

PRESTON ROAD WELL INSTALLATION AND GROUNDWATER SAMPLING RESULTS REPORT

Leica, Inc. Site Eggert and Sugar Roads Town of Cheektowaga, Erie County, New York Site ID Number 915156

Prepared for

Leica Inc., c/o Videojet Tech 1500 Mittell Boulevard Wood Dale, IL 60191

and

New York State Department of Environmental Conservation, Region 9 270 Michigan Avenue Buffalo, New York 14203-2999

October 2010



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Paul W. Martell, Jr, LEP Hydrogeologist

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10/13 Date

10/13/10

Date



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1.0 INTRODUCTION

This report presents the results of a limited offsite groundwater investigation that was performed at the former Leica, Inc. Site located at the corner of Eggert and Sugar Roads in Cheektowaga, New York (Inactive Hazardous Waste Disposal Site No. 915156). This investigation was based on the results of previous groundwater sampling events and an offsite vapor intrusion assessment at several residences south of the Leica site. The Site location is shown on Figure 1.

This report describes the activities associated with the installation of five new monitoring wells in the residential neighborhood downgradient of the Leica, Inc. site. Also included are the results of the second quarter groundwater sampling event conducted at the Leica, Inc. site in July 2010 which includes groundwater sample results for these five new monitoring wells.

1.1 Background Information

In a letter dated April 22, 2008, the New York State Department of Environmental Conservation (NYSDEC) expressed concern regarding volatile organic compound (VOC) detections in wells at the south side of the site, up-gradient of a residential neighborhood on Rowan Road. In response to the letter, Energy*Solutions* prepared plans to assess VOC impacts in the area. The NYSDEC recommended vapor intrusion sampling of selected homes on Rowan Road, along with the installation of additional groundwater monitoring wells on the south side of Rowan Road. Sampling plans were prepared and approved by NYSDEC and the New York State Department of Health (NYSDOH) by letter dated January 21, 2009. The indoor air sampling and groundwater monitoring plans were implemented in March of 2009, and a final report dated May 15, 2009 was submitted to the NYSDEC.

Based upon the indoor air results for the Rowan Road residences, and the groundwater sample results for the two new well pairs installed on Rowan Road, the NYSDEC requested additional indoor air sampling of residences on Preston Road, and the installation of additional groundwater monitoring wells on Rowan Road and Preston Road. A Groundwater Monitoring Well Installation and Vapor Intrusion Investigation Work Plan was submitted to the NYSDEC on December 28, 2009. After modification, the Work Plan was approved after modification by the NYSDEC on January 12, 2010. The vapor intrusion sampling was conducted in March 2010 and the results reported to the NYSDEC in September 2010.

The activities associated with the well installation and the subsequent groundwater sampling event are documented below.



1.2 Investigation Objectives

The activities described in this report were designed to fill identified data gaps in the groundwater data. Specifically, the investigation was designed to provide groundwater quality data downgradient of the Leica site. Based on NYSDEC comments, an additional well pair, MW-27, was installed to the west of the MW-26 well pair to delineate the western boundary of the contaminant plume. An additional well pair, MW-28, was installed on Preston Road, downgradient of the MW-26 well pair. An additional bedrock monitoring well, MW-29A, was installed further south along Preston Road, and downgradient from the MW-28 well pair. Locations of the five new monitoring wells are shown on Figure 2.

2.0 FIELD INVESTIGATIONS

This section presents a description of the field activities conducted by Energy*Solutions*. Field activities included the installation of two overburden monitoring wells (MW-27 and MW-28) and three shallow bedrock monitoring wells (MW-27A, MW-28A, and MW-29A), and the collection of a round of quarterly groundwater monitoring samples.

Prior to the monitoring well installation field work, access and approval for each borehole location was secured from the Town of Cheektowaga Town Engineer. Underground utilities were identified and cleared through the Dig Safe New York utility clearance system.

2.1 Borehole Construction and Sampling

During this investigation, five boreholes were advanced and completed as two well pairs and a single well. The first well pair, MW-27 and MW-27A, was installed on the grassy area south of Rowan Road near the corner of Marne Road. The second well pair, MW-28 and MW-28A was installed on the grassy area west of Preston Road, approximately 150 feet south of the intersection with Rowan Road. The single well, MW-29A, was installed approximately 120 feet south of the MW-28 well pair, and also installed in the grassy area west of Preston Road. All wells were installed on the Town of Cheektowaga right-of-way.

The overburden was logged at the three bedrock locations during the installation of the bedrock wells. Borings were advanced using 4.25-inch inside diameter hollow stem augers (HSA). The boreholes were drilled through the unconsolidated materials from ground surface to the top of the bedrock surface at depths of 11.5 feet (MW-27A), 12.5 feet (MW-28A) and 17 feet (MW-29A).

Unconsolidated materials were logged from the ground surface to the top of bedrock. Soil samples were collected using a 4-foot long, 2-inch inside diameter macrocore sampler with disposable acetate liners. Soil lithologies were logged from ground surface to the bedrock surface based on visual evaluation of the soil cores. Soils were described based on appearance according to the Unified Soil Classification Systems (USCS). The soil cores were screened for VOCs using a photo-ionization detector (PID). Results of the PID screening were recorded on the boring log in units of parts per million (ppm). No positive PID readings were encountered and no samples were collected for laboratory analysis. Boring logs with descriptions of materials encountered are included in Appendix A.



Upon reaching the top of bedrock, the HSAs were removed and a temporary steel casing was inserted into the borehole. A 6-inch diameter socket was roller-bitted from 2.5 feet to 3.5 into the bedrock. A 4-inch diameter steel casing was then grouted into place and the temporary casing removed. The grout was allowed to cure a minimum of 24 hours before drilling resumed. After the grout had cured, the bedrock was cored using an NX core (2½-inch outside diameter) barrel. Each core run was 10-foot in length and two core runs (20 feet total) were obtained from each well location. Rock cores were screened with a PID for VOCs. The rock encountered was a limestone and the core was described for bedding appearance, fossil content, presence of vugs, fracture content, orientation and weathering, and for the presence of staining, odor, or other indication of the presence of contamination. The cores were measured for percent recovery of the core, and for the rock quality designation (RQD), an indication of the degree of fracturing within the rock. Cores were photographed for a record of the features encountered. Following coring operations, each borehole was enlarged to a 4-inch diameter using a roller bit. Boring logs with core descriptions are included in Appendix A.

2.2 Overburden Monitoring Well Installation

Two overburden monitoring wells, MW-27 and MW-28, were installed within the unconsolidated sediments. The overburden monitoring wells were installed in a borehole drilled next to the initial boring (completed as a bedrock well). No overburden monitoring well was installed adjacent to the MW-29A bedrock well.

Each well was completed with a 5-foot section of nominal 2-inch diameter, schedule 40, flush threaded PVC with 0.010-inch slotted screen. Solid riser was added to the screen section for the well casing to reach ground surface. The annular space around the screen was filled with #00 silica sand to act as a filter pack around the screen. The sand filter pack was extended approximately 2 feet above the top of the screen. A 2-foot layer of bentonite chips were placed above the sand pack. A bentonite grout slurry was placed above the bentonite chips to approximately 1 foot below grade. All monitoring wells were completed with locking caps and flush-mounted road boxes cemented into place.

Monitoring well MW-27 was installed to a depth of 11.5 feet with a screened interval from 11.5 feet to 6.5 feet below grade. Monitoring well MW-28 was completed to a depth of 12.5 feet with a screened interval from 12.5 feet to 7.5 feet below grade. Well completion details are included on the boring logs included in Appendix A.

2.3 Bedrock Monitoring Well Installation

Three bedrock wells, MW-27A, MW-28A, and MW-29A, were installed following coring operations at each location. Each well was cored to the desired depth and completed as a 4-inch open-hole.

Monitoring wells MW-27A and MW-28A were each completed to a total depth of 35 feet, and MW-29A was completed with a total depth of 40 feet. Well completion details are included on the boring logs included in Appendix A.



2.4 Well Development

The overburden wells were developed using disposable polyethylene bailers, and the bedrock wells were developed using the drilling rig pump. The overburden wells were developed by surging the water column with the bailer to flush fine particles from the sand pack. The bedrock wells were developed by surging the water column with the drill tools to remove fine material from the fractures and open hole of the bedrock.

2.5 Groundwater Sampling

Groundwater samples were collected from the five newly installed monitoring wells as part of the quarterly sampling program for the site. Groundwater samples and elevation measurements were collected beginning on July 2, 2010. Groundwater samples were collected from shallow wells MW-5, MW-6, MW-10, MW-14, MW-16R, MW-18, MW-22, MW-24, MW-25, MW-26, MW-27, and MW-28. Groundwater samples were collected from bedrock wells MW-5A, MW-6A, MW-11A, MW-16A, MW-18A, MW-22A, MW-24A, MW-25A, MW-26A, MW-27A, MW-28A, and MW-29A.

The monitoring wells were purged of a minimum of three well volumes, or until the well went dry, prior to sample collection. Bedrock monitoring wells MW-5A, MW-26A, MW-27A, MW-28A, and MW-29A were all noted to have slow to very slow recharge rates. The shallow monitoring wells were purged using disposable polyethylene bailers and nylon rope, and the bedrock wells were purged using a submersible pump. Samples for both the shallow monitoring wells and the bedrock wells were collected using disposable bailers. Select wells were also analyzed for field water quality using a calibrated field meter. The field water quality parameters included pH, temperature, dissolved oxygen, specific conductance, and oxidation-reduction potential (ORP).

All samples collected were submitted under chain-of-custody to Columbia Analytical Services, Inc., located in Rochester, New York, for VOC analysis using EPA Method 8260. Selected samples were also analyzed for additional parameters designed to assess biological activity as proposed in the HRC injection plan.

2.6 Investigation Derived Waste

Soil cuttings, rock cores, sampling supplies and personal protective equipment (PPE) used or generated during well installation were placed in 55-gallon drums and staged at the Leica Site for characterization and management. Decontamination (decon) water and purge water were collected and containerized in 55-gallon drums and disposed through the on-site groundwater treatment system.

3.0 INVESTIGATION RESULTS

This section of the report describes the results of the field investigation including descriptions of the unconsolidated materials encountered during the well installation and descriptions of the visual properties of the bedrock cores. The results of the quarterly groundwater sampling event, which included the five newly installed monitoring wells, are also discussed.



3.1 Unconsolidated Materials

Unconsolidated materials were logged during the installation of bedrock monitoring wells MW-27A, MW-28A, and MW-29A. In general, the top 1 foot to 4 foot of material encountered consisted of light brown silt and clay. Gray green, light brown, and reddish brown silt, clay, or silt and clay combinations constituted the next 9 to 11 feet. An approximately 1 foot (MW-28A), to 6 foot (MW-29A) section of very fine to fine grained gray sand with varying amounts of silt was encountered at the bottom of each boring. The sand layer was the coarsest layer encountered within the borings. The sand layer was wet and is presumably the main water bearing unit within the unconsolidated materials. The sand layer rested directly on bedrock at MW-27A

MW-28A. An approximately 3 foot section of hard and dense gray till was identified below the sand and on top of the bedrock at MW-29A.

There were no odors, visible staining, or PID detections for any interval within the unconsolidated materials.

3.2 Bedrock

Bedrock encountered was a portion of the Morehouse Member of the Onondoga Limestone Formation. The limestone is light gray to gray, fine grained and mostly massively bedded. Rugose and fan corals, brachiopods and other fossil fragments are present. Dark gray chert nodules are intermittently present throughout. Abundant stylolites (pressure solution surfaces of inorganic solids) are present, some with carbonaceous layers which result in parting within the core. There are traces of vugs (small cavities) and open fractures. Core recoveries for all three locations were 100% with RQDs ranging from 91 to 95 indicating dense and competent rock. Specific details noted for each core are described below.

The core for MW-27A appears to be weathered at the top. There are some open vugs, partially filled with calcite, in the rugose corals. There are also small chert nodules, carbonaceous zones and some parting along the stylolites. Below 18.3 feet, there are several small, near vertical factures at an approximately 75° angle. These fractures are filled with calcite. Additional fractures are present at approximately 23 feet, 27 feet, and 33 feet. None of the visible vugs or fractures were stained or produced any PID detections.

The core for MW-28A is similar in appearance to the core for MW-27A. A near vertical, slightly weather fracture is present at the top of the core at 15 feet. A slightly weathered fracture at an approximately 60° angle is present at 19.2 feet, and small near vertical fracture filled with calcite is present at 24.2 feet. A small open vug at a 60° to 70° angle is present at 21.3 feet. A coral with open vugs was present at 26.3 feet. None of the visible vugs or fractures was stained or produced any PID detections.

The core for MW-29A is similar in appearance to the cores for MW-27A and MW-28A. A weathered open fracture was encountered at 36.5 feet, and a small healed fracture was present at 38.9 feet. A small vug was filled with calcite crystals at 23.6 feet. A large open vug was present with small chert nodules at 31.9 feet, and small vugs in coral were present at 33.9 feet.



The core at MW-29A was significantly different than the cores at MW-27A and MW-28A in that petroleum hydrocarbons were detected. A massive coral with abundant open pore space was identified in the 30.7 foot to 31.7 foot interval. The coral was heavily petroleum stained and had an oily odor. The PID registered a maximum reading of 3.4 parts per million for this interval.

Corals with open porosity, staining and petroleum odors have previously been identified within bedrock at the Leica Site. Bedrock cores include MW-13A (20.6 feet to 21.1 feet) and MW-14A (31.1 feet to 32.0 feet). A fuel oil odor was also reported for the 33.4 foot to 35.0 foot interval in MW-14A. A slight petroleum odor was also noted on the boring log for MW-6A at 26 feet. These reports of petroleum were all recorded at depths of 8 feet to 19 feet below the top of the bedrock surface.

Petroleum hydrocarbons present in the core for MW-29A appear to be naturally occurring. No staining, petroleum odor, or PID detections were present in any interval above or below the affected interval. There do not appear to be any associated fractures that could act as a conduit for the petroleum to reach this depth within the bedrock. Additionally, the impacted interval is approximately 13 feet below the top of the bedrock surface, and is more than 500 feet downgradient from the former disposal area at the Leica site.

Additional evidence suggesting the petroleum hydrocarbons encountered within the core of bedrock monitoring well MW-29A are naturally occurring is also available in New York State Geological Survey reports. According to New York Geological Survey, the Onondoga Limestone produces oil and gas from nearly 200 wells in 12 different counties in western New York ("Unconventional" Oil and Gas Plays of New York State, Microsoft PowerPoint Presentation on the Web, 2008). The hydrocarbons are produced from ancient reef structures characterized by rugose corals, as are present in MW-29A. It is likely that the petroleum hydrocarbons are associated with one of these reef structures and thus are part of a small naturally occurring petroleum reservoir.

3.3 Groundwater

The results of groundwater data collected during the July 2010 sampling event are included in this report. During the sampling event, all wells provided sufficient water for sample collection. The results for the five new groundwater monitoring wells and the results for the existing groundwater monitoring well network are briefly discussed separately below. A more thorough discussion of the results will be included as part of the 2010 annual report.

New Monitoring Wells

No VOCs were detected in the groundwater sample collected from monitoring well MW-27. Cis-1,2-dichloroethylene (DCE) was detected at a concentration of 27 micrograms per liter (μ g/L) in the groundwater sample collected at MW-28.



Chloroform was detected in all three of the newly installed bedrock wells, MW-27A, MW-28A and MW-29A) at concentrations ranging from 7.6 μ g/L to 9.4 μ g/L. The chloroform was likely a residual product of the municipal water used during the installation (coring) of the bedrock wells. Low concentrations of chloroform detected in groundwater samples are typically due to the chlorination of the municipal water supply.

Ethylbenzene at 10 μ g/L and total xylenes at 35 μ g/L were also detected in the groundwater sample collected from MW-29A. These two constituents are typically associated with petroleum releases. It is believed that the ethylbenzene and xylenes are residual hydrocarbons associated with the small naturally occurring petroleum reservoir in the area and were released during the coring conducted during the installation of bedrock monitoring well MW-29A.

Existing Monitoring Wells

No VOCs were detected in the two shallow wells, MW-25 and MW-26, installed as part of the vapor intrusion program on Rowan Road. Vinyl chloride at 14 μ g/L was the only VOC detected in bedrock well MW-25A. DCE and vinyl chloride were detected in bedrock well MW-26A at higher concentrations than in the previous sampling event.

Chlorinated VOC reduction continues to occur in the shallow overburden wells in Area B. VOC concentrations in overburden well MW-18 continue to be non-detect. The chlorinated solvents trichloroethylene (TCE), DCE, and vinyl chloride in MW-16R continue to be non-detect. Chloroethane in MW-16R has been reduced from the previous sampling event, while 1,1-dichloroethane (DCA) concentrations remained the same. Petroleum compounds ethylbenze and total xylenes showed slight increases in concentration from the previous sampling event. DCE and vinyl chloride concentrations in MW-24 continue to show decreases, while the DCA concentration increased slightly from the previous sampling event. Acetone and 2-butanone (methyl ethyl ketone or MEK) are both present in the groundwater samples collected from MW-24. Both of these compounds are believed to be by-products of biologic activity from the HRC injection, and these concentrations are expected to decrease.

Chlorinated VOC reduction also continues to occur in the bedrock well in Area B. TCE, DCE, vinyl chloride, 1,1,1-trichloroethane (TCA), and DCA concentrations all decreased in bedrock well MW-16A. TCE and DCE concentrations in MW-18A showed slight increases from the previous sampling event, while vinyl chloride slightly decreased. DCE, vinyl chloride, and chloroethane concentrations decreased in the groundwater sample collected at MW-24A, while acetone, MEK and DCA all showed slight increases in concentration.

TCE continues to be detected at one location in the shallow overburden at Area C, MW-6 at a concentration of 15 μ g/L. The TCE concentrations have been consistent at this location for many years. VOCs were not detected in groundwater samples collected at MW-5 and at downgradient well MW-22. VOC concentrations were similar to the previous sampling event at MW-6, and showed a decrease in concentrations at MW-10. Downgradient well location MW-14 showed increases for both DCE and vinyl chloride.



VOC concentrations in the groundwater samples collected from the bedrock wells in Area C generally showed little change from the previous sampling event. VOC concentrations in MW-5A, MW-6A and MW-11A showed little change other than an increase in MEK concentrations at MW-5A. DCE and vinyl chloride showed a decrease in concentrations at downgradient well location MW-14A. VOCs were not detected in the groundwater sample collected from MW-22A, also located downgradient of Area C.

Groundwater quality data tables and a groundwater elevation data table for the July sampling event are included in Appendix B. Groundwater contour maps and contaminant concentration isopleth figures are included in Appendix C. Laboratory analytical data for the July 2010 groundwater sampling event is included in Appendix D.

4.0 CONCLUSIONS

Five new monitoring wells were installed as part of this investigation; two within the unconsolidated overburden sediments, and three within the bedrock. The unconsolidated sediments encountered within the boreholes were consistent with sediments in nearby wells, consisting of silt and clay layers overlaying a water-bearing very fine to fine silty sand, which lies on top of bedrock. The bedrock encountered was the Onondaga Limestone which was similar to bedrock described from other locations at the site.

A porous coral zone was encountered within the bedrock at monitoring well MW-29A. The coral zone contained petroleum hydrocarbon staining, had a strong petroleum odor, and registered a reading on the PID meter; however, based on the site-specific evidence, it is apparent that the material is naturally occurring. Published literature suggests that the petroleum may be naturally occurring as the Onondaga produces oil and gas throughout western New York. There is no evidence, such as fracturing or staining, that suggest the petroleum hydrocarbons migrated from a surface release. A similar coral zone was noted in MW-6A, MW-13A and MW-14A with stained coral or petroleum odors at depths of 8 feet to 19 feet into bedrock. Further, the depth of the hydrocarbons within the bedrock, and the distance from the Leica site do not indicate that the Leica site is the source area for the petroleum hydrocarbons.

The groundwater analytical data shows that VOCs are not migrating to the west in the vicinity of Rowan Road as evidenced by non-detects for both the overburden and bedrock groundwater samples collected at the MW-27 well pair. This data provides a clear western boundary to the contaminant plume.

DCE is present in the shallow groundwater aquifer at MW-28 at a concentration of 27 μ g/L, but is not present in the bedrock aquifer at MW-28A. However, DCE was not detected in the shallow groundwater aquifer at MW-26, a location upgradient from MW-28.

Groundwater analytical results for the Area B pumping well, MW-16A show that the HRC injections in Area B have resulted in decreased VOC concentrations in groundwater. Decreases in VOC concentrations for other Area B groundwater samples suggest that groundwater quality in the area is generally improving.



Groundwater analytical results for Area C suggest that VOC concentrations are also declining in this area. Low concentrations of VOCs or non-detects in some samples, especially downgradient of the Area C excavation show that groundwater quality is improving and is becoming less of a threat for vapor intrusion at residential properties south of the Leica site.



APPENDIX A

BORING LOGS AND WELL COMPLETION REPORT



100 Mill Plain Road Danbury, Connecticut Project No.: 137015

Project: Leica

Client: Leica Microsystems

Location: Cheektowaga, New York

Borehole: MW-27

Geologist: P. Martell

Project Manager: R. McPeak

Sheet 1 of 1

		SUBSURFACE PROFILE		SA	١M	PL	E		
Depth	Symbol	Description	Blow Counts	Number	Tvne		Recovery	Vapor	Well Completion Details
		Ground Surface		-					
0	2	Topsoil							* • •
-		SAND and SILT, F, some clay							
2-		SILT , brown to tan, some clay, tr fine sand, little F rounded gravel		1			48	0 PPM	e Grout 7
4-		CLAY dark grav little silt				H			
6-		SILT and CLAY, brown, little F rounded gravel, wet at 8'		2			48	0 ppm	Bentonite Ch
-		CLAV grow groop and silt, wat							
- - 10- - -		SILT, gray-graybrown, some F sand, little clay SAND, gray, fine, some silt, tr clay		3			42	0 ppm	00 Silica Sar
12-		Auger Refusal on Bedrock at 11.5 feet				ī			
14-									
16- -									
18-									
20-									
		Drilled By: Nothnagle Drilling					H	lole Si	ze: 8"
		Drill Method: Hollow Stem Augers					Ľ	rill Da	<i>ite:</i> May 10-11, 2010
							_		



100 Mill Plain Road Danbury, Connecticut Project No.: 137015

Project: Leica

Client: Leica Microsystems

Location: Cheektowaga, New York

Borehole: MW-27A

Geologist: P. Martell

Project Manager: R. McPeak

Sheet 1 of 2

		SUBSURFACE PROFILE		SAN					
Depth	Symbol	Description	Core Run	Recovery %	RQD	PID Reading (ppm)	We	ell Comple Details	etion
0-		Ground Surface							
		For unconsolidated materials, see log for MW-27							
12		4" casing set in rock socket (11.5'-15')							
		NX Core Beginning at 15'					\otimes		\times
16- - - - 18-		LIMESTONE: (Onondoga Formation, Morehouse Member): light gray to gray, fine grained, massively bedded, little coral, fossils, cabonaceous partings, abundant stylolites, tr chert. 15.0' weathered at top (possible rubble) 15.7' rugose coral, calcite lined open vugs below stylolite 15.8'-15.9' coral, fossil fragments, small stylolite 16.0' Parting at stylolite, chert nodules 16.3', 16.7', 17.0', 17.1' stylolites 17.1' small chert nodules						edrock, 15' to 35'-	
		18.3'-18.4' smail, near vertical fracture, filled with calcite ~75° 18 5'-18.6' healed fracture ~75°						∋n be	
20-		19.0'-20.2' stylolite parting at carboniferous material, tr corals and fossils	1	100	94	0		ope	
		Drilled By: Nothnagle Drilling			Hole	Size:	8"		
		Drill Method: Hollow Stem Auger/Coring			Drill	Date:	May 10	-11, 2010	



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100 Mill Plain Road Danbury, Connecticut Project No.: 137015

Project: Leica

Client: Leica Microsystems

Location: Cheektowaga, New York

Geologist: P. Martell

Project Manager: R. McPeak

Borehole: MW-27A

Sheet 2 of 2

		SUBSURFACE PROFILE		SAN			
Depth	Symbol	Description	Core Run	Recovery %	Well Completion Details		
-		20.3'-20.4' stylolites, dark banding, possibly disturbed layer					
22-	<u>-</u>	 21.0' mechanical break, clean surfaces 21.4' parting at stylolite 21.8'-22.5' disturbed layers, slightly fossiliferous, dark color, breaks at carboniferous stylolites, slightly weathered 22.7'-23.7' fracture, very slightly weathered surface, small 2" vertical calcite filled vug 23.1'-23.3' fan corais 					
-		24.0 stylolite					
26-		25.5' carbonaceous parting at stylolite					to 35' -
		26.2' stylolite 26.2'-26.4' dark grav, disturbed, tr fossils, stylolites					10
28-		27.0' parting on carbonaceous stylolite, tr fossils 27.0'-27.4' dark gray, carbonaceous, stylolites, possible small fracture					bedrock
30-		27.4', 27.6', 28.2', 29.4' stylolites	2	100	93	0	Open
-		29.4'-31.2' massive bedding, fan coral @ 30.5'					
- 32 -		31.2'-31.6' disturbed bedding, gray, very fossiliferous					
34-		32.5'-32.7' corals					
36-		32.9'-33.4. stylolites, fossiliferous, small dark gray chert nodules 33.0'-33.7' fractures, ~70°, slightly weathered 34.8' stylolite End of core at 35'					
38-							
40-	-						
		Drilled By: Nothnagle Drilling			Hole	Size	<u> </u>
	,	Drill Method: Hollow Stem Auger/Coring			Drill	Date:	May 10-11, 2010
L						_	



100 Mill Plain Road Danbury, Connecticut Project No.: 137015

Project: Leica

Client: Leica Microsystems

Location: Cheektowaga, New York

Borehole: MW-28

Geologist: P. Martell

Project Manager: R. McPeak

Sheet 1 of 1

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		SUBSURFACE PROFILE		S	٩M	PLE		
Depth	Symbol	Description	Blow Counts	Number	Типе	Recovery	Vapor	Well Completion Details
		Ground Surface						
	{ }	Topsoil SAND and SILT, brown, F, some clay						
2-		SILT, dark brown, some clay, little vf sand, tr vf rounded gravel		1		48	0 PPN	Curb Bo
4-		SILT and CLAY , brown to redbrown, tr vf sand						hips L
6-				2		48	0 ppm	Bentonite C
8-		SILT and CLAY , brown to graybrown, tr vf rounded gravel, wet at 8'				$\left \right $		
10-		SILT, gray, some clay, tr vf sand, wet	i	3		48	0 ppm	00 Silica Sc
12-		SAND, gray, vf-f, some silt, tr fine rounded gravel		4		3	0 ppm	
- - 14 -		Auger Refusal on Bedrock at 12.5 feet						
16- - -								
- 18- - -								
20-								
	1	Drilled By: Nothnagle Drilling					Hole S	ize: 8"
	1	Drill Method: Hollow Stem Augers					Drill Da	a <i>te:</i> May 11, 2010



100 Mill Plain Road Danbury, Connecticut Project No.: 137015

Project: Leica

Client: Leica Microsystems

Location: Cheektowaga, New York

Borehole: MW-28A

Geologist: P. Martell

Project Manager: R. McPeak

Sheet 1 of 2





100 Mill Plain Road Danbury, Connecticut Project No.: 137015

Project: Leica

Client: Leica Microsystems

Location: Cheektowaga, New York

Geologist: P. Martell

Project Manager: R. McPeak

Sheet 2 of 2

		SUBSURFACE PROFILE		SA	VIPL	Ε					
Depth	Symbol	Description	Core Run	Recovery %	RQD	Well Completion Details					
22- 22- 24- 26- 28- 30- 32- 33- 33- 33- 33- 33- 33- 33- 33- 33		 21.3' Yug at 60-70' 21.4-21.6' Fossiliferous, brachlopod fragments 22.2', 23.0', 23.5' stylolites 23.5'-23.7' chert nodule 24.2'-24.3' small vertical fractures, healed, filled w/white mineral (calcite?) 25.0'-26.0' fossiliferous 26.3'-26.4' coral w/vugs 26.3'-26.6' fossiliferous 27.2' small corals 27.2' small corals 28.5'-29.1' disturbed bedding, some fossils, dk gray, parting on carbonaceous area 29.5' corals 31.1'-31.4' fossils, stylolites, parting at stylolite 32.5'-32.7' numerous small, near vetical healed fractures 33.1'-33.6' numerous stylolites 34.0'-34.5' fossiliferous End of Boring at 35' 	2	100	95	0	Open borehole 15' to 35'-				
	Ľ	Drilled By: Nothnagle Drilling			Hole	Size:	8"				
	Ľ	Drill Method: Hollow Stem Auger/Coring	Drill Date: May 11-12, 2010								

Borehole: MW-28A



100 Mill Plain Road Danbury, Connecticut Project No.: 137015

Project: Leica

Client: Leica Microsystems

Location: Cheektowaga, New York

Borehole: B-29

Geologist: P. Martell

Project Manager: R. McPeak

Sheet 1 of 1

		SUBSURFACE PROFILE	SAMPLE						
Depth	Symbol	Description	Blow Counts	Number		adki	Recovery	Vapor	Well Completion Details
0-	_	Ground Surface							
2-		Topsoil SILT and CLAY , light brown, tree roots at 4.5'-5.0', limestone cobble at 3.5' w/small limestone fragments below.		1			48	0	
6-		CLAY, gray, stiff CLAY, some silt, light brown, stiff, tr VF sand SILT, gray green/lt brown mottled, some clay, little F sand, tr VF rounded gravel		2			48	0	well MW-29A
0		SILT, brown, and VF SAND, wet at 7.5', tr clay SAND, VF, and SILT, gray, limestone cobble at 10.2', abundant limestone cobbles and fragments to 12'.		3			48	0	 Boring for bedrock
14		TILL, gray, hard, dense sand, silt and clay		4			48	0	No well installed
				5		L	12	0	
18- - - 20-		Auger Refusal on Bedrock at 17 feet.							
		Drilled By: Nothnagle Drilling					н	lole Si	ze: 8"
		Drill Method: Hollow Stem Augers	Drill Date: May 10, 2010						te: May 10, 2010



100 Mill Plain Road Danbury, Connecticut Project No.: 137015

Project: Leica

Client: Leica Microsystems

Location: Cheektowaga, New York

Borehole: MW-29A

Geologist: P. Martell

Project Manager: R. McPeak

Sheet 1 of 2





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100 Mill Plain Road Danbury, Connecticut

Project No.: 137015

Project: Leica

Client: Leica Microsystems

Location: Cheektowaga, New York

Geologist: P. Martell

Project Manager: R. McPeak

Borehole: MW-29A

Sheet 2 of 2

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		SUBSURFACE PROFILE		SAN	NPL	E			
Depth	Symbol	Description	Core Run	Recovery %	RQD	PID Reading (ppm)	Well Completion Details		
22	┙┶╌┙┙┙┙┙┙┙┙┙┙┙┙┙┙┙┙┙┙┙┙┙┙┙┙┙┙┙┙┙┙┙┙┙┙┙	 LIMESTONE: (Onondoga Formation, Morehouse Member); light gray to gray, fine to massively bedded, fossiliferous in part, little coral, carbonaceous partings, abundant stylolites, little chert 20.0'-21.0' fossiliferous, coral w/some open vugs 21.5'-21.9' fossiliferous 20.3', 21.1', 21.8', 22.9', 23.0' stylolites 22.5' slightly weathered on bedding plane/parting 23.6'-25.0' dark gray, more carbonaceous, vf bedding, vug filled w/calcite crystals, vertical worm burrows at 23.6'-24.1' 25.0'-25.5' dark gray, argillaceous, chert nodule 25.5 stylolite 26.3'-27.0' dark gray, argillaceous, some chert 27.6' stylolite 28.0'-28.5' fossiliferous 28.0'-28.5' fossiliferous 29.1'-29.7' stylolites 	1	100	91	0			
		30.5'-30.6' fossils, disturbed, dark gray and argillaceous, partings at top and bottom, weathered 30.7'-31.7' massive coral, porous, oil odor, heavily petroleum stained				3.4	0' to 40' -		
32-		31.9'-32.0 large open vugs, small chert nodule 32.9' small corals, carbonaceous partings					orehole, 2		
34-		33.9' corals, small vugs, carbonaceous partings 34.0'-34.3' fossiliferous, stylolite parting, slightly weathered	2	100	94	0	Open bc		
36-		35.1' stylolites 35.6'-35.7' slightly carbonaceous, partings 36.5' open fracture, weathered	~			J			
_ 38- _		37.6' stylolite, small chert nodules 38.4' stylolite, carbonaceous parting 38.9' small healed fracture, carbonaceous, massive limestone							
40-		End of boring at 40'							
	Ľ	Drilled By: Nothnagle Drilling			Hole	Size:	8"		
		Drill Method: Hollow Stem Auger/Coring			Drill	Date:	May 10 & 12, 2010		



APPENDIX B

GROUNDWATER MONITORING TABLES



TABLE 1

GROUNDWATER ELEVATION DATA (JULY, 2010)

Table 1 **Groundwater Elevation Data** July 2010

Well	Depth to	Depth to	Top of	Water	Well ID	One Well	Water	Natas
Number	Water (ft.)	Bottom (ft)	PVC Elevation	(ft)	(inches)	voiume (gal)	Elevation (ft)	Notes
M\\/_1	6 72	NM	662 38	NM	2	NA	655.66	
	16.28	25.80	663.48	9.52	4	1.55	647.20	
M\\\/-2	7 42	NM	657.01	NM	2	NA	649.59	
Μ\Λ/_2Δ	7.12	NM	657.02	NM	1	ΝΔ	6/9 58	
MW-2A	7.46	NM	655.94	NM	2	NA	648.48	
MW-4	11.04	NM	655.57	NM	2	NA	644.53	
MW-5	7.42	11.06	654.80	3.64	2	0.59	647.38	
MW-5A	7.34	38.94	654.84	31.60	4	5.15	647.50	Slow recovery
MW-6	12.08	14.80	660.84	2.72	2	0.44	648.76	
MW-6A	13.72	20.62	659.38	6.90	4	1.12	645.66	
MW-7	9.68	NM	658.21	NM	2	NA	648.53	
MW-9		NM	654.99	NM	2	NA	654.99	DRY
MW-9A	7.84	NM	654.67	NM	4	NA	646.83	
MW-10	7.84	10.04	655.48	2.20	2	0.36	647.64	
MW-11A	19.8	35.14	656.6	15.34	6	NA	636.8	Pumping Well
MW-13	5.56	NM	654.66	NM	2	NA	649.10	
MW-13A	6.76	NM	655.13	NM	4	NA	648.37	
MW-14	2.96	10.50	653.38	7.54	2	1.23	650.42	
MW-14A	7.56	33.92	653.70	26.36	4	4.30	646.14	
MW-16R ²	6.52	11.98	660.04	5.46	2	0.89	653.52	
MW-16A	22.66	26.8	659.95	NA	6	NA	637.29	Pumping Well
MW-17A	3.96	NM	659.18	NM	4	NA	655.22	
MW-18	9.16	12.70	662.51	3.54	2	0.58	653.35	
MW-18A	16.02	34.52	662.72	18.50	4	3.02	646.70	
MW-19	8.84	NM	660.84	NM	2	NA	652.00	
MW-20	6.86	NM	659.12	NM	2	NA	652.26	
MW-22	3.70	10.04	652.51	6.34	2	1.03	648.81	
MW-22A	7.60	45.96	654.45	38.36	6	6.25	646.85	
MW-23	5.42	NM	655.99	NM	2	NA	650.57	
MW-24	10.44	13.34	662.74	2.90	2	0.47	652.30	
MW-24A	16.56	34.18	662.85	17.62	4	2.87	646.29	
MW-25	5.16	10.52	653.20	5.36	2	0.87	648.04	
MW-25A	7.32	34.34	653.28	27.02	4	4.40	645.96	
MW-26	6.78	10.94	653.60	4.16	2	0.68	646.82	
MW-26A	7.30	34.40	653.70	27.10	4	4.42	646.40	very slow recovery
MW-27	7.86	10.88	654.68	10.88	2	1.77	646.82	
MW-27A	7.46	34.30	654.81	34.30	4	5.59	647.35	very slow recovery
MW-28	1.74	12.20	653.21	12.20	2	1.99	645.47	
MW-28A	6.62	34.46	652.97	34.46	4	5.62	646.35	Very slow recovery
MW-29A	6.54	39.58	652.99	39.58	4	6.45	646.45	Very slow recovery

Notes

Monitoring well accidently damaged or removed during excavation activities in Area C
 Monitoring well MW-16R installed to replace MW-16

3 NL = Not Located

4 NM = Not Measured

5 NA = Not Available



TABLE 2

QUARTERLY GROUNDWATER DATA (A (WELLS 1-10), B (WELLS 11-14A), C WELLS 15-16R), & D (WELLS 18-29A))

ANALYTE		Method	BAOs	MW-1A										MW-3					
Sample Collection Date:	CAS	Detection	GW	Mar-25-05	June 26-05	Oct-24-05	Jan-05-06	Mar-17-06	July-13-06	May-02-07	Mar-31-08	May-14-08	Jul-30-08	Apr-15-09	Oct-6-09	Jan-14-10	May-02-07	May-14-08	Apr-15-09
Dilution:		Limit	u	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Volatile Organic Compounds (ug/l)								•	•	·		•	·		•				
acetone	67641	20	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
benzene	71432	5.0	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
bromodichloromethane	75274	5.0	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
bromoform	75252	5.0	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
bromomethane	74839	5.0	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-butanone (MEK)	78933	10	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
carbon disulfide	75150	10	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
carbon tetrachloride	56235	5.0	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
chlorobenzene	108907	5.0	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
chloroethane	75003	5.0	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
chloroform	67663	5.0	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
chloromethane	74873	5.0	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
dibromochloromethane	124481	5.0	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-dichloroethane	75343	5.0	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-dichloroethane	107062	5.0	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-dichloroethene	75354	5.0	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-dichloroethene	156592	5.0	5	ND	ND	ND	5.3	ND	ND	ND	ND	ND	ND	ND	ND	8.3	ND	ND	ND
trans-1,2-dichloroethene	156605	5.0	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-dichloropropane	78875	5.0	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,3-dichloropropene	542756	5.0	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,3-dichloropropene	542756	5.0	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
ethylbenzene	100414	5.0	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-hexanone	591786	10	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
methylene chloride	75092	5.0	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-methyl-2-pentanone (MIBK)	108101	10	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
styrene	100425	5.0	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-tetrachloroethane	79345	5.0	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
tetrachloroethene	127184	5.0	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
toluene	108883	5.0	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-trichloroethane	71556	5.0	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-trichloroethane	79005	5.0	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trichloroethene	79016	5.0	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
vinyl chloride	75014	5.0	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
o-xylene	95476	5.0	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
m+p xylene	108383/106423	5.0	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TOTAL VOCs				0	0	0	5.3	0	0	0	0	0	0	0.00	0.00	8.3	0	0	0.00
Percent TCE				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Percent DCE				0	0	0	100%	0	0	0	0	0	0	0	0	100%	0	0	0
Percent VC				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chemistry (mg/L)										MW-1A								MW-3	· · ·
Chloride				NA	NA	NA	NA	NA	NA	NA	69.1	NA	57.3	46.6	99.8	82.1	NA	NA	NA
Ferrous Iron				NA	NA	NA	NA	NA	NA	NA	0.107	NA	<0.100	0.26	0.61	0.41	NA	NA	NA
Nitrate Nitrogen				NA	NA	NA	NA	NA	NA	NA	<0.500	NA	<0.500	0.50 L	J 0.74	0.50 U	NA	NA	NA
Sulfate				NA	NA	NA	NA	NA	NA	NA	36.3	NA	39.1	39.70	41.4	46.7	NA	NA	NA
Total Organic Carbon				NA	NA	NA	NA	NA	NA	NA	3.11	NA	3.00	4.90	5.4	8.1	NA	NA	NA
Ferrous Iron Dissolved				NA	NA	NA	NA	NA	NA	NA	.0.100	NA	0.288	0.28	0.35	0.29	NA	NA	NA
Manganese				NA	NA	NA	NA	NA	NA	NA	0.058	NA	0.0408	66	278	61	NA	NA	NA
Manganese Dissolved				NA	NA	NA	NA	NA	NA	NA	0.066	NA	0.0396	56	201	63	NA	NA	NA
Dissolved Oxygen (DO)				NA	NA	NA	NA	NA	NA	NA	NA	NA	11.32	NA	7.2	17.6	NA	NA	NA
pH				NA	NA	NA	NA	NA	NA	NA	NA	NA	7.29	NA	7.3	7.02	NA	NA	NA
Oxygen Reduction Potential				NA	NA	NA	NA	NA	NA	NA	NA	NA	-53.00	NA	-336.2	5.1	NA	NA	NA

NOTES:

RAOs GW = Remedial Action Objectives for Groundwater

CAS = Chemical Abstract Service registry number

Bold = Exceeds RAOs for groundwater (Not applicable to Treatment System Effluent)

Bold/Shaded = Exceeds Buffalo Sewer Authority Discharge Limits (Groundwater Treatment Effluent Sample only)

ND = Not Detected

E = Exceeds Calibration Range

D = Sample reanalyzed and quantified at higher dilution

Well MW-11 was removed during excavation and is no longer sampled.

Bergin Catissic Dirac CAS Dirac Dirac <thdira< th=""> Dirac <thdirac< th=""></thdirac<></thdira<>	ANALYTE		Method									MW-4							
Date Date <th< td=""><td>Sample Collection Date:</td><td>CAS</td><td>Detection</td><td>RAOs</td><td>Base</td><td>lun-22-00</td><td>Aug-21-00</td><td>Nov-30-00</td><td>Dec-19-01</td><td>Mar-20-02</td><td>lun-25-02</td><td>lan-20-03</td><td>Mar-27-03</td><td>Oct-21-03</td><td>Eeb-05-04</td><td>May-25-04</td><td>Sent-26-04</td><td>Dec-21-04</td><td>March-24-05</td></th<>	Sample Collection Date:	CAS	Detection	RAOs	Base	lun-22-00	Aug-21-00	Nov-30-00	Dec-19-01	Mar-20-02	lun-25-02	lan-20-03	Mar-27-03	Oct-21-03	Eeb-05-04	May-25-04	Sent-26-04	Dec-21-04	March-24-05
Description Description <thdescription< th=""> <thdescription< th=""></thdescription<></thdescription<>	Sample Obliection Date.		Limit	GW	1 000 00	4 00	2.00	2.00	5 00	1 00	5.00	1 or 20	10.00	2.00	2.00	5 00	1 00	5 00	2 50
Control Order Order Order NO	Volatile Organic Compounds (ug/l)	I		1	1,000.00	4.00	2.00	2.00	5.00	1.00	5.00	10120	10.00	2.00	2.00	5.00	1.00	5.00	2.00
Distance 71-92 5.0 - NO	acetone	67641	20	Ι.	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
pice TSP ND	benzene	71432	50	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dispondium TSB2 5.0 - NO ND	bromodichloromethane	75274	5.0	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dummenhame 74693 6.5 · ND	bromoform	75252	5.0	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Shatamon MEK) 7858 10 - ND	bromomethane	74839	5.0	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
carbon discling-include 7616 10 - ND N	2-butanone (MEK)	78933	10	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Headshirde 550 · ND	carbon disulfide	75150	10	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
chlorobersene 108907 5.0 - ND	carbon tetrachloride	56235	5.0	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
chlorederane 7503 5.0 - ND	chlorobenzene	108907	5.0	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
chlardom 6763 5.0 - ND	chloroethane	75003	5.0	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
chloromethane 74873 5.0 · ND	chloroform	67663	5.0	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
disconschlare 124441 5.0 - ND	chloromethane	74873	5.0	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1.1-dbfhroethane 7543 5.0 . ND N	dibromochloromethane	124481	5.0	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1.4-ordentrogename 11/-0/CE 5.0 - NU	1,1-dichloroethane	75343	5.0	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1.1-actinoregenene (7.35)4 5.0 - ND	1,2-dichloroethane	107062	5.0	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cites-1	1,1-dichloroethene	75354	5.0	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans	cis-1,2-dichloroethene	156592	5.0	5	110000	460	280	940	580	190	480	2200	1700	260	310	560	180	330	320
1.2-0entropropente r/887/s 5.0 - ND	trans-1,2-dichloroethene	156605	5.0	5	ND	ND	ND	ND	ND	2.2	ND	26	ND	ND	ND	ND	ND	ND	ND
Cish-1-3ch/information S42/56 S.0 - ND ND <th< td=""><td>1,2-dichloropropane</td><td>/88/5</td><td>5.0</td><td>-</td><td>ND</td><td>ND</td><td>ND</td><td>ND</td><td>ND</td><td>ND</td><td>ND</td><td>ND</td><td>ND</td><td>ND</td><td>ND</td><td>ND</td><td>ND</td><td>ND</td><td>ND</td></th<>	1,2-dichloropropane	/88/5	5.0	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1-3-demotropropene 542/56 5.0 - ND	cis-1,3-dichloropropene	542756	5.0	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
efry/Bergene 100/414 5.0 5 ND	trans-1,3-dichloropropene	542756	5.0	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2+18/and/e 591/26 10 - ND		100414	5.0	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
International (MIBK) OBIO 1 O ND	2-nexanone	591786	10	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hammany-spectraticity (mink) Hos IND ND	A methyl 2 pentenene (MIRK)	75092	5.0	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sylethe 1004-25 5.0 - ND	4-methyl-2-pentanone (MIBK)	100101	10	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1.1.2circlatand/operative 7.3.9-3 3.0 - ND ND <td></td> <td>70245</td> <td>5.0</td> <td>-</td> <td>ND</td> <td>ND</td> <td></td> <td>ND</td> <td>ND</td> <td>ND</td> <td>ND</td> <td>ND</td> <td>ND</td> <td>ND</td> <td>ND</td> <td>ND</td> <td></td> <td>ND</td> <td>ND</td>		70245	5.0	-	ND	ND		ND		ND	ND								
Iteration/definitie 12/164 3.0 · ND	totrachloroothono	19345	5.0	-	ND	ND		ND		ND	ND								
Inductive Inductory Sold of J Sold of J ND	teluene	109992	5.0	5	ND	ND	ND	ND	ND	ND				ND	ND	ND	ND	ND	ND
Instructionate Instr		71556	5.0	5	ND	ND		ND	ND	ND									
Ind ND ND <t< td=""><td></td><td>71550</td><td>5.0</td><td>5</td><td>ND</td><td>ND</td><td></td><td>ND</td><td>ND</td><td>ND</td><td>ND</td><td>ND</td><td>ND</td><td>ND</td><td>ND</td><td>ND</td><td>ND</td><td>ND</td><td>ND</td></t<>		71550	5.0	5	ND	ND		ND	ND	ND									
Inclusion of the field of	trichloroethene	79016	5.0	5	41000	130	200	120	62	24	36	70	ND	ND	20	ND	88	ND	ND
Instruction	vinyl chloride	75010	5.0	5		27	ND	25	ND			340	570	130	100	270	120	220	200
No. No. <td>o-xvlene</td> <td>95476</td> <td>5.0</td> <td>5</td> <td></td> <td></td> <td>ND</td> <td></td> <td></td> <td></td> <td>ND</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>ND</td> <td></td> <td></td>	o-xvlene	95476	5.0	5			ND				ND						ND		
Implyint No ND <		108383/106423	5.0	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Percent TCE O <tho< th=""> O</tho<>	TOTAL VOCs		5.0	Ť	151000	617	480	1085	642	216.2	516	2636	2270	390	430	830	308.8	550	520
Percent DCE Image: Constraint of the system 73% 75% 58% 87% 90% 88% 93% 83% 75% 67% 72% 67% 58% 60% 62% Percent VC 0 0 4% 0 2% 0 0 13% 25% 33% 23% 33% 39% 40% 38% Chemistry (mg/L) Image: Chemistry (mg/L) <	Percent TCE				27%	21%	42%	11%	10%	11%	7%	3%	0	0	5%	0	3%	0	0
Percent VC004%02%0013%25%33%23%33%39%40%38%Chemistry (mg/L)MW-4ChlorideNA <t< td=""><td>Percent DCE</td><td></td><td></td><td></td><td>73%</td><td>75%</td><td>58%</td><td>87%</td><td>90%</td><td>88%</td><td>93%</td><td>83%</td><td>75%</td><td>67%</td><td>72%</td><td>67%</td><td>58%</td><td>60%</td><td>62%</td></t<>	Percent DCE				73%	75%	58%	87%	90%	88%	93%	83%	75%	67%	72%	67%	58%	60%	62%
Chemistry (mg/L)MW-4ChlorideNA<	Percent VC				0	4%	0	2%	0	0	0	13%	25%	33%	23%	33%	39%	40%	38%
Chloride NA	Chemistry (mg/L)											MW-4							
Ferrous Iron NA NA<	Chloride				NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nitrate Nitrogen NA	Ferrous Iron				NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Nitrate Nitrogen				NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sulfate NA	Sulfate		1		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Total Organic Carbon		1		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Ferrous Iron Dissolved		1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Manganese		1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese Dissolved NA	Manganese Dissolved		1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Dissolved Oxygen (DO)		1		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	pH		1		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Oxygen Reduction Potential NA	Coxygen Reduction Potential			1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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Well MW-11 was removed during excavation and is no longer sampled.

ANALYTE		Method				MW-4 Co	nt.						Ν	лw	/-5					
Sample Collection Date:	CAS	Detection	RAOs	June-26-05	Oct-24-05	Jan-4-06	Mar-17-06	Mar-17-0)6	May-02-0	7 May-14-08	Jul-30-08	Apr-15-09	9	- Oct-6-0	9	Jan-14-10	T	Mar-24-10	-
Dilution:		Limit	GW	1 00	2 00	2 00	2 00	2 50		1 00	1 00	1 00	1 00	0	1 00	•	1 00	+	1 00	-
Volatile Organic Compounds (ug/l)		I		1.00	2.00	E.00	2.00	2.00		1.00	1.00	1.00	1.00		1.00		1.00	<u> </u>	1.00	
	67641	20		ND	ND				Γ	ND	ND			Т	ND		ND		ND	-
benzene	71432	5.0		ND	ND	ND	ND	ND		ND	ND	ND	ND		ND		ND	-+-	ND	+
bromodichloromethane	75274	5.0	-	ND	ND	ND	ND	ND		ND	ND	ND	ND		ND		ND	+	ND	-
bromoform	75252	5.0	-	ND	ND	ND	ND	ND		ND	ND	ND	ND		ND		ND	-	ND	-
bromomethane	74839	5.0	-	ND	ND	ND	ND	ND		ND	ND	ND	ND		ND		ND	-	ND	1
2-butanone (MEK)	78933	10	-	ND	ND	ND	ND	ND		ND	ND	ND	ND		ND		ND	-	ND	1
carbon disulfide	75150	10	-	ND	ND	ND	ND	ND		ND	ND	ND	ND		ND		ND	-	ND	
carbon tetrachloride	56235	5.0	-	ND	ND	ND	ND	ND		ND	ND	ND	ND		ND		ND		ND	
chlorobenzene	108907	5.0	-	ND	ND	ND	ND	ND		ND	ND	ND	ND		ND		ND		ND	
chloroethane	75003	5.0	-	ND	ND	ND	ND	ND		ND	ND	ND	ND		ND		ND		ND	
chloroform	67663	5.0	-	ND	ND	ND	ND	ND		ND	ND	ND	ND		ND		ND		ND	
chloromethane	74873	5.0	-	ND	ND	ND	ND	ND		ND	ND	ND	ND		ND		ND		ND	
dibromochloromethane	124481	5.0	-	ND	ND	ND	ND	ND		ND	ND	ND	ND		ND		ND		ND	_
1,1-dichloroethane	75343	5.0	-	ND	ND	ND	ND	ND		ND	ND	ND	ND		ND		ND		ND	_
1,2-dichloroethane	107062	5.0	-	ND	ND	ND	ND	ND		ND	ND	ND	ND		ND		ND	\rightarrow	ND	
1,1-dichloroethene	/5354	5.0	-	ND 70	ND 100	ND	ND F	ND 100	_	ND	ND	ND	ND		ND		ND	\rightarrow	ND	_
cis-1,2-dichloroethene	156592	5.0	5	79	180	320	420 E	420	D	ND	ND	ND	ND		ND		ND	\rightarrow	ND	_
trans-1,2-dichloroethene	156605	5.0	5	ND	ND	ND	ND	ND		ND	ND	ND	ND		ND		ND	\rightarrow	ND	_
	/88/5	5.0	-	ND	ND	ND	ND	ND		ND	ND	ND	ND		ND		ND		ND	+
cis-i,3-dichloropropene	542756	5.0	-	ND	ND	ND	ND	ND		ND	ND	ND	ND		ND		ND		ND	+
athulbonzono	100414	5.0	-		ND		ND				ND						ND	—		-
	501796	5.0	5		ND		ND				ND						ND	—		-
z-nexanone mothylono chlorido	75002	5.0	-	ND	ND		ND	ND		ND	ND	ND	ND		ND		ND		ND	+
4-methyl-2-pentanone (MIBK)	108101	10		ND	ND	ND	ND	ND			ND	ND	ND		ND		ND	-+-	ND	+
styrene	100/07	50		ND	ND	ND	ND	ND		ND	ND	ND	ND		ND		ND	-	ND	-
1 1 2 2-tetrachloroethane	79345	5.0		ND	ND	ND	ND	ND		ND	ND	ND	ND	_	ND		ND	+	ND	-
tetrachloroethene	127184	5.0		ND	ND	ND	ND	ND		ND	ND	ND	ND	_	ND		ND	+	ND	-
toluene	108883	5.0	5	ND	ND	ND	ND	ND		ND	ND	ND	ND		ND		ND	+	ND	+
1 1 1-trichloroethane	71556	5.0	5	ND	ND	ND	ND	ND		ND	ND	ND	ND		ND		ND		ND	1
1.1.2-trichloroethane	79005	5.0	-	ND	ND	ND	ND	ND		ND	ND	ND	ND		ND		ND	-	ND	1
trichloroethene	79016	5.0	5	6.8	ND	ND	ND	ND		ND	ND	ND	ND		ND		ND		ND	1
vinyl chloride	75014	5.0	5	93	190	220	180	170		ND	ND	ND	ND		ND		ND		ND	1
o-xylene	95476	5.0	5	ND	ND	ND	ND	ND		ND	ND	ND	ND		ND		ND	-	ND	
m+p xylene	108383/106423	5.0	5	ND	ND	ND	ND	ND		ND	ND	ND	ND		ND		ND		ND	
TOTAL VOCs				178.8	370	540	600	590		0	0	0	0.00		0.00		0.00		0.00	
Percent TCE				4%	0	0	0	0		0	0	0	0		0		0		0	-
Percent DCE				44%	49%	59%	70%	71%		0	0	0	0		0		0		0	╈
Percent VC				52%	51%	41%	30%	29%		0	0	0	0		0		0	+	0	┢
Chemistry (ma/L)						MW-4 Co	nt.	u ti			· ·		Ň	лŵ	/-5					
Chloride				NΔ	NΔ	ΝΔ	ΝΔ	ΝΔ	1	NΔ	18.1	23.8	37		2	11	4	-	110	-
Ferrous Iron				ΝA	NA	NA	NΔ	NΔ		NΔ	0 174	<0.100	0.1	11	0.1	11	0.1		NA	-
Nitrate Nitrogen			-	NA	NA	NA	NA	NA		NA	<0.500	<0.100	0.1	11	0.88	0	0.1	-	0.5 11	1
Sulfate				NA	NA	NA	NA	NA		NA	38.8	52.9	19.9	-	15		13	+	46.9	
Total Organic Carbon				NA	NA	NA	NA	NA		NA	2 11	2 71	27	\rightarrow	23		26	+	312	
Ferrous Iron Dissolved	1			NA	NA	NA	NA	NA		NA	<0.100	<0.100	0.1	U	0.5	U	0.1	υŤ	11200	
Manganese	1	1	1	NA	NA	NA	NA	NA		NA	0.0476	0.0217	65	-	39	5	22	1	NA	
Manganese Dissolved	İ	İ		NA	NA	NA	NA	NA		NA	< 0.0100	<0.0100	10	U	10		10	+	109	
Dissolved Oxygen (DO)	İ	İ		NA	NA	NA	NA	NA		NA	NA	0.70	NA	-	28.5		15.5	-	NA	
pH			1	NA	NA	NA	NA	NA		NA	NA	8.53	8.53	1	8.29		8.73	+	NA	
Oxygen Beduction Potential		1	1	NA	NA	NA	NA	NA	1	NA	NA	-131.00	-99.00		-207.4		-157.8	-	NA	1.

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Jul-6-10)
1.00	
ND	
ND	
ND	
0.00	
0	
0	
0	
2	
NΔ	
0.5	11
9.8	
3.8	
160	
NA	
33	
33.6	
8.43	
109.7	

ΔΝΔΙ ΥΤΕ		Method					M	N-5 A								MV	V-6			
	CAS	Detection	RAOs	May 00.07	May 14.0		0 Arr 15 00			Max 04 10		D		14	Max 00, 00			1 . 10.01	D. 10.01	14
Sample Collection Date:	040	Limit	GW	May-02-07	May-14-0	18 Jul-30-1	Apr-15-09	Oct-16-05	Jan-14-10	Mar-24-10	Jul-6-10	Ba	se	Mar-29-00	Mar-29-00	Jun-22-00	Mar-27-01	Jun-13-01	Dec-19-01	Mar-20-02
Dilution:				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	10.	.00	1.00	2.50	1.00	1.00	1.00	1.00	1.00
Volatile Organic Compounds (ug/l)										<u> </u>							-			
acetone	67641	20	-	ND	ND	ND	31	85	26	ND	32	N	D	ND	ND	ND	ND	ND	ND	ND
benzene	71432	5.0	-	ND	ND	ND	ND	ND	ND	ND	ND	N	D	ND	ND	ND	ND	ND	ND	ND
bromodichloromethane	75274	5.0	-	ND	ND	ND	ND	ND	ND	ND	ND	N	D	ND	ND	ND	ND	ND	ND	ND
bromoform	75252	5.0	-	ND	ND	ND	ND	ND	ND	ND	ND	N	D	ND	ND	ND	ND	ND	ND	ND
bromometnane	74839	5.0	-	ND	ND	ND	ND 01	ND 01	ND 70	ND 40	ND 100	N	D	ND	ND	ND	ND	ND	ND	ND
2-butarione (MEK)	76933	10	-	ND	ND	ND	24		72	43	120	IN		ND		ND	ND	ND	ND	ND
carbon totrachlorido	56225	5.0	-		ND	ND	ND	ND	ND	ND	ND	IN N	D	ND			ND			ND
chlorobenzene	108907	5.0	-	ND	ND	ND	ND	ND	ND	ND	ND	N	D	ND	ND	ND	ND	ND	ND	ND
chloroethane	75003	5.0	-	ND	ND	ND	ND	ND	ND	ND	ND	N	D	ND	ND	ND	ND	ND	ND	ND
chloroform	67663	5.0	-	ND	ND	ND	ND	ND	ND	ND	ND	N	D	ND	ND	ND	ND	ND	ND	ND
chloromethane	74873	5.0	-	ND	ND	ND	ND	ND	ND	ND	ND	N	D	ND	ND	ND	ND	ND	ND	ND
dibromochloromethane	124481	5.0	-	ND	ND	ND	ND	ND	ND	ND	ND	N	D	ND	ND	ND	ND	ND	ND	ND
1,1-dichloroethane	75343	5.0	-	ND	ND	ND	ND	ND	ND	ND	ND	N	D	ND	ND	ND	ND	ND	ND	ND
1,2-dichloroethane	107062	5.0	-	ND	ND	ND	ND	ND	ND	ND	ND	N	D	ND	ND	ND	ND	ND	ND	ND
1,1-dichloroethene	75354	5.0	-	ND	ND	ND	ND	ND	ND	ND	ND	N	D	ND	ND	ND	ND	ND	ND	ND
cis-1,2-dichloroethene	156592	5.0	5	12	10	9	ND	ND	ND	ND	ND	12	00	450	420	190	48	60	41	44
trans-1,2-dichloroethene	156605	5.0	5	ND	ND	ND	ND	ND	ND	ND	ND	N	D	ND	ND	ND	ND	ND	ND	1.2
1,2-dichloropropane	78875	5.0	-	ND	ND	ND	ND	ND	ND	ND	ND	N	D	ND	ND	ND	ND	ND	ND	ND
cis-1,3-dichloropropene	542756	5.0	-	ND	ND	ND	ND	ND	ND	ND	ND	N	D	ND	ND	ND	ND	ND	ND	ND
trans-1,3-dichloropropene	542756	5.0	-	ND	ND	ND	ND	ND	ND	ND	ND	N	D	ND	ND	ND	ND	ND	ND	ND
ethylbenzene	100414	5.0	5	ND	ND	ND	ND	ND	ND	ND	ND	N	D	ND	ND	ND	ND	ND	ND	ND
2-hexanone	591786	10	-	ND	ND	ND	ND	ND	ND	ND	ND	N	D	ND	ND	ND	ND	ND	ND	ND
methylene chloride	75092	5.0	-	ND	ND	ND	ND	ND	ND	ND	ND	N	D	ND	ND	ND	ND	ND	ND	ND
4-methyl-2-pentanone (MIBK)	108101	10	-	ND	ND	ND	ND	ND	ND	ND	ND	N	D	ND	ND	ND	ND	ND	ND	ND
styrene	100425	5.0	-	ND	ND	ND	ND	ND	ND	ND	ND	N	D	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-tetrachloroethane	79345	5.0	-	ND	ND	ND	ND	ND	ND	ND	ND	N	D	ND	ND	ND	ND	ND	ND	ND
tetrachloroethene	127184	5.0	-	ND	ND	ND	ND	ND	ND	ND	ND	N	D	ND	ND	ND	ND	ND	ND	ND
toluene	108883	5.0	5	ND	ND	ND	ND	ND	ND	ND	ND	N	D	ND	ND	ND	ND	ND	ND	ND
1,1,1-trichloroethane	71556	5.0	5	ND	ND	ND	ND	ND	ND	ND	ND	N	D	ND	ND	ND	ND	ND	ND	ND
1,1,2-trichloroethane	79005	5.0	-	ND	ND	ND	ND	ND	ND	ND	ND	N	D	ND	ND	ND	ND	ND	ND	ND
trichloroethene	79016	5.0	5	ND	ND	ND	ND	ND	ND	ND	ND	N	D	61	63	34	11	18	14	17
vinyl chloride	75014	5.0	5	16	14	9.6	16	18	19	16	7	12	20	ND	ND	ND	ND	ND	ND	ND
o-xylene	95476	5.0	5	ND	ND	ND	ND	ND	ND	ND	ND	N	D	ND	ND	ND	ND	ND	ND	ND
m+p xylene	108383/106423	5.0	5	ND	ND	ND	ND	ND	ND	ND	ND	N	D	ND	ND	ND	ND	ND	ND	ND
TOTAL VOCs				28	24	18.6	71	184	117	59	159	13	20	511	483	224	59	78	55	62.2
Percent TCE				0	0	0	0	0	0	0	0	()	12%	13%	15%	19%	23%	25%	27%
Percent DCE				43%	42%	48%	0	0	0	0	0	91	%	88%	87%	85%	81%	77%	75%	71%
Percent VC				57%	58%	52%	23%	10%	16%	27%	4%	9	%	0	0	0	0	0	0	0
Chemistry (mg/L)							M	N-5A								MV	V-6			
Chloride				NA	115.0	78.6	150	138	126	5.5	96	N	A	NA	NA	NA	NA	NA	NA	NA
Ferrous Iron				NA	<0.100	<0.100	2.67	1.03	1.5	NA	NA	N	A	NA	NA	NA	NA	NA	NA	NA
Nitrate Nitrogen				NA	< 0.500	< 0.500	0.5 l	J 0.5	U 0.5 I	J 0.58	0.5 l	J N	A	NA	NA	NA	NA	NA	NA	NA
Sulfate				NA	89.5	60.0	81.5	55.2	44.9	17.2	8.5	N	A	NA	NA	NA	NA	NA	NA	NA
Total Organic Carbon			_	NA	3.03	17.80	130	280	476	1.9	176	N	A	NA	NA	NA	NA	NA	NA	NA
Ferrous Iron Dissolved				NA	<0.100	<0.100	3.8	0.84	14.9	100 U	12500	N	A	NA	NA	NA	NA	NA	NA	NA
Manganese				NA	0.0932	0.0903	195	512	175	NA	NA	N	A	NA	NA	NA	NA	NA	NA	NA
Manganese Dissolved				NA	0.0735	0.0405	151	502	171	10 U	87	N	A	NA	NA	NA	NA	NA	NA	NA
Dissolved Oxygen (DO)				NA	NA	1.17	NA	11.2	29.8	NA	24.9	N	A	NA	NA	NA	NA	NA	NA	NA
pH				NA	NA	8.68	7.14	6.81	6.82	NA	6.79	N	A	NA	NA	NA	NA	NA	NA	NA
Oxygen Reduction Potential				NA	NA	-124.0	-122.0	-207.4	-90.9	NA	-114.2	N	A	NA	NA	NA	NA	NA	NA	NA

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ANALYTE		Method	RAOs									M۱	W-6 Cont.								
Sample Collection Date:	CAS	Detection	GW	Jun-25-02	Jan-20-03	Mar-27-03	Feb-05-04	May-25-04	Sept-26-04	Dec-21-04	Mar-24-05	Jan-04-06	Mar-17-06	Dec-18-06	May-02-07	May-14-08	Apr-15-09	Oct-6-09	Jan-14-10) Mar-23-10	Jul-6-10
Dilution:		Limit		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Volatile Organic Compounds (ug/l)																					
acetone	67641	20	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
benzene	71432	5.0	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
bromodichloromethane	75274	5.0	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
bromoform	75252	5.0	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
bromomethane	74839	5.0	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-butanone (MEK)	78933	10	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
carbon disulfide	75150	10	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
carbon tetrachloride	56235	5.0	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
chlorobenzene	108907	5.0	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
chloroethane	75003	5.0	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
chloroform	67663	5.0	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
chloromethane	74873	5.0	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
dibromochloromethane	124481	5.0	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-dichloroethane	/5343	5.0	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-dichloroethane	107062	5.0	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	75354	5.0	-	ND 10	ND 50	ND 50		ND	ND 00		ND	ND	ND 100	ND 100	ND 100	ND 100		ND 110	ND 100	100	ND
cis-i,2-dichloroethene	156592	5.0	5	42	53	53	75	89	92	78			120	130	190	120			120	130	120
1.2 diableropropago	100000	5.0	5	ND	ND			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND		ND
	70070	5.0	-					ND	ND		ND	ND	ND	ND	ND	ND	ND		ND		ND
trans 1.2 dichloropropene	542756	5.0	-						ND		ND	ND	ND	ND	ND				ND		ND
athulbonzono	100414	5.0	-					ND	ND		ND	ND	ND	ND	ND				ND		ND
	501786	5.0	5					ND	ND		ND	ND	ND		ND				ND		
mothylono chlorido	75002	5.0	-	ND		ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND
4 mothyl 2 poptanono (MIRK)	108101	10	-	ND		ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND
styrene	100/25	50		ND		ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND
1 1 2 2-tetrachloroethane	70345	5.0		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND
tetrachloroethene	127184	5.0		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND
toluene	108883	5.0	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND
1 1 1-trichloroethane	71556	5.0	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1 1 2-trichloroethane	79005	5.0	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trichloroethene	79016	5.0	5	15	18	16	19	18	19	19	20	20	20	23	22	15	18	21	20	17	15
vinvl chloride	75014	5.0	5	ND	ND	ND	ND	ND	ND	ND	5	6.6	6	7.8	5.8	8.1	13	14	28	28	53
o-xvlene	95476	5.0	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
m+p xvlene	108383/106423	5.0	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TOTAL VOCs			-	57	71	69	94	107	111	97	135	136.6	146	160.8	217.8	143.1	141	145	168	175	188
Barcant TCE				26%	25%	000/	20%	179/	170/	20%	159/	150:0	149/	1.49/	10%	10%	120/	1.49/	100	10%	99/
Percent ICE				20%	25%	23%	20%	1770 920/	17% 92%	20%	13% Q1%	13% 91%	92%	14% 91%	97%	9/9/	72%	76%	71%	7/%	6/%
Percent VC				0	75%	0	00%	03%	03%	00%	0170 //	5%	02%	5%	07 % 3%	6%	70% Q%	10%	17%	16%	28%
Chemistry (mg/L)				0	0	•	•	0	0	0	70	M\	W-6 Cont	070	070	070	570	1070	1770	1070	2070
Chlorido				NIA	NIA	NIA	NIA	NIA	NIA	NIA		NIA		NA	NA	70	0.0	0.0	0.1	74	0.0
Chioride				NA NA	NA NA	NA	NA NA	NA NA	NA NA	NA	NA	NA	NA	INA	NA	7.3	8.0	8.0	8.1	7.4	8.2
Ferrous Iron				NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA	NA	NA	NA	NA	NA	<0.100	0.1 0	0.1 0	0.1		
Rulfata				INA NA												<0.300	0.5 0	0.7	0.0	U U.5 L	106
Suilate				INA NA		NA NA	NA NA				NA NA					6.12	60	56	77	6.6	7.9
				INA NA		NA NA	NA NA				NA NA		NA NA	NA NA		0.12	0.2	0.1	0.1	0.0	7.0
Manganoso				NA NA		NA NA							NA NA	NA NA		0.0307	34	20	115		NA
Manganese Dissolved				ΝΔ	NA	NA	ΝΔ	NA	NA	NA	NA	NA	NA	NA	NA	0.0301	27	13	77	26	56
Dissolved Oxygen (DO)				NΔ	NA	NΔ	NΔ	NΔ	NA	NΔ	NΔ	NA	NA	NA	NA	NA	NΔ	35.5	19.5	<u></u> ΝΔ	37.4
nH				ΝΔ	NA	NA	ΝΔ	NA	NA	NA	NA	NA	NA	NA	NA	ΝΔ	7.04	7 47	7 30		7 37
Oxygen Reduction Potential				NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	-24.0	-178.9	7.4	NA	-21.8

NOTES:

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ND = Not Detected

E = Exceeds Calibration Range

D = Sample reanalyzed and quantified at higher dilution

Well MW-11 was removed during excavation and is no longer sampled.

ANALYTE		Method	PAOs								MW-	-6A (Deep	Well)							
Sample Collection Date:	CAS	Detection	GW	Base	Jun-22-00	Mar-27-01	Jun-13-01	Jun-13-01	Dec-19-01	Mar-20-02	Jun-25-02	Sept-19-02	Jan-20-03	Mar-27-03	Jul-11-03	Oct-21-03	Feb-05-04	May-25-04	Sept-26-04	Dec-21-04
Dilution:		Limit	•	20.00	2.50	5.00	5.00	10.00	5.00	5.00	10.00	5.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Volatile Organic Compounds (ug/l)								•					•				•			
acetone	67641	20	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
benzene	71432	5.0	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
bromodichloromethane	75274	5.0	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
bromoform	75252	5.0	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
bromomethane	74839	5.0	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-butanone (MEK)	78933	10	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
carbon disulfide	75150	10	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
carbon tetrachloride	56235	5.0	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
chlorobenzene	108907	5.0	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
chloroethane	75003	5.0	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
chloroform	67663	5.0	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
chioromethane	/48/3	5.0	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
dibromochioromethane	124481	5.0	-		ND	ND	ND	ND	ND	ND 5.0	ND	ND	ND	ND 10		ND	ND	ND 10	ND	ND
1,1-dichloroothano	107062	5.0	-					ND		5.2 ND			ND			ND	ND		ND	
	75354	5.0	-			ND	ND	ND				ND	ND	ND		ND	ND		ND	
cis-1 2-dichloroethene	156592	5.0	5	3900	380	780	1 400	1400	460	590	930	950	250	410	310	380	350	380	360	370
trans-1 2-dichloroethene	156605	5.0	5	ND	ND	34	40	ND	ND	26	ND	45	11	17	11	19	18	12	12	16
1 2-dichloropropane	78875	5.0	-	ND	ND	ND		ND	ND		ND	ND	ND	ND		ND		ND	ND	
cis-1.3-dichloropropene	542756	5.0	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1 3-dichloropropene	542756	5.0	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
ethylbenzene	100414	5.0	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-hexanone	591786	10	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
methylene chloride	75092	5.0	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-methyl-2-pentanone (MIBK)	108101	10	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
styrene	100425	5.0	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-tetrachloroethane	79345	5.0	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
tetrachloroethene	127184	5.0	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
toluene	108883	5.0	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-trichloroethane	71556	5.0	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-trichloroethane	79005	5.0	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trichloroethene	79016	5.0	5	ND	ND	ND	ND	ND	ND	7.6	ND	ND	ND	19	ND	ND	ND	28	18	16
vinyl chloride	75014	5.0	5	240	ND	230	690	750	230	290	140	820	65	260	92	120	99	96	120	150
o-xylene	95476	5.0	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
m+p xylene	108383/106423	5.0	5	120	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TOTAL VOCs				4260	380	1044	2130	2150	690	918.8	1070	1815	326	718	413	519	467	526	510	552
Percent TCE				0	0	0	0	0	0	1%	0	45%	20%	36%	22%	23%	0	5%	4%	3%
Percent DCE				92%	100%	75%	66%	65%	67%	64%	87%	2%	3%	2%	3%	4%	75%	72%	71%	67%
Percent VC				6%	0	22%	32%	35%	33%	32%	13%	0	0	0	0	0	21%	18%	24%	27%
Chemistry (mg/L)											MW-	-6A (Deep '	Well)							
Chloride				NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ferrous Iron				NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nitrate Nitrogen				NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sulfate				NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Organic Carbon				NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ferrous Iron Dissolved				NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese				NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese Dissolved				NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dissolved Oxygen (DO)				NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
рН				NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Oxygen Reduction Potential				NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

NOTES:

RAOs GW = Remedial Action Objectives for Groundwater

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Bold = Exceeds RAOs for groundwater (Not applicable to Treatment System Efflu

Bold/Shaded = Exceeds Buffalo Sewer Authority Discharge Limits (Groundwater 1

ND = Not Detected

E = Exceeds Calibration Range

D = Sample reanalyzed and quantified at higher dilution

Well MW-11 was removed during excavation and is no longer sampled.

ANALYTE		Method	DAOs									MW-6A (De	eep Well) Co	ont.							
Sample Collection Date:	CAS	Detection	GW	Mar-24-05	Mar-24-05	June 26-05	Oct-24-05	Oct-24-05	Jan-04-06	Mar-17-06	Mar-17-06	July-13-06	Dec-18-06	May-02-07	May-02-07	Nov-14-07	Nov-14-07	May-14-08	Jul-30-08	Apr-15-09	Oct-6-09
Dilution	:	Limit		2.00	2.50	2.50	2.50	5.00	1.00	1.00	5.00	2.50	1.00	1.00	2.50	1.00	2.50	2.50	2.50	1.00	1.00
Volatile Organic Compounds (ug/l)								-			•	•				•			•		
acetone	67641	20	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
benzene	71432	5.0	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
bromodichloromethane	75274	5.0	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
bromoform	75252	5.0	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
bromomethane	74839	5.0	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-butanone (MEK)	78933	10	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
carbon disulfide	75150	10	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
carbon tetrachloride	56235	5.0	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
chlorobenzene	108907	5.0	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
chloroethane	75003	5.0	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
chloroform	67663	5.0	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
chloromethane	74873	5.0	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
dibromochloromethane	124481	5.0	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-dichloroethane	75343	5.0	-	ND	ND	ND	ND	ND	ND	5.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-dichloroethane	107062	5.0	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-dichloroethene	75354	5.0	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-dichloroethene	156592	5.0	5	440	420	390	510	500	91	650 E	580 D	390	140	380 E	360 D	400 E	350 D	380	460	370	110
trans-1,2-dichloroethene	156605	5.0	5	17	20	17	18	ND	ND	17	ND	14	ND	11	ND	11	ND	ND	ND	ND	ND
1,2-dichloropropane	78875	5.0	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,3-dichloropropene	542756	5.0	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,3-dichloropropene	542756	5.0	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
ethylbenzene	100414	5.0	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-hexanone	591786	10	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
methylene chloride	75092	5.0	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-methyl-2-pentanone (MIBK)	108101	10	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
styrene	100425	5.0	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-tetrachloroethane	79345	5.0	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
tetrachloroethene	127184	5.0	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
toluene	108883	5.0	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-trichloroethane	71556	5.0	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-trichloroethane	79005	5.0	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trichloroethene	79016	5.0	5	32	33	ND	ND	ND	ND	21	ND	ND	ND	10	ND	ND	ND	ND	22	ND	ND
vinyl chloride	75014	5.0	5	140	140	96	240	230	23	250 E	220 D	110	47	160	170	280 E	250 D	220	120	350	170
o-xylene	95476	5.0	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
m+p xylene	108383/106423	5.0	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TOTAL VOCs				629	613	503	768	730	114	943.1	800	514	187	561	530	691	600	600	602	720	280
Percent TCE				5%	5%	0	0	0	0	2%	0	0	0	2%	0	0	0	0	4%	0	0
Percent DCE				70%	69%	78%	66%	68%	80%	69%	73%	76%	75%	68%	68%	58%	58%	63%	76%	51%	39%
Percent VC				22%	23%	19%	31%	32%	20%	27%	28%	21%	25%	29%	32%	41%	42%	37%	20%	49%	61%
Chemistry (mg/L)												MW-6A (De	eep Well) Co	ont.							
Chloride				NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.8	51.5	13.2	9.1
Ferrous Iron				NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.412	1.340	2.38	0.39
Nitrate Nitrogen				NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.500	< 0.500	0.50 U	0.85
Sulfate	1			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	125	135	169	95.1
Total Organic Carbon	1			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.36	5.38	11.6	5.6
Ferrous Iron Dissolved	1			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.298	1.050	2.78	0.24
Manganese	1			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0600	0.0944	54	434
Manganese Dissolved	1			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0532	0.1040	104	423
Dissolved Oxvaen (DO)	1 1		1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.67	NA	5.2
н на на на на на на на на на на на на на	1			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.37	7.22	7.36
Oxygen Reduction Potential				NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	-89	-157	-259.6

NOTES:

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Bold/Shaded = Exceeds Buffalo Sewer Authority Discharge Limits (Groundwater 1

ND = Not Detected

E = Exceeds Calibration Range

D = Sample reanalyzed and quantified at higher dilution

Well MW-11 was removed during excavation and is no longer sampled.

ANALYTE		Method	PAO ₂	MW-	6A (Deep V	Vell) (Cont.								MW-7								
Sample Collection Date:	CAS	Detection	GW	Jan-14-1	0 Mar-23-1	0	Jul-6-10	Base	Mar-29-00	Mar-29-00	Jun-13-01	Mar-20-02	Jun-25-02	Jan-20-03	Mar-27-03	Feb-05-04	May-25-04	Sept-26-04	Dec-21-04	Mar-24-05	Jan-4-06	Mar-17-0	6
Dilution:		Limit		1.00	2.50		2.50	10.00	1.00	2.50	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Volatile Organic Compounds (ug/l)						_																	
acetone	67641	20		ND	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		_
henzene	71432	5.0		ND	ND		ND	140	87	ND	ND	ND	ND	ND									
bromodichloromethane	75274	5.0	-	ND	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
bromoform	75252	5.0	-	ND	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
bromomethane	74839	5.0	-	ND	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
2-butanone (MEK)	78933	10	-	ND	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
carbon disulfide	75150	10	-	ND	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
carbon tetrachloride	56235	5.0	-	ND	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
chlorobenzene	108907	5.0	-	ND	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-
chloroethane	75003	5.0	-	ND	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-
chloroform	67663	5.0	-	ND	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
chloromethane	74873	5.0	-	ND	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
dibromochloromethane	124481	5.0	-	ND	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
1,1-dichloroethane	75343	5.0	-	ND	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
1,2-dichloroethane	107062	5.0	-	ND	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
1,1-dichloroethene	75354	5.0	-	ND	ND		ND	ND	ND	ND	ND	7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
cis-1,2-dichloroethene	156592	5.0	5	130	410		380	900	330	310	160	52	23	43	27	25	50	53	54	64	110	100	
trans-1,2-dichloroethene	156605	5.0	5	ND	ND		ND	64	8.6	ND	ND	22	ND	ND	ND	ND	ND	ND	ND	ND	5.4	5.9	
1,2-dichloropropane	78875	5.0	-	ND	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
cis-1,3-dichloropropene	542756	5.0	-	ND	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
trans-1,3-dichloropropene	542756	5.0	-	ND	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
ethylbenzene	100414	5.0	5	ND	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
2-hexanone	591786	10	-	ND	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
methylene chloride	75092	5.0	-	ND	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
4-methyl-2-pentanone (MIBK)	108101	10	-	ND	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
styrene	100425	5.0	-	ND	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
1,1,2,2-tetrachloroethane	79345	5.0	-	ND	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
tetrachloroethene	127184	5.0	-	ND	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
toluene	108883	5.0	5	ND	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
1,1,1-trichloroethane	71556	5.0	5	ND	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
1,1,2-trichloroethane	79005	5.0	-	ND	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
trichloroethene	79016	5.0	5	ND	ND		ND	ND	10	ND	12	12	ND	6.1	5.4	ND	5.6	6.4	6	6.5	5	ND	
vinyl chloride	75014	5.0	5	51	280		360	1600	7.8	ND	ND	56	ND	ND	ND	ND	8	11	8	11	17	13	
o-xylene	95476	5.0	5	ND	ND		ND	ND	19	18	ND	ND	ND	ND	ND								
m+p xylene	108383/106423	5.0	5	ND	ND		ND	ND	29	29	ND	ND	ND	ND	ND								
TOTAL VOCs				181	690		740	2704	743.1	357	172	149	23	49.1	32.4	25	63.6	70.4	68	81.5	137.4	118.9	
Percent TCE				0	0		0	0	1%	0	7%	8%	0	12%	17%	0	9%	9%	9%	8%	4%	0	
Percent DCE				72%	59%		51%	33%	44%	87%	93%	35%	100%	88%	83%	100%	79%	75%	79%	79%	80%	84%	
Percent VC				28%	41%		49%	59%	1%	0	0	38%	0	0	0	0	13%	16%	12%	13%	12%	11%	
Chemistry (mg/L)				MW-	6A (Deep V	Vell) (Cont.								MW-7								
Chloride				6.4	9.5		11.7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Ferrous Iron				0.25	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Nitrate Nitrogen				0.50	U 0.50		0.50 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Sulfate				56.7	117.0		67.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Total Organic Carbon				3.4	6.1		5.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Ferrous Iron Dissolved				0.10	3.55		230	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Manganese				206	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Manganese Dissolved				96	86		103	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Dissolved Oxygen (DO)				16.3	NA		21.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
pH				7.68	NA		7.40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Oxygen Reduction Potential				11.5	NA		-63.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	

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Well MW-11 was removed during excavation and is no longer sampled.

ANALYTE		Method	PAOs.										MW-10									
Sample Collection Date:	CAS	Detection	GW	Base	Mar-27-01 ¹	Jun-13-01	Jun-13-01	Dec-19-01	Mar-20-02	Mar-20-02	Jun-25-02	Jan-20-03	Mar-27-03	Oct-21-03	Oct-21-03	Feb-05-04	May-25-04	Sept-26-04	Dec-21-04	Mar-24-05	June-26-05	Oct-23-05
Dilution:		Limit	un	100.0	50.00	2.00	10.00	1.00	1.00	2.00	1.00	2.00	2.00	2.00	10.00	5.00	5.00	2.00	2.50	2.50	5.00	2.50
Volatile Organic Compounds (ug/l)								•	•	•			•		•		•					
acetone	67641	20	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
benzene	71432	5.0	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
bromodichloromethane	75274	5.0	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
bromoform	75252	5.0	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
bromomethane	74839	5.0	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-butanone (MEK)	78933	10	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
carbon disulfide	75150	10	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
carbon tetrachloride	56235	5.0	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
chlorobenzene	108907	5.0	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
chloroethane	75003	5.0	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
chloroform	67663	5.0	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
chloromethane	74873	5.0	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
dibromochloromethane	124481	5.0	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-dichloroethane	75343	5.0	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-dichloroethane	107062	5.0	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-dichloroethene	75354	5.0	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-dichloroethene	156592	5.0	5	16000	6300	450	460	96	220	220	160	210	360	1,500	1600	850	540	130	300	270	760	320
trans-1,2-dichloroethene	156605	5.0	5	ND	ND	ND	ND	ND	2.8	2.7	ND	ND	ND	13	ND	ND	ND	12	ND	14	ND	ND
1,2-dichloropropane	78875	5.0	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,3-dichloropropene	542756	5.0	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,3-dichloropropene	542756	5.0	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
ethylbenzene	100414	5.0	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-hexanone	591786	10	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
methylene chloride	75092	5.0	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-methyl-2-pentanone (MIBK)	108101	10	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
styrene	100425	5.0	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-tetrachloroethane	79345	5.0	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
tetrachloroethene	127184	5.0	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
toluene	108883	5.0	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-trichloroethane	71556	5.0	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-trichloroethane	79005	5.0	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trichloroethene	79016	5.0	5	ND	1500	460	470	30	47	48	57	78	130	ND	ND	ND	ND	ND	ND	ND	ND	ND
vinyl chloride	75014	5.0	5	5800	ND	27	ND	ND	ND	ND	ND	ND	21	110	110	480	420	270	150	360	750	150
o-xylene	95476	5.0	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
m+p xylene	108383/106423	5.0	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TOTAL VOCs				21800	7800	937	930	126	269.8	270.7	217	288	511	1623	1710	1330	960	412	450	644	1510	470
Percent TCE				0	19%	49%	51%	24%	17%	18%	26%	27%	25%	0	0	0	0	0	0	0	0	0
Percent DCE				73%	81%	48%	49%	76%	82%	81%	74%	73%	70%	92%	94%	64%	56%	32%	67%	42%	50%	68%
Percent VC				27%	0	3%	0	0	0	0	0	0	4%	7%	6%	36%	44%	66%	33%	56%	50%	32%
Chemistry (mg/L)													MW-10									
Chlorido				NIA	NA	NIA	NA	NA	NA	NA	NA	NA		NA	NIA	NIA	NIA	NA	ΝΑ	NIA	ΝΑ	NIA
				NA NA	INA NA	NA NA	INA NA	NA NA	INA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
Nitrata Nitragon				NA NA	INA NA	NA NA	INA NA	NA NA	INA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
Nitrate Nitrogen					INA NA								NA NA			NA NA	INA NA					
Juliale Total Organia Carbon					INA NA				NA NA													
				INA NA	INA NA	INA NA	NA NA	NA NA	INA NA	NA NA	INA NA	INA NA	NA NA	INA NA	NA NA	NA NA	INA NA	INA NA	INA NA	INA NA	INA NA	INA NA
rerrous iron Dissolved				NA	NA	NA	NA	NA	NA NA	NA NA	NA	NA	NA	NA NA	NA	NA	NA NA	NA	NA	NA NA	NA	NA NA
Manganese				INA NA	INA NA	INA NA	NA NA	NA NA	INA NA	NA NA	INA NA	NA NA	NA NA	INA NA	NA NA	INA NA	INA NA	INA NA	INA NA	INA NA	INA NA	INA NA
Manganese Dissolved				NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dissolved Oxygen (DO)				NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
рн				NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Oxygen Reduction Potential				NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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Well MW-11 was removed during excavation and is no longer sampled.

ANALYTE		Method	PAOs.									N	/W-10 co	ont.									
Sample Collection Date:	CAS	Detection	GW	Jan-04-0	6	Jan-04-06	Mar-17-0)6	Mar-17-0	6	Dec-18-06	6	May-02-07	7	Nov-14-07		May-14-08	Apr-1	5-09	Oct-6	-09	Jul-6	j-10
Dilution:		Limit	u	1.00		2.00	2.00		2.50		2.00		1.00		1.00		1.00	. 1.0	00	2.0	0	1.0	0
Volatile Organic Compounds (ug/l)		1					•													-			
acetone	67641	20	-	ND		ND	ND		ND		ND		ND		ND		ND	150		160		46	
benzene	71432	5.0	-	ND		ND	ND		ND		ND		ND		ND		ND	ND		ND		ND	
bromodichloromethane	75274	5.0	-	ND		ND	ND		ND		ND		ND		ND		ND	ND		ND		ND	
bromoform	75252	5.0	-	ND		ND	ND		ND		ND		ND		ND		ND	ND		ND		ND	
bromomethane	74839	5.0	-	ND		ND	ND		ND		ND		ND		ND		ND	ND		ND		ND	
2-butanone (MEK)	78933	10	-	ND		ND	ND		ND		ND		ND		ND		ND	180		270		110	
carbon disulfide	75150	10	-	ND		ND	ND		ND		ND		ND		ND		ND	ND		ND		ND	
carbon tetrachloride	56235	5.0	-	ND		ND	ND		ND		ND		ND		ND		ND	ND		ND		ND	
chlorobenzene	108907	5.0	-	ND		ND	ND		ND		ND		ND		ND		ND	ND		ND		ND	
chloroethane	75003	5.0	-	ND		ND	ND		ND		ND		ND		ND		ND	ND		ND		ND	
chloroform	67663	5.0	-	ND		ND	ND		ND		ND		ND		ND		ND	ND		ND		ND	
chloromethane	74873	5.0	-	ND		ND	ND		ND		ND		ND		ND		ND	ND		ND		ND	
dibromochloromethane	124481	5.0	-	ND		ND	ND		ND		ND		ND		ND		ND	ND		ND		ND	
1,1-dichloroethane	75343	5.0	-	ND		ND	ND		ND		ND		ND		ND		ND	ND		ND		ND	
1,2-dichloroethane	107062	5.0	-	ND		ND	ND		ND		ND		ND		ND		ND	ND		ND		ND	
1,1-dichloroethene	75354	5.0	-	ND		ND	ND		ND		ND		ND		ND		ND	ND		ND		ND	
cis-1,2-dichloroethene	156592	5.0	5	210	Е	200	270		260		220		160		110		190	120		ND		9.5	
trans-1,2-dichloroethene	156605	5.0	5	7.8		ND	ND		ND		ND		ND		ND		ND	ND		ND		ND	
1,2-dichloropropane	78875	5.0	-	ND		ND	ND		ND		ND		ND		ND		ND	ND		ND		ND	
cis-1,3-dichloropropene	542756	5.0	-	ND		ND	ND		ND		ND		ND		ND		ND	ND		ND		ND	
trans-1,3-dichloropropene	542756	5.0	-	ND		ND	ND		ND		ND		ND		ND		ND	ND		ND		ND	
ethylbenzene	100414	5.0	5	ND		ND	ND		ND		ND		ND		ND		ND	ND		ND		ND	
2-hexanone	591786	10	-	ND		ND	ND		ND		ND		ND		ND		ND	ND		ND		ND	
methylene chloride	75092	5.0	-	ND		ND	ND		ND		ND		ND		ND		ND	ND		ND		ND	
4-methyl-2-pentanone (MIBK)	108101	10	-	ND		ND	ND		ND		ND		ND		ND		ND	ND		ND		ND	
styrene	100425	5.0	-	ND		ND	ND		ND		ND		ND		ND		ND	ND		ND		ND	
1,1,2,2-tetrachloroethane	79345	5.0	-	ND		ND	ND		ND		ND		ND		ND		ND	ND		ND		ND	
tetrachloroethene	127184	5.0	-	ND		ND	ND		ND		ND		ND		ND		ND	ND		ND		ND	
toluene	108883	5.0	5	ND		ND	ND		ND		ND		ND		ND		ND	ND		ND		ND	
1.1.1-trichloroethane	71556	5.0	5	ND		ND	ND		ND		ND		ND		ND		ND	ND		ND		ND	
1.1.2-trichloroethane	79005	5.0	-	ND		ND	ND		ND		ND		ND		ND		ND	ND		ND		ND	
trichloroethene	79016	5.0	5	ND		ND	ND		ND		ND		ND		ND		ND	ND		ND		ND	
vinvl chloride	75014	5.0	5	140		140	430	E	430	D	72		71		38		73	38		ND		24	
o-xylene	95476	5.0	5	ND		ND	ND	_	ND	_	ND		ND		ND		ND	ND		ND		ND	
m+p xvlene	108383/106423	5.0	5	ND		ND	ND		ND		ND		ND		ND		ND	ND		ND		ND	
	100000,100120	0.0	-	357.8		340	700		690		292		231		148		263	488		430		190	
Percent TCF				0	_	0+0	0		0		0	_	0		0		0	400		400		0	_
Percent DCF				59%		59%	39%		38%		75%	-	69%	-	74%		72%	25%		0		5%	
Percent VC				39%		41%	61%		62%		25%		31%		26%		28%	8%	<u> </u>	0		13%	
Chemistry (ma/L)												N	/W-10 co	ont.									
Chlorido				NIA	1	NIA	NIA		NIA		NIA	-	NIA		NA	-	NA	NIA		NIA		22.5	
Entrope Irop					_							\rightarrow		-		+					_	55.5	
Nitrata Nitragan					_							\rightarrow		-		+		INA NA			_		
Nitrate Nitrogen					_				INA NA		INA NA	+	INA NA	+		+		INA NA		INA NA	_	0.5	
Juliale					_							\rightarrow		_		+		INA NA			_	4.1	
					_		INA NA	\vdash	INA NA		INA NA	+	INA NA	+		+		INA NA		INA NA	+	152	
rerrous Iron Dissolved				INA NA		NA NA	NA NA		INA NA		INA NA	+	INA NA	\rightarrow	NA NA	+		NA NA	_	NA NA	+	2510	
manganese				INA		NA NA	INA NA		INA		INA	+	INA	\rightarrow	INA NA	_	NA NA	NA NA		NA NA	_	NA 00	
Manganese Dissolved				NA		NA	NA		NA NA		NA	+	NA	\rightarrow	NA	+	NA	NA		NA	_	30	
Dissolved Oxygen (DO)				NA		NA	NA		NA NA		NA	+	NA	\rightarrow	NA	+	NA	NA		NA	_	NA	
pH Owners Badaatian Bataatiat				NA NA		NA	NA NA	$\left \right $	NA NA		NA	+	NA	-+	NA	+	NA	NA NA		NA	+	NA	
IUXVOEN REQUCTION POTENTIAL		1		NA NA		INA	INA INA		INA		INA		NA		INA		INA I	i ina	1	I NA	1	NA	

NOTES:

RAOs GW = Remedial Action Objectives for Groundwater

CAS = Chemical Abstract Service registry number

Bold = Exceeds RAOs for groundwater (Not applicable to Treatment System Efflue

Bold/Shaded = Exceeds Buffalo Sewer Authority Discharge Limits (Groundwater 1

ND = Not Detected

E = Exceeds Calibration Range

D = Sample reanalyzed and quantified at higher dilution

Well MW-11 was removed during excavation and is no longer sampled.
ANALYTE		Method	MW-11 (Well removed during excavation on May 18, 2003) RAOs GW Jun-22-00 Aug-21-00 Mov-30-00 Mar-27-01 ¹ Jun-13-01 Dec-19-01 Mar-20-02 Jun-25-02 Jan-20-03 Mar-27-03 Mar-27-03															MW-11A ((Deep Well)	1			
Sample Collection Date:	CAS	Detection	RAOs GW	Jun-22-00	Aug-21-00	Nov-30-00	Mar-27-01 ¹	Jun-13-01	Dec-19-01	Mar-20-02	Jun-25-02	Jan-20-03	Mar-27-03	Mar-29-00	Jun-22-00	Nov-30-00	Mar-27-01	Jun-13-01	Sep-28-01	Dec-19-01	Mar-20-02	Jun-25-02	Sept-19-02
Dilution:		Limit		5or20	10.00	2.50	10.00	10.00	5.00	10.00	2.00	20.00	25.00	100.00	25.00	10.00	10.00	10.00	5.00	5.00	5.00	5.00	2.50
Volatile Organic Compounds (ug/l)							•				•				•								•
acetone	67641	20	-	110	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
benzene	71432	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
bromodichloromethane	75274	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
bromoform	75252	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
bromomethane	74839	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-butanone (MEK)	78933	10	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
carbon disulfide	75150	10	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
carbon tetrachloride	56235	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
chlorobenzene	108907	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
chloroethane	75003	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
chloroform	67663	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
chloromethane	74873	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
dibromochloromethane	124481	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-dichloroethane	75343	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-dichloroethane	107062	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-dichloroethene	/5354	5	-	ND 1999	ND 500	ND	ND 450	ND 1999	ND	ND	ND	ND	ND	ND 10000	ND	ND	ND	ND 1000	ND	ND	ND	ND	ND
cis-1,2-dicnioroethene	156592	5	5	1200	500	440	450	1300	900	990	300	2900	4200	13000	3000	1400	1100	1000	600	830	610	420	250
trans-1,2-dichloroethene	156605	5	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	19	ND	ND
	/ 66/ 3 E407E6	5	-	ND	ND	ND	ND	ND	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND
trans 1.2 dichloropropono	542756	5	-	ND	ND	ND	ND		ND		ND				ND	ND	ND	ND	ND		ND		ND
ethylbenzene	100/1/	5	- 5	ND	ND	ND	ND		ND		ND	ND	ND	ND	ND	ND	ND	ND	ND		ND		ND
2-bevanone	591786	10	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
methylene chloride	75092	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-methyl-2-pentanone (MIBK)	108101	10	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
styrene	100425	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-tetrachloroethane	79345	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
tetrachloroethene	127184	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
toluene	108883	5	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-trichloroethane	71556	5	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-trichloroethane	79005	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trichloroethene	79016	5	5	2100	1200	260	990	1200	140	130	51	ND	ND	ND	ND	72	ND	ND	ND	ND	ND	ND	ND
vinyl chloride	75014	5	5	ND	ND	21	ND	ND	140	ND	10	ND	150	9000	1800	960	660	1000	580	820	820	580	340
o-xylene	95476	5	5	28	ND	ND	ND	ND	140	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
m+p xylene	108383/106423	5	5	27	ND	ND	ND	ND	140	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TOTAL VOCs				3465	1700	721	1440	2500	1460	1120	361	2900	4350	22000	4800	2432	1760	2000	1180	1650	1449	1000	590
Percent TCE				61%	71%	36%	69%	48%	10%	12%	14%	0	0	0	0	3%	0	0	0	0	0	0	0
Percent DCE				35%	29%	61%	31%	52%	62%	88%	83%	100%	97%	59%	63%	58%	63%	50%	51%	50%	42%	42%	42%
Percent VC				0	0	3%	0	0	10%	0	3%	0	3%	41%	38%	39%	38%	50%	49%	50%	57%	58%	58%
Chemisrty (mg/L)						MW-11 (Well remo	ved during	g excavatio	n on May 1	18, 2003)							MW-11A ((Deep Well))			
Chloride				NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ferrous Iron				NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nitrate Nitrogen				NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sulfate				NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Organic Carbon				NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ferrous Iron Dissolved				NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese	_			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese Dissolved				NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dissolved Oxygen (DO)				NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
pH				NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Oxygen Reduction Potential				NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
			•					•	•				•			•	•			•	·		•

NOTES:

RAOs GW = Remedial Action Objectives for Groundwater

CAS = Chemical Abstract Service registry number

Bold = Exceeds RAOs for groundwater (Not applicable to Treatment System Effluent) Bold/Shaded = Exceeds Buffalo Sewer Authority Discharge Limits (Groundnwater Treatment Effluent Sample only)

ND = Not Detected

E = Exceeds Calibration Range

D = Sample reanalyzed and quantified at higher dilution

Well MW-11 was removed during excavation and is no longer sampled.

Table 2B (Wells 11-16R) Quarterly Groundwater Data Leica Microsystems, Eggert Road Cheektowaga, NY

ANALYTE		Method										MW-1	1A (Deep \	Well) Cont.								
Sample Collection Date:	CAS	Detection	RAOs GW	Mar-27-03	Jul-11-03	Oct-21-03	Feb-06-04	Mav-25-04	Sept-26-04	Dec-21-04	Mar-25-05	June-27-05	Oct-23-05	Jan-05-06	Jan-05-0	6 Mar-17-06	Julv-11-06	Dec-18-0)6 Dec-18-0	6 May-02-07	Nov-14-0	7 Jul-1-08
Dilution:		Limit		5.00	2 50	2 50	10.00	5.00	5.00	5.00	5.00	5.00	5.00	2 00	5.00	2 50	2 50	2 00	5.00	5.00	2 50	2 50
Volatile Organic Compounds (ug/l)				0.00	2.00	2.00	10100	0.00	0.00	0.00	0.00	0.00	0.00									
	67641	20		ND	ND			ND	ND	ND	ND	ND	ND	ND	ND	ND		ND	ND	ND		ND
aceione	71400	E	-	ND		ND		ND	ND	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
benzene	71432	5	-	ND		ND		ND	ND	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
bromodicniorometnane	75274	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	75252	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	74639	5	-	ND		ND		ND	ND	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-butanone (MEK)	78933	10	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
carbon disulfide	75150	10	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	36233	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	108907	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
chloroethane	75003	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
chloroform	6/663	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
chioromethane	/48/3	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
dibromocnioromethane	124481	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	75343	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-dichloroethane	10/062	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-dichloroethene	/5354	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-dichloroethene	156592	5	5	550	320	340	580	610	600	540	520	420	400	540 E	540	460	310	450	E 420	D 490	290	290
trans-1,2-dichloroethene	156605	5	5	14	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-dichloropropane	78875	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,3-dichloropropene	542756	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,3-dichloropropene	542756	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
ethylbenzene	100414	5	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-hexanone	591786	10	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
methylene chloride	75092	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-methyl-2-pentanone (MIBK)	108101	10	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
styrene	100425	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-tetrachloroethane	79345	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
tetrachloroethene	127184	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
toluene	108883	5	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-trichloroethane	71556	5	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-trichloroethane	79005	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trichloroethene	79016	5	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
vinyl chloride	75014	5	5	710	170	38	960	900	980	750	790	500	510	660 E	720	470	340	560	E 540	D 500	320	300
o-xylene	95476	5	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
m+p xylene	108383/106423	5	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TOTAL VOCs				1274	490	378	1540	1510	1580	1290	1310	920	910	1200	1260	930	650	1010	960	990	610	590
Percent TCF				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Percent DCF				43%	65%	90%	38%	40%	38%	42%	40%	46%	44%	45%	43%	49%	48%	45%	44%	49%	48%	49%
Percent VC					35%	10%	62%	60%	62%	58%	60%	54%	56%	55%	57%	51%	52%	55%	56%	51%	52%	51%
Chomiorty (mg/L)				30 /8	5578	10 /6	02 /0	00 /8	02 /0	JU /0	00 /8	J4 /0 MW/_1	14 (Deen)	Well) Cont	51 /6	5178	J2 /0	JJ /8	50 /6	5178	J2 /0	51/6
													ім (веер				I					
Chloride			l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ferrous Iron				NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nitrate Nitrogen				NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sulfate				NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Organic Carbon				NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ferrous Iron Dissolved				NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese				NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese Dissolved				NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dissolved Oxygen (DO)	-			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
pH				NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Oxygen Reduction Potential				NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
				-												1 1			1	1 1		1 1 1

NOTES:

RAOs GW = Remedial Action Objectives for Groundwater

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Bold = Exceeds RAOs for groundwater (Not applicable to Treatment System Effluent) Bold/Shaded = Exceeds Buffalo Sewer Authority Discharge Limits (Groundnwater Trea

ND = Not Detected

E = Exceeds Calibration Range D = Sample reanalyzed and quantified at higher dilution

Well MW-11 was removed during excavation and is no longer sampled.

Table 2B (Wells 11-16R) Quarterly Groundwater Data Leica Microsystems, Eggert Road Cheektowaga, NY

ANALYTE		Method			MW-11A (D	eep Well) Co	ont.								M\	N-14							
Sample Collection Date:	CAS	Detection	RAOs GW	Apr-15-09	9 Oct-6-09	Mar-23-10	Jul-6-10	Base	Mar-29-00	Jun-22-00	Aug-21-00	Nov-30-00	Mar-27-01	Jun-13-01	Dec-19-01	Mar-20-02	Jun-25-02	Jan-20-03	March-27-03	Jul-11-03	Feb-05-04	May-25-04	Sept-26-04
Dilution:	:	Limit		1.00	1.00	2.50	2.50	2.00	2.50	2.00	2.00	2.50	2.00	5.00	2.00	2.00	2.00	2.00	1.00	2.50	2.50	1.00	2.50
Volatile Organic Compounds (ug/l)					- <u>'</u>																		
	67641	20	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
penzene	71432	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
promodichloromethane	75274	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
promoform	75252	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
promomethane	74839	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-butanone (MEK)	78933	10	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
carbon disulfide	75150	10	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
carbon tetrachloride	56235	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
chlorobenzene	108907	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
chloroethane	75003	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
chloroform	67663	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
chloromethane	74873	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
dibromochloromethane	124481	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-dichloroethane	75343	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-dichloroethane	107062	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-dichloroethene	75354	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-dichloroethene	156592	5	5	250	210	280	270	360	360	390	290	440	360	410	350	340	390	310	160	280	400	320	380
rans-1,2-dichloroethene	156605	5	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	9.2	ND	ND	ND	ND	ND	ND	ND
1,2-dichloropropane	78875	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,3-dichloropropene	542756	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
rans-1,3-dichloropropene	542756	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
ethylbenzene	100414	5	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-hexanone	591786	10	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
methylene chloride	75092	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-methyl-2-pentanone (MIBK)	108101	10	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
styrene	100425	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-tetrachioroethane	79345	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	12/184	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	108883	5	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-trichloroethane	71556	5	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND	ND	ND
	79005	5	-		ND	ND	ND	ND	ND		ND			ND		ND		ND					ND
richioroethene	79016	5	5		ND 200	200	ND 280	150	170	140		160		ND 44				ND 60	ND 27	110			ND 200
	75014	5	5		290	290	200	150	ND	140			30	44	30	20	40		37		290	04 ND	320
	108282/106422	5	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND		ND					ND
	100303/100423	5	5		500	570	550		500	500	0.07	ND	ND	154		075.0	100	070	107	000	ND		700
TOTAL VOCS				510	500	570	550	510	530	530	367	600	390	454	386	375.2	430	372	197	390	690	384	700
Percent TCE				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Percent DCE				49%	42%	49%	49%	71%	68%	74%	79%	73%	92%	90%	91%	91%	91%	83%	81%	72%	58%	83%	54%
Percent VC				51%	58%	51%	51%	29%	32%	26%	21%	27%	8%	10%	9%	7%	9%	17%	19%	28%	42%	17%	46%
Chemisrty (mg/L)					MW-11A (D	Deep Well) Co	ont.								M\	N-14							
Chloride				120	87.4	NA	107	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ferrous Iron				0.13	0.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nitrate Nitrogen				0.5	U 0.5	U NA	0.5 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sulfate				91.1	87.8	NA	74.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Organic Carbon			1	3.9	3.3	NA	3.9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ferrous Iron Dissolved			1	0.12	0.1	U NA	160	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese			1	73	74	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese Dissolved			1	74	69	NA	67	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dissolved Oxygen (DO)			1	NA	96.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
рН			1	7.21	7.22	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Oxvgen Reduction Potential			1	-216	-283	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1		1																				

NOTES:

RAOs GW = Remedial Action Objectives for Groundwater

CAS = Chemical Abstract Service registry number

Bold = Exceeds RAOs for groundwater (Not applicable to Treatment System Effluent) Bold/Shaded = Exceeds Buffalo Sewer Authority Discharge Limits (Groundnwater Trea

ND = Not Detected

E = Exceeds Calibration Range

D = Sample reanalyzed and quantified at higher dilution

Well MW-11 was removed during excavation and is no longer sampled.

Table 2B (Wells 11-16R) Quarterly Groundwater Data Leica Microsystems, Eggert Road Cheektowaga, NY

ANALYTE		Method											MW-14 Con	t.									
Sample Collection Date:	CAS	Detection	RAOs GW	Dec-21-04	Mar-24-05	June-26-05	Oct-23-05	Jan-04-06	Jan-04-06	Mar-17-06	July-20-06	Dec-18-06	May-02-07	May-14-08	8 May-14-08	Jul-30-08	Apr-15-09	Oct-6-09	Jan-14-10	Mar-23-10	Jul-6-10	Jul-6-1	0
Dilution:		Limit		2.50	2.50	2.50	5.00	1.00	2.50	2.50	2.50	2.00	2.00	1.00	2.00	1.00	1.00	2.00	2.00	2.00	2.00	1.00	
Volatile Organic Compounds (ug/l)	•	•			•								•				· ·			•			
acetone	67641	20	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
benzene	71432	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
bromodichloromethane	75274	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
bromoform	75252	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
bromomethane	74839	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
2-butanone (MEK)	78933	10	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
carbon disulfide	75150	10	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
carbon tetrachloride	56235	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
chlorobenzene	108907	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
chloroethane	75003	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
chloroform	67663	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
chloromethane	74873	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
dibromochloromethane	124481	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
1,1-dichloroethane	75343	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4
1,2-dichloroethane	107062	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4
1,1-dichloroethene	75354	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4_
cis-1,2-dichloroethene	156592	5	5	300	310	290	400	380 E	350	320	250	310	270	230	E 220 D	150	190	230	200	190	260	D 280	E
trans-1,2-dichloroethene	156605	5	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.9	ND	ND	ND	ND	7	4
1,2-dichloropropane	78875	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4
cis-1,3-dichloropropene	542756	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4
trans-1,3-dichloropropene	542756	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4
ethylbenzene	100414	5	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4
2-nexanone	591786	10	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4
A methyl 2 peptenega (MIDIC)	75092	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4
4-metnyi-2-pentanone (MIBK)	108101	10	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND	ND	ND	ND	ND	ND	ND	ND	4_
1 1 2 2 totrachloroothano	70245	5	-		ND	ND	ND	ND		ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		4
totrachloroothono	10719/	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		4
toluono	109992	5	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		4
1 1 1-trichloroethane	71556	5	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		4
1 1 2-trichloroethane	71330	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
trichloroethene	79016	5	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
vinyl chloride	75014	5	5	44	42	62	530	420 F	410	190	120	120	86	26	25 D	48	38	270	20	44	83	D 91	
n-xvlene	95476	5	5	ND	ND	ND	ND	ND 2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
m+p xvlene	108383/106423	5	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
	100000,100120			244	252	252	020	800	760	510	270	120	256	256	245	109	224.0	500	220	224	242	279	
IOTAL VOCS				344	332	302	930	800	760	510	370	430	336	200	240	196	234.9	500	220	234	343	370	4
Percent ICE				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
Percent DCE				87%	88%	82%	43%	48%	46%	63%	68%	/2%	76%	90%	90%	/6%	81%	46%	91%	81%	76%	/4%	4
Percent VC				13%	12%	18%	5/%	53%	54%	3/%	32%	28%	24%	10%	10%	24%	16%	54%	9%	19%	24%	24%	
Chemisrty (mg/L)													MW-14 Con	t.									
Chloride				NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	62.4	49.3	64.2	39	26.4	45	55.1	55.1	
Ferrous Iron				NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.384	0.861	1.67	0.1 U	0.86	NA	NA	NA	
Nitrate Nitrogen				NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.500	<0.500	0.5 U	0.5 U	0.5 U	0.5 L	0.5	U 0.5	U
Sulfate				NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	379	288	314	71.1	152	218	327	327	
Total Organic Carbon				NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.8	4.58	3.1	7.3	3.3	3.8	4.5	4.5	
Ferrous Iron Dissolved				NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.326	0.918	1.36	0.1 U	0.74	140	200	200	
Manganese				NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.11	0.0829	110	57	76	NA	NA	NA	
Manganese Dissolved				NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.106	0.0732	112	51	68	59	63	63	
Dissolved Oxygen (DO)				NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.84	NA	17.8	15.9	NA	20.9	20.9	
pH				NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.07	6.99	7.05	7.07	NA	7.04	7.04	
Oxygen Reduction Potential				NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	-24	-272	-278.4	-18.3	NA	-71.8	-71.8	

NOTES:

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ND = Not Detected

E = Exceeds Calibration Range

D = Sample reanalyzed and quantified at higher dilution

Well MW-11 was removed during excavation and is no longer sampled.

Table 2B (Wells 11-16R) Quarterly Groundwater Data Leica Microsystems, Eggert Road Cheektowaga, NY

Mar-24-05 June 1.00 1 ND 1 ND N ND N	e-26-05 Oct-23-05 1.00 1.00 ND ND ND ND	5
Mar-24-05 June 1.00 1 ND 1	e-26-05 Oct-23-05 1.00 1.00 ND ND ND ND	5
1.00 1 ND N	1.00 1.00 ND ND	
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ND ND	ND ND	
ND ND	ND ND	
78	55 15	
ND M	ND ND	
ND ND	ND ND	
166 1	139 27	
0	0 0	
53% 6	60% 44%	
47% 4	40% 56%	
NA NA	NA NA	
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NA N	NA NA	
NA N	NA NA	
NA NA	NA NA	_
	ND ND	ND<

NOTES:

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Table 2B (Wells 11-16R) Quarterly Groundwater Data Leica Microsystems, Eggert Road Cheektowaga, NY

ANALYTE		Method							MW-14	4A (Deep We	II) Cont.						
Sample Collection Date:	CAS	Detection	RAOs GW	.lan-04-06	Mar-17-06	July-13-06	Dec-18-06	May-02-07	Nov-14-07	/ May-14-08	Jul-30-08	Apr-15-09	Oct-6-09	.lan-14-10	Mar-23-10	.lul-6-1	10
Dilution:		Limit		1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1.00	1 00	
Valatila Organia Compounda (ug/l)				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	_
	07044			NB	NB												_
acetone	6/641	20	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4
benzene	71432	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4
	75274	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND			4
bromomothano	70202	5	-		ND		ND	ND	ND	ND				ND			4
2 butanono (MEK)	74039	10	-	ND	ND		ND	ND	ND	ND			ND	ND		ND	+
carbon disulfide	75150	10	-	ND	ND		ND	ND	ND	ND	ND		ND	ND		ND	
carbon tetrachloride	56235	5		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND	
chlorobenzene	108907	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
chloroethane	75003	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
chloroform	67663	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
chloromethane	74873	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
dibromochloromethane	124481	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
1.1-dichloroethane	75343	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
1.2-dichloroethane	107062	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
1.1-dichloroethene	75354	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
cis-1.2-dichloroethene	156592	5	5	47	48	13	43	39	ND	160	6.2	100	12	38	96	31	
trans-1.2-dichloroethene	156605	5	5	ND	ND	ND	ND	ND	ND	6.1	ND	ND	ND	ND	ND	ND	
1.2-dichloropropane	78875	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
cis-1,3-dichloropropene	542756	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
trans-1,3-dichloropropene	542756	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
ethylbenzene	100414	5	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
2-hexanone	591786	10	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
methylene chloride	75092	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
4-methyl-2-pentanone (MIBK)	108101	10	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
styrene	100425	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
1,1,2,2-tetrachloroethane	79345	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
tetrachloroethene	127184	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
toluene	108883	5	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
1,1,1-trichloroethane	71556	5	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
1,1,2-trichloroethane	79005	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
trichloroethene	79016	5	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
vinyl chloride	75014	5	5	57	40	10	42	29	7.2	56	8.2	57	16	ND	53	24	
o-xylene	95476	5	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
m+p xylene	108383/106423	5	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
TOTAL VOCs				104	88	23	85	68	7.2	222.1	14.4	157	28	38	149	55	
Percent TCF				0	0	0	0	0	0	0	0	0	0	0	0	0	-
Percent DCE				45%	55%	57%	51%	57%	0	72%	13%	64%	13%	100%	64%	56%	+
Percent VC				4J /0 55%	45%	/3%	/10%	/3%	100%	25%	57%	36%	43 /o 57%	0	36%	1/1%	+
				55%	43 /0	40 /0	43/0	43 /0	100 %	2370	57 /8	30 /8	5776	0	30%	44 /0	_
Chemisrty (mg/L)									MW-14	4A (Deep we	ell) Cont.						
Chloride				NA	NA	NA	NA	NA	NA	27.1	15.2	27.8	15.1	15.9	21.7	15	
Ferrous Iron				NA	NA	NA	NA	NA	NA	0.126	0.613	2.74	0.1 U	0.1 l	J NA	NA	
Nitrate Nitrogen				NA	NA	NA	NA	NA	NA	<0.500	<0.500	0.5 U	0.71	0.5 l	J 0.5 l	J 0.5	U
Sulfate				NA	NA	NA	NA	NA	NA	224	54.1	210	41.6	82.5	146	115	
Total Organic Carbon				NA	NA	NA	NA	NA	NA	3.48	3.53	2.9	2.6	3.4	4.5	3.9	
Ferrous Iron Dissolved				NA	NA	NA	NA	NA	NA	<0.100	1.29	4.17	0.1 U	0.1 l	J 1250	830	
Manganese				NA	NA	NA	NA	NA	NA	0.105	0.116	113	79	39	NA	NA	
Manganese Dissolved				NA	NA	NA	NA	NA	NA	0.0992	0.114	108	63	37	97	83	
Dissolved Oxygen (DO)				NA	NA	NA	NA	NA	NA	NA	1.42	NA	9	17.3	NA	15.2	
PH				NA	NA	NA	NA	NA	NA	NA	6.74	6.99	7.53	7.58	NA	7.17	
Oxygen Reduction Potential				NA	NA	NA	NA	NA	NA	NA	-205	-280	-276.2	26.4	NA	-104 7	

NOTES:

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CAS = Chemical Abstract Service registry number

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ND = Not Detected

E = Exceeds Calibration Range D = Sample reanalyzed and quantified at higher dilution

Well MW-11 was removed during excavation and is no longer sampled.

ANALYTE		Method				MW-15									MW 16A (Deep Well)						
Sample Collection Date:	CAS	Detection	RAOs GW	Mar-25-05	June-27-05	Oct-23-05	Jan-04-06	Mar-17-06	Base	Mar-29-00	Jun-22-00	Aug-21-00	Mar-27-01	Jun-13-01	Sep-28-01	Dec-19-01	Mar-20-02	Jun-25-02	Sept-19-02	Mar-27-03	Jul-11-03	Oct-21-03
Dilution:		Limit		1.00	1.00	1.00	1.00	1.00	500.00	20.00	25.00	20.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00
Volatile Organic Compounds (ug/l)			1					1														
acetone	67641	20	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
benzene	71/32	5		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
bromodichloromethane	75274	5		ND	ND	ND	ND	ND	ND	ND	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
bromoform	75252	5		ND	ND	ND	ND	ND	ND	ND	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
bromomethane	74839	5		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-butanone (MEK)	78933	10	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
carbon disulfide	75150	10	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
carbon tetrachloride	56235	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
chlorobenzene	108907	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
chloroethane	75003	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
chloroform	67663	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
chloromethane	74873	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
dibromochloromethane	124481	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1.1-dichloroethane	75343	5	1 -	93	10	12	8.2	6.2	ND	270	260	200	180	170	140	150	120	88	81	150	120	120
1.2-dichloroethane	107062	5	-	ND	ND	ND	ND	ND	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1.1-dichloroethene	75354	5	- 1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	21	ND	ND	ND	ND	ND
cis-1.2-dichloroethene	156592	5	5	6.4	ND	ND	ND	ND	9400	3800	3100	3200	2000	2000	1800	1600	1300	1300	1200	1200	1100	1300
trans-1,2-dichloroethene	156605	5	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	150	ND	ND	ND	21	ND	ND	ND	ND	ND
1.2-dichloropropane	78875	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,3-dichloropropene	542756	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1.3-dichloropropene	542756	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
ethylbenzene	100414	5	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-hexanone	591786	10	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
methylene chloride	75092	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-methyl-2-pentanone (MIBK)	108101	10	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
styrene	100425	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-tetrachloroethane	79345	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
tetrachloroethene	127184	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
toluene	108883	5	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	10	ND	ND	ND	ND	ND
1,1,1-trichloroethane	71556	5	5	ND	ND	ND	ND	ND	56000	410	290	200	160	120	89	120	92	55	ND	240	200	250
1,1,2-trichloroethane	79005	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trichloroethene	79016	5	5	ND	ND	ND	ND	ND	17000	2200	1300	910	1100	1000	730	690	840	480	260	1200	560	430
vinyl chloride	75014	5	5	ND	ND	ND	ND	ND	ND	620	620	1100	460	710	610	500	440	380	340	430	330	380
o-xylene	95476	5	5	ND	ND	ND	ND	ND	3800	110	ND	ND	ND	ND	ND	ND	12	ND	ND	ND	ND	ND
m+p xylene	108383/106423	5	5	ND	ND	ND	ND	ND	8400	ND	170	ND	ND	80	50	ND	19	ND	ND	ND	ND	ND
TOTAL VOCs				15.7	10	12	8.2	6.2	94600	7410	5740	5610	4050	4080	3419	3060	2875	2303	1881	3220	2310	2480
Percent TCE				0	0	0	0	0	18%	30%	23%	16%	27%	25%	21%	23%	29%	21%	14%	37%	24%	17%
Percent DCE				41%	0	0	0	0	10%	51%	54%	57%	49%	49%	53%	52%	45%	56%	64%	37%	48%	52%
Percent VC				0	0	0	0	0	0	8%	11%	20%	11%	17%	18%	16%	15%	17%	18%	13%	14%	15%
Chemisrty (mg/L)						MW-15									MW 16A (Deep Well)	•					
Chloride				NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ferrous Iron				NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nitrate Nitrogen			1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sulfate			1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Organic Carobn			1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ferrous Iron Dissolved			1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese			1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese Dissolved				NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dissolved Oxygen (DO)			1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
pH			1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Oxygen Reduction Potential			1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

NOTES:

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Bold/Shaded = Exceeds Buffalo Sewer Authority Discharge Limits (Groundnwater Treatment Effluent Sample only)

ND = Not Detected

E = Exceeds Calibration Range

D = Sample reanalyzed and quantified at higher dilution

Well MW-11 was removed during excavation and is no longer sampled.

ANALYTE		Method									М	W 16A (De	ep Well) Co	ont.							
Sample Collection Date:	CAS	Detection	RAOs GW	Feb-06-04	May-25-04	Sept-26-04	Dec-21-04	Mar-25-05	June-27-05	June 27-05	Oct-23-05	Jan-04-06	Mar-17-06	July-11-06	Dec-21-06	May-02-0	7 Nov-14-0	7 Nov-14-07	Mar-31-2008	Mar-31-20	08 July-01-08
Dilution:		Limit		10.00	10.00	10.00	20.00	20.00	20.00	100.00	10.00	10.00	10.00	10.00	10.00	5.00	1.00	10.00	5.00	10.00	,
Volatile Organic Compounds (ug/l)																				1	
acetone	67641	20	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
benzene	71432	5	_	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
bromodichloromethane	75274	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
bromoform	75252	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
bromomethane	74839	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-butanone (MEK)	78933	10	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
carbon disulfide	75150	10	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
carbon tetrachloride	56235	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
chlorobenzene	108907	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
chloroethane	75003	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
chloroform	67663	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
chloromethane	74873	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
dibromochloromethane	124481	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-dichloroethane	75343	5	-	110	170	240	190	200	410	ND	120	150	120	100	180	74	88	87	150	150	D 140
1,2-dichloroethane	107062	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-dichloroethene	75354	5	-	ND	ND	ND	ND	ND	160	ND	ND	ND	ND	ND	ND	ND	10	ND	ND	ND	ND
cis-1,2-dichloroethene	156592	5	5	1200	1400	1900	2100	2100	2300	2300	1200	1200	1100	1200	1500	860	980	E 960 [) 1100 E	1100	D 1400
trans-1,2-dichloroethene	156605	5	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	12	ND	ND	ND	ND
1,2-dichloropropane	78875	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,3-dichloropropene	542756	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,3-dichloropropene	542756	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
ethylbenzene	100414	5	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-nexanone	591786	10	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
methylene chloride	75092	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	100101	10	-								ND					ND	ND	ND	ND	ND	ND
	70245	5	-						ND		ND					ND	ND	ND	ND	ND	ND
tetrachloroethene	127184	5		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
toluene	108883	5	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1 1 1-trichloroethane	71556	5	5	160	970	1200	2200	2000	16 000E	17000	230	530	630	210	840	190	210	F 200 [) 730	750	D 580
1 1 2-trichloroethane	79005	5	-	ND	ND	ND	ND	ND	ND	ND	ND		ND	ND	ND	ND	ND		ND	ND	ND
trichloroethene	79016	5	5	330	790	970	1500	1100	3000	3000	630	800	590	460	930	160	370	E 330 [) 920	930	D 260
vinvl chloride	75014	5	5	330	380	240	300	300	390	ND	330	320	260	280	430	170	240	E 210 [250	260	D 290
o-xvlene	95476	5	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
m+p xvlene 1	08383/106423	3 5	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TOTAL VOCs				2130	3710	4550	6290	5700	6260	22300	2510	3000	2700	2250	3880	1454	1910	1787	3150	3190	2670
Percent TCE				15%	21%	21%	24%	19%	48%	13%	25%	27%	22%	20%	24%	11%	19%	18%	29%	29%	10%
Percent DCE				56%	38%	42%	33%	37%	37%	10%	48%	40%	41%	53%	39%	59%	51%	54%	35%	34%	52%
Percent VC				15%	10%	5%	5%	5%	6%	0	13%	11%	10%	12%	11%	12%	13%	12%	8%	8%	11%
Chemisrty (mg/L)		•									М	W 16A (De	ep Well) Co	ont.							
Chloride				NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	306	NA
Ferrous Iron				NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.100	NA
Nitrate Nitrogen				NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.500	NA
Sulfate				NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	83.1	NA
Total Organic Carobn				NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3	NA
Ferrous Iron Dissolved				NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.100	NA
Manganese				NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.102	NA
Manganese Dissolved				NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.098	NA
Dissolved Oxygen (DO)				NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
pH				NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Oxygen Reduction Potential				NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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ND = Not Detected

E = Exceeds Calibration Range

D = Sample reanalyzed and quantified at higher dilution

Well MW-11 was removed during excavation and is no longer sampled.

ANALYTE		Method				MW-16A (D) Deep Well) C	Cont.							MW-	-16R					
Sample Collection Date:	CAS	Detection	RAOs GW	Jul-30-08	Apr-15-09	Oct-6-09	Mar-23-101	0 Jul-6-10	Jul-6-10	Jun-22-00	Aug-21-00	Mar-27-01	Jun-13-01	Dec-19-01	Mar-20-02	Jun-25-02	Sept-19-02	Jan-20-03	Mar-27-03	Jul-11-03	Oct-21-03
Dilution:		Limit		10.00	1.00	1.00	10.00	5.00	1.00	50 or 100	10.00	5.00	5.00	5.00	2.00	2.50	50.00	5 or 10	5.00	2.00	2.50
Volatile Organic Compounds (ug/l)							1														
acetone	67641	20	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
benzene	71432	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
bromodichloromethane	75274	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
bromoform	75252	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
bromomethane	74839	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-butanone (MEK)	78933	10	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
carbon disulfide	75150	10	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
carbon tetrachloride	56235	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
chlorobenzene	108907	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
chloroethane	75003	5	-	ND	ND	ND	ND	ND	12	ND	ND	ND	ND	ND							
chloroform	67663	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
chloromethane	74873	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
dibromochloromethane	124481	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-dichloroethane	75343	5	-	120	130	220	280	78 D	88	ND	ND	ND	28	35	26	38	390	72	53	42	99
1,2-dichloroethane	107062	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-dichloroethene	75354	5	-	ND	ND	ND	ND	ND	6.3	ND	ND	ND	ND	ND	5.7	ND	ND	ND	ND	ND	ND
cis-1,2-dichloroethene	156592	5	5	1400	950	1300	1100	850 D	820 E	350	1800	84	71	550	320	440	3000	1300	780	140	450
trans-1,2-dichloroethene	156605	5	5	ND	ND	ND	ND	ND	11	ND	ND	ND	ND	ND	11	24	ND	ND	ND	ND	ND
1,2-dichloropropane	78875	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,3-dichloropropene	542756	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,3-dichloropropene	542756	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
ethylbenzene	100414	5	5	ND	ND	ND	ND	ND	5.9	1800	ND	26	38	ND	3.4	ND	ND	32	ND	ND	ND
2-hexanone	591786	10	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
methylene chloride	75092	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-methyl-2-pentanone (MIBK)	108101	10	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
styrene	100425	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-tetrachloroethane	79345	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
tetrachloroethene	127184	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
toluene	108883	5	5	ND	ND	ND	ND	ND	ND	850	ND	ND	ND	ND	2.1	ND	ND	ND	ND	ND	ND
1,1,1-trichloroethane	71556	5	5	330	370	420	140	39 D	43	3900	ND	270	600	380	320	350	2700	570	460	230	160
1,1,2-trichloroethane	79005	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trichloroethene	79016	5	5	200	300	420	400	160 D	180	11000	ND	600	990	250	290	500	9400	26	140	46	50
vinyl chloride	75014	5	5	350	260	290	320	160 D	200 E	ND	1300	ND	ND	ND	11	ND	ND	ND	ND	ND	ND
o-xylene	95476	5	5	ND	ND	ND	ND	ND	ND	7600	ND	110	140	25	6.6	ND	ND	46	ND	ND	ND
m+p xylene	108383/106423	5	5	ND	ND	ND	ND	ND	6.5	13000	ND	65	94	ND	5.9	ND	ND	52	26	ND	ND
TOTAL VOCs				2400	2010	2650	2240	1287	1372.7	38500	3100	1155	1961	1240	1001.7	1352	15490	2098	1459	458	759
Percent TCE				8%	15%	16%	18%	12%	13%	29%	0	52%	50%	20%	29%	37%	61%	1%	10%	10%	7%
Percent DCE				58%	47%	49%	49%	66%	60%	1%	58%	7%	4%	44%	32%	33%	19%	62%	53%	31%	59%
Percent VC				15%	13%	11%	14%	12%	15%	0	42%	0	0	0	1%	0	0	0	0	0	0
Chemisrty (mg/L)						MW-16A (C	eep Well) C	Cont.							MW-	-16R					
Chloride				242	225	197	273	216	216	NA	NA	NA	NA	NA							
Ferrous Iron				0.412	0.24	0.34	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nitrate Nitrogen				<0.500	0.5 U	0.5 L	J 0.5	U 0.5 U	0.5 U	NA	NA	NA	NA	NA							
Sulfate				93.3	66.9	80	79.2	79.7	79.7	NA	NA	NA	NA	NA							
Total Organic Carobn				7.62	5	4.5	4.5	3.6	3.6	NA	NA	NA	NA	NA							
Ferrous Iron Dissolved				0.288	0.3	0.23	130	130	130	NA	NA	NA	NA	NA							
Manganese				0.0963	79	84	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese Dissolved				0.0896	71	79	100	68	68	NA	NA	NA	NA	NA							
Dissolved Oxygen (DO)				8.57	NA	15.5	NA	47.8	47.8	NA	NA	NA	NA	NA							
pH				7.33	NA	7.19	NA	7.02	7.02	NA	NA	NA	NA	NA							
Oxygen Reduction Potential				-172	NA	-262	NA	-25.4	-25.4	NA	NA	NA	NA	NA							

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Well MW-11 was removed during excavation and is no longer sampled.

ANALYTE		Method										MW-16R C	ont.								
Sample Collection Date:	CAS	Detection	RAOs GW	Feb-05-04	May-25-04	Sept-26-04	Dec-21-04	Mar-24-05	June-26-05	Oct-24-05	Jan-05-06	6 Jan-05-06	Mar-17-06	July-13-06	Dec-18-06	May-02-07	May-02-07	Nov-15-07	Nov-15-07	Mar-31-08	3
Dilution:		Limit		20.00	20.00	100.00	100.00	20.00	200.00	100.00	25.00	1,000.00	25.00	20.00	10.00	10.00	20.00	10.00	25.00	10.00	
Volatile Organic Compounds (ug/l)	I								· · ·				1		•				1		
acetone	67641	20	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-
benzene	71432	5	_	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-
bromodichloromethane	75274	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-
bromoform	75252	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
bromomethane	74839	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
2-butanone (MEK)	78933	10	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
carbon disulfide	75150	10	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
carbon tetrachloride	56235	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
chlorobenzene	108907	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
chloroethane	75003	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	68	ND	70	
chloroform	67663	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
chloromethane	74873	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
dibromochloromethane	124481	5	-	ND	ND	ND	ND	ND	ND	NĎ	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
1,1-dichloroethane	75343	5	-	110	150	ND	ND	250	ND	590	980	1000	1600	2000	1300	1900	2000	1400	1400	1700	
1,2-dichloroethane	107062	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
1,1-dicnioroethene	/5354	5	-	ND	ND	ND	ND 1500	ND	ND	ND	ND	ND	ND	ND	ND 040	ND -	ND D	66	66	ND	
	156592	5	5	2300	2100	4/00	1500	930	6000	3500	6500	E 6200	3800	2100	840	2900 E	3000 D	2700 E	2600 [
trans-1,2-0ichloroethene	156605	5	5	ND	ND	ND	ND					ND	ND	ND					ND	ND	
1,2-dichloropropane	/88/5	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	_
trans 1.2 dishlarapropaga	542756	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
athylbonzono	100414	5	-			ND						ND	ND	ND	ND				ND	ND	
2-bevanone	591786	10	5		ND	ND	ND		ND	ND	ND	ND	ND	ND	ND		ND	ND	ND	ND	
methylene chloride	75092	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-
4-methyl-2-pentanone (MIBK)	108101	10	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-
styrene	100425	5	_	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-
1,1,2,2-tetrachloroethane	79345	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
tetrachloroethene	127184	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
toluene	108883	5	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
1,1,1-trichloroethane	71556	5	5	300	140	520	ND	120	ND	ND	630	610	250	160	94	280	290	280	270	84	
1,1,2-trichloroethane	79005	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
trichloroethene	79016	5	5	110	460	12000	14000	3300	30000	15000	14000	E 14000	4500	1900	390	2900 E	3000 D	3800 E	3600 [210	
vinyl chloride	75014	5	5	ND	ND	ND	ND	ND	ND	ND	150	ND	ND	ND	58	72	ND	110	ND	ND	
o-xylene	95476	5	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
m+p xylene 10	08383/106423	5	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
TOTAL VOCs				2820	2850	17220	15500	4600	36000	19090	22260	21810	10150	6160	2682	8052	8290	8424	7936	3164	
Percent TCE				4%	16%	70%	90%	72%	83%	79%	63%	64%	44%	31%	15%	36%	36%	45%	45%	7%	
Percent DCE				82%	74%	27%	10%	20%	17%	18%	29%	28%	37%	34%	31%	36%	36%	32%	33%	35%	
Percent VC				0	0	0	0	0	0	0	1%	0	0	0	2%	1%	0	1%	0	0	
Chemisrty (mg/L)												MW-16R C	ont.								
Chloride				NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1060	
Ferrous Iron				NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.107	
Nitrate Nitrogen				NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.500	
Sulfate				NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	31.7	
Total Organic Carobn				NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.8	
Ferrous Iron Dissolved				NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.100	
Manganese				NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.346	
Manganese Dissolved				NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.366	
Dissolved Oxygen (DO)				NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
pH				NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Oxygen Reduction Potential				NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	

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Well MW-11 was removed during excavation and is no longer sampled.

ANALYTE		Method							MW-1	6R Cont.					
Sample Collection Date:	CAS	Detection	RAOs GW	May-14-08	May-14-08	Jul-30-08	Jul-30-	-08	Apr-15-09	Oct-6-09	Jan-14-10	Mar-23-10) Jul-6-10	, I,	Jul-6-10
Dilution:		Limit		10.00	20.00	10.00	20.0	0	1.00	1.00	1.00	5.00	2.00		1.00
Volatile Organic Compounds (ug/l)	1							-			1				
acetone	67641	20	-	ND	ND	ND	ND		ND	ND	ND	ND	ND		ND
benzene	71432	5	-	ND	ND	ND	ND		ND	ND	ND	ND	ND		ND
bromodichloromethane	75274	5	-	ND	ND	ND	ND		ND	ND	ND	ND	ND		ND
bromoform	75252	5	-	ND	ND	ND	ND		ND	ND	ND	ND	ND		ND
bromomethane	74839	5	-	ND	ND	ND	ND		ND	ND	ND	ND	ND		ND
2-butanone (MEK)	78933	10	-	ND	ND	280	230	D	ND	ND	ND	ND	ND		14
carbon disulfide	75150	10	-	ND	ND	ND	ND		ND	ND	ND	ND	ND		ND
carbon tetrachloride	56235	5	-	ND	ND	ND	ND		ND	ND	ND	ND	ND		ND
chlorobenzene	108907	5	-	ND	ND	ND	ND		ND	ND	ND	ND	ND		ND
chloroethane	75003	5	-	ND	ND	ND	ND		520	280	290	500	320	D	340 E
chloroform	67663	5	-	ND	ND	ND	ND		ND	ND	ND	ND	ND		ND
chloromethane	74873	5	-	ND	ND	ND	ND		ND	ND	ND	ND	ND		ND
dibromochloromethane	124481	5	-	ND	ND	ND	ND		ND	ND	ND	ND	ND		ND
1,1-dichloroethane	75343	5	-	1800	1800 [D 1700	1700	D	170	130	140	110	110	D	130
1,2-dichloroethane	107062	5	-	ND	ND	ND	ND		ND	ND	ND	ND	ND		ND
1,1-dichloroethene	75354	5	-	ND	ND	ND	ND		ND	ND	ND	ND	ND		ND
cis-1,2-dichloroethene	156592	5	5	2000 E	2000 [D 2000 E	E 2100	D	ND	ND	ND	ND	ND		ND
trans-1,2-dichloroethene	156605	5	5	ND	ND	ND	ND		ND	ND	ND	ND	ND		ND
1,2-dichloropropane	78875	5	-	ND	ND	ND	ND		ND	ND	ND	ND	ND		ND
cis-1,3-dichloropropene	542756	5	-	ND	ND	ND	ND		ND	ND	ND	ND	ND		ND
trans-1,3-dichloropropene	542756	5	-	ND	ND	ND	ND		ND	ND	ND	ND	ND		ND
ethylbenzene	100414	5	5	ND	ND	ND	ND		ND	26	31	34	47	D	52
2-hexanone	591786	10	-	ND	ND	ND	ND		ND	ND	ND	ND	ND		ND
methylene chloride	75092	5	-	ND	ND	ND	ND		ND	ND	ND	ND	ND		ND
4-methyl-2-pentanone (MIBK)	108101	10	-	ND	ND	ND	ND	_	ND	ND	ND	ND	ND		
styrene	100425	5	-	ND	ND	ND	ND	_	ND	ND	ND	ND	ND		
1,1,2,2-tetrachioroethane	/9345	5	-	ND	ND	ND	ND	_	ND	ND	ND	ND	ND		
tetrachioroethene	12/184	5	-	ND	ND	ND	ND	_	ND	ND	ND	ND	ND		
Loluerie	71550	5	5	ND	100		100	-	ND	ND	ND	ND	ND		
1,1,1-trichloroethane	71556	5	5	130	130 1	J 100	100	D	ND	ND	ND	ND	ND		
1,1,2-trichloroethane	79005	5	-	ND			ND	_	ND	ND	ND	ND	ND		
	79016	5	5	280	290 1	J 85	ND 040	_	ND	ND	ND	ND	ND		
	75014	5	5	ND	ND	240	240	_	ND	10	ND 05	ND	ND 47		50
	90476	5	5	ND	ND	ND	ND	_	ND	12	35	57	47	\square	52 110
	106363/106423	5	5					-	ND	20	45	55	90		
TOTAL VOCs				4210	4220	4405	4370		690	476	541	736	614	e	698
Percent TCE				7%	7%	2%	0	_	0	0	0	0	0		0
Percent DCE				48%	47%	45%	48%	_	0	0	0	0	0		0
Percent VC				0	0	5%	5%		0	0	0	0	0		0
Chemisrty (mg/L)									MW-1	6R Cont.					
Chloride				NA	NA	NA	745		652	983	503	339	511	Ę	511
Ferrous Iron				NA	NA	NA	31.7		0.28	2.85	1.49	NA	NA		NA
Nitrate Nitrogen				NA	NA	NA	<0.500		0.5 l	J 0.5 U	0.5 U	0.5	U 0.5	u	0.5 U
Sulfate				NA	NA	NA	9.1		2.7	7.8	6.3	11.7	8.9		8.9
Total Organic Carobn				NA	NA	NA	1080		65.7	39.8	71.9	43	22.5	2	22.5
Ferrous Iron Dissolved				NA	NA	NA	30.1		0.38	2.35	1.52	280	940	Ş	940
Manganese				NA	NA	NA	1.05		184	175	156	NA	NA		NA
Manganese Dissolved				NA	NA	NA	0.854		123	167	73	64	82		82
Dissolved Oxygen (DO)				NA	NA	NA	3.97		NA	7.9	21.1	NA	35.2	3	35.2
pH				NA	NA	NA	6.43		NA	7.09	7.36	NA	7.18	7	7.18
Oxygen Reduction Potential				NA	NA	NA	-101		NA	-297	-77.8	NA	-103.2	-1	03.2

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Well MW-11 was removed during excavation and is no longer sampled.

Well MW-15A was filled with gravel and is no longer sampled.

10/13/20108:38 AM Summary Wells 15 thru 16R Page 5 of 5

ANALYTE		Method							MW	/-18								Μ	IW-18A			
Sample Collection Date:	CAS	Detection	RAOs GW	Mar-24-05	Oct-24-05	Jan-04-06	Mar-17-06	6 May-02-07	Mar-31-08	May-14-08	Apr-15-09	Oct-6-09	Jan-14-10	Mar-23-10	July-2-10	Mar-31-08	May-14-08	3 Jul-30-08	3 Jul-30-08	Apr-15-09	Oct-6-09	-
Dilution:		Limit		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	1.00	1.00	-
Volatile Organic Compounds (ug/l)									· · · · · · · · · · · · · · · · · · ·													
acetone	67641	20	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	_
benzene	71432	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-
bromodichloromethane	75274	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
bromoform	75252	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-
bromomethane	74839	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
2-butanone (MEK)	78933	10	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
carbon disulfide	75150	10	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
carbon tetrachloride	56235	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
chlorobenzene	108907	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
chloroethane	75003	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
chloroform	67663	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-
chloromethane	74873	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
dibromochloromethane	124481	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	_
1,1-dichloroethane	75343	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	_
1,2-dichloroethane	107062	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	_
1,1-dichloroethene	75354	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
cis-1,2-dichloroethene	156592	5	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	18	26	83	76 D	56	33	
trans-1,2-dichloroethene	156605	5	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	_
1,2-dichloropropane	78875	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
cis-1,3-dichloropropene	542756	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
trans-1,3-dichloropropene	542756	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
ethylbenzene	100414	5	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
2-hexanone	591786	10	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	_
methylene chloride	/5092	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
4-methyl-2-pentanone (MIBK)	108101	10	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
styrene	100425	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
1,1,2,2-tetrachioroethane	/9345	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
tetrachioroethene	12/184	5	-	ND	ND	ND	ND	ND	ND	ND	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	
	108883	5	5	ND	ND	ND	ND	ND	ND	ND	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	
1,1,1-trichloroethane	71556	5	5	ND	ND	ND	ND	ND	ND	ND	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	
	79005	5	-	ND	ND	ND	ND	ND	ND	ND	ND		ND	ND	ND	ND 20	15	200		140		_
linchioroethene	79016	5	5	ND	ND	ND	ND	ND	ND	ND	ND		ND	ND	ND	30	15	200		140	44	_
	05476	5	5			ND		ND		ND	ND			ND	ND	ND		ND			0.2	
	90470	5	5	ND		ND	ND	ND		ND	ND			ND	ND	ND		ND	ND	ND	ND	
	100303/100423	5	5		ND			ND	ND				ND			10	50	000	050	007		_
				0	0	0	0	0	0	0	0	0	0	0	0	40	52	263	200	207	03.2 500/	_
Percent ICE				0	0	0 0	0	0	0	0	0	0	0	0	0	03%	29%	71%	70%	08%	53%	-
Percent VC				0	0	0 0	0	0	0	0	0	0	0	0	0	0	21%	29%	0	5%	40% 7%	-
				0	0	0 0	U	U	MAN	/_19	0	0	0	U	U	0	21/0	M	IN/_19A	578	1 /0	-
Chemistry (mg/L)										1-10	05.0					10.1		IV				_
Chloride				NA	NA	NA	NA	NA	29.6	NA	25.6	19.1	8.7	NA	NA	134	NA	NA	167	98.6	46.2	
Nitroto Nitrogon				NA NA	NA NA	NA	NA NA	NA NA	<0.100	NA	0.79	0.64	0.98	NA	NA NA	<0.100	NA	NA NA	<0.100	0.7	0.49	_
Sulfato		<u> </u>			NA NA			NA NA	<0.300		74 0	72.0	0 C.U U		NA	<0.000	NA NA	NA NA	62.2	129	0.79	
Juliale Total Organic Carbon		<u> </u>			NA NA			NA NA	2.09		6.6	13.9	5 0		NA	90.2 2.11	NA NA	NA NA	2 00.0	120	90.0	
Forrous Iron Dissolvod			-					NA NA	3.90 -0.100		0.0	4	0.79		NA	-0.100		NA NA	-0.100	4	0.25	
Mangangeg			+		NA NA		NA NA	NA NA	0.162	NA NA	274	162	164	NA	NA	0.066	NA NA	NA NA		111	0.20	_
Manganese Dissolved					NA NA	ΝA		NA NA	0.102		100	164	169		NA	0.000		NA NA	<0.0100	74	273	_
Dissolved Oxygen (DO)			+	NA	ΝΔ		NA	ΝA	NA	NΔ	NA	7.4	16.7	ΝA	NA	0.0400 NA	NΔ	ΝA	4.27	Λ 4 ΝΔ	7.4	_
nH			+	NA	NA NA	NA	NΔ	NA NA	NΔ	NA	NA	7.4	7.50	NA	NA	NA	NΔ	ΝA	7/18	ΝΔ	7.4	_
Oxygen Beduction Potential				NA	NA	NA	NA	NA	NA	NA	NA	-296.9	-90.1	NA	NA	NA	NA	NA	-18	NA	-296.9	
	1	1	1							· ·· •										1		

NOTES:

Base = Baseline sample collected 12/14/99

RAOs GW = Remedial Action Objectives for Groundwater

CAS = Chemical Abstract Service registry number

Bold = Exceeds RAOs for groundwater (Not applicable to Treatment System Effluent)

Bold/Shaded = Exceeds Buffalo Sewer Authority Discharge Limits (Groundnwater Treatment Effluent Sample only) ND = Not Detected

E = Exceeds Calibration Range

D = Sample reanalyzed and quantified at higher dilution

NCD = (sample) Not Collected, Dry well

NSPD = Not sampled, pump down

Well MW-11 was removed during excavation and is no longer sampled.

ANALYTE		Method		М	MW-18A Cont. MW-22																	
Sample Collection Date:	CAS	Detection	RAOs GW	Jan-14-10	Mar-23-10	July-23-10	Base	Jun-22-00	Mar-27-01	Jun-13-01	Dec-19-01	Mar-20-02	Jun-25-02	Sept-19-02	Jan-20-03	Mar-27-03	Jul-11-03	Oct-21-03	Feb-05-04	May-25-04	Sept-26-04	Dec-21-04
Dilution:		Limit		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	NA	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Volatile Organic Compounds (ug/l)																						
acetone	67641	20	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NCD	ND	ND						
benzene	71432	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NCD	ND	ND						
bromodichloromethane	75274	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NCD	ND	ND						
bromoform	75252	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NCD	ND	ND						
bromomethane	74839	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NCD	ND	ND						
2-butanone (MEK)	78933	10	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NCD	ND	ND						
carbon disulfide	75150	10	-	ND	ND	ND	76	ND	ND	ND	ND	ND	ND	NCD	ND	ND						
carbon tetrachloride	56235	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NCD	ND	ND						
chlorobenzene	108907	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NCD	ND	ND						
chloroethane	75003	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NCD	ND	ND						
chloroform	67663	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NCD	ND	ND						
chloromethane	74873	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NCD	ND	ND						
dibromochloromethane	124481	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NCD	ND	ND						
1,1-dichloroethane	75343	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NCD	ND	ND						
1,2-dichloroethane	107062	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NCD	ND	ND						
1,1-dichloroethene	75354	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NCD	ND	ND						
cis-1,2-dichloroethene	156592	5	5	57	67	140	ND	ND	ND	ND	ND	ND	ND	NCD	ND	ND	ND	ND	ND	ND	11	ND
trans-1,2-dichloroethene	156605	5	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NCD	ND	ND						
1,2-dichloropropane	78875	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NCD	ND	ND						
cis-1,3-dichloropropene	542756	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NCD	ND	ND						
trans-1,3-dichloropropene	542756	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NCD	ND	ND						
	100414	5	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NCD	ND	ND						
z-nexanone	75002	10 F	-		ND	ND			ND		ND	ND			ND		ND	ND			ND	
4 mothyl 2 poptopopo (MIPK)	109101	10	-		ND	ND			ND		ND			NCD			ND		ND		ND	ND
4-memory-2-peritanone (MIBR)	100101	5	-	ND	ND	ND			ND	ND	ND	ND		NCD	ND	ND	ND		ND			ND
1 1 2 2-tetrachloroethane	79345	5	-	ND	ND	ND		ND	ND	ND	ND	ND		NCD		ND	ND	ND	ND	ND	ND	
tetrachloroethene	127184	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NCD	ND	ND						
toluene	108883	5	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NCD	ND	ND						
1 1 1-trichloroethane	71556	5	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NCD	ND	ND						
1.1.2-trichloroethane	79005	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NCD	ND	ND						
trichloroethene	79016	5	5	8.8	54	83	ND	ND	ND	ND	ND	ND	ND	NCD	ND	ND						
vinvl chloride	75014	5	5	44	34	21	ND	ND	ND	ND	ND	ND	ND	NCD	ND	ND	ND	5.7	ND	ND	48	ND
o-xvlene	95476	5	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NCD	ND	ND						
m+p xylene	108383/106423	5	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NCD	ND	ND						
TOTAL VOCs				109.8	155	244	76	0	0	0	0	0	0	0	0	0	0	5.7	0	0	59	0
Percent TCE				8%	35%	34%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Percent DCE				52%	43%	57%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19%	0
Percent VC				40%	22%	9%	0	0	0	0	0	0	0	0	0	0	0	100%	0	0	81%	0
Chemistry (ma/L)				M	W-18A Co	ont.	-				-			MV	V-22				-	-		
Chlorido				20.7			NA	NA	NA	NA	NIA	NIA	NIA	NIA		NIA	NA	NA	NA	NA	NA	NIA
Enrous Iron				20.7	NA	NA		NA NA	NA NA	NA NA			NA NA		NA NA			NA NA		NA NA	NA NA	NA NA
Nitrate Nitrogen				0.12			NA NA	NA	NA NA	NA			NA		NA	NA		NA			NA NA	NA
Sulfato				110			NA NA	NA	NA NA	NA			NA		NA	NA		NA			NA NA	NA
Total Organic Carbon				69		NA	NA										ΝA			ΝA		
Ferrous Iron Dissolved			+	0.3	NA	NA	NA	NA	ΝΔ	ΝΔ	ΝΔ	NA	ΝΔ	ΝΔ	NA	NA	ΝA	ΝΔ	NA	ΝΔ	ΝΔ	ΝΔ
Manganese			+	66	NA	NA	NA	NA	ΝΔ	ΝΔ	ΝΔ	NA	ΝΔ	ΝΔ	NA	NA	ΝA	ΝΔ	NA	ΝΔ	ΝΔ	ΝΔ
Manganese Dissolved				63	NA	NA	ΝΔ	ΝΔ	ΝΔ	ΝΔ	ΝΔ	ΝΔ	ΝΔ	ΝΔ	ΝΔ	NΔ	ΝΔ	ΝΔ	NA	ΝΔ	ΝΔ	ΝΔ
Dissolved Oxygen (DO)				31	NA	NA	ΝΔ	ΝΔ	ΝΔ	ΝΔ	ΝΔ	NΔ	ΝΔ	ΝΔ	ΝΔ	NΔ	ΝΔ	ΝΔ	ΝΔ	ΝΔ	NΔ	NA
nH				7 59	NA	NA	ΝΔ	ΝΔ	ΝΔ	ΝΔ	ΝΔ	NΔ	ΝΔ	ΝΔ	ΝΔ	NΔ	ΝΔ	ΝΔ	ΝΔ	ΝΔ	NΔ	NA
Oxygen Reduction Potential				-90 1	NA	NA	NA	NA	NA	NA	ΝΔ	ΝΔ	ΝΔ	NA	NA	ΝΔ	ΝΔ	NA	NA	NA	NA	NA
oxygen neuliclion Folential				-30.1	11/1	11/4	11/1	11/1	11/1	11/1	11/1		11/1	11/1	11/1	11/1	11/1	11/1	11/1	11/1	11/5	11/1

NOTES:

Base = Baseline sample collected 12/14/99

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CAS = Chemical Abstract Service registry number

Bold = Exceeds RAOs for groundwater (Not applicable to Treatment System Effluent)

Bold/Shaded = Exceeds Buffalo Sewer Authority Discharge Limits (Groundnwater Treat ND = Not Detected

E = Exceeds Calibration Range

D = Sample reanalyzed and quantified at higher dilution

NCD = (sample) Not Collected, Dry well

NSPD = Not sampled, pump down

Well MW-11 was removed during excavation and is no longer sampled. Well MW-15A was filled with gravel and is no longer sampled.

ANALYTE		Method		MW-22 cont.											MW-22A							
Sample Collection Date:	CAS	Detection	RAOs GW	Mar-24-05	June-26-05	Oct-23-05	Jan-04-06	Mar-17-06	6 July-13-06	6 Dec-18-06	May-02-07	Nov-14-07	May-14-08	Jul-30-08	Apr-15-09	Oct-6-09	Jan-14-10	Mar-23-10	July-2-10	May-3-07	Nov-22-07	7 May-14-08
Dilution:		Limit		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Volatile Organic Compounds (ug/l)																						
acetone	67641	20	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	160
benzene	71432	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
bromodichloromethane	75274	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
bromoform	75252	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
bromomethane	74839	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-butanone (MEK)	78933	10	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
carbon disulfide	75150	10	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
carbon tetrachloride	56235	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
chlorobenzene	108907	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
chloroethane	75003	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
chloroform	67663	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
chloromethane	/48/3	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
dibromocnioromethane	124481	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1, 1-uichloroethane	107000	3 F	-																			
1,2-uctiloroethane	75254) F	-																			
r, r-uchioroethene	156502	5	- 5			112						17				24			ND			
trans 1.2 dichloroothono	156605	5	5		ND		ND	ND	ND	ND	ND		ND	ND	ND		ND	ND			ND	ND
1.2 dichloropropano	79975	5	5		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND	ND
cis-1 3-dichloropropene	542756	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1 3-dichloropropene	542756	5		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
ethylbenzene	100414	5	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-hexanone	591786	10	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
methylene chloride	75092	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-methyl-2-pentanone (MIBK)	108101	10	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
styrene	100425	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-tetrachloroethane	79345	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
tetrachloroethene	127184	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
toluene	108883	5	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-trichloroethane	71556	5	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-trichloroethane	79005	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trichloroethene	79016	5	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
vinyl chloride	75014	5	5	ND	ND	36	ND	ND	ND	8.7	34	12	ND	ND	ND	96	ND	ND	ND	5	ND	ND
o-xylene	95476	5	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
m+p xylene	108383/106423	5	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TOTAL VOCs				0	0	49	0	0	0	8.7	34	29	0	0	0	120	0	0	0	5	0	160
Percent TCE				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Percent DCE				0	0	27%	0	0	0	0	0	59%	0	0	0	20%	0	0	0	0	0	0
Percent VC				0	0	73%	0	0	0	100%	100%	41%	0	0	0	80%	0	0	0	100%	0	0
Chemistry (mg/L)											MW-2	2 cont.									MW-22/	4
Chloride				NA	NA	NA	NA	NA	NA	NA	NA	NA	70.2	50.6	71.7	32.1	64.8	NA	NA	NA	NA	17.7
Ferrous Iron				NA	NA	NA	NA	NA	NA	NA	NA	NA	2.83	1.53	1.29	0.55	5.12	NA	NA	NA	NA	1.28
Nitrate Nitrogen				NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.500	<0.500	0.5 U	0.5 U	0.5 U	NA	NA	NA	NA	< 0.500
Sulfate				NA	NA	NA	NA	NA	NA	NA	NA	NA	407	302	514	276	454	NA	NA	NA	NA	77.7
Total Organic Carbon			1	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.88	3.81	4.5	5	4.1	NA	NA	NA	NA	7.96
Ferrous Iron Dissolved			1	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.62	1.08	2.47	0.48	4.18	NA	NA	NA	NA	0.126
Manganese			1	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.368	0.125	328	208	231	NA	NA	NA	NA	0.3
Manganese Dissolved			1	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.351	0.0929	273	156	241	NA	NA	NA	NA	0.163
Dissolved Oxygen (DO)				NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.04	NA	26	25.2	NA	NA	NA	NA	NA
pH			1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.48	6.94	6.91	6.89	NA	NA	NA	NA	NA
Oxygen Reduction Potential				NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	-112	-279	-273.8	-45.8	NA	NA	NA	NA	NA

NOTES:

Base = Baseline sample collected 12/14/99

RAOs GW = Remedial Action Objectives for Groundwater CAS = Chemical Abstract Service registry number

Bold = Exceeds RAOs for groundwater (Not applicable to Treatment System Effluent)

Bold/Shaded = Exceeds Buffalo Sewer Authority Discharge Limits (Groundnwater Treat

ND = Not Detected

E = Exceeds Calibration Range

D = Sample reanalyzed and quantified at higher dilution NCD = (sample) Not Collected, Dry well

NSPD = Not sampled, pump down

Well MW-11 was removed during excavation and is no longer sampled.

ANALYTE		Method		MW-22A Cont.							MW-23 MW-24										
Sample Collection Date:	CAS	Detection	RAOs GW	Jul-30-08	3 Apr-15-0	9 Oct-6-09	Jan-14-10	Mar-23-10	July-2-10	Apr-15-09	Oct-6-09	Mar-31-0	8 Mar-31-0	08 May-14-08	Jul-30-0	8 Apr-15-0	09 Oct-6-09	Jan-14-1	0 Mar-23-10	Jul-6-10	Jul-6-10
Dilution:		Limit		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	10.00	50.00	25.00	25.00	1.00	1.00	1.00	25.00	20.00	1.00
Volatile Organic Compounds (ug/l)																					
acetone	67641	20	-	110	46	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	650	ND	470 D	500 E
benzene	71432	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	120 D	140
bromodichloromethane	75274	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
bromoform	75252	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
bromomethane	74839	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-butanone (MEK)	78933	10	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1100	3700	3700	2600 D	2600 E
carbon disulfide	75150	10	-	ND	ND	ND	ND	ND	ND	24	14	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
carbon tetrachloride	56235	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
chlorobenzene	108907	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
chloroethane	75003	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	27
chloroform	67663	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
chloromethane	74873	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
dibromochloromethane	124481	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-dichloroethane	75343	5	-	ND	ND	ND	ND	ND	ND	ND	ND	300	330	D 240	190	350	370	470	680	830 D	860 E
1,2-dichloroethane	107062	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-dichloroethene	75354	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-dichloroethene	156592	5	5	ND	ND	5.1	ND	ND	ND	ND	ND	4600	E 4800	D 3600	2900	3200	2600	200	850	ND	85
trans-1,2-dichloroethene	156605	5	5	ND	ND	ND	ND	ND	ND	ND	ND	72	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-dichloropropane	78875	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,3-dichloropropene	542756	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,3-dichloropropene	542756	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
ethylbenzene	100414	5	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-nexanone	591786	10	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
methylene chloride	75092	5	-		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-metnyi-2-pentanone (MIBK)	108101	10	-		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Styrene	70245	5	-			ND	ND			ND	ND	ND	ND	ND		ND	ND	ND	ND		
totrachloroothono	10719/	5	-		ND	ND	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
toluene	108883	5	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1 1 1-trichloroethane	71556	5	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1 1 2-trichloroethane	79005	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trichloroethene	79016	5	5	ND	ND	ND	ND	ND	ND	ND	ND	620	640	D 490	380	370	ND	ND	ND	ND	ND
vinyl chloride	75014	5	5	ND	ND	17	7.7	14	ND	ND	ND	2200	F 2300	D 2000	1300	1800	2600	1500	2300	1200 D	1200 F
o-xylene	95476	5	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
m+p xvlene	108383/10642	3 5	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TOTAL VOCs				110	46	22.1	7.7	14	0	24	14	7792	8070	6330	4770	5720	6670	6520	7530	5220	5412
Percent TCE				0	0	0	0	0	0	0	0	8%	8%	8%	8%	6%	0	0	0	0	0
Percent DCE				0	0	23%	0	0	0	0	0	59%	59%	57%	61%	56%	39%	3%	11%	0	2%
Percent VC				0	0	77%	100%	100%	0	0	0	28%	29%	32%	27%	31%	39%	23%	31%	23%	22%
Chemistry (mg/L)						MW-2	22A Cont.			MW	/-23					I	W-24				
Chloride				16.8	10.1	25.4	12.8	NA	NA	NA	NA	90.1	NA	NA	380	194	191	200	239	237	237
Ferrous Iron				0.737	0.1	U 0.12	0.1 U	NA	NA	NA	NA	0.164	NA	NA	1.4	0.1	0.38	1	U NA	NA	NA
Nitrate Nitrogen				<0.500	0.5	U 0.5	U 0.5 U	NA	NA	NA	NA	<0.500	NA	NA	<0.500	0.5	U 0.5	U 0.5	U 0.51	0.5 U	0.5 U
Sulfate		1	1	79.3	15.2	74	27.8	NA	NA	NA	NA	46.7	NA	NA	69.1	37.3	12.8	5.7	8.6	5.8	5.8
Total Organic Carbon		1	1	6.18	3.8	3.3	4.1	NA	NA	NA	NA	6.4	NA	NA	5.46	7	249	1370	1670	1430	1430
Ferrous Iron Dissolved		1	1	<0.100	0.13	0.1	U 0.1 U	NA	NA	NA	NA	<0.100	NA	NA	1.22	0.18	0.25	12.9	15400	6000	6000
Manganese				0.139	67	55	70	NA	NA	NA	NA	0.175	NA	NA	0.0814	45	81	213	NA	NA	NA
Manganese Dissolved		1	1	0.131	64	52	66	NA	NA	NA	NA	0.16	NA	NA	0.0723	40	78	159	289	167	167
Dissolved Oxygen (DO)				2.46	NA	30.1	17.7	NA	NA	NA	NA	NA	NA	NA	4.58	NA	39.4	48	NA	41.3	41.3
pH				7.02	7.02	7.06	7.02	NA	NA	NA	NA	NA	NA	NA	6.79	NA	6.85	6.59	NA	6.48	6.48
Oxygen Reduction Potential				-283	-337	-294.8	-249.7	NA	NA	NA	NA	NA	NA	NA	-62	NA	-249.8	-8.2	NA	-10.8	-10.8

NOTES:

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Bold/Shaded = Exceeds Buffalo Sewer Authority Discharge Limits (Groundnwater Treat ND = Not Detected

E = Exceeds Calibration Range

D = Sample reanalyzed and quantified at higher dilution

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Well MW-11 was removed during excavation and is no longer sampled.

ANALYTE		Method						M۱	V-24A						M۱	V-25		MW-25A				
Sample Collection Date:	CAS	Detection	RAOs GW	Mar-31-08	May-14-08	May-14-08	Jul-30-08	Jul-30-08	Apr-15-09	Oct-6-09	Jan-14-10	Mar-23-10	Jul-6-10	Sept-9-09	Jan-27-10	Mar-24-10	July-2-10	Sept-9-09	Sept-9-09	Jan-27-10	Mar-24-10	July-2-10
Dilution:		Limit		2.00	2.00	20.00	2.00	20.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00 Dup	1.00	1.00	1.00
Volatile Organic Compounds (ug/l)																						
acetone	67641	20	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	31	ND								
benzene	71432	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
bromodichloromethane	75274	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
bromoform	75252	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
bromomethane	74839	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-butanone (MEK)	78933	10	-	ND	ND	ND	ND	ND	ND	ND	ND	27	130	ND								
carbon disulfide	/5150	10	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
carbon tetrachioride	109007	5	-	ND	ND	ND	ND	ND	ND	ND	ND		ND	ND	ND	ND	ND	ND		ND		ND
chloroothana	75002	5	-			ND	ND	ND	ND	280		11	ND 91	ND	ND	ND					ND	ND
chloroform	67663	5	-			ND	ND	ND	ND					ND	ND	ND		14	14	ND 6.1	ND	ND
chloromethane	7/873	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND		ND	ND
dibromochloromethane	124481	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1.1-dichloroethane	75343	5	-	26	61	ND	72	73	D 84	130	67	60	69	ND								
1.2-dichloroethane	107062	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-dichloroethene	75354	5	-	ND	13	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-dichloroethene	156592	5	5	380	1800 E	1700) 750	E 760	D 540	ND	140	77	36	ND	ND	ND	ND	ND	ND	6.4	ND	ND
trans-1,2-dichloroethene	156605	5	5	ND	19	ND	12	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-dichloropropane	78875	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,3-dichloropropene	542756	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,3-dichloropropene	542756	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
ethylbenzene	100414	5	5	ND	ND	ND	ND	ND	ND	26	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-hexanone	591786	10	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
methylene chloride	75092	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-methyl-2-pentanone (MIBK)	108101	10	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
styrene	100425	5	-	ND	ND	ND	ND	ND	ND	ND	ND		ND	ND	ND	ND	ND	ND		ND		ND
tetrachloroethene	12718/	5	-		ND	ND	ND	ND	ND	ND	ND		ND	ND	ND	ND	ND		ND	ND	ND	ND
toluene	108883	5	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	87	87	ND	ND	ND
1 1 1-trichloroethane	71556	5	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND			ND	ND	ND
1 1 2-trichloroethane	79005	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trichloroethene	79016	5	5	23	110	110	48	49	D 26	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
vinvl chloride	75014	5	5	94	590 E	560) 390	400	D 320	ND	190	110	64	ND	ND	ND	ND	9.1	9.9	23	15	14
o-xylene	95476	5	5	ND	ND	ND	ND	ND	ND	12	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
m+p xylene	108383/106423	5	5	ND	ND	ND	ND	ND	ND	28	ND	ND	ND	ND	ND	ND	ND	8.3	8.1	ND	ND	ND
TOTAL VOCs				523	2593	2370	1272	1282	970	476	397	285	338.1	0	0	0	0	40.1	40.7	35.5	15	14
Percent TCE				4%	4%	5%	4%	4%	3%	0	0	0	0	0	0	0	0	0	0	0	0	0
Percent DCE				73%	69%	72%	59%	59%	56%	0	35%	27%	11%	0	0	0	0	0	0	18%	0	0
Percent VC				18%	23%	24%	31%	31%	33%	0	48%	39%	19%	0	0	0	0	23%	24%	65%	100%	100%
Chemistry (mg/L)								M۱	V-24A						M۱	V-25				MW-25A		
Chloride				95.8	NA	NA	NA	218	231	186	183	256	288	49.4	NA	NA	NA	50.3	59.9	NA	NA	NA
Ferrous Iron				0.155	NA	NA	NA	<0.100	2.63	2.67	4.97	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nitrate Nitrogen				<0.500	NA	NA	NA	<0.500	0.5 l	J 0.5 U	0.5 U	0.55	0.5 U	0.88	NA	NA	NA	0.91	0.91	NA	NA	NA
Sulfate				94.5	NA	NA	NA	78.5	26.2	51.7	28.5	24.5	2.0 U	91.9	NA	NA	NA	43	43.8	NA	NA	NA
Total Organic Carbon				2.21	NA	NA	NA	3.73	5.9	19.6	10	19.1	73.2	17.1	NA	NA	NA	4.2	3.5	NA	NA	NA
Ferrous Iron Dissolved				<0.100	NA	NA	NA	<0.100	2.85	1.78	3.6	3380	16500	100 L	I NA	NA	NA	100 U	100 U	NA	NA	NA
Manganese				0.116	NA	NA	NA	0.142	186	254	129	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese Dissolved				0.148	NA	NA	NA	0.133	176	247	254	160	171	110	NA	NA	NA	10 U	10 U	NA	NA	NA
Dissolved Oxygen (DO)				NA	NA	NA	NA	7.08	NA	15.7	20.1	NA	19.9	NA								
				NA	NA	NA	NA	7.3	NA	7.2	7.45	NA	7.1	7.15	NA	NA	NA	7.69	8.34	NA	NA	NA
Oxygen Reduction Potential				NA	NA	NA	NA	-3	NA	-304.5	-119.8	NA	-72.3	NA								

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E = Exceeds Calibration Range

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Well MW-11 was removed during excavation and is no longer sampled.

ANALYTE		Method		MW-26								MW	/-26A	MW-27	MW-27A	MW-28	MW-28A	MW-29A		
Sample Collection Date:	CAS	Detection	RAOs GW	Sept-9-0)9	Jan-27-10	Mar-24-10	July-2-10	Sept-9-09	9 Se	ept-9-09	Jan-27-10	Mar-24-10	July-2-10	July-2-10	July-2-10	July-2-10	July-2-10	July-2-10	July-2-10
Dilution:		Limit		1.00		1.00	1.00	1.00	1.00		10.00	10.00	5.00	1.00	5.00	1.00	1.00	1.00	1.00	1.00
Volatile Organic Compounds (ug/l)																				
acetone	67641	20	-	ND		ND	ND	ND	ND	1	ND	ND	100	ND	ND	ND	ND	ND	ND	ND
benzene	71432	5	-	ND		ND	ND	ND	ND	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
bromodichloromethane	75274	5	-	ND		ND	ND	ND	ND	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
bromoform	75252	5	-	ND		ND	ND	ND	ND	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
bromomethane	74839	5	-	ND		ND	ND	ND	ND	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-butanone (MEK)	78933	10	-	ND		ND	ND	ND	ND	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
carbon disulfide	75150	10	-	ND		ND	ND	ND	ND	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
carbon tetrachloride	56235	5	-	ND		ND	ND	ND	ND	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
chlorobenzene	108907	5	-	ND		ND	ND	ND	ND	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
chloroethane	75003	5	-	ND		ND	ND	ND	ND	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
chloroform	67663	5	-	ND		ND	ND	ND	ND	1	ND	ND	ND	ND	ND	ND	7.7	ND	7.6	9.4
chloromethane	74873	5	-	ND		ND	ND	ND	ND	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
dibromochloromethane	124481	5	-	ND		ND	ND	ND	ND	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-dichloroethane	75343	5	-	ND		ND	ND	ND	ND	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-dichloroethane	107062	5	-	ND		ND	ND	ND	ND	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-dichloroethene	75354	5	-	ND		ND	ND	ND	ND	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-dichloroethene	156592	5	5	46		5.2	12	ND	750	E 7	7 40 D	490	540	710 E	680 D	ND	ND	27	ND	ND
trans-1,2-dichloroethene	156605	5	5	ND		ND	ND	ND	16	1	ND	ND	ND	7.1	ND	ND	ND	ND	ND	ND
1,2-dichloropropane	78875	5	-	ND		ND	ND	ND	ND	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,3-dichloropropene	542756	5	-	ND		ND	ND	ND	ND	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,3-dichloropropene	542756	5	-	ND		ND	ND	ND	ND	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
ethylbenzene	100414	5	5	ND		ND	ND	ND	ND	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	10
2-hexanone	591786	10	-	ND		ND	ND	ND	ND	r	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
methylene chloride	75092	5	-	ND		ND	ND	ND	ND	r	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-methyl-2-pentanone (MIBK)	108101	10	-	ND		ND	ND	ND	ND	r	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
styrene	100425	5	-	ND		ND	ND	ND	ND	r	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-tetrachioroethane	/9345	5	-			ND	ND	ND	ND	1		ND	ND	ND	ND	ND	ND	ND	ND	ND
teluene	12/164	5	-				ND	ND	ND			ND	ND	ND	ND	ND	ND	ND	ND	ND
	71550	5	5			ND	ND		ND			ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-trichleroothane	71556	5	5				ND		ND			ND	ND	ND	ND	ND	ND	ND	ND	ND
trichlereethene	79003	5	-			ND				1		ND	ND		ND	ND	ND	ND		
vinul oblorido	79010	5	5	1ND 20		ND	ND 9	ND	ND 560	E 5		270	350	500 E	500 D	ND	ND	ND		
	05476	5	5	20		ND	ND		500				330		330 D	ND	ND	ND		10
	90470	5	5				ND	ND	ND			ND	ND		ND	ND	ND	ND		19
	100303/100423	5		74		5.0	00		1000	1	200	700	000	1207.1	1070		77	07	7.0	F4.4
Demonst TOP				74		0.2	20	0	1320		300	700	990	1307.1	1270	0	7.7	21	7.0	34.4
Percent ICE				0		0	0	0	0	5	0	0	0	0	0	0	0	100%	0	0
Percent DCE				62%		100%	60%	0	57%	5	07%	64%	55%	54%	54%	0	0	100%	0	0
Percent VC				30%		0	40%	0	42%	4	3%	30%		43%	40%					
Chemistry (mg/L)						IV	IW-26						-26A		·	IVI VV-27	IVIVV-27A	MIW-28	MW-28A	MW-29A
Chloride				550		NA	NA	NA	46.1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ferrous Iron			-	NA		NA	NA	NA	NA	1 	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nitrate Nitrogen			 	0.5	U	NA	NA	NA	0.5	U 1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sultate				99.9	\vdash	NA	NA	NA	73.3	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Iotal Organic Carbon			ļ	14.6	$\left \ldots \right $	NA	NA	NA	4.9	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ferrous Iron Dissolved			ļ	100	U	NA	NA	NA	130	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese			ļ	NA	\square	NA	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese Dissolved				217	-	NA	NA	NA	10	U 1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dissolved Oxygen (DO)			ļ	NA	\square	NA	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
рн			ļ	7.18	\square	NA	NA	NA	8.49	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Oxygen Reduction Potential				NA		NA	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

NOTES:

Base = Baseline sample collected 12/14/99

RAOs GW = Remedial Action Objectives for Groundwater

CAS = Chemical Abstract Service registry number

Bold = Exceeds RAOs for groundwater (Not applicable to Treatment System Effluent)

Bold/Shaded = Exceeds Buffalo Sewer Authority Discharge Limits (Groundnwater Treat

ND = Not Detected

E = Exceeds Calibration Range

D = Sample reanalyzed and quantified at higher dilution

NCD = (sample) Not Collected, Dry well

NSPD = Not sampled, pump down

Well MW-11 was removed during excavation and is no longer sampled.



APPENDIX C

GROUNDWATER MONITORING FIGURES



SITE LOCATION MAP



HITHOFFER	Queen of Pear	chiller Park	Libraryl ander en 1,000 2,000	4,000 Feet
DOCUMENT CONTROL NO.	PROJECT	LEICA MICROSYSTEMS INC. 203 EGGERT ROAD CHEEKTOWAGA, NY	ENERGYSOLUTIONS	PROJECT # 137015 FILENAME: SCALE: DATE:
REVISION NO.	DRAWING	SITE LOCATION MAP	100 Mill Plain Road Danbury, CT 06811 203-797-8301	SEE SCALEBAR 12/23/09 BY: MT CK: FIGURE # 1



WELL LOCATIONS



Egert Rd 120	240 Feet			Centre
DOCUMENT CONTROL NO.	PROJECT	LEICA MICROSYSTEMS INC. 203 EGGERT ROAD CHEEKTOWAGA, NY	ENERGYSOLUTIONS	PROJECT # 137015 FILENAME: SCALE: DATE:
REVISION NO.	DRAWING	MONITORING WELL LOCATIONS	100 Mill Plain Road Danbury, CT 06811 203-797-8301	SEE SCALEBAR 8/17/10 BY: MT CK: PM FIGURE # 2



GROUNDWATER CONTOURS, JULY 2010, OVERBURDEN WELLS





GROUNDWATER CONTOURS, JULY 2010, BEDROCK WELLS





CIS-1,2-DCE CONTAMINANT CONCENTRATION ISOPLETHS, JULY 2010, OVERBURDEN WELLS





CIS-1,2-DCE CONTAMINANT CONCENTRATION ISOPLETHS, JULY 2010, BEDROCK WELLS





VINYL CHLORIDE CONTAMINANT CONCENTRATION ISOPLETHS, JULY 2010, OVERBURDEN WELLS





VINYL CHLORIDE CONTAMINANT CONCENTRATION ISOPLETHS, JULY 2010, BEDROCK WELLS





APPENDIX D

ANALYTICAL DATA

JULY 2010 GROUNDWATER ANALYTICAL DATA

1 Mustard Street, Suite 250 | Rochester, NY 14609 | 585-288-5380 | 585-288-8475 fax | www.caslab.com



July 19, 2010

Service Request No: R1003586

Mr. Robert McPeak Energy Solutions, Inc. 100 Mill Plain Rd 2nd Floor Mailbox 106 Danbury, CT 06811

Laboratory Results for: Leica Wells July 2010

Dear Mr. McPeak:

Enclosed are the results of the sample(s) submitted to our laboratory on July 7, 2010. For your reference, these analyses have been assigned our service request number **R1003586**.

All analyses were performed according to our laboratory's quality assurance program. The test results meet requirements of the NELAP standards except as noted in the case narrative report. All results are intended to be considered in their entirety, and Columbia Analytical Services, Inc. (CAS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please contact me if you have any questions. My extension is 134. You may also contact me via email at KBunker@caslab.com.

Respectfully submitted,

Columbia Analytical Services, Inc.

Burke

Karen Bunker Project Manager

Page 1 of 41
Client:	Energy Solutions	Service Request No.:	R1003586
Project:	Leica Wells 7/2010	Date Received:	7/7/2010
Sample Matrix:	Water		

All analyses were performed consistent with the quality assurance program of Columbia Analytical Services, Inc. (CAS). This report contains analytical results for samples designated for Tier II data deliverables. When appropriate to the method, method blank results have been reported with each analytical test. Surrogate recoveries have been reported for all applicable organic analyses.

Sample Receipt

Thirteen (13) groundwater samples were collected by the client between 7/2-3/2010 and received for analysis at Columbia Analytical Services on 7/7/10 via CAS Courier. The samples were received in good condition. The cooler receipt temperature was 3°C, within the guidelines of 0-6°C. One vial for each of the locations MW-22 and MW-22A were received broken. There was sufficient volume for analysis however.

Volatile Organics

Thirteen (13) water samples were analyzed for Volatile Organic compounds by GC/MS method 8260B.

The Initial and Continuing Calibration Criteria were met.

Batch QC is included in the report. All Laboratory Control Sample (LCS) recoveries for target compounds were within QC limits.

Hits above the calibration range of the standards are flagged as "E", estimated. The sample is then repeated at the appropriate dilution for the hit. Both sets of data are included in the report. The subsequent hit is flagged as "D".

All Surrogate recoveries are within acceptance limits.

All Laboratory Method Blanks were free from contamination.

The samples were analyzed within the 14 day holding time for the method. All vials are checked for preservation after the analysis in order to maintain the integrity of the sample. All vials were found to be preserved to a pH of ≤ 2 .

No problems were encountered during the analysis of these samples.

Burley Date 7/19/10 Approved by

CASE NARRATIVE

This report contains analytical results for the following samples: Service Request Number: R1003586

<u>Lab ID</u>	<u>Client ID</u>
R1003586-001	MW-27
R1003586-002	MW-25
R1003586-003	MW-25A
R1003586-004	MW-26
R1003586-005	MW-28
R1003586-006	MW-29A
R1003586-007	MW-28A
R1003586-008	MW-26A
R1003586-009	MW-27A
R1003586-010	MW-22A
R1003586-011	MW-22
R1003586-012	MW-18A
R1003586-013	MW-18



REPORT QUALIFIERS

- U Analyte was analyzed for but not detected. The sample quantitation limit has been corrected for dilution and for percent moisture, unless otherwise noted in the case narrative.
- J Estimated value due to either being a Tentatively Identified Compound (TIC) or that the concentration is between the MRL and the MDL. Concentrations are not verified within the linear range of the calibration. For DoD: concentration >40% difference between two GC columns (pesticides/Arclors).
- B Analyte was also detected in the associated method blank at a concentration that may have contributed to the sample result.
- E Inorganics- Concentration is estimated due to the serial dilution was outside control limits.
- E Organics- Concentration has exceeded the calibration range for that specific analysis.
- D Concentration is a result of a dilution, typically a secondary analysis of the sample due to exceeding the calibration range or that a surrogate has been diluted out of the sample and cannot be assessed.
- * Indicates that a quality control parameter has exceeded laboratory limits.
- # Spike was diluted out.
- + Correlation coefficient for MSA is <0.995.
- N Inorganics- Matrix spike recovery was outside laboratory limits.
- N Organics- Presumptive evidence of a compound (reported as a TIC) based on the MS library search.
- S Concentration has been determined using Method of Standard Additions (MSA).
- W Post-Digestion Spike recovery is outside control limits and the sample absorbance is <50% of the spike absorbance.
- P Concentration >40% (25% for CLP) difference between the two GC columns.
- C Confirmed by GC/MS
- Q DoD reports: indicates a pesticide/Aroclor is not confirmed (≥100% Difference between two GC columns).
- X See Case Narrative for discussion.



CAS/Rochester Lab ID # for State Certifications¹

NELAP Accredited Delaware Accredited Connecticut ID # PH0556 Florida ID # E87674 Illinois ID #200047 Maine ID #NY0032 Nebraska Accredited Navy Facilities Engineering Service Center Approved Nevada ID # NY-00032 New Jersey ID # NY004 New York ID # 10145 New Hampshire ID # 294100 A/B Pennsylvanía ID# 68-786 Rhode Island ID # 158 West Virginia ID # 292

¹ Analyses were performed according to our laboratory's NELAP-approved quality assurance program and any applicable state requirements. The test results meet requirements of the current NELAP standards or state requirements, where applicable, except as noted in the laboratory case narrative provided. For a specific list of accredited analytes, refer to the certifications section at <u>www.caslab.com</u>.

Analytical Report

Client:Energy SolutionsProject:Leica Wells July 2010Sample Matrix:WaterSample Name:MW-27Lab Code:R1003586-001

Service Request: R1003586 Date Collected: 7/ 2/10 1235 Date Received: 7/ 7/10

Volatile Organic Compounds by GC/MS

Analytical Method: 8260B

				Dilution	Date	Date	Extraction Analy	sis
Analyte Name	Result	Q	MRL	Factor	Extracted	Analyzed	Lot Lot	Note
Acetone	20	U	20	1	NA	7/10/10 01:53	20794	б
Benzene	5.0	U	5.0	1	NA	7/10/10 01:53	20794	÷6
Bromodichloromethane	5.0	U	5.0	1	NA	7/10/10 01:53	2079/	6
Bromoform	5.0	U	5,0	1	NA	7/10/10 01:53	20794	-6
Bromomethane	5.0	U	5.0	1	NA	7/10/10 01:53	20794	6
2-Butanone (MEK)	10	U	10	1	NA	7/10/10 01:53	20794	-б
Carbon Disulfide	10	U	10	1	NA	7/10/10 01:53	20794	6
Carbon Tetrachloride	5.0	U	5.0	1	NA	7/10/10 01:53	20794	6
Chlorobenzene	5.0	U	5.0	1	NA	7/10/10 01:53	20794	б
Chloroethane	5.0	U	5.0	1	NA	7/10/10 01:53	20794	-6
Chloroform	5.0	U	5.0	1	NA	7/10/10 01:53	2079	-6
Chloromethane	5.0	U	5.0	1	NA	7/10/10 01:53	2079	6
Dibromochloromethane	5.0	U	5.0	1	NA	7/10/10 01:53	20794	6
1,1-Dichloroethane	5.0	U	5.0	1	NA	7/10/10 01:53	20794	6
1,2-Dichloroethane	5.0	U	5.0	1	NA	7/10/10 01:53	2079	6
1,1-Dichloroethene	5,0	U	5.0	1	NA	7/10/10 01:53	20794	б
cis-1,2-Dichloroethene	5.0	U	5.0	1	NA	7/10/10 01:53	2079	6
trans-1,2-Dichloroethene	5.0	U	5.0	1	NA	7/10/10 01:53	2079	16
1,2-Dichloropropane	5.0	U	5.0	1	NA	7/10/10 01:53	2079	6
cis-1,3-Dichloropropene	5.0	U	5.0	1	NA	7/10/10 01:53	2079	16
trans-1,3-Dichloropropene	5.0	U	5.0	1	NA	7/10/10 01:53	2079	16
Ethylbenzene	5.0	U	5.0	1	NA	7/10/10 01:53	2079-	6
2-Hexanone	10	U	10	1	NA	7/10/10 01:53	2079	6
Methylene Chloride	5,0	U	5.0	1	NA	7/10/10 01:53	2079	16
4-Methyl-2-pentanone (MIBK)	10	U	10	1	NA	7/10/10 01:53	2079	16
Styrene	5.0	U	5.0	1	NA	7/10/10 01:53	2079	16
1,1,2,2-Tetrachloroethane	5.0	U	5.0	1	NA	7/10/10 01:53	2079	16
Tetrachloroethene	5.0	U	5.0	1	NA	7/10/10 01:53	2079-	16
Toluene	5.0	U	5.0	1	NA	7/10/10 01:53	2079	-6
1,1,1-Trichloroethane	5.0	U	5.0	1	NA	7/10/10 01:53	2079	16
1,1,2-Trichloroethane	5,0	U	5,0	1	NA	7/10/10 01:53	2079-	16
Trichloroethene	5.0	U	5.0	· 1	NA	7/10/10 01:53	2079	16
Vinyl Chloride	5.0	U	5.0	1	NA	7/10/10 01:53	2079	16

Comments:

SuperSet Reference: 10

e: 10-0000148748 rev 00



Analytical Report

Client:Energy SolutionsProject:Leica Wells July 2010Sample Matrix:WaterSample Name:MW-27Lab Code:R1003586-001

Service Request: R1003586 Date Collected: 7/ 2/10 1235 Date Received: 7/ 7/10

> Units: μg/L Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260B

			Dilution	Date	Date	Extraction Analysis		
Analyte Name	Result Q	MRL	Factor	Extracted	Analyzed	Lot	Lot	Note
o-Xylene	5.0 U	5.0	1	ŇA	7/10/10 01:53	3	207946	5
m,p-Xylenes	5.0 U	5,0	1	NA	7/10/10 01:53	3	207946	5

		Control	Date			
Surrogate Name	%Rec	Limits	Analyzed	Q	Note	
4-Bromofluorobenzene	105	85-122	7/10/10 01:53			
Toluene-d8	102	87-121	7/10/10 01:53			
Dibromofluoromethane	105	89-119	7/10/10 01:53			



Analytical Report

Client:Energy SolutionsProject:Leica Wells July 2010Sample Matrix:WaterSample Name:MW-25Lab Code:R1003586-002

Service Request: R1003586 Date Collected: 7/ 2/10 1345 Date Received: 7/ 7/10

> Units: µg/L Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260B

Analyte Name	Result	0	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysi Lot	s Note
Acetone	20	TI	20	1	ŇĂ	7/10/10 02:21		207946	
Benzene	5.0	Ŭ	5.0	ī	NA	7/10/10 02:21		207946	
Bromodichloromethane	5.0	U	5.0	1	NA	7/10/10 02:21		207946	
Bromoform	5,0	U	5.0	1	NA	7/10/10 02:21		207946	
Bromomethane	5.0	U	5.0	1	NA	7/10/10 02:21		207946	
2-Butanone (MEK)	10	U	10	1	NA	7/10/10 02:21		207946	
Carbon Disulfide	10	U	10	1	NA	7/10/10 02:21		207946	
Carbon Tetrachloride	5.0	U	5.0	1	NA	7/10/10 02:21		207946	
Chlorobenzene	5.0	U	5.0	1	NA	7/10/10 02:21		207946	
Chloroethane	5.0	U	5.0	1	NA	7/10/10 02:21		207946	*********
Chloroform	5.0	U	5.0	1	NA	7/10/10 02:21		207946	
Chloromethane	5.0	U	5.0	1	NA	7/10/10 02:21		207946	
Dibromochloromethane	5.0	U	5.0	1	NA	7/10/10 02:21		207946	
1,1-Dichloroethane	5.0	U	5.0	1	NA	7/10/10 02:21		207946	
1,2-Dichloroethane	5.0	U	5.0	1	NA	7/10/10 02:21	•	207946	
1,1-Dichloroethene	5.0	U	5.0	1	NA	7/10/10 02:21		207946	
cis-1,2-Dichloroethene	5.0	U	5.0	1	NA	7/10/10 02:21		207946	
trans-1,2-Dichloroethene	5.0	U	5,0	1	NA	7/10/10 02:21		207946	
1,2-Dichloropropane	5.0	U	5.0	1	NA	7/10/10 02:21		207946	
cis-1,3-Dichloropropene	5.0	υ	5.0	1	NA	7/10/10 02:21		207946	
trans-1,3-Dichloropropene	5.0	U	5.0	1	NA	7/10/10 02:21		207946	
Ethylbenzene	5.0	U	5.0	1	NA	7/10/10 02:21		207946	
2-Hexanone	10	U	10	1	NA	7/10/10 02:21	•	207946	
Methylene Chloride	5.0	U	5.0	1	NA	7/10/10 02:21		207946	
4-Methyl-2-pentanone (MIBK)	10	U	10	1	NA	7/10/10 02:21		207946	
Styrene	5.0	U	5.0	1	NA	7/10/10 02:21	l	207946	
1,1,2,2-Tetrachloroethane	5.0	U	5.0	1	NA	7/10/10 02:21		207946	
Tetrachloroethene	5.0	U	5.0	1	NA	7/10/10 02:21		207946	
Toluene	5.0	U	5.0	1	NA	7/10/10 02:21		207946	
1,1,1-Trichloroethane	5,0	U	5,0	1	NA	7/10/10 02:21		207946	
1,1,2-Trichloroethane	5.0	U	5,0	1	NA	7/10/10 02:21	L	207946	
Trichloroethene	5.0	U	5.0	1	NA	7/10/10 02:21	l	207946	
Vinyl Chloride	5.0	U	5.0	1	NA	7/10/10 02:21	L	207946	

Comments:



Analytical Report

Client:Energy SolutionsProject:Leica Wells July 2010Sample Matrix:WaterSample Name:MW-25Lab Code:R1003586-002

Service Request: R1003586 Date Collected: 7/2/10 1345 Date Received: 7/7/10

> Units: µg/L Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260B

				Dilution	Date	Date	Extraction	Analysi	is
Analyte Name	Result (Q	MRL	Factor	Extracted	Analyzed	Lot	Lot	Note
o-Xylene	5.0 L	J	5.0	1	NA	7/10/10 02:21		207946	5
m,p-Xylenes	5.0 L	IJ	5.0	1	NA	7/10/10 02:23		207946	5

		Control	Date		
Surrogate Name	%Rec	Limits	Analyzed (Q N	lote
4-Bromofluorobenzene	103	85-122	7/10/10 02:21		
Toluene-d8	102	87-121	7/10/10 02:21		
Dibromofluoromethane	106	89-119	7/10/10 02:21		



Analytical Report

Client:Energy SolutionsProject:Leica Wells July 2010Sample Matrix:WaterSample Name:MW-25ALab Code:R1003586-003

Service Request: R1003586 Date Collected: 7/2/10 1400 Date Received: 7/7/10

Volatile Organic Compounds by GC/MS

Analytical Method: 8260B

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Analysis Lot Lot Note
Acetone	20	U	20	1	NA	7/10/10 02:48	207946
Benzene	5.0	U	5.0	1	NA	7/10/10 02:48	207946
Bromodichloromethane	5.0	U	5.0	1	NA	7/10/10 02:48	207946
Bromoform	5.0	U	5.0	1	NA	7/10/10 02:48	207946
Bromomethane	5.0	U	5.0	1	NA	7/10/10 02:48	207946
2-Butanone (MEK)	10	U	10	1	NA	7/10/10 02:48	207946
Carbon Disulfide	10	υ	10	1	NA	7/10/10 02:48	207946
Carbon Tetrachloride	5.0	U	5.0	1	NA	7/10/10 02:48	207946
Chlorobenzene	5.0	U	5.0	1	NA	7/10/10 02:48	207946
Chloroethane	5,0	U	5.0	1	NA	7/10/10 02:48	207946
Chloroform	5.0	U	5.0	1	NA	7/10/10 02:48	207946
Chloromethane	5.0	υ	5.0	1	NA	7/10/10 02:48	207946
Dibromochloromethane	5.0	U	5.0	1	NA	7/10/10 02:48	207946
1,1-Dichloroethane	5.0	U	5.0	1	NA	7/10/10 02:48	207946
1,2-Dichloroethane	5.0	U	5.0	1	NA	7/10/10 02:48	207946
1,1-Dichloroethene	5,0	U	5.0	1	NA	7/10/10 02:48	207946
cis-1,2-Dichloroethene	5.0	U	5.0	1	NA	7/10/10 02;48	207946
trans-1,2-Dichloroethene	5.0	U	5.0	1	NA	7/10/10 02:48	207946
1,2-Dichloropropane	5,0	U	5.0	1	NA	7/10/10 02:48	207946
cis-1,3-Dichloropropene	5.0	U	5.0	1	NA	7/10/10 02:48	207946
trans-1,3-Dichloropropene	5.0	U	5.0	1	NA	7/10/10 02:48	207946
Ethylbenzene	5.0	U	5.0	1	NA	7/10/10 02:48	207946
2-Hexanone	10	U	10	1	NA	7/10/10 02:48	207946
Methylene Chloride	5.0	U	5.0	1	NA	7/10/10 02:48	207946
4-Methyl-2-pentanone (MIBK)	10	U	10	1	NA	7/10/10 02:48	207946
Styrene	5.0	U	5,0	1	NA	7/10/10 02:48	207946
1,1,2,2-Tetrachloroethane	5.0	U	5.0		NA	7/10/10 02:48	207946
Tetrachloroethene	5.0	υ	5.0	1	NA	7/10/10 02:48	207946
Toluene	5.0	υ	5.0	1	NA	7/10/10 02:48	207946
1,1,1-Trichloroethane	5.0	U	5.0	1	NA	7/10/10 02:48	207946
1,1,2-Trichloroethane	5.0	U	5.0	1	NA	7/10/10 02:48	207946
Trichloroethene	5.0	U	5.0	1	NA	7/10/10 02:48	207946
Vinyl Chloride	14		5.0	1	NA	7/10/10 02:48	207946



Analytical Report

Client:Energy SolutionsProject:Leica Wells July 2010Sample Matrix:WaterSample Name:MW-25ALab Code:R1003586-003

Service Request: R1003586 Date Collected: 7/ 2/10 1400 Date Received: 7/ 7/10

> Units: µg/L Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260B

				Dilut	Dilution		Date	Extraction	Analysi	8
Analyte Name	Result	Q	MRL	Fact	tor	Extracted	Analyzed	Lot	Lot	Note
o-Xylene	5.0	U	5.0	1		NA	7/10/10 02:48	3	207946	
m,p-Xylenes	5,0	U	5,0	1		NA	7/10/10 02:48	3	207946	
				Control		Data				

Surrogate Name	%Rec	Limits	Analyzed	Q	Note	
4-Bromofluorobenzene	99	85-122	7/10/10 02:48			
Toluene-d8	97	87-121	7/10/10 02:48			
Dibromofluoromethane	101	89-119	7/10/10 02:48			

Comments:

,

Analytical Report

Client:Energy SolutionsProject:Leica Wells July 2010Sample Matrix:WaterSample Name:MW-26Lab Code:R1003586-004

Service Request: R1003586 Date Collected: 7/ 2/10 1415 Date Received: 7/ 7/10

Volatile Organic Compounds by GC/MS

Analytical Method: 8260B

				Dilution	Date	Date	Extraction	Analysi	5
Analyte Name	Result	Q	MRL	Factor	Extracted	Analyzed	Lot	Lot	Note
Acetone	20	U	20	1	NA	7/10/10 03:15		207946	
Benzene	5.0	U	5.0	1	NA	7/10/10 03:15		207946	
Bromodichloromethane	5.0	U	5.0	1	NA	7/10/10 03:15		207946	
Bromoform	5.0	U	5.0	1	NA	7/10/10 03:15		207946	
Bromomethane	5.0	U	5.0	1	NA	7/10/10 03:15		207946	
2-Butanone (MEK)	10	U	10	1	NA	7/10/10 03:15		207946	
Carbon Disulfide	10	U	10	1	NA	7/10/10 03:15	;	207946	
Carbon Tetrachloride	5.0	U	5.0	1	NA	7/10/10 03:15	i	207946	
Chlorobenzene	5.0	U	5.0	1	NA	7/10/10 03:15	i	207946	
Chloroethane	5.0	U	5.0	1	NA	7/10/10 03:15		207946	
Chloroform	5.0	U	5.0	1	NA	7/10/10 03:15	i	207946	
Chloromethane	5.0	U	5.0	1	NA	7/10/10 03:15	i	207946	
Dibromochloromethane	5.0	U	5,0	1	NA	7/10/10 03:15	1	207946	
1,1-Dichloroethane	5.0	U	5.0	1	NA	7/10/10 03:15	;	207946	
1,2-Dichloroethane	5.0	U	5.0	1	NA	7/10/10 03:15	5	207946	
1,1-Dichloroethene	5.0	U	5.0	1	NA	7/10/10 03:15	;	207946	
cis-1,2-Dichloroethene	5.0	U	5.0	1	NA	7/10/10 03:15	5	207946	
trans-1,2-Dichloroethene	5.0	U	5.0	1	NA	7/10/10 03:15	5	207946	
1,2-Dichloropropane	5.0	U	5.0	1	NA	7/10/10 03:15	5	207946	
cis-1,3-Dichloropropene	5.0	U	5.0	1	NA	7/10/10 03:15	5	207946	
trans-1,3-Dichloropropene	5.0	U	5.0	1	NA	7/10/10 03:15	5	207946	
Ethylbenzene	5.0	U	5.0	1	NA	7/10/10 03:15	5	207946	
2-Hexanone	10	U	10	1	NA	7/10/10 03:15	5	207946	
Methylene Chloride	5.0	U	5.0	1	NA	7/10/10 03:15	5	207946	
4-Methyl-2-pentanone (MIBK)	10	U	10	1	NA	7/10/10 03:15	5	207946	
Styrene	5.0	U	5.0	1	NA	7/10/10 03:15	5	207946	
1,1,2,2-Tetrachloroethane	5.0	U	5.0	1	NA	7/10/10 03:15	5	207946	
Tetrachloroethene	5.0	U	5.0	1	NA	7/10/10 03:15	5	207946	
Toluene	5.0	U	5.0	.1	NA	7/10/10 03:15	5	207946	
1,1,1-Trichloroethane	5.0	U	5.0		NA	7/10/10 03:15	5	207946	
1,1,2-Trichloroethane	5.0	U	5.0	1	NA	7/10/10 03:15	5	207946	
Trichloroethene	5,0	U	5,0	1 ·	NA	7/10/10 03:15	5	207946	
Vinyl Chloride	5.0	U	5.0	1	NA	7/10/10 03:15	5	207946	

Analytical Report

Client:Energy SolutionsProject:Leica Wells July 2010Sample Matrix:WaterSample Name:MW-26Lab Code:R1003586-004

Service Request: R1003586 Date Collected: 7/ 2/10 1415 Date Received: 7/ 7/10

Units: µg/L Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260B

		Dilution	Date	Date	Extraction Analysis		is
Result Q	MRL	Factor	Extracted	Analyzed	Lot	Lot	Note
5,0 U	5.0	1	NA	7/10/10 03:15	5	207946	5
5.0 U	5.0	1	NA	7/10/10 03:15	5	207946	5
	Result Q 5.0 U 5.0 U	Result Q MRL 5.0 U 5.0 5.0 U 5.0 5.0 U 5.0	Result Q MRL Dilution 5.0 U 5.0 1 5.0 U 5.0 1 5.0 U 5.0 1	Result QMRLDilutionDate5.0 U5.01NA5.0 U5.01NA	Result QMRLDilutionDateDate5.0 U5.01NA7/10/10 03:155.0 U5.01NA7/10/10 03:15	Result QMRLDilutionDateDateExtraction5.0 U5.01NA7/10/10 03:151NA7/10/10 03:155.0 U5.01NA7/10/10 03:1511NA7/10/10 03:15	DilutionDateDateExtraction AnalysResult QMRLFactorExtractedAnalyzedLot5.0 U5.01NA7/10/10 03:152079405.0 U5.01NA7/10/10 03:15207940

		Control	Date			
Surrogate Name	%Rec	Limits	Analyzed	Q	Note	
4-Bromofluorobenzene	102	85-122	7/10/10 03:15			
Toluene-d8	99	87-121	7/10/10 03:15			
Dibromofluoromethane	104	89-119	7/10/10 03:15			

Analytical Report

Client:Energy SolutionsProject:Leica Wells July 2010Sample Matrix:WaterSample Name:MW-28Lab Code:R1003586-005

Service Request: R1003586 Date Collected: 7/2/10 1530 Date Received: 7/7/10

> Units: μg/L Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260B

			Dilution	Date	Date	Extraction Analysis
Analyte Name	Result Q	MRL	Factor	Extracted	Analyzed	Lot Lot Note
Acetone	20 U	20	1	NA	7/10/10 03:42	207946
Benzene	5.0 U	5.0	1	NA	7/10/10 03:42	207946
Bromodichloromethane	5.0 U	5,0	1	NA	7/10/10 03:42	207946
Bromoform	5.0 U	5,0	1	NA	7/10/10 03:42	207946
Bromomethane	5.0 U	5.0	1	NA	7/10/10 03:42	207946
2-Butanone (MEK)	10 U	10	1	NA	7/10/10 03:42	207946
Carbon Disulfide	10 U	10	1	NA	7/10/10 03:42	207946
Carbon Tetrachloride	5.0 U	5.0	1	NA	7/10/10 03:42	207946
Chlorobenzene	5.0 U	5.0	1	NA	7/10/10 03:42	207946
Chloroethane	5.0 U	5,0	1	NA	7/10/10 03:42	207946
Chloroform	5.0 U	5.0	1	NA	7/10/10 03:42	207946
Chloromethane	5.0 U	5.0	1	NA	7/10/10 03:42	207946
Dibromochloromethane	5.0 U	5,0	1	NA	7/10/10 03:42	207946
1,1-Dichloroethane	5.0 U	5.0	1	NA	7/10/10 03:42	207946
1,2-Dichloroethane	5.0 U	5,0	1	NA	7/10/10 03:42	207946
1,1-Dichloroethene	5.0 U	5,0	1	NA	7/10/10 03:42	207946
cis-1,2-Dichloroethene	27	5.0	1	NA	7/10/10 03:42	207946
trans-1,2-Dichloroethene	5.0 U	5.0	1	NA	7/10/10 03:42	207946
1,2-Dichloropropane	5.0 U	5.0	1	NA	7/10/10 03:42	207946
cis-1,3-Dichloropropene	5.0 U	5.0	1	NA	7/10/10 03:42	207946
trans-1,3-Dichloropropene	5.0 U	5.0	1	NA	7/10/10 03:42	207946
Ethylbenzene	5.0 U	5.0	1	NA	7/10/10 03:42	207946
2-Hexanone	10 U	10	1	NA	7/10/10 03:42	207946
Methylene Chloride	5.0 U	5.0	1	NA	7/10/10 03:42	207946
4-Methyl-2-pentanone (MIBK)	10 U	10	1	NA	7/10/10 03:42	207946
Styrene	5.0 U	5.0	1	NA	7/10/10 03:42	207946
1,1,2,2-Tetrachloroethane	5.0 U	5.0	1	NA	7/10/10 03:42	207946
Tetrachloroethene	5.0 U	5.0	1	NA	7/10/10 03:42	207946
Toluene	5.0 U	5,0	1	NA	7/10/10 03:42	207946
1,1,1-Trichloroethane	5.0 U	5.0	1	NA	7/10/10 03:42	207946
1,1,2-Trichloroethane	5.0 U	5.0	1	NA	7/10/10 03:42	207946
Trichloroethene	5.0 U	5.0	1	NA	7/10/10 03:42	207946
Vinyl Chloride	5.0 U	5.0	1	NA	7/10/10 03:42	207946

Analytical Report

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Client:Energy SolutionsProject:Leica Wells July 2010Sample Matrix:WaterSample Name:MW-28Lab Code:R1003586-005

Service Request: R1003586 Date Collected: 7/ 2/10 1530 Date Received: 7/ 7/10

> Units: µg/L Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260B

Analyte Name			Dilution	Date	Date	Extraction	on Analysis	
	Result Q	MRL	Factor	Extracted	Analyzed	Lot	Lot	Note
o-Xylene	5.0 U	5.0	1	NA	7/10/10 03:42	2	207946	
m,p-Xylenes	5.0 U	5.0	1	NA	7/10/10 03:42	2	207946	

		Control	Date			
Surrogate Name	%Rec	Limits	Analyzed	Q	Note	
4-Bromofluorobenzene	101	85-122	7/10/10 03:42			
Toluene-d8	100	87-121	7/10/10 03:42			
Dibromofluoromethane	105	89-119	7/10/10 03:42			

Analytical Report

Client:Energy SolutionsProject:Leica Wells July 2010Sample Matrix:WaterSample Name:MW-29ALab Code:R1003586-006

Service Request: R1003586 Date Collected: 7/3/10 1300 Date Received: 7/7/10

Volatile Organic Compounds by GC/MS

Analytical Method: 8260B

4 1 / NT		~	1 <i>C</i>11 1	Dilution	Date	Date	Extraction A	Analysi	S
Analyte Name	Result	Q	MRL	Factor	Extracted	Analyzed	Lot	Lot	Note
Acetone	20	U	20	1	NA	7/10/10 04:09	,	207946	
Benzene	5,0	U	5.0	1	NA	7/10/10 04:09	'	207946	
Bromodichloromethane	5.0	U	5.0	1	NA	7/10/10 04:09	2	207946	
Bromoform	5.0	U	5.0	1	NA	7/10/10 04:09	2	207946	
Bromomethane	5,0	U	5.0	1	NA	7/10/10 04:09	1 2	207946	
2-Butanone (MEK)	10	U	10	1	NA	7/10/10 04:09) 2	207946	
Carbon Disulfide	10	U	10	1	NA	7/10/10 04:09		207946	
Carbon Tetrachloride	5.0	U	5.0	1	NA	7/10/10 04:09		207946	
Chlorobenzene	5.0	U	5.0	1	NA	7/10/10 04:09		207946	
Chloroethane	5.0	υ	5.0	1	NA	7/10/10 04:09)	207946	
Chloroform	9.4		5.0	1	NA	7/10/10 04:09		207946	
Chloromethane	5,0	U	5.0	1	NA	7/10/10 04:09) :	207946	
Dibromochloromethane	5.0	U	5,0	1	NA	7/10/10 04:09)	207946	
1,1-Dichloroethane	5,0	U	5.0	1	NA	7/10/10 04:09) :	207946	
1,2-Dichloroethane	5.0	U	5.0	1	NA	7/10/10 04:09) (207946	
1,1-Dichloroethene	5.0	U	5.0	1	NA	7/10/10 04:09	1	207946	
cis-1,2-Dichloroethene	5.0	U	5.0	1	NA	7/10/10 04:09	1 1	207946	
trans-1,2-Dichloroethene	5.0	U	5.0	1	NA	7/10/10 04:09		207946	
1,2-Dichloropropane	5.0	U	5.0	1	NA	7/10/10 04:09		207946	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
cis-1,3-Dichloropropene	5.0	U	5.0	1	NA	7/10/10 04:09) :	207946	
trans-1,3-Dichloropropene	5.0	U	5.0	1	NA	7/10/10 04:09	' 2	207946	
Ethylbenzene	10		5.0	1	NA	7/10/10 04:09)	207946	
2-Hexanone	10	U	10	1	NA	7/10/10 04:09) 1	207946	
Methylene Chloride	5.0	U	5.0	1	NA	7/10/10 04:09		207946	
4-Methyl-2-pentanone (MIBK)	10	U	10	1	NA	7/10/10 04:09		207946	
Styrene	5,0	U	5.0	1	NA	7/10/10 04:09) :	207946	
1,1,2,2-Tetrachloroethane	5.0	U	5.0	1	NA	7/10/10 04:09		207946	
Tetrachloroethene	5.0	U	5.0	1	NA	7/10/10 04:09)	207946	
Toluene	5.0	U	5.0	1	NA	7/10/10 04:09) 1	207946	
1,1,1-Trichloroethane	5.0	U	5.0	1	NA	7/10/10 04:09		207946	
1,1,2-Trichloroethane	5.0	U	5.0	1	NA	7/10/10 04:09)	207946	
Trichloroethene	5.0	U	5.0	1	NA	7/10/10 04:09) :	207946	
Vinyl Chloride	5.0	U	5,0	1	NA	7/10/10 04:09		207946	

Analytical Report

Client:Energy SolutionsProject:Leica Wells July 2010Sample Matrix:WaterSample Name:MW-29ALab Code:R1003586-006

 Service Request:
 R1003586

 Date Collected:
 7/ 3/10 1300

 Date Received:
 7/ 7/10

Units: µg/L Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260B

Toluene-d8

Dibromofluoromethane

Analyte Name	Result Q	MRL		Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysi Lot	s Note
o-Xylene	19	5,0		1	NA	7/10/10 04:09)	207946	
m,p-Xylenes	16	5.0		1	NA	7/10/10 04:09)	207946	
Surrogate Name		%Rec	Control Limits	A	Date nalyzed	Q Note			
4-Bromofluorobenzene		105	85-122	7/10/	10 04:09				ini antoininini

87-121

89-119

7/10/10 04:09

7/10/10 04:09

102

106



Analytical Report

Client:Energy SolutionsProject:Leica Wells July 2010Sample Matrix:WaterSample Name:MW-28ALab Code:R1003586-007

Service Request: R1003586 Date Collected: 7/ 3/10 1315 Date Received: 7/ 7/10

> Units: µg/L Basis: NA

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Volatile Organic Compounds by GC/MS

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Analytical Method: 8260B

				Dilution	Date	Date .	Extraction Analysis	
Analyte Name	Result	Q	MRL	Factor	Extracted	Analyzed	Lot Lot 1	Note
Acetone	20	U	20	1	NA	7/10/10 04:36	207946	
Benzene	5.0	U	5.0	1	NA	7/10/10 04:36	207946	
Bromodichloromethane	5.0	U	5,0	1	NA	7/10/10 04:36	207946	
Bromoform	5.0	U	5.0	1	NA	7/10/10 04:36	207946	
Bromomethane	5.0	U	5,0	1	NA	7/10/10 04:36	207946	
2-Butanone (MEK)	10	U	10	1	NA	7/10/10 04:36	207946	
Carbon Disulfide	10	U	10	1	NA	7/10/10 04:36	207946	
Carbon Tetrachloride	5.0	Ũ	5.0	1	NA	7/10/10 04:36	207946	
Chlorobenzene	5.0	U	5.0	1	NA	7/10/10 04:36	207946	
Chloroethane	5.0	υ	5.0	1	NA	7/10/10 04:36	207946	
Chloroform	7.6		5.0	1	NA	7/10/10 04:36	207946	
Chloromethane	5.0	U	5.0	1	NA	7/10/10 04:36	207946	
Dibromochloromethane	5.0	υ	5.0	1	NA	7/10/10 04:36	207946	
1,1-Dichloroethane	5.0	U	5.0	1	NA	7/10/10 04:36	207946	
1,2-Dichloroethane	5.0	U	` 5.0	1	NA	7/10/10 04:36	207946	
1,1-Dichloroethene	5.0	U	5.0	1	NA	7/10/10 04:36	207946	
cis-1,2-Dichloroethene	5.0	U	5.0	1	NA	7/10/10 04:36	207946	
trans-1,2-Dichloroethene	5.0	U	5.0	1	NA	7/10/10 04:36	207946	
1,2-Dichloropropane	5.0	U	5.0	1	NA	7/10/10 04:36	207946	
cis-1,3-Dichloropropene	5.0	Ũ	5.0	1	NA	7/10/10 04:36	207946	
trans-1,3-Dichloropropene	5.0	U	5.0	1	NA	7/10/10 04:36	207946	
Ethylbenzene	5.0	U	5.0	1	NA	7/10/10 04:36	207946	
2-Hexanone	10	U	10	1	NA	7/10/10 04:36	207946	
Methylene Chloride	5.0	U	5.0	1	NA	7/10/10 04:36	207946	
4-Methyl-2-pentanone (MIBK)	10	U	10	1	NA	7/10/10 04:36	207946	
Styrene	5.0	U	5.0	1	NA	7/10/10 04:36	207946	
1,1,2,2-Tetrachloroethane	5.0	U	5.0	1	NA	7/10/10 04:36	207946	
Tetrachloroethene	5.0	U	5.0	1	NA	7/10/10 04:36	207946	
Toluene	5.0	U	5.0	1	NA	7/10/10 04:36	207946	
1,1,1-Trichloroethane	5.0	U	5.0	1	NA	7/10/10 04:36	207946	
1,1,2-Trichloroethane	5.0	U	5,0	1	NA	7/10/10 04:36	207946	_
Trichloroethene	5.0	U	5.0	1	NA	7/10/10 04:36	207946	
Vinyl Chloride	5.0	U	5.0	1	NA	7/10/10 04:36	207946	

Analytical Report

Client:Energy SolutionsProject:Leica Wells July 2010Sample Matrix:WaterSample Name:MW-28ALab Code:R1003586-007

Service Request: R1003586 Date Collected: 7/ 3/10 1315 Date Received: 7/ 7/10

> Units: µg/L Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260B

			Dilution	Date	Date	Extraction Analysis		
Analyte Name	Result Q	MRL	Factor	Extracted	Analyzed	Lot	Lot	Note
o-Xylene	5.0 U	5.0	1	NA	7/10/10 04:36	5	207946	j
m,p-Xylenes	5.0 U	5.0	1	NA	7/10/10 04:36	5	207946	5

		Control	Date		
Surrogate Name	%Rec	Limits	Analyzed Q	Note	
4-Bromofluorobenzene	100	85-122	7/10/10 04:36		
Toluene-d8	98	87-121	7/10/10 04:36		
Dibromofluoromethane	101	89-119	7/10/10 04:36		



Analytical Report

Client:Energy SolutionsProject:Leica Wells July 2010Sample Matrix:WaterSample Name:MW-26ALab Code:R1003586-008

Service Request: R1003586 Date Collected: 7/ 3/10 1330 Date Received: 7/ 7/10

> Units: µg/L Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260B

Analyte Name	Result	0	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Analysis Lot Lot Note
Acetone	20	Ū	20	1	NA	7/10/10 05:03	207946
Benzene	5,0	U	5.0	1	NA	7/10/10 05:03	207946
Bromodichloromethane	5.0	U	5.0	1	NA	7/10/10 05:03	207946
Bromoform	5.0	U	5.0	1	NA	7/10/10 05:03	207946
Bromomethane	5.0	U	5.0	1	NA	7/10/10 05:03	207946
2-Butanone (MEK)	10 1	σ	10	1	NA	7/10/10 05:03	207946
Carbon Disulfide	10	U	10	1	NA	7/10/10 05:03	207946
Carbon Tetrachloride	5.0 1	U	5.0	1	NA	7/10/10 05:03	207946
Chlorobenzene	5.0	U	5.0	1	NA	7/10/10 05:03	207946
Chloroethane	5.0	U	5,0	1	NA	7/10/10 05:03	207946
Chloroform	5.0	U	5.0	1	NA	7/10/10 05:03	207946
Chloromethane	5.0	U	5.0	1	NA	7/10/10 05:03	207946
Dibromochloromethane	5.0	U	5.0	1	NA	7/10/10 05:03	207946
1,1-Dichloroethane	5.0	U	5.0	1	NA	7/10/10 05:03	207946
1,2-Dichloroethane	5,0	U	5.0	1	NA	7/10/10 05:03	207946
1,1-Dichloroethene	5.0	υ	5.0	1	NA	7/10/10 05:03	207946
cis-1,2-Dichloroethene	710	Е	5.0	1	NA	7/10/10 05:03	207946
trans-1,2-Dichloroethene	7.1		5.0	1	ŇA	7/10/10 05:03	207946
1,2-Dichloropropane	5,0	U	5.0	1	NA	7/10/10 05:03	207946
cis-1,3-Dichloropropene	5.0	U	5.0	1	NA	7/10/10 05:03	207946
trans-1,3-Dichloropropene	5.0	U	5.0	1	NA	7/10/10 05:03	207946
Ethylbenzene	5.0	U	5.0	1	NA	7/10/10 05:03	207946
2-Hexanone	10	U	10	1	NA	7/10/10 05:03	207946
Methylene Chloride	5.0	U	5.0	1	NA	7/10/10 05:03	207946
4-Methyl-2-pentanone (MIBK)	10	U	10	1	NA	7/10/10 05:03	207946
Styrene	5.0	U	5.0	1	NA	7/10/10 05:03	207946
1,1,2,2-Tetrachloroethane	5.0	U	5.0	1	NA	7/10/10 05:03	207946
Tetrachloroethene	5.0	U	5.0	1	NA	7/10/10 05:03	207946
Toluene	5.0	U	5.0	1	NA	7/10/10 05:03	207946
1,1,1-Trichloroethane	5.0	U	5.0	1	NA	7/10/10 05:03	207946
1,1,2-Trichloroethane	5.0	σ	5.0	1	NA	7/10/10 05:03	207946
Trichloroethene	5.0 1	U	5.0	1	NA	7/10/10 05:03	207946
Vinyl Chloride	590]	Ξ	5.0	1	NA	7/10/10 05:03	207946

Comments:

10-0000148748 rev 00

Analytical Report

Client:Energy SolutionsProject:Leica Wells July 2010Sample Matrix:WaterSample Name:MW-26ALab Code:R1003586-008

Service Request: R1003586 Date Collected: 7/ 3/10 1330 Date Received: 7/ 7/10

Volatile Organic Compounds by GC/MS

Analytical Method: 8260B

				Dilution	Date	Date	Extraction	Analys	is
Analyte Name	Result	Q	MRL	Factor	Extracted	Analyzed	Lot	Lot	Note
o-Xylene	5.0	U	5.0	1	NA	7/10/10 05:03	5	207946	5
m,p-Xylenes	5.0	U	5.0	1	NA	7/10/10 05:03	;	207946	5

Surrogate Name	%Rec	Control Limits	Date Analyzed Q	Note	
4-Bromofluorobenzene	102	85-122	7/10/10 05:03		
Toluene-d8	100	87-121	7/10/10 05:03		
Dibromofluoromethane	103	89-119	7/10/10 05:03		



Analytical Report

Client:Energy SolutionsProject:Leica Wells July 2010Sample Matrix:Water

Sample Name:MW-26ALab Code:R1003586-008Run Type:Dilution

Service Request: R1003586 Date Collected: 7/ 3/10 1330 Date Received: 7/ 7/10

Volatile Organic Compounds by GC/MS

Analytical Method: 8260B

				Dilution	Date	Date	Extraction Analy	sis
Analyte Name	Result	Q	MRL	Factor	Extracted	Analyzed	Lot Lot	Note
Acetone	100	U	100	5	NA	7/13/10 14:29	20826	8
Benzene	25	U	25	5	NA	7/13/10 14:29	20826	8
Bromodichloromethane	25	U	25	5	NA	7/13/10 14:29	20826	8
Bromoform	25	U	25	5	NA	7/13/10 14:29	20826	8
Bromomethane	25	U	25	5	NA	7/13/10 14:29	20826	8
2-Butanone (MEK)	50	U	50	5	NA	7/13/10 14:29	20826	8
Carbon Disulfide	50	U	50	5	NA	7/13/10 14:29	20826	8
Carbon Tetrachloride	25	U	25	5	NA	7/13/10 14:29	20826	8
Chlorobenzene	25	U	25	5	NA	7/13/10 14:29	20826	8
Chloroethane	25	U	25	5	NA	7/13/10 14:29	20826	8
Chloroform	25	U	25	5	NA	7/13/10 14:29	20826	8
Chloromethane	25	U	25	5	NA	7/13/10 14:29	20826	8
Dibromochloromethane	25	U	25	5	NA	7/13/10 14:29	20826	8
1,1-Dichloroethane	25	U	25	5	NA	7/13/10 14:29	20826	8
1,2-Dichloroethane	25	U	25	5	NA	7/13/10 14:29	20826	8
1,1-Dichloroethene	25	U	25	5	NA	7/13/10 14:29	20826	8
cis-1,2-Dichloroethene	680	D	25	5	NA	7/13/10 14:29	20826	8
trans-1,2-Dichloroethene	25	U	25	5	NA	7/13/10 14:29	20826	8
1,2-Dichloropropane	25	U	25	5	NA	7/13/10 14:29	20826	8
cis-1,3-Dichloropropene	25	U	25	5	NA	7/13/10 14:29	20826	8
trans-1,3-Dichloropropene	25	U	25	5	NA	7/13/10 14:29	20826	8
Ethylbenzene	25	U	25	5	NA	7/13/10 14:29	20826	8
2-Hexanone	50	U	50	5	NA	7/13/10 14:29	20826	8
Methylene Chloride	25	U	25	5	NA	7/13/10 14:29	20826	8
4-Methyl-2-pentanone (MIBK)	50	U	50	5	NA	7/13/10 14:29	20826	8
Styrene	25	U	25	5	NA	7/13/10 14:29	20826	8
1,1,2,2-Tetrachloroethane	25	U	25	5	NA	7/13/10 14:29	20826	8
Tetrachloroethene	25	U	25	5	NA	7/13/10 14:29	20826	8
Toluene	25	U	25	5	NA	7/13/10 14:29	20826	8
1,1,1-Trichloroethane	25	U	25	5	NA	7/13/10 14:29	20826	8
1,1,2-Trichloroethane	25	U	25	5	NA	7/13/10 14:29	20826	8
Trichloroethene	25	U	25	5	NA	7/13/10 14:29	20826	8
Vinyl Chloride	590	D	25	5	NA	7/13/10 14:29	20826	8

Analytical Report

Client:Energy SolutionsProject:Leica Wells July 2010Sample Matrix:WaterSample Name:MW-26ALab Code:R1003586-008Run Type:Dilution

Service Request: R1003586 Date Collected: 7/3/10 1330 Date Received: 7/7/10

Units: µg/L Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260B

				Dilution	Date	Date	Extraction	ı Analys	is
Analyte Name	Result	Q	MRL	 Factor	Extracted	Analyzed	Lot	Lot	Note
o-Xylene	25	U	25	5	NA	7/13/10 14:29)	208268	3
m,p-Xylenes	25	U	25	5	NA	7/13/10 14:29)	208268	3

		Control	Date		
Surrogate Name	%Rec	Limits	Analyzed Q	Note	
4-Bromofluorobenzene	101	85-122	7/13/10 14:29	· ··	
Toluene-d8	96	87-121	7/13/10 14:29		
Dibromofluoromethane	105	89-119	7/13/10 14:29		



Analytical Report

Client:Energy SolutionsProject:Leica Wells July 2010Sample Matrix:WaterSample Name:MW-27ALab Code:R1003586-009

Service Request: R1003586 Date Collected: 7/ 3/10 1430 Date Received: 7/ 7/10

> Units: µg/L Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260B

Analyte Name	Result	n	MRI.	Dilution Factor	Date Extracted	Date Analyzed	Extraction	Analysi Lot	s Note
Acotone	20	× 11	20	1	ΝΔ	7/10/10 05:30		207946	11000
Benzene	50	и П	50	1	NA	7/10/10 05:30		207240	
Bromodichloromethane	5.0	n	5.0	1	NA	7/10/10 05:30)	207946	
	5.0	11	<i>E</i> 0	······································	 bt A	7/10/10 05:20		207046	
Bromotorm	5,0	U	5.0	1	NA NA	7/10/10 05:30		207940	
1 Patanona (MEV)	5,0 10	U TT	3,0	1	INA NA	7/10/10 05:30		207940	
		0	10	T	11/2	//10/10 05,50		201940	
Carbon Disulfide	10	U	10	1	NA	7/10/10 05:30)	207946	
Carbon Tetrachloride	5.0	U	5.0	1	NA	7/10/10 05:30)	207946	
Chlorobenzene	5.0	U	5.0	1	NA	7/10/10 05:30	l	207946	
Chloroethane	5.0	U	5.0	1	NA	7/10/10 05:30	1	207946	
Chloroform	7.7		5.0	1	NA	7/10/10 05:30)	207946	
Chloromethane	5.0	U	5.0	1	NA	7/10/10 05:30)	207946	
Dibromochloromethane	5.0	U	5,0	1	NA	7/10/10 05:30)	207946	
1.1-Dichloroethane	5.0	U	5.0	1	NA	7/10/10 05:30)	207946	
1,2-Dichloroethane	5,0	U	5.0	1	NA	7/10/10 05:30)	207946	
1.1-Dichloroethene	5.0	U	5.0	1	NA	7/10/10 05:30)	207946	
cis-1,2-Dichloroethene	5.0	U	5.0	1	NA	7/10/10 05:30)	207946	
trans-1,2-Dichloroethene	5.0	U	5.0	1	NA	7/10/10 05:30)	207946	
1,2-Dichloropropane	5,0	U	5.0	1	NA	7/10/10 05:30)	207946	
cis-1,3-Dichloropropene	5.0	U	5.0	1	NA	7/10/10 05:30)	207946	
trans-1,3-Dichloropropene	5.0	U	5.0	1	NA	7/10/10 05:30)	207946	
Ethylbenzene	5,0	U	5.0	1	NA	7/10/10 05:30)	207946	
2-Hexanone	10	U	10	1	NA	7/10/10 05:30)	207946	
Methylene Chloride	5.0	U	5,0	1	NA	7/10/10 05:30)	207946	
4-Methyl-2-pentanone (MIBK)	10	U	10	1	NA	7/10/10 05:30)	207946	
Styrene	5.0	U	5.0	1	NA	7/10/10 05:30)	207946	
1,1,2,2-Tetrachloroethane	5.0	U	5,0	1	NA	7/10/10 05:30)	207946	
Tetrachloroethene	5.0	U	5.0	1	NA	7/10/10 05:30)	207946	ł
Toluene	5,0	U	5.0	1	NA	7/10/10 05:30)	207946	
1,1,1-Trichloroethane	5.0	U	5.0	1	NA	7/10/10 05:30)	207946	
1,1,2-Trichloroethane	5.0	U	5.0	1	NA	7/10/10 05:30)	207946	
Trichloroethene	5.0	U	5.0	1	NA	7/10/10 05:30)	207946	
Vinyl Chloride	5.0	U	5.0	1	NA	7/10/10 05:30)	207946	

Analytical Report

Client:Energy SolutionsProject:Leica Wells July 2010Sample Matrix:WaterSample Name:MW-27ALab Code:R1003586-009

 Service Request:
 R1003586

 Date Collected:
 7/ 3/10 1430

 Date Received:
 7/ 7/10

Units: µg/L Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260B

			Dilution	Date	Date	Extraction	Analysi	S
Analyte Name	Result Q	MRL	Factor	Extracted	Analyzed	Lot	Lot	Note
o-Xylene	5.0 U	5.0	1	NA	7/10/10 05:30)	207946	,
m,p-Xylenes	5.0 U	5.0	1	NA	7/10/10 05:30)	207946	

		Control	Date		
Surrogate Name	%Rec	Limits	Analyzed Q	Note	
4-Bromofluorobenzene	103	85-122	7/10/10 05:30		
Toluene-d8	100	87-121	7/10/10 05:30		
Dibromofluoromethane	102	89-119	7/10/10 05:30		

Analytical Report

Client: Energy Solutions Project: Leica Wells July 2010 Sample Matrix: Water Sample Name: MW-22A Lab Code: R1003586-010

Service Request: R1003586 Date Collected: 7/ 3/10 1445 Date Received: 7/7/10

> Units: µg/L Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260B

				Dilution	Date	Date	Extraction	Analysi	\$
Analyte Name	Result	Q	MRL	Factor	Extracted	Analyzed	Lot	Lot	Note
Acetone	20	U	20	1	NA	7/10/10 05:57	,	207946	
Benzene	5.0	U	5,0	1	NA	7/10/10 05:57		207946	
Bromodichloromethane	5,0	U	5.0	1	NA	7/10/10 05;57		207946	
Bromoform	5.0	U	5.0	1	NA	7/10/10 05:57	1	207946	
Bromomethane	5.0	U	5.0	1	NA	7/10/10 05:57	1	207946	
2-Butanone (MEK)	10	U	10	1	NA	7/10/10 05:57	·	207946	
Carbon Disulfide	10	U	10	1	NA	7/10/10 05:57	1	207946	
Carbon Tetrachloride	5.0	U	5.0	1	NA	7/10/10 05:57	r	207946	
Chlorobenzene	5,0	U	5.0	1	NA	7/10/10 05:57	7	207946	
Chloroethane	5,0	υ	5.0	1	NA	7/10/10 05:57	1	207946	
Chloroform	5.0	U	5.0	1	ŇA	7/10/10 05:57	7	207946	
Chloromethane	5.0	U	5.0	1	NA	7/10/10 05:57	1	207946	
Dibromochloromethane	5.0	U	5.0	1	NA	7/10/10 05:57	7	207946	,
1,1-Dichloroethane	5.0	U	5.0	1	NA	7/10/10 05:57	7	207946	,
1,2-Dichloroethane	5,0	U	5.0	1	NA	7/10/10 05:57	7	207946	
1,1-Dichloroethene	5,0	U	5.0	1	NA	7/10/10 05:57	7	207946	•
cis-1,2-Dichloroethene	5.0	U	5.0	1	NA	7/10/10 05:57	7	207946	
trans-1,2-Dichloroethene	5.0	U	5.0	1	NA	7/10/10 05:57	1	207946	
1,2-Dichloropropane	5,0	U	5.0	1	NA	7/10/10 05:57	7	207946	1
cis-1,3-Dichloropropene	5.0	U	5.0	1	NA	7/10/10 05:57	7	207946	
trans-1,3-Dichloropropene	5.0	U	5.0	1	NA	7/10/10 05:57	7	207946	
Ethylbenzene	5.0	U	5.0	1	NA	7/10/10 05:57	7	207946	ļ
2-Hexanone	10	U	10	1	NA	7/10/10 05:57	7	207946	•
Methylene Chloride	5.0	U	5.0	1	NA	7/10/10 05:57	7	207946	i <u>-</u>
4-Methyl-2-pentanone (MIBK)	10	U	10	1	NA	7/10/10 05:53	7	207946	i
Styrene	5.0	U	5.0	1	NA	7/10/10 05:57	7	207946	,)
1,1,2,2-Tetrachloroethane	5,0	U	5.0	1	NA	7/10/10 05:57	7	207946	;
Tetrachloroethene	5.0	U	5.0	1	NA	7/10/10 05:53	7	207946	i
Toluene	5.0	U	5.0	1	NA	7/10/10 05:51	7	207946	i
1,1,1-Trichloroethane	5.0	U	5.0	1	NA	7/10/10 05:5	7	207946	;
1,1,2-Trichloroethane	5.0	U	5.0	1	NA	7/10/10 05:5	7	207946	5
Trichloroethene	5.0	U	5.0	1	NA	7/10/10 05:57	7	207946	5
Vinyl Chloride	5.0	U	5,0	1	NA	7/10/10 05:5	7	207946	6



Analytical Report

Client:Energy SolutionsProject:Leica Wells July 2010Sample Matrix:WaterSample Name:MW-22ALab Code:R1003586-010

Service Request: R1003586 Date Collected: 7/ 3/10 1445 Date Received: 7/ 7/10 Units: µg/L

Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260B

			Dilution I		Date	Extraction	Analysi	Analysis	
Analyte Name	Result Q	MRL	Factor	Extracted	Analyzed	Lot	Lot	Note	
o-Xylene	5.0 U	5.0	1	NA	7/10/10 05:57	7	207946)	
m,p-Xylenes	5.0 U	5.0	1	NA	7/10/10 05:57	7	207946	i	

		Control	Date		
Surrogate Name	%Rec	Limits	Analyzed Q	Note	
4-Bromofluorobenzene	99	85-122	7/10/10 05:57		
Toluene-d8	98	87-121	7/10/10 05:57		
Dibromofluoromethane	100	89-119	7/10/10 05;57		

Comments:

00026

Analytical Report

Energy Solutions Client: Leica Wells July 2010 **Project:** Sample Matrix: Water Sample Name: MW-22 Lab Code: R1003586-011

Service Request: R1003586 Date Collected: 7/ 3/10 1455 Date Received: 7/7/10

> Units: $\mu g/L$ Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260B

4 V (N Y		~	XOX	Dilution	Date	Date	Extraction	Analysis	S Noto
Analyte Name	Kesult	<u>v</u>	IVIRU	Factor	Extracted	Analyzed	LOL	LOU	Note
Acetone	20	U	20	1	NA	7/10/10 06:24		207946	
Benzene	5.0	U	5,0	1	NA	7/10/10 06:24	-	207946	
Bromodichloromethane	5.0	U	5.0	1	NA	7/10/10 06:24		207946	
Bromoform	5.0	U	5.0	1	NA	7/10/10 06:24		207946	
Bromomethane	5,0	Ű	5.0	1	NA	7/10/10 06:24	•	207946	
2-Butanone (MEK)	10	U	10	1	NA	7/10/10 06:24	r	207946	<u></u>
Carbon Disulfide	10	U	10	1	NA	7/10/10 06:24	ļ.	207946	
Carbon Tetrachloride	5.0	U	5.0	1	NA	7/10/10 06:24	ļ	207946	
Chlorobenzene	5.0	U	5.0	1	NA	7/10/10 06:24		207946	
Chloroethane	5.0	U	5.0	1	NA	7/10/10 06:24	ŀ	207946	
Chloroform	5.0	U	5,0	1	NA	7/10/10 06:24	ŀ	207946	
Chloromethane	5.0	U	5.0	1	NA	7/10/10 06:24		207946	
Dibromochloromethane	5.0	U	5,0	1	NA	7/10/10 06:24	ł	207946	
1,1-Dichloroethane	5.0	U	5.0	1	NA	7/10/10 06:24	ŀ	207946	
1,2-Dichloroethane	5.0	U	5.0	1	NA	7/10/10 06:24	ŀ	207946	
1.1-Dichloroethene	5.0	U	5,0	1	NA	7/10/10 06:24	ļ	207946	
cis-1,2-Dichloroethene	5.0	U	5.0	1	NA	7/10/10 06:24	ļ.	207946	
trans-1,2-Dichloroethene	5.0	U	5.0	1	NA	7/10/10 06:24	\$	207946	
1,2-Dichloropropane	5.0	U	5.0	1	NA	7/10/10 06:24	1	207946	
cis-1,3-Dichloropropene	5.0	U	5.0	1	NA	7/10/10 06:24	1	207946	
trans-1,3-Dichloropropene	5.0	U	5.0	1	NA	7/10/10 06:24	1	207946	······
Ethylbenzene	5.0	U	5.0	1	NA	7/10/10 06:24	4	207946	
2-Hexanone	10	U	10	1	NA	7/10/10 06:24	4	207946	
Methylene Chloride	5.0	U	5,0	1	NA	7/10/10 06:24	4	207946	
4-Methyl-2-pentanone (MIBK)	10	U	10	1	NA	7/10/10 06:24	1	207946	
Styrene	5.0	U	5.0	1	NA	7/10/10 06:24	4	207946	
1,1,2,2-Tetrachloroethane	5.0	U	5.0	1	NA	7/10/10 06:24	4	207946	
Tetrachloroethene	5.0	U	5,0	1	NA	7/10/10 06:24	4	207946	
Toluene	5,0	U	5.0	1	NA	7/10/10 06:24	4	207946	
1,1,1-Trichloroethane	5.0	Ŭ	5.0	1	NA	7/10/10 06:24	4	207946	•
1,1,2-Trichloroethane	5,0	U	5.0	1	ŇA	7/10/10 06:24	4	207946	•
Trichloroethene	5,0	U	5.0	1	NA	7/10/10 06:24	4	207946	
Vinyl Chloride	5.0	U	5.0	1	NA	7/10/10 06:24	4	207946)

Comments:

00027

Analytical Report

Client: Energy Solutions Leica Wells July 2010 **Project:** Sample Matrix: Water MW-22 Sample Name: Lab Code: R1003586-011

Service Request: R1003586 Date Collected: 7/ 3/10 1455 Date Received: 7/7/10

Units: µg/L Basis: NA

Volatile Organic Compounds by GC/MS

7/10/10 06:24

Analytical Method: 8260B

Dibromofluoromethane

Analyte Name	Result Q	MRL		Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysi Lot	s Note
o-Xylene	5.0 U	5.0		1	NA	7/10/10 06:24	1	207946	
m,p-Xylenes	5.0 U	5,0		1	NA	7/10/10 06:24	\$	207946	
.		64 D	Control		Date				
Surrogate Name		%Kec	Limits	A	naiyzeu	Q Note			
4-Bromofluorobenzene		102	85-122	7/10/	10 06:24				
Toluene-d8		100	87-121	7/10/	10 06:24				

89-119

102



Analytical Report

Client:Energy SolutionsProject:Leica Wells July 2010Sample Matrix:WaterSample Name:MW-18ALab Code:R1003586-012

Service Request: R1003586 Date Collected: 7/ 3/10 1530 Date Received: 7/ 7/10

> Units: µg/L Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260B

				Dilution	Date	Date	Extraction	Analysi	S
Analyte Name	Result	Q	MRL	Factor	Extracted	Analyzed	Lot	Lot	Note
Acetone	20	U	20	1	NA	7/10/10 06:51		207946	
Benzene	5.0	U	5.0	1	NA	7/10/10 06:51		207946	
Bromodichloromethane	5.0	U	5.0	1	NA	7/10/10 06:51		207946	
Bromoform	5.0	U	5.0	1	NA	7/10/10 06:51	_	207946	
Bromomethane	5.0	U	5.0	1	NA	7/10/10 06:51		207946	
2-Butanone (MEK)	10	U	10	1	NA	7/10/10 06:51	,	207946	
Carbon Disulfide	10	U	10	1	NA	7/10/10 06:51		207946	
Carbon Tetrachloride	5.0	U	5.0	1	NA	7/10/10 06:51		207946	
Chlorobenzene	5.0	U	5.0	1	NA	7/10/10 06:51		207946	
Chloroethane	5.0	U	5.0	1	NA	7/10/10 06:51		207946	
Chloroform	5.0	U	5.0	1	NA	7/10/10 06:51		207946	
Chloromethane	5.0	U	5.0	1	NA	7/10/10 06:51	-	207946	
Dibromochloromethane	5.0	U	5,0	1	NA	7/10/10 06:51		207946	
1,1-Dichloroethane	5.0	U	5.0	1	NA	7/10/10 06:51	L	207946	
1,2-Dichloroethane	5.0	U	5.0	1	NA	7/10/10 06:51		207946	
1,1-Dichloroethene	5.0	U	5,0	1	NA	7/10/10 06:51	l	207946	
cis-1,2-Dichloroethene	140		5.0	1	NA	7/10/10 06:51	L	207946	
trans-1,2-Dichloroethene	5.0	U	5,0	1	NA	7/10/10 06:51	L	207946	
1,2-Dichloropropane	5.0	U	5.0	1	NA	7/10/10 06:51	l	207946	
cis-1,3-Dichloropropene	5.0	U	5.0	1	NA	7/10/10 06:51	l	207946	
trans-1,3-Dichloropropene	5.0	U	5.0	1	NA	7/10/10 06:51		207946	
Ethylbenzene	5,0	U	5.0	1	NA	7/10/10 06:51	1	207946	
2-Hexanone	10	U	10	1	NA	7/10/10 06:51	I	207946	
Methylene Chloride	5.0	U	5.0	1	NA	7/10/10 06:53	l	207946	
4-Methyl-2-pentanone (MIBK)	10	U	10	1	NA	7/10/10 06:51	l	207946	
Styrene	5.0	U	5.0	1	NA	7/10/10 06:51	L	207946	
1,1,2,2-Tetrachloroethane	5.0	U	5.0	1	NA	7/10/10 06:51	I	207946	
Tetrachloroethene	5.0	U	5.0	1	NA	7/10/10 06:51	1	207946	F
Toluene	5,0	U	5.0	1	NA	7/10/10 06:51	I	207946	
1,1,1-Trichloroethane	5.0	U	5.0	1	NA	7/10/10 06:51	1	207946	
1,1,2-Trichloroethane	5.0	U	5.0	1	NA	7/10/10 06:51	1	207946	i
Trichloroethene	83		5,0	1	NA	7/10/10 06:51	1	207946	
Vinyl Chloride	21		5,0	1	NA	7/10/10 06:51	1	207946	

Comments:

00029

Analytical Report

Client:Energy SolutionsProject:Leica Wells July 2010Sample Matrix:WaterSample Name:MW-18ALab Code:R1003586-012

Service Request: R1003586 Date Collected: 7/ 3/10 1530 Date Received: 7/ 7/10

Units: µg/L Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260B

Analyte Name	Result Q	MRL	Dil Fa	lution actor	Date Extracted	Date Analyzed	Extraction Lot	Analysi Lot	s Note
o-Xylene	5.0 U	5.0		1	NA	7/10/10 06:51		207946	
m,p-Xylenes	5.0 U	5.0		1	NA	7/10/10 06:51	l	207946	
			Control		Date				

Surrogate Name	%Rec	Limits	Analyzed	Q	Note	
4-Bromofluorobenzene	103	85-122	7/10/10 06:51			
Toluene-d8	102	87-121	7/10/10 06:51			
Dibromofluoromethane	106	89-119	7/10/10 06:51			

Comments:

00030

Analytical Report

Client:Energy SolutionsProject:Leica Wells July 2010Sample Matrix:WaterSample Name:MW-18Lab Code:R1003586-013

Service Request: R1003586 Date Collected: 7/ 3/10 1600 Date Received: 7/ 7/10

> Units: µg/L Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260B

				Dilution	Date	Date	Extraction	Analysi	\$
Analyte Name	Result	Q	MRL	Factor	Extracted	Analyzed	Lot	Lot	Note
Acetone	20	U	20	1	NA	7/13/10 14:56	1	208268	
Benzene	5.0	U	5.0	1	NA	7/13/10 14:56		208268	
Bromodichloromethane	5,0	U	5.0	1	NA	7/13/10 14;56		208268	
Bromoform	5.0	U	5.0	1	NA	7/13/10 14:56	I	208268	
Bromomethane	5.0	U	5.0	1	NA	7/13/10 14:56		208268	
2-Butanone (MEK)	10	U	10	1	NA	7/13/10 14:56		208268	
Carbon Disulfide	10	U	10	1	NA	7/13/10 14:56	i i	208268	
Carbon Tetrachloride	5.0	U	5,0	1	NA	7/13/10 14:56		208268	
Chlorobenzene	5.0	U	5.0	I	NA	7/13/10 14:56	j	208268	
Chloroethane	5.0	U	5.0	1	NA	7/13/10 14:56	,	208268	
Chloroform	5.0	U	5.0	1	NA	7/13/10 14:56		208268	
Chloromethane	5.0	U	5.0	1	NA	7/13/10 14:56	i	208268	
Dibromochloromethane	5.0	U	5.0	1	NA	7/13/10 14:56	5	208268	
1,1-Dichloroethane	5.0	U	5.0	1	NA	7/13/10 14:56	5	208268	
1,2-Dichloroethane	5.0	U	5,0	1	NA	7/13/10 14:50	5	208268	
1,1-Dichloroethene	5.0	U	5,0	1	NA	7/13/10 14:56	5	208268	
cis-1,2-Dichloroethene	5.0	U	5.0	1	NA	7/13/10 14:50	5	208268	
trans-1,2-Dichloroethene	5.0	U	5.0	1	NA	7/13/10 14:56)	208268	i
1,2-Dichloropropane	5.0	U	5.0	1	NA	7/13/10 14:56	5	208268	
cis-1,3-Dichloropropene	5,0	U	5.0	1	NA	7/13/10 14:50	5	208268	
trans-1,3-Dichloropropene	5.0	U	5,0	1	NA	7/13/10 14:56	5	208268	
Ethylbenzene	5.0	U	5,0	1	NA	7/13/10 14:56	5	208268	•
2-Hexanone	10	U	10	1	NA	7/13/10 14:56	5	208268	6
Methylene Chloride	5.0	U	5.0	1	NA	7/13/10 14:50	5	208268	
4-Methyl-2-pentanone (MIBK)	10	U	10	1	NA	7/13/10 14:50	5	208268	1
Styrene	5.0	U	5.0	1	NA	7/13/10 14:56	5	208268	}
1,1,2,2-Tetrachloroethane	5.0	U	5.0	1	NA	7/13/10 14:50	5	208268	l
Tetrachloroethene	5,0	U	5.0	1	NA	7/13/10 14:50	5	208268	;
Toluene	5.0	U	5.0	1	NA	7/13/10 14:50	5	208268	1
1,1,1-Trichloroethane	5.0	U	5.0	1.	NA	7/13/10 14:50	5	208268	}
1,1,2-Trichloroethane	5.0	U	5,0	1	NA	7/13/10 14:50	5	208268	5
Trichloroethene	5.0	U	5.0	1	NA	7/13/10 14:50	5	208268	5
Vinyl Chloride	5.0	U	5.0	1	NA	7/13/10 14:50	5	208268	}

Analytical Report

Client: **Energy Solutions** Leica Wells July 2010 **Project:** Sample Matrix: Water Sample Name: MW-18 Lab Code: R1003586-013

Service Request: R1003586 Date Collected: 7/ 3/10 1600 Date Received: 7/7/10 Units: $\mu g/L$

Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260B

			Dilution	Date	Date	Extraction	Analysi	\$
Analyte Name	Result Q	MRL	Factor	Extracted	Analyzed	Lot	Lot	Note
o-Xylene	5.0 U	5.0	1	NA	7/13/10 14:56	5	208268	
m,p-Xylenes	5.0 U	5.0	1	NA	7/13/10 14:56	5	208268	

		Control	Date		
Surrogate Name	%Rec	Limits	Analyzed Q	Note	
4-Bromofluorobenzene	102	85-122	7/13/10 14:56		
Toluene-d8	97	87-121	7/13/10 14:56		
Dibromofluoromethane	107	89-119	7/13/10 14:56		

Comments:

00032

Analytical Report

Client:Energy SolutionsProject:Leica Wells July 2010Sample Matrix:WaterSample Name:Method BlankLab Code:RQ1005565-01

Service Request: R1003586 Date Collected: NA Date Received: NA

Units: µg/L Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260B

Analyta Nama	Rogult	0	MRI.	Dilution Factor	Date Extracted	Date Analyzed	Extraction A	nalysi: Lot	s Note
A softens	20	v 11	20	1	ΝΔ	7/9/10 23:37	200	7946	
Renzene	5.0	n n	5.0	1	NΔ	7/9/10 23:37	20	17946	
Bromodichloromethane	5.0	Î.	5.0	1	NA	7/9/10 23:37	20	07946	
	5.0	T 7	5.0			7/0/10 22:27		7016	
Bromoform	5.0	U	5,0	1	INA. NA	7/9/10 23:37	20	17940 17046	
Bromomethane	0,C 10	U TT	3,0	1	INPA. NIA	7/0/10 23.37	20	77940 77016	
2-Binanone (IVIEK)	10	<u> </u>	10	1	nn 	7/9/10 23.57	20		
Carbon Disulfide	10	U	10	1	NA	7/9/10 23:37	20	37946	
Carbon Tetrachloride	5.0	U	5.0	1	NA	7/9/10 23:37	20	57946	
Chlorobenzene	5.0	U	5.0	<u>l</u>	NA	7/9/10 23:37	2(57946	
Chloroethane	5.0	U	5.0	1	NA	7/9/10 23:37	20	07946	
Chloroform	5.0	U	5.0	1	NA	7/9/10 23:37	20	07946	
Chloromethane	5.0	U	5.0	1	NA	7/9/10 23:37	20	07946	
Dibromochloromethane	5.0	U	5.0	1	NA	7/9/10 23:37	20	07946	
1.1-Dichloroethane	5.0	U	5,0	1	NA	7/9/10 23:37	20	07946	
1,2-Dichloroethane	5.0	U	5.0	1	NA	7/9/10 23:37	20	07946	
1.1-Dichloroethene	5.0	U	5.0	1	NA	7/9/10 23:37	20	07946	
cis-1,2-Dichloroethene	5.0	U	5,0	1	NA	7/9/10 23:37	20	07946	
trans-1,2-Dichloroethene	5.0	U	5.0	1	NA	7/9/10 23:37	20	07946	
1,2-Dichloropropane	5.0	U	5.0	1	NA	7/9/10 23:37	20	07946	
cis-1,3-Dichloropropene	5.0	U	5.0	1	NA	7/9/10 23:37	20	07946	
trans-1,3-Dichloropropene	5.0	U	5,0	1	NA	7/9/10 23:37	20	07946	
Ethylbenzene	5.0	U	5.0	1	NA	7/9/10 23:37	20	07946	
2-Hexanone	10	U	10	1	NA	7/9/10 23:37	20	07946	
Methylene Chloride	5.0	U	5.0	1	NA	7/9/10 23:37	20	07946	
4-Methyl-2-pentanone (MIBK)	10	U	10	1	NA	7/9/10 23:37	20	07 9 46	
Styrene	5.0	U	5.0	1	NA	7/9/10 23:37	2	07946	
1,1,2,2-Tetrachloroethane	5,0	U	5.0	1	NA	7/9/10 23:37	2	07946	
Tetrachloroethene	5,0	U	5,0	1	NA	7/9/10 23:37	2	07946	1
Toluene	5.0	U	5.0	1	NA	7/9/10 23:37	2	07946	
1,1,1-Trichloroethane	5.0	U	5.0	1	NA	7/9/10 23:37	2	07946	i
1,1,2-Trichloroethane	5,0	U	5.0	l	NA	7/9/10 23:37	2	07946	, I
Trichloroethene	5.0	U	5.0	1	NA	7/9/10 23:37	2	07946	
Vinyl Chloride	5.0	U	5,0	1	NA	7/9/10 23:37	2	07946	

Comments:

SuperSet Reference: 10-0000148748 rev 00

, 10-00001-107-10141

Analytical Report

Client:Energy SolutionsProject:Leica Wells July 2010Sample Matrix:WaterSample Name:Method BlankLab Code:RQ1005565-01

Service Request: R1003586 Date Collected: NA Date Received: NA Units: µg/L

Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260B

			Dilution	Date	Date	Extraction	Analysi	s
Analyte Name	Result Q	MRL	Factor	Extracted	Analyzed	Lot	Lot	Note
o-Xylene	5.0 U	5.0	1	NA	7/9/10 23:37		207946	
m,p-Xylenes	5.0 U	5.0	1	NA	7/9/10 23:37		207946	

		Control	Date			
Surrogate Name	%Rec	Limits	Analyzed	Q	Note	
4-Bromofluorobenzene	103	85-122	7/9/10 23:37			
Toluene-d8	102	87-121	7/9/10 23:37			
Dibromofluoromethane	106	89-119	7/9/10 23:37			



Analytical Report

Client:Energy SolutionsProject:Leica Wells July 2010Sample Matrix:WaterSample Name:Method BlankLab Code:RQ1005638-01

Service Request: R1003586 Date Collected: NA Date Received: NA

Units: µg/L Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260B

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysi Lot	s Note
Acetone	20	U	20	1	NA	7/13/10 12:40		208268	
Benzene	5,0	U	5.0	1	NA	7/13/10 12:40	I	208268	
Bromodichloromethane	5.0	U	5.0	1	NA	7/13/10 12:40	I	208268	
Bromoform	5,0	U	5.0	1	NA	7/13/10 12:40	l	208268	
Bromomethane	5,0	U	5.0	1	NA	7/13/10 12:40	1	208268	
2-Butanone (MEK)	10	U	10	1	NA	7/13/10 12:40	ì	208268	
Carbon Disulfide	10	U	10	1	NA	7/13/10 12:40	1	208268	
Carbon Tetrachloride	5.0	U	5.0	1	NA	7/13/10 12:40	ł.	208268	
Chlorobenzene	5.0	U	5.0	1	NA	7/13/10 12:40	•	208268	
Chloroethane	5.0	U	5.0	1	NA	7/13/10 12:40		208268	
Chloroform	5.0	U	5.0	1	NA	7/13/10 12:40	li	208268	
Chloromethane	5.0	U	5.0	1	NA	7/13/10 12:40	E .	208268	
Dibromochloromethane	5.0	U	5,0	1	NA	7/13/10 12:40)	208268	
1,1-Dichloroethane	5.0	U	5.0	1	NA	7/13/10 12:40)	208268	
1,2-Dichloroethane	5.0	U	5.0	1	NA	7/13/10 12:40)	208268	
1,1-Dichloroethene	5.0	U	5.0	1	NA	7/13/10 12:40)	208268	
cis-1,2-Dichloroethene	5,0	U	5,0	1	NA	7/13/10 12:40)	208268	
trans-1,2-Dichloroethene	5,0	U	5.0	1	NA	7/13/10 12:40)	208268	
1,2-Dichioropropane	5.0	υ	5.0	1	NA	7/13/10 12:40)	208268	
cis-1,3-Dichloropropene	5.0	U	5.0	1	NA	7/13/10 12:40)	208268	
trans-1,3-Dichloropropene	5.0	U	5.0	1	NA	7/13/10 12:40) 	208268	
Ethylbenzene	5.0	U	5.0	1	NA	7/13/10 12:40)	208268	
2-Hexanone	10	U	10	1	NA	7/13/10 12:40)	208268	
Methylene Chloride	5.0	U	5.0	1	NA	7/13/10 12:40)	208268	
4-Methyl-2-pentanone (MIBK)	10	U	10	1	NA	7/13/10 12:40)	208268	
Styrene	5.0	U	5.0	1	NA	7/13/10 12:40)	208268	
1,1,2,2-Tetrachloroethane	5.0	U	5.0	1	NA	7/13/10 12:40)	208268	
Tetrachloroethene	5.0	U	5.0	1	NA	7/13/10 12:40)	208268	
Toluene	5,0	U	5.0	1	ŇĂ	7/13/10 12:40)	208268	
1,1,1-Trichloroethane	5.0	U	5.0	1	NA	7/13/10 12:40)	208268	
1,1,2-Trichloroethane	5.0	U	5.0	1	NA	7/13/10 12:40)	208268	
Trichloroethene	5,0	U	5.0	1	NA	7/13/10 12:40)	208268	
Vinyl Chloride	5.0	U	5.0	1	NA	7/13/10 12:40)	208268	

Comments:

: 10-0000148748 rev 00

00035

Analytical Report

Client:Energy SolutionsProject:Leica Wells July 2010Sample Matrix:WaterSample Name:Method BlankLab Code:RQ1005638-01

Service Request: R1003586 Date Collected: NA Date Received: NA

Units: μg/L Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260B

			Dilution	Date	Date	Extraction	Analys	is
Analyte Name	Result Q	MRL	Factor	Extracted	Analyzed	Lot	Lot	Note
o-Xylene	5.0 U	5.0	1	NA	7/13/10 12:40)	208268	3
m,p-Xylenes	5.0 U	5.0	1	NA	7/13/10 12:40)	208268	3

		Control	Date		
Surrogate Name	%Rec	Limits	Analyzed Q	Note	
4-Bromofluorobenzene	98	85-122	7/13/10 12:40		
Toluene-d8	93	87-121	7/13/10 12:40		
Dibromofluoromethane	99	89-119	7/13/10 12:40		



QA/QC Report

Lab Control Sample Summary Volatile Organic Compounds by GC/MS

Analytical Method: 8260B

Units: µg/L Basis: NA

Analysis Lot: 207946

Service Request: R1003586

Date Analyzed: 7/9/10

	Lab Control Sample			
	RQ1005565-02		2	% Rec
Analyte Name	Result	Expected	% Rec	Limits
Acetone	16.7	20,0	83	59 - 140
Benzene	19.4	20.0	97	78 - 121
Bromodichloromethane	19.9	20.0	99	80 - 125
Bromoform	17,8	20.0	89	73 - 132
Bromomethane	21.4	20.0	107	57 - 144
2-Butanone (MEK)	19.3	20.0	97	60 - 133
Carbon Disulfide	21.1	20.0	105	59 - 138
Carbon Tetrachloride	19,2	20.0	96	69 - 135
Chlorobenzene	18.8	20.0	94	80 - 121
Chloroethane	20.9	20.0	104	71 - 130
Chloroform	20.8	20.0	104	78 - 125
Chloromethane	19.5	20.0	97	62 - 133
Dibromochloromethane	19.5	20.0	97	78 - 133
1,1-Dichloroethane	20.7	20.0	103	76 - 122
1,2-Dichloroethane	21.3	20.0	106	78 - 126
1,1-Dichloroethene	19.9	20.0	99	72 - 129
cis-1,2-Dichloroethene	19.2	20.0	96	78 - 122
trans-1,2-Dichloroethene	19.3	20.0	96	75 - 121
1,2-Dichloropropane	19.8	20.0	99	80 - 123
cis-1,3-Dichloropropene	18.4	20.0	92	77 - 125
trans-1,3-Dichloropropene	18.3	20.0	91	69 - 127
Ethylbenzene	19.3	20.0	96	78 - 123
2-Hexanone	17.0	20.0	85	61 - 131
Methylene Chloride	19.8	20.0	99	75 - 125
4-Methyl-2-pentanone (MIBK)	17.1	20,0	85	61 - 132
Styrene	18.4	20,0	92	80 - 132
1,1,2,2-Tetrachloroethane	17.0	20.0	85	72 - 131
Tetrachloroethene	18.4	20.0	92	72 - 131
Toluene	18.1	20,0	90	78 - 122
1,1,1-Trichloroethane	20.7	20.0	104	72 - 128
1,1,2-Trichloroethane	18.7	20.0	93	80 - 122
Trichloroethene	19.3	20.0	96	74 - 127
Vinyl Chloride	21.0	20.0	105	71 - 136
o-Xylene	18.2	20.0	91	79 - 126
m,p-Xylenes	36,8	40.0	92	79 - 126

Comments:

Lab Control Sample Summary

SuperSet Reference: 10-0000148748 rev 00



00037
QA/QC Report

Lab Control Sample Summary Volatile Organic Compounds by GC/MS

Analytical Method: 8260B

Units: µg/L Basis: NA

Analysis Lot: 208268

Service Request: R1003586

Date Analyzed: 7/13/10

	Lab	Control San	nple 2	% Rec
Analyte Name	Result	Expected	% Rec	Limits
Acetone	13.9	20.0	69	59 - 140
Benzene	20.1	20.0	100	78 - 121
Bromodichloromethane	20.2	20.0	101	80 - 125
Bromoform	18.4	20.0	92	73 - 132
Bromomethane	20,0	20.0	100	57 - 144
2-Butanone (MEK)	17.5	20.0	88	60 - 133
Carbon Disulfide	21.4	20.0	107	59 - 138
Carbon Tetrachloride	20,9	20.0	104	69 - 135
Chlorobenzene	18.9	20.0	95	80 - 121
Chloroethane	20.7	20.0	104	71 - 130
Chloroform	20.5	20.0	102	78 - 125
Chloromethane	18.5	20.0	92	62 - 133
Dibromochloromethane	19,9	20.0	100	78 - 133
1,1-Dichloroethane	20.4	20.0	102	76 - 122
1,2-Dichloroethane	20.5	20.0	102	78 - 126
1,1-Dichloroethene	19,8	20.0	99	72 - 129
cis-1,2-Dichloroethene	18.4	20.0	92	78 - 122
trans-1,2-Dichloroethene	18.5	20.0	93	75 - 121
1,2-Dichloropropane	19.7	20.0	98	80 - 123
cis-1,3-Dichloropropene	18.9	20.0	95	77 - 125
trans-1,3-Dichloropropene	18.8	20.0	94	69 - 127
Ethylbenzene	19.7	20.0	99	78 - 123
2-Hexanone	16.7	20.0	83	61 - 131
Methylene Chloride	19.0	20.0	95	75 - 125
4-Methyl-2-pentanone (MIBK)	16.1	20.0	80	61 - 132
Styrene	17,9	20.0	90	80 - 132
1,1,2,2-Tetrachloroethane	16.4	20.0	82	72 - 131
Tetrachloroethene	20.1	20.0	100	72 - 131
Toluene	17.7	20.0	89	78 - 122
1,1,1-Trichloroethane	20.7	20.0	104	72 - 128
1,1,2-Trichloroethane	18.3	20.0	91	80 - 122
Trichloroethene	18.9	20.0	94	74 - 127
Vinyl Chloride	21.0	20.0	105	71 - 136
o-Xyiene	18.3	20.0	92	79 - 126
m,p-Xylenes	37.5	40.0	94	79 - 126

Comments:

Lab Control Sample Summary

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Name, Levece	Project Number			ANALYSIS	REQUESTED (Inc	clude Method Number and Con	tainer Preservative)
ob MePerk	Report CC		PRESERV	ATIVE			
- Nergy Solutio	NS TMC.		-				C Preservative Ke
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Danbury 1 CT	DG.	811	CONT	05 1 CTE	010 0 010 0 010 0 010 0	2 polo	6. Zn. Acetate 6. MeOH
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4 CLIENT SAMPLE ID	FOR OFFICE USE ONLY LAB ID	/ SAMPLING DATE TIME N		2000 C 20	1910 1910 1910 1910 1910 1910 1910 1910		
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IAL INSTRUCTIONS/COMMENTS				TURNAROUND RE RUSH (SURCHA	CUIREMENTS . RGES APPLY)	REPORT REQUIREMENTS	INVOICE INFORMATION
				STANDARD	tr	X II. Results + OC Summaries (LCS, DUP, MSMSD as required)	POH .
				HEQUESTED FAX DATE		III. Results + QC and Calibration Summaries	
				REPORT D	ATE		Data
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ATORY ANALYSIS R	2 x11 • FAX (585) 288-8475 PAGE	ANALYSIS REQUESTED	RVATIVE			2016 2016 2016 2016 2016	10100000000000000000000000000000000000											TURNAROUND REQUIREMENTS RISH /SURCHARGES APPLY	24 ft 48 ft 5 day	V STANDARD	REQUESTED FAX DATE	RECUESTED REPORT DATE			RECEIVED BY	Service A	50 CS	E AS	Date The 110 (1020	
CUSTODY/LABORA	609-0859(585) 288-5380 • 800-895-7222		PRESE		VINEUS CC	CONT	-8904	ALMING IT	SAMPLING THE TIME MATRIX	1 0 H 35 Ha	10 15(30 { 1	1 00;91 ot/												CUSTODY SEALS; Y 1	RELINQUISHED BY	and the second s	Pring Representation of the Pring Pr	Fittin PUCS,	1 34 11 1/2 1/20	11
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Columbia Serv	www.casiab.com One Mus	Project Name	Probal Manager McRak	Company Address Energy Solution	LOO Mill Plain F	Danbury , C	801-302- 1092	Sampler's Signature	CLIENT SAMPLE ID	MW aa	MW 18 A	MW 18			, , , , , , , , , , , , , , , , , , ,			SPECIAL INSTRUCTIONS/COMMENTS					See D4PP	SAMPLE RECEIPT: CONDITION/COC	HELINCUISHED BY	Sprine Act.	Prited Name, No. Philip, L	Punit Territe	10 1540	Distribution: White - Return to Originator; Yelo

Cooler Receipt And Preservation Check Form

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Other Comments:

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+ I VOA val for MW22 + MW 221A ware rectal proken.

7/19/10 PC Secondary Review: KB H:\SMODOCS\Cooler Receipt 2.doc

*significant air bubbles are greater than 5-6 mm



July 23, 2010

Service Request No: R1003551

Mr. Robert McPeak Energy Solutions, Inc. 100 Mill Plain Rd 2nd Floor Mailbox 106 Danbury, CT 06811

Laboratory Results for: Leica Wells July 2010

Dear Mr. McPeak:

Enclosed are the results of the sample(s) submitted to our laboratory on July 6, 2010. For your reference, these analyses have been assigned our service request number **R1003551**.

All analyses were performed according to our laboratory's quality assurance program. The test results meet requirements of the NELAP standards except as noted in the case narrative report. All results are intended to be considered in their entirety, and Columbia Analytical Services, Inc. (CAS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please contact me if you have any questions. My extension is 134. You may also contact me via email at KBunker@caslab.com.

Respectfully submitted,

Columbia Analytical Services, Inc.

er Burler

Karen Bunker Project Manager

Page 1 of ______66

Client:Energy SolutionsProject:Leica Wells 7/2010Sample Matrix:Water

Service Request No.: R1003551 Date Received: 7/6/10

All analyses were performed consistent with the quality assurance program of Columbia Analytical Services, Inc. (CAS). This report contains analytical results for samples designated for Tier II data deliverables. When appropriate to the method, method blank results have been reported with each analytical test. Surrogate recoveries have been reported for all applicable organic analyses.

Sample Receipt

Twelve (12) groundwater samples and one (1) Trip Blank were collected by the client on 7/7/2010 and received for analysis at Columbia Analytical Services on the same day via CAS Courier. The samples were received in good condition. The cooler receipt temperature range was 2.8-5.8°C, within the guidelines of 0-6°C.

Volatile Organics

Thirteen (13) water samples were analyzed for Volatile Organic compounds by GC/MS method 8260B.

The Initial and Continuing Calibration Criteria were met.

Batch QC is included in the report. All Laboratory Control Sample (LCS) and LCS Duplicate recoveries for target compounds were within QC limits. All Relative Percent Difference (RPD) calculations were acceptable.

All Surrogate recoveries are within acceptance limits.

Hits above the calibration range of the standards are flagged "E", estimated. The sample is then repeated at the appropriate dilution for the hits. Both sets of data are included in the report. The subsequent dilution hits are flagged as "D".

All Laboratory Method Blanks were free from contamination.

The samples were analyzed within the 14 day holding time for the method. All vials are checked for preservation after the analysis in order to maintain the integrity of the sample. All vials were found to be preserved to a pH of <2.

No problems were encountered during the analysis of these samples.

Inorganics

Twelve (12) water samples were analyzed for TOC, Dissolved Iron and Manganese, and IC compounds: Chloride, Nitrate, and Sulfate. All Method numbers are noted on the Data Form 1's of the report. The soluble locations were filtered in the laboratory.

All Initial and Continuing Calibration Criteria was met for these analyses.

Batch QC is included in the report. All Laboratory Control Sample recoveries were within QC acceptance limits.

All Laboratory Method Blanks were free from contamination.

All holding times were initially met for these analyses. The Nitrate analysis was repeated less than 2 hours outside of holding time for samples MW 16A (CAS #R1003551-017), MW 24A (R1003551-021) and MW 24 (R1003551-023). The repeats were necessary due to a Continuing Calibration failure on the initial run.

No problems were encountered with these analyses.

Approved by eni 12. Date

CASE NARRATIVE

This report contains analytical results for the following samples: Service Request Number: R1003551

Lab ID	Client ID
R1003551-001	MW 10
R1003551-002	MW 10 DISSOLVED
R1003551-003	MW 14
R1003551-004	MW 14 DISSOLVED
R1003551-005	MW 14A
R1003551-006	MW 14A DISSOLVED
R1003551-007	MW 5
R1003551-008	MW 5 DISSOLVED
R1003551-009	MW 5A
R1003551-010	MW 5A DISSOLVED
R1003551-011	MW 6
R1003551-012	MW 6 DISSOLVED
R1003551-013	MW 6A
R1003551-014	MW 6A DISSOLVED
R1003551-015	MW 16R
R1003551-016	MW 16R DISSOLVED
R1003551-017	MW 16A
R1003551-018	MW 16A DISSOLVED
R1003551-019	MW 11A
R1003551-020	MW 11A DISSOLVED
R1003551-021	MW 24A
R1003551-022	MW 24A DISSOLVED
R1003551-023	MW 24
R1003551-024	MW 24 DISSOLVED
R1003551-025	Trip Blank



REPORT QUALIFIERS

- U Analyte was analyzed for but not detected. The sample quantitation limit has been corrected for dilution and for percent moisture, unless otherwise noted in the case narrative.
- J Estimated value due to either being a Tentatively Identified Compound (TIC) or that the concentration is between the MRL and the MDL. Concentrations are not verified within the linear range of the calibration. For DoD: concentration >40% difference between two GC columns (pesticides/Arclors).
- B Analyte was also detected in the associated method blank at a concentration that may have contributed to the sample result.
- E Inorganics- Concentration is estimated due to the serial dilution was outside control limits.
- E Organics- Concentration has exceeded the calibration range for that specific analysis.
- D Concentration is a result of a dilution, typically a secondary analysis of the sample due to exceeding the calibration range or that a surrogate has been diluted out of the sample and cannot be assessed.
- * Indicates that a quality control parameter has exceeded laboratory limits.
- # Spike was diluted out.
- Correlation coefficient for MSA is <0.995.
- N Inorganics- Matrix spike recovery was outside laboratory limits.
- N Organics- Presumptive evidence of a compound (reported as a TIC) based on the MS library search.
- S Concentration has been determined using Method of Standard Additions (MSA).
- W Post-Digestion Spike recovery is outside control limits and the sample absorbance is <50% of the spike absorbance.
- P Concentration >40% (25% for CLP) difference between the two GC columns.
- C Confirmed by GC/MS
- Q DoD reports: indicates a pesticide/Aroclor is not confirmed (≥100% Difference between two GC columns).
- X See Case Narrative for discussion.



CAS/Rochester Lab ID # for State Certifications¹

NELAP Accredited Delaware Accredited Connecticut ID # PH0556 Florida ID # E87674 Illinois ID #200047 Maine ID #NY0032 Nebraska Accredited Navy Facilities Engineering Service Center Approved Nevada ID # NY-00032 New Jersey ID # NY004 New York ID # 10145 New Hampshire ID # 294100 A/B Pennsylvania ID# 68-786 Rhode Island ID # 158 West Virginia ID # 292

¹ Analyses were performed according to our laboratory's NELAP-approved quality assurance program and any applicable state requirements. The test results meet requirements of the current NELAP standards or state requirements, where applicable, except as noted in the laboratory case narrative provided. For a specific list of accredited analytes, refer to the certifications section at <u>www.caslab.com</u>.

Analytical Report

Client:	Energy Solutions
Project:	Leica Wells July 2010
Sample Matrix:	Water
Sample Name:	MW 10
Lab Code:	R1003551-001

Service Request: R1003551 Date Collected: 7/6/10 0800 Date Received: 7/6/10

Basis: NA

General Chemistry Parameters

Analyte Name	Method	Result Q	Units	MRL	Dilution Factor	Date Date Extracted	Date Analyzed
Carbon, Total Organic (TOC)	SM20 5310 C	152	mg/L	10	10	NA	7/15/10 23:08
Chloride	300.0	33.5	mg/L	2.0	10	NA	7/7/10 11:49
Nitrate as Nitrogen	300.0	0.50 U	mg/L	0.50	10	NA	7/7/10 11:49
Sulfate	300.0	4.1	mg/L	2.0	10	NA	7/7/10 11:49

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Analytical Report

Client:Energy SolutionsProject:Leica Wells July 2010Sample Matrix:WaterSample Name:MW 10Lab Code:R1003551-001

Service Request: R1003551 Date Collected: 7/ 6/10 0800 Date Received: 7/ 6/10

> Units: µg/L Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260B

Analyte Name	Result Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Analysis Lot Lot
Acetone	46	20	1	NA	7/14/10 15:57	208370
Benzene	5.0 U	5.0	1	NA	7/14/10 15:57	208370
Bromodichloromethanc	5.0 U	5.0	1	NA	7/14/10 15:57	208370
Bromoform	5.0 U	5.0	1	NA	7/14/10 15:57	208370
Bromomethane	5.0 U	5.0	1	NA	7/14/10 15:57	208370
2-Butanone (MEK)	110	10	1	NA	7/14/10 15:57	208370
Carbon Disulfide	10 U	10	1	NA	7/14/10 15:57	208370
Carbon Tetrachloride	5.0 U	5.0	1	NA	7/14/10 15:57	208370
Chlorobenzene	5.0 U	5.0	1	NA	7/14/10 15:57	208370
Chloroethane	5.0 U	5.0	1	NA	7/14/10 15:57	208370
Chloroform	5.0 U	5.0	1	NA	7/14/10 15:57	208370
Chloromethane	5.0 U	5.0	1	NA	7/14/10 15:57	208370
Dibromochloromethane	5.0 U	5,0	1	NA	7/14/10 15:57	208370
1,1-Dichloroethane	5.0 U	5.0	1	NA	7/14/10 15:57	208370
1,2-Dichloroethane	5.0 U	5.0	1	NA	7/14/10 15:57	208370
1,1-Dichloroethene	5.0 U	5.0	1	NA	7/14/10 15:57	7 208370
cis-1,2-Dichloroethene	9.5	5.0	1	NA	7/14/10 15:57	7 208370
trans-1,2-Dichloroethene	5.0 U	5.0	1	NA	7/14/10 15:57	208370
1,2-Dichloropropane	5.0 U	5.0	1	NA	7/14/10 15:57	7 208370
cis-1,3-Dichloropropene	5.0 U	5.0	1	NA -	7/14/10 15:57	7 208370
trans-1,3-Dichloropropene	5.0 U	5.0	1	NA	7/14/10 15:57	7 208370
Ethylbenzene	5.0 U	5.0	1	NA	7/14/10 15:57	7 208370
2-Hexanone	10 U	10	1	NA	7/14/10 15:57	7 208370
Methylene Chloride	5.0 U	5.0	1	NA	7/14/10 15:57	208370
4-Methyl-2-pentanone (MIBK)	10 U	10	1	NA	7/14/10 15:57	7 208370
Styrene	5.0 U	5.0	1	NA	7/14/10 15:57	7 208370
1,1,2,2-Tetrachloroethane	5.0 U	5.0	1	NA	7/14/10 15:57	7 208370
Tetrachloroethene	5.0 U	5.0	1	NA	7/14/10 15:57	7 208370
Toluene	5.0 U	5,0	1	NA	7/14/10 15:57	7 208370
1,1,1-Trichloroethane	5.0 U	5.0	1	NA	7/14/10 15:57	7 208370
1,1,2-Trichloroethane	5.0 U	5.0	1	NA	7/14/10 15:57	7 208370
Trichloroethene	5.0 U	5,0	1	NA	7/14/10 15:57	7 208370
Vinyl Chloride	24	5.0	1	NA	7/14/10 15:57	7 208370
o-Xylene	5.0 U	5.0	1	NA	7/14/10 15:57	7 208370
m,p-Xylenes	5.0 U	5.0	1	NA	7/14/10 15:57	7 208370

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Analytical Report

Client:Energy SolutionsProject:Leica Wells July 2010Sample Matrix:WaterSample Name:MW 10Lab Code:R1003551-001

Service Request: R1003551 Date Collected: 7/6/10 0800 Date Received: 7/6/10

> Units: Percent Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260B

		Control	Date	
Surrogate Name	%Rec	Limits	Analyzed	Q
4-Bromofluorobenzene	107	85-122	7/14/10 15:57	
Toluene-d8	106	87-121	7/14/10 15:57	
Dibromofluoromethane	114	89-119	7/14/10 15:57	

10-0000148545 rev 00



Analytical Report

Client:	Energy Solutions
Project:	Leica Wells July 2010
Sample Matrix:	Water
Sample Name:	MW 10 DISSOLVED
Lab Code:	R1003551-002

Service Request: R1003551 Date Collected: 7/6/10 0800 Date Received: 7/6/10

Basis: NA

Inorganic Parameters

Analyte Name	Method	Result Q	Units	MRL	Dilution Date Dat Factor Extracted Analy	e zed
Iron, Dissolved	6010B	2510	μg/L	100	1 7/12/10 7/16/10	14:29
Manganese, Dissolved	6010B	30	μg/L	10	1 7/12/10 7/16/10	14:29



Analytical Report

Client:	Energy Solutions
Project:	Leica Wells July 2010
Sample Matrix:	Water
Sample Name:	MW 14
Lab Code:	R1003551-003

Service Request: R1003551 Date Collected: 7/6/10 0815 Date Received: 7/6/10

General Chemistry Parameters

Analyte Name	Method	Result Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed
Carbon, Total Organic (TOC)	SM20 5310 C	4,5	mg/L	1.0	1	NA	7/19/10 17:02
Chloride	300.0	55.1	mg/L	2.0	10	NA	7/7/10 12:28
Nitrate as Nitrogen	300.0	0.50 U	mg/L	0.50	10	NA	7/7/10 12:28
Sulfate	300.0	327	mg/L	20	100	NA	7/8/10 18:29



Analytical Report

Client:Energy SolutionsProject:Leica Wells July 2010Sample Matrix:Water

Service Request: R1003551 Date Collected: 7/ 6/10 0815 Date Received: 7/ 6/10

> Units: µg/L Basis: NA

Sample Name: Lab Code: MW 14 R1003551-003

Volatile Organic Compounds by GC/MS

Analytical Method: 8260B

		No. 400 6466 1007	Dilution	Date	Date	Extraction Analysis
Analyte Name	Result Q	MRL	Factor	Extracted	Analyzed	Lot Lot
Acetone	20 U	20	1	NA	7/12/10 16:30	208123
Benzene	5.0 U	5.0	1	NA	7/12/10 16:30	208123
Bromodichloromethane	5.0 U	5.0	1	NA	7/12/10 16:30	208123
Bromoform	5.0 U	5.0	1	NA	7/12/10 16:30	208123
Bromomethane	5.0 U	5.0	1	NA	7/12/10 16:30	208123
2-Butanone (MEK)	10 U	10	1	NA	7/12/10 16:30	208123
Carbon Disulfide	10 U	10	1	NA	7/12/10 16:30	208123
Carbon Tetrachloride	5.0 U	5.0	1	NA	7/12/10 16:30	208123
Chlorobenzene	5.0 U	5.0	1	NA	7/12/10 16:30	208123
Chloroethane	5.0 U	5.0	1	NA	7/12/10 16:30	208123
Chloroform	5.0 U	5.0	1	NA	7/12/10 16:30	208123
Chloromethane	5.0 U	5.0	1	NA	7/12/10 16:30	208123
Dibromochloromethane	5.0 U	5.0	1	NA	7/12/10 16:30	208123
1,1-Dichloroethane	5.0 U	5.0	1	NA	7/12/10 16:30	208123
1,2-Dichloroethane	5.0 U	5.0	1	NA	7/12/10 16:30	208123
1,1-Dichloroethene	5.0 U	5.0	1	NA	7/12/10 16:30	208123
cis-1,2-Dichloroethene	280 E	5.0	1	NA	7/12/10 16:30	208123
trans-1,2-Dichloroethene	7.0	5.0	1	NA	7/12/10 16:30	208123
1,2-Dichloropropane	5.0 U	5.0	1	NA	7/12/10 16:30	208123
cis-1,3-Dichloropropene	5.0 U	5.0	1	NA	7/12/10 16:30	208123
trans-1,3-Dichloropropene	5.0 U	5.0	1	NA	7/12/10 16:30	208123
Ethylbenzene	5.0 U	5.0	1	NA	7/12/10 16:30	208123
2-Hexanone	10 U	10	1	NA	7/12/10 16:30	208123
Methylene Chloride	5.0 U	5.0	1	NA	7/12/10 16:30	208123
4-Methyl-2-pentanone (MIBK)	10 U	10	1	NA	7/12/10 16:30	208123
Styrene	5.0 U	5.0	1	NA	7/12/10 16:30	208123
1,1,2,2-Tetrachloroethane	5.0 U	5.0	1	NA	7/12/10 16:30	208123
Tetrachloroethene	5.0 U	5.0	1	NA	7/12/10 16:30	208123
Toluene	5.0 U	5.0	1	NA	7/12/10 16:30	208123
1,1,1-Trichloroethane	5.0 U	5.0	1	NA	7/12/10 16:30	208123
1,1,2-Trichloroethane	5.0 U	5.0	1	NA	7/12/10 16:30	208123
Trichloroethene	5.0 U	5.0	1	NA	7/12/10 16:30	208123
Vinyl Chloride	91	5.0	1	NA	7/12/10 16:30	208123
o-Xylene	5.0 U	5.0	1	NA	7/12/10 16:30	208123
m,p-Xylenes	5.0 U	5.0	1	NA	7/12/10 16:30	208123

SuperSet Reference: 10-0000148546 rev 00

Analytical Report

Client:Energy SolutionsProject:Leica Wells July 2010Sample Matrix:WaterSample Name:MW 14Lab Code:R1003551-003

Service Request: R1003551 Date Collected: 7/6/10 0815 Date Received: 7/6/10

> Units: Percent Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260B

Surrogate Name	%Rec	Control Limits	Date Analyzed	0	
4-Bromofluorobenzene	110	85-122	7/12/10 16:30		
Toluene-d8	102	87-121	7/12/10 16:30		
Dibromofluoromethane	111	89-119	7/12/10 16:30		

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Analytical Report

Client: Energy Solutions Project: Leica Wells July 2010

R1003551-003

Dilution

Sample Matrix: Water Sample Name: MW 14 Service Request: R1003551 Date Collected: 7/6/10 0815 Date Received: 7/6/10

> Units: µg/L Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260B

Lab Code:

Run Type:

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Analysis Lot Lot
Acetone	40	U	40	2	NA	7/14/10 16:35	208370
Benzene	10	U	10	2	NA	7/14/10 16:35	208370
Bromodichloromethane	10	U	10	2	NA	7/14/10 16:35	208370
Bromoform	10	U	10	2	NA	7/14/10 16:35	208370
Bromomethane	10	U	10	2	NA	7/14/10 16:35	208370
2-Butanone (MEK)	20	U	20	2	ŇA	7/14/10 16:35	208370
Carbon Disulfide	20	U	20	2	NA	7/14/10 16:35	208370
Carbon Tetrachloride	10	U	10	2	NA	7/14/10 16:35	208370
Chlorobenzene	10	U	10	2	NA	7/14/10 16:35	208370
Chloroethane	10	U	10	2	NA	7/14/10 16:35	208370
Chloroform	10	U	10	2	NA	7/14/10 16:35	208370
Chloromethane	10	U	10	2	NA	7/14/10 16:35	208370
Dibromochloromethane	10	U	10	2	NA	7/14/10 16:35	208370
1,1-Dichloroethane	10	U	10	2	NA	7/14/10 16:35	208370
1,2-Dichloroethane	10	U	10	2	NA	7/14/10 16:35	208370
1,1-Dichloroethene	10	U	10	2	NA	7/14/10 16:35	208370
cis-1,2-Dichloroethene	260	D	10	2	NA	7/14/10 16:35	208370
trans-1,2-Dichloroethene	10	U	10	2	NA	7/14/10 16:35	208370
1,2-Dichloropropane	10	U	10	2	NA	7/14/10 16:35	208370
cis-1,3-Dichloropropene	10	U	10	2	NA	7/14/10 16:35	208370
trans-I,3-Dichloropropene	10	U	10	2	NA	7/14/10 16:35	208370
Ethylbenzene	10	U	10	2	NA	7/14/10 16:35	208370
2-Hexanone	20	U	20	2	NA	7/14/10 16:35	208370
Methylene Chloride	10	U	10	2	NA	7/14/10 16:35	208370
4-Methyl-2-pentanone (MIBK)	20	U	20	2	NA	7/14/10 16:35	208370
Styrene	10	U	10	2	NA	7/14/10 16:35	208370
1,1,2,2-Tetrachloroethane	10	U	10	2	NA	7/14/10 16:35	208370
Tetrachloroethene	10	U	10	2	NA	7/14/10 16:35	208370
Toluene	10	U	10	2	NA	7/14/10 16:35	208370
1,1,1-Trichloroethane	10	U	10	2	NA	7/14/10 16:35	208370
1,1,2-Trichloroethane	10	U	10	2	NA	7/14/10 16:35	208370
Trichloroethene	10	U	10	2	NA	7/14/10 16:35	20837 0
Vinyl Chloride	83	D	10	2	NA	7/14/10 16:35	208370
o-Xylene	10	U	10	2	NA	7/14/10 16:35	208370
m,p-Xylenes	10	U	10	2	NA	7/14/10 16:35	208370

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SuperSet Reference: 10-0000148546 rev 00

Analytical Report

Client: Energy Solutions Project: Leica Wells July 2010 Sample Matrix: Water Sample Name: MW 14

R1003551-003

Dilution

Service Request: R1003551 Date Collected: 7/6/10 0815 Date Received: 7/6/10

> Units: Percent Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260B

,

Lab Code:

Run Type:

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	109	85-122	7/14/10 16:35	
Toluene-d8	104	87-121	7/14/10 16:35	
Dibromofluoromethane	109	89-119	7/14/10 16:35	



Analytical Report

Client:	Energy Solutions
Project:	Leica Wells July 2010
Sample Matrix:	Water
Sample Name:	MW 14 DISSOLVED
Lab Code:	R1003551-004

Service Request: R1003551 Date Collected: 7/ 6/10 0815 Date Received: 7/ 6/10

Basis: NA

Inorganic Parameters

Analyte Name	Method	Result Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed
Iron, Dissolved	6010B	200	μg/L	100	1	7/12/10	7/16/10 14:58
Manganese, Dissolved	6010B	63	μg/L	10	1	7/12/10	7/16/10 14:58

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Analytical Report

Client:Energy SolutionsProject:Leica Wells July 2010Sample Matrix:WaterSample Name:MW 14ALab Code:R1003551-005

Service Request: R1003551 Date Collected: 7/6/10 0825 Date Received: 7/6/10

Basis: NA

General Chemistry Parameters

Analyte Name	Method	Result Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed
Carbon, Total Organic (TOC)	SM20 5310 C	3.9	mg/L	1.0	1	NA	7/19/10 17:36
Chloride	300.0	15.0	mg/L	2.0	10	NA	7/7/10 12:42
Nitrate as Nitrogen	300,0	0.50 U	mg/L	0.50	10	NA	7/7/10 12:42
Sulfate	300.0	115	mg/L	4.0	20	NA	7/8/10 18:41



Analytical Report

Client:Energy SolutionsProject:Leica Wells July 2010Sample Matrix:Water

Sample Name:MW 14ALab Code:R1003551-005

Service Request: R1003551 Date Collected: 7/ 6/10 0825 Date Received: 7/ 6/10

> Units: µg/L Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260B

				Dilution	Date	Date	Extraction Analysis
Analyte Name	Result	Q	MRL	Factor	Extracted	Analyzed	Lot Lot
Acetone	20	U	20	1	NA	7/12/10 17:08	208123
Benzene	5.0	U	5.0	1	NA	7/12/10 17:08	208123
Bromodichloromethane	5.0	U	5.0	1	NA	7/12/10 17:08	208123
Bromoform	5.0	U	5.0	I	NA	7/12/10 17:08	208123
Bromomethane	5.0	U	5.0	1	NA	7/12/10 17:08	208123
2-Butanone (MEK)	10	U	10	I	NA	7/12/10 17:08	208123
Carbon Disulfide	10	U	10	1	NA	7/12/10 17:08	208123
Carbon Tetrachloride	5.0	U	5.0	1	NA	7/12/10 17:08	208123
Chlorobenzene	5.0	U	5.0	1	NA	7/12/10 17:08	208123
Chloroethane	5.0	υ	5.0	1	NA	7/12/10 17:08	208123
Chloroform	5.0	U	5.0	1	NA	7/12/10 17:08	208123
Chloromethane	5.0	U	5.0	1	NA	7/12/10 17:08	208123
Dibromochloromethane	5.0	υ	5.0	I	NA	7/12/10 17:08	208123
1,1-Dichlorcethane	5.0	U	5.0	1	NA	7/12/10 17:08	208123
1,2-Dichloroethane	5.0	U	5.0	1	NA	7/12/10 17:08	208123
1,1-Dichloroethene	5.0	U	5.0	1	NA	7/12/10 17:08	208123
cis-1,2-Dichloroethene	31		5.0	1	NA	7/12/10 17:08	208123
trans-1,2-Dichloroethene	5.0	U	5.0	1	NA	7/12/10 17:08	208123
1,2-Dichloropropane	5.0	υ	5.0	1	NA	7/12/10 17:08	208123
cis-1,3-Dichloropropene	5.0	U	5.0	1	NA	7/12/10 17:08	208123
trans-1,3-Dichloropropene	5.0	U	5.0	1	NA	7/12/10 17:08	208123
Ethylbenzene	5.0	U	5.0	1	NA	7/12/10 17:08	208123
2-Hexanone	10	U	10	1	NA	7/12/10 17:08	208123
Methylene Chloride	5.0	U	5.0	1	NA	7/12/10 17:08	208123
4-Methyl-2-pentanone (MIBK)	10	U	10	1	NA	7/12/10 17:08	208123
Styrene	5.0	U	5.0	1	NA	7/12/10 17:08	208123
1,1,2,2-Tetrachloroethane	5.0	U	5.0	1	NA	7/12/10 17:08	208123
Tetrachloroethene	5.0	U	5.0	1	NA	7/12/10 17:08	208123
Toluene	5.0	U	5,0	1	NA	7/12/10 17:08	208123
1,1,1-Trichloroethane	5.0	U	5.0	1	NA	7/12/10 17:08	208123
1,1,2-Trichloroethane	5.0	U	5.0	I	NA	7/12/10 17:08	208123
Trichloroethene	5.0	U	5.0	1	NA	7/12/10 17:08	208123
Vinyl Chloride	24		5.0	1	NA	7/12/10 17:08	208123
o-Xylene	5.0	U	5.0	1	NA	7/12/10 17:08	208123
m,p-Xylenes	5.0	U	5.0	1	NA	7/12/10 17:08	208123

SuperSet Reference: 10-0

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Analytical Report

Client:Energy SolutionsProject:Leica Wells July 2010Sample Matrix:Water

Service Request: R1003551 Date Collected: 7/ 6/10 0825 Date Received: 7/ 6/10

> Units: Percent Basis: NA

Sample Name:MW 14ALab Code:R1003551-005

Volatile Organic Compounds by GC/MS

Analytical Method: 8260B

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	111	85-122	7/12/10 17:08	
Toluene-d8	103	87-121	7/12/10 17:08	
Dibromofluoromethane	111	89-119	7/12/10 17:08	



Analytical Report

Client:	Energy Solutions
Project:	Leica Wells July 2010
Sample Matrix:	Water
Sample Name:	MW 14A DISSOLVED
Lab Code:	R1003551-006

Service Request: R1003551 Date Collected: 7/6/10 0825 Date Received: 7/6/10

Basis: NA

Inorganic Parameters

Analyte Name	Method	Result Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed
Iron, Dissolved	6010B	830	μg/L	100	1	7/12/10	7/16/10 15:04
Manganese, Dissolved	6010B	83	μg/L	10	1	7/12/10	7/16/10 15:04



Analytical Report

Client:Energy SolutionsProject:Leica Wells July 2010Sample Matrix:WaterSample Name:MW 5Lab Code:R1003551-007

Service Request: R1003551 Date Collected: 7/6/10 0840 Date Received: 7/6/10

Basis: NA

General Chemistry Parameters

Analyte Name	Method	Result Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed
Carbon, Total Organic (TOC)	SM20 5310 C	3.8	mg/L	1.0	1	NA	7/16/10 00:38
Chloride	300.0	2.0	mg/L	2.0	10	NA	7/7/10 12:55
Nitrate as Nitrogen	300.0	0.50 U	mg/L	0.50	10	NA	7/7/10 12:55
Sulfate	300.0	9.8	mg/L	2.0	10	NA	7/7/10 12:55

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Analytical Report

Client:Energy SolutionsProject:Leica Wells July 2010Sample Matrix:WaterSample Name:MW 5Lab Code:R1003551-007

Service Request: R1003551 Date Collected: 7/6/10 0840 Date Received: 7/6/10

> Units: µg/L Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260B

A		_		Dilution	Date	Date	Extraction Analysis
Analyte Name	Result	Q	MRL	Factor	Extracted	Analyzed	Lot Lot
Acetone	20	U	20	1	NA	7/12/10 17:46	208123
Benzene	5.0	U	5.0	1	NA	7/12/10 17:46	208123
Bromodichloromethane	5.0	U	5.0	1	NA	7/12/10 17:46	208123
Bromoform	5.0	U	5.0	1	NA	7/12/10 17:46	208123
Bromomethane	5.0	U	5.0	1	NA	7/12/10 17:46	208123
2-Butanone (MEK)	10	U	10	1	NA	7/12/10 17:46	208123
Carbon Disulfide	10	U	10	1	NA	7/12/10 17:46	208123
Carbon Tetrachloride	5.0	U	5.0	1	NA	7/12/10 17:46	208123
Chlorobenzene	5.0	U	5.0	1	NA	7/12/10 17:46	208123
Chloroethane	5.0	U	5.0	1	NA	7/12/10 17:46	208123
Chloroform	5.0	U	5.0	1	NA	7/12/10 17:46	208123
Chloromethane	5.0	U	5.0	1	NA	7/12/10 17:46	208123
Dibromochloromethane	5.0	U	5.0	1	NA	7/12/10 17:46	208123
1,1-Dichloroethane	5.0	U	5.0	1	NA	7/12/10 17:46	208123
1,2-Dichloroethane	5.0	U	5.0	1	NA	7/12/10 17:46	208123
1,1-Dichloroethene	5.0	U	5.0	1	NA	7/12/10 17:46	208123
cis-1,2-Dichloroethene	5.0	U	5.0	1	NA	7/12/10 17:46	208123
trans-1,2-Dichloroethene	5.0	U	5.0	1	NA	7/12/10 17:46	208123
1,2-Dichloropropane	5.0	U	5.0	1	NA	7/12/10 17:46	208123
cis-1,3-Dichloropropene	5.0	U	5.0	1	NA	7/12/10 17:46	208123
trans-1,3-Dichloropropene	5.0	U	5.0	1	NA	7/12/10 17:46	208123
Ethylbenzene	5.0	U	5.0	1	NA	7/12/10 17:46	208123
2-Hexanone	10	U	10	1	NA	7/12/10 17:46	208123
Methylene Chloride	5.0	U	5.0	I	NA	7/12/10 17:46	208123
4-Methyl-2-pentanone (MIBK)	10	U	10	1	NA	7/12/10 17:46	208123
Styrene	5.0	U	5.0	1	NA	7/12/10 17:46	208123
1,1,2,2-Tetrachloroethane	5.0	U	5.0	1	NA	7/12/10 17:46	208123
Tetrachloroethene	5.0	U	5.0	1	NA	7/12/10 17:46	208123
Toluene	5.0	U	5.0	1	NA	7/12/10 17:46	208123
1,1,1-Trichloroethane	5.0	U	5.0	1	NA	7/12/10 17:46	208123
1,1,2-Trichloroethane	5.0	υ	5.0	1	NA	7/12/10 17:46	208123
Trichloroethene	5.0	U	5.0	1	NA	7/12/10 17:46	208123
Vinyl Chloride	5.0	U	5.0	1	NA	7/12/10 17:46	208123
o-Xylene	5.0	U	5.0	1	NA	7/12/10 17:46	208123
m,p-Xylenes	5.0	U	5.0	1	NA	7/12/10 17:46	208123

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Analytical Report

Client:Energy SolutionsProject:Leica Wells July 2010Sample Matrix:WaterSample Name:MW 5Lab Code:R1003551-007

Service Request: R1003551 Date Collected: 7/ 6/10 0840 Date Received: 7/ 6/10

> Units: Percent Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260B

Surrogate Name	%Rec	Control Limits	Date Analyzed O	
4-Bromofluorobenzene	112	85-122	7/12/10 17:46	
Toluene-d8	102	87-121	7/12/10 17:46	
Dibromofluoromethane	113	89-119	7/12/10 17:46	

Analytical Report

Client:Energy SolutionsProject:Leica Wells July 2010Sample Matrix:WaterSample Name:MW 5 DISSOLVEDLab Code:R1003551-008

Service Request: R1003551 Date Collected: 7/ 6/10 0840 Date Received: 7/ 6/10

Basis: NA

Inorganic Parameters

Analyte Name	Method	Result Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed
Iron, Dissolved	6010B	160	μg/L	100	1	7/12/10	7/16/10 15:22
Manganese, Dissolved	6010B	33	μg/L	10	1	7/12/10	7/16/10 15:22



Analytical Report

Client:	Energy Solutions
Project:	Leica Wells July 2010
Sample Matrix:	Water
Sample Name:	MW 5A
Lab Code:	R1003551-009

Service Request: R1003551 Date Collected: 7/ 6/10 0850 Date Received: 7/ 6/10

Basis: NA

General Chemistry Parameters

Analyte Name	Method	Result Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed
Carbon, Total Organic (TOC)	SM20 5310 C	176	mg/L	10	10	NA	7/16/10 00:56
Chloride	300.0	96.0	mg/L.	2.0	10	NA	7/7/10 13:08
Nitrate as Nitrogen	300.0	0.50 U	mg/L	0.50	10	ŇA	7/7/10 13:08
Sulfate	300.0	8.5	mg/L	2.0	10	NA	7/7/10 13:08



Analytical Report

Client:Energy SolutionsProject:Leica Wells July 2010Sample Matrix:Water

Sample Name: Lab Code: MW 5A R1003551-009 Service Request: R1003551 Date Collected: 7/6/10 0850 Date Received: 7/6/10

> Units: µg/L Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260B

Analute Name	Pocult O	млэт	Dilution	Date	Date	Extraction Analysis
A sets s	Result Q		Factor	EXIFACICO	Analyzeu	
Aceione	32	20 5 0	l	NA	7/12/10 18:24	208123
Denzene	5,0 U 50 II	5,0	1	NA NA	7/12/10 18:24	208123
	J.0 U	5.0	Ĺ	NA	//12/10 18:24	208123
Bromoform	5.0 U	5.0	1	NA	7/12/10 18:24	208123
Bromomethane	5.0 U	5.0	1	NA	7/12/10 18:24	208123
2-Butanone (MEK)	120	10	1	NA	7/12/10 18:24	208123
Carbon Disulfide	10 U	10	1	NA	7/12/10 18:24	208123
Carbon Tetrachloride	5.0 U	5,0	1	NA	7/12/10 18:24	208123
Chlorobenzene	5.0 U	5,0	1	NA	7/12/10 18:24	208123
Chloroethane	5.0 U	5.0	1	NA	7/12/10 18:24	208123
Chloroform	5.0 U	5.0	1	NA	7/12/10 18:24	208123
Chloromethane	5.0 U	5.0	1	NA	7/12/10 18:24	208123
Dibromochloromethane	5.0 U	5.0	1	NA	7/12/10 18:24	208123
1,1-Dichloroethane	5.0 U	5.0	1	NA	7/12/10 18:24	208123
1,2-Dichloroethane	5.0 U	5.0	1	NA	7/12/10 18:24	208123
1,1-Dichloroethene	5.0 U	5,0	1	NA	7/12/10 18:24	208123
cis-1,2-Dichloroethene	5.0 U	5.0	1	NA	7/12/10 18:24	208123
trans-1,2-Dichloroethene	5.0 U	5.0	1	NA	7/12/10 18:24	208123
1,2-Dichloropropane	5.0 U	5.0	1	NA	7/12/10 18:24	208123
cis-1,3-Dichloropropene	5.0 U	5.0	1	NA	7/12/10 18:24	208123
trans-1,3-Dichloropropene	5.0 U	5.0	1	NA	7/12/10 18:24	208123
Ethylbenzene	5.0 U	5.0	1	NA	7/12/10 18:24	208123
2-Hexanone	10 U	10	1	NA	7/12/10 18:24	208123
Methylene Chloride	5.0 U	5.0	1	NA	7/12/10 18:24	208123
4-Methyl-2-pentanone (MIBK)	10 U	10	1	NA	7/12/10 18:24	208123
Styrene	5.0 U	5.0	1	NA	7/12/10 18:24	208123
1,1,2,2-Tetrachloroethane	5.0 U	5.0	1	NA	7/12/10 18:24	208123
Tetrachloroethene	5.0 U	5.0	1	NA	7/12/10 18:24	208123
Toluene	5.0 U	5.0	1	NA	7/12/10 18:24	208123
1,1,1-Trichloroethane	5.0 U	5.0	1	NA	7/12/10 18:24	208123
1,1,2-Trichloroethane	5.0 U	5.0	1	NA	7/12/10 18:24	208123
Trichloroethene	5.0 U	5.0	1	NA	7/12/10 18:24	208123
Vinyl Chloride	7.0	5.0	1	NA	7/12/10 18:24	208123
o-Xylene	5.0 U	5.0	1	NA	7/12/10 18:24	208123
m,p-Xylenes	5.0 U	5.0	1	NA	7/12/10 18:24	208123

SuperSet Reference: 10-00

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Analytical Report

Client: **Energy Solutions Project:** Leica Wells July 2010 Sample Matrix: Water Sample Name:

Lab Code:

MW 5A R1003551-009 Service Request: R1003551 Date Collected: 7/6/10 0850 Date Received: 7/6/10

> Units: Percent Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260B

.

		Control	Date	
Surrogate Name	%Rec	Limits	Analyzed	Q
4-Bromofluorobenzene	109	85-122	7/12/10 18:24	
Tohuene-d8	98	87-121	7/12/10 18:24	
Dibromofluoromethane	113	89-119	7/12/10 18:24	



Analytical Report

Client:	Energy Solutions
Project:	Leica Wells July 2010
Sample Matrix:	Water
Sample Name:	MW 5A DISSOLVED
Lab Code:	R1003551-010

Service Request: R1003551 Date Collected: 7/ 6/10 0850 Date Received: 7/ 6/10

Basis: NA

Inorganic Parameters

Analyte Name	Method	Result Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed
Iron, Dissolved	6010B	12500	μg/L	100	1	7/12/10	7/16/10 15:28
Manganese, Dissolved	6010B	87	μg/L	10	1	7/12/10	7/16/10 15:28

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Analytical Report

Client:	Energy Solutions
Project:	Leica Wells July 2010
Sample Matrix:	Water
Sample Name:	MW 6
Lab Code:	R1003551-011

Service Request: R1003551 Date Collected: 7/ 6/10 0910 Date Received: 7/6/10

Basis: NA

General Chemistry Parameters

Analyte Name	Method	Result Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed
Carbon, Total Organic (TOC)	SM20 5310 C	7.8	mg/L	1.0	1	NA	7/19/10 18:11
Chloride	300.0	8.2	mg/L.	2.0	10	NA	7/7/10 13:21
Nitrate as Nitrogen	300.0	0.50 U	mg/L	0.50	10	NA	7/7/10 13:21
Sulfate	300.0	196	mg/L	8.0	40	NA	7/8/10 18:53



Analytical Report

Client:Energy SolutionsProject:Leica Wells July 2010Sample Matrix:WaterSample Name:MW 6Lab Code:R1003551-011

Service Request: R1003551 Date Collected: 7/6/10 0910 Date Received: 7/6/10

> Units: µg/L Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260B

Analyte Name	Result	0	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Analysis
A ostopa	20	<u>~</u> TT	20	1	NIÁ	7/12/10 10:02	2001 200
Венгене	5.0	ττ	5.0	1	NA NA	7/12/10 19:02	208123
Bromodichloromethane	5.0	Ŭ	5.0]	NA	7/12/10 19:02	208123
Bromoform	5.0	U	5.0	1	NA	7/12/10 19:02	208123
Bromomethane	5.0	U	5.0	1	NA	7/12/10 19:02	208123
2-Butanone (MEK)	10	U	10	1	NA	7/12/10 19:02	208123
Carbon Disulfide	10	U	10	1	NA	7/12/10 19:02	208123
Carbon Tetrachloride	5.0	U	5.0	1	NA	7/12/10 19:02	208123
Chlorobenzene	5.0	U	5.0	1	NA	7/12/10 19:02	208123
Chloroethane	5.0	U	5.0	1	NA	7/12/10 19:02	208123
Chloroform	5.0	U	5.0	1	NA	7/12/10 19:02	208123
Chloromethane	5.0	U	5.0	1	NA	7/12/10 19:02	208123
Dibromochloromethane	5.0	U	5.0	1	NA	7/12/10 19:02	208123
1,1-Dichloroethane	5.0	U	5,0	1	NA	7/12/10 19:02	208123
1,2-Dichloroethane	5.0	U	5.0	1	NA	7/12/10 19:02	208123
1,1-Dichloroethene	5.0	U	5.0	1	NA	7/12/10 19:02	208123
cis-1,2-Dichloroethene	120		5.0	1	NA	7/12/10 19:02	208123
trans-1,2-Dichloroethene	5.0	U	5.0	1	NA	7/12/10 19:02	208123
1,2-Dichloropropane	5.0	U	5,0	1	NA	7/12/10 19:02	208123
cis-1,3-Dichloropropene	5.0	U	5.0	1	NA	7/12/10 19:02	208123
trans-1,3-Dichloropropene	5.0	U	5.0	1	NA	7/12/10 19:02	208123
Ethylbenzene	5,0	U	5.0	1	NA	7/12/10 19:02	208123
2-Hexanone	10	U	10	1	NA	7/12/10 19:02	208123
Methylene Chloride	5.0	U	5.0	1	NA	7/12/10 19:02	208123
4-Methyl-2-pentanone (MIBK)	10	U	10	1	NA	7/12/10 19:02	208123
Styrene	5.0	U	5.0	1	NA	7/12/10 19:02	208123
1,1,2,2-Tetrachloroethane	5.0	U	5.0	1	NA	7/12/10 19:02	208123
Tetrachloroethene	5.0	U	5.0	1	NA	7/12/10 19:02	208123
Toluene	5.0	U	5.0	1	NA	7/12/10 19:02	208123
1,1,1-Trichloroethane	5.0	U	5.0	1	NA	7/12/10 19:02	208123
1,1,2-Trichloroethane	5.0	U	5.0	1	NA	7/12/10 19:02	208123
Trichloroethene	15		5.0	1	NA	7/12/10 19:02	208123
Vinyl Chloride	53		5.0	<u> </u>	NA	7/12/10 19:02	208123
o-Xylene	5.0	U	5.0	1	NA	7/12/10 19:02	208123
m,p-Xylenes	5.0	U	5.0	1	NA	7/12/10 19:02	208123

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Analytical Report

Client:Energy SolutionsProject:Leica Wells July 2010Sample Matrix:WaterSample Name:MW 6Lab Code:R1003551-011

Service Request: R1003551 Date Collected: 7/ 6/10 0910 Date Received: 7/ 6/10

> Units: Percent Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260B

		Control	Date	
Surrogate Name	%Rec	Limits	Analyzed	Q
4-Bromofluorobenzene	114	85-122	7/12/10 19:02	
Toluene-d8	106	87-121	7/12/10 19:02	
Dibromofluoromethane	113	89-119	7/12/10 19:02	



Analytical Report

Client:Energy SolutionsProject:Leica Wells July 2010Sample Matrix:WaterSample Name:MW 6 DISSOLVEDLab Code:R1003551-012

Service Request: R1003551 Date Collected: 7/6/10 0910 Date Received: 7/6/10

Basis: NA

Inorganic Parameters

Analyte Name	Method	Result Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed
Iron, Dissolved	6010B	860	μg/L	100	1	7/12/10	7/16/10 15:34
Manganese, Dissolved	6010B	56	μg/L	10	1	7/12/10	7/16/10 15:34



Analytical Report

Client:Energy SolutionsProject:Leica Wells July 2010Sample Matrix:WaterSample Name:MW 6ALab Code:R1003551-013

Service Request: R1003551 Date Collected: 7/6/10 0920 Date Received: 7/6/10

Basis: NA

General Chemistry Parameters

Analyte Name	Method	Result Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed
Carbon, Total Organic (TOC)	SM20 5310 C	5.8	mg/L	1.0	1	NA	7/19/10 18:45
Chloride	300.0	11.7	mg/L	2.0	10	NA	7/7/10 13:34
Nitrate as Nitrogen	300.0	0.50 U	mg/L	0.50	10	NA	7/7/10 13:34
Sulfate	300.0	67.6	mg/L	2.0	10	NA	7/7/10 13:34



Analytical Report

Client:Energy SolutionsProject:Leica Wells July 2010Sample Matrix:WaterSample Name:MW 6ALab Code:R1003551-013

Service Request: R1003551 Date Collected: 7/6/10 0920 Date Received: 7/6/10

Volatile Organic Compounds by GC/MS

Analytical Method: 8260B

			Dilution	Date	Date	Extraction Analysis
Analyte Name	Result Q	MRL	Factor	Extracted	Analyzed	Lot Lot
Acetone	50 U	50	2,5	NA	7/12/10 19:40	208123
Benzene	13 U	13	2.5	NA	7/12/10 19:40	208123
Bromodichloromethane	13 U	13	2.5	NA	7/12/10 19:40	208123
Bromoform	13 U	13	2.5	NA	7/12/10 19:40	208123
Bromomethane	13 U	13	2.5	NA	7/12/10 19:40	208123
2-Butanone (MEK)	25 U	25	2.5	NA	7/12/10 19:40	208123
Carbon Disulfide	25 U	25	2.5	NA	7/12/10 19:40	208123
Carbon Tetrachloride	13 U	13	2,5	NA	7/12/10 19:40	208123
Chlorobenzene	13 U	13	2.5	NA	7/12/10 19:40	208123
Chloroethane	13 U	13	2,5	NA	7/12/10 19:40	208123
Chloroform	13 U	13	2,5	NA	7/12/10 19:40	208123
Chloromethane	13 U	13	2.5	NA	7/12/10 19:40	208123
Dibromochloromethane	13 U	13	2.5	NA	7/12/10 19:40	208123
1,1-Dichloroethane	13 U	13	2,5	NA	7/12/10 19:40	208123
1,2-Dichloroethane	13 U	13	2.5	NA	7/12/10 19:40	208123
1,1-Dichloroethene	13 U	13	2.5	NA	7/12/10 19:40	208123
cis-1,2-Dichloroethene	380	13	2.5	NA	7/12/10 19:40	208123
trans-1,2-Dichloroethene	13 U	13	2.5	NA	7/12/10 19:40	208123
1,2-Dichloropropane	13 U	13	2.5	NA	7/12/10 19:40	208123
cis-1,3-Dichloropropene	13 U	13	2.5	NA	7/12/10 19:40	208123
trans-1,3-Dichloropropene	13 U	13	2.5	NA	7/12/10 19:40	208123
Ethylbenzene	13 U	13	2.5	NA	7/12/10 19:40	208123
2-Hexanone	25 U	25	2.5	NA	7/12/10 19:40	208123
Methylene Chloride	13 U	13	2,5	NA	7/12/10 19:40	208123
4-Methyl-2-pentanone (MIBK)	25 U	25	2.5	NA	7/12/10 19:40	208123
Styrene	13 U	13	2.5	NA	7/12/10 19:40	208123
1,1,2,2-Tetrachloroethane	13 U	13	2,5	NA	7/12/10 19:40	208123
Tetrachloroethene	13 U	13	2.5	NA	7/12/10 19:40	208123
Toluene	13 U	13	2.5	NA	7/12/10 19:40	208123
1,1,1-Trichloroethane	13 U	13	2.5	NA	7/12/10 19:40	208123
1,1,2-Trichloroethane	13 U	13	2.5	NA	7/12/10 19:40	208123
Trichloroethene	13 U	13	2,5	NA	7/12/10 19:40	208123
Vinyl Chloride	360	13	2.5	NA	7/12/10 19:40	208123
o-Xylene	13 U	13	2.5	NA	7/12/10 19:40	208123
m,p-Xylenes	13 U	13	2.5	NA	7/12/10 19:40	208123

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Analytical Report

Client:Energy SolutionsProject:Leica Wells July 2010Sample Matrix:Water

Sample Name:MW 6ALab Code:R1003551-013

Service Request: R1003551 Date Collected: 7/6/10 0920 Date Received: 7/6/10

> Units: Percent Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260B

	Control	Date	
%Rec	Limits	Analyzed Q	
110	85-122	7/12/10 19:40	
98	87-121	7/12/10 19:40	
119	89-119	7/12/10 19:40	
	%Rec 110 98 119	Control %Rec Limits 110 85-122 98 87-121 119 89-119	Control Date %Rec Limits Analyzed Q 110 85-122 7/12/10 19:40 98 87-121 7/12/10 19:40 119 89-119 7/12/10 19:40 93 94 95 95



Analytical Report

Client:	Energy Solutions
Project:	Leica Wells July 2010
Sample Matrix:	Water
Sample Name:	MW 6A DISSOLVED
Lab Code:	R1003551-014

Service Request: R1003551 Date Collected: 7/ 6/10 0920 Date Received: 7/ 6/10

Basis: NA

Inorganic Parameters

Analyte Name	Method	Result Q	Units	MRL	Dilution Date Factor Extracted	Date Analyzed
Iron, Dissolved	6010B	230	μg/L	100	1 7/12/10	7/16/10 15:40
Manganese, Dissolved	6010B	103	μg/L	10	1 7/12/10	7/16/10 15:40



Analytical Report

Client:Energy SolutionsProject:Leica Wells July 2010Sample Matrix:WaterSample Name:MW 16RLab Code:R1003551-015

Service Request: R1003551 Date Collected: 7/6/10 1005 Date Received: 7/6/10

Basis: NA

General Chemistry Parameters

Analyte Name	Method	Result Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed
Carbon, Total Organic (TOC)	SM20 5310 C	22.5	mg/L	1.0	1	NA	7/19/10 19:03
Chloride	300.0	511	mg/L	20	100	NÅ	7/9/10 16:38
Nitrate as Nitrogen	300.0	0.50 U	mg/L	0.50	10	NA	7/7/10 14:13
Sulfate	300.0	8.9	mg/L	2.0	10	NA	7/7/10 14:13



Analytical Report

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Client:Energy SolutionsProject:Leica Wells July 2010Sample Matrix:WaterSample Name:MW 16RLab Code:R1003551-015

Service Request: R1003551 Date Collected: 7/ 6/10 1005 Date Received: 7/ 6/10

> Units: µg/L Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260B

				Dilution	Date	Date	Extraction Analysis
Analyte Name	Result	Q	MRL	Factor	Extracted	Analyzed	Lot Lot
Acetone	20	U	20	1	NA	7/13/10 03:03	208160
Benzene	5.0	U	5.0	1	NA	7/13/10 03:03	208160
Bromodichloromethane	5.0	U	5.0	1	NA	7/13/10 03:03	208160
Bromoform	5.0	υ	5.0	1	NA	7/13/10 03:03	208160
Bromomethane	5.0	U	5.0	1	NA	7/13/10 03:03	208160
2-Butanone (MEK)	14		10	1	NA	7/13/10 03:03	208160
Carbon Disulfide	10	U	10	1	NA	7/13/10 03:03	208160
Carbon Tetrachloride	5.0	U	5.0	1	NA	7/13/10 03:03	208160
Chlorobenzene	5.0	U	5.0	1	NA	7/13/10 03:03	208160
Chloroethane	340	Е	5.0	1	NA	7/13/10 03:03	208160
Chloroform	5.0	U	5.0	1	NA	7/13/10 03:03	208160
Chloromethane	5.0	U	5.0	1	NA	7/13/10 03:03	208160
Dibromochloromethane	5.0	U	5.0	1	NA	7/13/10 03:03	208160
1,1-Dichloroethane	130		5.0	1	NA	7/13/10 03:03	208160
1,2-Dichloroethane	5.0	U	5.0	1	NA	7/13/10 03:03	208160
1,1-Dichloroethene	5.0	U	5.0	1	NA	7/13/10 03:03	208160
cis-1,2-Dichloroethene	5.0	U	5.0	1	NA	7/13/10 03:03	208160
trans-1,2-Dichloroethene	5.0	U	5.0	1	NA	7/13/10 03:03	208160
1,2-Dichloropropane	5.0	U	5.0	1	NA	7/13/10 03:03	208160
cis-1,3-Dichloropropene	5.0	U	5.0	1	NA	7/13/10 03:03	208160
trans-1,3-Dichloropropene	5.0	U	5.0	1	NA	7/13/10 03:03	208160
Ethylbenzene	52		5.0	l	NA	7/13/10 03:03	208160
2-Hexanone	10	U	10	1	NA	7/13/10 03:03	208160
Methylene Chloride	5.0	U	5.0	1	NA	7/13/10 03:03	208160
4-Methyl-2-pentanone (MIBK)	10	U	10	1	NA	7/13/10 03:03	208160
Styrene	5.0	U	5.0	1	NA	7/13/10 03:03	208160
1,1,2,2-Tetrachloroethane	5.0	Ū	5.0	1	NA	7/13/10 03:03	208160
Tetrachloroethene	5.0	U	5,0	1	NA	7/13/10 03:03	208160
Toluene	5.0	U	5.0	1	NA	7/13/10 03:03	208160
1,1,1-Trichloroethane	5.0	U	5.0	1	NA	7/13/10 03:03	208160
1,1,2-Trichloroethane	5.0	U	5.0	1	NA	7/13/10 03:03	208160
Trichloroethene	5.0	U	5.0	1	NA	7/13/10 03:03	208160
Vinyl Chloride	5.0	U	5.0	1	NA	7/13/10 03:03	208160
o-Xylene	52		5,0	1	NA	7/13/10 03:03	208160
m,p-Xylenes	110		5.0	1	NA	7/13/10 03:03	208160

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Analytical Report

Client:Energy SolutionsProject:Leica Wells July 2010Sample Matrix:WaterSample Name:MW 16RLab Code:R1003551-015

Service Request: R1003551 Date Collected: 7/ 6/10 1005 Date Received: 7/ 6/10

> Units: Percent Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260B

		Control	Date	
Surrogate Name	%Rec	Limits	Analyzed	Q
4-Bromofluorobenzene	112	85-122	7/13/10 03:03	
Toluene-d8	103	87-121	7/13/10 03:03	
Dibromofluoromethane	110	89-119	7/13/10 03:03	



Analytical Report

Client:Energy SolutionsProject:Leica Wells July 2010Consult Mathematical Westerna

Dilution

Sample Matrix:WaterSample Name:MW 16RLab Code:R1003551-015

Service Request: R1003551 Date Collected: 7/ 6/10 1005 Date Received: 7/ 6/10

> Units: μg/L Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260B

Run Type:

4		~		Dilution	Date	Date	Extraction Analysis
Analyte Name	Result	Q	MRL	Factor	Extracted	Analyzed	Lot Lot
Acetone	40	U	40	2	NA	7/14/10 17:13	208370
Benzene	10	U	10	2	NA	7/14/10 17:13	208370
Bromodichloromethane	10	U	10	2	NA	7/14/10 17:13	208370
Bromoform	10	U	10	2	NA	7/14/10 17:13	208370
Bromomethane	10	U	10	2	NA	7/14/10 17:13	208370
2-Butanone (MEK)	20	U	20	2	NA	7/14/10 17:13	208370
Carbon Disulfide	20	U	20	2	NA	7/14/10 17:13	208370
Carbon Tetrachloride	10	U	10	2	NA	7/14/10 17:13	208370
Chlorobenzene	10	U	10	2	NA	7/14/10 17:13	208370
Chloroethane	320	D	10	2	NA	7/14/10 17:13	208370
Chloroform	10	U	10	2	NA	7/14/10 17:13	208370
Chloromethane	10	U	10	2	NA	7/14/10 17:13	208370
Dibromochloromethane	10	U	10	2	NA	7/14/10 17:13	208370
1,1-Dichloroethane	110	D	10	2	NA	7/14/10 17:13	208370
1,2-Dichloroethane	10	U	10	2	NA	7/14/10 17:13	208370
1,1-Dichloroethene	10	U	10	2	NA	7/14/10 17:13	208370
cis-1,2-Dichloroethene	10	U	10	2	NA	7/14/10 17:13	208370
trans-1,2-Dichloroethene	10	U	10	2	NA	7/14/10 17:13	208370
1,2-Dichloropropane	10	U	10	2	NA	7/14/10 17:13	208370
cis-1,3-Dichloropropene	10	U	10	2	NA	7/14/10 17:13	208370
trans-1,3-Dichloropropene	10	U	10	2	NA	7/14/10 17:13	208370
Ethylbenzene	47	D	10	2	NA	7/14/10 17:13	208370
2-Hexanone	20	U	20	2	NA	7/14/10 17:13	208370
Methylene Chloride	10	U	10	2	NA	7/14/10 17:13	208370
4-Methyl-2-pentanone (MIBK)	20	U	20	2	NA	7/14/10 17:13	208370
Styrene	10	U	10	2	NA	7/14/10 17:13	208370
1,1,2,2-Tetrachloroethane	10	U	10	2	NA	7/14/10 17:13	208370
Tetrachloroethene	10	U	10	2	NA	7/14/10 17:13	208370
Toluene	10	U	10	2	NA	7/14/10 17:13	208370
1,1,1-Trichloroethane	10	U	10	2	NA	7/14/10 17:13	208370
1,1,2-Trichloroethane	10	U	10	2	NA	7/14/10 17:13	208370
Trichloroethene	10	U	10	2	NA	7/14/10 17:13	208370
Vinyl Chloride	10	U	10	2	NA	7/14/10 17:13	208370
o-Xylene	47	D	10	2	NA	7/14/10 17:13	208370
m,p-Xylenes	90	D	10	2	NA	7/14/10 17:13	208370

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Analytical Report

Client:Energy SolutionsProject:Leica Wells July 2010Sample Matrix:WaterSample Name:MW 16R

R1003551-015

Dilution

Service Request: R1003551 Date Collected: 7/ 6/10 1005 Date Received: 7/ 6/10

> Units: Percent Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260B

Lab Code:

Run Type:

		Control	Date	
Surrogate Name	%Rec	Limits	Analyzed	Q
4-Bromofluorobenzene	112	85-122	7/14/10 17:13	1999 - Andrew Carlon and Carlon and Carlon and Carlon and Carlon and Carlon and Carlon and Carlon and Carlon an
Toluene-d8	100	87-121	7/14/10 17:13	
Dibromofluoromethane	114	89-119	7/14/10 17:13	



Analytical Report

Client:	Energy Solutions
Project:	Leica Wells July 2010
Sample Matrix:	Water
Sample Name:	MW 16R DISSOLVED
Lab Code:	R1003551-016

Service Request: R1003551 Date Collected: 7/ 6/10 1005 Date Received: 7/ 6/10

Basis: NA

Inorganic Parameters

Analyte Name	Method	Result Q	Units	MRL	Dilution Date Da Factor Extracted Analy	te /zed
Iron, Dissolved	6010B	940	μg/L	100	1 7/12/10 7/16/10) 15:45
Manganese, Dissolved	6010B	82	μg/L	10	1 7/12/10 7/16/10) 15:45



Analytical Report

Client:Energy SolutionsProject:Leica Wells July 2010Sample Matrix:WaterSample Name:MW 16ALab Code:R1003551-017

Service Request: R1003551 Date Collected: 7/6/10 1030 Date Received: 7/6/10

Basis: NA

General Chemistry Parameters

Analyte Name	Method	Result Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed
Carbon, Total Organic (TOC)	SM20 5310 C	3.6	mg/L	1.0	1	NA	7/19/10 19:38
Chloride	300.0	216	mg/L	8.0	40	NA.	7/8/10 22:41
Nitrate as Nitrogen	300.0	0.50 U	mg/L	0.50	10	NA	7/8/10 12:16
Sulfate	300.0	79. 7	mg/L	2.0	10	NA	7/7/10 14:26



Analytical Report

Client:Energy SolutionsProject:Leica Wells July 2010Sample Matrix:Water

 Service Request:
 R1003551

 Date Collected:
 7/ 6/10 1030

 Date Received:
 7/ 6/10

Sample Name:MW 16ALab Code:R1003551-017

Volatile Organic Compounds by GC/MS

Analytical Method: 8260B

				Dilution	Date	Date	Extraction Analysis
Analyte Name	Result	Q	MRL	Factor	Extracted	Analyzed	Lot Lot
Acetone	20	U	20	1	NA	7/13/10 03:40	208160
Benzene	5.0	U	5.0	1	NA	7/13/10 03:40	208160
Bromodichloromethane	5.0	υ	5.0	1	NA	7/13/10 03:40	208160
Bromoform	5.0	U	5.0	1	NA	7/13/10 03:40	208160
Bromomethane	5.0	U	5.0	1	NA	7/13/10 03:40	208160
2-Butanone (MEK)	10	U	10	1	NA	7/13/10 03:40	208160
Carbon Disulfide	10	U	10	1	NA	7/13/10 03:40	208160
Carbon Tetrachloride	5.0	U	5.0	1	NA	7/13/10 03:40	208160
Chlorobenzene	5.0	U	5.0	1	NA	7/13/10 03:40	208160
Chloroethane	12		5.0	1	NA	7/13/10 03:40	208160
Chloroform	5.0	U	5.0	1	NA	7/13/10 03:40	208160
Chloromethane	5.0	U	5.0	1	NA	7/13/10 03:40	208160
Dibromochloromethane	5.0	υ	5,0	1	NA	7/13/10 03:40	208160
1,1-Dichloroethane	88		5.0	1	NA	7/13/10 03:40	208160
1,2-Dichloroethane	5.0	U	5.0	1	NA	7/13/10 03:40	208160
1,1-Dichloroethene	6.3		5.0	1	NA	7/13/10 03:40	208160
cis-1,2-Dichloroethene	820	Е	5.0	1	NA	7/13/10 03:40	208160
trans-1,2-Dichloroethene	11		5.0	1	NA	7/13/10 03:40	208160
1,2-Dichloropropane	5.0	U	5.0	1	NA	7/13/10 03:40	208160
cis-1,3-Dichloropropene	5.0	Ŭ	5.0	1	NA	7/13/10 03:40	208160
trans-1,3-Dichloropropene	5.0	U	5.0	1	NA	7/13/10 03:40	208160
Ethylbenzene	5.9		5.0	1	NA	7/13/10 03:40	208160
2-Hexanone	ו 10	U	10	1	NA	7/13/10 03:40	208160
Methylene Chloride	5.0	U	5.0	1	NA	7/13/10 03:40	208160
4-Methyl-2-pentanone (MIBK)	10	U	10	1	NA	7/13/10 03:40	208160
Styrene	5.0	U	5.0	1	NA	7/13/10 03:40	208160
1,1,2,2-Tetrachloroethane	5.0 1	U	5.0	1	NA	7/13/10 03:40	208160
Tetrachloroethene	5.0 1	U	5.0	1	NA	7/13/10 03:40	208160
Toluene	5.0	U	5.0	1	NA	7/13/10 03:40	208160
1,1,1-Trichioroethane	43		5.0	1	NA	7/13/10 03:40	208160
1,1,2-Trichloroethane	5.0	U	5.0	1	NA	7/13/10 03:40	208160
Trichloroethene	180		5.0	1	NA	7/13/10 03:40	208160
Vinyl Chloride	200 1	E	5.0	1	NA	7/13/10 03:40	208160
o-Xylene	5.0 1	U	5.0	1	NA	7/13/10 03:40	208160
m,p-Xylenes	6.5		5.0	1	NA	7/13/10 03:40	208160

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Analytical Report

Client: **Energy Solutions** Leica Wells July 2010 Project: Sample Matrix: Water

Sample Name: Lab Code:

MW 16A R1003551-017 Service Request: R1003551 Date Collected: 7/ 6/10 1030 Date Received: 7/6/10

> Units: Percent Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260B

		Control	Date	
Surrogate Name	%Rec	Limits	Analyzed	Q
4-Bromofluorobenzene	111	85-122	7/13/10 03:40	
Toluene-d8	102	87-121	7/13/10 03:40	
Dibromofluoromethane	112	89-119	7/13/10 03:40	



Analytical Report

Client: **Energy Solutions Project:** Leica Wells July 2010

Dilution

Sample Matrix: Water Sample Name: MW 16A Lab Code: R1003551-017 Service Request: R1003551 Date Collected: 7/6/10 1030 Date Received: 7/6/10

> Units: µg/L Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260B

Run Type:

Analata Nama	Damili	~	3 6 15 1	Dilution	Date	Date	Extraction Analysis
Analyte Name	Kesun	<u>v</u>	MRL	Factor	Extracted	Analyzed	Lot Lot
Acetone	100	U	100	5	NA	7/14/10 17:51	208370
Benzene	25	U	25	5	NA	7/14/10 17:51	208370
Bromoaicmoroinemane	25	<u> </u>	25	5	NA	7/14/10 17:51	208370
Bromoform	25	U	25	5	NA	7/14/10 17:51	208370
Bromomethane	25	U	25	5	NA	7/14/10 17:51	208370
2-Butanone (MEK)	50	0	50	5	NA	7/14/10 17:51	208370
Carbon Disulfide	50	U	50	5	NA	7/14/10 17:51	208370
Carbon Tetrachloride	25	U	25	5	NA	7/14/10 17:51	208370
Chlorobenzene	25	U	25	5	NA	7/14/10 17:51	208370
Chloroethane	25	U	25	5	NA	7/14/10 17:51	208370
Chloroform	25	U	25	5	NA	7/14/10 17:51	208370
Chloromethane	25	U	25	5	NA	7/14/10 17:51	208370
Dibromochloromethane	25	U	25	5	NA	7/14/10 17:51	208370
1,1-Dichloroethane	78	D	25	5	NA	7/14/10 17:51	208370
1,2-Dichloroethane	25	U	25	5	NA	7/14/10 17:51	208370
1,1-Dichloroethene	25	U	25	5	NA	7/14/10 17:51	208370
cis-1,2-Dichloroethene	850	D	25	5	NA	7/14/10 17:51	208370
trans-1,2-Dichloroethene	25	U	25	5	NA	7/14/10 17:51	208370
1,2-Dichloropropane	25	U	25	5	NA	7/14/10 17:51	208370
cis-1,3-Dichloropropene	25	U	25	5	NA	7/14/10 17:51	208370
trans-1,3-Dichloropropene	25	U	25	5	NA	7/14/10 17:51	208370
Ethylbenzene	25	U	25	5	NA	7/14/10 17:51	208370
2-Hexanone	50	U	50	5	NA	7/14/10 17:51	208370
Methylene Chloride	25	U	25	5	NA	7/14/10 17:51	208370
4-Methyl-2-pentanone (MIBK)	50	U	50	5	NA	7/14/10 17:51	208370
Styrene	25	U	25	5	NA	7/14/10 17:51	20837 0
1,1,2,2-Tetrachloroethane	25	U	25	5	NA	7/14/10 17:51	208370
Tetrachloroethene	25	U	25	5	NA	7/14/10 17:51	208370
Toluene	25	U	25	5	NA	7/14/10 17:51	208370
1,1,1-Trichloroethane	39	D	25	5	NA	7/14/10 17:51	208370
1,1,2-Trichloroethane	25	υ	25	5	NA	7/14/10 17:51	208370
Trichloroethene	160	D	25	5	NA	7/14/10 17:51	208370
Vinyl Chloride	160	D	25	5	NA	7/14/10 17:51	208370
o-Xylene	25	U	25	5	NA	7/14/10 17:51	208370
m,p-Xylenes	25	U	25	5	NA	7/14/10 17:51	208370



Analytical Report

Client: **Energy Solutions** Project: Leica Wells July 2010

Sample Matrix: Water Sample Name: MW 16A

Lab Code: Run Type: R1003551-017 Dilution

Service Request: R1003551 Date Collected: 7/6/10 1030 Date Received: 7/6/10

> Units: Percent Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260B

		Control	Date		
Surrogate Name	%Rec	Limits	Analyzed	Q	
4-Bromofluorobenzene	115	85-122	7/14/10 17:51		
Toluene-d8	108	87-121	7/14/10 17:51		
Dibromofluoromethane	109	89-119	7/14/10 17:51		



Analytical Report

Client:	Energy Solutions
Project:	Leica Wells July 2010
Sample Matrix:	Water
Sample Name:	MW 16A DISSOLVED
Lab Code:	R1003551-018

Service Request: R1003551 Date Collected: 7/ 6/10 1030 Date Received: 7/ 6/10

Basis: NA

Inorganic Parameters

Analyte Name	Method	Result Q	Units	MRL.	Dilution Factor	Date Extracted	Date Analyzed
Iron, Dissolved	6010B	130	μg/L	100	1	7/12/10	7/16/10 15:51
Manganese, Dissolved	6010B	68	μg/L	10	1	7/12/10	7/16/10 15:51



Analytical Report

Client:	Energy Solutions
Project:	Leica Wells July 2010
Sample Matrix:	Water
Sample Name:	MW 11A
Lab Code:	R1003551-019

Service Request: R1003551 Date Collected: 7/ 6/10 1045 Date Received: 7/6/10

Basis: NA

General Chemistry Parameters

Analyte Name	Method	Result Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed
Carbon, Total Organic (TOC)	SM20 5310 C	3.9	mg/L	1.0	1	NA	7/19/10 20:12
Chloride	300.0	107	mg/L	4.0	20	NA	7/8/10 22:53
Nitrate as Nitrogen	300.0	0.50 U	mg/L	0.50	10	NA	7/7/10 14:39
Sulfate	300.0	74.8	mg/L	2.0	10	NA	7/7/10 14:39

.



Analytical Report

Client:Energy SolutionsProject:Leica Wells July 2010Sample Matrix:WaterSample Name:MW 11ALab Code:R1003551-019

Service Request: R1003551 Date Collected: 7/ 6/10 1045 Date Received: 7/ 6/10

Volatile Organic Compounds by GC/MS

Analytical Method: 8260B

				Dilution	Date	Date	Extraction Analysis
Analyte Name	Result	Q	MRL	Factor	Extracted	Analyzed	Lot Lot
Acetone	50	U	50	2,5	NA	7/13/10 04:18	208160
Benzene	13	U	13	2.5	NA	7/13/10 04:18	208160
Bromodichloromethane	13	U	13	2.5	NA	7/13/10 04:18	208160
Bromoform	13	U	13	2.5	NA	7/13/10 04:18	208160
Bromomethane	13	U	13	2.5	NA	7/13/10 04:18	208160
2-Butanone (MEK)	25	U	25	2.5	NA	7/13/10 04:18	208160
Carbon Disulfide	25	U	25	2.5	NA	7/13/10 04:18	208160
Carbon Tetrachloride	13	U	13	2.5	NA	7/13/10 04:18	208160
Chlorobenzene	13	U	13	2.5	NA	7/13/10 04:18	208160
Chloroethane	13	U	13	2.5	NA	7/13/10 04:18	208160
Chloroform	13	U	13	2.5	NA	7/13/10 04:18	208160
Chloromethane	13	U	13	2.5	NA	7/13/10 04:18	208160
Dibromochloromethane	13	U	13	2.5	NA	7/13/10 04:18	208160
1,1-Dichloroethane	13	U	13	2,5	NA	7/13/10 04:18	208160
1,2-Dichloroethane	13	U	13	2.5	NA	7/13/10 04:18	208160
1,1-Dichloroethene	13	U	13	2,5	NA	7/13/10 04:18	208160
cis-1,2-Dichloroethene	270		13	2.5	NA	7/13/10 04:18	208160
trans-1,2-Dichloroethene	13	U	13	2.5	NA	7/13/10 04:18	208160
1,2-Dichloropropane	13	U	13	2.5	NA	7/13/10 04:18	208160
cis-1,3-Dichloropropene	13	U	13	2.5	NA	7/13/10 04:18	208160
trans-1,3-Dichloropropene	13	U	13	2.5	NA	7/13/10 04:18	208160
Ethylbenzene	13	U	13	2.5	NA	7/13/10 04:18	208160
2-Hexanone	25	U	25	2.5	NA	7/13/10 04:18	208160
Methylene Chloride	13	U	13	2.5	NA	7/13/10 04:18	208160
4-Methyl-2-pentanone (MIBK)	25	U	25	2.5	NA	7/13/10 04:18	208160
Styrene	13	U	13	2.5	NA	7/13/10 04:18	208160
1,1,2,2-Tetrachloroethane	13	U	13	2.5	NA	7/13/10 04:18	208160
Tetrachloroethene	13	U	13	2.5	NA	7/13/10 04:18	208160
Toluene	13	U	13	2.5	NA	7/13/10 04:18	208160
1,1,1-Trichloroethane	13	U	13	2.5	NA	7/13/10 04:18	208160
1,1,2-Trichloroethane	13	U	13	2.5	NA	7/13/10 04:18	208160
Trichloroethene	13	U	13	2.5	NA	7/13/10 04:18	208160
Vinyl Chloride	280		13	2.5	NA	7/13/10 04:18	208160
o-Xylene	13	U	13	2.5	NA	7/13/10 04:18	208160
m,p-Xylenes	13	U	13	2.5	NA	7/13/10 04:18	208160

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Analytical Report

Client:Energy SolutionsProject:Leica Wells July 2010Sample Matrix:WaterSample Name:MW 11ALab Code:R1003551-019

Service Request: R1003551 Date Collected: 7/6/10 1045 Date Received: 7/6/10

> Units: Percent Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260B

		Control	Date	
Surrogate Name	%Rec	Limits	Analyzed	Q
4-Bromofluorobenzene	112	85-122	7/13/10 04:18	
Toluene-d8	105	87-121	7/13/10 04:18	
Dibromofluoromethane	112	89-119	7/13/10 04:18	



Analytical Report

Client:	Energy Solutions
Project:	Leica Wells July 2010
Sample Matrix:	Water
Sample Name:	MW 11A DISSOLVED
Lab Code:	R1003551-020

Service Request: R1003551 Date Collected: 7/ 6/10 1045 Date Received: 7/ 6/10

Basis: NA

Inorganic Parameters

Analyte Name	Method	Result Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed
Iron, Dissolved	6010B	160	μg/L,	100	1	7/12/10	7/16/10 15:57
Manganese, Dissolved	6010B	67	μg/L	10	1	7/12/10	7/16/10 15:57

.



Analytical Report

Client:	Energy Solutions
Project:	Leica Wells July 2010
Sample Matrix:	Water
Sample Name:	MW 24A
Lab Code:	R1003551-021

Service Request: R1003551 Date Collected: 7/6/10 1200 Date Received: 7/6/10

Basis: NA

General Chemistry Parameters

Analyte Name	Method	Result Q	Q Units	MRL	Dilution Factor	Date Extracted	Date Analyzed
Carbon, Total Organic (TOC)	SM20 5310 C	73.2	mg/L	4.0	4	NA	7/19/10 20:46
Chloride	300,0	288	mg/L	8.0	40	NA	7/8/10 23:05
Nitrate as Nitrogen	300.0	0.50 U	J mg/L	0.50	10	NA	7/8/10 12:52
Sulfate	300.0	2.0 U	J mg/L	2.0	10	NA	7/7/10 14:52



Analytical Report

Client:Energy SolutionsProject:Leica Wells July 2010Sample Matrix:WaterSample Name:MW 24ALab Code:R1003551-021

Service Request: R1003551 Date Collected: 7/6/10 1200 Date Received: 7/6/10

Volatile Organic Compounds by GC/MS

Analytical Method: 8260B

			Dilution	Date	Date	Extraction Analysis
Analyte Name	Result Q	9 MRL	Factor	Extracted	Analyzed	Lot Lot
Acetone	31	20	1	NA	7/13/10 04:56	208160
Benzene	5.0 U	5.0	1	NA	7/13/10 04:56	208160
Bromodichloromethane	5.0 U	5.0	1	NA	7/13/10 04:56	208160
Bromoform	5.0 U	5.0	1	NA	7/13/10 04:56	208160
Bromomethane	5.0 U	5.0	1	NA	7/13/10 04:56	208160
2-Butanone (MEK)	130	10	1	NA	7/13/10 04:56	208160
Carbon Disulfide	10 U	10	l	NA	7/13/10 04:56	208160
Carbon Tetrachloride	5.0 U	5.0	1	NA	7/13/10 04:56	208160
Chlorobenzene	5.0 U	5.0	1	NA	7/13/10 04:56	208160
Chloroethane	8.1	5.0	1	NA	7/13/10 04:56	208160
Chloroform	5.0 U	5.0	1	NA	7/13/10 04:56	208160
Chloromethane	5.0 U	5.0	1	NA	7/13/10 04:56	208160
Dibromochloromethane	5.0 U	5.0	1	NA	7/13/10 04:56	208160
1,1-Dichloroethane	69	5.0	1	NA	7/13/10 04:56	208160
1,2-Dichloroethane	5.0 U	5.0	1	NA	7/13/10 04:56	208160
1,1-Dichloroethene	5.0 U	5.0	1	NA	7/13/10 04:56	208160
cis-1,2-Dichloroethene	36	5.0	1	NA	7/13/10 04:56	208160
trans-1,2-Dichloroethene	5.0 U	5.0	1	NA	7/13/10 04:56	208160
1,2-Dichloropropane	5.0 U	5.0	1	NA	7/13/10 04:56	208160
cis-1,3-Dichloropropene	5.0 U	5,0	1	NA	7/13/10 04:56	208160
trans-1,3-Dichloropropene	5.0 U	5.0	1	NA	7/13/10 04:56	208160
Ethylbenzene	5.0 U	5.0	1	NA	7/13/10 04:56	208160
2-Hexanone	10 U	10	1	NA	7/13/10 04:56	208160
Methylene Chloride	5.0 U	5.0	1	NA	7/13/10 04:56	208160
4-Methyl-2-pentanone (MIBK)	10 U	10	1	NA	7/13/10 04:56	208160
Styrene	5.0 U	5.0	1	NA	7/13/10 04:56	208160
1,1,2,2-Tetrachloroethane	5.0 U	5.0	1	NA	7/13/10 04:56	208160
Tetrachloroethene	5.0 U	5.0	1	NA	7/13/10 04:56	208160
Toluene	5.0 U	5.0	1	NA	7/13/10 04:56	208160
1,1,1-Trichloroethane	5.0 U	5.0	1	NA	7/13/10 04:56	208160
1,1,2-Trichloroethane	5.0 U	5.0	1	NA	7/13/10 04:56	208160
Trichloroethene	5.0 U	5.0	1	NA	7/13/10 04:56	208160
Vinyl Chloride	64	5.0	1	NA	7/13/10 04:56	208160
o-Xylene	5.0 U	5.0	1	NA	7/13/10 04:56	208160
m,p-Xylenes	5.0 U	5.0	1	NA	7/13/10 04:56	208160

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Analytical Report

Client:Energy SolutionsProject:Leica Wells July 2010Sample Matrix:Water

Sample Name:MW 24ALab Code:R1003551-021

Service Request: R1003551 Date Collected: 7/6/10 1200 Date Received: 7/6/10

> Units: Percent Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260B

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	110	85-122	7/13/10 04:56	
Toluene-d8	101	87-121	7/13/10 04:56	
Dibromofluoromethane	111	89-119	7/13/10 04:56	



Analytical Report

Client:	Energy Solutions
Project:	Leica Wells July 2010
Sample Matrix:	Water
Sample Name:	MW 24A DISSOLVED
Lab Code:	R1003551-022

Service Request: R1003551 Date Collected: 7/6/10 1200 Date Received: 7/6/10

Basis: NA

Inorganic Parameters

Analyte Name	Method	Result Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed
Iron, Dissolved	6010B	16500	μg/L	100	1	7/12/10	7/16/10 16:03
Manganese, Dissolved	6010B	171	μg/L	10	1	7/12/10	7/16/10 16:03

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Analytical Report

Client:Energy SolutionsProject:Leica Wells July 2010Sample Matrix:WaterSample Name:MW 24Lab Code:R1003551-023

Service Request: R1003551 Date Collected: 7/6/10 1215 Date Received: 7/6/10

General Chemistry Parameters

Analyte Name	Method	Result Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed
Carbon, Total Organic (TOC)	SM20 5310 C	1430	mg/L	100	100	NA	7/19/10 21:21
Chloride	300.0	237	mg/L	8.0	40	NA	7/9/10 16:52
Nitrate as Nitrogen	300.0	0.50 U	mg/L.	0.50	10	NA	7/8/10 13:04
Sulfate	300.0	5.8	mg/L	2.0	10	NA	7/7/10 15:32



Analytical Report

Client:Energy SolutionsProject:Leica Wells July 2010Sample Matrix:WaterSample Name:MW 24Lab Code:R1003551-023

Service Request: R1003551 Date Collected: 7/6/10 1215 Date Received: 7/6/10

> Units: µg/L Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260B

				Dilution	Date	Date	Extraction Analysis
Analyte Name	Result	Q	MRL	Factor	Extracted	Analyzed	Lot Lot
Acetone	500	Ε	20	1	NA	7/13/10 05:33	208160
Benzene	140		5.0	1	NA	7/13/10 05:33	208160
Bromodichloromethane	5.0	U	5.0	1	NA	7/13/10 05:33	208160
Bromoform	5.0	U	5.0	1	NA	7/13/10 05:33	208160
Bromomethane	5,0	U	5,0	1	NA	7/13/10 05:33	208160
2-Butanone (MEK)	2600	Е	10	1	NA	7/13/10 05:33	208160
Carbon Disulfide	10	U	10	1	NA	7/13/10 05:33	208160
Carbon Tetrachloride	5.0	U	5.0	1	NA	7/13/10 05:33	208160
Chlorobenzene	5.0	U	5.0	1	NA	7/13/10 05:33	208160
Chloroethane	27		5.0	1	NA	7/13/10 05:33	208160
Chloroform	5.0	U	5.0	1	NA	7/13/10 05:33	208160
Chloromethane	5.0	U	5.0	1	NA	7/13/10 05:33	208160
Dibromochloromethane	5.0	U	5.0	1	NA	7/13/10 05:33	208160
1,1-Dichloroethane	860	Е	5.0	1	NA	7/13/10 05:33	208160
1,2-Dichloroethane	5.0	U	5.0	1	NA	7/13/10 05:33	208160
1,1-Dichloroethene	5.0	U	5.0	1	NA	7/13/10 05:33	208160
cis-1,2-Dichloroethene	85		5.0	1	NA	7/13/10 05:33	208160
trans-1,2-Dichloroethene	5.0	U	5.0	1	NA	7/13/10 05:33	208160
1,2-Dichloropropane	5.0	U	5.0	1	NA	7/13/10 05:33	208160
cis-1,3-Dichloropropene	5.0	U	5.0	1	NA	7/13/10 05:33	208160
trans-1,3-Dichloropropene	5,0	U	5.0	1	NA	7/13/10 05:33	208160
Ethylbenzene	5.0	U	5.0	1	NA	7/13/10 05:33	208160
2-Hexanone	10	U	10	1	NA	7/13/10 05:33	208160
Methylene Chloride	5.0	U	5,0	1	NA	7/13/10 05:33	208160
4-Methyl-2-pentanone (MIBK)	10	U	10	1	NA	7/13/10 05:33	208160
Styrene	5.0	U	5.0	1	NA	7/13/10 05:33	208160
1,1,2,2-Tetrachloroethane	5,0	U	5.0	1	NA	7/13/10 05:33	208160
Tetrachloroethene	5.0	U	5.0	1	NA	7/13/10 05:33	208160
Toluene	5.0	U	5.0	1	NA	7/13/10 05:33	208160
1,1,1-Trichloroethane	5.0	U	5.0	1	NA	7/13/10 05:33	208160
1,1,2-Trichloroethane	5.0	U	5.0	1	NA	7/13/10 05:33	208160
Trichloroethene	5.0	U	5.0	1	NA	7/13/10 05:33	208160
Vinyl Chloride	1200	E	5.0	1	NA	7/13/10 05:33	208160
o-Xylene	5.0	U	5.0	1	NA	7/13/10 05:33	208160
m,p-Xylenes	5,0	U	5.0	1	NA	7/13/10 05:33	208160

SuperSet Reference: 1



Analytical Report

Client:Energy SolutionsProject:Leica Wells July 2010Sample Matrix:WaterSample Name:MW 24Lab Code:R1003551-023

Service Request: R1003551 Date Collected: 7/6/10 1215 Date Received: 7/6/10

> Units: Percent Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260B

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	112	85-122	7/13/10 05:33	
Toluene-d8	105	87-121	7/13/10 05:33	
Dibromofluoromethane	114	89-119	7/13/10 05:33	



Analytical Report

Client: **Energy Solutions Project:** Leica Wells July 2010

Dilution

Sample Matrix: Water Sample Name: MW 24 Lab Code: R1003551-023 Service Request: R1003551 Date Collected: 7/6/10 1215 Date Received: 7/6/10

> Units: µg/L Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260B

Run Type:

				Dilution	Date	Date	Extraction Analysis
Analyte Name	Result	Q	MRL	Factor	Extracted	Analyzed	Lot Lot
Acetone	470	D	400	20	NA	7/14/10 18:29	208370
Benzene	120	D	100	20	NA	7/14/10 18:29	208370
Bromodichloromethane	100	U	100	20	NA	7/14/10 18:29	208370
Bromoform	100	U	100	20	NA	7/14/10 18:29	208370
Bromomethane	100	U	100	20	NA	7/14/10 18:29	208370
2-Butanone (MEK)	2600	D	200	20	NA	7/14/10 18:29	208370
Carbon Disulfide	200	U	200	20	NA	7/14/10 18:29	208370
Carbon Tetrachloride	100	U	100	20	NA	7/14/10 18:29	208370
Chlorobenzene	100	U	100	20	NA	7/14/10 18:29	208370
Chloroethane	100	U	100	20	NA	7/14/10 18:29	208370
Chloroform	100	U	100	20	NA	7/14/10 18:29	208370
Chloromethane	100	U	100	20	NA	7/14/10 18:29	208370
Dibromochloromethane	100	U	100	20	NA	7/14/10 18:29	208370
1,1-Dichloroethane	830	D	100	20	NA	7/14/10 18:29	208370
1,2-Dichloroethane	100	U	100	20	NA	7/14/10 18:29	208370
1,1-Dichloroethene	100	U	100	20	NA	7/14/10 18:29	208370
cis-1,2-Dichloroethene	100	U	100	20	NA	7/14/10 18:29	208370
trans-1,2-Dichloroethene	100	U	100	20	NA	7/14/10 18:29	208370
1,2-Dichloropropane	100	U	100	20	NA	7/14/10 18:29	208370
cis-1,3-Dichloropropene	100	U	100	20	NA	7/14/10 18:29	208370
trans-1,3-Dichloropropene	100	U	100	20	NA	7/14/10 18:29	208370
Ethylbenzene	100	U	100	20	NA	7/14/10 18:29	208370
2-Hexanone	200	U	200	20	NA	7/14/10 18:29	208370
Methylene Chloride	100	U	100	20	NA	7/14/10 18:29	208370
4-Methyl-2-pentanone (MIBK)	200	υ	200	20	NA	7/14/10 18:29	208370
Styrene	100	U	100	20	NA	7/14/10 18:29	208370
1,1,2,2-Tetrachloroethane	100	U	100	20	NA	7/14/10 18:29	208370
Tetrachloroethene	100	U	100	20	NA	7/14/10 18:29	208370
Toluene	100	U	100	20	NA	7/14/10 18:29	208370
1,1,1-Trichloroethane	100	U	100	20	NA	7/14/10 18:29	208370
1,1,2-Trichloroethane	100	U	100	20	NA	7/14/10 18:29	208370
Trichloroethene	100	U	100	20	NA	7/14/10 18:29	208370
Vinyl Chloride	1200	D	100	20	NA	7/14/10 18:29	208370
o-Xylene	100	U	100	20	NA	7/14/10 18:29	208370
m,p-Xylenes	100	U	100	20	NA	7/14/10 18:29	208370

SuperSet Reference: 10-0000148546 rev 00



Analytical Report

Client:Energy SolutionsProject:Leica Wells July 2010Sample Matrix:Water

Sample Name:MW 24Lab Code:R1003551-023Run Type:Dilution

Service Request: R1003551 Date Collected: 7/ 6/10 1215 Date Received: 7/ 6/10

> Units: Percent Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260B

		Control	Date	
Surrogate Name	%Rec	Limits	Analyzed	Q
4-Bromofluorobenzene	112	85-122	7/14/10 18:29	
Toluene-d8	107	87-121	7/14/10 18:29	
Dibromofluoromethane	109	89-119	7/14/10 18:29	



Analytical Report

Client:Energy SolutionsProject:Leica Wells July 2010Sample Matrix:WaterSample Name:MW 24 DISSOLVEDLab Code:R1003551-024

Service Request: R1003551 Date Collected: 7/6/10 1215 Date Received: 7/6/10

Basis: NA

Inorganic Parameters

Analyte Name	Method	Result Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed
Iron, Dissolved	6010B	6000	μg/L	100	1	7/12/10	7/16/10 16:09
Manganese, Dissolved	6010B	167	μg/L	10	1	7/12/10	7/16/10 16:09



Analytical Report

Client:Energy SolutionsProject:Leica Wells July 2010Sample Matrix:WaterSample Name:Trip BlankLab Code:R1003551-025

 Service Request:
 R1003551

 Date Collected:
 7/6/10

 Date Received:
 7/6/10

Units: µg/L Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260B

				Dilution	Date	Date	Extraction Analysis
Analyte Name	Result	Q	MRL	Factor	Extracted	Analyzed	Lot Lot
Acetone	20	U	20	1	NA	7/14/10 15:20	208370
Benzene	5.0	U	5.0	1	NA	7/14/10 15:20	208370
Bromodichloromethane	5.0	U	5.0	1	NA	7/14/10 15:20	208370
Bromoform	5.0	U	5.0	1	NA	7/14/10 15:20	208370
Bromomethane	5.0	U	5.0	1	NA	7/14/10 15:20	208370
2-Butanone (MEK)	10	U	10	1	NA	7/14/10 15:20	208370
Carbon Disulfide	10	U	10	1	NA	7/14/10 15:20	208370
Carbon Tetrachloride	5,0	U	5.0	1	NA	7/14/10 15:20	208370
Chlorobenzene	5.0	U	5.0	1	NA	7/14/10 15:20	208370
Chloroethane	5.0	U	5.0	1	ŇA	7/14/10 15:20	208370
Chloroform	5.0	U	5.0	1	NA	7/14/10 15:20	208370
Chloromethane	5.0	U	5.0	1	NA	7/14/10 15:20	208370
Dibromochloromethane	5.0	U	5.0	1	NA	7/14/10 15:20	208370
1,1-Dichloroethane	5.0	U	5.0	1	NA	7/14/10 15:20	208370
1,2-Dichloroethane	5.0	U	5.0	1	NA	7/14/10 15:20	208370
1,1-Dichloroethene	5,0	U	5.0	1	NA	7/14/10 15:20	208370
cis-1,2-Dichloroethene	5.0	U	5.0	1	NA	7/14/10 15:20	208370
trans-1,2-Dichloroethene	5.0	U	5.0	1	NA	7/14/10 15:20	208370
I,2-Dichloropropane	5.0	U	5.0	1	NA	7/14/10 15:20	208370
cis-1,3-Dichloropropene	5.0	U	5.0	1	NA	7/14/10 15:20	208370
trans-1,3-Dichloropropene	5.0	υ	5.0	1	NA	7/14/10 15:20	208370
Ethylbenzene	5.0	U	5.0	1	NA	7/14/10 15:20	208370
2-Hexanone	10	U	10	1	NA	7/14/10 15:20	208370
Methylene Chloride	5.0	U	5.0	1	NA	7/14/10 15:20	208370
4-Methyl-2-pentanone (MIBK)	10	U	10	1	NA	7/14/10 15:20	208370
Styrene	5.0	U	5.0	1	NA	7/14/10 15:20	208370
1,1,2,2-Tetrachloroethane	5.0	U	5.0	1	NA	7/14/10 15:20	208370
Tetrachloroethene	5.0	U	5.0	1	NA	7/14/10 15:20	208370
Toluene	5.0	U	5.0	1	NA	7/14/10 15:20	208370
1,1,1-Trichloroethane	5,0	U	5.0	1	NA	7/14/10 15:20	208370
1,1,2-Trichloroethane	5.0	υ	5.0	1	NA	7/14/10 15:20	208370
Trichloroethene	5,0	U	5.0	1	NA	7/14/10 15:20	208370
Vinyl Chloride	5.0	U	5.0	1	NA	7/14/10 15:20	208370
o-Xylene	5.0	U	5.0	1	NA	7/14/10 15:20	208370
m,p-Xylenes	5.0	U	5.0	1	NA	7/14/10 15:20	208370

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Analytical Report

Client:Energy SolutionsProject:Leica Wells July 2010Sample Matrix:Water

Sample Name:Trip BlankLab Code:R1003551-025

Service Request: R1003551 Date Collected: 7/6/10 Date Received: 7/6/10

> Units: Percent Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260B

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	112	85-122	7/14/10 15:20	
Toluene-d8	107	87-121	7/14/10 15:20	
Dibromofluoromethane	111	89-119	7/14/10 15:20	



Analytical Report

Client:Energy SolutionsProject:Leica Wells July 2010Sample Matrix:WaterSample Name:Method BlankLab Code:R1003551-MB1

Service Request: R1003551 Date Collected: NA Date Received: NA

Basis: NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	Dilution Factor	Date Date Extracted	Date Analyzed
Carbon, Total Organic (TOC)	SM20 5310 C	1.0	U	mg/L	1.0	• 1	NA	7/15/10 22:14
Chloride	300.0	0.20	U	mg/L	0.20	1	NA	7/7/10 11:23
Nitrate as Nitrogen	300.0	0.050	U	mg/L	0.050	1	NA	7/7/10 11:23
Sulfate	300.0	0.20	U	mg/L	0.20	1	NA	7/7/10 11:23



Analytical Report

Client:	Energy Solutions
Project:	Leica Wells July 2010
Sample Matrix:	Water
Sample Name:	Method Blank
Lab Code:	R1003551-MB2

Service Request: R1003551 Date Collected: NA Date Received: NA

Basis: NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed
Carbon, Total Organic (TOC)	SM20 5310 C	1.0	U	mg/L.	1.0	1	NA	7/19/10 15:37
Chloride	300.0	0.20	U	mg/L	0.20	1	NA	7/8/10 19:53
Nitrate as Nitrogen	300.0	0.050	U	mg/L	0.050	1	NA	7/8/10 10:15
Sulfate	300,0	0,20	U	mg/L	0.20	1	NA	7/8/10 15:04



Analytical Report

Client:Energy SolutionsProject:Leica Wells July 2010Sample Matrix:Water

Sample Name:Method BlankLab Code:R1003551-MB3

Service Request: R1003551 Date Collected: NA Date Received: NA

Basis: NA

Chloride

Analyte Name	Method	Result	Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed
Chloride	300.0	0.20	U	mg/L	0.20	1	NA	7/9/10 12:43

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Analytical Report

Client:Energy SolutionsProject:Leica Wells July 2010Sample Matrix:WaterSample Name:Method BlankLab Code:R1003551-MB1

Service Request: R1003551 Date Collected: NA Date Received: NA

Basis: NA

Inorganic Parameters

Analyte Name	Method	Result Q	Units	MRL	Dilution Date Factor Extracted	Date Analyzed
Iron, Dissolved	6010B	100 U	μg/Ľ	100	1 7/12/10	7/16/10 14:12
Manganese, Dissolved	6010B	10 U	μg/L	10	1 7/12/10	7/16/10 14:12

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Analytical Report

Energy Solutions						
Leica Wells July 2010						
Water						

Sample Name:Method BlankLab Code:R1003551-MB2

Service Request: R1003551 Date Collected: NA Date Received: NA

Basis: NA

Inorganic Parameters

Analyte Name	Method	Result Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed
Iron, Dissolved	6010B	100 U	μg/L	100	1	7/12/10	7/16/10 14:24
Manganese, Dissolved	6010B	10 U	μg/L	10	1	7/12/10	7/16/10 14:24



Analytical Report

Client:Energy SolutionsProject:Leica Wells July 2010Sample Matrix:WaterSample Name:Method BlankLab Code:RQ1005593-01

Service Request: R1003551 Date Collected: NA Date Received: NA

> Units: µg/L Basis: NA

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Volatile Organic Compounds by GC/MS

Analytical Method: 8260B

				Dilution	Date	Date	Extraction Analysis
Analyte Name	Result	Q	MRL	Factor	Extracted	Analyzed	Lot Lot
Acetone	20	U	20	1	NA	7/12/10 13:59	208123
Benzene	5.0	U	5.0	1	NA	7/12/10 13:59	208123
Bromodichloromethane	5.0	U	5.0	1	NA	7/12/10 13:59	208123
Bromoform	5.0	U	5.0	1	NA	7/12/10 13:59	208123
Bromomethane	5.0	U	5,0	1	NA	7/12/10 13:59	208123
2-Butanone (MEK)	10	U	10	1	NA	7/12/10 13:59	208123
Carbon Disulfide	10	U	10	1	NA	7/12/10 13:59	208123
Carbon Tetrachloride	5.0	U	5.0	1	NA	7/12/10 13:59	208123
Chlorobenzene	5.0	U	5.0	1	NA	7/12/10 13:59	208123
Chloroethane	5.0	U	5.0	1	NA	7/12/10 13:59	208123
Chloroform	5.0	U	5.0	1	NA	7/12/10 13:59	208123
Chloromethane	5.0	U	5.0	1	NA	7/12/10 13:59	208123
Dibromochloromethane	5.0	U	5.0	1	NA	7/12/10 13:59	208123
1,1-Dichloroethane	5.0	U	5.0	1	NA	7/12/10 13:59	208123
1,2-Dichloroethane	5.0	U	5.0	1	NA	7/12/10 13:59	208123
1,1-Dichloroethene	5.0	U	5,0	1	NA	7/12/10 13:59	208123
cis-1,2-Dichloroethene	5.0	U	5.0	1	NA	7/12/10 13:59	208123
trans-1,2-Dichloroethene	5.0	U	5.0	1	NA	7/12/10 13:59	208123
1,2-Dichloropropane	5.0	U	5.0	1	NA	7/12/10 13:59	208123
cis-1,3-Dichloropropene	5.0	U	5.0	1	NA	7/12/10 13:59	208123
trans-1,3-Dichloropropene	5.0	U	5.0	1	NA	7/12/10 13:59	208123
Ethylbenzene	5.0	U	5.0	1	NA	7/12/10 13:59	208123
2-Hexanone	10	U	10	1	NA	7/12/10 13:59	208123
Methylene Chloride	5.0	U	5.0	1	NA	7/12/10 13:59	208123
4-Methyl-2-pentanone (MIBK)	10	U	10	1	NA	7/12/10 13:59	208123
Styrene	5.0	U	5.0	1	NA	7/12/10 13:59	208123
1,1,2,2-Tetrachloroethane	5.0	U	5.0	1	NA	7/12/10 13:59	208123
Tetrachloroethene	5.0	U	5.0	1	NA	7/12/10 13:59	208123
Toluene	5.0	U	5.0	1	NA	7/12/10 13:59	208123
1,1,1-Trichloroethane	5.0	U	5.0	1	NA	7/12/10 13:59	208123
1,1,2-Trichloroethane	5.0	U	5.0	1	NA	7/12/10 13:59	208123
Trichloroethene	5.0	U	5.0	1	NA	7/12/10 13:59	208123
Vinyl Chloride	5.0	U	5.0	1	NA	7/12/10 13:59	208123
o-Xylene	5.0	U	5.0	1	NA	7/12/10 13:59	208123
m,p-Xylenes	5.0	U	5.0	1	NA	7/12/10 13:59	208123

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Analytical Report

Client:Energy SolutionsProject:Leica Wells July 2010Sample Matrix:Water

Sample Name:Method BlankLab Code:RQ1005593-01

Service Request: R1003551 Date Collected: NA Date Received: NA

> Units: Percent Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260B

Surrogate Name	%Rec	Control Limits	Date Analyzed Q	
4-Bromofluorobenzene	112	85-122	7/12/10 13:59	
Toluene-d8	106	87-121	7/12/10 13:59	
Dibromofluoromethane	112	89-119	7/12/10 13:59	



Analytical Report

Client: **Energy Solutions** Leica Wells July 2010 **Project:** Sample Matrix: Water Sample Name: Method Blank

RQ1005604-01

Service Request: R1003551 Date Collected: NA Date Received: NA

> Units: µg/L Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260B

Lab Code:

Analyte Name	Rogalt	0	MPI	Dilution	Date Extracted	Date	Extraction Analysis
		<u>v</u>		Factor	EXILACICU	Anaryzeu	
Renzene	20	U TI	20	1	NA. MA	7/13/10 02:25	208160
Bramadichloromethane	5.0	U TT	5.0	1	NA NA	7/13/10 02:23	208160
	J.U		5.0	i	1974	7/13/10 02.25	208100
Bromotorm	5.0	U .	5.0	1	NA	7/13/10 02:25	208160
Bromomethane	5,0	U	5.0	l	NA	7/13/10 02:25	208160
2-Butanone (MEK)	10	U	10	1	NA	7/13/10 02:25	208160
Carbon Disulfide	10	U	10	1	NA	7/13/10 02:25	208160
Carbon Tetrachloride	5.0	U	5.0	1	NA	7/13/10 02:25	208160
Chlorobenzene	5.0	U	5.0	1	NA	7/13/10 02:25	208160
Chloroethane	5.0	U	5.0	1	NA	7/13/10 02:25	208160
Chloroform	5.0	U	5.0	1	NA	7/13/10 02:25	208160
Chloromethane	5.0	U	5.0	1	NA	7/13/10 02:25	208160
Dibromochloromethane	5.0	U	5.0	1	NA	7/13/10 02:25	208160
1,1-Dichloroethane	5.0	U	5.0	1	NA	7/13/10 02:25	208160
1,2-Dichloroethane	5.0	U	5.0	1	NA	7/13/10 02:25	208160
1,1-Dichloroethene	5.0	U	5,0	1	NA	7/13/10 02:25	208160
cis-1,2-Dichloroethene	5.0	U	5.0	1	NA	7/13/10 02:25	208160
trans-1,2-Dichloroethene	5.0	U	5.0	1	NA	7/13/10 02:25	208160
1,2-Dichloropropane	5.0	U	5.0	1	NA	7/13/10 02:25	208160
cis-1,3-Dichloropropene	5,0	U	5.0	1	NA	7/13/10 02:25	208160
trans-1,3-Dichloropropene	5.0	U	5.0	1	NA	7/13/10 02:25	208160
Ethylbenzene	5.0	U	5.0	1	NA	7/13/10 02:25	208160
2-Hexanone	10	U	10	1	NA	7/13/10 02:25	208160
Methylene Chloride	5.0	U	5.0	1	NA	7/13/10 02:25	208160
4-Methyl-2-pentanone (MIBK)	10	υ	10	1	NA	7/13/10 02:25	208160
Styrene	5.0	U	5.0	1	NA	7/13/10 02:25	208160
1,1,2,2-Tetrachloroethane	5.0	U	5.0	1	NA	7/13/10 02:25	208160
Tetrachloroethene	5.0	υ	5.0	1	NA	7/13/10 02:25	208160
Toluene	5.0	U	5.0	1	NA	7/13/10 02:25	208160
1,1,1-Trichloroethane	5.0	U	5.0	1	NA	7/13/10 02:25	208160
1,1,2-Trichloroethane	5.0	U	5.0	1	NA	7/13/10 02:25	208160
Trichloroethene	5.0	U	5.0	1	NA	7/13/10 02:25	208160
Vinyl Chloride	5.0	U	5.0	1	NA	7/13/10 02:25	208160
o-Xyiene	5.0	U	5.0	1	NA	7/13/10 02:25	208160
m,p-Xylenes	5.0	U	5.0	1	NA	7/13/10 02:25	208160

SuperSet Reference:



Analytical Report

Client:Energy SolutionsProject:Leica Wells July 2010Sample Matrix:WaterSample Name:Method Blank

RQ1005604-01

Sample Name: Lab Code: Service Date C Date I

Service Request: R1003551 Date Collected: NA Date Received: NA

> Units: Percent Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260B

		Control	Date	
Surrogate Name	%Rec	Limits	Analyzed	Q
4-Bromofluorobenzene	114	85-122	7/13/10 02:25	
Toluene-d8	108	87-121	7/13/10 02:25	
Dibromofluoromethane	115	89-119	7/13/10 02:25	

Analytical Report

Client:Energy SolutionsProject:Leica Wells July 2010Sample Matrix:Water

Service Request: R1003551 Date Collected: NA Date Received: NA

> Units: µg/L Basis: NA

Sample Name:Method BlankLab Code:RQ1005662-01

Volatile Organic Compounds by GC/MS

Analytical Method: 8260B

Analyte Name	Result Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Analysis Lot Lot
Acetone	20 U	20	1	NA	7/14/10 13:58	208370
Benzene	5.0 U	5.0	1	NA	7/14/10 13:58	208370
Bromodichloromethane	5.0 U	5.0	1	NA	7/14/10 13:58	208370
Bromoform	5.0 U	5,0	1	NA	7/14/10 13:58	208370
Bromomethane	5.0 U	5.0	1	NA	7/14/10 13:58	208370
2-Butanone (MEK)	10 U	10	1	NA	7/14/10 13:58	208370
Carbon Disulfide	10 U	10	1	NA	7/14/10 13:58	208370
Carbon Tetrachloride	5.0 U	5.0	1	NA	7/14/10 13:58	208370
Chlorobenzene	5.0 U	5.0	1	NA	7/14/10 13:58	208370
Chloroethane	5.0 U	5.0	1	NA	7/14/10 13:58	208370
Chloroform	5.0 U	5.0	1	NA	7/14/10 13:58	208370
Chloromethane	5.0 U	5.0	1	NA	7/14/10 13:58	208370
Dibromochloromethane	5.0 U	5.0	1	NA	7/14/10 13:58	208370
1,1-Dichloroethane	5.0 U	5.0	1	NA	7/14/10 13:58	208370
1,2-Dichloroethane	5.0 U	5.0	1	NA	7/14/10 13:58	208370
1,1-Dichloroethene	5.0 U	5.0	1	NA	7/14/10 13:58	208370
cis-1,2-Dichloroethene	5.0 U	5.0	1	NA	7/14/10 13:58	208370
trans-1,2-Dichloroethene	5.0 U	5.0	1	NA	7/14/10 13:58	208370
1,2-Dichloropropane	5.0 U	5.0	1	NA	7/14/10 13:58	208370
cis-1,3-Dichloropropene	5.0 U	5.0	1	NA	7/14/10 13:58	208370
trans-1,3-Dichloropropene	5.0 U	5.0	1	NA	7/14/10 13:58	208370
Ethylbenzene	5,0 U	5.0	1	NA	7/14/10 13:58	208370
2-Hexanone	10 U	10	1	NA	7/14/10 13:58	208370
Methylene Chloride	5.0 U	5.0	1	NA	7/14/10 13:58	208370
4-Methyl-2-pentanone (MIBK)	10 U	10	I	NA	7/14/10 13:58	208370
Styrene	5.0 U	5.0	1	NA	7/14/10 13:58	208370
1,1,2,2-Tetrachloroethane	5.0 U	5.0	1	NA	7/14/10 13:58	208370
Tetrachloroethene	5.0 U	5.0	1	NA	7/14/10 13:58	208370
Toluene	5.0 U	5.0	1	NA	7/14/10 13:58	208370
1,1,1-Trichloroethane	5.0 U	5.0	1	NA	7/14/10 13:58	208370
1,1,2-Trichloroethane	5.0 U	5.0	1	NA	7/14/10 13:58	208370
Trichloroethene	5.0 U	5.0	1	NA	7/14/10 13:58	208370
Vinyl Chloride	5.0 U	5.0	1	NA	7/14/10 13:58	208370
o-Xylene	5.0 U	5.0	1	NA	7/14/10 13:58	208370
m,p-Xylenes	5.0 U	5.0	1	NA	7/14/10 13:58	208370

SuperSet Reference: 10-

Analytical Report

Client:Energy SolutionsProject:Leica Wells July 2010Sample Matrix:Water

Sample Name:Method BlankLab Code:RQ1005662-01

Service Request: R1003551 Date Collected: NA Date Received: NA

> Units: Percent Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260B

		Control	Date		
Surrogate Name	%Rec	Limits	Analyzed	Q	
4-Bromofluorobenzene	111	85-122	7/14/10 13:58		
Toluene-d8	106	87-121	7/14/10 13:58		
Dibromofluoromethane	112	89-119	7/14/10 13:58		



QA/QC Report

Lab Control Sample Summary General Chemistry Parameters

Client:Energy SolutionsProject:Leica Wells July 2010Sample Matrix:Water

Service Request: R1003551 Date Analyzed: 7/ 7/10 -7/15/10

Units: mg/L Basis: NA

Lab Control Sample R1003551-LCS1								
Analyte Name	Method	Result	Spike Amount	% Rec	% Rec Limits			
Carbon, Total Organic (TOC)	SM20 5310 C	9.61	10.0	96	86 - 117			
Chloride	300.0	1.97	2.00	98	90 - 110			
Nitrate as Nitrogen	300.0	0.951	1.00	95	90 - 110			
Sulfate	300.0	1.87	2.00	93	90 - 110			

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Lab Control Sample Summary

SuperSet Reference:

QA/QC Report

Client:Energy SolutionsProject:Leica Wells July 2010Sample Matrix:Water

Service Request: R1003551 Date Analyzed: 7/ 8/10 -7/19/10

Units:	mg/L
Basis :	NA

Lab Control Sample R1003551-LCS2								
Analyte Name	Method	Result	Spike Amount	% Rec	% Rec Limits			
Carbon, Total Organic (TOC)	SM20 5310 C	9.71	10.0	97	86 - 117			
Chloride	300.0	1.90	2.00	95	90 - 110			
Nitrate as Nitrogen	300.0	0.978	1.00	98	90 - 110			
Sulfate	300.0	1.94	2.00	97	90 - 110			

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.



QA/QC Report

Client:Energy SolutionsProject:Leica Wells July 2010Sample Matrix:Water

Service Request: R1003551 Date Analyzed: 7/ 9/10

Lab Control Sample Summary Chloride

Units: mg/L Basis: NA

		R10	03551-LC	S3		
			Spike		% Rec	
Analyte Name	Method	Result	Amount	% Rec	Limits	
Chloride	300.0	1.98	2.00	99	90 - 110	

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

QA/QC Report

Client:Energy SolutionsProject:Leica Wells July 2010Sample Matrix:Water

Service Request: R1003551 Date Analyzed: 7/16/10

Lab Control Sample Summary Inorganic Parameters

Units: µg/L Basis: NA

		Lab (R1(Control Sar 003551-LC	nple 28	
Analyte Name	Method	Result	Spike Amount	% Rec	% Rec Limits
Iron, Dissolved Manganese, Dissolved	6010B 6010B	983 495	1000 500	98 99	80 - 120 80 - 120

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.



QA/QC Report

Client:Energy SolutionsProject:Leica Wells July 2010Sample Matrix:Water

Lab Control Sample Summary Volatile Organic Compounds by GC/MS

Analytical Method: 8260B

Service Request: R1003551 Date Analyzed: 7/12/10

> Units: µg/L Basis: NA

Analysis Lot: 208123

	Lab F	Control San Q1005593-(mple)2		
Analyte Name	Result	Spike Amount	% Rec	% Rec Limits	
Acetone	18.5	20.0	93	59 - 140	
Benzene	20.0	20.0	100	78 - 121	
Bromodichloromethane	21.7	20.0	108	80 - 125	
Bromoform	20.1	20.0	101	73 - 132	
Bromomethane	21.6	20.0	108	57 - 144	
2-Butanone (MEK)	18.7	20.0	93	60 - 133	
Carbon Disulfide	21.9	20.0	109	59 - 138	
Carbon Tetrachloride	22.9	20.0	115	69 - 135	
Chlorobenzene	20.1	20.0	101	80 - 121	
Chloroethane	23.4	20.0	117	71 - 130	
Chloroform	22.6	20.0	113	78 - 125	
Chloromethane	23.5	20.0	118	62 - 133	
Dibromochloromethane	20.0	20.0	100	78 - 133	
1,1-Dichloroethane	21.7	20.0	109	76 - 122	
1,2-Dichloroethane	20.5	20.0	103	78 - 126	
1,1-Dichloroethene	23.9	20.0	119	72 - 129	
cis-1,2-Dichloroethene	22.0	20.0	110	78 - 122	
trans-1,2-Dichloroethene	21.4	20.0	107	75 - 121	
1,2-Dichloropropane	21.6	20.0	108	80 - 123	
cis-1,3-Dichloropropene	19.3	20.0	96	77 - 125	
trans-1,3-Dichloropropene	18.4	20.0	92	69 - 127	
Ethylbenzene	20.3	20.0	102	78 - 123	
2-Hexanone	16.3	20.0	81	61 - 131	
Methylene Chloride	22.1	20.0	110	75 - 125	
4-Methyl-2-pentanone (MIBK)	16.1	20.0	80	61 - 132	
Styrene	19.8	20.0	99	80 - 132	
1,1,2,2-Tetrachloroethane	17.6	20.0	88	72 - 131	
Tetrachloroethene	20.6	20.0	103	72 - 131	
Toluene	20.5	20.0	103	78 - 122	
1,1,1-Trichloroethane	22.7	20.0	113	72 - 128	
1,1,2-Trichloroethane	18.7	20.0	94	80 - 122	
Trichloroethene	21.9	20.0	109	74 - 127	

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Lab Control Sample Summary

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QA/QC Report

Client:Energy SolutionsProject:Leica Wells July 2010Sample Matrix:Water

Lab Control Sample Summary Volatile Organic Compounds by GC/MS

Analytical Method: 8260B

Service Request: R1003551 Date Analyzed: 7/12/10

> Units: μg/L Basis: NA

Analysis Lot: 208123

Analyte Name	Result	Spike Amount	% Rec	% Rec Limits	
Vinyl Chloride	26.3	20.0	131	71 - 136	
o-Xylene	20.3	20.0	102	79 - 126	
m,p-Xylenes	41.3	40.0	103	79 - 126	

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.



QA/QC Report

Service Request: R1003551 Date Analyzed: 7/13/10

Lab Control Sample Summary Volatile Organic Compounds by GC/MS

Analytical Method: 8260B

Units:	μg/L
Basis :	NA

Analysis Lot: 208160

	Lab F	Control San Q1005604-0	mple 02	Duplicate F	Lab Contro Q1005604-0	ol Sample	le % Rec P				
Analyte Name	Result	Spike Amount	% Rec	Result	Spike Amount	% Rec	% Rec Limits	RPD	RPD Limit		
Acetone	21.7	20.0	109	20.6	20.0	103	59 - 140	5	30		
Benzene	18.3	20,0	92	19.4	20.0	97	78 - 121	б	30		
Bromodichloromethane	19.6	20.0	98	19.6	20.0	98	80 - 125	0	30		
Bromoform	19.5	20,0		18.8	20.0	94	73 - 132	4	30		
Bromomethane	16.7	20.0	84	17.6	20.0	88	57 - 144	5	30		
2-Butanone (MEK)	19.7	20.0	98	18.6	20.0	93	60 - 133	5	30		
Carbon Disulfide	21.6	20.0	108	19.7	20.0	98	59 - 138	9	30		
Carbon Tetrachloride	18.5	20.0	93	19.6	20.0	98	69 - 135	6	30		
Chlorobenzene	17.1	20.0	85	18.5	20.0	93	80 - 121	8	30		
Chloroethane	18.9	20,0	95	19.4	20.0	97	71 - 130	3	30		
Chloroform	19.3	20.0	96	20.3	20.0	102	78 - 125	5	30		
Chloromethane	19.0	20.0	95	20.5	20.0	102	62 - 133	7	30		
Dibromochloromethane	18.5	20,0	92	19.0	20.0	95	78 - 133	3	30		
1,1-Dichloroethane	18.9	20.0	95	19.9	20.0	99	76 - 122	5	30		
1,2-Dichloroethane	20.5	20.0	103	21.0	20.0	105	78 - 126	2	30		
1,1-Dichloroethene	19.6	20.0	98	20.2	20.0	101	72 - 129	3	30		
cis-1,2-Dichloroethene	18.7	20.0	93	20.0	20.0	100	78 - 122	7	30		
trans-1,2-Dichloroethene	18.2	20.0	91	19.0	20.0	95	75 - 121	4	30		
1,2-Dichloropropane	20.1	20,0	100	20.2	20.0	101	80 - 123	0	30		
cis-1,3-Dichloropropene	17.8	20.0	89	18.5	20.0	92	77 - 125	4	30		
trans-1,3-Dichloropropene	17.0	20.0	85	17.5	20.0	87	69 - 127	2	30		
Ethylbenzene	16.6	20.0	83	17.8	20.0	89	78 - 123	7	30		
2-Hexanone	18.8	20.0	94	16.8	20.0	84	61 - 131	11	30		
Methylene Chloride	20.2	20.0	101	20.9	20.0	104	75 - 125	3	30		
4-Methyl-2-pentanone (MIBK)	18.4	20,0	92	17.4	20.0	87	61 - 132	6	30		
Styrene	16.6	20.0	83	17.1	20.0	85	80 - 132	3	30		
1,1,2,2-Tetrachloroethane	14.6	20.0	73	14.4	20.0	72	72 - 131	2	30		
Tetrachloroethene	16.4	20.0	82	17.4	20.0	87	72 - 131	6	30		
Toluene	17.0	20.0	85	17.7	20.0	88	78 - 122	4	30		
1,1,1-Trichloroethane	18.5	20.0	93	20.3	20.0	101	72 - 128	9	30		
1,1,2-Trichloroethane	17.3	20.0	86	17.5	20.0	88	80 - 122	1	30		
Trichloroethene	21.0	20.0	105	22.4	20.0	112	74 - 127	6	30		

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.



QA/QC Report

Client:Energy SolutionsProject:Leica Wells July 2010Sample Matrix:Water

Service Request: R1003551 Date Analyzed: 7/13/10

Lab Control Sample Summary Volatile Organic Compounds by GC/MS

Analytical Method: 8260B

Units: µg/L Basis: NA

Analysis Lot: 208160

	Lab R	Control Sa Q1005604-0	mple)2	Duplicate R	Lab Contr Q1005604-0	ol Sample			
Analyte Name	Result	Spike Amount	% Rec	Result	Spike Amount	% Rec	% Rec Limits	RPD	RPD Limit
Vinyl Chloride	20.9	20.0	105	22.1	20.0	111	71 - 136	6	30
o-Xylene	17.3	20.0	86	17.9	20,0	89	79 - 126	3	30
m,p-Xylenes	33.4	40.0	83	34.4	40.0	86	79 - 126	3	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.



QA/QC Report

Lab Control Sample Summary Volatile Organic Compounds by GC/MS

Analytical Method: 8260B

Service Request: R1003551 Date Analyzed: 7/14/10

> Units: μg/L Basis: NA

Analysis Lot: 208370

	Lab F	Control Sa Q1005662-(mple)2		
Analyte Name	Result	Spike Amount	% Rec	% Rec Limits	
Acetone Benzene Bromodichloromethane	19.4 20.4 20.9	20.0 20.0 20.0	97 102 104	59 - 140 78 - 121 80 - 125	
Bromoform Bromomethane 2-Butanone (MEK)	19.9 18.6 19.8	20.0 20.0 20.0	100 93 99	73 - 132 57 - 144 60 - 133	
Carbon Disulfide Carbon Tetrachloride Chlorobenzene	23.2 23.0 19.8	20.0 20.0 20.0	116 115 99	59 - 138 69 - 135 80 - 121	Webb on channels and an on the standard second second second second second second second second second second s
Chloroethane Chloroform Chloromethane	21.9 21.4 24.3	20.0 20.0 20.0	109 107 121	71 - 130 78 - 125 62 - 133	
Dibromochloromethane 1,1-Dichloroethane 1,2-Dichloroethane	19.7 21.2 21.6	20.0 20.0 20.0	98 106 108	78 - 133 76 - 122 78 - 126	
1,1-Dichloroethene cis-1,2-Dichloroethene trans-1,2-Dichloroethene	22.2 21.0 20.3	20.0 20.0 20.0	111 105 102	72 - 129 78 - 122 75 - 121	ull de la de forme en en en en en en en en en en en en en
1,2-Dichloropropane cis-1,3-Dichloropropene trans-1,3-Dichloropropene	20.6 20.7 19.3	20.0 20.0 20.0	103 103 97	80 - 123 77 - 125 69 - 127	£n
Ethylbenzene 2-Hexanone Methylene Chloride	19.0 17.9 21.4	20.0 20.0 20.0	95 90 107	78 - 123 61 - 131 75 - 125	
4-Methyl-2-pentanone (MIBK) Styrene 1,1,2,2-Tetrachloroethane	18.1 18.6 16.9	20.0 20,0 20.0	90 93 84	61 - 132 80 - 132 72 - 131	 Array 19. 2. 2. <u></u>
Tetrachloroethene Toluene 1,1,1-Trichloroethane	19.9 19.5 21.3	20.0 20.0 20.0	100 98 106	72 - 131 78 - 122 72 - 128	
1,1,2-Trichloroethane Trichloroethene	18.2 21.0	20.0 20.0	91 105	80 - 122 74 - 127	

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

QA/QC Report

Client:Energy SolutionsProject:Leica Wells July 2010Sample Matrix:Water

Lab Control Sample Summary Volatile Organic Compounds by GC/MS

Service Request: R1003551 Date Analyzed: 7/14/10

Analytical Method: 8260B

Units: µg/L Basis: NA

Analysis Lot: 208370

	Lab R	Control Sal Q1005662-0	mple)2		
Analyte Name	Result	Spike Amount	% Rec	% Rec Limits	
Vinyl Chloride	25.1	20.0	125	71 - 136	
o-Xylene	19.1	20.0	95	79 - 126	
m,p-Xylenes	38.5	40.0	96	79 - 126	

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.



DF CUSTODY/LABORATORY ANALYSIS REQUEST FORM SR # 09 585.288.5380 800.695.7222 585.288.8475 (fax) PAGE OF	PRESERVATIVE PRESERVATIVE PRESERVATIVE PRESERVATIVE PRESERVATION PR	SAMPLING SAMPLING SAMPLING DATE THE / 50 60 60 60 60 60 60 80 80 80 80 80 80 80 80 80 80 80 80 80	ID: VS ID: VS ID: VS ID: VS ID: VS TURNAROUND REQUIREMENTS REPORT REQUIREMENTS REPORT REQUIREMENTS TURNAROUND REQUIREMENTS REPORT REQUIREMENTS REPORT REQUIREMENTS TURNAROUND REQUIREMENTS REPORT REQUIREMENTS REPORT REQUIREMENTS ZAIN - 2AIN - 1. Results + OC summaries ZAIN - 2 AIN - 3 day ZAIN - 2 AIN - 48 MSD as required) REQUESTED FROM REPORT DATE - 1. Results + OC and Cabbration REQUESTED REPORT DATE - 1. Results + OC and Cabbration REQUESTED REPORT DATE - 1. And a validation Report with Raw Data REQUESTED REPORT DATE - 1. Specialized Forms / Oustom Rep	A CUSTODY SEALS (V) N RECINCTORY SEALS (V) N RECINCTORY SEALS (V) N RELINQUISHED BY RELINQUISHED BY RELINQUISHED BY Signature Signature Signature N Partice Name Signature N N Analo N Partice Name Signature N N Partice Name N N Film N Date/Time Partice Name
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Cooler Receipt And Preservation Check Form

Proje	ect/ClientLe	ach	······································							_*
Cool	ler received	on <u>~16/16</u>	by: <u>Dfn</u>	/CO	URIER:	QAS,	UPS	FEDEX	VELC	CITY CLIEN
1. 2. 3. 4. 5. 6. 7.	Were cus Were cus Did all bo Did any Wer c Ice Where di Temperat	stody se stody pa ottles an OA vis or Ice p d the bo ture of c	als on outside o pers properly fi rive in good con als have signific packs present? ttles originate? coler(s) upon re	of cooler? illed out (i ndition (un cant* air b eccipt:	nk, signed ubroken)? ubbles?	, etc.)?			NO NO NO NO C, CI	Caltillo N/A 3 Trip Blow LENT
	Is the tem	perature	e within 0° - 6°	C?:	Yes	G		Yes	Yes	Yes
	If No, Ex	plain B	elow		No	No		No	No	No
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Other Comments:

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7/23 PC Secondary Review: KB H:\SMODOCS\Cooler Receipt 2.doc

*significant air bubbles are greater than 5-6 mm