GZA
GeoEnvironmental, Inc.

Engineers and Scientists

December 14, 2009
File No. 32795.29

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

Re: Seventh Quarterly (July-September of 2009) Interim Compliance Monitoring Report
Charbert, Division of NFA
Richmond, Rhode Island
RIDEM Case # 99-037

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Dear Mr. Jablonski:

This letter with attachments serves as the seventh quarterly Interim Compliance Monitoring Report. The work was conducted in compliance with the December 18, 2007 Order of Approval and the October 15, 2007 *Remedial Action Work Plan (RAWP)* that was prepared to address the applicable requirements of Section 9.00 of the RIDEM's Rules and Regulations for the Investigation and Remediation of Hazardous Materials Releases, (DEM-DSR01-93 Remediation Regulations) for the Charbert facility located at 299 Church Street in Richmond (Alton), Rhode Island. It was prepared by GZA GeoEnvironmental, Inc., on behalf of our client Charbert, Division of NFA.

DATA SUMMARY

This report includes the following information and is subject to the Limitations presented in Attachment A:

Groundwater Monitoring Results

- The seventh round of groundwater sampling was conducted October 12, 2009 and consisted of 12 monitoring wells within areas of active treatment and along the down gradient compliance boundaries, see attached Figure 1 for monitoring well locations. Groundwater was analyzed for volatile organic compounds (VOCs) via EPA Method 8260B. The detected analytes have been summarized and compared to RIDEM's Method 1 GA Groundwater Objectives and Groundwater Quality Preventative Action Limits (PALs) in the attached Tables 1 through 12. The laboratory certificates of analysis are provided in Attachment B.

- Groundwater sampling was performed in general accordance with EPA's July 30, 1996 *Low Stress (low flow) Purging and Sampling Procedure* (Low Flow SOP). Low flow sampling equipment (exclusive of tubing which is dedicated) was decontaminated prior to use on-site and between each location following EPA's recommended protocols. Water quality monitoring for stabilization was conducted utilizing a Horiba multi-meter in a flow through cell. Field equipment used to perform the testing was

calibrated according to the manufacturer's instructions before each sampling day, and confirmatory readings were taken at the end of each sampling day.

Air Sparge and Soil Vapor Extraction System monitoring Results

- The air sparge and soil vapor extraction monthly monitoring reports and associated data tables for July, August, and September of 2009 are included as Attachment C. Soil vapor extraction and sparge wells for the interior and exterior remedial systems are shown on Figures 2 and 3, respectively. The monthly reports include the following information:

  Soil Vapor Extraction System

  During each visit, the following data was measured and recorded at each of the vent wells:

  1. Air flow rates;
  2. Vacuum response in inches of water column (IW);
  3. TVOC measurements using a PID equipped with a 10.6 eV lamp; and
  4. O_2, CO_2 and Lower Explosive Limit (LEL) measurements were collected utilizing a Land-Tech infrared gas meter.

  Air Sparge System

  During each visit, the following data was measured and recorded at each of the sparge points:

  1. Air flow rates; and
  2. Air pressures.

Underground Injection Control System Monitoring Results

The third quarter (July-September) 2009 underground injection control (UIC) report has been attached for your information. The report contains the sampling results of the six UIC monitoring wells. This report has been previously submitted to RIDEMs Office of Water Resources and the complete report has been included as Attachment D.

Perimeter Groundwater Quality Monitoring Results

- The seventh round of groundwater sampling from the five upgradient perimeter wells, conducted at the request of RIDEM, was conducted October 12, 2009. These five wells are generally located between the Charbert facility and nearby private wells. The report has been prepared containing the results of the monitoring well sampling for the seventh quarter. The complete report has been included as Attachment E.

EVALUATION

The October 12, 2009 groundwater results have been compared to the applicable groundwater standards for Rhode Island and there are contaminants that exceed the RIDEM GA Groundwater Objectives and RIDEM's Preventative Action Limits (PALs) for VOCs in 10 of the 12 monitoring wells. In certain wells, vinyl chloride, cis-1,2-dichloroethene, trichloroethene (TCE) and tetrachloroethene (PCE) exceeded the GA Groundwater Objectives established for each contaminant. In other wells, vinyl chloride and PCE exceeded the PALs. Monitoring wells RIZ-5 and RIZ-13 had no detectable levels of VOCs.

The RIDEM GA Groundwater Objective for vinyl chloride is 2 µg/L. The samples from RIZ-7, GP-28, GP-20, GP-26, and GZ-3 had levels of 97, 18, 84, 42, and 35 µg/L, respectively. The GA Groundwater Objective for cis-1,2-dichloroethene is 70 µg/L and the samples from GZ-20, GP-26, and GZ-3 had levels of 790, 190, and 230 µg/L, respectively. Cis-1,2-dichloroethene was detected at 57 µg/L, which exceeds the Preventative Action Limit (PAL), of 35 µg/L, in the sample from well RIZ-7. Trichloroethene (TCE) has a GA Groundwater Objective of 5 µg/L. The samples from monitoring well locations GZ-23, GZ-19, GZ-20, GP-26, GZ-7, and GZ-3 had TCE levels of 18, 7.7, 1,200, 41, 43, and 210 µg/L, respectively. Tetrachloroethene has a GA Groundwater Objective of 5 µg/L. The samples from monitoring well locations GZ-22, GZ-23, GZ-19, GZ-20, GP-26, GZ-7 and GZ-3 had PCE levels of 45, 10, 780, 2,100, 30, 28, and 630 µg/L, respectively. Tetrachloroethene was detected at 2.5 µg/L, the PAL, at GZ-21.

The detected levels of each of these compounds are within historical ranges of analytical data collected from the Site. A comparison of baseline results with the seventh quarter results shows that there have been changes in the distribution of contaminant concentrations within the identified zone of contamination. There are also changes in the ratio of parent to daughter products (i.e., PCE concentrations relative to TCE, 1,2-DCE and VC). The observed changes are not unexpected given the treatment level and disturbance to the aquifer introduced by the sparging system. As shown in Tables 1 through 12, contaminant concentrations in most wells have declined significantly (e.g., GZ-19, GP-28 and GP-26), while concentrations in other wells have increased (e.g., GZ-20 and GZ-3). The decrease in chlorinated daughter products is also consistent with a decrease in the level of reductive dechlorination caused by the oxygen introduced by the sparging system.

A previously non-detected constituent, 1,1,2-trichloroethane was observed in 2 wells, GZ-19 and GZ-20 during this monitoring round.

The quarterly monitoring program will be continued for 1 more quarter through December 2009. At that time, an evaluation will be made of the future sampling frequency potentially moving to semi-annual corresponding to periods of seasonal high and low groundwater (e.g., March and September). Seasonal groundwater levels will be evaluated prior to choosing a time (date) in which these samples will be collected.

We trust that this information fulfills your present needs. If you have any questions please call Stephen Andrus or Edward Summerly at (401) 421-4140.

Very truly yours,

GZA GEOENVIRONMENTAL, INC.

Stephen Andrus, P.E.
Assistant Project Manager

Albert Flori
Project Reviewer

Edward A. Summerly, P.G.
Principal

NEF/EAS:mac

CC: Tracy Nelson Hay, Richmond Town Clerk
Clark Memorial Library – Charbert Repository

Attachments: Tables - Tables 1 through 12 - Detected Constituents Summary
Figure 1: Monitoring Well Locations
Figure 2: Interior AS-SVE Monitoring System
Figure 3: Exterior AS-SVE Monitoring System
Appendix A – Limitations
Appendix B – Laboratory Certificates of Analysis
Appendix C – Monthly AS/SVE System Monitoring Data
Appendix D – Third Quarter 2009 UIC Report
Appendix E – Seventh Quarterly Perimeter Well Monitoring Results

TABLES

TABLE 1
GZ-21
DETECTED CONSTITUENTS SUMMARY

Second Quarter ICMP
Charbert Facility
Richmond, Rhode Island

GZ-21 Shallow Aquifer Monitoring Well Screen From 10'-20' BGS		RIDEM GA Groundwater Objectives	RIDEM Groundwater Quality PALs	Units	Date															
					Baseline 1/2/2008		04/01/2008		07/07/2008		10/01/2008		01/05/2009		04/01/2009		07/09/2009		10/12/2009	
					Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit
EPA 8260	**VOLATILE ORGANICS**																			
	Vinyl Chloride	2	1	ug/L	<	1.0	**8.4**	1.0	**2.8**	1.0	**3.4**	1.0	**2.3**	1.0	<	1.0	**1.0**	1.0	<	1.0
	cis-1,2-Dichloroethene	70	35	ug/L	**7.8**	1.0	**10.0**	1.0	**7.7**	1.0	**4.7**	1.0	**1.7**	1.0	<	1.0	<	1.0	**1.8**	1.0
	Trichloroethene	5	2.5	ug/L	**3.5**	1.0	**1.7**	1.0	**2.3**	1.0	**2.7**	1.0	**1.7**	1.0	**1.4**	1.0	**1.4**	1.0	**2.4**	1.0
	Tetrachloroethene	5	2.5	ug/L	**7.2**	1.0	**2.4**	1.0	**7.6**	1.0	**6.1**	1.0	**6.2**	1.0	**7.1**	1.0	**4.1**	1.0	**2.5**	1.0
Mod. EPA 8100	**TOTAL PETROLEUM HYDROCARBON**																			
	Hydrocarbon Content	NS	NS	ug/L	<	200	NT		NT		NT		<	200	NT		NT		NT	
	FIELD PARAMETERS																			
	pH	NS	NS	SU	4.0		5.0		5.7		6.2		5.4		6.4		7.0		6.2	
	CONDUCTIVITY	NS	NS	mS/cm	0.337		0.660		0.480		0.378		0.788		0.369		0.406		0.885	
	TURBIDITY	NS	NS	NTU	5		3		80		12		4		4		108		1	
	DISSOLVED OXYGEN	NS	NS	mg/L	1.0		0.0		1.4		0.6		0.45		6.51		0.0		0.0	
	TEMPERATURE	NS	NS	°C	16.4		14.4		14.8		17.9		13.2		9.8		13.0		16.0	
	ORP	NS	NS	mV	191		-58		-64		34		67		-64		-33		-8	

Notes:
PAL = RIDEMs Preventative Action Limit
RIDEM GA EXCEEDANCES ARE IN BOLD AND HIGHLIGHTED GREEN
PALs EXCEEDANCES ARE IN BOLD AND HIGHLIGHTED BLUE
< = NO DETECTS
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NT = NOT TESTED
BGS = BELOW GROUND SURFACE

TABLE 2
GZ-22
DETECTED CONSTITUENTS SUMMARY

Quarterly ICMP
Charbert Facility
Richmond, Rhode Island

GZ-22 Deep Aquifer Monitoring Well Screen From 25'-30' BGS		RIDEM GA Groundwater Objectives	RIDEM Groundwater Quality PALs	Units	Date															
					Baseline 1/2/2008		04/01/2008		07/07/2008		10/01/2008		01/05/2009		04/01/2009		07/08/2009		10/12/2009	
					Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit
EPA 8260	**VOLATILE ORGANICS**																			
	Vinyl Chloride	2	1	ug/L	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
	cis-1,2-Dichloroethene	70	35	ug/L	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
	Trichloroethene	5	2.5	ug/L	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
	Tetrachloroethene	5	2.5	ug/L	**14**	1.0	**12**	1.0	**86**	1.0	<	1.0	**28**	1.0	**17**	1.0	**35**	1.0	**45**	1.0
	FIELD PARAMETERS																			
	pH	NS	NS	SU	4.0		5.0		5.1		6.1		6.4		6.3		6.2		6.3	
	CONDUCTIVITY	NS	NS	mS/cm	0.330		0.218		0.173		0.146		0.128		0.127		0.137		0.227	
	TURBIDITY	NS	NS	NTU	5		5		25		31		126		141		NT		20	
	DISSOLVED OXYGEN	NS	NS	mg/L	1.0		0.0		1.5		0.5		0.2		0.1		0.0		0.0	
	TEMPERATURE	NS	NS	°C	15.8		15.1		15.9		16.6		11.7		11.0		14.0		14.5	
	ORP	NS	NS	mV	198		91		32		154		81		12		76		-25	

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TABLE 3
GZ-23
DETECTED CONSTITUENTS SUMMARY

Quarterly ICMP
Charbert Facility
Richmond, Rhode Island

GZ-23		RIDEM GA	RIDEM Groundwater	Units	Date															
Shallow Aquifer Monitoring Well		Groundwater	Quality		Baseline 1/2/2008		04/01/2008		07/07/2008		10/01/2008		01/05/2009		04/01/2009		07/08/2009		10/12/2009	
Screen From 10'-20' BGS		Objectives	PALs		Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit
EPA 8260	**VOLATILE ORGANICS**																			
	Vinyl Chloride	2	1	ug/L	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
	cis-1,2-Dichloroethene	70	35	ug/L	<	1.0	<	1.0	**6.5**	1.0	**<**	1.0	**<**	1.0	**3**	1.0	**3.4**	1.0	**6.4**	1.0
	Trichloroethene	5	2.5	ug/L	<	1.0	**1.8**	1.0	**27**	1.0	**1.8**	1.0	**1.4**	1.0	**14**	1.0	**21**	1.0	**18**	1.0
	Tetrachloroethene	5	2.5	ug/L	<	1.0	**2.4**	1.0	**59**	1.0	**1.7**	1.0	**2**	1.0	**24**	1.0	**17**	1.0	**10**	1.0
Mod. EPA 8100	**TOTAL PETROLEUM HYDROCARBON**																			
	Hydrocarbon Content	NS	NS	ug/L	<	200	NT		NT		NT		<	200	NT		NT		NT	
	FIELD PARAMETERS																			
	pH	NS	NS	SU	4.0		5.0		5.7		6.5		6.5		6.3		6.7		6.4	
	CONDUCTIVITY	NS	NS	mS/cm	0.339		0.428		0.254		0.109		0.129		0.481		0.335		0.266	
	TURBIDITY	NS	NS	NTU	157		0		224		12.2		4		2		59		0	
	DISSOLVED OXYGEN	NS	NS	mg/L	0.0		0.0		0.3		0.1		0.1		0.0		0.0		0.1	
	TEMPERATURE	NS	NS	°C	16.6		16.1		15.4		14.6		11.6		11.8		13.7		12.8	
	ORP	NS	NS	mV	-8		-60		-78		-106		25		-77		-39		-258	

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TABLE 4
GZ-19
DETECTED CONSTITUENTS SUMMARY

Quarterly ICMP
Charbert Facility
Richmond, Rhode Island

GZ-19 Deep Aquifer Monitoring Well Screen From 25'-30' BGS		RIDEM GA Groundwater Objectives	RIDEM Groundwater Quality PALs	Units	Date															
					Baseline 1/2/2008		04/01/2008		07/07/2008		10/01/2008		01/05/2009		04/01/2009		07/08/2009		10/12/2009	
					Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit
EPA 8260	**VOLATILE ORGANICS**																			
	cis-1,2-Dichloroethene	70	35	ug/L	**4.6**	1.0	<	250	**4.2**	1.0	<	250	<	250	<	3	<	10	<	5
	1,1,1-Trichloroethane	200	100	ug/L	**13**	1.0	<	250	**9.0**	1.0	<	250	<	250	<	3	<	10	<	5
	1,1,2-Trichloroethane	200	100	ug/L	<	1.0	<	250	<	1.0	<	250	<	250	<	3	<	10	**12**	5
	Trichloroethene	5	2.5	ug/L	**260**	1.0	**390**	250	**200**	1.0	<	250	<	250	<	3	<	10	**7.7**	5
	Tetrachloroethene	5	2.5	ug/L	**16,000**	1.0	**20,000**	250	**19,000**	1.0	**16,000**	250	**8,400**	250	**2,900**	3	**1,300**	10	**780**	5
	FIELD PARAMETERS																			
	pH	NS	NS	SU	4.0		5.0		5.0		6.1		6.4		6.2		6.3		6.3	
	CONDUCTIVITY	NS	NS	mS/cm	0.338		0.453		0.106		0.085		0.114		0.211		0.130		0.145	
	TURBIDITY	NS	NS	NTU	68		1		240		31.7		4		3		27.4		5	
	DISSOLVED OXYGEN	NS	NS	mg/L	0.0		0.0		0.3		0.1		0.2		0.8		0.0		0.3	
	TEMPERATURE	NS	NS	°C	16.5		15.6		15.6		14		12.4		11.6		14.1		12.7	
	ORP	NS	NS	mV	24		79		105		113		51		58		89		-10	

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TABLE 5
RIZ-7
DETECTED CONSTITUENTS SUMMARY

Quarterly ICMP
Charbert Facility
Richmond, Rhode Island

RIZ-7 Shallow Aquifer Monitoring Well Screen From 5'-15' BGS		RIDEM GA Groundwater Objectives	RIDEM Groundwater Quality PALs	Units	Date															
					Baseline 1/2/2008		04/01/2008		07/07/2008		10/01/2008		01/05/2009		04/01/2009		07/08/2009		10/12/2009	
					Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit
EPA 8260	**VOLATILE ORGANICS**																			
	Vinyl Chloride	2	1	ug/L	**15**	1.0	**120**	1.0	**85**	2.5	**100**	1.0	**130**	1.0	**150**	1.0	**130**	2.5	**97**	1.0
	trans-1,2-Dichloroethene	100	50	ug/L	<	1.0	**2.6**	1.0	**3.1**	2.5	**3**	1.0	**3.6**	1.0	**5.6**	1.0	**5.4**	2.5	**2.8**	1.0
	cis-1,2-Dichloroethene	70	35	ug/L	**2.5**	1.0	**64**	1.0	**41**	2.5	**54**	1.0	**100**	1.0	**190**	1.0	**160**	2.5	**57**	1.0
	Trichloroethene	5	2.5	ug/L	<	1.0	<	1.0	<	2.5	<	1.0	<	1.0	<	0.0	<	2.5	<	1.0
	Tetrachloroethene	5	2.5	ug/L	<	1.0	<	1.0	**7**	2.5	<	1.0	<	1.0	<	1.0	<	2.5	<	1.0
	Ethylbenzene	700	350	ug/L	<	1.0	**2.7**	1.0	**2.8**	2.5	<	1.0	<	1.0	<	1.0	<	2.5	<	1.0
	m&p-Xylene	NS	NS	ug/L	<	2.0	**2.9**	2.0	<	5.0	<	2.0	<	2.0	<	2.0	<	5.0	<	2.0
	o-Xylene	NS	NS	ug/L	**1.7**	1.0	**2.6**	1.0	**3.2**	2.5	**1.6**	1.0	**1.3**	1.0	<	1.0	<	2.5	**1.1**	1.0
	Total Xylenes	1000	500	ug/L	**1.7**	2.0	**5.7**	2.0	**3.2**	5.0	**1.6**	2.0	<	2.0	<	2.0	<	5.0	**1.1**	2.0
	2-Chlorotoluene	NS	NS	ug/L	**1.0**	1.0	**1.2**	1.0	<	2.5	**3.2**	1.0	**3**	1.0	**2.8**	1.0	**3.6**	2.5	**3.5**	1.0
	N-Propylbenzene	NS	NS	ug/L	<	1.0	<	1.0	**1.0**	2.5	<	1.0	<	1.0	<	1.0	<	2.5	<	1.0
	sec-Butylbenzene	NS	NS	ug/L	<	1.0	<	1.0	**1.0**	2.5	<	1.0	<	1.0	<	1.0	<	2.5	<	1.0
Mod. EPA 8100	**TOTAL PETROLEUM HYDROCARBON**																			
	Hydrocarbon Content	NS	NS	ug/L	**300**	200	NT		NT		NT		**570**	200	NT		NT		NT	
	FIELD PARAMETERS																			
	pH	NS	NS	SU	4.0		5.0		6.1		6.4		6.7		6.4		7.6		6.7	
	CONDUCTIVITY	NS	NS	mS/cm	0.786		0.748		0.357		0.249		0.316		0.090		0.474		0.332	
	TURBIDITY	NS	NS	NTU	5		0		153		20		0		3		4		5	
	DISSOLVED OXYGEN	NS	NS	mg/L	0.0		0.0		0.2		0.0		0.1		0.0		0.0		0.1	
	TEMPERATURE	NS	NS	°C	16.5		14.4		15.8		15.8		13.1		10.7		13.6		14.5	
	ORP	NS	NS	mV	-23		-53		-112		-117		5		-92		-46		-149	

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TABLE 6
GP-28
DETECTED CONSTITUENTS SUMMARY

Quarterly ICMP
Charbert Facility
Richmond, Rhode Island

GP-28 Shallow Aquifer Monitoring Well Screen From 3'-15' BGS		RIDEM GA Groundwater Objectives	RIDEM Groundwater Quality PALs	Units	Date															
					Baseline 1/2/2008		04/01/2008		07/07/2008		10/01/2008		01/05/2009		04/01/2009		07/08/2009		10/12/2009	
					Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit
EPA 8260	**VOLATILE ORGANICS**																			
	Vinyl Chloride	2	1	ug/L	**1,200**	5.0	**180**	2.5	<	1.0	**10**	1.0	**140**	1.0	**52**	50.0	**440**	5.0	**18**	1.0
	cis-1,2-Dichloroethene	70	35	ug/L	**1,400**	5.0	**200**	2.5	**6.2**	1.0	**2.9**	1.0	**940**	1.0	**2,900**	50.0	**560**	5.0	**12**	1.0
	Trichloroethene	5	2.5	ug/L	<	5.0	<	2.5	<	1.0	<	1.0	**350**	1.0	<	50.0	**23**	5.0	<	1.0
	Tetrachloroethene	5	2.5	ug/L	<	5.0	<	2.5	<	1.0	<	1.0	**2,900**	1.0	<	50.0	**15**	5.0	**1.5**	1.0
	trans-1,2-Dichloroethene	100	50	ug/L	**11**	5.0	<	2.5	<	1.0	<	1.0	**<**	25.0	<	50.0	**7**	5.0	<	1.0
	Ethylbenzene	700	350	ug/L	<	5.0	<	2.5	**1.2**	1.0		1.0	<	1.0	<	50.0	<	5.0	<	1.0
	o-Xylene	NS	NS	ug/L	<	5.0	<	2.5	**1.8**	1.0	**1.9**	1.0	<	1.0	<	50.0	<	5.0	<	1.0
	Total Xylenes	1000	500	ug/L	<	10	<	5.0	**1.8**	2.0	**<**	2.0	<	2.0	<	50.0	<	10.0	<	2.0
	2-Chlorotoluene	NS	NS	ug/L	<	5.0	<	2.5	**1.3**	1.0	**1.0**	1.0	<	1.0	<	50.0	<	5.0	<	1.0
Mod. EPA 8100	**TOTAL PETROLEUM HYDROCARBON**																			
	Hydrocarbon Content	NS	NS	ug/L	**350**	200	NT		NT		NT		**290**	200	**NT**		**NT**		**NT**	
	FIELD PARAMETERS																			
	pH	NS	NS	SU	4.0		5.0		5.5		6.5		6.9		6.8		7.2		6.7	
	CONDUCTIVITY	NS	NS	mS/cm	0.900		0.492		0.700		0.410		0.135		0.191		0.230		0.197	
	TURBIDITY	NS	NS	NTU	5		30		270		116		420		399		11		4	
	DISSOLVED OXYGEN	NS	NS	mg/L	0.0		0.0		0.6		0.1		0.32		0		0.71		0.19	
	TEMPERATURE	NS	NS	°C	12.0		11.1		17.6		16.8		5.9		7.9		19.6		15.1	
	ORP	NS	NS	mV	-47		-71		-112		-144		8		-117		-96		-138	

Notes:
PAL = RIDEMs Preventative Action Limit
RIDEM GA EXCEEDANCES ARE IN BOLD AND HIGHLIGHTED GREEN
PALs EXCEEDANCES ARE IN BOLD AND HIGHLIGHTED BLUE
ND = NO DETECTS
NS = NO STANDARD
NT = NOT TESTED
BGS = BELOW GROUND SURFACE

TABLE 7
RIZ-5
DETECTED CONSTITUENTS SUMMARY

Quarterly ICMP
Charbert Facility
Richmond, Rhode Island

RIZ-5 Shallow Aquifer Monitoring Well Screen From 9.5'-19.5' BGS		RIDEM GA Groundwater Objectives	RIDEM Groundwater Quality PALs	Units	Date															
					Baseline 1/2/2008		04/01/2008		07/07/2008		10/01/2008		01/05/2009		04/01/2009		07/08/2009		10/12/2009	
					Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit
EPA 8260	**VOLATILE ORGANICS**																			
	Vinyl Chloride	2	1	ug/L	<	1.0	<	1.0	<	2.5	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
	cis-1,2-Dichloroethene	70	35	ug/L	**2.9**	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
	Trichloroethene	5	2.5	ug/L	**2.4**	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
	Tetrachloroethene	5	2.5	ug/L	**5.3**	1.0	<	1.0	<	1.0	<	1.0	**1.9**	1.0	<	1.0	<	1.0	<	1.0
Mod. EPA 8100	**TOTAL PETROLEUM HYDROCARBON**																			
	Hydrocarbon Content	NS	NS	ug/L	<	200	NT		NT		NT		<	200	NT		NT		NT	
	FIELD PARAMETERS																			
	pH	NS	NS	SU	4.0		5.0		5.6		6.0		6.6		7.0		6.3		6.8	
	CONDUCTIVITY	NS	NS	mS/cm	0.465		0.919		0.181		0.226		0.353		0.221		0.165		0.185	
	TURBIDITY	NS	NS	NTU	64		110		713		325		1		5		3		3	
	DISSOLVED OXYGEN	NS	NS	mg/L	0.0		7.0		7.4		8.59		3.55		12.51		10.3		9.69	
	TEMPERATURE	NS	NS	°C	14.7		13.5		14.2		14.5		11.4		11.5		12.9		13.6	
	ORP	NS	NS	mV	26		135		140		154		143		42		119		-44	

Notes:
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PALs EXCEEDANCES ARE IN BOLD AND HIGHLIGHTED BLUE
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NT = NOT TESTED
BGS = BELOW GROUND SURFACE

TABLE 8
GZ-20
DETECTED CONSTITUENTS SUMMARY

Quarterly ICMP
Charbert Facility
Richmond, Rhode Island

GZ-20 Deep Aquifer Monitoring Well Screen From 25'-30' BGS		RIDEM GA Groundwater Objectives	RIDEM Groundwater Quality PALs	Units	Date															
					Baseline 1/2/2008		04/01/2008		07/07/2008		10/01/2008		01/05/2009		04/01/2009		07/08/2009		10/12/2009	
					Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit
EPA 8260	**VOLATILE ORGANICS**																			
	Vinyl Chloride	2	1	ug/L	**1.2**	1.0	**1.3**	1.0	<	5.0	<	5.0	**35**	5.0	**48**	10.0	**71**	10.0	**84**	10.0
	cis-1,2-Dichloroethene	70	35	ug/L	**52**	1.0	**64**	1.0	**120**	5.0	**230**	5.0	**500**	5.0	**600**	10.0	**830**	10.0	**790**	10.0
	1,1,2-Trichloroethane	200	100	ug/L	<	1.0	<	1.0	<	5.0	<	5.0	<	5.0	<	10.0	<	10.0	**35**	10.0
	Trichloroethene	5	2.5	ug/L	**52**	1.0	**60**	1.0	**99**	5.0	**180**	5.0	**400**	5.0	**520**	10.0	**690**	10.0	**1,200**	10.0
	Tetrachloroethene	5	2.5	ug/L	**89**	1.0	**130**	1.0	**230**	5.0	**430**	5.0	**880**	5.0	**110**	10.0	**1,200**	10.0	**2,100**	10.0
	FIELD PARAMETERS																			
	pH	NS	NS	SU	4.0		5.0		5.4		6.1		6.4		6.4		6.4		6.3	
	CONDUCTIVITY	NS	NS	mS/cm	0.346		0.220		0.124		0.139		0.132		0.148		0.163		0.146	
	TURBIDITY	NS	NS	NTU	280		165		585		118		42		185		52		5	
	DISSOLVED OXYGEN	NS	NS	mg/L	0.0		0.0		0.6		0.1		0.23		1.0		0.0		0.0	
	TEMPERATURE	NS	NS	°C	15.3		14.6		15.0		14.4		12.0		11.9		14.5		12.6	
	ORP	NS	NS	mV	8		-38		66		73		86		40		86		-7	

Notes:
PAL = RIDEMs Preventative Action Limit
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PALs EXCEEDANCES ARE IN BOLD AND HIGHLIGHTED BLUE
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BGS = BELOW GROUND SURFACE

TABLE 9
GP-26
DETECTED CONSTITUENTS SUMMARY

Quarterly ICMP
Charbert Facility
Richmond, Rhode Island

GP-26		RIDEM GA	RIDEM Groundwater	Units	Date															
Shallow Aquifer Monitoring Well		Groundwater	Quality		Baseline 1/2/2008		04/01/2008		07/07/2008		10/01/2008		01/05/2009		04/01/2009		07/08/2009		10/12/2009	
Screen From 4'-16' BGS		Objectives	PALs		Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit
EPA 8260	**VOLATILE ORGANICS**																			
	Vinyl Chloride	2	1	ug/L	**530**	25	**100**	1.0	**100**	5.0	**16**	10	**96**	10	**9**	2.5	**81**	10.0	**42**	1.0
	1,1-Dichloroethene	7	3.5	ug/L	<	25	**1.1**	1.0	<	5.0	<	10	<	10	<	2.5	<	10.0	<	1.0
	trans-1,2-Dichloroethene	100	50	ug/L	**70**	25	**20**	1.0	<	5.0	**19**	10	<	10	<	2.5	<	10.0	**1.4**	1.0
	cis-1,2-Dichloroethene	70	35	ug/L	**6,800**	25	**2,100**	1.0	**160**	5.0	**2,300**	100	**1,200**	100	**110**	2.5	**910**	10.0	**190**	1.0
	Trichloroethene	5	2.5	ug/L	**1,200**	25	**2,500**	1.0	**82**	5.0	**2,300**	100	**1,600**	100	**120**	2.5	**310**	10.0	**41**	1.0
	Tetrachloroethene	5	2.5	ug/L	**1,800**	25	**4,100**	1.0	**330**	5.0	**2,900**	100	**2,100**	100	**210**	2.5	**330**	10.0	**30**	1.0
Mod. EPA 8100	**TOTAL PETROLEUM HYDROCARBON**																			
	Hydrocarbon Content	NS	NS	ug/L	**800**	200	NT		NT		NT		**450**	200	NT		NT		NT	
	FIELD PARAMETERS																			
	pH	NS	NS	SU	4.0		6.0		5.3		6.5		6.8		6.6		7.0		6.7	
	CONDUCTIVITY	NS	NS	mS/cm	3.00		3.49		0.462		0.341		0.490		0.267		0.449		0.278	
	TURBIDITY	NS	NS	NTU	5		1		51		31		5		35		19		4	
	DISSOLVED OXYGEN	NS	NS	mg/L	0.0		0.0		0.3		0.3		0.3		0		0		0.2	
	TEMPERATURE	NS	NS	°C	13.9		12.5		14.6		17.7		10.4		10.6		15.4		14.5	
	ORP	NS	NS	mV	31		61		-40		-8		89		10		-24		-122	

Notes:
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PALs EXCEEDANCES ARE IN BOLD AND HIGHLIGHTED BLUE
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BGS = BELOW GROUND SURFACE

TABLE 10
GZ-7
DETECTED CONSTITUENTS SUMMARY

Quarterly ICMP
Charbert Facility
Richmond, Rhode Island

GZ-7 Deep Aquifer Monitoring Well Screen From 33'-43' BGS		RIDEM GA Groundwater Objectives	RIDEM Groundwater Quality PALs	Units	Date															
					Baseline 1/2/2008		04/01/2008		07/07/2008		10/01/2008		01/05/2009		04/01/2009		07/08/2009		10/12/2009	
					Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit
EPA 8260	**VOLATILE ORGANICS**																			
	Vinyl Chloride	2	1	ug/L	<	1.0	<	1.0	**1.3**	1.0	<	1.0	<	1.0	<	1.0	**2.2**	1.0	<	1.0
	cis-1,2-Dichloroethene	70	35	ug/L	<	1.0	**13**	1.0	**140**	1.0	**33**	1.0	**4.2**	1.0	**72**	1.0	**100**	1.0	**27**	1.0
	Trichloroethene	5	2.5	ug/L	<	1.0	**74**	1.0	**140**	1.0	**37**	1.0	<	1.0	**97**	1.0	**42**	1.0	**43**	1.0
	Tetrachloroethene	5	2.5	ug/L	<	1.0	**26**	1.0	**15**	1.0	**7.1**	1.0	<	1.0	**30**	1.0	**18**	1.0	**28**	1.0
	FIELD PARAMETERS																			
	pH	NS	NS	SU	4.0		5.0		5.5		6.3		7.2		6.6		7.7		6.5	
	CONDUCTIVITY	NS	NS	mS/cm	0.223		0.359		0.226		0.106		0.168		0.185		0.175		0.166	
	TURBIDITY	NS	NS	NTU	5		5		17		0.3		4		1.4		2		4	
	DISSOLVED OXYGEN	NS	NS	mg/L	0.0		0.0		1.0		0.4		0.3		0.0		0.0		0.1	
	TEMPERATURE	NS	NS	°C	14.5		14.3		13.9		13.9		12.2		12.6		13.5		12.6	
	ORP	NS	NS	mV	-8		-55		-80		-48		-18		-74		-98		-114	

Notes:
PAL = RIDEMs Preventative Action Limit
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PALs EXCEEDANCES ARE IN BOLD AND HIGHLIGHTED BLUE
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BGS = BELOW GROUND SURFACE

TABLE 11
GZ-3
DETECTED CONSTITUENTS SUMMARY

Second Quarter ICMP
Charbert Facility
Richmond, Rhode Island

GZ-3 Deep Aquifer Monitoring Well Screen From 30'-40' BGS		RIDEM GA Groundwater Objectives	RIDEM Groundwater Quality PALs	Units	Date															
					Baseline 1/2/2008		04/01/2008		07/07/2008		10/01/2008		01/06/2009		04/01/2009		07/08/2009		10/12/2009	
					Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit
EPA 8260	**VOLATILE ORGANICS**																			
	Vinyl Chloride	2	1	ug/L	<	1.0	<	1.0	**3.1**	1.0	<	10	**8.1**	10	**16**	5	**19**	5	**35**	5
	cis-1,2-Dichloroethene	70	35	ug/L	**9.3**	1.0	**16**	1.0	**65**	1.0	**86**	10	**110**	10	**180**	5	**180**	5	**230**	5
	Trichloroethene	5	2.5	ug/L	**10**	1.0	**17**	1.0	**91**	1.0	**93**	10	**81**	10	**150**	5	**180**	5	**210**	5
	Tetrachloroethene	5	2.5	ug/L	**12**	1.0	**22**	1.0	**440**	1.0	**180**	10	**160**	10	**450**	5	**560**	5	**630**	5
	FIELD PARAMETERS																			
	pH	NS	NS	SU	4.0		5.0		5.1		6.5		6.2		6.4		7.4		6.5	
	CONDUCTIVITY	NS	NS	mS/cm	0.339		0.392		0.206		0.114		0.415		0.419		0.171		0.152	
	TURBIDITY	NS	NS	NTU	5		5		34		7		5		4		19		3	
	DISSOLVED OXYGEN	NS	NS	mg/L	0.0		0.0		0.7		0.28		0.25		0		0		0.1	
	TEMPERATURE	NS	NS	°C	15.4		15.4		14.8		14.6		12.4		12.2		13.1		13.1	
	ORP	NS	NS	mV	-15		8		-22		-41		49		-25		-41		-90	

Notes:
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TABLE 12
RIZ-13
DETECTED CONSTITUENTS SUMMARY

Quarterly ICMP
Charbert Facility
Richmond, Rhode Island

RIZ-13 Shallow Aquifer Monitoring Well Screen From 14'-24' BGS		RIDEM GA Groundwater Objectives	RIDEM Groundwater Quality PALs	Units	Date															
					Baseline 1/2/2008		04/01/2008		07/07/2008		10/01/2008		01/06/2009		04/01/2009		07/09/2009		10/12/2009	
					Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit
EPA 8260	**VOLATILE ORGANICS**																			
	Vinyl Chloride	2	1	ug/L	**4.4**	1.0	<	1.0	<	1.0	<	1.0	**1.1**	1.0	<	1.0	<	1.0	<	1.0
	Tetrahydrofuran	NS	NS	ug/L	<	10.0	<	10.0	<	10.0	<	10.0	**<**	10.0	<	10.0	**17**	10.0	<	10.0
	cis-1,2-Dichloroethene	70	35	ug/L	**6.6**	1.0	<	1.0	<	1.0	<	1.0	**3.8**	1.0	<	1.0	<	1.0	<	1.0
	Trichloroethene	5	2.5	ug/L	**5.6**	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
	Tetrachloroethene	5	2.5	ug/L	**6.9**	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0	<	1.0
Mod. EPA 8100	**TOTAL PETROLEUM HYDROCARBON**																			
	Hydrocarbon Content	NS	NS	ug/L	<	200	NT		NT		NT		**1,100**	200	NT		NT		NT	
	FIELD PARAMETERS																			
	pH	NS	NS	SU	5.0		6.0		4.8		6.83		5.8		5.6		4.5		4.8	
	CONDUCTIVITY	NS	NS	mS/cm	0.392		0.900		0.773		0.361		0.875		0.571		0.562		0.910	
	TURBIDITY	NS	NS	NTU	3		5		208		54.8		4		88		22.2		11	
	DISSOLVED OXYGEN	NS	NS	mg/L	1.0		10.0		12.0		7.7		5.7		10.1		8.9		8.8	
	TEMPERATURE	NS	NS	°C	14.8		14.8		15.6		16.2		12.4		9.8		13.3		15.2	
	ORP	NS	NS	mV	28		56		34		-9		176		109		290		-160	

Notes:
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TABLE 13
RIZ-1
DETECTED CONSTITUENTS SUMMARY

Quarterly ICMP
Charbert Facility
Richmond, Rhode Island

RIZ-1 Shallow Aquifer Monitoring Well Screen From 5'-15' BGS		RIDEM GA Groundwater Objectives	RIDEM Groundwater Quality PALs	Units	Date															
					Baseline 1/2/2008		04/01/2008		07/07/2008		10/01/2008		01/06/2009		04/01/2009		07/09/2009		10/12/2009	
					Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit
EPA 8260	**VOLATILE ORGANICS**																			
	Vinyl Chloride	2	1	ug/L	<	1.0	NT		<	1.0	NT		<	1.0	<	1.0	<	1.0	<	1.0
	cis-1,2-Dichloroethene	70	35	ug/L	<	1.0	NT		<	1.0	NT		<	1.0	<	1.0	<	1.0	<	1.0
	Trichloroethene	5	2.5	ug/L	<	1.0	NT		<	1.0	NT		<	1.0	<	1.0	<	1.0	<	1.0
	Tetrachloroethene	5	2.5	ug/L	<	1.0	NT		<	1.0	NT		<	1.0	<	1.0	<	1.0	<	1.0
Mod. EPA 8100	**TOTAL PETROLEUM HYDROCARBON**																			
	Hydrocarbon Content	NS	NS	ug/L	<	200	NT		NT		NT		<	200	NT		NT		NT	
	FIELD PARAMETERS																			
	pH	NS	NS	SU	4.0		NT		NT		5.42		5.5		5.8		5.3		5.9	
	CONDUCTIVITY	NS	NS	mS/cm	0.912		NT		NT		0.199		0.342		0.79		0.962		0.515	
	TURBIDITY	NS	NS	NTU	5		NT		NT		1		3		5		3.4		1	
	DISSOLVED OXYGEN	NS	NS	mg/L	4.0		NT		NT		3		5.6		7.3		7.1		6.0	
	TEMPERATURE	NS	NS	°C	13.5		NT		NT		19.2		11.3		9.2		16.1		18.2	
	ORP	NS	NS	mV	256		NT		NT		248		222		115		222		-22	

Notes:
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FIGURES

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.

GZA

WOOD RIVER
GP-28
RIZ-5
GZ-20
WATER TOWER
GZ-19
RIZ-7
INDUSTRIAL WASTE PUMP HOUSE
GZ-23
GZ-21
GZ-22
OIL BUNKER
DRUM STORAGE AREA
FORMER (LAGOON 5)
RIZ-6
GZ-ML-3
RIZ-13
GZ-3
GZ-7
GP-26
GP-25
RIZ-3
EXTERIOR SVE/AS AREA
CHARBERT MILL BUILDING
GZ-6
CB-9
EW-4
PT-5
GP-27B
GP-27A
GZ-8
INTERIOR SVE/AS AREA
PT-4
EW-3
PT-1
EW-2
EW-1
RIZ-21
GP-22
WETLANDS BOUNDARY
RIVER EDGE
PT-2
GZ-1
RIZ-1
RIVER STREET
#18
#16
#14
#12
#10
GZ-ML-2
CHARBERT EMPLOYEE PARKING LOT
PSFM
JIC-MW6
SFM
IWW

REV. NO.	DESCRIPTION	BY	DATE

PROJ MGR: SMA
DESIGNED BY: SMA
REVIEWED BY: EAS
OPERATOR: DL
DATE: AUG., 2008

GZA
GeoEnvironmental, Inc.
Engineers and Scientists
530 BROADWAY
PROVIDENCE, RI 02909
(401) 421-4140
(401) 751-8613

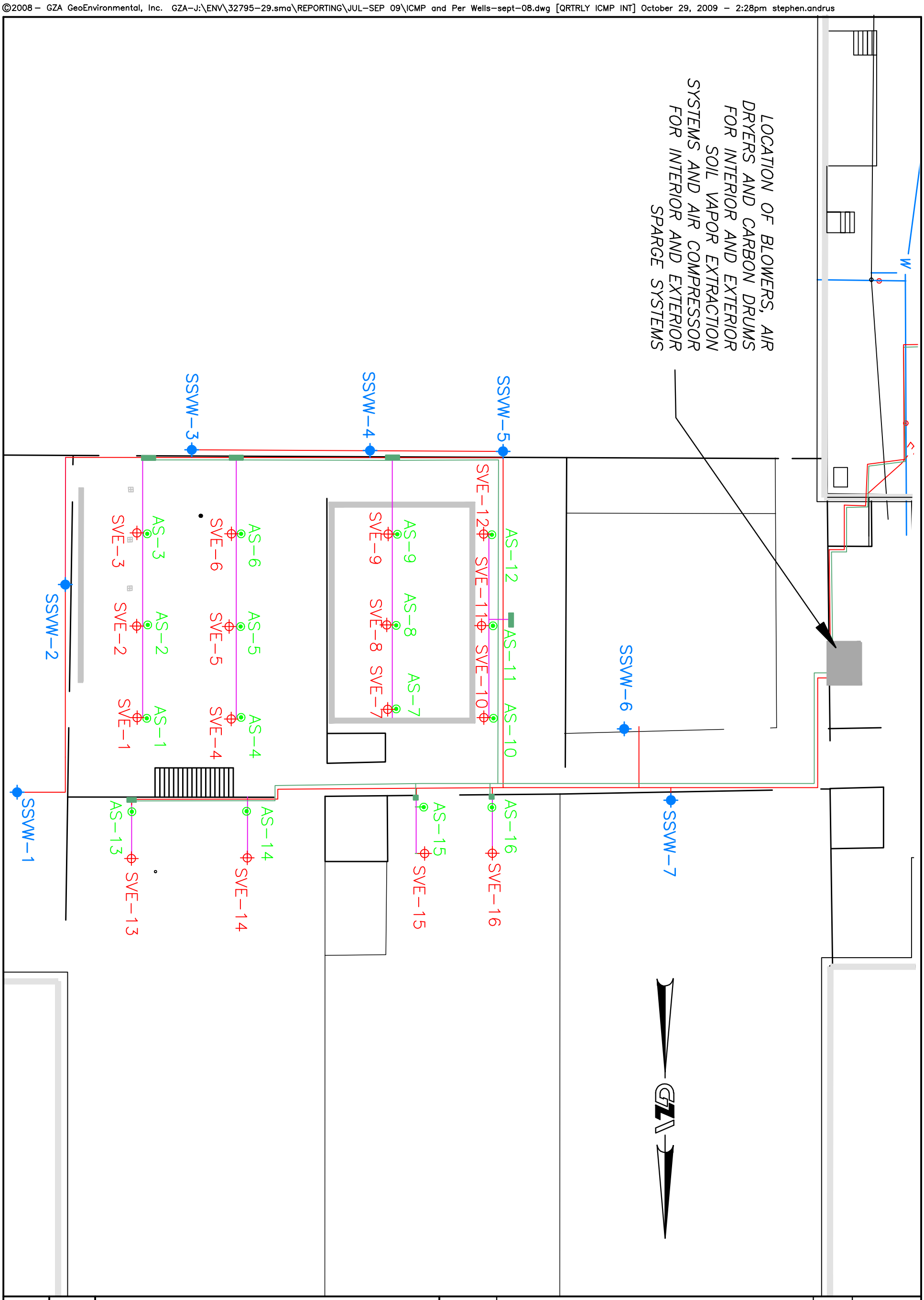
1 INCH = 80 FEET
0 40 80 160

CHARBERT FACILITY
ALTON, RHODE ISLAND

INTERIM COMPLIANCE MONITORING REPORT
MONITORING WELL LOCATIONS

JOB NO.
32795.29

FIGURE NO.
1



REV. NO.	DESCRIPTION	BY	DATE

FIGURE NO. 2

JOB NO. 32795.29

CHARBERT FACILITY
ALTON, RHODE ISLAND

INTERIM COMPLIANCE MONITORING REPORT
INTERIOR AS–SVE SYSTEM

1 INCH = 20 FEET

0 10 20 40

PROJ MGR: SMA
DESIGNED BY: SMA
REVIEWED BY: EAS

OPERATOR: DL
DATE: AUG., 2008

GZA
GeoEnvironmental, Inc.
Engineers and Scientists
530 BROADWAY
PROVIDENCE, RI 02909
(401) 421–4140
(401) 751–8613

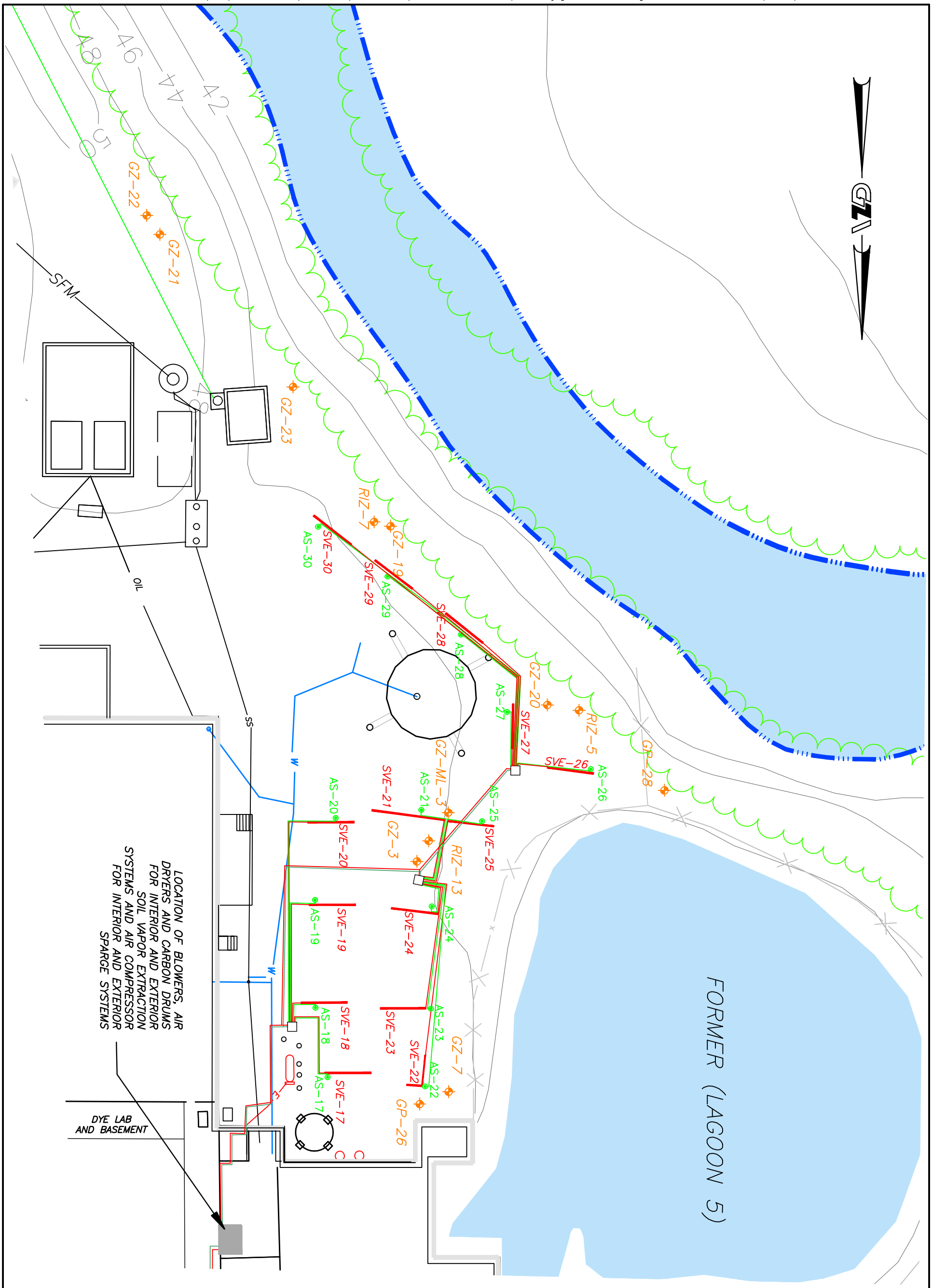


FIGURE NO. 3

JOB NO. 32795.29

CHARBERT FACILITY
ALTON, RHODE ISLAND

INTERIM COMPLIANCE MONITORING REPORT
EXTERIOR AS–SVE SYSTEM

REV. NO.	DESCRIPTION	BY	DATE

1 INCH = 30 FEET

0 15 30 60

PROJ MGR: SMA
DESIGNED BY: SMA
REVIEWED BY: EAS

OPERATOR: DL
DATE: AUG., 2008

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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

LABORATORY CERTIFICATES OF ANALYSIS

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 / Angela Harvey

Project No.: **03.0032795.29**
Work Order No.: **0910-00086**
Date Received: **10/14/2009**
Date Reported: **10/22/2009**

SAMPLE INFORMATION

Date Sampled	Matrix	Laboratory ID	Sample ID
10/12/2009	Aqueous	0910-00086 001	GP-26
10/12/2009	Aqueous	0910-00086 002	GZ-7
10/12/2009	Aqueous	0910-00086 003	GZ-3
10/12/2009	Aqueous	0910-00086 004	RIZ-13
10/12/2009	Aqueous	0910-00086 005	GP-28
10/12/2009	Aqueous	0910-00086 006	RIZ-5
10/12/2009	Aqueous	0910-00086 007	GZ-20
10/12/2009	Aqueous	0910-00086 008	GZ-19
10/12/2009	Aqueous	0910-00086 009	RIZ-7
10/12/2009	Aqueous	0910-00086 010	GZ-23
10/12/2009	Aqueous	0910-00086 011	GZ-21
10/12/2009	Aqueous	0910-00086 012	GZ-22
10/12/2009	Aqueous	0910-00086 013	Trip Blank

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Stephen Andrus / Angela Harvey

Project Name.: **Charbert ICMP**
Project No.: **03.0032795.29**

Date Received: **10/14/2009**
Date Reported: **10/22/2009**
Work Order No.: **0910-00086**

PROJECT NARRATIVE:

1. Sample Receipt

The samples were received on 10/13/09 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

The continuing calibration verification standard (CCV) (10/17/09#2) had an analyte outside of the 30%D QC acceptance limit. The outlier includes isopropylbenzene (31%).

The Laboratory Control Sample (LCS) (10/17/09#2 S) had an 8260 list analyte outside of the 70-130% QC acceptance limits. Specific outlier includes isopropylbenzene (131%). This analyte was not detected in the associated samples.

Sample GZ-20 (0910-86-007) was analyzed at a 1/25 dilution based upon screening information and in order to report all target analytes within the calibration range of the instrument.

Samples GZ-3 (0910-86-003) and GZ-19 (0910-86-008) were analyzed at a 1/10 dilution based upon screening information and in order to report all target analytes within the calibration range of the instrument.

Attach QC 8260 10/17/09#2 S - Aqueous

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Date Reported: **10/22/2009**
Work Order No.: **0910-00086**

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 Name.: **Charbert ICMP**
Project No.: **03.0032795.29**

Date Received: **10/14/2009**
Date Reported: **10/22/2009**
Work Order No.: **0910-00086**

Sample ID: **GP-26** Sample No.: **001**

Sample Date: **10/12/2009**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260				MQS	10/16/2009
Dichlorodifluoromethane	EPA 8260	<2.0	2.0	ug/L	MQS	10/16/2009
Chloromethane	EPA 8260	<2.0	2.0	ug/L	MQS	10/16/2009
Vinyl Chloride	EPA 8260	42	1.0	ug/L	MQS	10/16/2009
Bromomethane	EPA 8260	<2.0	2.0	ug/L	MQS	10/16/2009
Chloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/16/2009
Trichlorofluoromethane	EPA 8260	<2.0	2.0	ug/L	MQS	10/16/2009
Diethylether	EPA 8260	<5.0	5.0	ug/L	MQS	10/16/2009
Acetone	EPA 8260	<25	25	ug/L	MQS	10/16/2009
1,1-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	10/16/2009
Dichloromethane	EPA 8260	<2.0	2.0	ug/L	MQS	10/16/2009
Methyl-Tert-Butyl-Ether	EPA 8260	<1.0	1.0	ug/L	MQS	10/16/2009
trans-1,2-Dichloroethene	EPA 8260	1.4	1.0	ug/L	MQS	10/16/2009
1,1-Dichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/16/2009
2-Butanone	EPA 8260	<25	25	ug/L	MQS	10/16/2009
2,2-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	10/16/2009
cis-1,2-Dichloroethene	EPA 8260	190	1.0	ug/L	MQS	10/16/2009
Chloroform	EPA 8260	<1.0	1.0	ug/L	MQS	10/16/2009
Bromochloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/16/2009
Tetrahydrofuran	EPA 8260	<10	10	ug/L	MQS	10/16/2009
1,1,1-Trichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/16/2009
1,1-Dichloropropene	EPA 8260	<1.0	1.0	ug/L	MQS	10/16/2009
Carbon Tetrachloride	EPA 8260	<1.0	1.0	ug/L	MQS	10/16/2009
1,2-Dichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/16/2009
Benzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/16/2009
Trichloroethene	EPA 8260	41	1.0	ug/L	MQS	10/16/2009
1,2-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	10/16/2009
Bromodichloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/16/2009
Dibromomethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/16/2009
4-Methyl-2-Pentanone	EPA 8260	<25	25	ug/L	MQS	10/16/2009
cis-1,3-Dichloropropene	EPA 8260	<1.0	1.0	ug/L	MQS	10/16/2009
Toluene	EPA 8260	<1.0	1.0	ug/L	MQS	10/16/2009
trans-1,3-Dichloropropene	EPA 8260	<2.0	2.0	ug/L	MQS	10/16/2009
1,1,2-Trichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/16/2009
2-Hexanone	EPA 8260	<25	25	ug/L	MQS	10/16/2009

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Stephen Andrus / Angela Harvey
Project Name.: **Charbert ICMP**
Project No.: **03.0032795.29**

Date Received: **10/14/2009**
Date Reported: **10/22/2009**
Work Order No.: **0910-00086**

Sample ID: **GP-26** Sample No.: **001**
Sample Date: **10/12/2009**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
1,3-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	10/16/2009
Tetrachloroethene	EPA 8260	30	1.0	ug/L	MQS	10/16/2009
Dibromochloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/16/2009
1,2-Dibromoethane (EDB)	EPA 8260	<2.0	2.0	ug/L	MQS	10/16/2009
Chlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/16/2009
1,1,1,2-Tetrachloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/16/2009
Ethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/16/2009
m&p-Xylene	EPA 8260	<2.0	2.0	ug/L	MQS	10/16/2009
o-Xylene	EPA 8260	<1.0	1.0	ug/L	MQS	10/16/2009
Styrene	EPA 8260	<1.0	1.0	ug/L	MQS	10/16/2009
Bromoform	EPA 8260	<2.0	2.0	ug/L	MQS	10/16/2009
Isopropylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/16/2009
1,1,2,2-Tetrachloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/16/2009
1,2,3-Trichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	10/16/2009
Bromobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/16/2009
N-Propylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/16/2009
2-Chlorotoluene	EPA 8260	<1.0	1.0	ug/L	MQS	10/16/2009
1,3,5-Trimethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/16/2009
4-Chlorotoluene	EPA 8260	<1.0	1.0	ug/L	MQS	10/16/2009
tert-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/16/2009
1,2,4-Trimethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/16/2009
sec-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/16/2009
p-Isopropyltoluene	EPA 8260	<1.0	1.0	ug/L	MQS	10/16/2009
1,3-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/16/2009
1,4-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/16/2009
n-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/16/2009
1,2-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/16/2009
1,2-Dibromo-3-Chloropropane	EPA 8260	<5.0	5.0	ug/L	MQS	10/16/2009
1,2,4-Trichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/16/2009
Hexachlorobutadiene	EPA 8260	<1.0	1.0	ug/L	MQS	10/16/2009
Naphthalene	EPA 8260	<2.0	2.0	ug/L	MQS	10/16/2009
1,2,3-Trichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/16/2009
Surrogates:	EPA 8260					
***1,2-Dichloroethane-D4	EPA 8260	96.8	70-130	% R	MQS	10/16/2009
***Toluene-D8	EPA 8260	101	70-130	% R	MQS	10/16/2009

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Stephen Andrus / Angela Harvey

Project Name.: **Charbert ICMP**
Project No.: **03.0032795.29**

Date Received: **10/14/2009**
Date Reported: **10/22/2009**
Work Order No.: **0910-00086**

Sample ID: **GP-26** Sample No.: **001**
Sample Date: **10/12/2009**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
***4-Bromofluorobenzene	EPA 8260	98.1	70-130	% R	MQS	10/16/2009
Preparation	EPA 5030B	1.0		CF	MQS	10/16/2009

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ANALYTICAL REPORT

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Providence, RI 02903

Stephen Andrus / Angela Harvey

Project Name.: **Charbert ICMP**
Project No.: **03.0032795.29**

Date Received: **10/14/2009**
Date Reported: **10/22/2009**
Work Order No.: **0910-00086**

Sample ID: **GZ-7** Sample No.: **002**

Sample Date: **10/12/2009**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260				MQS	10/16/2009
Dichlorodifluoromethane	EPA 8260	<2.0	2.0	ug/L	MQS	10/16/2009
Chloromethane	EPA 8260	<2.0	2.0	ug/L	MQS	10/16/2009
Vinyl Chloride	EPA 8260	<1.0	1.0	ug/L	MQS	10/16/2009
Bromomethane	EPA 8260	<2.0	2.0	ug/L	MQS	10/16/2009
Chloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/16/2009
Trichlorofluoromethane	EPA 8260	<2.0	2.0	ug/L	MQS	10/16/2009
Diethylether	EPA 8260	<5.0	5.0	ug/L	MQS	10/16/2009
Acetone	EPA 8260	<25	25	ug/L	MQS	10/16/2009
1,1-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	10/16/2009
Dichloromethane	EPA 8260	<2.0	2.0	ug/L	MQS	10/16/2009
Methyl-Tert-Butyl-Ether	EPA 8260	<1.0	1.0	ug/L	MQS	10/16/2009
trans-1,2-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	10/16/2009
1,1-Dichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/16/2009
2-Butanone	EPA 8260	<25	25	ug/L	MQS	10/16/2009
2,2-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	10/16/2009
cis-1,2-Dichloroethene	EPA 8260	27	1.0	ug/L	MQS	10/16/2009
Chloroform	EPA 8260	<1.0	1.0	ug/L	MQS	10/16/2009
Bromochloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/16/2009
Tetrahydrofuran	EPA 8260	<10	10	ug/L	MQS	10/16/2009
1,1,1-Trichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/16/2009
1,1-Dichloropropene	EPA 8260	<1.0	1.0	ug/L	MQS	10/16/2009
Carbon Tetrachloride	EPA 8260	<1.0	1.0	ug/L	MQS	10/16/2009
1,2-Dichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/16/2009
Benzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/16/2009
Trichloroethene	EPA 8260	43	1.0	ug/L	MQS	10/16/2009
1,2-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	10/16/2009
Bromodichloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/16/2009
Dibromomethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/16/2009
4-Methyl-2-Pentanone	EPA 8260	<25	25	ug/L	MQS	10/16/2009
cis-1,3-Dichloropropene	EPA 8260	<1.0	1.0	ug/L	MQS	10/16/2009
Toluene	EPA 8260	<1.0	1.0	ug/L	MQS	10/16/2009
trans-1,3-Dichloropropene	EPA 8260	<2.0	2.0	ug/L	MQS	10/16/2009
1,1,2-Trichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/16/2009
2-Hexanone	EPA 8260	<25	25	ug/L	MQS	10/16/2009

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ANALYTICAL REPORT

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Providence, RI 02903

Stephen Andrus / Angela Harvey

Project Name.: **Charbert ICMP**
Project No.: **03.0032795.29**

Date Received: **10/14/2009**
Date Reported: **10/22/2009**
Work Order No.: **0910-00086**

Sample ID: **GZ-7** Sample No.: **002**

Sample Date: **10/12/2009**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
1,3-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	10/16/2009
Tetrachloroethene	EPA 8260	28	1.0	ug/L	MQS	10/16/2009
Dibromochloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/16/2009
1,2-Dibromoethane (EDB)	EPA 8260	<2.0	2.0	ug/L	MQS	10/16/2009
Chlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/16/2009
1,1,1,2-Tetrachloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/16/2009
Ethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/16/2009
m&p-Xylene	EPA 8260	<2.0	2.0	ug/L	MQS	10/16/2009
o-Xylene	EPA 8260	<1.0	1.0	ug/L	MQS	10/16/2009
Styrene	EPA 8260	<1.0	1.0	ug/L	MQS	10/16/2009
Bromoform	EPA 8260	<2.0	2.0	ug/L	MQS	10/16/2009
Isopropylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/16/2009
1,1,2,2-Tetrachloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/16/2009
1,2,3-Trichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	10/16/2009
Bromobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/16/2009
N-Propylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/16/2009
2-Chlorotoluene	EPA 8260	<1.0	1.0	ug/L	MQS	10/16/2009
1,3,5-Trimethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/16/2009
4-Chlorotoluene	EPA 8260	<1.0	1.0	ug/L	MQS	10/16/2009
tert-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/16/2009
1,2,4-Trimethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/16/2009
sec-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/16/2009
p-Isopropyltoluene	EPA 8260	<1.0	1.0	ug/L	MQS	10/16/2009
1,3-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/16/2009
1,4-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/16/2009
n-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/16/2009
1,2-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/16/2009
1,2-Dibromo-3-Chloropropane	EPA 8260	<5.0	5.0	ug/L	MQS	10/16/2009
1,2,4-Trichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/16/2009
Hexachlorobutadiene	EPA 8260	<1.0	1.0	ug/L	MQS	10/16/2009
Naphthalene	EPA 8260	<2.0	2.0	ug/L	MQS	10/16/2009
1,2,3-Trichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/16/2009
Surrogates:	EPA 8260					
***1,2-Dichloroethane-D4	EPA 8260	93.6	70-130	% R	MQS	10/16/2009
***Toluene-D8	EPA 8260	101	70-130	% R	MQS	10/16/2009

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A N A L Y T I C A L R E P O R T

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Stephen Andrus / Angela Harvey

Project Name.: **Charbert ICMP**
Project No.: **03.0032795.29**

Date Received: **10/14/2009**
Date Reported: **10/22/2009**
Work Order No.: **0910-00086**

Sample ID: **GZ-7** Sample No.: **002**

Sample Date: **10/12/2009**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
***4-Bromofluorobenzene	EPA 8260	97.4	70-130	% R	MQS	10/16/2009
Preparation	EPA 5030B	1.0		CF	MQS	10/16/2009

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ANALYTICAL REPORT

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Project Name.: **Charbert ICMP**
Project No.: **03.0032795.29**

Date Received: **10/14/2009**
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Work Order No.: **0910-00086**

Sample ID: **GZ-3** Sample No.: **003**

Sample Date: **10/12/2009**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260				MQS	10/17/2009
Dichlorodifluoromethane	EPA 8260	<10	10	ug/L	MQS	10/17/2009
Chloromethane	EPA 8260	<10	10	ug/L	MQS	10/17/2009
Vinyl Chloride	EPA 8260	37	5.0	ug/L	MQS	10/17/2009
Bromomethane	EPA 8260	<10	10	ug/L	MQS	10/17/2009
Chloroethane	EPA 8260	<5.0	5.0	ug/L	MQS	10/17/2009
Trichlorofluoromethane	EPA 8260	<10	10	ug/L	MQS	10/17/2009
Diethylether	EPA 8260	<25	25	ug/L	MQS	10/17/2009
Acetone	EPA 8260	<130	130	ug/L	MQS	10/17/2009
1,1-Dichloroethene	EPA 8260	<5.0	5.0	ug/L	MQS	10/17/2009
Dichloromethane	EPA 8260	<10	10	ug/L	MQS	10/17/2009
Methyl-Tert-Butyl-Ether	EPA 8260	<5.0	5.0	ug/L	MQS	10/17/2009
trans-1,2-Dichloroethene	EPA 8260	<5.0	5.0	ug/L	MQS	10/17/2009
1,1-Dichloroethane	EPA 8260	<5.0	5.0	ug/L	MQS	10/17/2009
2-Butanone	EPA 8260	<130	130	ug/L	MQS	10/17/2009
2,2-Dichloropropane	EPA 8260	<5.0	5.0	ug/L	MQS	10/17/2009
cis-1,2-Dichloroethene	EPA 8260	230	5.0	ug/L	MQS	10/17/2009
Chloroform	EPA 8260	<5.0	5.0	ug/L	MQS	10/17/2009
Bromochloromethane	EPA 8260	<5.0	5.0	ug/L	MQS	10/17/2009
Tetrahydrofuran	EPA 8260	<50	50	ug/L	MQS	10/17/2009
1,1,1-Trichloroethane	EPA 8260	<5.0	5.0	ug/L	MQS	10/17/2009
1,1-Dichloropropene	EPA 8260	<5.0	5.0	ug/L	MQS	10/17/2009
Carbon Tetrachloride	EPA 8260	<5.0	5.0	ug/L	MQS	10/17/2009
1,2-Dichloroethane	EPA 8260	<5.0	5.0	ug/L	MQS	10/17/2009
Benzene	EPA 8260	<5.0	5.0	ug/L	MQS	10/17/2009
Trichloroethene	EPA 8260	210	5.0	ug/L	MQS	10/17/2009
1,2-Dichloropropane	EPA 8260	<5.0	5.0	ug/L	MQS	10/17/2009
Bromodichloromethane	EPA 8260	<5.0	5.0	ug/L	MQS	10/17/2009
Dibromomethane	EPA 8260	<5.0	5.0	ug/L	MQS	10/17/2009
4-Methyl-2-Pentanone	EPA 8260	<130	130	ug/L	MQS	10/17/2009
cis-1,3-Dichloropropene	EPA 8260	<5.0	5.0	ug/L	MQS	10/17/2009
Toluene	EPA 8260	<5.0	5.0	ug/L	MQS	10/17/2009
trans-1,3-Dichloropropene	EPA 8260	<10	10	ug/L	MQS	10/17/2009
1,1,2-Trichloroethane	EPA 8260	11	5.0	ug/L	MQS	10/17/2009
2-Hexanone	EPA 8260	<130	130	ug/L	MQS	10/17/2009

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ANALYTICAL REPORT

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Project Name.: **Charbert ICMP**
Project No.: **03.0032795.29**

Date Received: **10/14/2009**
Date Reported: **10/22/2009**
Work Order No.: **0910-00086**

Sample ID: **GZ-3** Sample No.: **003**

Sample Date: **10/12/2009**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
1,3-Dichloropropane	EPA 8260	<5.0	5.0	ug/L	MQS	10/17/2009
Tetrachloroethene	EPA 8260	630	5.0	ug/L	MQS	10/17/2009
Dibromochloromethane	EPA 8260	<5.0	5.0	ug/L	MQS	10/17/2009
1,2-Dibromoethane (EDB)	EPA 8260	<10	10	ug/L	MQS	10/17/2009
Chlorobenzene	EPA 8260	<5.0	5.0	ug/L	MQS	10/17/2009
1,1,1,2-Tetrachloroethane	EPA 8260	<5.0	5.0	ug/L	MQS	10/17/2009
Ethylbenzene	EPA 8260	<5.0	5.0	ug/L	MQS	10/17/2009
m&p-Xylene	EPA 8260	<10	10	ug/L	MQS	10/17/2009
o-Xylene	EPA 8260	<5.0	5.0	ug/L	MQS	10/17/2009
Styrene	EPA 8260	<5.0	5.0	ug/L	MQS	10/17/2009
Bromoform	EPA 8260	<10	10	ug/L	MQS	10/17/2009
Isopropylbenzene	EPA 8260	<5.0	5.0	ug/L	MQS	10/17/2009
1,1,2,2-Tetrachloroethane	EPA 8260	<5.0	5.0	ug/L	MQS	10/17/2009
1,2,3-Trichloropropane	EPA 8260	<5.0	5.0	ug/L	MQS	10/17/2009
Bromobenzene	EPA 8260	<5.0	5.0	ug/L	MQS	10/17/2009
N-Propylbenzene	EPA 8260	<5.0	5.0	ug/L	MQS	10/17/2009
2-Chlorotoluene	EPA 8260	<5.0	5.0	ug/L	MQS	10/17/2009
1,3,5-Trimethylbenzene	EPA 8260	<5.0	5.0	ug/L	MQS	10/17/2009
4-Chlorotoluene	EPA 8260	<5.0	5.0	ug/L	MQS	10/17/2009
tert-Butylbenzene	EPA 8260	<5.0	5.0	ug/L	MQS	10/17/2009
1,2,4-Trimethylbenzene	EPA 8260	<5.0	5.0	ug/L	MQS	10/17/2009
sec-Butylbenzene	EPA 8260	<5.0	5.0	ug/L	MQS	10/17/2009
p-Isopropyltoluene	EPA 8260	<5.0	5.0	ug/L	MQS	10/17/2009
1,3-Dichlorobenzene	EPA 8260	<5.0	5.0	ug/L	MQS	10/17/2009
1,4-Dichlorobenzene	EPA 8260	<5.0	5.0	ug/L	MQS	10/17/2009
n-Butylbenzene	EPA 8260	<5.0	5.0	ug/L	MQS	10/17/2009
1,2-Dichlorobenzene	EPA 8260	<5.0	5.0	ug/L	MQS	10/17/2009
1,2-Dibromo-3-Chloropropane	EPA 8260	<25	25	ug/L	MQS	10/17/2009
1,2,4-Trichlorobenzene	EPA 8260	<5.0	5.0	ug/L	MQS	10/17/2009
Hexachlorobutadiene	EPA 8260	<5.0	5.0	ug/L	MQS	10/17/2009
Naphthalene	EPA 8260	<10	10	ug/L	MQS	10/17/2009
1,2,3-Trichlorobenzene	EPA 8260	<5.0	5.0	ug/L	MQS	10/17/2009
Surrogates:	EPA 8260					
***1,2-Dichloroethane-D4	EPA 8260	92.6	70-130	% R	MQS	10/17/2009
***Toluene-D8	EPA 8260	99.8	70-130	% R	MQS	10/17/2009

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A N A L Y T I C A L R E P O R T

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Stephen Andrus / Angela Harvey

Project Name.: **Charbert ICMP**
Project No.: **03.0032795.29**

Date Received: **10/14/2009**
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Work Order No.: **0910-00086**

Sample ID: **GZ-3** Sample No.: **003**

Sample Date: **10/12/2009**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
***4-Bromofluorobenzene	EPA 8260	94.2	70-130	% R	MQS	10/17/2009
Preparation	EPA 5030B	5.0		CF	MQS	10/16/2009

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Project Name.: **Charbert ICMP**
Project No.: **03.0032795.29**

Date Received: **10/14/2009**
Date Reported: **10/22/2009**
Work Order No.: **0910-00086**

Sample ID: **RIZ-13** Sample No.: **004**

Sample Date: **10/12/2009**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260				MQS	10/17/2009
Dichlorodifluoromethane	EPA 8260	<2.0	2.0	ug/L	MQS	10/17/2009
Chloromethane	EPA 8260	<2.0	2.0	ug/L	MQS	10/17/2009
Vinyl Chloride	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
Bromomethane	EPA 8260	<2.0	2.0	ug/L	MQS	10/17/2009
Chloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
Trichlorofluoromethane	EPA 8260	<2.0	2.0	ug/L	MQS	10/17/2009
Diethylether	EPA 8260	<5.0	5.0	ug/L	MQS	10/17/2009
Acetone	EPA 8260	<25	25	ug/L	MQS	10/17/2009
1,1-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
Dichloromethane	EPA 8260	<2.0	2.0	ug/L	MQS	10/17/2009
Methyl-Tert-Butyl-Ether	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
trans-1,2-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
1,1-Dichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
2-Butanone	EPA 8260	<25	25	ug/L	MQS	10/17/2009
2,2-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
cis-1,2-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
Chloroform	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
Bromochloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
Tetrahydrofuran	EPA 8260	<10	10	ug/L	MQS	10/17/2009
1,1,1-Trichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
1,1-Dichloropropene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
Carbon Tetrachloride	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
1,2-Dichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
Benzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
Trichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
1,2-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
Bromodichloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
Dibromomethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
4-Methyl-2-Pentanone	EPA 8260	<25	25	ug/L	MQS	10/17/2009
cis-1,3-Dichloropropene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
Toluene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
trans-1,3-Dichloropropene	EPA 8260	<2.0	2.0	ug/L	MQS	10/17/2009
1,1,2-Trichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
2-Hexanone	EPA 8260	<25	25	ug/L	MQS	10/17/2009

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ANALYTICAL REPORT

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Project Name.: **Charbert ICMP**
Project No.: **03.0032795.29**

Date Received: **10/14/2009**
Date Reported: **10/22/2009**
Work Order No.: **0910-00086**

Sample ID: **RIZ-13** Sample No.: **004**

Sample Date: **10/12/2009**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
1,3-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
Tetrachloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
Dibromochloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
1,2-Dibromoethane (EDB)	EPA 8260	<2.0	2.0	ug/L	MQS	10/17/2009
Chlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
1,1,1,2-Tetrachloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
Ethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
m&p-Xylene	EPA 8260	<2.0	2.0	ug/L	MQS	10/17/2009
o-Xylene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
Styrene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
Bromoform	EPA 8260	<2.0	2.0	ug/L	MQS	10/17/2009
Isopropylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
1,1,2,2-Tetrachloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
1,2,3-Trichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
Bromobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
N-Propylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
2-Chlorotoluene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
1,3,5-Trimethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
4-Chlorotoluene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
tert-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
1,2,4-Trimethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
sec-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
p-Isopropyltoluene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
1,3-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
1,4-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
n-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
1,2-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
1,2-Dibromo-3-Chloropropane	EPA 8260	<5.0	5.0	ug/L	MQS	10/17/2009
1,2,4-Trichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
Hexachlorobutadiene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
Naphthalene	EPA 8260	<2.0	2.0	ug/L	MQS	10/17/2009
1,2,3-Trichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
Surrogates:	EPA 8260					
***1,2-Dichloroethane-D4	EPA 8260	90.5	70-130	% R	MQS	10/17/2009
***Toluene-D8	EPA 8260	99.3	70-130	% R	MQS	10/17/2009

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Project Name.: **Charbert ICMP**
Project No.: **03.0032795.29**

Date Received: **10/14/2009**
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Work Order No.: **0910-00086**

Sample ID: **RIZ-13** Sample No.: **004**

Sample Date: **10/12/2009**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
***4-Bromofluorobenzene	EPA 8260	98.1	70-130	% R	MQS	10/17/2009
Preparation	EPA 5030B	1.0		CF	MQS	10/16/2009

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Work Order No.: **0910-00086**

Sample ID: **GP-28** Sample No.: **005**

Sample Date: **10/12/2009**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260				MQS	10/17/2009
Dichlorodifluoromethane	EPA 8260	<2.0	2.0	ug/L	MQS	10/17/2009
Chloromethane	EPA 8260	<2.0	2.0	ug/L	MQS	10/17/2009
Vinyl Chloride	EPA 8260	18	1.0	ug/L	MQS	10/17/2009
Bromomethane	EPA 8260	<2.0	2.0	ug/L	MQS	10/17/2009
Chloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
Trichlorofluoromethane	EPA 8260	<2.0	2.0	ug/L	MQS	10/17/2009
Diethylether	EPA 8260	<5.0	5.0	ug/L	MQS	10/17/2009
Acetone	EPA 8260	<25	25	ug/L	MQS	10/17/2009
1,1-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
Dichloromethane	EPA 8260	<2.0	2.0	ug/L	MQS	10/17/2009
Methyl-Tert-Butyl-Ether	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
trans-1,2-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
1,1-Dichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
2-Butanone	EPA 8260	<25	25	ug/L	MQS	10/17/2009
2,2-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
cis-1,2-Dichloroethene	EPA 8260	12	1.0	ug/L	MQS	10/17/2009
Chloroform	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
Bromochloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
Tetrahydrofuran	EPA 8260	<10	10	ug/L	MQS	10/17/2009
1,1,1-Trichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
1,1-Dichloropropene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
Carbon Tetrachloride	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
1,2-Dichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
Benzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
Trichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
1,2-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
Bromodichloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
Dibromomethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
4-Methyl-2-Pentanone	EPA 8260	<25	25	ug/L	MQS	10/17/2009
cis-1,3-Dichloropropene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
Toluene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
trans-1,3-Dichloropropene	EPA 8260	<2.0	2.0	ug/L	MQS	10/17/2009
1,1,2-Trichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
2-Hexanone	EPA 8260	<25	25	ug/L	MQS	10/17/2009

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ANALYTICAL REPORT

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Stephen Andrus / Angela Harvey

Project Name.: **Charbert ICMP**
Project No.: **03.0032795.29**

Date Received: **10/14/2009**
Date Reported: **10/22/2009**
Work Order No.: **0910-00086**

Sample ID: **GP-28** Sample No.: **005**

Sample Date: **10/12/2009**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
1,3-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
Tetrachloroethene	EPA 8260	1.5	1.0	ug/L	MQS	10/17/2009
Dibromochloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
1,2-Dibromoethane (EDB)	EPA 8260	<2.0	2.0	ug/L	MQS	10/17/2009
Chlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
1,1,1,2-Tetrachloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
Ethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
m&p-Xylene	EPA 8260	<2.0	2.0	ug/L	MQS	10/17/2009
o-Xylene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
Styrene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
Bromoform	EPA 8260	<2.0	2.0	ug/L	MQS	10/17/2009
Isopropylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
1,1,2,2-Tetrachloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
1,2,3-Trichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
Bromobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
N-Propylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
2-Chlorotoluene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
1,3,5-Trimethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
4-Chlorotoluene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
tert-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
1,2,4-Trimethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
sec-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
p-Isopropyltoluene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
1,3-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
1,4-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
n-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
1,2-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
1,2-Dibromo-3-Chloropropane	EPA 8260	<5.0	5.0	ug/L	MQS	10/17/2009
1,2,4-Trichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
Hexachlorobutadiene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
Naphthalene	EPA 8260	<2.0	2.0	ug/L	MQS	10/17/2009
1,2,3-Trichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
Surrogates:	EPA 8260					
***1,2-Dichloroethane-D4	EPA 8260	86.7	70-130	% R	MQS	10/17/2009
***Toluene-D8	EPA 8260	101	70-130	% R	MQS	10/17/2009

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Stephen Andrus / Angela Harvey

Project Name.: **Charbert ICMP**
Project No.: **03.0032795.29**

Date Received: **10/14/2009**
Date Reported: **10/22/2009**
Work Order No.: **0910-00086**

Sample ID: **GP-28** Sample No.: **005**

Sample Date: **10/12/2009**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
***4-Bromofluorobenzene	EPA 8260	99.0	70-130	% R	MQS	10/17/2009
Preparation	EPA 5030B	1.0		CF	MQS	10/16/2009

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Project Name.: **Charbert ICMP**
Project No.: **03.0032795.29**

Date Received: **10/14/2009**
Date Reported: **10/22/2009**
Work Order No.: **0910-00086**

Sample ID: **RIZ-5** Sample No.: **006**

Sample Date: **10/12/2009**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260				MQS	10/17/2009
Dichlorodifluoromethane	EPA 8260	<2.0	2.0	ug/L	MQS	10/17/2009
Chloromethane	EPA 8260	<2.0	2.0	ug/L	MQS	10/17/2009
Vinyl Chloride	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
Bromomethane	EPA 8260	<2.0	2.0	ug/L	MQS	10/17/2009
Chloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
Trichlorofluoromethane	EPA 8260	<2.0	2.0	ug/L	MQS	10/17/2009
Diethylether	EPA 8260	<5.0	5.0	ug/L	MQS	10/17/2009
Acetone	EPA 8260	<25	25	ug/L	MQS	10/17/2009
1,1-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
Dichloromethane	EPA 8260	<2.0	2.0	ug/L	MQS	10/17/2009
Methyl-Tert-Butyl-Ether	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
trans-1,2-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
1,1-Dichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
2-Butanone	EPA 8260	<25	25	ug/L	MQS	10/17/2009
2,2-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
cis-1,2-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
Chloroform	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
Bromochloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
Tetrahydrofuran	EPA 8260	<10	10	ug/L	MQS	10/17/2009
1,1,1-Trichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
1,1-Dichloropropene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
Carbon Tetrachloride	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
1,2-Dichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
Benzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
Trichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
1,2-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
Bromodichloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
Dibromomethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
4-Methyl-2-Pentanone	EPA 8260	<25	25	ug/L	MQS	10/17/2009
cis-1,3-Dichloropropene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
Toluene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
trans-1,3-Dichloropropene	EPA 8260	<2.0	2.0	ug/L	MQS	10/17/2009
1,1,2-Trichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
2-Hexanone	EPA 8260	<25	25	ug/L	MQS	10/17/2009

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Project Name.: **Charbert ICMP**
Project No.: **03.0032795.29**

Date Received: **10/14/2009**
Date Reported: **10/22/2009**
Work Order No.: **0910-00086**

Sample ID: **RIZ-5** Sample No.: **006**

Sample Date: **10/12/2009**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
1,3-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
Tetrachloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
Dibromochloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
1,2-Dibromoethane (EDB)	EPA 8260	<2.0	2.0	ug/L	MQS	10/17/2009
Chlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
1,1,1,2-Tetrachloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
Ethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
m&p-Xylene	EPA 8260	<2.0	2.0	ug/L	MQS	10/17/2009
o-Xylene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
Styrene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
Bromoform	EPA 8260	<2.0	2.0	ug/L	MQS	10/17/2009
Isopropylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
1,1,2,2-Tetrachloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
1,2,3-Trichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
Bromobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
N-Propylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
2-Chlorotoluene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
1,3,5-Trimethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
4-Chlorotoluene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
tert-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
1,2,4-Trimethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
sec-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
p-Isopropyltoluene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
1,3-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
1,4-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
n-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
1,2-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
1,2-Dibromo-3-Chloropropane	EPA 8260	<5.0	5.0	ug/L	MQS	10/17/2009
1,2,4-Trichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
Hexachlorobutadiene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
Naphthalene	EPA 8260	<2.0	2.0	ug/L	MQS	10/17/2009
1,2,3-Trichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
Surrogates:	EPA 8260					
***1,2-Dichloroethane-D4	EPA 8260	95.0	70-130	% R	MQS	10/17/2009
***Toluene-D8	EPA 8260	100	70-130	% R	MQS	10/17/2009

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Project Name.: **Charbert ICMP**
Project No.: **03.0032795.29**

Date Received: **10/14/2009**
Date Reported: **10/22/2009**
Work Order No.: **0910-00086**

Sample ID: **RIZ-5** Sample No.: **006**

Sample Date: **10/12/2009**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
***4-Bromofluorobenzene	EPA 8260	95.6	70-130	% R	MQS	10/17/2009
Preparation	EPA 5030B	1.0		CF	MQS	10/16/2009

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ANALYTICAL REPORT

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Project Name.: **Charbert ICMP**
Project No.: **03.0032795.29**

Date Received: **10/14/2009**
Date Reported: **10/22/2009**
Work Order No.: **0910-00086**

Sample ID: **GZ-20** Sample No.: **007**

Sample Date: **10/12/2009**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260				MQS	10/17/2009
Dichlorodifluoromethane	EPA 8260	<20	20	ug/L	MQS	10/17/2009
Chloromethane	EPA 8260	<20	20	ug/L	MQS	10/17/2009
Vinyl Chloride	EPA 8260	84	10	ug/L	MQS	10/17/2009
Bromomethane	EPA 8260	<20	20	ug/L	MQS	10/17/2009
Chloroethane	EPA 8260	<10	10	ug/L	MQS	10/17/2009
Trichlorofluoromethane	EPA 8260	<20	20	ug/L	MQS	10/17/2009
Diethylether	EPA 8260	<50	50	ug/L	MQS	10/17/2009
Acetone	EPA 8260	<250	250	ug/L	MQS	10/17/2009
1,1-Dichloroethene	EPA 8260	<10	10	ug/L	MQS	10/17/2009
Dichloromethane	EPA 8260	<20	20	ug/L	MQS	10/17/2009
Methyl-Tert-Butyl-Ether	EPA 8260	<10	10	ug/L	MQS	10/17/2009
trans-1,2-Dichloroethene	EPA 8260	<10	10	ug/L	MQS	10/17/2009
1,1-Dichloroethane	EPA 8260	<10	10	ug/L	MQS	10/17/2009
2-Butanone	EPA 8260	<250	250	ug/L	MQS	10/17/2009
2,2-Dichloropropane	EPA 8260	<10	10	ug/L	MQS	10/17/2009
cis-1,2-Dichloroethene	EPA 8260	790	10	ug/L	MQS	10/17/2009
Chloroform	EPA 8260	<10	10	ug/L	MQS	10/17/2009
Bromochloromethane	EPA 8260	<10	10	ug/L	MQS	10/17/2009
Tetrahydrofuran	EPA 8260	<100	100	ug/L	MQS	10/17/2009
1,1,1-Trichloroethane	EPA 8260	<10	10	ug/L	MQS	10/17/2009
1,1-Dichloropropene	EPA 8260	<10	10	ug/L	MQS	10/17/2009
Carbon Tetrachloride	EPA 8260	<10	10	ug/L	MQS	10/17/2009
1,2-Dichloroethane	EPA 8260	<10	10	ug/L	MQS	10/17/2009
Benzene	EPA 8260	<10	10	ug/L	MQS	10/17/2009
Trichloroethene	EPA 8260	1200	10	ug/L	MQS	10/17/2009
1,2-Dichloropropane	EPA 8260	<10	10	ug/L	MQS	10/17/2009
Bromodichloromethane	EPA 8260	<10	10	ug/L	MQS	10/17/2009
Dibromomethane	EPA 8260	<10	10	ug/L	MQS	10/17/2009
4-Methyl-2-Pentanone	EPA 8260	<250	250	ug/L	MQS	10/17/2009
cis-1,3-Dichloropropene	EPA 8260	<10	10	ug/L	MQS	10/17/2009
Toluene	EPA 8260	<10	10	ug/L	MQS	10/17/2009
trans-1,3-Dichloropropene	EPA 8260	<20	20	ug/L	MQS	10/17/2009
1,1,2-Trichloroethane	EPA 8260	35	10	ug/L	MQS	10/17/2009
2-Hexanone	EPA 8260	<250	250	ug/L	MQS	10/17/2009

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Date Received: **10/14/2009**
Date Reported: **10/22/2009**
Work Order No.: **0910-00086**

Sample ID: **GZ-20** Sample No.: **007**

Sample Date: **10/12/2009**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
1,3-Dichloropropane	EPA 8260	<10	10	ug/L	MQS	10/17/2009
Tetrachloroethene	EPA 8260	2100	10	ug/L	MQS	10/17/2009
Dibromochloromethane	EPA 8260	<10	10	ug/L	MQS	10/17/2009
1,2-Dibromoethane (EDB)	EPA 8260	<20	20	ug/L	MQS	10/17/2009
Chlorobenzene	EPA 8260	<10	10	ug/L	MQS	10/17/2009
1,1,1,2-Tetrachloroethane	EPA 8260	<10	10	ug/L	MQS	10/17/2009
Ethylbenzene	EPA 8260	<10	10	ug/L	MQS	10/17/2009
m&p-Xylene	EPA 8260	<20	20	ug/L	MQS	10/17/2009
o-Xylene	EPA 8260	<10	10	ug/L	MQS	10/17/2009
Styrene	EPA 8260	<10	10	ug/L	MQS	10/17/2009
Bromoform	EPA 8260	<20	20	ug/L	MQS	10/17/2009
Isopropylbenzene	EPA 8260	<10	10	ug/L	MQS	10/17/2009
1,1,2,2-Tetrachloroethane	EPA 8260	<10	10	ug/L	MQS	10/17/2009
1,2,3-Trichloropropane	EPA 8260	<10	10	ug/L	MQS	10/17/2009
Bromobenzene	EPA 8260	<10	10	ug/L	MQS	10/17/2009
N-Propylbenzene	EPA 8260	<10	10	ug/L	MQS	10/17/2009
2-Chlorotoluene	EPA 8260	<10	10	ug/L	MQS	10/17/2009
1,3,5-Trimethylbenzene	EPA 8260	<10	10	ug/L	MQS	10/17/2009
4-Chlorotoluene	EPA 8260	<10	10	ug/L	MQS	10/17/2009
tert-Butylbenzene	EPA 8260	<10	10	ug/L	MQS	10/17/2009
1,2,4-Trimethylbenzene	EPA 8260	<10	10	ug/L	MQS	10/17/2009
sec-Butylbenzene	EPA 8260	<10	10	ug/L	MQS	10/17/2009
p-Isopropyltoluene	EPA 8260	<10	10	ug/L	MQS	10/17/2009
1,3-Dichlorobenzene	EPA 8260	<10	10	ug/L	MQS	10/17/2009
1,4-Dichlorobenzene	EPA 8260	<10	10	ug/L	MQS	10/17/2009
n-Butylbenzene	EPA 8260	<10	10	ug/L	MQS	10/17/2009
1,2-Dichlorobenzene	EPA 8260	<10	10	ug/L	MQS	10/17/2009
1,2-Dibromo-3-Chloropropane	EPA 8260	<50	50	ug/L	MQS	10/17/2009
1,2,4-Trichlorobenzene	EPA 8260	<10	10	ug/L	MQS	10/17/2009
Hexachlorobutadiene	EPA 8260	<10	10	ug/L	MQS	10/17/2009
Naphthalene	EPA 8260	<20	20	ug/L	MQS	10/17/2009
1,2,3-Trichlorobenzene	EPA 8260	<10	10	ug/L	MQS	10/17/2009
Surrogates:	EPA 8260					
***1,2-Dichloroethane-D4	EPA 8260	88.9	70-130	% R	MQS	10/17/2009
***Toluene-D8	EPA 8260	98.4	70-130	% R	MQS	10/17/2009

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Project Name.: **Charbert ICMP**
Project No.: **03.0032795.29**

Date Received: **10/14/2009**
Date Reported: **10/22/2009**
Work Order No.: **0910-00086**

Sample ID: **GZ-20** Sample No.: **007**
Sample Date: **10/12/2009**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
***4-Bromofluorobenzene	EPA 8260	98.5	70-130	% R	MQS	10/17/2009
Preparation	EPA 5030B	10		CF	MQS	10/16/2009

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Stephen Andrus / Angela Harvey

Project Name.: **Charbert ICMP**
Project No.: **03.0032795.29**

Date Received: **10/14/2009**
Date Reported: **10/22/2009**
Work Order No.: **0910-00086**

Sample ID: **GZ-19** Sample No.: **008**

Sample Date: **10/12/2009**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260				MQS	10/17/2009
Dichlorodifluoromethane	EPA 8260	<10	10	ug/L	MQS	10/17/2009
Chloromethane	EPA 8260	<10	10	ug/L	MQS	10/17/2009
Vinyl Chloride	EPA 8260	<5.0	5.0	ug/L	MQS	10/17/2009
Bromomethane	EPA 8260	<10	10	ug/L	MQS	10/17/2009
Chloroethane	EPA 8260	<5.0	5.0	ug/L	MQS	10/17/2009
Trichlorofluoromethane	EPA 8260	<10	10	ug/L	MQS	10/17/2009
Diethylether	EPA 8260	<25	25	ug/L	MQS	10/17/2009
Acetone	EPA 8260	<130	130	ug/L	MQS	10/17/2009
1,1-Dichloroethene	EPA 8260	<5.0	5.0	ug/L	MQS	10/17/2009
Dichloromethane	EPA 8260	<10	10	ug/L	MQS	10/17/2009
Methyl-Tert-Butyl-Ether	EPA 8260	<5.0	5.0	ug/L	MQS	10/17/2009
trans-1,2-Dichloroethene	EPA 8260	<5.0	5.0	ug/L	MQS	10/17/2009
1,1-Dichloroethane	EPA 8260	<5.0	5.0	ug/L	MQS	10/17/2009
2-Butanone	EPA 8260	<130	130	ug/L	MQS	10/17/2009
2,2-Dichloropropane	EPA 8260	<5.0	5.0	ug/L	MQS	10/17/2009
cis-1,2-Dichloroethene	EPA 8260	<5.0	5.0	ug/L	MQS	10/17/2009
Chloroform	EPA 8260	<5.0	5.0	ug/L	MQS	10/17/2009
Bromochloromethane	EPA 8260	<5.0	5.0	ug/L	MQS	10/17/2009
Tetrahydrofuran	EPA 8260	<50	50	ug/L	MQS	10/17/2009
1,1,1-Trichloroethane	EPA 8260	<5.0	5.0	ug/L	MQS	10/17/2009
1,1-Dichloropropene	EPA 8260	<5.0	5.0	ug/L	MQS	10/17/2009
Carbon Tetrachloride	EPA 8260	<5.0	5.0	ug/L	MQS	10/17/2009
1,2-Dichloroethane	EPA 8260	<5.0	5.0	ug/L	MQS	10/17/2009
Benzene	EPA 8260	<5.0	5.0	ug/L	MQS	10/17/2009
Trichloroethene	EPA 8260	7.7	5.0	ug/L	MQS	10/17/2009
1,2-Dichloropropane	EPA 8260	<5.0	5.0	ug/L	MQS	10/17/2009
Bromodichloromethane	EPA 8260	<5.0	5.0	ug/L	MQS	10/17/2009
Dibromomethane	EPA 8260	<5.0	5.0	ug/L	MQS	10/17/2009
4-Methyl-2-Pentanone	EPA 8260	<130	130	ug/L	MQS	10/17/2009
cis-1,3-Dichloropropene	EPA 8260	<5.0	5.0	ug/L	MQS	10/17/2009
Toluene	EPA 8260	<5.0	5.0	ug/L	MQS	10/17/2009
trans-1,3-Dichloropropene	EPA 8260	<10	10	ug/L	MQS	10/17/2009
1,1,2-Trichloroethane	EPA 8260	12	5.0	ug/L	MQS	10/17/2009
2-Hexanone	EPA 8260	<130	130	ug/L	MQS	10/17/2009

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ANALYTICAL REPORT

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Stephen Andrus / Angela Harvey

Project Name.: **Charbert ICMP**
Project No.: **03.0032795.29**

Date Received: **10/14/2009**
Date Reported: **10/22/2009**
Work Order No.: **0910-00086**

Sample ID: **GZ-19** Sample No.: **008**

Sample Date: **10/12/2009**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
1,3-Dichloropropane	EPA 8260	<5.0	5.0	ug/L	MQS	10/17/2009
Tetrachloroethene	EPA 8260	780	5.0	ug/L	MQS	10/17/2009
Dibromochloromethane	EPA 8260	<5.0	5.0	ug/L	MQS	10/17/2009
1,2-Dibromoethane (EDB)	EPA 8260	<10	10	ug/L	MQS	10/17/2009
Chlorobenzene	EPA 8260	<5.0	5.0	ug/L	MQS	10/17/2009
1,1,1,2-Tetrachloroethane	EPA 8260	<5.0	5.0	ug/L	MQS	10/17/2009
Ethylbenzene	EPA 8260	<5.0	5.0	ug/L	MQS	10/17/2009
m&p-Xylene	EPA 8260	<10	10	ug/L	MQS	10/17/2009
o-Xylene	EPA 8260	<5.0	5.0	ug/L	MQS	10/17/2009
Styrene	EPA 8260	<5.0	5.0	ug/L	MQS	10/17/2009
Bromoform	EPA 8260	<10	10	ug/L	MQS	10/17/2009
Isopropylbenzene	EPA 8260	<5.0	5.0	ug/L	MQS	10/17/2009
1,1,2,2-Tetrachloroethane	EPA 8260	<5.0	5.0	ug/L	MQS	10/17/2009
1,2,3-Trichloropropane	EPA 8260	<5.0	5.0	ug/L	MQS	10/17/2009
Bromobenzene	EPA 8260	<5.0	5.0	ug/L	MQS	10/17/2009
N-Propylbenzene	EPA 8260	<5.0	5.0	ug/L	MQS	10/17/2009
2-Chlorotoluene	EPA 8260	<5.0	5.0	ug/L	MQS	10/17/2009
1,3,5-Trimethylbenzene	EPA 8260	<5.0	5.0	ug/L	MQS	10/17/2009
4-Chlorotoluene	EPA 8260	<5.0	5.0	ug/L	MQS	10/17/2009
tert-Butylbenzene	EPA 8260	<5.0	5.0	ug/L	MQS	10/17/2009
1,2,4-Trimethylbenzene	EPA 8260	<5.0	5.0	ug/L	MQS	10/17/2009
sec-Butylbenzene	EPA 8260	<5.0	5.0	ug/L	MQS	10/17/2009
p-Isopropyltoluene	EPA 8260	<5.0	5.0	ug/L	MQS	10/17/2009
1,3-Dichlorobenzene	EPA 8260	<5.0	5.0	ug/L	MQS	10/17/2009
1,4-Dichlorobenzene	EPA 8260	<5.0	5.0	ug/L	MQS	10/17/2009
n-Butylbenzene	EPA 8260	<5.0	5.0	ug/L	MQS	10/17/2009
1,2-Dichlorobenzene	EPA 8260	<5.0	5.0	ug/L	MQS	10/17/2009
1,2-Dibromo-3-Chloropropane	EPA 8260	<25	25	ug/L	MQS	10/17/2009
1,2,4-Trichlorobenzene	EPA 8260	<5.0	5.0	ug/L	MQS	10/17/2009
Hexachlorobutadiene	EPA 8260	<5.0	5.0	ug/L	MQS	10/17/2009
Naphthalene	EPA 8260	<10	10	ug/L	MQS	10/17/2009
1,2,3-Trichlorobenzene	EPA 8260	<5.0	5.0	ug/L	MQS	10/17/2009
Surrogates:	EPA 8260					
***1,2-Dichloroethane-D4	EPA 8260	88.1	70-130	% R	MQS	10/17/2009
***Toluene-D8	EPA 8260	101	70-130	% R	MQS	10/17/2009

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Stephen Andrus / Angela Harvey

Project Name.: **Charbert ICMP**
Project No.: **03.0032795.29**

Date Received: **10/14/2009**
Date Reported: **10/22/2009**
Work Order No.: **0910-00086**

Sample ID: **GZ-19** Sample No.: **008**

Sample Date: **10/12/2009**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
***4-Bromofluorobenzene	EPA 8260	95.3	70-130	% R	MQS	10/17/2009
Preparation	EPA 5030B	5.0		CF	MQS	10/16/2009

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Project No.: **03.0032795.29**

Date Received: **10/14/2009**
Date Reported: **10/22/2009**
Work Order No.: **0910-00086**

Sample ID: **RIZ-7** Sample No.: **009**

Sample Date: **10/12/2009**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260				MQS	10/17/2009
Dichlorodifluoromethane	EPA 8260	<2.0	2.0	ug/L	MQS	10/17/2009
Chloromethane	EPA 8260	<2.0	2.0	ug/L	MQS	10/17/2009
Vinyl Chloride	EPA 8260	97	1.0	ug/L	MQS	10/17/2009
Bromomethane	EPA 8260	<2.0	2.0	ug/L	MQS	10/17/2009
Chloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
Trichlorofluoromethane	EPA 8260	<2.0	2.0	ug/L	MQS	10/17/2009
Diethylether	EPA 8260	<5.0	5.0	ug/L	MQS	10/17/2009
Acetone	EPA 8260	<25	25	ug/L	MQS	10/17/2009
1,1-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
Dichloromethane	EPA 8260	<2.0	2.0	ug/L	MQS	10/17/2009
Methyl-Tert-Butyl-Ether	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
trans-1,2-Dichloroethene	EPA 8260	2.8	1.0	ug/L	MQS	10/17/2009
1,1-Dichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
2-Butanone	EPA 8260	<25	25	ug/L	MQS	10/17/2009
2,2-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
cis-1,2-Dichloroethene	EPA 8260	57	1.0	ug/L	MQS	10/17/2009
Chloroform	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
Bromochloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
Tetrahydrofuran	EPA 8260	<10	10	ug/L	MQS	10/17/2009
1,1,1-Trichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
1,1-Dichloropropene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
Carbon Tetrachloride	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
1,2-Dichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
Benzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
Trichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
1,2-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
Bromodichloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
Dibromomethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
4-Methyl-2-Pentanone	EPA 8260	<25	25	ug/L	MQS	10/17/2009
cis-1,3-Dichloropropene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
Toluene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
trans-1,3-Dichloropropene	EPA 8260	<2.0	2.0	ug/L	MQS	10/17/2009
1,1,2-Trichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
2-Hexanone	EPA 8260	<25	25	ug/L	MQS	10/17/2009

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Stephen Andrus / Angela Harvey
Project Name.: **Charbert ICMP**
Project No.: **03.0032795.29**

Date Received: **10/14/2009**
Date Reported: **10/22/2009**
Work Order No.: **0910-00086**

Sample ID: **RIZ-7** Sample No.: **009**
Sample Date: **10/12/2009**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
1,3-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
Tetrachloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
Dibromochloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
1,2-Dibromoethane (EDB)	EPA 8260	<2.0	2.0	ug/L	MQS	10/17/2009
Chlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
1,1,1,2-Tetrachloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
Ethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
m&p-Xylene	EPA 8260	<2.0	2.0	ug/L	MQS	10/17/2009
o-Xylene	EPA 8260	1.1	1.0	ug/L	MQS	10/17/2009
Styrene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
Bromoform	EPA 8260	<2.0	2.0	ug/L	MQS	10/17/2009
Isopropylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
1,1,2,2-Tetrachloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
1,2,3-Trichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
Bromobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
N-Propylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
2-Chlorotoluene	EPA 8260	3.5	1.0	ug/L	MQS	10/17/2009
1,3,5-Trimethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
4-Chlorotoluene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
tert-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
1,2,4-Trimethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
sec-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
p-Isopropyltoluene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
1,3-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
1,4-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
n-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
1,2-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
1,2-Dibromo-3-Chloropropane	EPA 8260	<5.0	5.0	ug/L	MQS	10/17/2009
1,2,4-Trichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
Hexachlorobutadiene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
Naphthalene	EPA 8260	<2.0	2.0	ug/L	MQS	10/17/2009
1,2,3-Trichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
Surrogates:	EPA 8260					
***1,2-Dichloroethane-D4	EPA 8260	93.4	70-130	% R	MQS	10/17/2009
***Toluene-D8	EPA 8260	99.7	70-130	% R	MQS	10/17/2009

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Date Received: **10/14/2009**
Date Reported: **10/22/2009**
Work Order No.: **0910-00086**

Sample ID: **RIZ-7** Sample No.: **009**

Sample Date: **10/12/2009**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
***4-Bromofluorobenzene	EPA 8260	95.8	70-130	% R	MQS	10/17/2009
Preparation	EPA 5030B	1.0		CF	MQS	10/16/2009

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Date Received: **10/14/2009**
Date Reported: **10/22/2009**
Work Order No.: **0910-00086**

Sample ID: **GZ-23** Sample No.: **010**

Sample Date: **10/12/2009**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260				MQS	10/17/2009
Dichlorodifluoromethane	EPA 8260	<2.0	2.0	ug/L	MQS	10/17/2009
Chloromethane	EPA 8260	<2.0	2.0	ug/L	MQS	10/17/2009
Vinyl Chloride	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
Bromomethane	EPA 8260	<2.0	2.0	ug/L	MQS	10/17/2009
Chloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
Trichlorofluoromethane	EPA 8260	<2.0	2.0	ug/L	MQS	10/17/2009
Diethylether	EPA 8260	<5.0	5.0	ug/L	MQS	10/17/2009
Acetone	EPA 8260	<25	25	ug/L	MQS	10/17/2009
1,1-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
Dichloromethane	EPA 8260	<2.0	2.0	ug/L	MQS	10/17/2009
Methyl-Tert-Butyl-Ether	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
trans-1,2-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
1,1-Dichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
2-Butanone	EPA 8260	<25	25	ug/L	MQS	10/17/2009
2,2-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
cis-1,2-Dichloroethene	EPA 8260	6.4	1.0	ug/L	MQS	10/17/2009
Chloroform	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
Bromochloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
Tetrahydrofuran	EPA 8260	<10	10	ug/L	MQS	10/17/2009
1,1,1-Trichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
1,1-Dichloropropene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
Carbon Tetrachloride	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
1,2-Dichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
Benzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
Trichloroethene	EPA 8260	18	1.0	ug/L	MQS	10/17/2009
1,2-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
Bromodichloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
Dibromomethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
4-Methyl-2-Pentanone	EPA 8260	<25	25	ug/L	MQS	10/17/2009
cis-1,3-Dichloropropene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
Toluene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
trans-1,3-Dichloropropene	EPA 8260	<2.0	2.0	ug/L	MQS	10/17/2009
1,1,2-Trichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
2-Hexanone	EPA 8260	<25	25	ug/L	MQS	10/17/2009

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Sample ID: **GZ-23** Sample No.: **010**
Sample Date: **10/12/2009**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
1,3-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
Tetrachloroethene	EPA 8260	10	1.0	ug/L	MQS	10/17/2009
Dibromochloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
1,2-Dibromoethane (EDB)	EPA 8260	<2.0	2.0	ug/L	MQS	10/17/2009
Chlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
1,1,1,2-Tetrachloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
Ethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
m&p-Xylene	EPA 8260	<2.0	2.0	ug/L	MQS	10/17/2009
o-Xylene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
Styrene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
Bromoform	EPA 8260	<2.0	2.0	ug/L	MQS	10/17/2009
Isopropylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
1,1,2,2-Tetrachloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
1,2,3-Trichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
Bromobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
N-Propylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
2-Chlorotoluene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
1,3,5-Trimethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
4-Chlorotoluene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
tert-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
1,2,4-Trimethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
sec-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
p-Isopropyltoluene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
1,3-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
1,4-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
n-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
1,2-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
1,2-Dibromo-3-Chloropropane	EPA 8260	<5.0	5.0	ug/L	MQS	10/17/2009
1,2,4-Trichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
Hexachlorobutadiene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
Naphthalene	EPA 8260	<2.0	2.0	ug/L	MQS	10/17/2009
1,2,3-Trichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
Surrogates:	EPA 8260					
***1,2-Dichloroethane-D4	EPA 8260	91.3	70-130	% R	MQS	10/17/2009
***Toluene-D8	EPA 8260	98.0	70-130	% R	MQS	10/17/2009

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A N A L Y T I C A L R E P O R T

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Stephen Andrus / Angela Harvey

Project Name.: **Charbert ICMP**
Project No.: **03.0032795.29**

Date Received: **10/14/2009**
Date Reported: **10/22/2009**
Work Order No.: **0910-00086**

Sample ID: **GZ-23** Sample No.: **010**

Sample Date: **10/12/2009**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
***4-Bromofluorobenzene	EPA 8260	99.6	70-130	% R	MQS	10/17/2009
Preparation	EPA 5030B	1.0		CF	MQS	10/16/2009

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ANALYTICAL REPORT

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Project Name.: **Charbert ICMP**
Project No.: **03.0032795.29**

Date Received: **10/14/2009**
Date Reported: **10/22/2009**
Work Order No.: **0910-00086**

Sample ID: **GZ-21** Sample No.: **011**

Sample Date: **10/12/2009**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260				MQS	10/17/2009
Dichlorodifluoromethane	EPA 8260	<2.0	2.0	ug/L	MQS	10/17/2009
Chloromethane	EPA 8260	<2.0	2.0	ug/L	MQS	10/17/2009
Vinyl Chloride	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
Bromomethane	EPA 8260	<2.0	2.0	ug/L	MQS	10/17/2009
Chloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
Trichlorofluoromethane	EPA 8260	<2.0	2.0	ug/L	MQS	10/17/2009
Diethylether	EPA 8260	<5.0	5.0	ug/L	MQS	10/17/2009
Acetone	EPA 8260	<25	25	ug/L	MQS	10/17/2009
1,1-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
Dichloromethane	EPA 8260	<2.0	2.0	ug/L	MQS	10/17/2009
Methyl-Tert-Butyl-Ether	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
trans-1,2-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
1,1-Dichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
2-Butanone	EPA 8260	<25	25	ug/L	MQS	10/17/2009
2,2-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
cis-1,2-Dichloroethene	EPA 8260	1.8	1.0	ug/L	MQS	10/17/2009
Chloroform	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
Bromochloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
Tetrahydrofuran	EPA 8260	<10	10	ug/L	MQS	10/17/2009
1,1,1-Trichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
1,1-Dichloropropene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
Carbon Tetrachloride	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
1,2-Dichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
Benzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
Trichloroethene	EPA 8260	2.4	1.0	ug/L	MQS	10/17/2009
1,2-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
Bromodichloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
Dibromomethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
4-Methyl-2-Pentanone	EPA 8260	<25	25	ug/L	MQS	10/17/2009
cis-1,3-Dichloropropene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
Toluene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
trans-1,3-Dichloropropene	EPA 8260	<2.0	2.0	ug/L	MQS	10/17/2009
1,1,2-Trichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
2-Hexanone	EPA 8260	<25	25	ug/L	MQS	10/17/2009

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ANALYTICAL REPORT

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Stephen Andrus / Angela Harvey

Project Name.: **Charbert ICMP**
Project No.: **03.0032795.29**

Date Received: **10/14/2009**
Date Reported: **10/22/2009**
Work Order No.: **0910-00086**

Sample ID: **GZ-21** Sample No.: **011**

Sample Date: **10/12/2009**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
1,3-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
Tetrachloroethene	EPA 8260	2.5	1.0	ug/L	MQS	10/17/2009
Dibromochloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
1,2-Dibromoethane (EDB)	EPA 8260	<2.0	2.0	ug/L	MQS	10/17/2009
Chlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
1,1,1,2-Tetrachloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
Ethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
m&p-Xylene	EPA 8260	<2.0	2.0	ug/L	MQS	10/17/2009
o-Xylene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
Styrene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
Bromoform	EPA 8260	<2.0	2.0	ug/L	MQS	10/17/2009
Isopropylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
1,1,2,2-Tetrachloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
1,2,3-Trichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
Bromobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
N-Propylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
2-Chlorotoluene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
1,3,5-Trimethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
4-Chlorotoluene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
tert-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
1,2,4-Trimethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
sec-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
p-Isopropyltoluene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
1,3-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
1,4-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
n-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
1,2-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
1,2-Dibromo-3-Chloropropane	EPA 8260	<5.0	5.0	ug/L	MQS	10/17/2009
1,2,4-Trichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
Hexachlorobutadiene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
Naphthalene	EPA 8260	<2.0	2.0	ug/L	MQS	10/17/2009
1,2,3-Trichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
Surrogates:	EPA 8260					
***1,2-Dichloroethane-D4	EPA 8260	98.2	70-130	% R	MQS	10/17/2009
***Toluene-D8	EPA 8260	100	70-130	% R	MQS	10/17/2009

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A N A L Y T I C A L R E P O R T

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Stephen Andrus / Angela Harvey

Project Name.: **Charbert ICMP**
Project No.: **03.0032795.29**

Date Received: **10/14/2009**
Date Reported: **10/22/2009**
Work Order No.: **0910-00086**

Sample ID: **GZ-21** Sample No.: **011**

Sample Date: **10/12/2009**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
***4-Bromofluorobenzene	EPA 8260	96.4	70-130	% R	MQS	10/17/2009
Preparation	EPA 5030B	1.0		CF	MQS	10/16/2009

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ANALYTICAL REPORT

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Project No.: **03.0032795.29**

Date Received: **10/14/2009**
Date Reported: **10/22/2009**
Work Order No.: **0910-00086**

Sample ID: **GZ-22** Sample No.: **012**

Sample Date: **10/12/2009**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260				MQS	10/17/2009
Dichlorodifluoromethane	EPA 8260	<2.0	2.0	ug/L	MQS	10/17/2009
Chloromethane	EPA 8260	<2.0	2.0	ug/L	MQS	10/17/2009
Vinyl Chloride	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
Bromomethane	EPA 8260	<2.0	2.0	ug/L	MQS	10/17/2009
Chloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
Trichlorofluoromethane	EPA 8260	<2.0	2.0	ug/L	MQS	10/17/2009
Diethylether	EPA 8260	<5.0	5.0	ug/L	MQS	10/17/2009
Acetone	EPA 8260	<25	25	ug/L	MQS	10/17/2009
1,1-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
Dichloromethane	EPA 8260	<2.0	2.0	ug/L	MQS	10/17/2009
Methyl-Tert-Butyl-Ether	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
trans-1,2-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
1,1-Dichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
2-Butanone	EPA 8260	<25	25	ug/L	MQS	10/17/2009
2,2-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
cis-1,2-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
Chloroform	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
Bromochloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
Tetrahydrofuran	EPA 8260	<10	10	ug/L	MQS	10/17/2009
1,1,1-Trichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
1,1-Dichloropropene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
Carbon Tetrachloride	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
1,2-Dichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
Benzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
Trichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
1,2-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
Bromodichloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
Dibromomethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
4-Methyl-2-Pentanone	EPA 8260	<25	25	ug/L	MQS	10/17/2009
cis-1,3-Dichloropropene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
Toluene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
trans-1,3-Dichloropropene	EPA 8260	<2.0	2.0	ug/L	MQS	10/17/2009
1,1,2-Trichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
2-Hexanone	EPA 8260	<25	25	ug/L	MQS	10/17/2009

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ANALYTICAL REPORT

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Project Name.: **Charbert ICMP**
Project No.: **03.0032795.29**

Date Received: **10/14/2009**
Date Reported: **10/22/2009**
Work Order No.: **0910-00086**

Sample ID: **GZ-22** Sample No.: **012**

Sample Date: **10/12/2009**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
1,3-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
Tetrachloroethene	EPA 8260	45	1.0	ug/L	MQS	10/17/2009
Dibromochloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
1,2-Dibromoethane (EDB)	EPA 8260	<2.0	2.0	ug/L	MQS	10/17/2009
Chlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
1,1,1,2-Tetrachloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
Ethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
m&p-Xylene	EPA 8260	<2.0	2.0	ug/L	MQS	10/17/2009
o-Xylene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
Styrene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
Bromoform	EPA 8260	<2.0	2.0	ug/L	MQS	10/17/2009
Isopropylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
1,1,2,2-Tetrachloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
1,2,3-Trichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
Bromobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
N-Propylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
2-Chlorotoluene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
1,3,5-Trimethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
4-Chlorotoluene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
tert-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
1,2,4-Trimethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
sec-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
p-Isopropyltoluene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
1,3-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
1,4-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
n-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
1,2-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
1,2-Dibromo-3-Chloropropane	EPA 8260	<5.0	5.0	ug/L	MQS	10/17/2009
1,2,4-Trichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
Hexachlorobutadiene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
Naphthalene	EPA 8260	<2.0	2.0	ug/L	MQS	10/17/2009
1,2,3-Trichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
Surrogates:	EPA 8260					
***1,2-Dichloroethane-D4	EPA 8260	92.0	70-130	% R	MQS	10/17/2009
***Toluene-D8	EPA 8260	100	70-130	% R	MQS	10/17/2009

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Project Name.: **Charbert ICMP**
Project No.: **03.0032795.29**

Date Received: **10/14/2009**
Date Reported: **10/22/2009**
Work Order No.: **0910-00086**

Sample ID: **GZ-22** Sample No.: **012**
Sample Date: **10/12/2009**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
***4-Bromofluorobenzene	EPA 8260	98.8	70-130	% R	MQS	10/17/2009
Preparation	EPA 5030B	1.0		CF	MQS	10/16/2009

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ANALYTICAL REPORT

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Project Name.: **Charbert ICMP**
Project No.: **03.0032795.29**

Date Received: **10/14/2009**
Date Reported: **10/22/2009**
Work Order No.: **0910-00086**

Sample ID: **Trip Blank** Sample No.: **013**

Sample Date: **10/12/2009**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260				MQS	10/17/2009
Dichlorodifluoromethane	EPA 8260	<2.0	2.0	ug/L	MQS	10/17/2009
Chloromethane	EPA 8260	<2.0	2.0	ug/L	MQS	10/17/2009
Vinyl Chloride	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
Bromomethane	EPA 8260	<2.0	2.0	ug/L	MQS	10/17/2009
Chloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
Trichlorofluoromethane	EPA 8260	<2.0	2.0	ug/L	MQS	10/17/2009
Diethylether	EPA 8260	<5.0	5.0	ug/L	MQS	10/17/2009
Acetone	EPA 8260	<25	25	ug/L	MQS	10/17/2009
1,1-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
Dichloromethane	EPA 8260	<2.0	2.0	ug/L	MQS	10/17/2009
Methyl-Tert-Butyl-Ether	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
trans-1,2-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
1,1-Dichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
2-Butanone	EPA 8260	<25	25	ug/L	MQS	10/17/2009
2,2-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
cis-1,2-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
Chloroform	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
Bromochloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
Tetrahydrofuran	EPA 8260	<10	10	ug/L	MQS	10/17/2009
1,1,1-Trichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
1,1-Dichloropropene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
Carbon Tetrachloride	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
1,2-Dichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
Benzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
Trichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
1,2-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
Bromodichloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
Dibromomethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
4-Methyl-2-Pentanone	EPA 8260	<25	25	ug/L	MQS	10/17/2009
cis-1,3-Dichloropropene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
Toluene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
trans-1,3-Dichloropropene	EPA 8260	<2.0	2.0	ug/L	MQS	10/17/2009
1,1,2-Trichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
2-Hexanone	EPA 8260	<25	25	ug/L	MQS	10/17/2009

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.
140 Broadway
Providence, RI 02903

Stephen Andrus / Angela Harvey
Project Name.: **Charbert ICMP**
Project No.: **03.0032795.29**

Date Received: **10/14/2009**
Date Reported: **10/22/2009**
Work Order No.: **0910-00086**

Sample ID: **Trip Blank** Sample No.: **013**
Sample Date: **10/12/2009**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
1,3-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
Tetrachloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
Dibromochloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
1,2-Dibromoethane (EDB)	EPA 8260	<2.0	2.0	ug/L	MQS	10/17/2009
Chlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
1,1,1,2-Tetrachloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
Ethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
m&p-Xylene	EPA 8260	<2.0	2.0	ug/L	MQS	10/17/2009
o-Xylene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
Styrene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
Bromoform	EPA 8260	<2.0	2.0	ug/L	MQS	10/17/2009
Isopropylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
1,1,2,2-Tetrachloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
1,2,3-Trichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
Bromobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
N-Propylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
2-Chlorotoluene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
1,3,5-Trimethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
4-Chlorotoluene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
tert-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
1,2,4-Trimethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
sec-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
p-Isopropyltoluene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
1,3-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
1,4-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
n-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
1,2-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
1,2-Dibromo-3-Chloropropane	EPA 8260	<5.0	5.0	ug/L	MQS	10/17/2009
1,2,4-Trichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
Hexachlorobutadiene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
Naphthalene	EPA 8260	<2.0	2.0	ug/L	MQS	10/17/2009
1,2,3-Trichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/17/2009
Surrogates:	EPA 8260					
***1,2-Dichloroethane-D4	EPA 8260	94.1	70-130	% R	MQS	10/17/2009
***Toluene-D8	EPA 8260	101	70-130	% R	MQS	10/17/2009

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A N A L Y T I C A L R E P O R T

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Providence, RI 02903

Stephen Andrus / Angela Harvey

Project Name.: **Charbert ICMP**
Project No.: **03.0032795.29**

Date Received: **10/14/2009**
Date Reported: **10/22/2009**
Work Order No.: **0910-00086**

Sample ID: **Trip Blank** Sample No.: **013**

Sample Date: **10/12/2009**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
***4-Bromofluorobenzene	EPA 8260	98.0	70-130	% R	MQS	10/17/2009
Preparation	EPA 5030B	1.0		CF	MQS	10/16/2009

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 2			Laboratory Control Sample 2				Laboratory Control Sample Duplicate 2					
Date Analyzed:	10/16/09		Date Analyzed:	10/17/09			10/17/09					
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	90.0	70-130	ok	93.0	70-130	ok	3.21	<25	ok
chloromethane	< 1.0	< 1.0	chloromethane	93.0	70-130	ok	98.5	70-130	ok	5.80	<25	ok
vinyl chloride	< 0.5	< 0.5	vinyl chloride	96.8	80-120	ok	105	70-130	ok	7.87	<25	ok
bromomethane	< 1.0	< 1.0	bromomethane	103	70-130	ok	103	70-130	ok	0.13	<25	ok
chloroethane	< 0.5	< 0.5	chloroethane	96.7	70-130	ok	103	70-130	ok	6.35	<25	ok
trichlorofluoromethane	< 1.0	< 1.0	trichlorofluoromethane	111	70-130	ok	111	70-130	ok	0.01	<25	ok
diethyl ether	< 2.5	< 2.5	diethyl ether	93.4	70-130	ok	88.2	70-130	ok	5.72	<25	ok
acetone	< 13	< 13	acetone	95.2	70-130	ok	91.6	70-130	ok	3.92	<25	ok
1,1-dichloroethene	< 0.5	< 0.5	1,1-dichloroethene	102	80-120	ok	104	70-130	ok	1.71	<25	ok
FREON-113	< 1.0	< 1.0	FREON-113	106	70-130	ok	111	70-130	ok	4.48	<25	ok
iodomethane	< 0.5	< 0.5	iodomethane	96.2	70-130	ok	98.0	70-130	ok	1.79	<25	ok
carbon disulfide	< 5.0	< 5.0	carbon disulfide	111	70-130	ok	116	70-130	ok	4.79	<25	ok
dichloromethane	< 1.0	< 1.0	dichloromethane	95.9	70-130	ok	97.7	70-130	ok	1.86	<25	ok
tert-butyl alcohol (TBA)	< 13	< 13	tert-butyl alcohol (TBA)	88.5	70-130	ok	78.9	70-130	ok	11.5	<25	ok
acrylonitrile	< 0.5	< 0.5	acrylonitrile	106	70-130	ok	96.3	70-130	ok	9.47	<25	ok
methyl-tert-butyl-ether	< 0.5	< 0.5	methyl-tert-butyl-ether	97.3	70-130	ok	94.6	70-130	ok	2.84	<25	ok
trans-1,2-dichloroethene	< 0.5	< 0.5	trans-1,2-dichloroethene	107	70-130	ok	111	70-130	ok	3.06	<25	ok
1,1-dichloroethane	< 0.5	< 0.5	1,1-dichloroethane	104	70-130	ok	105	70-130	ok	1.22	<25	ok
di-isopropyl ether (DIPE)	< 1.0	< 1.0	di-isopropyl ether (DIPE)	108	70-130	ok	104	70-130	ok	4.14	<25	ok
ethyl tert-butyl ether (EtBE)	< 1.0	< 1.0	ethyl tert-butyl ether (EtBE)	97.8	70-130	ok	94.5	70-130	ok	3.34	<25	ok
vinyl acetate	< 13	< 13	vinyl acetate	103	70-130	ok	90.3	70-130	ok	12.7	<25	ok
2-butanone	< 13	< 13	2-butanone	108	70-130	ok	97.4	70-130	ok	10.1	<25	ok
2,2-dichloropropane	< 0.5	< 0.5	2,2-dichloropropane	99.2	70-130	ok	101	70-130	ok	1.42	<25	ok
cis-1,2-dichloroethene	< 0.5	< 0.5	cis-1,2-dichloroethene	95.1	70-130	ok	95.6	70-130	ok	0.58	<25	ok
chloroform	< 0.5	< 0.5	chloroform	103	80-120	ok	100	70-130	ok	2.70	<25	ok
bromochloromethane	< 0.5	< 0.5	bromochloromethane	92.5	70-130	ok	91.6	70-130	ok	0.92	<25	ok
tetrahydrofuran	< 5.0	< 5.0	tetrahydrofuran	100	70-130	ok	95.5	70-130	ok	4.85	<25	ok
1,1,1-trichloroethane	< 0.5	< 0.5	1,1,1-trichloroethane	103	70-130	ok	104	70-130	ok	0.97	<25	ok
1,1-dichloropropene	< 0.5	< 0.5	1,1-dichloropropene	105	70-130	ok	107	70-130	ok	2.12	<25	ok
carbon tetrachloride	< 0.5	< 0.5	carbon tetrachloride	102	70-130	ok	102	70-130	ok	0.08	<25	ok
1,2-dichloroethane	< 0.5	< 0.5	1,2-dichloroethane	101	70-130	ok	93.8	70-130	ok	7.15	<25	ok
benzene	< 0.5	< 0.5	benzene	106	70-130	ok	107	70-130	ok	0.68	<25	ok
tert-amyl methyl ether (TAME)	< 1.0	< 1.0	tert-amyl methyl ether (TAME)	96.7	70-130	ok	92.9	70-130	ok	4.02	<25	ok
trichloroethene	< 0.5	< 0.5	trichloroethene	94.3	70-130	ok	97.8	70-130	ok	3.64	<25	ok
1,2-dichloropropane	< 0.5	< 0.5	1,2-dichloropropane	104	80-120	ok	103	70-130	ok	0.50	<25	ok
bromodichloromethane	< 0.5	< 0.5	bromodichloromethane	99.6	70-130	ok	95.6	70-130	ok	4.14	<25	ok
1,4-Dioxane	< 50	< 50	1,4-Dioxane	85.0	70-130	ok	81.5	70-130	ok	4.13	<25	ok
dibromomethane	< 0.5	< 0.5	dibromomethane	87.8	70-130	ok	84.1	70-130	ok	4.35	<25	ok
4-methyl-2-pentanone	< 13	< 13	4-methyl-2-pentanone	107	70-130	ok	97.2	70-130	ok	9.79	<25	ok
cis-1,3-dichloropropene	< 0.5	< 0.5	cis-1,3-dichloropropene	98.4	70-130	ok	95.8	70-130	ok	2.61	<25	ok
toluene	< 0.5	< 0.5	toluene	100	80-120	ok	101	70-130	ok	0.77	<25	ok
trans-1,3-dichloropropene	< 1.0	< 1.0	trans-1,3-dichloropropene	95.5	70-130	ok	91.0	70-130	ok	4.87	<25	ok
1,1,2-trichloroethane	< 0.5	< 0.5	1,1,2-trichloroethane	88.3	70-130	ok	87.3	70-130	ok	1.13	<25	ok
2-hexanone	< 13	< 13	2-hexanone	102	70-130	ok	94.7	70-130	ok	6.97	<25	ok
1,3-dichloropropane	< 0.5	< 0.5	1,3-dichloropropane	97.8	70-130	ok	92.8	70-130	ok	5.17	<25	ok
tetrachloroethene	< 0.5	< 0.5	tetrachloroethene	88.6	70-130	ok	96.0	70-130	ok	8.04	<25	ok
dibromochloromethane	< 0.5	< 0.5	dibromochloromethane	83.3	70-130	ok	81.8	70-130	ok	1.78	<25	ok
1,2-dibromoethane (EDB)	< 1.0	< 1.0	1,2-dibromoethane (EDB)	91.3	70-130	ok	87.6	70-130	ok	4.06	<25	ok
chlorobenzene	< 0.5	< 0.5	chlorobenzene	90.6	70-130	ok	93.2	70-130	ok	2.79	<25	ok
1,1,1,2-tetrachloroethane	< 0.5	< 0.5	1,1,1,2-tetrachloroethane	93.0	70-130	ok	91.2	70-130	ok	1.94	<25	ok
ethylbenzene	< 0.5	< 0.5	ethylbenzene	94.7	80-120	ok	97.6	70-130	ok	3.00	<25	ok
1,1,2,2-tetrachloroethane	< 0.5	< 0.5	1,1,2,2-tetrachloroethane	102	70-130	ok	94.9	70-130	ok	7.03	<25	ok
m&p-xylene	< 1.0	< 1.0	m&p-xylene	99.4	70-130	ok	103	70-130	ok	3.03	<25	ok
o-xylene	< 0.5	< 0.5	o-xylene	109	70-130	ok	111	70-130	ok	1.60	<25	ok
styrene	< 0.5	< 0.5	styrene	106	70-130	ok	105	70-130	ok	0.52	<25	ok
bromoform	< 1.0	< 1.0	bromoform	99.9	70-130	ok	95.4	70-130	ok	4.62	<25	ok
isopropylbenzene	< 0.5	< 0.5	isopropylbenzene	131	70-130	out	133	70-130	out	1.51	<25	ok
1,2,3-trichloropropane	< 0.5	< 0.5	1,2,3-trichloropropane	97.2	70-130	ok	97.4	70-130	ok	0.25	<25	ok
bromobenzene	< 0.5	< 0.5	bromobenzene	99.6	70-130	ok	97.3	70-130	ok	2.34	<25	ok
n-propylbenzene	< 0.5	< 0.5	n-propylbenzene	121	70-130	ok	123	70-130	ok	1.58	<25	ok
2-chlorotoluene	< 0.5	< 0.5	2-chlorotoluene	113	70-130	ok	113	70-130	ok	0.35	<25	ok
1,3,5-trimethylbenzene	< 0.5	< 0.5	1,3,5-trimethylbenzene	114	70-130	ok	116	70-130	ok	1.69	<25	ok
trans-1,4-dichloro-2-butene	< 1.0	< 1.0	trans-1,4-dichloro-2-butene	108	70-130	ok	96.8	70-130	ok	10.6	<25	ok
4-chlorotoluene	< 0.5	< 0.5	4-chlorotoluene	115	70-130	ok	115	70-130	ok	0.23	<25	ok
tert-butyl-benzene	< 0.5	< 0.5	tert-butyl-benzene	110	70-130	ok	112	70-130	ok	1.89	<25	ok
1,2,4-trimethylbenzene	< 0.5	< 0.5	1,2,4-trimethylbenzene	111	70-130	ok	113	70-130	ok	1.43	<25	ok
sec-butyl-benzene	< 0.5	< 0.5	sec-butyl-benzene	115	70-130	ok	117	70-130	ok	1.57	<25	ok
p-isopropyltoluene	< 0.5	< 0.5	p-isopropyltoluene	113	70-130	ok	115	70-130	ok	1.62	<25	ok
1,3-dichlorobenzene	< 0.5	< 0.5	1,3-dichlorobenzene	98.9	70-130	ok	99.3	70-130	ok	0.39	<25	ok
1,4-dichlorobenzene	< 0.5	< 0.5	1,4-dichlorobenzene	99.4	70-130	ok	99.6	70-130	ok	0.18	<25	ok
n-butylbenzene	< 0.5	< 0.5	n-butylbenzene	123	70-130	ok	123	70-130	ok	0.41	<25	ok
1,2-dichlorobenzene	< 0.5	< 0.5	1,2-dichlorobenzene	100	70-130	ok	98.2	70-130	ok	2.10	<25	ok
1,2-dibromo-3-chloropropane	< 2.5	< 2.5	1,2-dibromo-3-chloropropane	94.8	70-130	ok	93.2	70-130	ok	1.72	<25	ok
1,3,5-trichlorobenzene	< 0.5	< 0.5	1,3,5-trichlorobenzene	115	70-130	ok	114	70-130	ok	0.94	<25	ok
1,2,4-trichlorobenzene	< 0.5	< 0.5	1,2,4-trichlorobenzene	115	70-130	ok	112	70-130	ok	2.77	<25	ok
hexachlorobutadiene	< 0.5	< 0.5	hexachlorobutadiene	123	70-130	ok	124	70-130	ok	0.78	<25	ok
naphthalene	< 1.0	< 1.0	naphthalene	102	70-130	ok	97.1	70-130	ok	4.58	<25	ok
1,2,3-trichlorobenzene	< 0.5	< 0.5	1,2,3-trichlorobenzene	114	70-130	ok	109	70-130	ok	4.49	<25	ok

Surrogates:	Recovery (%)	Acceptance Limits	Surrogates:	Recovery (%)	Acceptance Limits	Verdict	Recovery (%)	Acceptance Limits	Verdict	RPD	Acceptance Limits	Verdict
DIBROMOFLUOROMETHANE	100	70-130	DIBROMOFLUOROMETHANE	96.0	70-130	ok	97.0	70-130	ok	1.05	<25	ok
1,2-DICHLOROETHANE-D4	96.9	70-130	1,2-DICHLOROETHANE-D4	94.8	70-130	ok	88.8	70-130	ok	6.52	<25	ok
TOLUENE-D8	101	70-130	TOLUENE-D8	99.8	70-130	ok	101	70-130	ok	0.85	<25	ok
4-BROMOFLUOROBENZENE	98.5	70-130	4-BROMOFLUOROBENZENE	102	70-130	ok	98.8	70-130	ok	3.26	<25	ok
1,2-DICHLOROBENZENE-D4	94.8	70-130	1,2-DICHLOROBENZENE-D4	101	70-130	ok	95.4	70-130	ok	5.52	<25	ok

Instrument: HP GC/MS "S"

CHAIN-OF-CUSTODY RECORD

W.O. # 0910-00086
(for lab use only)

Matrix: A=Air, S=Soil, GW=Ground W., SW=Surface W., WW=Waste W., DW=Drinking W., P=Product, Other (specify)

ANALYSIS REQUIRED

Sample I.D.	Date/Time Sampled	Matrix	❑ 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 #
GP-26	10-13-09/920	GW			Y																							3	
GZ-7	945																												
GZ-3	1000																												
RIZ-13																													
GP-28	1020																												
RIZ-5	1030																												
GZ-20	1110																												
GZ-19	1140																												
RIZ-7	1220																												
GZ-23	1235																												
GZ-21	1055																												
GZ-22	1120																												(1)
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)
P. McGrady	10/13/09 0930	B Ce Bureau
B Ce Bureau	10/13/09 1620	Walton
WALKIN	10/14/09 1045	[signature]

NOTES: (Unless otherwise noted, all samples have been refrigerated to 4° C)
*Specify "Other" preservatives and containers types in this space.

(1) Add Tripblank per BM 10/14 FA

PROJECT MANAGER: Steve Andrus EXT:____

TURNAROUND TIME: Standard Rush__ Days, Approved by ____

LAB USE: 0913 BB
TEMP. OF COOLER 1.7 °C
Temp Blank ✓
Cooler Air____

10/14 26 03.00

GZA FILE NO: 32795.29 TASK NO:____ P.O. NO.____

PROJECT Charbert ICMP

LOCATION Alton RI

COLLECTOR(S) M. Bergen E. Beloff SHEET____ OF____

GZA GeoEnvironmental, Inc.
Laboratory Division

106 South Street
Hopkinton, MA 01748
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APPENDIX C

MONTHLY AS/SVE SYSTEM MONITORING DATA

SOIL VAPOR EXTRACTION & AIR SPARGE OPERATIONS LOG

CHARBERT FACILITY
Alton, Rhode Island

Date:		7/23/2009
Personnel:		Angela Harvey
Company (GZA/Charbert):		Charbert
Interior SVE System		
	- On (yes/no):	Yes
	- Operational (cont./hr):	Continuous
Exterior SVE System		
	- On (yes/no):	Yes
	- Operational (cont./hr):	Continuous
Interior SVE System		
	- 5Hp hr meter (hrs):	13249
	- Vac. (DH) in. of H_20:	30
	- Flow (scfm):	155
Exterior SVE System		
	- 1Hp hr meter (hrs):	12667
	- Vac. (DH) in. of H_20:	15
	- Flow (scfm):	55
AS Compressor hr meter (hrs):		
Combine Pressure AS		
	- Interior (psi):	18
	- Exterior (psi):	18
SVE Condensate Collection		
	- Interior (yes/no/gal):	no
	- Exterior (yes/no/gal):	no
Notes:		

SVE/AS Monitoring Order:

Fill out Site & Field Operations Logs
Balance AS Flows then,
Balance SVE Flows then,
Monitor SVE System for (O2%, CO2%, CH4%, LEL%, TVOC ppmv, Vacuum in.)

Equipment Needed:

Landtec (O_2%, CO_2%, CH_4%, LEL%)
OVM 10.6 PID (TVOC ppmv)
Air Pump
Digital Manometer
- (1.0 - 0.001)
- (20.0 - 0.01)
- (200.0 - 1.0)
Extension Cord (100 ft)
Flat head screw driver
9/16" socket wrench
2 small adjustable wrenchs
last months field notes
Oriface flow curves
Pitot tube flow curves

Name: Angela Harvey
Date:7/23/2009
Hour meter: 13249

TABLE 1

INTERIOR SVE SYSTEM
Charbert Facility
Alton, Rhode Island

Location	Order	TVOC (ppm)	O2 (%)	CO2 (%)	CH4 (%)	LEL (%)	Vacuum (in.)	Diff Pressure (in of water)	Flow (ft^3/min)	Notes:
SVE-1	16	3.9	19.4	0.0	0.0	0	1.90	0.019		
SVE-2	17	3.9	19.3	0.0	0.0	0	2.83	0.018		
SVE-3	18	3.7	19.4	0.0	0.0	0	2.09	0.020		
SVE-4	13	4.7	19.2	0.1	0.0	0	1.32	0.019		
SVE-5	14	3.9	19.2	0.0	0.0	0	3.12	0.000		Valve Fully Open (VFO)
SVE-6	15	4.0	19.3	0.0	0.0	0	2.60	0.190		
SVE-7	10	1.2	19.1	0	0.0	0	3.34	0.190		
SVE-8	11	2.1	19.2	0.0	0.0	0	3.35	0.140		Valve Fully Open (VFO)
SVE-9	12	3.2	19.1	0	0.0	0	1.72	0.019		
SVE-10	7	3.3	19.4	0.0	0.0	0	2.34	0.018		
SVE-11	8	2.2	19.1	0.0	0.0	0	2.54	0.019		
SVE-12	9	1.9	18.9	0.0	0.0	0	3.82	0.018		
SVE-13	22	3.0	19.4	0.0	0.0	0	1.58	0.019		
SVE-14	23	2.9	19.5	0.0	0.0	0	1.88	0.018		
SVE-15	4	2.5	19.5	0.0	0.0	0	0.81	0.019		
SVE-16	3	2.2	19.4	0.0	0.0	0	2.06	0.018		
SSVW-1	19	3.6	19.6	0.0	0.0	0	1.22	0.019		
SSVW-2	20	1.4	19.8	0.0	0.0	0	2.72	0.016		Valve Fully Open (VFO)
SSVW-3	21	2.4	19.9	0.0	0.0	0	1.32	0.019		
SSVW-4	6	1.1	19.8	0.0	0.0	0	1.91	0.021		
SSVW-5	5	2.7	19.7	0.0	0.1	1	0.34	0.021		
SSVW-6	2	5.2	19.3	0.1	0.0	0	1.30	0.019		
SSVW-7	1	5.0	19.3	0.1	0.0	0		0.017		
Combine (BD)		2.0					4.20	--	--	
Combine (DH)		--	--	--	--	--	20.00	--	--	
Combine (AD)		--	--	--	--	--	25.80	--	--	
Combine (AB)		--	--	--	--	--	17.50	--		
Effluent 1st drum		2.0	--	--	--	--	--	--	--	
Effluent 2nd drum		2.3	--	--	--	--	--	--	--	

Combined 155 scfm per 23 wells = 6.8 scfm per well = 0.019 inches DP per well.

Baselines: Landtec: O2 = 20.6, CO2 = 0.0, CH4 = 0, LEL = 0.0%
OVM: 98.6 ppmv

Name: Angela Harvey
Date: 7/23/2009
Hour meter: 12667

TABLE 2

EXTERIOR SVE SYSTEM
Charbert Facility
Alton, Rhode Island

Location	Order	TVOC (ppm)	O2 (%)	CO2 (%)	CH4 (%)	LEL (%)	Vacuum (in.)	Diff Pressure (in of water)	Flow (ft^3/min)	Notes:
SVE-17	1	2.8	20.6	0.1	0.1	1.7	3.13	0.010		Valve Fully Open (VFO)
SVE-18	2	4.0	20.5	0.0	0.1	1	3.47	0.012		Valve Fully Open (VFO)
SVE-19	3	5.3	20.4	0.1	0.1	1	3.59	0.000		Valve Fully Open (VFO)
SVE-20	4	2.1	20.5	0.0	0.0	0	3.24	0.010		
SVE-21	5	3.1	20.1	0.1	0.0	0	3.00	0.004		Valve Fully Open (VFO)
SVE-22	6	10.6	10.6	0.1	0.0	0	3.13	0.007		Valve Fully Open (VFO)
SVE-23	7	3.6	20.3	0.1	0.0	0	3.25	0.009		Valve Fully Open (VFO)
SVE-24	8	3.5	20.5	0.0	0.0	0	2.88	0.010		
SVE-25	9	3.0	20.1	0.0	0.0	0	3.21	0.005		Valve Fully Open (VFO)
SVE-26	10	2.3	20.0	0.0	0.0	0	1.20	0.009		
SVE-27	11	2.1	20.1	0.0	0.0	0	3.27	0.001		
SVE-28	12	2.2	20.0	0.0	0.0	0	5.39	0.005		
SVE-29	13	7.2	19.9	0.0	0.0	0	3.30	0.004		
SVE-30	14	2.3	19.8	0.0	0.0	0	3.20	0.008		
SVE-31	15	1.2	20.0	0.0	0.0	0	0.35	0.009		
SVE-32	16	1.7	19.7	0.0	0.0	0	3.30	0.013		
Combine (BD)		1.5					--	14.9	--	
Combine (DH)		--	--	--	--	--	--	23.2	--	
Combine (AD)		--	--	--	--	--	--	18	--	
Combine (AB)		--	--	--	--	--	--	4.1		
Effluent 1st drum		4.2	--	--	--	--	--	--	--	
Effluent 2nd drum		3.1	--	--	--	--	--	--	--	

Combined 80 scfm per 16 wells = 5.714 scfm per well = 0.0.012 inches DP per well.
*Estimated flow rate

Name: Angela Harvey
Date: 7/23/2009

TABLE 3

INTERIOR AS SYSTEM

Charbert Facility
Alton, Rhode Island

Location	Pressure (psi)	Diff Pressure (in of water)	Flow (ft^3/min)	Notes:
AS-1	12	1.7		
AS-2		1.9		
AS-3		1.6		
AS-4	14	1.6		
AS-5		1.8		
AS-6		1.6		
AS-7	14	1.5		
AS-8		1.9		
AS-9		1.6		
AS-10	14	1.6		
AS-11		1.7		
AS-12		1.7		
AS-13	14	1.5		
AS-14		1.6		
AS-15	1	1.5		
AS-16	12	1.6		
Combine	12			

Combined 6.8 inches DP @ 18 psi = 32 scfm per 16 wells = 2 scfm per well = 1.6 inches DP per well.

Name: Angela Harvey
Date: 7/23/2009

TABLE 4

EXTERIOR AS SYSTEM

Charbert Facility
Alton, Rhode Island

Location	Pressure (psi)	Diff Pressure (in of water)	Flow (ft^3/min)	Notes:
AS-17	14	1.6		
AS-18		1.5		
AS-19		1.6		
AS-20		1.6		
AS-21	6	1.6		
AS-22		1.7		
AS-23		1.4		
AS-24		1.4		
AS-25		1.5		
AS-26	13	1.4		
AS-27		1.6		
AS-28		1.7		
AS-29		1.5		
AS-30		1.6		
Combine				

Combined 6.5 inches DP @ 18 psi = 28 scfm per 14 wells = 2.0 scfm per well = 1.6 inches DP per well.

Charbert Facility
Alton, RI

Trench System Data

7/23/2009

Date	Location	Depth to Product	Depth to Water (ft)	Thickness of Product (ft)	Volume of Product (cf)	Notes
2/20/2009	MW 115	--	5.25	0	0	
	MW 116	--	5.43	0	0	
	MW 117	--	5.23	0	0	
	MW 114	--	5.34	0	0	
	North	4.87	4.87	Sheen	0	Air bubbling from AS system.
	South	4.97	4.97	Sheen	0	
3/27/2009	North	5.40	5.40	Possible sheen	0	Air bubbling from AS system.
	South	5.59	5.59	Sheen	0	
4/24/2009	North	3.63	3.63	Sheen, frothy	0	Cleaned out froth with absorbant rag.
	South	3.78	3.78	Sheen	0	
5/22/2009	North	5.06	5.06	Sheen	0	Air bubbling from AS system.
	South	5.24	5.24	Sheen	0	
6/30/2009	North	5.55	5.56	0.01		Cleaned out with absorbant rag.
	South	5.86	5.87	0.01		Cleaned out with absorbant rag.
7/23/2009	North	5.43	5.43	Sheen	0	
	South	5.63	5.63	Sheen	0	

SOIL VAPOR EXTRACTION & AIR SPARGE OPERATIONS LOG

CHARBERT FACILITY
Alton, Rhode Island

Date:		8/19/2009
Personnel:		Angela Harvey
Company (GZA/Charbert):		Charbert
Interior SVE System		
	- On (yes/no):	Y
	- Operational (cont./hr):	C
Exterior SVE System		
	- On (yes/no):	Y
	- Operational (cont./hr):	C
Interior SVE System		
	- 5Hp hr meter (hrs):	13873
	- Vac. (DH) in. of H_20:	20
	- Flow (scfm):	155
Exterior SVE System		
	- 1Hp hr meter (hrs):	15290
	- Vac. (DH) in. of H_20:	12
	- Flow (scfm):	80
AS Compressor hr meter (hrs):		
Combine Pressure AS		
	- Interior (psi):	18
	- Exterior (psi):	18
SVE Condensate Collection		
	- Interior (yes/no/gal):	No
	- Exterior (yes/no/gal):	No
Notes:		AS pressure gauge changed for AS 21-25

SVE/AS Monitoring Order:

Fill out Site & Field Operations Logs
Balance AS Flows then,
Balance SVE Flows then,
Monitor SVE System for (O2%, CO2%, CH4%, LEL%, TVOC ppmv, Vacuum in.)

Equipment Needed:

Landtec (O_2%, CO_2%, CH_4%, LEL%)
OVM 10.6 PID (TVOC ppmv)
Air Pump
Digital Manometer
- (1.0 - 0.001)
- (20.0 - 0.01)
- (200.0 - 1.0)
Extension Cord (100 ft)
Flat head screw driver
9/16" socket wrench
2 small adjustable wrenchs
last months field notes
Oriface flow curves
Pitot tube flow curves

Name: Angela Harvey
Date:8/19/2009
Hour meter: 13873

TABLE 1

INTERIOR SVE SYSTEM
Charbert Facility
Alton, Rhode Island

Location	Order	TVOC (ppm)	O2 (%)	CO2 (%)	CH4 (%)	LEL (%)	Vacuum (in.)	Diff Pressure (in of water)	Flow (ft^3/min)	Notes:
SVE-1	16	0.8	20.6	0.0	0.0	0	1.69	0.019		
SVE-2	17	1.4	20.5	0.0	0.0	0	2.67	0.020		
SVE-3	18	1.1	20.7	0.0	0.0	0	1.70	0.019		
SVE-4	13	1.1	20.4	0.0	0.0	0	1.29	0.020		
SVE-5	14	1.4	20.6	0.1	0.0	0	3.47	0.009		Valve Fully Open
SVE-6	15	1.0	20.4	0.0	0.0	0	2.74	0.021		
SVE-7	10	0.9	20.6	0.0	0.0	0	3.64	0.019		
SVE-8	11	0.6	20.7	0.1	0.0	0	3.66	0.020		Valve Fully Open
SVE-9	12	1.0	20.6	0.0	0.0	0	1.68	0.021		
SVE-10	7	0.5	20.4	0.0	0.0	0	1.50	0.019		
SVE-11	8	0.3	20.5	0.1	0.0	0	2.14	0.019		
SVE-12	9	0.8	20.6	0.0	0.0	0	3.63	0.019		
SVE-13	22	0.8	20.4	0.1	0.0	0	1.58	0.019		
SVE-14	23	1.1	20.5	0.0	0.0	0	1.89	0.020		
SVE-15	4	1.1	20.6	0.1	0.0	0	1.90	0.019		
SVE-16	3	1.4	20.4	0.0	0.0	0	2.12	0.019		
SSVW-1	19	1.4	20.5	0.0	0.0	0	1.99	0.019		
SSVW-2	20	1.7	20.2	0.0	0.0	0	1.45	0.022		
SSVW-3	21	1.0	20.4	0.0	0.0	0	1.23	0.020		
SSVW-4	6	1.2	20.3	0.0	0.0	0	1.39	0.019		
SSVW-5	5	0.8	20.6	0.2	0.0	0	0.28	0.017		
SSVW-6	2	1.4	20.4	0.0	0.0	0	1.88	0.019		
SSVW-7	1	1.1	20.2	0.0	0.0	0	1.78	0.020		
Combine (BD)		1.1	20.4	0.0	0.0	0	5.10	--	--	
Combine (DH)		--	--	--	--	--	20	--	--	
Combine (AD)		--	--	--	--	--	25.20	--	--	
Combine (AB)		--	--	--	--	--	18.40	--	155	
Effluent 1st drum		0.5	--	--	--	--	--	--	--	
Effluent 2nd drum		0.5	--	--	--	--	--	--	--	

Combined 155 scfm per 23 wells = 6.74 scfm per well = 0.019 inches DP per well.

Baselines: Landtec: O2 = 20.1, CO2 = 0.0, CH4 = 0, LEL = 0.0%
OVM: 104.8 ppmv after calibration

Name: Angela Harvey
Date: 8/19/2009
Hour meter: 15290

TABLE 2

EXTERIOR SVE SYSTEM
Charbert Facility
Alton, Rhode Island

Location	Order	TVOC (ppm)	O2 (%)	CO2 (%)	CH4 (%)	LEL (%)	Vacuum (in.)	Diff Pressure (in of water)	Flow (ft^3/min)	Notes:
SVE-17	1	1.7	20.0	0.1	0	0	1.10	0.009		
SVE-18	2	2.6	20.0	0.0	0	0	2.20	0.005		Valve Fully Open
SVE-19	3	4.6	20.1	0.0	0	0	2.70	0.003		Valve Fully Open
SVE-20	4	2.6	19.9	0.0	0	0	1.90	0.009		
SVE-21	5	1.7	20.0	0.0	0	0	2.10	0.005		Valve Fully Open
SVE-22	6	13.8	20.0	0.0	0	0	1.85	0.005		Valve Fully Open
SVE-23	7	3.6	20.1	0.0	0	0	1.83	0.003		Valve Fully Open
SVE-24	8	4.0	19.9	0.0	0	0	1.45	0.009		
SVE-25	9	1.7	20.0	0.0	0	0	1.80	0.004		Valve Fully Open
SVE-26	10	1.6	19.0	0.0	0	0	0.59	0.010		
SVE-27	11	1.4	19.9	0.0	0	0	1.30	0.010		
SVE-28	12	1.3	19.8	0.0	0	0	1.87	0.000		Valve Fully Open
SVE-29	13	1.6	19.9	0.0	0	0	1.67	0.000		Valve Fully Open
SVE-30	14	2.0	20.0	0.0	0	0	1.70	0.000		Valve Fully Open
SVE-31	15	6.6	20.2	0.0	0	0	0.31	0.009		Valve Fully Open
SVE-32	16	1.1	20.2	0.0	0	0	2.67	0.009		Valve Fully Open
Combine (BD)		3.1	20.0	0.0	0	0	--	8.8	--	
Combine (DH)		--	--	--	--	--	--	12	--	
Combine (AD)		--	--	--	--	--	--	16.4	--	
Combine (AB)		--	--	--	--	--	--	4.8	80	
Effluent 1st drum		2.3	--	--	--	--	--	--	--	
Effluent 2nd drum		3.7	--	--	--	--	--	--	--	

Combined 80 scfm per 16 wells = 5 scfm per well = 0.009 inches DP per well.
*Estimated flow rate

Name: Angela Harvey
Date: 8/19/2009

TABLE 3

INTERIOR AS SYSTEM

Charbert Facility
Alton, Rhode Island

Location	Pressure (psi)	Diff Pressure (in of water)	Flow (ft^3/min)	Notes:
AS-1	12	1.6		
AS-2		1.8		
AS-3		1.4		
AS-4	14	1.6		
AS-5		1.8		
AS-6		1.5		
AS-7	14	1.7		
AS-8		1.5		
AS-9		1.8		
AS-10	12	1.1		
AS-11		1.6		
AS-12		1.6		
AS-13	12	1.7		
AS-14		1.8		
AS-15	12	1.6		
AS-16	12	1.7		
Combine	18			

Combined 8.8 inches DP @ 18 psi = 32 scfm per 16 wells = 2 scfm per well = 1.6 inches DP per well.

Name: Angela Harvey
Date: 8/17/2009

TABLE 4

EXTERIOR AS SYSTEM

Charbert Facility
Alton, Rhode Island

Location	Pressure (psi)	Diff Pressure (in of water)	Flow (ft^3/min)	Notes:
AS-17	16	1.6		
AS-18		1.6		
AS-19		1.5		
AS-20		1.7		
AS-21	6	1.6		
AS-22		1.5		
AS-23		1.4		
AS-24		1.4		
AS-25		1.4		
AS-26	14	1.6		
AS-27		1.5		
AS-28		1.6		
AS-29		1.4		
AS-30		1.5		
Combine	18			

Combined 5.1 inches DP @ 18 psi = 24 scfm per 14 wells = 1.7 scfm per well = 1.5 inches DP per well.

Charbert Facility
Alton, RI

Trench System Data

8/19/2009

Date	Location	Depth to Product	Depth to Water (ft)	Thickness of Product (ft)	Volume of Product (cf)	Notes
2/20/2009	MW 115	--	5.25	0	0	
	MW 116	--	5.43	0	0	
	MW 117	--	5.23	0	0	
	MW 114	--	5.34	0	0	
	North	4.87	4.87	Sheen	0	Air bubbling from AS system.
	South	4.97	4.97	Sheen	0	
3/27/2009	North	5.40	5.40	Possible sheen	0	Air bubbling from AS system.
	South	5.59	5.59	Sheen	0	
4/24/2009	North	3.63	3.63	Sheen, frothy	0	Cleaned out froth with absorbant rag.
	South	3.78	3.78	Sheen	0	
5/22/2009	North	5.06	5.06	Sheen	0	Air bubbling from AS system.
	South	5.24	5.24	Sheen	0	
6/30/2009	North	5.55	5.56	0.01		Cleaned out with absorbant rag.
	South	5.86	5.87	0.01		Cleaned out with absorbant rag.
7/23/2009	North	5.43	5.43	Sheen	0	
	South	5.63	5.63	Sheen	0	
8/19/2009	North	5.82	5.82	Sheen	0	
	South	6.18	6.18	Sheen	0	

SOIL VAPOR EXTRACTION & AIR SPARGE OPERATIONS LOG

CHARBERT FACILITY
Alton, Rhode Island

Date:		9/29/2009
Personnel:		Matt Bergen
Company (GZA/Charbert):		GZA
Interior SVE System		
	- On (yes/no):	Y
	- Operational (cont./hr):	C
Exterior SVE System		
	- On (yes/no):	Y
	- Operational (cont./hr):	C
Interior SVE System		
	- 5Hp hr meter (hrs):	14857.5
	- Vac. (DH) in. of H_20:	12
	- Flow (scfm):	168
Exterior SVE System		
	- 1Hp hr meter (hrs):	14274.5
	- Vac. (DH) in. of H_20:	12
	- Flow (scfm):	75
AS Compressor hr meter (hrs):		
Combine Pressure AS		
	- Interior (psi):	22
	- Exterior (psi):	18
SVE Condensate Collection		
	- Interior (yes/no/gal):	No
	- Exterior (yes/no/gal):	No
Notes:		Interior vac gauge may have water in it.

SVE/AS Monitoring Order:

Fill out Site & Field Operations Logs
Balance AS Flows then,
Balance SVE Flows then,
Monitor SVE System for (O2%, CO2%, CH4%, LEL%, TVOC ppmv, Vacuum in.)

Equipment Needed:

Landtec (O_2%, CO_2%, CH_4%, LEL%)
OVM 10.6 PID (TVOC ppmv)
Air Pump
Digital Manometer
- (1.0 - 0.001)
- (20.0 - 0.01)
- (200.0 - 1.0)
Extension Cord (100 ft)
Flat head screw driver
9/16" socket wrench
2 small adjustable wrenchs
last months field notes
Oriface flow curves
Pitot tube flow curves

Name: Matt Bergen
Date: September 29, 2009
Hour meter: 14857.5

TABLE 1

INTERIOR SVE SYSTEM
Charbert Facility
Alton, Rhode Island

Location	Order	TVOC (ppm)	O2 (%)	CO2 (%)	CH4 (%)	LEL (%)	Vacuum (in.)	Diff Pressure (in of water)	Flow (ft^3/min)	Notes:
SVE-1	16	0.3	20.7	0.0	0.1	1	1.23	0.016		Valve fully open.
SVE-2	17	0.7	20.8	0.0	0.1	1	1.23	0.009		Valve fully open.
SVE-3	18	0.3	20.7	0.0	0.1	1	1.23	0.018		Valve fully open.
SVE-4	13	0.7	20.7	0.1	0.1	1	0.79	0.018		
SVE-5	14	1.0	20.8	0.0	0.1	1	1.09	0.018		
SVE-6	15	0.7	20.6	0.0	0.1	0	1.33	0.016		Valve fully open.
SVE-7	10	0.3	20.7	0.0	0.1	1	1.48	0.007		Valve fully open.
SVE-8	11	0.7	20.8	0.0	0.1	1	1.49	0.008		Valve fully open.
SVE-9	12	0.3	20.7	0.0	0.1	1	1.09	0.018		
SVE-10	7	0.0	20.8	0.1	0.1	1	1.10	0.019		
SVE-11	8	0.0	20.7	0.1	0.1	1	1.42	0.018		
SVE-12	9	0.0	20.9	0.0	0.1	1	1.76	0.018		
SVE-13	22	0.3	20.6	0.0	0.1	1	1.08	0.012		Valve fully open.
SVE-14	23	0.3	20.5	0.0	0.1	1	1.08	0.006		Valve fully open.
SVE-15	4	0.3	20.6	0.0	0.1	1	0.68	0.018		
SVE-16	3	0.7	20.8	0.0	0.1	1	1.56	0.018		
SSVW-1	19	0.3	20.6	0.0	0.1	1	0.75	0.013		Valve fully open.
SSVW-2	20	0.7	20.7	0.0	0.1	1	1.16	0.018		
SSVW-3	21	0.3	20.7	0.0	0.1	1	0.33	0.018		
SSVW-4	6	0.3	20.7	0.1	0.1	1	1.14	0.018		
SSVW-5	5	0.0	20.6	0.0	0.1	1	0.26	0.017		
SSVW-6	2	0.3	20.9	0.0	0.1	1	1.26	0.019		
SSVW-7	1	0.0	20.9	0.0	0.1	1	0.15	0.016		
Combine (BD)		0.3	20.8	0.0	0.1	1	4.68	--	--	
Combine (DH)		--	--	--	--	--	12	--	--	
Combine (AD)		--	--	--	--	--	15.56	--	--	
Combine (AB)		--	--	--	--	--	20.95	--	168	
Effluent 1st drum		0.3	--	--	--	--	--	--	--	
Effluent 2nd drum		0.3	--	--	--	--	--	--	--	

Combined 168 scfm per 23 wells = 7.3 scfm per well = 0.018 inches DP per well.

Baselines: Landtec: O2 = , CO2 = , CH4 = , LEL = %
OVM: ppmv after calibration

Name: Matt Bergen
Date: 9/29/2009
Hour meter: 14274.5

TABLE 2

EXTERIOR SVE SYSTEM
Charbert Facility
Alton, Rhode Island

Location	Order	TVOC (ppm)	O2 (%)	CO2 (%)	CH4 (%)	LEL (%)	Vacuum (in.)	Diff Pressure (in of water)	Flow (ft^3/min)	Notes:
SVE-17	1	6.8	20.1	0.6	0.0	0	1.36	0.007		
SVE-18	2	6.8	20.0	0.7	0.0	0	2.10	0.007		
SVE-19	3	6.1	19.9	0.9	0.0	0	2.19	0.002		Valve fully open.
SVE-20	4	2.1	20.0	0.2	0.0	0	2.08	0.009		
SVE-21	5	2.1	20.0	0.0	0.0	0	1.82	0.006		Valley fully open.
SVE-22	6	16.3	20.9	0.5	0.1	1	1.61	0.005		Valley fully open.
SVE-23	7	4.3	20.4	0.6	0.1	2	1.70	0.008		Valley fully open.
SVE-24	8	2.1	20.3	0.3	0.1	1	1.20	0.008		
SVE-25	9	2.4	20.4	0.1	0.1	1	1.80	0.008		Valve fully open.
SVE-26	10	0.7	20.8	0.2	0.0	0	0.52	0.009		
SVE-27	11	0.3	20.8	0.1	0.0	0	1.08	0.008		
SVE-28	12	0.7	20.8	0.1	0.1	1	1.83	0.005		Valve fully open.
SVE-29	13	0.3	20.8	0.1	0.0	0	1.78	0.007		Valve fully open.
SVE-30	14	1.0	20.8	0.2	0.1	1	1.80	0.010		Valve fully open.
SVE-31	15	0.3	20.8	0.1	0.1	1	0.21	0.009		
SVE-32	16	0.3	20.5	0.1	0.1	1	2.07	0.008		
Combine (BD)		1	20.2	0.1	0.1	1	9.6	--	--	
Combine (DH)		--	--	--	--	--	12	--	--	
Combine (AD)		--	--	--	--	--	16.3	--	--	
Combine (AB)		--	--	--	--	--	4.9	--	75	
Effluent 1st drum		0.3	--	--	--	--	--	--	--	
Effluent 2nd drum		0.3	--	--	--	--	--	--	--	

Combined 75 scfm per 16 wells = 4.75 scfm per well = 0.008 inches DP per well.
*Estimated flow rate

Name: Matt Bergen
Date: 9/29/2009

TABLE 3

INTERIOR AS SYSTEM

Charbert Facility
Alton, Rhode Island

Location	Pressure (psi)	Diff Pressure (in of water)	Flow (ft^3/min)	Notes:
AS-1	12	1.9		
AS-2		2.1		
AS-3		1.8		
AS-4	12	1.9		
AS-5		1.9		
AS-6		1.8		
AS-7	12	1.9		
AS-8		1.9		
AS-9		2.0		
AS-10	12	1.8		
AS-11		2.0		
AS-12		2.0		
AS-13	12	1.8		
AS-14		1.8		
AS-15	11	2.0		
AS-16	11	2.0		
Combine	22	10.0		

Combined 9.98 inches DP @ 22 psi = 33.5 scfm per 16 wells = 2.2 scfm per well = 1.9 inches DP per well.

Name: Matt Bergen
Date: 9/29/2009

TABLE 4

EXTERIOR AS SYSTEM

Charbert Facility
Alton, Rhode Island

Location	Pressure (psi)	Diff Pressure (in of water)	Flow (ft^3/min)	Notes:
AS-17	14	2.3		
AS-18		2.3		
AS-19		2.2		
AS-20		2.2		
AS-21	12	2.4		
AS-22		2.4		
AS-23		2.4		
AS-24		2.5		
AS-25		2.5		
AS-26	12	2.6		
AS-27		2.5		
AS-28		2.5		
AS-29		2.4		
AS-30		2.5		
Combine	18	9.6		

Combined 9.6 inches DP @ 18 psi = 35 scfm per 14 wells = 25 scfm per well = 2.5 inches DP per well.

Charbert Facility
Alton, RI

Trench System Data

9/29/2009

Date	Location	Depth to Product	Depth to Water (ft)	Thickness of Product (ft)	Volume of Product (cf)	Notes
2/20/2009	MW 115	--	5.25	0	0	
	MW 116	--	5.43	0	0	
	MW 117	--	5.23	0	0	
	MW 114	--	5.34	0	0	
	North	4.87	4.87	Sheen	0	Air bubbling from AS system.
	South	4.97	4.97	Sheen	0	
3/27/2009	North	5.40	5.40	Possible sheen	0	Air bubbling from AS system.
	South	5.59	5.59	Sheen	0	
4/24/2009	North	3.63	3.63	Sheen, frothy	0	Cleaned out froth with absorbant rag.
	South	3.78	3.78	Sheen	0	
5/22/2009	North	5.06	5.06	Sheen	0	Air bubbling from AS system.
	South	5.24	5.24	Sheen	0	
6/30/2009	North	5.55	5.56	0.01		Cleaned out with absorbant rag.
	South	5.86	5.87	0.01		Cleaned out with absorbant rag.
7/23/2009	North	5.43	5.43	Sheen	0	
	South	5.63	5.63	Sheen	0	
8/19/2009	North	5.82	5.82	Sheen	0	
	South	6.18	6.18	Sheen	0	
9/29/2009	North	6.62	6.62	Sheen	0	
	South	6.90	6.90	Sheen	0	

APPENDIX D

THIRD QUARTER 2009 UIC REPORT

GZA
GeoEnvironmental, Inc.

Engineers and Scientists

September 28, 2009
File No. 32795.33

Mr. Craig Roy
Senior Environmental Scientist
RI Department of Environmental Management
Office of Water Resources
235 Promenade Street
Providence, Rhode Island 02908

Re: Third Quarter 2009 UIC Monitoring Report
Charbert, Division of N.F.A.
Richmond, Rhode Island
(UIC Order of Approval # 1108)

530 Broadway
Providence
Rhode Island
02909
401-421-4140
FAX 401-751-8613
www.gza.net

Dear Mr. Roy:

This letter with attachments serves as the third Quarterly UIC Monitoring Report of 2009, in compliance with the above referenced UIC Order of Approval for the Charbert facility located at 299 Church Street in Richmond (Alton), Rhode Island. It was prepared by GZA GeoEnvironmental, Inc., on behalf of our client Charbert, a Division of N.F.A. As you are aware, the Charbert facility stopped production in late February of 2008. Thus, there is no wastewater to sample in the pump house and no wastewater volume to report. This report includes the following information:

- Analytical test results from the six monitoring wells (designated MW-1A, MW-2A, MW-3, MW-4A, MW-5B and MW-6), which were analyzed for total and dissolved chromium, volatile organic compounds (VOCs), the semi-volatile organic compound bis(2-Ethylhexyl) phthalate, and total petroleum hydrocarbons (TPH). The detected analytes have been summarized and compared to RIDEM's GA Groundwater Objectives and Groundwater Quality Preventative Action Limits (PALs) in Table 1, attached.
- Disposal system usage and monitoring well maintenance activities are summarized in Table 2.
- Static groundwater elevation measurements and field screening logs for each monitoring well are provided in Attachment A.
- Laboratory Certificates of Analysis are provided in Attachment B.

The groundwater results have been compared to the applicable groundwater standards for Rhode Island and there are no VOC, SVOC, TPH or chromium exceedances.

As you are aware, we submitted a UIC closure application for decommissioning Lagoons 1, 2 and 3 to your department on December 15, 2008 and a stormwater pollution prevention plan (SWPPP) for that construction work was submitted to the Office of Water Resources on August 6, 2009. We received your oral approval of the closure application on September 14, 2009. We are currently addressing Joseph's Camara's comments on the SWPPP, after which time, construction work will commence. Following the lagoon closure we will be proposing a revised monitoring schedule that reduces the scope and frequency of the ongoing monitoring program.

We trust that this information fulfills your present needs. If you have any questions please call Angela Harvey or Edward Summerly at (401) 421-4140.

Very truly yours,

GZA GEOENVIRONMENTAL, INC.

Angela L. Harvey, E.I.T.
Project Engineer

Stephen Andrus, P.E.
Assistant Project Manager

Edward A. Summerly, P.G.
Principal

EAS/ALH:mac

CC: Tracy Nelson Hay, Richmond Town Clerk
Clark Memorial Library – Charbert Repository

Attachments: Tables - Table 1 Detected Constituents
Table 2 Lagoon Influent Schedule and Maintenance Schedules
Attachment A - Low Flow Sampling Logs
Attachment B - Laboratory Certificates of Analysis

TABLES

TABLE 1
UIC MONITORING DETECTED CONSTITUENTS
SEPTEMBER 2009

Charbert Facility
Richmond, Rhode Island

	RIDEM	RIDEM		MW-1A		MW-2A		MW-3		MW-4A		MW-5B		MW-6	
	GA	Groundwater	UNITS	(GP-29)				(RIZ-15)				(GP-30)		(RIZ-20)	
	Groundwater	Quality		09/01/2009		09/01/2009		09/01/2009		09/01/2009		09/01/2009		09/01/2009	
	Objectives	PALs		Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit
VOLATILE ORGANICS:															
No VOCs Detected	NS	NS	ug/L (ppb)	<	1	<	1	<	1	<	1	<	1	<	1
SEMI-VOLATILE ORGANICS:															
bis(2-Ethylhexyl)Phthalate	NS	NS	ug/L (ppb)	<	10	<	10	<	10	<	10	<	10.0	<	10.0
TOTAL PETROLEUM HYDROCARBONS:															
Hydrocarbon Content	NS	NS	ug/L (ppb)	850	200	740	200	<	200	1,700	200	<	200	<	200
TOTAL METALS:															
Chromium	100	50	ug/L (ppb)	16	5	8.8	5	<	5	9.8	5	<	5	<	5
DISSOLVED METALS:															
Chromium	NS	NS	ug/L (ppb)	7.8	5	7.9	5	<	5	9.1	5	<	5	<	5

PAL = RIDEMs Preventative Action Limit
DETECTED ANALYTES ARE IN BOLD AND HIGHLIGHTED
< = NOT DETECTED
NT = NOT TESTED
NS = NO STANDARD

INDICATES DETECTED CONSTITUANT

INDICATES RIDEM GA EXCEEDANCE

INDICATES RIDEM PAL EXCEEDANCE

TABLE 2
UIC MONITORING
LAGOON INFLUENT SCHEDULE AND MAINTENANCE SCHEDULES
SEPTEMBER 2009

Charbert Facility
Richmond, Rhode Island

LAGOON INFLUENT SCHEDULE			
DATE	**RECEIVING LAGOON**	**CHANGED TO LAGOON**	**REMARKS**
March 2008 to September 2009	None	Cessation of Discharge	Facility closed February 24, 2008.
January 2006 to March 2008	1	No Change	All industrial waste water is discharged to Lagoon 1. Lagoon 1 is used as a settling pond, waste water is then transferred by an electric powered pump from Lagoon 1 to Lagoon 2. A second electric powered pump transfers waste water from Lagoon 2 to Lagoon 3.

LAGOON MAINTENANCE SCHEDULE		
	Date	Remarks
Lagoon 1		There was no significant lagoon maintenance performed this quarter.
Lagoon 2		There was no significant lagoon maintenance performed this quarter.
Lagoon 3		There was no significant lagoon maintenance performed this quarter.

MONITORING WELL MAINTENANCE		
Well ID	Date	Remarks
MW-1A (GP-29)		Required No Maintenance
MW-2A		Required No Maintenance
MW-3 (RIZ-15)		Required No Maintenance
MW-4A		Required No Maintenance
MW-5B		Required No Maintenance
MW-6 (RIZ-20)		Required No Maintenance

ATTACHEMENT A
LOW FLOW LOGS

LOW FLOW GROUNDWATER SAMPLING LOG

Charbert Facility
Richmond, Rhode Island

LOCATION: Charbert
DATE: Tuesday, September 01, 2009
GZA JOB NO.: 32795.33
WELL ID: MW-1A (GP-29)
WEATHER: Sunny
AIR TEMP (°F): 60
PUMP TYPE: Bailer
DATUM: 66.90 TOP OF PVC ELEVATION
SAMPLED BY: EMB
TOP OF CASING ELEVATION

WELL DEPTH (FT): 31.34
LENGTH OF WATER COLUMN (FT): 7.32
WATER DEPTH (FT): 24.02
WELL DIAMETER: 2"
UPPER PRODUCT LAYER (FT): NA
WELL VOLUME: LITERS 4.52
LOWER PRODUCT LAYER (FT): NA

2" WELL = 0.163 GALLONS /FT WATER = 0.617 LITERS/FT
1" WELL = 0.013 GALLONS /FT WATER = 0.0492 LITERS/FT

FLOW RATE CALCULATIONS:
START FLOW
VOLUME: Liters
SAMPLE TIME: 11:45
START TIME
DELTA TIME (MIN):
END TIME Seconds
FLOW RATE: (L/min)
MINIMUM PURGE TIME (MINUTES):
WELL DRAW DOWN (FT): Not measured Flow Depth
VOLUME PURGED (Liters): 14.0
Drawdown

TIME	ORP (mV)	pH (SU)	COND (mS/cm)	TURB (NTU)	DO (mg/L)	TEMP (°C)
11:45	66	5.9	0.820	1.4	4.1	15.5

COLOR: Slightly pink
WELL LOCKED YES X
ODOR: Slight chemical odor
NO

NOTES:

Sampled for VOCS, bis(2-Ethylhexyl)Phthalate, TPH, Total Chromium, and Dissolved Chromium

Samples collected with disposable polyethylene bailer.

GUIDELINES:
TURBIDITY < 5NTU AND +/-10 %
ORP +/- 10 mV
DO 10%
TEMP 3%
SPEC COND 3%
pH +/- 0.10 UNITS

LOW FLOW GROUNDWATER SAMPLING LOG

Charbert Facility
Richmond, Rhode Island

LOCATION: Charbert
DATE: Tuesday, September 01, 2009
GZA JOB NO.: 32795.33
WELL ID: MW-2A
WEATHER: Sunny
AIR TEMP (°F): 60
PUMP TYPE: Peristaltic
DATUM: 63.59 TOP OF PVC ELEVATION
SAMPLED BY: EMB
TOP OF CASING ELEVATION

WELL DEPTH (FT): 19.72
LENGTH OF WATER COLUMN (FT): 5.51
WATER DEPTH (FT): 14.21
WELL DIAMETER: 2"
UPPER PRODUCT LAYER (FT): NA
WELL VOLUME: LITERS 3.40
LOWER PRODUCT LAYER (FT): NA

2" WELL = 0.163 GALLONS /FT WATER = 0.617 LITERS/FT
1" WELL = 0.013 GALLONS /FT WATER = 0.0492 LITERS/FT

FLOW RATE CALCULATIONS:
START FLOW 11:30
VOLUME: 0.5 Liters
SAMPLE TIME: 13:15
START TIME 0.0
DELTA TIME (MIN): 105
END TIME 60 Seconds
FLOW RATE: (L/min) 0.50
MINIMUM PURGE TIME (MINUTES): 6.8
WELL DRAW DOWN (FT): 14.43 Flow Depth
VOLUME PURGED (Liters): 52.5
0.22 Drawdown

TIME	ORP (mV)	pH (SU)	COND (mS/cm)	TURB (NTU)	DO (mg/L)	TEMP (°C)
11:50	-75	6.9	1.410	31.5	6.0	21.6
12:05	-80	7.0	1.460	6	6.3	21.1
12:15	-76	7.0	1.490	5.2	4.6	21.7
12:25	-76	6.8	1.500	5.2	3.6	21.2
12:30	-77	6.8	1.490	4.6	3.2	21.1
12:32	-77	6.8	1.490	4.8	3.2	21.1
12:34	-77	6.9	1.490	4.1	3.2	21.1
12:36	-77	6.8	1.500	4.2	3.2	21.2

COLOR: Pink
WELL LOCKED YES
ODOR: Chemical odor
NO X
NOTES: Sampled for VOCS, bis(2-Ethylhexyl)Phthalate, TPH, Total Chromium, and Dissolved Chromium

GUIDELINES:
TURBIDITY <5 NTU AND +/-10 %
ORP +/- 10 mV
DO 10%
TEMP 3%
SPEC COND 3%
pH +/- 0.10 UNITS

LOW FLOW GROUNDWATER SAMPLING LOG

Charbert Facility
Richmond, Rhode Island

LOCATION: Charbert
DATE: Tuesday, September 01, 2009
GZA JOB NO.: 32795.33
WELL ID: MW-3 (RIZ-15)
WEATHER: Sunny
AIR TEMP (°F): 60
PUMP TYPE: Peristaltic
DATUM: 62.51 TOP OF PVC ELEVATION
SAMPLED BY: EMB
TOP OF CASING ELEVATION

WELL DEPTH (FT): 21.55
LENGTH OF WATER COLUMN (FT): 7.3
WATER DEPTH (FT): 14.25
WELL DIAMETER: 2"
UPPER PRODUCT LAYER (FT): NA
WELL VOLUME: LITERS 4.50
LOWER PRODUCT LAYER (FT): NA

2" WELL = 0.163 GALLONS /FT WATER = 0.617 LITERS/FT
1" WELL = 0.013 GALLONS /FT WATER = 0.0492 LITERS/FT

FLOW RATE CALCULATIONS:
START FLOW 8:43
VOLUME: 0.5 Liters
SAMPLE TIME: 9:55
START TIME 0
DELTA TIME (MIN): 72
END TIME 60 Seconds
FLOW RATE: (L/min) 0.50
MINIMUM PURGE TIME (MINUTES): 9.0
WELL DRAW DOWN (FT): 14.49 Flow Depth
VOLUME PURGED (Liters): 36.0
0.24 Drawdown

TIME	ORP (mV)	pH (SU)	COND (mS/cm)	TURB (NTU)	DO (mg/L)	TEMP (°C)
8:55	45	6.0	0.167	0	4.5	15.2
9:15	6	6.3	0.193	2.2	4.2	15.4
9:20	-6	6.5	0.198	0	3.7	16.1
9:40	-8	6.5	0.198	0	3.7	16.1
9:50	-10	6.5	0.200	0	3.7	16.1
9:52	-10	6.6	0.200	0	3.8	15.8
9:53	-9	6.6	0.200	0	3.7	15.8

COLOR: Clear
WELL LOCKED YES X
ODOR: Chemical odor
NO
NOTES: Sampled for VOCS, bis(2-Ethylhexyl)Phthalate, TPH, Total Chromium, and Dissolved Chromium

GUIDELINES:
TURBIDITY <5 NTU AND +/-10 %
ORP +/- 10 mV
DO 10%
TEMP 3%
SPEC COND 3%
pH +/- 0.10 UNITS

LOW FLOW GROUNDWATER SAMPLING LOG

Charbert Facility
Richmond, Rhode Island

LOCATION: Charbert
DATE: Tuesday, September 01, 2009
GZA JOB NO.: 32795.33
WELL ID: MW-4A
WEATHER: Sunny
AIR TEMP (°F): 60
PUMP TYPE: Peristaltic
DATUM: 58.43 TOP OF PVC ELEVATION
SAMPLED BY: EMB
TOP OF CASING ELEVATION

WELL DEPTH (FT): 14.10
LENGTH OF WATER COLUMN (FT): 4.82
WATER DEPTH (FT): 9.28
WELL DIAMETER: 2"
UPPER PRODUCT LAYER (FT): NA
WELL VOLUME: LITERS 2.97
LOWER PRODUCT LAYER (FT): NA

2" WELL = 0.163 GALLONS /FT WATER = 0.617 LITERS/FT
1" WELL = 0.013 GALLONS /FT WATER = 0.0492 LITERS/FT

FLOW RATE CALCULATIONS:
START FLOW 9:40
VOLUME: 0.5 Liters
SAMPLE TIME: 10:50
START TIME 0
DELTA TIME (MIN): 70
END TIME 60 Seconds
FLOW RATE: (L/min) 0.50
MINIMUM PURGE TIME (MINUTES): 5.9
WELL DRAW DOWN (FT): 9.41 Flow Depth
VOLUME PURGED (Liters): 35.0
0.13 Drawdown

TIME	ORP (mV)	pH (SU)	COND (mS/cm)	TURB (NTU)	DO (mg/L)	TEMP (°C)
9:45	-48	6.6	0.353	6.1	5.2	17.3
9:55	-85	6.9	0.427	0.0	0.3	17.4
10:05	-84	7.0	0.444	0.0	0.2	17.4
10:10	-79	6.9	0.458	0	0.2	17.4
10:15	-78	7.0	0.456	0	0.4	17.4
10:33	-63	6.7	0.442	0	0.4	17.5
10:42	-63	6.7	0.443	0	0.3	17.7
10:44	-64	6.8	0.444	0	0.3	17.7
10:46	-64	6.8	0.444	0	0.3	17.7

COLOR: Slightly pink
WELL LOCKED YES X
ODOR: Chemical odor
NO
NOTES: Sampled for VOCS, bis(2-Ethylhexyl)Phthalate, TPH, Total Chromium, and Dissolved Chromium

GUIDELINES:
TURBIDITY <5 NTU AND +/-10 %
ORP +/- 10 mV
DO 10%
TEMP 3%
SPEC COND 3%
pH +/- 0.10 UNITS

LOW FLOW GROUNDWATER SAMPLING LOG

Charbert Facility
Richmond, Rhode Island

LOCATION: Charbert
DATE: Tuesday, September 01, 2009
GZA JOB NO.: 32795.33
WELL ID: MW-5B (GP-30)
WEATHER: Sunny
AIR TEMP (^{o}F): 60
PUMP TYPE: Peristaltic
DATUM: 63.16 TOP OF PVC ELEVATION
SAMPLED BY: EMB
TOP OF CASING ELEVATION

WELL DEPTH (FT): 22.83
LENGTH OF WATER COLUMN (FT): 10.84
WATER DEPTH (FT): 11.99
WELL DIAMETER: 2"
UPPER PRODUCT LAYER (FT): NA
WELL VOLUME: LITERS 6.69
LOWER PRODUCT LAYER (FT): NA

2" WELL = 0.163 GALLONS /FT WATER = 0.617 LITERS/FT
1" WELL = 0.013 GALLONS /FT WATER = 0.0492 LITERS/FT

FLOW RATE CALCULATIONS:
START FLOW 10:05
VOLUME: 0.5 Liters
SAMPLE TIME: 11:15
START TIME 0
DELTA TIME (MIN): 70
END TIME 60 Seconds
FLOW RATE: (L/min) 0.50
MINIMUM PURGE TIME (MINUTES): 13.4
WELL DRAW DOWN (FT): 12.14 Flow Depth
VOLUME PURGED (Liters): 35.0
0.15 Drawdown

TIME	ORP (mV)	pH (SU)	COND (mS/cm)	TURB (NTU)	DO (mg/L)	TEMP (oC)
10:20	-37	7.0	0.049	0	7.4	15.1
10:25	-13	6.7	0.048	0	7.3	14.9
10:30	13	3.4	0.049	0	7.1	14.9
11:00	11	6.5	0.052	0	7.4	15.1
11:05	25	6.2	0.051	0	7.0	15.1
11:10	25	6.2	0.051	0	7.0	15.1
11:12	25	6.2	0.051	0	7.0	15.1
11:14	26	6.2	0.050	0	7.0	15.1

COLOR: Clear
WELL LOCKED YES X
ODOR: No odor
NO

NOTES: Sampled for VOCS, bis(2-Ethylhexyl)Phthalate, TPH, Total Chromium, and Dissolved Chromium

GUIDELINES:
TURBIDITY <5 NTU AND +/-10 %
ORP +/- 10 mV
DO 10%
TEMP 3%
SPEC COND 3%
pH +/- 0.10 UNITS

LOW FLOW GROUNDWATER SAMPLING LOG

Charbert Facility
Richmond, Rhode Island

LOCATION: Charbert
DATE: Tuesday, September 01, 2009
GZA JOB NO.: 32795.33
WELL ID: MW-6 (RIZ-20)
WEATHER: Sunny
AIR TEMP (°F): 60
PUMP TYPE: Peristaltic
DATUM: 60.79 TOP OF PVC ELEVATION
SAMPLED BY: EMB
TOP OF CASING ELEVATION

WELL DEPTH (FT): 20.85
LENGTH OF WATER COLUMN (FT): 6.57
WATER DEPTH (FT): 14.28
WELL DIAMETER: 2"
UPPER PRODUCT LAYER (FT): NA
WELL VOLUME: LITERS 4.05
LOWER PRODUCT LAYER (FT): NA

2" WELL = 0.163 GALLONS /FT WATER = 0.617 LITERS/FT
1" WELL = 0.013 GALLONS /FT WATER = 0.0492 LITERS/FT

FLOW RATE CALCULATIONS:
START FLOW 8:32
VOLUME: 0.5 Liters
SAMPLE TIME: 9:38
START TIME 0
DELTA TIME (MIN): 66
END TIME 60 Seconds
FLOW RATE: (L/min) 0.50
MINIMUM PURGE TIME (MINUTES): 8.1
WELL DRAW DOWN (FT): 14.56 Flow Depth
VOLUME PURGED (Liters): 33.0
0.28 Drawdown

TIME	ORP (mV)	pH (SU)	COND (mS/cm)	TURB (NTU)	DO (mg/L)	TEMP (°C)
8:42	266	4.3	0.235	0.0	3.4	15.8
9:03	124	5.2	0.202	0.0	2.1	16.3
9:10	146	5.1	0.201	0.0	1.1	16.4
9:20	91	5.4	0.201	0.0	1.6	16.4
9:25	105	5.3	0.201	0.0	0.9	16.4
9:30	110	5.3	0.201	0.0	0.6	16.4
9:31	118	5.3	0.200	0	0.6	16.4
9:33	119	5.3	0.201	0	0.6	16.4
9:35	120	5.2	0.201	0	0.6	16.4

COLOR: Clear
WELL LOCKED YES X
ODOR: No odor
NO
NOTES: Sampled for VOCS, bis(2-Ethylhexyl)Phthalate, TPH, Total Chromium, and Dissolved Chromium

GUIDELINES:
TURBIDITY <5 NTU AND +/- 10 %
ORP +/- 10 mV
DO 10%
TEMP 3%
SPEC COND 3%
pH +/- 0.10 UNITS

ATTACHEMENT B
LABORATORY CERTIFICATES

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

Revised 9/21/09

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.: **03.0032795.33**
Work Order No.: **0909-00015**
Date Received: **09/02/2009**
Date Reported: **09/11/2009**

SAMPLE INFORMATION

Date Sampled	Matrix	Laboratory ID	Sample ID
09/01/2009	Aqueous	0909-00015 001	MW - 1A
09/01/2009	Aqueous	0909-00015 002	MW - 1A / Dissolved Metal
09/01/2009	Aqueous	0909-00015 003	MW - 2A
09/01/2009	Aqueous	0909-00015 004	MW - 2A / Dissolved Metal
09/01/2009	Aqueous	0909-00015 005	MW - 3
09/01/2009	Aqueous	0909-00015 006	MW - 3 / Dissolved Metal
09/01/2009	Aqueous	0909-00015 007	MW - 4A
09/01/2009	Aqueous	0909-00015 008	MW - 4A / Dissolved Metal
09/01/2009	Aqueous	0909-00015 009	MW - 5B
09/01/2009	Aqueous	0909-00015 010	MW - 5B / Dissolved Metal
09/01/2009	Aqueous	0909-00015 011	MW - 6
09/01/2009	Aqueous	0909-00015 012	MW - 6 / Dissolved Metal
09/01/2009	Aqueous	0909-00015 013	TBLK 090109

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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 02903

Stephen Andrus

Project Name.: **Charbert UIC Quarterly Testing**
Project No.: **03.0032795.33**

Date Received: **09/02/2009**
Date Reported: **09/11/2009**
Work Order No.: **0909-00015**

PROJECT NARRATIVE:

1. Sample Receipt

The samples were received on 09/02/09 via _x_GZA courier, __EC, __FEDEX, or ___hand delivered. The temperature of the __temperature blank/_x_cooler air, was 3.4 & 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 - Metals

Attach QC 6010B 09/03/09 - Aqueous

3. EPA Method 8260 - VOCs

Attach QC 8260 09/03/09 S - Aqueous

4. EPA Method 8270 - SVOCs

* The low surrogate recoveries are due to sample matrix interference. A chromatogram showing the matrix interference is attached.

Attach QC 8270 09/04/09 - Aqueous
Attach Chromatogram

5. Total Petroleum Hydrocarbons

For all samples with reportable concentrations above the reporting limit, a review of the chromatograms indicate >75% of total hydrocarbons are from non-petroleum based sources. The chromatograms are not identical to previous sampling rounds and do not appear to indicate organosiloxane content.

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Project Name.: **Charbert UIC Quarterly Testing**
Project No.: **03.0032795.33**

Date Received: **09/02/2009**
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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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Stephen Andrus

Project Name.: **Charbert UIC Quarterly Testing**
Project No.: **03.0032795.33**

Date Received: **09/02/2009**
Date Reported: **09/11/2009**
Work Order No.: **0909-00015**

Sample ID: **MW - 1A** Sample No.: **001**
Sample Date: **09/01/2009**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260				MQS	09/03/2009
Dichlorodifluoromethane	EPA 8260	<2.0	2.0	ug/L	MQS	09/03/2009
Chloromethane	EPA 8260	<2.0	2.0	ug/L	MQS	09/03/2009
Vinyl Chloride	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
Bromomethane	EPA 8260	<2.0	2.0	ug/L	MQS	09/03/2009
Chloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
Trichlorofluoromethane	EPA 8260	<2.0	2.0	ug/L	MQS	09/03/2009
Diethylether	EPA 8260	<5.0	5.0	ug/L	MQS	09/03/2009
Acetone	EPA 8260	<25	25	ug/L	MQS	09/03/2009
1,1-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
Dichloromethane	EPA 8260	<2.0	2.0	ug/L	MQS	09/03/2009
Methyl-Tert-Butyl-Ether	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
trans-1,2-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
1,1-Dichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
2-Butanone	EPA 8260	<25	25	ug/L	MQS	09/03/2009
2,2-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
cis-1,2-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
Chloroform	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
Bromochloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
Tetrahydrofuran	EPA 8260	<10	10	ug/L	MQS	09/03/2009
1,1,1-Trichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
1,1-Dichloropropene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
Carbon Tetrachloride	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
1,2-Dichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
Benzene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
Trichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
1,2-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
Bromodichloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
Dibromomethane	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
4-Methyl-2-Pentanone	EPA 8260	<25	25	ug/L	MQS	09/03/2009
cis-1,3-Dichloropropene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
Toluene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
trans-1,3-Dichloropropene	EPA 8260	<2.0	2.0	ug/L	MQS	09/03/2009
1,1,2-Trichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
2-Hexanone	EPA 8260	<25	25	ug/L	MQS	09/03/2009

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ANALYTICAL REPORT

GZA GeoEnvironmental, Inc.
140 Broadway
Providence, RI 02903

Stephen Andrus

Project Name.: **Charbert UIC Quarterly Testing**
Project No.: **03.0032795.33**

Date Received: **09/02/2009**
Date Reported: **09/11/2009**
Work Order No.: **0909-00015**

Sample ID: **MW - 1A** Sample No.: **001**
Sample Date: **09/01/2009**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
1,3-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
Tetrachloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
Dibromochloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
1,2-Dibromoethane (EDB)	EPA 8260	<2.0	2.0	ug/L	MQS	09/03/2009
Chlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
1,1,1,2-Tetrachloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
Ethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
m&p-Xylene	EPA 8260	<2.0	2.0	ug/L	MQS	09/03/2009
o-Xylene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
Styrene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
Bromoform	EPA 8260	<2.0	2.0	ug/L	MQS	09/03/2009
Isopropylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
1,1,2,2-Tetrachloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
1,2,3-Trichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
Bromobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
N-Propylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
2-Chlorotoluene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
1,3,5-Trimethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
4-Chlorotoluene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
tert-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
1,2,4-Trimethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
sec-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
p-Isopropyltoluene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
1,3-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
1,4-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
n-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
1,2-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
1,2-Dibromo-3-Chloropropane	EPA 8260	<5.0	5.0	ug/L	MQS	09/03/2009
1,2,4-Trichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
Hexachlorobutadiene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
Naphthalene	EPA 8260	<2.0	2.0	ug/L	MQS	09/03/2009
1,2,3-Trichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
Surrogates:	EPA 8260					
***1,2-Dichloroethane-D4	EPA 8260	103	70-130	% R	MQS	09/03/2009
***Toluene-D8	EPA 8260	102	70-130	% R	MQS	09/03/2009

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Providence, RI 02903

Stephen Andrus

Project Name.: **Charbert UIC Quarterly Testing**
Project No.: **03.0032795.33**

Date Received: **09/02/2009**
Date Reported: **09/11/2009**
Work Order No.: **0909-00015**

Sample ID: **MW - 1A** Sample No.: **001**
Sample Date: **09/01/2009**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
***4-Bromofluorobenzene	EPA 8260	97.7	70-130	% R	MQS	09/03/2009
Preparation	EPA 5030B	1.0		CF	MQS	09/03/2009
SEMI-VOLATILE ORGANICS	EPA 8270				CMG	09/10/2009
bis(2-Ethylhexyl)Phthalate	EPA 8270	<6.0	6.0	ug/L	CMG	09/10/2009
Surrogates:	EPA 8270					
***Nitrobenzene-D5	EPA 8270	41.1	30-130	% R	CMG	09/10/2009
***2-Fluorobiphenyl	EPA 8270	42.7	30-130	% R	CMG	09/10/2009
***P-Terphenyl-D14	EPA 8270	51.2	30-130	% R	CMG	09/10/2009
Extraction	EPA 3510C	1.0		DF	NOG	09/04/2009
TOTAL PETROLEUM HYDROCARBON	Mod. EPA 8100				RJD	09/09/2009
Hydrocarbon Content		850	200	ug/L	RJD	09/09/2009
Surrogate:						
***p-Terphenyl		60.2	40-130	% R	RJD	09/09/2009
Extraction	EPA 3510C	1.0		DF	NOG	09/03/2009
TOTAL METALS						
Chromium	EPA 6010B	0.016	0.0050	mg/L	LLZ	09/03/2009

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Stephen Andrus

Project Name.: **Charbert UIC Quarterly Testing**
Project No.: **03.0032795.33**

Date Received: **09/02/2009**
Date Reported: **09/11/2009**
Work Order No.: **0909-00015**

Sample ID: **MW - 1A / Dissolved Metal** Sample No.: **002**
Sample Date: **09/01/2009**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
DISSOLVED METALS						
Chromium	EPA 6010B	0.0078	0.0050	mg/L	LLZ	09/03/2009

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ANALYTICAL REPORT

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Stephen Andrus

Project Name.: **Charbert UIC Quarterly Testing**
Project No.: **03.0032795.33**

Date Received: **09/02/2009**
Date Reported: **09/11/2009**
Work Order No.: **0909-00015**

Sample ID: **MW - 2A** Sample No.: **003**

Sample Date: **09/01/2009**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260				MQS	09/03/2009
Dichlorodifluoromethane	EPA 8260	<2.0	2.0	ug/L	MQS	09/03/2009
Chloromethane	EPA 8260	<2.0	2.0	ug/L	MQS	09/03/2009
Vinyl Chloride	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
Bromomethane	EPA 8260	<2.0	2.0	ug/L	MQS	09/03/2009
Chloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
Trichlorofluoromethane	EPA 8260	<2.0	2.0	ug/L	MQS	09/03/2009
Diethylether	EPA 8260	<5.0	5.0	ug/L	MQS	09/03/2009
Acetone	EPA 8260	<25	25	ug/L	MQS	09/03/2009
1,1-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
Dichloromethane	EPA 8260	<2.0	2.0	ug/L	MQS	09/03/2009
Methyl-Tert-Butyl-Ether	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
trans-1,2-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
1,1-Dichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
2-Butanone	EPA 8260	<25	25	ug/L	MQS	09/03/2009
2,2-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
cis-1,2-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
Chloroform	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
Bromochloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
Tetrahydrofuran	EPA 8260	<10	10	ug/L	MQS	09/03/2009
1,1,1-Trichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
1,1-Dichloropropene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
Carbon Tetrachloride	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
1,2-Dichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
Benzene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
Trichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
1,2-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
Bromodichloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
Dibromomethane	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
4-Methyl-2-Pentanone	EPA 8260	<25	25	ug/L	MQS	09/03/2009
cis-1,3-Dichloropropene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
Toluene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
trans-1,3-Dichloropropene	EPA 8260	<2.0	2.0	ug/L	MQS	09/03/2009
1,1,2-Trichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
2-Hexanone	EPA 8260	<25	25	ug/L	MQS	09/03/2009

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ANALYTICAL REPORT

GZA GeoEnvironmental, Inc.
140 Broadway
Providence, RI 02903

Stephen Andrus

Project Name.: **Charbert UIC Quarterly Testing**
Project No.: **03.0032795.33**

Date Received: **09/02/2009**
Date Reported: **09/11/2009**
Work Order No.: **0909-00015**

Sample ID: **MW - 2A** Sample No.: **003**
Sample Date: **09/01/2009**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
1,3-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
Tetrachloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
Dibromochloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
1,2-Dibromoethane (EDB)	EPA 8260	<2.0	2.0	ug/L	MQS	09/03/2009
Chlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
1,1,1,2-Tetrachloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
Ethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
m&p-Xylene	EPA 8260	<2.0	2.0	ug/L	MQS	09/03/2009
o-Xylene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
Styrene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
Bromoform	EPA 8260	<2.0	2.0	ug/L	MQS	09/03/2009
Isopropylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
1,1,2,2-Tetrachloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
1,2,3-Trichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
Bromobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
N-Propylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
2-Chlorotoluene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
1,3,5-Trimethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
4-Chlorotoluene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
tert-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
1,2,4-Trimethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
sec-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
p-Isopropyltoluene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
1,3-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
1,4-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
n-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
1,2-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
1,2-Dibromo-3-Chloropropane	EPA 8260	<5.0	5.0	ug/L	MQS	09/03/2009
1,2,4-Trichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
Hexachlorobutadiene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
Naphthalene	EPA 8260	<2.0	2.0	ug/L	MQS	09/03/2009
1,2,3-Trichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
Surrogates:	EPA 8260					
***1,2-Dichloroethane-D4	EPA 8260	107	70-130	% R	MQS	09/03/2009
***Toluene-D8	EPA 8260	99.4	70-130	% R	MQS	09/03/2009

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A N A L Y T I C A L R E P O R T

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Stephen Andrus

Project Name.: **Charbert UIC Quarterly Testing**
Project No.: **03.0032795.33**

Date Received: **09/02/2009**
Date Reported: **09/11/2009**
Work Order No.: **0909-00015**

Sample ID: **MW - 2A** Sample No.: **003**
Sample Date: **09/01/2009**

Test Performed	Method	Results		Reporting Limit	Units	Tech	Analysis Date
***4-Bromofluorobenzene	EPA 8260	96.0		70-130	% R	MQS	09/03/2009
Preparation	EPA 5030B	1.0			CF	MQS	09/03/2009
SEMI-VOLATILE ORGANICS	EPA 8270					CMG	09/10/2009
bis(2-Ethylhexyl)Phthalate	EPA 8270	<6.0		6.0	ug/L	CMG	09/10/2009
Surrogates:	EPA 8270						
***Nitrobenzene-D5	EPA 8270	25.4	*	30-130	% R	CMG	09/10/2009
***2-Fluorobiphenyl	EPA 8270	25.8	*	30-130	% R	CMG	09/10/2009
***P-Terphenyl-D14	EPA 8270	33.9		30-130	% R	CMG	09/10/2009
Extraction	EPA 3510C	1.0			DF	NOG	09/04/2009
TOTAL PETROLEUM HYDROCARBON	Mod. EPA 8100					RJD	09/09/2009
Hydrocarbon Content		740		200	ug/L	RJD	09/09/2009
Surrogate:							
***p-Terphenyl		47.7		40-130	% R	RJD	09/09/2009
Extraction	EPA 3510C	1.0			DF	NOG	09/03/2009
TOTAL METALS							
Chromium	EPA 6010B	0.0088		0.0050	mg/L	LLZ	09/03/2009

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Project Name.: **Charbert UIC Quarterly Testing**
Project No.: **03.0032795.33**

Date Received: **09/02/2009**
Date Reported: **09/11/2009**
Work Order No.: **0909-00015**

Sample ID: **MW - 2A / Dissolved Metal**
Sample No.: **004**
Sample Date: **09/01/2009**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
DISSOLVED METALS						
Chromium	EPA 6010B	0.0079	0.0050	mg/L	LLZ	09/03/2009

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Project Name.: **Charbert UIC Quarterly Testing**
Project No.: **03.0032795.33**

Date Received: **09/02/2009**
Date Reported: **09/11/2009**
Work Order No.: **0909-00015**

Sample ID: **MW - 3** Sample No.: **005**
Sample Date: **09/01/2009**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260				MQS	09/03/2009
Dichlorodifluoromethane	EPA 8260	<2.0	2.0	ug/L	MQS	09/03/2009
Chloromethane	EPA 8260	<2.0	2.0	ug/L	MQS	09/03/2009
Vinyl Chloride	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
Bromomethane	EPA 8260	<2.0	2.0	ug/L	MQS	09/03/2009
Chloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
Trichlorofluoromethane	EPA 8260	<2.0	2.0	ug/L	MQS	09/03/2009
Diethylether	EPA 8260	<5.0	5.0	ug/L	MQS	09/03/2009
Acetone	EPA 8260	<25	25	ug/L	MQS	09/03/2009
1,1-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
Dichloromethane	EPA 8260	<2.0	2.0	ug/L	MQS	09/03/2009
Methyl-Tert-Butyl-Ether	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
trans-1,2-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
1,1-Dichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
2-Butanone	EPA 8260	<25	25	ug/L	MQS	09/03/2009
2,2-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
cis-1,2-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
Chloroform	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
Bromochloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
Tetrahydrofuran	EPA 8260	<10	10	ug/L	MQS	09/03/2009
1,1,1-Trichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
1,1-Dichloropropene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
Carbon Tetrachloride	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
1,2-Dichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
Benzene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
Trichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
1,2-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
Bromodichloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
Dibromomethane	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
4-Methyl-2-Pentanone	EPA 8260	<25	25	ug/L	MQS	09/03/2009
cis-1,3-Dichloropropene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
Toluene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
trans-1,3-Dichloropropene	EPA 8260	<2.0	2.0	ug/L	MQS	09/03/2009
1,1,2-Trichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
2-Hexanone	EPA 8260	<25	25	ug/L	MQS	09/03/2009

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Project Name.: **Charbert UIC Quarterly Testing**
Project No.: **03.0032795.33**

Date Received: **09/02/2009**
Date Reported: **09/11/2009**
Work Order No.: **0909-00015**

Sample ID: **MW - 3** Sample No.: **005**
Sample Date: **09/01/2009**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
1,3-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
Tetrachloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
Dibromochloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
1,2-Dibromoethane (EDB)	EPA 8260	<2.0	2.0	ug/L	MQS	09/03/2009
Chlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
1,1,1,2-Tetrachloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
Ethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
m&p-Xylene	EPA 8260	<2.0	2.0	ug/L	MQS	09/03/2009
o-Xylene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
Styrene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
Bromoform	EPA 8260	<2.0	2.0	ug/L	MQS	09/03/2009
Isopropylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
1,1,2,2-Tetrachloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
1,2,3-Trichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
Bromobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
N-Propylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
2-Chlorotoluene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
1,3,5-Trimethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
4-Chlorotoluene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
tert-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
1,2,4-Trimethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
sec-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
p-Isopropyltoluene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
1,3-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
1,4-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
n-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
1,2-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
1,2-Dibromo-3-Chloropropane	EPA 8260	<5.0	5.0	ug/L	MQS	09/03/2009
1,2,4-Trichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
Hexachlorobutadiene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
Naphthalene	EPA 8260	<2.0	2.0	ug/L	MQS	09/03/2009
1,2,3-Trichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
Surrogates:	EPA 8260					
***1,2-Dichloroethane-D4	EPA 8260	100	70-130	% R	MQS	09/03/2009
***Toluene-D8	EPA 8260	100	70-130	% R	MQS	09/03/2009

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Project Name.: **Charbert UIC Quarterly Testing**
Project No.: **03.0032795.33**

Date Received: **09/02/2009**
Date Reported: **09/11/2009**
Work Order No.: **0909-00015**

Sample ID: **MW - 3** Sample No.: **005**
Sample Date: **09/01/2009**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
***4-Bromofluorobenzene	EPA 8260	96.1	70-130	% R	MQS	09/03/2009
Preparation	EPA 5030B	1.0		CF	MQS	09/03/2009
TOTAL PETROLEUM HYDROCARBON	Mod. EPA 8100				RJD	09/09/2009
Hydrocarbon Content		<200	200	ug/L	RJD	09/09/2009
Surrogate:						
***p-Terphenyl		40.7	40-130	% R	RJD	09/09/2009
Extraction	EPA 3510C	1.0		DF	NOG	09/03/2009
TOTAL METALS						
Chromium	EPA 6010B	<0.0050	0.0050	mg/L	LLZ	09/03/2009
SEMI-VOLATILE ORGANICS	EPA 8270				CMG	09/10/2009
bis(2-Ethylhexyl)Phthalate	EPA 8270	<6.0	6.0	ug/L	CMG	09/10/2009
Surrogates:	EPA 8270					
***Nitrobenzene-D5	EPA 8270	30.9	30-130	% R	CMG	09/10/2009
***2-Fluorobiphenyl	EPA 8270	31.8	30-130	% R	CMG	09/10/2009
***P-Terphenyl-D14	EPA 8270	33.6	30-130	% R	CMG	09/10/2009
Extraction	EPA 3510C	1.0		DF	NOG	09/04/2009

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Project Name.: **Charbert UIC Quarterly Testing**
Project No.: **03.0032795.33**

Date Received: **09/02/2009**
Date Reported: **09/11/2009**
Work Order No.: **0909-00015**

Sample ID: **MW - 3 / Dissolved Metal**
Sample No.: **006**
Sample Date: **09/01/2009**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
DISSOLVED METALS						
Chromium	EPA 6010B	<0.0050	0.0050	mg/L	LLZ	09/03/2009

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Project Name.: **Charbert UIC Quarterly Testing**
Project No.: **03.0032795.33**

Date Received: **09/02/2009**
Date Reported: **09/11/2009**
Work Order No.: **0909-00015**

Sample ID: **MW - 4A** Sample No.: **007**
Sample Date: **09/01/2009**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260				MQS	09/03/2009
Dichlorodifluoromethane	EPA 8260	<2.0	2.0	ug/L	MQS	09/03/2009
Chloromethane	EPA 8260	<2.0	2.0	ug/L	MQS	09/03/2009
Vinyl Chloride	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
Bromomethane	EPA 8260	<2.0	2.0	ug/L	MQS	09/03/2009
Chloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
Trichlorofluoromethane	EPA 8260	<2.0	2.0	ug/L	MQS	09/03/2009
Diethylether	EPA 8260	<5.0	5.0	ug/L	MQS	09/03/2009
Acetone	EPA 8260	<25	25	ug/L	MQS	09/03/2009
1,1-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
Dichloromethane	EPA 8260	<2.0	2.0	ug/L	MQS	09/03/2009
Methyl-Tert-Butyl-Ether	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
trans-1,2-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
1,1-Dichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
2-Butanone	EPA 8260	<25	25	ug/L	MQS	09/03/2009
2,2-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
cis-1,2-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
Chloroform	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
Bromochloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
Tetrahydrofuran	EPA 8260	<10	10	ug/L	MQS	09/03/2009
1,1,1-Trichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
1,1-Dichloropropene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
Carbon Tetrachloride	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
1,2-Dichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
Benzene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
Trichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
1,2-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
Bromodichloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
Dibromomethane	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
4-Methyl-2-Pentanone	EPA 8260	<25	25	ug/L	MQS	09/03/2009
cis-1,3-Dichloropropene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
Toluene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
trans-1,3-Dichloropropene	EPA 8260	<2.0	2.0	ug/L	MQS	09/03/2009
1,1,2-Trichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
2-Hexanone	EPA 8260	<25	25	ug/L	MQS	09/03/2009

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Project Name.: **Charbert UIC Quarterly Testing**
Project No.: **03.0032795.33**

Date Received: **09/02/2009**
Date Reported: **09/11/2009**
Work Order No.: **0909-00015**

Sample ID: **MW - 4A** Sample No.: **007**
Sample Date: **09/01/2009**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
1,3-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
Tetrachloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
Dibromochloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
1,2-Dibromoethane (EDB)	EPA 8260	<2.0	2.0	ug/L	MQS	09/03/2009
Chlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
1,1,1,2-Tetrachloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
Ethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
m&p-Xylene	EPA 8260	<2.0	2.0	ug/L	MQS	09/03/2009
o-Xylene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
Styrene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
Bromoform	EPA 8260	<2.0	2.0	ug/L	MQS	09/03/2009
Isopropylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
1,1,2,2-Tetrachloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
1,2,3-Trichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
Bromobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
N-Propylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
2-Chlorotoluene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
1,3,5-Trimethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
4-Chlorotoluene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
tert-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
1,2,4-Trimethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
sec-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
p-Isopropyltoluene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
1,3-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
1,4-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
n-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
1,2-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
1,2-Dibromo-3-Chloropropane	EPA 8260	<5.0	5.0	ug/L	MQS	09/03/2009
1,2,4-Trichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
Hexachlorobutadiene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
Naphthalene	EPA 8260	<2.0	2.0	ug/L	MQS	09/03/2009
1,2,3-Trichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
Surrogates:	EPA 8260					
***1,2-Dichloroethane-D4	EPA 8260	106	70-130	% R	MQS	09/03/2009
***Toluene-D8	EPA 8260	101	70-130	% R	MQS	09/03/2009

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A N A L Y T I C A L R E P O R T

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Stephen Andrus

Project Name.: **Charbert UIC Quarterly Testing**
Project No.: **03.0032795.33**

Date Received: **09/02/2009**
Date Reported: **09/11/2009**
Work Order No.: **0909-00015**

Sample ID: **MW - 4A** Sample No.: **007**
Sample Date: **09/01/2009**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
***4-Bromofluorobenzene	EPA 8260	95.9	70-130	% R	MQS	09/03/2009
Preparation	EPA 5030B	1.0		CF	MQS	09/03/2009
SEMI-VOLATILE ORGANICS	EPA 8270				CMG	09/10/2009
bis(2-Ethylhexyl)Phthalate	EPA 8270	<6.0	6.0	ug/L	CMG	09/10/2009
Surrogates:	EPA 8270					
***Nitrobenzene-D5	EPA 8270	68.0	30-130	% R	CMG	09/10/2009
***2-Fluorobiphenyl	EPA 8270	70.4	30-130	% R	CMG	09/10/2009
***P-Terphenyl-D14	EPA 8270	80.3	30-130	% R	CMG	09/10/2009
Extraction	EPA 3510C	1.0		DF	NOG	09/04/2009
TOTAL PETROLEUM HYDROCARBON	Mod. EPA 8100				RJD	09/09/2009
Hydrocarbon Content		1700	200	ug/L	RJD	09/09/2009
Surrogate:						
***p-Terphenyl		70.9	40-130	% R	RJD	09/09/2009
Extraction	EPA 3510C	1.0		DF	NOG	09/03/2009
TOTAL METALS						
Chromium	EPA 6010B	0.0098	0.0050	mg/L	LLZ	09/03/2009

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Project Name.: **Charbert UIC Quarterly Testing**
Project No.: **03.0032795.33**

Date Received: **09/02/2009**
Date Reported: **09/11/2009**
Work Order No.: **0909-00015**

Sample ID: **MW - 4A / Dissolved Metal** Sample No.: **008**
Sample Date: **09/01/2009**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
DISSOLVED METALS						
Chromium	EPA 6010B	0.0091	0.0050	mg/L	LLZ	09/03/2009

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Project Name.: **Charbert UIC Quarterly Testing**
Project No.: **03.0032795.33**

Date Received: **09/02/2009**
Date Reported: **09/11/2009**
Work Order No.: **0909-00015**

Sample ID: **MW - 5B** Sample No.: **009**

Sample Date: **09/01/2009**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260				MQS	09/03/2009
Dichlorodifluoromethane	EPA 8260	<2.0	2.0	ug/L	MQS	09/03/2009
Chloromethane	EPA 8260	<2.0	2.0	ug/L	MQS	09/03/2009
Vinyl Chloride	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
Bromomethane	EPA 8260	<2.0	2.0	ug/L	MQS	09/03/2009
Chloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
Trichlorofluoromethane	EPA 8260	<2.0	2.0	ug/L	MQS	09/03/2009
Diethylether	EPA 8260	<5.0	5.0	ug/L	MQS	09/03/2009
Acetone	EPA 8260	<25	25	ug/L	MQS	09/03/2009
1,1-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
Dichloromethane	EPA 8260	<2.0	2.0	ug/L	MQS	09/03/2009
Methyl-Tert-Butyl-Ether	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
trans-1,2-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
1,1-Dichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
2-Butanone	EPA 8260	<25	25	ug/L	MQS	09/03/2009
2,2-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
cis-1,2-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
Chloroform	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
Bromochloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
Tetrahydrofuran	EPA 8260	<10	10	ug/L	MQS	09/03/2009
1,1,1-Trichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
1,1-Dichloropropene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
Carbon Tetrachloride	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
1,2-Dichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
Benzene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
Trichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
1,2-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
Bromodichloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
Dibromomethane	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
4-Methyl-2-Pentanone	EPA 8260	<25	25	ug/L	MQS	09/03/2009
cis-1,3-Dichloropropene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
Toluene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
trans-1,3-Dichloropropene	EPA 8260	<2.0	2.0	ug/L	MQS	09/03/2009
1,1,2-Trichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
2-Hexanone	EPA 8260	<25	25	ug/L	MQS	09/03/2009

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ANALYTICAL REPORT

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Project Name.: **Charbert UIC Quarterly Testing**
Project No.: **03.0032795.33**

Date Received: **09/02/2009**
Date Reported: **09/11/2009**
Work Order No.: **0909-00015**

Sample ID: **MW - 5B** Sample No.: **009**
Sample Date: **09/01/2009**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
1,3-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
Tetrachloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
Dibromochloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
1,2-Dibromoethane (EDB)	EPA 8260	<2.0	2.0	ug/L	MQS	09/03/2009
Chlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
1,1,1,2-Tetrachloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
Ethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
m&p-Xylene	EPA 8260	<2.0	2.0	ug/L	MQS	09/03/2009
o-Xylene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
Styrene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
Bromoform	EPA 8260	<2.0	2.0	ug/L	MQS	09/03/2009
Isopropylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
1,1,2,2-Tetrachloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
1,2,3-Trichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
Bromobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
N-Propylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
2-Chlorotoluene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
1,3,5-Trimethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
4-Chlorotoluene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
tert-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
1,2,4-Trimethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
sec-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
p-Isopropyltoluene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
1,3-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
1,4-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
n-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
1,2-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
1,2-Dibromo-3-Chloropropane	EPA 8260	<5.0	5.0	ug/L	MQS	09/03/2009
1,2,4-Trichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
Hexachlorobutadiene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
Naphthalene	EPA 8260	<2.0	2.0	ug/L	MQS	09/03/2009
1,2,3-Trichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
Surrogates:	EPA 8260					
***1,2-Dichloroethane-D4	EPA 8260	101	70-130	% R	MQS	09/03/2009
***Toluene-D8	EPA 8260	101	70-130	% R	MQS	09/03/2009

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Project Name.: **Charbert UIC Quarterly Testing**
Project No.: **03.0032795.33**

Date Received: **09/02/2009**
Date Reported: **09/11/2009**
Work Order No.: **0909-00015**

Sample ID: **MW - 5B** Sample No.: **009**

Sample Date: **09/01/2009**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
***4-Bromofluorobenzene	EPA 8260	96.5	70-130	% R	MQS	09/03/2009
Preparation	EPA 5030B	1.0		CF	MQS	09/03/2009
SEMI-VOLATILE ORGANICS	EPA 8270				CMG	09/10/2009
bis(2-Ethylhexyl)Phthalate	EPA 8270	<6.0	6.0	ug/L	CMG	09/10/2009
Surrogates:	EPA 8270					
***Nitrobenzene-D5	EPA 8270	43.9	30-130	% R	CMG	09/10/2009
***2-Fluorobiphenyl	EPA 8270	44.9	30-130	% R	CMG	09/10/2009
***P-Terphenyl-D14	EPA 8270	54.8	30-130	% R	CMG	09/10/2009
Extraction	EPA 3510C	1.0		DF	NOG	09/04/2009
TOTAL PETROLEUM HYDROCARBON	Mod. EPA 8100				RJD	09/09/2009
Hydrocarbon Content		<200	200	ug/L	RJD	09/09/2009
Surrogate:						
***p-Terphenyl		49.4	40-130	% R	RJD	09/09/2009
Extraction	EPA 3510C	1.0		DF	NOG	09/03/2009
TOTAL METALS						
Chromium	EPA 6010B	<0.0050	0.0050	mg/L	LLZ	09/03/2009

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Project Name.: **Charbert UIC Quarterly Testing**
Project No.: **03.0032795.33**

Date Received: **09/02/2009**
Date Reported: **09/11/2009**
Work Order No.: **0909-00015**

Sample ID: **MW - 5B / Dissolved Metal** Sample No.: **010**
Sample Date: **09/01/2009**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
DISSOLVED METALS						
Chromium	EPA 6010B	<0.0050	0.0050	mg/L	LLZ	09/03/2009

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ANALYTICAL REPORT

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Project Name.: **Charbert UIC Quarterly Testing**
Project No.: **03.0032795.33**

Date Received: **09/02/2009**
Date Reported: **09/11/2009**
Work Order No.: **0909-00015**

Sample ID: **MW - 6** Sample No.: **011**
Sample Date: **09/01/2009**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260				MQS	09/03/2009
Dichlorodifluoromethane	EPA 8260	<2.0	2.0	ug/L	MQS	09/03/2009
Chloromethane	EPA 8260	<2.0	2.0	ug/L	MQS	09/03/2009
Vinyl Chloride	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
Bromomethane	EPA 8260	<2.0	2.0	ug/L	MQS	09/03/2009
Chloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
Trichlorofluoromethane	EPA 8260	<2.0	2.0	ug/L	MQS	09/03/2009
Diethylether	EPA 8260	<5.0	5.0	ug/L	MQS	09/03/2009
Acetone	EPA 8260	<25	25	ug/L	MQS	09/03/2009
1,1-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
Dichloromethane	EPA 8260	<2.0	2.0	ug/L	MQS	09/03/2009
Methyl-Tert-Butyl-Ether	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
trans-1,2-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
1,1-Dichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
2-Butanone	EPA 8260	<25	25	ug/L	MQS	09/03/2009
2,2-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
cis-1,2-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
Chloroform	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
Bromochloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
Tetrahydrofuran	EPA 8260	<10	10	ug/L	MQS	09/03/2009
1,1,1-Trichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
1,1-Dichloropropene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
Carbon Tetrachloride	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
1,2-Dichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
Benzene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
Trichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
1,2-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
Bromodichloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
Dibromomethane	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
4-Methyl-2-Pentanone	EPA 8260	<25	25	ug/L	MQS	09/03/2009
cis-1,3-Dichloropropene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
Toluene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
trans-1,3-Dichloropropene	EPA 8260	<2.0	2.0	ug/L	MQS	09/03/2009
1,1,2-Trichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
2-Hexanone	EPA 8260	<25	25	ug/L	MQS	09/03/2009

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ANALYTICAL REPORT

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Project Name.: **Charbert UIC Quarterly Testing**
Project No.: **03.0032795.33**

Date Received: **09/02/2009**
Date Reported: **09/11/2009**
Work Order No.: **0909-00015**

Sample ID: **MW - 6** Sample No.: **011**

Sample Date: **09/01/2009**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
1,3-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
Tetrachloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
Dibromochloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
1,2-Dibromoethane (EDB)	EPA 8260	<2.0	2.0	ug/L	MQS	09/03/2009
Chlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
1,1,1,2-Tetrachloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
Ethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
m&p-Xylene	EPA 8260	<2.0	2.0	ug/L	MQS	09/03/2009
o-Xylene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
Styrene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
Bromoform	EPA 8260	<2.0	2.0	ug/L	MQS	09/03/2009
Isopropylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
1,1,2,2-Tetrachloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
1,2,3-Trichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
Bromobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
N-Propylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
2-Chlorotoluene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
1,3,5-Trimethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
4-Chlorotoluene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
tert-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
1,2,4-Trimethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
sec-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
p-Isopropyltoluene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
1,3-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
1,4-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
n-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
1,2-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
1,2-Dibromo-3-Chloropropane	EPA 8260	<5.0	5.0	ug/L	MQS	09/03/2009
1,2,4-Trichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
Hexachlorobutadiene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
Naphthalene	EPA 8260	<2.0	2.0	ug/L	MQS	09/03/2009
1,2,3-Trichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
Surrogates:	EPA 8260					
***1,2-Dichloroethane-D4	EPA 8260	102	70-130	% R	MQS	09/03/2009
***Toluene-D8	EPA 8260	102	70-130	% R	MQS	09/03/2009

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Project Name.: **Charbert UIC Quarterly Testing**
Project No.: **03.0032795.33**

Date Received: **09/02/2009**
Date Reported: **09/11/2009**
Work Order No.: **0909-00015**

Sample ID: **MW - 6** Sample No.: **011**

Sample Date: **09/01/2009**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
***4-Bromofluorobenzene	EPA 8260	95.8	70-130	% R	MQS	09/03/2009
Preparation	EPA 5030B	1.0		CF	MQS	09/03/2009
SEMI-VOLATILE ORGANICS	EPA 8270				CMG	09/10/2009
bis(2-Ethylhexyl)Phthalate	EPA 8270	<6.0	6.0	ug/L	CMG	09/10/2009
Surrogates:	EPA 8270					
***Nitrobenzene-D5	EPA 8270	34.7	30-130	% R	CMG	09/10/2009
***2-Fluorobiphenyl	EPA 8270	35.9	30-130	% R	CMG	09/10/2009
***P-Terphenyl-D14	EPA 8270	41.2	30-130	% R	CMG	09/10/2009
Extraction	EPA 3510C	1.0		DF	NOG	09/04/2009
TOTAL PETROLEUM HYDROCARBON	Mod. EPA 8100				RJD	09/09/2009
Hydrocarbon Content		<200	200	ug/L	RJD	09/09/2009
Surrogate:						
***p-Terphenyl		42.5	40-130	% R	RJD	09/09/2009
Extraction	EPA 3510C	1.0		DF	NOG	09/03/2009
TOTAL METALS						
Chromium	EPA 6010B	<0.0050	0.0050	mg/L	LLZ	09/03/2009

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Providence, RI 02903

Stephen Andrus

Project Name.: **Charbert UIC Quarterly Testing**
Project No.: **03.0032795.33**

Date Received: **09/02/2009**
Date Reported: **09/11/2009**
Work Order No.: **0909-00015**

Sample ID: **MW - 6 / Dissolved Metal**
Sample No.: **012**
Sample Date: **09/01/2009**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
DISSOLVED METALS						
Chromium	EPA 6010B	<0.0050	0.0050	mg/L	LLZ	09/03/2009

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ANALYTICAL REPORT

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Project No.: **03.0032795.33**

Date Received: **09/02/2009**
Date Reported: **09/11/2009**
Work Order No.: **0909-00015**

Sample ID: **TBLK 090109** Sample No.: **013**

Sample Date: **09/01/2009**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260				MQS	09/03/2009
Dichlorodifluoromethane	EPA 8260	<2.0	2.0	ug/L	MQS	09/03/2009
Chloromethane	EPA 8260	<2.0	2.0	ug/L	MQS	09/03/2009
Vinyl Chloride	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
Bromomethane	EPA 8260	<2.0	2.0	ug/L	MQS	09/03/2009
Chloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
Trichlorofluoromethane	EPA 8260	<2.0	2.0	ug/L	MQS	09/03/2009
Diethylether	EPA 8260	<5.0	5.0	ug/L	MQS	09/03/2009
Acetone	EPA 8260	<25	25	ug/L	MQS	09/03/2009
1,1-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
Dichloromethane	EPA 8260	<2.0	2.0	ug/L	MQS	09/03/2009
Methyl-Tert-Butyl-Ether	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
trans-1,2-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
1,1-Dichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
2-Butanone	EPA 8260	<25	25	ug/L	MQS	09/03/2009
2,2-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
cis-1,2-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
Chloroform	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
Bromochloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
Tetrahydrofuran	EPA 8260	<10	10	ug/L	MQS	09/03/2009
1,1,1-Trichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
1,1-Dichloropropene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
Carbon Tetrachloride	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
1,2-Dichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
Benzene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
Trichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
1,2-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
Bromodichloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
Dibromomethane	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
4-Methyl-2-Pentanone	EPA 8260	<25	25	ug/L	MQS	09/03/2009
cis-1,3-Dichloropropene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
Toluene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
trans-1,3-Dichloropropene	EPA 8260	<2.0	2.0	ug/L	MQS	09/03/2009
1,1,2-Trichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
2-Hexanone	EPA 8260	<25	25	ug/L	MQS	09/03/2009

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Project No.: **03.0032795.33**

Date Received: **09/02/2009**
Date Reported: **09/11/2009**
Work Order No.: **0909-00015**

Sample ID: **TBLK 090109** Sample No.: **013**

Sample Date: **09/01/2009**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
1,3-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
Tetrachloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
Dibromochloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
1,2-Dibromoethane (EDB)	EPA 8260	<2.0	2.0	ug/L	MQS	09/03/2009
Chlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
1,1,1,2-Tetrachloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
Ethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
m&p-Xylene	EPA 8260	<2.0	2.0	ug/L	MQS	09/03/2009
o-Xylene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
Styrene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
Bromoform	EPA 8260	<2.0	2.0	ug/L	MQS	09/03/2009
Isopropylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
1,1,2,2-Tetrachloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
1,2,3-Trichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
Bromobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
N-Propylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
2-Chlorotoluene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
1,3,5-Trimethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
4-Chlorotoluene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
tert-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
1,2,4-Trimethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
sec-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
p-Isopropyltoluene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
1,3-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
1,4-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
n-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
1,2-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
1,2-Dibromo-3-Chloropropane	EPA 8260	<5.0	5.0	ug/L	MQS	09/03/2009
1,2,4-Trichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
Hexachlorobutadiene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
Naphthalene	EPA 8260	<2.0	2.0	ug/L	MQS	09/03/2009
1,2,3-Trichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	09/03/2009
Surrogates:	EPA 8260					
***1,2-Dichloroethane-D4	EPA 8260	98.8	70-130	% R	MQS	09/03/2009
***Toluene-D8	EPA 8260	101	70-130	% R	MQS	09/03/2009

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A N A L Y T I C A L R E P O R T

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Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
***4-Bromofluorobenzene	EPA 8260	94.6	70-130	% R	MQS	09/03/2009
Preparation	EPA 5030B	1.0		CF	MQS	09/03/2009

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: 9/3/2009

QC Sample	Method Blank	Lab Control Sample	LC Duplicate	LC/LCD Diff.
Units	mg/L	% Recovery	% Recovery	RPD
Acceptance Limits	Results	80-120	80-120	20%
Analyte				
Silver (Ag)	NA	NA	NA	NA
Aluminum (Al)	NA	NA	NA	NA
Arsenic (As)	NA	NA	NA	NA
Boron (B)	NA	NA	NA	NA
Barium (Ba)	NA	NA	NA	NA
Beryllium (Be)	NA	NA	NA	NA
Calcium (Ca)	NA	NA	NA	NA
Cadmium (Cd)	NA	NA	NA	NA
Cobalt (Co)	NA	NA	NA	NA
Chromium (Cr)	<0.0050	97.9	98.4	0.56
Copper (Cu)	NA	NA	NA	NA
Iron (Fe)	<0.025	101	103	1.65
Magnesium (Mg)	NA	NA	NA	NA
Manganese (Mn)	NA	NA	NA	NA
Molybdenum (Mo)	NA	NA	NA	NA
Nickel (Ni)	NA	NA	NA	NA
Lead (Pb)	<0.010	97.4	97.4	0.04
Antimony (Sb)	NA	NA	NA	NA
Selenium (Se)	NA	NA	NA	NA
Strontium (Sr)	NA	NA	NA	NA
Titanium (Ti)	NA	NA	NA	NA
Thallium (Tl)	NA	NA	NA	NA
Vanadium (V)	NA	NA	NA	NA
Zinc (Zn)	NA	NA	NA	NA
Zirconium (Zr)	NA	NA	NA	NA
Tin (Sn)	NA	NA	NA	NA

Matrix Spike / Duplicate Spike performed as per method and reported if assigned on Chain of Custody.

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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:	9/3/2009		Date Analyzed:	9/3/2009			9/3/2009					
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	99.9	70-130	ok	104	70-130	ok	3.68	<25	ok
chloromethane	< 1.0	< 1.0	chloromethane	87.7	70-130	ok	94.0	70-130	ok	6.92	<25	ok
vinyl chloride	< 0.5	< 0.5	vinyl chloride	97.4	80-120	ok	103	70-130	ok	6.02	<25	ok
bromomethane	< 1.0	< 1.0	bromomethane	92.1	70-130	ok	96.1	70-130	ok	4.25	<25	ok
chloroethane	< 0.5	< 0.5	chloroethane	95.0	70-130	ok	99.7	70-130	ok	4.85	<25	ok
trichlorofluoromethane	< 1.0	< 1.0	trichlorofluoromethane	97.0	70-130	ok	100	70-130	ok	3.08	<25	ok
diethyl ether	< 2.5	< 2.5	diethyl ether	98.3	70-130	ok	101	70-130	ok	2.38	<25	ok
acetone	< 13	< 13	acetone	96.3	70-130	ok	105	70-130	ok	8.24	<25	ok
1,1-dichloroethene	< 0.5	< 0.5	1,1-dichloroethene	95.0	80-120	ok	98.3	70-130	ok	3.36	<25	ok
FREON-113	< 1.0	< 1.0	FREON-113	107	70-130	ok	109	70-130	ok	1.74	<25	ok
iodomethane	< 0.5	< 0.5	iodomethane	93.7	70-130	ok	99.8	70-130	ok	6.35	<25	ok
carbon disulfide	< 5.0	< 5.0	carbon disulfide	107	70-130	ok	109	70-130	ok	2.48	<25	ok
dichloromethane	< 1.0	< 1.0	dichloromethane	91.9	70-130	ok	94.1	70-130	ok	2.41	<25	ok
tert-butyl alcohol (TBA)	< 13	< 13	tert-butyl alcohol (TBA)	106	70-130	ok	105	70-130	ok	0.69	<25	ok
acrylonitrile	< 0.5	< 0.5	acrylonitrile	104	70-130	ok	103	70-130	ok	0.13	<25	ok
methyl-tert-butyl-ether	< 0.5	< 0.5	methyl-tert-butyl-ether	102	70-130	ok	105	70-130	ok	3.10	<25	ok
trans-1,2-dichloroethene	< 0.5	< 0.5	trans-1,2-dichloroethene	108	70-130	ok	111	70-130	ok	2.58	<25	ok
1,1-dichloroethane	< 0.5	< 0.5	1,1-dichloroethane	97.2	70-130	ok	101	70-130	ok	3.57	<25	ok
di-isopropyl ether (DIPE)	< 1.0	< 1.0	di-isopropyl ether (DIPE)	98.7	70-130	ok	102	70-130	ok	3.34	<25	ok
ethyl tert-butyl ether (EtBE)	< 1.0	< 1.0	ethyl tert-butyl ether (EtBE)	101	70-130	ok	103	70-130	ok	2.03	<25	ok
vinyl acetate	< 13	< 13	vinyl acetate	98.5	70-130	ok	97.8	70-130	ok	0.75	<25	ok
2-butanone	< 13	< 13	2-butanone	100	70-130	ok	105	70-130	ok	4.91	<25	ok
2,2-dichloropropane	< 0.5	< 0.5	2,2-dichloropropane	110	70-130	ok	108	70-130	ok	2.13	<25	ok
cis-1,2-dichloroethene	< 0.5	< 0.5	cis-1,2-dichloroethene	94.6	70-130	ok	97.4	70-130	ok	2.88	<25	ok
chloroform	< 0.5	< 0.5	chloroform	94.9	80-120	ok	96.6	70-130	ok	1.81	<25	ok
bromochloromethane	< 0.5	< 0.5	bromochloromethane	99.8	70-130	ok	104	70-130	ok	4.25	<25	ok
tetrahydrofuran	< 5.0	< 5.0	tetrahydrofuran	110	70-130	ok	105	70-130	ok	4.58	<25	ok
1,1,1-trichloroethane	< 0.5	< 0.5	1,1,1-trichloroethane	96.0	70-130	ok	97.0	70-130	ok	0.99	<25	ok
1,1-dichloropropene	< 0.5	< 0.5	1,1-dichloropropene	99.1	70-130	ok	99.9	70-130	ok	0.81	<25	ok
carbon tetrachloride	< 0.5	< 0.5	carbon tetrachloride	97.3	70-130	ok	100	70-130	ok	2.80	<25	ok
1,2-dichloroethane	< 0.5	< 0.5	1,2-dichloroethane	96.2	70-130	ok	96.6	70-130	ok	0.37	<25	ok
benzene	< 0.5	< 0.5	benzene	99.8	70-130	ok	103	70-130	ok	2.83	<25	ok
tert-amyl methyl ether (TAME)	< 1.0	< 1.0	tert-amyl methyl ether (TAME)	98.8	70-130	ok	104	70-130	ok	5.22	<25	ok
trichloroethene	< 0.5	< 0.5	trichloroethene	100	70-130	ok	105	70-130	ok	4.72	<25	ok
1,2-dichloropropane	< 0.5	< 0.5	1,2-dichloropropane	97.5	80-120	ok	101	70-130	ok	3.23	<25	ok
bromodichloromethane	< 0.5	< 0.5	bromodichloromethane	93.5	70-130	ok	96.5	70-130	ok	3.14	<25	ok
1,4-Dioxane	< 50	< 50	1,4-Dioxane	98.4	70-130	ok	99.0	70-130	ok	0.67	<25	ok
dibromomethane	< 0.5	< 0.5	dibromomethane	100	70-130	ok	100	70-130	ok	0.23	<25	ok
4-methyl-2-pentanone	< 13	< 13	4-methyl-2-pentanone	96.3	70-130	ok	99.1	70-130	ok	2.85	<25	ok
cis-1,3-dichloropropene	< 0.5	< 0.5	cis-1,3-dichloropropene	97.5	70-130	ok	99.8	70-130	ok	2.33	<25	ok
toluene	< 0.5	< 0.5	toluene	98.8	80-120	ok	102	70-130	ok	2.92	<25	ok
trans-1,3-dichloropropene	< 1.0	< 1.0	trans-1,3-dichloropropene	97.9	70-130	ok	99.8	70-130	ok	1.90	<25	ok
1,1,2-trichloroethane	< 0.5	< 0.5	1,1,2-trichloroethane	97.0	70-130	ok	98.8	70-130	ok	1.75	<25	ok
2-hexanone	< 13	< 13	2-hexanone	97.3	70-130	ok	100	70-130	ok	3.13	<25	ok
1,3-dichloropropane	< 0.5	< 0.5	1,3-dichloropropane	98.1	70-130	ok	101	70-130	ok	3.16	<25	ok
tetrachloroethene	< 0.5	< 0.5	tetrachloroethene	99.8	70-130	ok	102	70-130	ok	2.63	<25	ok
dibromochloromethane	< 0.5	< 0.5	dibromochloromethane	96.9	70-130	ok	101	70-130	ok	4.44	<25	ok
1,2-dibromoethane (EDB)	< 1.0	< 1.0	1,2-dibromoethane (EDB)	102	70-130	ok	102	70-130	ok	0.14	<25	ok
chlorobenzene	< 0.5	< 0.5	chlorobenzene	97.5	70-130	ok	101	70-130	ok	3.83	<25	ok
1,1,1,2-tetrachloroethane	< 0.5	< 0.5	1,1,1,2-tetrachloroethane	101	70-130	ok	102	70-130	ok	1.66	<25	ok
ethylbenzene	< 0.5	< 0.5	ethylbenzene	99.3	80-120	ok	102	70-130	ok	2.84	<25	ok
1,1,2,2-tetrachloroethane	< 0.5	< 0.5	1,1,2,2-tetrachloroethane	101	70-130	ok	103	70-130	ok	2.16	<25	ok
m&p-xylene	< 1.0	< 1.0	m&p-xylene	99.0	70-130	ok	100	70-130	ok	1.23	<25	ok
o-xylene	< 0.5	< 0.5	o-xylene	94.8	70-130	ok	96.4	70-130	ok	1.76	<25	ok
styrene	< 0.5	< 0.5	styrene	97.7	70-130	ok	98.9	70-130	ok	1.28	<25	ok
bromoform	< 1.0	< 1.0	bromoform	101	70-130	ok	104	70-130	ok	2.39	<25	ok
isopropylbenzene	< 0.5	< 0.5	isopropylbenzene	114	70-130	ok	117	70-130	ok	3.06	<25	ok
1,2,3-trichloropropane	< 0.5	< 0.5	1,2,3-trichloropropane	97.6	70-130	ok	98.7	70-130	ok	1.14	<25	ok
bromobenzene	< 0.5	< 0.5	bromobenzene	98.6	70-130	ok	101	70-130	ok	2.24	<25	ok
n-propylbenzene	< 0.5	< 0.5	n-propylbenzene	103	70-130	ok	104	70-130	ok	0.86	<25	ok
2-chlorotoluene	< 0.5	< 0.5	2-chlorotoluene	96.6	70-130	ok	97.4	70-130	ok	0.83	<25	ok
1,3,5-trimethylbenzene	< 0.5	< 0.5	1,3,5-trimethylbenzene	98.9	70-130	ok	101	70-130	ok	2.41	<25	ok
trans-1,4-dichloro-2-butene	< 1.0	< 1.0	trans-1,4-dichloro-2-butene	103	70-130	ok	101	70-130	ok	2.22	<25	ok
4-chlorotoluene	< 0.5	< 0.5	4-chlorotoluene	99.1	70-130	ok	100	70-130	ok	1.41	<25	ok
tert-butyl-benzene	< 0.5	< 0.5	tert-butyl-benzene	96.8	70-130	ok	99.9	70-130	ok	3.16	<25	ok
1,2,4-trimethylbenzene	< 0.5	< 0.5	1,2,4-trimethylbenzene	98.3	70-130	ok	101	70-130	ok	2.58	<25	ok
sec-butyl-benzene	< 0.5	< 0.5	sec-butyl-benzene	96.9	70-130	ok	99.3	70-130	ok	2.48	<25	ok
p-isopropyltoluene	< 0.5	< 0.5	p-isopropyltoluene	99.3	70-130	ok	101	70-130	ok	1.65	<25	ok
1,3-dichlorobenzene	< 0.5	< 0.5	1,3-dichlorobenzene	97.8	70-130	ok	99.6	70-130	ok	1.78	<25	ok
1,4-dichlorobenzene	< 0.5	< 0.5	1,4-dichlorobenzene	96.4	70-130	ok	101	70-130	ok	4.14	<25	ok
n-butylbenzene	< 0.5	< 0.5	n-butylbenzene	99.6	70-130	ok	102	70-130	ok	2.15	<25	ok
1,2-dichlorobenzene	< 0.5	< 0.5	1,2-dichlorobenzene	95.9	70-130	ok	99.4	70-130	ok	3.55	<25	ok
1,2-dibromo-3-chloropropane	< 2.5	< 2.5	1,2-dibromo-3-chloropropane	102	70-130	ok	100	70-130	ok	1.70	<25	ok
1,3,5-trichlorobenzene	< 0.5	< 0.5	1,3,5-trichlorobenzene	102	70-130	ok	106	70-130	ok	3.36	<25	ok
1,2,4-trichlorobenzene	< 0.5	< 0.5	1,2,4-trichlorobenzene	105	70-130	ok	108	70-130	ok	3.18	<25	ok
hexachlorobutadiene	< 0.5	< 0.5	hexachlorobutadiene	101	70-130	ok	106	70-130	ok	5.12	<25	ok
naphthalene	< 1.0	< 1.0	naphthalene	95.5	70-130	ok	102	70-130	ok	6.18	<25	ok
1,2,3-trichlorobenzene	< 0.5	< 0.5	1,2,3-trichlorobenzene	100	70-130	ok	106	70-130	ok	5.38	<25	ok

Surrogates:	Recovery (%)	Acceptance Limits	Surrogates:	Recovery (%)	Acceptance Limits	Verdict	Recovery (%)	Acceptance Limits	Verdict	RPD	Acceptance Limits	Verdict
DIBROMOFLUOROMETHANE	100	70-130	DIBROMOFLUOROMETHANE	98.2	70-130	ok	99.8	70-130	ok	1.65	<25	ok
1,2-DICHLOROETHANE-D4	99.1	70-130	1,2-DICHLOROETHANE-D4	101	70-130	ok	99.9	70-130	ok	0.72	<25	ok
TOLUENE-D8	101	70-130	TOLUENE-D8	101	70-130	ok	101	70-130	ok	0.11	<25	ok
4-BROMOFLUOROBENZENE	94.6	70-130	4-BROMOFLUOROBENZENE	100	70-130	ok	101	70-130	ok	0.87	<25	ok
1,2-DICHLOROBENZENE-D4	92.2	70-130	1,2-DICHLOROBENZENE-D4	95.7	70-130	ok	99.3	70-130	ok	3.71	<25	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:	**09/04/09**	
Date Analyzed:	**09/09/09**	
File Name:	**M2418**	
Semi-Volatile Organics	**Result**	**Reporting Limit (ug/L)**
bis(2-ethylhexyl)phthalate	ND	10

Surrogates:	**Recovery (%)**	**Acceptance Limits**
NITROBENZENE-D5	37.1	30-130
2-FLUOROBIPHENYL	37.1	30-130
p-TERPHENYL-D14	45.9	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:	**09/04/09**
Date Analyzed:	**09/09/09**
File Name:	**M2419**

Spike Concentration = 20ug/L	**% Recovery**	**Acceptance Limits**	**Verdict**
bis(2-ethylhexyl)phthalate	43.9	40-140	ok

CAM criteria allows 15% of analytes to exceed criteria.

Surrogates:	**Recovery (%)**	**Acceptance Limits**	**Verdict**
NITROBENZENE-D5	33.7	30-130	ok
2-FLUOROBIPHENYL	33.9	30-130	ok
p-TERPHENYL-D14	42.2	30-130	ok

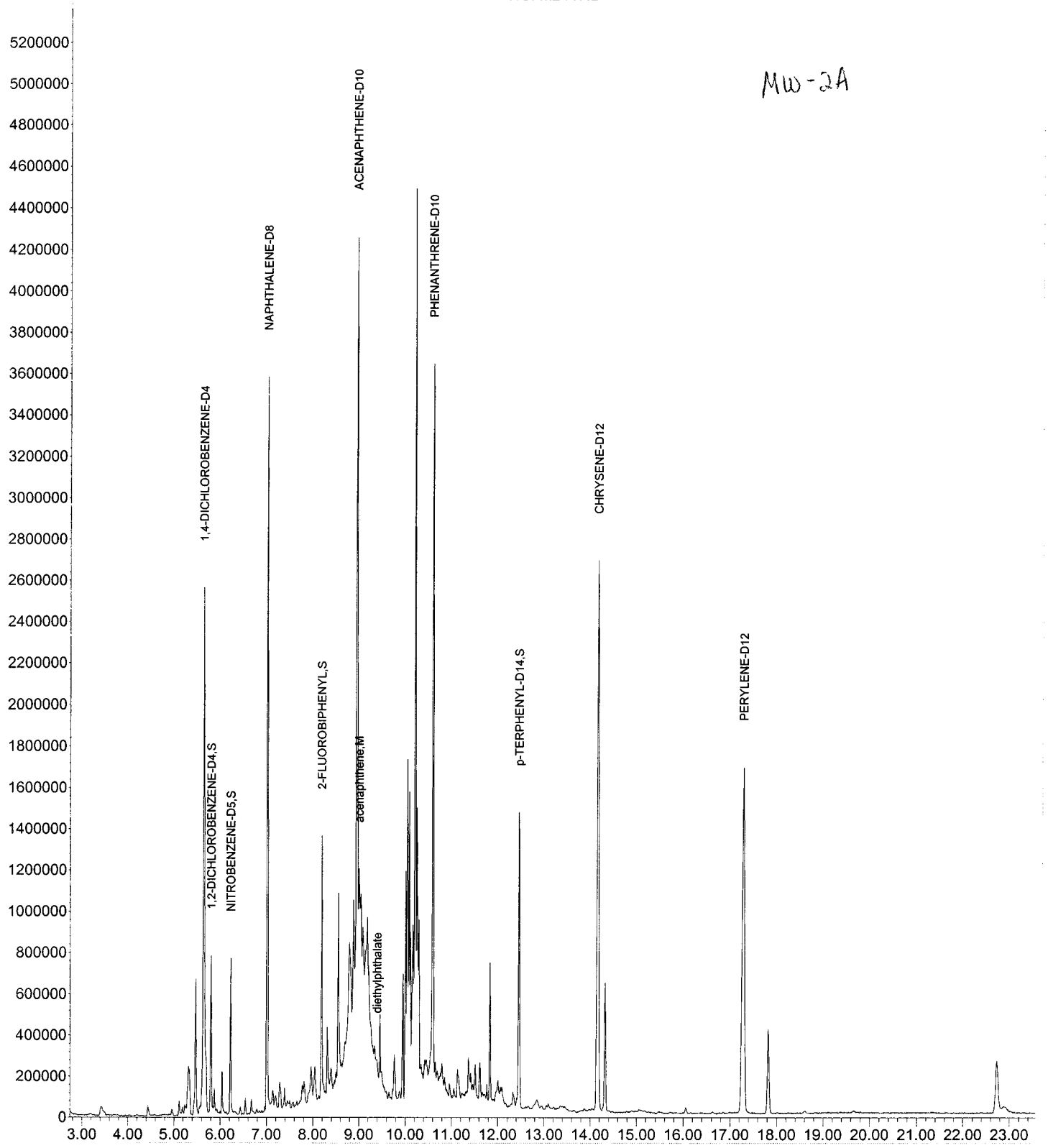
Quantitation Report

Data File : C:\HPCHEM\DATA\M2447.D Vial: 4
Acq On : 10 Sep 2009 5:57 pm Operator: cmg
Sample : 0909-00015-003 df=1/500 Inst : INGRID
Misc : NOG e:9/4/09 IS:A063483 Multiplr: 0.00
MS Integration Params: INTP58.P
Quant Time: Sep 11 10:18 2009 Quant Results File: IABN180.RES

Method : C:\HPCHEM\1\METHODS\IABN180.M (RTE Integrator)
Title : 8270 ABN ICAL - Aug 09'(S8387-S8396)
Last Update : Fri Sep 11 10:57:21 2009
Response via : Initial Calibration

TIC: M2447.D

MW-2A



CHAIN-OF-CUSTODY RECORD

W.O. # 0909-00015
(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)	❑ 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	[illegible]	[illegible]				Total # of Cont.	Note #
MW-1A	9-1-09 1135	GW			X							X					X											X	X				7	1
MW-2A	1315				X							X					X											X	X				7	
MW-3	0955				X							X					X											X	X				7	
MW-4A	[illegible]				X							X					X											X	X				7	
MW-5R	[illegible]				X							X					X											X	X				7	
MW-6	[illegible]				X							X					X											X	X				7	√
TBLK090109	√	√			X																												2	
PRESERVATIVE (Cl - HCl, M=Methanol, N - HNO3, S - H2SO4, Na - NaOH, O - Other)*					Cl							–					–											N	N					
CONTAINER TYPE (P-Plastic, G-Glass, V-Vial, T-Teflon, O-Other)*					V							G					G											P	P					

RELINQUISHED BY: (AFFILIATION)	DATE/TIME	RECEIVED BY: (AFFILIATION)
[signature]	9-1-09 0900	Bill Buecan 9/2/09
Bill Buecan	9/2/09 1045	[signature] 9/2/09 1320

NOTES: (Unless otherwise noted, all samples have been refrigerated to 4° C)
*Specify "Other" preservatives and containers types in this space.

1 Please analyze/report [illegible] for [illegible]
-2 [illegible]

PROJECT MANAGER: Steve Andrus EXT: 2740

LAB USE:
TURNAROUND TIME: (Standard) Rush___ Days, Approved by ___________ TEMP. OF COOLER 3.4 °C ___ Temp Blank / Cooler Air 0905

9/2 [initials] 3.3TB 0908 9/2/09 1105 [initials]

GZA FILE NO: 03.0032745.33 TASK NO: ______ P.O. NO. ______

PROJECT [illegible]

LOCATION ______

COLLECTOR(S) Erik [illegible] SHEET 1 OF 1

GZA GeoEnvironmental, Inc.
Labaratory Division

106 South Street
Hopkinton, MA 01748
(781) 278-4700
FAX (508) 435-9912

APPENDIX E

SEVENTH QUARTERLY PERIMETER WELL MONITORING RESULTS

GZA
GeoEnvironmental, Inc.

Engineers and Scientists

December 14, 2009
File No. 32795.29

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

Re: Seventh Quarterly (July-September 2009) Perimeter Well Monitoring Report
Charbert, Division of N.F.A.
Richmond, Rhode Island
RIDEM Case # 99-037

530 Broadway
Providence
Rhode Island
02909
401-421-4140
FAX 401-751-8613
www.gza.net

Dear Mr. Jablonski:

This letter with attachments serves as the seventh quarterly Perimeter Well Monitoring Report for the Charbert facility located at 299 Church Street in Richmond (Alton), Rhode Island. It was prepared by GZA GeoEnvironmental, Inc., on behalf of our client Charbert, Division of N.F.A.

In accordance with discussions during the conference call on April 23, 2008 between RIDEM and Charbert, it was agreed that, as part of the environmental monitoring, additional groundwater samples would be collected from perimeter wells located between the Charbert facility and nearby private wells and analyzed for VOCs, see Figure 1, attached. Perimeter monitoring wells included RIZ-1, RIZ-14, RIZ-21, GP-22 and GZ-1. Sample results from these wells were received on May 1, 2008. Based on previous results and the results of the Piezometric Monitoring Report dated May 2, 2008, RIDEM concurred with Charbert's recommendation (received via email 5/9/08) to sample these wells for a total of eight quarters, following which the need for any future monitoring will be assessed.

Groundwater Sampling

GZA personnel were on site on October 12, 2009 and collected samples from five monitoring wells, RIZ-1, RIZ-14, RIZ-21, GP-22 and GZ-1. Groundwater sampling was performed in general accordance with EPA's July 30, 1996 *Low Stress (low flow) Purging and Sampling Procedure* (Low Flow SOP). Low flow sampling equipment (exclusive of tubing which was dedicated to the wells) was decontaminated prior to use on-site and between each location following EPA's required protocols. Water quality monitoring for stabilization was conducted utilizing a Horiba multi-meter in a flow through cell.

Analysis

As agreed upon, groundwater was analyzed for volatile organic compounds (VOCs) via EPA Method 8260B in samples from all five monitoring wells. The detected analytes have been summarized and compared to RIDEM's Method 1 GA Groundwater Objectives and Groundwater Quality Preventative Action Limits (PALs) in the attached Table 1. The low flow field screening results are provided in Table 2, attached, and the laboratory certificates of analysis are provided in Attachment A.

Results

The October 12, 2009 groundwater results have been compared to the applicable groundwater standards for Rhode Island and there are GA Groundwater Objectives exceedances for VOCs in one of the five wells. The remaining four wells had no VOCs detected above the method detection limit.

The sample from monitoring well GZ-1 has five VOCs detected with cis-1,2-dichloroethene present at 49 µg/L, (above the PAL of 35 µg/L), and trichloroethene present at 11.0 µg/L, (above the GA Groundwater Objectives of 5 µg/L). The three other detects were 1,1-dichloroethane at 2.2 µg/L, tetrachloroethene at 1.8 µg/L, and 1,2,4-trichlorobenzene at 3.4 µg/L. These results are consistent with prior contaminant levels observed in samples from monitoring well GZ-1. For reference, all previous analytical testing results for the five wells tested on October 12, 2009 have been included in Table 1.

At this time, we do not see any significant change in the pattern of migration of contaminants from the previously delineated areas of concern. The perimeter wells will be sampled and analyzed on a quarterly basis for the one more quarter, after which the need to continue sampling these monitoring wells will be re-evaluated in conjunction with RIDEM.

Please feel free to call Ed or Steve (401) 421-4140 (or via email at *esummerly@gza.com* or *stephen.andrus@gza.com*) with any questions or comments.

Very truly yours,

GZA GEOENVIRONMENTAL, INC.

Nichole E. Fugere, E.I.T.
Project Engineer

Stephen Andrus, P.E.
Assistant Project Manager

Edward A. Summerly, P.G.
Principal

NEF/EAS:mac

CC: Tracy Nelson Hay, Richmond Town Clerk
Clark Memorial Library – Charbert Repository

Attachments: Tables: Table 1 - Detected Constituents
Table 2 - Low Flow Field Screening Readings
Figures: Figure 1 - Monitoring Well Locations
Attachment A – Laboratory Certification Sheets

J:\ENV\32795-29.sma\REPORTING\JUL-SEP 09\PERI WELLS\32795.29 SEVENTH QTR PER WELLS.doc

TABLES

TABLE 1
DETECTED CONSTITUENTS SUMMARY

October 2009 Perimeter Wells
Charbert Facility
Richmond, Rhode Island

GZ-1	UNITS	RIDEM GA Groundwater Objectives	RIDEM Groundwater Quality PALs	DATE																	
				8/6/2004		2/15/2005		4/25/2008		7/7/2008		10/3/2008		1/6/2009		4/1/2009		7/9/2009		10/12/2009	
				Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit
VOLATILE ORGANICS																					
1,2,4-Trimethylbenzene	ug/L (ppb)	NS	NS	<	1	<	1	<	1	4.2	1	4.2	1	3.9	1	<	1	<	1	<	1
1,1-Dichloroethane	ug/L (ppb)	---	---	2.2	1	2.0	1	1.0	1	<	1	1.5	1	1.8	1	1.8	1	2.3	1	2.2	1
1,2,3-Trichlorobenzene	ug/L (ppb)	---	---	<	1	8.3	1	<	1	<	1	<	1	<	1	<	1	<	1	<	1
1,2,4-Trichlorobenzene	ug/L (ppb)	70	35	9.5	1	<	1	3.0	1	<	1	<	1	<	1	3.6	1	4.3	1	3.4	1
cis-1,2-Dichloroethene	ug/L (ppb)	70	35	**73**	1	**68**	1	**29**	1	**20**	1	**39**	1	**45**	1	**41**	1	**50**	1	**49**	1
Tetrachloroethene	ug/L (ppb)	5	2.5	2.2	1	2.0	1	<	1	**1.2**	1	**1.6**	1	**2.0**	1	**2.1**	1	**2.1**	1	**1.8**	1
trans-1,2-Dichloroethene	ug/L (ppb)	100	50	<	1	1.0	1	<	1	<	1	<	1	<	1	<	1	<	1	<	1
Trichloroethene	ug/L (ppb)	5	2.5	**12**	1	**8.6**	1	**5.0**	1	**4.2**	1	**8.0**	1	**10**	1	**9.6**	1	**10**	1	**11**	1
Vinyl Chloride	ug/L (ppb)	2	1	**1.1**	1	**1.4**	1	<	1	<	1	<	1	<	1	<	1	<	1	<	1

RIZ-1	UNITS	RIDEM GA Groundwater Objectives	RIDEM Groundwater Quality PALs	DATE																	
				01/02//2008		4/1/2008		4/25/2008		7/7/2008		10/3/2008		1/6/2009		4/1/2009		7/9/2009		10/12/2009	
				Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit
VOLATILE ORGANICS	ug/L (ppb)			ND		ND		ND		ND		ND		ND		ND		ND		ND	

RIZ-14	UNITS	RIDEM GA Groundwater Objectives	RIDEM Groundwater Quality PALs	DATE													
				4/25/2008		7/7/2008		10/3/2008		1/6/2009		4/1/2009		7/9/2009		10/12/2009	
				Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit
VOLATILE ORGANICS																	
Tetrachloroethene	ug/L (ppb)	5	2.5	<	1.0	**4.4**	1.0	ND	1	ND	1	ND	1	ND	1	<	1

RIZ-21	UNITS	RIDEM GA Groundwater Objectives	RIDEM Groundwater Quality PALs	DATE													
				4/25/2008		7/7/2008		10/3/2008		1/6/2009		4/1/2009		7/9/2009		10/12/2009	
				Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit
VOLATILE ORGANICS	ug/L (ppb)			ND		ND		ND		ND		ND		ND		ND	

GP-22	UNITS	RIDEM GA Groundwater Objectives	RIDEM Groundwater Quality PALs	DATE																	
				2/15/2005		4/25/2008		7/7/2008		10/3/2008		10/28/2008		1/6/2009		4/1/2009		7/9/2009		10/12/2009	
				Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit
VOLATILE ORGANICS																					
Tetrachloroethene	ug/L (ppb)	5	2.5	<		<		<		**12**	1	<	1	<	1	<	1	<	1	<	1

Notes:
1. Cells shaded yellow have results above the method detection limit.
2. Cells shaded green are above RIDEM GA Groundwater Objective.
3. Cells shaded blueare above RIDEM Preventative Action Limit.
ND= Not Detected

TABLE 2
LOW FLOW SCREENING RESULTS
October *2009 Perimeter Wells*
Charbert Facility
Richmond, RI

OCTOBER 2009 GROUNDWATER SAMPLING FIELD DATA									
WELL ID	pH	CONDUCTIVITY	TURBIDITY	DISSOLVED OXYGEN	TEMPERATURE	ORP	WELL DATUM ELEV.	DEPTH TO GWT	GW ELEV.
	SU	mS/cm	NTU	mg/l	^{o}C	mV	FT	FT	FT
RIZ-1	5.9	0.515	1.0	6.0	18.2	-22	50.2	6.8	43.4
RIZ-14	5.9	0.73	1.0	4.6	13.0	51	62.6	15.9	46.7
RIZ-21	5.8	0.374	1.0	5.7	13.3	-8	52.9	11.9	40.9
GZ-1	7.4	0.722	1.0	0.0	13.2	122	56.5	15.5	41.0
GP-22	5.9	0.280	2.0	6.2	17.0	133	48.6	7.3	41.2

Notes:
1. Field screening parameters were collected using a Horiba Model U-10 Water Quality Monitor.

FIGURES

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.

INDUSTRIAL WASTE PUMP HOUSE
OIL BUNKER
DRUM STORAGE AREA
FORMER (LAGOON 5)
EXTERIOR SVE/AS AREA
INTERIOR SVE/AS AREA
CHARBERT MILL BUILDING
CHARBERT EMPLOYEE PARKING LOT
WETLANDS BOUNDARY
RIVER EDGE
RIVER STREET
CATION SYSTEM
PSFM
IC-MW6
PRIVATE WELL-16 RIVER STREET
PRIVATE WELL-14 RIVER STREET
PRIVATE WELL-18 RIVER STREET
#18
#16
#14
#12
#10
RIZ-7
RIZ-6
RIZ-13
RIZ-3
RIZ-21
RIZ-14
RIZ-1
GZ-ML-3
GZ-3
GZ-23
GZ-21
GZ-22
GZ-7
GP-26
GP-25
GZ-6
GZ-8
GP-27B
GP-27A
GP-22
GP-15
GZ-ML-2
GZ-1
GZ-4A
GP-18
GP-19
GZ-2
EW-4
CB-9
PT-5
EW-3
PT-4
PT-1
EW-2
EW-1
PT-2
SFM
WW

REV. NO.	DESCRIPTION	BY	DATE

PROJ MGR:
DESIGNED BY: SMA
REVIEWED BY: EAS
OPERATOR: DL
DATE: MAY, 2008

1 INCH = 80 FEET
0 40 80 160

GZA
GeoEnvironmental, Inc.
Engineers and Scientists
530 BROADWAY
PROVIDENCE, RI 02909
(401) 421-4140
(401) 751-8613

CHARBERT FACILITY
ALTON, RHODE ISLAND

SUPPLEMENTAL GROUNDWATER SAMPLING LOCATIONS

JOB NO.
32795.12

FIGURE NO.
1

APPENDIX A

LABORATORY CERTIFICATES OF ANALYSIS

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 / Angela Harvey

Project No.: **03.0032795.29**
Work Order No.: **0910-00087**
Date Received: **10/14/2009**
Date Reported: **10/22/2009**

SAMPLE INFORMATION

Date Sampled	Matrix	Laboratory ID	Sample ID
10/12/2009	Aqueous	0910-00087 001	RIZ-1
10/12/2009	Aqueous	0910-00087 002	RIZ-14
10/12/2009	Aqueous	0910-00087 003	RIZ-21
10/12/2009	Aqueous	0910-00087 004	RIZ-100
10/12/2009	Aqueous	0910-00087 005	GP-22
10/12/2009	Aqueous	0910-00087 006	GZ-1
10/12/2009	Aqueous	0910-00087 007	TBLK 101209

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.
140 Broadway
Providence, RI 02903

Stephen Andrus / Angela Harvey

Project Name.: **Charbert ICMP**
Project No.: **03.0032795.29**

Date Received: **10/14/2009**
Date Reported: **10/22/2009**
Work Order No.: **0910-00087**

PROJECT NARRATIVE:

1. Sample Receipt

The samples were received on 10/13/09 via _x_GZA courier, __EC, __FEDEX, or ___hand delivered. The temperature of the __temperature blank/_x_cooler air, was 4.2 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 continuing calibration verification standard (CCV) (10/19/09) had an analyte outside of the 30%D QC acceptance limit. The outlier includes dichlorodifluoromethane (60%).

The Laboratory Control Sample (LCS) (10/19/09 S) had an 8260 list analyte outside of the 70-130% QC acceptance limits. Specific outlier includes dichlorodifluoromethane (160%). This analyte was not detected in the associated samples.

Attach QC 8260 10/19/09 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.
140 Broadway
Providence, RI 02903

Stephen Andrus / Angela Harvey

Project Name.: **Charbert ICMP**
Project No.: **03.0032795.29**

Date Received: **10/14/2009**
Date Reported: **10/22/2009**
Work Order No.: **0910-00087**

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.

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

ANALYTICAL REPORT

GZA GeoEnvironmental, Inc.
140 Broadway
Providence, RI 02903

Stephen Andrus / Angela Harvey

Project Name.: **Charbert ICMP**
Project No.: **03.0032795.29**

Date Received: **10/14/2009**
Date Reported: **10/22/2009**
Work Order No.: **0910-00087**

Sample ID: **RIZ-1** Sample No.: **001**

Sample Date: **10/12/2009**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260				MQS	10/19/2009
Dichlorodifluoromethane	EPA 8260	<2.0	2.0	ug/L	MQS	10/19/2009
Chloromethane	EPA 8260	<2.0	2.0	ug/L	MQS	10/19/2009
Vinyl Chloride	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
Bromomethane	EPA 8260	<2.0	2.0	ug/L	MQS	10/19/2009
Chloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
Trichlorofluoromethane	EPA 8260	<2.0	2.0	ug/L	MQS	10/19/2009
Diethylether	EPA 8260	<5.0	5.0	ug/L	MQS	10/19/2009
Acetone	EPA 8260	<25	25	ug/L	MQS	10/19/2009
1,1-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
Dichloromethane	EPA 8260	<2.0	2.0	ug/L	MQS	10/19/2009
Methyl-Tert-Butyl-Ether	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
trans-1,2-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
1,1-Dichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
2-Butanone	EPA 8260	<25	25	ug/L	MQS	10/19/2009
2,2-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
cis-1,2-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
Chloroform	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
Bromochloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
Tetrahydrofuran	EPA 8260	<10	10	ug/L	MQS	10/19/2009
1,1,1-Trichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
1,1-Dichloropropene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
Carbon Tetrachloride	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
1,2-Dichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
Benzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
Trichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
1,2-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
Bromodichloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
Dibromomethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
4-Methyl-2-Pentanone	EPA 8260	<25	25	ug/L	MQS	10/19/2009
cis-1,3-Dichloropropene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
Toluene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
trans-1,3-Dichloropropene	EPA 8260	<2.0	2.0	ug/L	MQS	10/19/2009
1,1,2-Trichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
2-Hexanone	EPA 8260	<25	25	ug/L	MQS	10/19/2009

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Stephen Andrus / Angela Harvey

Project Name.: **Charbert ICMP**
Project No.: **03.0032795.29**

Date Received: **10/14/2009**
Date Reported: **10/22/2009**
Work Order No.: **0910-00087**

Sample ID: **RIZ-1** Sample No.: **001**

Sample Date: **10/12/2009**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
1,3-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
Tetrachloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
Dibromochloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
1,2-Dibromoethane (EDB)	EPA 8260	<2.0	2.0	ug/L	MQS	10/19/2009
Chlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
1,1,1,2-Tetrachloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
Ethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
m&p-Xylene	EPA 8260	<2.0	2.0	ug/L	MQS	10/19/2009
o-Xylene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
Styrene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
Bromoform	EPA 8260	<2.0	2.0	ug/L	MQS	10/19/2009
Isopropylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
1,1,2,2-Tetrachloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
1,2,3-Trichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
Bromobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
N-Propylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
2-Chlorotoluene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
1,3,5-Trimethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
4-Chlorotoluene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
tert-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
1,2,4-Trimethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
sec-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
p-Isopropyltoluene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
1,3-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
1,4-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
n-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
1,2-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
1,2-Dibromo-3-Chloropropane	EPA 8260	<5.0	5.0	ug/L	MQS	10/19/2009
1,2,4-Trichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
Hexachlorobutadiene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
Naphthalene	EPA 8260	<2.0	2.0	ug/L	MQS	10/19/2009
1,2,3-Trichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
Surrogates:	EPA 8260					
***1,2-Dichloroethane-D4	EPA 8260	95.2	70-130	% R	MQS	10/19/2009
***Toluene-D8	EPA 8260	98.8	70-130	% R	MQS	10/19/2009

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Stephen Andrus / Angela Harvey

Project Name.: **Charbert ICMP**
Project No.: **03.0032795.29**

Date Received: **10/14/2009**
Date Reported: **10/22/2009**
Work Order No.: **0910-00087**

Sample ID: **RIZ-1** Sample No.: **001**

Sample Date: **10/12/2009**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
***4-Bromofluorobenzene	EPA 8260	100	70-130	% R	MQS	10/19/2009
Preparation	EPA 5030B	1.0		CF	MQS	10/19/2009

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Project Name.: **Charbert ICMP**
Project No.: **03.0032795.29**

Date Received: **10/14/2009**
Date Reported: **10/22/2009**
Work Order No.: **0910-00087**

Sample ID: **RIZ-14** Sample No.: **002**
Sample Date: **10/12/2009**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260				MQS	10/19/2009
Dichlorodifluoromethane	EPA 8260	<2.0	2.0	ug/L	MQS	10/19/2009
Chloromethane	EPA 8260	<2.0	2.0	ug/L	MQS	10/19/2009
Vinyl Chloride	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
Bromomethane	EPA 8260	<2.0	2.0	ug/L	MQS	10/19/2009
Chloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
Trichlorofluoromethane	EPA 8260	<2.0	2.0	ug/L	MQS	10/19/2009
Diethylether	EPA 8260	<5.0	5.0	ug/L	MQS	10/19/2009
Acetone	EPA 8260	<25	25	ug/L	MQS	10/19/2009
1,1-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
Dichloromethane	EPA 8260	<2.0	2.0	ug/L	MQS	10/19/2009
Methyl-Tert-Butyl-Ether	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
trans-1,2-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
1,1-Dichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
2-Butanone	EPA 8260	<25	25	ug/L	MQS	10/19/2009
2,2-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
cis-1,2-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
Chloroform	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
Bromochloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
Tetrahydrofuran	EPA 8260	<10	10	ug/L	MQS	10/19/2009
1,1,1-Trichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
1,1-Dichloropropene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
Carbon Tetrachloride	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
1,2-Dichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
Benzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
Trichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
1,2-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
Bromodichloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
Dibromomethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
4-Methyl-2-Pentanone	EPA 8260	<25	25	ug/L	MQS	10/19/2009
cis-1,3-Dichloropropene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
Toluene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
trans-1,3-Dichloropropene	EPA 8260	<2.0	2.0	ug/L	MQS	10/19/2009
1,1,2-Trichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
2-Hexanone	EPA 8260	<25	25	ug/L	MQS	10/19/2009

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Project Name.: **Charbert ICMP**
Project No.: **03.0032795.29**

Date Received: **10/14/2009**
Date Reported: **10/22/2009**
Work Order No.: **0910-00087**

Sample ID: **RIZ-14** Sample No.: **002**

Sample Date: **10/12/2009**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
1,3-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
Tetrachloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
Dibromochloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
1,2-Dibromoethane (EDB)	EPA 8260	<2.0	2.0	ug/L	MQS	10/19/2009
Chlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
1,1,1,2-Tetrachloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
Ethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
m&p-Xylene	EPA 8260	<2.0	2.0	ug/L	MQS	10/19/2009
o-Xylene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
Styrene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
Bromoform	EPA 8260	<2.0	2.0	ug/L	MQS	10/19/2009
Isopropylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
1,1,2,2-Tetrachloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
1,2,3-Trichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
Bromobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
N-Propylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
2-Chlorotoluene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
1,3,5-Trimethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
4-Chlorotoluene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
tert-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
1,2,4-Trimethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
sec-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
p-Isopropyltoluene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
1,3-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
1,4-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
n-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
1,2-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
1,2-Dibromo-3-Chloropropane	EPA 8260	<5.0	5.0	ug/L	MQS	10/19/2009
1,2,4-Trichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
Hexachlorobutadiene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
Naphthalene	EPA 8260	<2.0	2.0	ug/L	MQS	10/19/2009
1,2,3-Trichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
Surrogates:	EPA 8260					
***1,2-Dichloroethane-D4	EPA 8260	93.1	70-130	% R	MQS	10/19/2009
***Toluene-D8	EPA 8260	99.2	70-130	% R	MQS	10/19/2009

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Project Name.: **Charbert ICMP**
Project No.: **03.0032795.29**

Date Received: **10/14/2009**
Date Reported: **10/22/2009**
Work Order No.: **0910-00087**

Sample ID: **RIZ-14** Sample No.: **002**

Sample Date: **10/12/2009**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
***4-Bromofluorobenzene	EPA 8260	95.3	70-130	% R	MQS	10/19/2009
Preparation	EPA 5030B	1.0		CF	MQS	10/19/2009

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Project No.: **03.0032795.29**

Date Received: **10/14/2009**
Date Reported: **10/22/2009**
Work Order No.: **0910-00087**

Sample ID: **RIZ-21** Sample No.: **003**
Sample Date: **10/12/2009**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260				MQS	10/19/2009
Dichlorodifluoromethane	EPA 8260	<2.0	2.0	ug/L	MQS	10/19/2009
Chloromethane	EPA 8260	<2.0	2.0	ug/L	MQS	10/19/2009
Vinyl Chloride	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
Bromomethane	EPA 8260	<2.0	2.0	ug/L	MQS	10/19/2009
Chloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
Trichlorofluoromethane	EPA 8260	<2.0	2.0	ug/L	MQS	10/19/2009
Diethylether	EPA 8260	<5.0	5.0	ug/L	MQS	10/19/2009
Acetone	EPA 8260	<25	25	ug/L	MQS	10/19/2009
1,1-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
Dichloromethane	EPA 8260	<2.0	2.0	ug/L	MQS	10/19/2009
Methyl-Tert-Butyl-Ether	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
trans-1,2-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
1,1-Dichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
2-Butanone	EPA 8260	<25	25	ug/L	MQS	10/19/2009
2,2-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
cis-1,2-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
Chloroform	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
Bromochloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
Tetrahydrofuran	EPA 8260	<10	10	ug/L	MQS	10/19/2009
1,1,1-Trichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
1,1-Dichloropropene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
Carbon Tetrachloride	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
1,2-Dichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
Benzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
Trichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
1,2-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
Bromodichloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
Dibromomethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
4-Methyl-2-Pentanone	EPA 8260	<25	25	ug/L	MQS	10/19/2009
cis-1,3-Dichloropropene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
Toluene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
trans-1,3-Dichloropropene	EPA 8260	<2.0	2.0	ug/L	MQS	10/19/2009
1,1,2-Trichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
2-Hexanone	EPA 8260	<25	25	ug/L	MQS	10/19/2009

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Project No.: **03.0032795.29**

Date Received: **10/14/2009**
Date Reported: **10/22/2009**
Work Order No.: **0910-00087**

Sample ID: **RIZ-21** Sample No.: **003**
Sample Date: **10/12/2009**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
1,3-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
Tetrachloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
Dibromochloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
1,2-Dibromoethane (EDB)	EPA 8260	<2.0	2.0	ug/L	MQS	10/19/2009
Chlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
1,1,1,2-Tetrachloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
Ethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
m&p-Xylene	EPA 8260	<2.0	2.0	ug/L	MQS	10/19/2009
o-Xylene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
Styrene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
Bromoform	EPA 8260	<2.0	2.0	ug/L	MQS	10/19/2009
Isopropylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
1,1,2,2-Tetrachloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
1,2,3-Trichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
Bromobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
N-Propylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
2-Chlorotoluene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
1,3,5-Trimethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
4-Chlorotoluene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
tert-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
1,2,4-Trimethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
sec-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
p-Isopropyltoluene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
1,3-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
1,4-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
n-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
1,2-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
1,2-Dibromo-3-Chloropropane	EPA 8260	<5.0	5.0	ug/L	MQS	10/19/2009
1,2,4-Trichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
Hexachlorobutadiene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
Naphthalene	EPA 8260	<2.0	2.0	ug/L	MQS	10/19/2009
1,2,3-Trichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
Surrogates:	EPA 8260					
***1,2-Dichloroethane-D4	EPA 8260	94.2	70-130	% R	MQS	10/19/2009
***Toluene-D8	EPA 8260	100	70-130	% R	MQS	10/19/2009

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.
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Providence, RI 02903

Stephen Andrus / Angela Harvey

Project Name.: **Charbert ICMP**
Project No.: **03.0032795.29**

Date Received: **10/14/2009**
Date Reported: **10/22/2009**
Work Order No.: **0910-00087**

Sample ID: **RIZ-21** Sample No.: **003**

Sample Date: **10/12/2009**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
***4-Bromofluorobenzene	EPA 8260	95.6	70-130	% R	MQS	10/19/2009
Preparation	EPA 5030B	1.0		CF	MQS	10/19/2009

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ANALYTICAL REPORT

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Project Name.: **Charbert ICMP**
Project No.: **03.0032795.29**

Date Received: **10/14/2009**
Date Reported: **10/22/2009**
Work Order No.: **0910-00087**

Sample ID: **RIZ-100** Sample No.: **004**

Sample Date: **10/12/2009**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260				MQS	10/19/2009
Dichlorodifluoromethane	EPA 8260	<2.0	2.0	ug/L	MQS	10/19/2009
Chloromethane	EPA 8260	<2.0	2.0	ug/L	MQS	10/19/2009
Vinyl Chloride	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
Bromomethane	EPA 8260	<2.0	2.0	ug/L	MQS	10/19/2009
Chloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
Trichlorofluoromethane	EPA 8260	<2.0	2.0	ug/L	MQS	10/19/2009
Diethylether	EPA 8260	<5.0	5.0	ug/L	MQS	10/19/2009
Acetone	EPA 8260	<25	25	ug/L	MQS	10/19/2009
1,1-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
Dichloromethane	EPA 8260	<2.0	2.0	ug/L	MQS	10/19/2009
Methyl-Tert-Butyl-Ether	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
trans-1,2-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
1,1-Dichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
2-Butanone	EPA 8260	<25	25	ug/L	MQS	10/19/2009
2,2-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
cis-1,2-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
Chloroform	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
Bromochloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
Tetrahydrofuran	EPA 8260	<10	10	ug/L	MQS	10/19/2009
1,1,1-Trichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
1,1-Dichloropropene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
Carbon Tetrachloride	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
1,2-Dichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
Benzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
Trichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
1,2-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
Bromodichloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
Dibromomethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
4-Methyl-2-Pentanone	EPA 8260	<25	25	ug/L	MQS	10/19/2009
cis-1,3-Dichloropropene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
Toluene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
trans-1,3-Dichloropropene	EPA 8260	<2.0	2.0	ug/L	MQS	10/19/2009
1,1,2-Trichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
2-Hexanone	EPA 8260	<25	25	ug/L	MQS	10/19/2009

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Stephen Andrus / Angela Harvey
Project Name.: **Charbert ICMP**
Project No.: **03.0032795.29**

Date Received: **10/14/2009**
Date Reported: **10/22/2009**
Work Order No.: **0910-00087**

Sample ID: **RIZ-100** Sample No.: **004**
Sample Date: **10/12/2009**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
1,3-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
Tetrachloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
Dibromochloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
1,2-Dibromoethane (EDB)	EPA 8260	<2.0	2.0	ug/L	MQS	10/19/2009
Chlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
1,1,1,2-Tetrachloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
Ethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
m&p-Xylene	EPA 8260	<2.0	2.0	ug/L	MQS	10/19/2009
o-Xylene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
Styrene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
Bromoform	EPA 8260	<2.0	2.0	ug/L	MQS	10/19/2009
Isopropylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
1,1,2,2-Tetrachloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
1,2,3-Trichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
Bromobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
N-Propylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
2-Chlorotoluene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
1,3,5-Trimethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
4-Chlorotoluene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
tert-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
1,2,4-Trimethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
sec-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
p-Isopropyltoluene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
1,3-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
1,4-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
n-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
1,2-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
1,2-Dibromo-3-Chloropropane	EPA 8260	<5.0	5.0	ug/L	MQS	10/19/2009
1,2,4-Trichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
Hexachlorobutadiene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
Naphthalene	EPA 8260	<2.0	2.0	ug/L	MQS	10/19/2009
1,2,3-Trichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
Surrogates:	EPA 8260					
***1,2-Dichloroethane-D4	EPA 8260	103	70-130	% R	MQS	10/19/2009
***Toluene-D8	EPA 8260	101	70-130	% R	MQS	10/19/2009

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A N A L Y T I C A L R E P O R T

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Stephen Andrus / Angela Harvey

Project Name.: **Charbert ICMP**
Project No.: **03.0032795.29**

Date Received: **10/14/2009**
Date Reported: **10/22/2009**
Work Order No.: **0910-00087**

Sample ID: **RIZ-100** Sample No.: **004**

Sample Date: **10/12/2009**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
***4-Bromofluorobenzene	EPA 8260	99.2	70-130	% R	MQS	10/19/2009
Preparation	EPA 5030B	1.0		CF	MQS	10/19/2009

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Project No.: **03.0032795.29**

Date Received: **10/14/2009**
Date Reported: **10/22/2009**
Work Order No.: **0910-00087**

Sample ID: **GP-22** Sample No.: **005**

Sample Date: **10/12/2009**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260				MQS	10/19/2009
Dichlorodifluoromethane	EPA 8260	<2.0	2.0	ug/L	MQS	10/19/2009
Chloromethane	EPA 8260	<2.0	2.0	ug/L	MQS	10/19/2009
Vinyl Chloride	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
Bromomethane	EPA 8260	<2.0	2.0	ug/L	MQS	10/19/2009
Chloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
Trichlorofluoromethane	EPA 8260	<2.0	2.0	ug/L	MQS	10/19/2009
Diethylether	EPA 8260	<5.0	5.0	ug/L	MQS	10/19/2009
Acetone	EPA 8260	<25	25	ug/L	MQS	10/19/2009
1,1-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
Dichloromethane	EPA 8260	<2.0	2.0	ug/L	MQS	10/19/2009
Methyl-Tert-Butyl-Ether	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
trans-1,2-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
1,1-Dichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
2-Butanone	EPA 8260	<25	25	ug/L	MQS	10/19/2009
2,2-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
cis-1,2-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
Chloroform	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
Bromochloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
Tetrahydrofuran	EPA 8260	<10	10	ug/L	MQS	10/19/2009
1,1,1-Trichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
1,1-Dichloropropene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
Carbon Tetrachloride	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
1,2-Dichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
Benzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
Trichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
1,2-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
Bromodichloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
Dibromomethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
4-Methyl-2-Pentanone	EPA 8260	<25	25	ug/L	MQS	10/19/2009
cis-1,3-Dichloropropene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
Toluene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
trans-1,3-Dichloropropene	EPA 8260	<2.0	2.0	ug/L	MQS	10/19/2009
1,1,2-Trichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
2-Hexanone	EPA 8260	<25	25	ug/L	MQS	10/19/2009

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ANALYTICAL REPORT

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Project Name.: **Charbert ICMP**
Project No.: **03.0032795.29**

Date Received: **10/14/2009**
Date Reported: **10/22/2009**
Work Order No.: **0910-00087**

Sample ID: **GP-22** Sample No.: **005**

Sample Date: **10/12/2009**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
1,3-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
Tetrachloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
Dibromochloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
1,2-Dibromoethane (EDB)	EPA 8260	<2.0	2.0	ug/L	MQS	10/19/2009
Chlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
1,1,1,2-Tetrachloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
Ethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
m&p-Xylene	EPA 8260	<2.0	2.0	ug/L	MQS	10/19/2009
o-Xylene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
Styrene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
Bromoform	EPA 8260	<2.0	2.0	ug/L	MQS	10/19/2009
Isopropylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
1,1,2,2-Tetrachloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
1,2,3-Trichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
Bromobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
N-Propylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
2-Chlorotoluene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
1,3,5-Trimethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
4-Chlorotoluene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
tert-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
1,2,4-Trimethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
sec-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
p-Isopropyltoluene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
1,3-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
1,4-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
n-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
1,2-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
1,2-Dibromo-3-Chloropropane	EPA 8260	<5.0	5.0	ug/L	MQS	10/19/2009
1,2,4-Trichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
Hexachlorobutadiene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
Naphthalene	EPA 8260	<2.0	2.0	ug/L	MQS	10/19/2009
1,2,3-Trichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
Surrogates:	EPA 8260					
***1,2-Dichloroethane-D4	EPA 8260	100	70-130	% R	MQS	10/19/2009
***Toluene-D8	EPA 8260	99.0	70-130	% R	MQS	10/19/2009

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Project Name.: **Charbert ICMP**
Project No.: **03.0032795.29**

Date Received: **10/14/2009**
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Work Order No.: **0910-00087**

Sample ID: **GP-22** Sample No.: **005**

Sample Date: **10/12/2009**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
***4-Bromofluorobenzene	EPA 8260	96.7	70-130	% R	MQS	10/19/2009
Preparation	EPA 5030B	1.0		CF	MQS	10/19/2009

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ANALYTICAL REPORT

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Project Name.: **Charbert ICMP**
Project No.: **03.0032795.29**

Date Received: **10/14/2009**
Date Reported: **10/22/2009**
Work Order No.: **0910-00087**

Sample ID: **GZ-1** Sample No.: **006**

Sample Date: **10/12/2009**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260				MQS	10/19/2009
Dichlorodifluoromethane	EPA 8260	<2.0	2.0	ug/L	MQS	10/19/2009
Chloromethane	EPA 8260	<2.0	2.0	ug/L	MQS	10/19/2009
Vinyl Chloride	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
Bromomethane	EPA 8260	<2.0	2.0	ug/L	MQS	10/19/2009
Chloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
Trichlorofluoromethane	EPA 8260	<2.0	2.0	ug/L	MQS	10/19/2009
Diethylether	EPA 8260	<5.0	5.0	ug/L	MQS	10/19/2009
Acetone	EPA 8260	<25	25	ug/L	MQS	10/19/2009
1,1-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
Dichloromethane	EPA 8260	<2.0	2.0	ug/L	MQS	10/19/2009
Methyl-Tert-Butyl-Ether	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
trans-1,2-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
1,1-Dichloroethane	EPA 8260	2.2	1.0	ug/L	MQS	10/19/2009
2-Butanone	EPA 8260	<25	25	ug/L	MQS	10/19/2009
2,2-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
cis-1,2-Dichloroethene	EPA 8260	49	1.0	ug/L	MQS	10/19/2009
Chloroform	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
Bromochloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
Tetrahydrofuran	EPA 8260	<10	10	ug/L	MQS	10/19/2009
1,1,1-Trichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
1,1-Dichloropropene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
Carbon Tetrachloride	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
1,2-Dichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
Benzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
Trichloroethene	EPA 8260	11	1.0	ug/L	MQS	10/19/2009
1,2-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
Bromodichloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
Dibromomethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
4-Methyl-2-Pentanone	EPA 8260	<25	25	ug/L	MQS	10/19/2009
cis-1,3-Dichloropropene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
Toluene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
trans-1,3-Dichloropropene	EPA 8260	<2.0	2.0	ug/L	MQS	10/19/2009
1,1,2-Trichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
2-Hexanone	EPA 8260	<25	25	ug/L	MQS	10/19/2009

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ANALYTICAL REPORT

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Providence, RI 02903

Stephen Andrus / Angela Harvey

Project Name.: **Charbert ICMP**
Project No.: **03.0032795.29**

Date Received: **10/14/2009**
Date Reported: **10/22/2009**
Work Order No.: **0910-00087**

Sample ID: **GZ-1** Sample No.: **006**

Sample Date: **10/12/2009**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
1,3-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
Tetrachloroethene	EPA 8260	1.8	1.0	ug/L	MQS	10/19/2009
Dibromochloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
1,2-Dibromoethane (EDB)	EPA 8260	<2.0	2.0	ug/L	MQS	10/19/2009
Chlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
1,1,1,2-Tetrachloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
Ethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
m&p-Xylene	EPA 8260	<2.0	2.0	ug/L	MQS	10/19/2009
o-Xylene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
Styrene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
Bromoform	EPA 8260	<2.0	2.0	ug/L	MQS	10/19/2009
Isopropylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
1,1,2,2-Tetrachloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
1,2,3-Trichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
Bromobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
N-Propylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
2-Chlorotoluene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
1,3,5-Trimethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
4-Chlorotoluene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
tert-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
1,2,4-Trimethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
sec-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
p-Isopropyltoluene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
1,3-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
1,4-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
n-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
1,2-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
1,2-Dibromo-3-Chloropropane	EPA 8260	<5.0	5.0	ug/L	MQS	10/19/2009
1,2,4-Trichlorobenzene	EPA 8260	3.4	1.0	ug/L	MQS	10/19/2009
Hexachlorobutadiene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
Naphthalene	EPA 8260	<2.0	2.0	ug/L	MQS	10/19/2009
1,2,3-Trichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/19/2009
Surrogates:	EPA 8260					
***1,2-Dichloroethane-D4	EPA 8260	92.2	70-130	% R	MQS	10/19/2009
***Toluene-D8	EPA 8260	98.8	70-130	% R	MQS	10/19/2009

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A N A L Y T I C A L R E P O R T

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Stephen Andrus / Angela Harvey

Project Name.: **Charbert ICMP**
Project No.: **03.0032795.29**

Date Received: **10/14/2009**
Date Reported: **10/22/2009**
Work Order No.: **0910-00087**

Sample ID: **GZ-1** Sample No.: **006**

Sample Date: **10/12/2009**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
***4-Bromofluorobenzene	EPA 8260	97.6	70-130	% R	MQS	10/19/2009
Preparation	EPA 5030B	1.0		CF	MQS	10/19/2009

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Project No.: **03.0032795.29**

Date Received: **10/14/2009**
Date Reported: **10/22/2009**
Work Order No.: **0910-00087**

Sample ID: **TBLK 101209** Sample No.: **007**

Sample Date: **10/12/2009**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260				MQS	10/20/2009
Dichlorodifluoromethane	EPA 8260	<2.0	2.0	ug/L	MQS	10/20/2009
Chloromethane	EPA 8260	<2.0	2.0	ug/L	MQS	10/20/2009
Vinyl Chloride	EPA 8260	<1.0	1.0	ug/L	MQS	10/20/2009
Bromomethane	EPA 8260	<2.0	2.0	ug/L	MQS	10/20/2009
Chloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/20/2009
Trichlorofluoromethane	EPA 8260	<2.0	2.0	ug/L	MQS	10/20/2009
Diethylether	EPA 8260	<5.0	5.0	ug/L	MQS	10/20/2009
Acetone	EPA 8260	<25	25	ug/L	MQS	10/20/2009
1,1-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	10/20/2009
Dichloromethane	EPA 8260	<2.0	2.0	ug/L	MQS	10/20/2009
Methyl-Tert-Butyl-Ether	EPA 8260	<1.0	1.0	ug/L	MQS	10/20/2009
trans-1,2-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	10/20/2009
1,1-Dichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/20/2009
2-Butanone	EPA 8260	<25	25	ug/L	MQS	10/20/2009
2,2-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	10/20/2009
cis-1,2-Dichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	10/20/2009
Chloroform	EPA 8260	<1.0	1.0	ug/L	MQS	10/20/2009
Bromochloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/20/2009
Tetrahydrofuran	EPA 8260	<10	10	ug/L	MQS	10/20/2009
1,1,1-Trichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/20/2009
1,1-Dichloropropene	EPA 8260	<1.0	1.0	ug/L	MQS	10/20/2009
Carbon Tetrachloride	EPA 8260	<1.0	1.0	ug/L	MQS	10/20/2009
1,2-Dichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/20/2009
Benzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/20/2009
Trichloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	10/20/2009
1,2-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	10/20/2009
Bromodichloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/20/2009
Dibromomethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/20/2009
4-Methyl-2-Pentanone	EPA 8260	<25	25	ug/L	MQS	10/20/2009
cis-1,3-Dichloropropene	EPA 8260	<1.0	1.0	ug/L	MQS	10/20/2009
Toluene	EPA 8260	<1.0	1.0	ug/L	MQS	10/20/2009
trans-1,3-Dichloropropene	EPA 8260	<2.0	2.0	ug/L	MQS	10/20/2009
1,1,2-Trichloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/20/2009
2-Hexanone	EPA 8260	<25	25	ug/L	MQS	10/20/2009

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Project Name.: **Charbert ICMP**
Project No.: **03.0032795.29**

Date Received: **10/14/2009**
Date Reported: **10/22/2009**
Work Order No.: **0910-00087**

Sample ID: **TBLK 101209** Sample No.: **007**

Sample Date: **10/12/2009**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
1,3-Dichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	10/20/2009
Tetrachloroethene	EPA 8260	<1.0	1.0	ug/L	MQS	10/20/2009
Dibromochloromethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/20/2009
1,2-Dibromoethane (EDB)	EPA 8260	<2.0	2.0	ug/L	MQS	10/20/2009
Chlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/20/2009
1,1,1,2-Tetrachloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/20/2009
Ethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/20/2009
m&p-Xylene	EPA 8260	<2.0	2.0	ug/L	MQS	10/20/2009
o-Xylene	EPA 8260	<1.0	1.0	ug/L	MQS	10/20/2009
Styrene	EPA 8260	<1.0	1.0	ug/L	MQS	10/20/2009
Bromoform	EPA 8260	<2.0	2.0	ug/L	MQS	10/20/2009
Isopropylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/20/2009
1,1,2,2-Tetrachloroethane	EPA 8260	<1.0	1.0	ug/L	MQS	10/20/2009
1,2,3-Trichloropropane	EPA 8260	<1.0	1.0	ug/L	MQS	10/20/2009
Bromobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/20/2009
N-Propylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/20/2009
2-Chlorotoluene	EPA 8260	<1.0	1.0	ug/L	MQS	10/20/2009
1,3,5-Trimethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/20/2009
4-Chlorotoluene	EPA 8260	<1.0	1.0	ug/L	MQS	10/20/2009
tert-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/20/2009
1,2,4-Trimethylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/20/2009
sec-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/20/2009
p-Isopropyltoluene	EPA 8260	<1.0	1.0	ug/L	MQS	10/20/2009
1,3-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/20/2009
1,4-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/20/2009
n-Butylbenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/20/2009
1,2-Dichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/20/2009
1,2-Dibromo-3-Chloropropane	EPA 8260	<5.0	5.0	ug/L	MQS	10/20/2009
1,2,4-Trichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/20/2009
Hexachlorobutadiene	EPA 8260	<1.0	1.0	ug/L	MQS	10/20/2009
Naphthalene	EPA 8260	<2.0	2.0	ug/L	MQS	10/20/2009
1,2,3-Trichlorobenzene	EPA 8260	<1.0	1.0	ug/L	MQS	10/20/2009
Surrogates:	EPA 8260					
***1,2-Dichloroethane-D4	EPA 8260	98.1	70-130	% R	MQS	10/20/2009
***Toluene-D8	EPA 8260	101	70-130	% R	MQS	10/20/2009

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Date Received: **10/14/2009**
Date Reported: **10/22/2009**
Work Order No.: **0910-00087**

Sample ID: **TBLK 101209**
Sample No.: **007**
Sample Date: **10/12/2009**

Test Performed	Method	Results	Reporting Limit	Units	Tech	Analysis Date
***4-Bromofluorobenzene	EPA 8260	96.6	70-130	% R	MQS	10/20/2009
Preparation	EPA 5030B	1.0		CF	MQS	10/19/2009

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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:	10/19/09		Date Analyzed:	10/19/09			10/19/09					
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	160	70-130	out	149	70-130	out	7.54	<25	ok
chloromethane	< 1.0	< 1.0	chloromethane	118	70-130	ok	119	70-130	ok	1.04	<25	ok
vinyl chloride	< 0.5	< 0.5	vinyl chloride	119	80-120	ok	116	70-130	ok	2.64	<25	ok
bromomethane	< 1.0	< 1.0	bromomethane	119	70-130	ok	112	70-130	ok	6.36	<25	ok
chloroethane	< 0.5	< 0.5	chloroethane	111	70-130	ok	108	70-130	ok	3.36	<25	ok
trichlorofluoromethane	< 1.0	< 1.0	trichlorofluoromethane	121	70-130	ok	113	70-130	ok	6.35	<25	ok
diethyl ether	< 2.5	< 2.5	diethyl ether	98.9	70-130	ok	98.5	70-130	ok	0.46	<25	ok
acetone	< 13	< 13	acetone	102	70-130	ok	101	70-130	ok	1.03	<25	ok
1,1-dichloroethene	< 0.5	< 0.5	1,1-dichloroethene	106	80-120	ok	102	70-130	ok	3.89	<25	ok
FREON-113	< 1.0	< 1.0	FREON-113	116	70-130	ok	110	70-130	ok	5.37	<25	ok
iodomethane	< 0.5	< 0.5	iodomethane	104	70-130	ok	100	70-130	ok	3.26	<25	ok
carbon disulfide	< 5.0	< 5.0	carbon disulfide	114	70-130	ok	108	70-130	ok	5.62	<25	ok
dichloromethane	< 1.0	< 1.0	dichloromethane	102	70-130	ok	98.0	70-130	ok	3.76	<25	ok
tert-butyl alcohol (TBA)	< 13	< 13	tert-butyl alcohol (TBA)	113	70-130	ok	110	70-130	ok	2.76	<25	ok
acrylonitrile	< 0.5	< 0.5	acrylonitrile	110	70-130	ok	108	70-130	ok	1.33	<25	ok
methyl-tert-butyl-ether	< 0.5	< 0.5	methyl-tert-butyl-ether	111	70-130	ok	107	70-130	ok	3.45	<25	ok
trans-1,2-dichloroethene	< 0.5	< 0.5	trans-1,2-dichloroethene	109	70-130	ok	108	70-130	ok	0.81	<25	ok
1,1-dichloroethane	< 0.5	< 0.5	1,1-dichloroethane	103	70-130	ok	103	70-130	ok	0.13	<25	ok
di-isopropyl ether (DIPE)	< 1.0	< 1.0	di-isopropyl ether (DIPE)	110	70-130	ok	108	70-130	ok	1.50	<25	ok
ethyl tert-butyl ether (EtBE)	< 1.0	< 1.0	ethyl tert-butyl ether (EtBE)	107	70-130	ok	104	70-130	ok	3.39	<25	ok
vinyl acetate	< 13	< 13	vinyl acetate	108	70-130	ok	109	70-130	ok	0.99	<25	ok
2-butanone	< 13	< 13	2-butanone	111	70-130	ok	110	70-130	ok	0.72	<25	ok
2,2-dichloropropane	< 0.5	< 0.5	2,2-dichloropropane	111	70-130	ok	103	70-130	ok	6.87	<25	ok
cis-1,2-dichloroethene	< 0.5	< 0.5	cis-1,2-dichloroethene	96.0	70-130	ok	94.9	70-130	ok	1.13	<25	ok
chloroform	< 0.5	< 0.5	chloroform	101	80-120	ok	98.1	70-130	ok	2.72	<25	ok
bromochloromethane	< 0.5	< 0.5	bromochloromethane	103	70-130	ok	100	70-130	ok	3.14	<25	ok
tetrahydrofuran	< 5.0	< 5.0	tetrahydrofuran	110	70-130	ok	105	70-130	ok	4.78	<25	ok
1,1,1-trichloroethane	< 0.5	< 0.5	1,1,1-trichloroethane	102	70-130	ok	98.5	70-130	ok	3.35	<25	ok
1,1-dichloropropene	< 0.5	< 0.5	1,1-dichloropropene	104	70-130	ok	102	70-130	ok	1.79	<25	ok
carbon tetrachloride	< 0.5	< 0.5	carbon tetrachloride	101	70-130	ok	101	70-130	ok	0.19	<25	ok
1,2-dichloroethane	< 0.5	< 0.5	1,2-dichloroethane	101	70-130	ok	97.3	70-130	ok	3.75	<25	ok
benzene	< 0.5	< 0.5	benzene	104	70-130	ok	103	70-130	ok	1.10	<25	ok
tert-amyl methyl ether (TAME)	< 1.0	< 1.0	tert-amyl methyl ether (TAME)	106	70-130	ok	104	70-130	ok	1.68	<25	ok
trichloroethene	< 0.5	< 0.5	trichloroethene	98.6	70-130	ok	99.2	70-130	ok	0.54	<25	ok
1,2-dichloropropane	< 0.5	< 0.5	1,2-dichloropropane	103	80-120	ok	104	70-130	ok	0.64	<25	ok
bromodichloromethane	< 0.5	< 0.5	bromodichloromethane	99.6	70-130	ok	97.3	70-130	ok	2.34	<25	ok
1,4-Dioxane	< 50	< 50	1,4-Dioxane	109	70-130	ok	107	70-130	ok	2.54	<25	ok
dibromomethane	< 0.5	< 0.5	dibromomethane	94.9	70-130	ok	98.3	70-130	ok	3.51	<25	ok
4-methyl-2-pentanone	< 13	< 13	4-methyl-2-pentanone	112	70-130	ok	109	70-130	ok	2.69	<25	ok
cis-1,3-dichloropropene	< 0.5	< 0.5	cis-1,3-dichloropropene	103	70-130	ok	102	70-130	ok	1.41	<25	ok
toluene	< 0.5	< 0.5	toluene	99.6	80-120	ok	98.3	70-130	ok	1.32	<25	ok
trans-1,3-dichloropropene	< 1.0	< 1.0	trans-1,3-dichloropropene	102	70-130	ok	98.0	70-130	ok	3.68	<25	ok
1,1,2-trichloroethane	< 0.5	< 0.5	1,1,2-trichloroethane	91.3	70-130	ok	93.8	70-130	ok	2.64	<25	ok
2-hexanone	< 13	< 13	2-hexanone	105	70-130	ok	105	70-130	ok	0.11	<25	ok
1,3-dichloropropane	< 0.5	< 0.5	1,3-dichloropropane	97.1	70-130	ok	98.2	70-130	ok	1.13	<25	ok
tetrachloroethene	< 0.5	< 0.5	tetrachloroethene	90.4	70-130	ok	90.5	70-130	ok	0.08	<25	ok
dibromochloromethane	< 0.5	< 0.5	dibromochloromethane	91.2	70-130	ok	91.5	70-130	ok	0.37	<25	ok
1,2-dibromoethane (EDB)	< 1.0	< 1.0	1,2-dibromoethane (EDB)	97.2	70-130	ok	94.8	70-130	ok	2.50	<25	ok
chlorobenzene	< 0.5	< 0.5	chlorobenzene	92.9	70-130	ok	92.5	70-130	ok	0.50	<25	ok
1,1,1,2-tetrachloroethane	< 0.5	< 0.5	1,1,1,2-tetrachloroethane	95.4	70-130	ok	95.2	70-130	ok	0.23	<25	ok
ethylbenzene	< 0.5	< 0.5	ethylbenzene	92.6	80-120	ok	92.9	70-130	ok	0.27	<25	ok
1,1,2,2-tetrachloroethane	< 0.5	< 0.5	1,1,2,2-tetrachloroethane	104	70-130	ok	101	70-130	ok	2.82	<25	ok
m&p-xylene	< 1.0	< 1.0	m&p-xylene	94.8	70-130	ok	94.3	70-130	ok	0.51	<25	ok
o-xylene	< 0.5	< 0.5	o-xylene	98.9	70-130	ok	99.2	70-130	ok	0.29	<25	ok
styrene	< 0.5	< 0.5	styrene	98.9	70-130	ok	98.7	70-130	ok	0.20	<25	ok
bromoform	< 1.0	< 1.0	bromoform	101	70-130	ok	100	70-130	ok	1.24	<25	ok
isopropylbenzene	< 0.5	< 0.5	isopropylbenzene	119	70-130	ok	119	70-130	ok	0.14	<25	ok
1,2,3-trichloropropane	< 0.5	< 0.5	1,2,3-trichloropropane	105	70-130	ok	97.7	70-130	ok	6.76	<25	ok
bromobenzene	< 0.5	< 0.5	bromobenzene	98.2	70-130	ok	96.6	70-130	ok	1.67	<25	ok
n-propylbenzene	< 0.5	< 0.5	n-propylbenzene	107	70-130	ok	106	70-130	ok	0.64	<25	ok
2-chlorotoluene	< 0.5	< 0.5	2-chlorotoluene	101	70-130	ok	99.7	70-130	ok	0.88	<25	ok
1,3,5-trimethylbenzene	< 0.5	< 0.5	1,3,5-trimethylbenzene	105	70-130	ok	103	70-130	ok	1.36	<25	ok
trans-1,4-dichloro-2-butene	< 1.0	< 1.0	trans-1,4-dichloro-2-butene	106	70-130	ok	105	70-130	ok	0.66	<25	ok
4-chlorotoluene	< 0.5	< 0.5	4-chlorotoluene	104	70-130	ok	102	70-130	ok	1.62	<25	ok
tert-butyl-benzene	< 0.5	< 0.5	tert-butyl-benzene	102	70-130	ok	102	70-130	ok	0.44	<25	ok
1,2,4-trimethylbenzene	< 0.5	< 0.5	1,2,4-trimethylbenzene	103	70-130	ok	102	70-130	ok	0.72	<25	ok
sec-butyl-benzene	< 0.5	< 0.5	sec-butyl-benzene	104	70-130	ok	103	70-130	ok	1.29	<25	ok
p-isopropyltoluene	< 0.5	< 0.5	p-isopropyltoluene	104	70-130	ok	103	70-130	ok	0.33	<25	ok
1,3-dichlorobenzene	< 0.5	< 0.5	1,3-dichlorobenzene	96.1	70-130	ok	93.9	70-130	ok	2.29	<25	ok
1,4-dichlorobenzene	< 0.5	< 0.5	1,4-dichlorobenzene	95.6	70-130	ok	96.9	70-130	ok	1.35	<25	ok
n-butylbenzene	< 0.5	< 0.5	n-butylbenzene	107	70-130	ok	107	70-130	ok	0.07	<25	ok
1,2-dichlorobenzene	< 0.5	< 0.5	1,2-dichlorobenzene	98.0	70-130	ok	98.1	70-130	ok	0.01	<25	ok
1,2-dibromo-3-chloropropane	< 2.5	< 2.5	1,2-dibromo-3-chloropropane	107	70-130	ok	102	70-130	ok	5.15	<25	ok
1,3,5-trichlorobenzene	< 0.5	< 0.5	1,3,5-trichlorobenzene	112	70-130	ok	112	70-130	ok	0.16	<25	ok
1,2,4-trichlorobenzene	< 0.5	< 0.5	1,2,4-trichlorobenzene	113	70-130	ok	115	70-130	ok	1.29	<25	ok
hexachlorobutadiene	< 0.5	< 0.5	hexachlorobutadiene	107	70-130	ok	109	70-130	ok	2.04	<25	ok
naphthalene	< 1.0	< 1.0	naphthalene	106	70-130	ok	104	70-130	ok	1.93	<25	ok
1,2,3-trichlorobenzene	< 0.5	< 0.5	1,2,3-trichlorobenzene	114	70-130	ok	114	70-130	ok	0.04	<25	ok

Surrogates:	Recovery (%)	Acceptance Limits	Surrogates:	Recovery (%)	Acceptance Limits	Verdict	Recovery (%)	Acceptance Limits	Verdict	RPD	Acceptance Limits	Verdict
DIBROMOFLUOROMETHANE	101	70-130	DIBROMOFLUOROMETHANE	102	70-130	ok	96.5	70-130	ok	5.17	<25	ok
1,2-DICHLOROETHANE-D4	102	70-130	1,2-DICHLOROETHANE-D4	101	70-130	ok	95.6	70-130	ok	5.05	<25	ok
TOLUENE-D8	102	70-130	TOLUENE-D8	101	70-130	ok	99.1	70-130	ok	2.41	<25	ok
4-BROMOFLUOROBENZENE	93.6	70-130	4-BROMOFLUOROBENZENE	99.3	70-130	ok	97.7	70-130	ok	1.60	<25	ok
1,2-DICHLOROBENZENE-D4	93.9	70-130	1,2-DICHLOROBENZENE-D4	102	70-130	ok	100	70-130	ok	1.31	<25	ok

Instrument: HP GC/MS "S"

CHAIN-OF-CUSTODY RECORD

W.O. # 0910 - 00087 (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 #
RIZ-1	10-12-09 1315	GW			X																							3	
RIZ-14	1020				X																							3	
RIZ-21	0852				X																							3	
RIZ-10c	0857				X																							3	
GP-22	0850				X																							3	
GZ-1	0945				X																							3	
TBLK101209					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)
P McGrady 10/13/09 0932 Bill Brecan

RELINQUISHED BY: (AFFILIATION) DATE/TIME RECEIVED BY: (AFFILIATION)
Bill Brecan 10/13/09 1620 Walden

RELINQUISHED BY: (AFFILIATION) DATE/TIME RECEIVED BY: (AFFILIATION)
WA/GZA 10/14/09 1045

NOTES: (Unless otherwise noted, all samples have been refrigerated to 4° C)
*Specify "Other" preservatives and containers types in this space.

PROJECT MANAGER: Steve Andres EXT:

TURNAROUND TIME: (Standard) Rush___ Days, Approved by ___ LAB USE: 0913 BB TEMP. OF COOLER 4.2 °C Temp Blank ___ Cooler Air ✓

10/14/09

GZA FILE NO: 03.00 32795.29 TASK NO: ___ P.O. NO. ___

PROJECT Chesbrough Perimeter Wells

LOCATION Alton, RI

COLLECTOR(S) EMB / MB SHEET 1 OF 1

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Laboratory Division

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