones and identifying vertical flow in the borehole between zones of differing hydraulic head penetrated by wells. Borehole flow between zones is indicated by temperature gradients that are less than the regional geothermal gradient, which is about 1 degree Fahrenheit per 100 feet of depth.

Fluid resistivity logs measure the electric resistivity of water in the borehole. Changes in fluid

resistivity reflect differences in the concentration of dissolved solids in water. Fluid resistivity logs are useful for delineating water-bearing zones and, possibly, contaminants in the borehole.

The sample interval for the poly-electric logging was 0.04 feet at a logging rate of approximately 6 feet per minute. When run independently, the natural gamma logging sample interval was 0.04 feet at a logging rate of 16 feet per minute.

3) Acoustic Televiewer (ATV) Probe

Using high frequency acoustic energy, the **acoustic televiewer** measures the acoustic impedance of the borehole wall and the two-way travel time of the transmitted signals. Major differences in travel time and reflection amplitudes from background values are seen as anomalous features. Borehole deviation data, recorded from a three-component magnetometer and two accelerometers, are used to provide the corrected orientation and shape of the imaged features. As a result, it is possible to calculate the dip direction and dip angle of imaged planar features. Discontinuities imaged with the ATV include open or filled fractures, foliation, mineralization, weathered zones, and other rock fabric.

The sample interval used for ATV logging was 0.01 foot. A scan time of 1250 µsec was used with a sample rate of 288 measurements per revolution. The logging rate was approximately 6 feet per minute. Logging tools and cable were cleaned after each run with a clean water rinse.

4) and 5) Heat Pulse Flow Meter Probe

The **heat-pulse flow meter (HPFM) log** is usually run under ambient and stressed conditions at predetermined depth intervals or at intervals selected on-site after a preliminary review of the previous log data. The tool contains a thermistor, for generating a pulse of heat into the water, and two temperature sensors for measuring the direction and magnitude of the pulse of heated water in the borehole. Diverters are used to channel the heated water flow past the sensors for measurement. The HPFM measures the direction and rate of induced low vertical flow in the borehole. The HPFM probe is designed to resolve flow rates from approximately 0.01 to 1.0 gpm. Accurate measurements require sufficient time between readings for the area around the tool to stabilize. At least three readings, each lasting up to 15 seconds, are recorded per interval to obtain a reasonable average measurement. The HPFM log is run under ambient and stressed well conditions to provide data for quantitative flow analyses. In certain circumstances, such as with very small open-hole intervals and wells with very low or very high well recharge rates, reasonable pump rates cannot be maintained for measuring flow under stressed-well conditions. In such cases, testing can be performed to obtain the relative productivity of the exposed fractures.

Both ambient and stressed HPFM measurements were made in GZML-4 and GZML-5, using a pumping rate of approximately 1 gpm for the stressed well HPFM measurements. Flow measurements were made at 10-foot intervals in both wells, with minor adjustments for large fractures that would prevent a proper diverter separation.

3.0 DATA REDUCTION

Borehole logging data were processed as graphical logs using WELLCAD for Windows© software system, Excel spreadsheets, and Rockworks. Logs were compiled onto a one-sheet format to allow for more efficient graphical log analysis. Log scales were set to optimize the detection of readings that depart from baseline and background values. *Field logging* depths were referenced to the top of casing. *Report logs* have been shifted and are referenced to the ground surface (Appendix A).

ATV deviation data are affected by metal casing. The probe's magnetometers are progressively affected starting from approximately 6 feet below the casing. Consequently, measurements of borehole structures made within this interval using unadjusted orientation data will be incorrect. HGI uses a procedure to correct the affected data to a value representing a good approximation of the true values of measured structures.

Structure logs identifying notable and representative discontinuities from ATV data were constructed using WELLCAD. Borehole image and deviation logs were rotated from the magnetic north reference markers to True North using a site-specific 14.67-degree west magnetic declination. Depths are relative to ground level and all structural data are relative to true north. The structure (discontinuity) data were used to calculate dip direction and dip angle. Tables 1 and 2 in Appendix B contain tabulated data for discontinuities interpreted from the ATV logs for the two wells. The stereonets shown at mid-depth on the logs are constructed using a southern hemisphere equal-area Schmidt polar projection showing ***dip direction and dip angle***. The structural data set has been color-coded to reflect the relative and apparent openness of the imaged discontinuities. The ranking system is based on caliper, acoustic amplitude, and acoustic travel time logs. The ranking index is subjective and attempts to qualitatively identify the potential weakness of the individual discontinuities. Red (code 105), green (code 106), blue (code 107), and magenta (code 110) colors represent wide-, moderate-, small-, and tight-fracture aperture, respectively. Large formal rose diagrams and stereonets are included in Appendix C.

ATV logs are presented as 2-D and 3-D images of the borehole in combination with the caliper, poly-electric, and HPFM logs. The 3-D virtual core is constructed using the caliper log data to define the core shape. The 3-D Caliper virtual core log is a true physical representation of the borehole geometry. The 3-D view is useful for analyzing the physical characteristics of the structures/discontinuities shown as amplitude variations on the 2-D ATV log format.

Bull's Eye and 3D cylinder deviation plots were constructed from the ATV deviation data and are included in Appendix D to show the borehole trajectory.

Digital files of the logs for each well are on a CD in a pocket at the end of this report. The CD also contains a WELLCAD Reader that allows the user to view the log files. The reader functions in a Windows operating environment and is designed to facilitate log analysis performed by the reviewer. The WellCAD reader can be used to scroll logs, view and rotate 3-D logs, review digital log data, and print logs.

4.0 RESULTS

Preliminary caliper logs were provided to GZA on July 1st, prior to leaving the well site. Appendix A contains individual and combination logs for GZML-4 and GZML-5. The report log suite (see Appendix A) for each well consists of:

- Caliper Log
- Poly-Electric Log
- HPFM Log (ambient & stressed)
- Combination Log (caliper, HPFM, 4-trace resistivity, SP, SPR, natural gamma, fluid temperature, fluid resistivity, ATV image, structure, 3-D core, rose plot, polar plot, and deviation plots)

The predominant features observed from the image logs are interpreted to be fracture discontinuities and possible foliation. The structural results are consistent with those obtained from nearby wells in December of 2006. The predominant dip direction of discontinuities in both wells is to the northwest. GZML-5 contains a tighter distribution of fracture orientations than GZML-4 and suggests conjugate fracture sets. GZML-4 dip directions are more widely distributed in the northwest quadrant than those of GZML-5 and also include a conjugate fracture set with northeast-southwest dips.

Most of the discontinuities observed in the boreholes were tight or had small aperture. Common to wells GZML-4 and GZML-5 is a moderately deep alteration zone extending to approximately 70 feet below the bottom of the casing, or almost 130 feet below ground surface. This is reflected in resistivity and natural gamma logs for GZML-4 that show low resistivity and higher gamma counts to a depth of approximately 130 feet, below which the formation becomes more resistive and shows lower gamma counts.

HPFM measurements were made every ten feet in both wells starting at well bottom in GZML-4 and at 120 feet in GZML-5. HPFM results show that upward flow in GZML-5 reached almost 1.3 gpm with almost all of the inflow occurring in a large breakout at 47 feet, approximately 2 feet below the bottom of the casing. Flow rates in GZML-4 reached approximately 0.7 gpm. Unlike GZML-5, flow rates increased progressively up the well, with a large jump in flow rate after a large breakout at 78 feet. Under ambient test conditions, these wells showed no fracture flow and are, therefore, considered to be in equilibrium.

Borehole deviation data show that GZML-4 deviated approximately 10.5 feet to the northeast and GZML-5 approximately 4 feet to the southeast at 120-foot depths.

5.0 GEOPHYSICAL BOREHOLE LOGGING

5.1. Description of the Method. HGI performs borehole logging using a fully equipped field vehicle that includes a lunchbox computer, heavy-duty generator, tools, and other necessary equipment and supplies. The HGI logging system consists of a Mount Sopris Instruments 5MXA-1000 Matrix logger and MSI 4MXA-1000 winch; MSI 2PEA/F_0-2500Ohm-m,T,F-R

combination poly-electric probe (includes fluid temperature/resistivity and natural gamma probes); MSI 2CAA-1000 three-arm caliper probe; Advanced Logic Technologies FAC40 acoustic televiewer (ATV); and MSI HFP-2293 Heat Pulse Flow Meter (HPFM).

The Mount Sopris single-conductor system stores digitized log data on the hard drive of a portable computer. Logging speeds can range from 1.5 to 20 feet per minute depending on the resolution desired. All logging activities are performed in accordance with the equipment manufacturer's recommended procedures, as well as the appropriate ASTM standard. We normally clean the logging probes and wireline with non-phosphate soap and a tap water rinse during each upward run and/or after completing work on each well.

5.2. Data Analysis and Interpretation. Borehole logging data are processed as graphical logs using WELLCAD for Windows© and MS Heat© (for HPFM) software systems, Excel spreadsheets, and Rockworks©. Caliper and ATV logs are compiled onto a one-sheet format to allow for more efficient graphical log analysis. Data ranges will be set to optimize the detection of readings that depart from baseline and background readings.

We use WELLCAD to construct structure logs identifying notable and representative discontinuities from ATV data and superimpose them onto the ATV log. Numerical representations of the structural traces are used to calculate strike and dip values of discontinuities and subsequently used to construct rose diagrams and stereonet projections of the structural data. Apparent aperture values for discontinuities visible in the ATV log are tabulated. Acoustic images of the borehole (360 degrees) are graphically represented as false-color amplitude and travel-time logs in developed cylindrical view format on a strip log. 3-D core-like representation of the borehole can also be developed from the ATV data.

5.3. Limitations of the Method. The ATV must be properly centered in the borehole to provide clear images. Eccentricity of the ATV tool in the borehole will produce an asymmetrical pattern of the acoustic wave front emanating from the tool, thereby making it difficult to establish a uniform background amplitude and travel-time log of the reflected energy against which the anomalous reflections can be discerned. Borehole tilt and small borehole diameters both degrade data quality.

ATV features or discontinuities may represent open or filled fractures, foliation, and mineralized or weathered zones. Interpreting the type of feature present from the ATV log requires using other logs or core data, if available. For open fractures imaged in the ATV log, the width of the feature does not represent the true aperture. A portion of the acoustic energy hitting the fracture surface is diffracted. The recorded arrivals of these diffractions will appear on the log above and below the normal position of the fracture edges as lower-amplitude arrivals with longer travel times. Subtle changes in amplitude within each discontinuity can be used to approximate the true aperture; however, the measurement is approximate and should be designated as "apparent aperture."

APPENDIX A.

REPORT WELL LOGS

Borehole Geophysical Logging
Charbert Facility
Alton, RI

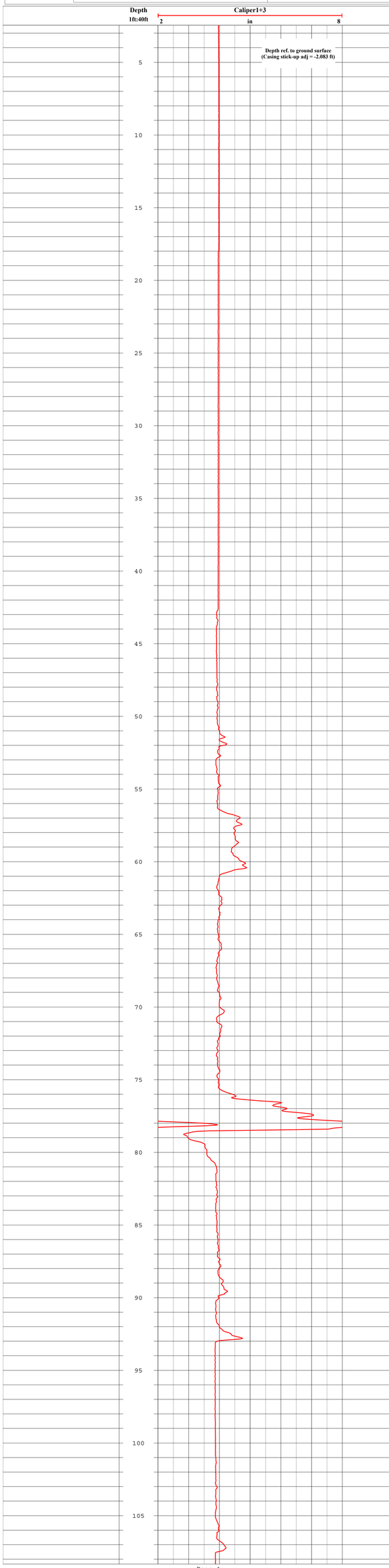
File 2009047

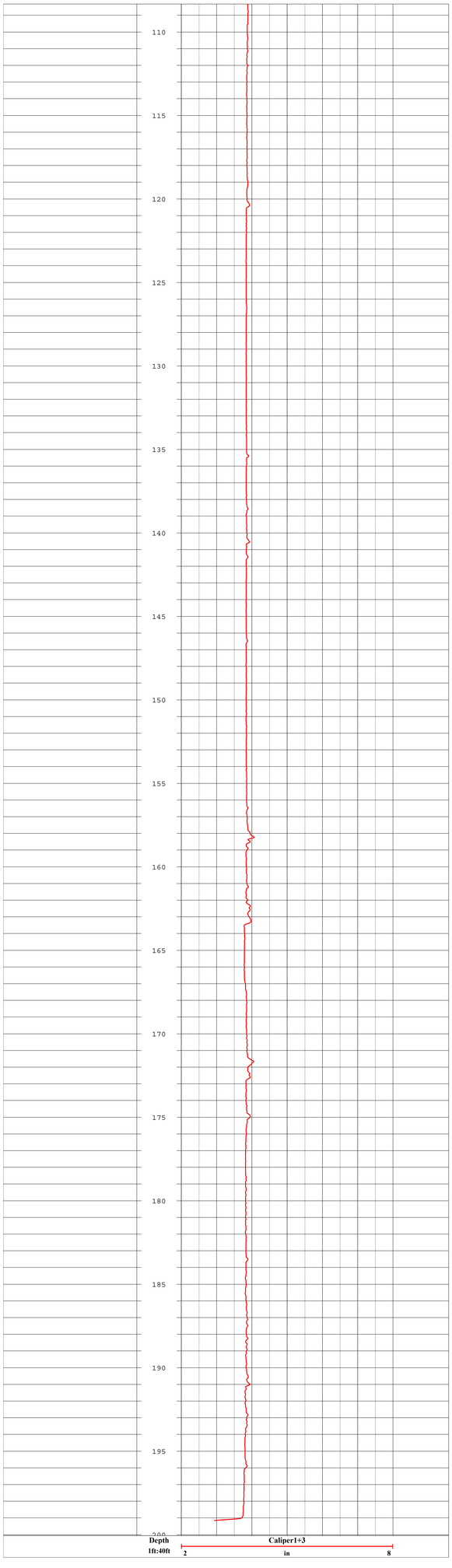
GZ-ML-4

REPORT WELL LOGS

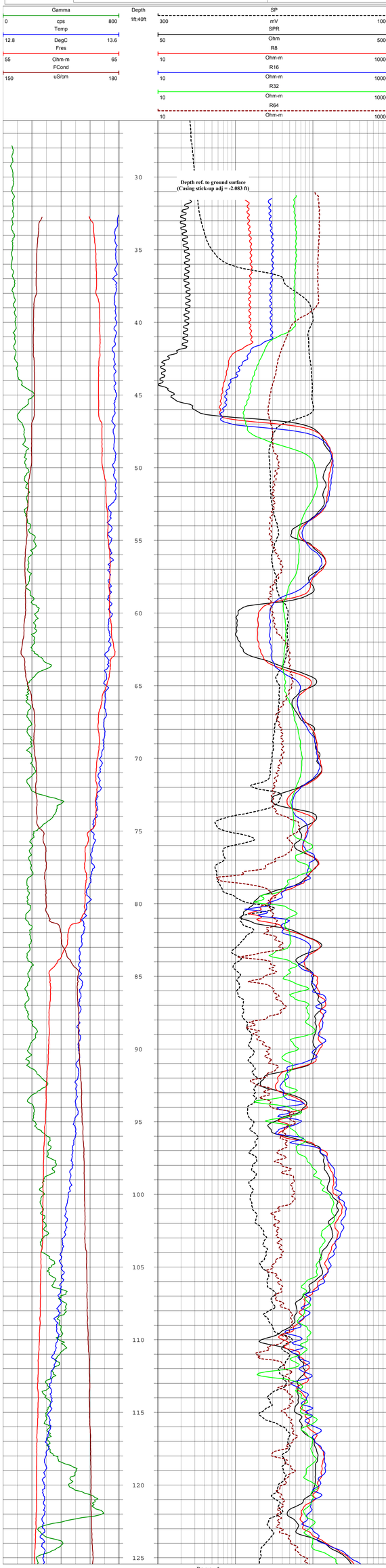
Hager GeoScience, Inc.

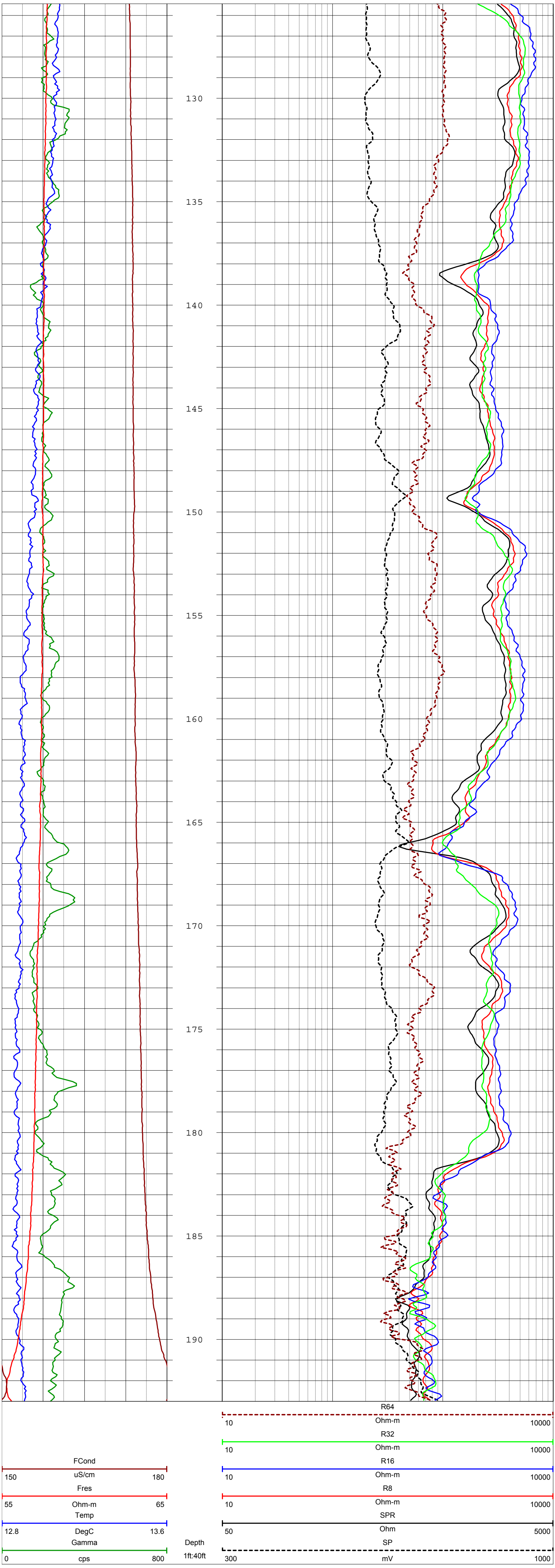
Hager GeoScience Inc.	Geophysical Logging Record: ***Caliper Log***
Site: Charbert Facility	Boring #: GZ-ML-4
Location: Alton, MA	Date Logged: 7-1-09
Client: GZA GeoEnvironmental	Logged By: MC, JB, KS




110
115
120
125
130
135
140
145
150
155
160
165
170
175
180
185
190
195
Depth
1ft:40ft
Caliper1+3
2
in
8

Hager GeoScience Inc.	Geophysical Logging Record: ***Poly-Electric Log***
Site: Charbert Facility	Boring #: GZ-ML-4
Location: Alton, RI	Date Logged: 7-1-09
Client: GZA Environmental	Logged By: MC, JB, KS

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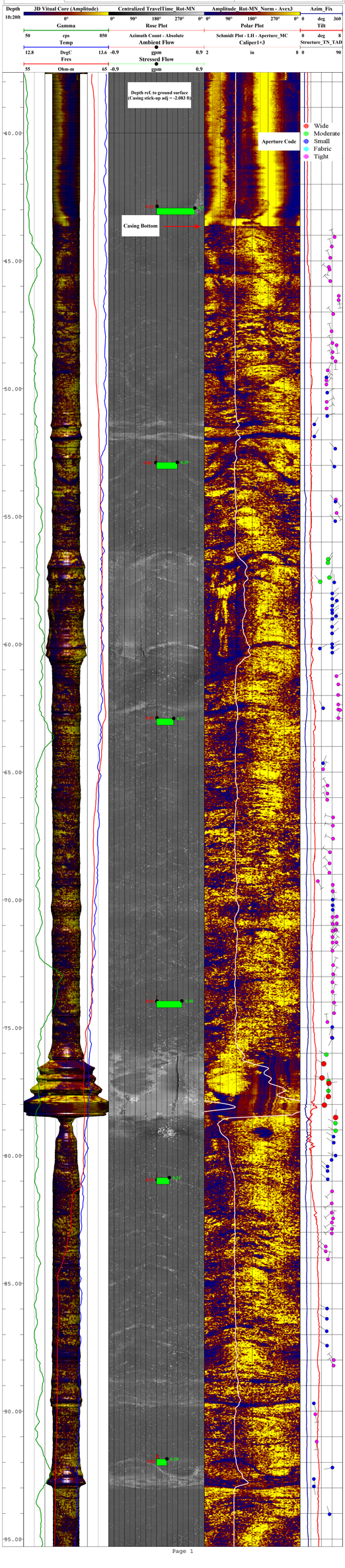
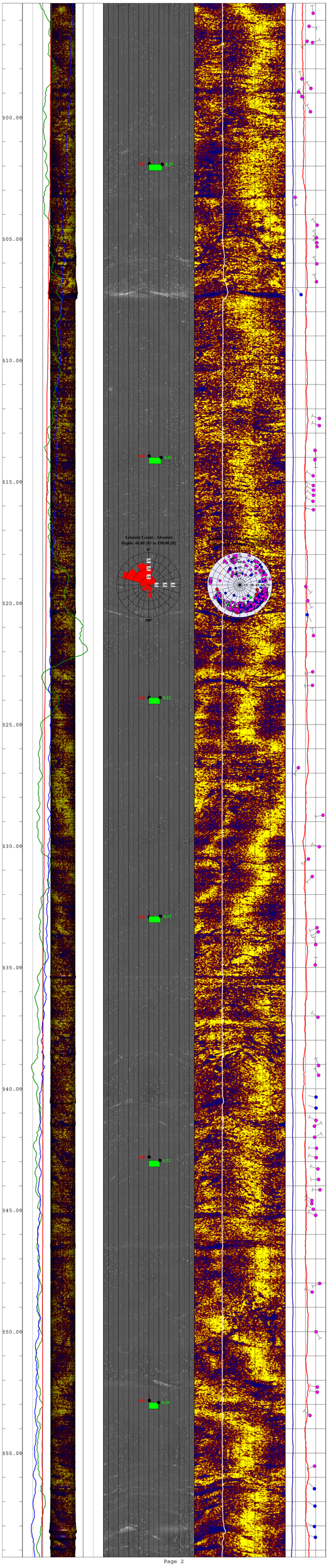
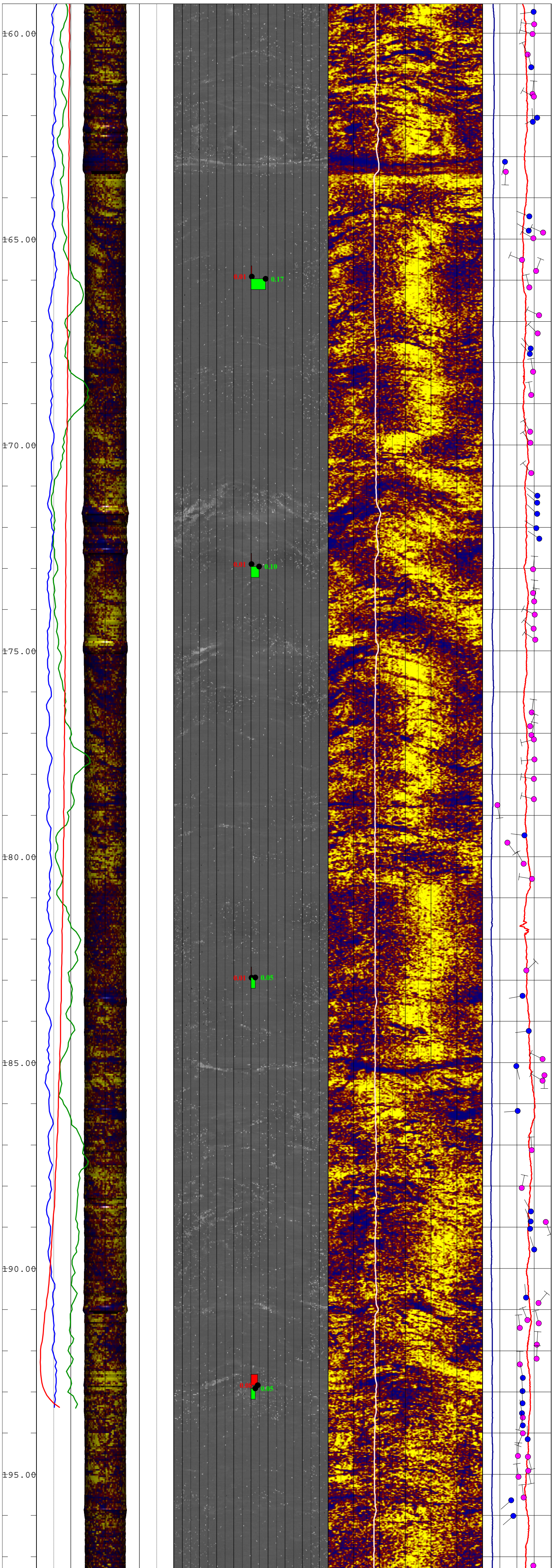
135
140
145
150
155
160
165
170
175
180
185
190
FCond
uS/cm
150
180
Fres
55
Ohm-m
65
Temp
12.8
DegC
13.6
Gamma
0
cps
800
Depth
1ft:40ft
R64
10
Ohm-m
10000
R32
10
Ohm-m
10000
R16
10
Ohm-m
10000
R8
10
Ohm-m
10000
SPR
50
Ohm
5000
SP
300
mV
1000

Hager GeoScience Inc.	Geophysical Logging Record: ***HPFM Ambient & Stressed Logs***
Site: Charbert Facility	Boring #: GZ-ML-4
Location: Alton, RI	Date Logged: 7-1-09
Client: GZA GeoEnvironmental	Logged By: MC, JB, KS

Hager GeoScience Inc.	Geophysical Logging Record: *Image, Fluid, & Structure Logs*
Site: Charbert Facility	Boring #: GZ-ML-4
Location: Alton, MA	Date Logged: 7-01-09
Client: GZA GeoEnvironmental	Logged By: MC, JB, KS




100.00
105.00
110.00
115.00
120.00
125.00
130.00
135.00
140.00
145.00
150.00
155.00
Azimuth Count - Absolute
Depth: 40.00 [ft] to 190.00 [ft]
0°
90°
180°
Dip Angle - Azimuth Count
Depth: 40.00 [ft] to 190.00 [ft]
0°
15°
30°
45°
60°
90°


160.00
165.00
170.00
175.00
180.00
185.00
190.00
195.00
0.01
0.17
0.01
0.10
0.01
0.05
0.05
Fres
55
Ohm-m
65
Stressed Flow
-0.9
gpm
0.9
Temp
12.8
DegC
13.6
Ambient Flow
-0.9
gpm
0.9
Caliper1+3
2
in
8
Structure_TN_TAD
0
90
Gamma
50
cps
850
Rose Plot
Azimuth Count - Absolute
Polar Plot
Schmidt Plot - LH - Aperture_MC
Tilt
0
deg
8
Depth
1ft:20ft
3D Vitual Core (Amplitude)
0°
Centralized TravelTime_Rot-MN
0°
90°
180°
270°
0°
Amplitude_Rot-MN_Norm - Avex3
0°
90°
180°
270°
0°
Azim_Fix
0
deg
360

Borehole Geophysical Logging
Charbert Facility
Alton, RI

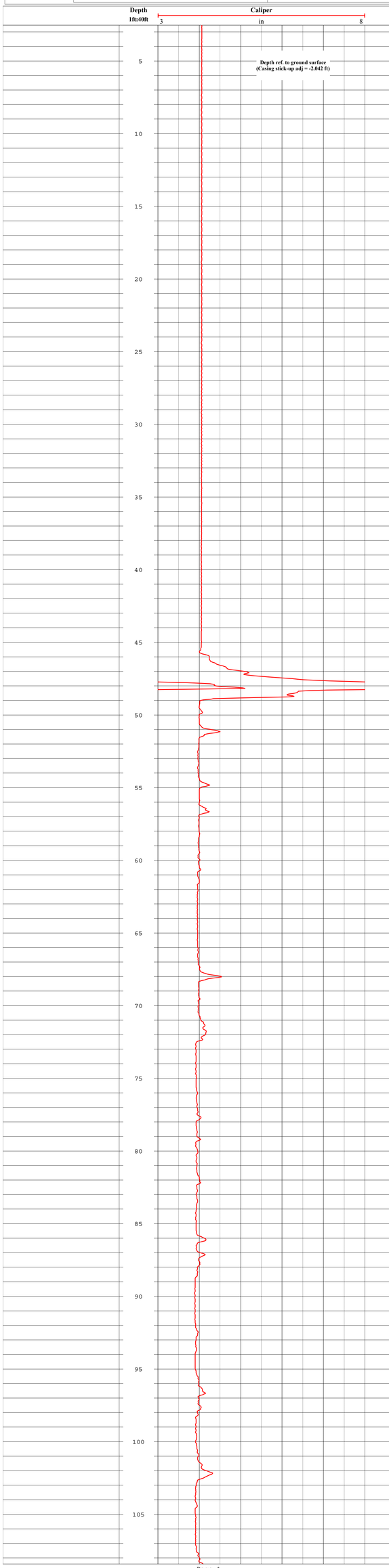
File 2009047

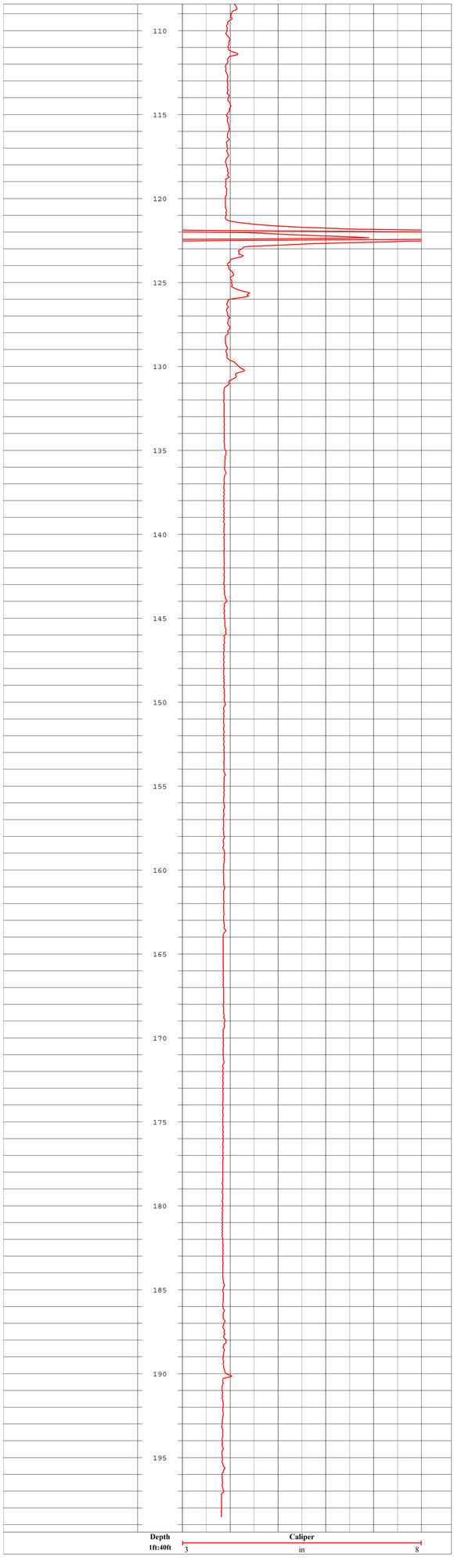
GZ-ML-5

REPORT WELL LOGS

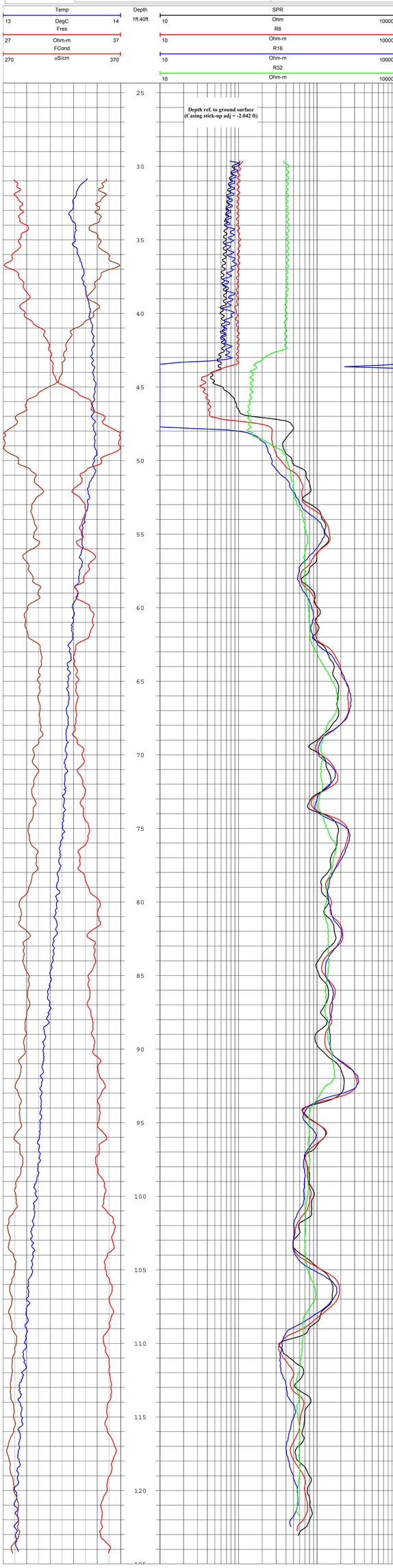
Hager GeoScience, Inc.

Hager GeoScience Inc.	Geophysical Logging Record: ***Caliper Log***
Site: Charbert Facility	Boring #: GZ-ML-5
Location: Alton, RI	Date Logged: 6-30-09
Client: GZA GeoEnvironmental	Logged By: MC, JB, KS

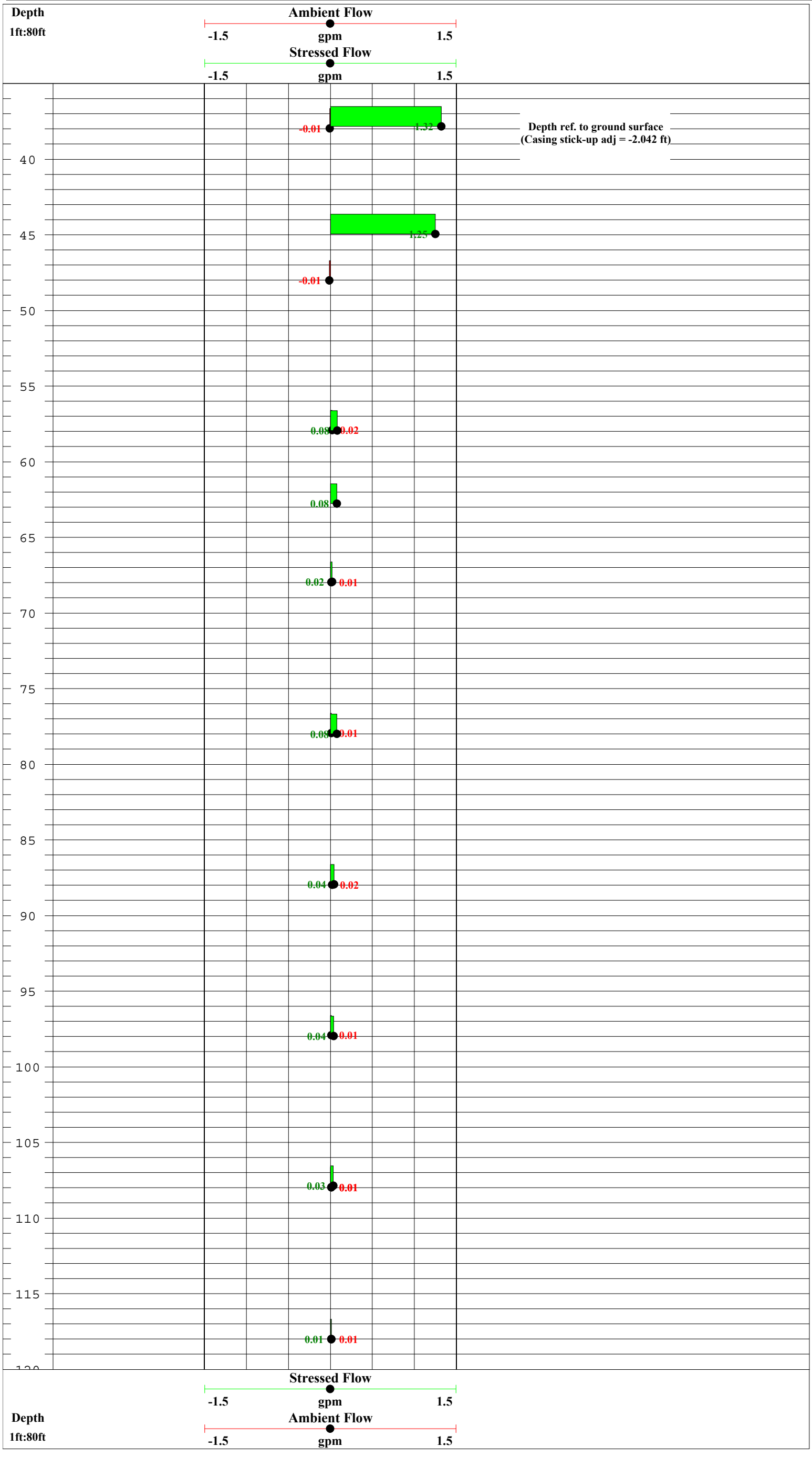



110
115
120
125
130
135
140
145
150
155
160
165
170
175
180
185
190
195
Depth
1ft:40ft
Caliper
3
in
8

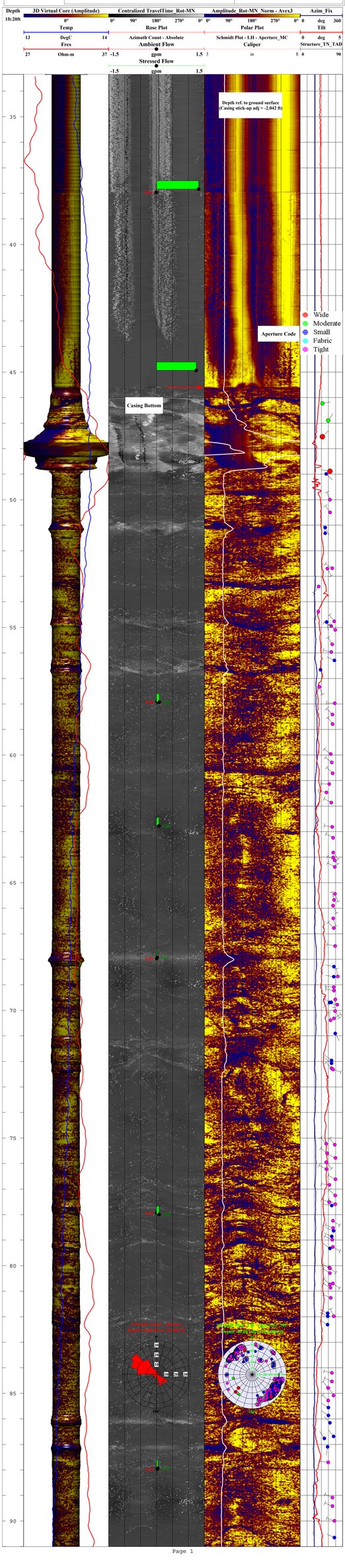
Hager GeoScience Inc.	Geophysical Logging Record: ***Poly-Electric Log***
Site: Charbert Facility	Boring #: GZ-ML-5
Location: Alton, MA	Date Logged: 6-30-09
Client: GZA GeoEnvironmental	Logged By: MC, JB, KS



Hager GeoScience Inc.	Geophysical Logging Record: ***HPFM Ambient & Stressed Logs***
Site: Charbert Facility	Boring #: GZ-ML-5
Location: Alton, RI	Date Logged: 6-30-09
Client: GZA GeoEnvironmental	Logged By: MC, JB, KS



Hager GeoScience Inc.	Geophysical Logging Record: *Image, Fluid, and Structure Logs*
Site: Charbert Facility	Boring #: GZ-ML-5
Location: Alton, RI	Date Logged: 6-30-09
Client: GZA GeoEnvironmental	Logged By: MC, JB, KS



95
100
105
110
115
120

Stressed Flow
-1.5 gpm 1.5

Fres
27 Ohm-m 37

Ambient Flow
-1.5 gpm 1.5

Caliper
3 in 8

Structure_TN_TAD
0 90

Temp
13 DegC 14

Rose Plot
Azimuth Count - Absolute

Polar Plot
Schmidt Plot - LH - Aperture_MC

Tilt
0 deg 5

Depth
1ft:20ft

3D Virtual Core (Amplitude)
0°

Centralized TravelTime_Rot-MN
0° 90° 180° 270° 0°

Amplitude_Rot-MN_Norm - Avex3
0° 90° 180° 270° 0°

Azim_Fix
0 deg 360

APPENDIX B.

STRUCTURE TABLES

TABLE 1

GZ-ML-4 STRUCTURE TABLES

Table 1
GZ-ML-4
Structure Data

Depth (ft bgl)	True Dip Azimuth	True Dip Angle	Apparent Aperture Code	Code Desc.	Code Color	Azimuth Strike (RHR)	Strike Direction (RHR)	Dip Direction Quadrant	Strike Direction Quadrant
44.1	335.0	72.9	110	Tight	Magenta	245.0	SW	NW	NE
44.4	343.7	67.0	110	Tight	Magenta	253.7	SW	NW	NE
44.9	338.0	63.9	110	Tight	Magenta	248.0	SW	NW	NE
45.2	189.9	61.1	110	Tight	Magenta	99.9	SE	SW	NW
45.3	308.1	62.3	110	Tight	Magenta	218.1	SW	NW	NE
45.8	313.7	63.8	110	Tight	Magenta	223.7	SW	NW	NE
46.4	174.3	81.8	110	Tight	Magenta	84.3	NE	SE	NE
46.5	168.6	81.5	110	Tight	Magenta	78.6	NE	SE	NE
47.1	323.7	70.3	110	Tight	Magenta	233.7	SW	NW	NE
47.8	342.8	66.6	110	Tight	Magenta	252.8	SW	NW	NE
48.2	335.6	68.5	110	Tight	Magenta	245.6	SW	NW	NE
48.3	172.5	77.3	110	Tight	Magenta	82.5	NE	SE	NE
48.6	334.1	68.7	110	Tight	Magenta	244.1	SW	NW	NE
48.8	337.3	68.6	110	Tight	Magenta	247.3	SW	NW	NE
48.9	179.7	75.3	110	Tight	Magenta	89.7	NE	SE	NE
49.3	25.6	58.3	110	Tight	Magenta	295.6	NW	NE	NW
49.6	33.3	55.7	107	Small	Blue	303.3	NW	NE	NW
49.7	36.0	55.7	110	Tight	Magenta	306.0	NW	NE	NW
49.8	35.4	55.8	110	Tight	Magenta	305.4	NW	NE	NW
50.2	59.1	57.3	107	Small	Blue	329.1	NW	NE	NW
50.5	60.4	56.2	110	Tight	Magenta	330.4	NW	NE	NW
50.8	58.5	56.1	110	Tight	Magenta	328.5	NW	NE	NW
51.1	68.8	57.3	107	Small	Blue	338.8	NW	NE	NW
51.4	27.9	30.2	107	Small	Blue	297.9	NW	NE	NW
51.9	29.4	30.2	107	Small	Blue	299.4	NW	NE	NW
52.4	317.8	74.4	107	Small	Blue	227.8	SW	NW	NE
53.1	329.0	72.6	107	Small	Blue	239.0	SW	NW	NE
54.3	143.7	75.8	110	Tight	Magenta	53.7	NE	SE	NE
54.4	322.1	74.6	107	Small	Blue	232.1	SW	NW	NE
54.9	147.6	77.3	110	Tight	Magenta	57.6	NE	SE	NE
55.2	322.1	74.5	107	Small	Blue	232.1	SW	NW	NE
56.7	31.5	59.5	106	Moderate	Green	301.5	NW	NE	NW
56.8	32.1	58.8	106	Moderate	Green	302.1	NW	NE	NW
57.4	19.1	61.9	106	Moderate	Green	289.1	NW	NE	NW
57.6	319.6	42.4	106	Moderate	Green	229.6	SW	NW	NE
57.6	356.7	72.2	107	Small	Blue	266.7	SW	NW	NE
58.0	49.3	68.2	107	Small	Blue	319.3	NW	NE	NW
58.2	50.5	68.1	107	Small	Blue	320.5	NW	NE	NW
58.3	225.1	77.4	107	Small	Blue	135.1	SE	SW	NW
58.5	53.8	68.1	107	Small	Blue	323.8	NW	NE	NW
58.7	54.5	67.8	107	Small	Blue	324.5	NW	NE	NW
58.8	50.5	68.0	107	Small	Blue	320.5	NW	NE	NW
58.9	230.6	76.1	107	Small	Blue	140.6	SE	SW	NW
59.0	41.6	67.9	107	Small	Blue	311.6	NW	NE	NW
59.3	47.4	67.8	107	Small	Blue	317.4	NW	NE	NW
59.6	50.5	67.8	107	Small	Blue	320.5	NW	NE	NW
60.0	65.3	67.7	107	Small	Blue	335.3	NW	NE	NW
60.1	64.5	68.2	107	Small	Blue	334.5	NW	NE	NW
60.2	60.2	41.8	107	Small	Blue	330.2	NW	NE	NW
60.3	57.5	67.9	107	Small	Blue	327.5	NW	NE	NW

Table 1
GZ-ML-4
Structure Data

Depth (ft bgl)	True Dip Azimuth	True Dip Angle	Apparent Aperture Code	Code Desc.	Code Color	Azimuth Strike (RHR)	Strike Direction (RHR)	Dip Direction Quadrant	Strike Direction Quadrant
61.3	63.6	76.8	110	Tight	Magenta	333.6	NW	NE	NW
61.6	99.6	80.9	110	Tight	Magenta	9.6	NE	SE	NE
62.0	95.8	80.5	110	Tight	Magenta	5.8	NE	SE	NE
62.4	93.5	80.8	110	Tight	Magenta	3.5	NE	SE	NE
62.5	333.6	48.7	107	Small	Blue	243.6	SW	NW	NE
62.6	99.6	80.7	110	Tight	Magenta	9.6	NE	SE	NE
62.6	198.4	84.7	110	Tight	Magenta	108.4	SE	SW	NW
62.9	100.9	81.1	110	Tight	Magenta	10.9	NE	SE	NE
64.7	21.9	48.6	107	Small	Blue	291.9	NW	NE	NW
64.9	24.6	48.7	110	Tight	Magenta	294.6	NW	NE	NW
65.5	330.8	58.0	110	Tight	Magenta	240.8	SW	NW	NE
65.8	333.9	57.9	110	Tight	Magenta	243.9	SW	NW	NE
66.1	334.0	57.4	110	Tight	Magenta	244.0	SW	NW	NE
66.8	285.2	69.7	110	Tight	Magenta	195.2	SW	NW	NE
67.1	285.3	69.6	110	Tight	Magenta	195.3	SW	NW	NE
67.6	291.5	69.7	110	Tight	Magenta	201.5	SW	NW	NE
68.1	304.9	62.9	110	Tight	Magenta	214.9	SW	NW	NE
68.6	319.3	62.3	110	Tight	Magenta	229.3	SW	NW	NE
68.9	327.1	61.9	110	Tight	Magenta	237.1	SW	NW	NE
69.3	151.2	37.7	110	Tight	Magenta	61.2	NE	SE	NE
69.4	164.5	69.0	110	Tight	Magenta	74.5	NE	SE	NE
69.7	161.2	68.8	110	Tight	Magenta	71.2	NE	SE	NE
70.0	164.4	69.2	107	Small	Blue	74.4	NE	SE	NE
70.2	165.5	68.9	107	Small	Blue	75.5	NE	SE	NE
70.4	164.4	68.9	107	Small	Blue	74.4	NE	SE	NE
70.7	218.8	77.6	110	Tight	Magenta	128.8	SE	SW	NW
70.7	165.5	68.8	110	Tight	Magenta	75.5	NE	SE	NE
70.9	216.2	77.5	110	Tight	Magenta	126.2	SE	SW	NW
70.9	165.5	68.7	110	Tight	Magenta	75.5	NE	SE	NE
71.2	212.1	75.8	110	Tight	Magenta	122.1	SE	SW	NW
71.2	39.5	68.7	110	Tight	Magenta	309.5	NW	NE	NW
71.5	39.3	68.8	110	Tight	Magenta	309.3	NW	NE	NW
71.7	215.7	77.1	110	Tight	Magenta	125.7	SE	SW	NW
71.7	40.6	68.8	110	Tight	Magenta	310.6	NW	NE	NW
72.0	41.4	68.4	110	Tight	Magenta	311.4	NW	NE	NW
72.6	22.8	69.8	110	Tight	Magenta	292.8	NW	NE	NW
72.9	28.3	69.6	110	Tight	Magenta	298.3	NW	NE	NW
73.2	18.7	68.4	110	Tight	Magenta	288.7	NW	NE	NW
73.6	20.4	68.8	110	Tight	Magenta	290.4	NW	NE	NW
74.0	3.0	71.8	110	Tight	Magenta	273.0	NW	NE	NW
74.4	7.5	71.8	110	Tight	Magenta	277.5	NW	NE	NW
74.8	351.7	57.6	110	Tight	Magenta	261.7	SW	NW	NE
75.0	199.9	68.2	107	Small	Blue	109.9	SE	SW	NW
75.4	3.3	66.8	110	Tight	Magenta	273.3	NW	NE	NW
75.4	207.2	68.4	107	Small	Blue	117.2	SE	SW	NW
76.1	296.8	55.7	106	Moderate	Green	206.8	SW	NW	NE
76.4	300.1	50.1	105	Large	Red	210.1	SW	NW	NE
77.0	285.4	46.3	105	Large	Red	195.4	SW	NW	NE
77.1	352.0	60.3	106	Moderate	Green	262.0	SW	NW	NE
77.2	79.2	60.8	105	Large	Red	349.2	NW	NE	NW

Table 1
GZ-ML-4
Structure Data

Depth (ft bgl)	True Dip Azimuth	True Dip Angle	Apparent Aperture Code	Code Desc.	Code Color	Azimuth Strike (RHR)	Strike Direction (RHR)	Dip Direction Quadrant	Strike Direction Quadrant
77.5	355.6	59.7	106	Moderate	Green	265.6	SW	NW	NE
77.7	359.5	60.1	105	Large	Red	269.5	SW	NW	NE
78.0	0.4	51.4	105	Large	Red	270.4	NW	NE	NW
78.5	5.0	75.0	105	Large	Red	275.0	NW	NE	NW
78.7	299.5	74.8	106	Moderate	Green	209.5	SW	NW	NE
79.0	297.3	75.0	106	Moderate	Green	207.3	SW	NW	NE
79.3	299.6	70.9	107	Small	Blue	209.6	SW	NW	NE
79.5	303.5	71.1	107	Small	Blue	213.5	SW	NW	NE
80.0	291.4	75.1	107	Small	Blue	201.4	SW	NW	NE
80.2	10.5	66.6	107	Small	Blue	280.5	NW	NE	NW
80.4	312.6	58.3	107	Small	Blue	222.6	SW	NW	NE
80.6	315.0	58.1	107	Small	Blue	225.0	SW	NW	NE
80.9	307.9	58.4	107	Small	Blue	217.9	SW	NW	NE
81.4	224.9	67.6	110	Tight	Magenta	134.9	SE	SW	NW
81.9	237.3	67.0	110	Tight	Magenta	147.3	SE	SW	NW
82.2	232.9	67.1	110	Tight	Magenta	142.9	SE	SW	NW
82.5	9.7	70.0	110	Tight	Magenta	279.7	NW	NE	NW
82.6	236.1	67.2	110	Tight	Magenta	146.1	SE	SW	NW
82.9	237.5	67.3	110	Tight	Magenta	147.5	SE	SW	NW
83.1	14.3	67.1	110	Tight	Magenta	284.3	NW	NE	NW
83.6	310.7	54.2	110	Tight	Magenta	220.7	SW	NW	NE
83.8	307.6	54.4	110	Tight	Magenta	217.6	SW	NW	NE
84.1	14.8	58.9	110	Tight	Magenta	284.8	NW	NE	NW
86.0	297.4	57.1	107	Small	Blue	207.4	SW	NW	NE
86.4	300.3	56.9	107	Small	Blue	210.3	SW	NW	NE
86.9	305.0	56.4	107	Small	Blue	215.0	SW	NW	NE
87.4	300.3	57.1	107	Small	Blue	210.3	SW	NW	NE
88.0	322.2	71.3	110	Tight	Magenta	232.2	SW	NW	NE
88.2	329.7	70.8	110	Tight	Magenta	239.7	SW	NW	NE
89.7	161.8	29.1	107	Small	Blue	71.8	NE	SE	NE
90.1	169.8	32.3	110	Tight	Magenta	79.8	NE	SE	NE
91.2	182.9	35.1	110	Tight	Magenta	92.9	SE	SW	NW
92.2	259.5	68.3	107	Small	Blue	169.5	SE	SW	NW
92.7	167.2	29.0	107	Small	Blue	77.2	NE	SE	NE
92.9	169.2	28.9	107	Small	Blue	79.2	NE	SE	NE
94.0	342.9	62.4	107	Small	Blue	252.9	SW	NW	NE
95.7	352.8	62.2	110	Tight	Magenta	262.8	SW	NW	NE
96.3	102.1	52.7	110	Tight	Magenta	12.1	NE	SE	NE
96.9	216.6	48.6	110	Tight	Magenta	126.6	SE	SW	NW
96.9	69.7	60.8	110	Tight	Magenta	339.7	NW	NE	NW
98.4	343.6	36.7	110	Tight	Magenta	253.6	SW	NW	NE
98.8	326.6	56.9	110	Tight	Magenta	236.6	SW	NW	NE
99.0	138.0	29.5	110	Tight	Magenta	48.0	NE	SE	NE
99.2	339.0	37.0	110	Tight	Magenta	249.0	SW	NW	NE
99.8	334.2	55.9	110	Tight	Magenta	244.2	SW	NW	NE
103.3	173.3	21.8	110	Tight	Magenta	83.3	NE	SE	NE
104.4	323.1	70.9	110	Tight	Magenta	233.1	SW	NW	NE
105.0	340.1	69.6	110	Tight	Magenta	250.1	SW	NW	NE
105.2	336.8	70.1	110	Tight	Magenta	246.8	SW	NW	NE
105.3	335.0	70.4	110	Tight	Magenta	245.0	SW	NW	NE

Table 1
GZ-ML-4
Structure Data

Depth (ft bgl)	True Dip Azimuth	True Dip Angle	Apparent Aperture Code	Code Desc.	Code Color	Azimuth Strike (RHR)	Strike Direction (RHR)	Dip Direction Quadrant	Strike Direction Quadrant
106.0	337.0	70.2	110	Tight	Magenta	247.0	SW	NW	NE
106.8	341.9	69.4	110	Tight	Magenta	251.9	SW	NW	NE
107.3	321.9	35.2	107	Small	Blue	231.9	SW	NW	NE
112.4	290.7	75.9	110	Tight	Magenta	200.7	SW	NW	NE
112.7	291.4	75.8	110	Tight	Magenta	201.4	SW	NW	NE
113.7	175.2	66.3	110	Tight	Magenta	85.2	NE	SE	NE
114.1	175.1	65.9	110	Tight	Magenta	85.1	NE	SE	NE
114.8	300.6	62.0	110	Tight	Magenta	210.6	SW	NW	NE
115.2	293.7	62.4	110	Tight	Magenta	203.7	SW	NW	NE
115.4	299.1	62.9	110	Tight	Magenta	209.1	SW	NW	NE
115.6	303.0	62.6	110	Tight	Magenta	213.0	SW	NW	NE
115.8	299.2	61.7	110	Tight	Magenta	209.2	SW	NW	NE
116.2	281.5	62.9	110	Tight	Magenta	191.5	SW	NW	NE
119.3	139.9	45.7	110	Tight	Magenta	49.9	NE	SE	NE
119.9	150.8	50.0	110	Tight	Magenta	60.8	NE	SE	NE
120.5	147.7	48.6	107	Small	Blue	57.7	NE	SE	NE
121.3	351.3	62.8	110	Tight	Magenta	261.3	SW	NW	NE
122.8	256.0	61.1	110	Tight	Magenta	166.0	SE	SW	NW
123.4	266.5	60.6	110	Tight	Magenta	176.5	SE	SW	NW
126.8	209.8	29.2	110	Tight	Magenta	119.8	SE	SW	NW
128.7	259.0	83.9	110	Tight	Magenta	169.0	SE	SW	NW
130.0	288.8	75.5	110	Tight	Magenta	198.8	SW	NW	NE
130.5	233.8	51.5	110	Tight	Magenta	143.8	SE	SW	NW
131.3	224.4	59.8	110	Tight	Magenta	134.4	SE	SW	NW
133.4	247.2	70.7	110	Tight	Magenta	157.2	SE	SW	NW
133.5	239.8	73.3	110	Tight	Magenta	149.8	SE	SW	NW
134.1	347.0	67.8	110	Tight	Magenta	257.0	SW	NW	NE
134.9	5.5	66.6	110	Tight	Magenta	275.5	NW	NE	NW
137.1	307.6	72.6	110	Tight	Magenta	217.6	SW	NW	NE
139.1	339.6	73.9	110	Tight	Magenta	249.6	SW	NW	NE
139.4	333.0	74.0	110	Tight	Magenta	243.0	SW	NW	NE
140.3	281.4	68.2	107	Small	Blue	191.4	SW	NW	NE
140.8	288.7	68.5	107	Small	Blue	198.7	SW	NW	NE
141.3	297.0	68.2	110	Tight	Magenta	207.0	SW	NW	NE
141.6	63.4	64.9	110	Tight	Magenta	333.4	NW	NE	NW
142.0	62.5	65.0	110	Tight	Magenta	332.5	NW	NE	NW
142.5	273.8	69.3	110	Tight	Magenta	183.8	SW	NW	NE
142.8	286.2	68.7	110	Tight	Magenta	196.2	SW	NW	NE
143.3	289.9	72.8	110	Tight	Magenta	199.9	SW	NW	NE
143.7	270.8	74.0	110	Tight	Magenta	180.8	SW	NW	NE
144.2	271.4	77.3	110	Tight	Magenta	181.4	SW	NW	NE
144.6	310.1	59.0	110	Tight	Magenta	220.1	SW	NW	NE
144.7	308.1	59.0	110	Tight	Magenta	218.1	SW	NW	NE
145.0	301.7	62.2	110	Tight	Magenta	211.7	SW	NW	NE
145.2	292.7	67.8	110	Tight	Magenta	202.7	SW	NW	NE
148.0	248.7	76.4	110	Tight	Magenta	158.7	SE	SW	NW
148.4	296.4	59.9	110	Tight	Magenta	206.4	SW	NW	NE
150.0	149.3	68.5	110	Tight	Magenta	59.3	NE	SE	NE
152.3	281.8	71.3	110	Tight	Magenta	191.8	SW	NW	NE
152.5	282.1	71.3	110	Tight	Magenta	192.1	SW	NW	NE

Table 1
GZ-ML-4
Structure Data

Depth (ft bgl)	True Dip Azimuth	True Dip Angle	Apparent Aperture Code	Code Desc.	Code Color	Azimuth Strike (RHR)	Strike Direction (RHR)	Dip Direction Quadrant	Strike Direction Quadrant
153.5	308.4	55.1	110	Tight	Magenta	218.4	SW	NW	NE
155.5	247.1	65.2	110	Tight	Magenta	157.1	SE	SW	NW
156.5	316.3	65.0	107	Small	Blue	226.3	SW	NW	NE
157.2	300.6	65.8	107	Small	Blue	210.6	SW	NW	NE
158.0	293.0	65.0	107	Small	Blue	203.0	SW	NW	NE
158.5	287.5	66.8	107	Small	Blue	197.5	SW	NW	NE
159.5	262.9	67.1	107	Small	Blue	172.9	SE	SW	NW
159.8	277.8	67.6	110	Tight	Magenta	187.8	SW	NW	NE
160.0	287.2	65.7	110	Tight	Magenta	197.2	SW	NW	NE
160.5	336.0	59.1	110	Tight	Magenta	246.0	SW	NW	NE
160.8	348.1	63.6	107	Small	Blue	258.1	SW	NW	NE
161.5	4.8	65.6	110	Tight	Magenta	274.8	NW	NE	NW
161.5	297.9	67.4	110	Tight	Magenta	207.9	SW	NW	NE
162.1	243.2	71.7	107	Small	Blue	153.2	SE	SW	NW
162.2	357.2	65.8	107	Small	Blue	267.2	SW	NW	NE
163.1	193.0	29.6	107	Small	Blue	103.0	SE	SW	NW
163.4	182.8	30.3	110	Tight	Magenta	92.8	SE	SW	NW
164.5	292.7	61.2	107	Small	Blue	202.7	SW	NW	NE
164.8	302.0	60.6	107	Small	Blue	212.0	SW	NW	NE
164.8	294.0	79.4	110	Tight	Magenta	204.0	SW	NW	NE
165.0	299.8	66.6	110	Tight	Magenta	209.8	SW	NW	NE
165.5	292.4	51.6	110	Tight	Magenta	202.4	SW	NW	NE
165.8	20.9	70.2	110	Tight	Magenta	290.9	NW	NE	NW
166.2	345.7	61.3	110	Tight	Magenta	255.7	SW	NW	NE
166.9	295.5	74.0	110	Tight	Magenta	205.5	SW	NW	NE
167.3	315.4	72.2	110	Tight	Magenta	225.4	SW	NW	NE
167.7	319.5	63.0	107	Small	Blue	229.5	SW	NW	NE
167.8	319.8	62.2	107	Small	Blue	229.8	SW	NW	NE
168.2	350.9	66.3	110	Tight	Magenta	260.9	SW	NW	NE
168.8	349.8	63.7	110	Tight	Magenta	259.8	SW	NW	NE
169.7	329.2	62.4	110	Tight	Magenta	239.2	SW	NW	NE
170.0	325.7	62.8	110	Tight	Magenta	235.7	SW	NW	NE
170.7	321.5	63.7	110	Tight	Magenta	231.5	SW	NW	NE
171.2	307.5	71.9	107	Small	Blue	217.5	SW	NW	NE
171.4	311.5	71.6	107	Small	Blue	221.5	SW	NW	NE
171.7	312.8	71.5	107	Small	Blue	222.8	SW	NW	NE
172.0	302.9	70.5	107	Small	Blue	212.9	SW	NW	NE
172.3	304.1	74.5	107	Small	Blue	214.1	SW	NW	NE
173.0	6.3	66.4	110	Tight	Magenta	276.3	NW	NE	NW
173.6	6.7	66.2	110	Tight	Magenta	276.7	NW	NE	NW
173.8	9.0	67.6	110	Tight	Magenta	279.0	NW	NE	NW
174.1	296.5	68.3	110	Tight	Magenta	206.5	SW	NW	NE
174.5	311.2	66.9	110	Tight	Magenta	221.2	SW	NW	NE
174.7	303.8	69.1	110	Tight	Magenta	213.8	SW	NW	NE
176.5	7.0	64.6	110	Tight	Magenta	277.0	NW	NE	NW
176.8	22.4	62.5	110	Tight	Magenta	292.4	NW	NE	NW
177.1	13.6	64.0	110	Tight	Magenta	283.6	NW	NE	NW
177.2	256.1	67.5	110	Tight	Magenta	166.1	SE	SW	NW
177.6	264.2	68.0	110	Tight	Magenta	174.2	SE	SW	NW
178.1	280.3	67.4	110	Tight	Magenta	190.3	SW	NW	NE

Table 1
GZ-ML-4
Structure Data

Depth (ft bgl)	True Dip Azimuth	True Dip Angle	Apparent Aperture Code	Code Desc.	Code Color	Azimuth Strike (RHR)	Strike Direction (RHR)	Dip Direction Quadrant	Strike Direction Quadrant
178.6	285.5	67.4	110	Tight	Magenta	195.5	SW	NW	NE
178.8	170.4	19.6	110	Tight	Magenta	80.4	NE	SE	NE
179.5	277.1	55.1	107	Small	Blue	187.1	SW	NW	NE
179.7	142.2	32.5	110	Tight	Magenta	52.2	NE	SE	NE
180.2	330.7	53.7	110	Tight	Magenta	240.7	SW	NW	NE
180.5	280.4	64.8	110	Tight	Magenta	190.4	SW	NW	NE
182.8	46.7	57.6	110	Tight	Magenta	316.7	NW	NE	NW
183.4	260.2	52.3	107	Small	Blue	170.2	SE	SW	NW
184.2	263.2	60.6	107	Small	Blue	173.2	SE	SW	NW
184.9	296.5	78.8	110	Tight	Magenta	206.5	SW	NW	NE
185.1	166.4	44.4	107	Small	Blue	76.4	NE	SE	NE
185.3	180.1	81.0	110	Tight	Magenta	90.1	SE	SW	NW
185.4	301.4	78.7	110	Tight	Magenta	211.4	SW	NW	NE
186.2	265.5	46.1	107	Small	Blue	175.5	SE	SW	NW
187.1	356.9	64.7	110	Tight	Magenta	266.9	SW	NW	NE
188.0	12.3	51.5	110	Tight	Magenta	282.3	NW	NE	NW
188.6	331.9	63.4	107	Small	Blue	241.9	SW	NW	NE
188.9	337.0	63.2	107	Small	Blue	247.0	SW	NW	NE
188.9	158.9	82.8	110	Tight	Magenta	68.9	NE	SE	NE
189.0	349.3	62.3	107	Small	Blue	259.3	SW	NW	NE
189.5	342.7	67.7	107	Small	Blue	252.7	SW	NW	NE
190.7	354.9	57.0	107	Small	Blue	264.9	SW	NW	NE
190.8	40.1	73.2	110	Tight	Magenta	310.1	NW	NE	NW
191.3	339.5	58.7	110	Tight	Magenta	249.5	SW	NW	NE
191.3	346.4	73.6	110	Tight	Magenta	256.4	SW	NW	NE
191.5	354.6	48.9	110	Tight	Magenta	264.6	SW	NW	NE
191.9	4.0	71.3	110	Tight	Magenta	274.0	NW	NE	NW
192.2	2.5	70.8	110	Tight	Magenta	272.5	NW	NE	NW
192.3	0.1	48.8	110	Tight	Magenta	270.1	NW	NE	NW
192.7	350.2	53.0	107	Small	Blue	260.2	SW	NW	NE
193.0	357.3	52.6	107	Small	Blue	267.3	SW	NW	NE
193.3	358.7	52.5	107	Small	Blue	268.7	SW	NW	NE
193.5	351.9	51.8	107	Small	Blue	261.9	SW	NW	NE
193.6	197.7	52.8	110	Tight	Magenta	107.7	SE	SW	NW
193.8	354.3	52.7	107	Small	Blue	264.3	SW	NW	NE
194.0	201.1	52.8	110	Tight	Magenta	111.1	SE	SW	NW
194.2	357.8	59.0	107	Small	Blue	267.8	SW	NW	NE
194.6	2.3	46.5	110	Tight	Magenta	272.3	NW	NE	NW
194.6	164.1	59.7	110	Tight	Magenta	74.1	NE	SE	NE
194.9	167.9	60.0	110	Tight	Magenta	77.9	NE	SE	NE
195.1	352.7	47.0	110	Tight	Magenta	262.7	SW	NW	NE
195.6	353.3	53.8	110	Tight	Magenta	263.3	SW	NW	NE
195.6	228.9	37.5	107	Small	Blue	138.9	SE	SW	NW
196.0	229.0	40.3	107	Small	Blue	139.0	SE	SW	NW
197.2	222.0	66.7	110	Tight	Magenta	132.0	SE	SW	NW
197.5	221.7	66.6	110	Tight	Magenta	131.7	SE	SW	NW

TABLE 2

GZ-ML-5 STRUCTURE TABLES

Table 2
GZ-ML-5
Structure Data

Depth (ft bgl)	True Dip Azimuth	True Dip Angle	Apparent Aperture Code	Code Desc.	Code Color	Azimuth Strike (RHR)	Strike Direction (RHR)	Dip Direction Quadrant	Strike Direction Quadrant
46.2	79.4	47.2	106	Moderate	Green	349.4	NW	NE	NW
46.9	34.2	59.6	106	Moderate	Green	304.2	NW	NE	NW
47.5	45.5	47.1	105	Large	Red	315.5	NW	NE	NW
48.9	280.2	63.1	105	Large	Red	190.2	SW	NW	NE
49.0	134.5	55.4	107	Small	Blue	44.5	NE	SE	NE
50.0	339.5	62.9	110	Tight	Magenta	249.5	SW	NW	NE
50.5	325.2	63.6	110	Tight	Magenta	235.2	SW	NW	NE
51.1	154.0	53.1	107	Small	Blue	64.0	NE	SE	NE
51.3	345.7	53.2	107	Small	Blue	255.7	SW	NW	NE
52.7	303.2	67.9	110	Tight	Magenta	213.2	SW	NW	NE
52.7	152.7	57.6	110	Tight	Magenta	62.7	NE	SE	NE
53.4	214.9	39.4	110	Tight	Magenta	124.9	SE	SW	NW
54.4	204.1	38.6	110	Tight	Magenta	114.1	SE	SW	NW
54.8	324.0	72.4	110	Tight	Magenta	234.0	SW	NW	NE
54.8	170.0	56.3	107	Small	Blue	80.0	NE	SE	NE
55.0	296.8	65.9	110	Tight	Magenta	206.8	SW	NW	NE
55.1	312.7	74.4	110	Tight	Magenta	222.7	SW	NW	NE
55.7	329.9	68.1	110	Tight	Magenta	239.9	SW	NW	NE
56.0	283.6	65.9	110	Tight	Magenta	193.6	SW	NW	NE
56.3	295.6	72.6	107	Small	Blue	205.6	SW	NW	NE
56.7	158.5	43.2	107	Small	Blue	68.5	NE	SE	NE
57.3	157.8	40.6	110	Tight	Magenta	67.8	NE	SE	NE
58.0	273.7	73.3	110	Tight	Magenta	183.7	SW	NW	NE
58.4	315.6	68.5	110	Tight	Magenta	225.6	SW	NW	NE
58.8	324.7	68.8	110	Tight	Magenta	234.7	SW	NW	NE
60.0	307.3	64.9	110	Tight	Magenta	217.3	SW	NW	NE
60.3	308.8	66.9	110	Tight	Magenta	218.8	SW	NW	NE
60.7	314.9	68.8	110	Tight	Magenta	224.9	SW	NW	NE
61.1	272.4	61.8	110	Tight	Magenta	182.4	SW	NW	NE
61.5	283.3	55.6	110	Tight	Magenta	193.3	SW	NW	NE
61.9	299.9	66.1	110	Tight	Magenta	209.9	SW	NW	NE
62.8	278.3	68.2	110	Tight	Magenta	188.3	SW	NW	NE
63.2	299.7	69.8	110	Tight	Magenta	209.7	SW	NW	NE
63.8	143.1	70.1	110	Tight	Magenta	53.1	NE	SE	NE
64.0	147.7	70.2	110	Tight	Magenta	57.7	NE	SE	NE
64.1	298.8	73.5	110	Tight	Magenta	208.8	SW	NW	NE
64.4	299.8	73.2	110	Tight	Magenta	209.8	SW	NW	NE
65.4	159.2	73.7	110	Tight	Magenta	69.2	NE	SE	NE
65.7	345.1	72.0	110	Tight	Magenta	255.1	SW	NW	NE
65.9	156.6	69.9	110	Tight	Magenta	66.6	NE	SE	NE
66.4	164.2	70.3	110	Tight	Magenta	74.2	NE	SE	NE
66.8	317.5	71.3	110	Tight	Magenta	227.5	SW	NW	NE
67.5	282.4	74.1	110	Tight	Magenta	192.4	SW	NW	NE
68.3	281.0	71.5	107	Small	Blue	191.0	SW	NW	NE
68.7	349.9	79.7	110	Tight	Magenta	259.9	SW	NW	NE
68.7	278.9	71.4	107	Small	Blue	188.9	SW	NW	NE
69.1	273.9	71.4	110	Tight	Magenta	183.9	SW	NW	NE
69.2	280.6	71.6	110	Tight	Magenta	190.6	SW	NW	NE
69.6	187.9	74.6	110	Tight	Magenta	97.9	SE	SW	NW

Table 2
GZ-ML-5
Structure Data

Depth (ft bgl)	True Dip Azimuth	True Dip Angle	Apparent Aperture Code	Code Desc.	Code Color	Azimuth Strike (RHR)	Strike Direction (RHR)	Dip Direction Quadrant	Strike Direction Quadrant
69.7	293.2	65.7	107	Small	Blue	203.2	SW	NW	NE
69.7	231.5	62.4	107	Small	Blue	141.5	SE	SW	NW
69.8	278.1	78.5	110	Tight	Magenta	188.1	SW	NW	NE
70.0	147.5	74.1	110	Tight	Magenta	57.5	NE	SE	NE
70.3	57.8	71.5	110	Tight	Magenta	327.8	NW	NE	NW
70.4	345.7	64.6	110	Tight	Magenta	255.7	SW	NW	NE
70.9	149.7	74.3	107	Small	Blue	59.7	NE	SE	NE
72.0	308.5	66.7	107	Small	Blue	218.5	SW	NW	NE
72.1	308.4	66.6	107	Small	Blue	218.4	SW	NW	NE
72.3	316.4	66.6	110	Tight	Magenta	226.4	SW	NW	NE
72.3	108.1	70.0	110	Tight	Magenta	18.1	NE	SE	NE
75.2	319.3	55.4	110	Tight	Magenta	229.3	SW	NW	NE
75.3	322.2	73.2	110	Tight	Magenta	232.2	SW	NW	NE
75.6	309.0	57.1	110	Tight	Magenta	219.0	SW	NW	NE
75.8	296.9	74.9	110	Tight	Magenta	206.9	SW	NW	NE
76.0	138.0	55.2	110	Tight	Magenta	48.0	NE	SE	NE
76.2	298.0	55.8	110	Tight	Magenta	208.0	SW	NW	NE
76.6	298.0	74.6	110	Tight	Magenta	208.0	SW	NW	NE
76.8	278.0	62.0	110	Tight	Magenta	188.0	SW	NW	NE
77.3	313.0	74.3	110	Tight	Magenta	223.0	SW	NW	NE
77.5	293.8	61.5	110	Tight	Magenta	203.8	SW	NW	NE
77.6	303.1	74.4	110	Tight	Magenta	213.1	SW	NW	NE
77.7	279.6	67.0	107	Small	Blue	189.6	SW	NW	NE
78.2	123.4	69.5	110	Tight	Magenta	33.4	NE	SE	NE
78.5	292.6	69.7	110	Tight	Magenta	202.6	SW	NW	NE
78.6	293.0	71.0	107	Small	Blue	203.0	SW	NW	NE
78.9	294.4	66.9	107	Small	Blue	204.4	SW	NW	NE
79.0	295.1	68.0	110	Tight	Magenta	205.1	SW	NW	NE
79.3	121.2	69.6	110	Tight	Magenta	31.2	NE	SE	NE
79.3	306.8	63.0	107	Small	Blue	216.8	SW	NW	NE
80.1	126.9	62.0	110	Tight	Magenta	36.9	NE	SE	NE
80.1	297.7	63.3	110	Tight	Magenta	207.7	SW	NW	NE
80.3	304.6	63.2	110	Tight	Magenta	214.6	SW	NW	NE
80.7	125.4	69.6	110	Tight	Magenta	35.4	NE	SE	NE
80.7	312.7	63.0	110	Tight	Magenta	222.7	SW	NW	NE
80.9	301.3	64.6	110	Tight	Magenta	211.3	SW	NW	NE
81.3	294.7	64.7	110	Tight	Magenta	204.7	SW	NW	NE
81.9	296.0	58.6	107	Small	Blue	206.0	SW	NW	NE
82.0	298.0	58.4	107	Small	Blue	208.0	SW	NW	NE
82.0	335.8	71.1	110	Tight	Magenta	245.8	SW	NW	NE
82.3	300.8	58.2	107	Small	Blue	210.8	SW	NW	NE
84.2	282.8	67.4	110	Tight	Magenta	192.8	SW	NW	NE
84.5	294.2	67.5	110	Tight	Magenta	204.2	SW	NW	NE
84.8	321.6	59.3	110	Tight	Magenta	231.6	SW	NW	NE
85.1	327.9	70.8	110	Tight	Magenta	237.9	SW	NW	NE
85.3	315.3	59.4	110	Tight	Magenta	225.3	SW	NW	NE
85.6	302.5	60.0	107	Small	Blue	212.5	SW	NW	NE
85.9	304.0	59.9	107	Small	Blue	214.0	SW	NW	NE
86.2	317.6	63.0	107	Small	Blue	227.6	SW	NW	NE

Table 2
GZ-ML-5
Structure Data

Depth (ft bgl)	True Dip Azimuth	True Dip Angle	Apparent Aperture Code	Code Desc.	Code Color	Azimuth Strike (RHR)	Strike Direction (RHR)	Dip Direction Quadrant	Strike Direction Quadrant
86.7	322.0	70.9	107	Small	Blue	232.0	SW	NW	NE
86.8	326.8	51.5	107	Small	Blue	236.8	SW	NW	NE
87.1	188.2	58.0	107	Small	Blue	98.2	SE	SW	NW
87.7	278.0	59.6	110	Tight	Magenta	188.0	SW	NW	NE
89.1	293.6	68.4	110	Tight	Magenta	203.6	SW	NW	NE
89.4	293.0	68.3	110	Tight	Magenta	203.0	SW	NW	NE
90.0	289.3	72.8	110	Tight	Magenta	199.3	SW	NW	NE
90.7	295.0	72.7	107	Small	Blue	205.0	SW	NW	NE
92.4	322.0	75.6	107	Small	Blue	232.0	SW	NW	NE
92.4	209.8	41.2	107	Small	Blue	119.8	SE	SW	NW
94.1	186.3	79.9	110	Tight	Magenta	96.3	SE	SW	NW
94.5	300.5	78.7	110	Tight	Magenta	210.5	SW	NW	NE
94.9	307.7	78.4	110	Tight	Magenta	217.7	SW	NW	NE
95.3	311.1	78.4	110	Tight	Magenta	221.1	SW	NW	NE
96.7	154.3	78.5	110	Tight	Magenta	64.3	NE	SE	NE
97.2	159.4	78.7	110	Tight	Magenta	69.4	NE	SE	NE
97.5	156.9	78.8	110	Tight	Magenta	66.9	NE	SE	NE
98.4	225.9	77.1	110	Tight	Magenta	135.9	SE	SW	NW
99.7	137.0	67.2	110	Tight	Magenta	47.0	NE	SE	NE
100.0	134.8	65.8	110	Tight	Magenta	44.8	NE	SE	NE
100.5	133.6	66.9	110	Tight	Magenta	43.6	NE	SE	NE
100.9	313.6	73.1	110	Tight	Magenta	223.6	SW	NW	NE
101.2	133.6	69.2	110	Tight	Magenta	43.6	NE	SE	NE
101.8	134.2	68.1	107	Small	Blue	44.2	NE	SE	NE
102.0	135.6	68.1	107	Small	Blue	45.6	NE	SE	NE
102.4	144.2	68.2	110	Tight	Magenta	54.2	NE	SE	NE
105.0	221.3	78.4	110	Tight	Magenta	131.3	SE	SW	NW
105.4	222.2	78.5	110	Tight	Magenta	132.2	SE	SW	NW
106.6	348.9	77.0	110	Tight	Magenta	258.9	SW	NW	NE
106.9	341.8	66.3	110	Tight	Magenta	251.8	SW	NW	NE
107.2	281.1	82.0	110	Tight	Magenta	191.1	SW	NW	NE
107.2	340.8	66.1	110	Tight	Magenta	250.8	SW	NW	NE
107.4	226.3	48.1	110	Tight	Magenta	136.3	SE	SW	NW
108.3	88.4	64.8	110	Tight	Magenta	358.4	NW	NE	NW
108.5	90.0	63.2	107	Small	Blue	360.0	NW	NE	NW
108.5	331.1	74.5	110	Tight	Magenta	241.1	SW	NW	NE
108.9	248.2	56.6	107	Small	Blue	158.2	SE	SW	NW
109.0	70.7	66.7	110	Tight	Magenta	340.7	NW	NE	NW
109.1	248.2	55.4	107	Small	Blue	158.2	SE	SW	NW
110.0	243.4	60.5	107	Small	Blue	153.4	SE	SW	NW
110.1	241.2	60.6	107	Small	Blue	151.2	SE	SW	NW
110.6	308.1	64.7	107	Small	Blue	218.1	SW	NW	NE
111.1	284.2	77.0	107	Small	Blue	194.2	SW	NW	NE
111.1	268.9	72.9	107	Small	Blue	178.9	SE	SW	NW
111.4	270.7	73.2	107	Small	Blue	180.7	SW	NW	NE
111.6	291.2	65.3	107	Small	Blue	201.2	SW	NW	NE
112.0	291.7	73.5	107	Small	Blue	201.7	SW	NW	NE
112.7	283.8	74.1	107	Small	Blue	193.8	SW	NW	NE
115.4	147.7	74.5	107	Small	Blue	57.7	NE	SE	NE

Table 2
GZ-ML-5
Structure Data

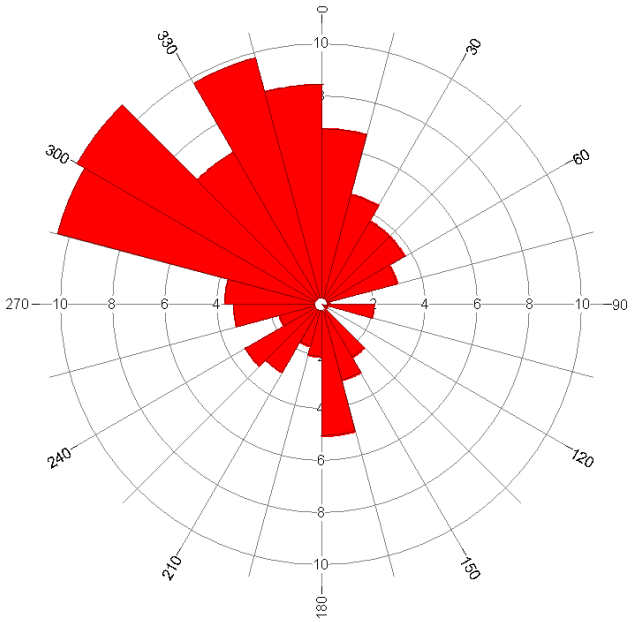
Depth (ft bgl)	True Dip Azimuth	True Dip Angle	Apparent Aperture Code	Code Desc.	Code Color	Azimuth Strike (RHR)	Strike Direction (RHR)	Dip Direction Quadrant	Strike Direction Quadrant
115.6	305.9	71.9	107	Small	Blue	215.9	SW	NW	NE
116.1	130.8	74.5	107	Small	Blue	40.8	NE	SE	NE
116.3	131.4	72.3	110	Tight	Magenta	41.4	NE	SE	NE
116.4	305.8	74.3	107	Small	Blue	215.8	SW	NW	NE
116.5	123.0	72.5	110	Tight	Magenta	33.0	NE	SE	NE
116.6	309.5	74.5	107	Small	Blue	219.5	SW	NW	NE
116.7	124.4	72.4	110	Tight	Magenta	34.4	NE	SE	NE
116.9	313.2	74.3	107	Small	Blue	223.2	SW	NW	NE
117.5	295.2	74.1	107	Small	Blue	205.2	SW	NW	NE
118.0	305.1	74.5	107	Small	Blue	215.1	SW	NW	NE
118.2	118.7	67.6	107	Small	Blue	28.7	NE	SE	NE
118.4	303.9	74.6	107	Small	Blue	213.9	SW	NW	NE
118.6	304.4	73.5	110	Tight	Magenta	214.4	SW	NW	NE
118.9	198.7	72.5	107	Small	Blue	108.7	SE	SW	NW
119.2	197.1	72.3	107	Small	Blue	107.1	SE	SW	NW
119.5	197.1	68.9	107	Small	Blue	107.1	SE	SW	NW
119.5	158.1	38.1	107	Small	Blue	68.1	NE	SE	NE
119.6	146.0	62.0	110	Tight	Magenta	56.0	NE	SE	NE
121.0	144.5	37.5	107	Small	Blue	54.5	NE	SE	NE
121.1	321.5	77.0	107	Small	Blue	231.5	SW	NW	NE
121.1	314.2	75.5	107	Small	Blue	224.2	SW	NW	NE
121.3	162.4	63.8	105	Large	Red	72.4	NE	SE	NE
121.3	319.7	75.4	105	Large	Red	229.7	SW	NW	NE
121.8	43.9	59.7	105	Large	Red	313.9	NW	NE	NW

APPENDIX C.

ROSE DIAGRAMS AND STEREONETS

Borehole Geophysical Logging
Charbert Facility
Alton, RI

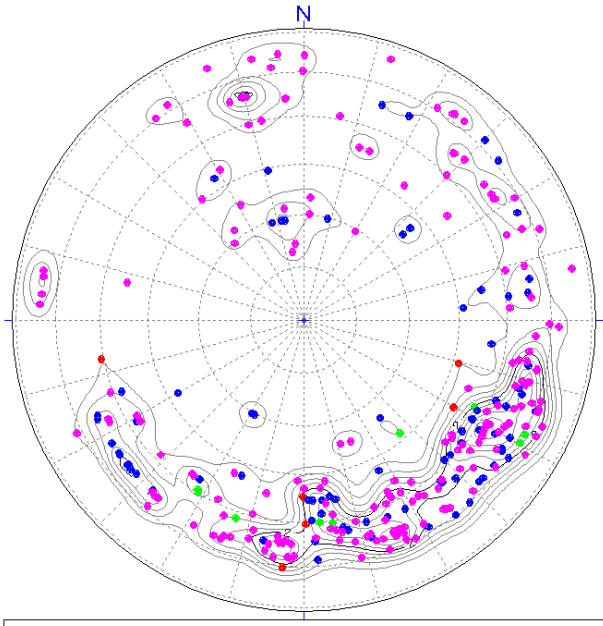
File 2009047



Well GZ-ML-4

Calculation Method .... Frequency
Class Interval ..... 15 Degrees
Length Filtering ..... Deactivated
Azimuth Filtering ..... Deactivated
Data Type ..... Unidirectional
Population 296
Maximum Percentage .... 10.8 Percent
Mean Percentage ..... 4.5 Percent
Standard Deviation .... 3.01 Percent
Vector Mean ..... 321.47 Degrees
Confidence Interval ... 10.8 Degrees
R-mag 0.41

Well GZ-ML-4



Projection ..... Schmidt (Equal Area)
Number of Sample Points 296
Mean Lineation Azimuth 149.2
Mean Lineation Plunge 26.4
Great Circle Azimuth 48.4
Great Circle Plunge 26.8
1st Eigenvalue 0.542
2nd Eigenvalue 0.312
3rd Eigenvalue 0.146
LN (E1 / E2) 0.553
LN (E2 / E3) 0.762
(LN(E1/E2)] / (LN(E2/E3)) .. 0.725
Spherical variance 0.4211
Rbar 0.5789

Charbert Facility

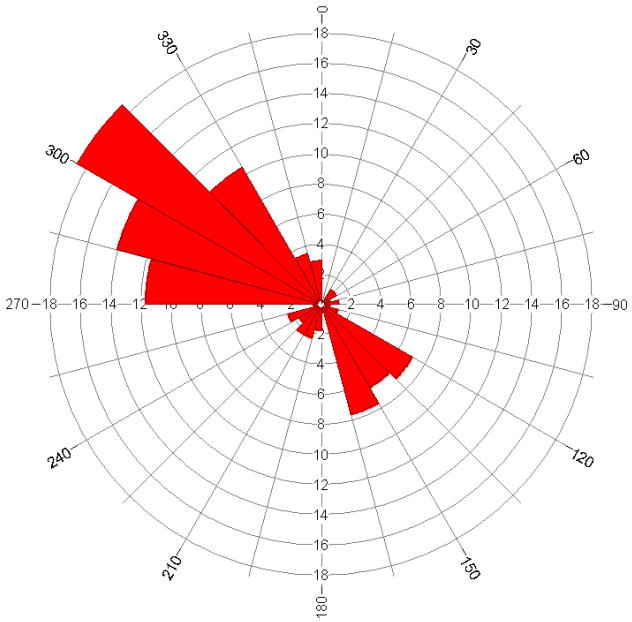
Polar Plot Diagram - Dip Azimuth & Angle

- Large Apperture
- Moderate Apperture
- Small Apperture
- Tight Apperture
- Rock Fabric
- Bedding

Hager GeoScience, Inc.

Borehole Geophysical Logging
Charbert Facility
Alton, RI

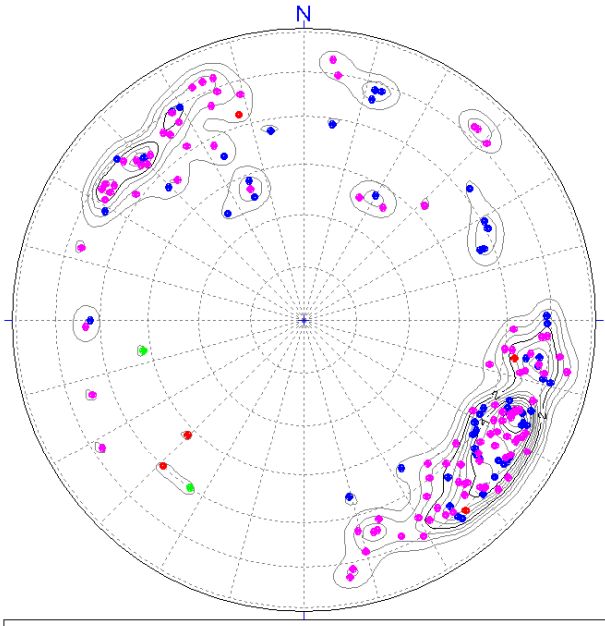
File 2009047



Well GZ-ML-5

Calculation Method .... Frequency
Class Interval ..... 15 Degrees
Length Filtering ..... Deactivated
Azimuth Filtering ..... Deactivated
Data Type ..... Unidirectional
Population 171
Maximum Percentage .... 18.7 Percent
Mean Percentage ..... 4.5 Percent
Standard Deviation .... 5.07 Percent
Vector Mean ..... 284.6 Degrees
Confidence Interval ... 15.35 Degrees
R-mag 0.38

Well GZ-ML-5



Projection ..... Schmidt (Equal Area)
Number of Sample Points 171
Mean Lineation Azimuth 126.4
Mean Lineation Plunge 12.3
Great Circle Azimuth 322
Great Circle Plunge 39.2
1st Eigenvalue 0.685
2nd Eigenvalue 0.209
3rd Eigenvalue 0.106
LN (E1 / E2) 1.189
LN (E2 / E3) 0.678
(LN(E1/E2)] / (LN(E2/E3)) .. 1.755
Spherical variance 0.4731
Rbar 0.5269

Charbert Facility

Polar Plot Diagram - Dip Azimuth & Angle

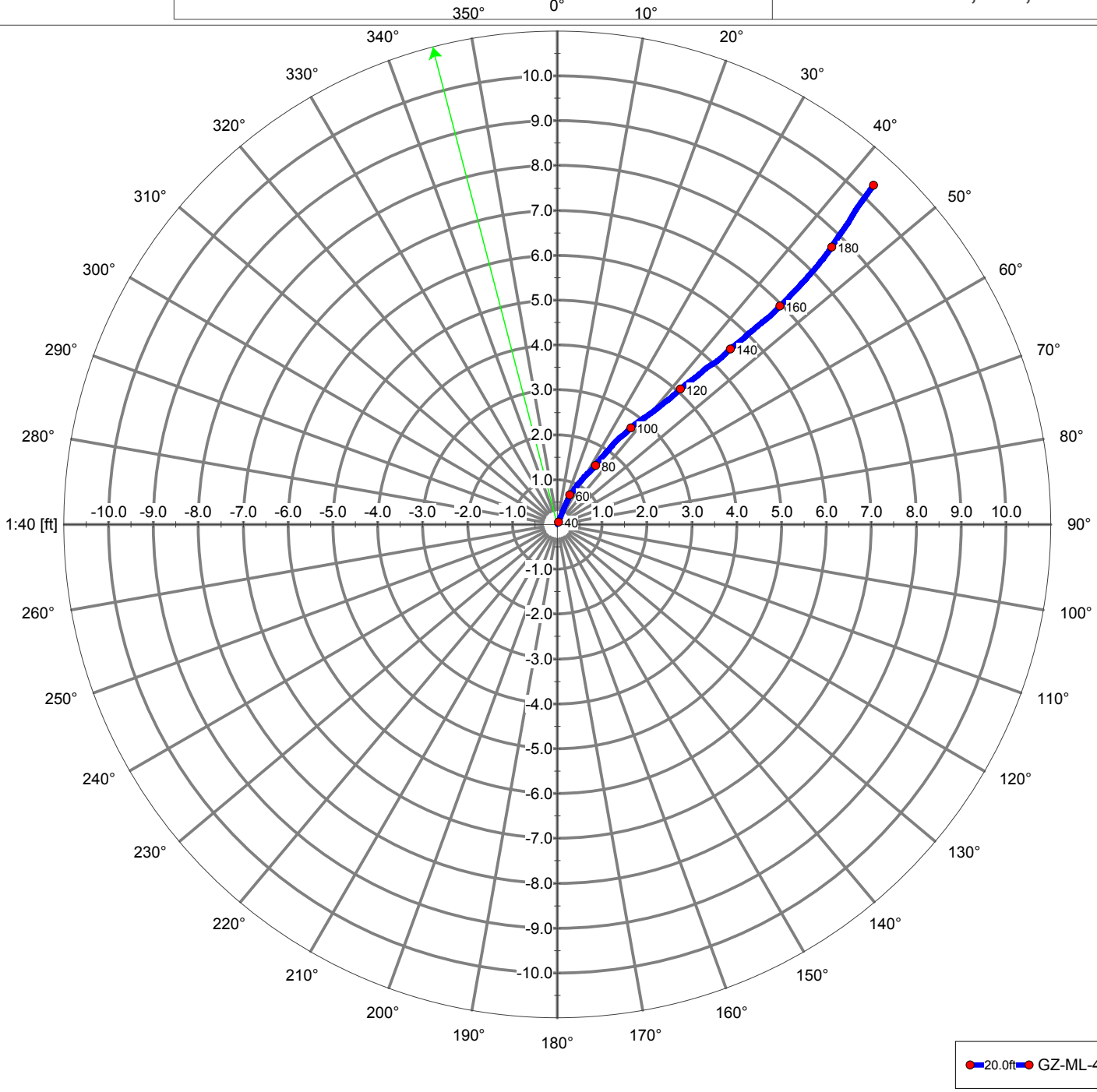
- Large Apperture
- Moderate Apperture
- Small Apperture
- Tight Apperture
- Rock Fabric
- Bedding

Hager GeoScience, Inc.

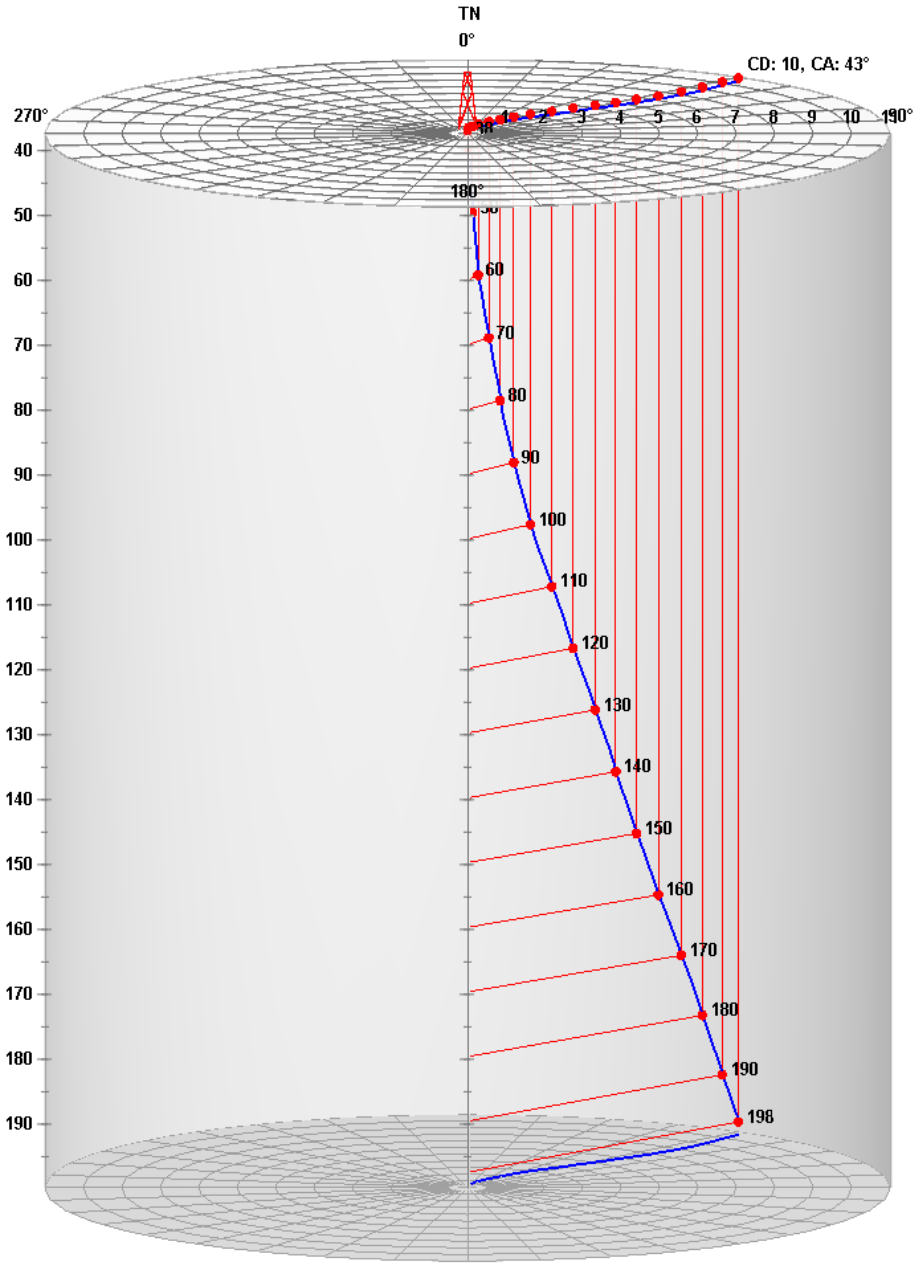
APPENDIX D.

DEVIATION PLOTS

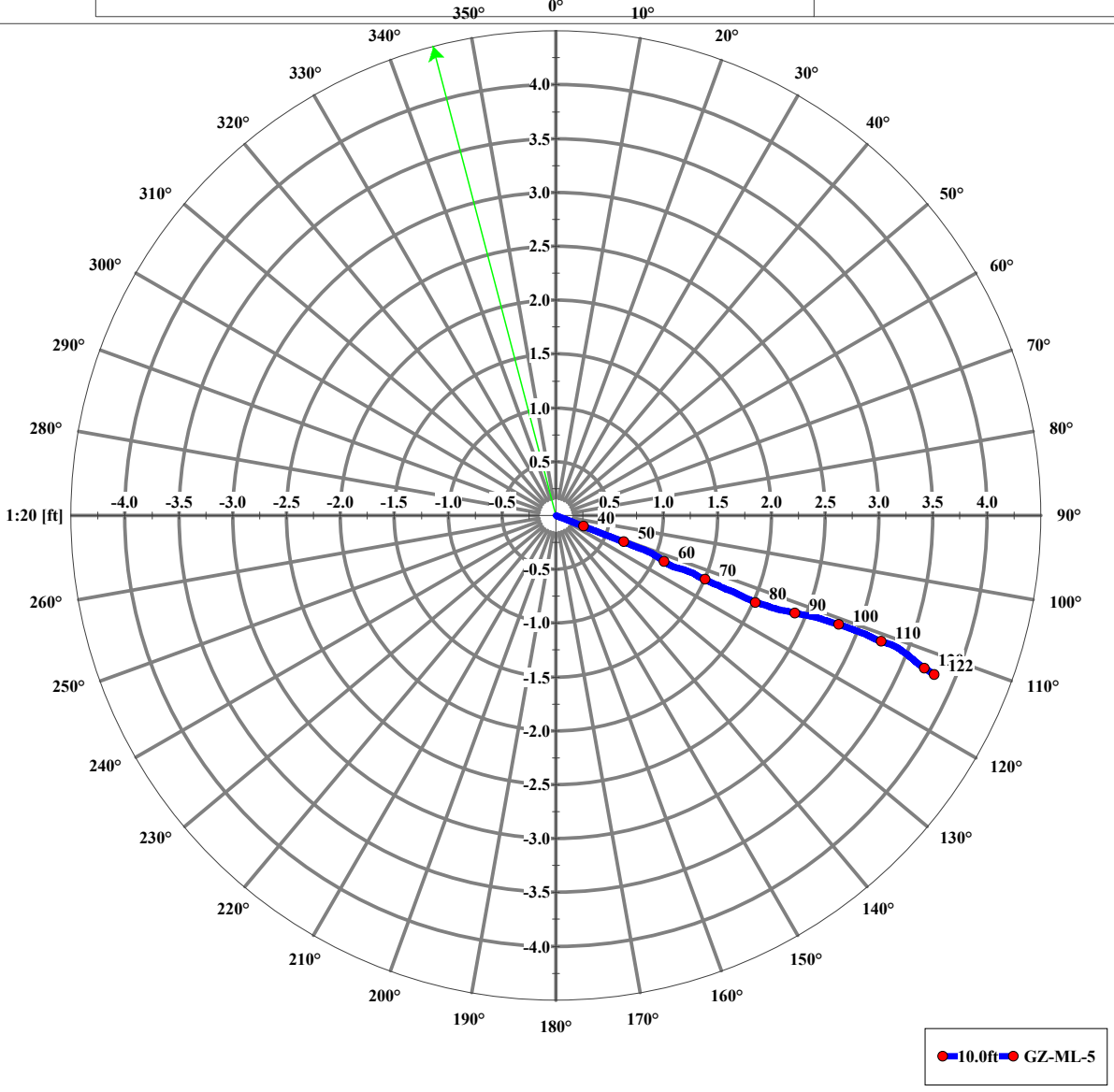
Hager GeoScience Inc.	Geophysical Logging Record: ***Bull's Eye Deviation Plot***
Site: Charbert Facility	Boring #: GZ-ML-4
Location: Alton, RI	Date Logged: 7-1-09
Client: GZA GeoEnvironmental	Logged By: MC, JB, KS



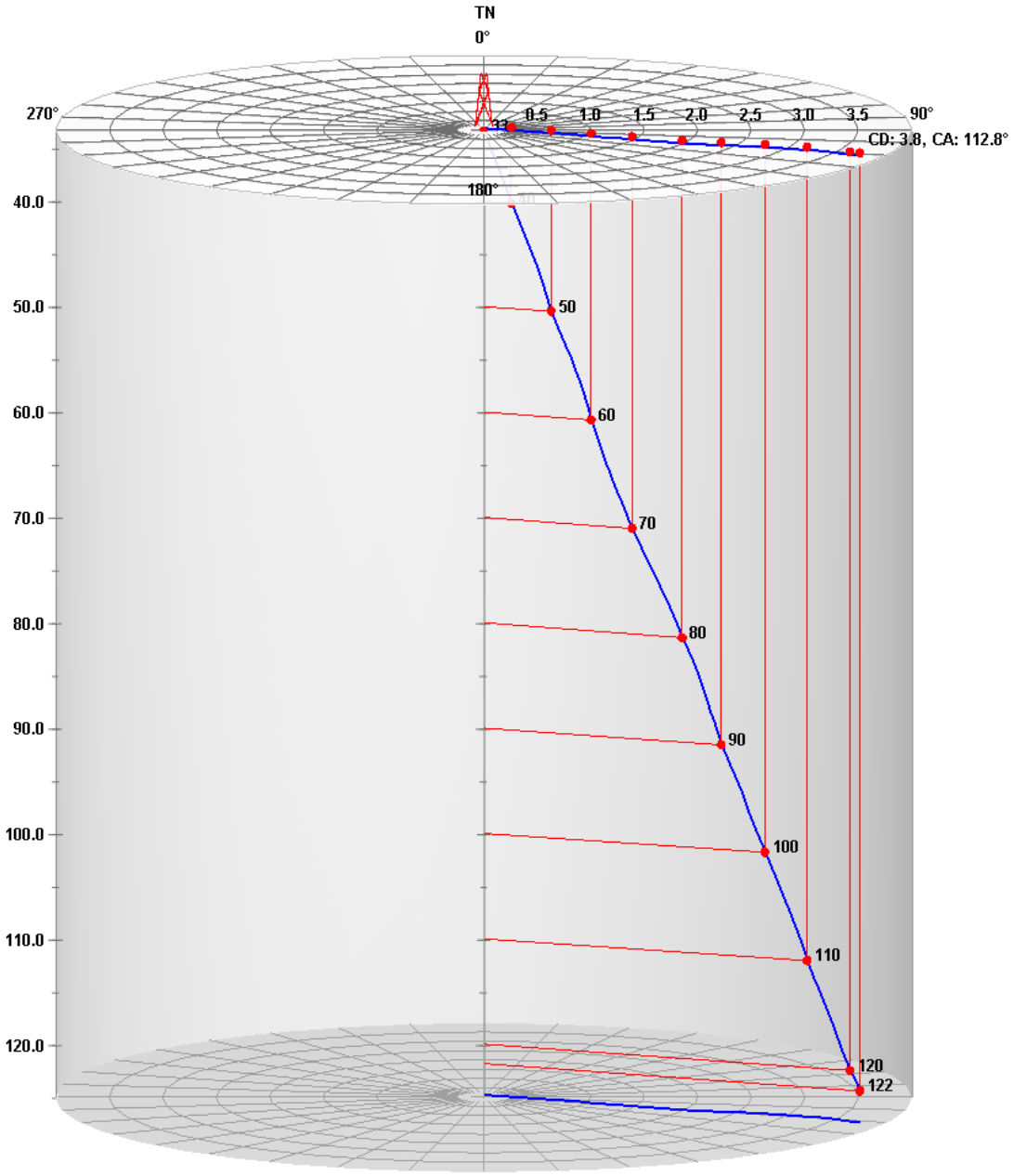
Hager GeoScience Inc.	Geophysical Logging Record: **3D Cylinder Deviation Plot**
Site: Charbert Facility	Boring #: GZ-ML-4
Location: Alton, RI	Date Logged: 7-1-09
Client: GZA Environmental	Logged By: MC, JB, KS



Hager GeoScience Inc.	Geophysical Logging Record: ***Bull's Eye Deviation Plot***
Site: Charbert Facility	Boring #: GZ-ML-5
Location: Alton, RI	Date Logged: 6-30-09
Client: GZA GeoEnvironmental	Logged By: MC, JB, KS



Hager GeoScience Inc.	Geophysical Logging Record: **3D Cylinder Deviation Plot**
Site: Charbert Facility	Boring #: GZ-ML-5
Location: Alton, RI	Date Logged: 6-30-09
Client: GZA Environmental	Logged By: MC, JB, KS



APPENDIX E

NBBS LEACHING STUDY

Ground Water Monitoring&Remediation

Laboratory Investigation into the Contribution of Contaminants to Ground Water from Equipment Materials Used in Sampling

by Tyler J Gilmore, Alexandre V. Mitroshkov, P. Evan Dresel, and Deborah S. Sklarew

Abstract

Benzene contamination was detected in well water samples from the Ogallala Aquifer beneath and adjacent to the Department of Energy's Pantex Plant near Amarillo, Texas. This study assessed whether or not the materials used in multilevel sampling equipment at this site could have contributed to the contaminants found in well water samples. As part of this investigation, laboratory testing of the sample equipment material was conducted.

Results from the laboratory tests indicated three different materials from two types of multilevel samplers did, in fact, contribute volatile and semivolatile organic compounds to the ground water samples from static leach tests that were conducted during an eight week period. The nylon–11 tubing contributed trace concentrations of benzene (1.37 µg/L) and relatively high concentrations of the plasticizer N-butylbenzenesulfonamide (NBSA) (764 mg/L) to the water; a urethane-coated nylon well liner contributed relatively high concentrations of toluene (278 µg/L) and trace amounts of NBSA; and a sampling port spacer material made of nylon/polypropylene/polyester-composite contributed trace amounts of toluene and NBSA.

While the concentrations of benzene and toluene measured in the laboratory tests were below the concentrations measured in actual ground water samples, the concentrations of organics from these equipment materials were sufficient to render the results reported for the ground water samples suspect.

Introduction

In an effort to acquire depth-discrete samples from the Ogallala Aquifer at the Department of Energy's (DOE) Pantex Plant, Texas, several multiport sampling systems from two different manufacturers were installed in monitoring wells. The sampling systems consisted of (1) urethane-coated nylon borehole liners with nylon–11 sample tubes connected to spacer material at the sample depths of interest, or (2) nylon–11 sample tubes at specific depths with packers isolating the intervals of interest. Initial sampling from these systems detected benzene ranging from 0.73 to 6.6 µg/L and other volatile organic compounds including toluene and acetone at low µg/L levels that were not anticipated. Prior to installation of this new equipment, benzene had not been detected in the aquifer at these locations. The site requested that the DOE assemble a technical assistance team to develop recommendations for evaluating the benzene source. The team recommended conducting a combination of field and laboratory testing to investigate the potential contamination of ground water samples from the sampling equipment material. This paper reports on the results of the laboratory testing of the sample equipment materials.

Background

A significant amount of work has been reported in the scientific literature on leaching and adsorption/desorption of organic constituents by polymer materials. Several studies have examined tubing made of various polymers for their sorption and desorption properties (Barcelona et al. 1984; Miller 1982; Reynolds and Gillham 1985; Parker and Ranney 1996, 1997, 1998; Gron et al. 1996).

Nylon–11 sample tubing is the major component that comes in contact with the sample water in both multilevel sampling systems at the Pantex site. The Gron et al. (1996) and the Parker and Ranney (1996, 1997, 1998) studies indicated nylon–11 tubing contributes organic compounds to the water, in particular the plasticizer N-butylbenzenesulfonamide (NBSA). It was hypothesized that one possible source of the benzene could therefore be the degradation of NBSA.

Published in 2004 by the National Ground Water Association.

The laboratory study presented in this paper was undertaken because these previous studies did not specifically address the leaching of the three volatile organics—benzene, toluene, and acetone—which were the primary compounds of interest at the Pantex site. Nor were the previous studies designed to track the occurrence of plasticizers, including NBSA, in the water. Therefore, leaching studies were performed on the three materials introduced into the sampling environment at Pantex with the goal of determining the leachability of the three volatile organics of interest and that of NBSA.

Materials and Methods

The laboratory testing focused on the material used in the ground water sampling equipment at the Pantex Plant. The materials tested included nylon–11 (polyamide) tubing, a urethane-coated nylon borehole liner, and a nylon/polypropylene/polyester-composite spacer material (Figures 1, 2, and 3). The latter two materials were unique to one of the sampling systems. This laboratory study involved three separate sets of experiments:

1. Vapor purge of tubing with sorbent trap analysis.
2. Static leach tests on the tubing, liner, and spacer material.
3. Leach tests with repeated purging of the tubing.

Vapor Purge and Sampling on Triple Sorbent Trap Tubes

An initial vapor purge and trap test was conducted on the tubing as it was received from the manufacturer. The tubing was filled with nitrogen at approximately atmospheric pressure, capped, and allowed to equilibrate for 1 hr. The tubing was then purged with additional nitrogen through a triple sorbent trap tube to capture any organics in the purged gas. The Supelco Carbotrap™ 300 traps are ground-glass tubes containing a series of sorbents arranged in order of increasing retentivity. The first two sorbent materials trap the less volatile compounds and the final trapping stage retains the most volatile components, including some persistent atmospheric gases such as Freon–12. The triple sorbent traps were thermally desorbed and the volatile compounds were analyzed by gas chromatography/mass spectrometry (GC/MS). Two blanks were used to establish background. Each blank used similar flow rates and exposure times as the tubing samples. Nitrogen gas was drawn over a sorbent trap minus the tubing for the first blank, and ambient air was used for the second blank.

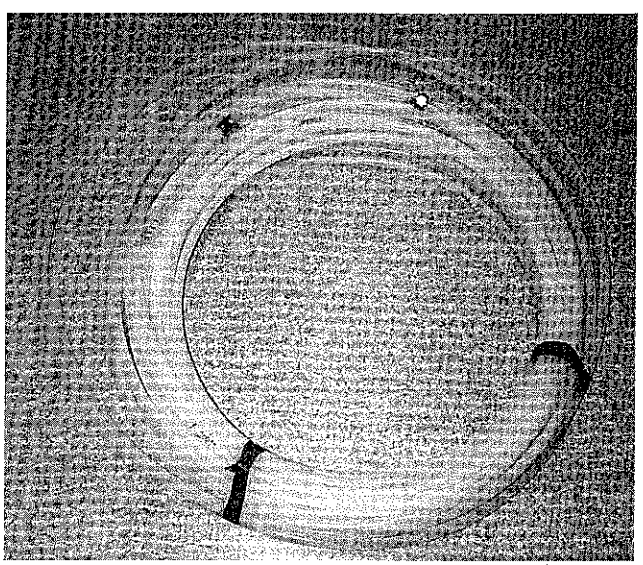


Figure 1. Nylon–11 sample tubing.

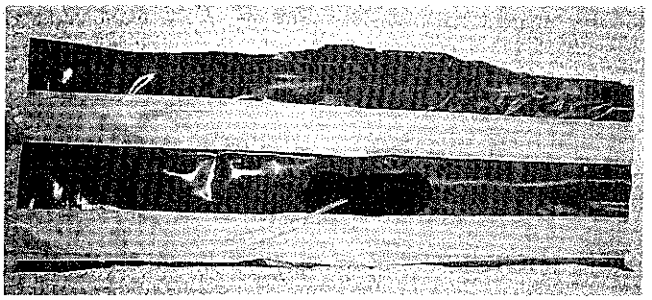


Figure 2. Urethane-coated well liner.

Static Leach Tests

Leach tests involved exposing the sample equipment material to four water types: Ogallala ground water; Ogallala water spiked with toluene and acetone; laboratory-grade water, deionized and filtered through activated carbon; and laboratory-grade water spiked with known concentrations of toluene and acetone. The ground water used in the experiment was obtained from an uncontaminated Ogallala Aquifer well at the Pantex site. The toluene- and acetone-spiked water was intended to test the hypothesis that these constituents could increase the leaching of plasticizers from the tubing. The water was spiked by adding the toluene and acetone by micropipette into a 20 L gas carboy, sealing, and allowing the constituents to dissolve using a magnetic stir plate for up to 12 hrs. The concentrations of toluene and acetone in the spiked water were ~300 µg/L and 1200 µg/L, respectively, and were intended to replicate the higher concentrations measured in the ground water at the site. Mercuric chloride (35 mg/L) was added to all the leach test water to prevent losses from biological activity.

The leach tests were conducted over a period of eight weeks with sampling intervals at one, two, four, and eight weeks. These sample times were designed to simulate the length of time stagnant water may have been in contact with the tubing between installation and the initial sampling of the multiport wells. It should be noted that the sampling procedures recommended by the manufacturer allow the tubing to be fully purged before a sample is collected. If the procedures are followed, the water collected may only be in contact with the nylon–11 tubing for ~10 min. According to field notes, the original field ground water samples were apparently collected without completely purging the tubing.

Prior to conducting leach tests on the tubing, the tubing was rinsed with deionized water three times and then dried using nitrogen gas. Two spools of tubing, each ~275 m long, were then filled, one with uncontaminated water and the second with spiked (toluene and acetone) ground water. The tubing was capped with stainless steel compression fittings and stored at room temperature (21°C) in a dark cabinet to simulate the natural sampling conditions in the field. For

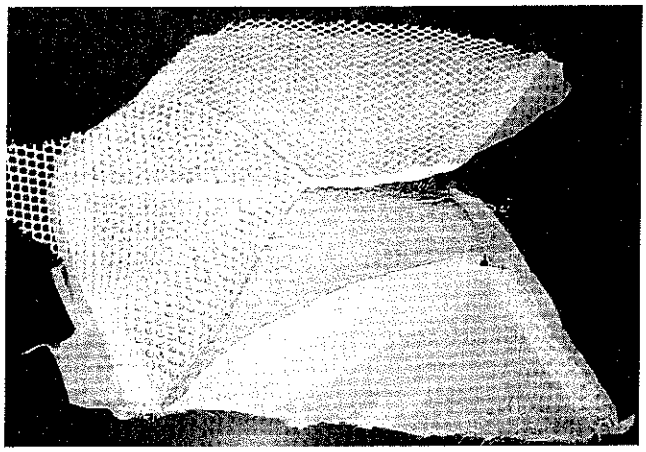


Figure 3. Spacer material used at sampling port.

each time-series sample, a length of tubing was cut off the tubing spool, and the sample water was drained into sample jars for analysis. The remaining tubing was immediately resealed with the caps. The samples collected from the leach experiments for volatile organic analysis were transferred to septum-topped 40 mL vials, and the semivolatile samples were placed in 1 L amber glass jars.

The volume of sample water required for the analyses determined the total length of the tubing required for the leach experiments. To work with practical lengths of tubing, the larger-volume 1.27 cm diameter tubing was used for laboratory tests. In the field installations of the multilevel samplers, both 1.27 and 0.63 cm tubing are used. The 0.63 cm tubing has a higher surface-to-volume ratio, ~1.8 times higher than the 1.27 cm surface-to-volume ratio. The effects of the surface-to-volume ratios are considered in the presentation of the results.

For the leach tests, the liner was cut to 0.093 m^2 and the spacer was cut to 0.278 m^2, representing the approximate surface area under field conditions. The material was placed in amber glass jars and filled with laboratory-grade water and spiked laboratory water. Amber glass jars that did not contain sample equipment materials were also filled with water and used as control samples. The sample jars were all stored in a dark cabinet at room temperature. One jar was sacrificed for each time-series analysis to eliminate the potential effects of headspace in the sample containers. Sample water was extracted from the jars at one, two, four, and eight weeks, placed in the appropriate sample bottles, and analyzed for volatile and semivolatile organic compounds.

Purge Testing of Tubing

To test the hypothesis that volatile organic compounds leach from the tubing and the leach rate decreases over time, one piece of tubing was sampled several times. This piece of tubing was sampled and refilled at the two, four, and eight week sample periods along with the other leach samples.

Analytical Methods

Water samples from these experiments were analyzed by gas chromatography with photoionization and electrolytic conductivity detectors (GC/PID/ELCD) for benzene and other volatile organic compounds. Extraneous peaks found by the GC/PID/ELCD were analyzed by GC/MS to identify the compounds. Semivolatile organic compounds were measured by GC/MS; specific monitoring of NBSA was conducted. Split samples were sent to a contract laboratory for validation.

Analysis of benzene and other volatile organic compounds was based on the guidelines set forth in U.S. EPA method 502.2 (U.S. EPA 1995). Specific deviations to this method include the use of external rather than internal standards and the use of four as opposed to five point calibrations. This method can quantify up to a total of 64 chlorinated and nonchlorinated aromatic compounds. Instrument detection limits for the benzene and toluene components in the water sample are estimated at 0.10 ppb.

The semivolatile analysis focused on the compounds of interest, which are the plasticizers and, in particular, NBSA. Although a number of phthalate ester plasticizers are included in the standard semivolatile methods, NBSA is not. This required that a standard for NBSA be obtained. A standard was purchased from Aldrich Chemical Company Inc. (Milwaukee, Wisconsin). The method used in this investigation was the U.S. EPA SW–846 method 8270C (U.S. EPA 1986) in which the water from these experiments was initially extracted by liquid-liquid partitioning with methylene chloride. The optimum pH for extraction was determined to be neutral. Quality control was accomplished by performing the same procedures for reagent blanks (laboratory-grade water), laboratory control samples, duplicate samples, and split samples analyzed by a contract laboratory.

Results

The results from each of the three separate sets of experiments detected at least trace organics resulting from the sample equipment material (Table 1).

Table 1
Peak Concentrations of Contaminants of Primary Concern

Sample Equipment Material	Benzene	Toluene	NBSA* Plasticizer
Nylon-11 tubing (1.27 cm diameter)	1.37 µg/L	< 0.02 µg/L	764 mg/L
Urethane-coated nylon liner	< 0.02 µg/L	278 µg/L	Trace
Nylon/polypylene/polyester-composite spacer	< 0.02 µg/L	1.53 µg/L	Trace

*N-butylbenzenesulfoneamide

Vapor Purge of Tubing and Sorbent Trap Results

The results indicated that a significant number of volatile organic compounds were present inside the tubing as it was received from the manufacturer. The constituents with the highest concentrations were 2-methyl–1-propene, acetone, ethanol, and benzene. The concentrations were at least 30 times above background concentrations in air. Although it is difficult to quantify the results, which are related to surface area, residence time, purge flow rate, and volumes, specific organic compounds were identified and relative concentrations determined. These volatile organic compounds are not typically used in the making of nylon–11 and are suspected to be residue from the extrusion process during formation of the tubing.

Leach Experiment Results

Volatile organics were detected in varying concentrations from leachates of all three of the sample materials.

Tubing

Elevated concentrations of benzene were present in all leachates of the sample tubing (Figure 4). The benzene concentrations peaked at ~1.37 µg/L after two weeks and then appeared to level off for the remainder of the eight week study period. The benzene concentration profiles for both the ground water spiked with toluene and acetone and the unspiked ground water were nearly the same. This indicates that the presence of elevated toluene and acetone concentrations do not increase the benzene concentrations in the water samples. There was no difference in the leached concentrations of benzene in the laboratory-grade water vs. water from the Ogallala Aquifer.

Concentrations of the NBSA plasticizer leached from the tubing varied between 481 and 770 mg/L during the course of the study. With the exception of one relatively high duplicate sample, the concentrations of NBSA continued to increase during the eight week period of the leach experiment (Figure 5). This plasticizer has previously been found to leach from nylon–11 tubing by Gron et al. (1996) and

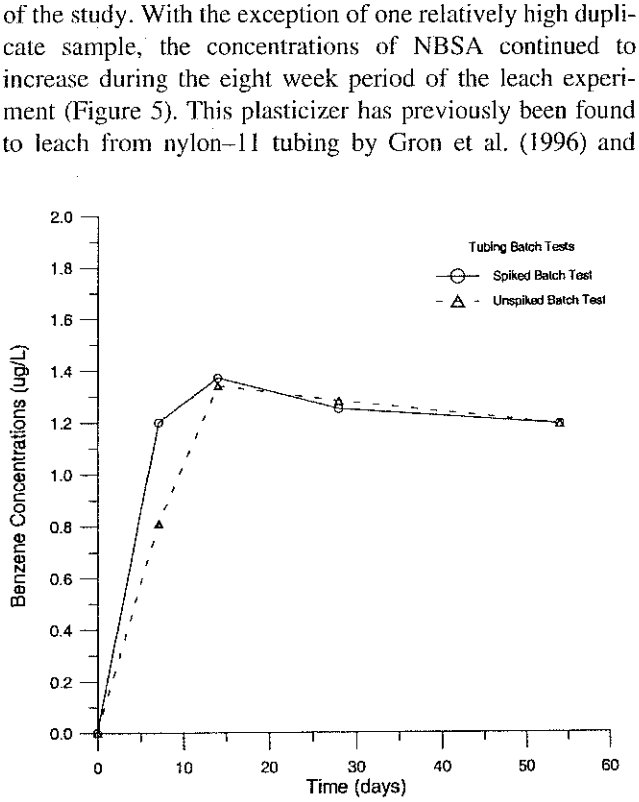


Figure 4. Results of tubing leach tests for benzene.

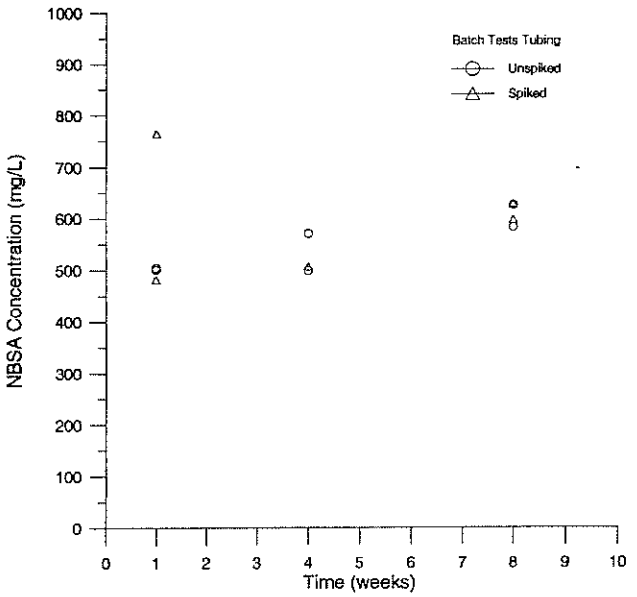


Figure 5. Results of the tubing leach tests for plasticizer NBSA.

Parker and Ranney (1997). Other semivolatile compounds identified in the tubing extract were 1,1′-sulfonylbis-benzene and N-(secbutyl)benzenesulfonamide, but in significantly lower concentrations than NBSA (Table 2).

The NBSA concentrations increased during the course of the experiment, while the benzene concentrations stabilized or slightly decreased after two weeks, indicating that the NBSA leaching is independent of the benzene. Thus, it appears that NBSA does not degrade into benzene, at least in the presence of a biocide. This experiment, however, cannot address whether NBSA can biologically degrade into benzene in a field setting.

Spacer Material

Spacer material leach tests produced toluene concentrations that averaged 1.4 µg/L. The concentrations peaked during the second week's sampling and then declined slightly during the remaining six weeks. There were only trace amounts of benzene (< 0.1 µg/L), acetone (< 5.4 µg/L), and NBSA leached from the spacer material. A few other semivolatile compounds were identified on chromatograms in the concentration range of 1 to 10 mg/L (Tables 1 and 2). The most intensive peak was identified as the plastic additive Tinuvin® (a benzotriazole UV absorber).

Vinyl Liner

The vinyl liner leached toluene at concentrations as high as 260 µg/L. The concentrations also peaked during the second week and appeared constant over the remaining time of the leach tests. Benzene and acetone were not detected. Trace levels of semivolatile organic compounds such as NBSA were also present. Other semivolatile organics in the range of 1 to100 mg/L included the plastic additive Tinuvin®. Other compounds tentatively identified are listed in Table 2.

Consecutive Leaching

To assess whether leachable concentrations of volatile organics would decrease with time and water flushes, one

Table 2
Tentatively Identified Compounds in the Samples

Compound	CAS Number	Tubing	Liner	Spacer
Benzene, 1,1'-sulfonylbis	127-63-9	+		
N-(sec-butyl)benzenesulfonamide	NA	+		
Toluene	108-88-3		+	
N,N-dimethyl-formamide	68-12-2		+	
Phenol	108-95-2		+	
Benzoic acid	65-85-0		+	
2-(2-butoxyethoxy)-ethanol	112-34-5		+	
Benzoylformic acid	611-73-4		+	
1,6-dioxacyclododecane-7,12-dione	777-95-7		+	
2,2,6,6-tetramethyl-4-piperidylamino betacrotonic acid ethyl ester	NA		+	
Tinuvin®	NA		+	+

+ = detected
NA = no CAS number assigned

length of tubing was filled with water and purged three times. The first sample was collected after the water was in contact with the tubing for two weeks. The initial leached concentration for benzene was 1.51 µg/L. The tubing was emptied, refilled, and sampled again after two weeks of exposure. The tubing was again emptied, refilled, and sampled after four weeks of exposure. The data showed a decrease in concentrations; however, the final benzene concentration was still 1 µg/L (Figure 6).

Discussion

The concentration of benzene in the tubing is a function of the tubing surface-to-water volume ratio. The multilevel samplers in the field use both 1.27 and 0.63 cm tubing, with the 0.63 cm tubing having a higher surface-to-water volume ratio. In the laboratory tests, 1.27 cm tubing was used because the lengths needed for the required sample water volumes were more practical than those using the 0.63 cm tubing. To compare benzene concentrations between different tubing diameters, the surface-to-volume ratios must be estimated. The surface-to-volume ratio of the 0.63 cm tubing is ~1.8 times the ratio of the 1.27 cm tubing. Assuming the effects of the surface-to-volume ratios are linear, a concentration of 1.37 µg/L in 1.27 cm tubing is equivalent to ~2.5 µg/L concentration in the 0.63 cm tubing.

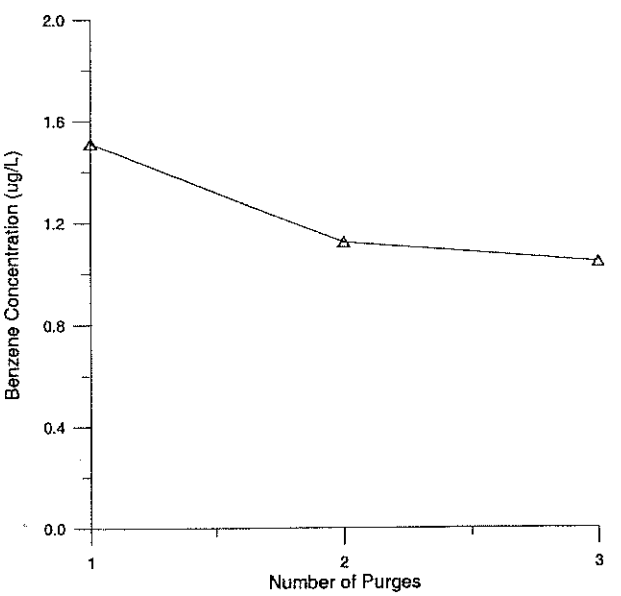


Figure 6. Benzene concentration trend with repeated purging.

While the concentrations measured in the laboratory leach tests are below many of the benzene concentrations measured in the field, which ranged from ~1 to 11 µg/L, the most critical finding is that the sample material as tested did contribute benzene to the water. Because the concentrations of benzene measured in the field are at or above maximum contaminant level (5 µg/L), and the implications of exceeding the maximum contaminant level are significant, the aquifer should be resampled using sampling equipment that does not contribute benzene to the sample water for a more accurate assessment of the aquifer waters.

The source of the benzene in the tubing is problematic. The suggestion that the plasticizers contribute to the benzene was unsupported by the leach testing results. In addition, benzene is not part of the formulation of nylon–11, which is a castor oil-based material, although benzene could be used in the extraction process of the castor beans. The tubing is suspected to pick up the benzene contamination from somewhere in the manufacturing or shipping process. During a phone interview, the tubing manufacturer could not identify sources of benzene in the extrusion process. The manufacturer receives the nylon–11 material in bulk barrels; it is dried, melted, and formed into tubing through an extrusion process. The nylon melt is ~221°C, which should drive off many of the volatile organics. The extruded tubing is cooled in a water bath, then cut, packaged, and shipped. The water bath contacts only the outside of the tubing. A vent hole in the extruder allows ambient air inside the tubing to keep it from collapsing and, according to the manufacturing engineer, it should not contain volatile organics. Regardless, the volatiles—2-methyl–1-propene, acetone, ethanol, and benzene—were all measured during the initial nitrogen purge of

the tubing. Therefore, the original source of the volatile organics in the tubing at present is unresolved.

The toluene measured from the urethane-coated nylon liner is suspected to be from the manufacturing process. The supplier indicated that all the urethane-coated nylons use toluene in the process. The urethane is applied at the melt temperature, well above the boiling temperature of toluene. However, some toluene vapor may be trapped between the urethane coatings.

The source of the NBSA is the plastics. The NBSA concentrations measured in the leach tests ranged from 481 to 764 mg/L and were much higher than anticipated. Although there is no drinking water standard for NBSA, the compound has been shown to be persistent in the environment and Germany has stopped the production of the compound because of concern regarding the potentially toxic effects of the plasticizer (Huppert et. al. 1998). In general, the more plasticizer used, the more flexible the tubing. There are tubing materials that do not contribute plasticizers to the water, and these should be considered when using multiport sampling systems.

Whatever the source(s), it is critical for environmental sampling to have essentially inert and contamination-free equipment to ensure representative evaluation of the aquifer. The sample material components that come in contact with the sample water must be cleaned before use and equipment blanks collected to document the results. In addition, it may be beneficial to archive some of the sampling material in the event the results are suspicious and the material is needed for an equipment blank.

Conclusions

All the sample materials tested contributed organic compounds to the water when exposed to ground water and laboratory-grade water under static leach conditions. The nylon–11 tubing contributed trace concentrations of benzene and relatively high concentrations of the plasticizer NBSA (764 mg/L) to the water, the liner contributed relatively high concentrations of toluene (278 µg/L) and trace amounts of NBSA, and the spacer contributed trace amounts of toluene and NBSA. The presence of other solvents (acetone and toluene) added to some test waters did not increase the leaching of benzene or NBSA from the sample materials.

The vapor purge tests of the tubing show that the tubing can arrive from the manufacturer with organic contamination. The leached concentrations of benzene from the tubing increased in the first two weeks of exposure and then appeared to level off, while the NBSA increased during the course of the eight week test. This is one indication that the leachable concentrations of NBSA are independent of benzene under the conditions of this test. The nylon–11 tubing was found to contribute up to 1.37 µg/L of benzene to the sample water; the amount appeared to decrease with repeated purging. Normalizing to account for the higher surface-to-volume ratio of the smallest tubing used in the field makes this concentration ~2.5 µg/L. While these concentrations may not account for all of the benzene detected in the Pantex Plant ground water samples, which ranged from 1 to 11 µg/L, they do call into question the representativeness of those samples collected using nylon–11 tubing.

The nylon–11 tubing also leached much higher concentrations, 481 to 764 mg/L, of the plasticizer NBSA to the water. While there are no regulatory concentration limits on NBSA, the premise of using sampling materials that contribute organic compounds to the sample water when organics are the constituents of concern is unsound. It is critical in environmental sampling to test and clean the materials before use in a well. This will eliminate or minimize the questionable sample results that may occur.

Acknowledgments

The authors would like to thank the U.S. Department of Energy's Technical Assistance Program, and the technical assistance team members for Pantex: Brian Riha, Steve Conrad, Paul Hezel, Bob Starr, and Dawn Kaback. Also, thanks to Tom Hicks, DOE Pantex, and Dale Stout and his staff at BWXT Pantex for their support and Carl Keller for providing some of the sampling materials, and two anonymous reviewers for their comments and suggestions on the manuscript.

Editor's Note: The use of brand names in peer-reviewed papers is for identification purposes only and does not constitute endorsement by the authors, their employers, or the National Ground Water Association.

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CHARBERT, A DIVISION OF NFA CORP.

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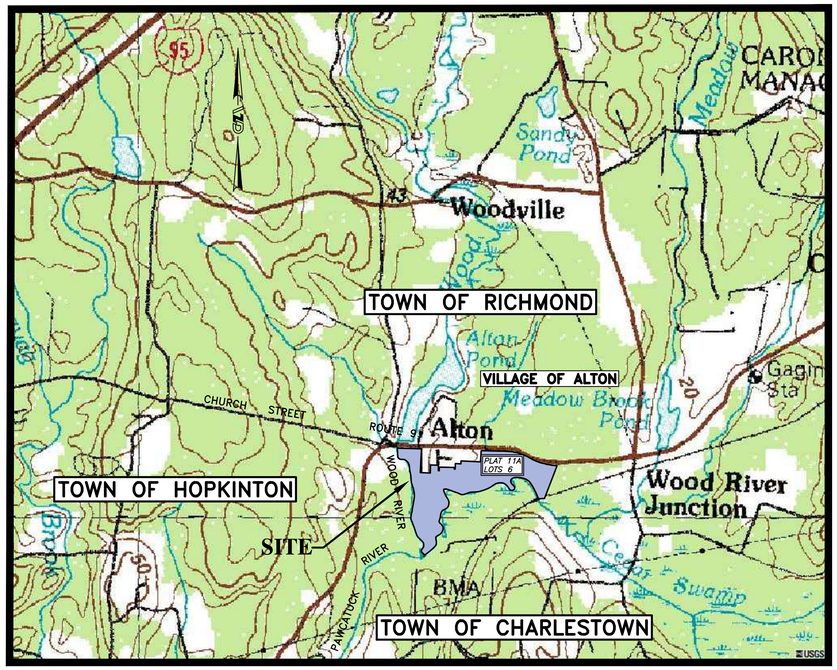
RICHMOND, RHODE ISLAND



LOCUS PLAN/PROPERTY BOUNDARY PLAN

NOT TO SCALE

Index of Drawings

FIGURE NUMBER	SHEET TITLE
C-1	LOCUS PLAN/PROPERTY BOUNDARY PLAN
1	EXPLORATION LOCATION PLAN
2	BEDROCK ELEVATION MAP
3	OPERATIONAL GROUNDWATER CONTOUR PLAN & MONITORING LOCATIONS 02/13/2008
4	OVERBURDEN GROUNDWATER CONTOUR PLAN JUNE 2010 POST-FACILITY SHUT DOWN
5	BEDROCK CONTAMINANT DISTRIBUTION PLAN
6	GEOLOGIC CROSS-SECTION A-A'
7	GEOLOGIC CROSS-SECTION B-B'
8	BEDROCK AND OVERBURDEN CONTAMINANT ISOPLETHS PLAN

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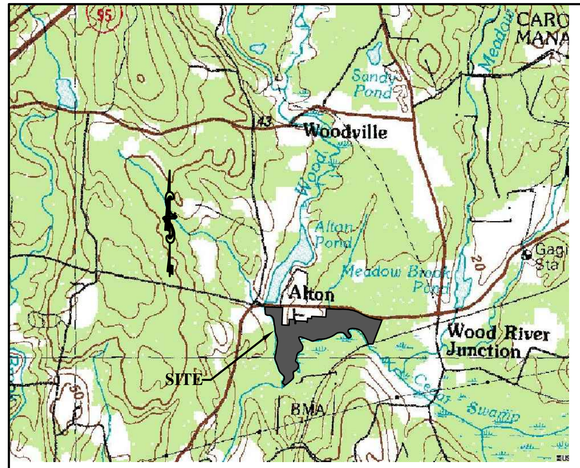
BEDROCK SITE INVESTIGATION REPORT

SUBMITTAL DATE: DECEMBER 2010

GZA Project No. 32795.35

PROJECT NO. 32795.35

FIGURE NO. **C-1**



LOCUS

NOT TO SCALE

GENERAL NOTES

1 LOCUS MAP DEVELOPED FROM ELECTRONIC FILES FROM MAPTECH TERRAIN NAVIGATOR 2001.

2 THE LOCATIONS OF THE SITE BOUDARY WERE APPROXIMATELY DETERMINED BY VISUAL OVERLAY. THIS DATA SHOULD BE CONSIDERED ACCURATE ONLY TO THE DEGREE IMPLIED BY THE METHOD USED.

LEGEND

- 200 FT. RIVER BANK BUFFER
- 50 FT. WETLAND BUFFER
- SEWER LINE
- INDUSTRIAL WASTEWATER LINE
- UNDERGROUND ELECTRICAL LINE
- STORM WATER DRAINAGE LINE
- OIL LINE
- EXISTING SEWER FORCE MAIN
- OVERHEAD UTILITY
- POST INDICATOR VALVE
- FIRE HYDRANT
- UTILITY POLE
- CHAIN LINK FENCE
- EXISTING SURFACE CONTOURS
- EDGE OF RIVER
- DB-5 2007 DIFFUSION BAG MONITORING LOCATION
- DB-5 2008, 2009, AND 2010 DIFFUSION BAG MONITORING LOCATION
- GZ GZA MONITORING WELL
- GZ-ML GZA MULTI-LEVEL MONITORING WELL
- GP GZA GEOPROBE
- EW EXTRACTION (PRODUCTION) WELL
- CB CLAYTON TEMPORARY WELL
- RIZ RIZZO MONITORING WELL
- AREA OF POTENTIAL ENVIRONMENTAL CONCERN

GZA

RESIDENTIAL WELL

FORMER LAGOON 5

FORMER DRY CLEANING EQUIPMENT AREA

BOILER BLOWDOWN LEACHING SYSTEM

AS-BUILT LOCATION OF LEACHING SYSTEM

ABANDONED ISDS GALLEYS

50' PERIMETER WETLAND

200' RIVER BANK SETBACK

50' PERIMETER WETLAND

200' RIVER RIVERBANK SETBACK

WOOD RIVER

TBM = DH Point #4 Top of Drill Hole Set in Concrete Curb EL. = 54.63

GENERAL NOTES

1 BASE MAP DEVELOPED FROM ELECTRONIC CAD FILES PROVIDED BY AEROTECH INTERNATIONAL DIGITAL PHOTOGRAMMETRIC MAPPING DATED 12-01-04, DATE FLOWN MARCH 26, 1999. THE TOPOGRAPHY OF THE 1998, 2001 AND 2004 SOIL STOCK PILES WERE UPDATED BY INSTRUMENT SURVEY CONDUCTED BY GZA PERSONNEL IN SEPTEMBER 2004 THROUGH FEBRUARY 2005. FORMER LAGOONS HAVE BEEN FILLED AND TOPO UPGRADED BY INSTRUMENT SURVEY JUNE 2010 BY GZA.

2 THE LOCATIONS AND ELEVATIONS OF MONITORING WELLS AND EXPLORATIONS WERE APPROXIMATELY DETERMINED BY SURVEY. THIS DATA SHOULD BE CONSIDERED ACCURATE ONLY TO THE DEGREE IMPLIED BY THE METHOD USED.

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REV. NO.	DESCRIPTION	BY	DATE

SCALE: 1" = 100'

0 50 100 200

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DESIGNED BY: RAC
REVIEWED BY: EAS
OPERATOR: SMA-CB
CHECKER: MH
DATE: NOV. 2010

BEDROCK SITE INVESTIGATION REPORT
CHARBERT FACILITY
ALTON, RHODE ISLAND

EXPLORATION LOCATION PLAN

PROJECT NO.
32795.35

FIGURE NO.
1

Bedrock Elevation (feet)

20
15
10
5
0
−5
−10
−15
−20
−25
−30
−35
−40
−45
−50
−55
−60
−65

LEGEND

- RIZ — RIZZO MONITORING WELL
- GZ — GZA MONITORING WELL
- GP — GZA GEOPROBE
- EW — EXTRACTION (PRODUCTION) WELL
- CB — CLAYTON TEMPORARY WELL
- SW — SURFACE WATER MONITORING STATION
- RIZ — NON-LOCATABLE MONITORING WELL
- GZ-ML — AS-BUILT LOCATION BEDROCK MONITORING WELLS
- DB-5 — 2007 DIFFUSION BAG MONITORING LOCATION
- DB-5 — 2008, 2009, AND 2010 DIFFUSION BAG MONITORING LOCATION

SEISMIC LOW VELOCITY ZONES

AREA OF POTENTIAL ENVIRONMENTAL CONCERN

BOILER BLOWDOWN LEACHING SYSTEM

AS-BUILT LOCATION OF LEACHING SYSTEM

ABANDONED ISDS GALLEYS

NEW 2001 SOILS STOCK PILE

NORTH SOILS STOCK PILE (2005)

FORMER PILE TOE LINE

SOILS MOVED MARCH 2005

SUSPECTED SUPERFICIAL WASTE DISCHARGE AREA

SPILL & SUSPECTED FORMER UST AREA

SOUTHWEST BUNKER OIL STORAGE AREA

FORMER UST AREA

SOUTHEAST BUNKER OIL STORAGE AREA

POTABLE WELL & PUMP HOUSE

1990 THERMINOL 55 SPILL

1985 THERMINOL 55 SPILL

FORMER DRY CLEANING EQUIPMENT AREA

EQUIPMENT & STORAGE

PARKING AREA

FORMER FACTORY WALL FOUNDATIONS

PRIVATE WELL

200' RIVER BANK

200' RIVER RIVERBANK SETBACK

50' PERIMETER WETLAND

WETLAND

SETBACK

WOOD RIVER

HARLOCK RIVER

GZ-ML-1 41.5 (BEDROCK SHALLOW GW)

GZ-ML-2 39.0 (BEDROCK SHALLOW GW)

GZ-ML-3 ND (BEDROCK SHALLOW GW)

GZ-ML-4 39.0 (BEDROCK SHALLOW GW)

UIC MW-5A REPLACED UIC MW-5 NO LONGER EXIST

RIZ 16 UIC MW-4 NO LONGER EXIST

RIZ 17 UIC MW-5 NO LONGER EXIST

GPR Line A1/A2

GPR Line A3

GPR Line A4

GPR Line A5

GPR Line A6

GPR Line B1

GPR Line B2

GPR Line B3

GPR Line B4

GPR Line B5

GPR Line C1

GPR Line C2

GPR Line D1

GPR Line F

Seismic Line A1/2

Seismic Line A3

Seismic Line A4

Seismic Line A5

Seismic Line A6

Seismic Line B1

Seismic Line B2

Seismic Line B3

Seismic Line B4

Seismic Line B5

Seismic Line C1

Seismic Line C2

Seismic Line D1

Seismic Line F

SCALE: 1"=80'

0 40 80 160

SCALE: 1" = 100'

0 50 100 200

GENERAL NOTES

1 BASE MAP DEVELOPED FROM ELECTRONIC CAD FILES PROVIDED BY AEROTECH INTERNATIONAL DIGITAL PHOTOGRAMMETRIC MAPPING DATED 12-01-04, DATE FLOWN MARCH 26, 1999. THE TOPOGRAPHY OF THE LAGOONS, THE 1998, 2001 AND 2004 SOIL STOCK PILES WERE UPDATED BY INSTRUMENT SURVEY CONDUCTED BY GZA PERSONNEL IN SEPTEMBER 2004 THROUGH FEBRUARY 2005.

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3. BEDROCK ELEVATION COLOR MAP BY HAGER GEOSCIENCE, INC. 569 MAIN ST., WOBURN, MA. DATED JULY 2006, FILE NO. 200633.

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REV. NO.	DESCRIPTION	BY	DATE

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(401) 751-8613

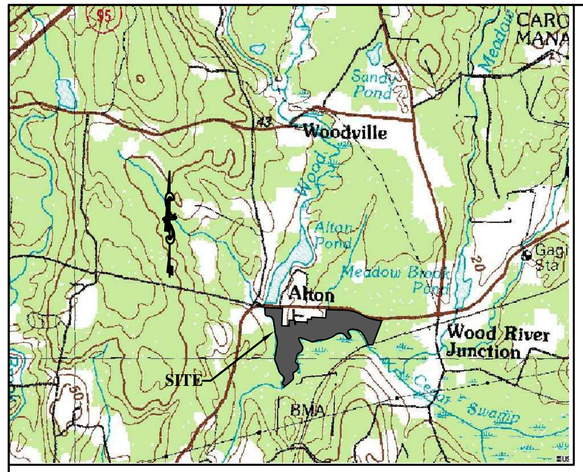
PROJ MGR: MH
DESIGNED BY: RAC
REVIEWED BY: EAS
OPERATOR: CRB
CHECKER:
DATE: NOV. 2010

BEDROCK SITE INVESTIGATION REPORT
CHARBERT FACILITY
ALTON, RHODE ISLAND

BEDROCK ELEVATION MAP

PROJECT NO.
32795.35

FIGURE NO.
2



LEGEND

- SS — SEWER LINE
- IWW — INDUSTRIAL WASTEWATER LINE
- E — UNDERGROUND ELECTRICAL LINE
- D — STORM WATER DRAINAGE LINE
- OIL — OIL LINE
- SFM — EXISTING SEWER FORCE MAIN
- OHU — OVERHEAD UTILITY
- UTILITY POLE
- CHAIN LINK FENCE
- 60 — EXISTING SURFACE CONTOURS
- 50 — INFERRED SHALLOW GROUNDWATER CONTOUR ELEVATIONS 02-13-2008 (MAJOR)
- 48 — INFERRED SHALLOW GROUNDWATER CONTOUR ELEVATIONS 02-13-2008 (MINOR)

- GZ — GZA MONITORING WELL
- GZ-ML — GZA MULTI-LEVEL MONITORING WELL
- GP — GZA GEOPROBE
- EW — EXTRACTION (PRODUCTION) WELL
- CB — CLAYTON TEMPORARY WELL
- RIZ — RIZZO MONITORING WELL
- SW — SURFACE WATER MONITORING STATION
- a-118 — FIELD DELINIATED EDGE OF WETLAND

- 02/13/08 GW ELEV: 44.3' — GW OR SW ELEVATION USED TO CREATE CONTOURS FOR 02-13-2008
- ***02/13/08 GW ELEV: 50.9' — GW OR SW ELEVATION NOT USED TO CREATE CONTOURS FOR 02-13-2008
- AREA OF SOIL VAPOR EXTRACTION AND AIR SPARGE REMEDIATION

GZA

WOOD RIVER

PAWCATUCK RIVER

PD-2 DRILL HOLE ELEV.: 54.43'
02/13/2008 WATER SURFACE ELEV. 40.4'

PD-1 DRILL HOLE ELEV.: 53.53
02/13/2008 WATER SURFACE ELEV. 49.7'

SW-1 TOP OF NUT ELEV: 44.36
02/13/08 WATER SURFACE ELEV. 40.0'

SW-3 TOP OF REBAR ELEV: 39.83
02/13/2008 WATER SURFACE ELEV. 39.9'

SW-6 TO-REBAR ELEV: 40.43
02/13/2008 WATER SURFACE ELEV. 38.9'

SW-2 TOP REBAR ELEV: 42.33
02/13/2008 WATER SURFACE ELEV. 42.3'

02/13/08 LAGOON # 3 APPROX. ELEV.: 63.5'
02/13/08 LAGOON # 2 APPROX. ELEV.: 60.0'
02/13/08 LAGOON # 1 APPROX. ELEV.: 61.0'

SOUTH SOILS STOCK PILE (1998)
NORTH SOILS STOCK PILE (1998)

TEMPORARY HOLDING POND-(LAGOON 4) DRY ON 02/13/08

PRIVATE WELL-16 RIVER STREET
PRIVATE WELL-14 RIVER STREET
PRIVATE WELL-18 RIVER STREET

GENERAL NOTES

1 BASE MAP DEVELOPED FROM ELECTRONIC CAD FILES PROVIDED BY AEROTECH INTERNATIONAL DIGITAL PHOTOGRAMMETRIC MAPPING DATED 12-01-04, DATE FLOWN MARCH 26, 1999. THE TOPOGRAPHY OF THE LAGOONS, THE 1998, 2001 AND 2004 SOIL STOCK PILES WERE UPDATED BY INSTRUMENT SURVEY CONDUCTED BY GZA PERSONNEL IN SEPTEMBER 2004 THROUGH FEBRUARY 2005.

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REV. NO.	DESCRIPTION	BY	DATE

SCALE: 1" = 100'
0 50 100 200

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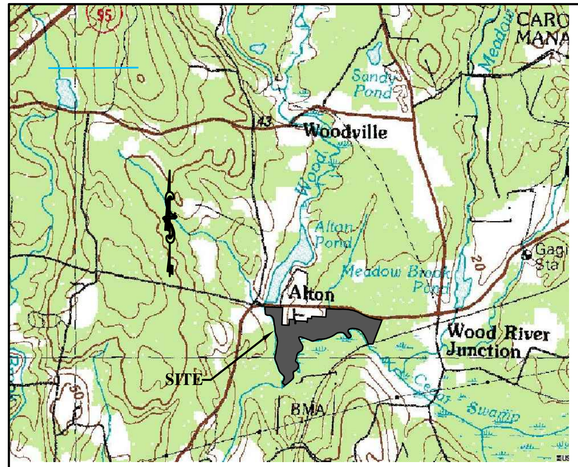
REVIEWED BY: EAS
OPERATOR: SMA
CHECKER: ALF
DATE: NOV. 2010

BEDROCK SITE INVESTIGATION REPORT
CHARBERT FACILITY
ALTON, RHODE ISLAND

OPERATIONAL GROUNDWATER CONTOUR PLAN AND MONITORING LOCATIONS 02/13/2008

PROJECT NO.
32795.35

FIGURE NO.
3



LOCUS

NOT TO SCALE

GENERAL NOTES

1 LOCUS MAP DEVELOPED FROM ELECTRONIC FILES FROM MAPTECH TERRAIN NAVIGATOR 2001.

2 THE LOCATIONS OF THE SITE BOUDARY WERE APPROXIMATELY DETERMINED BY VISUAL OVERLAY. THIS DATA SHOULD BE CONSIDERED ACCURATE ONLY TO THE DEGREE IMPLIED BY THE METHOD USED.

LEGEND

- 200 FT. RIVER BANK BUFFER
- 50 FT. WETLAND BUFFER
- SEWER LINE
- INDUSTRIAL WASTEWATER LINE
- UNDERGROUND ELECTRICAL LINE
- STORM WATER DRAINAGE LINE
- OIL LINE
- EXISTING SEWER FORCE MAIN
- OVERHEAD UTILITY
- POST INDICATOR VALVE
- FIRE HYDRANT
- UTILITY POLE
- CHAIN LINK FENCE
- EXISTING SURFACE CONTOURS
- EDGE OF RIVER
- INFERRED SHALLOW GROUNDWATER CONTOUR ELEVATIONS JUNE 4, 2010 (MAJOR) (DASHED WHERE HEAVILY INFWRRED)
- INFERRED SHALLOW GROUNDWATER CONTOUR ELEVATIONS JUNE 4, 2010 (MINOR) DAHED WHERE HEAVILY INFERRED)
- GROUNDWATER ELEVATION (IN FEET) AT INDICATED AT WELL OR WATER SURFACE OF POND OR RIVER (READING TAKEN 6–4–10) (BROWN TEXT INDICATES SHALLOW BEDROCK WATER ELEVATION 6–4–10)

- 2007 DIFFUSION BAG MONITORING LOCATION
- 2008, 2009, AND 2010 DIFFUSION BAG MONITORING LOCATION
- GZ GZA MONITORING WELL
- GZ–ML GZA MULTI–LEVEL MONITORING WELL
- GP GZA GEOPROBE
- EW EXTRACTION (PRODUCTION) WELL
- CB CLAYTON TEMPORARY WELL
- RIZ RIZZO MONITORING WELL
- SW SURFACE WATER MONITORING STATION
- GP–103 GZA GEOPROBE PERFORMED JANUARY 2009
- GP–39 GZA GEOPROBE PERFORMED OCTOBER 2005
- AREA OF POTENTIAL ENVIRONMENTAL CONCERN

GENERAL NOTES

1 BASE MAP DEVELOPED FROM ELECTRONIC CAD FILES PROVIDED BY AEROTECH INTERNATIONAL DIGITAL PHOTOGRAMMETRIC MAPPING DATED 12–01–04, DATE FLOWN MARCH 26, 1999. THE TOPOGRAPHY OF THE 1998, 2001 AND 2004 SOIL STOCK PILES WERE UPDATED BY INSTRUMENT SURVEY CONDUCTED BY GZA PERSONNEL IN SEPTEMBER 2004 THROUGH FEBRUARY 2005. FORMER LAGOONS HAVE BEEN FILLED AND TOPO UPGRADED BY INSTRUMENT SURVEY JUNE 2010 BY GZA.

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SCALE: 1" = 100'

0 50 100 200

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REVIEWED BY: EAS
OPERATOR: SMA–CB
CHECKER: MH
DATE: NOV. 2010

BEDROCK SITE INVESTIGATION REPORT
CHARBERT FACILITY
ALTON, RHODE ISLAND

OVERBURDEN GROUNDWATER CONTOUR PLAN
JUNE 2010 POST–FACILITY SHUT DOWN

PROJECT NO.
32795.35

FIGURE NO.
4

LEGEND

- 200 FT. RIVER BANK BUFFER
- 50 FT. WETLAND BUFFER
- SEWER LINE
- INDUSTRIAL WASTEWATER LINE
- UNDERGROUND ELECTRICAL LINE
- STORM WATER DRAINAGE LINE
- OIL LINE
- EXISTING SEWER FORCE MAIN
- OVERHEAD UTILITY
- POST INDICATOR VALVE
- FIRE HYDRANT
- UTILITY POLE
- CHAIN LINK FENCE
- EXISTING SURFACE CONTOURS
- APPROX. 100 YEAR FLOOD LEVEL
- EDGE OF RIVER

- DB-5 — 2007 DIFFUSION BAG MONITORING LOCATION
- DB-5 — 2008 AND 2009 DIFFUSION BAG MONITORING LOCATION
- GZ — GZA MONITORING WELL
- GZ-ML — GZA MULTI-LEVEL MONITORING WELL
- GP — GZA GEOPROBE
- EW — EXTRACTION (PRODUCTION) WELL
- CB — CLAYTON TEMPORARY WELL
- RIZ — RIZZO MONITORING WELL
- SW — SURFACE WATER MONITORING STATION
- GP-103 — GZA GEOPROBE PERFORMED JANUARY 2009
- GP-39 — GZA GEOPROBE PERFORMED OCTOBER 2005
- WR-1 01-30-09 — GZA 2009 SURFACE WATER SAMPLING LOCATION
- HIGHLIGHTED AREAS INDICATE EXCEEDANCE OF RIDEM'S GA GROUNDWATWER OBJECTIVE
- AREA OF POTENTIAL ENVIRONMENTAL CONCERN

GZ-ML-3-1-49 to 61.66 feet below ground surface

PARAMETERS	RIDEM GA GROUNDWATER OBJECTIVE	Result 06/21/2007	Result 08/09/2007	Result 8/9/2007-Blind Duplicate	Result 10/08/2008	Result 10/8/2008-Blind Duplicate	Result 04/26/2010
trans-1,2-Dichloroethene (ug/L)	100	ND	ND	2.5	ND	ND	ND
cis-1,2-Dichloroethene (ug/L)	70	110	260	270	87	82	ND
Trichloroethene (ug/L)	5	ND	190	200	ND	ND	ND
Tetrachloroethene (ug/L)	5	3,700	3,400	3,400	1,300	1,400	5,500

GZ-ML-3-2-93.66 to 112.6 feet below ground surface

PARAMETERS	RIDEM GA GROUNDWATER	Result 06/21/2007	Result 08/09/2007	Result	Result 10/08/2008		Result 04/26/2010
cis-1,2-Dichloroethene (ug/L)	70	3.2	12		6.2		4.4
Trichloroethene (ug/L)	5	ND	1.4		ND		ND
Toluene (ug/L)	1,000	3.2	2.4		2.6		ND
Tetrachloroethene (ug/L)	5	11	6		ND		ND

GZ-ML-3-3-145.2 to 158 feet below ground surface

PARAMETERS	RIDEM GA GROUNDWATER OBJECTIVE	Result 06/21/2007	Result 6/21/2007-Blind Duplicate	Result 08/09/2007	Result 10/08/2008		Result 04/26/2010
cis-1,2-Dichloroethene (ug/L)	70	2.5	ND	1.1	1		ND
Benzene (ug/L)	5	1.1	ND	ND	ND		ND
Toluene (ug/L)	1,000	3.6	ND	ND	3.1		ND

GZ-ML-4-1-44 to 56.3 feet below ground surface

PARAMETERS	RIDEM GA GROUNDWATER OBJECTIVE	Result 04/27/2010	Result 06/01/2010
Acetone (ug/L)	---	59	13
Trichloroethene (ug/L)	5	ND	1.3
Toluene (ug/L)	1,000	1.8	1.5
Tetrachloroethene (ug/L)	5	ND	77

GZ-ML-4-2-69.3 to 82.8 feet below ground surface

PARAMETERS	RIDEM GA GROUNDWATER	Result 04/27/2010	Result 06/01/2010
Toluene (ug/L)	1,000	1.2	ND

GZ-ML-4-3-181.8 to 194.3 feet below ground surface

PARAMETERS	RIDEM GA GROUNDWATER OBJECTIVE	Result 04/27/2010	Result 06/01/2010
Vapors		Vapors ND	ND

GZ-ML-5-2-45.9 to 61.4 feet below ground surface

PARAMETERS	RIDEM GA GROUNDWATER OBJECTIVE	Result 04/27/2010	Result 06/01/2010
cis-1,2-Dichloroethene (ug/L)	70	19	19
Trichloroethene (ug/L)	5	2.6	2.4

GZ-ML-5-3-86.3 to 140 feet below ground surface

PARAMETERS	RIDEM GA GROUNDWATER OBJECTIVE	Result 04/27/2010	Result 06/01/2010
cis-1,2-Dichloroethene (ug/L)	70	4.1	3.3

GZ-ML-2-1-97.5 to 110 feet below ground surface

PARAMETERS	RIDEM GA GROUNDWATER OBJECTIVE	Result 06/21/2007	Result 08/09/2007	Result 10/08/2008	Result 04/26/2010
Methyl-Tert-Butyl-Ether (ug/L)	40	1.1	1.2	ND	ND
Toluene (ug/L)	1,000	2.3	3.1	ND	ND

GZ-ML-2-2-145 to 157.5 feet below ground surface

PARAMETERS	RIDEM GA GROUNDWATER OBJECTIVE	Result 06/21/2007	Result 08/09/2007	Result 10/08/2008	Result 04/26/2010
Toluene (ug/L)	1000	ND	1.6	1.9	1.1

GZ-ML-2-3-191.5 to 201 feet below ground surface

PARAMETERS	RIDEM GA GROUNDWATER OBJECTIVE	Result 06/21/2007	Result 08/09/2007	Result 10/08/2008	Result 04/26/2010
Methyl-Tert-Butyl-Ether (ug/L)	40	1	ND	ND	ND
2-Butanone (ug/L)	---	ND	33	ND	ND
Toluene (ug/L)	1,000	1.8	6.4	5	ND

GZ-ML-1-1-122 to 132 feet below ground surface

PARAMETERS	RIDEM GA GROUNDWATER OBJECTIVE	Result 06/21/2007	Result 08/09/2007	Result 10/08/2008	Result 04/26/2010
Dichloromethane (ug/L)	5	ND	1.1	ND	ND
Chloroform (ug/L)	80	18	16	1.6	ND
Bromodichloromethane (ug/L)	80	1.6	ND	ND	ND
Toluene (ug/L)	1,000	2.2	2.5	1.6	ND

GZ-ML-1-2-149 to 159.5 feet below ground surface

PARAMETERS	RIDEM GA GROUNDWATER OBJECTIVE	Result 06/21/2007	Result 08/09/2007	Result 10/08/2008	Result 04/26/2010
Dichloromethane (ug/L)	5	ND	1.3	ND	ND
2-Butanone (ug/L)	---	ND	ND	57	ND
cis-1,2-Dichloroethene (ug/L)	70	ND	ND	ND	ND
Chloroform (ug/L)	80	9.3	7.9	ND	ND
Toluene (ug/L)	1,000	5.6	5.5	1.4	ND

GZ-ML-1-3-170.5 to 182.5 feet below ground surface

PARAMETERS	RIDEM GA GROUNDWATER OBJECTIVE	Result 06/21/2007	Result 08/09/2007	Result 10/08/2008	Result 04/26/2010
Acetone (ug/L)	---	ND	ND	52	110
2-Butanone (ug/L)	---	ND	ND	460	820
Chloroform (ug/L)	80	6.6	3.7	ND	ND
Toluene (ug/L)	1,000	3.9	3.8	2.9	1.7

GENERAL NOTES

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DATE	BY	DESCRIPTION	REV. NO.

SCALE: 1" = 100'

0 50 100 200

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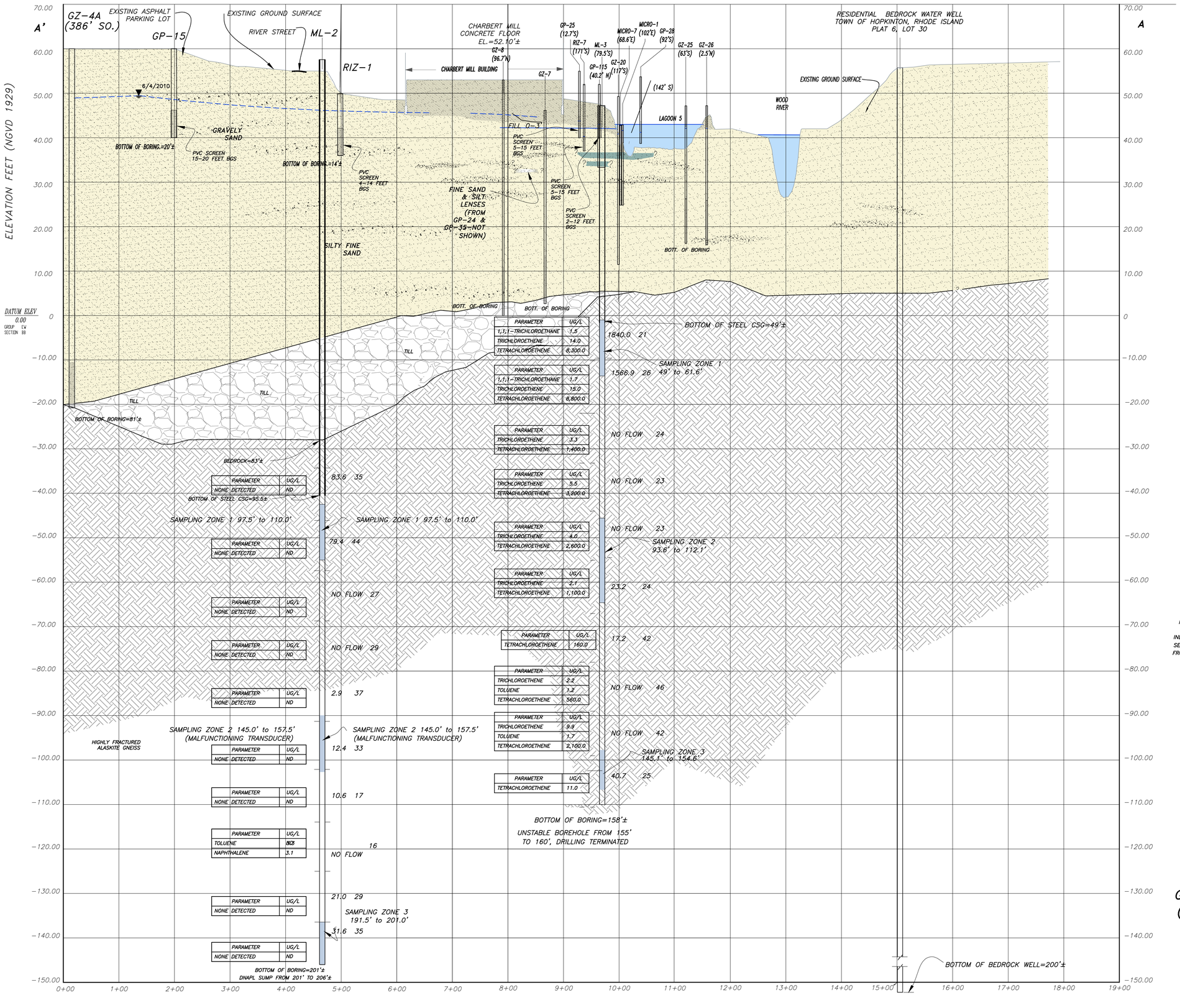
PROJ MGR: MH
DESIGNED BY: RAC
REVIEWED BY: EAS
OPERATOR: SMA-CB
CHECKED: MH
DATE: DEC. 2010

BEDROCK SITE INVESTIGATION REPORT
CHARBERT FACILITY
ALTON, RHODE ISLAND

BEDROCK CONTAMINANT DISTRIBUTION PLAN

PROJECT NO.
32795.35

FIGURE NO.
5



GEOLOGIC CROSS−SECTION A−A' (EAST TO WEST FACILITY AREA)

VERTICAL SCALE: 1"=10'
0 5 10 20
0 40 80 160
HORIZ. SCALE: 1"=80'

REV. NO.	DESCRIPTION	BY	DATE

GZA GeoEnvironmental, Inc.
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(401) 421−4140
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PROJ MGR: MH
DESIGNED BY: RAC
REVIEWED BY: EAS
OPERATOR: RAC−CB
CHECKER: MH
DATE: DEC. 2010

BEDROCK SITE INVESTIGATION REPORT
CHARBERT FACILITY
ALTON, RHODE ISLAND

GEOLOGIC CROSS−SECTION A−A'

PROJECT NO.
32795.35

FIGURE NO.
6

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GEOLOGIC CROSS-SECTION B-B'
(SOUTH TO NORTH SITEWIDE)

VERTICAL SCALE: 1"=10'
0 5 10 20
0 40 80 160
HORIZ. SCALE: 1"=80'

B

B'

ELEVATION FEET (NGVD 1929)

DATUM ELEV.

GP-21 / GZ-5 / RIZ-15 / ML-1 / GZ-2 / GP-19 / GP-18 / GZ-4A / ML-2 / GP-27-A / GZ-8

FILL LAYER
SAND FILL
LAGOON STAIN & ODOR
± 7' GREY STAIN
FORMER LAGOON #3
FORMER LAGOON #2
FORMER LAGOON #1
LOAM AND SUBSOIL
CHARBERT MILL CONCRETE FLOOR EL.-52.20'±
BRICK LAYER(FILL)
FILL LAYER (APPROX. 3')

GWT=47.74 6/4/10
GWT=46.47 6/4/10
GWT=48.74 6/4/10
GWT=42.48 6/4/10

GRAVELLY SAND
DENSE, BLACK SILT LENSE 19'± TO 22'± BGS
FINE TO COURSE SAND & SILT
BOTTOM OF BORING=19'±
PVC SCREEN 28' TO 38' BG
TILL
BOTTOM OF BORING=39'±
FINE TO MEDIUM SAND
PVC SCREEN 9.6' TO 19.6' BG'
BOTTOM OF BORING=20'±
SILTY FINE SAND
BOTTOM OF BORING=20'±
BOTTOM OF BORING=25'±
BOTTOM OF BORING=86'±
PVC SCREEN 73' TO 83' BG
PVC SCREEN 67' TO 77' BG
BOTTOM OF BORING=80.5'±
SAND AND GRAVEL TO 8'
1" FINE SAND & SILT LENSES
BOTTOM OF BORING=19'±
PVC SCREEN 41' TO 51' BG
BOTTOM OF BORING=52'±
BEDROCK=53'±
BEDROCK=117'±
BOTTOM OF STEEL CSG=123±
BOTTOM OF STEEL CSG=95.5±
BOTTOM OF STEEL CSG=201'±
BOTTOM OF BORING=197'±
DNAPL SUMP FROM 197' TO 206'±
BOTTOM OF BORING=201'±
DNAPL SUMP FROM 201' TO 206'±
HIGHLY FRACTURED ALASKITE GNEISS

SAMPLING ZONE 1 97.5' to 110.0'

PARAMETER	UG/L
NONE DETECTED	ND

63.6 35

SAMPLING ZONE 1 123.0 to 132.0'

317.6 34

PARAMETER	UG/L
NONE DETECTED	

SAMPLING ZONE 2 149.0' to 159.5'

25.6 23

PARAMETER	UG/L
TOLUENE	1.8
TETRACHLOROETHENE	1.0

2.9 18

PARAMETER	UG/L
ACETONE	40.0
TOLUENE	2.4
TETRACHLOROETHENE	1.5

SAMPLING ZONE 3 170.5' to 182.5'

2.9 23

PARAMETER	UG/L
ACETONE	70.0
TOLUENE	2.6
TETRACHLOROETHENE	2.2

13.5 23

PARAMETER	UG/L
ACETONE	21.0
TOLUENE	2.7

2.7 30

PARAMETER	UG/L
TOLUENE	1.1

SAMPLING ZONE 3 191.5' to 201.0'

31.6 35

PARAMETER	UG/L
NONE DETECTED	ND

79.4 44

PARAMETER	UG/L
NONE DETECTED	ND

NO FLOW 27

PARAMETER	UG/L
NOT DETECTED	ND

NO FLOW 29

PARAMETER	UG/L
NONE DETECTED	ND

2.9 37

PARAMETER	UG/L
NONE DETECTED	ND

SAMPLING ZONE 2 145.0' to 157.5' (MALFUNCTIONING TRANSDUCER)

12.4 33

PARAMETER	UG/L
NONE DETECTED	ND

10.6 17

PARAMETER	UG/L
NONE DETECTED	ND

NO FLOW 16

PARAMETER	UG/L
TOLUENE	3.3
NAPHTHALENE	3.1

21.0 29

PARAMETER	UG/L
NONE DETECTED	ND

PARAMETER	UG/L
NONE DETECTED	ND

0+00 2+00 4+00 6+00 8+00 10+00 12+00 14+00 16+00 18+00 20+00 21+00

70.00 60.00 50.00 40.00 30.00 20.00 10.00 0 -10.00 -20.00 -30.00 -40.00 -50.00 -60.00 -70.00 -80.00 -90.00 -100.00 -110.00 -120.00 -130.00 -140.00 -150.00

LEGEND

AREAS OF FILL

GLACIAL OUTWASH (SILTY FINE SAND)

GLACIAL OUTWASH (GRAVELY SAND)

OVERBURDEN (GLACIAL TILL)

GROUNDWATER MONITORING WELL WITH WELL SCREEN

SURFACE WATER BODY

GROUNDWATER ELEVATION AND DATE OF READING

FINE SAND & SILT LENSES

OIL STAINED SOIL & ODOR DETECTED

LEGEND

MULTI-LEVEL WELL SAMPLING ZONE

INDICATES SPRING 2008 SEASONAL HIGH GROUNDWATER ELEVATION FROM BEDROCK WELL SAMPLING ZONES

HYDRAULIC CONDUCTIVITY FROM PACKER TESTING (FT/YEAR)

83.6 35

OF FRACTURES IN PACKER TEST INTERVAL ZONE FROM ACOUSTIC TELEVIEWER LOGS

PACKER TEST ZONE

EXTRACTION PACKER TEST VOC CHEMICAL DATA

PARAMETER	UG/L
NONE DETECTED	ND

GENERAL NOTES

1 BASE MAP DEVELOPED FROM ELECTRONIC CAD FILES PROVIDED BY AEROTECH INTERNATIONAL DIGITAL PHOTOGRAMMETRIC MAPPING DATED 12-01-04, DATE FLOWN MARCH 26, 1999. THE TOPOGRAPHY OF THE LAGOONS, THE 1998, 2001 AND 2004 SOIL STOCK PILES WERE UPDATED BY INSTRUMENT SURVEY CONDUCTED BY GZA PERSONNEL IN SEPTEMBER 2004 THROUGH FEBRUARY 2005.

2 THE LOCATIONS AND ELEVATIONS OF MONITORING WELLS AND EXPLORATIONS WERE APPROXIMATELY DETERMINED BY SURVEY. THIS DATA SHOULD BE CONSIDERED ACCURATE ONLY TO THE DEGREE IMPLIED BY THE METHOD USED.

3) THE STATIFICATION LINES ARE BASED UPON INTERPOLATIONS BETWEEN WIDELY SPACED TEST BORINGS, TEST PITS, AND MONITORING WELLS, THUS REPRESENT THE APPROXIMATE BOUNDARIES BETWEEN SOIL TYPES. ACTUAL TRANSITIONS MAY VARY FROM THOSE SHOWN.

4) MAGNIFICATION OF VERTICAL SCALE FOR PURPOSES OF PRESENTATION CAUSES TRENDS IN SOIL STRATA TO APPEAR MORE PRONOUNCED THAN THOSE WHICH ACTUALLY EXIST.

J:\ENV\32795.35.sma\Figures\CADD\dwg\32795.35-GEO-CROSS-SECTIONS-BEDROCK.dwg [7] December 09, 2010 - 2:08pm cori.bergden

REV. NO.	DESCRIPTION	BY	DATE

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(401) 421-4140
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PROJ MGR: MH
DESIGNED BY: RAC
REVIEWED BY: EAS
OPERATOR: RAC-CB
CHECKER: MH
DATE: DEC. 2010

BEDROCK SITE INVESTIGATION REPORT
CHARBERT FACILITY
ALTON, RHODE ISLAND

GEOLOGIC CROSS-SECTION B-B'

PROJECT NO.
32795.35

FIGURE NO.
7

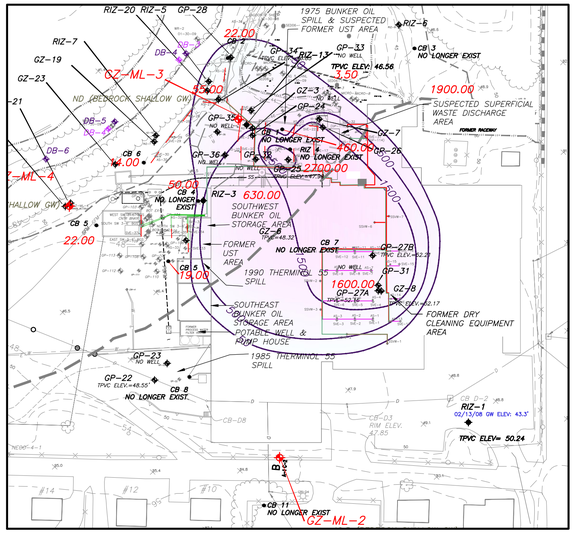
LEGEND

- 200 FT. RIVER BANK BUFFER
- 50 FT. WETLAND BUFFER
- SEWER LINE
- INDUSTRIAL WASTEWATER LINE
- UNDERGROUND ELECTRICAL LINE
- STORM WATER DRAINAGE LINE
- OIL LINE
- EXISTING SEWER FORCE MAIN
- OVERHEAD UTILITY
- POST INDICATOR VALVE
- FIRE HYDRANT
- UTILITY POLE
- CHAIN LINK FENCE
- EXISTING SURFACE CONTOURS

- DB-5 — 2007 DIFFUSION BAG MONITORING LOCATION
- DB-5 — 2008 AND 2009 DIFFUSION BAG MONITORING LOCATION
- GZ — GZA MONITORING WELL
- GZ-ML — GZA MULTI-LEVEL MONITORING WELL
- GP — GZA GEOPROBE
- EW — EXTRACTION (PRODUCTION) WELL
- CB — CLAYTON TEMPORARY WELL
- RIZ — RIZZO MONITORING WELL
- SW — SURFACE WATER MONITORING STATION
- GP-103 — GZA GEOPROBE PERFORMED JANUARY 2009
- GP-39 — GZA GEOPROBE PERFORMED OCTOBER 2005
- WR-1 01-30-09 — GZA 2009 SURFACE WATER SAMPLING LOCATION
- SW-1/SED-1 — GZA 2005 SEDIMENT AND SURFACE WATER SAMPLING LOCATION
- SED06-2 — GZA 2006 SEDIMENT SAMPLING LOCATION

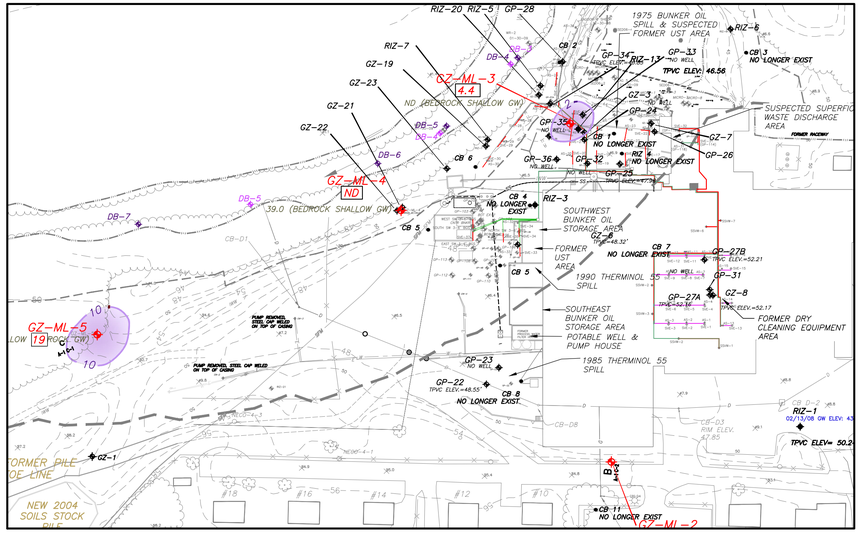
KEY

- ISOPLETH FOR CIS-1,2-DICHLOROETHENE CONCENTRATION (MILIGRAMS/LITER) IN OVERBURDEN GROUNDWATER
- ISOPLETH FOR CIS-1,2-DICHLOROETHENE CONCENTRATION (MILIGRAMS/LITER) IN BEDROCK GROUNDWATER
- ISOPLETH FOR TETRACHLOROETHANE CONCENTRATION (MILIGRAMS/LITER) IN OVERBURDEN GROUNDWATER
- ISOPLETH FOR TETRACHLOROETHANE CONCENTRATION (MILIGRAMS/LITER) IN BEDROCK GROUNDWATER



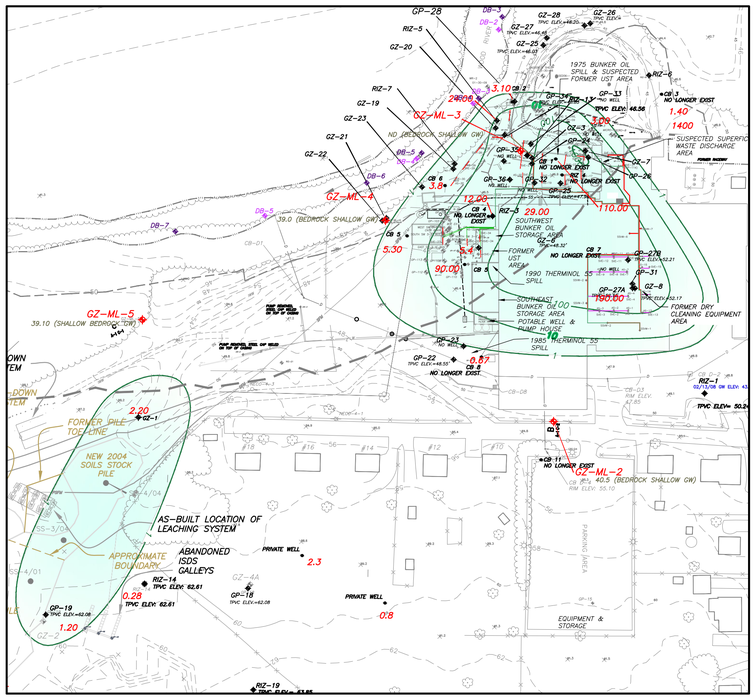
CIS-1,2-DICHLOROETHANE DISTRIBUTION (OVERBURDEN)

(MICROGRAMS/LITER) GROUNDWATER (JUNE 2, 2005)



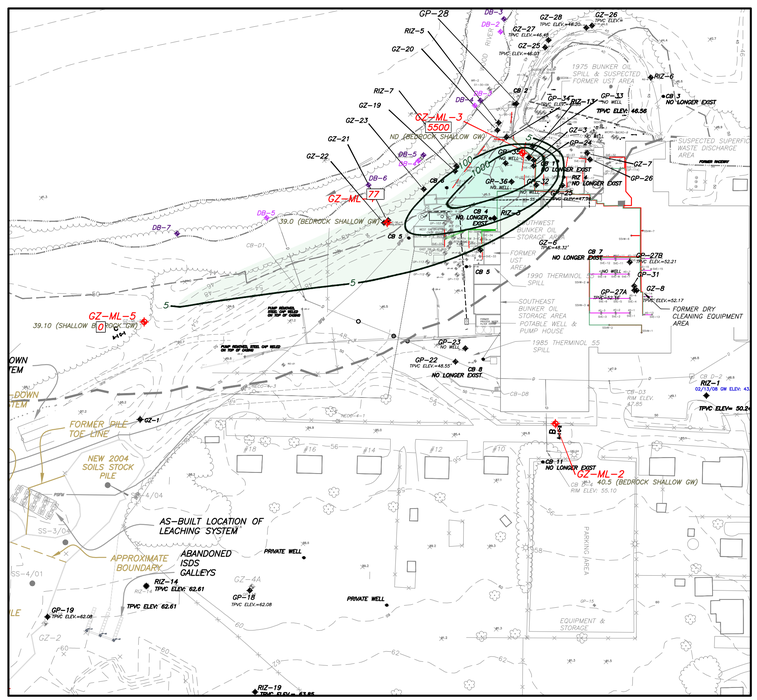
CIS-1,2-DICHLOROETHANE DISTRIBUTION (BEDROCK)

(MICROGRAMS/LITER) GROUNDWATER (JUNE 2010)



TETRACHLOROETHANE DISTRIBUTION (OVERBURDEN)

(MICROGRAMS/LITER) GROUNDWATER (JUNE 2, 2005)



TETRACHLOROETHANE DISTRIBUTION (BEDROCK)

(MICROGRAMS/LITER) GROUNDWATER (JUNE 2010)

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SCALE: 1" = 100'
0 50 100 200

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BEDROCK & OVERBURDEN CONTAMINANT ISOPLETHS PLAN

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FIGURE NO.
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