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March 27, 2015

Mr. Tauren Beggs
Hydrogeologist
Wisconsin Department of Natural Resources
2984 Shawano Avenue
Green Bay WI 54313-6727

Subject: 2014 Third Quarterly Potable Well Monitoring Letter Report
Former Town of Newton Gravel Pit
BRRTS No. 02-36-000268
AECOM Project No: 60135471(82518)

Dear Mr. Beggs:

AECOM Technical Services, Inc. (AECOM), on the behalf of the City of Manitowoc, is pleased to submit this 2014 Third Quarterly Potable Well Monitoring Letter Report for wells in the vicinity of the Former Town of Newton Gravel Pit site (See Figure1). The report presents the potable well sampling results from the third quarterly sampling event September through November 2014.

Presented below are site background information, sampling methodology, well documentation research, the potable well monitoring results, and an update to the Potable Well Monitoring Work Plan.

BACKGROUND INFORMATION

Previous work and data on the potable well sampling can be found in the 2013-2014 Potable Well Monitoring Letter Report[1] and the 2014 First and Second Quarterly Potable Well Monitoring Letter Reports[2][3].

The third quarterly potable well sampling event followed the sampling schedule presented in the Potable Well Sampling Plan update submitted to the WDNR with the 2014 Second Quarterly Potable Well Monitoring Letter Report. The Work Plan groups the potable wells into the following categories:

- Target Zone Wells – wells with detectable contaminants of concern (COCs) or wells bounded by impacted wells.
- Replacement Wells – wells that were replaced due to enforcement standard exceedances of the COCs.
- Sentinel Zone Wells – wells outside and adjacent to the Target Zone that do not have detectable COCs.
- Data Gap Wells – wells not previously sampled.
- Upgradient and Historically Sampled Wells – wells outside the Sentinel Zone that have been sampled in the past but are not currently scheduled to be sampled.

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[1] 2013-2014 Potable Well Monitoring Letter Report Former Town of Newton Gravel Pit, BRRTS No. 02-36-000268, AECOM Project No: 60135471(82518), August 15, 2014.
[2] 2014 First Quarterly Potable Well Monitoring Letter Report, Former Newton Gravel Pit, BRRTS No. 02-36-000268, AECOM Project No: 60135471(82518), November 28, 2014.
[3] 2014 Second Quarterly Potable Well Monitoring Letter Report, Former Newton Gravel Pit, BRRTS No. 02-36-000268, AECOM Project No: 60135471(82518), December 2, 2014.

Based on the first and second quarter sampling results ten new Data Gap well locations were added to the sample list for the third quarter. They are as follows:

Third Quarter Data Gap Wells	
3902 Silver Creek Road	3817 Viebahn Street
4004 Silver Creek Road	3825 Viebahn Street
3617 Viebahn Street	4025 Viebahn Street
3701 Viebahn Street	4101 Viebahn Street
3815 Viebahn Street	3911 Blackhawk Court

An update to the Work Plan for the fourth quarterly sampling event, based on the third quarter monitoring results, is presented at the end of this report.

The third quarterly sampling started on September 29, 2014 and ended on November 25, 2014. In total 40 well locations were proposed in the Work Plan to be sampled. During the sampling event a total of 37 well locations were sampled. Details of the sampling event are as follows.

On September 29, October 8 and 21, 2014 a total of five samples were collected from the newly installed replacement potable wells:

September 29, October 8 & 21, 2014 Sampling Addresses	
3515 Hecker Road	3120 CTH CR
3609 Hecker Road	3403 CTH CR
3023 CTH CR	

On October 29, 2014 a total of five data gap wells were sampled:

October 29, 2014 Sampling Addresses	
3701 Viebahn Street	4025 Viebahn Street
3817 Viebahn Street	4101 Viebahn Street
3825 Viebahn Street	

On November 4, 2014 a total of five second round confirmation samples were collected on the newly installed replacement potable wells:

November 4, 2014 Sampling Addresses	
3515 Hecker Road	3120 CTH CR
3609 Hecker Road	3403 CTH CR
3023 CTH CR	

On November 5, 2014 lab results were received for the October 29 sampling event indicating that the residences at 3701 Viebahn Street, 4025 Viebahn Street, and 4101 Viebahn Street had an NR 140 Enforcement Standard (ES) exceedance of vinyl chloride (VC). The City informed the property owners of the results and provided a temporary supply of clean potable water.

On November 7, 2014 a total of five confirmation (confirm) samples were collected along Viebahn along with samples from two initially non-responsive data gap well property owners:

November 7, 2014 Sampling Addresses	
3617 Viebahn Street	3825 Viebahn Street (confirm)
3701 Viebahn Street (confirm)	4025 Viebahn Street (confirm)
3815 Viebahn Street	4101 Viebahn Street (confirm)
3817 Viebahn Street (confirm)	

On November 18, 2014 lab results were received indicating that the residences at 3617 Viebahn Street and 3815 Viebahn Street had an NR 140 Enforcement Standard (ES) exceedance of VC. The City informed the property owners of the results and provided a temporary supply of clean potable water.

On November 10, 11, 13, 14, 17, 18 and 19, 2014 a total of 27 wells were sampled including two confirmation (confirm) samples:

November 10, 11, 13, 14, 17, 18, and 19, 2014 Sampling Addresses		
3303 Hecker Road	2717 CTH CR(4141 Viebahn St)	3618 CTH CR
3327 Hecker Road	2734 (2804) CTH CR	4005 Thunder Ridge Road
3461 (3417) Hecker Road	2916 CTH CR	4111 Thunder Ridge Road
3518 Hecker Road	3224 CTH CR	4027 Thunder Ridge Road
3702 Hecker Road	3312 CTH CR	4101 Thunder Ridge Road
3902 Silver Creek Road	3322 CTH CR	3617 Viebahn Street (confirm)
4156 Silver Creek Road	3412 CTH CR	3815 Viebahn Street (confirm)
4004 Silver Creek Road	3422 CTH CR	3921 Black Hawk Court
2716 CTH CR	3504 CTH CR	3027 Orchard Lane

On November 19, 2014 lab results were received indicating that the residences at 2734 CTH CR and 2916 CTH CR had an NR 140 Enforcement Standard (ES) exceedance of vinyl chloride. The City informed the property owners of the results and provided a temporary supply of clean potable water.

On November 25, 2014 a total of two confirmation samples were collected at 2734 CTH CR and 2916 CTH CR:

November 25, 2014 Sampling Addresses	
2734 CTH CR	2916 CTH CR

Three proposed well locations, 3911 Blackhawk Court, 4002 Thunder Ridge Road, and 4010 Thunder Ridge Road were not sampled during the third quarterly sampling event. The residents did not respond to phone calls by the City to set up sampling appointments.

SAMPLING METHODOLOGY

Samples were collected following purging from a cold water tap or spigot as near to the well as possible, and preferably before any storage/pressure tanks or physical/chemical treatment system that might be present.

Prior to the collection of samples, field screening was conducted with a handheld YSI 556MPS water quality meter to obtain pH, conductivity, temperature, and oxidation/reduction (redox) potential measurements. The measurements were collected by running the tap water into a clean glass bottle until the readings stabilize then the readings were recorded on a sample collection form. Whenever possible, each system was purged for at least 10 minutes immediately prior to sampling.

Samples for volatile organic compound (VOC) laboratory analyses were collected in three 40-ml glass vials with hydrochloric acid preservative and Teflon septa. The vials were filled to the top, leaving no headspace or bubbles, and then quickly capped. Samples were labeled and stored on ice for shipment, with chain of custody, to the laboratory.

Samples collected by AECOM were submitted to a Wisconsin Administrative Code (WAC) Chapter NR 149 certified laboratory (Synergy Environmental Lab, Inc., Appleton, Wisconsin) for analyses of VOCs by EPA Method 8260B.

WELL DOCUMENTATION

During the well sampling period four replacement wells were installed, five wells were abandoned, and AECOM made efforts to research the construction of the latest potable wells being sampled.

Based on information obtained from historical well construction reports (WCRs) the well at 3120 CTH CR was thought to be 145 feet in depth and completed within bedrock. Based on measurements obtained during the abandonment of the well, the well is now known to have been approximately 51 feet in depth and completed within a sand/gravel layer. The other wells abandoned during this period had total depths similar to the historical WCRs.

Research of the latest potable wells being sampled included interviewing the well owners, searching on the Wisconsin Department of Agriculture Trade and Consumer Protection (DATCP) Well Constructor's Reports web site[4] for historical WCRs through 1989, and searching the WDNR's online Drinking Water Data Retrieval System[5] for WCRs since 1987.

The main goal of the data search was to determine the installed depth of the potable wells to assist in the interpretation of the groundwater impacts. Unfortunately, the overall lack of WCRs for many addresses currently limits the use of the data. This data collection effort will be continued in the future to improve the data set.

New well construction information along with historical information and address specific sampling information is presented on Table 1, *Summary of Potable Well Information.* Copies of the replacement well WCRs, the well abandonment forms, and the WCRs for the latest wells sampled are provided in Attachment A.

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[4] Wisconsin Department of Agriculture Trade and Consumer Protection (DATCP) Well Constructor's Reports web site, at: http://datcpgis.wi.gov/WellLogs/

[5] Wisconsin Department of Natural Resources – Wisconsin DNR Drinking Water Data, at: http://prodoasext.dnr.wi.gov/inter1/watr$.startup

DATCP provides the following qualification of the historical WCRs provided on its web site:

> "DATCP has created an interactive web map for accessing historic (1936 - 1989) well construction reports (WCRs) that were obtained from the Wisconsin Geological and Natural History Survey (WGNHS). Wells were mapped to the centroid of either a section, quarter section, or quarter-quarter section as recorded on the original WCR. These locations have not been field verified, and errors are very common. The average success rate for finding a specific WCR for a specific well is only 50%. Electronic copies of the well construction reports were converted to PDF format for easier web viewing. See the **WGNHS site** for more information regarding Well Records, or contact WGNHS staff at **geodata@wgnhs.uwex.edu**.
>
> The Wisconsin Department of Agriculture, Trade and Consumer Protection (DATCP) does not guarantee the accuracy, completeness or legality of data provided by other sources. No warranty, expressed or implied is made regarding the accuracy or utility of this data. See **DATCP Legal Notice** for more information."

MONITORING RESULTS

The results for the third quarterly potable well sampling event, September 29 through November 25, 2014, are discussed below. During this sample period AECOM obtained a total of 52 water samples (not including quality control samples) from a total of 37 wells over a series of sampling events.

A number of wells were sampled twice during the third quarter, either because they were replacement wells or because confirmation samples were obtained. The following wells were sampled twice:

- 3515 Hecker Road (replacement),
- 3518 Hecker Road (replacement),
- 3609 Hecker Road (replacement),
- 2717 CTH CR (4141 Viebahn St.),
- 2734(2804) CTH CR,
- 3023 CTH CR,
- 3120 CTH CR (replacement),
- 3403 CTH CR (replacement),
- 3617(3621) Viebahn Street,
- 3701 Viebahn Street,
- 3815 Viebahn Street,
- 3817 Viebahn Street,
- 3825 Viebahn Street,
- 4025 Viebahn Street, and
- 4101 Viebahn Street.

The wells at 3911 Blackhawk Court, 4002 Thunder Ridge Road, and 4010 Thunder Ridge Road were not sampled.

A summary of the sampled wells with detected laboratory analytical results is presented on Table 2 and on Figure 2. Table 3 provides a summary of wells sampled with all laboratory analytical results. The laboratory analytical reports are provided in Attachment B.

Field Screening Results

Field screening measurements for pH, temperature, conductivity, dissolved oxygen, and oxidation reduction potential provide general indications of water quality. Field screening data are summarized in Table 3.

Laboratory Analytical Results

The laboratory analytical data indicates that contaminant compounds are present in some of the potable well water samples. The concentration of the COCs found in the potable well water samples were compared to applicable WAC Chapter NR 140 Table 1 Public Health enforcement standards (ESs) and preventive action limits (PALs).

The laboratory analytical results are presented categorically as follows:

- COCs with NR 140 ES exceedences
- COCs with NR 140 PAL exceedences
- Detected COCs with no regulatory exceedences
- Observed changes in analytical results since the last monitoring event

Potable Wells with NR 140 COC ES Exceedences:
There were a total of eight potable wells with vinyl chloride ES exceedance's and cis-1,2-dichloroethene detects below regulatory limits. They are:

ES Exceedances of Vinyl Chloride	
2717 CTH CR (4141 Viebahn St.)	3701 Viebahn Street
2734(2804) CTH CR	3815 Viebahn Street
2916 CTH CR	4025 Viebahn Street
3617(3621) Viebahn Street	4101 Viebahn Street

Potable Wells with NR 140 COC PAL Exceedences:
There were no wells that had a COC PAL exceedances of cis-1,2-dichloroethene.

Detected COCs with No Regulatory Exceedences:
There were a total of nine wells with a single COC (cis-1,2-dichloroethene) below regulatory limits.

Cis-1,2-dichloroethene Detects	
3327 Hecker Road	4027 Thunder Ridge Road
3461(3417) Hecker Road	4101 Thunder Ridge Road
4159 Silver Creek Road	3817 Viebahn Street
3504 CTH CR	3921 Black Hawk Court
3618 CTH CR	

One well, 4025 Viebahn Street, also had a detection of toluene below regulatory limits.

Other Detected Compounds:
Laboratory analytical data indicates that water from the well at 3701 Viebahn Street had a detection of methylene chloride and the well at 2734(2804) CTH CR had a detection of chloromethane. These compounds are not typically considered as COCs because they can be present from other sources including:

- As a residual chlorination byproduct present in the water from disinfecting a well,
- from a reaction of the preservatives typically used for environmental soil and groundwater sampling (hydrochloric acid and methanol),
- or due to solvents used by the laboratory.

A summary of the sampled wells with detectable COC laboratory results is presented on Table 2 and on Figure 2. Table 3 provides a summary of sampled wells with all laboratory results. The laboratory analytical reports are provided in Attachment B.

Observed Changes in Analytical Results Since the Last Monitoring Event:
The following changes since the second quarterly sampling event were noted in the analytical results:

- The following seven wells were either Data Gap or Sentinel Zone wells where VC detections are currently above the ES.
    - 2734(2804) CTH CR
    - 2916 CTH CR
    - 3617(3621) Viebahn Street
    - 3701 Viebahn Street
    - 3815 Viebahn Street
    - 4025 Viebahn Street
    - 4101 Viebahn Street

  These wells are now identified as Target Zone Wells.

- The initial third quarter sample from 3504 CTH CR had no detectable VC. The duplicate sample had a detection of VC above the MDL but below the ES. Vinyl chloride had previously been detected in this well.

- During this quarterly period, replacement wells were installed at the following address:
    - 3515 Hecker Road
    - 3609 Hecker Road
    - 3023 CTH CR
    - 3120 CTH CR

  The original wells at these locations contained VC above the ES standard. The new replacement wells have no detectable COCs.

- The following were Data Gap wells sampled for the first time. They contained cis-1,2-dichloroethene at levels above the MDL but below the PAL:
    - 3701 Viebahn Street
    - 3817 Viebahn Street
    - 3825 Viebahn Street
    - 4025 Viebahn Street
    - 4101 Viebahn Street

- The following four wells had a change in cis-1,2-dichloroethene from above the MDL but below the PAL to non-detect levels below the MDL.
    - 3303 Hecker Road
    - 4005 Thunder Ridge Road
    - 4111 Thunder Ridge Road
    - 3027 Orchard Lane

UPDATES TO THE POTABLE WELL MONITORING WORK PLAN

Based on the third quarter analytical results, the Potable Well Monitoring Work Plan for the fourth quarterly monitoring event has been updated as follows.

Seven wells have been moved from the Data Gap to the Target Zone:

- 3617(3621) Viebahn Street
- 3701 Viebahn Street
- 3815 Viebahn Street
- 3817 Viebahn Street
- 3825 Viebahn Street
- 4025 Viebahn Street
- 4101 Viebahn Street

Five wells have been moved from the Target Zone to a new category of Replacement Wells:

- 3515 Hecker Road
- 3518 Hecker Road
- 3609 Hecker Road
- 3023 CTH CR
- 3120 CTH CR

Six wells have been moved from the Target Zone to Sentinel Zone:

- 2716 CTH CR
- 3224 CTH CR
- 3312 CTH CR
- 3322 CTH CR
- 3412 CTH CR
- 3422 CTH CR

Two wells have been moved from the Data Gap to the Sentinel Zone:

- 3902 Silver Creek Road
- 4004 Silver Creek Road

One well remained as a Data Gap well to be sampled during the fourth quarterly event due to cis-1,2-dichlorethene detections located in the vicinity of Thunder Ridge Road.

- 3911 Blackhawk Court

Two wells have been moved from Historically Sampled Wells to Sentinel Zone:

- 3627 Hecker Road
- 4127 Thunder Ridge Road

Three wells have been moved from Sentinel Zone to Historically Sampled Wells:

- 3114 Hecker Road
- 3627 Hecker Road
- 3523 Orchard Lane

During the fourth quarterly sampling event 32 wells (Target Zone and Data Gap Wells) are scheduled to be sampled. No other expansion of the potable well sampling program is anticipated during the fourth quarter sampling event.

The updated Work Plan list and a figure showing the sample locations are presented as Table 4 and Figure 3, respectively. The Table 4 list identifies the wells that will be sampled during the fourth quarterly sampling event.

SUMMARY

The following is a summary of the impacted wells sampled during the September 2014 through November 2014 potable well water monitoring period.

Analytical results indicate NR 140 ES standard exceedances for vinyl chloride with cis-1,2-dichloroethene detects below regulatory limits from the following eight wells:

- 2717 CTH CR (4141 Viebahn St.)
- 2734 (2804) CTH CR
- 2916 CTH CR
- 3617(3621) Viebahn Street
- 3701 Viebahn Street
- 3815 Viebahn Street
- 4025 Viebahn Street
- 4101 Viebahn Street

Analytical results from nine potable well water samples indicate contaminants of concern below regulatory limits:

- 3327 Hecker Road
- 3461(3417) Hecker Road
- 4159 Silver Creek Road
- 3403 CTH CR
- 3504 CTH CR
- 3618 CTH CR
- 4027 Thunder Ridge Road
- 4101 Thunder Ridge Road
- 3921 Blackhawk Court

The only Data Gap well scheduled for sampling during the fourth quarter sampling event is at 3911 Blackhawk Court. No other expansion of the potable well sampling program is anticipated during the fourth quarter sampling event.

If you have any questions regarding these results, please contact Dave Henderson at 414.944.6190 or dave.henderson@aecom.com.

Yours sincerely,

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Attachments: Tables, Figures, Attachment A: Well Construction Reports, Attachment B: Laboratory Reports

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Tables:

Table 1, Summary of Potable Well Information
Table 2, Summary of Contaminates Detected in Potable Wells
Table 3, Summary of Contaminates Analyzed in Potable Wells
Table 4, Updated 3rd Quarter 2014 Summary of Quarterly Potable Well Sampling

TABLE 1
SUMMARY OF POTABLE WELL INFORMATION

TABLE 1
SUMMARY OF POTABLE WELL INFORMATION
FORMER TOWN OF NEWTON GRAVEL PIT
MANITOWOC, WISCONSIN

Well Address	Sampling Events			Well Depth (ft. BGS)	Casing Depth (ft. BGS)	Well Draws From	Well/Casing Depth Reference	Well and 2013/2014 Sample Description
	1993[1]	2008[2]	2013-14[3]					
3114 Hecker Rd.	---	---	10/22/13 11/8/13 5/28/14	153	149	Limestone	Well Const. Rpt., dated 4/30/12.	10/22/13 and 11/8/13 - Sampled from spigot on north side of house.
3121 Hecker Rd.	2	---	10/22/13 11/7/13 5/28/14	NA	NA	NA	No well const. rpt. identified for this property. Owner reports that well possibly installed by Sieracki Well Drilling.	10/22/13 and 11/7/13 - Sampled in basement, directly from well.
3303 Hecker Rd.	3	---	10/23/13 11/7/13 6/3/14 11/17/14	143	120	Limestone	Well Const. Rpt., dated 4/14/87.	10/23/13 and 11/7/13 - Sampled from basement spigot through garden hose.
3320 Hecker Rd.	4, 5	---	10/22/13 11/7/13 5/28/14	138	115	Limestone	Well Const. Rpt., dated 5/8/01.	10/22/13 - Sampled from spigot nearest well. 11/7/13 - Sampled from spigot on east side of outbuilding near diesel fuel AST.
3327 Hecker Rd.	---	---	10/23/13 11/7/13 5/28/14 8/25/14 11/10/14	NA	NA	NA	No well const. rpt. identified for this property. Owner had no information.	10/23/13 and 11/7/13 - Sampled from west spigot.
3461(3417) Hecker Rd.	---	---	10/24/13 11/12/13 5/30/14 8/26/14 11/10/14	NA	NA	NA	No well const. rpt. identified for this property. Owner had no information.	10/24/13 and 11/12/13 - Sampled from indoor sink faucet.
3515 Hecker Rd.	---	---	10/22/13 11/7/13 11/22/13 5/28/14 8/28/14	52	52	Gravel	Well Const. Rpt., dated 2/14/79.	Well located to NW corner of house. 10/22/13 - Sampled from front spigot. 11/7/13 - Samples from west spigot and indoor kitchen faucet. 11/22/13 - Sampled from west spigot.
	---	---	9/29/14 11/4/14	300	277	Limestone	Well Const. Rpt., dated 9/2/14.	Well is located to NW corner of house. Sampled from west spigot.
3518 Hecker Rd.	---	---	10/23/13 11/7/13	120	NA	Sandy Clay with Sand Seams	Well abandonment Rpt., indicating this well abandoned on 12/10/13.	Well located to SE corner of house. 10/23/13 - Sampled from south spigot near well. 11/7/13 - Sampled from south spigot near well and indoor kitchen faucet. Well abandoned based on abandonment form dated 3/18/14.
	---	---	3/11/14 3/31/14 4/22/14 5/29/14 8/25/14 11/10/14	282	250	Limestone	Well Const. Rpt., dated 3/6/14.	3/11/14 - Sampled from outdoor spigot on east side of house. 3/31/14 and 4/22/14 - Sampled from newly installed outdoor spigot on south side of house.
3609 Hecker Rd.	---	---	10/22/13 11/7/13 11/22/13 5/28/14 7/11/14 8/25/14	NA	NA	NA	No well const. rpt. identified for this property. Owner had no information.	10/22/13 - Sampled from only spigot on house. 11/7/13 - Samples from east spigot and kitchen faucet. 11/22/13 - Sampled from SE spigot.
	---	---	9/29/14 11/4/14	300	290	Limestone	Well Const. Rpt., dated 9/2/14.	Well is located southwest of house. Sampled from east spigot.
3625 Hecker Rd.	---	---	10/22/13 11/7/13 5/28/14	105	105	NA	Well Const. Rpt., dated 6/14/89.	10/22/13 and 11/7/13 - Sampled from south spigot on house.
3627 Hecker Rd.	---	---	10/23/13 11/7/13 5/29/14	NA	NA	Gravel	No well const. rpt. identified for this property.	10/23/13 and 11/7/13 - Sampled from south spigot.
3702 Hecker Rd.	---	---	10/22/13 11/12/13 6/3/14 8/25/14 11/13/14	160	144	Gravel	Well Const. Rpt., dated 7/13/05.	10/22/13 and 11/12/13 - Sampled from south spigot.
3720 Hecker Rd.	---	---	10/22/13 11/12/13 6/2/14	NA	NA	NA	No well const. rpt. identified for this property.	10/22/13 and 11/12/13 - Sampled from front spigot.
3812 Silver Creek Rd.	---	---	5/28/14	NA	NA	NA	No well const. rpt. identified for this property.	Well is located northeast corner of the house. Sampled from outside spigot on north side of house.
3902 Sivler Creek Rd.	---	---	11/18/14	180	160	Limestone	Well Const. Rpt., dated 8/9/06. TL919	Well is located east of the house. Sampled off pressure tank in basement.
4004 Silver Creek Rd.	---	---	11/18/14	NA	NA	NA	No well Const. Rpt identified for this property.	Well is located north of building. Sampled off of pressure tank.
4156 Silver Creek Rd.	---	---	5/28/14	60	NA	NA	No well const. rpt. Identified for this property. Interview with homeowner stated well is 60 feet deep	Well is located east of the deck. Collected sample from spigot on east side of the house.
4159 Silver Creek Rd.	---	---	12/12/13 1/6/14 6/4/14 9/8/14 11/10/14	181	172	Limestone	Well Const. Rpt., dated 1/2/09.	Well located to northwest corner of property. 12/12/13 and 1/6/14 - Sampled from pressure tank spigot.
4212/4220/5236 Silver Creek Rd.	---	---	5/30/14	NA	NA	NA	No well const. rpt. Identified for this property. Owner had no information.	Well is shared with the three properties. Well is located between 4220 and 4212. Sampled from 4220 kitchen sink
4314 Silver Creek Rd.	---	---	12/5/13 6/4/14	NA	NA	NA	No well const. rpt. identified for this property. Owner had no information.	Well located to south of house. 12/5/13 - Sampled from pump spicket in basement.
4315 Silver Creek Rd.	---	---	12/12/13 6/2/14	200	NA	Limestone	No well const. rpt. identified for this property. Owner had no information.	Well located to southwest corner of house. 12/12/13 - Sampled from pressure tank spigot in basement.
4609 Silver Creek Rd.	---	---	12/3/13 6/3/14	76	76	Gravel	Well Const. Rpt., dated 8/13/49.	12/3/13 - Sampled by WDNR, Sampled from pressure tank spigot.
4620 Silver Creek Rd.	---	---	11/8/13 11/12/13 5/28/14	160	139	Limestone /Dolomite	Well Const. Rpt., dated 4/29/05.	11/8/13 - House well, Sampled from spicket on east side of house. 11/12/13 - Sampled from second well in barn, spigot in barn. 5/28/14 sampled from barn and house.

TABLE 1
SUMMARY OF POTABLE WELL INFORMATION
FORMER TOWN OF NEWTON GRAVEL PIT
MANITOWOC, WISCONSIN

Well Address	Sampling Events			Well Depth (ft. BGS)	Casing Depth (ft. BGS)	Well Draws From	Well/Casing Depth Reference	Well and 2013/2014 Sample Description
	1993[1]	2008[2]	2013-14[3]					
4752 Silver Creek Rd.	---	---	12/5/13 6/2/14	93	93	Gravel	Well Const. Rpt., dated 11/15/78.	Well located at south side of house. 12/5/13 - Sampled from kitchen sink.
4808 Silver Creek Rd.	---	---	12/5/13 5/30/14	105	105	Gravel	Well Const. Rpt., dated 12/15/98.	Well located at NW corner of house. 12/5/13 - Sampled from spicket by pump.
5202 Silver Creek Rd.	---	X	1/9/08	NA	NA	NA	No well const. rpt. identified for this property. Owner had no information.	Well location not provided. 12/5/13 - Sampled from pressure tank in barn.
2706 CTH CR	NA	NA	8/26/14	NA	NA	NA	No well const. rpt. Identified for this property.	Well is located east of the house. Collected sample on the north spigot.
2716 CTH CR	NA	NA	9/8/14 11/18/14	NA	NA	NA	No well const. rpt. Identified for this property.	Well is located west of garage. Collected sample off of pressure tank in garage.
2717 CTH CR 4141 Viebahn	NA	NA	8/25/14 9/8/14 11/10/14	146	132	Limestone	Well Const. Rpt., dated 4/2/91	Well is located north of residential garage. Collected sample off of pressure tank.
2734/2804 CTH CR	---	---	6/3/14 8/25/14 11/10/14 11/25/14	139	137	Gravel	Well Const. Rpt., dated 11/01/90. DE552	Well is located between the two buildings. Sampled from spigot in recycling facilities garage.
2832 (2904) CTH CR	---	---	2/4/14 6/3/14	NA	NA	NA	No well const. rpt. identified for this property. Owner believes well is 100 feet deep based on interview on 2/4/2014.	Both properties are on the same well. 2832 was a former hotel with several buildings. Well is located in the northern most building. Sampled from kitchen sink in third hotel building.
2911 CTH CR	---	---	5/29/14	NA	NA	NA	No well const. rprt. Identified for this property. Owner had no information.	Well is located in basement on the east side of the house. Sampled off pressure tank.
2916 CTH CR	---	---	2/4/14 5/28/14 8/25/14 11/10/14 11/25/14	132	131	Limestone	Well Const. Rpt., dated 5/23/00.	Well is located W of building. Sampled from pressure tank spigot.
2917 CTH CR	---	---	2/4/14 5/30/14	162	137	Limestone	Well Const. Rpt., dated 4/13/94.	Well is located E of building. Sampled from kitchen sink.
3023 CTH CR	---	---	2/4/14 6/2/14 8/25/14	160	NA	Limestone	Well Const. Rpt., undated. Based on depth, assume draws from limestone.	Well is located E of building. Sampled from outside spigot.
	---	---	10/8/14 11/4/14	308	275	Limestone	Well Const. Rpt., dated 9/9/14.	Well is located E of building. Sampled from outside spigot.
3120 CTH CR	---	---	1/3/14 2/4/14 5/28/14 8/25/14	51	NA	Gravel?	Updated based on Well Abandonment Form, date 10/21/14	Well located at SW corner of house. 1/3/14 and 2/4/14 - Sampled from pressure tank spigot.
	---	---	10/8/14 11/4/14	305	279	Limestone	Well Const. Rpt., dated 9/9/14.	Well is located at SW corner of the house. Sampled from pressure tank.
3224 CTH CR	---	---	2/4/14 6/4/14 8/25/14 11/17/14	NA	NA	NA	No well const. rpt. identified for this property. Owner had no information.	Pump is located in pumproom in the west side of the basement. Sampled from pressure tank spigot.
3312 CTH CR	---	---	2/26/14 6/2/14 8/26/14 11/10/14	NA	NA	NA	No well const. rpt. identified for this property. Owner had no information.	Sampled by James Blaha, Health Officer for Manitowoc Co. Sampled from bath tub.
3322 CTH CR	---	---	1/6/14 6/4/14 8/25/14 11/10/14	NA	NA	NA	No well const. rpt. identified for this property. Owner had no information.	Well located at south side of house. 1/6/14 - Sampled from kitchen sink.
3403 CTH CR	---	---	1/3/14 2/5/14 5/28/14 8/25/14	32	NA	Gravel	Well Const. Rpt., dated 10/25/38, indicates pump depth at 32' in gravel. Owner estimated 28' per interview on 1/3/14.	Well located in white shed north of house. 1/3/14 and 2/5/14 - Sampled from kitchen sink.
	---	---	10/21/14 11/4/14	307	275	Limestone	Well Const. Rpt., dated 10/15/14.	Well is located northeast of house. Sampled out of kitchen sink.
3412 CTH CR	---	---	1/3/14 8/26/14 11/10/14	NA	NA	NA	No well const. rpt. identified for this property. Owner had no information.	Well located at SW corner of house. 1/3/14 - Sampled from pressure tank spigot.
3422 CTH CR	---	---	1/6/14 5/30/14 8/25/14 11/18/14	NA	NA	NA	No well const. rpt. identified for this property. Owner had no information.	Well located 15' south of house. 1/6/14 - Sampled from pressure tank spigot.
3504 CTH CR	---	---	12/5/13 1/6/14 2/5/14 5/30/14 8/25/14 11/18/14	180	172	Hardpan	Well Const. Rpt., dated 9/3/99.	Well is located to NE of building. 12/5/13 - Sampled from spicket on north side of building. 1/6/14 and 2/5/14 - Sampled from pressure tank spigot in basement.
3523 CTH CR	---	---	1/3/14 6/3/14	250	NA	Limestone	No well const. rpt. identified for this property. Well is ~250' and constructed ~1960s, per owner interview on 1/3/14. Based on depth, assume draws from limestone.	Well located to west of house. 1/3/14 - Sampled from basement sink.
3533 CTH CR	---	---	1/6/14 6/3/14	40-50	NA	Gravel	Well Const. Rpt. not available. Owner estimated 40-50' per interview on 1/6/14. Based on depth, assume well draws from gravel.	Well located south of garage. 1/6/14 - Sampled from basement sink.
3611 CTH CR	---	---	5/30/14	~14	NA	NA	No well const. rpt. identified for this property. Owner believes well is 14 feet deep, sandpoint well	Sampled from spigot on east side of house. Well is located on the northeast corner of the house.
3618 CTH CR	---	---	1/3/14 5/29/14 8/25/14 11/10/14	NA	NA	NA	No well const. rpt. identified for this property. Owner had no information.	Well located 100' west of house. 1/3/14 - Sampled from kitchen sink.
3626 CTH CR and 3626 CTH CR #B	---	---	12/5/13 5/30/14	NA	NA	NA	No well const. rpt. identified for this property. Owner had no information.	Well serves two adjacent business/parcels, Well located to NW of Nelson Truck business buildings. 12/5/13 - Sampled from auto shop bathroom sink, after pressure tank.

TABLE 1
SUMMARY OF POTABLE WELL INFORMATION
FORMER TOWN OF NEWTON GRAVEL PIT
MANITOWOC, WISCONSIN

Well Address	Sampling Events			Well Depth (ft. BGS)	Casing Depth (ft. BGS)	Well Draws From	Well/Casing Depth Reference	Well and 2013/2014 Sample Description
	1993[1]	2008[2]	2013-14[3]					
3627 CTH CR	---	---	12/5/13 5/29/14	NA	NA	NA	No well const. rpt. identified for this property. Owner had no information.	Well located to SE of building. 12/5/13 - Sampled from basement sink, after pressure tank.
3904 CTH CR	---	---	12/5/13 5/28/14	84	84	Gravel	Well Const. Rpt., dated 2/17/95.	Well located to east of house. 12/5/13 - Sampled from pressure tank in basement.
4024 CTH CR	---	---	12/12/13 5/28/14	168	160	Limestone	Well Const. Rpt., dated 11/10/06.	Well located to southwest corner of house. 12/12/13 - Sampled from spigot in barn.
4101 CTH CR	---	---	5/29/14	NA	NA	NA	No well const. rpt. identified for this property.	Well is located south of house. Sampled from pressure tank.
4002 Thunder Ridge Rd.	---	---	1/3/14 8/25/14	200	181	Limestone	Well Const. Rpt., dated 10/21/03.	Well located in basement of house. 1/3/14 - Sampled from pressure tank spigot in basement.
4005 Thunder Ridge Rd.	---	---	5/29/14 8/26/14 11/11/14	NA	NA	NA	No well const. rpt. identified for this property.	Well is located on south side of house. Sample from south spigot, nearest well.
4010 Thunder Ridge Rd.	---	---	5/28/14 8/26/14	200	176	Limestone	Well Const. Rpt., dated 4/24/03.	Sampled off of south spigot.
4027 Thunder Ridge Rd.	---	---	5/29/14 8/26/14 11/11/14	201	181	Limestone	Well Const. Rpt., dated 6/27/07.	Sampled off of east spigot in backyard.
4101 Thunder Ridge Rd.	---	---	8/26/14 11/17/14	NA	NA	NA	No well const. rpt. Identified for this property	Well is located on the east side of the house. Collected sample off spigot on west side of house
4111 Thunder Ridge Rd.	---	---	8/25/14 11/17/14	220	197	Limestone	Well Const. Rpt., dated 9/23/03.	Well is located on northeast corner of house. Sampled from spigot on northeast corner of house.
4127 Thunder Ridge Rd.	---	---	12/5/13 5/29/14	220	194	Limestone	Well Const. Rpt., dated 9/22/03.	Well located east of house. 12/5/13 - Sampled from east spicket.
2925 Fricke Dr.	12	---	---	NA	NA	NA	No well const. rpt. identified for this property.	NA
3107 Fricke Dr.	---	---	12/5/13	200	NA	Limestone	Owner stated well is ~200' and constructed ~2003 per interview on 12/5/13. Based on depth, assume well draws from limestone.	Well located 10' south of building. 12/5/13 - Sampled from indoor well pump.
	10	---	---	115	115	Gravel	Well Const. Rpt. for non-potable well, dated 4/17/80.	Well located inside building. Not used during winter.
	11	---	---	NA	NA	NA	No well const. rpt. identified for this property.	This well is/was located near former house trailer on north side of Fricke property (3107 Fricke Dr.).
3617 Viebahn St.	---	---	11/7/14 11/19/14	166	158	Limestone	Possible well log, Well Const. Rpt. Dated 6/7/62, for property at So. 35th & Veibohn (sic) - Owner John Hruby	Sampled off of pressure tank in basement.
3701 Viebahn St.	---	---	10/29/14 11/7/14	147	143	Limestone	Well Const. Rpt. Dated 11/8/72.	Sampled off of pressure tank.
3815 Viebahn St.	---	---	11/7/14 11/19/14	125	NA	Gravel	Well depth located on pressure tank.	Sampled off of pressure tank in basement.
3817 Viebahn St.	---	---	10/29/14 11/7/14	129	129	Gravel	Well Const. Rpt. Dated 1964.	Sampled off of spigot on the SE side of the house.
3825 Viebahn St.	---	---	10/29/14 11/7/14	NA	NA	NA	No well Const. Rpt identified for this property.	Sampled off of south spigot.
4025 Viebahn St.	---	---	10/29/14 11/7/14	138	134	Limestone	Well Const. Rpt., Dated 11/29/66.	Sampled off of pressure tank in basement. Well is located on NE of the house.
4101 Viebahn St.	---	---	10/29/14 11/7/14	NA	NA	NA	No well const. rpt. Identified for this property	Well is lcoated west of the house. Sampled off of pressure tank in basement.
4219 Viebahn St.	---	---	9/8/14	NA	NA	NA	No well const. rpt. identified for this property.	Sampled from south spigot. Well is located east of the property
5107 Viebahn St.	1	---	12/5/13	189	184	Limestone	Well Const. Rpt., dated 8/24/72.	12/5/13 - Sampled from kitchen sink.
3609 M&M Ln.	6	---	12/4/13 12/16/13	109	NA	Gravel	Measured 1998, installed 1973, per sticker on pump. Based on depth, assume well draws from gravel.	12/4/13 and 12/16/13 - Sampled by WDNR, Sampled from pressure tank spigot.
3717 M&M Ln.	7	---	---	NA	NA	NA	No well const. rpt. identified for this property.	NA
3840 M&M Ln.	8	---	---	126	126	Gravel	Well Const. Rpt., dated 10/30/87.	NA
3610 Gass Lake Rd.	9	---	---	NA	NA	NA	No well const. rpt. identified for this property.	NA
3027 Orchard Ln.	---	---	2/5/14 6/4/14 8/28/14 11/11/14	NA	NA	NA	No well const. rpt. identified for this property. Owner had no information.	Sampled from pressure tank spigot.
3128 Orchard Ln.	---	---	2/4/14 6/4/14	142	137	Limestone	Well Const. Rpt., dated 10/16/86.	CONFIRM RICHARD RATAJCZAK WAS OWNER IN 1986. Current owner is William Ratajczak and Brenda Birringer. Rental property, well is located to the S of building. 2/4/14 - Sampled from pressure tank spigot.
3318 Orchard Ln.	---	---	7/11/14	NA	NA	NA	No well const. rpt. identified for this property. Previous homeowners name is John.	Well is located approximately 100 feet to the southeast. Sampled from east spigot.
3420 Orchard Ln.	---	---	2/4/14 6/2/14	NA	NA	NA	No well const. rpt.identified for this property. Owner stated pump is installed at 100 feet per interview on 2/4/2014.	Well is located to SW of building. Sampled from kitchen sink.
3523 Orchard Ln.	---	---	2/4/14 5/28/14	NA	NA	NA	No well const. rpt. identified for this property. Owner had no information.	Well is located to S of building. Sampled from kitchen sink.
3524 Orchard Ln.	---	---	2/4/14 6/2/14	NA	NA	NA	No well const. rpt. identified for this property. Owner had no information.	Well is located to N of building. Sampled from kitchen sink.
3921 Black Hawk Ct.	---	---	2/4/14 6/2/14 8/26/14 11/10/14	182	168	Limestone	Well Const. Rpt., dated 9/24/02.	Sampled from pressure tank spigot.

Notes:
[1] Shown are location IDs from Figure 6 in "Investigation Report - Former Gravel Pit, Town of Newton, Wisconsin," August 1993.
[2] Only one well sampled in 2008.
[3] Sampling dates provided for each well. Samples collected from 4609 Silver Creek Rd. on 12/3/13 and 3609 M&M Ln. on 12/16/13 were collected by WDNR.
BGS = Below Ground Surface
NA = Not Available

Table 2
SUMMARY OF CONTAMINANTS DETECTED IN POTABLE WELLS

SUMMARY OF CONTAMINATES DETECTED IN POTABLE WELLS
FORMER TOWN OF NEWTON GRAVEL PIT
MANITOWOC, WISCONSIN

Analyte	ES[1]	PAL[2]	3303 Hecker Rd.					3327 Hecker Rd.				
			10/23/13	11/7/13	6/3/14	6/3/2014(DUP)	11/17/14	10/23/13	11/7/13	5/28/14	8/25/14	11/10/14
			Basement	Basement	Basement	Basement	Basement	Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot
Volatile Organic Compounds (VOCs) (µg/L):												
Benzene	5	0.5	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24
1,2-Dichloroethane	5	0.5	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41
1,1-Dichloroethene	7	0.7	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4
cis-1,2-Dichloroethene	70	7	< 0.38	< 0.38	0.68 J	0.68 J	< 0.38	**11**	**11.6**	6.4	6.9	5.6
trans-1,2-Dichloroethene	100	20	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35
Toluene	800	160	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69
Vinyl Chloride	0.2	0.02	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18
RCRA Metals (mg/L)												
Arsenic	0.01	0.001	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Barium	2	0.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead	0.015	0.0015	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mercury	0.002	0.0002	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

SUMMARY OF CONTAMINATES DETECTED IN POTABLE WELLS
FORMER TOWN OF NEWTON GRAVEL PIT
MANITOWOC, WISCONSIN

			3461(3417) Hecker Rd.					3515 Hecker Rd.							
								Original Potable Well						Replacement Potable Well	
			10/24/13	11/12/13	5/30/14	8/26/14	11/10/14	10/22/13	11/7/13	11/7/13	11/22/13	5/28/14	8/28/14	9/29/14	11/4/14
Analyte	**ES[1]**	**PAL[2]**	Inside Sink	Inside Sink	Inside Sink	Inside Sink	Inside Sink	Outside Spigot	Outside Spigot	Inside Kitchen	Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot
Volatile Organic Compounds (VOCs) (µg/L):															
Benzene	5	0.5	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	NA	< 0.24	< 0.24	< 0.24	< 0.24
1,2-Dichloroethane	5	0.5	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	NA	< 0.41	< 0.41	< 0.41	< 0.41
1,1-Dichloroethene	7	0.7	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	NA	< 0.4	< 0.4	< 0.4	< 0.4
cis-1,2-Dichloroethene	70	7	2.58	2.15	2.12	1.79	1.49	**7.4**	**7.2**	**7.4**	NA	**10**	**7.8**	< 0.38	< 0.38
trans-1,2-Dichloroethene	100	20	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	NA	< 0.35	< 0.35	< 0.35	< 0.35
Toluene	800	160	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	NA	< 0.69	< 0.69	< 0.69	< 0.69
Vinyl Chloride	0.2	0.02	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	**0.22 J**	**0.24 J**	**0.24 J**	NA	**0.47 J**	**0.28 J**	< 0.18	< 0.18
RCRA Metals (mg/L)															
Arsenic	0.01	0.001	NA	NA	NA	NA	NA	NA	NA	NA	**0.0019**	NA	NA	NA	NA
Barium	2	0.4	NA	NA	NA	NA	NA	NA	NA	NA	0.15	NA	NA	NA	NA
Lead	0.015	0.0015	NA	NA	NA	NA	NA	NA	NA	NA	0.00034 J	NA	NA	NA	NA
Mercury	0.002	0.0002	NA	NA	NA	NA	NA	NA	NA	NA	0.000061 J	NA	NA	NA	NA

SUMMARY OF CONTAMINATES DETECTED IN POTABLE WELLS
FORMER TOWN OF NEWTON GRAVEL PIT
MANITOWOC, WISCONSIN

Analyte	ES[1]	PAL[2]	3518 Hecker Rd.										
			Original Potable Well			Replacement Potable Well							
			10/23/13	11/7/13	11/7/13	3/11/14	3/11/2014 (DUP)	3/31/14	4/22/14	5/29/14	5/29/14(DUP)	8/25/14	11/10/14
			Outside Spigot	Outside Spigot	Inside Kitchen	Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot
Volatile Organic Compounds (VOCs) (µg/L):													
Benzene	5	0.5	**1.74**	< 2.4	< 2.4	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24
1,2-Dichloroethane	5	0.5	0.42 J	< 4.1	< 4.1	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41
1,1-Dichloroethene	7	0.7	**1.62**	< 4	< 4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4
cis-1,2-Dichloroethene	70	7	**510**	**510**	**530**	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38
trans-1,2-Dichloroethene	100	20	5.5	< 3.5	< 3.5	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35
Toluene	800	160	< 0.69	< 6.9	< 6.9	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69
Vinyl Chloride	0.2	0.02	**102**	**86**	**92**	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18
RCRA Metals (mg/L)													
Arsenic	0.01	0.001	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Barium	2	0.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead	0.015	0.0015	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mercury	0.002	0.0002	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

SUMMARY OF CONTAMINATES DETECTED IN POTABLE WELLS
FORMER TOWN OF NEWTON GRAVEL PIT
MANITOWOC, WISCONSIN

Analyte	ES[1]	PAL[2]	3609 Hecker Rd.										
			Original Potable Well									Replacement Potable Well	
			10/22/13	11/7/13	11/7/13	11/22/13	5/28/14	5/28/2014(DUP)	7/11/14	8/25/16	8/25/2016(DUP)	9/29/14	11/4/14
			Outside Spigot	Outside Spigot	Inside Kitchen	Outside Spigot	Ouside Spigot	Ouside Spigot	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank
Volatile Organic Compounds (VOCs) (µg/L):													
Benzene	5	0.5	< 0.24	< 0.24	< 0.24	NA	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24
1,2-Dichloroethane	5	0.5	< 0.41	< 0.41	< 0.41	NA	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41
1,1-Dichloroethene	7	0.7	< 0.4	< 0.4	< 0.4	NA	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4
cis-1,2-Dichloroethene	70	7	**45**	**45**	**46**	NA	**49**	**49**	**51**	**35**	**36**	< 0.38	< 0.38
trans-1,2-Dichloroethene	100	20	< 0.35	0.39 J	< 0.35	NA	0.42 J	0.37 J	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35
Toluene	800	160	< 0.69	< 0.69	< 0.69	NA	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69
Vinyl Chloride	0.2	0.02	**1.0**	**1.09**	**1.02**	NA	**7.40**	**7.60**	**8.60**	**4.60**	**5.20**	< 0.18	< 0.18
RCRA Metals (mg/L)													
Arsenic	0.01	0.001	NA	NA	NA	0.00032 J	NA	NA	NA	NA	NA	NA	NA
Barium	2	0.4	NA	NA	NA	0.065	NA	NA	NA	NA	NA	NA	NA
Lead	0.015	0.0015	NA	NA	NA	0.00056 J	NA	NA	NA	NA	NA	NA	NA
Mercury	0.002	0.0002	NA	NA	NA	< 0.000049	NA	NA	NA	NA	NA	NA	NA

TABLE 2

SUMMARY OF CONTAMINATES DETECTED IN POTABLE WELLS
FORMER TOWN OF NEWTON GRAVEL PIT
MANITOWOC, WISCONSIN

Analyte	ES[1]	PAL[2]	3702 Hecker Rd.					4159 Silver Creek Rd						
			10/22/13	11/12/13	6/3/14	8/25/14	11/13/14	12/12/13	1/6/14	6/4/14	6/4/2014(DUP)	9/8/14	11/10/14	11/10/14 (DUP)
			Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank
Volatile Organic Compounds (VOCs) (µg/L):														
Benzene	5	0.5	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24
1,2-Dichloroethane	5	0.5	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41
1,1-Dichloroethene	7	0.7	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4
cis-1,2-Dichloroethene	70	7	0.71 J	0.61 J	< 0.38	< 0.38	< 0.38	0.49 J	0.73 J	0.72 J	0.64 J	0.54 J	0.59 J	0.52 J
trans-1,2-Dichloroethene	100	20	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35
Toluene	800	160	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69
Vinyl Chloride	0.2	0.02	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18
RCRA Metals (mg/L)														
Arsenic	0.01	0.001	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Barium	2	0.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead	0.015	0.0015	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mercury	0.002	0.0002	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

SUMMARY OF CONTAMINATES DETECTED IN POTABLE WELLS
FORMER TOWN OF NEWTON GRAVEL PIT
MANITOWOC, WISCONSIN

Analyte	ES[1]	PAL[2]	2717 CTH CR(4141 Viebahn St.)				2734(2804) CTH CR				
			8/25/14	9/8/14	9/8/2014(DUP)	11/10/14	6/3/14	8/25/14	11/10/14	11/25/14	11/25/2014 (DUP)
			Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Garage Spigot	Garage Spigot	Garage Spigot	Garage Spigot	Garage Spigot
Volatile Organic Compounds (VOCs) (µg/L):											
Benzene	5	0.5	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24
1,2-Dichloroethane	5	0.5	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41
1,1-Dichloroethene	7	0.7	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4
cis-1,2-Dichloroethene	70	7	1.4	1.31	1.44	1.3	0.77 J	0.77 J	0.63 J	0.93 J	1.02 J
trans-1,2-Dichloroethene	100	20	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35
Toluene	800	160	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69
Vinyl Chloride	0.2	0.02	**0.21 J**	**0.29 J**	**0.31 J**	**0.39 J**	< 0.18	< 0.18	**0.26 J**	**0.38 J**	**0.43 J**
RCRA Metals (mg/L)											
Arsenic	0.01	0.001	NA	NA	NA	NA	NA	NA	NA	NA	NA
Barium	2	0.4	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead	0.015	0.0015	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mercury	0.002	0.0002	NA	NA	NA	NA	NA	NA	NA	NA	NA

SUMMARY OF CONTAMINATES DETECTED IN POTABLE WELLS
FORMER TOWN OF NEWTON GRAVEL PIT
MANITOWOC, WISCONSIN

Analyte	ES[1]	PAL[2]	2916 CTH CR					3023 CTH CR				
								Original Potable Well			Replacement Potable Well	
			2/4/14	5/28/14	8/25/14	11/10/14	11/25/14	2/4/14	6/2/14	8/25/14	10/8/14	11/4/14
			Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot
Volatile Organic Compounds (VOCs) (µg/L):												
Benzene	5	0.5	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24
1,2-Dichloroethane	5	0.5	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41
1,1-Dichloroethene	7	0.7	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4
cis-1,2-Dichloroethene	70	7	0.97 J	0.9 J	1.02 J	0.74 J	0.82 J	2.84	2.87	2.34	< 0.38	< 0.38
trans-1,2-Dichloroethene	100	20	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35
Toluene	800	160	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69
Vinyl Chloride	0.2	0.02	**0.18 J**	< 0.18	< 0.18	**0.28 J**	**0.37 J**	**0.55 J**	**0.41 J**	**0.33 J**	< 0.18	< 0.18
RCRA Metals (mg/L)												
Arsenic	0.01	0.001	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Barium	2	0.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead	0.015	0.0015	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mercury	0.002	0.0002	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

SUMMARY OF CONTAMINATES DETECTED IN POTABLE WELLS
FORMER TOWN OF NEWTON GRAVEL PIT
MANITOWOC, WISCONSIN

Analyte	ES[1]	PAL[2]	3120 CTH CR							
			Original Potable Well						Replacement Potable Well	
			1/3/14	2/4/14	5/28/14	5/28/2014(DUP)	8/25/14	8/25/2014(DUP)	10/8/14	11/4/14
			Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank
Volatile Organic Compounds (VOCs) (µg/L):										
Benzene	5	0.5	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24
1,2-Dichloroethane	5	0.5	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41
1,1-Dichloroethene	7	0.7	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4
cis-1,2-Dichloroethene	70	7	2.74	2.86	2.65	2.68	1.89	2.23	< 0.38	< 0.38
trans-1,2-Dichloroethene	100	20	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35
Toluene	800	160	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69
Vinyl Chloride	0.2	0.02	**0.60**	**0.43 J**	**0.35 J**	**0.26 J**	**0.27 J**	**0.24 J**	< 0.18	< 0.18
RCRA Metals (mg/L)										
Arsenic	0.01	0.001	NA	NA	NA	NA	NA	NA	NA	NA
Barium	2	0.4	NA	NA	NA	NA	NA	NA	NA	NA
Lead	0.015	0.0015	NA	NA	NA	NA	NA	NA	NA	NA
Mercury	0.002	0.0002	NA	NA	NA	NA	NA	NA	NA	NA

SUMMARY OF CONTAMINATES DETECTED IN POTABLE WELLS
FORMER TOWN OF NEWTON GRAVEL PIT
MANITOWOC, WISCONSIN

Analyte	ES[1]	PAL[2]	3403 CTH CR					
			Original Potable Well				Replacement Potable Well	
			1/3/14	2/5/14	5/28/14	8/25/14	10/21/14	11/4/14
			Kitchen Sink	Kitchen Sink	Kitchen Sink	Kitchen Sink	Kitchen Sink	Kitchen Sink
Volatile Organic Compounds (VOCs) (µg/L):								
Benzene	5	0.5	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24
1,2-Dichloroethane	5	0.5	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41
1,1-Dichloroethene	7	0.7	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4
cis-1,2-Dichloroethene	70	7	1.3	1.67	1.48	1.34	< 0.38	< 0.38
trans-1,2-Dichloroethene	100	20	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35
Toluene	800	160	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69
Vinyl Chloride	0.2	0.02	**0.56 J**	**0.25 J**	**0.22 J**	< 0.18	< 0.18	< 0.18
RCRA Metals (mg/L)								
Arsenic	0.01	0.001	NA	NA	NA	NA	NA	NA
Barium	2	0.4	NA	NA	NA	NA	NA	NA
Lead	0.015	0.0015	NA	NA	NA	NA	NA	NA
Mercury	0.002	0.0002	NA	NA	NA	NA	NA	NA

SUMMARY OF CONTAMINATES DETECTED IN POTABLE WELLS
FORMER TOWN OF NEWTON GRAVEL PIT
MANITOWOC, WISCONSIN

Analyte	ES[1]	PAL[2]	3504 CTH CR									
			12/5/13	1/6/14	1/6/2014 (DUP)	2/5/14	5/30/14	5/30/14(DUP)	8/25/14	8/25/14(DUP)	11/18/14	11/18/2014 (DUP)
			Outside Spigot	Basement	Basement	Basement	Basement	Basement	Basement	Basement	Basement	Basement
Volatile Organic Compounds (VOCs) (µg/L):												
Benzene	5	0.5	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24
1,2-Dichloroethane	5	0.5	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41
1,1-Dichloroethene	7	0.7	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4
cis-1,2-Dichloroethene	70	7	1.28	1.43	1.34	1.42	1.22	1.13 J	0.99 J	1.02 J	1.41	1.26
trans-1,2-Dichloroethene	100	20	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35
Toluene	800	160	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69
Vinyl Chloride	0.2	0.02	< 0.18	< 0.18	**0.23 J**	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	0.18 J
RCRA Metals (mg/L)												
Arsenic	0.01	0.001	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Barium	2	0.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead	0.015	0.0015	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mercury	0.002	0.0002	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

SUMMARY OF CONTAMINATES DETECTED IN POTABLE WELLS
FORMER TOWN OF NEWTON GRAVEL PIT
MANITOWOC, WISCONSIN

Analyte	ES[1]	PAL[2]	3618 CTH CR				4002 Thunder Ridge Rd.		4005 Thunder Ridge Rd.		
			1/3/14	5/29/14	8/25/14	11/10/14	1/3/14	8/25/14	5/29/14	8/26/14	11/11/14
			Kitchen Sink	Kitchen Sink	Kitchen Sink	Kitchen Sink	Pressure Tank	Pressure Tank	Outside Spigot	Outside Spigot	Outside Spigot
Volatile Organic Compounds (VOCs) (µg/L):											
Benzene	5	0.5	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24
1,2-Dichloroethane	5	0.5	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41
1,1-Dichloroethene	7	0.7	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4
cis-1,2-Dichloroethene	70	7	1.24	1.16 J	0.48 J	0.83 J	1.67	1.29	0.83 J	0.9 J	< 0.38
trans-1,2-Dichloroethene	100	20	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35
Toluene	800	160	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69
Vinyl Chloride	0.2	0.02	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18
RCRA Metals (mg/L)											
Arsenic	0.01	0.001	NA	NA	NA	NA	NA	NA	NA	NA	NA
Barium	2	0.4	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead	0.015	0.0015	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mercury	0.002	0.0002	NA	NA	NA	NA	NA	NA	NA	NA	NA

SUMMARY OF CONTAMINATES DETECTED IN POTABLE WELLS
FORMER TOWN OF NEWTON GRAVEL PIT
MANITOWOC, WISCONSIN

Analyte	ES[1]	PAL[2]	4010 Thunder Ridge Rd.		4027 Thunder Ridge Rd.				4101 Thunder Ridge Rd.		4111 Thunder Ridge Rd.	
			5/28/14	8/26/14	5/29/14	8/26/14	11/11/14	11/11/14 DUP	8/26/14	11/17/14	8/25/14	11/17/14
			Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot
Volatile Organic Compounds (VOCs) (µg/L):												
Benzene	5	0.5	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24
1,2-Dichloroethane	5	0.5	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41
1,1-Dichloroethene	7	0.7	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4
cis-1,2-Dichloroethene	70	7	1.37	1.18 J	0.59 J	0.52 J	0.6 J	0.53 J	0.73 J	0.63 J	0.41 J	< 0.38
trans-1,2-Dichloroethene	100	20	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35
Toluene	800	160	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69
Vinyl Chloride	0.2	0.02	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18
RCRA Metals (mg/L)												
Arsenic	0.01	0.001	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Barium	2	0.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead	0.015	0.0015	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mercury	0.002	0.0002	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

SUMMARY OF CONTAMINATES DETECTED IN POTABLE WELLS
FORMER TOWN OF NEWTON GRAVEL PIT
MANITOWOC, WISCONSIN

Analyte	ES[1]	PAL[2]	3617 Viebahn St.		3701 Viebahn St.			3815 Viebahn St.		3817 Viebahn St.		4025 Viebahn St.	
			11/7/14	11/19/14	10/29/14	11/7/14	11/7/2014 (DUP)	11/7/14	11/19/14	10/29/14	11/7/14	10/29/14	11/7/14
			Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Outside Spigot	Outside Spigot	Pressure Tank	Pressure Tank
Volatile Organic Compounds (VOCs) (µg/L):													
Benzene	5	0.5	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24
1,2-Dichloroethane	5	0.5	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41
1,1-Dichloroethene	7	0.7	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4
cis-1,2-Dichloroethene	70	7	1.13 J	1.12 J	1.23	1.18 J	1.29	0.74 J	0.94 J	0.4 J	< 0.38	1.38	1.46
trans-1,2-Dichloroethene	100	20	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35
Toluene	800	160	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	0.95 J	< 0.69
Vinyl Chloride	0.2	0.02	**0.48 J**	**0.4 J**	**0.29 J**	**0.32 J**	**0.49 J**	**0.33 J**	**0.31 J**	< 0.18	< 0.18	**0.34 J**	**0.31 J**
RCRA Metals (mg/L)													
Arsenic	0.01	0.001	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Barium	2	0.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead	0.015	0.0015	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mercury	0.002	0.0002	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

SUMMARY OF CONTAMINATES DETECTED IN POTABLE WELLS
FORMER TOWN OF NEWTON GRAVEL PIT
MANITOWOC, WISCONSIN

Analyte	ES[1]	PAL[2]	4101 Viebahn St.		3027 Orchard Ln.				3921 Black Hawk Ct.			
			10/29/14	11/7/14	2/5/14	6/4/14	8/28/14	11/11/14	2/4/14	6/2/14	8/26/14	11/10/14
			Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank
Volatile Organic Compounds (VOCs) (µg/L):												
Benzene	5	0.5	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24
1,2-Dichloroethane	5	0.5	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41
1,1-Dichloroethene	7	0.7	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4
cis-1,2-Dichloroethene	70	7	1.48	1.13 J	0.47 J	0.39 J	0.49 J	< 0.38	0.87 J	0.97 J	1.14 J	0.65 J
trans-1,2-Dichloroethene	100	20	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35
Toluene	800	160	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69
Vinyl Chloride	0.2	0.02	**0.38 J**	**0.39 J**	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18
RCRA Metals (mg/L)												
Arsenic	0.01	0.001	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Barium	2	0.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead	0.015	0.0015	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mercury	0.002	0.0002	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

SUMMARY OF CONTAMINATES DETECTED IN POTABLE WELLS
FORMER TOWN OF NEWTON GRAVEL PIT
MANITOWOC, WISCONSIN

NOTES:

(1) Enforcement Standard from NR140, January 2012.

(2) Preventive Action Limit from NR140, January 2012.

NL - ES or PAL not listed in NR140.

NA - Not analyzed.
ND - Not detected.
NM - Not measured.
NS - Not sampled.
J - Compound was detected at a concentration between the limit of detection (LOD) and the limit of quantitation (LOQ).
Q - Compound was detected at a concentration between the limit of detection (LOD) and the limit of quantitation (LOQ).
& - LCS recovery was outside of control limits.
H - Holding time exceeded by (n) days
D - The result is from a dilution analysis.
A - Analyte is detected in the method blank. Method blank criteria is evaluated to the laboratory LOD. Additionally, method blank acceptance may be based on project specific criteria or determined from analyte concentrations in the sample and are evaluated on a sample by sample basis.
ED - Elevated detection limit due to matric effects.
MS - Either the matrix spike or matrix spike duplicate was outside of the acceptable control limits. All other supporting QC was within the acceptable control limits.
E - Analyte concentraion exceeds calibration range (see Sample Narrative).
* - Duplicate analyses not within control limits.
B(x) - Analyte is detected in the method blank at "x" concentration. Method blank criteria is evaluated to the laboratory LOD. Additionally, method blank acceptance may be basedon project specific criteria or determined from analyte concentrations in the sample and are evaluated on a sample by sample basis.
N - Spiked sample revocery not within control limits; post-digestion spike recovery accepted.
B - Analyte found in method blank.
OC - Elevated reporting limit due to analyte concentration.

Bold indicates a PAL exceedance.
Bold and underlining indicates an ES exceedance.

Table 3
SUMMARY OF CONTAMINATES ANALYZED IN POTABLE WELLS

SUMMARY OF CONTAMINATES ANALYZED IN POTABLE WELLS
FORMER TOWN OF NEWTON GRAVEL PIT
MANITOWOC, WISCONSIN

			3114 Hecker Rd.			3121 Hecker Rd.			3303 Hecker Rd.				
			10/22/13	11/8/13	5/28/14	10/22/13	11/7/13	5/28/14	10/23/13	11/7/13	6/3/14	6/3/2014(DUP)	11/17/14
Analyte	**ES[1]**	**PAL[2]**	Outside Spigot	Outside Spigot	Outside Spigot	Basement	Basement	Basement	Basement	Basement	Basement	Basement	Basement
Volatile Organic Compounds (VOCs) (µg/L):													
Benzene	5	0.5	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24
Bromobenzene	NL	NL	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32
Bromochloromethane	NL	NL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bromodichloromethane	0.6	0.06	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37
Bromoform	4.4	0.44	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35
tert-Butylbenzene	NL	NL	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36
sec-Butylbenzene	NL	NL	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
n-Butylbenzene	NL	NL	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35
Carbon Tetrachloride	5	0.5	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
Chlorobenzene	NL	NL	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24
Chloroethane	400	80	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63
Chloroform	6	0.6	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28
Chloromethane	3	0.3	**1.36 J**	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81
2-Chlorotoluene	NL	NL	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21
4-Chlorotoluene	NL	NL	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21
1,2-Dibromo-3-chloropropane (DBCP)	0.2	0.02	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88
Dibromochloromethane	60	6	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22
Dibromomethane	NL	NL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,4-Dichlorobenzene	75	15	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
1,3-Dichlorobenzene	600	120	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28
1,2-Dichlorobenzene	600	60	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36
Dichlorodifluoromethane	1000	200	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44
1,2-Dichloroethane	5	0.5	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41
1,1-Dichloroethane	850	85	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
1,1-Dichloroethene	7	0.7	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4
cis-1,2-Dichloroethene	70	7	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38	0.68 J	0.68 J	< 0.38
trans-1,2-Dichloroethene	100	20	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35
1,2-Dichloropropane	5	0.5	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32
2,2-Dichloropropane	NL	NL	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36
1,3-Dichloropropane	NL	NL	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
1,1-Dichloropropene	NL	NL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
cis-1,3-Dichloropropene	0.4	0.04	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
trans-1,3-Dichloropropene	0.4	0.04	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Di-isopropyl ether	NL	NL	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23
EDB (1,2-Dibromoethane)	0.05	0.005	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44
Ethylbenzene	700	140	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55
Hexachlorobutadiene	NL	NL	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5
Isopropylbenzene	NS	NS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
p-Isopropyltoluene	NL	NL	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31
Methylene Chloride	5	0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Methyl tert-butyl ether (MTBE)	60	12	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23
Naphthalene	100	10	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7
n-Propylbenzene	NL	NL	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25
Styrene	100	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1,2,2-Tetrachloroethane	0.2	0.02	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45
1,1,1,2-Tetrachloroethane	70	7	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
Tetrachloroethene	5	0.5	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
Toluene	800	160	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69
1,2,4-Trichlorobenzene	70	14	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98
1,2,3-Trichlorobenzene	NL	NL	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8
1,1,1-Trichloroethane	200	40	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
1,1,2-Trichloroethane	5	0.5	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34
Trichloroethene (TCE)	5	0.5	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
Trichlorofluoromethane	NL	NL	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71
1,2,3-Trichloropropane	60	12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2,4-Trimethylbenzene	--	--	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2
1,3,5-Trimethylbenzene	--	--	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4
Total Trimethylbenzene	480	96	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2
Vinyl Chloride	0.2	0.02	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18
m&p-Xylene	--	--	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69
o-Xylene	--	--	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63
Total Xylenes	2,000	400	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69
RCRA Metals (mg/L)													
Antimony	0.006	0.0012	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Arsenic	0.01	0.001	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Barium	2	0.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Beryllium	0.004	0.0004	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium	0.005	0.0005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium	0.1	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Copper	1.3	0.13	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Iron	0.3	0.15	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead	0.015	0.0015	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese	0.05	0.025	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mercury	0.002	0.0002	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nickel	0.1	0.02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Selenium	0.05	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sliver	0.05	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sodium	increase of 10		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Thallium	0.002	0.0004	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Zinc	5	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Poychlorinated Biphenyls (PCBs) (µg/L):													
Aroclor-1016	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1221	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1232	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1242	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1248	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1254	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1260	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total PCBs	0.03	0.003	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Field Screening Measurements													
pH (IU)	--	--	7.84	8.22	7.85	6.01	7.55	7.55	8.13	7.32	7.32	7.32	7.85
Conductivity (uS)	--	--	617	443	502	877	635	689	585	538	538	538	587
Temperature (°C)	--	--	10.54	10.09	10.5	9.72	10.25	10.4	9.69	10.31	10.31	10.31	8.83
Dissolved Oxygen (ppm)	--	--	4.11	150.31	1.3	4.22	8.42	2.2	4.22	2.41	2.41	2.41	6.84
Redox Potential (mV)	--	--	20.2	90.5	70	90.1	95.7	38	62	76.4	76.4	76.4	9.2

SUMMARY OF CONTAMINATES ANALYZED IN POTABLE WELLS
FORMER TOWN OF NEWTON GRAVEL PIT
MANITOWOC, WISCONSIN

Analyte	ES[1]	PAL[2]	3320 Hecker Rd.			3327 Hecker Rd.				
			10/22/13	11/7/13	5/28/14	10/23/13	11/7/13	5/28/14	8/25/14	11/10/14
			Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot
Volatile Organic Compounds (VOCs) (µg/L):										
Benzene	5	0.5	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24
Bromobenzene	NL	NL	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32
Bromochloromethane	NL	NL	NA	NA	NA	NA	NA	NA	NA	NA
Bromodichloromethane	0.6	0.06	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37
Bromoform	4.4	0.44	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35
tert-Butylbenzene	NL	NL	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36
sec-Butylbenzene	NL	NL	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
n-Butylbenzene	NL	NL	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35
Carbon Tetrachloride	5	0.5	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
Chlorobenzene	NL	NL	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24
Chloroethane	400	80	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63
Chloroform	6	0.6	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28
Chloromethane	3	0.3	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81
2-Chlorotoluene	NL	NL	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21
4-Chlorotoluene	NL	NL	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21
1,2-Dibromo-3-chloropropane (DBCP)	0.2	0.02	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88
Dibromochloromethane	60	6	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22
Dibromomethane	NL	NL	NA	NA	NA	NA	NA	NA	NA	NA
1,4-Dichlorobenzene	75	15	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
1,3-Dichlorobenzene	600	120	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28
1,2-Dichlorobenzene	600	60	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36
Dichlorodifluoromethane	1000	200	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44
1,2-Dichloroethane	5	0.5	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41
1,1-Dichloroethane	850	85	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
1,1-Dichloroethene	7	0.7	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4
cis-1,2-Dichloroethene	70	7	< 0.38	< 0.38	< 0.38	**11**	**11.6**	6.4	6.9	5.6
trans-1,2-Dichloroethene	100	20	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35
1,2-Dichloropropane	5	0.5	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32
2,2-Dichloropropane	NL	NL	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36
1,3-Dichloropropane	NL	NL	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
1,1-Dichloropropene	NL	NL	NA	NA	NA	NA	NA	NA	NA	NA
cis-1,3-Dichloropropene	0.4	0.04	NA	NA	NA	NA	NA	NA	NA	NA
trans-1,3-Dichloropropene	0.4	0.04	NA	NA	NA	NA	NA	NA	NA	NA
Di-isopropyl ether	NL	NL	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23
EDB (1,2-Dibromoethane)	0.05	0.005	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44
Ethylbenzene	700	140	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55
Hexachlorobutadiene	NL	NL	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5
Isopropylbenzene	NS	NS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
p-Isopropyltoluene	NL	NL	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31
Methylene Chloride	5	0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Methyl tert-butyl ether (MTBE)	60	12	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23
Naphthalene	100	10	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7
n-Propylbenzene	NL	NL	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25
Styrene	100	10	NA	NA	NA	NA	NA	NA	NA	NA
1,1,2,2-Tetrachloroethane	0.2	0.02	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45
1,1,1,2-Tetrachloroethane	70	7	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
Tetrachloroethene	5	0.5	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
Toluene	800	160	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69
1,2,4-Trichlorobenzene	70	14	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98
1,2,3-Trichlorobenzene	NL	NL	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8
1,1,1-Trichloroethane	200	40	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
1,1,2-Trichloroethane	5	0.5	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34
Trichloroethene (TCE)	5	0.5	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
Trichlorofluoromethane	NL	NL	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71
1,2,3-Trichloropropane	60	12	NA	NA	NA	NA	NA	NA	NA	NA
1,2,4-Trimethylbenzene	--	--	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2
1,3,5-Trimethylbenzene	--	--	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4
Total Trimethylbenzene	480	96	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2
Vinyl Chloride	0.2	0.02	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18
m&p-Xylene	--	--	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69
o-Xylene	--	--	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63
Total Xylenes	2,000	400	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69
RCRA Metals (mg/L)										
Antimony	0.006	0.0012	NA	NA	NA	NA	NA	NA	NA	NA
Arsenic	0.01	0.001	NA	NA	NA	NA	NA	NA	NA	NA
Barium	2	0.4	NA	NA	NA	NA	NA	NA	NA	NA
Beryllium	0.004	0.0004	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium	0.005	0.0005	NA	NA	NA	NA	NA	NA	NA	NA
Chromium	0.1	0.01	NA	NA	NA	NA	NA	NA	NA	NA
Copper	1.3	0.13	NA	NA	NA	NA	NA	NA	NA	NA
Iron	0.3	0.15	NA	NA	NA	NA	NA	NA	NA	NA
Lead	0.015	0.0015	NA	NA	NA	NA	NA	NA	NA	NA
Manganese	0.05	0.025	NA	NA	NA	NA	NA	NA	NA	NA
Mercury	0.002	0.0002	NA	NA	NA	NA	NA	NA	NA	NA
Nickel	0.1	0.02	NA	NA	NA	NA	NA	NA	NA	NA
Selenium	0.05	0.01	NA	NA	NA	NA	NA	NA	NA	NA
Sliver	0.05	0.01	NA	NA	NA	NA	NA	NA	NA	NA
Sodium	increase of 10		NA	NA	NA	NA	NA	NA	NA	NA
Thallium	0.002	0.0004	NA	NA	NA	NA	NA	NA	NA	NA
Zinc	5	2.5	NA	NA	NA	NA	NA	NA	NA	NA
Poychlorinated Biphenyls (PCBs) (µg/L):										
Aroclor-1016	--	--	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1221	--	--	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1232	--	--	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1242	--	--	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1248	--	--	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1254	--	--	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1260	--	--	NA	NA	NA	NA	NA	NA	NA	NA
Total PCBs	0.03	0.003	NA	NA	NA	NA	NA	NA	NA	NA
Field Screening Measurements										
pH (IU)	--	--	7.66	7.99	7.78	8.38	7.82	7.81	7.72	8.04
Conductivity (uS)	--	--	598	455	477	620	478	528	603	596
Temperature (°C)	--	--	10.41	9.78	11	10.96	8.62	10.2	12.6	10.35
Dissolved Oxygen (ppm)	--	--	4.03	6.51	0.89	3.22	6.69	1.11	1.89	1.23
Redox Potential (mV)	--	--	56	86.7	50	53.7	93.9	71	146	-14.5

SUMMARY OF CONTAMINATES ANALYZED IN POTABLE WELLS
FORMER TOWN OF NEWTON GRAVEL PIT
MANITOWOC, WISCONSIN

Analyte	ES[1]	PAL[2]	3461(3417) Hecker Rd.				
			10/24/13	11/12/13	5/30/14	8/26/14	11/10/14
			Inside Sink	Inside Sink	Inside Sink	Inside Sink	Inside Sink
Volatile Organic Compounds (VOCs) (µg/L):							
Benzene	5	0.5	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24
Bromobenzene	NL	NL	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32
Bromochloromethane	NL	NL	NA	NA	NA	NA	NA
Bromodichloromethane	0.6	0.06	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37
Bromoform	4.4	0.44	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35
tert-Butylbenzene	NL	NL	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36
sec-Butylbenzene	NL	NL	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
n-Butylbenzene	NL	NL	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35
Carbon Tetrachloride	5	0.5	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
Chlorobenzene	NL	NL	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24
Chloroethane	400	80	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63
Chloroform	6	0.6	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28
Chloromethane	3	0.3	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81
2-Chlorotoluene	NL	NL	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21
4-Chlorotoluene	NL	NL	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21
1,2-Dibromo-3-chloropropane (DBCP)	0.2	0.02	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88
Dibromochloromethane	60	6	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22
Dibromomethane	NL	NL	NA	NA	NA	NA	NA
1,4-Dichlorobenzene	75	15	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
1,3-Dichlorobenzene	600	120	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28
1,2-Dichlorobenzene	600	60	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36
Dichlorodifluoromethane	1000	200	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44
1,2-Dichloroethane	5	0.5	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41
1,1-Dichloroethane	850	85	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
1,1-Dichloroethene	7	0.7	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4
cis-1,2-Dichloroethene	70	7	2.58	2.15	2.12	1.79	1.49
trans-1,2-Dichloroethene	100	20	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35
1,2-Dichloropropane	5	0.5	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32
2,2-Dichloropropane	NL	NL	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36
1,3-Dichloropropane	NL	NL	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
1,1-Dichloropropene	NL	NL	NA	NA	NA	NA	NA
cis-1,3-Dichloropropene	0.4	0.04	NA	NA	NA	NA	NA
trans-1,3-Dichloropropene	0.4	0.04	NA	NA	NA	NA	NA
Di-isopropyl ether	NL	NL	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23
EDB (1,2-Dibromoethane)	0.05	0.005	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44
Ethylbenzene	700	140	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55
Hexachlorobutadiene	NL	NL	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5
Isopropylbenzene	NS	NS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
p-Isopropyltoluene	NL	NL	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31
Methylene Chloride	5	0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Methyl tert-butyl ether (MTBE)	60	12	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23
Naphthalene	100	10	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7
n-Propylbenzene	NL	NL	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25
Styrene	100	10	NA	NA	NA	NA	NA
1,1,2,2-Tetrachloroethane	0.2	0.02	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45
1,1,1,2-Tetrachloroethane	70	7	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
Tetrachloroethene	5	0.5	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
Toluene	800	160	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69
1,2,4-Trichlorobenzene	70	14	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98
1,2,3-Trichlorobenzene	NL	NL	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8
1,1,1-Trichloroethane	200	40	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
1,1,2-Trichloroethane	5	0.5	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34
Trichloroethene (TCE)	5	0.5	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
Trichlorofluoromethane	NL	NL	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71
1,2,3-Trichloropropane	60	12	NA	NA	NA	NA	NA
1,2,4-Trimethylbenzene	--	--	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2
1,3,5-Trimethylbenzene	--	--	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4
Total Trimethylbenzene	480	96	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2
Vinyl Chloride	0.2	0.02	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18
m&p-Xylene	--	--	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69
o-Xylene	--	--	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63
Total Xylenes	2,000	400	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69
RCRA Metals (mg/L)							
Antimony	0.006	0.0012	NA	NA	NA	NA	NA
Arsenic	0.01	0.001	NA	NA	NA	NA	NA
Barium	2	0.4	NA	NA	NA	NA	NA
Beryllium	0.004	0.0004	NA	NA	NA	NA	NA
Cadmium	0.005	0.0005	NA	NA	NA	NA	NA
Chromium	0.1	0.01	NA	NA	NA	NA	NA
Copper	1.3	0.13	NA	NA	NA	NA	NA
Iron	0.3	0.15	NA	NA	NA	NA	NA
Lead	0.015	0.0015	NA	NA	NA	NA	NA
Manganese	0.05	0.025	NA	NA	NA	NA	NA
Mercury	0.002	0.0002	NA	NA	NA	NA	NA
Nickel	0.1	0.02	NA	NA	NA	NA	NA
Selenium	0.05	0.01	NA	NA	NA	NA	NA
Sliver	0.05	0.01	NA	NA	NA	NA	NA
Sodium	increase of 10		NA	NA	NA	NA	NA
Thallium	0.002	0.0004	NA	NA	NA	NA	NA
Zinc	5	2.5	NA	NA	NA	NA	NA
Poychlorinated Biphenyls (PCBs) (µg/L):							
Aroclor-1016	--	--	NA	NA	NA	NA	NA
Aroclor-1221	--	--	NA	NA	NA	NA	NA
Aroclor-1232	--	--	NA	NA	NA	NA	NA
Aroclor-1242	--	--	NA	NA	NA	NA	NA
Aroclor-1248	--	--	NA	NA	NA	NA	NA
Aroclor-1254	--	--	NA	NA	NA	NA	NA
Aroclor-1260	--	--	NA	NA	NA	NA	NA
Total PCBs	0.03	0.003	NA	NA	NA	NA	NA
Field Screening Measurements							
pH (IU)	--	--	7.55	7.27	7.45	7.89	7.81
Conductivity (uS)	--	--	723	554	562	721	733
Temperature (°C)	--	--	10.5	9.43	11.9	14.1	10.72
Dissolved Oxygen (ppm)	--	--	4.73	17.93	1.53	0.95	2.47
Redox Potential (mV)	--	--	69	91.7	146	237	-112.9

SUMMARY OF CONTAMINATES ANALYZED IN POTABLE WELLS
FORMER TOWN OF NEWTON GRAVEL PIT
MANITOWOC, WISCONSIN

Analyte	ES[1]	PAL[2]	3515 Hecker Rd.							
			Original Potable Well						Replacement Potable Well	
			10/22/13	11/7/13	11/7/13	11/22/13	5/28/14	8/28/14	9/29/14	11/4/14
			Outside Spigot	Outside Spigot	Inside Kitchen	Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot
Volatile Organic Compounds (VOCs) (µg/L):										
Benzene	5	0.5	< 0.24	< 0.24	< 0.24	NA	< 0.24	< 0.24	< 0.24	< 0.24
Bromobenzene	NL	NL	< 0.32	< 0.32	< 0.32	NA	< 0.32	< 0.32	< 0.32	< 0.32
Bromochloromethane	NL	NL	NA	NA	NA	NA	NA	NA	NA	NA
Bromodichloromethane	0.6	0.06	< 0.37	< 0.37	< 0.37	NA	< 0.37	< 0.37	< 0.37	< 0.37
Bromoform	4.4	0.44	< 0.35	< 0.35	< 0.35	NA	< 0.35	< 0.35	< 0.35	< 0.35
tert-Butylbenzene	NL	NL	< 0.36	< 0.36	< 0.36	NA	< 0.36	< 0.36	< 0.36	< 0.36
sec-Butylbenzene	NL	NL	< 0.33	< 0.33	< 0.33	NA	< 0.33	< 0.33	< 0.33	< 0.33
n-Butylbenzene	NL	NL	< 0.35	< 0.35	< 0.35	NA	< 0.35	< 0.35	< 0.35	< 0.35
Carbon Tetrachloride	5	0.5	< 0.33	< 0.33	< 0.33	NA	< 0.33	< 0.33	< 0.33	< 0.33
Chlorobenzene	NL	NL	< 0.24	< 0.24	< 0.24	NA	< 0.24	< 0.24	< 0.24	< 0.24
Chloroethane	400	80	< 0.63	< 0.63	< 0.63	NA	< 0.63	< 0.63	< 0.63	< 0.63
Chloroform	6	0.6	< 0.28	< 0.28	< 0.28	NA	< 0.28	< 0.28	< 0.28	< 0.28
Chloromethane	3	0.3	**1.02 J**	< 0.81	< 0.81	NA	< 0.81	< 0.81	< 0.81	< 0.81
2-Chlorotoluene	NL	NL	< 0.21	< 0.21	< 0.21	NA	< 0.21	< 0.21	< 0.21	< 0.21
4-Chlorotoluene	NL	NL	< 0.21	< 0.21	< 0.21	NA	< 0.21	< 0.21	< 0.21	< 0.21
1,2-Dibromo-3-chloropropane (DBCP)	0.2	0.02	< 0.88	< 0.88	< 0.88	NA	< 0.88	< 0.88	< 0.88	< 0.88
Dibromochloromethane	60	6	< 0.22	< 0.22	< 0.22	NA	< 0.22	< 0.22	< 0.22	< 0.22
Dibromomethane	NL	NL	NA	NA	NA	NA	NA	NA	NA	NA
1,4-Dichlorobenzene	75	15	< 0.3	< 0.3	< 0.3	NA	< 0.3	< 0.3	< 0.3	< 0.3
1,3-Dichlorobenzene	600	120	< 0.28	< 0.28	< 0.28	NA	< 0.28	< 0.28	< 0.28	< 0.28
1,2-Dichlorobenzene	600	60	< 0.36	< 0.36	< 0.36	NA	< 0.36	< 0.36	< 0.36	< 0.36
Dichlorodifluoromethane	1000	200	< 0.44	< 0.44	< 0.44	NA	< 0.44	< 0.44	< 0.44	< 0.44
1,2-Dichloroethane	5	0.5	< 0.41	< 0.41	< 0.41	NA	< 0.41	< 0.41	< 0.41	< 0.41
1,1-Dichloroethane	850	85	< 0.3	< 0.3	< 0.3	NA	< 0.3	< 0.3	< 0.3	< 0.3
1,1-Dichloroethene	7	0.7	< 0.4	< 0.4	< 0.4	NA	< 0.4	< 0.4	< 0.4	< 0.4
cis-1,2-Dichloroethene	70	7	**7.4**	**7.2**	**7.4**	NA	**10**	**7.8**	< 0.38	< 0.38
trans-1,2-Dichloroethene	100	20	< 0.35	< 0.35	< 0.35	NA	< 0.35	< 0.35	< 0.35	< 0.35
1,2-Dichloropropane	5	0.5	< 0.32	< 0.32	< 0.32	NA	< 0.32	< 0.32	< 0.32	< 0.32
2,2-Dichloropropane	NL	NL	< 0.36	< 0.36	< 0.36	NA	< 0.36	< 0.36	< 0.36	< 0.36
1,3-Dichloropropane	NL	NL	< 0.33	< 0.33	< 0.33	NA	< 0.33	< 0.33	< 0.33	< 0.33
1,1-Dichloropropene	NL	NL	NA	NA	NA	NA	NA	NA	NA	NA
cis-1,3-Dichloropropene	0.4	0.04	NA	NA	NA	NA	NA	NA	NA	NA
trans-1,3-Dichloropropene	0.4	0.04	NA	NA	NA	NA	NA	NA	NA	NA
Di-isopropyl ether	NL	NL	< 0.23	< 0.23	< 0.23	NA	< 0.23	< 0.23	< 0.23	< 0.23
EDB (1,2-Dibromoethane)	0.05	0.005	< 0.44	< 0.44	< 0.44	NA	< 0.44	< 0.44	< 0.44	< 0.44
Ethylbenzene	700	140	< 0.55	< 0.55	< 0.55	NA	< 0.55	< 0.55	< 0.55	< 0.55
Hexachlorobutadiene	NL	NL	< 1.5	< 1.5	< 1.5	NA	< 1.5	< 1.5	< 1.5	< 1.5
Isopropylbenzene	NS	NS	< 0.3	< 0.3	< 0.3	NA	< 0.3	< 0.3	< 0.3	< 0.3
p-Isopropyltoluene	NL	NL	< 0.31	< 0.31	< 0.31	NA	< 0.31	< 0.31	< 0.31	< 0.31
Methylene Chloride	5	0.5	< 0.5	< 0.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5
Methyl tert-butyl ether (MTBE)	60	12	< 0.23	< 0.23	< 0.23	NA	< 0.23	< 0.23	< 0.23	< 0.23
Naphthalene	100	10	< 1.7	< 1.7	< 1.7	NA	< 1.7	< 1.7	< 1.7	< 1.7
n-Propylbenzene	NL	NL	< 0.25	< 0.25	< 0.25	NA	< 0.25	< 0.25	< 0.25	< 0.25
Styrene	100	10	NA	NA	NA	NA	NA	NA	NA	NA
1,1,2,2-Tetrachloroethane	0.2	0.02	< 0.45	< 0.45	< 0.45	NA	< 0.45	< 0.45	< 0.45	< 0.45
1,1,1,2-Tetrachloroethane	70	7	< 0.33	< 0.33	< 0.33	NA	< 0.33	< 0.33	< 0.33	< 0.33
Tetrachloroethene	5	0.5	< 0.33	< 0.33	< 0.33	NA	< 0.33	< 0.33	< 0.33	< 0.33
Toluene	800	160	< 0.69	< 0.69	< 0.69	NA	< 0.69	< 0.69	< 0.69	< 0.69
1,2,4-Trichlorobenzene	70	14	< 0.98	< 0.98	< 0.98	NA	< 0.98	< 0.98	< 0.98	< 0.98
1,2,3-Trichlorobenzene	NL	NL	< 1.8	< 1.8	< 1.8	NA	< 1.8	< 1.8	< 1.8	< 1.8
1,1,1-Trichloroethane	200	40	< 0.33	< 0.33	< 0.33	NA	< 0.33	< 0.33	< 0.33	< 0.33
1,1,2-Trichloroethane	5	0.5	< 0.34	< 0.34	< 0.34	NA	< 0.34	< 0.34	< 0.34	< 0.34
Trichloroethene (TCE)	5	0.5	< 0.33	< 0.33	< 0.33	NA	< 0.33	< 0.33	< 0.33	< 0.33
Trichlorofluoromethane	NL	NL	< 0.71	< 0.71	< 0.71	NA	< 0.71	< 0.71	< 0.71	< 0.71
1,2,3-Trichloropropane	60	12	NA	NA	NA	NA	NA	NA	NA	NA
1,2,4-Trimethylbenzene	--	--	< 2.2	< 2.2	< 2.2	NA	< 2.2	< 2.2	< 2.2	< 2.2
1,3,5-Trimethylbenzene	--	--	< 1.4	< 1.4	< 1.4	NA	< 1.4	< 1.4	< 1.4	< 1.4
Total Trimethylbenzene	480	96	< 2.2	< 2.2	< 2.2	NA	< 2.2	< 2.2	< 2.2	< 2.2
Vinyl Chloride	0.2	0.02	**0.22 J**	**0.24 J**	**0.24 J**	NA	**0.47 J**	**0.28 J**	< 0.18	< 0.18
m&p-Xylene	--	--	< 0.69	< 0.69	< 0.69	NA	< 0.69	< 0.69	< 0.69	< 0.69
o-Xylene	--	--	< 0.63	< 0.63	< 0.63	NA	< 0.63	< 0.63	< 0.63	< 0.63
Total Xylenes	2,000	400	< 0.69	< 0.69	< 0.69	NA	< 0.69	< 0.69	< 0.69	< 0.69
RCRA Metals (mg/L)										
Antimony	0.006	0.0012	NA	NA	NA	NA	NA	NA	NA	NA
Arsenic	0.01	0.001	NA	NA	NA	**0.0019**	NA	NA	NA	NA
Barium	2	0.4	NA	NA	NA	0.15	NA	NA	NA	NA
Beryllium	0.004	0.0004	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium	0.005	0.0005	NA	NA	NA	< 0.00016	NA	NA	NA	NA
Chromium	0.1	0.01	NA	NA	NA	< 0.00054	NA	NA	NA	NA
Copper	1.3	0.13	NA	NA	NA	NA	NA	NA	NA	NA
Iron	0.3	0.15	NA	NA	NA	NA	NA	NA	NA	NA
Lead	0.015	0.0015	NA	NA	NA	0.00034 J	NA	NA	NA	NA
Manganese	0.05	0.025	NA	NA	NA	NA	NA	NA	NA	NA
Mercury	0.002	0.0002	NA	NA	NA	0.000061 J	NA	NA	NA	NA
Nickel	0.1	0.02	NA	NA	NA	NA	NA	NA	NA	NA
Selenium	0.05	0.01	NA	NA	NA	< 0.00038	NA	NA	NA	NA
Sliver	0.05	0.01	NA	NA	NA	< 0.00031	NA	NA	NA	NA
Sodium	increase of 10		NA	NA	NA	NA	NA	NA	NA	NA
Thallium	0.002	0.0004	NA	NA	NA	NA	NA	NA	NA	NA
Zinc	5	2.5	NA	NA	NA	NA	NA	NA	NA	NA
Poychlorinated Biphenyls (PCBs) (µg/L):										
Aroclor-1016	--	--	NA	NA	NA	< 0.02	NA	NA	NA	NA
Aroclor-1221	--	--	NA	NA	NA	< 0.024	NA	NA	NA	NA
Aroclor-1232	--	--	NA	NA	NA	< 0.021	NA	NA	NA	NA
Aroclor-1242	--	--	NA	NA	NA	< 0.024	NA	NA	NA	NA
Aroclor-1248	--	--	NA	NA	NA	< 0.014	NA	NA	NA	NA
Aroclor-1254	--	--	NA	NA	NA	< 0.018	NA	NA	NA	NA
Aroclor-1260	--	--	NA	NA	NA	< 0.015	NA	NA	NA	NA
Total PCBs	0.03	0.003	NA	NA	NA	< 0.024	NA	NA	NA	NA
Field Screening Measurements										
pH (IU)	--	--	8.02	7.77	7.44	NM	7.75	7.97	NM	NM
Conductivity (uS)	--	--	775	634	616	NM	694	783	NM	NM
Temperature (°C)	--	--	9.56	10.1	10.48	NM	10.6	11.7	NM	NM
Dissolved Oxygen (ppm)	--	--	3.81	5.75	5.46	NM	2.13	1.73	NM	NM
Redox Potential (mV)	--	--	20.1	74.8	91.8	NM	92	231	NM	NM

SUMMARY OF CONTAMINATES ANALYZED IN POTABLE WELLS
FORMER TOWN OF NEWTON GRAVEL PIT
MANITOWOC, WISCONSIN

Analyte	ES[1]	PAL[2]	3518 Hecker Rd.										
			Original Potable Well			Replacement Potable Well							
			10/23/13	11/7/13	11/7/13	3/11/14	3/11/14	3/31/14	4/22/14	5/29/14	5/29/14(DUP)	8/25/14	11/10/14
			Outside Spigot	Outside Spigot	Inside Kitchen	Outside Spigot	Duplicate	Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot
Volatile Organic Compounds (VOCs) (µg/L):													
Benzene	5	0.5	**1.74**	< 2.4	< 2.4	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24
Bromobenzene	NL	NL	< 0.32	< 3.2	< 3.2	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32
Bromochloromethane	NL	NL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bromodichloromethane	0.6	0.06	< 0.37	< 3.7	< 3.7	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37
Bromoform	4.4	0.44	< 0.35	< 3.5	< 3.5	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35
tert-Butylbenzene	NL	NL	< 0.36	< 3.6	< 3.6	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36
sec-Butylbenzene	NL	NL	< 0.33	< 3.3	< 3.3	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
n-Butylbenzene	NL	NL	< 0.35	< 3.5	< 3.5	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35
Carbon Tetrachloride	5	0.5	< 0.33	< 3.3	< 3.3	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
Chlorobenzene	NL	NL	< 0.24	< 2.4	< 2.4	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24
Chloroethane	400	80	< 0.63	< 6.3	< 6.3	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63
Chloroform	6	0.6	< 0.28	< 2.8	< 2.8	< 0.28	< 0.28	0.45 J	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28
Chloromethane	3	0.3	< 0.81	< 8.1	< 8.1	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81
2-Chlorotoluene	NL	NL	< 0.21	< 2.1	< 2.1	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21
4-Chlorotoluene	NL	NL	< 0.21	< 2.1	< 2.1	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21
1,2-Dibromo-3-chloropropane (DBCP)	0.2	0.02	< 0.88	< 8.8	< 8.8	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88
Dibromochloromethane	60	6	< 0.22	< 2.2	< 2.2	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22
Dibromomethane	NL	NL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,4-Dichlorobenzene	75	15	< 0.3	< 3	< 3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
1,3-Dichlorobenzene	600	120	< 0.28	< 2.8	< 2.8	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28
1,2-Dichlorobenzene	600	60	< 0.36	< 3.6	< 3.6	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36
Dichlorodifluoromethane	1000	200	< 0.44	< 4.4	< 4.4	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44
1,2-Dichloroethane	5	0.5	0.42 J	< 4.1	< 4.1	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41
1,1-Dichloroethane	850	85	< 0.3	< 3	< 3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
1,1-Dichloroethene	7	0.7	**1.62**	< 4	< 4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4
cis-1,2-Dichloroethene	70	7	**510**	**510**	**530**	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38
trans-1,2-Dichloroethene	100	20	5.5	< 3.5	< 3.5	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35
1,2-Dichloropropane	5	0.5	< 0.32	< 3.2	< 3.2	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32
2,2-Dichloropropane	NL	NL	< 0.36	< 3.6	< 3.6	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36
1,3-Dichloropropane	NL	NL	< 0.33	< 3.3	< 3.3	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
1,1-Dichloropropene	NL	NL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
cis-1,3-Dichloropropene	0.4	0.04	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
trans-1,3-Dichloropropene	0.4	0.04	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Di-isopropyl ether	NL	NL	< 0.23	< 2.3	< 2.3	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23
EDB (1,2-Dibromoethane)	0.05	0.005	< 0.44	< 4.4	< 4.4	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44
Ethylbenzene	700	140	< 0.55	< 5.5	< 5.5	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55
Hexachlorobutadiene	NL	NL	< 1.5	< 15	< 15	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5
Isopropylbenzene	NS	NS	< 0.3	< 3	< 3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
p-Isopropyltoluene	NL	NL	< 0.31	< 3.1	< 3.1	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31
Methylene Chloride	5	0.5	< 0.5	< 5	< 5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Methyl tert-butyl ether (MTBE)	60	12	< 0.23	< 2.3	< 2.3	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23
Naphthalene	100	10	< 1.7	< 17	< 17	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7
n-Propylbenzene	NL	NL	< 0.25	< 2.5	< 2.5	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25
Styrene	100	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1,2,2-Tetrachloroethane	0.2	0.02	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45
1,1,1,2-Tetrachloroethane	70	7	< 0.33	< 3.3	< 3.3	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
Tetrachloroethene	5	0.5	< 0.33	< 3.3	< 3.3	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
Toluene	800	160	< 0.69	< 6.9	< 6.9	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69
1,2,4-Trichlorobenzene	70	14	< 0.98	< 9.8	< 9.8	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98
1,2,3-Trichlorobenzene	NL	NL	< 1.8	< 18	< 18	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8
1,1,1-Trichloroethane	200	40	< 0.33	< 3.3	< 3.3	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
1,1,2-Trichloroethane	5	0.5	< 0.34	< 3.4	< 3.4	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34
Trichloroethene (TCE)	5	0.5	< 0.33	< 3.3	< 3.3	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
Trichlorofluoromethane	NL	NL	< 0.71	< 7.1	< 7.1	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71
1,2,3-Trichloropropane	60	12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2,4-Trimethylbenzene	--	--	< 2.2	< 22	< 22	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2
1,3,5-Trimethylbenzene	--	--	< 1.4	< 14	< 14	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4
Total Trimethylbenzene	480	96	< 2.2	< 22	< 22	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2
Vinyl Chloride	0.2	0.02	**102**	**86**	**92**	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18
m&p-Xylene	--	--	< 0.69	< 6.9	< 6.9	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69
o-Xylene	--	--	< 0.63	< 6.3	< 6.3	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63
Total Xylenes	2,000	400	< 0.69	< 6.9	< 6.9	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69
RCRA Metals (mg/L)													
Antimony	0.006	0.0012	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Arsenic	0.01	0.001	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Barium	2	0.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Beryllium	0.004	0.0004	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium	0.005	0.0005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium	0.1	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Copper	1.3	0.13	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Iron	0.3	0.15	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead	0.015	0.0015	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese	0.05	0.025	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mercury	0.002	0.0002	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nickel	0.1	0.02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Selenium	0.05	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sliver	0.05	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sodium	increase of 10		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Thallium	0.002	0.0004	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Zinc	5	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Poychlorinated Biphenyls (PCBs) (µg/L):													
Aroclor-1016	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1221	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1232	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1242	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1248	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1254	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1260	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total PCBs	0.03	0.003	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Field Screening Measurements													
pH (IU)	--	--	6.16	7.48	7.4	NM	NM	NM	NM	7.37	7.37	7.9	7.74
Conductivity (uS)	--	--	744	554	554	NM	NM	NM	NM	1571	1571	2080	1942
Temperature (°C)	--	--	9.89	9.36	10.58	NM	NM	NM	NM	11.2	11.2	12.5	10.11
Dissolved Oxygen (ppm)	--	--	3.21	3.32	3.85	NM	NM	NM	NM	3.87	3.87	1.22	1.93
Redox Potential (mV)	--	--	74.1	92	93.1	NM	NM	NM	NM	-190	-190	178	-109.4

SUMMARY OF CONTAMINATES ANALYZED IN POTABLE WELLS
FORMER TOWN OF NEWTON GRAVEL PIT
MANITOWOC, WISCONSIN

Analyte	ES[1]	PAL[2]	3609 Hecker Rd.										
			Original Potable Well									Replacement Potable Well	
			10/22/13	11/7/13	11/7/13	11/22/13	5/28/14	5/28/2014(DUP)	7/11/14	8/25/16	8/25/2016(DUP)	9/29/14	11/4/14
			Outside Spigot	Outside Spigot	Inside Kitchen	Outside Spigot	Ouside Spigot	Ouside Spigot	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank
Volatile Organic Compounds (VOCs) (µg/L):													
Benzene	5	0.5	< 0.24	< 0.24	< 0.24	NA	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24
Bromobenzene	NL	NL	< 0.32	< 0.32	< 0.32	NA	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32
Bromochloromethane	NL	NL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bromodichloromethane	0.6	0.06	< 0.37	< 0.37	< 0.37	NA	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37
Bromoform	4.4	0.44	< 0.35	< 0.35	< 0.35	NA	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35
tert-Butylbenzene	NL	NL	< 0.36	< 0.36	< 0.36	NA	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36
sec-Butylbenzene	NL	NL	< 0.33	< 0.33	< 0.33	NA	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
n-Butylbenzene	NL	NL	< 0.35	< 0.35	< 0.35	NA	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35
Carbon Tetrachloride	5	0.5	< 0.33	< 0.33	< 0.33	NA	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
Chlorobenzene	NL	NL	< 0.24	< 0.24	< 0.24	NA	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24
Chloroethane	400	80	< 0.63	< 0.63	< 0.63	NA	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63
Chloroform	6	0.6	< 0.28	< 0.28	< 0.28	NA	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28
Chloromethane	3	0.3	< 0.81	< 0.81	< 0.81	NA	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81
2-Chlorotoluene	NL	NL	< 0.21	< 0.21	< 0.21	NA	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21
4-Chlorotoluene	NL	NL	< 0.21	< 0.21	< 0.21	NA	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21
1,2-Dibromo-3-chloropropane (DBCP)	0.2	0.02	< 0.88	< 0.88	< 0.88	NA	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88
Dibromochloromethane	60	6	< 0.22	< 0.22	< 0.22	NA	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22
Dibromomethane	NL	NL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,4-Dichlorobenzene	75	15	< 0.3	< 0.3	< 0.3	NA	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
1,3-Dichlorobenzene	600	120	< 0.28	< 0.28	< 0.28	NA	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28
1,2-Dichlorobenzene	600	60	< 0.36	< 0.36	< 0.36	NA	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36
Dichlorodifluoromethane	1000	200	< 0.44	< 0.44	< 0.44	NA	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44
1,2-Dichloroethane	5	0.5	< 0.41	< 0.41	< 0.41	NA	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41
1,1-Dichloroethane	850	85	< 0.3	< 0.3	< 0.3	NA	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
1,1-Dichloroethene	7	0.7	< 0.4	< 0.4	< 0.4	NA	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4
cis-1,2-Dichloroethene	70	7	**45**	**45**	**46**	NA	**49**	**49**	**51**	**35**	**36**	< 0.38	< 0.38
trans-1,2-Dichloroethene	100	20	< 0.35	0.39 J	< 0.35	NA	0.42 J	0.37 J	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35
1,2-Dichloropropane	5	0.5	< 0.32	< 0.32	< 0.32	NA	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32
2,2-Dichloropropane	NL	NL	< 0.36	< 0.36	< 0.36	NA	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36
1,3-Dichloropropane	NL	NL	< 0.33	< 0.33	< 0.33	NA	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
1,1-Dichloropropene	NL	NL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
cis-1,3-Dichloropropene	0.4	0.04	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
trans-1,3-Dichloropropene	0.4	0.04	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Di-isopropyl ether	NL	NL	< 0.23	< 0.23	< 0.23	NA	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23
EDB (1,2-Dibromoethane)	0.05	0.005	< 0.44	< 0.44	< 0.44	NA	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44
Ethylbenzene	700	140	< 0.55	< 0.55	< 0.55	NA	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55
Hexachlorobutadiene	NL	NL	< 1.5	< 1.5	< 1.5	NA	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5
Isopropylbenzene	NS	NS	< 0.3	< 0.3	< 0.3	NA	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
p-Isopropyltoluene	NL	NL	< 0.31	< 0.31	< 0.31	NA	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31
Methylene Chloride	5	0.5	**0.82 J**	< 0.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Methyl tert-butyl ether (MTBE)	60	12	< 0.23	< 0.23	< 0.23	NA	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23
Naphthalene	100	10	< 1.7	< 1.7	< 1.7	NA	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7
n-Propylbenzene	NL	NL	< 0.25	< 0.25	< 0.25	NA	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25
Styrene	100	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1,2,2-Tetrachloroethane	0.2	0.02	< 0.45	< 0.45	< 0.45	NA	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45
1,1,1,2-Tetrachloroethane	70	7	< 0.33	< 0.33	< 0.33	NA	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
Tetrachloroethene	5	0.5	< 0.33	< 0.33	< 0.33	NA	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
Toluene	800	160	< 0.69	< 0.69	< 0.69	NA	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69
1,2,4-Trichlorobenzene	70	14	< 0.98	< 0.98	< 0.98	NA	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98
1,2,3-Trichlorobenzene	NL	NL	< 1.8	< 1.8	< 1.8	NA	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8
1,1,1-Trichloroethane	200	40	< 0.33	< 0.33	< 0.33	NA	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
1,1,2-Trichloroethane	5	0.5	< 0.34	< 0.34	< 0.34	NA	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34
Trichloroethene (TCE)	5	0.5	< 0.33	< 0.33	< 0.33	NA	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
Trichlorofluoromethane	NL	NL	< 0.71	< 0.71	< 0.71	NA	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71
1,2,3-Trichloropropane	60	12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2,4-Trimethylbenzene	--	--	< 2.2	< 2.2	< 2.2	NA	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2
1,3,5-Trimethylbenzene	--	--	< 1.4	< 1.4	< 1.4	NA	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4
Total Trimethylbenzene	480	96	< 2.2	< 2.2	< 2.2	NA	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2
Vinyl Chloride	0.2	0.02	**1.0**	**1.09**	**1.02**	NA	**7.40**	**7.60**	**8.60**	**4.60**	**5.20**	< 0.18	< 0.18
m&p-Xylene	--	--	< 0.69	< 0.69	< 0.69	NA	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69
o-Xylene	--	--	< 0.63	< 0.63	< 0.63	NA	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63
Total Xylenes	2,000	400	< 0.69	< 0.69	< 0.69	NA	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69
RCRA Metals (mg/L)													
Antimony	0.006	0.0012	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Arsenic	0.01	0.001	NA	NA	NA	0.00032 J	NA	NA	NA	NA	NA	NA	NA
Barium	2	0.4	NA	NA	NA	0.065	NA	NA	NA	NA	NA	NA	NA
Beryllium	0.004	0.0004	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium	0.005	0.0005	NA	NA	NA	< 0.00016	NA	NA	NA	NA	NA	NA	NA
Chromium	0.1	0.01	NA	NA	NA	< 0.00054	NA	NA	NA	NA	NA	NA	NA
Copper	1.3	0.13	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Iron	0.3	0.15	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead	0.015	0.0015	NA	NA	NA	0.00056 J	NA	NA	NA	NA	NA	NA	NA
Manganese	0.05	0.025	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mercury	0.002	0.0002	NA	NA	NA	< 0.000049	NA	NA	NA	NA	NA	NA	NA
Nickel	0.1	0.02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Selenium	0.05	0.01	NA	NA	NA	< 0.00038	NA	NA	NA	NA	NA	NA	NA
Sliver	0.05	0.01	NA	NA	NA	< 0.00031	NA	NA	NA	NA	NA	NA	NA
Sodium	increase of 10		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Thallium	0.002	0.0004	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Zinc	5	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Poychlorinated Biphenyls (PCBs) (µg/L):													
Aroclor-1016	--	--	NA	NA	NA	< 0.02	NA	NA	NA	NA	NA	NA	NA
Aroclor-1221	--	--	NA	NA	NA	< 0.024	NA	NA	NA	NA	NA	NA	NA
Aroclor-1232	--	--	NA	NA	NA	< 0.021	NA	NA	NA	NA	NA	NA	NA
Aroclor-1242	--	--	NA	NA	NA	< 0.024	NA	NA	NA	NA	NA	NA	NA
Aroclor-1248	--	--	NA	NA	NA	< 0.014	NA	NA	NA	NA	NA	NA	NA
Aroclor-1254	--	--	NA	NA	NA	< 0.018	NA	NA	NA	NA	NA	NA	NA
Aroclor-1260	--	--	NA	NA	NA	< 0.015	NA	NA	NA	NA	NA	NA	NA
Total PCBs	0.03	0.003	NA	NA	NA	< 0.024	NA	NA	NA	NA	NA	NA	NA
Field Screening Measurements													
pH (IU)	--	--	7.56	7.28	7.42	NM	7.5	7.5	7.91	7.7	7.7	NM	7.77
Conductivity (uS)	--	--	754	558	614	NM	634	634	983	675	675	NM	2248
Temperature (°C)	--	--	10.53	9.99	12.84	NM	11.1	11.1	15.2	12.4	12.4	NM	10.69
Dissolved Oxygen (ppm)	--	--	4.02	3.9	4.14	NM	1.43	1.43	2.11	2.79	2.79	NM	3.42
Redox Potential (mV)	--	--	73	95.4	91.6	NM	60	60	131	199	199	NM	-141.9

SUMMARY OF CONTAMINATES ANALYZED IN POTABLE WELLS
FORMER TOWN OF NEWTON GRAVEL PIT
MANITOWOC, WISCONSIN

			3625 Hecker Rd.			3627 Hecker Rd.			3702 Hecker Rd.				
			10/22/13	11/7/13	11/7/13	10/23/13	11/7/13	5/29/14	10/22/13	11/12/13	6/3/14	8/25/14	11/13/14
Analyte	**ES[1]**	**PAL[2]**	Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot
Volatile Organic Compounds (VOCs) (µg/L):													
Benzene	5	0.5	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24
Bromobenzene	NL	NL	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32
Bromochloromethane	NL	NL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bromodichloromethane	0.6	0.06	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37
Bromoform	4.4	0.44	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35
tert-Butylbenzene	NL	NL	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36
sec-Butylbenzene	NL	NL	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
n-Butylbenzene	NL	NL	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35
Carbon Tetrachloride	5	0.5	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
Chlorobenzene	NL	NL	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24
Chloroethane	400	80	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63
Chloroform	6	0.6	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28
Chloromethane	3	0.3	**0.82 J**	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81
2-Chlorotoluene	NL	NL	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21
4-Chlorotoluene	NL	NL	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21
1,2-Dibromo-3-chloropropane (DBCP)	0.2	0.02	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88
Dibromochloromethane	60	6	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22
Dibromomethane	NL	NL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,4-Dichlorobenzene	75	15	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
1,3-Dichlorobenzene	600	120	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28
1,2-Dichlorobenzene	600	60	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36
Dichlorodifluoromethane	1000	200	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44
1,2-Dichloroethane	5	0.5	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41
1,1-Dichloroethane	850	85	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
1,1-Dichloroethene	7	0.7	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4
cis-1,2-Dichloroethene	70	7	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38	0.71 J	0.61 J	< 0.38	< 0.38	< 0.38
trans-1,2-Dichloroethene	100	20	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35
1,2-Dichloropropane	5	0.5	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32
2,2-Dichloropropane	NL	NL	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36
1,3-Dichloropropane	NL	NL	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
1,1-Dichloropropene	NL	NL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
cis-1,3-Dichloropropene	0.4	0.04	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
trans-1,3-Dichloropropene	0.4	0.04	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Di-isopropyl ether	NL	NL	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23
EDB (1,2-Dibromoethane)	0.05	0.005	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44
Ethylbenzene	700	140	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55
Hexachlorobutadiene	NL	NL	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5
Isopropylbenzene	NS	NS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
p-Isopropyltoluene	NL	NL	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31
Methylene Chloride	5	0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Methyl tert-butyl ether (MTBE)	60	12	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23
Naphthalene	100	10	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7
n-Propylbenzene	NL	NL	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25
Styrene	100	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1,2,2-Tetrachloroethane	0.2	0.02	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45
1,1,1,2-Tetrachloroethane	70	7	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
Tetrachloroethene	5	0.5	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
Toluene	800	160	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69
1,2,4-Trichlorobenzene	70	14	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98
1,2,3-Trichlorobenzene	NL	NL	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8
1,1,1-Trichloroethane	200	40	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
1,1,2-Trichloroethane	5	0.5	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34
Trichloroethene (TCE)	5	0.5	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
Trichlorofluoromethane	NL	NL	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71
1,2,3-Trichloropropane	60	12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2,4-Trimethylbenzene	--	--	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2
1,3,5-Trimethylbenzene	--	--	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4
Total Trimethylbenzene	480	96	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2
Vinyl Chloride	0.2	0.02	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18
m&p-Xylene	--	--	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69
o-Xylene	--	--	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63
Total Xylenes	2,000	400	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69
RCRA Metals (mg/L)													
Antimony	0.006	0.0012	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Arsenic	0.01	0.001	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Barium	2	0.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Beryllium	0.004	0.0004	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium	0.005	0.0005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium	0.1	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Copper	1.3	0.13	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Iron	0.3	0.15	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead	0.015	0.0015	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese	0.05	0.025	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mercury	0.002	0.0002	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nickel	0.1	0.02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Selenium	0.05	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sliver	0.05	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sodium	increase of 10		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Thallium	0.002	0.0004	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Zinc	5	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Poychlorinated Biphenyls (PCBs) (µg/L):													
Aroclor-1016	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1221	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1232	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1242	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1248	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1254	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1260	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total PCBs	0.03	0.003	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Field Screening Measurements													
pH (IU)	--	--	7.38	7.77	7.75	7.98	7.75	7.18	7.83	8.28	7.62	7.87	7.87
Conductivity (uS)	--	--	782	552	651	707	531	576	757	522	552	657	657
Temperature (^oC)	--	--	11.04	10.92	15.5	10.13	9.63	11.5	9.82	10.58	14	14.1	14.1
Dissolved Oxygen (ppm)	--	--	4.54	5.31	1.71	4.53	4.69	2.53	4.73	8.16	4.6	3.77	3.77
Redox Potential (mV)	--	--	68.4	85.9	119	45.1	91.3	137	52.9	100.4	158	245	245

SUMMARY OF CONTAMINATES ANALYZED IN POTABLE WELLS
FORMER TOWN OF NEWTON GRAVEL PIT
MANITOWOC, WISCONSIN

Analyte	ES[1]	PAL[2]	3720 Hecker Rd.			3812 Silver Creek Rd	3902 Silver Creek Rd	4004 Silver Creek Rd	4156 Silver Creek Rd
			10/22/13	11/12/13	6/2/14	5/28/14	11/18/14	11/18/14	5/28/14
			Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot	Pressure Tank	Outside Spigot
Volatile Organic Compounds (VOCs) (µg/L):									
Benzene	5	0.5	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24
Bromobenzene	NL	NL	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32
Bromochloromethane	NL	NL	NA	NA	NA	NA	NA	NA	NA
Bromodichloromethane	0.6	0.06	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37
Bromoform	4.4	0.44	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35
tert-Butylbenzene	NL	NL	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36
sec-Butylbenzene	NL	NL	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
n-Butylbenzene	NL	NL	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35
Carbon Tetrachloride	5	0.5	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
Chlorobenzene	NL	NL	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24
Chloroethane	400	80	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63
Chloroform	6	0.6	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28
Chloromethane	3	0.3	**1.48 J**	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81
2-Chlorotoluene	NL	NL	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21
4-Chlorotoluene	NL	NL	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21
1,2-Dibromo-3-chloropropane (DBCP)	0.2	0.02	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88
Dibromochloromethane	60	6	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22
Dibromomethane	NL	NL	NA	NA	NA	NA	NA	NA	NA
1,4-Dichlorobenzene	75	15	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
1,3-Dichlorobenzene	600	120	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28
1,2-Dichlorobenzene	600	60	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36
Dichlorodifluoromethane	1000	200	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44
1,2-Dichloroethane	5	0.5	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41
1,1-Dichloroethane	850	85	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
1,1-Dichloroethene	7	0.7	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4
cis-1,2-Dichloroethene	70	7	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38
trans-1,2-Dichloroethene	100	20	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35
1,2-Dichloropropane	5	0.5	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32
2,2-Dichloropropane	NL	NL	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36
1,3-Dichloropropane	NL	NL	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
1,1-Dichloropropene	NL	NL	NA	NA	NA	NA	NA	NA	NA
cis-1,3-Dichloropropene	0.4	0.04	NA	NA	NA	NA	NA	NA	NA
trans-1,3-Dichloropropene	0.4	0.04	NA	NA	NA	NA	NA	NA	NA
Di-isopropyl ether	NL	NL	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23
EDB (1,2-Dibromoethane)	0.05	0.005	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44
Ethylbenzene	700	140	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55
Hexachlorobutadiene	NL	NL	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5
Isopropylbenzene	NS	NS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
p-Isopropyltoluene	NL	NL	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31
Methylene Chloride	5	0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Methyl tert-butyl ether (MTBE)	60	12	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23
Naphthalene	100	10	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7
n-Propylbenzene	NL	NL	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25
Styrene	100	10	NA	NA	NA	NA	NA	NA	NA
1,1,2,2-Tetrachloroethane	0.2	0.02	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45
1,1,1,2-Tetrachloroethane	70	7	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
Tetrachloroethene	5	0.5	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
Toluene	800	160	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69
1,2,4-Trichlorobenzene	70	14	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98
1,2,3-Trichlorobenzene	NL	NL	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8
1,1,1-Trichloroethane	200	40	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
1,1,2-Trichloroethane	5	0.5	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34
Trichloroethene (TCE)	5	0.5	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
Trichlorofluoromethane	NL	NL	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71
1,2,3-Trichloropropane	60	12	NA	NA	NA	NA	NA	NA	NA
1,2,4-Trimethylbenzene	--	--	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2
1,3,5-Trimethylbenzene	--	--	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4
Total Trimethylbenzene	480	96	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2
Vinyl Chloride	0.2	0.02	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18
m&p-Xylene	--	--	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69
o-Xylene	--	--	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63
Total Xylenes	2,000	400	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69
RCRA Metals (mg/L)									
Antimony	0.006	0.0012	NA	NA	NA	NA	NA	NA	NA
Arsenic	0.01	0.001	NA	NA	NA	NA	NA	NA	NA
Barium	2	0.4	NA	NA	NA	NA	NA	NA	NA
Beryllium	0.004	0.0004	NA	NA	NA	NA	NA	NA	NA
Cadmium	0.005	0.0005	NA	NA	NA	NA	NA	NA	NA
Chromium	0.1	0.01	NA	NA	NA	NA	NA	NA	NA
Copper	1.3	0.13	NA	NA	NA	NA	NA	NA	NA
Iron	0.3	0.15	NA	NA	NA	NA	NA	NA	NA
Lead	0.015	0.0015	NA	NA	NA	NA	NA	NA	NA
Manganese	0.05	0.025	NA	NA	NA	NA	NA	NA	NA
Mercury	0.002	0.0002	NA	NA	NA	NA	NA	NA	NA
Nickel	0.1	0.02	NA	NA	NA	NA	NA	NA	NA
Selenium	0.05	0.01	NA	NA	NA	NA	NA	NA	NA
Sliver	0.05	0.01	NA	NA	NA	NA	NA	NA	NA
Sodium	increase of 10		NA	NA	NA	NA	NA	NA	NA
Thallium	0.002	0.0004	NA	NA	NA	NA	NA	NA	NA
Zinc	5	2.5	NA	NA	NA	NA	NA	NA	NA
Poychlorinated Biphenyls (PCBs) (µg/L):									
Aroclor-1016	--	--	NA	NA	NA	NA	NA	NA	NA
Aroclor-1221	--	--	NA	NA	NA	NA	NA	NA	NA
Aroclor-1232	--	--	NA	NA	NA	NA	NA	NA	NA
Aroclor-1242	--	--	NA	NA	NA	NA	NA	NA	NA
Aroclor-1248	--	--	NA	NA	NA	NA	NA	NA	NA
Aroclor-1254	--	--	NA	NA	NA	NA	NA	NA	NA
Aroclor-1260	--	--	NA	NA	NA	NA	NA	NA	NA
Total PCBs	0.03	0.003	NA	NA	NA	NA	NA	NA	NA
Field Screening Measurements									
pH (lU)	--	--	8.03	7.86	7.43	7.97	8.26	7.96	7.91
Conductivity (uS)	--	--	775	529	622	520	654	826	683
Temperature (°C)	--	--	9.56	10.58	12.1	10.4	10	9.68	12.2
Dissolved Oxygen (ppm)	--	--	3.81	7.26	1.22	1.98	7.75	2.8	3.76
Redox Potential (mV)	--	--	20.1	87.4	155	112.0	-38.0	65.8	117.0

SUMMARY OF CONTAMINATES ANALYZED IN POTABLE WELLS
FORMER TOWN OF NEWTON GRAVEL PIT
MANITOWOC, WISCONSIN

			4159 Silver Creek Rd							4220 Silver Creek Rd	4314 Silver Creek Rd	
			12/12/13	1/6/14	6/4/14	6/4/2014(DUP)	9/8/14	11/10/14	11/10/14 DUP	5/30/14	12/5/13	6/4/14
Analyte	**ES[1]**	**PAL[2]**	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Kitchen Sink	Pump Spigot	Pump Spigot
Volatile Organic Compounds (VOCs) (µg/L):												
Benzene	5	0.5	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24
Bromobenzene	NL	NL	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32
Bromochloromethane	NL	NL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bromodichloromethane	0.6	0.06	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37
Bromoform	4.4	0.44	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35
tert-Butylbenzene	NL	NL	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36
sec-Butylbenzene	NL	NL	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
n-Butylbenzene	NL	NL	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35
Carbon Tetrachloride	5	0.5	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
Chlorobenzene	NL	NL	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24
Chloroethane	400	80	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63
Chloroform	6	0.6	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28
Chloromethane	3	0.3	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81
2-Chlorotoluene	NL	NL	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21
4-Chlorotoluene	NL	NL	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21
1,2-Dibromo-3-chloropropane (DBCP)	0.2	0.02	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88
Dibromochloromethane	60	6	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22
Dibromomethane	NL	NL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,4-Dichlorobenzene	75	15	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
1,3-Dichlorobenzene	600	120	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28
1,2-Dichlorobenzene	600	60	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36
Dichlorodifluoromethane	1000	200	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44
1,2-Dichloroethane	5	0.5	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41
1,1-Dichloroethane	850	85	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
1,1-Dichloroethene	7	0.7	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4
cis-1,2-Dichloroethene	70	7	0.49 J	0.73 J	0.72 J	0.64 J	0.54 J	0.59 J	0.52 J	< 0.38	< 0.38	< 0.38
trans-1,2-Dichloroethene	100	20	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35
1,2-Dichloropropane	5	0.5	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32
2,2-Dichloropropane	NL	NL	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36
1,3-Dichloropropane	NL	NL	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
1,1-Dichloropropene	NL	NL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
cis-1,3-Dichloropropene	0.4	0.04	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
trans-1,3-Dichloropropene	0.4	0.04	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Di-isopropyl ether	NL	NL	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23
EDB (1,2-Dibromoethane)	0.05	0.005	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44
Ethylbenzene	700	140	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55
Hexachlorobutadiene	NL	NL	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5
Isopropylbenzene	NS	NS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
p-Isopropyltoluene	NL	NL	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31
Methylene Chloride	5	0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Methyl tert-butyl ether (MTBE)	60	12	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23
Naphthalene	100	10	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7
n-Propylbenzene	NL	NL	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25
Styrene	100	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1,2,2-Tetrachloroethane	0.2	0.02	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45
1,1,1,2-Tetrachloroethane	70	7	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
Tetrachloroethene	5	0.5	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
Toluene	800	160	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69
1,2,4-Trichlorobenzene	70	14	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98
1,2,3-Trichlorobenzene	NL	NL	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8
1,1,1-Trichloroethane	200	40	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
1,1,2-Trichloroethane	5	0.5	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34
Trichloroethene (TCE)	5	0.5	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
Trichlorofluoromethane	NL	NL	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71
1,2,3-Trichloropropane	60	12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2,4-Trimethylbenzene	--	--	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2
1,3,5-Trimethylbenzene	--	--	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4
Total Trimethylbenzene	480	96	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2
Vinyl Chloride	0.2	0.02	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18
m&p-Xylene	--	--	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69
o-Xylene	--	--	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63
Total Xylenes	2,000	400	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69
RCRA Metals (mg/L)												
Antimony	0.006	0.0012	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Arsenic	0.01	0.001	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Barium	2	0.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Beryllium	0.004	0.0004	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium	0.005	0.0005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium	0.1	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Copper	1.3	0.13	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Iron	0.3	0.15	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead	0.015	0.0015	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese	0.05	0.025	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mercury	0.002	0.0002	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nickel	0.1	0.02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Selenium	0.05	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sliver	0.05	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sodium	increase of 10		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Thallium	0.002	0.0004	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Zinc	5	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Poychlorinated Biphenyls (PCBs) (µg/L):												
Aroclor-1016	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1221	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1232	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1242	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1248	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1254	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1260	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total PCBs	0.03	0.003	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Field Screening Measurements												
pH (lU)	--	--	8.75	7.99	7.53	7.53	7.53	7.93	7.93	7.11	8.05	7.48
Conductivity (uS)	--	--	979	593	562	562	562	562	562	835	956	958
Temperature (°C)	--	--	9.8	9.72	12.4	12.4	12.4	11.23	11.23	11.4	8.64	11.7
Dissolved Oxygen (ppm)	--	--	2.59	5.87	2.3	2.3	2.3	4.12	4.12	4.54	7.32	2.97
Redox Potential (mV)	--	--	101.0	135.2	146	146	146	-63.9	-63.9	145.0	87.0	168.0

SUMMARY OF CONTAMINATES ANALYZED IN POTABLE WELLS
FORMER TOWN OF NEWTON GRAVEL PIT
MANITOWOC, WISCONSIN

			4315 Silver Creek Rd		4609 Silver Creek Rd		4620 Silver Creek Rd.				4752 Silver Creek Rd	
			12/12/13	6/2/14	12/3/13	6/3/14	11/8/13	11/12/13	5/28/14	5/28/14	12/5/13	6/2/14
Analyte	ES[1]	PAL[2]	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	House-Outside	Barn-Inside	House-Outside	Barn-Inside	Kitchen Sink	Kitchen Sink
Volatile Organic Compounds (VOCs) (µg/L):												
Benzene	5	0.5	< 0.24	< 0.24	< 0.15	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24
Bromobenzene	NL	NL	< 0.32	< 0.32	< 0.15	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32
Bromochloromethane	NL	NL	NA	NA	< 0.15	NA	NA	NA	NA	NA	NA	NA
Bromodichloromethane	0.6	0.06	< 0.37	< 0.37	< 0.15	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37
Bromoform	4.4	0.44	< 0.35	< 0.35	< 0.15	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35
tert-Butylbenzene	NL	NL	< 0.36	< 0.36	< 0.15	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36
sec-Butylbenzene	NL	NL	< 0.33	< 0.33	< 0.15	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
n-Butylbenzene	NL	NL	< 0.35	< 0.35	< 0.15	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35
Carbon Tetrachloride	5	0.5	< 0.33	< 0.33	< 0.15	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
Chlorobenzene	NL	NL	< 0.24	< 0.24	< 0.15	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24
Chloroethane	400	80	< 0.63	< 0.63	< 0.15	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63
Chloroform	6	0.6	< 0.28	< 0.28	< 0.15	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28
Chloromethane	3	0.3	< 0.81	< 0.81	< 0.15	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81
2-Chlorotoluene	NL	NL	< 0.21	< 0.21	< 0.15	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21
4-Chlorotoluene	NL	NL	< 0.21	< 0.21	< 0.15	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21
1,2-Dibromo-3-chloropropane (DBCP)	0.2	0.02	< 0.88	< 0.88	< 0.20	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88
Dibromochloromethane	60	6	< 0.22	< 0.22	< 0.15	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22
Dibromomethane	NL	NL	NA	NA	< 0.15	NA	NA	NA	NA	NA	NA	NA
1,4-Dichlorobenzene	75	15	< 0.3	< 0.3	< 0.15	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
1,3-Dichlorobenzene	600	120	< 0.28	< 0.28	< 0.15	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28
1,2-Dichlorobenzene	600	60	< 0.36	< 0.36	< 0.15	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36
Dichlorodifluoromethane	1000	200	< 0.44	< 0.44	< 0.20	< 0.44	< 0.44	< 0.44	< 0.44	0.45 J	< 0.44	< 0.44
1,2-Dichloroethane	5	0.5	< 0.41	< 0.41	< 0.15	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41
1,1-Dichloroethane	850	85	< 0.3	< 0.3	< 0.15	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
1,1-Dichloroethene	7	0.7	< 0.4	< 0.4	< 0.15	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4
cis-1,2-Dichloroethene	70	7	< 0.38	< 0.38	< 0.15	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38
trans-1,2-Dichloroethene	100	20	< 0.35	< 0.35	< 0.15	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35
1,2-Dichloropropane	5	0.5	< 0.32	< 0.32	< 0.15	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32
2,2-Dichloropropane	NL	NL	< 0.36	< 0.36	< 0.15	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36
1,3-Dichloropropane	NL	NL	< 0.33	< 0.33	< 0.15	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
1,1-Dichloropropene	NL	NL	NA	NA	< 0.15	NA	NA	NA	NA	NA	NA	NA
cis-1,3-Dichloropropene	0.4	0.04	NA	NA	< 0.15	NA	NA	NA	NA	NA	NA	NA
trans-1,3-Dichloropropene	0.4	0.04	NA	NA	< 0.15	NA	NA	NA	NA	NA	NA	NA
Di-isopropyl ether	NL	NL	< 0.23	< 0.23	NA	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23
EDB (1,2-Dibromoethane)	0.05	0.005	< 0.44	< 0.44	< 0.15	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44
Ethylbenzene	700	140	< 0.55	< 0.55	< 0.15	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55
Hexachlorobutadiene	NL	NL	< 1.5	< 1.5	< 0.15	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5
Isopropylbenzene	NS	NS	< 0.3	< 0.3	< 0.15	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
p-Isopropyltoluene	NL	NL	< 0.31	< 0.31	< 0.15	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31
Methylene Chloride	5	0.5	< 0.5	< 0.5	< 0.15	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Methyl tert-butyl ether (MTBE)	60	12	< 0.23	< 0.23	< 0.15	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23
Naphthalene	100	10	< 1.7	< 1.7	< 0.15	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7
n-Propylbenzene	NL	NL	< 0.25	< 0.25	< 0.15	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25
Styrene	100	10	NA	NA	< 0.15	NA	NA	NA	NA	NA	NA	NA
1,1,2,2-Tetrachloroethane	0.2	0.02	< 0.45	< 0.45	< 0.20	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45
1,1,1,2-Tetrachloroethane	70	7	< 0.33	< 0.33	< 0.15	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
Tetrachloroethene	5	0.5	< 0.33	< 0.33	< 0.15	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
Toluene	800	160	< 0.69	< 0.69	< 0.15	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69
1,2,4-Trichlorobenzene	70	14	< 0.98	< 0.98	< 0.15	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98
1,2,3-Trichlorobenzene	NL	NL	< 1.8	< 1.8	< 0.15	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8
1,1,1-Trichloroethane	200	40	< 0.33	< 0.33	< 0.15	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
1,1,2-Trichloroethane	5	0.5	< 0.34	< 0.34	< 0.15	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34
Trichloroethene (TCE)	5	0.5	< 0.33	< 0.33	< 0.15	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
Trichlorofluoromethane	NL	NL	< 0.71	< 0.71	< 0.15	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71
1,2,3-Trichloropropane	60	12	NA	NA	< 0.15	NA	NA	NA	NA	NA	NA	NA
1,2,4-Trimethylbenzene	--	--	< 2.2	< 2.2	< 0.15	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2
1,3,5-Trimethylbenzene	--	--	< 1.4	< 1.4	< 0.15	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4
Total Trimethylbenzene	480	96	< 2.2	< 2.2	< 0.15	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2
Vinyl Chloride	0.2	0.02	< 0.18	< 0.18	< 0.20	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18
m&p-Xylene	--	--	< 0.69	< 0.69	< 0.15	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69
o-Xylene	--	--	< 0.63	< 0.63	< 0.15	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63
Total Xylenes	2,000	400	< 0.69	< 0.69	< 0.15	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69
RCRA Metals (mg/L)												
Antimony	0.006	0.0012	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Arsenic	0.01	0.001	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Barium	2	0.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Beryllium	0.004	0.0004	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium	0.005	0.0005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium	0.1	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Copper	1.3	0.13	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Iron	0.3	0.15	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead	0.015	0.0015	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese	0.05	0.025	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mercury	0.002	0.0002	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nickel	0.1	0.02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Selenium	0.05	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sliver	0.05	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sodium	increase of 10		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Thallium	0.002	0.0004	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Zinc	5	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Poychlorinated Biphenyls (PCBs) (µg/L):												
Aroclor-1016	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1221	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1232	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1242	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1248	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1254	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1260	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total PCBs	0.03	0.003	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Field Screening Measurements												
pH (IU)	--	--	8.32	7.38	NM	7.25	7.84	7.53	7.84	7.68	7.39	7.64
Conductivity (uS)	--	--	789	545	NM	526	534	493	614	576	535	530
Temperature (°C)	--	--	6.8	12.3	NM	12.4	10.58	8.23	10.2	8.2	12.19	12.1
Dissolved Oxygen (ppm)	--	--	4.01	1.91	NM	2.61	10.33	3.49	0.99	4.3	5.22	1.21
Redox Potential (mV)	--	--	105	111	NM	165	86.7	114.5	89	88	69.9	138

SUMMARY OF CONTAMINATES ANALYZED IN POTABLE WELLS
FORMER TOWN OF NEWTON GRAVEL PIT
MANITOWOC, WISCONSIN

			4808 Silver Creek Rd		5202 Silver Creek Rd.		2706 CTH CR	2716 CTH CR		2717 CTH CR(4141 Viebahn St.)			
			12/5/13	5/30/14	1/9/08	12/5/13	8/26/14	9/8/14	11/18/14	8/25/14	9/8/14	9/8/2014(DUP)	11/10/14
Analyte	**ES[1]**	**PAL[2]**	Pump Spigot	Pump Spigot	Hose Bib	Inside Barn	Outside Spigot	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank
Volatile Organic Compounds (VOCs) (µg/L):													
Benzene	5	0.5	< 0.24	< 0.24	< 0.47	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24
Bromobenzene	NL	NL	< 0.32	< 0.32	< 0.36	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32
Bromochloromethane	NL	NL	NA	NA	< NA	NA	NA	NA	NA	NA	NA	NA	NA
Bromodichloromethane	0.6	0.06	< 0.37	< 0.37	< 0.5	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37
Bromoform	4.4	0.44	< 0.35	< 0.35	< 0.38	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35
tert-Butylbenzene	NL	NL	< 0.36	< 0.36	< 0.34	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36
sec-Butylbenzene	NL	NL	< 0.33	< 0.33	< 0.36	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
n-Butylbenzene	NL	NL	< 0.35	< 0.35	< 0.52	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35
Carbon Tetrachloride	5	0.5	< 0.33	< 0.33	< 0.46	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
Chlorobenzene	NL	NL	< 0.24	< 0.24	< 0.31	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24
Chloroethane	400	80	< 0.63	< 0.63	< 0.47	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63
Chloroform	6	0.6	< 0.28	< 0.28	< 0.48	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28
Chloromethane	3	0.3	< 0.81	< 0.81	< 1	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81
2-Chlorotoluene	NL	NL	< 0.21	< 0.21	< 0.49	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21
4-Chlorotoluene	NL	NL	< 0.21	< 0.21	< 0.38	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21
1,2-Dibromo-3-chloropropane (DBCP)	0.2	0.02	< 0.88	< 0.88	< 1.4	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88
Dibromochloromethane	60	6	< 0.22	< 0.22	< 0.32	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22
Dibromomethane	NL	NL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,4-Dichlorobenzene	75	15	< 0.3	< 0.3	< 0.33	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
1,3-Dichlorobenzene	600	120	< 0.28	< 0.28	< 0.3	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28
1,2-Dichlorobenzene	600	60	< 0.36	< 0.36	< 0.35	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36
Dichlorodifluoromethane	1000	200	< 0.44	< 0.44	< 0.46	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44
1,2-Dichloroethane	5	0.5	< 0.41	< 0.41	< 0.45	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41
1,1-Dichloroethane	850	85	< 0.3	< 0.3	< 0.56	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
1,1-Dichloroethene	7	0.7	< 0.4	< 0.4	< 0.64	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4
cis-1,2-Dichloroethene	70	7	< 0.38	< 0.38	< 0.7	< 0.38	< 0.38	< 0.38	< 0.38	1.4	1.31	1.44	1.3
trans-1,2-Dichloroethene	100	20	< 0.35	< 0.35	< 0.95	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35
1,2-Dichloropropane	5	0.5	< 0.32	< 0.32	< 0.47	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32
2,2-Dichloropropane	NL	NL	< 0.36	< 0.36	< 0.98	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36
1,3-Dichloropropane	NL	NL	< 0.33	< 0.33	< 0.39	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
1,1-Dichloropropene	NL	NL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
cis-1,3-Dichloropropene	0.4	0.04	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
trans-1,3-Dichloropropene	0.4	0.04	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Di-isopropyl ether	NL	NL	< 0.23	< 0.23	< 1.3	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23
EDB (1,2-Dibromoethane)	0.05	0.005	< 0.44	< 0.44	< 0.49	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44
Ethylbenzene	700	140	< 0.55	< 0.55	< 0.38	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55
Hexachlorobutadiene	NL	NL	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5
Isopropylbenzene	NS	NS	< 0.3	< 0.3	< 0.48	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
p-Isopropyltoluene	NL	NL	< 0.31	< 0.31	< 0.35	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31
Methylene Chloride	5	0.5	< 0.5	< 0.5	< 0.69	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Methyl tert-butyl ether (MTBE)	60	12	< 0.23	< 0.23	< 0.52	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23
Naphthalene	100	10	< 1.7	< 1.7	< 1.8	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7
n-Propylbenzene	NL	NL	< 0.25	< 0.25	< 0.38	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25
Styrene	100	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1,2,2-Tetrachloroethane	0.2	0.02	< 0.45	< 0.45	< 0.75	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45
1,1,1,2-Tetrachloroethane	70	7	< 0.33	< 0.33	< 0.65	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
Tetrachloroethene	5	0.5	< 0.33	< 0.33	< 0.52	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
Toluene	800	160	< 0.69	< 0.69	< 0.46	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69
1,2,4-Trichlorobenzene	70	14	< 0.98	< 0.98	< 1.5	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98
1,2,3-Trichlorobenzene	NL	NL	< 1.8	< 1.8	< 1.6	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8
1,1,1-Trichloroethane	200	40	< 0.33	< 0.33	< 0.5	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
1,1,2-Trichloroethane	5	0.5	< 0.34	< 0.34	< 0.5	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34
Trichloroethene (TCE)	5	0.5	< 0.33	< 0.33	< 0.44	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
Trichlorofluoromethane	NL	NL	< 0.71	< 0.71	< 0.61	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71
1,2,3-Trichloropropane	60	12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2,4-Trimethylbenzene	--	--	< 2.2	< 2.2	< 1.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2
1,3,5-Trimethylbenzene	--	--	< 1.4	< 1.4	< 0.37	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4
Total Trimethylbenzene	480	96	< 2.2	< 2.2	< 1.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2
Vinyl Chloride	0.2	0.02	< 0.18	< 0.18	< 0.2	< 0.18	< 0.18	< 0.18	< 0.18	**0.21 J**	**0.29 J**	**0.31 J**	**0.39 J**
m&p-Xylene	--	--	< 0.69	< 0.69	< 0.67	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69
o-Xylene	--	--	< 0.63	< 0.63	< 0.32	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63
Total Xylenes	2,000	400	< 0.69	< 0.69	< 0.67	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69
RCRA Metals (mg/L)													
Antimony	0.006	0.0012	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Arsenic	0.01	0.001	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Barium	2	0.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Beryllium	0.004	0.0004	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium	0.005	0.0005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium	0.1	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Copper	1.3	0.13	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Iron	0.3	0.15	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead	0.015	0.0015	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese	0.05	0.025	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mercury	0.002	0.0002	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nickel	0.1	0.02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Selenium	0.05	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sliver	0.05	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sodium	increase of 10		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Thallium	0.002	0.0004	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Zinc	5	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Poychlorinated Biphenyls (PCBs) (µg/L):													
Aroclor-1016	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1221	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1232	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1242	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1248	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1254	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1260	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total PCBs	0.03	0.003	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Field Screening Measurements													
pH (IU)	--	--	6.54	7.69	NM	8.72	7.59	7.59	8.61	8.03	7.87	7.87	7.95
Conductivity (uS)	--	--	588	538	NM	609	540	658	374	640	721	721	625
Temperature (ºC)	--	--	8.93	11.4	NM	7.50	14.20	12.83	8.45	8.03	9.15	9.15	12.28
Dissolved Oxygen (ppm)	--	--	7.21	1.58	NM	5.32	1.76	2.11	7.32	2.28	1.73	1.73	3.39
Redox Potential (mV)	--	--	83.4	137	NM	81.1	227	131	20.6	239	221	221	-65

SUMMARY OF CONTAMINATES ANALYZED IN POTABLE WELLS
FORMER TOWN OF NEWTON GRAVEL PIT
MANITOWOC, WISCONSIN

			2734(2804) CTH CR					2832/2904 CTH CR		2911 CTH CR
			6/3/14	8/25/14	11/10/14	11/25/14	11/25/2014 (DUP)	2/4/14	6/3/14	5/29/14
Analyte	**ES[1]**	**PAL[2]**	Garage Spigot	Garage Spigot	Garage Spigot	Garage Spigot	Garage Spigot	Kitchen Sink	Kitchen Sink	Pressure Tank
Volatile Organic Compounds (VOCs) (µg/L):										
Benzene	5	0.5	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24
Bromobenzene	NL	NL	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32
Bromochloromethane	NL	NL	NA	NA	NA	NA	NA	NA	NA	NA
Bromodichloromethane	0.6	0.06	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37
Bromoform	4.4	0.44	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35
tert-Butylbenzene	NL	NL	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36
sec-Butylbenzene	NL	NL	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
n-Butylbenzene	NL	NL	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35
Carbon Tetrachloride	5	0.5	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
Chlorobenzene	NL	NL	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24
Chloroethane	400	80	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63
Chloroform	6	0.6	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28
Chloromethane	3	0.3	< 0.81	< 0.81	< 0.81	< 0.81	24.3	< 0.81	< 0.81	< 0.81
2-Chlorotoluene	NL	NL	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21
4-Chlorotoluene	NL	NL	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21
1,2-Dibromo-3-chloropropane (DBCP)	0.2	0.02	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88
Dibromochloromethane	60	6	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22
Dibromomethane	NL	NL	NA	NA	NA	NA	NA	NA	NA	NA
1,4-Dichlorobenzene	75	15	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
1,3-Dichlorobenzene	600	120	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28
1,2-Dichlorobenzene	600	60	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36
Dichlorodifluoromethane	1000	200	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44
1,2-Dichloroethane	5	0.5	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41
1,1-Dichloroethane	850	85	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
1,1-Dichloroethene	7	0.7	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4
cis-1,2-Dichloroethene	70	7	0.77 J	0.77 J	0.63 J	0.93 J	1.02 J	< 0.38	< 0.38	< 0.38
trans-1,2-Dichloroethene	100	20	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35
1,2-Dichloropropane	5	0.5	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32
2,2-Dichloropropane	NL	NL	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36
1,3-Dichloropropane	NL	NL	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
1,1-Dichloropropene	NL	NL	NA	NA	NA	NA	NA	NA	NA	NA
cis-1,3-Dichloropropene	0.4	0.04	NA	NA	NA	NA	NA	NA	NA	NA
trans-1,3-Dichloropropene	0.4	0.04	NA	NA	NA	NA	NA	NA	NA	NA
Di-isopropyl ether	NL	NL	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23
EDB (1,2-Dibromoethane)	0.05	0.005	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44
Ethylbenzene	700	140	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55
Hexachlorobutadiene	NL	NL	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5
Isopropylbenzene	NS	NS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
p-Isopropyltoluene	NL	NL	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31
Methylene Chloride	5	0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Methyl tert-butyl ether (MTBE)	60	12	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23
Naphthalene	100	10	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7
n-Propylbenzene	NL	NL	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25
Styrene	100	10	NA	NA	NA	NA	NA	NA	NA	NA
1,1,2,2-Tetrachloroethane	0.2	0.02	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45
1,1,1,2-Tetrachloroethane	70	7	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
Tetrachloroethene	5	0.5	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
Toluene	800	160	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69
1,2,4-Trichlorobenzene	70	14	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98
1,2,3-Trichlorobenzene	NL	NL	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8
1,1,1-Trichloroethane	200	40	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
1,1,2-Trichloroethane	5	0.5	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34
Trichloroethene (TCE)	5	0.5	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
Trichlorofluoromethane	NL	NL	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71
1,2,3-Trichloropropane	60	12	NA	NA	NA	NA	NA	NA	NA	NA
1,2,4-Trimethylbenzene	--	--	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2
1,3,5-Trimethylbenzene	--	--	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4
Total Trimethylbenzene	480	96	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2
Vinyl Chloride	0.2	0.02	< 0.18	< 0.18	**0.26 J**	**0.38 J**	**0.43 J**	< 0.18	< 0.18	< 0.18
m&p-Xylene	--	--	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69
o-Xylene	--	--	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63
Total Xylenes	2,000	400	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69
RCRA Metals (mg/L)										
Antimony	0.006	0.0012	NA	NA	NA	NA	NA	NA	NA	NA
Arsenic	0.01	0.001	NA	NA	NA	NA	NA	NA	NA	NA
Barium	2	0.4	NA	NA	NA	NA	NA	NA	NA	NA
Beryllium	0.004	0.0004	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium	0.005	0.0005	NA	NA	NA	NA	NA	NA	NA	NA
Chromium	0.1	0.01	NA	NA	NA	NA	NA	NA	NA	NA
Copper	1.3	0.13	NA	NA	NA	NA	NA	NA	NA	NA
Iron	0.3	0.15	NA	NA	NA	NA	NA	NA	NA	NA
Lead	0.015	0.0015	NA	NA	NA	NA	NA	NA	NA	NA
Manganese	0.05	0.025	NA	NA	NA	NA	NA	NA	NA	NA
Mercury	0.002	0.0002	NA	NA	NA	NA	NA	NA	NA	NA
Nickel	0.1	0.02	NA	NA	NA	NA	NA	NA	NA	NA
Selenium	0.05	0.01	NA	NA	NA	NA	NA	NA	NA	NA
Sliver	0.05	0.01	NA	NA	NA	NA	NA	NA	NA	NA
Sodium	increase of 10		NA	NA	NA	NA	NA	NA	NA	NA
Thallium	0.002	0.0004	NA	NA	NA	NA	NA	NA	NA	NA
Zinc	5	2.5	NA	NA	NA	NA	NA	NA	NA	NA
Poychlorinated Biphenyls (PCBs) (µg/L):										
Aroclor-1016	--	--	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1221	--	--	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1232	--	--	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1242	--	--	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1248	--	--	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1254	--	--	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1260	--	--	NA	NA	NA	NA	NA	NA	NA	NA
Total PCBs	0.03	0.003	NA	NA	NA	NA	NA	NA	NA	NA
Field Screening Measurements										
pH (IU)	--	--	7.32	8.01	7.87	NM	NM	7.32	7.6	7.19
Conductivity (uS)	--	--	485	606	661	NM	NM	411	588	727
Temperature (°C)	--	--	12.20	15.50	10.42	NM	NM	6.61	14.50	11.70
Dissolved Oxygen (ppm)	--	--	0.97	0.96	1.79	NM	NM	NM	2.35	2.98
Redox Potential (mV)	--	--	161	237	-99.4	NM	NM	95.2	167	115

SUMMARY OF CONTAMINATES ANALYZED IN POTABLE WELLS
FORMER TOWN OF NEWTON GRAVEL PIT
MANITOWOC, WISCONSIN

Analyte	ES[1]	PAL[2]	2916 CTH CR					2917 CTH CR	
			2/4/14	5/28/14	8/25/14	11/10/14	11/25/14	2/4/14	5/30/14
			Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Kitchen Sink	Kitchen Sink
Volatile Organic Compounds (VOCs) (µg/L):									
Benzene	5	0.5	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24
Bromobenzene	NL	NL	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32
Bromochloromethane	NL	NL	NA	NA	NA	NA	NA	NA	NA
Bromodichloromethane	0.6	0.06	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37
Bromoform	4.4	0.44	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35
tert-Butylbenzene	NL	NL	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36
sec-Butylbenzene	NL	NL	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
n-Butylbenzene	NL	NL	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35
Carbon Tetrachloride	5	0.5	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
Chlorobenzene	NL	NL	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24
Chloroethane	400	80	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63
Chloroform	6	0.6	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28
Chloromethane	3	0.3	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81
2-Chlorotoluene	NL	NL	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21
4-Chlorotoluene	NL	NL	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21
1,2-Dibromo-3-chloropropane (DBCP)	0.2	0.02	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88
Dibromochloromethane	60	6	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22
Dibromomethane	NL	NL	NA	NA	NA	NA	NA	NA	NA
1,4-Dichlorobenzene	75	15	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
1,3-Dichlorobenzene	600	120	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28
1,2-Dichlorobenzene	600	60	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36
Dichlorodifluoromethane	1000	200	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44
1,2-Dichloroethane	5	0.5	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41
1,1-Dichloroethane	850	85	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
1,1-Dichloroethene	7	0.7	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4
cis-1,2-Dichloroethene	70	7	0.97 J	0.9 J	1.02 J	0.74 J	0.82 J	< 0.38	< 0.38
trans-1,2-Dichloroethene	100	20	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35
1,2-Dichloropropane	5	0.5	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32
2,2-Dichloropropane	NL	NL	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36
1,3-Dichloropropane	NL	NL	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
1,1-Dichloropropene	NL	NL	NA	NA	NA	NA	NA	NA	NA
cis-1,3-Dichloropropene	0.4	0.04	NA	NA	NA	NA	NA	NA	NA
trans-1,3-Dichloropropene	0.4	0.04	NA	NA	NA	NA	NA	NA	NA
Di-isopropyl ether	NL	NL	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23
EDB (1,2-Dibromoethane)	0.05	0.005	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44
Ethylbenzene	700	140	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55
Hexachlorobutadiene	NL	NL	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5
Isopropylbenzene	NS	NS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
p-Isopropyltoluene	NL	NL	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31
Methylene Chloride	5	0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Methyl tert-butyl ether (MTBE)	60	12	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23
Naphthalene	100	10	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7
n-Propylbenzene	NL	NL	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25
Styrene	100	10	NA	NA	NA	NA	NA	NA	NA
1,1,2,2-Tetrachloroethane	0.2	0.02	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45
1,1,1,2-Tetrachloroethane	70	7	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
Tetrachloroethene	5	0.5	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
Toluene	800	160	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69
1,2,4-Trichlorobenzene	70	14	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98
1,2,3-Trichlorobenzene	NL	NL	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8
1,1,1-Trichloroethane	200	40	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
1,1,2-Trichloroethane	5	0.5	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34
Trichloroethene (TCE)	5	0.5	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
Trichlorofluoromethane	NL	NL	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71
1,2,3-Trichloropropane	60	12	NA	NA	NA	NA	NA	NA	NA
1,2,4-Trimethylbenzene	--	--	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2
1,3,5-Trimethylbenzene	--	--	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4
Total Trimethylbenzene	480	96	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2
Vinyl Chloride	0.2	0.02	**0.18 J**	< 0.18	< 0.18	**0.28 J**	**0.37 J**	< 0.18	< 0.18
m&p-Xylene	--	--	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69
o-Xylene	--	--	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63
Total Xylenes	2,000	400	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69
RCRA Metals (mg/L)									
Antimony	0.006	0.0012	NA	NA	NA	NA	NA	NA	NA
Arsenic	0.01	0.001	NA	NA	NA	NA	NA	NA	NA
Barium	2	0.4	NA	NA	NA	NA	NA	NA	NA
Beryllium	0.004	0.0004	NA	NA	NA	NA	NA	NA	NA
Cadmium	0.005	0.0005	NA	NA	NA	NA	NA	NA	NA
Chromium	0.1	0.01	NA	NA	NA	NA	NA	NA	NA
Copper	1.3	0.13	NA	NA	NA	NA	NA	NA	NA
Iron	0.3	0.15	NA	NA	NA	NA	NA	NA	NA
Lead	0.015	0.0015	NA	NA	NA	NA	NA	NA	NA
Manganese	0.05	0.025	NA	NA	NA	NA	NA	NA	NA
Mercury	0.002	0.0002	NA	NA	NA	NA	NA	NA	NA
Nickel	0.1	0.02	NA	NA	NA	NA	NA	NA	NA
Selenium	0.05	0.01	NA	NA	NA	NA	NA	NA	NA
Sliver	0.05	0.01	NA	NA	NA	NA	NA	NA	NA
Sodium	increase of 10		NA	NA	NA	NA	NA	NA	NA
Thallium	0.002	0.0004	NA	NA	NA	NA	NA	NA	NA
Zinc	5	2.5	NA	NA	NA	NA	NA	NA	NA
Poychlorinated Biphenyls (PCBs) (µg/L):									
Aroclor-1016	--	--	NA	NA	NA	NA	NA	NA	NA
Aroclor-1221	--	--	NA	NA	NA	NA	NA	NA	NA
Aroclor-1232	--	--	NA	NA	NA	NA	NA	NA	NA
Aroclor-1242	--	--	NA	NA	NA	NA	NA	NA	NA
Aroclor-1248	--	--	NA	NA	NA	NA	NA	NA	NA
Aroclor-1254	--	--	NA	NA	NA	NA	NA	NA	NA
Aroclor-1260	--	--	NA	NA	NA	NA	NA	NA	NA
Total PCBs	0.03	0.003	NA	NA	NA	NA	NA	NA	NA
Field Screening Measurements									
pH (lU)	--	--	7.35	12.6	7.53	7.91	NM	7.32	7.82
Conductivity (uS)	--	--	396	1329	NM	601	NM	962	1709
Temperature (°C)	--	--	9.60	12.60	11.50	10.50	NM	9.01	11.90
Dissolved Oxygen (ppm)	--	--	5.32	1.5	1.73	1.64	NM	NM	1.22
Redox Potential (mV)	--	--	110	121	138	-85.3	NM	113.2	134

SUMMARY OF CONTAMINATES ANALYZED IN POTABLE WELLS
FORMER TOWN OF NEWTON GRAVEL PIT
MANITOWOC, WISCONSIN

			3023 CTH CR					3120 CTH CR							
			Original Potable Well			Replacement Potable Well		Original Potable Well						Replacement Potable Well	
			2/4/14	6/2/14	8/25/14	10/8/14	11/4/14	1/3/14	2/4/14	5/28/14	5/28/2014(DUP)	8/25/14	8/25/2014(DUP)	10/8/14	11/4/14
Analyte	ES[1]	PAL[2]	Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank
Volatile Organic Compounds (VOCs) (µg/L):															
Benzene	5	0.5	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24
Bromobenzene	NL	NL	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32
Bromochloromethane	NL	NL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bromodichloromethane	0.6	0.06	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37
Bromoform	4.4	0.44	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35
tert-Butylbenzene	NL	NL	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36
sec-Butylbenzene	NL	NL	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
n-Butylbenzene	NL	NL	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35
Carbon Tetrachloride	5	0.5	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
Chlorobenzene	NL	NL	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24
Chloroethane	400	80	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63
Chloroform	6	0.6	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28
Chloromethane	3	0.3	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81
2-Chlorotoluene	NL	NL	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21
4-Chlorotoluene	NL	NL	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21
1,2-Dibromo-3-chloropropane (DBCP)	0.2	0.02	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88
Dibromochloromethane	60	6	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22
Dibromomethane	NL	NL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,4-Dichlorobenzene	75	15	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
1,3-Dichlorobenzene	600	120	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28
1,2-Dichlorobenzene	600	60	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36
Dichlorodifluoromethane	1000	200	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44
1,2-Dichloroethane	5	0.5	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41
1,1-Dichloroethane	850	85	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
1,1-Dichloroethene	7	0.7	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4
cis-1,2-Dichloroethene	70	7	2.84	2.87	2.34	< 0.38	< 0.38	2.74	2.86	2.65	2.68	1.89	2.23	< 0.38	< 0.38
trans-1,2-Dichloroethene	100	20	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35
1,2-Dichloropropane	5	0.5	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32
2,2-Dichloropropane	NL	NL	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36
1,3-Dichloropropane	NL	NL	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
1,1-Dichloropropene	NL	NL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
cis-1,3-Dichloropropene	0.4	0.04	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
trans-1,3-Dichloropropene	0.4	0.04	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Di-isopropyl ether	NL	NL	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23
EDB (1,2-Dibromoethane)	0.05	0.005	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44
Ethylbenzene	700	140	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55
Hexachlorobutadiene	NL	NL	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5
Isopropylbenzene	NS	NS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
p-Isopropyltoluene	NL	NL	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31
Methylene Chloride	5	0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Methyl tert-butyl ether (MTBE)	60	12	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23
Naphthalene	100	10	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7
n-Propylbenzene	NL	NL	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25
Styrene	100	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1,2,2-Tetrachloroethane	0.2	0.02	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45
1,1,1,2-Tetrachloroethane	70	7	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
Tetrachloroethene	5	0.5	0 0.33	0 0.33	0 0.33	0 0.33	0 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
Toluene	800	160	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69
1,2,4-Trichlorobenzene	70	14	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98
1,2,3-Trichlorobenzene	NL	NL	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8
1,1,1-Trichloroethane	200	40	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
1,1,2-Trichloroethane	5	0.5	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34
Trichloroethene (TCE)	5	0.5	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
Trichlorofluoromethane	NL	NL	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71
1,2,3-Trichloropropane	60	12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2,4-Trimethylbenzene	--	--	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2
1,3,5-Trimethylbenzene	--	--	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4
Total Trimethylbenzene	480	96	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2
Vinyl Chloride	0.2	0.02	**0.55 J**	**0.41 J**	**0.33 J**	< 0.18	< 0.18	**0.60**	**0.43 J**	**0.35 J**	**0.26 J**	**0.27 J**	**0.24 J**	< 0.18	< 0.18
m&p-Xylene	--	--	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69
o-Xylene	--	--	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63
Total Xylenes	2,000	400	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69
RCRA Metals (mg/L)															
Antimony	0.006	0.0012	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Arsenic	0.01	0.001	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Barium	2	0.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Beryllium	0.004	0.0004	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium	0.005	0.0005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium	0.1	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Copper	1.3	0.13	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Iron	0.3	0.15	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead	0.015	0.0015	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese	0.05	0.025	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mercury	0.002	0.0002	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nickel	0.1	0.02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Selenium	0.05	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sliver	0.05	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sodium	increase of 10		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Thallium	0.002	0.0004	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Zinc	5	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Poychlorinated Biphenyls (PCBs) (µg/L):															
Aroclor-1016	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1221	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1232	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1242	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1248	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1254	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1260	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total PCBs	0.03	0.003	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Field Screening Measurements															
pH (IU)	--	--	7.32	7.42	7.75	NM	7.7	7.51	7.38	7.8	7.8	7.91	7.91	NM	7.61
Conductivity (uS)	--	--	404	562	619	NM	2352	566	570	616	616	649	649	NM	2177
Temperature (°C)	--	--	9.16	11.10	12.80	NM	10.30	8.27	8.04	11.20	11.20	7.91	7.91	NM	10.30
Dissolved Oxygen (ppm)	--	--	NM	1.5	0.87	NM	2.21	5.32	5.32	4.79	4.79	1.24	1.24	NM	3.21
Redox Potential (mV)	--	--	113.2	152	222	NM	-126.3	158.1	157.3	111	111	247	247	NM	-135.6

SUMMARY OF CONTAMINATES ANALYZED IN POTABLE WELLS
FORMER TOWN OF NEWTON GRAVEL PIT
MANITOWOC, WISCONSIN

			3224 CTH CR				3312 CTH CR				3322 CTH CR			
			2/4/14	6/4/14	8/25/14	11/17/14	2/26/14	6/2/14	8/26/14	11/10/14	1/6/14	6/4/14	8/25/14	11/10/14
Analyte	**ES[1]**	**PAL[2]**	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Bath Tub	Bath Tub	Outside Spigot	Outside Spigot	Kitchen Sink	Kitchen Sink	Kitchen Sink	Kitchen Sink
Volatile Organic Compounds (VOCs) (µg/L):														
Benzene	5	0.5	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24
Bromobenzene	NL	NL	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32
Bromochloromethane	NL	NL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bromodichloromethane	0.6	0.06	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37
Bromoform	4.4	0.44	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35
tert-Butylbenzene	NL	NL	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36
sec-Butylbenzene	NL	NL	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
n-Butylbenzene	NL	NL	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35
Carbon Tetrachloride	5	0.5	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
Chlorobenzene	NL	NL	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24
Chloroethane	400	80	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63
Chloroform	6	0.6	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28
Chloromethane	3	0.3	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81
2-Chlorotoluene	NL	NL	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21
4-Chlorotoluene	NL	NL	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21
1,2-Dibromo-3-chloropropane (DBCP)	0.2	0.02	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88
Dibromochloromethane	60	6	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22
Dibromomethane	NL	NL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,4-Dichlorobenzene	75	15	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
1,3-Dichlorobenzene	600	120	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28
1,2-Dichlorobenzene	600	60	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36
Dichlorodifluoromethane	1000	200	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44
1,2-Dichloroethane	5	0.5	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41
1,1-Dichloroethane	850	85	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
1,1-Dichloroethene	7	0.7	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4
cis-1,2-Dichloroethene	70	7	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38
trans-1,2-Dichloroethene	100	20	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35
1,2-Dichloropropane	5	0.5	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32
2,2-Dichloropropane	NL	NL	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36
1,3-Dichloropropane	NL	NL	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
1,1-Dichloropropene	NL	NL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
cis-1,3-Dichloropropene	0.4	0.04	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
trans-1,3-Dichloropropene	0.4	0.04	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Di-isopropyl ether	NL	NL	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23
EDB (1,2-Dibromoethane)	0.05	0.005	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44
Ethylbenzene	700	140	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55
Hexachlorobutadiene	NL	NL	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5
Isopropylbenzene	NS	NS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
p-Isopropyltoluene	NL	NL	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31
Methylene Chloride	5	0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Methyl tert-butyl ether (MTBE)	60	12	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23
Naphthalene	100	10	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7
n-Propylbenzene	NL	NL	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25
Styrene	100	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1,2,2-Tetrachloroethane	0.2	0.02	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45
1,1,1,2-Tetrachloroethane	70	7	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
Tetrachloroethene	5	0.5	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
Toluene	800	160	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69
1,2,4-Trichlorobenzene	70	14	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98
1,2,3-Trichlorobenzene	NL	NL	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8
1,1,1-Trichloroethane	200	40	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
1,1,2-Trichloroethane	5	0.5	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34
Trichloroethene (TCE)	5	0.5	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
Trichlorofluoromethane	NL	NL	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71
1,2,3-Trichloropropane	60	12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2,4-Trimethylbenzene	--	--	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2
1,3,5-Trimethylbenzene	--	--	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4
Total Trimethylbenzene	480	96	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2
Vinyl Chloride	0.2	0.02	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18
m&p-Xylene	--	--	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69
o-Xylene	--	--	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63
Total Xylenes	2,000	400	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69
RCRA Metals (mg/L)														
Antimony	0.006	0.0012	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Arsenic	0.01	0.001	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Barium	2	0.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Beryllium	0.004	0.0004	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium	0.005	0.0005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium	0.1	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Copper	1.3	0.13	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Iron	0.3	0.15	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead	0.015	0.0015	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese	0.05	0.025	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mercury	0.002	0.0002	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nickel	0.1	0.02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Selenium	0.05	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sliver	0.05	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sodium	increase of 10		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Thallium	0.002	0.0004	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Zinc	5	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Poychlorinated Biphenyls (PCBs) (µg/L):														
Aroclor-1016	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1221	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1232	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1242	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1248	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1254	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1260	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total PCBs	0.03	0.003	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Field Screening Measurements														
pH (IU)	--	--	NM	7.66	8.17	7.98	NM	7.93	7.75	7.98	7.82	7.9	8.06	8.06
Conductivity (uS)	--	--	383	513	653	598	NM	416	765	2750	417	380	475	475
Temperature (°C)	--	--	9.24	11.50	13.10	8.69	NM	11.8	11.7	10.63	9.08	12.10	14.40	14.40
Dissolved Oxygen (ppm)	--	--	NM	2.87	1.91	2.61	NM	2.48	0.57	3.11	5.32	1.3	0.57	0.57
Redox Potential (mV)	--	--	111.3	170	235	-55.8	NM	87	225	40.3	174.8	151	242	242

SUMMARY OF CONTAMINATES ANALYZED IN POTABLE WELLS
FORMER TOWN OF NEWTON GRAVEL PIT
MANITOWOC, WISCONSIN

Analyte	ES[1]	PAL[2]	3403 CTH CR					
			Original Potable Well				Replacement Potable Well	
			1/3/14	2/5/14	5/28/14	8/25/14	10/21/14	11/4/14
			Kitchen Sink	Kitchen Sink	Kitchen Sink	Kitchen Sink	Kitchen Sink	Kitchen Sink
Volatile Organic Compounds (VOCs) (µg/L):								
Benzene	5	0.5	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24
Bromobenzene	NL	NL	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32
Bromochloromethane	NL	NL	NA	NA	NA	NA	NA	NA
Bromodichloromethane	0.6	0.06	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37
Bromoform	4.4	0.44	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35
tert-Butylbenzene	NL	NL	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36
sec-Butylbenzene	NL	NL	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
n-Butylbenzene	NL	NL	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35
Carbon Tetrachloride	5	0.5	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
Chlorobenzene	NL	NL	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24
Chloroethane	400	80	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63
Chloroform	6	0.6	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28
Chloromethane	3	0.3	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81
2-Chlorotoluene	NL	NL	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21
4-Chlorotoluene	NL	NL	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21
1,2-Dibromo-3-chloropropane (DBCP)	0.2	0.02	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88
Dibromochloromethane	60	6	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22
Dibromomethane	NL	NL	NA	NA	NA	NA	NA	NA
1,4-Dichlorobenzene	75	15	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
1,3-Dichlorobenzene	600	120	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28
1,2-Dichlorobenzene	600	60	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36
Dichlorodifluoromethane	1000	200	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44
1,2-Dichloroethane	5	0.5	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41
1,1-Dichloroethane	850	85	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
1,1-Dichloroethene	7	0.7	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4
cis-1,2-Dichloroethene	70	7	1.3	1.67	1.48	1.34	< 0.38	< 0.38
trans-1,2-Dichloroethene	100	20	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35
1,2-Dichloropropane	5	0.5	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32
2,2-Dichloropropane	NL	NL	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36
1,3-Dichloropropane	NL	NL	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
1,1-Dichloropropene	NL	NL	NA	NA	NA	NA	NA	NA
cis-1,3-Dichloropropene	0.4	0.04	NA	NA	NA	NA	NA	NA
trans-1,3-Dichloropropene	0.4	0.04	NA	NA	NA	NA	NA	NA
Di-isopropyl ether	NL	NL	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23
EDB (1,2-Dibromoethane)	0.05	0.005	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44
Ethylbenzene	700	140	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55
Hexachlorobutadiene	NL	NL	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5
Isopropylbenzene	NS	NS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
p-Isopropyltoluene	NL	NL	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31
Methylene Chloride	5	0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Methyl tert-butyl ether (MTBE)	60	12	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23
Naphthalene	100	10	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7
n-Propylbenzene	NL	NL	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25
Styrene	100	10	NA	NA	NA	NA	NA	NA
1,1,2,2-Tetrachloroethane	0.2	0.02	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45
1,1,1,2-Tetrachloroethane	70	7	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
Tetrachloroethene	5	0.5	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
Toluene	800	160	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69
1,2,4-Trichlorobenzene	70	14	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98
1,2,3-Trichlorobenzene	NL	NL	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8
1,1,1-Trichloroethane	200	40	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
1,1,2-Trichloroethane	5	0.5	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34
Trichloroethene (TCE)	5	0.5	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
Trichlorofluoromethane	NL	NL	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71
1,2,3-Trichloropropane	60	12	NA	NA	NA	NA	NA	NA
1,2,4-Trimethylbenzene	--	--	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2
1,3,5-Trimethylbenzene	--	--	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4
Total Trimethylbenzene	480	96	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2
Vinyl Chloride	0.2	0.02	**0.56 J**	**0.25 J**	**0.22 J**	< 0.18	< 0.18	< 0.18
m&p-Xylene	--	--	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69
o-Xylene	--	--	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63
Total Xylenes	2,000	400	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69
RCRA Metals (mg/L)								
Antimony	0.006	0.0012	NA	NA	NA	NA	NA	NA
Arsenic	0.01	0.001	NA	NA	NA	NA	NA	NA
Barium	2	0.4	NA	NA	NA	NA	NA	NA
Beryllium	0.004	0.0004	NA	NA	NA	NA	NA	NA
Cadmium	0.005	0.0005	NA	NA	NA	NA	NA	NA
Chromium	0.1	0.01	NA	NA	NA	NA	NA	NA
Copper	1.3	0.13	NA	NA	NA	NA	NA	NA
Iron	0.3	0.15	NA	NA	NA	NA	NA	NA
Lead	0.015	0.0015	NA	NA	NA	NA	NA	NA
Manganese	0.05	0.025	NA	NA	NA	NA	NA	NA
Mercury	0.002	0.0002	NA	NA	NA	NA	NA	NA
Nickel	0.1	0.02	NA	NA	NA	NA	NA	NA
Selenium	0.05	0.01	NA	NA	NA	NA	NA	NA
Sliver	0.05	0.01	NA	NA	NA	NA	NA	NA
Sodium	increase of 10		NA	NA	NA	NA	NA	NA
Thallium	0.002	0.0004	NA	NA	NA	NA	NA	NA
Zinc	5	2.5	NA	NA	NA	NA	NA	NA
Poychlorinated Biphenyls (PCBs) (µg/L):								
Aroclor-1016	--	--	NA	NA	NA	NA	NA	NA
Aroclor-1221	--	--	NA	NA	NA	NA	NA	NA
Aroclor-1232	--	--	NA	NA	NA	NA	NA	NA
Aroclor-1242	--	--	NA	NA	NA	NA	NA	NA
Aroclor-1248	--	--	NA	NA	NA	NA	NA	NA
Aroclor-1254	--	--	NA	NA	NA	NA	NA	NA
Aroclor-1260	--	--	NA	NA	NA	NA	NA	NA
Total PCBs	0.03	0.003	NA	NA	NA	NA	NA	NA
Field Screening Measurements								
pH (lU)	--	--	7.51	7.18	7.64	7.74	NM	7.69
Conductivity (uS)	--	--	935	682	1060	1094	NM	2528
Temperature (°C)	--	--	7.63	8.12	10.50	12.90	NM	11.76
Dissolved Oxygen (ppm)	--	--	6.51	5.01	1.19	3.23	NM	1.49
Redox Potential (mV)	--	--	166.6	32.2	84	236	NM	-219.9

SUMMARY OF CONTAMINATES ANALYZED IN POTABLE WELLS
FORMER TOWN OF NEWTON GRAVEL PIT
MANITOWOC, WISCONSIN

Analyte	ES[1]	PAL[2]	3412 CTH CR			3422 CTH CR			
			1/3/14	8/26/14	11/10/14	1/6/14	5/30/14	8/25/14	11/18/14
			Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank
Volatile Organic Compounds (VOCs) (µg/L):									
Benzene	5	0.5	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24
Bromobenzene	NL	NL	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32
Bromochloromethane	NL	NL	NA	NA	NA	NA	NA	NA	NA
Bromodichloromethane	0.6	0.06	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37
Bromoform	4.4	0.44	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35
tert-Butylbenzene	NL	NL	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36
sec-Butylbenzene	NL	NL	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
n-Butylbenzene	NL	NL	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35
Carbon Tetrachloride	5	0.5	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
Chlorobenzene	NL	NL	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24
Chloroethane	400	80	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63
Chloroform	6	0.6	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28
Chloromethane	3	0.3	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81
2-Chlorotoluene	NL	NL	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21
4-Chlorotoluene	NL	NL	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21
1,2-Dibromo-3-chloropropane (DBCP)	0.2	0.02	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88
Dibromochloromethane	60	6	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22
Dibromomethane	NL	NL	NA	NA	NA	NA	NA	NA	NA
1,4-Dichlorobenzene	75	15	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
1,3-Dichlorobenzene	600	120	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28
1,2-Dichlorobenzene	600	60	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36
Dichlorodifluoromethane	1000	200	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44
1,2-Dichloroethane	5	0.5	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41
1,1-Dichloroethane	850	85	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
1,1-Dichloroethene	7	0.7	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4
cis-1,2-Dichloroethene	70	7	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38
trans-1,2-Dichloroethene	100	20	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35
1,2-Dichloropropane	5	0.5	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32
2,2-Dichloropropane	NL	NL	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36
1,3-Dichloropropane	NL	NL	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
1,1-Dichloropropene	NL	NL	NA	NA	NA	NA	NA	NA	NA
cis-1,3-Dichloropropene	0.4	0.04	NA	NA	NA	NA	NA	NA	NA
trans-1,3-Dichloropropene	0.4	0.04	NA	NA	NA	NA	NA	NA	NA
Di-isopropyl ether	NL	NL	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23
EDB (1,2-Dibromoethane)	0.05	0.005	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44
Ethylbenzene	700	140	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55
Hexachlorobutadiene	NL	NL	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5
Isopropylbenzene	NS	NS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
p-Isopropyltoluene	NL	NL	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31
Methylene Chloride	5	0.5	< 0.5	1.56 J	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Methyl tert-butyl ether (MTBE)	60	12	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23
Naphthalene	100	10	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7
n-Propylbenzene	NL	NL	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25
Styrene	100	10	NA	NA	NA	NA	NA	NA	NA
1,1,2,2-Tetrachloroethane	0.2	0.02	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45
1,1,1,2-Tetrachloroethane	70	7	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
Tetrachloroethene	5	0.5	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
Toluene	800	160	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69
1,2,4-Trichlorobenzene	70	14	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98
1,2,3-Trichlorobenzene	NL	NL	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8
1,1,1-Trichloroethane	200	40	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
1,1,2-Trichloroethane	5	0.5	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34
Trichloroethene (TCE)	5	0.5	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
Trichlorofluoromethane	NL	NL	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71
1,2,3-Trichloropropane	60	12	NA	NA	NA	NA	NA	NA	NA
1,2,4-Trimethylbenzene	--	--	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2
1,3,5-Trimethylbenzene	--	--	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4
Total Trimethylbenzene	480	96	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2
Vinyl Chloride	0.2	0.02	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18
m&p-Xylene	--	--	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69
o-Xylene	--	--	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63
Total Xylenes	2,000	400	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69
RCRA Metals (mg/L)									
Antimony	0.006	0.0012	NA	NA	NA	NA	NA	NA	NA
Arsenic	0.01	0.001	NA	NA	NA	NA	NA	NA	NA
Barium	2	0.4	NA	NA	NA	NA	NA	NA	NA
Beryllium	0.004	0.0004	NA	NA	NA	NA	NA	NA	NA
Cadmium	0.005	0.0005	NA	NA	NA	NA	NA	NA	NA
Chromium	0.1	0.01	NA	NA	NA	NA	NA	NA	NA
Copper	1.3	0.13	NA	NA	NA	NA	NA	NA	NA
Iron	0.3	0.15	NA	NA	NA	NA	NA	NA	NA
Lead	0.015	0.0015	NA	NA	NA	NA	NA	NA	NA
Manganese	0.05	0.025	NA	NA	NA	NA	NA	NA	NA
Mercury	0.002	0.0002	NA	NA	NA	NA	NA	NA	NA
Nickel	0.1	0.02	NA	NA	NA	NA	NA	NA	NA
Selenium	0.05	0.01	NA	NA	NA	NA	NA	NA	NA
Sliver	0.05	0.01	NA	NA	NA	NA	NA	NA	NA
Sodium	increase of 10		NA	NA	NA	NA	NA	NA	NA
Thallium	0.002	0.0004	NA	NA	NA	NA	NA	NA	NA
Zinc	5	2.5	NA	NA	NA	NA	NA	NA	NA
Poychlorinated Biphenyls (PCBs) (µg/L):									
Aroclor-1016	--	--	NA	NA	NA	NA	NA	NA	NA
Aroclor-1221	--	--	NA	NA	NA	NA	NA	NA	NA
Aroclor-1232	--	--	NA	NA	NA	NA	NA	NA	NA
Aroclor-1242	--	--	NA	NA	NA	NA	NA	NA	NA
Aroclor-1248	--	--	NA	NA	NA	NA	NA	NA	NA
Aroclor-1254	--	--	NA	NA	NA	NA	NA	NA	NA
Aroclor-1260	--	--	NA	NA	NA	NA	NA	NA	NA
Total PCBs	0.03	0.003	NA	NA	NA	NA	NA	NA	NA
Field Screening Measurements									
pH (lU)	--	--	7.02	7.98	7.95	7.13	7.62	8.07	8
Conductivity (uS)	--	--	909	521	512	627	605	633	653
Temperature (°C)	--	--	8.99	13.60	10.65	8.81	12.30	14.20	10.56
Dissolved Oxygen (ppm)	--	--	5.52	1.25	2.82	5.32	4.07	2.53	7.38
Redox Potential (mV)	--	--	155.0	238.0	-51.5	142.0	1.3	246.0	-84.2

SUMMARY OF CONTAMINATES ANALYZED IN POTABLE WELLS
FORMER TOWN OF NEWTON GRAVEL PIT
MANITOWOC, WISCONSIN

Analyte	ES[1]	PAL[2]	3504 CTH CR									
			12/5/13	1/6/14	1/6/2014 (DUP)	2/5/14	5/30/14	5/30/14(DUP)	8/25/14	8/25/14(DUP)	11/18/14	11/18/2014 (DUP)
			Outside Spigot	Basement	Basement	Basement	Basement	Basement	Basement	Basement	Basement	Basement
Volatile Organic Compounds (VOCs) (µg/L):												
Benzene	5	0.5	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24
Bromobenzene	NL	NL	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32
Bromochloromethane	NL	NL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bromodichloromethane	0.6	0.06	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37
Bromoform	4.4	0.44	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35
tert-Butylbenzene	NL	NL	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36
sec-Butylbenzene	NL	NL	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
n-Butylbenzene	NL	NL	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35
Carbon Tetrachloride	5	0.5	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
Chlorobenzene	NL	NL	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24
Chloroethane	400	80	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63
Chloroform	6	0.6	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28
Chloromethane	3	0.3	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81
2-Chlorotoluene	NL	NL	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21
4-Chlorotoluene	NL	NL	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21
1,2-Dibromo-3-chloropropane (DBCP)	0.2	0.02	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88
Dibromochloromethane	60	6	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22
Dibromomethane	NL	NL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,4-Dichlorobenzene	75	15	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
1,3-Dichlorobenzene	600	120	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28
1,2-Dichlorobenzene	600	60	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36
Dichlorodifluoromethane	1000	200	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44
1,2-Dichloroethane	5	0.5	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41
1,1-Dichloroethane	850	85	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
1,1-Dichloroethene	7	0.7	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4
cis-1,2-Dichloroethene	70	7	1.28	1.43	1.34	1.42	1.22	1.13 J	0.99 J	1.02 J	1.41	1.26
trans-1,2-Dichloroethene	100	20	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35
1,2-Dichloropropane	5	0.5	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32
2,2-Dichloropropane	NL	NL	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36
1,3-Dichloropropane	NL	NL	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
1,1-Dichloropropene	NL	NL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
cis-1,3-Dichloropropene	0.4	0.04	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
trans-1,3-Dichloropropene	0.4	0.04	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Di-isopropyl ether	NL	NL	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23
EDB (1,2-Dibromoethane)	0.05	0.005	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44
Ethylbenzene	700	140	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55
Hexachlorobutadiene	NL	NL	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5
Isopropylbenzene	NS	NS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
p-Isopropyltoluene	NL	NL	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31
Methylene Chloride	5	0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Methyl tert-butyl ether (MTBE)	60	12	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23
Naphthalene	100	10	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7
n-Propylbenzene	NL	NL	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25
Styrene	100	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1,2,2-Tetrachloroethane	0.2	0.02	< 0.45	< 0.45	< 0.33	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45
1,1,1,2-Tetrachloroethane	70	7	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
Tetrachloroethene	5	0.5	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
Toluene	800	160	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69
1,2,4-Trichlorobenzene	70	14	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98
1,2,3-Trichlorobenzene	NL	NL	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8
1,1,1-Trichloroethane	200	40	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
1,1,2-Trichloroethane	5	0.5	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34
Trichloroethene (TCE)	5	0.5	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
Trichlorofluoromethane	NL	NL	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71
1,2,3-Trichloropropane	60	12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2,4-Trimethylbenzene	--	--	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2
1,3,5-Trimethylbenzene	--	--	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4
Total Trimethylbenzene	480	96	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2
Vinyl Chloride	0.2	0.02	< 0.18	< 0.18	**0.23 J**	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	0.18 J
m&p-Xylene	--	--	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69
o-Xylene	--	--	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63
Total Xylenes	2,000	400	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69
RCRA Metals (mg/L)												
Antimony	0.006	0.0012	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Arsenic	0.01	0.001	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Barium	2	0.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Beryllium	0.004	0.0004	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium	0.005	0.0005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium	0.1	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Copper	1.3	0.13	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Iron	0.3	0.15	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead	0.015	0.0015	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese	0.05	0.025	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mercury	0.002	0.0002	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nickel	0.1	0.02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Selenium	0.05	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sliver	0.05	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sodium	increase of 10		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Thallium	0.002	0.0004	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Zinc	5	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Poychlorinated Biphenyls (PCBs) (µg/L):												
Aroclor-1016	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1221	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1232	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1242	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1248	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1254	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1260	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total PCBs	0.03	0.003	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Field Screening Measurements												
pH (IU)	--	--	8.15	7.53	7.53	7.13	7.39	7.39	7.75	7.75	8.05	8.05
Conductivity (uS)	--	--	633	636	636	503	586	586	699	699	687	687
Temperature (ºC)	--	--	12.49	9.07	9.07	11.49	12.1	12.1	13.8	13.8	9.79	9.79
Dissolved Oxygen (ppm)	--	--	4.58	7.70	7.70	5.06	2.30	2.30	2.42	2.42	5.33	5.33
Redox Potential (mV)	--	--	75.3	124.4	124.4	38.2	144.0	144.0	242.0	242.0	-100.7	-100.7

SUMMARY OF CONTAMINATES ANALYZED IN POTABLE WELLS
FORMER TOWN OF NEWTON GRAVEL PIT
MANITOWOC, WISCONSIN

			3523 CTH CR		3533 CTH CR		3611 CTH CR	3618 CTH CR				3626 CTH CR	
			1/3/14	6/3/14	1/6/14	6/3/14	5/30/14	1/3/14	5/29/14	8/25/14	11/10/14	12/5/13	5/30/14
Analyte	ES[1]	PAL[2]	Basement	Basement	Basement	Basement	Outside Spigot	Kitchen Sink	Kitchen Sink	Kitchen Sink	Kitchen Sink	Bathroom	Bathroom
Volatile Organic Compounds (VOCs) (µg/L):													
Benzene	5	0.5	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24
Bromobenzene	NL	NL	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32
Bromochloromethane	NL	NL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bromodichloromethane	0.6	0.06	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37
Bromoform	4.4	0.44	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35
tert-Butylbenzene	NL	NL	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36
sec-Butylbenzene	NL	NL	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
n-Butylbenzene	NL	NL	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35
Carbon Tetrachloride	5	0.5	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
Chlorobenzene	NL	NL	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24
Chloroethane	400	80	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63
Chloroform	6	0.6	< 0.28	< 0.28	0.28 J	0.28 J	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28
Chloromethane	3	0.3	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81
2-Chlorotoluene	NL	NL	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21
4-Chlorotoluene	NL	NL	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21
1,2-Dibromo-3-chloropropane (DBCP)	0.2	0.02	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88
Dibromochloromethane	60	6	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22
Dibromomethane	NL	NL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,4-Dichlorobenzene	75	15	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
1,3-Dichlorobenzene	600	120	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28
1,2-Dichlorobenzene	600	60	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36
Dichlorodifluoromethane	1000	200	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44
1,2-Dichloroethane	5	0.5	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41
1,1-Dichloroethane	850	85	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
1,1-Dichloroethene	7	0.7	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4
cis-1,2-Dichloroethene	70	7	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38	1.24	1.16 J	0.48 J	0.83 J	< 0.38	< 0.38
trans-1,2-Dichloroethene	100	20	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35
1,2-Dichloropropane	5	0.5	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32
2,2-Dichloropropane	NL	NL	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36
1,3-Dichloropropane	NL	NL	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
1,1-Dichloropropene	NL	NL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
cis-1,3-Dichloropropene	0.4	0.04	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
trans-1,3-Dichloropropene	0.4	0.04	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Di-isopropyl ether	NL	NL	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23
EDB (1,2-Dibromoethane)	0.05	0.005	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44
Ethylbenzene	700	140	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55
Hexachlorobutadiene	NL	NL	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5
Isopropylbenzene	NS	NS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
p-Isopropyltoluene	NL	NL	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31
Methylene Chloride	5	0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Methyl tert-butyl ether (MTBE)	60	12	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23
Naphthalene	100	10	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7
n-Propylbenzene	NL	NL	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25
Styrene	100	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1,2,2-Tetrachloroethane	0.2	0.02	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45
1,1,1,2-Tetrachloroethane	70	7	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
Tetrachloroethene	5	0.5	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
Toluene	800	160	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69
1,2,4-Trichlorobenzene	70	14	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98
1,2,3-Trichlorobenzene	NL	NL	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8
1,1,1-Trichloroethane	200	40	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
1,1,2-Trichloroethane	5	0.5	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34
Trichloroethene (TCE)	5	0.5	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
Trichlorofluoromethane	NL	NL	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71
1,2,3-Trichloropropane	60	12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2,4-Trimethylbenzene	--	--	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2
1,3,5-Trimethylbenzene	--	--	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4
Total Trimethylbenzene	480	96	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2
Vinyl Chloride	0.2	0.02	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18
m&p-Xylene	--	--	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69
o-Xylene	--	--	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63
Total Xylenes	2,000	400	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69
RCRA Metals (mg/L)													
Antimony	0.006	0.0012	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Arsenic	0.01	0.001	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Barium	2	0.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Beryllium	0.004	0.0004	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium	0.005	0.0005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium	0.1	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Copper	1.3	0.13	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Iron	0.3	0.15	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead	0.015	0.0015	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese	0.05	0.025	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mercury	0.002	0.0002	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nickel	0.1	0.02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Selenium	0.05	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sliver	0.05	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sodium	increase of 10		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Thallium	0.002	0.0004	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Zinc	5	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Poychlorinated Biphenyls (PCBs) (µg/L):													
Aroclor-1016	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1221	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1232	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1242	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1248	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1254	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1260	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total PCBs	0.03	0.003	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Field Screening Measurements													
pH (IU)	--	--	7.93	7.93	7.49	6.84	6.98	7.02	7.8	7.87	7.95	8,42	7.58
Conductivity (uS)	--	--	506	506	739	885	931	543	520	658	674	519	500
Temperature (°C)	--	--	11.71	11.71	9.92	12.50	10.30	9.02	7.80	18.30	11.33	8.69	11.98
Dissolved Oxygen (ppm)	--	--	2.96	2.96	5.91	1.85	3.95	5.32	2.24	0.8	1.44	5.73	1.83
Redox Potential (mV)	--	--	187.0	187.0	157.2	138	166	147.6	136	238	-102.5	90.0	143.0

SUMMARY OF CONTAMINATES ANALYZED IN POTABLE WELLS
FORMER TOWN OF NEWTON GRAVEL PIT
MANITOWOC, WISCONSIN

			3627 CTH CR		3904 CTH CR		4024 CTH CR		4101 CTH CR	4002 Thunder Ridge Rd.	
			12/5/13	5/29/14	12/5/13	5/28/14	12/12/13	5/28/14	5/29/14	1/3/14	8/25/14
Analyte	**ES[1]**	**PAL[2]**	Basement	Basement	Pressure Tank	Pressure Tank	Spigot in Barn	Spigot in Barn	Pressure Tank	Pressure Tank	Pressure Tank
Volatile Organic Compounds (VOCs) (µg/L):											
Benzene	5	0.5	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24
Bromobenzene	NL	NL	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32
Bromochloromethane	NL	NL	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bromodichloromethane	0.6	0.06	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37
Bromoform	4.4	0.44	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35
tert-Butylbenzene	NL	NL	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36
sec-Butylbenzene	NL	NL	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
n-Butylbenzene	NL	NL	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35
Carbon Tetrachloride	5	0.5	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
Chlorobenzene	NL	NL	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24
Chloroethane	400	80	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63
Chloroform	6	0.6	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28
Chloromethane	3	0.3	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81
2-Chlorotoluene	NL	NL	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21
4-Chlorotoluene	NL	NL	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21
1,2-Dibromo-3-chloropropane (DBCP)	0.2	0.02	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88
Dibromochloromethane	60	6	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22
Dibromomethane	NL	NL	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,4-Dichlorobenzene	75	15	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
1,3-Dichlorobenzene	600	120	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28
1,2-Dichlorobenzene	600	60	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36
Dichlorodifluoromethane	1000	200	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44
1,2-Dichloroethane	5	0.5	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41
1,1-Dichloroethane	850	85	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
1,1-Dichloroethene	7	0.7	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4
cis-1,2-Dichloroethene	70	7	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38	1.67	1.29
trans-1,2-Dichloroethene	100	20	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35
1,2-Dichloropropane	5	0.5	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32
2,2-Dichloropropane	NL	NL	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36
1,3-Dichloropropane	NL	NL	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
1,1-Dichloropropene	NL	NL	NA	NA	NA	NA	NA	NA	NA	NA	NA
cis-1,3-Dichloropropene	0.4	0.04	NA	NA	NA	NA	NA	NA	NA	NA	NA
trans-1,3-Dichloropropene	0.4	0.04	NA	NA	NA	NA	NA	NA	NA	NA	NA
Di-isopropyl ether	NL	NL	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23
EDB (1,2-Dibromoethane)	0.05	0.005	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44
Ethylbenzene	700	140	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55
Hexachlorobutadiene	NL	NL	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5
Isopropylbenzene	NS	NS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
p-Isopropyltoluene	NL	NL	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31
Methylene Chloride	5	0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Methyl tert-butyl ether (MTBE)	60	12	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23
Naphthalene	100	10	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7
n-Propylbenzene	NL	NL	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25
Styrene	100	10	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1,2,2-Tetrachloroethane	0.2	0.02	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45
1,1,1,2-Tetrachloroethane	70	7	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
Tetrachloroethene	5	0.5	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
Toluene	800	160	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69
1,2,4-Trichlorobenzene	70	14	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98
1,2,3-Trichlorobenzene	NL	NL	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8
1,1,1-Trichloroethane	200	40	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
1,1,2-Trichloroethane	5	0.5	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34
Trichloroethene (TCE)	5	0.5	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
Trichlorofluoromethane	NL	NL	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71
1,2,3-Trichloropropane	60	12	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2,4-Trimethylbenzene	--	--	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2
1,3,5-Trimethylbenzene	--	--	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4
Total Trimethylbenzene	480	96	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2
Vinyl Chloride	0.2	0.02	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18
m&p-Xylene	--	--	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69
o-Xylene	--	--	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63
Total Xylenes	2,000	400	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69
RCRA Metals (mg/L)											
Antimony	0.006	0.0012	NA	NA	NA	NA	NA	NA	NA	NA	NA
Arsenic	0.01	0.001	NA	NA	NA	NA	NA	NA	NA	NA	NA
Barium	2	0.4	NA	NA	NA	NA	NA	NA	NA	NA	NA
Beryllium	0.004	0.0004	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium	0.005	0.0005	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium	0.1	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA
Copper	1.3	0.13	NA	NA	NA	NA	NA	NA	NA	NA	NA
Iron	0.3	0.15	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead	0.015	0.0015	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese	0.05	0.025	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mercury	0.002	0.0002	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nickel	0.1	0.02	NA	NA	NA	NA	NA	NA	NA	NA	NA
Selenium	0.05	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sliver	0.05	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sodium	increase of 10		NA	NA	NA	NA	NA	NA	NA	NA	NA
Thallium	0.002	0.0004	NA	NA	NA	NA	NA	NA	NA	NA	NA
Zinc	5	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA
Poychlorinated Biphenyls (PCBs) (µg/L):											
Aroclor-1016	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1221	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1232	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1242	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1248	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1254	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1260	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total PCBs	0.03	0.003	NA	NA	NA	NA	NA	NA	NA	NA	NA
Field Screening Measurements											
pH (IU)	--	--	8.49	7.5	8.05	7.88	8.32	7.65	7.42	7.21	7.32
Conductivity (uS)	--	--	655	861	828	905	599	565	598	583	740
Temperature (°C)	--	--	12.16	15.1	8.43	11.5	5.6	12.3	12.4	8.51	13.1
Dissolved Oxygen (ppm)	--	--	4.92	1.46	5.32	3.84	4.71	1.44	2.3	5.32	3.49
Redox Potential (mV)	--	--	91.3	152	96.9	138	99	124	126	159.0	237.0

SUMMARY OF CONTAMINATES ANALYZED IN POTABLE WELLS
FORMER TOWN OF NEWTON GRAVEL PIT
MANITOWOC, WISCONSIN

Analyte	ES[1]	PAL[2]	4005 Thunder Ridge Rd.			4010 Thunder Ridge Rd.		4027 Thunder Ridge Rd.			
			5/29/14	8/26/14	11/11/14	5/28/14	8/26/14	5/29/14	8/26/14	11/11/14	11/11/14 (DUP)
			Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot
Volatile Organic Compounds (VOCs) (µg/L):											
Benzene	5	0.5	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24
Bromobenzene	NL	NL	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32
Bromochloromethane	NL	NL	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bromodichloromethane	0.6	0.06	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37
Bromoform	4.4	0.44	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35
tert-Butylbenzene	NL	NL	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36
sec-Butylbenzene	NL	NL	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
n-Butylbenzene	NL	NL	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35
Carbon Tetrachloride	5	0.5	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
Chlorobenzene	NL	NL	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24
Chloroethane	400	80	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63
Chloroform	6	0.6	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28
Chloromethane	3	0.3	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81
2-Chlorotoluene	NL	NL	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21
4-Chlorotoluene	NL	NL	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21
1,2-Dibromo-3-chloropropane (DBCP)	0.2	0.02	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88
Dibromochloromethane	60	6	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22
Dibromomethane	NL	NL	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,4-Dichlorobenzene	75	15	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
1,3-Dichlorobenzene	600	120	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28
1,2-Dichlorobenzene	600	60	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36
Dichlorodifluoromethane	1000	200	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44
1,2-Dichloroethane	5	0.5	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41
1,1-Dichloroethane	850	85	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
1,1-Dichloroethene	7	0.7	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4
cis-1,2-Dichloroethene	70	7	0.83 J	0.9 J	< 0.38	1.37	1.18 J	0.59 J	0.52 J	0.6 J	0.53 J
trans-1,2-Dichloroethene	100	20	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35
1,2-Dichloropropane	5	0.5	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32
2,2-Dichloropropane	NL	NL	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36
1,3-Dichloropropane	NL	NL	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
1,1-Dichloropropene	NL	NL	NA	NA	NA	NA	NA	NA	NA	NA	NA
cis-1,3-Dichloropropene	0.4	0.04	NA	NA	NA	NA	NA	NA	NA	NA	NA
trans-1,3-Dichloropropene	0.4	0.04	NA	NA	NA	NA	NA	NA	NA	NA	NA
Di-isopropyl ether	NL	NL	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23
EDB (1,2-Dibromoethane)	0.05	0.005	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44
Ethylbenzene	700	140	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55
Hexachlorobutadiene	NL	NL	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5
Isopropylbenzene	NS	NS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
p-Isopropyltoluene	NL	NL	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31
Methylene Chloride	5	0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Methyl tert-butyl ether (MTBE)	60	12	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23
Naphthalene	100	10	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7
n-Propylbenzene	NL	NL	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25
Styrene	100	10	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1,2,2-Tetrachloroethane	0.2	0.02	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45
1,1,1,2-Tetrachloroethane	70	7	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
Tetrachloroethene	5	0.5	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
Toluene	800	160	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69
1,2,4-Trichlorobenzene	70	14	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98
1,2,3-Trichlorobenzene	NL	NL	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8
1,1,1-Trichloroethane	200	40	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
1,1,2-Trichloroethane	5	0.5	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34
Trichloroethene (TCE)	5	0.5	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
Trichlorofluoromethane	NL	NL	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71
1,2,3-Trichloropropane	60	12	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2,4-Trimethylbenzene	--	--	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2
1,3,5-Trimethylbenzene	--	--	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4
Total Trimethylbenzene	480	96	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2
Vinyl Chloride	0.2	0.02	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18
m&p-Xylene	--	--	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69
o-Xylene	--	--	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63
Total Xylenes	2,000	400	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69
RCRA Metals (mg/L)											
Antimony	0.006	0.0012	NA	NA	NA	NA	NA	NA	NA	NA	NA
Arsenic	0.01	0.001	NA	NA	NA	NA	NA	NA	NA	NA	NA
Barium	2	0.4	NA	NA	NA	NA	NA	NA	NA	NA	NA
Beryllium	0.004	0.0004	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium	0.005	0.0005	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium	0.1	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA
Copper	1.3	0.13	NA	NA	NA	NA	NA	NA	NA	NA	NA
Iron	0.3	0.15	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead	0.015	0.0015	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese	0.05	0.025	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mercury	0.002	0.0002	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nickel	0.1	0.02	NA	NA	NA	NA	NA	NA	NA	NA	NA
Selenium	0.05	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sliver	0.05	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sodium	increase of 10		NA	NA	NA	NA	NA	NA	NA	NA	NA
Thallium	0.002	0.0004	NA	NA	NA	NA	NA	NA	NA	NA	NA
Zinc	5	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA
Poychlorinated Biphenyls (PCBs) (µg/L):											
Aroclor-1016	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1221	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1232	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1242	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1248	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1254	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1260	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total PCBs	0.03	0.003	NA	NA	NA	NA	NA	NA	NA	NA	NA
Field Screening Measurements											
pH (IU)	--	--	7.75	8.06	8	7.97	7.85	7.52	7.43	7.95	7.95
Conductivity (uS)	--	--	663	781	774	687	742	702	837	890	890
Temperature (°C)	--	--	12	14.9	9.71	14.2	13.3	12	13	11.13	11.13
Dissolved Oxygen (ppm)	--	--	1.43	1.35	1.66	0.99	2.35	2.1	1.96	3.25	3.25
Redox Potential (mV)	--	--	122.0	199.0	-120.9	118.0	245.0	132.0	229.0	-109.8	-109.8

SUMMARY OF CONTAMINATES ANALYZED IN POTABLE WELLS
FORMER TOWN OF NEWTON GRAVEL PIT
MANITOWOC, WISCONSIN

Analyte	ES[1]	PAL[2]	4101 Thunder Ridge Rd.		4111 Thunder Ridge Rd.		4127 Thunder Ridge Rd.		3107 Fricke Dr.	3617 Viebahn St.		3701 Viebahn St.		
			8/26/14	11/17/14	8/25/14	11/17/14	12/5/13	5/29/14	12/5/13	11/7/14	11/19/14	10/29/14	11/7/14	11/7/2014 (DUP)
			Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot	Well Pump	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank
Volatile Organic Compounds (VOCs) (µg/L):														
Benzene	5	0.5	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24
Bromobenzene	NL	NL	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32
Bromochloromethane	NL	NL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bromodichloromethane	0.6	0.06	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37
Bromoform	4.4	0.44	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35
tert-Butylbenzene	NL	NL	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36
sec-Butylbenzene	NL	NL	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
n-Butylbenzene	NL	NL	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35
Carbon Tetrachloride	5	0.5	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
Chlorobenzene	NL	NL	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24
Chloroethane	400	80	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63
Chloroform	6	0.6	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28
Chloromethane	3	0.3	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81
2-Chlorotoluene	NL	NL	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21
4-Chlorotoluene	NL	NL	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21
1,2-Dibromo-3-chloropropane (DBCP)	0.2	0.02	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88
Dibromochloromethane	60	6	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22
Dibromomethane	NL	NL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,4-Dichlorobenzene	75	15	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
1,3-Dichlorobenzene	600	120	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28
1,2-Dichlorobenzene	600	60	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36
Dichlorodifluoromethane	1000	200	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44
1,2-Dichloroethane	5	0.5	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41
1,1-Dichloroethane	850	85	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
1,1-Dichloroethene	7	0.7	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4
cis-1,2-Dichloroethene	70	7	0.73 J	0.63 J	0.41 J	< 0.38	< 0.38	< 0.38	< 0.38	1.13 J	1.12 J	1.23	1.18 J	1.29
trans-1,2-Dichloroethene	100	20	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35
1,2-Dichloropropane	5	0.5	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32
2,2-Dichloropropane	NL	NL	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36
1,3-Dichloropropane	NL	NL	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
1,1-Dichloropropene	NL	NL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
cis-1,3-Dichloropropene	0.4	0.04	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
trans-1,3-Dichloropropene	0.4	0.04	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Di-isopropyl ether	NL	NL	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23
EDB (1,2-Dibromoethane)	0.05	0.005	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44
Ethylbenzene	700	140	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55
Hexachlorobutadiene	NL	NL	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5
Isopropylbenzene	NS	NS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
p-Isopropyltoluene	NL	NL	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31
Methylene Chloride	5	0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	1.5 J	1.17 J	1.12 J
Methyl tert-butyl ether (MTBE)	60	12	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23
Naphthalene	100	10	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7
n-Propylbenzene	NL	NL	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25
Styrene	100	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1,2,2-Tetrachloroethane	0.2	0.02	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45
1,1,1,2-Tetrachloroethane	70	7	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
Tetrachloroethene	5	0.5	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
Toluene	800	160	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69
1,2,4-Trichlorobenzene	70	14	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98
1,2,3-Trichlorobenzene	NL	NL	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8
1,1,1-Trichloroethane	200	40	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
1,1,2-Trichloroethane	5	0.5	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34
Trichloroethene (TCE)	5	0.5	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
Trichlorofluoromethane	NL	NL	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71
1,2,3-Trichloropropane	60	12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2,4-Trimethylbenzene	--	--	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2
1,3,5-Trimethylbenzene	--	--	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4
Total Trimethylbenzene	480	96	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2
Vinyl Chloride	0.2	0.02	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	**0.48 J**	**0.4 J**	**0.29 J**	**0.32 J**	**0.49 J**
m&p-Xylene	--	--	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69
o-Xylene	--	--	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63
Total Xylenes	2,000	400	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69
RCRA Metals (mg/L)														
Antimony	0.006	0.0012	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Arsenic	0.01	0.001	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Barium	2	0.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Beryllium	0.004	0.0004	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium	0.005	0.0005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium	0.1	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Copper	1.3	0.13	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Iron	0.3	0.15	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead	0.015	0.0015	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese	0.05	0.025	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mercury	0.002	0.0002	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nickel	0.1	0.02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Selenium	0.05	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sliver	0.05	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sodium	increase of 10		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Thallium	0.002	0.0004	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Zinc	5	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Poychlorinated Biphenyls (PCBs) (µg/L):														
Aroclor-1016	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1221	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1232	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1242	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1248	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1254	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1260	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total PCBs	0.03	0.003	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Field Screening Measurements														
pH (IU)	--	--	7.75	7.7	7.65	7.99	8.24	7.32	7.63	8.12	7.99	8.38	7.76	7.76
Conductivity (uS)	--	--	836	777	809	786	1033	1046	561	646	590	630	658	658
Temperature (°C)	--	--	15.4	9.74	12.8	8.88	8.53	11.5	8.58	10.44	9.95	10.13	9.68	9.68
Dissolved Oxygen (ppm)	--	--	1.4	1.24	0.97	5.9	5.21	1.33	5.32	3.7	1.93	6.51	4.68	4.68
Redox Potential (mV)	--	--	236.0	-33.7	236.0	-41.4	95.0	132.0	80.3	-29.2	-147.6	-58.3	13.3	13.3

SUMMARY OF CONTAMINATES ANALYZED IN POTABLE WELLS
FORMER TOWN OF NEWTON GRAVEL PIT
MANITOWOC, WISCONSIN

Analyte	ES[1]	PAL[2]	3815 Viebahn St.		3817 Viebahn St.		3825 Viebahn St.		4025 Viebahn St.		4101 Viebahn St.	
			11/7/14	11/19/14	10/29/14	11/7/14	10/29/14	11/7/14	10/29/14	11/7/14	10/29/14	11/7/14
			Pressure Tank	Pressure Tank	Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank
Volatile Organic Compounds (VOCs) (µg/L):												
Benzene	5	0.5	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24
Bromobenzene	NL	NL	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32
Bromochloromethane	NL	NL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bromodichloromethane	0.6	0.06	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37
Bromoform	4.4	0.44	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35
tert-Butylbenzene	NL	NL	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36
sec-Butylbenzene	NL	NL	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
n-Butylbenzene	NL	NL	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35
Carbon Tetrachloride	5	0.5	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
Chlorobenzene	NL	NL	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24
Chloroethane	400	80	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63
Chloroform	6	0.6	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28
Chloromethane	3	0.3	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81
2-Chlorotoluene	NL	NL	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21
4-Chlorotoluene	NL	NL	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21
1,2-Dibromo-3-chloropropane (DBCP)	0.2	0.02	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88
Dibromochloromethane	60	6	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22
Dibromomethane	NL	NL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,4-Dichlorobenzene	75	15	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
1,3-Dichlorobenzene	600	120	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28
1,2-Dichlorobenzene	600	60	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36
Dichlorodifluoromethane	1000	200	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44
1,2-Dichloroethane	5	0.5	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41
1,1-Dichloroethane	850	85	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
1,1-Dichloroethene	7	0.7	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4
cis-1,2-Dichloroethene	70	7	0.74 J	0.94 J	0.4 J	< 0.38	< 0.38	< 0.38	1.38	1.46	1.48	1.13 J
trans-1,2-Dichloroethene	100	20	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35
1,2-Dichloropropane	5	0.5	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32
2,2-Dichloropropane	NL	NL	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36
1,3-Dichloropropane	NL	NL	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
1,1-Dichloropropene	NL	NL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
cis-1,3-Dichloropropene	0.4	0.04	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
trans-1,3-Dichloropropene	0.4	0.04	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Di-isopropyl ether	NL	NL	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23
EDB (1,2-Dibromoethane)	0.05	0.005	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44
Ethylbenzene	700	140	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55
Hexachlorobutadiene	NL	NL	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5
Isopropylbenzene	NS	NS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
p-Isopropyltoluene	NL	NL	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31
Methylene Chloride	5	0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Methyl tert-butyl ether (MTBE)	60	12	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23
Naphthalene	100	10	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7
n-Propylbenzene	NL	NL	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25
Styrene	100	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1,2,2-Tetrachloroethane	0.2	0.02	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45
1,1,1,2-Tetrachloroethane	70	7	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
Tetrachloroethene	5	0.5	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
Toluene	800	160	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	0.95 J	< 0.69	< 0.69	< 0.69
1,2,4-Trichlorobenzene	70	14	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98
1,2,3-Trichlorobenzene	NL	NL	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8
1,1,1-Trichloroethane	200	40	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
1,1,2-Trichloroethane	5	0.5	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34
Trichloroethene (TCE)	5	0.5	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
Trichlorofluoromethane	NL	NL	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71
1,2,3-Trichloropropane	60	12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2,4-Trimethylbenzene	--	--	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2
1,3,5-Trimethylbenzene	--	--	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4
Total Trimethylbenzene	480	96	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2
Vinyl Chloride	0.2	0.02	**0.33 J**	**0.31 J**	< 0.18	< 0.18	< 0.18	< 0.18	**0.34 J**	**0.31 J**	**0.38 J**	**0.39 J**
m&p-Xylene	--	--	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69
o-Xylene	--	--	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63
Total Xylenes	2,000	400	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69
RCRA Metals (mg/L)												
Antimony	0.006	0.0012	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Arsenic	0.01	0.001	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Barium	2	0.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Beryllium	0.004	0.0004	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium	0.005	0.0005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium	0.1	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Copper	1.3	0.13	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Iron	0.3	0.15	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead	0.015	0.0015	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese	0.05	0.025	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mercury	0.002	0.0002	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nickel	0.1	0.02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Selenium	0.05	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sliver	0.05	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sodium	increase of 10		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Thallium	0.002	0.0004	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Zinc	5	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Poychlorinated Biphenyls (PCBs) (µg/L):												
Aroclor-1016	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1221	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1232	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1242	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1248	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1254	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1260	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total PCBs	0.03	0.003	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Field Screening Measurements												
pH (IU)	--	--	8.01	7.63	7.83	8.31	7.87	8.21	7.87	8.03	7.79	7.99
Conductivity (uS)	--	--	644	561	631	658	674	668	824	629	644	627
Temperature (°C)	--	--	10.05	8.58	10.85	10.42	10.27	9.86	10.89	10.23	11.17	10.87
Dissolved Oxygen (ppm)	--	--	2.54	5.32	3.22	3.37	2.94	6.05	2.45	3.11	2.31	3.21
Redox Potential (mV)	--	--	21.5	80.3	-95.3	14	-104.5	-21.3	-104.9	-2.2	-91.1	-22.3

SUMMARY OF CONTAMINATES ANALYZED IN POTABLE WELLS
FORMER TOWN OF NEWTON GRAVEL PIT
MANITOWOC, WISCONSIN

Analyte	ES[1]	PAL[2]	4219 Viebahn St.	5107 Viebahn St.	3609 M&M Ln.		3027 Orchard Ln.				3128 Orchard Ln.	
			9/8/14	12/5/13	12/4/13	12/16/13	2/5/14	6/4/14	8/28/14	11/11/14	2/4/14	6/4/14
			Outside Spigot	Well Pump	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank
Volatile Organic Compounds (VOCs) (µg/L):												
Benzene	5	0.5	< 0.24	< 0.24	< 0.15	< 0.15	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24
Bromobenzene	NL	NL	< 0.32	< 0.32	< 0.15	< 0.15	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32
Bromochloromethane	NL	NL	NA	NA	< 0.15	< 0.15	NA	NA	NA	NA	NA	NA
Bromodichloromethane	0.6	0.06	< 0.37	< 0.37	< 0.15	< 0.15	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37
Bromoform	4.4	0.44	< 0.35	< 0.35	< 0.15	< 0.15	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35
tert-Butylbenzene	NL	NL	< 0.36	< 0.36	< 0.15	< 0.15	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36
sec-Butylbenzene	NL	NL	< 0.33	< 0.33	< 0.15	< 0.15	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
n-Butylbenzene	NL	NL	< 0.35	< 0.35	< 0.15	< 0.15	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35
Carbon Tetrachloride	5	0.5	< 0.33	< 0.33	< 0.15	< 0.15	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
Chlorobenzene	NL	NL	< 0.24	< 0.24	< 0.15	< 0.15	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24
Chloroethane	400	80	< 0.63	< 0.63	< 0.15	< 0.15	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63
Chloroform	6	0.6	< 0.28	< 0.28	< 0.15	< 0.15	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28
Chloromethane	3	0.3	< 0.81	< 0.81	< 0.15	< 0.15	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81
2-Chlorotoluene	NL	NL	< 0.21	< 0.21	< 0.15	< 0.15	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21
4-Chlorotoluene	NL	NL	< 0.21	< 0.21	< 0.15	< 0.15	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21
1,2-Dibromo-3-chloropropane (DBCP)	0.2	0.02	< 0.88	< 0.88	< 0.20	< 0.20	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88
Dibromochloromethane	60	6	< 0.22	< 0.22	< 0.15	< 0.15	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22
Dibromomethane	NL	NL	NA	NA	< 0.15	< 0.15	NA	NA	NA	NA	NA	NA
1,4-Dichlorobenzene	75	15	< 0.3	< 0.3	< 0.15	< 0.15	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
1,3-Dichlorobenzene	600	120	< 0.28	< 0.28	< 0.15	< 0.15	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28
1,2-Dichlorobenzene	600	60	< 0.36	< 0.36	< 0.15	< 0.15	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36
Dichlorodifluoromethane	1000	200	< 0.44	< 0.44	< 0.20	< 0.20	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44
1,2-Dichloroethane	5	0.5	< 0.41	< 0.41	< 0.15	< 0.15	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41
1,1-Dichloroethane	850	85	< 0.3	< 0.3	< 0.15	< 0.15	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
1,1-Dichloroethene	7	0.7	< 0.4	< 0.4	< 0.15	< 0.15	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4
cis-1,2-Dichloroethene	70	7	< 0.38	< 0.38	< 0.15	< 0.15	0.47 J	0.39 J	0.49 J	< 0.38	< 0.38	< 0.38
trans-1,2-Dichloroethene	100	20	< 0.35	< 0.35	< 0.15	< 0.15	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35
1,2-Dichloropropane	5	0.5	< 0.32	< 0.32	< 0.15	< 0.15	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32
2,2-Dichloropropane	NL	NL	< 0.36	< 0.36	< 0.15	< 0.15	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36
1,3-Dichloropropane	NL	NL	< 0.33	< 0.33	< 0.15	< 0.15	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
1,1-Dichloropropene	NL	NL	NA	NA	< 0.15	< 0.15	NA	NA	NA	NA	NA	NA
cis-1,3-Dichloropropene	0.4	0.04	NA	NA	< 0.15	< 0.15	NA	NA	NA	NA	NA	NA
trans-1,3-Dichloropropene	0.4	0.04	NA	NA	< 0.15	< 0.15	NA	NA	NA	NA	NA	NA
Di-isopropyl ether	NL	NL	< 0.23	< 0.23	NA	NA	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23
EDB (1,2-Dibromoethane)	0.05	0.005	< 0.44	< 0.44	< 0.15	< 0.15	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44
Ethylbenzene	700	140	< 0.55	< 0.55	< 0.15	< 0.15	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55
Hexachlorobutadiene	NL	NL	< 1.5	< 1.5	< 0.15	< 0.15	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5
Isopropylbenzene	NS	NS	< 0.3	< 0.3	< 0.15	< 0.15	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
p-Isopropyltoluene	NL	NL	< 0.31	< 0.31	< 0.15	< 0.15	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31
Methylene Chloride	5	0.5	< 0.5	< 0.5	< 0.15	< 0.15	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Methyl tert-butyl ether (MTBE)	60	12	< 0.23	< 0.23	< 0.15	< 0.15	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23
Naphthalene	100	10	< 1.7	< 1.7	< 0.15	< 0.15	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7
n-Propylbenzene	NL	NL	< 0.25	< 0.25	< 0.15	< 0.15	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25
Styrene	100	10	NA	NA	< 0.15	< 0.15	NA	NA	NA	NA	NA	NA
1,1,2,2-Tetrachloroethane	0.2	0.02	< 0.45	< 0.45	< 0.20	< 0.20	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45
1,1,1,2-Tetrachloroethane	70	7	< 0.33	< 0.33	< 0.15	< 0.15	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
Tetrachloroethene	5	0.5	< 0.33	< 0.33	< 0.15	< 0.15	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
Toluene	800	160	< 0.69	< 0.69	< 0.15	< 0.15	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69
1,2,4-Trichlorobenzene	70	14	< 0.98	< 0.98	< 0.15	< 0.15	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98
1,2,3-Trichlorobenzene	NL	NL	< 1.8	< 1.8	< 0.15	< 0.15	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8
1,1,1-Trichloroethane	200	40	< 0.33	< 0.33	< 0.15	< 0.15	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
1,1,2-Trichloroethane	5	0.5	< 0.34	< 0.34	< 0.15	< 0.15	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34
Trichloroethene (TCE)	5	0.5	< 0.33	< 0.33	< 0.15	< 0.15	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
Trichlorofluoromethane	NL	NL	< 0.71	< 0.71	< 0.15	< 0.15	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71
1,2,3-Trichloropropane	60	12	NA	NA	< 0.15	< 0.15	NA	NA	NA	NA	NA	NA
1,2,4-Trimethylbenzene	--	--	< 2.2	< 2.2	< 0.15	< 0.15	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2
1,3,5-Trimethylbenzene	--	--	< 1.4	< 1.4	< 0.15	< 0.15	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4
Total Trimethylbenzene	480	96	< 2.2	< 2.2	< 0.15	< 0.15	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2
Vinyl Chloride	0.2	0.02	< 0.18	< 0.18	< 0.20	< 0.20	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18
m&p-Xylene	--	--	< 0.69	< 0.69	< 0.15	< 0.15	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69
o-Xylene	--	--	< 0.63	< 0.63	< 0.15	< 0.15	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63
Total Xylenes	2,000	400	< 0.69	< 0.69	< 0.15	< 0.15	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69
RCRA Metals (mg/L)												
Antimony	0.006	0.0012	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Arsenic	0.01	0.001	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Barium	2	0.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Beryllium	0.004	0.0004	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium	0.005	0.0005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium	0.1	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Copper	1.3	0.13	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Iron	0.3	0.15	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead	0.015	0.0015	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese	0.05	0.025	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mercury	0.002	0.0002	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nickel	0.1	0.02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Selenium	0.05	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sliver	0.05	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sodium	increase of 10		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Thallium	0.002	0.0004	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Zinc	5	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Poychlorinated Biphenyls (PCBs) (µg/L):												
Aroclor-1016	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1221	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1232	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1242	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1248	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1254	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1260	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total PCBs	0.03	0.003	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Field Screening Measurements												
pH (IU)	--	--	7.45	8.1	NM	NM	7.21	7.25	7.82	8.03	7.32	7.63
Conductivity (uS)	--	--	779	571	NM	NM	379	136	921	553	603	797
Temperature (°C)	--	--	11.75	11.09	NM	NM	8.5	10.6	10.7	10.29	8.75	10.4
Dissolved Oxygen (ppm)	--	--	3.21	4.23	NM	NM	7.42	2.5	1.22	4.06	NM	1.97
Redox Potential (mV)	--	--	225	84.5	NM	NM	42.4	136	236	-7.3	113.2	117

SUMMARY OF CONTAMINATES ANALYZED IN POTABLE WELLS
FORMER TOWN OF NEWTON GRAVEL PIT
MANITOWOC, WISCONSIN

Analyte	ES[1]	PAL[2]	3318 Orchard Ln.	3420 Orchard Ln.		3523 Orchard Ln.		3524 Orchard Ln.			3921 Black Hawk Ct.			
			7/11/14	2/4/14	6/2/14	2/4/14	5/28/14	2/4/14	6/2/14	6/2/2014(DUP)	2/4/14	6/2/14	8/26/14	11/10/14
			Outside Spigot	Kitchen Sink	Kitchen Sink	Kitchen Sink	Kitchen Sink	Kitchen Sink	Kitchen Sink	Kitchen Sink	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank
Volatile Organic Compounds (VOCs) (µg/L):														
Benzene	5	0.5	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24
Bromobenzene	NL	NL	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32
Bromochloromethane	NL	NL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bromodichloromethane	0.6	0.06	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37
Bromoform	4.4	0.44	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35
tert-Butylbenzene	NL	NL	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36
sec-Butylbenzene	NL	NL	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
n-Butylbenzene	NL	NL	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35
Carbon Tetrachloride	5	0.5	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
Chlorobenzene	NL	NL	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24
Chloroethane	400	80	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63
Chloroform	6	0.6	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28
Chloromethane	3	0.3	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81
2-Chlorotoluene	NL	NL	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21
4-Chlorotoluene	NL	NL	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21
1,2-Dibromo-3-chloropropane (DBCP)	0.2	0.02	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88
Dibromochloromethane	60	6	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22
Dibromomethane	NL	NL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,4-Dichlorobenzene	75	15	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
1,3-Dichlorobenzene	600	120	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28
1,2-Dichlorobenzene	600	60	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36
Dichlorodifluoromethane	1000	200	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44
1,2-Dichloroethane	5	0.5	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41
1,1-Dichloroethane	850	85	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
1,1-Dichloroethene	7	0.7	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4
cis-1,2-Dichloroethene	70	7	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38	0.87 J	0.97 J	1.14 J	0.65 J
trans-1,2-Dichloroethene	100	20	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35
1,2-Dichloropropane	5	0.5	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32
2,2-Dichloropropane	NL	NL	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36
1,3-Dichloropropane	NL	NL	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
1,1-Dichloropropene	NL	NL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
cis-1,3-Dichloropropene	0.4	0.04	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
trans-1,3-Dichloropropene	0.4	0.04	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Di-isopropyl ether	NL	NL	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23
EDB (1,2-Dibromoethane)	0.05	0.005	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44
Ethylbenzene	700	140	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55
Hexachlorobutadiene	NL	NL	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5
Isopropylbenzene	NS	NS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
p-Isopropyltoluene	NL	NL	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31
Methylene Chloride	5	0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Methyl tert-butyl ether (MTBE)	60	12	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23
Naphthalene	100	10	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7
n-Propylbenzene	NL	NL	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25
Styrene	100	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1,2,2-Tetrachloroethane	0.2	0.02	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45
1,1,1,2-Tetrachloroethane	70	7	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
Tetrachloroethene	5	0.5	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
Toluene	800	160	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69
1,2,4-Trichlorobenzene	70	14	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98
1,2,3-Trichlorobenzene	NL	NL	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8
1,1,1-Trichloroethane	200	40	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
1,1,2-Trichloroethane	5	0.5	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34
Trichloroethene (TCE)	5	0.5	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
Trichlorofluoromethane	NL	NL	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71
1,2,3-Trichloropropane	60	12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2,4-Trimethylbenzene	--	--	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2
1,3,5-Trimethylbenzene	--	--	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4
Total Trimethylbenzene	480	96	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2
Vinyl Chloride	0.2	0.02	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18
m&p-Xylene	--	--	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69
o-Xylene	--	--	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63
Total Xylenes	2,000	400	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69
RCRA Metals (mg/L)														
Antimony	0.006	0.0012	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Arsenic	0.01	0.001	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Barium	2	0.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Beryllium	0.004	0.0004	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium	0.005	0.0005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium	0.1	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Copper	1.3	0.13	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Iron	0.3	0.15	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead	0.015	0.0015	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese	0.05	0.025	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mercury	0.002	0.0002	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nickel	0.1	0.02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Selenium	0.05	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sliver	0.05	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sodium	increase of 10		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Thallium	0.002	0.0004	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Zinc	5	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Poychlorinated Biphenyls (PCBs) (µg/L):														
Aroclor-1016	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1221	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1232	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1242	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1248	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1254	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1260	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total PCBs	0.03	0.003	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Field Screening Measurements														
pH (lU)	--	--	7.52	7.1	8.06	7.21	7.78	7.03	7.41	7.41	7.21	7.61	7.45	7.95
Conductivity (uS)	--	--	1033	454	470	514	671	579	672	672	468	636	762	754
Temperature (°C)	--	--	13.8	7.1	11.8	8.96	10.6	9.29	12.1	12.1	10.06	12.7	14.3	11.85
Dissolved Oxygen (ppm)	--	--	4.11	6.53	1.23	5.32	4.99	5.3	1.62	1.62	NM	2.83	1.34	5.53
Redox Potential (mV)	--	--	123	123.2	165	210.0	111.0	117.3	159.0	159.0	100.3	148	206	-27.2

SUMMARY OF CONTAMINATES ANALYZED IN POTABLE WELLS
FORMER TOWN OF NEWTON GRAVEL PIT
MANITOWOC, WISCONSIN

NOTES:

(1) Enforcement Standard from NR140, January 2012.

(2) Preventive Action Limit from NR140, January 2012.

NL - ES or PAL not listed in NR140.

NA - Not analyzed.
ND - Not detected.
NM - Not measured.
NS - Not sampled.
J - Compound was detected at a concentration between the limit of detection (LOD) and the limit of quantitation (LOQ).
Q - Compound was detected at a concentration between the limit of detection (LOD) and the limit of quantitation (LOQ).
& - LCS recovery was outside of control limits.
H - Holding time exceeded by (n) days
D - The result is from a dilution analysis.
A - Analyte is detected in the method blank. Method blank criteria is evaluated to the laboratory LOD. Additionally, method blank acceptance may be based on project specific criteria or determined from analyte concentrations in the sample and are evaluated on a sample by sample basis.
ED - Elevated detection limit due to matric effects.
MS - Either the matrix spike or matrix spike duplicate was outside of the acceptable control limits. All other supporting QC was within the acceptable control limits.
E - Analyte concentraion exceeds calibration range (see Sample Narrative).
* - Duplicate analyses not within control limits.
B(x) - Analyte is detected in the method blank at "x" concentration. Method blank criteria is evaluated to the laboratory LOD. Additionally, method blank acceptance may be basedon project specific criteria or determined from analyte concentrations in the sample and are evaluated on a sample by sample basis.
N - Spiked sample revocery not within control limits; post-digestion spike recovery accepted.
B - Analyte found in method blank.
OC - Elevated reporting limit due to analyte concentration.

Bold indicates a PAL exceedance.
Bold and underlining indicates an ES exceedance.

Table 4
POTABLE WELL MONITORING WORK PLAN, 3rd QUARTER 2014 UPDATE

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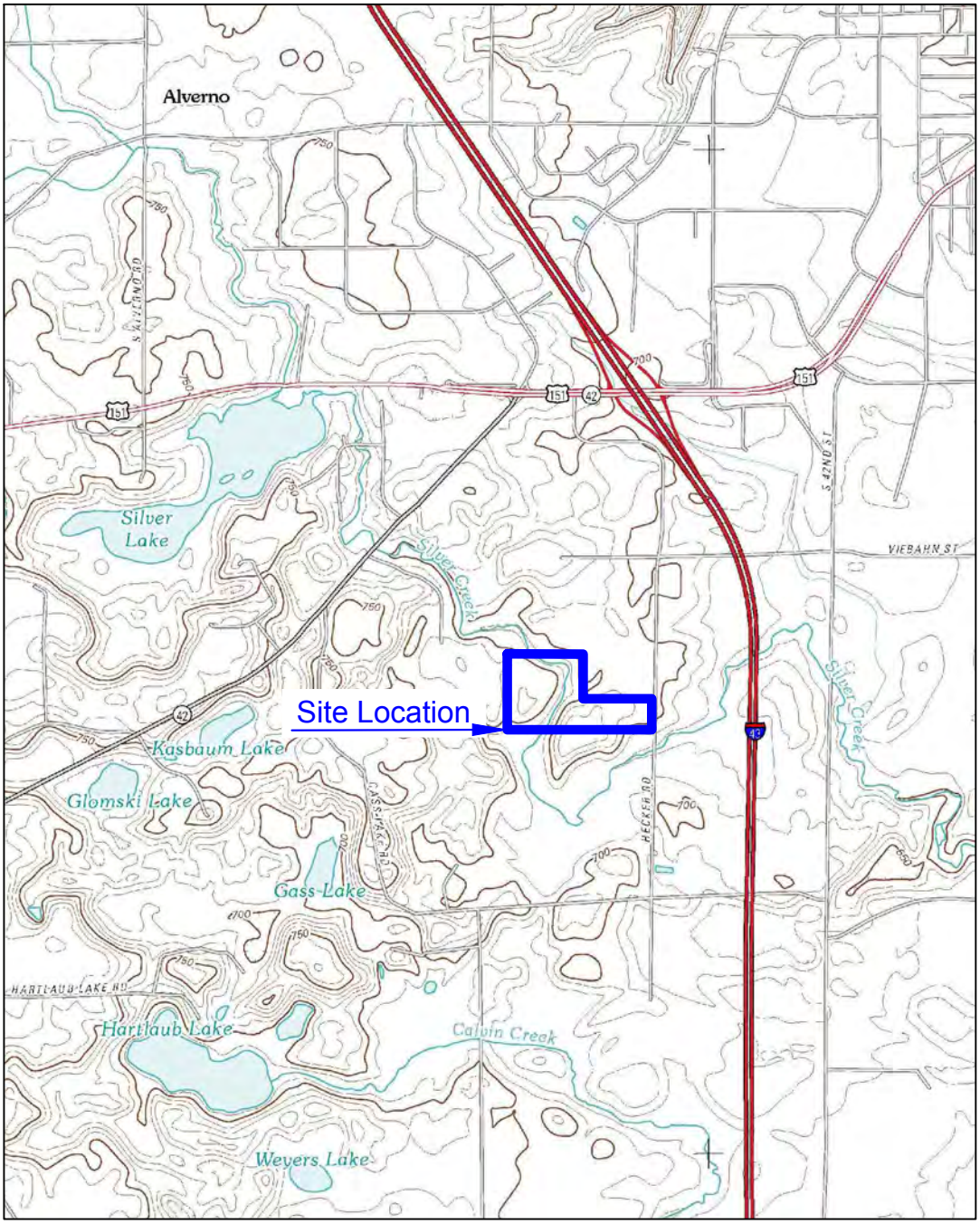
TABLE 4
POTABLE WELL MONITORING WORK PLAN
3rd QUARTER 2014 UPDATE
SUMMARY OF QUARTERLY POTABLE WELL SAMPLING
FORMER TOWN OF NEWTON GRAVEL PIT
MANITOWOC, WISCONSIN

Well Address	1st Quarter May 2014	Notes Based on Results from Q1:	2nd Quarter August 2014	Notes Based on Results from Q2:	3rd Quarter November 2014	Notes Based on Results from Q3:	4th Quarter February 2015
Target Zone Wells							
3617(3621) Viebahn St	na		na	Q2, new DG well for Q3	1	Q3, moved from DG to Target	1
3701 Viebahn St	na		na	Q2, new DG well for Q3	1	Q3, moved from DG to Target	1
3815 Viebahn St	na		na	Q2, new DG well for Q3	1	Q3, moved from DG to Target	1
3817 Viebahn St	na		na	Q2, new DG well for Q3	1	Q3, moved from DG to Target	1
3825 Viebahn St	na		na	Q2, new DG well for Q3	1	Q3, moved from DG to Target	1
4025 Viebahn St	na		na	Q2, new DG well for Q3	1	Q3, moved from DG to Target	1
4101 Viebahn St	na		na	Q2, new DG well for Q3	1	Q3, moved from DG to Target	1
4141 Viebahn St 2717 CTH CR	na	Q1, new DG well, 2 properties served by 1 well	1	Q2, moved from DG to Target	1		1
3303 Hecker Rd.	1	Q1, moved from Sent. to Target	0	not sampled	1		1
3327 Hecker Rd.	1		1		1		1
3461(3417) Hecker Rd.	1		1		1		1
3702 Hecker Rd.	1		1		1		1
2734(2804) CTH CR	1	Q1, moved from DG to Target	1		1		1
2916 CTH CR	1		1		1		1
3403 CTH CR	1		1		1		1
3504 CTH CR	1		1		1	Replacement well not installed yet	1
3618 CTH CR	1		1		1		1
4002 Thunder Ridge	O	Q1, not sampled, non responsive	1		O	Q3, not sampled, non responsive	1
4005 Thunder Ridge	1	Q1, moved from DG to Target	1		1		1
4010 Thunder Ridge	1	Q1, moved from DG to Target	1		O	Q3, not sampled, non responsive	1
4027 Thunder Ridge	1	Q1, moved from DG to Target	1		1		1
4101 Thunder Ridge	na	Q1, new DG well	1	Q2, moved from DG to Target	1		1
4111 Thunder Ridge	na	Q1, new DG well	1	Q2, moved from DG to Target	1		1
3921 Black Hawk Ct.	1		1		1		1
4159 Silver Creek Rd.	1		1		1		1
3027 Orchard Ln.	1		1		1		1
Replacement Wells							
3515 Hecker Rd.	1		1		1	Q3, moved from Target to Replacement	1
3518 Hecker Rd.	1		1		1	Q3, moved from Target to Replacement	1
3609 Hecker Rd.	1		1		1	Q3, moved from Target to Replacement	1
3023 CTH CR	1		1		1	Q3, moved from Target to Replacement	1
3120 CTH CR	1		1		1	Q3, moved from Target to Replacement	1
Sentinel Zone Wells							
4219 Viebahn St	na	Q1, new DG well	1	Q2, moved from DG to Sentinal			
3121 Hecker Rd.	1						
3320 Hecker Rd.	1						
3625 Hecker Rd.	1						
3720 Hecker Rd.	1						
2706 CTH CR	na	Q1, new DG well	1	Q2, moved from DG to Sentinel			
2716 CTH CR	na	Q1, new DG well	1	Q2, moved from DG to Target	1	Q3, moved from Target to Sentinel	
2832 (2904) CTH CR	1					Q3, perm. Sentinel to targ. Sentinel	
2911 CTH CR	1	Q1, moved from DG to Sentinal				Q3, perm. Sentinel to targ. Sentinel	
2917 CTH CR	1					Q3, perm. Sentinel to targ. Sentinel	
3224 CTH CR	1		1		1	Q3, moved from Target to targ. Sentinel	
3312 CTH CR	1		1		1	Q3, moved from Target to targ. Sentinel	
3322 CTH CR	1		1		1	Q3, moved from Target to targ. Sentinel	
3412 CTH CR	O	Q1, not sampled, non responsive	1		1	Q3, moved from Target to targ. Sentinel	
3422 CTH CR	1		1		1	Q3, moved from Target to targ. Sentinel	
3523 CTH CR	1					Q3, perm. Sentinel to targ. Sentinel	
3533 CTH CR	1					Q3, perm. Sentinel to targ. Sentinel	
3611 CTH CR	1	Q1, moved from DG to Sentinal				Q3, perm. Sentinel to targ. Sentinel	
3626(3626B) CTH CR	1					Q3, perm. Sentinel to targ. Sentinel	
3627 CTH CR	1					Q3, moved from Historical to targ. Sentinel	
4024 CTH CR	1						
4101 CTH CR	1	Q1, moved from DG to Sentinal					
4127 Thunder Ridge Rd.	1		na		na	Q3, moved from Historical to Sentinel	
3128 Orchard Ln.	1						
3420 Orchard Ln.	1						
3524 Orchard Ln.	1						
3318 Orchard Ln.	1	Q1, moved from DG to Sentinel					
3812 Silver Creek	1	Q1, moved from DG to Sentinal					
3902 Silver Creek Rd.	na		na	Q2, new DG well for Q3	1	Q3, moved from DG to Sentinel	
4004 Silver Creek Rd.	na		na	Q2, new DG well for Q3	1	Q3, moved from DG to Sentinel	
4156 Silver Creek	1	Q1, moved from DG to Sentinal					
Data Gap Wells							
3911 Blackhawk Ct	O	Q1, not sampled, non responsive	O	Q2, not sampled, non responsive	O	Q3, not sampled, non responsive	1
Historically Sampled Wells							
5107 Veibahn St.	na	Q1, not sampled, upgradient					
2925 Fricke Rd.	na	Q1, not sampled, upgradient					
3107 Fricke Rd.	na	Q1, not sampled, upgradient					
3610 Gass Lake Rd.	na	Q1, not sampled, upgradient					
3609 M&M Ln.	na	Q1, not sampled, upgradient					
3717 M&M Ln.	na	Q1, not sampled, upgradient					
3804 M&M Ln.	na	Q1, not sampled, upgradient					
3114 Hecker Rd.	1		na		na	Q3, moved from Sentinel to Historical	
3627 Hecker Rd.	1		na		na	Q3, moved from Sentinel to Historical	
2881 CTH CR	O	Q1, not sampled, out of service					
3904 CTH CR	1						
4212 Silver Creek 4220 Silver Creek 4236 Silver Creek	1	Q1, moved from DG to Historical - 3 properties served by 1 well, 4212 Silver Crk					
4314 Silver Creek Rd.	1						
4315 Silver Creek Rd.	1						
4609 Silver Creek Rd.	1						
4620 Silver Creek Rd. (two wells)	2						
4752 Silver Creek Rd.	1						
4808 Silver Creek Rd.	1						
5202 Silver Creek Rd.	na	Q1, not sampled, upgradient					
3523 Orchard Ln.	1		na		na	Q3, moved from Sentinel to Historical	

AECOM

Figures:

Figure 1; Site Location
Figure 2; 2014 Third Quarter Potable Well VOC Sampling Results
Figure 3; 2014 Fourth Quarter Potable Well VOC Sampling



SCALE 1:24 000

KILOMETERS 1 0.5 0 1 2

METERS 1000 500 0 1000 2000

MILES 1 0.5 0 1

FEET 1000 0 1000 2000 3000 4000 5000 6000 7000 8000 9000 10000

CONTOUR INTERVAL 10 FEET
NORTH AMERICAN VERTICAL DATUM OF 1988

Topographic Map courtesy of the United States Geological Survey

http://store.usgs.gov/b2c_usgs/usgs/maplocator/(ctype=areaDetails&xcm=r3standardpitrex_prd&carea=%24ROOT&layout=6_1_61_48&uiarea=2)/.do

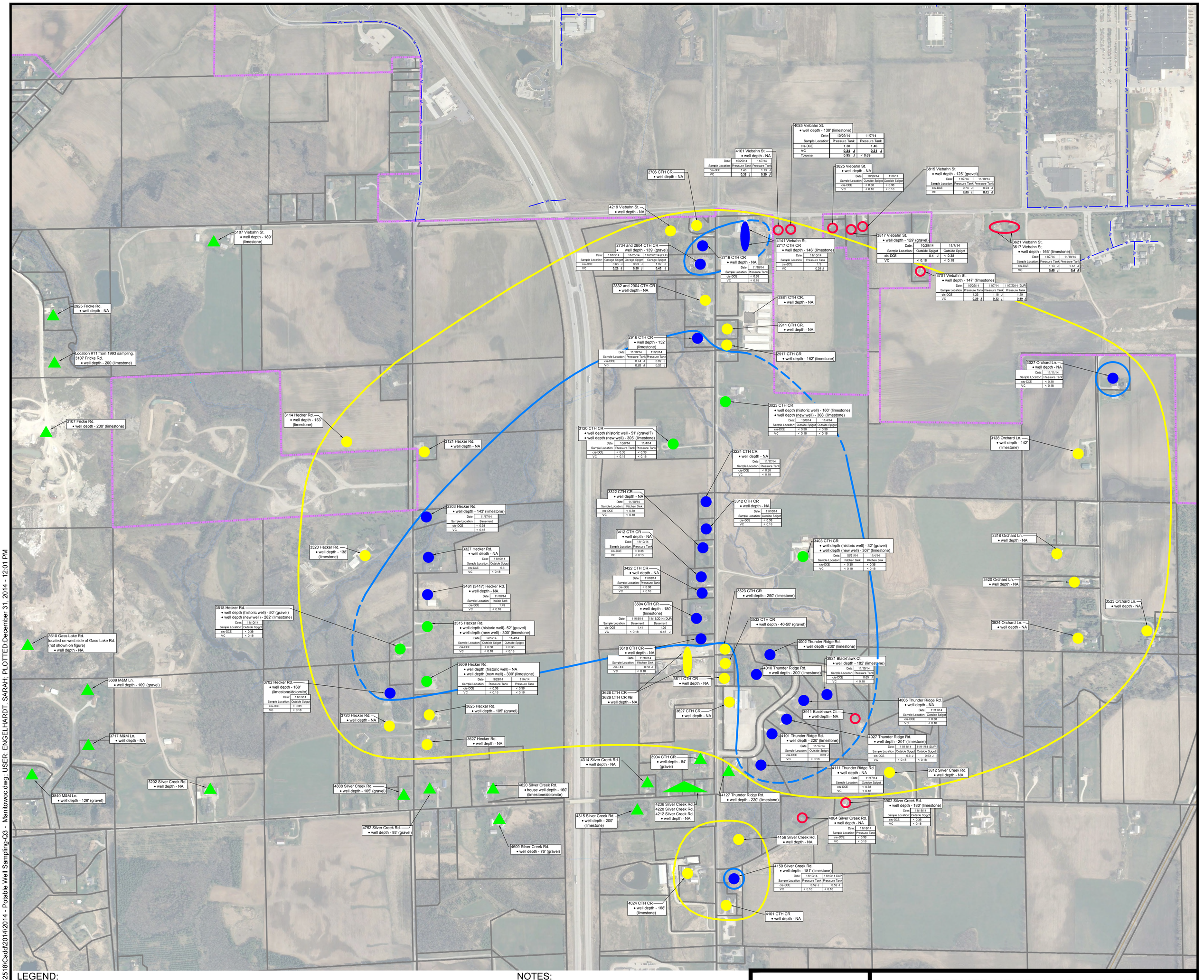
Map Date: 2010

AECOM
Milwaukee Office
1555 RiverCenter Dr
Milwaukee, WI
414.944.6080

FORMER NEWTON GRAVEL PIT

SITE LOCATION

Project Number:	Drawn By:	Date:	Figure No.
60135471	SAE	2/8/2013	1



LEGEND:

- PROPERTY BOUNDARY
- PROPERTY BOUNDARY - CITY LIMITS
- UTILITIES:
- W — -POTABLE WATER SUPPLY (from City of Manitowoc)
- POTABLE WELL SAMPLE LOCATIONS
- -WITHIN TARGET ZONE
- -WITHIN SENTINEL ZONE
- -REPLACEMENT WELL WITHIN TARGET ZONE
- -UPGRADIENT AND HISTORICALLY SAMPLED WELLS
- TARGET ZONE
- SENTINEL ZONE
- DATA GAP SAMPLE LOCATION
- WELL OUT OF SERVICE

- VOCs = Volatile Organic Compounds
- cis-DCE = cis-1,2-Dichloroethene
- VC = Vinyl Chloride
- **bold** = PAL exceedance
- **bold and underlined** = ES exceedance
- PAL = Preventive Action Limit
- ES = Enforcement Standard

NOTES:

1. VOCs detected from likely laboratory or sampling cross-contamination not reported on figure.
2. VOC values for Q3-2014 sampling event reported on figure.
3. Analytical data presented in µg/L.

N

0' 150' 300' 600'
SCALE

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FORMER NEWTON GRAVEL PIT

2014 QUARTER 3 POTABLE WELL SAMPLING RESULTS

Project Number: 60311767
Drawn By: SAE
Date: 12/31/2014

Figure No. 2

5107 Viebahn St.
• well depth - 189' (limestone)

2925 Fricke Rd.
• well depth - NA

Location #11 from 1993 sampling.
3107 Fricke Rd.
• well depth - 200 (limestone)

3107 Fricke Rd.
• well depth - 200' (limestone)

3114 Hecker Rd.
• well depth - 153' (limestone)

3121 Hecker Rd.
• well depth - NA

3303 Hecker Rd.
• well depth - 143' (limestone)

3320 Hecker Rd.
• well depth - 138' (limestone)

3327 Hecker Rd.
• well depth - NA

3461 (3417) Hecker Rd.
• well depth - NA

3518 Hecker Rd.
• well depth (historic well) - 50' (gravel)
• well depth (new well) - 212' (limestone)

3515 Hecker Rd.
• well depth (historic well)- 52' (gravel)
• well depth (new well) - 300' (limestone)

3610 Gass Lake Rd.
located on west side of Gass Lake Rd. (not shown on figure)
• well depth - NA

3609 Hecker Rd.
• well depth (historic well) - NA
• well depth (new well) - 300' (limestone)

3609 M&M Ln.
• well depth - 109' (gravel)

3702 Hecker Rd.
• well depth - 160' (limestone/dolomite)

3625 Hecker Rd.
• well depth - 105' (gravel)

3720 Hecker Rd.
• well depth - NA

3627 Hecker Rd.
• well depth - NA

3717 M&M Ln.
• well depth - NA

3840 M&M Ln.
• well depth - 126' (gravel)

5202 Silver Creek Rd.
• well depth - NA

4808 Silver Creek Rd.
• well depth - 105' (gravel)

4620 Silver Creek Rd.
• house well depth - 160' (limestone/dolomite)

4752 Silver Creek Rd.
• well depth - 93' (gravel)

4609 Silver Creek Rd.
• well depth - 76' (gravel)

4025 Viebahn St.
• well depth - 138' (limestone)

4101 Viebahn St.
• well depth - NA

2706 CTH CR
• well depth - NA

3825 Viebahn St.
• well depth - NA

3815 Viebahn St.
• well depth - 125' (gravel)

4219 Viebahn St.
• well depth - NA

4141 Viebahn St.
2717 CTH CR
• well depth - 146' (limestone)

3817 Viebahn St.
• well depth - 129' (gravel)

3621 Viebahn St.
3617 Viebahn St.
• well depth - 166' (limestone)

2734 and 2804 CTH CR
• well depth - 139' (gravel)

2716 CTH CR
• well depth - NA

3701 Viebahn St.
• well depth - 147' (limestone)

2832 and 2904 CTH CR
• well depth - NA

2881 CTH CR.
• well depth - NA

2911 CTH CR.
• well depth - NA

2916 CTH CR
• well depth - 132' (limestone)

2917 CTH CR
• well depth - 162' (limestone)

3027 Orchard Ln.
• well depth - NA

3023 CTH CR
• well depth (historic well) - 160' (limestone)
• well depth (new well) - 308' (limestone)

3120 CTH CR
• well depth (historic well - 51' (gravel?)
• well depth (new well) - 305' (limestone)

3224 CTH CR
• well depth - NA

3128 Orchard Ln.
• well depth - 142' (limestone)

3322 CTH CR
• well depth - NA

3312 CTH CR
• well depth - NA

3412 CTH CR
• well depth - NA

3403 CTH CR
• well depth (historic well) - 32' (gravel)
• well depth (new well) - 307' (limestone)

3318 Orchard Ln.
• well depth - NA

3422 CTH CR
• well depth - NA

3420 Orchard Ln.
• well depth - NA

3523 CTH CR
• well depth - 250' (limestone)

3523 Orchard Ln.
• well depth - NA

3504 CTH CR
• well depth - 180' (limestone)

3533 CTH CR
• well depth - 40-50' (gravel)

3524 Orchard Ln.
• well depth - NA

3618 CTH CR
• well depth - NA

4002 Thunder Ridge Rd.
• well depth - 200' (limestone)

3921 Blackhawk Ct.
• well depth - 182' (limestone)

4010 Thunder Ridge Rd.
• well depth - 200' (limestone)

3611 CTH CR
• well depth - NA

3626 CTH CR
3626 CTH CR #B
• well depth - NA

4005 Thunder Ridge Rd.
• well depth - NA

3627 CTH CR
• well depth - NA

3911 Blackhawk Ct.
• well depth - NA

4101 Thunder Ridge Rd.
• well depth - 220' (limestone)

4027 Thunder Ridge Rd.
• well depth - 201' (limestone)

4314 Silver Creek Rd.
• well depth - NA

3904 CTH CR
• well depth - 84' (gravel)

4111 Thunder Ridge Rd.
• well depth - NA

3812 Silver Creek Rd.
• well depth - NA

4127 Thunder Ridge Rd.
• well depth - 220' (limestone)

3902 Silver Creek Rd.
• well depth - 180' (limestone)

4315 Silver Creek Rd.
• well depth - 200' (limestone)

4236 Silver Creek Rd
4220 Silver Creek Rd.
4212 Silver Creek Rd.
• well depth - NA

4004 Silver Creek Rd.
• well depth - NA

4156 Silver Creek Rd.
• well depth - NA

4159 Silver Creek Rd.
• well depth - 181' (limestone)

4024 CTH CR
• well depth - 168' (limestone)

4101 CTH CR
• well depth - NA

LEGEND:

- PROPERTY BOUNDARY
- PROPERTY BOUNDARY - CITY LIMITS
- UTILITIES:
- W -POTABLE WATER SUPPLY (from City of Manitowoc)
- POTABLE WELL SAMPLE LOCATIONS
- -WITHIN TARGET ZONE
- -WITHIN TARGET ZONE WITH NO DETECTS
- -WITHIN SENTINEL ZONE
- -REPLACEMENT WELL WITHIN TARGET ZONE
- -UPGRADIENT AND HISTORICALLY SAMPLED WELLS
- TARGET ZONE
- SENTINEL ZONE
- FORMER GRAVEL PIT ZONE
- DATA GAP SAMPLE LOCATION
- WELL OUT OF SERVICE

N

0' 150' 300' 600'
SCALE

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Milwaukee, WI
414.944.6080

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FORMER NEWTON GRAVEL PIT

2014 QUARTER 3
PROPOSED QUARTER 4
POTABLE WELL SAMPLING LOCATIONS

Project Number: 60311767
Drawn By: SAE
Date: 12/31/2014

Figure No. 3

Attachment A:

Well Construction Reports

Well Construction Report

WISCONSIN UNIQUE WELL NUMBER **YK881**

State of WI - Private Water Systems-DG/5
Department of Natural Resources, Box 7921
Madison, WI 53707

Form 3300-077A (R 7/10)

Property Owner: James Schnuelle	Telephone Number: ( )
Mailing Address: 3403 Hwy CR	
City: Manitowoc	State: WI — Zip Code: 54220-
County of Well Location: MANITOWOC	Co. Well Permit No.: W
Well Completion Date (mm-dd-yyyy): 10 - 15 - 2014	

1. Well Location

X Town ☐ City ☐ Village of Newton — Fire # (If avail.)

Street Address or Road Name and Number: 3403 Hwy CR

Subdivision Name — Lot # — Block #

Gov't Lot # ___ or NW 1/4 of SW 1/4 of Section 1, T 18 N; R 23 X E ☐ W

Latitude Deg. 44 Min. 3.486

Longitude Deg. 87 Min. 41.916

Well Constructor (Business Name): Ground Source	License #: 4462
Address: 3671 Monroe Road	Facility ID Number (Public Wells):
City: De Pere — State: WI — Zip Code: 54115-	Well Plan Approval #:
Hicap Permanent Well #	Common Well #
	Date of Approval (mm/dd/yyyy):
	Specific Capacity: gpm/ft

2. Well Type

X Replacement ☐ New ☐ Reconstruction (see item 12 below)

of previous unique well # ___ constructed in ___

Reason for replaced or reconstructed well? contamination

Lat/Long Method: GPS008

X Drilled ☐ Driven Point ☐ Jetted ☐ Other ___

3. Well serves 1 # of home
(For example: home, barn, restaurant, church, school, industry, etc.)

High Capacity: Well? ☐ Yes X No; Property? ☐ Yes X No

4. Is the well located upslope or sideslope and not downslope from any contamination sources, including those on neighboring properties? X Yes ☐ No (If no, explain on back side.)

Well located within 1,200 feet of a quarry? ☐ Yes X No If yes, distance in feet from quarry: ___

Well located in floodplain? ☐ Yes X No

Distance in feet from well to nearest: (include proposed)

- ___ 1. Landfill
- 22 2. Building Overhang
- 40 3. Septic ☐ Holding Tank X
- 65 4. Sewage Absorption Unit
- ___ 5. Nonconforming Pit
- ___ 6. Buried Home Heating Oil Tank
- ___ 7. Buried Petroleum Tank
- ___ 8. Shoreline ☐ Swimming Pool ☐
- ___ 9. Downspout/Yard Hydrant
- ___ 10. Privy
- ___ 11. Foundation Drain to Clearwater
- ___ 12. Foundation Drain to Sewer
- ___ 13. Building Drain ☐ Cast Iron or Plastic ☐ Other
- ___ 14. Building Sewer ☐ Gravity ☐ Pressure ☐ Cast Iron or Plastic ☐ Other
- ___ 15. Collector Sewer: ☐ sanitary ___ units ___ in. diam. ☐ storm ☐ ≤ 6" ☐ > 6"
- ___ 16. Clearwater Sump
- ___ 17. Wastewater Sump
- ___ 18. Paved Animal Barn Pen
- ___ 19. Animal Yard or Shelter
- ___ 20. Silo
- ___ 21. Barn Gutter
- ___ 22. Manure Pipe ☐ Gravity ☐ Pressure ☐ Cast Iron or Plastic ☐ Other
- ___ 23. Other Manure Storage ___
- ___ 24. Ditch
- ___ 25. Other NR 812 Waste Source ___

5. Drillhole Dimensions and Construction Method

Dia.(in.)	From (ft.)	To (ft.)	Upper Enlarged Drillhole	Lower Open Bedrock
13	surface	172	X 1. Rotary - Mud Circulation	☐
			☐ 2. Rotary - Air	X
			☐ 3. Rotary - Air and Foam	☐
9	172	275	☐ 4. Drill-Through Casing Hammer	
			☐ 5. Reverse Rotary	
			☐ 6. Cable-tool Bit ___ in. dia.	☐
6	275	307	☐ 7. Temp. Outer Casing ___ in. dia. Removed? ___ depth ft. ☐ Yes ☐ No - If no, explain on back side.	
			☐ 8. Dual Rotary	☐

6. Casing, Liner, Screen

Dia. (in.)	Material, Weight, Specification, Manufacturer & Method of Assembly	From (ft.)	To (ft.)
10	new pln end blk steel welded 4	surface	172
6	new pln end blk steel welded 18		275
	.97 .280 A53 Exltube		
Dia. (in.)	Screen type, material & slot size	From	To

7. Grout or Other Sealing Material

Method Bradenhead

Kind of Sealing Material	From (ft.)	To (ft.)	# Sacks Cement
Neat cement grout	surface	275	130
(Gravel pack if applicable)			

Geology Codes	8. Geology Type, Caving/Noncaving, Color, Hardness, etc.	From (ft.)	To (ft.)
- - Z -	Clay & Gravel	0	13
- - C -	Clay	13	100
- - Z -	Clay & Gravel	100	130
- - P -	Hardpan	130	150
- - L -	Limestone/Dolomite	150	164
- C L -	Cavernous, Limestone/Dolomite	165	168
- - L -	Limestone/Dolomite	168	240
- B L -	Broken, Limestone/Dolomite	240	242
- - L -	Limestone/Dolomite	242	307

9. Static Water Level

1 ft. above ground surface

___ ft. below ground surface

10. Pump Test

Pumping level 50 ft. below surface

Pumping at 30 GPM for 1 Hrs.

11. Well Is:

24 in. X Above Grade ☐ Below

Developed? X Yes ☐ No

Disinfected? X Yes ☐ No

Capped? X Yes ☐ No

12. Did you permanently abandon and fill all unused, noncomplying or unsafe wells on this property?

X Yes ☐ No If no, explain on reverse.

13. Signature of Well Constructor or Supervisory Driller: tv — Date Signed: 10/23/2014

Print Name of Drill Rig Operator (Mandatory unless same as above): kv — Date: 10/23/2014

Make additional comments on reverse side about geology, additional screens, water quality, etc.

Comments on reverse side X (CHECK √, IF YES) **Variance Issued** ☐ Yes X No

Notification # 53012471

DNR

Well Construction Report

WISCONSIN UNIQUE WELL NUMBER **YK875**

State of WI - Private Water Systems-DG/5
Department of Natural Resources, Box 7921
Madison, WI 53707

Form 3300-077A (R 7/10)

Property Owner: John C. Shoop	Telephone Number: ( )
Mailing Address: 3120 Hwy CR	
City: Manitowoc	State: WI Zip Code: 54220-
County of Well Location: MANITOWOC	Co. Well Permit No.: W
Well Completion Date (mm-dd-yyyy): 9/ - 9/ - 014	

1. Well Location

[X] Town [ ] City [ ] Village of Newton

Fire # (If avail.)

Street Address or Road Name and Number: 3120 Hwy CR

Subdivision Name | Lot # | Block #

Gov't Lot # ___ or SE 1/4 of NE 1/4 of Section 2, T 18 N; R 23 [X] E [ ] W

Latitude Deg. ___ Min. ___

Longitude Deg. ___ Min. ___

Lat/Long Method

Well Constructor (Business Name): Ground Source	License #: 4462
Address: 3671 Monroe Road	Facility ID Number (Public Wells):
City: De Pere State: WI Zip Code: 54115-	Well Plan Approval #:
Hicap Permanent Well #:	Common Well #:
	Date of Approval (mm/dd/yyyy): / /
	Specific Capacity: gpm/ft

2. Well Type

[ ] New [X] Replacement [ ] Reconstruction (see item 12 below)

of previous unique well # ___ constructed in ___

Reason for replaced or reconstructed well? contamination

[X] Drilled [ ] Driven Point [ ] Jetted [ ] Other ___

3. Well serves 1 # of home (For example: home, barn, restaurant, church, school, industry, etc.)

High Capacity: Well? [ ] Yes [X] No; Property? [ ] Yes [X] No

4. Is the well located upslope or sideslope and not downslope from any contamination sources, including those on neighboring properties? [X] Yes [ ] No If no, explain on back side.

Well located within 1,200 feet of a quarry? [ ] Yes [X] No If yes, distance in feet from quarry: ___

Well located in floodplain? [ ] Yes [X] No

Distance in feet from well to nearest: (include proposed)

___ 1. Landfill
22 2. Building Overhang
40 3. Septic [ ] Holding Tank [X]
58 4. Sewage Absorption Unit
___ 5. Nonconforming Pit
___ 6. Buried Home Heating Oil Tank
___ 7. Buried Petroleum Tank
___ 8. Shoreline [ ] Swimming Pool [ ]
___ 9. Downspout/Yard Hydrant
___ 10. Privy
___ 11. Foundation Drain to Clearwater
___ 12. Foundation Drain to Sewer
___ 13. Building Drain [ ] Cast Iron or Plastic [ ] Other
___ 14. Building Sewer [ ] Gravity [ ] Pressure [ ] Cast Iron or Plastic [ ] Other
___ 15. Collector Sewer: [ ] sanitary ___ units ___ in. diam. [ ] storm [ ] ≤ 6" [ ] > 6"
___ 16. Clearwater Sump
___ 17. Wastewater Sump
___ 18. Paved Animal Barn Pen
___ 19. Animal Yard or Shelter
___ 20. Silo
___ 21. Barn Gutter
___ 22. Manure Pipe [ ] Gravity [ ] Pressure [ ] Cast Iron or Plastic [ ] Other
___ 23. Other Manure Storage ___
___ 24. Ditch
___ 25. Other NR 812 Waste Source ___

5. Drillhole Dimensions and Construction Method

Dia.(in.)	From (ft.)	To (ft.)	Upper Enlarged Drillhole	Lower Open Bedrock
			[X] 1. Rotary - Mud Circulation	[ ]
9	surface	279	[ ] 2. Rotary - Air	[X]
			[ ] 3. Rotary - Air and Foam	[ ]
6	279	305	[ ] 4. Drill-Through Casing Hammer	
			[ ] 5. Reverse Rotary	
			[ ] 6. Cable-tool Bit ___ in. dia.	[ ]
			[ ] 7. Temp. Outer Casing ___ in. dia. Removed? ___ depth ft. [ ] Yes [ ] No - If no, explain on back side.	
			[ ] 8. Dual Rotary	[ ]

8. Geology

Geology Codes	Type, Caving/Noncaving, Color, Hardness, etc.	From (ft.)	To (ft.)
- - X -	Sand & Clay	0	6
- - C -	Clay	6	50
- - Z -	Clay & Gravel	50	121
- B L -	Broken, Limestone/Dolomite	121	136
- H L -	Hard/Firm, Limestone/Dolomite	136	305

6. Casing, Liner, Screen

Dia. (in.)	Material, Weight, Specification Manufacturer & Method of Assembly	From (ft.)	To (ft.)
6	new pln end blk steel welded	surface	279
	18.97 .280 A53 Exltube		
Dia. (in.)	Screen type, material & slot size	From	To

9. Static Water Level

___ ft. above ground surface

5 ft. below ground surface

10. Pump Test

Pumping level 50 ft. below surface

Pumping at 30 GPM for 1 Hrs.

11. Well Is:

[X] Above Grade 12 in. [ ] Below

Developed? [X] Yes [ ] No

Disinfected? [X] Yes [ ] No

Capped? [X] Yes [ ] No

7. Grout or Other Sealing Material

Method Bradenhead

Kind of Sealing Material	From (ft.)	To (ft.)	# Sacks Cement
Neat cement grout	surface	279	70
(Gravel pack if applicable)			

12. Did you permanently abandon and fill all unused, noncomplying or unsafe wells on this property? [X] Yes [ ] No If no, explain on reverse.

13. Signature of Well Constructor or Supervisory Driller: tv — Date Signed: 10/23/2014

Print Name of Drill Rig Operator (Mandatory unless same as above): kv — Date: 10/23/2014

Make additional comments on reverse side about geology, additional screens, water quality, etc.

Comments on reverse side ___ (CHECK √, IF YES) **Variance Issued** [ ] Yes [X] No

Notification # 52884913

DNR

Well Construction Report
WISCONSIN UNIQUE WELL NUMBER **YK874**

State of WI - Private Water Systems-DG/5
Department of Natural Resources, Box 7921
Madison, WI 53707

Form 3300-077A (R 7/10)

Property Owner: **Ronald & Corinna Eberhardt**	Telephone Number: ( )
Mailing Address: **3023 Hwy CR**	
City: **Manitowoc**	State: **WI** Zip Code: **54220-**
County of Well Location: **MANITOWOC**	Co. Well Permit No.: **W**
Well Completion Date (mm-dd-yyyy): **9/ - 9/ - 014**	

1. Well Location

[X] Town [ ] City [ ] Village of **Newton** | Fire # (If avail.)

Street Address or Road Name and Number: **3023 Hwy CR**

Subdivision Name | Lot # | Block #

Gov't Lot # ____ or **SW** 1/4 of **NW** 1/4 of Section **1**, T **18** N; R **23** [X] E [ ] W

Latitude Deg. ____ Min. ____

Longitude Deg. ____ Min. ____

Well Constructor (Business Name): **Ground Source**	License #: **4462**
Address: **3671 Monroe Road**	Facility ID Number (Public Wells)
City: **De Pere** State: **WI** Zip Code: **54115-**	Well Plan Approval #
Hicap Permanent Well #	Common Well #
	Date of Approval (mm/dd/yyyy)
	Specific Capacity gpm/ft

2. Well Type [ ] New [X] Replacement [ ] Reconstruction (see item 12 below)

Lat/Long Method

of previous unique well # ____ constructed in ____

Reason for replaced or reconstructed well? **contamination**

[X] Drilled [ ] Driven Point [ ] Jetted [ ] Other ____

3. Well serves **1** # of **home** (For example: home, barn, restaurant, church, school, industry, etc.)

High Capacity: Well? [ ] Yes [X] No Property? [ ] Yes [X] No

4. Is the well located upslope or sideslope and not downslope from any contamination sources, including those on neighboring properties? [X] Yes [ ] No If no, explain on back side.

Well located within 1,200 feet of a quarry? [ ] Yes [X] No If yes, distance in feet from quarry: ____

Well located in floodplain? [ ] Yes [X] No

Distance in feet from well to nearest: (include proposed)

- ____ 1. Landfill
- **45** 2. Building Overhang
- **55** 3. Septic [ ] Holding Tank [X]
- **60** 4. Sewage Absorption Unit
- ____ 5. Nonconforming Pit
- ____ 6. Buried Home Heating Oil Tank
- ____ 7. Buried Petroleum Tank
- ____ 8. Shoreline [ ] Swimming Pool [ ]
- ____ 9. Downspout/Yard Hydrant
- ____ 10. Privy
- ____ 11. Foundation Drain to Clearwater
- ____ 12. Foundation Drain to Sewer
- ____ 13. Building Drain [ ] Cast Iron or Plastic [ ] Other
- ____ 14. Building Sewer [ ] Gravity [ ] Pressure [ ] Cast Iron or Plastic [ ] Other
- ____ 15. Collector Sewer: [ ] sanitary ___ units ___ in. diam. [ ] storm [ ] ≤ 6" [ ] > 6"
- ____ 16. Clearwater Sump
- ____ 17. Wastewater Sump
- ____ 18. Paved Animal Barn Pen
- ____ 19. Animal Yard or Shelter
- ____ 20. Silo
- ____ 21. Barn Gutter
- ____ 22. Manure Pipe [ ] Gravity [ ] Pressure [ ] Cast Iron or Plastic [ ] Other
- ____ 23. Other Manure Storage ____
- ____ 24. Ditch
- ____ 25. Other NR 812 Waste Source ____

5. Drillhole Dimensions and Construction Method

Dia.(in.)	From (ft.)	To (ft.)
9	surface	275
6	275	308

Upper Enlarged Drillhole / Lower Open Bedrock

[X] ---1. Rotary - Mud Circulation---------- [ ]
[ ] ---2. Rotary - Air---------- [X]
[ ] ---3. Rotary - Air and Foam---------- [ ]
[ ] ---4. Drill-Through Casing Hammer
[ ] ---5. Reverse Rotary
[ ] ---6. Cable-tool Bit ____ in. dia.---------- [ ]
[ ] ---7. Temp. Outer Casing ____ in. dia. Removed? ____ depth ft. [ ] Yes [ ] No - If no, explain on back side.
[ ] ---8. Dual Rotary---------- [ ]

8. Geology Type, Caving/Noncaving, Color, Hardness, etc.

Geology Codes	Type, Caving/Noncaving, Color, Hardness, etc.	From (ft.)	To (ft.)
- - S -	**Sand**	**0**	**10**
- - C -	**Clay**	**10**	**90**
- - C G	**Clay, w/Gravel/Cobbles/Boulders/Stones**	**90**	**120**
- - P T	**Hardpan, w/Till**	**120**	**133**
- - L -	**Limestone/Dolomite**	**133**	**308**

6. Casing, Liner, Screen

Dia. (in.)	Material, Weight, Specification Manufacturer & Method of Assembly	From (ft.)	To (ft.)
6	**new pln end blk steel welded**	surface	275
	18.97 .280 A53 Exltube		
Dia. (in.)	Screen type, material & slot size	From	To

9. Static Water Level

2 ft. above ground surface

____ ft. below ground surface

11. Well Is:

[X] Above Grade **24** in. [ ] Below

10. Pump Test

Pumping level **40** ft. below surface

Pumping at **50** GPM for **1** Hrs.

Developed? [X] Yes [ ] No
Disinfected? [X] Yes [ ] No
Capped? [X] Yes [ ] No

7. Grout or Other Sealing Material

Method **Bradenhead**

Kind of Sealing Material	From (ft.)	To (ft.)	# Sacks Cement
Neat cement grout	surface	275	75
(Gravel pack if applicable)			

12. Did you permanently abandon and fill all unused, noncomplying or unsafe wells on this property?

[X] Yes [ ] No If no, explain on reverse.

13. Signature of Well Constructor or Supervisory Driller: **tv** Date Signed: **10/23/2014**

Print Name of Drill Rig Operator (Mandatory unless same as above): **kv** Date: **10/23/2014**

Make additional comments on reverse side about geology, additional screens, water quality, etc.

Comments on reverse side ____ (CHECK √, IF YES) **Variance Issued** [ ] Yes [X] No

Notification # **52884911**

DNR

Well Construction Report

WISCONSIN UNIQUE WELL NUMBER **YK856**

State of WI - Private Water Systems-DG/5
Department of Natural Resources, Box 7921
Madison, WI 53707

Form 3300-077A (R 7/10)

Property Owner: ORP Real Estate Holding	Telephone Number: ( )
Mailing Address: 1746 Executive Drive	
City: Oconmowoc	State: WI Zip Code: 53066-
County of Well Location: MANITOWOC	Co. Well Permit No.: W
Well Completion Date (mm-dd-yyyy): 9/ - 2/ - 014	

1. Well Location

[X] Town [ ] City [ ] Village of Newton

Fire # (If avail.)

Street Address or Road Name and Number: 3609 Hecker Road

Subdivision Name | Lot # | Block #

Gov't Lot # ____ or SW 1/4 of SE 1/4 of Section 2, T 18 N; R 23 [X] E [ ] W

Latitude Deg. ____ Min. ____

Longitude Deg. ____ Min. ____

Lat/Long Method

Well Constructor (Business Name): Ground Source	License #: 4462
Address: 3671 Monroe Road	Facility ID Number (Public Wells)
City: De Pere State: WI Zip Code: 54115-	Well Plan Approval #
Hicap Permanent Well #	Common Well #
	Date of Approval (mm/dd/yyyy)
	Specific Capacity gpm/ft

2. Well Type

[ ] New [X] Replacement [ ] Reconstruction (see item 12 below)

of previous unique well # ____ constructed in ____

Reason for replaced or reconstructed well? contamination

[X] Drilled [ ] Driven Point [ ] Jetted [ ] Other ____

3. Well serves 1 # of home (For example: home, barn, restaurant, church, school, industry, etc.)

High Capacity: Well? [ ] Yes [X] No; Property? [ ] Yes [X] No

4. Is the well located upslope or sideslope and not downslope from any contamination sources, including those on neighboring properties? [X] Yes [ ] No If no, explain on back side.

Well located within 1,200 feet of a quarry? [ ] Yes [X] No If yes, distance in feet from quarry: ____

Well located in floodplain? [ ] Yes [X] No

Distance in feet from well to nearest: (include proposed)

- ____ 1. Landfill
- 30 2. Building Overhang
- 75 3. Septic [ ] Holding Tank [X]
- 165 4. Sewage Absorption Unit
- ____ 5. Nonconforming Pit
- ____ 6. Buried Home Heating Oil Tank
- ____ 7. Buried Petroleum Tank
- ____ 8. Shoreline [ ] Swimming Pool [ ]
- ____ 9. Downspout/Yard Hydrant
- ____ 10. Privy
- ____ 11. Foundation Drain to Clearwater
- ____ 12. Foundation Drain to Sewer
- ____ 13. Building Drain [ ] Cast Iron or Plastic [ ] Other
- ____ 14. Building Sewer [ ] Gravity [ ] Pressure [ ] Cast Iron or Plastic [ ] Other
- ____ 15. Collector Sewer: [ ] sanitary ___ units ___ in. diam. [ ] storm [ ] ≤ 6" [ ] > 6"
- ____ 16. Clearwater Sump
- ____ 17. Wastewater Sump
- ____ 18. Paved Animal Barn Pen
- ____ 19. Animal Yard or Shelter
- ____ 20. Silo
- ____ 21. Barn Gutter
- ____ 22. Manure Pipe [ ] Gravity [ ] Pressure [ ] Cast Iron or Plastic [ ] Other
- ____ 23. Other Manure Storage ____
- ____ 24. Ditch
- ____ 25. Other NR 812 Waste Source ____

5. Drillhole Dimensions and Construction Method

Dia.(in.)	From (ft.)	To (ft.)
9	surface	290
6	290	300

Upper Enlarged Drillhole

[X] 1. Rotary - Mud Circulation
[ ] 2. Rotary - Air
[ ] 3. Rotary - Air and Foam
[ ] 4. Drill-Through Casing Hammer
[ ] 5. Reverse Rotary
[ ] 6. Cable-tool Bit ____ in. dia.
[ ] 7. Temp. Outer Casing ____ in. dia. Removed? ____ depth ft. [ ] Yes [ ] No - If no, explain on back side.
[ ] 8. Dual Rotary

Lower Open Bedrock: [ ] [X] [ ]

6. Casing, Liner, Screen

Dia. (in.)	Material, Weight, Specification, Manufacturer & Method of Assembly	From (ft.)	To (ft.)
6	new pln end blk steel welded	surface	290
	18.97 .280 A53 Exltube		
Dia. (in.)	Screen type, material & slot size	From	To

7. Grout or Other Sealing Material

Method Bradenhead

Kind of Sealing Material	From (ft.)	To (ft.)	# Sacks Cement
Neat cement grout	surface	290	70
(Gravel pack if applicable)			

Geology Codes	8. Geology Type, Caving/Noncaving, Color, Hardness, etc.	From (ft.)	To (ft.)
- - X -	Sand & Clay	0	8
- - G -	Gravel/Cobbles/Boulders/Stones	8	20
- - C -	Clay	20	50
- - X G	Sand & Clay, w/Gravel/Cobbles/Boulders/St	50	80
- - P -	Hardpan	80	131
- - L -	Limestone/Dolomite	131	135
- F L -	Fractured, Limestone/Dolomite	135	137
- - L -	Limestone/Dolomite	137	300

9. Static Water Level

____ ft. above ground surface

20 ft. below ground surface

10. Pump Test

Pumping level 60 ft. below surface

Pumping at 30 GPM for 1 Hrs.

11. Well Is:

12 in. [X] Above Grade [ ] Below

Developed? [X] Yes [ ] No

Disinfected? [X] Yes [ ] No

Capped? [X] Yes [ ] No

12. Did you permanently abandon and fill all unused, noncomplying or unsafe wells on this property?

[X] Yes [ ] No If no, explain on reverse.

13. Signature of Well Constructor or Supervisory Driller: tv — Date Signed: 10/23/2014

Print Name of Drill Rig Operator (Mandatory unless same as above): kv — Date: 10/23/2014

Make additional comments on reverse side about geology, additional screens, water quality, etc.

Comments on reverse side ____ (CHECK √, IF YES) **Variance Issued** [ ] Yes [X] No

Notification # 52774192

DNR

Well Construction Report

WISCONSIN UNIQUE WELL NUMBER **YK855**

State of WI - Private Water Systems-DG/5
Department of Natural Resources, Box 7921
Madison, WI 53707

Form 3300-077A (R 7/10)

Property Owner: Dennis & Karen Vogel	Telephone Number: ( )
Mailing Address: 3515 Hecker Road	
City: Manitowoc	State: WI Zip Code: 54220-
County of Well Location: MANITOWOC	Co. Well Permit No.: W
Well Completion Date (mm-dd-yyyy): 9/ - 2/ - 014	

1. Well Location

X Town ☐ City ☐ Village of Newton

Fire # (If avail.)

Street Address or Road Name and Number: 3515 Hecker Road

Subdivision Name | Lot # | Block #

Gov't Lot # ___ or NW 1/4 of SE 1/4 of Section 2, T 18 N; R 23 X E ☐ W

Latitude Deg. ___ Min. ___

Longitude Deg. ___ Min. ___

Well Constructor (Business Name): Ground Source	License #: 4462
Address: 3671 Monroe Road	Facility ID Number (Public Wells):
City: De Pere State: WI Zip Code: 54115-	Well Plan Approval #:
Hicap Permanent Well #	Common Well #:
	Date of Approval (mm/dd/yyyy): / /
	Specific Capacity: gpm/ft

2. Well Type

☐ New ☐ Replacement X Reconstruction (see item 12 below)

of previous unique well # ___ constructed in ___

Reason for replaced or reconstructed well? contamination

Lat/Long Method: ___

X Drilled ☐ Driven Point ☐ Jetted ☐ Other ___

3. Well serves 1 # of home (For example: home, barn, restaurant, church, school, industry, etc.)

High Capacity: Well? ☐ Yes X No; Property? ☐ Yes X No

4. Is the well located upslope or sideslope and not downslope from any contamination sources, including those on neighboring properties? X Yes ☐ No (If no, explain on back side.)

Well located within 1,200 feet of a quarry? ☐ Yes X No If yes, distance in feet from quarry: ___

Well located in floodplain? ☐ Yes X No

Distance in feet from well to nearest: (include proposed)

- ___ 1. Landfill
- 38 2. Building Overhang
- 60 3. Septic ☐ Holding Tank X
- 90 4. Sewage Absorption Unit
- ___ 5. Nonconforming Pit
- ___ 6. Buried Home Heating Oil Tank
- ___ 7. Buried Petroleum Tank
- ___ 8. Shoreline ☐ Swimming Pool ☐
- ___ 9. Downspout/Yard Hydrant
- ___ 10. Privy
- ___ 11. Foundation Drain to Clearwater
- ___ 12. Foundation Drain to Sewer
- ___ 13. Building Drain ☐ Cast Iron or Plastic ☐ Other
- ___ 14. Building Sewer ☐ Gravity ☐ Pressure ☐ Cast Iron or Plastic ☐ Other
- ___ 15. Collector Sewer: ☐ sanitary ___ units ___ in. diam. ☐ storm ☐ ≤ 6" ☐ > 6"
- ___ 16. Clearwater Sump
- ___ 17. Wastewater Sump
- ___ 18. Paved Animal Barn Pen
- ___ 19. Animal Yard or Shelter
- ___ 20. Silo
- ___ 21. Barn Gutter
- ___ 22. Manure Pipe ☐ Gravity ☐ Pressure ☐ Cast Iron or Plastic ☐ Other
- ___ 23. Other Manure Storage ___
- ___ 24. Ditch
- ___ 25. Other NR 812 Waste Source ___

5. Drillhole Dimensions and Construction Method

Dia.(in.)	From (ft.)	To (ft.)	Upper Enlarged Drillhole	Lower Open Bedrock
			X ---1. Rotary - Mud Circulation----------	☐
9	surface	277	☐ ---2. Rotary - Air----------	X
			☐ ---3. Rotary - Air and Foam----------	☐
6	277	300	☐ ---4. Drill-Through Casing Hammer	
			☐ ---5. Reverse Rotary	
			☐ ---6. Cable-tool Bit ___ in. dia.--------	☐
			☐ ---7. Temp. Outer Casing ___ in. dia. Removed? ___ depth ft. ☐ Yes ☐ No - If no, explain on back side.	
			☐ ---8. Dual Rotary----------	☐

6. Casing, Liner, Screen

Dia. (in.)	Material, Weight, Specification Manufacturer & Method of Assembly	From (ft.)	To (ft.)
6	new pln end blk steel welded	surface	277
	18.97 .280 A53 Exltube		
Dia. (in.)	Screen type, material & slot size	From	To

7. Grout or Other Sealing Material

Method Bradenhead

Kind of Sealing Material	From (ft.)	To (ft.)	# Sacks Cement
Neat cement grout	surface	277	70
(Gravel pack if applicable)			

Geology Codes	8. Geology Type, Caving/Noncaving, Color, Hardness, etc.	From (ft.)	To (ft.)
- - Y -	Sand & Gravel	0	12
- Q Z S	Caving, Clay & Gravel, Sandy	12	60
- - Z -	Clay & Gravel	60	100
- - C -	Clay	100	110
- F L -	Fractured, Limestone/Dolomite	110	113
- H L -	Hard/Firm, Limestone/Dolomite	113	170
T F L -	Tan/Brown, Fractured, Limestone/Dolomite	170	205
- H L -	Hard/Firm, Limestone/Dolomite	205	300

9. Static Water Level

___ ft. above ground surface

16 ft. below ground surface

10. Pump Test

Pumping level 80 ft. below surface

Pumping at 30 GPM for 1 Hrs.

11. Well Is:

24 in. X Above Grade ☐ Below

Developed? X Yes ☐ No

Disinfected? X Yes ☐ No

Capped? X Yes ☐ No

12. Did you permanently abandon and fill all unused, noncomplying or unsafe wells on this property?

X Yes ☐ No If no, explain on reverse.

13. Signature of Well Constructor or Supervisory Driller: tv — Date Signed: 10/23/2014

Print Name of Drill Rig Operator (Mandatory unless same as above): kv — Date: 10/23/2014

Make additional comments on reverse side about geology, additional screens, water quality, etc.

Comments on reverse side ___ (CHECK √, IF YES) Variance Issued ☐ Yes X No

Notification # 52774255

DNR

State of Wis., Dept. of Natural Resources
dnr.wi.gov

Well / Drillhole / Borehole Filling & Sealing

Form 3300-005 (R 4/08)

Notice: Completion of this report is required by chs. 160, 281, 283, 289, 291-293, 295, and 299, Wis. Stats., and ch. NR 141, Wis. Adm. Code. In accordance with chs. 281, 289, 291-293, 295, and 299, Wis. Stats., failure to file this form may result in a forfeiture of between $10-25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be used for any other purpose. Return form to the appropriate DNR office and bureau. See instructions on reverse for more information.

☐ Verification Only of Fill and Seal

Route to: ☐ Drinking Water ☐ Watershed/Wastewater ☐ Remediation/Redevelopment ☐ Waste Management ☐ Other:

1. Well Location Information

County	WI Unique Well # of Removed Well	Hicap #
MANITOWOC		

Latitude / Longitude (Degrees and Minutes): 44 • 3.328 'N / 87 • 42.652 'W — Method Code (see instructions): GPS006

¼ / ¼	¼	Section	Township	Range	
SW	SE	2	18 N	23	[X] E ☐ W

or Gov't Lot #

Well Street Address: 3609 Hecker Road

Well City, Village or Town: Newton — Well ZIP Code: 54220-

Subdivision Name — Lot #

Reason For Removal From Service: contamination — WI Unique Well # of Replacement Well: YK856

2. Facility / Owner Information

Facility Name: COM1

Facility ID (FID or PWS)

License/Permit/Monitoring #

Original Well Owner

Present Well Owner: City of Manitowoc

Mailing Address of Present Owner: 3609 Hecker Road

City of Present Owner: Manitowoc — State: WI — ZIP Code: 54220-

3. Well / Drillhole / Borehole Information

☐ Monitoring Well
[X] Water Well
☐ Borehole / Drillhole

Original Construction Date (mm/dd/yyyy)

If a Well Construction Report is available, please attach.

Construction Type:
[X] Drilled ☐ Driven (Sandpoint) ☐ Dug ☐ Other (specify):

Formation Type:
☐ Unconsolidated Formation [X] Bedrock

Total Well Depth From Ground Surface (ft.)	Casing Diameter (in.)
69	6
Lower Drillhole Diameter (in.)	**Casing Depth (ft.)**
6	

Was well annular space grouted? ☐ Yes ☐ No [X] Unknown

If yes, to what depth (feet)?	Depth to Water (feet)
	18

4. Pump, Liner, Screen, Casing & Sealing Material

Pump and piping removed?	[X] Yes	☐ No	☐ N/A
Liner(s) removed?	☐ Yes	☐ No	[X] N/A
Screen removed?	☐ Yes	☐ No	[X] N/A
Casing left in place?	[X] Yes	☐ No	☐ N/A
Was casing cut off below surface?	[X] Yes	☐ No	☐ N/A
Did sealing material rise to surface?	[X] Yes	☐ No	☐ N/A
Did material settle after 24 hours?	☐ Yes	[X] No	☐ N/A
If yes, was hole retopped?	☐ Yes	☐ No	[X] N/A
If bentonite chips were used, were they hydrated with water from a known safe source?	[X] Yes	☐ No	☐ N/A

Required Method of Placing Sealing Material
☐ Conductor Pipe-Gravity ☐ Conductor Pipe-Pumped
[X] Screened & Poured (Bentonite Chips) ☐ Other (Explain):

Sealing Materials
☐ Neat Cement Grout ☐ Clay-Sand Slurry (11 lb./gal. wt.)
☐ Sand-Cement (Concrete) Grout ☐ Bentonite-Sand Slurry * *
☐ Concrete [X] Bentonite Chips

For Monitoring Wells and Monitoring Well Boreholes Only:
☐ Bentonite Chips ☐ Bentonite - Cement Grout
☐ Granular Bentonite ☐ Bentonite - Sand Slurry

5. Material Used To Fill Well / Drillhole

From (ft.)	To (ft.)	Sacks Sealant	
Surface	69	20	
Bentonite Chips			

6. Comments

7. Supervision of Work

Name of Person or Firm Doing Filling & Sealing	License #	Date of Filling & Sealing (mm/dd/yyyy)
Ground Source	4462	10/15/2014

Street or Route: 3671 Monroe Road — Telephone Number: (920) 336-3659

City: De Pere — State: WI — ZIP Code: 54115-

Signature of Person Doing Work: BP — Date Signed: 10/23/2014

DNR Use Only

Date Received	Noted By
Comments	

State of Wis., Dept. of Natural Resources
dnr.wi.gov

Well / Drillhole / Borehole Filling & Sealing

Form 3300-005 (R 4/08)

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☐ Verification Only of Fill and Seal

Route to: ☐ Drinking Water ☐ Watershed/Wastewater ☐ Remediation/Redevelopment ☐ Waste Management ☐ Other:

1. Well Location Information

County	WI Unique Well # of Removed Well	Hicap #
MANITOWOC		

Latitude / Longitude (Degrees and Minutes): 44 • 3.419 'N; 87 • 42.655 'W — Method Code (see instructions): GPS006

¼ / ¼	¼	Section	Township	Range	
NW	SE	2	18 N	23	[X] E ☐ W

or Gov't Lot #

Well Street Address: 3515 Hecker Road

Well City, Village or Town	Well ZIP Code
Newton	54220-

Subdivision Name	Lot #

Reason For Removal From Service	WI Unique Well # of Replacement Well
Contamination	YK855

3. Well / Drillhole / Borehole Information

☐ Monitoring Well
[X] Water Well
☐ Borehole / Drillhole

Original Construction Date (mm/dd/yyyy):

If a Well Construction Report is available, please attach.

Construction Type:
[X] Drilled ☐ Driven (Sandpoint) ☐ Dug
☐ Other (specify):

Formation Type:
☐ Unconsolidated Formation [X] Bedrock

Total Well Depth From Ground Surface (ft.)	Casing Diameter (in.)
49	6

Lower Drillhole Diameter (in.)	Casing Depth (ft.)
6	

Was well annular space grouted? ☐ Yes ☐ No [X] Unknown

If yes, to what depth (feet)?	Depth to Water (feet)
	15

2. Facility / Owner Information

Facility Name: COM1

Facility ID (FID or PWS):

License/Permit/Monitoring #:

Original Well Owner:

Present Well Owner: City of Manitowoc

Mailing Address of Present Owner: 3515 Hecker Road

City of Present Owner	State	ZIP Code
Manitowoc	WI	54220-

4. Pump, Liner, Screen, Casing & Sealing Material

	Yes	No	N/A
Pump and piping removed?	[X]	☐	☐
Liner(s) removed?	☐	☐	[X]
Screen removed?	☐	☐	[X]
Casing left in place?	[X]	☐	☐
Was casing cut off below surface?	[X]	☐	☐
Did sealing material rise to surface?	[X]	☐	☐
Did material settle after 24 hours?	☐	[X]	☐
If yes, was hole retopped?	☐	☐	[X]
If bentonite chips were used, were they hydrated with water from a known safe source?	[X]	☐	☐

Required Method of Placing Sealing Material
☐ Conductor Pipe-Gravity ☐ Conductor Pipe-Pumped
[X] Screened & Poured (Bentonite Chips) ☐ Other (Explain):

Sealing Materials
☐ Neat Cement Grout ☐ Clay-Sand Slurry (11 lb./gal. wt.)
☐ Sand-Cement (Concrete) Grout ☐ Bentonite-Sand Slurry * *
☐ Concrete [X] Bentonite Chips

For Monitoring Wells and Monitoring Well Boreholes Only:
☐ Bentonite Chips ☐ Bentonite - Cement Grout
☐ Granular Bentonite ☐ Bentonite - Sand Slurry

5. Material Used To Fill Well / Drillhole

	From (ft.)	To (ft.)	Sacks Sealant	
Bentonite Chips	Surface	49	14	

6. Comments

7. Supervision of Work

Name of Person or Firm Doing Filling & Sealing	License #	Date of Filling & Sealing (mm/dd/yyyy)
Ground Source	4462	10/15/2014

Street or Route	Telephone Number
3671 Monroe Road	(920) 336-3659

City	State	ZIP Code	Signature of Person Doing Work	Date Signed
De Pere	WI	54115-	BP	10/23/2014

DNR Use Only

Date Received	Noted By

Comments:

State of Wis., Dept. of Natural Resources
dnr.wi.gov

Well / Drillhole / Borehole Filling & Sealing

Form 3300-005 (R 4/08)

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☐ Verification Only of Fill and Seal

Route to:
☐ Drinking Water ☐ Watershed/Wastewater ☐ Remediation/Redevelopment
☐ Waste Management ☐ Other:

1. Well Location Information

County	WI Unique Well # of Removed Well	Hicap #
MANITOWOC		

Latitude / Longitude (Degrees and Minutes) and Method Code (see instructions)
44 • 3.724 ' N
87 • 42.035 ' W
Method Code: GPS006

¼ / ¼	¼	Section	Township	Range	
SW	NW	1	18 N	23	[X] E ☐ W

or Govt Lot #

Well Street Address: 3023 Hwy CR

Well City, Village or Town	Well ZIP Code
Newton	54220-

Subdivision Name	Lot #

Reason For Removal From Service	WI Unique Well # of Replacement Well
contamination	YK874

2. Facility / Owner Information

Facility Name: COM1
Facility ID (FID or PWS):
License/Permit/Monitoring #:
Original Well Owner:
Present Well Owner: City of Manitowoc
Mailing Address of Present Owner: 3023 Hwy CR

City of Present Owner	State	ZIP Code
Manitowoc	WI	54220-

3. Well / Drillhole / Borehole Information

☐ Monitoring Well
[X] Water Well
☐ Borehole / Drillhole

Original Construction Date (mm/dd/yyyy):
If a Well Construction Report is available, please attach.

Construction Type:
[X] Drilled ☐ Driven (Sandpoint) ☐ Dug
☐ Other (specify):

Formation Type:
☐ Unconsolidated Formation [X] Bedrock

Total Well Depth From Ground Surface (ft.)	Casing Diameter (in.)
140	4

Lower Drillhole Diameter (in.)	Casing Depth (ft.)
4	

Was well annular space grouted? ☐ Yes ☐ No [X] Unknown

If yes, to what depth (feet)?	Depth to Water (feet)
	7

4. Pump, Liner, Screen, Casing & Sealing Material

Pump and piping removed?	[X] Yes	☐ No	☐ N/A
Liner(s) removed?	☐ Yes	☐ No	[X] N/A
Screen removed?	☐ Yes	☐ No	[X] N/A
Casing left in place?	[X] Yes	☐ No	☐ N/A
Was casing cut off below surface?	[X] Yes	☐ No	☐ N/A
Did sealing material rise to surface?	[X] Yes	☐ No	☐ N/A
Did material settle after 24 hours?	☐ Yes	[X] No	☐ N/A
If yes, was hole retopped?	☐ Yes	☐ No	[X] N/A
If bentonite chips were used, were they hydrated with water from a known safe source?	[X] Yes	☐ No	☐ N/A

Required Method of Placing Sealing Material
☐ Conductor Pipe-Gravity ☐ Conductor Pipe-Pumped
[X] Screened & Poured (Bentonite Chips) ☐ Other (Explain):

Sealing Materials
☐ Neat Cement Grout ☐ Clay-Sand Slurry (11 lb./gal. wt.)
☐ Sand-Cement (Concrete) Grout ☐ Bentonite-Sand Slurry
☐ Concrete [X] Bentonite Chips

For Monitoring Wells and Monitoring Well Boreholes Only:
[X] Bentonite Chips ☐ Bentonite - Cement Grout
☐ Granular Bentonite ☐ Bentonite - Sand Slurry

5. Material Used To Fill Well / Drillhole

	From (ft.)	To (ft.)	Sacks Sealant	
Bentonite Chips	Surface	140	17	

6. Comments

7. Supervision of Work

Name of Person or Firm Doing Filling & Sealing	License #	Date of Filling & Sealing (mm/dd/yyyy)
Ground Source	4462	10/15/2014

Street or Route	Telephone Number
3671 Monroe Road	(920) 336-3659

City	State	ZIP Code
De Pere	WI	54115-

Signature of Person Doing Work: BP
Date Signed: 10/23/2014

DNR Use Only

Date Received	Noted By

Comments:

State of Wis., Dept. of Natural Resources
dnr.wi.gov

Well / Drillhole / Borehole Filling & Sealing

Form 3300-005 (R 4/08)

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☐ Verification Only of Fill and Seal

Route to: ☐ Drinking Water ☐ Watershed/Wastewater ☐ Remediation/Redevelopment ☐ Waste Management ☐ Other: _____

1. Well Location Information

County	Wi Unique Well # of Removed Well	Hicap #
MANITOWOC		

Latitude / Longitude (Degrees and Minutes): 44 • 3.658 ' N; 87 • 42.176 ' W — Method Code (see instructions): GPS006

¼ / ¼	¼	Section	Township	Range	
SE	NE	2	18 N	23	[X] E ☐ W

or Gov't Lot #

Well Street Address: 3120 Hwy CR

Well City, Village or Town	Well ZIP Code
Newton	54220-

Subdivision Name	Lot #

Reason For Removal From Service	Wi Unique Well # of Replacement Well
contamination	YK875

2. Facility / Owner Information

Facility Name: COM1

Facility ID (FID or PWS):

License/Permit/Monitoring #:

Original Well Owner:

Present Well Owner: City of Manitowoc

Mailing Address of Present Owner: 3120 Hwy CR

City of Present Owner	State	ZIP Code
Manitowoc	WI	54220-

3. Well / Drillhole / Borehole Information

☐ Monitoring Well
[X] Water Well
☐ Borehole / Drillhole

Original Construction Date (mm/dd/yyyy):

If a Well Construction Report is available, please attach.

Construction Type:
[X] Drilled ☐ Driven (Sandpoint) ☐ Dug ☐ Other (specify): _____

Formation Type:
☐ Unconsolidated Formation [X] Bedrock

Total Well Depth From Ground Surface (ft.)	Casing Diameter (in.)
51	6

Lower Drillhole Diameter (in.)	Casing Depth (ft.)
6	

Was well annular space grouted? ☐ Yes ☐ No [X] Unknown

If yes, to what depth (feet)?	Depth to Water (feet)
	8

4. Pump, Liner, Screen, Casing & Sealing Material

Pump and piping removed?	[X] Yes	☐ No	☐ N/A
Liner(s) removed?	☐ Yes	☐ No	[X] N/A
Screen removed?	☐ Yes	☐ No	[X] N/A
Casing left in place?	[X] Yes	☐ No	☐ N/A
Was casing cut off below surface?	[X] Yes	☐ No	☐ N/A
Did sealing material rise to surface?	[X] Yes	☐ No	☐ N/A
Did material settle after 24 hours?	☐ Yes	[X] No	☐ N/A
If yes, was hole retopped?	☐ Yes	☐ No	[X] N/A
If bentonite chips were used, were they hydrated with water from a known safe source?	[X] Yes	☐ No	☐ N/A

Required Method of Placing Sealing Material
☐ Conductor Pipe-Gravity ☐ Conductor Pipe-Pumped
[X] Screened & Poured (Bentonite Chips) ☐ Other (Explain): _____

Sealing Materials
☐ Neat Cement Grout ☐ Clay-Sand Slurry (11 lb./gal. wt.)
☐ Sand-Cement (Concrete) Grout ☐ Bentonite-Sand Slurry
☐ Concrete [X] Bentonite Chips

For Monitoring Wells and Monitoring Well Boreholes Only:
☐ Bentonite Chips ☐ Bentonite - Cement Grout
☐ Granular Bentonite ☐ Bentonite - Sand Slurry

5. Material Used To Fill Well / Drillhole

	From (ft.)	To (ft.)	Sacks Sealant	
Bentonite Chips	Surface	51	14	

6. Comments

7. Supervision of Work

Name of Person or Firm Doing Filling & Sealing	License #	Date of Filling & Sealing (mm/dd/yyyy)
Ground Source	4461	10/21/2014

Street or Route	Telephone Number
3671 Monroe Road	(920) 336-3659

City	State	ZIP Code
De Pere	WI	54115-

Signature of Person Doing Work: BP — Date Signed: 10/23/2014

DNR Use Only

Date Received	Noted By

Comments:

State of Wis., Dept. of Natural Resources
dnr.wi.gov

Well / Drillhole / Borehole Filling & Sealing

Form 3300-005 (R 4/08)

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☐ Verification Only of Fill and Seal

Route to: ☐ Drinking Water ☐ Watershed/Wastewater ☐ Remediation/Redevelopment ☐ Waste Management ☐ Other:

1. Well Location Information

County	WI Unique Well # of Removed Well	Hicap #
MANITOWOC		

Latitude / Longitude (Degrees and Minutes): 44 • 3.486 'N; 87 • 41.916 'W — Method Code (see instructions): GPS006

¼ / ¼	¼	Section	Township	Range	
NW	SW	1	18 N	23	[X] E ☐ W

or Gov't Lot #

Well Street Address: 3402 Hwy CR

Well City, Village or Town: Newton — Well ZIP Code: 54220-

Subdivision Name — Lot #

Reason For Removal From Service: Unused-not to code — WI Unique Well # of Replacement Well: YK881

2. Facility / Owner Information

Facility Name: COM1

Facility ID (FID or PWS)

License/Permit/Monitoring #

Original Well Owner

Present Well Owner: City of Manitowoc

Mailing Address of Present Owner: 3403 Hwy CR

City of Present Owner	State	ZIP Code
Manitowoc	WI	54220-

3. Well / Drillhole / Borehole Information

☐ Monitoring Well
[X] Water Well
☐ Borehole / Drillhole

Original Construction Date (mm/dd/yyyy)

If a Well Construction Report is available, please attach.

Construction Type:
☐ Drilled ☐ Driven (Sandpoint) [X] Dug
☐ Other (specify):

Formation Type:
[X] Unconsolidated Formation ☐ Bedrock

Total Well Depth From Ground Surface (ft.)	Casing Diameter (in.)
22	36
Lower Drillhole Diameter (in.)	**Casing Depth (ft.)**

Was well annular space grouted? ☐ Yes [X] No ☐ Unknown

If yes, to what depth (feet)?	Depth to Water (feet)
	7

4. Pump, Liner, Screen, Casing & Sealing Material

Pump and piping removed?	[X] Yes	☐ No	☐ N/A
Liner(s) removed?	☐ Yes	☐ No	[X] N/A
Screen removed?	☐ Yes	☐ No	[X] N/A
Casing left in place?	☐ Yes	☐ No	[X] N/A
Was casing cut off below surface?	☐ Yes	☐ No	[X] N/A
Did sealing material rise to surface?	[X] Yes	☐ No	☐ N/A
Did material settle after 24 hours?	☐ Yes	[X] No	☐ N/A
If yes, was hole retopped?	☐ Yes	☐ No	[X] N/A
If bentonite chips were used, were they hydrated with water from a known safe source?	☐ Yes	☐ No	[X] N/A

Required Method of Placing Sealing Material
[X] Conductor Pipe-Gravity ☐ Conductor Pipe-Pumped
☐ Screened & Poured (Bentonite Chips) ☐ Other (Explain):

Sealing Materials
☐ Neat Cement Grout ☐ Clay-Sand Slurry (11 lb./gal. wt.)
☐ Sand-Cement (Concrete) Grout ☐ Bentonite-Sand Slurry " "
☐ Concrete ☐ Bentonite Chips

For Monitoring Wells and Monitoring Well Boreholes Only:
☐ Bentonite Chips ☐ Bentonite - Cement Grout
☐ Granular Bentonite ☐ Bentonite - Sand Slurry

5. Material Used To Fill Well / Drillhole

	From (ft.)	To (ft.)	Cubic Feet	
Sandy Clay Native Soils	Surface	22	400	

6. Comments

7. Supervision of Work

Name of Person or Firm Doing Filling & Sealing	License #	Date of Filling & Sealing (mm/dd/yyyy)
Ground Source	4462	10/23/2014

Street or Route: 3671 Monroe Road — Telephone Number: (920) 336-3659

City	State	ZIP Code
DePere	WI	54115-

Signature of Person Doing Work: LC — Date Signed: 10/23/2014

DNR Use Only

Date Received	Noted By

Comments:

State of Wis., Dept. of Natural Resources
dnr.wi.gov

Well / Drillhole / Borehole Filling & Sealing

Form 3300-005 (R 4/08)

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☐ Verification Only of Fill and Seal

Route to: ☐ Drinking Water ☐ Watershed/Wastewater ☐ Remediation/Redevelopment ☐ Waste Management ☐ Other:

1. Well Location Information

County	Wi Unique Well # of Removed Well	Hicap #
MANITOWOC		

Latitude / Longitude (Degrees and Minutes): 44 • 3.489 ' N; 87 • 41.916 ' W — Method Code (see instructions): GPS006

¼ / ¼	¼	Section	Township	Range	
NW	SW	1	18 N	23	[X] E ☐ W

or Gov't Lot #

Well Street Address: 3403 Hwy CR

Well City, Village or Town: Newton — Well ZIP Code:

Subdivision Name — Lot #

Reason For Removal From Service: contaminated — Wi Unique Well # of Replacement Well: YK881

2. Facility / Owner Information

Facility Name: COM1

Facility ID (FID or PWS)

License/Permit/Monitoring #

Original Well Owner

Present Well Owner: City of Manitowoc

Mailing Address of Present Owner: 3403 Hwy CR

City of Present Owner	State	ZIP Code
Manitowoc	WI	54220-

3. Well / Drillhole / Borehole Information

☐ Monitoring Well ☒ Water Well ☐ Borehole / Drillhole

Original Construction Date (mm/dd/yyyy)

If a Well Construction Report is available, please attach.

Construction Type: ☒ Drilled ☐ Driven (Sandpoint) ☐ Dug ☐ Other (specify):

Formation Type: ☐ Unconsolidated Formation ☐ Bedrock

Total Well Depth From Ground Surface (ft.)	Casing Diameter (in.)
36	4
Lower Drillhole Diameter (in.)	**Casing Depth (ft.)**
4	

Was well annular space grouted? ☐ Yes ☐ No ☒ Unknown

If yes, to what depth (feet)?	Depth to Water (feet)
	8

4. Pump, Liner, Screen, Casing & Sealing Material

Pump and piping removed?	[X] Yes	☐ No	☐ N/A
Liner(s) removed?	☐ Yes	☐ No	[X] N/A
Screen removed?	☐ Yes	☐ No	[X] N/A
Casing left in place?	[X] Yes	☐ No	☐ N/A
Was casing cut off below surface?	[X] Yes	☐ No	☐ N/A
Did sealing material rise to surface?	[X] Yes	☐ No	☐ N/A
Did material settle after 24 hours?	☐ Yes	[X] No	☐ N/A
If yes, was hole retopped?	☐ Yes	☐ No	[X] N/A
If bentonite chips were used, were they hydrated with water from a known safe source?	[X] Yes	☐ No	☐ N/A

Required Method of Placing Sealing Material
☐ Conductor Pipe-Gravity ☐ Conductor Pipe-Pumped
☒ Screened & Poured (Bentonite Chips) ☐ Other (Explain):

Sealing Materials
☐ Neat Cement Grout ☐ Clay-Sand Slurry (11 lb./gal. wt.)
☐ Sand-Cement (Concrete) Grout ☐ Bentonite-Sand Slurry " "
☐ Concrete ☒ Bentonite Chips

For Monitoring Wells and Monitoring Well Boreholes Only:
☐ Bentonite Chips ☐ Bentonite - Cement Grout
☐ Granular Bentonite ☐ Bentonite - Sand Slurry

5. Material Used To Fill Well / Drillhole

	From (ft.)	To (ft.)	Sacks Sealant	
Bentonite Chips	Surface	36	5	

6. Comments

7. Supervision of Work

Name of Person or Firm Doing Filling & Sealing	License #	Date of Filling & Sealing (mm/dd/yyyy)
ground source	4462	10/20/2014

Street or Route	Telephone Number
3671 Monroe Road	(920) 336-3659

City	State	ZIP Code	Signature of Person Doing Work	Date Signed
De Pere	WI	54115-	BP	10/23/2014

DNR Use Only

Date Received	Noted By

Comments

WELL CONSTRUCTOR'S REPORT TO WISCONSIN STATE BOARD OF HEALTH

Wel 6

See Instructions on Reverse Side

RECEIVED

JUN 18 1962

SANITARY ENGINEERING

1. County Manitowoc — Town ☐ Village ☐ City ☐ Newton — Check one and give name

NE, NE, NW, Sec. 1

2. Location So. 35th + Usibelli — T18N R23E

Name of street and number of premise or Section, Town and Range numbers

3. Owner ☐ or Agent ☐ John Hruby

Name of individual, partnership or firm

4. Mail Address Rt #1 Manitowoc

Complete address required

5. From well to nearest: Building 12 ft; sewer 25 ft; drain 12 ft; septic tank — ft;

dry well or filter bed — ft; abandoned well — ft.

6. Well is intended to supply water for: Home

7. DRILLHOLE:

Dia. (in.)	From (ft.)	To (ft.)	Dia. (in.)	From (ft.)	To (ft.)
10	0	20			
6	20	166			

8. CASING AND LINER PIPE OR CURBING:

Dia (in.)	Kind and Weight	From (ft.)	To (ft.)
6D	Steel 23#	0	158

9. GROUT:

Kind	From (ft.)	To (ft.)
Drill cuttings	0	20

10. FORMATIONS:

Kind	From (ft.)	To (ft.)
Brown Sand	0	40
Sandy Clay	40	158
Limestone	158	166

Construction of the well was completed on: 6/7 1962

The well is terminated 8 inches ☑ above, below ☐ the permanent ground surface.

Was the well disinfected upon completion?

Yes ✓ No ——

Was the well sealed watertight upon completion?

Yes ✓ No ——

11. MISCELLANEOUS DATA:

Yield test: 4 Hrs. at 20 GPM.

Depth from surface to water-level: 20 ft.

Water-level when pumping: 30 ft.

Water sample was sent to the state laboratory at: Madison City on 6/11 1962

Signature A. Halverson Registered Well Driller

Valders Wis. Complete Mail Address

Please do not write in space below

JUN 13 1962

Rec'd —— No. 19450

Ans'd ——

Interpretation SAFE—BACTERIOLOGICALLY

MN 2313

	10 ml	10 ml	10 ml	10 ml	10 ml
Gas—24 hrs.					
48 hrs.					
Confirm					
B. Coli	0				

Examiner ——

Plat

Well Construction Report For WISCONSIN UNIQUE WELL NUMBER DE552

State of WI - Private Water Systems - DG/2
Department of Natural Resources, Box 7921
Madison, WI 53707
Please type or Print using a black Pen
Please Use Decimals Instead of Fractions.

Form 3300-77A
(R 8/00)

Property Owner: **MARVIN KRAEMER**
Telephone Number: **414-682-6300**
Mailing Address: **2804 CTY TRK CR**
City: **MANITOWOC**
State: **WI**
Zip Code: **54220**
County of Well Location: **Manitowoc**
County Well Permit No.: **W**
Well Completion Date: **11/01/1990**

1. Well Location: [X] Town [ ] City [ ] Village of **NEWTON**
Fire # (if available):
Grid or Street Address or Road Name and Number:
Subdivision Name: Lot #: Block #:

Well Constructor (Business Name): **WEBER ROGER**
License #: **99**
Facility ID Number (Public Wells):
Address: **W2691 ST CHARLES RD**
Public Well Plan Approval #: W--
City: **CHILTON**
State: **WI**
Zip Code: **53014**
Date of Approval (mm/dd/yyyy):
Hicap Permanent well #:
Common Well #:
Specific Capacity: **2.2** gpm/ft

Gov't Lot #: or **SE** 1/4 of **SE** 1/4 of
Section **34** T **18** N; R **23** [x] E [ ] W
Latitude Deg. Min.
Longitude Deg Min.

2. Well Type: [ ] Replacement [X] New [ ] Reconstruction
Lat/Long Method: **GPS008**
of previous unique well # constructed in
Reason for replaced or Reconstructed Well?: **NEW HOME**

3. Well serves **1** # of homes and or (e.g. barn, restaurant, church, school, industry, etc.)
High capacity Well? [ ] Yes [X] No
Property? [ ] Yes [X] No

[X] Drilled [ ] Driven Point [ ] Jetted [ ] Other:

4. Is the well located upslope or sideslope and not downslope from any contamination source, including those on neighboring properties? [X] Yes [ ] No
Well located within 1,200 feet of a quarry? [ ] Yes [ ] No If yes, distance in feet from quarry:
Well located in floodplain? [ ] Yes [X] No

Distance in Feet from Well to Nearest:
1. Landfill
30 2. Building Overhang
35 3. Septic [ ] Holding Tank [ ]
4. Sewage Absorption Unit
5. Nonconforming Pit
6. Buried Home Heating Oil Tank
7. Buried Petroleum Tank
8. Shoreline [ ] Swimming Pool [ ]
29 9. Downspout/Yard Hydrant
10. Privy
29 11. Foundation Drain to Clearwater
12. Foundation Drain to Sewer
13. Building Drain [ ] Cast Iron or Plastic [ ] Other
31 14. Building Sewer [X] Gravity [ ] Pressure [X] Cast Iron or Plastic [ ] Other
15. Collector or Street Sewer: [ ] Sanitary units in. diam. [ ] Storm [ ] =< 6 [ ] > 6
40 16. Clearwater Sump
17. Wastewater Sump
18. Paved Animal Barn Pen
19. Animal Yard or Shelter
20. Silo
21. Barn Gutter
22. Manure Pipe [ ] Gravity [ ] Pressure [ ] Cast Iron or Plastic [ ] Other
23. Other Manure Storage
24. Ditch
25. Other NR 812 Waste Storage

5. Drillhole Dimensions and Construction Method

Dia (in.)	From (ft.)	To (ft.)
10	**0**	**14**
6	**14**	**139**

Upper Enlarged Drillhole / Lower Open Bedrock
[ ] ---1. Rotary - Mud Circulation----------
[X] ---2. Rotary - Air----------
[ ] ---3. Rotary - Air and Foam----------
[ ] ---4.Drill-Through Casing Hammer
[ ] ---5. Reverse Rotary
[ ] ---6. Cable-tool Bit in. dia------
[ ] 7. Dual Rotary
[ ] 8. Temp. Outer Casing in. dia. depth (ft)
Removed? [ ] Yes [ ] No
If no, why not?

8. Geology

Type, Caving/Noncaving, Color, Hardness, etc	From (ft.)	To (ft.)
--I- TOP SOIL	**0**	**2**
R-C- RED CLAY	**2**	**14**
-XSC SAND @ CLAY LAYERS	**14**	**120**
U-C- BLUE CLAY	**120**	**137**
-WG- WATER BEARING GRAVEL	**137**	**139**

6. Casing, Liner, Screen

Dia. (in.)	Material, Weight, Specification	From (ft.)	To (ft.)
6	**BLACK STAND. STEEL PIPE-NEW-18.97#/FT. P.E.SEAMLESS LTV STEEL ASTM-A-53 GR. B**	**0**	**139**

Dia. (in.)	Screen type, material & slot size		

9. Static Water Level
4 ft. above ground surface
ft. below ground surface

10. Pump Test
Pumping Level **5** ft. below surface
Pumping at **20** GPM for **2** hours

11. Well is: [X] Above Grade **24** in. [ ] Below Grade
Developed? [X] Yes [ ] No
Disinfected? [X] Yes [ ] No
Capped? [X] Yes [ ] No

7. Grout or Other Sealing Material. Method
Method:

Kind of Sealing Material	From (ft.)	To (ft.)	# Sacks Cement
PUDDLED CLAY	**0**	**14**	

12. Did you notify the owner of the need to permanently abandon and fill all unused wells on this property? [ ] Yes [ ] No If no, explain:

13. Signature of the Well Constructor or Supervisory Driller: **RW** Date signed: **11/01/1990**
Signature of Drill Rig Operator (Mandatory unless same as above): **FF** Date signed: **11/01/1990**

Make additional comments on reverse side about geology, additional screens, water quality, etc.

Variance issued [ ] Yes [X] No

NOV - 8 1972

WELL CONSTRUCTOR'S REPORT
FORM 3300–15

NOTE
WHITE COPY – DIVISION'S COPY
GREEN COPY – DRILLER'S COPY
YELLOW COPY – OWNER'S COPY

STATE OF WISCONSIN
DEPARTMENT OF NATURAL RESOURCES
Box 450
Madison, Wisconsin 53701

1. COUNTY Manitowoc

CHECK ONE: ☒ Town ☐ Village ☐ City — NAME: Newton

2. LOCATION – ¼ Section: NE NW | Section: 1 | Township: 18N | Range: 23E

OR – Grid or street no | Street name

AND – If available subdivision name, lot & block no.

3 OWNER AT TIME OF DRILLING Siegfried O Tittl

ADDRESS 3701 Viebahn St.

POST OFFICE Manitowoc Wis.

4. Distance in feet from well to nearest: (Record answer in appropriate block)

BUILDING	SANITARY SEWER C. I.	SANITARY SEWER TILE	FLOOR DRAIN C. I.	FLOOR DRAIN TILE	FOUNDATION DRAIN SEWER CONNECTED	FOUNDATION DRAIN INDEPENDENT	WASTE WATER DRAIN C. I.	WASTE WATER DRAIN TILE
10	—	—	18	—	—	—	—	—

CLEAR WATER DRAIN C. I.	CLEAR WATER DRAIN TILE	SEPTIC TANK	PRIVY	SEEPAGE PIT	ABSORPTION FIELD	BARN	SILO	ABANDONED WELL	SINK HOLE
—	—	85	—	—	90	75	125	—	—

OTHER POLLUTION SOURCES (Give description such as dump, quarry, drainage well, stream, pond, lake, etc.)

5. Well is intended to supply water for: Home use

6. DRILLHOLE

Dia (in.)	From (ft.)	To (ft.)	Dia (in.)	From (ft.)	To (ft.)
10	Surface	20	6	20	147

7. CASING, LINER, CURBING, AND SCREEN

Dia (in.)	Kind and Weight	From (ft.)	To (ft.)
6	steel std. 19-45 new black T+C	Surface	143

8. GROUT OR OTHER SEALING MATERIAL

Kind	From (ft.)	To (ft.)
Drive Slurry	Surface	20

9. FORMATIONS

Kind	From (ft.)	To (ft.)
Clay	Surface	128
Hardpan	128	143
Limestone	143	147

10. TYPE OF DRILLING MACHINE USED

☐ Cable Tool ☒ Direct Rotary ☐ Reverse Rotary
☐ Rotary – air w/drilling mud ☐ Rotary – hammer with drilling mud & air ☐ Jetting with ☐ Air ☐ Water

Well construction completed on Nov. 1 19 72

Well is terminated 12 inches ☒ above ☐ below final grade

Well disinfected upon completion ☒ Yes ☐ No

Well sealed watertight upon completion ☒ Yes ☐ No

11. MISCELLANEOUS DATA

Yield test: 2 3/4 Hrs. at 18 GPM

Depth from surface to normal water level 38 ft.

Depth to water level when pumping 44 ft.

Water sample sent to Madison laboratory on: Nov. 7 – 19 72

Your opinion concerning other pollution hazards, information concerning difficulties encountered, and data relating to nearby wells, screens, seals, type of casing joints, method of finishing the well, amount of cement used in grouting, blasting, sub-surface pumprooms, access pits, etc., should be given on reverse side.

SIGNATURE: Joseph Rehm — Registered Well Driller

COMPLETE MAIL ADDRESS: 4217 Conrad St. Manitowoc Wis.

Please do not write in space below

COLIFORM TEST RESULT	GAS – 24 HRS.	GAS – 48 HRS	CONFIRMED	REMARKS

REV. 3–71

WELL CONSTRUCTOR'S REPORT TO WISCONSIN STATE BOARD OF HEALTH

See Instructions on Reverse Side

1. County Manitowoc — Town ☒ / Village ☐ / City ☐ Newton (Check one and give name)

2. Location S1-T18N R23E
Name of street and number of premise or Section, Town and Range numbers

3. Owner ☒ or Agent ☐ Gerald R Fitzgerald
Name of individual, partnership or firm

4. Mail Address 3817 Vebahn Dr
Complete address required

5. From well to nearest: Building 12 ft; sewer 28 ft; drain 60 ft; septic tank 32 ft; dry well or filter bed 124 ft; abandoned well 129 ft.

6. Well is intended to supply water for: House Trailer

RECEIVED DEC 31 1964 SANITARY ENGINEERING

7. DRILLHOLE:

Dia. (in.)	From (ft.)	To (ft.)	Dia. (in.)	From (ft.)	To (ft.)
10	0	20	6	0	129

8. CASING AND LINER PIPE OR CURBING:

Dia. (in.)	Kind and Weight	From (ft.)	To (ft.)
6	Steel Std.	0	129

9. GROUT:

Kind	From (ft.)	To (ft.)
puddle clay	0	20

10. FORMATIONS:

Kind	From (ft.)	To (ft.)
Clay	0	127
Gravel	127	129

Construction of the well was completed on: June 1964

The well is terminated 8 inches ☒ above, below ☐ the permanent ground surface.

Was the well disinfected upon completion? Yes X No

Was the well sealed watertight upon completion? Yes X No

11. MISCELLANEOUS DATA:

Yield test: 3 Hrs. at 15 GPM.

Depth from surface to water-level: 28 ft.

Water-level when pumping: 35 ft.

Water sample was sent to the state laboratory at: will be sent in week of (City) on Jan 4 1965

Signature Joseph Pelkme (Registered Well Driller) 4217 Conrad St. Manitowoc Wis. (Complete Mail Address)

Please do not write in space below

Rec'd No.

Ans'd

Interpretation

MN 2298

	10 ml	10 ml	10 ml	10 ml	10 ml
Gas—24 hrs.					
48 hrs.					
Confirm					
B. Coli					

Examiner

Well Construction Report For WISCONSIN UNIQUE WELL NUMBER TL919

State of WI - Private Water Systems - DG/2
Department of Natural Resources, Box 7921
Madison, WI 53707
Please type or Print using a black Pen
Please Use Decimals Instead of Fractions.

Form 3300-77A (R 8/00)

Property Owner: **JOHNSON, ERIC**
Telephone Number: **920-901-3464**
Mailing Address: **3902 SILVER CREEK RD**
City: **MANITOWOC** State: **WI** Zip Code: **54220**
County of Well Location: **Manitowoc**
County Well Permit No.: **W**
Well Completion Date: **08/09/2006**

1. Well Location: [X] Town [ ] City [ ] Village of **NEWTON**
Fire # (if available):
Grid or Street Address or Road Name and Number: **3902 SILVER CREEK RD**
Subdivision Name / Lot # / Block #:

Well Constructor (Business Name): **RETZLAFF WELL DRILLING INC** License #: **86**
Facility ID Number (Public Wells):
Address: **PO BOX 81**
Public Well Plan Approval #: W--
City: **LUXEMBURG** State: **WI** Zip Code: **54217-0081**
Date of Approval (mm/dd/yyyy):
Hicap Permanent well #:
Common Well #:
Specific Capacity: **1.2** gpm/ft

Gov't Lot # or **SE** 1/4 of **SW** 1/4 of
Section **1** T **18** N; R **23** [X] E [ ] W
Latitude Deg. Min.
Longitude Deg Min.

2. Well Type: [X] New [ ] Replacement [ ] Reconstruction
Lat/Long Method:
of previous unique well # constructed in
Reason for replaced or Reconstructed Well?

3. Well serves **1** # of homes and or (e.g. barn, restaurant, church, school, industry, etc.)
High capacity Well? [ ] Yes [X] No
Property? [ ] Yes [X] No

[X] Drilled [ ] Driven Point [ ] Jetted [ ] Other:

4. Is the well located upslope or sideslope and not downslope from any contamination source, including those on neighboring properties? [X] Yes [ ] No
Well located within 1,200 feet of a quarry? [ ] Yes [ ] No If yes, distance in feet from quarry:
Well located in floodplain? [ ] Yes [X] No

Distance in Feet from Well to Nearest:
1. Landfill
20 2. Building Overhang
80 3. Septic [X] Holding Tank [ ]
90 4. Sewage Absorption Unit
5. Nonconforming Pit
6. Buried Home Heating Oil Tank
7. Buried Petroleum Tank
8. Shoreline [ ] Swimming Pool [ ]
9. Downspout/Yard Hydrant
10. Privy
20 11. Foundation Drain to Clearwater
12. Foundation Drain to Sewer
13. Building Drain [ ] Cast Iron or Plastic [ ] Other
14. Building Sewer [ ] Gravity [ ] Pressure [ ] Cast Iron or Plastic [ ] Other
15. Collector or Street Sewer: [ ] Sanitary units in. diam. [ ] Storm [ ] =< 6 [ ] > 6
20 16. Clearwater Sump
17. Wastewater Sump
18. Paved Animal Barn Pen
19. Animal Yard or Shelter
20. Silo
21. Barn Gutter
22. Manure Pipe [ ] Gravity [ ] Pressure [ ] Cast Iron or Plastic [ ] Other
23. Other Manure Storage
24. Ditch
25. Other NR 812 Waste Storage

5. Drillhole Dimensions and Construction Method

Dia (in.)	From (ft.)	To (ft.)
8.75	**0**	**160**
6	**160**	**180**

Upper Enlarged Drillhole / Lower Open Bedrock
[X] ---1. Rotary - Mud Circulation---------- [ ]
[ ] ---2. Rotary - Air---------- [X]
[ ] ---3. Rotary - Air and Foam---------- [ ]
[ ] ---4.Drill-Through Casing Hammer
[ ] ---5. Reverse Rotary
[ ] ---6. Cable-tool Bit in. dia------ [ ]
[ ] 7. Dual Rotary [ ]
[ ] 8. Temp. Outer Casing in. dia. depth (ft)
Removed? [ ] Yes [ ] No
If no, why not?

8. Geology

Type, Caving/Noncaving, Color, Hardness, etc		From (ft.)	To (ft.)
--CS	**SANDY CLAY**	**0**	**100**
--G-	**GRAVEL**	**100**	**140**
--CG	**CLAY & STONES**	**140**	**160**
--L-	**LIMESTONE**	**160**	**180**

6. Casing, Liner, Screen

Dia. (in.)	Material, Weight, Specification	From (ft.)	To (ft.)
6	**WHEATLAND STEELPE 18.97 PER FT BLACK NEW ASTM A53B MADE IN USA**	**0**	**160**

Dia. (in.)	Screen type, material & slot size		

9. Static Water Level
ft. above ground surface
36 ft. below ground surface

10. Pump Test
Pumping Level **70** ft. below surface
Pumping at **40** GPM for **1** hours

11. Well is: [X] Above Grade **18** in. [ ] Below Grade
Developed? [X] Yes [ ] No
Disinfected? [X] Yes [ ] No
Capped? [X] Yes [ ] No

7. Grout or Other Sealing Material. Method
Method:

Kind of Sealing Material	From (ft.)	To (ft.)	# Sacks Cement
CLAY SLURRY	**0**	**160**	

12. Did you notify the owner of the need to permanently abandon and fill all unused wells on this property? [X] Yes [ ] No If no, explain:

13. Signature of the Well Constructor or Supervisory Driller: **JR** Date signed: **08/10/2006**
Signature of Drill Rig Operator (Mandatory unless same as above) Date signed

Make additional comments on reverse side about geology, additional screens, water quality, etc.

Variance issued [ ] Yes [X] No

WELL CONSTRUCTOR'S REPORT — WISCONSIN STATE BOARD OF HEALTH — Wel 6

RECEIVED NOV 29 1966 DEPARTMENT OF RESOURCE DEVELOPMENT

1. COUNTY: Manitowoc — CHECK ONE: ☒ Town ☐ Village ☐ City — NAME: Newton

2. LOCATION (Number and Street or ¼ section, section, township and range. Also give subdivision name, lot and block numbers, when available): T 18 N R 23 E S 1

3. OWNER AT TIME OF DRILLING: Sylvester Bey 4025 Viebahn

4. OWNER'S COMPLETE MAIL ADDRESS: R#1 Manitowoc Wis

5. Distance in feet from well to nearest: (Record answer in appropriate block)

BUILDING	SANITARY SEWER C. I.	SANITARY SEWER TILE	FLOOR DRAIN C I	FLOOR DRAIN TILE	FOUNDATION DRAIN SEWER CONNECTED	FOUNDATION DRAIN INDEPENDENT	WASTE WATER DRAIN C. I.	WASTE WATER DRAIN TILE
15	25	—	25	—	—	X	40	—

CLEAR WATER DRAIN C. I.	CLEAR WATER DRAIN TILE	SEPTIC TANK	PRIVY	SEEPAGE PIT	ABSORPTION FIELD	BARN	SILO	ABANDONED WELL	SINK HOLE
—	75	75	—	—	85	—	—	—	—

OTHER POLLUTION SOURCES (Give description such as dump, quarry, drainage well, stream, pond, lake, etc.)

6. Well is intended to supply water for: Home use

7. DRILLHOLE

Dia. (in.)	From (ft.)	To (ft.)	Dia. (in.)	From (ft.)	To (ft.)
10	Surface	20	6	20	138

8. CASING, LINER, CURBING, AND SCREEN

Dia. (in.)	Kind and Weight	From (ft.)	To (ft.)
6	Steel Std.	Surface	134

9. GROUT OR OTHER SEALING MATERIAL

Kind	From (ft.)	To (ft.)
Drill slurry	Surface	20

10. FORMATIONS

Kind	From (ft.)	To (ft.)
Clay	Surface	102
Hard pan	102	134
Limestone	134	138

11. MISCELLANEOUS DATA

Yield test: 3 Hrs. at 20 GPM

Depth from surface to normal water level 26 ft.

Depth to water level when pumping 28 ft.

Water sample sent to Madison Nov. 22 laboratory on: 1966

Well construction completed on Nov. 21 1966

Well is terminated 10 inches ☒ above ☐ below final grade

Well disinfected upon completion ☒ Yes ☐ No

Well sealed watertight upon completion ☒ Yes ☐ No

Your opinion concerning other pollution hazards, information concerning difficulties encountered, and data relating to nearby wells, screens, seals, type of casing joints, method of finishing the well, amount of cement used in grouting, blasting, subsurface pumprooms, access pits, etc., should be given on reverse side.

SIGNATURE: Joseph E Rehm Registered Well Driller

COMPLETE MAIL ADDRESS: 4217 Conrad St. Manitowoc Wis

Please do not write in space below

COLL	GAS — 24 HRS.	GAS — 48 HRS	CONFIRMED	REMARKS
M N 2 2 9 7				

NOV - 8 1972

WELL CONSTRUCTOR'S REPORT
FORM 3300–15

NOTE
WHITE COPY – DIVISION'S COPY
GREEN COPY – DRILLER'S COPY
YELLOW COPY – OWNER'S COPY

STATE OF WISCONSIN
DEPARTMENT OF NATURAL RESOURCES
Box 450
Madison, Wisconsin 53701

1. COUNTY Manitowoc

CHECK ONE: ☒ Town ☐ Village ☐ City — NAME: Newton

2. LOCATION – ¼ Section: NE NW | Section: 1 | Township: 18N | Range: 23E

OR – Grid or street no | Street name

AND – If available subdivision name, lot & block no.

3 OWNER AT TIME OF DRILLING Siegfried O Tittl

ADDRESS 3701 Viebahn St.

POST OFFICE Manitowoc Wis.

4. Distance in feet from well to nearest: (Record answer in appropriate block)

BUILDING	SANITARY SEWER C. I.	SANITARY SEWER TILE	FLOOR DRAIN C. I.	FLOOR DRAIN TILE	FOUNDATION DRAIN SEWER CONNECTED	FOUNDATION DRAIN INDEPENDENT	WASTE WATER DRAIN C. I.	WASTE WATER DRAIN TILE
10	—	—	18	—	—	—	—	—

CLEAR WATER DRAIN C. I.	CLEAR WATER DRAIN TILE	SEPTIC TANK	PRIVY	SEEPAGE PIT	ABSORPTION FIELD	BARN	SILO	ABANDONED WELL	SINK HOLE
—	—	85	—	—	90	75	125	—	—

OTHER POLLUTION SOURCES (Give description such as dump, quarry, drainage well, stream, pond, lake, etc.)

5. Well is intended to supply water for: Home use

6. DRILLHOLE

Dia (in.)	From (ft.)	To (ft.)	Dia (in.)	From (ft.)	To (ft.)
10	Surface	20	6	20	147

7. CASING, LINER, CURBING, AND SCREEN

Dia (in.)	Kind and Weight	From (ft.)	To (ft.)
6	steel std. 19-45 new black T+C	Surface	143

8. GROUT OR OTHER SEALING MATERIAL

Kind	From (ft.)	To (ft.)
Drive Slurry	Surface	20

9. FORMATIONS

Kind	From (ft.)	To (ft.)
Clay	Surface	128
Hardpan	128	143
Limestone	143	147

10. TYPE OF DRILLING MACHINE USED

☐ Cable Tool ☒ Direct Rotary ☐ Reverse Rotary
☐ Rotary – air w/drilling mud ☐ Rotary – hammer with drilling mud & air ☐ Jetting with ☐ Air ☐ Water

Well construction completed on Nov. 1 19 72

Well is terminated 12 inches ☒ above ☐ below final grade

Well disinfected upon completion ☒ Yes ☐ No

Well sealed watertight upon completion ☒ Yes ☐ No

11. MISCELLANEOUS DATA

Yield test: 2 3/4 Hrs. at 18 GPM

Depth from surface to normal water level 38 ft.

Depth to water level when pumping 44 ft.

Water sample sent to Madison laboratory on: Nov. 7 – 19 72

Your opinion concerning other pollution hazards, information concerning difficulties encountered, and data relating to nearby wells, screens, seals, type of casing joints, method of finishing the well, amount of cement used in grouting, blasting, sub-surface pumprooms, access pits, etc., should be given on reverse side.

SIGNATURE: Joseph Rehm — Registered Well Driller

COMPLETE MAIL ADDRESS: 4217 Conrad St. Manitowoc Wis.

Please do not write in space below

COLIFORM TEST RESULT	GAS – 24 HRS.	GAS – 48 HRS	CONFIRMED	REMARKS

REV. 3–71

WELL CONSTRUCTOR'S REPORT TO WISCONSIN STATE BOARD OF HEALTH

See Instructions on Reverse Side

1. County Manitowoc — Town ☒ / Village ☐ / City ☐ Newton (Check one and give name)

2. Location S1-T18N R23E
Name of street and number of premise or Section, Town and Range numbers

3. Owner ☒ or Agent ☐ Gerald R Fitzgerald
Name of individual, partnership or firm

4. Mail Address 3817 Vebahn Dr
Complete address required

5. From well to nearest: Building 12 ft; sewer 28 ft; drain 60 ft; septic tank 32 ft; dry well or filter bed 124 ft; abandoned well 129 ft.

6. Well is intended to supply water for: House Trailer

RECEIVED DEC 31 1964 SANITARY ENGINEERING

7. DRILLHOLE:

Dia. (in.)	From (ft.)	To (ft.)	Dia. (in.)	From (ft.)	To (ft.)
10	0	20	6	0	129

8. CASING AND LINER PIPE OR CURBING:

Dia. (in.)	Kind and Weight	From (ft.)	To (ft.)
6	Steel Std.	0	129

9. GROUT:

Kind	From (ft.)	To (ft.)
puddle clay	0	20

10. FORMATIONS:

Kind	From (ft.)	To (ft.)
Clay	0	127
Gravel	127	129

Construction of the well was completed on: June 1964

The well is terminated 8 inches ☒ above, below ☐ the permanent ground surface.

Was the well disinfected upon completion? Yes X No

Was the well sealed watertight upon completion? Yes X No

11. MISCELLANEOUS DATA:

Yield test: 3 Hrs. at 15 GPM.

Depth from surface to water-level: 28 ft.

Water-level when pumping: 35 ft.

Water sample was sent to the state laboratory at: will be sent in week of (City) on Jan 4 1965

Signature Joseph Pelkme (Registered Well Driller) 4217 Conrad St. Manitowoc Wis. (Complete Mail Address)

Please do not write in space below

Rec'd No.

Ans'd

Interpretation

MN 2298

	10 ml	10 ml	10 ml	10 ml	10 ml
Gas—24 hrs.					
48 hrs.					
Confirm					
B. Coli					

Examiner

WELL CONSTRUCTOR'S REPORT TO WISCONSIN STATE BOARD OF HEALTH

Wel 6

See Instructions on Reverse Side

RECEIVED

JUN 18 1962

SANITARY ENGINEERING

1. County Manitowoc — Town ☐ Village ☐ City ☐ Newton — Check one and give name

NE, NE, NW, Sec. 1

2. Location So. 35th + Usibelli — T18N R23E

Name of street and number of premise or Section, Town and Range numbers

3. Owner ☐ or Agent ☐ John Hruby

Name of individual, partnership or firm

4. Mail Address Rt #1 Manitowoc

Complete address required

5. From well to nearest: Building 12 ft; sewer 25 ft; drain 12 ft; septic tank — ft;

dry well or filter bed — ft; abandoned well — ft.

6. Well is intended to supply water for: Home

7. DRILLHOLE:

Dia. (in.)	From (ft.)	To (ft.)	Dia. (in.)	From (ft.)	To (ft.)
10	0	20			
6	20	166			

8. CASING AND LINER PIPE OR CURBING:

Dia (in.)	Kind and Weight	From (ft.)	To (ft.)
6D	Steel 23#	0	158

9. GROUT:

Kind	From (ft.)	To (ft.)
Drill cuttings	0	20

10. FORMATIONS:

Kind	From (ft.)	To (ft.)
Brown Sand	0	40
Sandy Clay	40	158
Limestone	158	166

Construction of the well was completed on: 6/7 1962

The well is terminated 8 inches ☑ above, below ☐ the permanent ground surface.

Was the well disinfected upon completion?

Yes ✓ No ——

Was the well sealed watertight upon completion?

Yes ✓ No ——

11. MISCELLANEOUS DATA:

Yield test: 4 Hrs. at 20 GPM.

Depth from surface to water-level: 20 ft.

Water-level when pumping: 30 ft.

Water sample was sent to the state laboratory at: Madison City on 6/11 1962

Signature A. Halverson Registered Well Driller

Valders Wis. Complete Mail Address

Please do not write in space below

JUN 13 1962

Rec'd —— No. 19450

Ans'd ——

Interpretation SAFE—BACTERIOLOGICALLY

MN 2313

	10 ml	10 ml	10 ml	10 ml	10 ml
Gas—24 hrs.					
48 hrs.					
Confirm					
B. Coli	0				

Examiner ——

Plat

Well Construction Report For WISCONSIN UNIQUE WELL NUMBER UG707

State of WI - Private Water Systems - DG/2
Department of Natural Resources, Box 7921
Madison, WI 53707
Please type or Print using a black Pen
Please Use Decimals Instead of Fractions.

Form 3300-77A
(R 8/00)

Property Owner: **LINSMEIER, HOWARD**
Telephone Number: --
Mailing Address: **4027 THUNDER RIDGE RD**
City: **MANITOWOC**
State: **WI**
Zip Code: **54220**
County of Well Location: **Manitowoc**
County Well Permit No.: **W**
Well Completion Date: **06/27/2007**

1. Well Location: [X] Town [ ] City [ ] Village of **NEWTON**
Fire # (if available):
Grid or Street Address or Road Name and Number: **4027 THUNDER RIDGE RD**
Subdivision Name / Lot # / Block #:

Well Constructor (Business Name): **WILLEMS WELL DRILLING INC**
License #: **6155**
Facility ID Number (Public Wells):
Address: **7962 ST PATS CHURCH RD**
Public Well Plan Approval #: W--
City: **GREENLEAF**
State: **WI**
Zip Code: **54126-9611**
Date of Approval (mm/dd/yyyy):
Hicap Permanent well #:
Common Well #:
Specific Capacity: **.6** gpm/ft

Gov't Lot # or **SW** 1/4 of **SW** 1/4 of Section **1** T **18** N; R **23** [X] E [ ] W
Latitude Deg. **44** Min. **3.248**
Longitude Deg **87** Min. **41.965**

2. Well Type: [ ] Replacement [X] New [ ] Reconstruction
Lat/Long Method: **GPS008**
of previous unique well # constructed in
Reason for replaced or Reconstructed Well?

3. Well serves **1** # of homes and or (e.g. barn, restaurant, church, school, industry, etc.)
High capacity Well? [ ] Yes [X] No
Property? [ ] Yes [X] No

[X] Drilled [ ] Driven Point [ ] Jetted [ ] Other:

4. Is the well located upslope or sideslope and not downslope from any contamination source, including those on neighboring properties? [ ] Yes [ ] No
Well located within 1,200 feet of a quarry? [ ] Yes [X] No If yes, distance in feet from quarry:
Well located in floodplain? [ ] Yes [X] No

Distance in Feet from Well to Nearest:
1. Landfill
35 2. Building Overhang
90 3. Septic [X] Holding Tank [ ]
120 4. Sewage Absorption Unit
5. Nonconforming Pit
6. Buried Home Heating Oil Tank
7. Buried Petroleum Tank
8. Shoreline [ ] Swimming Pool [ ]
9. Downspout/Yard Hydrant
10. Privy
11. Foundation Drain to Clearwater
12. Foundation Drain to Sewer
13. Building Drain [ ] Cast Iron or Plastic [ ] Other
14. Building Sewer [ ] Gravity [ ] Pressure [ ] Cast Iron or Plastic [ ] Other
15. Collector or Street Sewer: [ ] Sanitary [ ] Storm units in. diam. [ ] =< 6 [ ] > 6
16. Clearwater Sump
17. Wastewater Sump
18. Paved Animal Barn Pen
19. Animal Yard or Shelter
20. Silo
21. Barn Gutter
22. Manure Pipe [ ] Gravity [ ] Pressure [ ] Cast Iron or Plastic [ ] Other
23. Other Manure Storage
24. Ditch
25. Other NR 812 Waste Storage

5. Drillhole Dimensions and Construction Method

Dia (in.)	From (ft.)	To (ft.)
9	**0**	**181**
6	**181**	**201**

Upper Enlarged Drillhole / Lower Open Bedrock
[X] ---1. Rotary - Mud Circulation---------- [ ]
[ ] ---2. Rotary - Air---------- [X]
[ ] ---3. Rotary - Air and Foam---------- [X]
[ ] ---4.Drill-Through Casing Hammer
[ ] ---5. Reverse Rotary
[ ] ---6. Cable-tool Bit in. dia------ [ ]
[ ] 7. Dual Rotary [ ]
[ ] 8. Temp. Outer Casing in. dia. depth (ft)
Removed? [ ] Yes [ ] No
If no, why not?

8. Geology

Type, Caving/Noncaving, Color, Hardness, etc	From (ft.)	To (ft.)
TSS- SOFT-SAND (TAN	**0**	**68**
GMG- MEDIUM-GRAVEL (GRAY	**68**	**152**
THC- HARD-CLAY (BROWN	**152**	**173**
GMP- MEDIUM-HARD PAN (GRAY	**173**	**181**
GML- MEDIUM-LIMESTONE (GRAY	**181**	**201**

6. Casing, Liner, Screen

Dia. (in.)	Material, Weight, Specification	From (ft.)	To (ft.)
6	**ASTM A-53 GR. B IPSO-WELDED JOINT WT. 18.97 PER FT.**	**0**	**181**

Dia. (in.)	Screen type, material & slot size		

9. Static Water Level
ft. above ground surface
20 ft. below ground surface

10. Pump Test
Pumping Level **100** ft. below surface
Pumping at **50** GPM for **4** hours

11. Well is: [X] Above Grade **12** in. [ ] Below Grade
Developed? [X] Yes [ ] No
Disinfected? [X] Yes [ ] No
Capped? [X] Yes [ ] No

7. Grout or Other Sealing Material. Method
Method:

Kind of Sealing Material	From (ft.)	To (ft.)	# Sacks Cement
DRILLING MUD	**0**	**181**	

12. Did you notify the owner of the need to permanently abandon and fill all unused wells on this property? [ ] Yes [ ] No If no, explain:

13. Signature of the Well Constructor or Supervisory Driller: **LW** Date signed: **07/05/2007**
Signature of Drill Rig Operator (Mandatory unless same as above): **TW** Date signed: **07/05/2007**

Make additional comments on reverse side about geology, additional screens, water quality, etc.

Variance issued [ ] Yes [X] No

Attachment B:

Laboratory Reports

Synergy Environmental Lab, INC.

1990 Prospect Ct., Appleton, WI 54914 *P 920-830-2455 * F 920-733-0631

DAVE HENDERSON
AECOM
1555 N RIVER CENTER DRIVE
MILWAUKEE, WI 53212

Report Date *03-Oct-14*

Project Name FMR NEWTON GRAVEL PIT **Invoice #** E27809
Project #

Lab Code 5027809A
Sample ID 3515 HECKER RD
Sample Matrix Water
Sample Date 9/29/2014

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
VOC's										
Benzene	< 0.24	ug/l	0.24	0.77	1	8260B		10/2/2014	CJR	1
Bromobenzene	< 0.32	ug/l	0.32	1	1	8260B		10/2/2014	CJR	1
Bromodichloromethane	< 0.37	ug/l	0.37	1.2	1	8260B		10/2/2014	CJR	1
Bromoform	< 0.35	ug/l	0.35	1.1	1	8260B		10/2/2014	CJR	1
tert-Butylbenzene	< 0.36	ug/l	0.36	1.2	1	8260B		10/2/2014	CJR	1
sec-Butylbenzene	< 0.33	ug/l	0.33	1	1	8260B		10/2/2014	CJR	1
n-Butylbenzene	< 0.35	ug/l	0.35	1.1	1	8260B		10/2/2014	CJR	1
Carbon Tetrachloride	< 0.33	ug/l	0.33	1.1	1	8260B		10/2/2014	CJR	1
Chlorobenzene	< 0.24	ug/l	0.24	0.77	1	8260B		10/2/2014	CJR	1
Chloroethane	< 0.63	ug/l	0.63	2	1	8260B		10/2/2014	CJR	1
Chloroform	< 0.28	ug/l	0.28	0.88	1	8260B		10/2/2014	CJR	1
Chloromethane	< 0.81	ug/l	0.81	2.6	1	8260B		10/2/2014	CJR	1
2-Chlorotoluene	< 0.21	ug/l	0.21	0.66	1	8260B		10/2/2014	CJR	1
4-Chlorotoluene	< 0.21	ug/l	0.21	0.68	1	8260B		10/2/2014	CJR	1
1,2-Dibromo-3-chloropropane	< 0.88	ug/l	0.88	2.8	1	8260B		10/2/2014	CJR	1
Dibromochloromethane	< 0.22	ug/l	0.22	0.7	1	8260B		10/2/2014	CJR	1
1,4-Dichlorobenzene	< 0.3	ug/l	0.3	0.96	1	8260B		10/2/2014	CJR	1
1,3-Dichlorobenzene	< 0.28	ug/l	0.28	0.89	1	8260B		10/2/2014	CJR	1
1,2-Dichlorobenzene	< 0.36	ug/l	0.36	1.2	1	8260B		10/2/2014	CJR	1
Dichlorodifluoromethane	< 0.44	ug/l	0.44	1.4	1	8260B		10/2/2014	CJR	1
1,2-Dichloroethane	< 0.41	ug/l	0.41	1.3	1	8260B		10/2/2014	CJR	1
1,1-Dichloroethane	< 0.3	ug/l	0.3	0.97	1	8260B		10/2/2014	CJR	1
1,1-Dichloroethene	< 0.4	ug/l	0.4	1.3	1	8260B		10/2/2014	CJR	1
cis-1,2-Dichloroethene	< 0.38	ug/l	0.38	1.2	1	8260B		10/2/2014	CJR	1
trans-1,2-Dichloroethene	< 0.35	ug/l	0.35	1.1	1	8260B		10/2/2014	CJR	1
1,2-Dichloropropane	< 0.32	ug/l	0.32	1	1	8260B		10/2/2014	CJR	1
2,2-Dichloropropane	< 0.36	ug/l	0.36	1.2	1	8260B		10/2/2014	CJR	1
1,3-Dichloropropane	< 0.33	ug/l	0.33	1	1	8260B		10/2/2014	CJR	1
Di-isopropyl ether	< 0.23	ug/l	0.23	0.73	1	8260B		10/2/2014	CJR	1
EDB (1,2-Dibromoethane)	< 0.44	ug/l	0.44	1.4	1	8260B		10/2/2014	CJR	1
Ethylbenzene	< 0.55	ug/l	0.55	1.7	1	8260B		10/2/2014	CJR	1
Hexachlorobutadiene	< 1.5	ug/l	1.5	4.8	1	8260B		10/2/2014	CJR	1
Isopropylbenzene	< 0.3	ug/l	0.3	0.96	1	8260B		10/2/2014	CJR	1

Project Name FMR NEWTON GRAVEL PIT **Invoice #** E27809
Project #

Lab Code 5027809A
Sample ID 3515 HECKER RD
Sample Matrix Water
Sample Date 9/29/2014

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
p-Isopropyltoluene	< 0.31	ug/l	0.31	0.98	1	8260B		10/2/2014	CJR	1
Methylene chloride	< 0.5	ug/l	0.5	1.6	1	8260B		10/2/2014	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.23	ug/l	0.23	0.74	1	8260B		10/2/2014	CJR	1
Naphthalene	< 1.7	ug/l	1.7	5.5	1	8260B		10/2/2014	CJR	1
n-Propylbenzene	< 0.25	ug/l	0.25	0.81	1	8260B		10/2/2014	CJR	1
1,1,2,2-Tetrachloroethane	< 0.45	ug/l	0.45	1.4	1	8260B		10/2/2014	CJR	1
1,1,1,2-Tetrachloroethane	< 0.33	ug/l	0.33	1.1	1	8260B		10/2/2014	CJR	1
Tetrachloroethene	< 0.33	ug/l	0.33	1.1	1	8260B		10/2/2014	CJR	1
Toluene	< 0.69	ug/l	0.69	2.2	1	8260B		10/2/2014	CJR	1
1,2,4-Trichlorobenzene	< 0.98	ug/l	0.98	3.1	1	8260B		10/2/2014	CJR	1
1,2,3-Trichlorobenzene	< 1.8	ug/l	1.8	5.8	1	8260B		10/2/2014	CJR	1
1,1,1-Trichloroethane	< 0.33	ug/l	0.33	1	1	8260B		10/2/2014	CJR	1
1,1,2-Trichloroethane	< 0.34	ug/l	0.34	1.1	1	8260B		10/2/2014	CJR	1
Trichloroethene (TCE)	< 0.33	ug/l	0.33	1	1	8260B		10/2/2014	CJR	1
Trichlorofluoromethane	< 0.71	ug/l	0.71	2.3	1	8260B		10/2/2014	CJR	1
1,2,4-Trimethylbenzene	< 2.2	ug/l	2.2	6.9	1	8260B		10/2/2014	CJR	1
1,3,5-Trimethylbenzene	< 1.4	ug/l	1.4	4.5	1	8260B		10/2/2014	CJR	1
Vinyl Chloride	< 0.18	ug/l	0.18	0.57	1	8260B		10/2/2014	CJR	1
m&p-Xylene	< 0.69	ug/l	0.69	2.2	1	8260B		10/2/2014	CJR	1
o-Xylene	< 0.63	ug/l	0.63	2	1	8260B		10/2/2014	CJR	1
SUR - Dibromofluoromethane	102	REC %			1	8260B		10/2/2014	CJR	1
SUR - 1,2-Dichloroethane-d4	110	REC %			1	8260B		10/2/2014	CJR	1
SUR - 4-Bromofluorobenzene	112	REC %			1	8260B		10/2/2014	CJR	1
SUR - Toluene-d8	101	REC %			1	8260B		10/2/2014	CJR	1

Project Name FMR NEWTON GRAVEL PIT **Invoice #** E27809
Project #

Lab Code 5027809B
Sample ID 3609 HECKER RD
Sample Matrix Water
Sample Date 9/29/2014

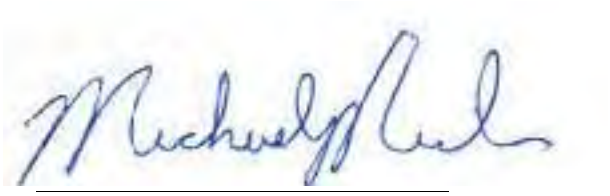
	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
VOC's										
Benzene	< 0.24	ug/l	0.24	0.77	1	8260B		10/2/2014	CJR	1
Bromobenzene	< 0.32	ug/l	0.32	1	1	8260B		10/2/2014	CJR	1
Bromodichloromethane	< 0.37	ug/l	0.37	1.2	1	8260B		10/2/2014	CJR	1
Bromoform	< 0.35	ug/l	0.35	1.1	1	8260B		10/2/2014	CJR	1
tert-Butylbenzene	< 0.36	ug/l	0.36	1.2	1	8260B		10/2/2014	CJR	1
sec-Butylbenzene	< 0.33	ug/l	0.33	1	1	8260B		10/2/2014	CJR	1
n-Butylbenzene	< 0.35	ug/l	0.35	1.1	1	8260B		10/2/2014	CJR	1
Carbon Tetrachloride	< 0.33	ug/l	0.33	1.1	1	8260B		10/2/2014	CJR	1
Chlorobenzene	< 0.24	ug/l	0.24	0.77	1	8260B		10/2/2014	CJR	1
Chloroethane	< 0.63	ug/l	0.63	2	1	8260B		10/2/2014	CJR	1
Chloroform	< 0.28	ug/l	0.28	0.88	1	8260B		10/2/2014	CJR	1
Chloromethane	< 0.81	ug/l	0.81	2.6	1	8260B		10/2/2014	CJR	1
2-Chlorotoluene	< 0.21	ug/l	0.21	0.66	1	8260B		10/2/2014	CJR	1
4-Chlorotoluene	< 0.21	ug/l	0.21	0.68	1	8260B		10/2/2014	CJR	1
1,2-Dibromo-3-chloropropane	< 0.88	ug/l	0.88	2.8	1	8260B		10/2/2014	CJR	1
Dibromochloromethane	< 0.22	ug/l	0.22	0.7	1	8260B		10/2/2014	CJR	1
1,4-Dichlorobenzene	< 0.3	ug/l	0.3	0.96	1	8260B		10/2/2014	CJR	1
1,3-Dichlorobenzene	< 0.28	ug/l	0.28	0.89	1	8260B		10/2/2014	CJR	1
1,2-Dichlorobenzene	< 0.36	ug/l	0.36	1.2	1	8260B		10/2/2014	CJR	1
Dichlorodifluoromethane	< 0.44	ug/l	0.44	1.4	1	8260B		10/2/2014	CJR	1
1,2-Dichloroethane	< 0.41	ug/l	0.41	1.3	1	8260B		10/2/2014	CJR	1
1,1-Dichloroethane	< 0.3	ug/l	0.3	0.97	1	8260B		10/2/2014	CJR	1
1,1-Dichloroethene	< 0.4	ug/l	0.4	1.3	1	8260B		10/2/2014	CJR	1
cis-1,2-Dichloroethene	< 0.38	ug/l	0.38	1.2	1	8260B		10/2/2014	CJR	1
trans-1,2-Dichloroethene	< 0.35	ug/l	0.35	1.1	1	8260B		10/2/2014	CJR	1
1,2-Dichloropropane	< 0.32	ug/l	0.32	1	1	8260B		10/2/2014	CJR	1
2,2-Dichloropropane	< 0.36	ug/l	0.36	1.2	1	8260B		10/2/2014	CJR	1
1,3-Dichloropropane	< 0.33	ug/l	0.33	1	1	8260B		10/2/2014	CJR	1
Di-isopropyl ether	< 0.23	ug/l	0.23	0.73	1	8260B		10/2/2014	CJR	1
EDB (1,2-Dibromoethane)	< 0.44	ug/l	0.44	1.4	1	8260B		10/2/2014	CJR	1
Ethylbenzene	< 0.55	ug/l	0.55	1.7	1	8260B		10/2/2014	CJR	1
Hexachlorobutadiene	< 1.5	ug/l	1.5	4.8	1	8260B		10/2/2014	CJR	1
Isopropylbenzene	< 0.3	ug/l	0.3	0.96	1	8260B		10/2/2014	CJR	1
p-Isopropyltoluene	< 0.31	ug/l	0.31	0.98	1	8260B		10/2/2014	CJR	1
Methylene chloride	< 0.5	ug/l	0.5	1.6	1	8260B		10/2/2014	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.23	ug/l	0.23	0.74	1	8260B		10/2/2014	CJR	1
Naphthalene	< 1.7	ug/l	1.7	5.5	1	8260B		10/2/2014	CJR	2
n-Propylbenzene	< 0.25	ug/l	0.25	0.81	1	8260B		10/2/2014	CJR	1
1,1,2,2-Tetrachloroethane	< 0.45	ug/l	0.45	1.4	1	8260B		10/2/2014	CJR	1
1,1,1,2-Tetrachloroethane	< 0.33	ug/l	0.33	1.1	1	8260B		10/2/2014	CJR	1
Tetrachloroethene	< 0.33	ug/l	0.33	1.1	1	8260B		10/2/2014	CJR	1
Toluene	< 0.69	ug/l	0.69	2.2	1	8260B		10/2/2014	CJR	1
1,2,4-Trichlorobenzene	< 0.98	ug/l	0.98	3.1	1	8260B		10/2/2014	CJR	1
1,2,3-Trichlorobenzene	< 1.8	ug/l	1.8	5.8	1	8260B		10/2/2014	CJR	1
1,1,1-Trichloroethane	< 0.33	ug/l	0.33	1	1	8260B		10/2/2014	CJR	1
1,1,2-Trichloroethane	< 0.34	ug/l	0.34	1.1	1	8260B		10/2/2014	CJR	1
Trichloroethene (TCE)	< 0.33	ug/l	0.33	1	1	8260B		10/2/2014	CJR	1
Trichlorofluoromethane	< 0.71	ug/l	0.71	2.3	1	8260B		10/2/2014	CJR	1
1,2,4-Trimethylbenzene	< 2.2	ug/l	2.2	6.9	1	8260B		10/2/2014	CJR	1
1,3,5-Trimethylbenzene	< 1.4	ug/l	1.4	4.5	1	8260B		10/2/2014	CJR	1
Vinyl Chloride	< 0.18	ug/l	0.18	0.57	1	8260B		10/2/2014	CJR	1
m&p-Xylene	< 0.69	ug/l	0.69	2.2	1	8260B		10/2/2014	CJR	1
o-Xylene	< 0.63	ug/l	0.63	2	1	8260B		10/2/2014	CJR	1
SUR - Toluene-d8	99	REC %			1	8260B		10/2/2014	CJR	1
SUR - 1,2-Dichloroethane-d4	99	REC %			1	8260B		10/2/2014	CJR	1
SUR - 4-Bromofluorobenzene	110	REC %			1	8260B		10/2/2014	CJR	1
SUR - Dibromofluoromethane	99	REC %			1	8260B		10/2/2014	CJR	1

"J" Flag: Analyte detected between LOD and LOQ LOD Limit of Detection LOQ Limit of Quantitation

Code	*Comment*
1	Laboratory QC within limits.
2	Relative percent difference failed for laboratory spiked samples.

All solid sample results reported on a dry weight basis unless otherwise indicated. All LOD's and LOQ's are adjusted for dilutions but not dry weight. Subcontracted results are denoted by SUB in the analyst field.

Authorized Signature



AECOM

Chain of Custody

Client Information

Company: Town of Newton Gravel Pit
Address:
City/State/Zip:
Phone: Fax:
Email:

Project Information

Project Name: Newton Gravel
Project Number:
Project Location: State:
Report To: Dave Henderson 414-944-6190
Invoice To: Dave Henderson

Requested Due Date/TAT:						Preservatives and # of Containers							Analyze For:								
5027809 Sample ID	Date Sampled	Time Sampled	G = Grab C = Composite	field filtered	Matrix Code see bottom of page for codes	HNO3	HCL	NaOH	H2SO4	Methanol	None	Other	VOCs								Lab ID or Additional Comments
A 3515 Hecker Rd	9/29/14	1512	G		DW		X						X								3 vials
B 3609 Hecker Rd	9/29/14	1528	G		DW		X						X								3 vials
3609 MS	9/29/14	1528	G		DW		X						X								3 vials
3609 MSD	9/29/14	1528	G		DW		X						X								3 vials

MATRIX (CODE)
Drinking Water (DW), Water (W), Waste Water (WW), Product (P), Soil/Solid (S), Sludge (SL), Oil (OL), Wipe (WP), Air (AR), Other (OT), Tissue (TS)

Special Instructions:

Relinquished By:		Date:	9/30/14	Time:	0850	Received By:		Date: 9/30/14	9/30/14	Time:	850
Relinquished By:		Date:	10/1/14	Time:	0700	Received By:		Date:		Time:	
Relinquished By:		Date:		Time:		Received By:		Date: 10/2	10/2/14	Time:	9:00

Sample Condition: Temp in C Received on ice (Y) N Custody Sealed Cooler (Y) N Sample Intact (Y) N

Synergy Environmental Lab, INC.

1990 Prospect Ct., Appleton, WI 54914 *P 920-830-2455 * F 920-733-0631

DAVE HENDERSON
AECOM
1555 N RIVER CENTER DRIVE
MILWAUKEE, WI 53212

Report Date *13-Oct-14*

Project Name NEWTON PIT POTABLE WELLS **Invoice #** E27866
Project #

Lab Code 5027866A
Sample ID 3023 CTH CR
Sample Matrix Water
Sample Date 10/8/2014

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
VOC's										
Benzene	< 0.24	ug/l	0.24	0.77	1	8260B		10/10/2014	CJR	1
Bromobenzene	< 0.32	ug/l	0.32	1	1	8260B		10/10/2014	CJR	1
Bromodichloromethane	< 0.37	ug/l	0.37	1.2	1	8260B		10/10/2014	CJR	1
Bromoform	< 0.35	ug/l	0.35	1.1	1	8260B		10/10/2014	CJR	1
tert-Butylbenzene	< 0.36	ug/l	0.36	1.2	1	8260B		10/10/2014	CJR	1
sec-Butylbenzene	< 0.33	ug/l	0.33	1	1	8260B		10/10/2014	CJR	1
n-Butylbenzene	< 0.35	ug/l	0.35	1.1	1	8260B		10/10/2014	CJR	1
Carbon Tetrachloride	< 0.33	ug/l	0.33	1.1	1	8260B		10/10/2014	CJR	1
Chlorobenzene	< 0.24	ug/l	0.24	0.77	1	8260B		10/10/2014	CJR	1
Chloroethane	< 0.63	ug/l	0.63	2	1	8260B		10/10/2014	CJR	1
Chloroform	< 0.28	ug/l	0.28	0.88	1	8260B		10/10/2014	CJR	1
Chloromethane	< 0.81	ug/l	0.81	2.6	1	8260B		10/10/2014	CJR	1
2-Chlorotoluene	< 0.21	ug/l	0.21	0.66	1	8260B		10/10/2014	CJR	1
4-Chlorotoluene	< 0.21	ug/l	0.21	0.68	1	8260B		10/10/2014	CJR	1
1,2-Dibromo-3-chloropropane	< 0.88	ug/l	0.88	2.8	1	8260B		10/10/2014	CJR	1
Dibromochloromethane	< 0.22	ug/l	0.22	0.7	1	8260B		10/10/2014	CJR	1
1,4-Dichlorobenzene	< 0.3	ug/l	0.3	0.96	1	8260B		10/10/2014	CJR	1
1,3-Dichlorobenzene	< 0.28	ug/l	0.28	0.89	1	8260B		10/10/2014	CJR	1
1,2-Dichlorobenzene	< 0.36	ug/l	0.36	1.2	1	8260B		10/10/2014	CJR	1
Dichlorodifluoromethane	< 0.44	ug/l	0.44	1.4	1	8260B		10/10/2014	CJR	1
1,2-Dichloroethane	< 0.41	ug/l	0.41	1.3	1	8260B		10/10/2014	CJR	1
1,1-Dichloroethane	< 0.3	ug/l	0.3	0.97	1	8260B		10/10/2014	CJR	1
1,1-Dichloroethene	< 0.4	ug/l	0.4	1.3	1	8260B		10/10/2014	CJR	1
cis-1,2-Dichloroethene	< 0.38	ug/l	0.38	1.2	1	8260B		10/10/2014	CJR	1
trans-1,2-Dichloroethene	< 0.35	ug/l	0.35	1.1	1	8260B		10/10/2014	CJR	1
1,2-Dichloropropane	< 0.32	ug/l	0.32	1	1	8260B		10/10/2014	CJR	1
2,2-Dichloropropane	< 0.36	ug/l	0.36	1.2	1	8260B		10/10/2014	CJR	8
1,3-Dichloropropane	< 0.33	ug/l	0.33	1	1	8260B		10/10/2014	CJR	1
Di-isopropyl ether	< 0.23	ug/l	0.23	0.73	1	8260B		10/10/2014	CJR	1
EDB (1,2-Dibromoethane)	< 0.44	ug/l	0.44	1.4	1	8260B		10/10/2014	CJR	1
Ethylbenzene	< 0.55	ug/l	0.55	1.7	1	8260B		10/10/2014	CJR	1
Hexachlorobutadiene	< 1.5	ug/l	1.5	4.8	1	8260B		10/10/2014	CJR	1
Isopropylbenzene	< 0.3	ug/l	0.3	0.96	1	8260B		10/10/2014	CJR	1

Project Name NEWTON PIT POTABLE WELLS **Invoice #** E27866
Project #

Lab Code 5027866A
Sample ID 3023 CTH CR
Sample Matrix Water
Sample Date 10/8/2014

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
p-Isopropyltoluene	< 0.31	ug/l	0.31	0.98	1	8260B		10/10/2014	CJR	1
Methylene chloride	< 0.5	ug/l	0.5	1.6	1	8260B		10/10/2014	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.23	ug/l	0.23	0.74	1	8260B		10/10/2014	CJR	1
Naphthalene	< 1.7	ug/l	1.7	5.5	1	8260B		10/10/2014	CJR	1
n-Propylbenzene	< 0.25	ug/l	0.25	0.81	1	8260B		10/10/2014	CJR	1
1,1,2,2-Tetrachloroethane	< 0.45	ug/l	0.45	1.4	1	8260B		10/10/2014	CJR	1
1,1,1,2-Tetrachloroethane	< 0.33	ug/l	0.33	1.1	1	8260B		10/10/2014	CJR	1
Tetrachloroethene	< 0.33	ug/l	0.33	1.1	1	8260B		10/10/2014	CJR	1
Toluene	< 0.69	ug/l	0.69	2.2	1	8260B		10/10/2014	CJR	1
1,2,4-Trichlorobenzene	< 0.98	ug/l	0.98	3.1	1	8260B		10/10/2014	CJR	1
1,2,3-Trichlorobenzene	< 1.8	ug/l	1.8	5.8	1	8260B		10/10/2014	CJR	1
1,1,1-Trichloroethane	< 0.33	ug/l	0.33	1	1	8260B		10/10/2014	CJR	1
1,1,2-Trichloroethane	< 0.34	ug/l	0.34	1.1	1	8260B		10/10/2014	CJR	1
Trichloroethene (TCE)	< 0.33	ug/l	0.33	1	1	8260B		10/10/2014	CJR	1
Trichlorofluoromethane	< 0.71	ug/l	0.71	2.3	1	8260B		10/10/2014	CJR	1
1,2,4-Trimethylbenzene	< 2.2	ug/l	2.2	6.9	1	8260B		10/10/2014	CJR	1
1,3,5-Trimethylbenzene	< 1.4	ug/l	1.4	4.5	1	8260B		10/10/2014	CJR	1
Vinyl Chloride	< 0.18	ug/l	0.18	0.57	1	8260B		10/10/2014	CJR	1
m&p-Xylene	< 0.69	ug/l	0.69	2.2	1	8260B		10/10/2014	CJR	1
o-Xylene	< 0.63	ug/l	0.63	2	1	8260B		10/10/2014	CJR	1
SUR - Dibromofluoromethane	96	REC %			1	8260B		10/10/2014	CJR	1
SUR - 1,2-Dichloroethane-d4	97	REC %			1	8260B		10/10/2014	CJR	1
SUR - 4-Bromofluorobenzene	103	REC %			1	8260B		10/10/2014	CJR	1
SUR - Toluene-d8	98	REC %			1	8260B		10/10/2014	CJR	1

Project Name NEWTON PIT POTABLE WELLS **Invoice #** E27866
Project #

Lab Code 5027866B
Sample ID 3120 CTH CR
Sample Matrix Water
Sample Date 10/8/2014

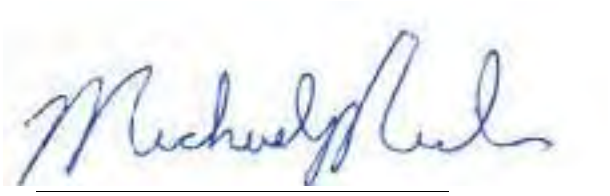
	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
VOC's										
Benzene	< 0.24	ug/l	0.24	0.77	1	8260B		10/10/2014	CJR	1
Bromobenzene	< 0.32	ug/l	0.32	1	1	8260B		10/10/2014	CJR	1
Bromodichloromethane	< 0.37	ug/l	0.37	1.2	1	8260B		10/10/2014	CJR	1
Bromoform	< 0.35	ug/l	0.35	1.1	1	8260B		10/10/2014	CJR	1
tert-Butylbenzene	< 0.36	ug/l	0.36	1.2	1	8260B		10/10/2014	CJR	1
sec-Butylbenzene	< 0.33	ug/l	0.33	1	1	8260B		10/10/2014	CJR	1
n-Butylbenzene	< 0.35	ug/l	0.35	1.1	1	8260B		10/10/2014	CJR	1
Carbon Tetrachloride	< 0.33	ug/l	0.33	1.1	1	8260B		10/10/2014	CJR	1
Chlorobenzene	< 0.24	ug/l	0.24	0.77	1	8260B		10/10/2014	CJR	1
Chloroethane	< 0.63	ug/l	0.63	2	1	8260B		10/10/2014	CJR	1
Chloroform	< 0.28	ug/l	0.28	0.88	1	8260B		10/10/2014	CJR	1
Chloromethane	< 0.81	ug/l	0.81	2.6	1	8260B		10/10/2014	CJR	1
2-Chlorotoluene	< 0.21	ug/l	0.21	0.66	1	8260B		10/10/2014	CJR	1
4-Chlorotoluene	< 0.21	ug/l	0.21	0.68	1	8260B		10/10/2014	CJR	1
1,2-Dibromo-3-chloropropane	< 0.88	ug/l	0.88	2.8	1	8260B		10/10/2014	CJR	1
Dibromochloromethane	< 0.22	ug/l	0.22	0.7	1	8260B		10/10/2014	CJR	1
1,4-Dichlorobenzene	< 0.3	ug/l	0.3	0.96	1	8260B		10/10/2014	CJR	1
1,3-Dichlorobenzene	< 0.28	ug/l	0.28	0.89	1	8260B		10/10/2014	CJR	1
1,2-Dichlorobenzene	< 0.36	ug/l	0.36	1.2	1	8260B		10/10/2014	CJR	1
Dichlorodifluoromethane	< 0.44	ug/l	0.44	1.4	1	8260B		10/10/2014	CJR	1
1,2-Dichloroethane	< 0.41	ug/l	0.41	1.3	1	8260B		10/10/2014	CJR	1
1,1-Dichloroethane	< 0.3	ug/l	0.3	0.97	1	8260B		10/10/2014	CJR	1
1,1-Dichloroethene	< 0.4	ug/l	0.4	1.3	1	8260B		10/10/2014	CJR	1
cis-1,2-Dichloroethene	< 0.38	ug/l	0.38	1.2	1	8260B		10/10/2014	CJR	1
trans-1,2-Dichloroethene	< 0.35	ug/l	0.35	1.1	1	8260B		10/10/2014	CJR	1
1,2-Dichloropropane	< 0.32	ug/l	0.32	1	1	8260B		10/10/2014	CJR	1
2,2-Dichloropropane	< 0.36	ug/l	0.36	1.2	1	8260B		10/10/2014	CJR	8
1,3-Dichloropropane	< 0.33	ug/l	0.33	1	1	8260B		10/10/2014	CJR	1
Di-isopropyl ether	< 0.23	ug/l	0.23	0.73	1	8260B		10/10/2014	CJR	1
EDB (1,2-Dibromoethane)	< 0.44	ug/l	0.44	1.4	1	8260B		10/10/2014	CJR	1
Ethylbenzene	< 0.55	ug/l	0.55	1.7	1	8260B		10/10/2014	CJR	1
Hexachlorobutadiene	< 1.5	ug/l	1.5	4.8	1	8260B		10/10/2014	CJR	1
Isopropylbenzene	< 0.3	ug/l	0.3	0.96	1	8260B		10/10/2014	CJR	1
p-Isopropyltoluene	< 0.31	ug/l	0.31	0.98	1	8260B		10/10/2014	CJR	1
Methylene chloride	< 0.5	ug/l	0.5	1.6	1	8260B		10/10/2014	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.23	ug/l	0.23	0.74	1	8260B		10/10/2014	CJR	1
Naphthalene	< 1.7	ug/l	1.7	5.5	1	8260B		10/10/2014	CJR	1
n-Propylbenzene	< 0.25	ug/l	0.25	0.81	1	8260B		10/10/2014	CJR	1
1,1,2,2-Tetrachloroethane	< 0.45	ug/l	0.45	1.4	1	8260B		10/10/2014	CJR	1
1,1,1,2-Tetrachloroethane	< 0.33	ug/l	0.33	1.1	1	8260B		10/10/2014	CJR	1
Tetrachloroethene	< 0.33	ug/l	0.33	1.1	1	8260B		10/10/2014	CJR	1
Toluene	< 0.69	ug/l	0.69	2.2	1	8260B		10/10/2014	CJR	1
1,2,4-Trichlorobenzene	< 0.98	ug/l	0.98	3.1	1	8260B		10/10/2014	CJR	1
1,2,3-Trichlorobenzene	< 1.8	ug/l	1.8	5.8	1	8260B		10/10/2014	CJR	1
1,1,1-Trichloroethane	< 0.33	ug/l	0.33	1	1	8260B		10/10/2014	CJR	1
1,1,2-Trichloroethane	< 0.34	ug/l	0.34	1.1	1	8260B		10/10/2014	CJR	1
Trichloroethene (TCE)	< 0.33	ug/l	0.33	1	1	8260B		10/10/2014	CJR	1
Trichlorofluoromethane	< 0.71	ug/l	0.71	2.3	1	8260B		10/10/2014	CJR	1
1,2,4-Trimethylbenzene	< 2.2	ug/l	2.2	6.9	1	8260B		10/10/2014	CJR	1
1,3,5-Trimethylbenzene	< 1.4	ug/l	1.4	4.5	1	8260B		10/10/2014	CJR	1
Vinyl Chloride	< 0.18	ug/l	0.18	0.57	1	8260B		10/10/2014	CJR	1
m&p-Xylene	< 0.69	ug/l	0.69	2.2	1	8260B		10/10/2014	CJR	1
o-Xylene	< 0.63	ug/l	0.63	2	1	8260B		10/10/2014	CJR	1
SUR - Toluene-d8	98	REC %			1	8260B		10/10/2014	CJR	1
SUR - 1,2-Dichloroethane-d4	104	REC %			1	8260B		10/10/2014	CJR	1
SUR - 4-Bromofluorobenzene	114	REC %			1	8260B		10/10/2014	CJR	1
SUR - Dibromofluoromethane	97	REC %			1	8260B		10/10/2014	CJR	1

"J" Flag: Analyte detected between LOD and LOQ LOD Limit of Detection LOQ Limit of Quantitation

Code	*Comment*
1	Laboratory QC within limits.
8	Closing calibration standard not within established limits.

All solid sample results reported on a dry weight basis unless otherwise indicated. All LOD's and LOQ's are adjusted for dilutions but not dry weight. Subcontracted results are denoted by SUB in the analyst field.

Authorized Signature



AECOM

P. 1 of 1

Chain of Custody

Client Information

Company: AECOM - Milwaukee
Address: 1555 N RiverCenter Drive
City/State/Zip: Milwaukee WI 53212
Phone: 414 944 6190 Fax:
Email: Dave.Henderson@AECOM.com

Project Information

Project Name: Newton Pit - Potable wells
Project Number:
Project Location: State:
Report To: Dave Henderson
Invoice To: " "

Requested Due Date/TAT:	Date Sampled	Time Sampled	G = Grab C = Composite	field filtered	Matrix Code see bottom of page for codes	Preservatives and # of Containers							Analyze For:								Lab ID or Additional Comments
Sample ID						HNO3	HCL	NaOH	H2SO4	Methanol	None	Other	VOC's								
3023 CTH CR	10/9/14	2:15	G	N	W		3						X								562866 A
3120 CTH CR	"	2:55	G	N	W		3						X								B

MATRIX (CODE)
Drinking Water (DW), Water (W), Waste Water (WW), Product (P), Soil/Solid (S), Sludge (SL), Oil (OL), Wipe (WP), Air (AR), Other (OT), Tissue (TS)

Special Instructions: 24 Hr TAT

Relinquished By:	D.S. Henderson	Date:		Time:		Received By:		Date:	10/10/14	Time:	8:00A
Relinquished By:		Date:		Time:		Received By:		Date:		Time:	
Relinquished By:		Date:		Time:		Received By:		Date:		Time:	

Sample Condition: Temp in C Received on ice Y N Custody Sealed Cooler Y N Sample Intact Y N

Synergy Environmental Lab, INC.

1990 Prospect Ct., Appleton, WI 54914 *P 920-830-2455 * F 920-733-0631

DAVE HENDERSON
AECOM
1555 N RIVER CENTER DRIVE
MILWAUKEE, WI 53212

Report Date *24-Oct-14*

Project Name NEWTON GRAVEL **Invoice #** E27922
Project #

Lab Code 5027922A
Sample ID 3403 CTH CR
Sample Matrix Water
Sample Date 10/21/2014

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
VOC's										
Benzene	< 0.24	ug/l	0.24	0.77	1	8260B		10/23/2014	CJR	1
Bromobenzene	< 0.32	ug/l	0.32	1	1	8260B		10/23/2014	CJR	1
Bromodichloromethane	< 0.37	ug/l	0.37	1.2	1	8260B		10/23/2014	CJR	1
Bromoform	< 0.35	ug/l	0.35	1.1	1	8260B		10/23/2014	CJR	1
tert-Butylbenzene	< 0.36	ug/l	0.36	1.2	1	8260B		10/23/2014	CJR	1
sec-Butylbenzene	< 0.33	ug/l	0.33	1	1	8260B		10/23/2014	CJR	1
n-Butylbenzene	< 0.35	ug/l	0.35	1.1	1	8260B		10/23/2014	CJR	1
Carbon Tetrachloride	< 0.33	ug/l	0.33	1.1	1	8260B		10/23/2014	CJR	1
Chlorobenzene	< 0.24	ug/l	0.24	0.77	1	8260B		10/23/2014	CJR	1
Chloroethane	< 0.63	ug/l	0.63	2	1	8260B		10/23/2014	CJR	1
Chloroform	< 0.28	ug/l	0.28	0.88	1	8260B		10/23/2014	CJR	1
Chloromethane	< 0.81	ug/l	0.81	2.6	1	8260B		10/23/2014	CJR	1
2-Chlorotoluene	< 0.21	ug/l	0.21	0.66	1	8260B		10/23/2014	CJR	1
4-Chlorotoluene	< 0.21	ug/l	0.21	0.68	1	8260B		10/23/2014	CJR	1
1,2-Dibromo-3-chloropropane	< 0.88	ug/l	0.88	2.8	1	8260B		10/23/2014	CJR	8
Dibromochloromethane	< 0.22	ug/l	0.22	0.7	1	8260B		10/23/2014	CJR	1
1,4-Dichlorobenzene	< 0.3	ug/l	0.3	0.96	1	8260B		10/23/2014	CJR	1
1,3-Dichlorobenzene	< 0.28	ug/l	0.28	0.89	1	8260B		10/23/2014	CJR	1
1,2-Dichlorobenzene	< 0.36	ug/l	0.36	1.2	1	8260B		10/23/2014	CJR	1
Dichlorodifluoromethane	< 0.44	ug/l	0.44	1.4	1	8260B		10/23/2014	CJR	1
1,2-Dichloroethane	< 0.41	ug/l	0.41	1.3	1	8260B		10/23/2014	CJR	1
1,1-Dichloroethane	< 0.3	ug/l	0.3	0.97	1	8260B		10/23/2014	CJR	1
1,1-Dichloroethene	< 0.4	ug/l	0.4	1.3	1	8260B		10/23/2014	CJR	1
cis-1,2-Dichloroethene	< 0.38	ug/l	0.38	1.2	1	8260B		10/23/2014	CJR	1
trans-1,2-Dichloroethene	< 0.35	ug/l	0.35	1.1	1	8260B		10/23/2014	CJR	1
1,2-Dichloropropane	< 0.32	ug/l	0.32	1	1	8260B		10/23/2014	CJR	1
2,2-Dichloropropane	< 0.36	ug/l	0.36	1.2	1	8260B		10/23/2014	CJR	1
1,3-Dichloropropane	< 0.33	ug/l	0.33	1	1	8260B		10/23/2014	CJR	1
Di-isopropyl ether	< 0.23	ug/l	0.23	0.73	1	8260B		10/23/2014	CJR	1
EDB (1,2-Dibromoethane)	< 0.44	ug/l	0.44	1.4	1	8260B		10/23/2014	CJR	1
Ethylbenzene	< 0.55	ug/l	0.55	1.7	1	8260B		10/23/2014	CJR	1
Hexachlorobutadiene	< 1.5	ug/l	1.5	4.8	1	8260B		10/23/2014	CJR	1
Isopropylbenzene	< 0.3	ug/l	0.3	0.96	1	8260B		10/23/2014	CJR	1

Project Name NEWTON GRAVEL **Invoice #** E27922
Project #

Lab Code 5027922A
Sample ID 3403 CTH CR
Sample Matrix Water
Sample Date 10/21/2014

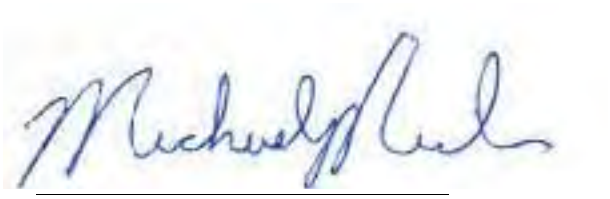
	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
p-Isopropyltoluene	< 0.31	ug/l	0.31	0.98	1	8260B		10/23/2014	CJR	1
Methylene chloride	< 0.5	ug/l	0.5	1.6	1	8260B		10/23/2014	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.23	ug/l	0.23	0.74	1	8260B		10/23/2014	CJR	1
Naphthalene	< 1.7	ug/l	1.7	5.5	1	8260B		10/23/2014	CJR	1
n-Propylbenzene	< 0.25	ug/l	0.25	0.81	1	8260B		10/23/2014	CJR	1
1,1,2,2-Tetrachloroethane	< 0.45	ug/l	0.45	1.4	1	8260B		10/23/2014	CJR	1
1,1,1,2-Tetrachloroethane	< 0.33	ug/l	0.33	1.1	1	8260B		10/23/2014	CJR	1
Tetrachloroethene	< 0.33	ug/l	0.33	1.1	1	8260B		10/23/2014	CJR	1
Toluene	< 0.69	ug/l	0.69	2.2	1	8260B		10/23/2014	CJR	1
1,2,4-Trichlorobenzene	< 0.98	ug/l	0.98	3.1	1	8260B		10/23/2014	CJR	1
1,2,3-Trichlorobenzene	< 1.8	ug/l	1.8	5.8	1	8260B		10/23/2014	CJR	1
1,1,1-Trichloroethane	< 0.33	ug/l	0.33	1	1	8260B		10/23/2014	CJR	1
1,1,2-Trichloroethane	< 0.34	ug/l	0.34	1.1	1	8260B		10/23/2014	CJR	1
Trichloroethene (TCE)	< 0.33	ug/l	0.33	1	1	8260B		10/23/2014	CJR	1
Trichlorofluoromethane	< 0.71	ug/l	0.71	2.3	1	8260B		10/23/2014	CJR	1
1,2,4-Trimethylbenzene	< 2.2	ug/l	2.2	6.9	1	8260B		10/23/2014	CJR	1
1,3,5-Trimethylbenzene	< 1.4	ug/l	1.4	4.5	1	8260B		10/23/2014	CJR	1
Vinyl Chloride	< 0.18	ug/l	0.18	0.57	1	8260B		10/23/2014	CJR	1
m&p-Xylene	< 0.69	ug/l	0.69	2.2	1	8260B		10/23/2014	CJR	1
o-Xylene	< 0.63	ug/l	0.63	2	1	8260B		10/23/2014	CJR	1
SUR - Toluene-d8	99	REC %			1	8260B		10/23/2014	CJR	1
SUR - 1,2-Dichloroethane-d4	111	REC %			1	8260B		10/23/2014	CJR	1
SUR - 4-Bromofluorobenzene	115	REC %			1	8260B		10/23/2014	CJR	1
SUR - Dibromofluoromethane	101	REC %			1	8260B		10/23/2014	CJR	1

"J" Flag: Analyte detected between LOD and LOQ LOD Limit of Detection LOQ Limit of Quantitation

Code	*Comment*
1	Laboratory QC within limits.

All solid sample results reported on a dry weight basis unless otherwise indicated. All LOD's and LOQ's are adjusted for dilutions but not dry weight. Subcontracted results are denoted by SUB in the analyst field.

Authorized Signature



AECOM

Chain of Custody

Client Information

Company: AECOM / Dave Henderson
Address:
City/State/Zip:
Phone: 414-944-6190 - 414-429-8304(c) Fax:
Email: dave.henderson@aecom.com

Project Information

Project Name: Newton Gravel
Project Number:
Project Location: State:
Report To: Dave Henderson
Invoice To: Dave Henderson

Requested Due Date/TAT:	Date Sampled	Time Sampled	G = Grab C = Composite	field filtered	Matrix Code see bottom of page for codes	Preservatives and # of Containers							Analyze For:								Lab ID or Additional Comments
Sample ID						HNO3	HCL	NaOH	H2SO4	Methanol	None	Other	VOCs								
3403 CTH CR	10/21/14	1710	G		DW		3						X							502792ZA	

MATRIX (CODE)
Drinking Water (DW), Water (W), Waste Water (WW), Product (P), Soil/Solid (S), Sludge (SL), Oil (OL), Wipe (WP), Air (AR), Other (OT), Tissue (TS)

Special Instructions:
24 TAT - confirm w/Dave Henderson @ 414-944-6190

Relinquished By:	Jeffrey D. Mielke	Date:	10/22/14	Time:	0730	Received By:		Date:		Time:	
Relinquished By:		Date:		Time:		Received By:		Date:		Time:	
Relinquished By:		Date:		Time:		Received By:		Date:	10/23/14	Time:	8:42

Sample Condition: Temp in C Received on ice (Y) N Custody Sealed Cooler (Y) N Sample Intact (Y) N

Synergy Environmental Lab, INC.

1990 Prospect Ct., Appleton, WI 54914 *P 920-830-2455 * F 920-733-0631

DAVE HENDERSON
AECOM
1555 N RIVER CENTER DRIVE
MILWAUKEE, WI 53212

Report Date *05-Nov-14*

Project Name FMR NEWTON GRAVEL PIT **Invoice #** E27987
Project #

Lab Code 5027987A
Sample ID 4101 VIEBAHN
Sample Matrix Water
Sample Date 10/29/2014

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
VOC's										
Benzene	< 0.24	ug/l	0.24	0.77	1	8260B		11/3/2014	CJR	1
Bromobenzene	< 0.32	ug/l	0.32	1	1	8260B		11/3/2014	CJR	1
Bromodichloromethane	< 0.37	ug/l	0.37	1.2	1	8260B		11/3/2014	CJR	1
Bromoform	< 0.35	ug/l	0.35	1.1	1	8260B		11/3/2014	CJR	1
tert-Butylbenzene	< 0.36	ug/l	0.36	1.2	1	8260B		11/3/2014	CJR	1
sec-Butylbenzene	< 0.33	ug/l	0.33	1	1	8260B		11/3/2014	CJR	1
n-Butylbenzene	< 0.35	ug/l	0.35	1.1	1	8260B		11/3/2014	CJR	1
Carbon Tetrachloride	< 0.33	ug/l	0.33	1.1	1	8260B		11/3/2014	CJR	1
Chlorobenzene	< 0.24	ug/l	0.24	0.77	1	8260B		11/3/2014	CJR	1
Chloroethane	< 0.63	ug/l	0.63	2	1	8260B		11/3/2014	CJR	1
Chloroform	< 0.28	ug/l	0.28	0.88	1	8260B		11/3/2014	CJR	1
Chloromethane	< 0.81	ug/l	0.81	2.6	1	8260B		11/3/2014	CJR	1
2-Chlorotoluene	< 0.21	ug/l	0.21	0.66	1	8260B		11/3/2014	CJR	1
4-Chlorotoluene	< 0.21	ug/l	0.21	0.68	1	8260B		11/3/2014	CJR	1
1,2-Dibromo-3-chloropropane	< 0.88	ug/l	0.88	2.8	1	8260B		11/3/2014	CJR	1
Dibromochloromethane	< 0.22	ug/l	0.22	0.7	1	8260B		11/3/2014	CJR	1
1,4-Dichlorobenzene	< 0.3	ug/l	0.3	0.96	1	8260B		11/3/2014	CJR	1
1,3-Dichlorobenzene	< 0.28	ug/l	0.28	0.89	1	8260B		11/3/2014	CJR	1
1,2-Dichlorobenzene	< 0.36	ug/l	0.36	1.2	1	8260B		11/3/2014	CJR	1
Dichlorodifluoromethane	< 0.44	ug/l	0.44	1.4	1	8260B		11/3/2014	CJR	1
1,2-Dichloroethane	< 0.41	ug/l	0.41	1.3	1	8260B		11/3/2014	CJR	1
1,1-Dichloroethane	< 0.3	ug/l	0.3	0.97	1	8260B		11/3/2014	CJR	1
1,1-Dichloroethene	< 0.4	ug/l	0.4	1.3	1	8260B		11/3/2014	CJR	1
cis-1,2-Dichloroethene	1.48	ug/l	0.38	1.2	1	8260B		11/3/2014	CJR	1
trans-1,2-Dichloroethene	< 0.35	ug/l	0.35	1.1	1	8260B		11/3/2014	CJR	1
1,2-Dichloropropane	< 0.32	ug/l	0.32	1	1	8260B		11/3/2014	CJR	1
2,2-Dichloropropane	< 0.36	ug/l	0.36	1.2	1	8260B		11/3/2014	CJR	4 8
1,3-Dichloropropane	< 0.33	ug/l	0.33	1	1	8260B		11/3/2014	CJR	1
Di-isopropyl ether	< 0.23	ug/l	0.23	0.73	1	8260B		11/3/2014	CJR	1
EDB (1,2-Dibromoethane)	< 0.44	ug/l	0.44	1.4	1	8260B		11/3/2014	CJR	1
Ethylbenzene	< 0.55	ug/l	0.55	1.7	1	8260B		11/3/2014	CJR	1
Hexachlorobutadiene	< 1.5	ug/l	1.5	4.8	1	8260B		11/3/2014	CJR	1
Isopropylbenzene	< 0.3	ug/l	0.3	0.96	1	8260B		11/3/2014	CJR	1

Project Name FMR NEWTON GRAVEL PIT **Invoice #** E27987
Project #

Lab Code 5027987A
Sample ID 4101 VIEBAHN
Sample Matrix Water
Sample Date 10/29/2014

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
p-Isopropyltoluene	< 0.31	ug/l	0.31	0.98	1	8260B		11/3/2014	CJR	1
Methylene chloride	< 0.5	ug/l	0.5	1.6	1	8260B		11/3/2014	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.23	ug/l	0.23	0.74	1	8260B		11/3/2014	CJR	1
Naphthalene	< 1.7	ug/l	1.7	5.5	1	8260B		11/3/2014	CJR	1
n-Propylbenzene	< 0.25	ug/l	0.25	0.81	1	8260B		11/3/2014	CJR	1
1,1,2,2-Tetrachloroethane	< 0.45	ug/l	0.45	1.4	1	8260B		11/3/2014	CJR	1
1,1,1,2-Tetrachloroethane	< 0.33	ug/l	0.33	1.1	1	8260B		11/3/2014	CJR	1
Tetrachloroethene	< 0.33	ug/l	0.33	1.1	1	8260B		11/3/2014	CJR	1
Toluene	< 0.69	ug/l	0.69	2.2	1	8260B		11/3/2014	CJR	1
1,2,4-Trichlorobenzene	< 0.98	ug/l	0.98	3.1	1	8260B		11/3/2014	CJR	1
1,2,3-Trichlorobenzene	< 1.8	ug/l	1.8	5.8	1	8260B		11/3/2014	CJR	1
1,1,1-Trichloroethane	< 0.33	ug/l	0.33	1	1	8260B		11/3/2014	CJR	1
1,1,2-Trichloroethane	< 0.34	ug/l	0.34	1.1	1	8260B		11/3/2014	CJR	1
Trichloroethene (TCE)	< 0.33	ug/l	0.33	1	1	8260B		11/3/2014	CJR	1
Trichlorofluoromethane	< 0.71	ug/l	0.71	2.3	1	8260B		11/3/2014	CJR	1
1,2,4-Trimethylbenzene	< 2.2	ug/l	2.2	6.9	1	8260B		11/3/2014	CJR	1
1,3,5-Trimethylbenzene	< 1.4	ug/l	1.4	4.5	1	8260B		11/3/2014	CJR	1
Vinyl Chloride	0.38 "J"	ug/l	0.18	0.57	1	8260B		11/3/2014	CJR	1
m&p-Xylene	< 0.69	ug/l	0.69	2.2	1	8260B		11/3/2014	CJR	1
o-Xylene	< 0.63	ug/l	0.63	2	1	8260B		11/3/2014	CJR	1
SUR - 4-Bromofluorobenzene	101	REC %			1	8260B		11/3/2014	CJR	1
SUR - Dibromofluoromethane	93	REC %			1	8260B		11/3/2014	CJR	1
SUR - Toluene-d8	99	REC %			1	8260B		11/3/2014	CJR	1
SUR - 1,2-Dichloroethane-d4	93	REC %			1	8260B		11/3/2014	CJR	1

Project Name FMR NEWTON GRAVEL PIT **Invoice #** E27987
Project #

Lab Code 5027987B
Sample ID 4025 VIEBAHN
Sample Matrix Water
Sample Date 10/29/2014

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
VOC's										
Benzene	< 0.24	ug/l	0.24	0.77	1	8260B		11/3/2014	CJR	1
Bromobenzene	< 0.32	ug/l	0.32	1	1	8260B		11/3/2014	CJR	1
Bromodichloromethane	< 0.37	ug/l	0.37	1.2	1	8260B		11/3/2014	CJR	1
Bromoform	< 0.35	ug/l	0.35	1.1	1	8260B		11/3/2014	CJR	1
tert-Butylbenzene	< 0.36	ug/l	0.36	1.2	1	8260B		11/3/2014	CJR	1
sec-Butylbenzene	< 0.33	ug/l	0.33	1	1	8260B		11/3/2014	CJR	1
n-Butylbenzene	< 0.35	ug/l	0.35	1.1	1	8260B		11/3/2014	CJR	1
Carbon Tetrachloride	< 0.33	ug/l	0.33	1.1	1	8260B		11/3/2014	CJR	1
Chlorobenzene	< 0.24	ug/l	0.24	0.77	1	8260B		11/3/2014	CJR	1
Chloroethane	< 0.63	ug/l	0.63	2	1	8260B		11/3/2014	CJR	1
Chloroform	< 0.28	ug/l	0.28	0.88	1	8260B		11/3/2014	CJR	1
Chloromethane	< 0.81	ug/l	0.81	2.6	1	8260B		11/3/2014	CJR	1
2-Chlorotoluene	< 0.21	ug/l	0.21	0.66	1	8260B		11/3/2014	CJR	1
4-Chlorotoluene	< 0.21	ug/l	0.21	0.68	1	8260B		11/3/2014	CJR	1
1,2-Dibromo-3-chloropropane	< 0.88	ug/l	0.88	2.8	1	8260B		11/3/2014	CJR	1
Dibromochloromethane	< 0.22	ug/l	0.22	0.7	1	8260B		11/3/2014	CJR	1
1,4-Dichlorobenzene	< 0.3	ug/l	0.3	0.96	1	8260B		11/3/2014	CJR	1
1,3-Dichlorobenzene	< 0.28	ug/l	0.28	0.89	1	8260B		11/3/2014	CJR	1
1,2-Dichlorobenzene	< 0.36	ug/l	0.36	1.2	1	8260B		11/3/2014	CJR	1
Dichlorodifluoromethane	< 0.44	ug/l	0.44	1.4	1	8260B		11/3/2014	CJR	1
1,2-Dichloroethane	< 0.41	ug/l	0.41	1.3	1	8260B		11/3/2014	CJR	1
1,1-Dichloroethane	< 0.3	ug/l	0.3	0.97	1	8260B		11/3/2014	CJR	1
1,1-Dichloroethene	< 0.4	ug/l	0.4	1.3	1	8260B		11/3/2014	CJR	1
cis-1,2-Dichloroethene	1.38	ug/l	0.38	1.2	1	8260B		11/3/2014	CJR	1
trans-1,2-Dichloroethene	< 0.35	ug/l	0.35	1.1	1	8260B		11/3/2014	CJR	1
1,2-Dichloropropane	< 0.32	ug/l	0.32	1	1	8260B		11/3/2014	CJR	1
2,2-Dichloropropane	< 0.36	ug/l	0.36	1.2	1	8260B		11/3/2014	CJR	4 8
1,3-Dichloropropane	< 0.33	ug/l	0.33	1	1	8260B		11/3/2014	CJR	1
Di-isopropyl ether	< 0.23	ug/l	0.23	0.73	1	8260B		11/3/2014	CJR	1
EDB (1,2-Dibromoethane)	< 0.44	ug/l	0.44	1.4	1	8260B		11/3/2014	CJR	1
Ethylbenzene	< 0.55	ug/l	0.55	1.7	1	8260B		11/3/2014	CJR	1
Hexachlorobutadiene	< 1.5	ug/l	1.5	4.8	1	8260B		11/3/2014	CJR	1
Isopropylbenzene	< 0.3	ug/l	0.3	0.96	1	8260B		11/3/2014	CJR	1
p-Isopropyltoluene	< 0.31	ug/l	0.31	0.98	1	8260B		11/3/2014	CJR	1
Methylene chloride	< 0.5	ug/l	0.5	1.6	1	8260B		11/3/2014	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.23	ug/l	0.23	0.74	1	8260B		11/3/2014	CJR	1
Naphthalene	< 1.7	ug/l	1.7	5.5	1	8260B		11/3/2014	CJR	1
n-Propylbenzene	< 0.25	ug/l	0.25	0.81	1	8260B		11/3/2014	CJR	1
1,1,2,2-Tetrachloroethane	< 0.45	ug/l	0.45	1.4	1	8260B		11/3/2014	CJR	1
1,1,1,2-Tetrachloroethane	< 0.33	ug/l	0.33	1.1	1	8260B		11/3/2014	CJR	1
Tetrachloroethene	< 0.33	ug/l	0.33	1.1	1	8260B		11/3/2014	CJR	1
Toluene	0.95 "J"	ug/l	0.69	2.2	1	8260B		11/3/2014	CJR	1
1,2,4-Trichlorobenzene	< 0.98	ug/l	0.98	3.1	1	8260B		11/3/2014	CJR	1
1,2,3-Trichlorobenzene	< 1.8	ug/l	1.8	5.8	1	8260B		11/3/2014	CJR	1
1,1,1-Trichloroethane	< 0.33	ug/l	0.33	1	1	8260B		11/3/2014	CJR	1
1,1,2-Trichloroethane	< 0.34	ug/l	0.34	1.1	1	8260B		11/3/2014	CJR	1
Trichloroethene (TCE)	< 0.33	ug/l	0.33	1	1	8260B		11/3/2014	CJR	1
Trichlorofluoromethane	< 0.71	ug/l	0.71	2.3	1	8260B		11/3/2014	CJR	1
1,2,4-Trimethylbenzene	< 2.2	ug/l	2.2	6.9	1	8260B		11/3/2014	CJR	1
1,3,5-Trimethylbenzene	< 1.4	ug/l	1.4	4.5	1	8260B		11/3/2014	CJR	1
Vinyl Chloride	0.34 "J"	ug/l	0.18	0.57	1	8260B		11/3/2014	CJR	1
m&p-Xylene	< 0.69	ug/l	0.69	2.2	1	8260B		11/3/2014	CJR	1
o-Xylene	< 0.63	ug/l	0.63	2	1	8260B		11/3/2014	CJR	1
SUR - 1,2-Dichloroethane-d4	99	REC %			1	8260B		11/3/2014	CJR	1
SUR - 4-Bromofluorobenzene	99	REC %			1	8260B		11/3/2014	CJR	1
SUR - Dibromofluoromethane	95	REC %			1	8260B		11/3/2014	CJR	1
SUR - Toluene-d8	100	REC %			1	8260B		11/3/2014	CJR	1

Project Name FMR NEWTON GRAVEL PIT **Invoice #** E27987
Project #

Lab Code 5027987C
Sample ID 3825 VIEBAHN
Sample Matrix Water
Sample Date 10/29/2014

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
VOC's										
Benzene	< 0.24	ug/l	0.24	0.77	1	8260B		11/3/2014	CJR	1
Bromobenzene	< 0.32	ug/l	0.32	1	1	8260B		11/3/2014	CJR	1
Bromodichloromethane	< 0.37	ug/l	0.37	1.2	1	8260B		11/3/2014	CJR	1
Bromoform	< 0.35	ug/l	0.35	1.1	1	8260B		11/3/2014	CJR	1
tert-Butylbenzene	< 0.36	ug/l	0.36	1.2	1	8260B		11/3/2014	CJR	1
sec-Butylbenzene	< 0.33	ug/l	0.33	1	1	8260B		11/3/2014	CJR	1
n-Butylbenzene	< 0.35	ug/l	0.35	1.1	1	8260B		11/3/2014	CJR	1
Carbon Tetrachloride	< 0.33	ug/l	0.33	1.1	1	8260B		11/3/2014	CJR	1
Chlorobenzene	< 0.24	ug/l	0.24	0.77	1	8260B		11/3/2014	CJR	1
Chloroethane	< 0.63	ug/l	0.63	2	1	8260B		11/3/2014	CJR	1
Chloroform	< 0.28	ug/l	0.28	0.88	1	8260B		11/3/2014	CJR	1
Chloromethane	< 0.81	ug/l	0.81	2.6	1	8260B		11/3/2014	CJR	1
2-Chlorotoluene	< 0.21	ug/l	0.21	0.66	1	8260B		11/3/2014	CJR	1
4-Chlorotoluene	< 0.21	ug/l	0.21	0.68	1	8260B		11/3/2014	CJR	1
1,2-Dibromo-3-chloropropane	< 0.88	ug/l	0.88	2.8	1	8260B		11/3/2014	CJR	1
Dibromochloromethane	< 0.22	ug/l	0.22	0.7	1	8260B		11/3/2014	CJR	1
1,4-Dichlorobenzene	< 0.3	ug/l	0.3	0.96	1	8260B		11/3/2014	CJR	1
1,3-Dichlorobenzene	< 0.28	ug/l	0.28	0.89	1	8260B		11/3/2014	CJR	1
1,2-Dichlorobenzene	< 0.36	ug/l	0.36	1.2	1	8260B		11/3/2014	CJR	1
Dichlorodifluoromethane	< 0.44	ug/l	0.44	1.4	1	8260B		11/3/2014	CJR	1
1,2-Dichloroethane	< 0.41	ug/l	0.41	1.3	1	8260B		11/3/2014	CJR	1
1,1-Dichloroethane	< 0.3	ug/l	0.3	0.97	1	8260B		11/3/2014	CJR	1
1,1-Dichloroethene	< 0.4	ug/l	0.4	1.3	1	8260B		11/3/2014	CJR	1
cis-1,2-Dichloroethene	< 0.38	ug/l	0.38	1.2	1	8260B		11/3/2014	CJR	1
trans-1,2-Dichloroethene	< 0.35	ug/l	0.35	1.1	1	8260B		11/3/2014	CJR	1
1,2-Dichloropropane	< 0.32	ug/l	0.32	1	1	8260B		11/3/2014	CJR	1
2,2-Dichloropropane	< 0.36	ug/l	0.36	1.2	1	8260B		11/3/2014	CJR	4 8
1,3-Dichloropropane	< 0.33	ug/l	0.33	1	1	8260B		11/3/2014	CJR	1
Di-isopropyl ether	< 0.23	ug/l	0.23	0.73	1	8260B		11/3/2014	CJR	1
EDB (1,2-Dibromoethane)	< 0.44	ug/l	0.44	1.4	1	8260B		11/3/2014	CJR	1
Ethylbenzene	< 0.55	ug/l	0.55	1.7	1	8260B		11/3/2014	CJR	1
Hexachlorobutadiene	< 1.5	ug/l	1.5	4.8	1	8260B		11/3/2014	CJR	1
Isopropylbenzene	< 0.3	ug/l	0.3	0.96	1	8260B		11/3/2014	CJR	1
p-Isopropyltoluene	< 0.31	ug/l	0.31	0.98	1	8260B		11/3/2014	CJR	1
Methylene chloride	< 0.5	ug/l	0.5	1.6	1	8260B		11/3/2014	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.23	ug/l	0.23	0.74	1	8260B		11/3/2014	CJR	1
Naphthalene	< 1.7	ug/l	1.7	5.5	1	8260B		11/3/2014	CJR	1
n-Propylbenzene	< 0.25	ug/l	0.25	0.81	1	8260B		11/3/2014	CJR	1
1,1,2,2-Tetrachloroethane	< 0.45	ug/l	0.45	1.4	1	8260B		11/3/2014	CJR	1
1,1,1,2-Tetrachloroethane	< 0.33	ug/l	0.33	1.1	1	8260B		11/3/2014	CJR	1
Tetrachloroethene	< 0.33	ug/l	0.33	1.1	1	8260B		11/3/2014	CJR	1
Toluene	< 0.69	ug/l	0.69	2.2	1	8260B		11/3/2014	CJR	1
1,2,4-Trichlorobenzene	< 0.98	ug/l	0.98	3.1	1	8260B		11/3/2014	CJR	1
1,2,3-Trichlorobenzene	< 1.8	ug/l	1.8	5.8	1	8260B		11/3/2014	CJR	1
1,1,1-Trichloroethane	< 0.33	ug/l	0.33	1	1	8260B		11/3/2014	CJR	1
1,1,2-Trichloroethane	< 0.34	ug/l	0.34	1.1	1	8260B		11/3/2014	CJR	1
Trichloroethene (TCE)	< 0.33	ug/l	0.33	1	1	8260B		11/3/2014	CJR	1
Trichlorofluoromethane	< 0.71	ug/l	0.71	2.3	1	8260B		11/3/2014	CJR	1
1,2,4-Trimethylbenzene	< 2.2	ug/l	2.2	6.9	1	8260B		11/3/2014	CJR	1
1,3,5-Trimethylbenzene	< 1.4	ug/l	1.4	4.5	1	8260B		11/3/2014	CJR	1
Vinyl Chloride	< 0.18	ug/l	0.18	0.57	1	8260B		11/3/2014	CJR	1
m&p-Xylene	< 0.69	ug/l	0.69	2.2	1	8260B		11/3/2014	CJR	1
o-Xylene	< 0.63	ug/l	0.63	2	1	8260B		11/3/2014	CJR	1
SUR - Dibromofluoromethane	93	REC %			1	8260B		11/3/2014	CJR	1
SUR - 1,2-Dichloroethane-d4	99	REC %			1	8260B		11/3/2014	CJR	1
SUR - 4-Bromofluorobenzene	99	REC %			1	8260B		11/3/2014	CJR	1
SUR - Toluene-d8	100	REC %			1	8260B		11/3/2014	CJR	1

Project Name FMR NEWTON GRAVEL PIT **Invoice #** E27987
Project #

Lab Code 5027987D
Sample ID 3701 VIEBAHN
Sample Matrix Water
Sample Date 10/29/2014

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
VOC's										
Benzene	< 0.24	ug/l	0.24	0.77	1	8260B		11/3/2014	CJR	1
Bromobenzene	< 0.32	ug/l	0.32	1	1	8260B		11/3/2014	CJR	1
Bromodichloromethane	< 0.37	ug/l	0.37	1.2	1	8260B		11/3/2014	CJR	1
Bromoform	< 0.35	ug/l	0.35	1.1	1	8260B		11/3/2014	CJR	1
tert-Butylbenzene	< 0.36	ug/l	0.36	1.2	1	8260B		11/3/2014	CJR	1
sec-Butylbenzene	< 0.33	ug/l	0.33	1	1	8260B		11/3/2014	CJR	1
n-Butylbenzene	< 0.35	ug/l	0.35	1.1	1	8260B		11/3/2014	CJR	1
Carbon Tetrachloride	< 0.33	ug/l	0.33	1.1	1	8260B		11/3/2014	CJR	1
Chlorobenzene	< 0.24	ug/l	0.24	0.77	1	8260B		11/3/2014	CJR	1
Chloroethane	< 0.63	ug/l	0.63	2	1	8260B		11/3/2014	CJR	1
Chloroform	< 0.28	ug/l	0.28	0.88	1	8260B		11/3/2014	CJR	1
Chloromethane	< 0.81	ug/l	0.81	2.6	1	8260B		11/3/2014	CJR	1
2-Chlorotoluene	< 0.21	ug/l	0.21	0.66	1	8260B		11/3/2014	CJR	1
4-Chlorotoluene	< 0.21	ug/l	0.21	0.68	1	8260B		11/3/2014	CJR	1
1,2-Dibromo-3-chloropropane	< 0.88	ug/l	0.88	2.8	1	8260B		11/3/2014	CJR	1
Dibromochloromethane	< 0.22	ug/l	0.22	0.7	1	8260B		11/3/2014	CJR	1
1,4-Dichlorobenzene	< 0.3	ug/l	0.3	0.96	1	8260B		11/3/2014	CJR	1
1,3-Dichlorobenzene	< 0.28	ug/l	0.28	0.89	1	8260B		11/3/2014	CJR	1
1,2-Dichlorobenzene	< 0.36	ug/l	0.36	1.2	1	8260B		11/3/2014	CJR	1
Dichlorodifluoromethane	< 0.44	ug/l	0.44	1.4	1	8260B		11/3/2014	CJR	1
1,2-Dichloroethane	< 0.41	ug/l	0.41	1.3	1	8260B		11/3/2014	CJR	1
1,1-Dichloroethane	< 0.3	ug/l	0.3	0.97	1	8260B		11/3/2014	CJR	1
1,1-Dichloroethene	< 0.4	ug/l	0.4	1.3	1	8260B		11/3/2014	CJR	1
cis-1,2-Dichloroethene	1.23	ug/l	0.38	1.2	1	8260B		11/3/2014	CJR	1
trans-1,2-Dichloroethene	< 0.35	ug/l	0.35	1.1	1	8260B		11/3/2014	CJR	1
1,2-Dichloropropane	< 0.32	ug/l	0.32	1	1	8260B		11/3/2014	CJR	1
2,2-Dichloropropane	< 0.36	ug/l	0.36	1.2	1	8260B		11/3/2014	CJR	4 8
1,3-Dichloropropane	< 0.33	ug/l	0.33	1	1	8260B		11/3/2014	CJR	1
Di-isopropyl ether	< 0.23	ug/l	0.23	0.73	1	8260B		11/3/2014	CJR	1
EDB (1,2-Dibromoethane)	< 0.44	ug/l	0.44	1.4	1	8260B		11/3/2014	CJR	1
Ethylbenzene	< 0.55	ug/l	0.55	1.7	1	8260B		11/3/2014	CJR	1
Hexachlorobutadiene	< 1.5	ug/l	1.5	4.8	1	8260B		11/3/2014	CJR	1
Isopropylbenzene	< 0.3	ug/l	0.3	0.96	1	8260B		11/3/2014	CJR	1
p-Isopropyltoluene	< 0.31	ug/l	0.31	0.98	1	8260B		11/3/2014	CJR	1
Methylene chloride	1.5 "J"	ug/l	0.5	1.6	1	8260B		11/3/2014	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.23	ug/l	0.23	0.74	1	8260B		11/3/2014	CJR	1
Naphthalene	< 1.7	ug/l	1.7	5.5	1	8260B		11/3/2014	CJR	1
n-Propylbenzene	< 0.25	ug/l	0.25	0.81	1	8260B		11/3/2014	CJR	1
1,1,2,2-Tetrachloroethane	< 0.45	ug/l	0.45	1.4	1	8260B		11/3/2014	CJR	1
1,1,1,2-Tetrachloroethane	< 0.33	ug/l	0.33	1.1	1	8260B		11/3/2014	CJR	1
Tetrachloroethene	< 0.33	ug/l	0.33	1.1	1	8260B		11/3/2014	CJR	1
Toluene	< 0.69	ug/l	0.69	2.2	1	8260B		11/3/2014	CJR	1
1,2,4-Trichlorobenzene	< 0.98	ug/l	0.98	3.1	1	8260B		11/3/2014	CJR	1
1,2,3-Trichlorobenzene	< 1.8	ug/l	1.8	5.8	1	8260B		11/3/2014	CJR	1
1,1,1-Trichloroethane	< 0.33	ug/l	0.33	1	1	8260B		11/3/2014	CJR	1
1,1,2-Trichloroethane	< 0.34	ug/l	0.34	1.1	1	8260B		11/3/2014	CJR	1
Trichloroethene (TCE)	< 0.33	ug/l	0.33	1	1	8260B		11/3/2014	CJR	1
Trichlorofluoromethane	< 0.71	ug/l	0.71	2.3	1	8260B		11/3/2014	CJR	1
1,2,4-Trimethylbenzene	< 2.2	ug/l	2.2	6.9	1	8260B		11/3/2014	CJR	1
1,3,5-Trimethylbenzene	< 1.4	ug/l	1.4	4.5	1	8260B		11/3/2014	CJR	1
Vinyl Chloride	0.29 "J"	ug/l	0.18	0.57	1	8260B		11/3/2014	CJR	1
m&p-Xylene	< 0.69	ug/l	0.69	2.2	1	8260B		11/3/2014	CJR	1
o-Xylene	< 0.63	ug/l	0.63	2	1	8260B		11/3/2014	CJR	1
SUR - 4-Bromofluorobenzene	101	REC %			1	8260B		11/3/2014	CJR	1
SUR - Dibromofluoromethane	95	REC %			1	8260B		11/3/2014	CJR	1
SUR - Toluene-d8	98	REC %			1	8260B		11/3/2014	CJR	1
SUR - 1,2-Dichloroethane-d4	93	REC %			1	8260B		11/3/2014	CJR	1

Project Name FMR NEWTON GRAVEL PIT **Invoice #** E27987
Project #

Lab Code 5027987E
Sample ID 3817 VIEBAHN
Sample Matrix Water
Sample Date 10/29/2014

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
VOC's										
Benzene	< 0.24	ug/l	0.24	0.77	1	8260B		11/3/2014	CJR	1
Bromobenzene	< 0.32	ug/l	0.32	1	1	8260B		11/3/2014	CJR	1
Bromodichloromethane	< 0.37	ug/l	0.37	1.2	1	8260B		11/3/2014	CJR	1
Bromoform	< 0.35	ug/l	0.35	1.1	1	8260B		11/3/2014	CJR	1
tert-Butylbenzene	< 0.36	ug/l	0.36	1.2	1	8260B		11/3/2014	CJR	1
sec-Butylbenzene	< 0.33	ug/l	0.33	1	1	8260B		11/3/2014	CJR	1
n-Butylbenzene	< 0.35	ug/l	0.35	1.1	1	8260B		11/3/2014	CJR	1
Carbon Tetrachloride	< 0.33	ug/l	0.33	1.1	1	8260B		11/3/2014	CJR	1
Chlorobenzene	< 0.24	ug/l	0.24	0.77	1	8260B		11/3/2014	CJR	1
Chloroethane	< 0.63	ug/l	0.63	2	1	8260B		11/3/2014	CJR	1
Chloroform	< 0.28	ug/l	0.28	0.88	1	8260B		11/3/2014	CJR	1
Chloromethane	< 0.81	ug/l	0.81	2.6	1	8260B		11/3/2014	CJR	1
2-Chlorotoluene	< 0.21	ug/l	0.21	0.66	1	8260B		11/3/2014	CJR	1
4-Chlorotoluene	< 0.21	ug/l	0.21	0.68	1	8260B		11/3/2014	CJR	1
1,2-Dibromo-3-chloropropane	< 0.88	ug/l	0.88	2.8	1	8260B		11/3/2014	CJR	1
Dibromochloromethane	< 0.22	ug/l	0.22	0.7	1	8260B		11/3/2014	CJR	1
1,4-Dichlorobenzene	< 0.3	ug/l	0.3	0.96	1	8260B		11/3/2014	CJR	1
1,3-Dichlorobenzene	< 0.28	ug/l	0.28	0.89	1	8260B		11/3/2014	CJR	1
1,2-Dichlorobenzene	< 0.36	ug/l	0.36	1.2	1	8260B		11/3/2014	CJR	1
Dichlorodifluoromethane	< 0.44	ug/l	0.44	1.4	1	8260B		11/3/2014	CJR	1
1,2-Dichloroethane	< 0.41	ug/l	0.41	1.3	1	8260B		11/3/2014	CJR	1
1,1-Dichloroethane	< 0.3	ug/l	0.3	0.97	1	8260B		11/3/2014	CJR	1
1,1-Dichloroethene	< 0.4	ug/l	0.4	1.3	1	8260B		11/3/2014	CJR	1
cis-1,2-Dichloroethene	0.40 "J"	ug/l	0.38	1.2	1	8260B		11/3/2014	CJR	1
trans-1,2-Dichloroethene	< 0.35	ug/l	0.35	1.1	1	8260B		11/3/2014	CJR	1
1,2-Dichloropropane	< 0.32	ug/l	0.32	1	1	8260B		11/3/2014	CJR	1
2,2-Dichloropropane	< 0.36	ug/l	0.36	1.2	1	8260B		11/3/2014	CJR	4 8
1,3-Dichloropropane	< 0.33	ug/l	0.33	1	1	8260B		11/3/2014	CJR	1
Di-isopropyl ether	< 0.23	ug/l	0.23	0.73	1	8260B		11/3/2014	CJR	1
EDB (1,2-Dibromoethane)	< 0.44	ug/l	0.44	1.4	1	8260B		11/3/2014	CJR	1
Ethylbenzene	< 0.55	ug/l	0.55	1.7	1	8260B		11/3/2014	CJR	1
Hexachlorobutadiene	< 1.5	ug/l	1.5	4.8	1	8260B		11/3/2014	CJR	1
Isopropylbenzene	< 0.3	ug/l	0.3	0.96	1	8260B		11/3/2014	CJR	1
p-Isopropyltoluene	< 0.31	ug/l	0.31	0.98	1	8260B		11/3/2014	CJR	1
Methylene chloride	< 0.5	ug/l	0.5	1.6	1	8260B		11/3/2014	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.23	ug/l	0.23	0.74	1	8260B		11/3/2014	CJR	1
Naphthalene	< 1.7	ug/l	1.7	5.5	1	8260B		11/3/2014	CJR	1
n-Propylbenzene	< 0.25	ug/l	0.25	0.81	1	8260B		11/3/2014	CJR	1
1,1,2,2-Tetrachloroethane	< 0.45	ug/l	0.45	1.4	1	8260B		11/3/2014	CJR	1
1,1,1,2-Tetrachloroethane	< 0.33	ug/l	0.33	1.1	1	8260B		11/3/2014	CJR	1
Tetrachloroethene	< 0.33	ug/l	0.33	1.1	1	8260B		11/3/2014	CJR	1
Toluene	< 0.69	ug/l	0.69	2.2	1	8260B		11/3/2014	CJR	1
1,2,4-Trichlorobenzene	< 0.98	ug/l	0.98	3.1	1	8260B		11/3/2014	CJR	1
1,2,3-Trichlorobenzene	< 1.8	ug/l	1.8	5.8	1	8260B		11/3/2014	CJR	1
1,1,1-Trichloroethane	< 0.33	ug/l	0.33	1	1	8260B		11/3/2014	CJR	1
1,1,2-Trichloroethane	< 0.34	ug/l	0.34	1.1	1	8260B		11/3/2014	CJR	1
Trichloroethene (TCE)	< 0.33	ug/l	0.33	1	1	8260B		11/3/2014	CJR	1
Trichlorofluoromethane	< 0.71	ug/l	0.71	2.3	1	8260B		11/3/2014	CJR	1
1,2,4-Trimethylbenzene	< 2.2	ug/l	2.2	6.9	1	8260B		11/3/2014	CJR	1
1,3,5-Trimethylbenzene	< 1.4	ug/l	1.4	4.5	1	8260B		11/3/2014	CJR	1
Vinyl Chloride	< 0.18	ug/l	0.18	0.57	1	8260B		11/3/2014	CJR	1
m&p-Xylene	< 0.69	ug/l	0.69	2.2	1	8260B		11/3/2014	CJR	1
o-Xylene	< 0.63	ug/l	0.63	2	1	8260B		11/3/2014	CJR	1
SUR - 1,2-Dichloroethane-d4	102	REC %			1	8260B		11/3/2014	CJR	1
SUR - 4-Bromofluorobenzene	98	REC %			1	8260B		11/3/2014	CJR	1
SUR - Dibromofluoromethane	97	REC %			1	8260B		11/3/2014	CJR	1
SUR - Toluene-d8	101	REC %			1	8260B		11/3/2014	CJR	1

Project Name FMR NEWTON GRAVEL PIT **Invoice #** E27987
Project #

Lab Code 5027987F
Sample ID TRIP BLANK
Sample Matrix Water
Sample Date 10/29/2014

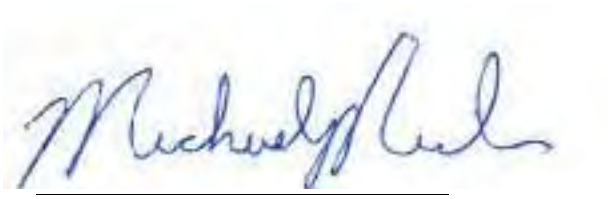
	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
VOC's										
Benzene	< 0.24	ug/l	0.24	0.77	1	8260B		11/3/2014	CJR	1
Bromobenzene	< 0.32	ug/l	0.32	1	1	8260B		11/3/2014	CJR	1
Bromodichloromethane	< 0.37	ug/l	0.37	1.2	1	8260B		11/3/2014	CJR	1
Bromoform	< 0.35	ug/l	0.35	1.1	1	8260B		11/3/2014	CJR	1
tert-Butylbenzene	< 0.36	ug/l	0.36	1.2	1	8260B		11/3/2014	CJR	1
sec-Butylbenzene	< 0.33	ug/l	0.33	1	1	8260B		11/3/2014	CJR	1
n-Butylbenzene	< 0.35	ug/l	0.35	1.1	1	8260B		11/3/2014	CJR	1
Carbon Tetrachloride	< 0.33	ug/l	0.33	1.1	1	8260B		11/3/2014	CJR	1
Chlorobenzene	< 0.24	ug/l	0.24	0.77	1	8260B		11/3/2014	CJR	1
Chloroethane	< 0.63	ug/l	0.63	2	1	8260B		11/3/2014	CJR	1
Chloroform	< 0.28	ug/l	0.28	0.88	1	8260B		11/3/2014	CJR	1
Chloromethane	< 0.81	ug/l	0.81	2.6	1	8260B		11/3/2014	CJR	1
2-Chlorotoluene	< 0.21	ug/l	0.21	0.66	1	8260B		11/3/2014	CJR	1
4-Chlorotoluene	< 0.21	ug/l	0.21	0.68	1	8260B		11/3/2014	CJR	1
1,2-Dibromo-3-chloropropane	< 0.88	ug/l	0.88	2.8	1	8260B		11/3/2014	CJR	1
Dibromochloromethane	< 0.22	ug/l	0.22	0.7	1	8260B		11/3/2014	CJR	1
1,4-Dichlorobenzene	< 0.3	ug/l	0.3	0.96	1	8260B		11/3/2014	CJR	1
1,3-Dichlorobenzene	< 0.28	ug/l	0.28	0.89	1	8260B		11/3/2014	CJR	1
1,2-Dichlorobenzene	< 0.36	ug/l	0.36	1.2	1	8260B		11/3/2014	CJR	1
Dichlorodifluoromethane	< 0.44	ug/l	0.44	1.4	1	8260B		11/3/2014	CJR	1
1,2-Dichloroethane	< 0.41	ug/l	0.41	1.3	1	8260B		11/3/2014	CJR	1
1,1-Dichloroethane	< 0.3	ug/l	0.3	0.97	1	8260B		11/3/2014	CJR	1
1,1-Dichloroethene	< 0.4	ug/l	0.4	1.3	1	8260B		11/3/2014	CJR	1
cis-1,2-Dichloroethene	< 0.38	ug/l	0.38	1.2	1	8260B		11/3/2014	CJR	1
trans-1,2-Dichloroethene	< 0.35	ug/l	0.35	1.1	1	8260B		11/3/2014	CJR	1
1,2-Dichloropropane	< 0.32	ug/l	0.32	1	1	8260B		11/3/2014	CJR	1
2,2-Dichloropropane	< 0.36	ug/l	0.36	1.2	1	8260B		11/3/2014	CJR	4 8
1,3-Dichloropropane	< 0.33	ug/l	0.33	1	1	8260B		11/3/2014	CJR	1
Di-isopropyl ether	< 0.23	ug/l	0.23	0.73	1	8260B		11/3/2014	CJR	1
EDB (1,2-Dibromoethane)	< 0.44	ug/l	0.44	1.4	1	8260B		11/3/2014	CJR	1
Ethylbenzene	< 0.55	ug/l	0.55	1.7	1	8260B		11/3/2014	CJR	1
Hexachlorobutadiene	< 1.5	ug/l	1.5	4.8	1	8260B		11/3/2014	CJR	1
Isopropylbenzene	< 0.3	ug/l	0.3	0.96	1	8260B		11/3/2014	CJR	1
p-Isopropyltoluene	< 0.31	ug/l	0.31	0.98	1	8260B		11/3/2014	CJR	1
Methylene chloride	< 0.5	ug/l	0.5	1.6	1	8260B		11/3/2014	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.23	ug/l	0.23	0.74	1	8260B		11/3/2014	CJR	1
Naphthalene	< 1.7	ug/l	1.7	5.5	1	8260B		11/3/2014	CJR	1
n-Propylbenzene	< 0.25	ug/l	0.25	0.81	1	8260B		11/3/2014	CJR	1
1,1,2,2-Tetrachloroethane	< 0.45	ug/l	0.45	1.4	1	8260B		11/3/2014	CJR	1
1,1,1,2-Tetrachloroethane	< 0.33	ug/l	0.33	1.1	1	8260B		11/3/2014	CJR	1
Tetrachloroethene	< 0.33	ug/l	0.33	1.1	1	8260B		11/3/2014	CJR	1
Toluene	< 0.69	ug/l	0.69	2.2	1	8260B		11/3/2014	CJR	1
1,2,4-Trichlorobenzene	< 0.98	ug/l	0.98	3.1	1	8260B		11/3/2014	CJR	1
1,2,3-Trichlorobenzene	< 1.8	ug/l	1.8	5.8	1	8260B		11/3/2014	CJR	1
1,1,1-Trichloroethane	< 0.33	ug/l	0.33	1	1	8260B		11/3/2014	CJR	1
1,1,2-Trichloroethane	< 0.34	ug/l	0.34	1.1	1	8260B		11/3/2014	CJR	1
Trichloroethene (TCE)	< 0.33	ug/l	0.33	1	1	8260B		11/3/2014	CJR	1
Trichlorofluoromethane	< 0.71	ug/l	0.71	2.3	1	8260B		11/3/2014	CJR	1
1,2,4-Trimethylbenzene	< 2.2	ug/l	2.2	6.9	1	8260B		11/3/2014	CJR	1
1,3,5-Trimethylbenzene	< 1.4	ug/l	1.4	4.5	1	8260B		11/3/2014	CJR	1
Vinyl Chloride	< 0.18	ug/l	0.18	0.57	1	8260B		11/3/2014	CJR	1
m&p-Xylene	< 0.69	ug/l	0.69	2.2	1	8260B		11/3/2014	CJR	1
o-Xylene	< 0.63	ug/l	0.63	2	1	8260B		11/3/2014	CJR	1
SUR - Toluene-d8	100	REC %			1	8260B		11/3/2014	CJR	1
SUR - 1,2-Dichloroethane-d4	99	REC %			1	8260B		11/3/2014	CJR	1
SUR - 4-Bromofluorobenzene	100	REC %			1	8260B		11/3/2014	CJR	1
SUR - Dibromofluoromethane	98	REC %			1	8260B		11/3/2014	CJR	1

"J" Flag: Analyte detected between LOD and LOQ LOD Limit of Detection LOQ Limit of Quantitation

Code	*Comment*
1	Laboratory QC within limits.
4	The continuing calibration standard not within established limits.
8	Closing calibration standard not within established limits.

All solid sample results reported on a dry weight basis unless otherwise indicated. All LOD's and LOQ's are adjusted for dilutions but not dry weight. Subcontracted results are denoted by SUB in the analyst field.

Authorized Signature



CHAIN OF CUSTODY RECORD

Synergy
Environmental Lab, Inc.

1990 Prospect Ct. • Appleton, WI 54914
920-830-2455 • FAX 920-733-0631

Chain # № 2790

Page 1 of 1

Sample Handling Request
_____ Rush Analysis Date Required _____
(Rushes accepted only with prior authorization)
X Normal Turn Around

Lab I.D. #	
Account No. :	Quote No.:
Project #:	
Sampler: (signature)	
Project (Name / Location):	Former Newton Gravel Pit
Reports To:	Dave Henderson
Company	AECOM
Address	1555 N. RiverCenter Dr. STE 214
City State Zip	Milwaukee, WI 53212
Phone	414-944-6190
FAX	414-944-6081
Invoice To:	Dave Henderson
Company	SAME
Address	
City State Zip	
Phone	
FAX	

Analysis Requested | **Other Analysis**

Lab I.D.	Sample I.D.	Collection Date	Collection Time	Comp	Grab	Filtered Y/N	No. of Containers	Sample Type (Matrix)*	Preservation	DRO (Mod DRO Sep 95)	GRO (Mod GRO Sep 95)	LEAD	NITRATE/NITRITE	OIL & GREASE	PAH (EPA 8270)	PCB	PVOC (EPA 8021)	PVOC + NAPHTHALENE	SULFATE	TOTAL SUSPENDED SOLIDS	VOC DW (EPA 542.2)	VOC (EPA 8260)	8-RCRA METALS	PID/FID
5027987A	4101 Viebahn	10/29/14	920		X	N	3	GW	HCl													X		
B	4025 Viebahn	10/29/14	945		X	N	3	GW	HCl													X		
C	3825 Viebahn	10/29/14	1015		X	N	3	GW	HCl													X		
D	3701 Viebahn	10/29/14	1445		X	N	3	GW	HCl													X		
E	3817 Viebahn	10/29/14	1545		X	N	3	GW	HCl													X		
F	Trip Blank	10/29/14	0800		X	N	3	GW	HCl													X		
					X																			

Comments/Special Instructions (*Specify groundwater "GW", Drinking Water "DW", Waste Water "WW", Soil "S", Air "A", Oil, Sludge etc.)

Analysis per Contract

Sample Integrity - To be completed by receiving lab.
Method of Shipment: Driven
Temp. of Temp. Blank ____ °C On Ice: X
Cooler seal intact upon receipt: X Yes ____ No

Relinquished By: (sign)	Time	Date	Received By: (sign)	Time	Date
	0800	10/31/14			

Received in Laboratory By: Time: 10:00 Date: 11/01/14

Synergy Environmental Lab, INC.

1990 Prospect Ct., Appleton, WI 54914 *P 920-830-2455 * F 920-733-0631

DAVE HENDERSON
AECOM
1555 N RIVER CENTER DRIVE
MILWAUKEE, WI 53212

Report Date *10-Nov-14*

Project Name FMR NEWTON GRAVEL PIT **Invoice #** E28016
Project #

Lab Code 5028016A
Sample ID 3515 HECKER
Sample Matrix Water
Sample Date 11/4/2014

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
VOC's										
Benzene	< 0.24	ug/l	0.24	0.77	1	8260B		11/6/2014	CJR	1
Bromobenzene	< 0.32	ug/l	0.32	1	1	8260B		11/6/2014	CJR	1
Bromodichloromethane	< 0.37	ug/l	0.37	1.2	1	8260B		11/6/2014	CJR	1
Bromoform	< 0.35	ug/l	0.35	1.1	1	8260B		11/6/2014	CJR	1
tert-Butylbenzene	< 0.36	ug/l	0.36	1.2	1	8260B		11/6/2014	CJR	1
sec-Butylbenzene	< 0.33	ug/l	0.33	1	1	8260B		11/6/2014	CJR	1
n-Butylbenzene	< 0.35	ug/l	0.35	1.1	1	8260B		11/6/2014	CJR	1
Carbon Tetrachloride	< 0.33	ug/l	0.33	1.1	1	8260B		11/6/2014	CJR	1
Chlorobenzene	< 0.24	ug/l	0.24	0.77	1	8260B		11/6/2014	CJR	1
Chloroethane	< 0.63	ug/l	0.63	2	1	8260B		11/6/2014	CJR	1
Chloroform	< 0.28	ug/l	0.28	0.88	1	8260B		11/6/2014	CJR	1
Chloromethane	< 0.81	ug/l	0.81	2.6	1	8260B		11/6/2014	CJR	1
2-Chlorotoluene	< 0.21	ug/l	0.21	0.66	1	8260B		11/6/2014	CJR	1
4-Chlorotoluene	< 0.21	ug/l	0.21	0.68	1	8260B		11/6/2014	CJR	1
1,2-Dibromo-3-chloropropane	< 0.88	ug/l	0.88	2.8	1	8260B		11/6/2014	CJR	1
Dibromochloromethane	< 0.22	ug/l	0.22	0.7	1	8260B		11/6/2014	CJR	1
1,4-Dichlorobenzene	< 0.3	ug/l	0.3	0.96	1	8260B		11/6/2014	CJR	1
1,3-Dichlorobenzene	< 0.28	ug/l	0.28	0.89	1	8260B		11/6/2014	CJR	1
1,2-Dichlorobenzene	< 0.36	ug/l	0.36	1.2	1	8260B		11/6/2014	CJR	1
Dichlorodifluoromethane	< 0.44	ug/l	0.44	1.4	1	8260B		11/6/2014	CJR	1
1,2-Dichloroethane	< 0.41	ug/l	0.41	1.3	1	8260B		11/6/2014	CJR	1
1,1-Dichloroethane	< 0.3	ug/l	0.3	0.97	1	8260B		11/6/2014	CJR	1
1,1-Dichloroethene	< 0.4	ug/l	0.4	1.3	1	8260B		11/6/2014	CJR	1
cis-1,2-Dichloroethene	< 0.38	ug/l	0.38	1.2	1	8260B		11/6/2014	CJR	1
trans-1,2-Dichloroethene	< 0.35	ug/l	0.35	1.1	1	8260B		11/6/2014	CJR	1
1,2-Dichloropropane	< 0.32	ug/l	0.32	1	1	8260B		11/6/2014	CJR	1
2,2-Dichloropropane	< 0.36	ug/l	0.36	1.2	1	8260B		11/6/2014	CJR	8
1,3-Dichloropropane	< 0.33	ug/l	0.33	1	1	8260B		11/6/2014	CJR	1
Di-isopropyl ether	< 0.23	ug/l	0.23	0.73	1	8260B		11/6/2014	CJR	1
EDB (1,2-Dibromoethane)	< 0.44	ug/l	0.44	1.4	1	8260B		11/6/2014	CJR	1
Ethylbenzene	< 0.55	ug/l	0.55	1.7	1	8260B		11/6/2014	CJR	1
Hexachlorobutadiene	< 1.5	ug/l	1.5	4.8	1	8260B		11/6/2014	CJR	1
Isopropylbenzene	< 0.3	ug/l	0.3	0.96	1	8260B		11/6/2014	CJR	1

Project Name FMR NEWTON GRAVEL PIT **Invoice #** E28016
Project #

Lab Code 5028016A
Sample ID 3515 HECKER
Sample Matrix Water
Sample Date 11/4/2014

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
p-Isopropyltoluene	< 0.31	ug/l	0.31	0.98	1	8260B		11/6/2014	CJR	1
Methylene chloride	< 0.5	ug/l	0.5	1.6	1	8260B		11/6/2014	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.23	ug/l	0.23	0.74	1	8260B		11/6/2014	CJR	1
Naphthalene	< 1.7	ug/l	1.7	5.5	1	8260B		11/6/2014	CJR	1
n-Propylbenzene	< 0.25	ug/l	0.25	0.81	1	8260B		11/6/2014	CJR	1
1,1,2,2-Tetrachloroethane	< 0.45	ug/l	0.45	1.4	1	8260B		11/6/2014	CJR	1
1,1,1,2-Tetrachloroethane	< 0.33	ug/l	0.33	1.1	1	8260B		11/6/2014	CJR	1
Tetrachloroethene	< 0.33	ug/l	0.33	1.1	1	8260B		11/6/2014	CJR	1
Toluene	< 0.69	ug/l	0.69	2.2	1	8260B		11/6/2014	CJR	1
1,2,4-Trichlorobenzene	< 0.98	ug/l	0.98	3.1	1	8260B		11/6/2014	CJR	1
1,2,3-Trichlorobenzene	< 1.8	ug/l	1.8	5.8	1	8260B		11/6/2014	CJR	1
1,1,1-Trichloroethane	< 0.33	ug/l	0.33	1	1	8260B		11/6/2014	CJR	1
1,1,2-Trichloroethane	< 0.34	ug/l	0.34	1.1	1	8260B		11/6/2014	CJR	1
Trichloroethene (TCE)	< 0.33	ug/l	0.33	1	1	8260B		11/6/2014	CJR	1
Trichlorofluoromethane	< 0.71	ug/l	0.71	2.3	1	8260B		11/6/2014	CJR	1
1,2,4-Trimethylbenzene	< 2.2	ug/l	2.2	6.9	1	8260B		11/6/2014	CJR	1
1,3,5-Trimethylbenzene	< 1.4	ug/l	1.4	4.5	1	8260B		11/6/2014	CJR	1
Vinyl Chloride	< 0.18	ug/l	0.18	0.57	1	8260B		11/6/2014	CJR	1
m&p-Xylene	< 0.69	ug/l	0.69	2.2	1	8260B		11/6/2014	CJR	1
o-Xylene	< 0.63	ug/l	0.63	2	1	8260B		11/6/2014	CJR	1
SUR - 4-Bromofluorobenzene	110	REC %			1	8260B		11/6/2014	CJR	1
SUR - Dibromofluoromethane	96	REC %			1	8260B		11/6/2014	CJR	1
SUR - Toluene-d8	101	REC %			1	8260B		11/6/2014	CJR	1
SUR - 1,2-Dichloroethane-d4	89	REC %			1	8260B		11/6/2014	CJR	1

Project Name FMR NEWTON GRAVEL PIT **Invoice #** E28016
Project #

Lab Code 5028016B
Sample ID 3120 CTH CR
Sample Matrix Water
Sample Date 11/4/2014

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
VOC's										
Benzene	< 0.24	ug/l	0.24	0.77	1	8260B		11/6/2014	CJR	1
Bromobenzene	< 0.32	ug/l	0.32	1	1	8260B		11/6/2014	CJR	1
Bromodichloromethane	< 0.37	ug/l	0.37	1.2	1	8260B		11/6/2014	CJR	1
Bromoform	< 0.35	ug/l	0.35	1.1	1	8260B		11/6/2014	CJR	1
tert-Butylbenzene	< 0.36	ug/l	0.36	1.2	1	8260B		11/6/2014	CJR	1
sec-Butylbenzene	< 0.33	ug/l	0.33	1	1	8260B		11/6/2014	CJR	1
n-Butylbenzene	< 0.35	ug/l	0.35	1.1	1	8260B		11/6/2014	CJR	1
Carbon Tetrachloride	< 0.33	ug/l	0.33	1.1	1	8260B		11/6/2014	CJR	1
Chlorobenzene	< 0.24	ug/l	0.24	0.77	1	8260B		11/6/2014	CJR	1
Chloroethane	< 0.63	ug/l	0.63	2	1	8260B		11/6/2014	CJR	1
Chloroform	< 0.28	ug/l	0.28	0.88	1	8260B		11/6/2014	CJR	1
Chloromethane	< 0.81	ug/l	0.81	2.6	1	8260B		11/6/2014	CJR	1
2-Chlorotoluene	< 0.21	ug/l	0.21	0.66	1	8260B		11/6/2014	CJR	1
4-Chlorotoluene	< 0.21	ug/l	0.21	0.68	1	8260B		11/6/2014	CJR	1
1,2-Dibromo-3-chloropropane	< 0.88	ug/l	0.88	2.8	1	8260B		11/6/2014	CJR	1
Dibromochloromethane	< 0.22	ug/l	0.22	0.7	1	8260B		11/6/2014	CJR	1
1,4-Dichlorobenzene	< 0.3	ug/l	0.3	0.96	1	8260B		11/6/2014	CJR	1
1,3-Dichlorobenzene	< 0.28	ug/l	0.28	0.89	1	8260B		11/6/2014	CJR	1
1,2-Dichlorobenzene	< 0.36	ug/l	0.36	1.2	1	8260B		11/6/2014	CJR	1
Dichlorodifluoromethane	< 0.44	ug/l	0.44	1.4	1	8260B		11/6/2014	CJR	1
1,2-Dichloroethane	< 0.41	ug/l	0.41	1.3	1	8260B		11/6/2014	CJR	1
1,1-Dichloroethane	< 0.3	ug/l	0.3	0.97	1	8260B		11/6/2014	CJR	1
1,1-Dichloroethene	< 0.4	ug/l	0.4	1.3	1	8260B		11/6/2014	CJR	1
cis-1,2-Dichloroethene	< 0.38	ug/l	0.38	1.2	1	8260B		11/6/2014	CJR	1
trans-1,2-Dichloroethene	< 0.35	ug/l	0.35	1.1	1	8260B		11/6/2014	CJR	1
1,2-Dichloropropane	< 0.32	ug/l	0.32	1	1	8260B		11/6/2014	CJR	1
2,2-Dichloropropane	< 0.36	ug/l	0.36	1.2	1	8260B		11/6/2014	CJR	8
1,3-Dichloropropane	< 0.33	ug/l	0.33	1	1	8260B		11/6/2014	CJR	1
Di-isopropyl ether	< 0.23	ug/l	0.23	0.73	1	8260B		11/6/2014	CJR	1
EDB (1,2-Dibromoethane)	< 0.44	ug/l	0.44	1.4	1	8260B		11/6/2014	CJR	1
Ethylbenzene	< 0.55	ug/l	0.55	1.7	1	8260B		11/6/2014	CJR	1
Hexachlorobutadiene	< 1.5	ug/l	1.5	4.8	1	8260B		11/6/2014	CJR	1
Isopropylbenzene	< 0.3	ug/l	0.3	0.96	1	8260B		11/6/2014	CJR	1
p-Isopropyltoluene	< 0.31	ug/l	0.31	0.98	1	8260B		11/6/2014	CJR	1
Methylene chloride	< 0.5	ug/l	0.5	1.6	1	8260B		11/6/2014	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.23	ug/l	0.23	0.74	1	8260B		11/6/2014	CJR	1
Naphthalene	< 1.7	ug/l	1.7	5.5	1	8260B		11/6/2014	CJR	1
n-Propylbenzene	< 0.25	ug/l	0.25	0.81	1	8260B		11/6/2014	CJR	1
1,1,2,2-Tetrachloroethane	< 0.45	ug/l	0.45	1.4	1	8260B		11/6/2014	CJR	1
1,1,1,2-Tetrachloroethane	< 0.33	ug/l	0.33	1.1	1	8260B		11/6/2014	CJR	1
Tetrachloroethene	< 0.33	ug/l	0.33	1.1	1	8260B		11/6/2014	CJR	1
Toluene	< 0.69	ug/l	0.69	2.2	1	8260B		11/6/2014	CJR	1
1,2,4-Trichlorobenzene	< 0.98	ug/l	0.98	3.1	1	8260B		11/6/2014	CJR	1
1,2,3-Trichlorobenzene	< 1.8	ug/l	1.8	5.8	1	8260B		11/6/2014	CJR	1
1,1,1-Trichloroethane	< 0.33	ug/l	0.33	1	1	8260B		11/6/2014	CJR	1
1,1,2-Trichloroethane	< 0.34	ug/l	0.34	1.1	1	8260B		11/6/2014	CJR	1
Trichloroethene (TCE)	< 0.33	ug/l	0.33	1	1	8260B		11/6/2014	CJR	1
Trichlorofluoromethane	< 0.71	ug/l	0.71	2.3	1	8260B		11/6/2014	CJR	1
1,2,4-Trimethylbenzene	< 2.2	ug/l	2.2	6.9	1	8260B		11/6/2014	CJR	1
1,3,5-Trimethylbenzene	< 1.4	ug/l	1.4	4.5	1	8260B		11/6/2014	CJR	1
Vinyl Chloride	< 0.18	ug/l	0.18	0.57	1	8260B		11/6/2014	CJR	1
m&p-Xylene	< 0.69	ug/l	0.69	2.2	1	8260B		11/6/2014	CJR	1
o-Xylene	< 0.63	ug/l	0.63	2	1	8260B		11/6/2014	CJR	1
SUR - 1,2-Dichloroethane-d4	99	REC %			1	8260B		11/6/2014	CJR	1
SUR - 4-Bromofluorobenzene	109	REC %			1	8260B		11/6/2014	CJR	1
SUR - Dibromofluoromethane	103	REC %			1	8260B		11/6/2014	CJR	1
SUR - Toluene-d8	95	REC %			1	8260B		11/6/2014	CJR	1

Project Name FMR NEWTON GRAVEL PIT **Invoice #** E28016
Project #

Lab Code 5028016C
Sample ID 3403 CTH CR
Sample Matrix Water
Sample Date 11/4/2014

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
VOC's										
Benzene	< 0.24	ug/l	0.24	0.77	1	8260B		11/6/2014	CJR	1
Bromobenzene	< 0.32	ug/l	0.32	1	1	8260B		11/6/2014	CJR	1
Bromodichloromethane	< 0.37	ug/l	0.37	1.2	1	8260B		11/6/2014	CJR	1
Bromoform	< 0.35	ug/l	0.35	1.1	1	8260B		11/6/2014	CJR	1
tert-Butylbenzene	< 0.36	ug/l	0.36	1.2	1	8260B		11/6/2014	CJR	1
sec-Butylbenzene	< 0.33	ug/l	0.33	1	1	8260B		11/6/2014	CJR	1
n-Butylbenzene	< 0.35	ug/l	0.35	1.1	1	8260B		11/6/2014	CJR	1
Carbon Tetrachloride	< 0.33	ug/l	0.33	1.1	1	8260B		11/6/2014	CJR	1
Chlorobenzene	< 0.24	ug/l	0.24	0.77	1	8260B		11/6/2014	CJR	1
Chloroethane	< 0.63	ug/l	0.63	2	1	8260B		11/6/2014	CJR	1
Chloroform	< 0.28	ug/l	0.28	0.88	1	8260B		11/6/2014	CJR	1
Chloromethane	< 0.81	ug/l	0.81	2.6	1	8260B		11/6/2014	CJR	1
2-Chlorotoluene	< 0.21	ug/l	0.21	0.66	1	8260B		11/6/2014	CJR	1
4-Chlorotoluene	< 0.21	ug/l	0.21	0.68	1	8260B		11/6/2014	CJR	1
1,2-Dibromo-3-chloropropane	< 0.88	ug/l	0.88	2.8	1	8260B		11/6/2014	CJR	1
Dibromochloromethane	< 0.22	ug/l	0.22	0.7	1	8260B		11/6/2014	CJR	1
1,4-Dichlorobenzene	< 0.3	ug/l	0.3	0.96	1	8260B		11/6/2014	CJR	1
1,3-Dichlorobenzene	< 0.28	ug/l	0.28	0.89	1	8260B		11/6/2014	CJR	1
1,2-Dichlorobenzene	< 0.36	ug/l	0.36	1.2	1	8260B		11/6/2014	CJR	1
Dichlorodifluoromethane	< 0.44	ug/l	0.44	1.4	1	8260B		11/6/2014	CJR	1
1,2-Dichloroethane	< 0.41	ug/l	0.41	1.3	1	8260B		11/6/2014	CJR	1
1,1-Dichloroethane	< 0.3	ug/l	0.3	0.97	1	8260B		11/6/2014	CJR	1
1,1-Dichloroethene	< 0.4	ug/l	0.4	1.3	1	8260B		11/6/2014	CJR	1
cis-1,2-Dichloroethene	< 0.38	ug/l	0.38	1.2	1	8260B		11/6/2014	CJR	1
trans-1,2-Dichloroethene	< 0.35	ug/l	0.35	1.1	1	8260B		11/6/2014	CJR	1
1,2-Dichloropropane	< 0.32	ug/l	0.32	1	1	8260B		11/6/2014	CJR	1
2,2-Dichloropropane	< 0.36	ug/l	0.36	1.2	1	8260B		11/6/2014	CJR	8
1,3-Dichloropropane	< 0.33	ug/l	0.33	1	1	8260B		11/6/2014	CJR	1
Di-isopropyl ether	< 0.23	ug/l	0.23	0.73	1	8260B		11/6/2014	CJR	1
EDB (1,2-Dibromoethane)	< 0.44	ug/l	0.44	1.4	1	8260B		11/6/2014	CJR	1
Ethylbenzene	< 0.55	ug/l	0.55	1.7	1	8260B		11/6/2014	CJR	1
Hexachlorobutadiene	< 1.5	ug/l	1.5	4.8	1	8260B		11/6/2014	CJR	1
Isopropylbenzene	< 0.3	ug/l	0.3	0.96	1	8260B		11/6/2014	CJR	1
p-Isopropyltoluene	< 0.31	ug/l	0.31	0.98	1	8260B		11/6/2014	CJR	1
Methylene chloride	< 0.5	ug/l	0.5	1.6	1	8260B		11/6/2014	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.23	ug/l	0.23	0.74	1	8260B		11/6/2014	CJR	1
Naphthalene	< 1.7	ug/l	1.7	5.5	1	8260B		11/6/2014	CJR	1
n-Propylbenzene	< 0.25	ug/l	0.25	0.81	1	8260B		11/6/2014	CJR	1
1,1,2,2-Tetrachloroethane	< 0.45	ug/l	0.45	1.4	1	8260B		11/6/2014	CJR	1
1,1,1,2-Tetrachloroethane	< 0.33	ug/l	0.33	1.1	1	8260B		11/6/2014	CJR	1
Tetrachloroethene	< 0.33	ug/l	0.33	1.1	1	8260B		11/6/2014	CJR	1
Toluene	< 0.69	ug/l	0.69	2.2	1	8260B		11/6/2014	CJR	1
1,2,4-Trichlorobenzene	< 0.98	ug/l	0.98	3.1	1	8260B		11/6/2014	CJR	1
1,2,3-Trichlorobenzene	< 1.8	ug/l	1.8	5.8	1	8260B		11/6/2014	CJR	1
1,1,1-Trichloroethane	< 0.33	ug/l	0.33	1	1	8260B		11/6/2014	CJR	1
1,1,2-Trichloroethane	< 0.34	ug/l	0.34	1.1	1	8260B		11/6/2014	CJR	1
Trichloroethene (TCE)	< 0.33	ug/l	0.33	1	1	8260B		11/6/2014	CJR	1
Trichlorofluoromethane	< 0.71	ug/l	0.71	2.3	1	8260B		11/6/2014	CJR	1
1,2,4-Trimethylbenzene	< 2.2	ug/l	2.2	6.9	1	8260B		11/6/2014	CJR	1
1,3,5-Trimethylbenzene	< 1.4	ug/l	1.4	4.5	1	8260B		11/6/2014	CJR	1
Vinyl Chloride	< 0.18	ug/l	0.18	0.57	1	8260B		11/6/2014	CJR	1
m&p-Xylene	< 0.69	ug/l	0.69	2.2	1	8260B		11/6/2014	CJR	1
o-Xylene	< 0.63	ug/l	0.63	2	1	8260B		11/6/2014	CJR	1
SUR - Dibromofluoromethane	104	REC %			1	8260B		11/6/2014	CJR	1
SUR - 1,2-Dichloroethane-d4	110	REC %			1	8260B		11/6/2014	CJR	1
SUR - 4-Bromofluorobenzene	102	REC %			1	8260B		11/6/2014	CJR	1
SUR - Toluene-d8	91	REC %			1	8260B		11/6/2014	CJR	1

Project Name FMR NEWTON GRAVEL PIT **Invoice #** E28016
Project #

Lab Code 5028016D
Sample ID 3023 CTH CR
Sample Matrix Water
Sample Date 11/4/2014

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
VOC's										
Benzene	< 0.24	ug/l	0.24	0.77	1	8260B		11/6/2014	CJR	1
Bromobenzene	< 0.32	ug/l	0.32	1	1	8260B		11/6/2014	CJR	1
Bromodichloromethane	< 0.37	ug/l	0.37	1.2	1	8260B		11/6/2014	CJR	1
Bromoform	< 0.35	ug/l	0.35	1.1	1	8260B		11/6/2014	CJR	1
tert-Butylbenzene	< 0.36	ug/l	0.36	1.2	1	8260B		11/6/2014	CJR	1
sec-Butylbenzene	< 0.33	ug/l	0.33	1	1	8260B		11/6/2014	CJR	1
n-Butylbenzene	< 0.35	ug/l	0.35	1.1	1	8260B		11/6/2014	CJR	1
Carbon Tetrachloride	< 0.33	ug/l	0.33	1.1	1	8260B		11/6/2014	CJR	1
Chlorobenzene	< 0.24	ug/l	0.24	0.77	1	8260B		11/6/2014	CJR	1
Chloroethane	< 0.63	ug/l	0.63	2	1	8260B		11/6/2014	CJR	1
Chloroform	< 0.28	ug/l	0.28	0.88	1	8260B		11/6/2014	CJR	1
Chloromethane	< 0.81	ug/l	0.81	2.6	1	8260B		11/6/2014	CJR	1
2-Chlorotoluene	< 0.21	ug/l	0.21	0.66	1	8260B		11/6/2014	CJR	1
4-Chlorotoluene	< 0.21	ug/l	0.21	0.68	1	8260B		11/6/2014	CJR	1
1,2-Dibromo-3-chloropropane	< 0.88	ug/l	0.88	2.8	1	8260B		11/6/2014	CJR	1
Dibromochloromethane	< 0.22	ug/l	0.22	0.7	1	8260B		11/6/2014	CJR	1
1,4-Dichlorobenzene	< 0.3	ug/l	0.3	0.96	1	8260B		11/6/2014	CJR	1
1,3-Dichlorobenzene	< 0.28	ug/l	0.28	0.89	1	8260B		11/6/2014	CJR	1
1,2-Dichlorobenzene	< 0.36	ug/l	0.36	1.2	1	8260B		11/6/2014	CJR	1
Dichlorodifluoromethane	< 0.44	ug/l	0.44	1.4	1	8260B		11/6/2014	CJR	1
1,2-Dichloroethane	< 0.41	ug/l	0.41	1.3	1	8260B		11/6/2014	CJR	1
1,1-Dichloroethane	< 0.3	ug/l	0.3	0.97	1	8260B		11/6/2014	CJR	1
1,1-Dichloroethene	< 0.4	ug/l	0.4	1.3	1	8260B		11/6/2014	CJR	1
cis-1,2-Dichloroethene	< 0.38	ug/l	0.38	1.2	1	8260B		11/6/2014	CJR	1
trans-1,2-Dichloroethene	< 0.35	ug/l	0.35	1.1	1	8260B		11/6/2014	CJR	1
1,2-Dichloropropane	< 0.32	ug/l	0.32	1	1	8260B		11/6/2014	CJR	1
2,2-Dichloropropane	< 0.36	ug/l	0.36	1.2	1	8260B		11/6/2014	CJR	8
1,3-Dichloropropane	< 0.33	ug/l	0.33	1	1	8260B		11/6/2014	CJR	1
Di-isopropyl ether	< 0.23	ug/l	0.23	0.73	1	8260B		11/6/2014	CJR	1
EDB (1,2-Dibromoethane)	< 0.44	ug/l	0.44	1.4	1	8260B		11/6/2014	CJR	1
Ethylbenzene	< 0.55	ug/l	0.55	1.7	1	8260B		11/6/2014	CJR	1
Hexachlorobutadiene	< 1.5	ug/l	1.5	4.8	1	8260B		11/6/2014	CJR	1
Isopropylbenzene	< 0.3	ug/l	0.3	0.96	1	8260B		11/6/2014	CJR	1
p-Isopropyltoluene	< 0.31	ug/l	0.31	0.98	1	8260B		11/6/2014	CJR	1
Methylene chloride	< 0.5	ug/l	0.5	1.6	1	8260B		11/6/2014	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.23	ug/l	0.23	0.74	1	8260B		11/6/2014	CJR	1
Naphthalene	< 1.7	ug/l	1.7	5.5	1	8260B		11/6/2014	CJR	1
n-Propylbenzene	< 0.25	ug/l	0.25	0.81	1	8260B		11/6/2014	CJR	1
1,1,2,2-Tetrachloroethane	< 0.45	ug/l	0.45	1.4	1	8260B		11/6/2014	CJR	1
1,1,1,2-Tetrachloroethane	< 0.33	ug/l	0.33	1.1	1	8260B		11/6/2014	CJR	1
Tetrachloroethene	< 0.33	ug/l	0.33	1.1	1	8260B		11/6/2014	CJR	1
Toluene	< 0.69	ug/l	0.69	2.2	1	8260B		11/6/2014	CJR	1
1,2,4-Trichlorobenzene	< 0.98	ug/l	0.98	3.1	1	8260B		11/6/2014	CJR	1
1,2,3-Trichlorobenzene	< 1.8	ug/l	1.8	5.8	1	8260B		11/6/2014	CJR	1
1,1,1-Trichloroethane	< 0.33	ug/l	0.33	1	1	8260B		11/6/2014	CJR	1
1,1,2-Trichloroethane	< 0.34	ug/l	0.34	1.1	1	8260B		11/6/2014	CJR	1
Trichloroethene (TCE)	< 0.33	ug/l	0.33	1	1	8260B		11/6/2014	CJR	1
Trichlorofluoromethane	< 0.71	ug/l	0.71	2.3	1	8260B		11/6/2014	CJR	1
1,2,4-Trimethylbenzene	< 2.2	ug/l	2.2	6.9	1	8260B		11/6/2014	CJR	1
1,3,5-Trimethylbenzene	< 1.4	ug/l	1.4	4.5	1	8260B		11/6/2014	CJR	1
Vinyl Chloride	< 0.18	ug/l	0.18	0.57	1	8260B		11/6/2014	CJR	1
m&p-Xylene	< 0.69	ug/l	0.69	2.2	1	8260B		11/6/2014	CJR	1
o-Xylene	< 0.63	ug/l	0.63	2	1	8260B		11/6/2014	CJR	1
SUR - 4-Bromofluorobenzene	104	REC %			1	8260B		11/6/2014	CJR	1
SUR - Dibromofluoromethane	99	REC %			1	8260B		11/6/2014	CJR	1
SUR - Toluene-d8	92	REC %			1	8260B		11/6/2014	CJR	1
SUR - 1,2-Dichloroethane-d4	101	REC %			1	8260B		11/6/2014	CJR	1

Project Name FMR NEWTON GRAVEL PIT **Invoice #** E28016
Project #

Lab Code 5028016E
Sample ID 3609 HECKER
Sample Matrix Water
Sample Date 11/4/2014

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
VOC's										
Benzene	< 0.24	ug/l	0.24	0.77	1	8260B		11/6/2014	CJR	1
Bromobenzene	< 0.32	ug/l	0.32	1	1	8260B		11/6/2014	CJR	1
Bromodichloromethane	< 0.37	ug/l	0.37	1.2	1	8260B		11/6/2014	CJR	1
Bromoform	< 0.35	ug/l	0.35	1.1	1	8260B		11/6/2014	CJR	1
tert-Butylbenzene	< 0.36	ug/l	0.36	1.2	1	8260B		11/6/2014	CJR	1
sec-Butylbenzene	< 0.33	ug/l	0.33	1	1	8260B		11/6/2014	CJR	1
n-Butylbenzene	< 0.35	ug/l	0.35	1.1	1	8260B		11/6/2014	CJR	1
Carbon Tetrachloride	< 0.33	ug/l	0.33	1.1	1	8260B		11/6/2014	CJR	1
Chlorobenzene	< 0.24	ug/l	0.24	0.77	1	8260B		11/6/2014	CJR	1
Chloroethane	< 0.63	ug/l	0.63	2	1	8260B		11/6/2014	CJR	1
Chloroform	< 0.28	ug/l	0.28	0.88	1	8260B		11/6/2014	CJR	1
Chloromethane	< 0.81	ug/l	0.81	2.6	1	8260B		11/6/2014	CJR	1
2-Chlorotoluene	< 0.21	ug/l	0.21	0.66	1	8260B		11/6/2014	CJR	1
4-Chlorotoluene	< 0.21	ug/l	0.21	0.68	1	8260B		11/6/2014	CJR	1
1,2-Dibromo-3-chloropropane	< 0.88	ug/l	0.88	2.8	1	8260B		11/6/2014	CJR	1
Dibromochloromethane	< 0.22	ug/l	0.22	0.7	1	8260B		11/6/2014	CJR	1
1,4-Dichlorobenzene	< 0.3	ug/l	0.3	0.96	1	8260B		11/6/2014	CJR	1
1,3-Dichlorobenzene	< 0.28	ug/l	0.28	0.89	1	8260B		11/6/2014	CJR	1
1,2-Dichlorobenzene	< 0.36	ug/l	0.36	1.2	1	8260B		11/6/2014	CJR	1
Dichlorodifluoromethane	< 0.44	ug/l	0.44	1.4	1	8260B		11/6/2014	CJR	1
1,2-Dichloroethane	< 0.41	ug/l	0.41	1.3	1	8260B		11/6/2014	CJR	1
1,1-Dichloroethane	< 0.3	ug/l	0.3	0.97	1	8260B		11/6/2014	CJR	1
1,1-Dichloroethene	< 0.4	ug/l	0.4	1.3	1	8260B		11/6/2014	CJR	1
cis-1,2-Dichloroethene	< 0.38	ug/l	0.38	1.2	1	8260B		11/6/2014	CJR	1
trans-1,2-Dichloroethene	< 0.35	ug/l	0.35	1.1	1	8260B		11/6/2014	CJR	1
1,2-Dichloropropane	< 0.32	ug/l	0.32	1	1	8260B		11/6/2014	CJR	1
2,2-Dichloropropane	< 0.36	ug/l	0.36	1.2	1	8260B		11/6/2014	CJR	8
1,3-Dichloropropane	< 0.33	ug/l	0.33	1	1	8260B		11/6/2014	CJR	1
Di-isopropyl ether	< 0.23	ug/l	0.23	0.73	1	8260B		11/6/2014	CJR	1
EDB (1,2-Dibromoethane)	< 0.44	ug/l	0.44	1.4	1	8260B		11/6/2014	CJR	1
Ethylbenzene	< 0.55	ug/l	0.55	1.7	1	8260B		11/6/2014	CJR	1
Hexachlorobutadiene	< 1.5	ug/l	1.5	4.8	1	8260B		11/6/2014	CJR	1
Isopropylbenzene	< 0.3	ug/l	0.3	0.96	1	8260B		11/6/2014	CJR	1
p-Isopropyltoluene	< 0.31	ug/l	0.31	0.98	1	8260B		11/6/2014	CJR	1
Methylene chloride	< 0.5	ug/l	0.5	1.6	1	8260B		11/6/2014	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.23	ug/l	0.23	0.74	1	8260B		11/6/2014	CJR	1
Naphthalene	< 1.7	ug/l	1.7	5.5	1	8260B		11/6/2014	CJR	1
n-Propylbenzene	< 0.25	ug/l	0.25	0.81	1	8260B		11/6/2014	CJR	1
1,1,2,2-Tetrachloroethane	< 0.45	ug/l	0.45	1.4	1	8260B		11/6/2014	CJR	1
1,1,1,2-Tetrachloroethane	< 0.33	ug/l	0.33	1.1	1	8260B		11/6/2014	CJR	1
Tetrachloroethene	< 0.33	ug/l	0.33	1.1	1	8260B		11/6/2014	CJR	1
Toluene	< 0.69	ug/l	0.69	2.2	1	8260B		11/6/2014	CJR	1
1,2,4-Trichlorobenzene	< 0.98	ug/l	0.98	3.1	1	8260B		11/6/2014	CJR	1
1,2,3-Trichlorobenzene	< 1.8	ug/l	1.8	5.8	1	8260B		11/6/2014	CJR	1
1,1,1-Trichloroethane	< 0.33	ug/l	0.33	1	1	8260B		11/6/2014	CJR	1
1,1,2-Trichloroethane	< 0.34	ug/l	0.34	1.1	1	8260B		11/6/2014	CJR	1
Trichloroethene (TCE)	< 0.33	ug/l	0.33	1	1	8260B		11/6/2014	CJR	1
Trichlorofluoromethane	< 0.71	ug/l	0.71	2.3	1	8260B		11/6/2014	CJR	1
1,2,4-Trimethylbenzene	< 2.2	ug/l	2.2	6.9	1	8260B		11/6/2014	CJR	1
1,3,5-Trimethylbenzene	< 1.4	ug/l	1.4	4.5	1	8260B		11/6/2014	CJR	1
Vinyl Chloride	< 0.18	ug/l	0.18	0.57	1	8260B		11/6/2014	CJR	1
m&p-Xylene	< 0.69	ug/l	0.69	2.2	1	8260B		11/6/2014	CJR	1
o-Xylene	< 0.63	ug/l	0.63	2	1	8260B		11/6/2014	CJR	1
SUR - 1,2-Dichloroethane-d4	101	REC %			1	8260B		11/6/2014	CJR	1
SUR - 4-Bromofluorobenzene	109	REC %			1	8260B		11/6/2014	CJR	1
SUR - Dibromofluoromethane	104	REC %			1	8260B		11/6/2014	CJR	1
SUR - Toluene-d8	90	REC %			1	8260B		11/6/2014	CJR	1

Project Name FMR NEWTON GRAVEL PIT **Invoice #** E28016
Project #

Lab Code 5028016F
Sample ID TRIP BLANK
Sample Matrix Water
Sample Date 11/4/2014

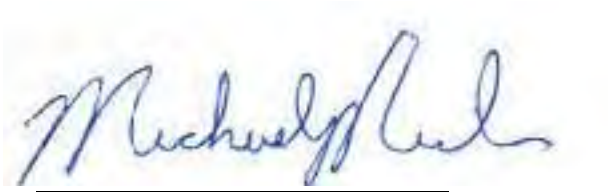
	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
VOC's										
Benzene	< 0.24	ug/l	0.24	0.77	1	8260B		11/6/2014	CJR	1
Bromobenzene	< 0.32	ug/l	0.32	1	1	8260B		11/6/2014	CJR	1
Bromodichloromethane	< 0.37	ug/l	0.37	1.2	1	8260B		11/6/2014	CJR	1
Bromoform	< 0.35	ug/l	0.35	1.1	1	8260B		11/6/2014	CJR	1
tert-Butylbenzene	< 0.36	ug/l	0.36	1.2	1	8260B		11/6/2014	CJR	1
sec-Butylbenzene	< 0.33	ug/l	0.33	1	1	8260B		11/6/2014	CJR	1
n-Butylbenzene	< 0.35	ug/l	0.35	1.1	1	8260B		11/6/2014	CJR	1
Carbon Tetrachloride	< 0.33	ug/l	0.33	1.1	1	8260B		11/6/2014	CJR	1
Chlorobenzene	< 0.24	ug/l	0.24	0.77	1	8260B		11/6/2014	CJR	1
Chloroethane	< 0.63	ug/l	0.63	2	1	8260B		11/6/2014	CJR	1
Chloroform	< 0.28	ug/l	0.28	0.88	1	8260B		11/6/2014	CJR	1
Chloromethane	< 0.81	ug/l	0.81	2.6	1	8260B		11/6/2014	CJR	1
2-Chlorotoluene	< 0.21	ug/l	0.21	0.66	1	8260B		11/6/2014	CJR	1
4-Chlorotoluene	< 0.21	ug/l	0.21	0.68	1	8260B		11/6/2014	CJR	1
1,2-Dibromo-3-chloropropane	< 0.88	ug/l	0.88	2.8	1	8260B		11/6/2014	CJR	1
Dibromochloromethane	< 0.22	ug/l	0.22	0.7	1	8260B		11/6/2014	CJR	1
1,4-Dichlorobenzene	< 0.3	ug/l	0.3	0.96	1	8260B		11/6/2014	CJR	1
1,3-Dichlorobenzene	< 0.28	ug/l	0.28	0.89	1	8260B		11/6/2014	CJR	1
1,2-Dichlorobenzene	< 0.36	ug/l	0.36	1.2	1	8260B		11/6/2014	CJR	1
Dichlorodifluoromethane	< 0.44	ug/l	0.44	1.4	1	8260B		11/6/2014	CJR	1
1,2-Dichloroethane	< 0.41	ug/l	0.41	1.3	1	8260B		11/6/2014	CJR	1
1,1-Dichloroethane	< 0.3	ug/l	0.3	0.97	1	8260B		11/6/2014	CJR	1
1,1-Dichloroethene	< 0.4	ug/l	0.4	1.3	1	8260B		11/6/2014	CJR	1
cis-1,2-Dichloroethene	< 0.38	ug/l	0.38	1.2	1	8260B		11/6/2014	CJR	1
trans-1,2-Dichloroethene	< 0.35	ug/l	0.35	1.1	1	8260B		11/6/2014	CJR	1
1,2-Dichloropropane	< 0.32	ug/l	0.32	1	1	8260B		11/6/2014	CJR	1
2,2-Dichloropropane	< 0.36	ug/l	0.36	1.2	1	8260B		11/6/2014	CJR	8
1,3-Dichloropropane	< 0.33	ug/l	0.33	1	1	8260B		11/6/2014	CJR	1
Di-isopropyl ether	< 0.23	ug/l	0.23	0.73	1	8260B		11/6/2014	CJR	1
EDB (1,2-Dibromoethane)	< 0.44	ug/l	0.44	1.4	1	8260B		11/6/2014	CJR	1
Ethylbenzene	< 0.55	ug/l	0.55	1.7	1	8260B		11/6/2014	CJR	1
Hexachlorobutadiene	< 1.5	ug/l	1.5	4.8	1	8260B		11/6/2014	CJR	1
Isopropylbenzene	< 0.3	ug/l	0.3	0.96	1	8260B		11/6/2014	CJR	1
p-Isopropyltoluene	< 0.31	ug/l	0.31	0.98	1	8260B		11/6/2014	CJR	1
Methylene chloride	< 0.5	ug/l	0.5	1.6	1	8260B		11/6/2014	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.23	ug/l	0.23	0.74	1	8260B		11/6/2014	CJR	1
Naphthalene	< 1.7	ug/l	1.7	5.5	1	8260B		11/6/2014	CJR	1
n-Propylbenzene	< 0.25	ug/l	0.25	0.81	1	8260B		11/6/2014	CJR	1
1,1,2,2-Tetrachloroethane	< 0.45	ug/l	0.45	1.4	1	8260B		11/6/2014	CJR	1
1,1,1,2-Tetrachloroethane	< 0.33	ug/l	0.33	1.1	1	8260B		11/6/2014	CJR	1
Tetrachloroethene	< 0.33	ug/l	0.33	1.1	1	8260B		11/6/2014	CJR	1
Toluene	< 0.69	ug/l	0.69	2.2	1	8260B		11/6/2014	CJR	1
1,2,4-Trichlorobenzene	< 0.98	ug/l	0.98	3.1	1	8260B		11/6/2014	CJR	1
1,2,3-Trichlorobenzene	< 1.8	ug/l	1.8	5.8	1	8260B		11/6/2014	CJR	1
1,1,1-Trichloroethane	< 0.33	ug/l	0.33	1	1	8260B		11/6/2014	CJR	1
1,1,2-Trichloroethane	< 0.34	ug/l	0.34	1.1	1	8260B		11/6/2014	CJR	1
Trichloroethene (TCE)	< 0.33	ug/l	0.33	1	1	8260B		11/6/2014	CJR	1
Trichlorofluoromethane	< 0.71	ug/l	0.71	2.3	1	8260B		11/6/2014	CJR	1
1,2,4-Trimethylbenzene	< 2.2	ug/l	2.2	6.9	1	8260B		11/6/2014	CJR	1
1,3,5-Trimethylbenzene	< 1.4	ug/l	1.4	4.5	1	8260B		11/6/2014	CJR	1
Vinyl Chloride	< 0.18	ug/l	0.18	0.57	1	8260B		11/6/2014	CJR	1
m&p-Xylene	< 0.69	ug/l	0.69	2.2	1	8260B		11/6/2014	CJR	1
o-Xylene	< 0.63	ug/l	0.63	2	1	8260B		11/6/2014	CJR	1
SUR - Toluene-d8	92	REC %			1	8260B		11/6/2014	CJR	1
SUR - 1,2-Dichloroethane-d4	94	REC %			1	8260B		11/6/2014	CJR	1
SUR - 4-Bromofluorobenzene	108	REC %			1	8260B		11/6/2014	CJR	1
SUR - Dibromofluoromethane	100	REC %			1	8260B		11/6/2014	CJR	1

"J" Flag: Analyte detected between LOD and LOQ LOD Limit of Detection LOQ Limit of Quantitation

Code	*Comment*
1	Laboratory QC within limits.
8	Closing calibration standard not within established limits.

All solid sample results reported on a dry weight basis unless otherwise indicated. All LOD's and LOQ's are adjusted for dilutions but not dry weight. Subcontracted results are denoted by SUB in the analyst field.

Authorized Signature



CHAIN OF CUSTODY RECORD

Synergy Environmental Lab, Inc.

1990 Prospect Ct. • Appleton, WI 54914
920-830-2455 • FAX 920-733-0631

Chain # No 2790

Page 1 of 1

Sample Handling Request
____ Rush Analysis Date Required ____
(Rushes accepted only with prior authorization)
X Normal Turn Around

Lab I.D. #

Account No. : **Quote No.:**

Project #:

Sampler: (signature)

Project (Name / Location): Former Newton Gravel Pit / Manitowoc, WI

Reports To: Dave Henderson	Invoice To: DAVE HENDERSON
Company AECOM	Company SAME
Address 1555 N. River Center Dr. Ste 214	Address
City State Zip Milwaukee, WI 53212	City State Zip
Phone 414-944-6190	Phone
FAX 414-944-6080	FAX

Lab I.D.	Sample I.D.	Collection Date	Collection Time	Comp	Grab	Filtered Y/N	No. of Containers	Sample Type (Matrix)*	Preservation
502801 6A	3515 Hecker	11/4/14	915		x	N	3	GW	HCl
B	3120 CTH CR	11/4/14	1030		X	N	5	GW	HCl
C	3403 CTH CR	11/4/14	1000		X	N	3	GW	HCl
D	3028 CTH CR	11/4/14			X	N	3	GW	HCl
E	3609 Hecker	11/4/14	1205		X	N	3	GW	HCl
F	Trip Blank	11/4/14	800		X	N	2	GW	HCl

Analysis Requested

DRO (Mod DRO Sep 95)	GRO (Mod GRO Sep 95)	LEAD	NITRATE/NITRITE	OIL & GREASE	PAH (EPA 8270)	PCB	PVOC (EPA 8021)	PVOC + NAPHTHALENE	SULFATE	TOTAL SUSPENDED SOLIDS	VOC DW (EPA 542.2)	VOC (EPA 8260)	8-RCRA METALS
												X	
												X	
												X	
												X	
												X	
												X	

Other Analysis

PID/FID

Comments/Special Instructions (*Specify groundwater "GW", Drinking Water "DW", Waste Water "WW", Soil "S", Air "A", Oil, Sludge etc.)

Analysis per contract
Separate lab reports per ID

Sample Integrity - To be completed by receiving lab.

Method of Shipment:

Temp. of Temp. Blank ____ °C On Ice: X

Cooler seal intact upon receipt: X Yes ____ No

Relinquished By: (sign)	Time	Date	Received By: (sign)	Time	Date
	11/5/14	0800			

Received in Laboratory By: Time: 8:00 Date: 11/6/14

Synergy Environmental Lab, INC.

1990 Prospect Ct., Appleton, WI 54914 *P 920-830-2455 * F 920-733-0631

DAVE HENDERSON
AECOM
200 INDIANA AVENUE
STEVENS POINT, WI 54481-2266

Report Date *18-Nov-14*

Project Name FORMER NEWTON GRAVEL PIT **Invoice #** E28048
Project #

Lab Code 5028048A
Sample ID 3701 VIEBAHN
Sample Matrix Water
Sample Date 11/7/2014

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
VOC's										
Benzene	< 0.24	ug/l	0.24	0.77	1	8260B		11/12/2014	CJR	1
Bromobenzene	< 0.32	ug/l	0.32	1	1	8260B		11/12/2014	CJR	1
Bromodichloromethane	< 0.37	ug/l	0.37	1.2	1	8260B		11/12/2014	CJR	1
Bromoform	< 0.35	ug/l	0.35	1.1	1	8260B		11/12/2014	CJR	1
tert-Butylbenzene	< 0.36	ug/l	0.36	1.2	1	8260B		11/12/2014	CJR	1
sec-Butylbenzene	< 0.33	ug/l	0.33	1	1	8260B		11/12/2014	CJR	1
n-Butylbenzene	< 0.35	ug/l	0.35	1.1	1	8260B		11/12/2014	CJR	1
Carbon Tetrachloride	< 0.33	ug/l	0.33	1.1	1	8260B		11/12/2014	CJR	1
Chlorobenzene	< 0.24	ug/l	0.24	0.77	1	8260B		11/12/2014	CJR	1
Chloroethane	< 0.63	ug/l	0.63	2	1	8260B		11/12/2014	CJR	1
Chloroform	< 0.28	ug/l	0.28	0.88	1	8260B		11/12/2014	CJR	1
Chloromethane	< 0.81	ug/l	0.81	2.6	1	8260B		11/12/2014	CJR	1
2-Chlorotoluene	< 0.21	ug/l	0.21	0.66	1	8260B		11/12/2014	CJR	1
4-Chlorotoluene	< 0.21	ug/l	0.21	0.68	1	8260B		11/12/2014	CJR	1
1,2-Dibromo-3-chloropropane	< 0.88	ug/l	0.88	2.8	1	8260B		11/12/2014	CJR	4
Dibromochloromethane	< 0.22	ug/l	0.22	0.7	1	8260B		11/12/2014	CJR	1
1,4-Dichlorobenzene	< 0.3	ug/l	0.3	0.96	1	8260B		11/12/2014	CJR	1
1,3-Dichlorobenzene	< 0.28	ug/l	0.28	0.89	1	8260B		11/12/2014	CJR	1
1,2-Dichlorobenzene	< 0.36	ug/l	0.36	1.2	1	8260B		11/12/2014	CJR	1
Dichlorodifluoromethane	< 0.44	ug/l	0.44	1.4	1	8260B		11/12/2014	CJR	1
1,2-Dichloroethane	< 0.41	ug/l	0.41	1.3	1	8260B		11/12/2014	CJR	1
1,1-Dichloroethane	< 0.3	ug/l	0.3	0.97	1	8260B		11/12/2014	CJR	1
1,1-Dichloroethene	< 0.4	ug/l	0.4	1.3	1	8260B		11/12/2014	CJR	1
cis-1,2-Dichloroethene	1.18 "J"	ug/l	0.38	1.2	1	8260B		11/12/2014	CJR	1
trans-1,2-Dichloroethene	< 0.35	ug/l	0.35	1.1	1	8260B		11/12/2014	CJR	1
1,2-Dichloropropane	< 0.32	ug/l	0.32	1	1	8260B		11/12/2014	CJR	1
2,2-Dichloropropane	< 0.36	ug/l	0.36	1.2	1	8260B		11/12/2014	CJR	1
1,3-Dichloropropane	< 0.33	ug/l	0.33	1	1	8260B		11/12/2014	CJR	1
Di-isopropyl ether	< 0.23	ug/l	0.23	0.73	1	8260B		11/12/2014	CJR	1
EDB (1,2-Dibromoethane)	< 0.44	ug/l	0.44	1.4	1	8260B		11/12/2014	CJR	1
Ethylbenzene	< 0.55	ug/l	0.55	1.7	1	8260B		11/12/2014	CJR	1
Hexachlorobutadiene	< 1.5	ug/l	1.5	4.8	1	8260B		11/12/2014	CJR	1
Isopropylbenzene	< 0.3	ug/l	0.3	0.96	1	8260B		11/12/2014	CJR	1

Project Name FORMER NEWTON GRAVEL PIT **Invoice #** E28048
Project #

Lab Code 5028048A
Sample ID 3701 VIEBAHN
Sample Matrix Water
Sample Date 11/7/2014

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
p-Isopropyltoluene	< 0.31	ug/l	0.31	0.98	1	8260B		11/12/2014	CJR	1
Methylene chloride	1.17 "J"	ug/l	0.5	1.6	1	8260B		11/12/2014	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.23	ug/l	0.23	0.74	1	8260B		11/12/2014	CJR	1
Naphthalene	< 1.7	ug/l	1.7	5.5	1	8260B		11/12/2014	CJR	1
n-Propylbenzene	< 0.25	ug/l	0.25	0.81	1	8260B		11/12/2014	CJR	1
1,1,2,2-Tetrachloroethane	< 0.45	ug/l	0.45	1.4	1	8260B		11/12/2014	CJR	1
1,1,1,2-Tetrachloroethane	< 0.33	ug/l	0.33	1.1	1	8260B		11/12/2014	CJR	1
Tetrachloroethene	< 0.33	ug/l	0.33	1.1	1	8260B		11/12/2014	CJR	1
Toluene	< 0.69	ug/l	0.69	2.2	1	8260B		11/12/2014	CJR	1
1,2,4-Trichlorobenzene	< 0.98	ug/l	0.98	3.1	1	8260B		11/12/2014	CJR	1
1,2,3-Trichlorobenzene	< 1.8	ug/l	1.8	5.8	1	8260B		11/12/2014	CJR	1
1,1,1-Trichloroethane	< 0.33	ug/l	0.33	1	1	8260B		11/12/2014	CJR	1
1,1,2-Trichloroethane	< 0.34	ug/l	0.34	1.1	1	8260B		11/12/2014	CJR	1
Trichloroethene (TCE)	< 0.33	ug/l	0.33	1	1	8260B		11/12/2014	CJR	1
Trichlorofluoromethane	< 0.71	ug/l	0.71	2.3	1	8260B		11/12/2014	CJR	1
1,2,4-Trimethylbenzene	< 2.2	ug/l	2.2	6.9	1	8260B		11/12/2014	CJR	1
1,3,5-Trimethylbenzene	< 1.4	ug/l	1.4	4.5	1	8260B		11/12/2014	CJR	1
Vinyl Chloride	0.32 "J"	ug/l	0.18	0.57	1	8260B		11/12/2014	CJR	1
m&p-Xylene	< 0.69	ug/l	0.69	2.2	1	8260B		11/12/2014	CJR	1
o-Xylene	< 0.63	ug/l	0.63	2	1	8260B		11/12/2014	CJR	1
SUR - Dibromofluoromethane	98	REC %			1	8260B		11/12/2014	CJR	1
SUR - Toluene-d8	99	REC %			1	8260B		11/12/2014	CJR	1
SUR - 4-Bromofluorobenzene	112	REC %			1	8260B		11/12/2014	CJR	1
SUR - 1,2-Dichloroethane-d4	105	REC %			1	8260B		11/12/2014	CJR	1

Project Name FORMER NEWTON GRAVEL PIT **Invoice #** E28048
Project #

Lab Code 5028048B
Sample ID 3701 VIEBAHN DUP
Sample Matrix Water
Sample Date 11/7/2014

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
VOC's										
Benzene	< 0.24	ug/l	0.24	0.77	1	8260B		11/12/2014	CJR	1
Bromobenzene	< 0.32	ug/l	0.32	1	1	8260B		11/12/2014	CJR	1
Bromodichloromethane	< 0.37	ug/l	0.37	1.2	1	8260B		11/12/2014	CJR	1
Bromoform	< 0.35	ug/l	0.35	1.1	1	8260B		11/12/2014	CJR	1
tert-Butylbenzene	< 0.36	ug/l	0.36	1.2	1	8260B		11/12/2014	CJR	1
sec-Butylbenzene	< 0.33	ug/l	0.33	1	1	8260B		11/12/2014	CJR	1
n-Butylbenzene	< 0.35	ug/l	0.35	1.1	1	8260B		11/12/2014	CJR	1
Carbon Tetrachloride	< 0.33	ug/l	0.33	1.1	1	8260B		11/12/2014	CJR	1
Chlorobenzene	< 0.24	ug/l	0.24	0.77	1	8260B		11/12/2014	CJR	1
Chloroethane	< 0.63	ug/l	0.63	2	1	8260B		11/12/2014	CJR	1
Chloroform	< 0.28	ug/l	0.28	0.88	1	8260B		11/12/2014	CJR	1
Chloromethane	< 0.81	ug/l	0.81	2.6	1	8260B		11/12/2014	CJR	1
2-Chlorotoluene	< 0.21	ug/l	0.21	0.66	1	8260B		11/12/2014	CJR	1
4-Chlorotoluene	< 0.21	ug/l	0.21	0.68	1	8260B		11/12/2014	CJR	1
1,2-Dibromo-3-chloropropane	< 0.88	ug/l	0.88	2.8	1	8260B		11/12/2014	CJR	4
Dibromochloromethane	< 0.22	ug/l	0.22	0.7	1	8260B		11/12/2014	CJR	1
1,4-Dichlorobenzene	< 0.3	ug/l	0.3	0.96	1	8260B		11/12/2014	CJR	1
1,3-Dichlorobenzene	< 0.28	ug/l	0.28	0.89	1	8260B		11/12/2014	CJR	1
1,2-Dichlorobenzene	< 0.36	ug/l	0.36	1.2	1	8260B		11/12/2014	CJR	1
Dichlorodifluoromethane	< 0.44	ug/l	0.44	1.4	1	8260B		11/12/2014	CJR	1
1,2-Dichloroethane	< 0.41	ug/l	0.41	1.3	1	8260B		11/12/2014	CJR	1
1,1-Dichloroethane	< 0.3	ug/l	0.3	0.97	1	8260B		11/12/2014	CJR	1
1,1-Dichloroethene	< 0.4	ug/l	0.4	1.3	1	8260B		11/12/2014	CJR	1
cis-1,2-Dichloroethene	1.29	ug/l	0.38	1.2	1	8260B		11/12/2014	CJR	1
trans-1,2-Dichloroethene	< 0.35	ug/l	0.35	1.1	1	8260B		11/12/2014	CJR	1
1,2-Dichloropropane	< 0.32	ug/l	0.32	1	1	8260B		11/12/2014	CJR	1
2,2-Dichloropropane	< 0.36	ug/l	0.36	1.2	1	8260B		11/12/2014	CJR	1
1,3-Dichloropropane	< 0.33	ug/l	0.33	1	1	8260B		11/12/2014	CJR	1
Di-isopropyl ether	< 0.23	ug/l	0.23	0.73	1	8260B		11/12/2014	CJR	1
EDB (1,2-Dibromoethane)	< 0.44	ug/l	0.44	1.4	1	8260B		11/12/2014	CJR	1
Ethylbenzene	< 0.55	ug/l	0.55	1.7	1	8260B		11/12/2014	CJR	1
Hexachlorobutadiene	< 1.5	ug/l	1.5	4.8	1	8260B		11/12/2014	CJR	1
Isopropylbenzene	< 0.3	ug/l	0.3	0.96	1	8260B		11/12/2014	CJR	1
p-Isopropyltoluene	< 0.31	ug/l	0.31	0.98	1	8260B		11/12/2014	CJR	1
Methylene chloride	1.12 "J"	ug/l	0.5	1.6	1	8260B		11/12/2014	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.23	ug/l	0.23	0.74	1	8260B		11/12/2014	CJR	1
Naphthalene	< 1.7	ug/l	1.7	5.5	1	8260B		11/12/2014	CJR	1
n-Propylbenzene	< 0.25	ug/l	0.25	0.81	1	8260B		11/12/2014	CJR	1
1,1,2,2-Tetrachloroethane	< 0.45	ug/l	0.45	1.4	1	8260B		11/12/2014	CJR	1
1,1,1,2-Tetrachloroethane	< 0.33	ug/l	0.33	1.1	1	8260B		11/12/2014	CJR	1
Tetrachloroethene	< 0.33	ug/l	0.33	1.1	1	8260B		11/12/2014	CJR	1
Toluene	< 0.69	ug/l	0.69	2.2	1	8260B		11/12/2014	CJR	1
1,2,4-Trichlorobenzene	< 0.98	ug/l	0.98	3.1	1	8260B		11/12/2014	CJR	1
1,2,3-Trichlorobenzene	< 1.8	ug/l	1.8	5.8	1	8260B		11/12/2014	CJR	1
1,1,1-Trichloroethane	< 0.33	ug/l	0.33	1	1	8260B		11/12/2014	CJR	1
1,1,2-Trichloroethane	< 0.34	ug/l	0.34	1.1	1	8260B		11/12/2014	CJR	1
Trichloroethene (TCE)	< 0.33	ug/l	0.33	1	1	8260B		11/12/2014	CJR	1
Trichlorofluoromethane	< 0.71	ug/l	0.71	2.3	1	8260B		11/12/2014	CJR	1
1,2,4-Trimethylbenzene	< 2.2	ug/l	2.2	6.9	1	8260B		11/12/2014	CJR	1
1,3,5-Trimethylbenzene	< 1.4	ug/l	1.4	4.5	1	8260B		11/12/2014	CJR	1
Vinyl Chloride	0.49 "J"	ug/l	0.18	0.57	1	8260B		11/12/2014	CJR	1
m&p-Xylene	< 0.69	ug/l	0.69	2.2	1	8260B		11/12/2014	CJR	1
o-Xylene	< 0.63	ug/l	0.63	2	1	8260B		11/12/2014	CJR	1
SUR - 4-Bromofluorobenzene	111	REC %			1	8260B		11/12/2014	CJR	1
SUR - Dibromofluoromethane	99	REC %			1	8260B		11/12/2014	CJR	1
SUR - Toluene-d8	103	REC %			1	8260B		11/12/2014	CJR	1
SUR - 1,2-Dichloroethane-d4	109	REC %			1	8260B		11/12/2014	CJR	1

Project Name FORMER NEWTON GRAVEL PIT **Invoice #** E28048
Project #

Lab Code 5028048C
Sample ID 3815 VIEBAHN
Sample Matrix Water
Sample Date 11/7/2014

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
VOC's										
Benzene	< 0.24	ug/l	0.24	0.77	1	8260B		11/12/2014	CJR	1
Bromobenzene	< 0.32	ug/l	0.32	1	1	8260B		11/12/2014	CJR	1
Bromodichloromethane	< 0.37	ug/l	0.37	1.2	1	8260B		11/12/2014	CJR	1
Bromoform	< 0.35	ug/l	0.35	1.1	1	8260B		11/12/2014	CJR	1
tert-Butylbenzene	< 0.36	ug/l	0.36	1.2	1	8260B		11/12/2014	CJR	1
sec-Butylbenzene	< 0.33	ug/l	0.33	1	1	8260B		11/12/2014	CJR	1
n-Butylbenzene	< 0.35	ug/l	0.35	1.1	1	8260B		11/12/2014	CJR	1
Carbon Tetrachloride	< 0.33	ug/l	0.33	1.1	1	8260B		11/12/2014	CJR	1
Chlorobenzene	< 0.24	ug/l	0.24	0.77	1	8260B		11/12/2014	CJR	1
Chloroethane	< 0.63	ug/l	0.63	2	1	8260B		11/12/2014	CJR	1
Chloroform	< 0.28	ug/l	0.28	0.88	1	8260B		11/12/2014	CJR	1
Chloromethane	< 0.81	ug/l	0.81	2.6	1	8260B		11/12/2014	CJR	1
2-Chlorotoluene	< 0.21	ug/l	0.21	0.66	1	8260B		11/12/2014	CJR	1
4-Chlorotoluene	< 0.21	ug/l	0.21	0.68	1	8260B		11/12/2014	CJR	1
1,2-Dibromo-3-chloropropane	< 0.88	ug/l	0.88	2.8	1	8260B		11/12/2014	CJR	4
Dibromochloromethane	< 0.22	ug/l	0.22	0.7	1	8260B		11/12/2014	CJR	1
1,4-Dichlorobenzene	< 0.3	ug/l	0.3	0.96	1	8260B		11/12/2014	CJR	1
1,3-Dichlorobenzene	< 0.28	ug/l	0.28	0.89	1	8260B		11/12/2014	CJR	1
1,2-Dichlorobenzene	< 0.36	ug/l	0.36	1.2	1	8260B		11/12/2014	CJR	1
Dichlorodifluoromethane	< 0.44	ug/l	0.44	1.4	1	8260B		11/12/2014	CJR	1
1,2-Dichloroethane	< 0.41	ug/l	0.41	1.3	1	8260B		11/12/2014	CJR	1
1,1-Dichloroethane	< 0.3	ug/l	0.3	0.97	1	8260B		11/12/2014	CJR	1
1,1-Dichloroethene	< 0.4	ug/l	0.4	1.3	1	8260B		11/12/2014	CJR	1
cis-1,2-Dichloroethene	0.74 "J"	ug/l	0.38	1.2	1	8260B		11/12/2014	CJR	1
trans-1,2-Dichloroethene	< 0.35	ug/l	0.35	1.1	1	8260B		11/12/2014	CJR	1
1,2-Dichloropropane	< 0.32	ug/l	0.32	1	1	8260B		11/12/2014	CJR	1
2,2-Dichloropropane	< 0.36	ug/l	0.36	1.2	1	8260B		11/12/2014	CJR	1
1,3-Dichloropropane	< 0.33	ug/l	0.33	1	1	8260B		11/12/2014	CJR	1
Di-isopropyl ether	< 0.23	ug/l	0.23	0.73	1	8260B		11/12/2014	CJR	1
EDB (1,2-Dibromoethane)	< 0.44	ug/l	0.44	1.4	1	8260B		11/12/2014	CJR	1
Ethylbenzene	< 0.55	ug/l	0.55	1.7	1	8260B		11/12/2014	CJR	1
Hexachlorobutadiene	< 1.5	ug/l	1.5	4.8	1	8260B		11/12/2014	CJR	1
Isopropylbenzene	< 0.3	ug/l	0.3	0.96	1	8260B		11/12/2014	CJR	1
p-Isopropyltoluene	< 0.31	ug/l	0.31	0.98	1	8260B		11/12/2014	CJR	1
Methylene chloride	< 0.5	ug/l	0.5	1.6	1	8260B		11/12/2014	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.23	ug/l	0.23	0.74	1	8260B		11/12/2014	CJR	1
Naphthalene	< 1.7	ug/l	1.7	5.5	1	8260B		11/12/2014	CJR	1
n-Propylbenzene	< 0.25	ug/l	0.25	0.81	1	8260B		11/12/2014	CJR	1
1,1,2,2-Tetrachloroethane	< 0.45	ug/l	0.45	1.4	1	8260B		11/12/2014	CJR	1
1,1,1,2-Tetrachloroethane	< 0.33	ug/l	0.33	1.1	1	8260B		11/12/2014	CJR	1
Tetrachloroethene	< 0.33	ug/l	0.33	1.1	1	8260B		11/12/2014	CJR	1
Toluene	< 0.69	ug/l	0.69	2.2	1	8260B		11/12/2014	CJR	1
1,2,4-Trichlorobenzene	< 0.98	ug/l	0.98	3.1	1	8260B		11/12/2014	CJR	1
1,2,3-Trichlorobenzene	< 1.8	ug/l	1.8	5.8	1	8260B		11/12/2014	CJR	1
1,1,1-Trichloroethane	< 0.33	ug/l	0.33	1	1	8260B		11/12/2014	CJR	1
1,1,2-Trichloroethane	< 0.34	ug/l	0.34	1.1	1	8260B		11/12/2014	CJR	1
Trichloroethene (TCE)	< 0.33	ug/l	0.33	1	1	8260B		11/12/2014	CJR	1
Trichlorofluoromethane	< 0.71	ug/l	0.71	2.3	1	8260B		11/12/2014	CJR	1
1,2,4-Trimethylbenzene	< 2.2	ug/l	2.2	6.9	1	8260B		11/12/2014	CJR	1
1,3,5-Trimethylbenzene	< 1.4	ug/l	1.4	4.5	1	8260B		11/12/2014	CJR	1
Vinyl Chloride	0.33 "J"	ug/l	0.18	0.57	1	8260B		11/12/2014	CJR	1
m&p-Xylene	< 0.69	ug/l	0.69	2.2	1	8260B		11/12/2014	CJR	1
o-Xylene	< 0.63	ug/l	0.63	2	1	8260B		11/12/2014	CJR	1
SUR - 1,2-Dichloroethane-d4	93	REC %			1	8260B		11/12/2014	CJR	1
SUR - Toluene-d8	103	REC %			1	8260B		11/12/2014	CJR	1
SUR - 4-Bromofluorobenzene	106	REC %			1	8260B		11/12/2014	CJR	1
SUR - Dibromofluoromethane	98	REC %			1	8260B		11/12/2014	CJR	1

Project Name FORMER NEWTON GRAVEL PIT **Invoice #** E28048
Project #

Lab Code 5028048D
Sample ID 4101 VIEBAHN
Sample Matrix Water
Sample Date 11/7/2014

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
VOC's										
Benzene	< 0.24	ug/l	0.24	0.77	1	8260B		11/12/2014	CJR	1
Bromobenzene	< 0.32	ug/l	0.32	1	1	8260B		11/12/2014	CJR	1
Bromodichloromethane	< 0.37	ug/l	0.37	1.2	1	8260B		11/12/2014	CJR	1
Bromoform	< 0.35	ug/l	0.35	1.1	1	8260B		11/12/2014	CJR	1
tert-Butylbenzene	< 0.36	ug/l	0.36	1.2	1	8260B		11/12/2014	CJR	1
sec-Butylbenzene	< 0.33	ug/l	0.33	1	1	8260B		11/12/2014	CJR	1
n-Butylbenzene	< 0.35	ug/l	0.35	1.1	1	8260B		11/12/2014	CJR	1
Carbon Tetrachloride	< 0.33	ug/l	0.33	1.1	1	8260B		11/12/2014	CJR	1
Chlorobenzene	< 0.24	ug/l	0.24	0.77	1	8260B		11/12/2014	CJR	1
Chloroethane	< 0.63	ug/l	0.63	2	1	8260B		11/12/2014	CJR	1
Chloroform	< 0.28	ug/l	0.28	0.88	1	8260B		11/12/2014	CJR	1
Chloromethane	< 0.81	ug/l	0.81	2.6	1	8260B		11/12/2014	CJR	1
2-Chlorotoluene	< 0.21	ug/l	0.21	0.66	1	8260B		11/12/2014	CJR	1
4-Chlorotoluene	< 0.21	ug/l	0.21	0.68	1	8260B		11/12/2014	CJR	1
1,2-Dibromo-3-chloropropane	< 0.88	ug/l	0.88	2.8	1	8260B		11/12/2014	CJR	4
Dibromochloromethane	< 0.22	ug/l	0.22	0.7	1	8260B		11/12/2014	CJR	1
1,4-Dichlorobenzene	< 0.3	ug/l	0.3	0.96	1	8260B		11/12/2014	CJR	1
1,3-Dichlorobenzene	< 0.28	ug/l	0.28	0.89	1	8260B		11/12/2014	CJR	1
1,2-Dichlorobenzene	< 0.36	ug/l	0.36	1.2	1	8260B		11/12/2014	CJR	1
Dichlorodifluoromethane	< 0.44	ug/l	0.44	1.4	1	8260B		11/12/2014	CJR	1
1,2-Dichloroethane	< 0.41	ug/l	0.41	1.3	1	8260B		11/12/2014	CJR	1
1,1-Dichloroethane	< 0.3	ug/l	0.3	0.97	1	8260B		11/12/2014	CJR	1
1,1-Dichloroethene	< 0.4	ug/l	0.4	1.3	1	8260B		11/12/2014	CJR	1
cis-1,2-Dichloroethene	1.13 "J"	ug/l	0.38	1.2	1	8260B		11/12/2014	CJR	1
trans-1,2-Dichloroethene	< 0.35	ug/l	0.35	1.1	1	8260B		11/12/2014	CJR	1
1,2-Dichloropropane	< 0.32	ug/l	0.32	1	1	8260B		11/12/2014	CJR	1
2,2-Dichloropropane	< 0.36	ug/l	0.36	1.2	1	8260B		11/12/2014	CJR	1
1,3-Dichloropropane	< 0.33	ug/l	0.33	1	1	8260B		11/12/2014	CJR	1
Di-isopropyl ether	< 0.23	ug/l	0.23	0.73	1	8260B		11/12/2014	CJR	1
EDB (1,2-Dibromoethane)	< 0.44	ug/l	0.44	1.4	1	8260B		11/12/2014	CJR	1
Ethylbenzene	< 0.55	ug/l	0.55	1.7	1	8260B		11/12/2014	CJR	1
Hexachlorobutadiene	< 1.5	ug/l	1.5	4.8	1	8260B		11/12/2014	CJR	1
Isopropylbenzene	< 0.3	ug/l	0.3	0.96	1	8260B		11/12/2014	CJR	1
p-Isopropyltoluene	< 0.31	ug/l	0.31	0.98	1	8260B		11/12/2014	CJR	1
Methylene chloride	< 0.5	ug/l	0.5	1.6	1	8260B		11/12/2014	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.23	ug/l	0.23	0.74	1	8260B		11/12/2014	CJR	1
Naphthalene	< 1.7	ug/l	1.7	5.5	1	8260B		11/12/2014	CJR	1
n-Propylbenzene	< 0.25	ug/l	0.25	0.81	1	8260B		11/12/2014	CJR	1
1,1,2,2-Tetrachloroethane	< 0.45	ug/l	0.45	1.4	1	8260B		11/12/2014	CJR	1
1,1,1,2-Tetrachloroethane	< 0.33	ug/l	0.33	1.1	1	8260B		11/12/2014	CJR	1
Tetrachloroethene	< 0.33	ug/l	0.33	1.1	1	8260B		11/12/2014	CJR	1
Toluene	< 0.69	ug/l	0.69	2.2	1	8260B		11/12/2014	CJR	1
1,2,4-Trichlorobenzene	< 0.98	ug/l	0.98	3.1	1	8260B		11/12/2014	CJR	1
1,2,3-Trichlorobenzene	< 1.8	ug/l	1.8	5.8	1	8260B		11/12/2014	CJR	1
1,1,1-Trichloroethane	< 0.33	ug/l	0.33	1	1	8260B		11/12/2014	CJR	1
1,1,2-Trichloroethane	< 0.34	ug/l	0.34	1.1	1	8260B		11/12/2014	CJR	1
Trichloroethene (TCE)	< 0.33	ug/l	0.33	1	1	8260B		11/12/2014	CJR	1
Trichlorofluoromethane	< 0.71	ug/l	0.71	2.3	1	8260B		11/12/2014	CJR	1
1,2,4-Trimethylbenzene	< 2.2	ug/l	2.2	6.9	1	8260B		11/12/2014	CJR	1
1,3,5-Trimethylbenzene	< 1.4	ug/l	1.4	4.5	1	8260B		11/12/2014	CJR	1
Vinyl Chloride	0.39 "J"	ug/l	0.18	0.57	1	8260B		11/12/2014	CJR	1
m&p-Xylene	< 0.69	ug/l	0.69	2.2	1	8260B		11/12/2014	CJR	1
o-Xylene	< 0.63	ug/l	0.63	2	1	8260B		11/12/2014	CJR	1
SUR - Toluene-d8	99	REC %			1	8260B		11/12/2014	CJR	1
SUR - Dibromofluoromethane	96	REC %			1	8260B		11/12/2014	CJR	1
SUR - 4-Bromofluorobenzene	111	REC %			1	8260B		11/12/2014	CJR	1
SUR - 1,2-Dichloroethane-d4	94	REC %			1	8260B		11/12/2014	CJR	1

Project Name FORMER NEWTON GRAVEL PIT **Invoice #** E28048
Project #

Lab Code 5028048E
Sample ID 4025 VIEBAHN
Sample Matrix Water
Sample Date 11/7/2014

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
VOC's										
Benzene	< 0.24	ug/l	0.24	0.77	1	8260B		11/12/2014	CJR	1
Bromobenzene	< 0.32	ug/l	0.32	1	1	8260B		11/12/2014	CJR	1
Bromodichloromethane	< 0.37	ug/l	0.37	1.2	1	8260B		11/12/2014	CJR	1
Bromoform	< 0.35	ug/l	0.35	1.1	1	8260B		11/12/2014	CJR	1
tert-Butylbenzene	< 0.36	ug/l	0.36	1.2	1	8260B		11/12/2014	CJR	1
sec-Butylbenzene	< 0.33	ug/l	0.33	1	1	8260B		11/12/2014	CJR	1
n-Butylbenzene	< 0.35	ug/l	0.35	1.1	1	8260B		11/12/2014	CJR	1
Carbon Tetrachloride	< 0.33	ug/l	0.33	1.1	1	8260B		11/12/2014	CJR	1
Chlorobenzene	< 0.24	ug/l	0.24	0.77	1	8260B		11/12/2014	CJR	1
Chloroethane	< 0.63	ug/l	0.63	2	1	8260B		11/12/2014	CJR	1
Chloroform	< 0.28	ug/l	0.28	0.88	1	8260B		11/12/2014	CJR	1
Chloromethane	< 0.81	ug/l	0.81	2.6	1	8260B		11/12/2014	CJR	1
2-Chlorotoluene	< 0.21	ug/l	0.21	0.66	1	8260B		11/12/2014	CJR	1
4-Chlorotoluene	< 0.21	ug/l	0.21	0.68	1	8260B		11/12/2014	CJR	1
1,2-Dibromo-3-chloropropane	< 0.88	ug/l	0.88	2.8	1	8260B		11/12/2014	CJR	4
Dibromochloromethane	< 0.22	ug/l	0.22	0.7	1	8260B		11/12/2014	CJR	1
1,4-Dichlorobenzene	< 0.3	ug/l	0.3	0.96	1	8260B		11/12/2014	CJR	1
1,3-Dichlorobenzene	< 0.28	ug/l	0.28	0.89	1	8260B		11/12/2014	CJR	1
1,2-Dichlorobenzene	< 0.36	ug/l	0.36	1.2	1	8260B		11/12/2014	CJR	1
Dichlorodifluoromethane	< 0.44	ug/l	0.44	1.4	1	8260B		11/12/2014	CJR	1
1,2-Dichloroethane	< 0.41	ug/l	0.41	1.3	1	8260B		11/12/2014	CJR	1
1,1-Dichloroethane	< 0.3	ug/l	0.3	0.97	1	8260B		11/12/2014	CJR	1
1,1-Dichloroethene	< 0.4	ug/l	0.4	1.3	1	8260B		11/12/2014	CJR	1
cis-1,2-Dichloroethene	1.46	ug/l	0.38	1.2	1	8260B		11/12/2014	CJR	1
trans-1,2-Dichloroethene	< 0.35	ug/l	0.35	1.1	1	8260B		11/12/2014	CJR	1
1,2-Dichloropropane	< 0.32	ug/l	0.32	1	1	8260B		11/12/2014	CJR	1
2,2-Dichloropropane	< 0.36	ug/l	0.36	1.2	1	8260B		11/12/2014	CJR	1
1,3-Dichloropropane	< 0.33	ug/l	0.33	1	1	8260B		11/12/2014	CJR	1
Di-isopropyl ether	< 0.23	ug/l	0.23	0.73	1	8260B		11/12/2014	CJR	1
EDB (1,2-Dibromoethane)	< 0.44	ug/l	0.44	1.4	1	8260B		11/12/2014	CJR	1
Ethylbenzene	< 0.55	ug/l	0.55	1.7	1	8260B		11/12/2014	CJR	1
Hexachlorobutadiene	< 1.5	ug/l	1.5	4.8	1	8260B		11/12/2014	CJR	1
Isopropylbenzene	< 0.3	ug/l	0.3	0.96	1	8260B		11/12/2014	CJR	1
p-Isopropyltoluene	< 0.31	ug/l	0.31	0.98	1	8260B		11/12/2014	CJR	1
Methylene chloride	< 0.5	ug/l	0.5	1.6	1	8260B		11/12/2014	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.23	ug/l	0.23	0.74	1	8260B		11/12/2014	CJR	1
Naphthalene	< 1.7	ug/l	1.7	5.5	1	8260B		11/12/2014	CJR	1
n-Propylbenzene	< 0.25	ug/l	0.25	0.81	1	8260B		11/12/2014	CJR	1
1,1,2,2-Tetrachloroethane	< 0.45	ug/l	0.45	1.4	1	8260B		11/12/2014	CJR	1
1,1,1,2-Tetrachloroethane	< 0.33	ug/l	0.33	1.1	1	8260B		11/12/2014	CJR	1
Tetrachloroethene	< 0.33	ug/l	0.33	1.1	1	8260B		11/12/2014	CJR	1
Toluene	< 0.69	ug/l	0.69	2.2	1	8260B		11/12/2014	CJR	1
1,2,4-Trichlorobenzene	< 0.98	ug/l	0.98	3.1	1	8260B		11/12/2014	CJR	1
1,2,3-Trichlorobenzene	< 1.8	ug/l	1.8	5.8	1	8260B		11/12/2014	CJR	1
1,1,1-Trichloroethane	< 0.33	ug/l	0.33	1	1	8260B		11/12/2014	CJR	1
1,1,2-Trichloroethane	< 0.34	ug/l	0.34	1.1	1	8260B		11/12/2014	CJR	1
Trichloroethene (TCE)	< 0.33	ug/l	0.33	1	1	8260B		11/12/2014	CJR	1
Trichlorofluoromethane	< 0.71	ug/l	0.71	2.3	1	8260B		11/12/2014	CJR	1
1,2,4-Trimethylbenzene	< 2.2	ug/l	2.2	6.9	1	8260B		11/12/2014	CJR	1
1,3,5-Trimethylbenzene	< 1.4	ug/l	1.4	4.5	1	8260B		11/12/2014	CJR	1
Vinyl Chloride	0.31 "J"	ug/l	0.18	0.57	1	8260B		11/12/2014	CJR	1
m&p-Xylene	< 0.69	ug/l	0.69	2.2	1	8260B		11/12/2014	CJR	1
o-Xylene	< 0.63	ug/l	0.63	2	1	8260B		11/12/2014	CJR	1
SUR - 4-Bromofluorobenzene	112	REC %			1	8260B		11/12/2014	CJR	1
SUR - Dibromofluoromethane	94	REC %			1	8260B		11/12/2014	CJR	1
SUR - Toluene-d8	100	REC %			1	8260B		11/12/2014	CJR	1
SUR - 1,2-Dichloroethane-d4	92	REC %			1	8260B		11/12/2014	CJR	1

Project Name FORMER NEWTON GRAVEL PIT **Invoice #** E28048
Project #

Lab Code 5028048F
Sample ID 3825 VIEBAHN
Sample Matrix Water
Sample Date 11/7/2014

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
VOC's										
Benzene	< 0.24	ug/l	0.24	0.77	1	8260B		11/12/2014	CJR	1
Bromobenzene	< 0.32	ug/l	0.32	1	1	8260B		11/12/2014	CJR	1
Bromodichloromethane	< 0.37	ug/l	0.37	1.2	1	8260B		11/12/2014	CJR	1
Bromoform	< 0.35	ug/l	0.35	1.1	1	8260B		11/12/2014	CJR	1
tert-Butylbenzene	< 0.36	ug/l	0.36	1.2	1	8260B		11/12/2014	CJR	1
sec-Butylbenzene	< 0.33	ug/l	0.33	1	1	8260B		11/12/2014	CJR	1
n-Butylbenzene	< 0.35	ug/l	0.35	1.1	1	8260B		11/12/2014	CJR	1
Carbon Tetrachloride	< 0.33	ug/l	0.33	1.1	1	8260B		11/12/2014	CJR	1
Chlorobenzene	< 0.24	ug/l	0.24	0.77	1	8260B		11/12/2014	CJR	1
Chloroethane	< 0.63	ug/l	0.63	2	1	8260B		11/12/2014	CJR	1
Chloroform	< 0.28	ug/l	0.28	0.88	1	8260B		11/12/2014	CJR	1
Chloromethane	< 0.81	ug/l	0.81	2.6	1	8260B		11/12/2014	CJR	1
2-Chlorotoluene	< 0.21	ug/l	0.21	0.66	1	8260B		11/12/2014	CJR	1
4-Chlorotoluene	< 0.21	ug/l	0.21	0.68	1	8260B		11/12/2014	CJR	1
1,2-Dibromo-3-chloropropane	< 0.88	ug/l	0.88	2.8	1	8260B		11/12/2014	CJR	4
Dibromochloromethane	< 0.22	ug/l	0.22	0.7	1	8260B		11/12/2014	CJR	1
1,4-Dichlorobenzene	< 0.3	ug/l	0.3	0.96	1	8260B		11/12/2014	CJR	1
1,3-Dichlorobenzene	< 0.28	ug/l	0.28	0.89	1	8260B		11/12/2014	CJR	1
1,2-Dichlorobenzene	< 0.36	ug/l	0.36	1.2	1	8260B		11/12/2014	CJR	1
Dichlorodifluoromethane	< 0.44	ug/l	0.44	1.4	1	8260B		11/12/2014	CJR	1
1,2-Dichloroethane	< 0.41	ug/l	0.41	1.3	1	8260B		11/12/2014	CJR	1
1,1-Dichloroethane	< 0.3	ug/l	0.3	0.97	1	8260B		11/12/2014	CJR	1
1,1-Dichloroethene	< 0.4	ug/l	0.4	1.3	1	8260B		11/12/2014	CJR	1
cis-1,2-Dichloroethene	< 0.38	ug/l	0.38	1.2	1	8260B		11/12/2014	CJR	1
trans-1,2-Dichloroethene	< 0.35	ug/l	0.35	1.1	1	8260B		11/12/2014	CJR	1
1,2-Dichloropropane	< 0.32	ug/l	0.32	1	1	8260B		11/12/2014	CJR	1
2,2-Dichloropropane	< 0.36	ug/l	0.36	1.2	1	8260B		11/12/2014	CJR	1
1,3-Dichloropropane	< 0.33	ug/l	0.33	1	1	8260B		11/12/2014	CJR	1
Di-isopropyl ether	< 0.23	ug/l	0.23	0.73	1	8260B		11/12/2014	CJR	1
EDB (1,2-Dibromoethane)	< 0.44	ug/l	0.44	1.4	1	8260B		11/12/2014	CJR	1
Ethylbenzene	< 0.55	ug/l	0.55	1.7	1	8260B		11/12/2014	CJR	1
Hexachlorobutadiene	< 1.5	ug/l	1.5	4.8	1	8260B		11/12/2014	CJR	1
Isopropylbenzene	< 0.3	ug/l	0.3	0.96	1	8260B		11/12/2014	CJR	1
p-Isopropyltoluene	< 0.31	ug/l	0.31	0.98	1	8260B		11/12/2014	CJR	1
Methylene chloride	< 0.5	ug/l	0.5	1.6	1	8260B		11/12/2014	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.23	ug/l	0.23	0.74	1	8260B		11/12/2014	CJR	1
Naphthalene	< 1.7	ug/l	1.7	5.5	1	8260B		11/12/2014	CJR	1
n-Propylbenzene	< 0.25	ug/l	0.25	0.81	1	8260B		11/12/2014	CJR	1
1,1,2,2-Tetrachloroethane	< 0.45	ug/l	0.45	1.4	1	8260B		11/12/2014	CJR	1
1,1,1,2-Tetrachloroethane	< 0.33	ug/l	0.33	1.1	1	8260B		11/12/2014	CJR	1
Tetrachloroethene	< 0.33	ug/l	0.33	1.1	1	8260B		11/12/2014	CJR	1
Toluene	< 0.69	ug/l	0.69	2.2	1	8260B		11/12/2014	CJR	1
1,2,4-Trichlorobenzene	< 0.98	ug/l	0.98	3.1	1	8260B		11/12/2014	CJR	1
1,2,3-Trichlorobenzene	< 1.8	ug/l	1.8	5.8	1	8260B		11/12/2014	CJR	1
1,1,1-Trichloroethane	< 0.33	ug/l	0.33	1	1	8260B		11/12/2014	CJR	1
1,1,2-Trichloroethane	< 0.34	ug/l	0.34	1.1	1	8260B		11/12/2014	CJR	1
Trichloroethene (TCE)	< 0.33	ug/l	0.33	1	1	8260B		11/12/2014	CJR	1
Trichlorofluoromethane	< 0.71	ug/l	0.71	2.3	1	8260B		11/12/2014	CJR	1
1,2,4-Trimethylbenzene	< 2.2	ug/l	2.2	6.9	1	8260B		11/12/2014	CJR	1
1,3,5-Trimethylbenzene	< 1.4	ug/l	1.4	4.5	1	8260B		11/12/2014	CJR	1
Vinyl Chloride	< 0.18	ug/l	0.18	0.57	1	8260B		11/12/2014	CJR	1
m&p-Xylene	< 0.69	ug/l	0.69	2.2	1	8260B		11/12/2014	CJR	1
o-Xylene	< 0.63	ug/l	0.63	2	1	8260B		11/12/2014	CJR	1
SUR - 1,2-Dichloroethane-d4	95	REC %			1	8260B		11/12/2014	CJR	1
SUR - 4-Bromofluorobenzene	106	REC %			1	8260B		11/12/2014	CJR	1
SUR - Dibromofluoromethane	90	REC %			1	8260B		11/12/2014	CJR	1
SUR - Toluene-d8	100	REC %			1	8260B		11/12/2014	CJR	1

Project Name FORMER NEWTON GRAVEL PIT **Invoice #** E28048
Project #

Lab Code 5028048G
Sample ID 3617 VIEBAHN
Sample Matrix Water
Sample Date 11/7/2014

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
VOC's										
Benzene	< 0.24	ug/l	0.24	0.77	1	8260B		11/12/2014	CJR	1
Bromobenzene	< 0.32	ug/l	0.32	1	1	8260B		11/12/2014	CJR	1
Bromodichloromethane	< 0.37	ug/l	0.37	1.2	1	8260B		11/12/2014	CJR	1
Bromoform	< 0.35	ug/l	0.35	1.1	1	8260B		11/12/2014	CJR	1
tert-Butylbenzene	< 0.36	ug/l	0.36	1.2	1	8260B		11/12/2014	CJR	1
sec-Butylbenzene	< 0.33	ug/l	0.33	1	1	8260B		11/12/2014	CJR	1
n-Butylbenzene	< 0.35	ug/l	0.35	1.1	1	8260B		11/12/2014	CJR	1
Carbon Tetrachloride	< 0.33	ug/l	0.33	1.1	1	8260B		11/12/2014	CJR	1
Chlorobenzene	< 0.24	ug/l	0.24	0.77	1	8260B		11/12/2014	CJR	1
Chloroethane	< 0.63	ug/l	0.63	2	1	8260B		11/12/2014	CJR	1
Chloroform	< 0.28	ug/l	0.28	0.88	1	8260B		11/12/2014	CJR	1
Chloromethane	< 0.81	ug/l	0.81	2.6	1	8260B		11/12/2014	CJR	1
2-Chlorotoluene	< 0.21	ug/l	0.21	0.66	1	8260B		11/12/2014	CJR	1
4-Chlorotoluene	< 0.21	ug/l	0.21	0.68	1	8260B		11/12/2014	CJR	1
1,2-Dibromo-3-chloropropane	< 0.88	ug/l	0.88	2.8	1	8260B		11/12/2014	CJR	4
Dibromochloromethane	< 0.22	ug/l	0.22	0.7	1	8260B		11/12/2014	CJR	1
1,4-Dichlorobenzene	< 0.3	ug/l	0.3	0.96	1	8260B		11/12/2014	CJR	1
1,3-Dichlorobenzene	< 0.28	ug/l	0.28	0.89	1	8260B		11/12/2014	CJR	1
1,2-Dichlorobenzene	< 0.36	ug/l	0.36	1.2	1	8260B		11/12/2014	CJR	1
Dichlorodifluoromethane	< 0.44	ug/l	0.44	1.4	1	8260B		11/12/2014	CJR	1
1,2-Dichloroethane	< 0.41	ug/l	0.41	1.3	1	8260B		11/12/2014	CJR	1
1,1-Dichloroethane	< 0.3	ug/l	0.3	0.97	1	8260B		11/12/2014	CJR	1
1,1-Dichloroethene	< 0.4	ug/l	0.4	1.3	1	8260B		11/12/2014	CJR	1
cis-1,2-Dichloroethene	1.13 "J"	ug/l	0.38	1.2	1	8260B		11/12/2014	CJR	1
trans-1,2-Dichloroethene	< 0.35	ug/l	0.35	1.1	1	8260B		11/12/2014	CJR	1
1,2-Dichloropropane	< 0.32	ug/l	0.32	1	1	8260B		11/12/2014	CJR	1
2,2-Dichloropropane	< 0.36	ug/l	0.36	1.2	1	8260B		11/12/2014	CJR	1
1,3-Dichloropropane	< 0.33	ug/l	0.33	1	1	8260B		11/12/2014	CJR	1
Di-isopropyl ether	< 0.23	ug/l	0.23	0.73	1	8260B		11/12/2014	CJR	1
EDB (1,2-Dibromoethane)	< 0.44	ug/l	0.44	1.4	1	8260B		11/12/2014	CJR	1
Ethylbenzene	< 0.55	ug/l	0.55	1.7	1	8260B		11/12/2014	CJR	1
Hexachlorobutadiene	< 1.5	ug/l	1.5	4.8	1	8260B		11/12/2014	CJR	1
Isopropylbenzene	< 0.3	ug/l	0.3	0.96	1	8260B		11/12/2014	CJR	1
p-Isopropyltoluene	< 0.31	ug/l	0.31	0.98	1	8260B		11/12/2014	CJR	1
Methylene chloride	< 0.5	ug/l	0.5	1.6	1	8260B		11/12/2014	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.23	ug/l	0.23	0.74	1	8260B		11/12/2014	CJR	1
Naphthalene	< 1.7	ug/l	1.7	5.5	1	8260B		11/12/2014	CJR	1
n-Propylbenzene	< 0.25	ug/l	0.25	0.81	1	8260B		11/12/2014	CJR	1
1,1,2,2-Tetrachloroethane	< 0.45	ug/l	0.45	1.4	1	8260B		11/12/2014	CJR	1
1,1,1,2-Tetrachloroethane	< 0.33	ug/l	0.33	1.1	1	8260B		11/12/2014	CJR	1
Tetrachloroethene	< 0.33	ug/l	0.33	1.1	1	8260B		11/12/2014	CJR	1
Toluene	< 0.69	ug/l	0.69	2.2	1	8260B		11/12/2014	CJR	1
1,2,4-Trichlorobenzene	< 0.98	ug/l	0.98	3.1	1	8260B		11/12/2014	CJR	1
1,2,3-Trichlorobenzene	< 1.8	ug/l	1.8	5.8	1	8260B		11/12/2014	CJR	1
1,1,1-Trichloroethane	< 0.33	ug/l	0.33	1	1	8260B		11/12/2014	CJR	1
1,1,2-Trichloroethane	< 0.34	ug/l	0.34	1.1	1	8260B		11/12/2014	CJR	1
Trichloroethene (TCE)	< 0.33	ug/l	0.33	1	1	8260B		11/12/2014	CJR	1
Trichlorofluoromethane	< 0.71	ug/l	0.71	2.3	1	8260B		11/12/2014	CJR	1
1,2,4-Trimethylbenzene	< 2.2	ug/l	2.2	6.9	1	8260B		11/12/2014	CJR	1
1,3,5-Trimethylbenzene	< 1.4	ug/l	1.4	4.5	1	8260B		11/12/2014	CJR	1
Vinyl Chloride	0.48 "J"	ug/l	0.18	0.57	1	8260B		11/12/2014	CJR	1
m&p-Xylene	< 0.69	ug/l	0.69	2.2	1	8260B		11/12/2014	CJR	1
o-Xylene	< 0.63	ug/l	0.63	2	1	8260B		11/12/2014	CJR	1
SUR - 1,2-Dichloroethane-d4	101	REC %			1	8260B		11/12/2014	CJR	1
SUR - 4-Bromofluorobenzene	106	REC %			1	8260B		11/12/2014	CJR	1
SUR - Dibromofluoromethane	102	REC %			1	8260B		11/12/2014	CJR	1
SUR - Toluene-d8	101	REC %			1	8260B		11/12/2014	CJR	1

Project Name FORMER NEWTON GRAVEL PIT **Invoice #** E28048
Project #

Lab Code 5028048H
Sample ID 3817 VIEBAHN
Sample Matrix Water
Sample Date 11/7/2014

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
VOC's										
Benzene	< 0.24	ug/l	0.24	0.77	1	8260B		11/12/2014	CJR	1
Bromobenzene	< 0.32	ug/l	0.32	1	1	8260B		11/12/2014	CJR	1
Bromodichloromethane	< 0.37	ug/l	0.37	1.2	1	8260B		11/12/2014	CJR	1
Bromoform	< 0.35	ug/l	0.35	1.1	1	8260B		11/12/2014	CJR	1
tert-Butylbenzene	< 0.36	ug/l	0.36	1.2	1	8260B		11/12/2014	CJR	1
sec-Butylbenzene	< 0.33	ug/l	0.33	1	1	8260B		11/12/2014	CJR	1
n-Butylbenzene	< 0.35	ug/l	0.35	1.1	1	8260B		11/12/2014	CJR	1
Carbon Tetrachloride	< 0.33	ug/l	0.33	1.1	1	8260B		11/12/2014	CJR	1
Chlorobenzene	< 0.24	ug/l	0.24	0.77	1	8260B		11/12/2014	CJR	1
Chloroethane	< 0.63	ug/l	0.63	2	1	8260B		11/12/2014	CJR	1
Chloroform	< 0.28	ug/l	0.28	0.88	1	8260B		11/12/2014	CJR	1
Chloromethane	< 0.81	ug/l	0.81	2.6	1	8260B		11/12/2014	CJR	1
2-Chlorotoluene	< 0.21	ug/l	0.21	0.66	1	8260B		11/12/2014	CJR	1
4-Chlorotoluene	< 0.21	ug/l	0.21	0.68	1	8260B		11/12/2014	CJR	1
1,2-Dibromo-3-chloropropane	< 0.88	ug/l	0.88	2.8	1	8260B		11/12/2014	CJR	4
Dibromochloromethane	< 0.22	ug/l	0.22	0.7	1	8260B		11/12/2014	CJR	1
1,4-Dichlorobenzene	< 0.3	ug/l	0.3	0.96	1	8260B		11/12/2014	CJR	1
1,3-Dichlorobenzene	< 0.28	ug/l	0.28	0.89	1	8260B		11/12/2014	CJR	1
1,2-Dichlorobenzene	< 0.36	ug/l	0.36	1.2	1	8260B		11/12/2014	CJR	1
Dichlorodifluoromethane	< 0.44	ug/l	0.44	1.4	1	8260B		11/12/2014	CJR	1
1,2-Dichloroethane	< 0.41	ug/l	0.41	1.3	1	8260B		11/12/2014	CJR	1
1,1-Dichloroethane	< 0.3	ug/l	0.3	0.97	1	8260B		11/12/2014	CJR	1
1,1-Dichloroethene	< 0.4	ug/l	0.4	1.3	1	8260B		11/12/2014	CJR	1
cis-1,2-Dichloroethene	< 0.38	ug/l	0.38	1.2	1	8260B		11/12/2014	CJR	1
trans-1,2-Dichloroethene	< 0.35	ug/l	0.35	1.1	1	8260B		11/12/2014	CJR	1
1,2-Dichloropropane	< 0.32	ug/l	0.32	1	1	8260B		11/12/2014	CJR	1
2,2-Dichloropropane	< 0.36	ug/l	0.36	1.2	1	8260B		11/12/2014	CJR	1
1,3-Dichloropropane	< 0.33	ug/l	0.33	1	1	8260B		11/12/2014	CJR	1
Di-isopropyl ether	< 0.23	ug/l	0.23	0.73	1	8260B		11/12/2014	CJR	1
EDB (1,2-Dibromoethane)	< 0.44	ug/l	0.44	1.4	1	8260B		11/12/2014	CJR	1
Ethylbenzene	< 0.55	ug/l	0.55	1.7	1	8260B		11/12/2014	CJR	1
Hexachlorobutadiene	< 1.5	ug/l	1.5	4.8	1	8260B		11/12/2014	CJR	1
Isopropylbenzene	< 0.3	ug/l	0.3	0.96	1	8260B		11/12/2014	CJR	1
p-Isopropyltoluene	< 0.31	ug/l	0.31	0.98	1	8260B		11/12/2014	CJR	1
Methylene chloride	< 0.5	ug/l	0.5	1.6	1	8260B		11/12/2014	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.23	ug/l	0.23	0.74	1	8260B		11/12/2014	CJR	1
Naphthalene	< 1.7	ug/l	1.7	5.5	1	8260B		11/12/2014	CJR	1
n-Propylbenzene	< 0.25	ug/l	0.25	0.81	1	8260B		11/12/2014	CJR	1
1,1,2,2-Tetrachloroethane	< 0.45	ug/l	0.45	1.4	1	8260B		11/12/2014	CJR	1
1,1,1,2-Tetrachloroethane	< 0.33	ug/l	0.33	1.1	1	8260B		11/12/2014	CJR	1
Tetrachloroethene	< 0.33	ug/l	0.33	1.1	1	8260B		11/12/2014	CJR	1
Toluene	< 0.69	ug/l	0.69	2.2	1	8260B		11/12/2014	CJR	1
1,2,4-Trichlorobenzene	< 0.98	ug/l	0.98	3.1	1	8260B		11/12/2014	CJR	1
1,2,3-Trichlorobenzene	< 1.8	ug/l	1.8	5.8	1	8260B		11/12/2014	CJR	1
1,1,1-Trichloroethane	< 0.33	ug/l	0.33	1	1	8260B		11/12/2014	CJR	1
1,1,2-Trichloroethane	< 0.34	ug/l	0.34	1.1	1	8260B		11/12/2014	CJR	1
Trichloroethene (TCE)	< 0.33	ug/l	0.33	1	1	8260B		11/12/2014	CJR	1
Trichlorofluoromethane	< 0.71	ug/l	0.71	2.3	1	8260B		11/12/2014	CJR	1
1,2,4-Trimethylbenzene	< 2.2	ug/l	2.2	6.9	1	8260B		11/12/2014	CJR	1
1,3,5-Trimethylbenzene	< 1.4	ug/l	1.4	4.5	1	8260B		11/12/2014	CJR	1
Vinyl Chloride	< 0.18	ug/l	0.18	0.57	1	8260B		11/12/2014	CJR	1
m&p-Xylene	< 0.69	ug/l	0.69	2.2	1	8260B		11/12/2014	CJR	1
o-Xylene	< 0.63	ug/l	0.63	2	1	8260B		11/12/2014	CJR	1
SUR - Toluene-d8	96	REC %			1	8260B		11/12/2014	CJR	1
SUR - 1,2-Dichloroethane-d4	82	REC %			1	8260B		11/12/2014	CJR	1
SUR - 4-Bromofluorobenzene	103	REC %			1	8260B		11/12/2014	CJR	1
SUR - Dibromofluoromethane	95	REC %			1	8260B		11/12/2014	CJR	1

Project Name FORMER NEWTON GRAVEL PIT **Invoice #** E28048
Project #

Lab Code 5028048I
Sample ID TRIP BLANK
Sample Matrix Water
Sample Date 11/7/2014

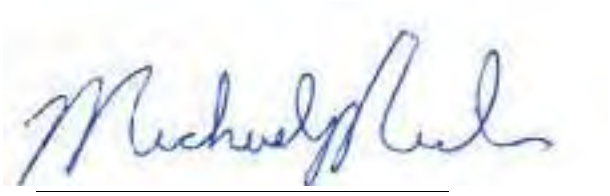
	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
VOC's										
Benzene	< 0.24	ug/l	0.24	0.77	1	8260B		11/12/2014	CJR	1
Bromobenzene	< 0.32	ug/l	0.32	1	1	8260B		11/12/2014	CJR	1
Bromodichloromethane	< 0.37	ug/l	0.37	1.2	1	8260B		11/12/2014	CJR	1
Bromoform	< 0.35	ug/l	0.35	1.1	1	8260B		11/12/2014	CJR	1
tert-Butylbenzene	< 0.36	ug/l	0.36	1.2	1	8260B		11/12/2014	CJR	1
sec-Butylbenzene	< 0.33	ug/l	0.33	1	1	8260B		11/12/2014	CJR	1
n-Butylbenzene	< 0.35	ug/l	0.35	1.1	1	8260B		11/12/2014	CJR	1
Carbon Tetrachloride	< 0.33	ug/l	0.33	1.1	1	8260B		11/12/2014	CJR	1
Chlorobenzene	< 0.24	ug/l	0.24	0.77	1	8260B		11/12/2014	CJR	1
Chloroethane	< 0.63	ug/l	0.63	2	1	8260B		11/12/2014	CJR	1
Chloroform	< 0.28	ug/l	0.28	0.88	1	8260B		11/12/2014	CJR	1
Chloromethane	< 0.81	ug/l	0.81	2.6	1	8260B		11/12/2014	CJR	1
2-Chlorotoluene	< 0.21	ug/l	0.21	0.66	1	8260B		11/12/2014	CJR	1
4-Chlorotoluene	< 0.21	ug/l	0.21	0.68	1	8260B		11/12/2014	CJR	1
1,2-Dibromo-3-chloropropane	< 0.88	ug/l	0.88	2.8	1	8260B		11/12/2014	CJR	4
Dibromochloromethane	< 0.22	ug/l	0.22	0.7	1	8260B		11/12/2014	CJR	1
1,4-Dichlorobenzene	< 0.3	ug/l	0.3	0.96	1	8260B		11/12/2014	CJR	1
1,3-Dichlorobenzene	< 0.28	ug/l	0.28	0.89	1	8260B		11/12/2014	CJR	1
1,2-Dichlorobenzene	< 0.36	ug/l	0.36	1.2	1	8260B		11/12/2014	CJR	1
Dichlorodifluoromethane	< 0.44	ug/l	0.44	1.4	1	8260B		11/12/2014	CJR	1
1,2-Dichloroethane	< 0.41	ug/l	0.41	1.3	1	8260B		11/12/2014	CJR	1
1,1-Dichloroethane	< 0.3	ug/l	0.3	0.97	1	8260B		11/12/2014	CJR	1
1,1-Dichloroethene	< 0.4	ug/l	0.4	1.3	1	8260B		11/12/2014	CJR	1
cis-1,2-Dichloroethene	< 0.38	ug/l	0.38	1.2	1	8260B		11/12/2014	CJR	1
trans-1,2-Dichloroethene	< 0.35	ug/l	0.35	1.1	1	8260B		11/12/2014	CJR	1
1,2-Dichloropropane	< 0.32	ug/l	0.32	1	1	8260B		11/12/2014	CJR	1
2,2-Dichloropropane	< 0.36	ug/l	0.36	1.2	1	8260B		11/12/2014	CJR	1
1,3-Dichloropropane	< 0.33	ug/l	0.33	1	1	8260B		11/12/2014	CJR	1
Di-isopropyl ether	< 0.23	ug/l	0.23	0.73	1	8260B		11/12/2014	CJR	1
EDB (1,2-Dibromoethane)	< 0.44	ug/l	0.44	1.4	1	8260B		11/12/2014	CJR	1
Ethylbenzene	< 0.55	ug/l	0.55	1.7	1	8260B		11/12/2014	CJR	1
Hexachlorobutadiene	< 1.5	ug/l	1.5	4.8	1	8260B		11/12/2014	CJR	1
Isopropylbenzene	< 0.3	ug/l	0.3	0.96	1	8260B		11/12/2014	CJR	1
p-Isopropyltoluene	< 0.31	ug/l	0.31	0.98	1	8260B		11/12/2014	CJR	1
Methylene chloride	< 0.5	ug/l	0.5	1.6	1	8260B		11/12/2014	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.23	ug/l	0.23	0.74	1	8260B		11/12/2014	CJR	1
Naphthalene	< 1.7	ug/l	1.7	5.5	1	8260B		11/12/2014	CJR	1
n-Propylbenzene	< 0.25	ug/l	0.25	0.81	1	8260B		11/12/2014	CJR	1
1,1,2,2-Tetrachloroethane	< 0.45	ug/l	0.45	1.4	1	8260B		11/12/2014	CJR	1
1,1,1,2-Tetrachloroethane	< 0.33	ug/l	0.33	1.1	1	8260B		11/12/2014	CJR	1
Tetrachloroethene	< 0.33	ug/l	0.33	1.1	1	8260B		11/12/2014	CJR	1
Toluene	< 0.69	ug/l	0.69	2.2	1	8260B		11/12/2014	CJR	1
1,2,4-Trichlorobenzene	< 0.98	ug/l	0.98	3.1	1	8260B		11/12/2014	CJR	1
1,2,3-Trichlorobenzene	< 1.8	ug/l	1.8	5.8	1	8260B		11/12/2014	CJR	1
1,1,1-Trichloroethane	< 0.33	ug/l	0.33	1	1	8260B		11/12/2014	CJR	1
1,1,2-Trichloroethane	< 0.34	ug/l	0.34	1.1	1	8260B		11/12/2014	CJR	1
Trichloroethene (TCE)	< 0.33	ug/l	0.33	1	1	8260B		11/12/2014	CJR	1
Trichlorofluoromethane	< 0.71	ug/l	0.71	2.3	1	8260B		11/12/2014	CJR	1
1,2,4-Trimethylbenzene	< 2.2	ug/l	2.2	6.9	1	8260B		11/12/2014	CJR	1
1,3,5-Trimethylbenzene	< 1.4	ug/l	1.4	4.5	1	8260B		11/12/2014	CJR	1
Vinyl Chloride	< 0.18	ug/l	0.18	0.57	1	8260B		11/12/2014	CJR	1
m&p-Xylene	< 0.69	ug/l	0.69	2.2	1	8260B		11/12/2014	CJR	1
o-Xylene	< 0.63	ug/l	0.63	2	1	8260B		11/12/2014	CJR	1
SUR - Toluene-d8	103	REC %			1	8260B		11/12/2014	CJR	1
SUR - 1,2-Dichloroethane-d4	107	REC %			1	8260B		11/12/2014	CJR	1
SUR - 4-Bromofluorobenzene	106	REC %			1	8260B		11/12/2014	CJR	1
SUR - Dibromofluoromethane	101	REC %			1	8260B		11/12/2014	CJR	1

"J" Flag: Analyte detected between LOD and LOQ LOD Limit of Detection LOQ Limit of Quantitation

Code	*Comment*
1	Laboratory QC within limits.
4	The continuing calibration standard not within established limits.

All solid sample results reported on a dry weight basis unless otherwise indicated. All LOD's and LOQ's are adjusted for dilutions but not dry weight. Subcontracted results are denoted by SUB in the analyst field.

Authorized Signature



CHAIN OF STODY RECORD

Synergy Environmental Lab, Inc.

1990 Prospect Ct. • Appleton, WI 54914
920-830-2455 • FAX 920-733-0631

Chain # No 2790

Page 1 of 1

Sample Handling Request
____ Rush Analysis Date Required ____
(Rushes accepted only with prior authorization)
X Normal Turn Around

Lab I.D. #

Account No. : | **Quote No.:**

Project #:

Sampler: (signature) Jordan J

Project (Name / Location): Former Newton Gravel Pit / Manitowoc, WI

Reports To: Dave Henderson	Invoice To: Dave Henderson
Company AECOM	Company SAME
Address 1555 N. RiverCenter Dr. STE 214	Address
City State Zip Milwaukee, WI 53212	City State Zip
Phone 414-944-6190	Phone
FAX 414-944-6080	FAX

Analysis Requested | **Other Analysis**

Lab I.D.	Sample I.D.	Collection Date	Collection Time	Comp	Grab	Filtered Y/N	No. of Containers	Sample Type (Matrix)*	Preservation	DRO (Mod DRO Sep 95)	GRO (Mod GRO Sep 95)	LEAD	NITRATE/NITRITE	OIL & GREASE	PAH (EPA 8270)	PCB	PVOC (EPA 8021)	PVOC + NAPHTHALENE	SULFATE	TOTAL SUSPENDED SOLIDS	VOC DW (EPA 542.2)	VOC (EPA 8260)	8-RCRA METALS	PID/FID
502848A	3701 Viebahn	11/7/14	845		X	N	3	GW	HCl													X		
B	3701 Viebahn Dup	11/7/14	845		X	N	3	GW	HCl													X		
C	3815 Viebahn	11/7/14	920		X	N	3	GW	HCl													X		
D	4101 Viebahn	11/7/14	1015		X	N	3	GW	HCl													X		
E	4025 Viebahn	11/7/14	945		X	N	3	GW	HCl													X		
F	3825 Viebahn	11/7/14	1095		X	N	3	GW	HCl													X		
G	3617 Viebahn	11/7/14	1115		X	N	3	GW	HCl													X		
H	3817 Viebahn	11/7/14	1540		X	N	3	GW	HCl													X		
I	Trip Blank	11/7/14	0800		X	N		GW	HCl													X		

Comments/Special Instructions (*Specify groundwater "GW", Drinking Water "DW", Waste Water "WW", Soil "S", Air "A", Oil, Sludge etc.)

Analysis per Contract
Separate lab report per sample ID

Sample Integrity - To be completed by receiving lab.
Method of Shipment: Durham Express
Temp. of Temp. Blank ___ °C On Ice: X
Cooler seal intact upon receipt: X Yes ___ No

Relinquished By: (sign)	Time	Date	Received By: (sign)	Time	Date
Jordan J	1417	1900	Tay A Sc		
Tay A Sc	11/10/14	0900			

Received in Laboratory By: [signature] Time: 8:20 AM Date: 11-11-14

Synergy Environmental Lab, INC.

1990 Prospect Ct., Appleton, WI 54914 *P 920-830-2455 * F 920-733-0631

DAVE HENDERSON
AECOM
1555 N RIVER CENTER DRIVE
MILWAUKEE, WI 53212

Report Date *19-Nov-14*

Project Name FMR NEWTON GRAVEL PIT **Invoice #** E28074
Project #

Lab Code 5028074A
Sample ID 3312 CTH CR
Sample Matrix Water
Sample Date 11/10/2014

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
VOC's										
Benzene	< 0.24	ug/l	0.24	0.77	1	8260B		11/17/2014	CJR	1
Bromobenzene	< 0.32	ug/l	0.32	1	1	8260B		11/17/2014	CJR	1
Bromodichloromethane	< 0.37	ug/l	0.37	1.2	1	8260B		11/17/2014	CJR	1
Bromoform	< 0.35	ug/l	0.35	1.1	1	8260B		11/17/2014	CJR	1
tert-Butylbenzene	< 0.36	ug/l	0.36	1.2	1	8260B		11/17/2014	CJR	1
sec-Butylbenzene	< 0.33	ug/l	0.33	1	1	8260B		11/17/2014	CJR	1
n-Butylbenzene	< 0.35	ug/l	0.35	1.1	1	8260B		11/17/2014	CJR	1
Carbon Tetrachloride	< 0.33	ug/l	0.33	1.1	1	8260B		11/17/2014	CJR	1
Chlorobenzene	< 0.24	ug/l	0.24	0.77	1	8260B		11/17/2014	CJR	1
Chloroethane	< 0.63	ug/l	0.63	2	1	8260B		11/17/2014	CJR	1
Chloroform	< 0.28	ug/l	0.28	0.88	1	8260B		11/17/2014	CJR	1
Chloromethane	< 0.81	ug/l	0.81	2.6	1	8260B		11/17/2014	CJR	1
2-Chlorotoluene	< 0.21	ug/l	0.21	0.66	1	8260B		11/17/2014	CJR	1
4-Chlorotoluene	< 0.21	ug/l	0.21	0.68	1	8260B		11/17/2014	CJR	1
1,2-Dibromo-3-chloropropane	< 0.88	ug/l	0.88	2.8	1	8260B		11/17/2014	CJR	1
Dibromochloromethane	< 0.22	ug/l	0.22	0.7	1	8260B		11/17/2014	CJR	1
1,4-Dichlorobenzene	< 0.3	ug/l	0.3	0.96	1	8260B		11/17/2014	CJR	1
1,3-Dichlorobenzene	< 0.28	ug/l	0.28	0.89	1	8260B		11/17/2014	CJR	1
1,2-Dichlorobenzene	< 0.36	ug/l	0.36	1.2	1	8260B		11/17/2014	CJR	1
Dichlorodifluoromethane	< 0.44	ug/l	0.44	1.4	1	8260B		11/17/2014	CJR	1
1,2-Dichloroethane	< 0.41	ug/l	0.41	1.3	1	8260B		11/17/2014	CJR	1
1,1-Dichloroethane	< 0.3	ug/l	0.3	0.97	1	8260B		11/17/2014	CJR	1
1,1-Dichloroethene	< 0.4	ug/l	0.4	1.3	1	8260B		11/17/2014	CJR	1
cis-1,2-Dichloroethene	< 0.38	ug/l	0.38	1.2	1	8260B		11/17/2014	CJR	1
trans-1,2-Dichloroethene	< 0.35	ug/l	0.35	1.1	1	8260B		11/17/2014	CJR	1
1,2-Dichloropropane	< 0.32	ug/l	0.32	1	1	8260B		11/17/2014	CJR	1
2,2-Dichloropropane	< 0.36	ug/l	0.36	1.2	1	8260B		11/17/2014	CJR	1
1,3-Dichloropropane	< 0.33	ug/l	0.33	1	1	8260B		11/17/2014	CJR	1
Di-isopropyl ether	< 0.23	ug/l	0.23	0.73	1	8260B		11/17/2014	CJR	1
EDB (1,2-Dibromoethane)	< 0.44	ug/l	0.44	1.4	1	8260B		11/17/2014	CJR	1
Ethylbenzene	< 0.55	ug/l	0.55	1.7	1	8260B		11/17/2014	CJR	1
Hexachlorobutadiene	< 1.5	ug/l	1.5	4.8	1	8260B		11/17/2014	CJR	1
Isopropylbenzene	< 0.3	ug/l	0.3	0.96	1	8260B		11/17/2014	CJR	1

Project Name FMR NEWTON GRAVEL PIT **Invoice #** E28074
Project #

Lab Code 5028074A
Sample ID 3312 CTH CR
Sample Matrix Water
Sample Date 11/10/2014

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
p-Isopropyltoluene	< 0.31	ug/l	0.31	0.98	1	8260B		11/17/2014	CJR	1
Methylene chloride	< 0.5	ug/l	0.5	1.6	1	8260B		11/17/2014	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.23	ug/l	0.23	0.74	1	8260B		11/17/2014	CJR	1
Naphthalene	< 1.7	ug/l	1.7	5.5	1	8260B		11/17/2014	CJR	1
n-Propylbenzene	< 0.25	ug/l	0.25	0.81	1	8260B		11/17/2014	CJR	1
1,1,2,2-Tetrachloroethane	< 0.45	ug/l	0.45	1.4	1	8260B		11/17/2014	CJR	1
1,1,1,2-Tetrachloroethane	< 0.33	ug/l	0.33	1.1	1	8260B		11/17/2014	CJR	1
Tetrachloroethene	< 0.33	ug/l	0.33	1.1	1	8260B		11/17/2014	CJR	1
Toluene	< 0.69	ug/l	0.69	2.2	1	8260B		11/17/2014	CJR	1
1,2,4-Trichlorobenzene	< 0.98	ug/l	0.98	3.1	1	8260B		11/17/2014	CJR	1
1,2,3-Trichlorobenzene	< 1.8	ug/l	1.8	5.8	1	8260B		11/17/2014	CJR	1
1,1,1-Trichloroethane	< 0.33	ug/l	0.33	1	1	8260B		11/17/2014	CJR	1
1,1,2-Trichloroethane	< 0.34	ug/l	0.34	1.1	1	8260B		11/17/2014	CJR	1
Trichloroethene (TCE)	< 0.33	ug/l	0.33	1	1	8260B		11/17/2014	CJR	1
Trichlorofluoromethane	< 0.71	ug/l	0.71	2.3	1	8260B		11/17/2014	CJR	1
1,2,4-Trimethylbenzene	< 2.2	ug/l	2.2	6.9	1	8260B		11/17/2014	CJR	1
1,3,5-Trimethylbenzene	< 1.4	ug/l	1.4	4.5	1	8260B		11/17/2014	CJR	1
Vinyl Chloride	< 0.18	ug/l	0.18	0.57	1	8260B		11/17/2014	CJR	1
m&p-Xylene	< 0.69	ug/l	0.69	2.2	1	8260B		11/17/2014	CJR	1
o-Xylene	< 0.63	ug/l	0.63	2	1	8260B		11/17/2014	CJR	1
SUR - Dibromofluoromethane	96	REC %			1	8260B		11/17/2014	CJR	1
SUR - Toluene-d8	102	REC %			1	8260B		11/17/2014	CJR	1
SUR - 4-Bromofluorobenzene	103	REC %			1	8260B		11/17/2014	CJR	1
SUR - 1,2-Dichloroethane-d4	118	REC %			1	8260B		11/17/2014	CJR	1

Project Name FMR NEWTON GRAVEL PIT **Invoice #** E28074
Project #

Lab Code 5028074B
Sample ID 3921 BLACKHAWK
Sample Matrix Water
Sample Date 11/10/2014

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
VOC's										
Benzene	< 0.24	ug/l	0.24	0.77	1	8260B		11/17/2014	CJR	1
Bromobenzene	< 0.32	ug/l	0.32	1	1	8260B		11/17/2014	CJR	1
Bromodichloromethane	< 0.37	ug/l	0.37	1.2	1	8260B		11/17/2014	CJR	1
Bromoform	< 0.35	ug/l	0.35	1.1	1	8260B		11/17/2014	CJR	1
tert-Butylbenzene	< 0.36	ug/l	0.36	1.2	1	8260B		11/17/2014	CJR	1
sec-Butylbenzene	< 0.33	ug/l	0.33	1	1	8260B		11/17/2014	CJR	1
n-Butylbenzene	< 0.35	ug/l	0.35	1.1	1	8260B		11/17/2014	CJR	1
Carbon Tetrachloride	< 0.33	ug/l	0.33	1.1	1	8260B		11/17/2014	CJR	1
Chlorobenzene	< 0.24	ug/l	0.24	0.77	1	8260B		11/17/2014	CJR	1
Chloroethane	< 0.63	ug/l	0.63	2	1	8260B		11/17/2014	CJR	1
Chloroform	< 0.28	ug/l	0.28	0.88	1	8260B		11/17/2014	CJR	1
Chloromethane	< 0.81	ug/l	0.81	2.6	1	8260B		11/17/2014	CJR	1
2-Chlorotoluene	< 0.21	ug/l	0.21	0.66	1	8260B		11/17/2014	CJR	1
4-Chlorotoluene	< 0.21	ug/l	0.21	0.68	1	8260B		11/17/2014	CJR	1
1,2-Dibromo-3-chloropropane	< 0.88	ug/l	0.88	2.8	1	8260B		11/17/2014	CJR	1
Dibromochloromethane	< 0.22	ug/l	0.22	0.7	1	8260B		11/17/2014	CJR	1
1,4-Dichlorobenzene	< 0.3	ug/l	0.3	0.96	1	8260B		11/17/2014	CJR	1
1,3-Dichlorobenzene	< 0.28	ug/l	0.28	0.89	1	8260B		11/17/2014	CJR	1
1,2-Dichlorobenzene	< 0.36	ug/l	0.36	1.2	1	8260B		11/17/2014	CJR	1
Dichlorodifluoromethane	< 0.44	ug/l	0.44	1.4	1	8260B		11/17/2014	CJR	1
1,2-Dichloroethane	< 0.41	ug/l	0.41	1.3	1	8260B		11/17/2014	CJR	1
1,1-Dichloroethane	< 0.3	ug/l	0.3	0.97	1	8260B		11/17/2014	CJR	1
1,1-Dichloroethene	< 0.4	ug/l	0.4	1.3	1	8260B		11/17/2014	CJR	1
cis-1,2-Dichloroethene	0.65 "J"	ug/l	0.38	1.2	1	8260B		11/17/2014	CJR	1
trans-1,2-Dichloroethene	< 0.35	ug/l	0.35	1.1	1	8260B		11/17/2014	CJR	1
1,2-Dichloropropane	< 0.32	ug/l	0.32	1	1	8260B		11/17/2014	CJR	1
2,2-Dichloropropane	< 0.36	ug/l	0.36	1.2	1	8260B		11/17/2014	CJR	1
1,3-Dichloropropane	< 0.33	ug/l	0.33	1	1	8260B		11/17/2014	CJR	1
Di-isopropyl ether	< 0.23	ug/l	0.23	0.73	1	8260B		11/17/2014	CJR	1
EDB (1,2-Dibromoethane)	< 0.44	ug/l	0.44	1.4	1	8260B		11/17/2014	CJR	1
Ethylbenzene	< 0.55	ug/l	0.55	1.7	1	8260B		11/17/2014	CJR	1
Hexachlorobutadiene	< 1.5	ug/l	1.5	4.8	1	8260B		11/17/2014	CJR	1
Isopropylbenzene	< 0.3	ug/l	0.3	0.96	1	8260B		11/17/2014	CJR	1
p-Isopropyltoluene	< 0.31	ug/l	0.31	0.98	1	8260B		11/17/2014	CJR	1
Methylene chloride	< 0.5	ug/l	0.5	1.6	1	8260B		11/17/2014	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.23	ug/l	0.23	0.74	1	8260B		11/17/2014	CJR	1
Naphthalene	< 1.7	ug/l	1.7	5.5	1	8260B		11/17/2014	CJR	1
n-Propylbenzene	< 0.25	ug/l	0.25	0.81	1	8260B		11/17/2014	CJR	1
1,1,2,2-Tetrachloroethane	< 0.45	ug/l	0.45	1.4	1	8260B		11/17/2014	CJR	1
1,1,1,2-Tetrachloroethane	< 0.33	ug/l	0.33	1.1	1	8260B		11/17/2014	CJR	1
Tetrachloroethene	< 0.33	ug/l	0.33	1.1	1	8260B		11/17/2014	CJR	1
Toluene	< 0.69	ug/l	0.69	2.2	1	8260B		11/17/2014	CJR	1
1,2,4-Trichlorobenzene	< 0.98	ug/l	0.98	3.1	1	8260B		11/17/2014	CJR	1
1,2,3-Trichlorobenzene	< 1.8	ug/l	1.8	5.8	1	8260B		11/17/2014	CJR	1
1,1,1-Trichloroethane	< 0.33	ug/l	0.33	1	1	8260B		11/17/2014	CJR	1
1,1,2-Trichloroethane	< 0.34	ug/l	0.34	1.1	1	8260B		11/17/2014	CJR	1
Trichloroethene (TCE)	< 0.33	ug/l	0.33	1	1	8260B		11/17/2014	CJR	1
Trichlorofluoromethane	< 0.71	ug/l	0.71	2.3	1	8260B		11/17/2014	CJR	1
1,2,4-Trimethylbenzene	< 2.2	ug/l	2.2	6.9	1	8260B		11/17/2014	CJR	1
1,3,5-Trimethylbenzene	< 1.4	ug/l	1.4	4.5	1	8260B		11/17/2014	CJR	1
Vinyl Chloride	< 0.18	ug/l	0.18	0.57	1	8260B		11/17/2014	CJR	1
m&p-Xylene	< 0.69	ug/l	0.69	2.2	1	8260B		11/17/2014	CJR	1
o-Xylene	< 0.63	ug/l	0.63	2	1	8260B		11/17/2014	CJR	1
SUR - 4-Bromofluorobenzene	110	REC %			1	8260B		11/17/2014	CJR	1
SUR - Dibromofluoromethane	93	REC %			1	8260B		11/17/2014	CJR	1
SUR - Toluene-d8	101	REC %			1	8260B		11/17/2014	CJR	1
SUR - 1,2-Dichloroethane-d4	88	REC %			1	8260B		11/17/2014	CJR	1

Project Name FMR NEWTON GRAVEL PIT **Invoice #** E28074
Project #

Lab Code 5028074C
Sample ID 2916 CTH CR
Sample Matrix Water
Sample Date 11/10/2014

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
VOC's										
Benzene	< 0.24	ug/l	0.24	0.77	1	8260B		11/17/2014	CJR	1
Bromobenzene	< 0.32	ug/l	0.32	1	1	8260B		11/17/2014	CJR	1
Bromodichloromethane	< 0.37	ug/l	0.37	1.2	1	8260B		11/17/2014	CJR	1
Bromoform	< 0.35	ug/l	0.35	1.1	1	8260B		11/17/2014	CJR	1
tert-Butylbenzene	< 0.36	ug/l	0.36	1.2	1	8260B		11/17/2014	CJR	1
sec-Butylbenzene	< 0.33	ug/l	0.33	1	1	8260B		11/17/2014	CJR	1
n-Butylbenzene	< 0.35	ug/l	0.35	1.1	1	8260B		11/17/2014	CJR	1
Carbon Tetrachloride	< 0.33	ug/l	0.33	1.1	1	8260B		11/17/2014	CJR	1
Chlorobenzene	< 0.24	ug/l	0.24	0.77	1	8260B		11/17/2014	CJR	1
Chloroethane	< 0.63	ug/l	0.63	2	1	8260B		11/17/2014	CJR	1
Chloroform	< 0.28	ug/l	0.28	0.88	1	8260B		11/17/2014	CJR	1
Chloromethane	< 0.81	ug/l	0.81	2.6	1	8260B		11/17/2014	CJR	1
2-Chlorotoluene	< 0.21	ug/l	0.21	0.66	1	8260B		11/17/2014	CJR	1
4-Chlorotoluene	< 0.21	ug/l	0.21	0.68	1	8260B		11/17/2014	CJR	1
1,2-Dibromo-3-chloropropane	< 0.88	ug/l	0.88	2.8	1	8260B		11/17/2014	CJR	1
Dibromochloromethane	< 0.22	ug/l	0.22	0.7	1	8260B		11/17/2014	CJR	1
1,4-Dichlorobenzene	< 0.3	ug/l	0.3	0.96	1	8260B		11/17/2014	CJR	1
1,3-Dichlorobenzene	< 0.28	ug/l	0.28	0.89	1	8260B		11/17/2014	CJR	1
1,2-Dichlorobenzene	< 0.36	ug/l	0.36	1.2	1	8260B		11/17/2014	CJR	1
Dichlorodifluoromethane	< 0.44	ug/l	0.44	1.4	1	8260B		11/17/2014	CJR	1
1,2-Dichloroethane	< 0.41	ug/l	0.41	1.3	1	8260B		11/17/2014	CJR	1
1,1-Dichloroethane	< 0.3	ug/l	0.3	0.97	1	8260B		11/17/2014	CJR	1
1,1-Dichloroethene	< 0.4	ug/l	0.4	1.3	1	8260B		11/17/2014	CJR	1
cis-1,2-Dichloroethene	0.74 "J"	ug/l	0.38	1.2	1	8260B		11/17/2014	CJR	1
trans-1,2-Dichloroethene	< 0.35	ug/l	0.35	1.1	1	8260B		11/17/2014	CJR	1
1,2-Dichloropropane	< 0.32	ug/l	0.32	1	1	8260B		11/17/2014	CJR	1
2,2-Dichloropropane	< 0.36	ug/l	0.36	1.2	1	8260B		11/17/2014	CJR	1
1,3-Dichloropropane	< 0.33	ug/l	0.33	1	1	8260B		11/17/2014	CJR	1
Di-isopropyl ether	< 0.23	ug/l	0.23	0.73	1	8260B		11/17/2014	CJR	1
EDB (1,2-Dibromoethane)	< 0.44	ug/l	0.44	1.4	1	8260B		11/17/2014	CJR	1
Ethylbenzene	< 0.55	ug/l	0.55	1.7	1	8260B		11/17/2014	CJR	1
Hexachlorobutadiene	< 1.5	ug/l	1.5	4.8	1	8260B		11/17/2014	CJR	1
Isopropylbenzene	< 0.3	ug/l	0.3	0.96	1	8260B		11/17/2014	CJR	1
p-Isopropyltoluene	< 0.31	ug/l	0.31	0.98	1	8260B		11/17/2014	CJR	1
Methylene chloride	< 0.5	ug/l	0.5	1.6	1	8260B		11/17/2014	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.23	ug/l	0.23	0.74	1	8260B		11/17/2014	CJR	1
Naphthalene	< 1.7	ug/l	1.7	5.5	1	8260B		11/17/2014	CJR	1
n-Propylbenzene	< 0.25	ug/l	0.25	0.81	1	8260B		11/17/2014	CJR	1
1,1,2,2-Tetrachloroethane	< 0.45	ug/l	0.45	1.4	1	8260B		11/17/2014	CJR	1
1,1,1,2-Tetrachloroethane	< 0.33	ug/l	0.33	1.1	1	8260B		11/17/2014	CJR	1
Tetrachloroethene	< 0.33	ug/l	0.33	1.1	1	8260B		11/17/2014	CJR	1
Toluene	< 0.69	ug/l	0.69	2.2	1	8260B		11/17/2014	CJR	1
1,2,4-Trichlorobenzene	< 0.98	ug/l	0.98	3.1	1	8260B		11/17/2014	CJR	1
1,2,3-Trichlorobenzene	< 1.8	ug/l	1.8	5.8	1	8260B		11/17/2014	CJR	1
1,1,1-Trichloroethane	< 0.33	ug/l	0.33	1	1	8260B		11/17/2014	CJR	1
1,1,2-Trichloroethane	< 0.34	ug/l	0.34	1.1	1	8260B		11/17/2014	CJR	1
Trichloroethene (TCE)	< 0.33	ug/l	0.33	1	1	8260B		11/17/2014	CJR	1
Trichlorofluoromethane	< 0.71	ug/l	0.71	2.3	1	8260B		11/17/2014	CJR	1
1,2,4-Trimethylbenzene	< 2.2	ug/l	2.2	6.9	1	8260B		11/17/2014	CJR	1
1,3,5-Trimethylbenzene	< 1.4	ug/l	1.4	4.5	1	8260B		11/17/2014	CJR	1
Vinyl Chloride	0.28 "J"	ug/l	0.18	0.57	1	8260B		11/17/2014	CJR	1
m&p-Xylene	< 0.69	ug/l	0.69	2.2	1	8260B		11/17/2014	CJR	1
o-Xylene	< 0.63	ug/l	0.63	2	1	8260B		11/17/2014	CJR	1
SUR - 1,2-Dichloroethane-d4	101	REC %			1	8260B		11/17/2014	CJR	1
SUR - Toluene-d8	99	REC %			1	8260B		11/17/2014	CJR	1
SUR - 4-Bromofluorobenzene	98	REC %			1	8260B		11/17/2014	CJR	1
SUR - Dibromofluoromethane	97	REC %			1	8260B		11/17/2014	CJR	1

Project Name FMR NEWTON GRAVEL PIT **Invoice #** E28074
Project #

Lab Code 5028074D
Sample ID 3412 CTH CR
Sample Matrix Water
Sample Date 11/10/2014

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
VOC's										
Benzene	< 0.24	ug/l	0.24	0.77	1	8260B		11/17/2014	CJR	1
Bromobenzene	< 0.32	ug/l	0.32	1	1	8260B		11/17/2014	CJR	1
Bromodichloromethane	< 0.37	ug/l	0.37	1.2	1	8260B		11/17/2014	CJR	1
Bromoform	< 0.35	ug/l	0.35	1.1	1	8260B		11/17/2014	CJR	1
tert-Butylbenzene	< 0.36	ug/l	0.36	1.2	1	8260B		11/17/2014	CJR	1
sec-Butylbenzene	< 0.33	ug/l	0.33	1	1	8260B		11/17/2014	CJR	1
n-Butylbenzene	< 0.35	ug/l	0.35	1.1	1	8260B		11/17/2014	CJR	1
Carbon Tetrachloride	< 0.33	ug/l	0.33	1.1	1	8260B		11/17/2014	CJR	1
Chlorobenzene	< 0.24	ug/l	0.24	0.77	1	8260B		11/17/2014	CJR	1
Chloroethane	< 0.63	ug/l	0.63	2	1	8260B		11/17/2014	CJR	1
Chloroform	< 0.28	ug/l	0.28	0.88	1	8260B		11/17/2014	CJR	1
Chloromethane	< 0.81	ug/l	0.81	2.6	1	8260B		11/17/2014	CJR	1
2-Chlorotoluene	< 0.21	ug/l	0.21	0.66	1	8260B		11/17/2014	CJR	1
4-Chlorotoluene	< 0.21	ug/l	0.21	0.68	1	8260B		11/17/2014	CJR	1
1,2-Dibromo-3-chloropropane	< 0.88	ug/l	0.88	2.8	1	8260B		11/17/2014	CJR	1
Dibromochloromethane	< 0.22	ug/l	0.22	0.7	1	8260B		11/17/2014	CJR	1
1,4-Dichlorobenzene	< 0.3	ug/l	0.3	0.96	1	8260B		11/17/2014	CJR	1
1,3-Dichlorobenzene	< 0.28	ug/l	0.28	0.89	1	8260B		11/17/2014	CJR	1
1,2-Dichlorobenzene	< 0.36	ug/l	0.36	1.2	1	8260B		11/17/2014	CJR	1
Dichlorodifluoromethane	< 0.44	ug/l	0.44	1.4	1	8260B		11/17/2014	CJR	1
1,2-Dichloroethane	< 0.41	ug/l	0.41	1.3	1	8260B		11/17/2014	CJR	1
1,1-Dichloroethane	< 0.3	ug/l	0.3	0.97	1	8260B		11/17/2014	CJR	1
1,1-Dichloroethene	< 0.4	ug/l	0.4	1.3	1	8260B		11/17/2014	CJR	1
cis-1,2-Dichloroethene	< 0.38	ug/l	0.38	1.2	1	8260B		11/17/2014	CJR	1
trans-1,2-Dichloroethene	< 0.35	ug/l	0.35	1.1	1	8260B		11/17/2014	CJR	1
1,2-Dichloropropane	< 0.32	ug/l	0.32	1	1	8260B		11/17/2014	CJR	1
2,2-Dichloropropane	< 0.36	ug/l	0.36	1.2	1	8260B		11/17/2014	CJR	1
1,3-Dichloropropane	< 0.33	ug/l	0.33	1	1	8260B		11/17/2014	CJR	1
Di-isopropyl ether	< 0.23	ug/l	0.23	0.73	1	8260B		11/17/2014	CJR	1
EDB (1,2-Dibromoethane)	< 0.44	ug/l	0.44	1.4	1	8260B		11/17/2014	CJR	1
Ethylbenzene	< 0.55	ug/l	0.55	1.7	1	8260B		11/17/2014	CJR	1
Hexachlorobutadiene	< 1.5	ug/l	1.5	4.8	1	8260B		11/17/2014	CJR	1
Isopropylbenzene	< 0.3	ug/l	0.3	0.96	1	8260B		11/17/2014	CJR	1
p-Isopropyltoluene	< 0.31	ug/l	0.31	0.98	1	8260B		11/17/2014	CJR	1
Methylene chloride	< 0.5	ug/l	0.5	1.6	1	8260B		11/17/2014	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.23	ug/l	0.23	0.74	1	8260B		11/17/2014	CJR	1
Naphthalene	< 1.7	ug/l	1.7	5.5	1	8260B		11/17/2014	CJR	1
n-Propylbenzene	< 0.25	ug/l	0.25	0.81	1	8260B		11/17/2014	CJR	1
1,1,2,2-Tetrachloroethane	< 0.45	ug/l	0.45	1.4	1	8260B		11/17/2014	CJR	1
1,1,1,2-Tetrachloroethane	< 0.33	ug/l	0.33	1.1	1	8260B		11/17/2014	CJR	1
Tetrachloroethene	< 0.33	ug/l	0.33	1.1	1	8260B		11/17/2014	CJR	1
Toluene	< 0.69	ug/l	0.69	2.2	1	8260B		11/17/2014	CJR	1
1,2,4-Trichlorobenzene	< 0.98	ug/l	0.98	3.1	1	8260B		11/17/2014	CJR	1
1,2,3-Trichlorobenzene	< 1.8	ug/l	1.8	5.8	1	8260B		11/17/2014	CJR	1
1,1,1-Trichloroethane	< 0.33	ug/l	0.33	1	1	8260B		11/17/2014	CJR	1
1,1,2-Trichloroethane	< 0.34	ug/l	0.34	1.1	1	8260B		11/17/2014	CJR	1
Trichloroethene (TCE)	< 0.33	ug/l	0.33	1	1	8260B		11/17/2014	CJR	1
Trichlorofluoromethane	< 0.71	ug/l	0.71	2.3	1	8260B		11/17/2014	CJR	1
1,2,4-Trimethylbenzene	< 2.2	ug/l	2.2	6.9	1	8260B		11/17/2014	CJR	1
1,3,5-Trimethylbenzene	< 1.4	ug/l	1.4	4.5	1	8260B		11/17/2014	CJR	1
Vinyl Chloride	< 0.18	ug/l	0.18	0.57	1	8260B		11/17/2014	CJR	1
m&p-Xylene	< 0.69	ug/l	0.69	2.2	1	8260B		11/17/2014	CJR	1
o-Xylene	< 0.63	ug/l	0.63	2	1	8260B		11/17/2014	CJR	1
SUR - Toluene-d8	99	REC %			1	8260B		11/17/2014	CJR	1
SUR - Dibromofluoromethane	95	REC %			1	8260B		11/17/2014	CJR	1
SUR - 4-Bromofluorobenzene	99	REC %			1	8260B		11/17/2014	CJR	1
SUR - 1,2-Dichloroethane-d4	104	REC %			1	8260B		11/17/2014	CJR	1

Project Name FMR NEWTON GRAVEL PIT **Invoice #** E28074
Project #

Lab Code 5028074E
Sample ID 4159 SILVER
Sample Matrix Water
Sample Date 11/10/2014

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
VOC's										
Benzene	< 0.24	ug/l	0.24	0.77	1	8260B		11/17/2014	CJR	1
Bromobenzene	< 0.32	ug/l	0.32	1	1	8260B		11/17/2014	CJR	1
Bromodichloromethane	< 0.37	ug/l	0.37	1.2	1	8260B		11/17/2014	CJR	1
Bromoform	< 0.35	ug/l	0.35	1.1	1	8260B		11/17/2014	CJR	1
tert-Butylbenzene	< 0.36	ug/l	0.36	1.2	1	8260B		11/17/2014	CJR	1
sec-Butylbenzene	< 0.33	ug/l	0.33	1	1	8260B		11/17/2014	CJR	1
n-Butylbenzene	< 0.35	ug/l	0.35	1.1	1	8260B		11/17/2014	CJR	1
Carbon Tetrachloride	< 0.33	ug/l	0.33	1.1	1	8260B		11/17/2014	CJR	1
Chlorobenzene	< 0.24	ug/l	0.24	0.77	1	8260B		11/17/2014	CJR	1
Chloroethane	< 0.63	ug/l	0.63	2	1	8260B		11/17/2014	CJR	1
Chloroform	< 0.28	ug/l	0.28	0.88	1	8260B		11/17/2014	CJR	1
Chloromethane	< 0.81	ug/l	0.81	2.6	1	8260B		11/17/2014	CJR	1
2-Chlorotoluene	< 0.21	ug/l	0.21	0.66	1	8260B		11/17/2014	CJR	1
4-Chlorotoluene	< 0.21	ug/l	0.21	0.68	1	8260B		11/17/2014	CJR	1
1,2-Dibromo-3-chloropropane	< 0.88	ug/l	0.88	2.8	1	8260B		11/17/2014	CJR	1
Dibromochloromethane	< 0.22	ug/l	0.22	0.7	1	8260B		11/17/2014	CJR	1
1,4-Dichlorobenzene	< 0.3	ug/l	0.3	0.96	1	8260B		11/17/2014	CJR	1
1,3-Dichlorobenzene	< 0.28	ug/l	0.28	0.89	1	8260B		11/17/2014	CJR	1
1,2-Dichlorobenzene	< 0.36	ug/l	0.36	1.2	1	8260B		11/17/2014	CJR	1
Dichlorodifluoromethane	< 0.44	ug/l	0.44	1.4	1	8260B		11/17/2014	CJR	1
1,2-Dichloroethane	< 0.41	ug/l	0.41	1.3	1	8260B		11/17/2014	CJR	1
1,1-Dichloroethane	< 0.3	ug/l	0.3	0.97	1	8260B		11/17/2014	CJR	1
1,1-Dichloroethene	< 0.4	ug/l	0.4	1.3	1	8260B		11/17/2014	CJR	1
cis-1,2-Dichloroethene	0.59 "J"	ug/l	0.38	1.2	1	8260B		11/17/2014	CJR	1
trans-1,2-Dichloroethene	< 0.35	ug/l	0.35	1.1	1	8260B		11/17/2014	CJR	1
1,2-Dichloropropane	< 0.32	ug/l	0.32	1	1	8260B		11/17/2014	CJR	1
2,2-Dichloropropane	< 0.36	ug/l	0.36	1.2	1	8260B		11/17/2014	CJR	1
1,3-Dichloropropane	< 0.33	ug/l	0.33	1	1	8260B		11/17/2014	CJR	1
Di-isopropyl ether	< 0.23	ug/l	0.23	0.73	1	8260B		11/17/2014	CJR	1
EDB (1,2-Dibromoethane)	< 0.44	ug/l	0.44	1.4	1	8260B		11/17/2014	CJR	1
Ethylbenzene	< 0.55	ug/l	0.55	1.7	1	8260B		11/17/2014	CJR	1
Hexachlorobutadiene	< 1.5	ug/l	1.5	4.8	1	8260B		11/17/2014	CJR	1
Isopropylbenzene	< 0.3	ug/l	0.3	0.96	1	8260B		11/17/2014	CJR	1
p-Isopropyltoluene	< 0.31	ug/l	0.31	0.98	1	8260B		11/17/2014	CJR	1
Methylene chloride	< 0.5	ug/l	0.5	1.6	1	8260B		11/17/2014	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.23	ug/l	0.23	0.74	1	8260B		11/17/2014	CJR	1
Naphthalene	< 1.7	ug/l	1.7	5.5	1	8260B		11/17/2014	CJR	1
n-Propylbenzene	< 0.25	ug/l	0.25	0.81	1	8260B		11/17/2014	CJR	1
1,1,2,2-Tetrachloroethane	< 0.45	ug/l	0.45	1.4	1	8260B		11/17/2014	CJR	1
1,1,1,2-Tetrachloroethane	< 0.33	ug/l	0.33	1.1	1	8260B		11/17/2014	CJR	1
Tetrachloroethene	< 0.33	ug/l	0.33	1.1	1	8260B		11/17/2014	CJR	1
Toluene	< 0.69	ug/l	0.69	2.2	1	8260B		11/17/2014	CJR	1
1,2,4-Trichlorobenzene	< 0.98	ug/l	0.98	3.1	1	8260B		11/17/2014	CJR	1
1,2,3-Trichlorobenzene	< 1.8	ug/l	1.8	5.8	1	8260B		11/17/2014	CJR	1
1,1,1-Trichloroethane	< 0.33	ug/l	0.33	1	1	8260B		11/17/2014	CJR	1
1,1,2-Trichloroethane	< 0.34	ug/l	0.34	1.1	1	8260B		11/17/2014	CJR	1
Trichloroethene (TCE)	< 0.33	ug/l	0.33	1	1	8260B		11/17/2014	CJR	1
Trichlorofluoromethane	< 0.71	ug/l	0.71	2.3	1	8260B		11/17/2014	CJR	1
1,2,4-Trimethylbenzene	< 2.2	ug/l	2.2	6.9	1	8260B		11/17/2014	CJR	1
1,3,5-Trimethylbenzene	< 1.4	ug/l	1.4	4.5	1	8260B		11/17/2014	CJR	1
Vinyl Chloride	< 0.18	ug/l	0.18	0.57	1	8260B		11/17/2014	CJR	1
m&p-Xylene	< 0.69	ug/l	0.69	2.2	1	8260B		11/17/2014	CJR	1
o-Xylene	< 0.63	ug/l	0.63	2	1	8260B		11/17/2014	CJR	1
SUR - 4-Bromofluorobenzene	100	REC %			1	8260B		11/17/2014	CJR	1
SUR - Dibromofluoromethane	93	REC %			1	8260B		11/17/2014	CJR	1
SUR - Toluene-d8	99	REC %			1	8260B		11/17/2014	CJR	1
SUR - 1,2-Dichloroethane-d4	106	REC %			1	8260B		11/17/2014	CJR	1

Project Name FMR NEWTON GRAVEL PIT **Invoice #** E28074
Project #

Lab Code 5028074F
Sample ID 4159 SILVER DUP
Sample Matrix Water
Sample Date 11/10/2014

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
VOC's										
Benzene	< 0.24	ug/l	0.24	0.77	1	8260B		11/17/2014	CJR	1
Bromobenzene	< 0.32	ug/l	0.32	1	1	8260B		11/17/2014	CJR	1
Bromodichloromethane	< 0.37	ug/l	0.37	1.2	1	8260B		11/17/2014	CJR	1
Bromoform	< 0.35	ug/l	0.35	1.1	1	8260B		11/17/2014	CJR	1
tert-Butylbenzene	< 0.36	ug/l	0.36	1.2	1	8260B		11/17/2014	CJR	1
sec-Butylbenzene	< 0.33	ug/l	0.33	1	1	8260B		11/17/2014	CJR	1
n-Butylbenzene	< 0.35	ug/l	0.35	1.1	1	8260B		11/17/2014	CJR	1
Carbon Tetrachloride	< 0.33	ug/l	0.33	1.1	1	8260B		11/17/2014	CJR	1
Chlorobenzene	< 0.24	ug/l	0.24	0.77	1	8260B		11/17/2014	CJR	1
Chloroethane	< 0.63	ug/l	0.63	2	1	8260B		11/17/2014	CJR	1
Chloroform	< 0.28	ug/l	0.28	0.88	1	8260B		11/17/2014	CJR	1
Chloromethane	< 0.81	ug/l	0.81	2.6	1	8260B		11/17/2014	CJR	1
2-Chlorotoluene	< 0.21	ug/l	0.21	0.66	1	8260B		11/17/2014	CJR	1
4-Chlorotoluene	< 0.21	ug/l	0.21	0.68	1	8260B		11/17/2014	CJR	1
1,2-Dibromo-3-chloropropane	< 0.88	ug/l	0.88	2.8	1	8260B		11/17/2014	CJR	1
Dibromochloromethane	< 0.22	ug/l	0.22	0.7	1	8260B		11/17/2014	CJR	1
1,4-Dichlorobenzene	< 0.3	ug/l	0.3	0.96	1	8260B		11/17/2014	CJR	1
1,3-Dichlorobenzene	< 0.28	ug/l	0.28	0.89	1	8260B		11/17/2014	CJR	1
1,2-Dichlorobenzene	< 0.36	ug/l	0.36	1.2	1	8260B		11/17/2014	CJR	1
Dichlorodifluoromethane	< 0.44	ug/l	0.44	1.4	1	8260B		11/17/2014	CJR	1
1,2-Dichloroethane	< 0.41	ug/l	0.41	1.3	1	8260B		11/17/2014	CJR	1
1,1-Dichloroethane	< 0.3	ug/l	0.3	0.97	1	8260B		11/17/2014	CJR	1
1,1-Dichloroethene	< 0.4	ug/l	0.4	1.3	1	8260B		11/17/2014	CJR	1
cis-1,2-Dichloroethene	0.52 "J"	ug/l	0.38	1.2	1	8260B		11/17/2014	CJR	1
trans-1,2-Dichloroethene	< 0.35	ug/l	0.35	1.1	1	8260B		11/17/2014	CJR	1
1,2-Dichloropropane	< 0.32	ug/l	0.32	1	1	8260B		11/17/2014	CJR	1
2,2-Dichloropropane	< 0.36	ug/l	0.36	1.2	1	8260B		11/17/2014	CJR	1
1,3-Dichloropropane	< 0.33	ug/l	0.33	1	1	8260B		11/17/2014	CJR	1
Di-isopropyl ether	< 0.23	ug/l	0.23	0.73	1	8260B		11/17/2014	CJR	1
EDB (1,2-Dibromoethane)	< 0.44	ug/l	0.44	1.4	1	8260B		11/17/2014	CJR	1
Ethylbenzene	< 0.55	ug/l	0.55	1.7	1	8260B		11/17/2014	CJR	1
Hexachlorobutadiene	< 1.5	ug/l	1.5	4.8	1	8260B		11/17/2014	CJR	1
Isopropylbenzene	< 0.3	ug/l	0.3	0.96	1	8260B		11/17/2014	CJR	1
p-Isopropyltoluene	< 0.31	ug/l	0.31	0.98	1	8260B		11/17/2014	CJR	1
Methylene chloride	< 0.5	ug/l	0.5	1.6	1	8260B		11/17/2014	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.23	ug/l	0.23	0.74	1	8260B		11/17/2014	CJR	1
Naphthalene	< 1.7	ug/l	1.7	5.5	1	8260B		11/17/2014	CJR	1
n-Propylbenzene	< 0.25	ug/l	0.25	0.81	1	8260B		11/17/2014	CJR	1
1,1,2,2-Tetrachloroethane	< 0.45	ug/l	0.45	1.4	1	8260B		11/17/2014	CJR	1
1,1,1,2-Tetrachloroethane	< 0.33	ug/l	0.33	1.1	1	8260B		11/17/2014	CJR	1
Tetrachloroethene	< 0.33	ug/l	0.33	1.1	1	8260B		11/17/2014	CJR	1
Toluene	< 0.69	ug/l	0.69	2.2	1	8260B		11/17/2014	CJR	1
1,2,4-Trichlorobenzene	< 0.98	ug/l	0.98	3.1	1	8260B		11/17/2014	CJR	1
1,2,3-Trichlorobenzene	< 1.8	ug/l	1.8	5.8	1	8260B		11/17/2014	CJR	1
1,1,1-Trichloroethane	< 0.33	ug/l	0.33	1	1	8260B		11/17/2014	CJR	1
1,1,2-Trichloroethane	< 0.34	ug/l	0.34	1.1	1	8260B		11/17/2014	CJR	1
Trichloroethene (TCE)	< 0.33	ug/l	0.33	1	1	8260B		11/17/2014	CJR	1
Trichlorofluoromethane	< 0.71	ug/l	0.71	2.3	1	8260B		11/17/2014	CJR	1
1,2,4-Trimethylbenzene	< 2.2	ug/l	2.2	6.9	1	8260B		11/17/2014	CJR	1
1,3,5-Trimethylbenzene	< 1.4	ug/l	1.4	4.5	1	8260B		11/17/2014	CJR	1
Vinyl Chloride	< 0.18	ug/l	0.18	0.57	1	8260B		11/17/2014	CJR	1
m&p-Xylene	< 0.69	ug/l	0.69	2.2	1	8260B		11/17/2014	CJR	1
o-Xylene	< 0.63	ug/l	0.63	2	1	8260B		11/17/2014	CJR	1
SUR - 1,2-Dichloroethane-d4	88	REC %			1	8260B		11/17/2014	CJR	1
SUR - 4-Bromofluorobenzene	118	REC %			1	8260B		11/17/2014	CJR	1
SUR - Dibromofluoromethane	94	REC %			1	8260B		11/17/2014	CJR	1
SUR - Toluene-d8	101	REC %			1	8260B		11/17/2014	CJR	1

Project Name FMR NEWTON GRAVEL PIT **Invoice #** E28074
Project #

Lab Code 5028074G
Sample ID 3518 HECKER
Sample Matrix Water
Sample Date 11/10/2014

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
VOC's										
Benzene	< 0.24	ug/l	0.24	0.77	1	8260B		11/17/2014	CJR	1
Bromobenzene	< 0.32	ug/l	0.32	1	1	8260B		11/17/2014	CJR	1
Bromodichloromethane	< 0.37	ug/l	0.37	1.2	1	8260B		11/17/2014	CJR	1
Bromoform	< 0.35	ug/l	0.35	1.1	1	8260B		11/17/2014	CJR	1
tert-Butylbenzene	< 0.36	ug/l	0.36	1.2	1	8260B		11/17/2014	CJR	1
sec-Butylbenzene	< 0.33	ug/l	0.33	1	1	8260B		11/17/2014	CJR	1
n-Butylbenzene	< 0.35	ug/l	0.35	1.1	1	8260B		11/17/2014	CJR	1
Carbon Tetrachloride	< 0.33	ug/l	0.33	1.1	1	8260B		11/17/2014	CJR	1
Chlorobenzene	< 0.24	ug/l	0.24	0.77	1	8260B		11/17/2014	CJR	1
Chloroethane	< 0.63	ug/l	0.63	2	1	8260B		11/17/2014	CJR	1
Chloroform	< 0.28	ug/l	0.28	0.88	1	8260B		11/17/2014	CJR	1
Chloromethane	< 0.81	ug/l	0.81	2.6	1	8260B		11/17/2014	CJR	1
2-Chlorotoluene	< 0.21	ug/l	0.21	0.66	1	8260B		11/17/2014	CJR	1
4-Chlorotoluene	< 0.21	ug/l	0.21	0.68	1	8260B		11/17/2014	CJR	1
1,2-Dibromo-3-chloropropane	< 0.88	ug/l	0.88	2.8	1	8260B		11/17/2014	CJR	1
Dibromochloromethane	< 0.22	ug/l	0.22	0.7	1	8260B		11/17/2014	CJR	1
1,4-Dichlorobenzene	< 0.3	ug/l	0.3	0.96	1	8260B		11/17/2014	CJR	1
1,3-Dichlorobenzene	< 0.28	ug/l	0.28	0.89	1	8260B		11/17/2014	CJR	1
1,2-Dichlorobenzene	< 0.36	ug/l	0.36	1.2	1	8260B		11/17/2014	CJR	1
Dichlorodifluoromethane	< 0.44	ug/l	0.44	1.4	1	8260B		11/17/2014	CJR	1
1,2-Dichloroethane	< 0.41	ug/l	0.41	1.3	1	8260B		11/17/2014	CJR	1
1,1-Dichloroethane	< 0.3	ug/l	0.3	0.97	1	8260B		11/17/2014	CJR	1
1,1-Dichloroethene	< 0.4	ug/l	0.4	1.3	1	8260B		11/17/2014	CJR	1
cis-1,2-Dichloroethene	< 0.38	ug/l	0.38	1.2	1	8260B		11/17/2014	CJR	1
trans-1,2-Dichloroethene	< 0.35	ug/l	0.35	1.1	1	8260B		11/17/2014	CJR	1
1,2-Dichloropropane	< 0.32	ug/l	0.32	1	1	8260B		11/17/2014	CJR	1
2,2-Dichloropropane	< 0.36	ug/l	0.36	1.2	1	8260B		11/17/2014	CJR	1
1,3-Dichloropropane	< 0.33	ug/l	0.33	1	1	8260B		11/17/2014	CJR	1
Di-isopropyl ether	< 0.23	ug/l	0.23	0.73	1	8260B		11/17/2014	CJR	1
EDB (1,2-Dibromoethane)	< 0.44	ug/l	0.44	1.4	1	8260B		11/17/2014	CJR	1
Ethylbenzene	< 0.55	ug/l	0.55	1.7	1	8260B		11/17/2014	CJR	1
Hexachlorobutadiene	< 1.5	ug/l	1.5	4.8	1	8260B		11/17/2014	CJR	1
Isopropylbenzene	< 0.3	ug/l	0.3	0.96	1	8260B		11/17/2014	CJR	1
p-Isopropyltoluene	< 0.31	ug/l	0.31	0.98	1	8260B		11/17/2014	CJR	1
Methylene chloride	< 0.5	ug/l	0.5	1.6	1	8260B		11/17/2014	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.23	ug/l	0.23	0.74	1	8260B		11/17/2014	CJR	1
Naphthalene	< 1.7	ug/l	1.7	5.5	1	8260B		11/17/2014	CJR	1
n-Propylbenzene	< 0.25	ug/l	0.25	0.81	1	8260B		11/17/2014	CJR	1
1,1,2,2-Tetrachloroethane	< 0.45	ug/l	0.45	1.4	1	8260B		11/17/2014	CJR	1
1,1,1,2-Tetrachloroethane	< 0.33	ug/l	0.33	1.1	1	8260B		11/17/2014	CJR	1
Tetrachloroethene	< 0.33	ug/l	0.33	1.1	1	8260B		11/17/2014	CJR	1
Toluene	< 0.69	ug/l	0.69	2.2	1	8260B		11/17/2014	CJR	1
1,2,4-Trichlorobenzene	< 0.98	ug/l	0.98	3.1	1	8260B		11/17/2014	CJR	1
1,2,3-Trichlorobenzene	< 1.8	ug/l	1.8	5.8	1	8260B		11/17/2014	CJR	1
1,1,1-Trichloroethane	< 0.33	ug/l	0.33	1	1	8260B		11/17/2014	CJR	1
1,1,2-Trichloroethane	< 0.34	ug/l	0.34	1.1	1	8260B		11/17/2014	CJR	1
Trichloroethene (TCE)	< 0.33	ug/l	0.33	1	1	8260B		11/17/2014	CJR	1
Trichlorofluoromethane	< 0.71	ug/l	0.71	2.3	1	8260B		11/17/2014	CJR	1
1,2,4-Trimethylbenzene	< 2.2	ug/l	2.2	6.9	1	8260B		11/17/2014	CJR	1
1,3,5-Trimethylbenzene	< 1.4	ug/l	1.4	4.5	1	8260B		11/17/2014	CJR	1
Vinyl Chloride	< 0.18	ug/l	0.18	0.57	1	8260B		11/17/2014	CJR	1
m&p-Xylene	< 0.69	ug/l	0.69	2.2	1	8260B		11/17/2014	CJR	1
o-Xylene	< 0.63	ug/l	0.63	2	1	8260B		11/17/2014	CJR	1
SUR - 1,2-Dichloroethane-d4	94	REC %			1	8260B		11/17/2014	CJR	1
SUR - 4-Bromofluorobenzene	110	REC %			1	8260B		11/17/2014	CJR	1
SUR - Dibromofluoromethane	101	REC %			1	8260B		11/17/2014	CJR	1
SUR - Toluene-d8	105	REC %			1	8260B		11/17/2014	CJR	1

Project Name FMR NEWTON GRAVEL PIT **Invoice #** E28074
Project #

Lab Code 5028074H
Sample ID 3618 CTH CR
Sample Matrix Water
Sample Date 11/10/2014

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
VOC's										
Benzene	< 0.24	ug/l	0.24	0.77	1	8260B		11/18/2014	CJR	1
Bromobenzene	< 0.32	ug/l	0.32	1	1	8260B		11/18/2014	CJR	1
Bromodichloromethane	< 0.37	ug/l	0.37	1.2	1	8260B		11/18/2014	CJR	1
Bromoform	< 0.35	ug/l	0.35	1.1	1	8260B		11/18/2014	CJR	1
tert-Butylbenzene	< 0.36	ug/l	0.36	1.2	1	8260B		11/18/2014	CJR	1
sec-Butylbenzene	< 0.33	ug/l	0.33	1	1	8260B		11/18/2014	CJR	1
n-Butylbenzene	< 0.35	ug/l	0.35	1.1	1	8260B		11/18/2014	CJR	1
Carbon Tetrachloride	< 0.33	ug/l	0.33	1.1	1	8260B		11/18/2014	CJR	1
Chlorobenzene	< 0.24	ug/l	0.24	0.77	1	8260B		11/18/2014	CJR	1
Chloroethane	< 0.63	ug/l	0.63	2	1	8260B		11/18/2014	CJR	1
Chloroform	< 0.28	ug/l	0.28	0.88	1	8260B		11/18/2014	CJR	1
Chloromethane	< 0.81	ug/l	0.81	2.6	1	8260B		11/18/2014	CJR	1
2-Chlorotoluene	< 0.21	ug/l	0.21	0.66	1	8260B		11/18/2014	CJR	1
4-Chlorotoluene	< 0.21	ug/l	0.21	0.68	1	8260B		11/18/2014	CJR	1
1,2-Dibromo-3-chloropropane	< 0.88	ug/l	0.88	2.8	1	8260B		11/18/2014	CJR	1
Dibromochloromethane	< 0.22	ug/l	0.22	0.7	1	8260B		11/18/2014	CJR	1
1,4-Dichlorobenzene	< 0.3	ug/l	0.3	0.96	1	8260B		11/18/2014	CJR	1
1,3-Dichlorobenzene	< 0.28	ug/l	0.28	0.89	1	8260B		11/18/2014	CJR	1
1,2-Dichlorobenzene	< 0.36	ug/l	0.36	1.2	1	8260B		11/18/2014	CJR	1
Dichlorodifluoromethane	< 0.44	ug/l	0.44	1.4	1	8260B		11/18/2014	CJR	1
1,2-Dichloroethane	< 0.41	ug/l	0.41	1.3	1	8260B		11/18/2014	CJR	1
1,1-Dichloroethane	< 0.3	ug/l	0.3	0.97	1	8260B		11/18/2014	CJR	1
1,1-Dichloroethene	< 0.4	ug/l	0.4	1.3	1	8260B		11/18/2014	CJR	1
cis-1,2-Dichloroethene	0.83 "J"	ug/l	0.38	1.2	1	8260B		11/18/2014	CJR	1
trans-1,2-Dichloroethene	< 0.35	ug/l	0.35	1.1	1	8260B		11/18/2014	CJR	1
1,2-Dichloropropane	< 0.32	ug/l	0.32	1	1	8260B		11/18/2014	CJR	1
2,2-Dichloropropane	< 0.36	ug/l	0.36	1.2	1	8260B		11/18/2014	CJR	8
1,3-Dichloropropane	< 0.33	ug/l	0.33	1	1	8260B		11/18/2014	CJR	1
Di-isopropyl ether	< 0.23	ug/l	0.23	0.73	1	8260B		11/18/2014	CJR	1
EDB (1,2-Dibromoethane)	< 0.44	ug/l	0.44	1.4	1	8260B		11/18/2014	CJR	1
Ethylbenzene	< 0.55	ug/l	0.55	1.7	1	8260B		11/18/2014	CJR	1
Hexachlorobutadiene	< 1.5	ug/l	1.5	4.8	1	8260B		11/18/2014	CJR	1
Isopropylbenzene	< 0.3	ug/l	0.3	0.96	1	8260B		11/18/2014	CJR	1
p-Isopropyltoluene	< 0.31	ug/l	0.31	0.98	1	8260B		11/18/2014	CJR	1
Methylene chloride	< 0.5	ug/l	0.5	1.6	1	8260B		11/18/2014	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.23	ug/l	0.23	0.74	1	8260B		11/18/2014	CJR	1
Naphthalene	< 1.7	ug/l	1.7	5.5	1	8260B		11/18/2014	CJR	1
n-Propylbenzene	< 0.25	ug/l	0.25	0.81	1	8260B		11/18/2014	CJR	1
1,1,2,2-Tetrachloroethane	< 0.45	ug/l	0.45	1.4	1	8260B		11/18/2014	CJR	1
1,1,1,2-Tetrachloroethane	< 0.33	ug/l	0.33	1.1	1	8260B		11/18/2014	CJR	1
Tetrachloroethene	< 0.33	ug/l	0.33	1.1	1	8260B		11/18/2014	CJR	1
Toluene	< 0.69	ug/l	0.69	2.2	1	8260B		11/18/2014	CJR	1
1,2,4-Trichlorobenzene	< 0.98	ug/l	0.98	3.1	1	8260B		11/18/2014	CJR	1
1,2,3-Trichlorobenzene	< 1.8	ug/l	1.8	5.8	1	8260B		11/18/2014	CJR	1
1,1,1-Trichloroethane	< 0.33	ug/l	0.33	1	1	8260B		11/18/2014	CJR	1
1,1,2-Trichloroethane	< 0.34	ug/l	0.34	1.1	1	8260B		11/18/2014	CJR	1
Trichloroethene (TCE)	< 0.33	ug/l	0.33	1	1	8260B		11/18/2014	CJR	1
Trichlorofluoromethane	< 0.71	ug/l	0.71	2.3	1	8260B		11/18/2014	CJR	1
1,2,4-Trimethylbenzene	< 2.2	ug/l	2.2	6.9	1	8260B		11/18/2014	CJR	1
1,3,5-Trimethylbenzene	< 1.4	ug/l	1.4	4.5	1	8260B		11/18/2014	CJR	1
Vinyl Chloride	< 0.18	ug/l	0.18	0.57	1	8260B		11/18/2014	CJR	1
m&p-Xylene	< 0.69	ug/l	0.69	2.2	1	8260B		11/18/2014	CJR	1
o-Xylene	< 0.63	ug/l	0.63	2	1	8260B		11/18/2014	CJR	1
SUR - Toluene-d8	110	REC %			1	8260B		11/18/2014	CJR	1
SUR - 1,2-Dichloroethane-d4	98	REC %			1	8260B		11/18/2014	CJR	1
SUR - 4-Bromofluorobenzene	95	REC %			1	8260B		11/18/2014	CJR	1
SUR - Dibromofluoromethane	103	REC %			1	8260B		11/18/2014	CJR	1

Project Name FMR NEWTON GRAVEL PIT **Invoice #** E28074
Project #

Lab Code 5028074I
Sample ID 3322 CTH CR
Sample Matrix Water
Sample Date 11/10/2014

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
VOC's										
Benzene	< 0.24	ug/l	0.24	0.77	1	8260B		11/17/2014	CJR	1
Bromobenzene	< 0.32	ug/l	0.32	1	1	8260B		11/17/2014	CJR	1
Bromodichloromethane	< 0.37	ug/l	0.37	1.2	1	8260B		11/17/2014	CJR	1
Bromoform	< 0.35	ug/l	0.35	1.1	1	8260B		11/17/2014	CJR	1
tert-Butylbenzene	< 0.36	ug/l	0.36	1.2	1	8260B		11/17/2014	CJR	1
sec-Butylbenzene	< 0.33	ug/l	0.33	1	1	8260B		11/17/2014	CJR	1
n-Butylbenzene	< 0.35	ug/l	0.35	1.1	1	8260B		11/17/2014	CJR	1
Carbon Tetrachloride	< 0.33	ug/l	0.33	1.1	1	8260B		11/17/2014	CJR	1
Chlorobenzene	< 0.24	ug/l	0.24	0.77	1	8260B		11/17/2014	CJR	1
Chloroethane	< 0.63	ug/l	0.63	2	1	8260B		11/17/2014	CJR	1
Chloroform	< 0.28	ug/l	0.28	0.88	1	8260B		11/17/2014	CJR	1
Chloromethane	< 0.81	ug/l	0.81	2.6	1	8260B		11/17/2014	CJR	1
2-Chlorotoluene	< 0.21	ug/l	0.21	0.66	1	8260B		11/17/2014	CJR	1
4-Chlorotoluene	< 0.21	ug/l	0.21	0.68	1	8260B		11/17/2014	CJR	1
1,2-Dibromo-3-chloropropane	< 0.88	ug/l	0.88	2.8	1	8260B		11/17/2014	CJR	1
Dibromochloromethane	< 0.22	ug/l	0.22	0.7	1	8260B		11/17/2014	CJR	1
1,4-Dichlorobenzene	< 0.3	ug/l	0.3	0.96	1	8260B		11/17/2014	CJR	1
1,3-Dichlorobenzene	< 0.28	ug/l	0.28	0.89	1	8260B		11/17/2014	CJR	1
1,2-Dichlorobenzene	< 0.36	ug/l	0.36	1.2	1	8260B		11/17/2014	CJR	1
Dichlorodifluoromethane	< 0.44	ug/l	0.44	1.4	1	8260B		11/17/2014	CJR	1
1,2-Dichloroethane	< 0.41	ug/l	0.41	1.3	1	8260B		11/17/2014	CJR	1
1,1-Dichloroethane	< 0.3	ug/l	0.3	0.97	1	8260B		11/17/2014	CJR	1
1,1-Dichloroethene	< 0.4	ug/l	0.4	1.3	1	8260B		11/17/2014	CJR	1
cis-1,2-Dichloroethene	< 0.38	ug/l	0.38	1.2	1	8260B		11/17/2014	CJR	1
trans-1,2-Dichloroethene	< 0.35	ug/l	0.35	1.1	1	8260B		11/17/2014	CJR	1
1,2-Dichloropropane	< 0.32	ug/l	0.32	1	1	8260B		11/17/2014	CJR	1
2,2-Dichloropropane	< 0.36	ug/l	0.36	1.2	1	8260B		11/17/2014	CJR	1
1,3-Dichloropropane	< 0.33	ug/l	0.33	1	1	8260B		11/17/2014	CJR	1
Di-isopropyl ether	< 0.23	ug/l	0.23	0.73	1	8260B		11/17/2014	CJR	1
EDB (1,2-Dibromoethane)	< 0.44	ug/l	0.44	1.4	1	8260B		11/17/2014	CJR	1
Ethylbenzene	< 0.55	ug/l	0.55	1.7	1	8260B		11/17/2014	CJR	1
Hexachlorobutadiene	< 1.5	ug/l	1.5	4.8	1	8260B		11/17/2014	CJR	1
Isopropylbenzene	< 0.3	ug/l	0.3	0.96	1	8260B		11/17/2014	CJR	1
p-Isopropyltoluene	< 0.31	ug/l	0.31	0.98	1	8260B		11/17/2014	CJR	1
Methylene chloride	< 0.5	ug/l	0.5	1.6	1	8260B		11/17/2014	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.23	ug/l	0.23	0.74	1	8260B		11/17/2014	CJR	1
Naphthalene	< 1.7	ug/l	1.7	5.5	1	8260B		11/17/2014	CJR	1
n-Propylbenzene	< 0.25	ug/l	0.25	0.81	1	8260B		11/17/2014	CJR	1
1,1,2,2-Tetrachloroethane	< 0.45	ug/l	0.45	1.4	1	8260B		11/17/2014	CJR	1
1,1,1,2-Tetrachloroethane	< 0.33	ug/l	0.33	1.1	1	8260B		11/17/2014	CJR	1
Tetrachloroethene	< 0.33	ug/l	0.33	1.1	1	8260B		11/17/2014	CJR	1
Toluene	< 0.69	ug/l	0.69	2.2	1	8260B		11/17/2014	CJR	1
1,2,4-Trichlorobenzene	< 0.98	ug/l	0.98	3.1	1	8260B		11/17/2014	CJR	1
1,2,3-Trichlorobenzene	< 1.8	ug/l	1.8	5.8	1	8260B		11/17/2014	CJR	1
1,1,1-Trichloroethane	< 0.33	ug/l	0.33	1	1	8260B		11/17/2014	CJR	1
1,1,2-Trichloroethane	< 0.34	ug/l	0.34	1.1	1	8260B		11/17/2014	CJR	1
Trichloroethene (TCE)	< 0.33	ug/l	0.33	1	1	8260B		11/17/2014	CJR	1
Trichlorofluoromethane	< 0.71	ug/l	0.71	2.3	1	8260B		11/17/2014	CJR	1
1,2,4-Trimethylbenzene	< 2.2	ug/l	2.2	6.9	1	8260B		11/17/2014	CJR	1
1,3,5-Trimethylbenzene	< 1.4	ug/l	1.4	4.5	1	8260B		11/17/2014	CJR	1
Vinyl Chloride	< 0.18	ug/l	0.18	0.57	1	8260B		11/17/2014	CJR	1
m&p-Xylene	< 0.69	ug/l	0.69	2.2	1	8260B		11/17/2014	CJR	1
o-Xylene	< 0.63	ug/l	0.63	2	1	8260B		11/17/2014	CJR	1
SUR - Dibromofluoromethane	95	REC %			1	8260B		11/17/2014	CJR	1
SUR - 1,2-Dichloroethane-d4	112	REC %			1	8260B		11/17/2014	CJR	1
SUR - 4-Bromofluorobenzene	100	REC %			1	8260B		11/17/2014	CJR	1
SUR - Toluene-d8	86	REC %			1	8260B		11/17/2014	CJR	1

Project Name FMR NEWTON GRAVEL PIT **Invoice #** E28074
Project #

Lab Code 5028074J
Sample ID 2717 CTH CR
Sample Matrix Water
Sample Date 11/10/2014

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
VOC's										
Benzene	< 0.24	ug/l	0.24	0.77	1	8260B		11/17/2014	CJR	1
Bromobenzene	< 0.32	ug/l	0.32	1	1	8260B		11/17/2014	CJR	1
Bromodichloromethane	< 0.37	ug/l	0.37	1.2	1	8260B		11/17/2014	CJR	1
Bromoform	< 0.35	ug/l	0.35	1.1	1	8260B		11/17/2014	CJR	1
tert-Butylbenzene	< 0.36	ug/l	0.36	1.2	1	8260B		11/17/2014	CJR	1
sec-Butylbenzene	< 0.33	ug/l	0.33	1	1	8260B		11/17/2014	CJR	1
n-Butylbenzene	< 0.35	ug/l	0.35	1.1	1	8260B		11/17/2014	CJR	1
Carbon Tetrachloride	< 0.33	ug/l	0.33	1.1	1	8260B		11/17/2014	CJR	1
Chlorobenzene	< 0.24	ug/l	0.24	0.77	1	8260B		11/17/2014	CJR	1
Chloroethane	< 0.63	ug/l	0.63	2	1	8260B		11/17/2014	CJR	1
Chloroform	< 0.28	ug/l	0.28	0.88	1	8260B		11/17/2014	CJR	1
Chloromethane	< 0.81	ug/l	0.81	2.6	1	8260B		11/17/2014	CJR	1
2-Chlorotoluene	< 0.21	ug/l	0.21	0.66	1	8260B		11/17/2014	CJR	1
4-Chlorotoluene	< 0.21	ug/l	0.21	0.68	1	8260B		11/17/2014	CJR	1
1,2-Dibromo-3-chloropropane	< 0.88	ug/l	0.88	2.8	1	8260B		11/17/2014	CJR	1
Dibromochloromethane	< 0.22	ug/l	0.22	0.7	1	8260B		11/17/2014	CJR	1
1,4-Dichlorobenzene	< 0.3	ug/l	0.3	0.96	1	8260B		11/17/2014	CJR	1
1,3-Dichlorobenzene	< 0.28	ug/l	0.28	0.89	1	8260B		11/17/2014	CJR	1
1,2-Dichlorobenzene	< 0.36	ug/l	0.36	1.2	1	8260B		11/17/2014	CJR	1
Dichlorodifluoromethane	< 0.44	ug/l	0.44	1.4	1	8260B		11/17/2014	CJR	1
1,2-Dichloroethane	< 0.41	ug/l	0.41	1.3	1	8260B		11/17/2014	CJR	1
1,1-Dichloroethane	< 0.3	ug/l	0.3	0.97	1	8260B		11/17/2014	CJR	1
1,1-Dichloroethene	< 0.4	ug/l	0.4	1.3	1	8260B		11/17/2014	CJR	1
cis-1,2-Dichloroethene	1.3	ug/l	0.38	1.2	1	8260B		11/17/2014	CJR	1
trans-1,2-Dichloroethene	< 0.35	ug/l	0.35	1.1	1	8260B		11/17/2014	CJR	1
1,2-Dichloropropane	< 0.32	ug/l	0.32	1	1	8260B		11/17/2014	CJR	1
2,2-Dichloropropane	< 0.36	ug/l	0.36	1.2	1	8260B		11/17/2014	CJR	1
1,3-Dichloropropane	< 0.33	ug/l	0.33	1	1	8260B		11/17/2014	CJR	1
Di-isopropyl ether	< 0.23	ug/l	0.23	0.73	1	8260B		11/17/2014	CJR	1
EDB (1,2-Dibromoethane)	< 0.44	ug/l	0.44	1.4	1	8260B		11/17/2014	CJR	1
Ethylbenzene	< 0.55	ug/l	0.55	1.7	1	8260B		11/17/2014	CJR	1
Hexachlorobutadiene	< 1.5	ug/l	1.5	4.8	1	8260B		11/17/2014	CJR	1
Isopropylbenzene	< 0.3	ug/l	0.3	0.96	1	8260B		11/17/2014	CJR	1
p-Isopropyltoluene	< 0.31	ug/l	0.31	0.98	1	8260B		11/17/2014	CJR	1
Methylene chloride	< 0.5	ug/l	0.5	1.6	1	8260B		11/17/2014	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.23	ug/l	0.23	0.74	1	8260B		11/17/2014	CJR	1
Naphthalene	< 1.7	ug/l	1.7	5.5	1	8260B		11/17/2014	CJR	1
n-Propylbenzene	< 0.25	ug/l	0.25	0.81	1	8260B		11/17/2014	CJR	1
1,1,2,2-Tetrachloroethane	< 0.45	ug/l	0.45	1.4	1	8260B		11/17/2014	CJR	1
1,1,1,2-Tetrachloroethane	< 0.33	ug/l	0.33	1.1	1	8260B		11/17/2014	CJR	1
Tetrachloroethene	< 0.33	ug/l	0.33	1.1	1	8260B		11/17/2014	CJR	1
Toluene	< 0.69	ug/l	0.69	2.2	1	8260B		11/17/2014	CJR	1
1,2,4-Trichlorobenzene	< 0.98	ug/l	0.98	3.1	1	8260B		11/17/2014	CJR	1
1,2,3-Trichlorobenzene	< 1.8	ug/l	1.8	5.8	1	8260B		11/17/2014	CJR	1
1,1,1-Trichloroethane	< 0.33	ug/l	0.33	1	1	8260B		11/17/2014	CJR	1
1,1,2-Trichloroethane	< 0.34	ug/l	0.34	1.1	1	8260B		11/17/2014	CJR	1
Trichloroethene (TCE)	< 0.33	ug/l	0.33	1	1	8260B		11/17/2014	CJR	1
Trichlorofluoromethane	< 0.71	ug/l	0.71	2.3	1	8260B		11/17/2014	CJR	1
1,2,4-Trimethylbenzene	< 2.2	ug/l	2.2	6.9	1	8260B		11/17/2014	CJR	1
1,3,5-Trimethylbenzene	< 1.4	ug/l	1.4	4.5	1	8260B		11/17/2014	CJR	1
Vinyl Chloride	0.39 "J"	ug/l	0.18	0.57	1	8260B		11/17/2014	CJR	1
m&p-Xylene	< 0.69	ug/l	0.69	2.2	1	8260B		11/17/2014	CJR	1
o-Xylene	< 0.63	ug/l	0.63	2	1	8260B		11/17/2014	CJR	1
SUR - Dibromofluoromethane	97	REC %			1	8260B		11/17/2014	CJR	1
SUR - Toluene-d8	77	REC %			1	8260B		11/17/2014	CJR	1
SUR - 4-Bromofluorobenzene	85	REC %			1	8260B		11/17/2014	CJR	1
SUR - 1,2-Dichloroethane-d4	100	REC %			1	8260B		11/17/2014	CJR	1

Project Name FMR NEWTON GRAVEL PIT **Invoice #** E28074
Project #

Lab Code 5028074K
Sample ID 3327 HECKER
Sample Matrix Water
Sample Date 11/10/2014

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
VOC's										
Benzene	< 0.24	ug/l	0.24	0.77	1	8260B		11/17/2014	CJR	1
Bromobenzene	< 0.32	ug/l	0.32	1	1	8260B		11/17/2014	CJR	1
Bromodichloromethane	< 0.37	ug/l	0.37	1.2	1	8260B		11/17/2014	CJR	1
Bromoform	< 0.35	ug/l	0.35	1.1	1	8260B		11/17/2014	CJR	1
tert-Butylbenzene	< 0.36	ug/l	0.36	1.2	1	8260B		11/17/2014	CJR	1
sec-Butylbenzene	< 0.33	ug/l	0.33	1	1	8260B		11/17/2014	CJR	1
n-Butylbenzene	< 0.35	ug/l	0.35	1.1	1	8260B		11/17/2014	CJR	1
Carbon Tetrachloride	< 0.33	ug/l	0.33	1.1	1	8260B		11/17/2014	CJR	1
Chlorobenzene	< 0.24	ug/l	0.24	0.77	1	8260B		11/17/2014	CJR	1
Chloroethane	< 0.63	ug/l	0.63	2	1	8260B		11/17/2014	CJR	1
Chloroform	< 0.28	ug/l	0.28	0.88	1	8260B		11/17/2014	CJR	1
Chloromethane	< 0.81	ug/l	0.81	2.6	1	8260B		11/17/2014	CJR	1
2-Chlorotoluene	< 0.21	ug/l	0.21	0.66	1	8260B		11/17/2014	CJR	1
4-Chlorotoluene	< 0.21	ug/l	0.21	0.68	1	8260B		11/17/2014	CJR	1
1,2-Dibromo-3-chloropropane	< 0.88	ug/l	0.88	2.8	1	8260B		11/17/2014	CJR	1
Dibromochloromethane	< 0.22	ug/l	0.22	0.7	1	8260B		11/17/2014	CJR	1
1,4-Dichlorobenzene	< 0.3	ug/l	0.3	0.96	1	8260B		11/17/2014	CJR	1
1,3-Dichlorobenzene	< 0.28	ug/l	0.28	0.89	1	8260B		11/17/2014	CJR	1
1,2-Dichlorobenzene	< 0.36	ug/l	0.36	1.2	1	8260B		11/17/2014	CJR	1
Dichlorodifluoromethane	< 0.44	ug/l	0.44	1.4	1	8260B		11/17/2014	CJR	1
1,2-Dichloroethane	< 0.41	ug/l	0.41	1.3	1	8260B		11/17/2014	CJR	1
1,1-Dichloroethane	< 0.3	ug/l	0.3	0.97	1	8260B		11/17/2014	CJR	1
1,1-Dichloroethene	< 0.4	ug/l	0.4	1.3	1	8260B		11/17/2014	CJR	1
cis-1,2-Dichloroethene	5.6	ug/l	0.38	1.2	1	8260B		11/17/2014	CJR	1
trans-1,2-Dichloroethene	< 0.35	ug/l	0.35	1.1	1	8260B		11/17/2014	CJR	1
1,2-Dichloropropane	< 0.32	ug/l	0.32	1	1	8260B		11/17/2014	CJR	1
2,2-Dichloropropane	< 0.36	ug/l	0.36	1.2	1	8260B		11/17/2014	CJR	1
1,3-Dichloropropane	< 0.33	ug/l	0.33	1	1	8260B		11/17/2014	CJR	1
Di-isopropyl ether	< 0.23	ug/l	0.23	0.73	1	8260B		11/17/2014	CJR	1
EDB (1,2-Dibromoethane)	< 0.44	ug/l	0.44	1.4	1	8260B		11/17/2014	CJR	1
Ethylbenzene	< 0.55	ug/l	0.55	1.7	1	8260B		11/17/2014	CJR	1
Hexachlorobutadiene	< 1.5	ug/l	1.5	4.8	1	8260B		11/17/2014	CJR	1
Isopropylbenzene	< 0.3	ug/l	0.3	0.96	1	8260B		11/17/2014	CJR	1
p-Isopropyltoluene	< 0.31	ug/l	0.31	0.98	1	8260B		11/17/2014	CJR	1
Methylene chloride	< 0.5	ug/l	0.5	1.6	1	8260B		11/17/2014	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.23	ug/l	0.23	0.74	1	8260B		11/17/2014	CJR	1
Naphthalene	< 1.7	ug/l	1.7	5.5	1	8260B		11/17/2014	CJR	1
n-Propylbenzene	< 0.25	ug/l	0.25	0.81	1	8260B		11/17/2014	CJR	1
1,1,2,2-Tetrachloroethane	< 0.45	ug/l	0.45	1.4	1	8260B		11/17/2014	CJR	1
1,1,1,2-Tetrachloroethane	< 0.33	ug/l	0.33	1.1	1	8260B		11/17/2014	CJR	1
Tetrachloroethene	< 0.33	ug/l	0.33	1.1	1	8260B		11/17/2014	CJR	1
Toluene	< 0.69	ug/l	0.69	2.2	1	8260B		11/17/2014	CJR	1
1,2,4-Trichlorobenzene	< 0.98	ug/l	0.98	3.1	1	8260B		11/17/2014	CJR	1
1,2,3-Trichlorobenzene	< 1.8	ug/l	1.8	5.8	1	8260B		11/17/2014	CJR	1
1,1,1-Trichloroethane	< 0.33	ug/l	0.33	1	1	8260B		11/17/2014	CJR	1
1,1,2-Trichloroethane	< 0.34	ug/l	0.34	1.1	1	8260B		11/17/2014	CJR	1
Trichloroethene (TCE)	< 0.33	ug/l	0.33	1	1	8260B		11/17/2014	CJR	1
Trichlorofluoromethane	< 0.71	ug/l	0.71	2.3	1	8260B		11/17/2014	CJR	1
1,2,4-Trimethylbenzene	< 2.2	ug/l	2.2	6.9	1	8260B		11/17/2014	CJR	1
1,3,5-Trimethylbenzene	< 1.4	ug/l	1.4	4.5	1	8260B		11/17/2014	CJR	1
Vinyl Chloride	< 0.18	ug/l	0.18	0.57	1	8260B		11/17/2014	CJR	1
m&p-Xylene	< 0.69	ug/l	0.69	2.2	1	8260B		11/17/2014	CJR	1
o-Xylene	< 0.63	ug/l	0.63	2	1	8260B		11/17/2014	CJR	1
SUR - 4-Bromofluorobenzene	103	REC %			1	8260B		11/17/2014	CJR	1
SUR - Dibromofluoromethane	101	REC %			1	8260B		11/17/2014	CJR	1
SUR - Toluene-d8	96	REC %			1	8260B		11/17/2014	CJR	1
SUR - 1,2-Dichloroethane-d4	102	REC %			1	8260B		11/17/2014	CJR	1

Project Name FMR NEWTON GRAVEL PIT **Invoice #** E28074
Project #

Lab Code 5028074L
Sample ID 3461 HECKER
Sample Matrix Water
Sample Date 11/10/2014

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
VOC's										
Benzene	< 0.24	ug/l	0.24	0.77	1	8260B		11/17/2014	CJR	1
Bromobenzene	< 0.32	ug/l	0.32	1	1	8260B		11/17/2014	CJR	1
Bromodichloromethane	< 0.37	ug/l	0.37	1.2	1	8260B		11/17/2014	CJR	1
Bromoform	< 0.35	ug/l	0.35	1.1	1	8260B		11/17/2014	CJR	1
tert-Butylbenzene	< 0.36	ug/l	0.36	1.2	1	8260B		11/17/2014	CJR	1
sec-Butylbenzene	< 0.33	ug/l	0.33	1	1	8260B		11/17/2014	CJR	1
n-Butylbenzene	< 0.35	ug/l	0.35	1.1	1	8260B		11/17/2014	CJR	1
Carbon Tetrachloride	< 0.33	ug/l	0.33	1.1	1	8260B		11/17/2014	CJR	1
Chlorobenzene	< 0.24	ug/l	0.24	0.77	1	8260B		11/17/2014	CJR	1
Chloroethane	< 0.63	ug/l	0.63	2	1	8260B		11/17/2014	CJR	1
Chloroform	< 0.28	ug/l	0.28	0.88	1	8260B		11/17/2014	CJR	1
Chloromethane	< 0.81	ug/l	0.81	2.6	1	8260B		11/17/2014	CJR	1
2-Chlorotoluene	< 0.21	ug/l	0.21	0.66	1	8260B		11/17/2014	CJR	1
4-Chlorotoluene	< 0.21	ug/l	0.21	0.68	1	8260B		11/17/2014	CJR	1
1,2-Dibromo-3-chloropropane	< 0.88	ug/l	0.88	2.8	1	8260B		11/17/2014	CJR	1
Dibromochloromethane	< 0.22	ug/l	0.22	0.7	1	8260B		11/17/2014	CJR	1
1,4-Dichlorobenzene	< 0.3	ug/l	0.3	0.96	1	8260B		11/17/2014	CJR	1
1,3-Dichlorobenzene	< 0.28	ug/l	0.28	0.89	1	8260B		11/17/2014	CJR	1
1,2-Dichlorobenzene	< 0.36	ug/l	0.36	1.2	1	8260B		11/17/2014	CJR	1
Dichlorodifluoromethane	< 0.44	ug/l	0.44	1.4	1	8260B		11/17/2014	CJR	1
1,2-Dichloroethane	< 0.41	ug/l	0.41	1.3	1	8260B		11/17/2014	CJR	1
1,1-Dichloroethane	< 0.3	ug/l	0.3	0.97	1	8260B		11/17/2014	CJR	1
1,1-Dichloroethene	< 0.4	ug/l	0.4	1.3	1	8260B		11/17/2014	CJR	1
cis-1,2-Dichloroethene	1.49	ug/l	0.38	1.2	1	8260B		11/17/2014	CJR	1
trans-1,2-Dichloroethene	< 0.35	ug/l	0.35	1.1	1	8260B		11/17/2014	CJR	1
1,2-Dichloropropane	< 0.32	ug/l	0.32	1	1	8260B		11/17/2014	CJR	1
2,2-Dichloropropane	< 0.36	ug/l	0.36	1.2	1	8260B		11/17/2014	CJR	1
1,3-Dichloropropane	< 0.33	ug/l	0.33	1	1	8260B		11/17/2014	CJR	1
Di-isopropyl ether	< 0.23	ug/l	0.23	0.73	1	8260B		11/17/2014	CJR	1
EDB (1,2-Dibromoethane)	< 0.44	ug/l	0.44	1.4	1	8260B		11/17/2014	CJR	1
Ethylbenzene	< 0.55	ug/l	0.55	1.7	1	8260B		11/17/2014	CJR	1
Hexachlorobutadiene	< 1.5	ug/l	1.5	4.8	1	8260B		11/17/2014	CJR	1
Isopropylbenzene	< 0.3	ug/l	0.3	0.96	1	8260B		11/17/2014	CJR	1
p-Isopropyltoluene	< 0.31	ug/l	0.31	0.98	1	8260B		11/17/2014	CJR	1
Methylene chloride	< 0.5	ug/l	0.5	1.6	1	8260B		11/17/2014	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.23	ug/l	0.23	0.74	1	8260B		11/17/2014	CJR	1
Naphthalene	< 1.7	ug/l	1.7	5.5	1	8260B		11/17/2014	CJR	1
n-Propylbenzene	< 0.25	ug/l	0.25	0.81	1	8260B		11/17/2014	CJR	1
1,1,2,2-Tetrachloroethane	< 0.45	ug/l	0.45	1.4	1	8260B		11/17/2014	CJR	1
1,1,1,2-Tetrachloroethane	< 0.33	ug/l	0.33	1.1	1	8260B		11/17/2014	CJR	1
Tetrachloroethene	< 0.33	ug/l	0.33	1.1	1	8260B		11/17/2014	CJR	1
Toluene	< 0.69	ug/l	0.69	2.2	1	8260B		11/17/2014	CJR	1
1,2,4-Trichlorobenzene	< 0.98	ug/l	0.98	3.1	1	8260B		11/17/2014	CJR	1
1,2,3-Trichlorobenzene	< 1.8	ug/l	1.8	5.8	1	8260B		11/17/2014	CJR	1
1,1,1-Trichloroethane	< 0.33	ug/l	0.33	1	1	8260B		11/17/2014	CJR	1
1,1,2-Trichloroethane	< 0.34	ug/l	0.34	1.1	1	8260B		11/17/2014	CJR	1
Trichloroethene (TCE)	< 0.33	ug/l	0.33	1	1	8260B		11/17/2014	CJR	1
Trichlorofluoromethane	< 0.71	ug/l	0.71	2.3	1	8260B		11/17/2014	CJR	1
1,2,4-Trimethylbenzene	< 2.2	ug/l	2.2	6.9	1	8260B		11/17/2014	CJR	1
1,3,5-Trimethylbenzene	< 1.4	ug/l	1.4	4.5	1	8260B		11/17/2014	CJR	1
Vinyl Chloride	< 0.18	ug/l	0.18	0.57	1	8260B		11/17/2014	CJR	1
m&p-Xylene	< 0.69	ug/l	0.69	2.2	1	8260B		11/17/2014	CJR	1
o-Xylene	< 0.63	ug/l	0.63	2	1	8260B		11/17/2014	CJR	1
SUR - 1,2-Dichloroethane-d4	108	REC %			1	8260B		11/17/2014	CJR	1
SUR - Toluene-d8	120	REC %			1	8260B		11/17/2014	CJR	1
SUR - 4-Bromofluorobenzene	106	REC %			1	8260B		11/17/2014	CJR	1
SUR - Dibromofluoromethane	97	REC %			1	8260B		11/17/2014	CJR	1

Project Name FMR NEWTON GRAVEL PIT **Invoice #** E28074
Project #

Lab Code 5028074M
Sample ID 2734 CTH CR
Sample Matrix Water
Sample Date 11/10/2014

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
VOC's										
Benzene	< 0.24	ug/l	0.24	0.77	1	8260B		11/17/2014	CJR	1
Bromobenzene	< 0.32	ug/l	0.32	1	1	8260B		11/17/2014	CJR	1
Bromodichloromethane	< 0.37	ug/l	0.37	1.2	1	8260B		11/17/2014	CJR	1
Bromoform	< 0.35	ug/l	0.35	1.1	1	8260B		11/17/2014	CJR	1
tert-Butylbenzene	< 0.36	ug/l	0.36	1.2	1	8260B		11/17/2014	CJR	1
sec-Butylbenzene	< 0.33	ug/l	0.33	1	1	8260B		11/17/2014	CJR	1
n-Butylbenzene	< 0.35	ug/l	0.35	1.1	1	8260B		11/17/2014	CJR	1
Carbon Tetrachloride	< 0.33	ug/l	0.33	1.1	1	8260B		11/17/2014	CJR	1
Chlorobenzene	< 0.24	ug/l	0.24	0.77	1	8260B		11/17/2014	CJR	1
Chloroethane	< 0.63	ug/l	0.63	2	1	8260B		11/17/2014	CJR	1
Chloroform	< 0.28	ug/l	0.28	0.88	1	8260B		11/17/2014	CJR	1
Chloromethane	< 0.81	ug/l	0.81	2.6	1	8260B		11/17/2014	CJR	1
2-Chlorotoluene	< 0.21	ug/l	0.21	0.66	1	8260B		11/17/2014	CJR	1
4-Chlorotoluene	< 0.21	ug/l	0.21	0.68	1	8260B		11/17/2014	CJR	1
1,2-Dibromo-3-chloropropane	< 0.88	ug/l	0.88	2.8	1	8260B		11/17/2014	CJR	1
Dibromochloromethane	< 0.22	ug/l	0.22	0.7	1	8260B		11/17/2014	CJR	1
1,4-Dichlorobenzene	< 0.3	ug/l	0.3	0.96	1	8260B		11/17/2014	CJR	1
1,3-Dichlorobenzene	< 0.28	ug/l	0.28	0.89	1	8260B		11/17/2014	CJR	1
1,2-Dichlorobenzene	< 0.36	ug/l	0.36	1.2	1	8260B		11/17/2014	CJR	1
Dichlorodifluoromethane	< 0.44	ug/l	0.44	1.4	1	8260B		11/17/2014	CJR	1
1,2-Dichloroethane	< 0.41	ug/l	0.41	1.3	1	8260B		11/17/2014	CJR	1
1,1-Dichloroethane	< 0.3	ug/l	0.3	0.97	1	8260B		11/17/2014	CJR	1
1,1-Dichloroethene	< 0.4	ug/l	0.4	1.3	1	8260B		11/17/2014	CJR	1
cis-1,2-Dichloroethene	0.63 "J"	ug/l	0.38	1.2	1	8260B		11/17/2014	CJR	1
trans-1,2-Dichloroethene	< 0.35	ug/l	0.35	1.1	1	8260B		11/17/2014	CJR	1
1,2-Dichloropropane	< 0.32	ug/l	0.32	1	1	8260B		11/17/2014	CJR	1
2,2-Dichloropropane	< 0.36	ug/l	0.36	1.2	1	8260B		11/17/2014	CJR	1
1,3-Dichloropropane	< 0.33	ug/l	0.33	1	1	8260B		11/17/2014	CJR	1
Di-isopropyl ether	< 0.23	ug/l	0.23	0.73	1	8260B		11/17/2014	CJR	1
EDB (1,2-Dibromoethane)	< 0.44	ug/l	0.44	1.4	1	8260B		11/17/2014	CJR	1
Ethylbenzene	< 0.55	ug/l	0.55	1.7	1	8260B		11/17/2014	CJR	1
Hexachlorobutadiene	< 1.5	ug/l	1.5	4.8	1	8260B		11/17/2014	CJR	1
Isopropylbenzene	< 0.3	ug/l	0.3	0.96	1	8260B		11/17/2014	CJR	1
p-Isopropyltoluene	< 0.31	ug/l	0.31	0.98	1	8260B		11/17/2014	CJR	1
Methylene chloride	< 0.5	ug/l	0.5	1.6	1	8260B		11/17/2014	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.23	ug/l	0.23	0.74	1	8260B		11/17/2014	CJR	1
Naphthalene	< 1.7	ug/l	1.7	5.5	1	8260B		11/17/2014	CJR	1
n-Propylbenzene	< 0.25	ug/l	0.25	0.81	1	8260B		11/17/2014	CJR	1
1,1,2,2-Tetrachloroethane	< 0.45	ug/l	0.45	1.4	1	8260B		11/17/2014	CJR	1
1,1,1,2-Tetrachloroethane	< 0.33	ug/l	0.33	1.1	1	8260B		11/17/2014	CJR	1
Tetrachloroethene	< 0.33	ug/l	0.33	1.1	1	8260B		11/17/2014	CJR	1
Toluene	< 0.69	ug/l	0.69	2.2	1	8260B		11/17/2014	CJR	1
1,2,4-Trichlorobenzene	< 0.98	ug/l	0.98	3.1	1	8260B		11/17/2014	CJR	1
1,2,3-Trichlorobenzene	< 1.8	ug/l	1.8	5.8	1	8260B		11/17/2014	CJR	1
1,1,1-Trichloroethane	< 0.33	ug/l	0.33	1	1	8260B		11/17/2014	CJR	1
1,1,2-Trichloroethane	< 0.34	ug/l	0.34	1.1	1	8260B		11/17/2014	CJR	1
Trichloroethene (TCE)	< 0.33	ug/l	0.33	1	1	8260B		11/17/2014	CJR	1
Trichlorofluoromethane	< 0.71	ug/l	0.71	2.3	1	8260B		11/17/2014	CJR	1
1,2,4-Trimethylbenzene	< 2.2	ug/l	2.2	6.9	1	8260B		11/17/2014	CJR	1
1,3,5-Trimethylbenzene	< 1.4	ug/l	1.4	4.5	1	8260B		11/17/2014	CJR	1
Vinyl Chloride	0.26 "J"	ug/l	0.18	0.57	1	8260B		11/17/2014	CJR	1
m&p-Xylene	< 0.69	ug/l	0.69	2.2	1	8260B		11/17/2014	CJR	1
o-Xylene	< 0.63	ug/l	0.63	2	1	8260B		11/17/2014	CJR	1
SUR - Toluene-d8	95	REC %			1	8260B		11/17/2014	CJR	1
SUR - Dibromofluoromethane	83	REC %			1	8260B		11/17/2014	CJR	1
SUR - 4-Bromofluorobenzene	104	REC %			1	8260B		11/17/2014	CJR	1
SUR - 1,2-Dichloroethane-d4	96	REC %			1	8260B		11/17/2014	CJR	1

Project Name FMR NEWTON GRAVEL PIT **Invoice #** E28074
Project #

Lab Code 5028074N
Sample ID 4027 THUNDER
Sample Matrix Water
Sample Date 11/11/2014

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
VOC's										
Benzene	< 0.24	ug/l	0.24	0.77	1	8260B		11/18/2014	CJR	1
Bromobenzene	< 0.32	ug/l	0.32	1	1	8260B		11/18/2014	CJR	1
Bromodichloromethane	< 0.37	ug/l	0.37	1.2	1	8260B		11/18/2014	CJR	1
Bromoform	< 0.35	ug/l	0.35	1.1	1	8260B		11/18/2014	CJR	1
tert-Butylbenzene	< 0.36	ug/l	0.36	1.2	1	8260B		11/18/2014	CJR	1
sec-Butylbenzene	< 0.33	ug/l	0.33	1	1	8260B		11/18/2014	CJR	1
n-Butylbenzene	< 0.35	ug/l	0.35	1.1	1	8260B		11/18/2014	CJR	1
Carbon Tetrachloride	< 0.33	ug/l	0.33	1.1	1	8260B		11/18/2014	CJR	1
Chlorobenzene	< 0.24	ug/l	0.24	0.77	1	8260B		11/18/2014	CJR	1
Chloroethane	< 0.63	ug/l	0.63	2	1	8260B		11/18/2014	CJR	1
Chloroform	< 0.28	ug/l	0.28	0.88	1	8260B		11/18/2014	CJR	1
Chloromethane	< 0.81	ug/l	0.81	2.6	1	8260B		11/18/2014	CJR	1
2-Chlorotoluene	< 0.21	ug/l	0.21	0.66	1	8260B		11/18/2014	CJR	1
4-Chlorotoluene	< 0.21	ug/l	0.21	0.68	1	8260B		11/18/2014	CJR	1
1,2-Dibromo-3-chloropropane	< 0.88	ug/l	0.88	2.8	1	8260B		11/18/2014	CJR	1
Dibromochloromethane	< 0.22	ug/l	0.22	0.7	1	8260B		11/18/2014	CJR	1
1,4-Dichlorobenzene	< 0.3	ug/l	0.3	0.96	1	8260B		11/18/2014	CJR	1
1,3-Dichlorobenzene	< 0.28	ug/l	0.28	0.89	1	8260B		11/18/2014	CJR	1
1,2-Dichlorobenzene	< 0.36	ug/l	0.36	1.2	1	8260B		11/18/2014	CJR	1
Dichlorodifluoromethane	< 0.44	ug/l	0.44	1.4	1	8260B		11/18/2014	CJR	1
1,2-Dichloroethane	< 0.41	ug/l	0.41	1.3	1	8260B		11/18/2014	CJR	1
1,1-Dichloroethane	< 0.3	ug/l	0.3	0.97	1	8260B		11/18/2014	CJR	1
1,1-Dichloroethene	< 0.4	ug/l	0.4	1.3	1	8260B		11/18/2014	CJR	1
cis-1,2-Dichloroethene	0.60 "J"	ug/l	0.38	1.2	1	8260B		11/18/2014	CJR	1
trans-1,2-Dichloroethene	< 0.35	ug/l	0.35	1.1	1	8260B		11/18/2014	CJR	1
1,2-Dichloropropane	< 0.32	ug/l	0.32	1	1	8260B		11/18/2014	CJR	1
2,2-Dichloropropane	< 0.36	ug/l	0.36	1.2	1	8260B		11/18/2014	CJR	1
1,3-Dichloropropane	< 0.33	ug/l	0.33	1	1	8260B		11/18/2014	CJR	1
Di-isopropyl ether	< 0.23	ug/l	0.23	0.73	1	8260B		11/18/2014	CJR	1
EDB (1,2-Dibromoethane)	< 0.44	ug/l	0.44	1.4	1	8260B		11/18/2014	CJR	1
Ethylbenzene	< 0.55	ug/l	0.55	1.7	1	8260B		11/18/2014	CJR	1
Hexachlorobutadiene	< 1.5	ug/l	1.5	4.8	1	8260B		11/18/2014	CJR	1
Isopropylbenzene	< 0.3	ug/l	0.3	0.96	1	8260B		11/18/2014	CJR	1
p-Isopropyltoluene	< 0.31	ug/l	0.31	0.98	1	8260B		11/18/2014	CJR	1
Methylene chloride	< 0.5	ug/l	0.5	1.6	1	8260B		11/18/2014	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.23	ug/l	0.23	0.74	1	8260B		11/18/2014	CJR	1
Naphthalene	< 1.7	ug/l	1.7	5.5	1	8260B		11/18/2014	CJR	1
n-Propylbenzene	< 0.25	ug/l	0.25	0.81	1	8260B		11/18/2014	CJR	1
1,1,2,2-Tetrachloroethane	< 0.45	ug/l	0.45	1.4	1	8260B		11/18/2014	CJR	1
1,1,1,2-Tetrachloroethane	< 0.33	ug/l	0.33	1.1	1	8260B		11/18/2014	CJR	1
Tetrachloroethene	< 0.33	ug/l	0.33	1.1	1	8260B		11/18/2014	CJR	1
Toluene	< 0.69	ug/l	0.69	2.2	1	8260B		11/18/2014	CJR	1
1,2,4-Trichlorobenzene	< 0.98	ug/l	0.98	3.1	1	8260B		11/18/2014	CJR	1
1,2,3-Trichlorobenzene	< 1.8	ug/l	1.8	5.8	1	8260B		11/18/2014	CJR	1
1,1,1-Trichloroethane	< 0.33	ug/l	0.33	1	1	8260B		11/18/2014	CJR	1
1,1,2-Trichloroethane	< 0.34	ug/l	0.34	1.1	1	8260B		11/18/2014	CJR	1
Trichloroethene (TCE)	< 0.33	ug/l	0.33	1	1	8260B		11/18/2014	CJR	1
Trichlorofluoromethane	< 0.71	ug/l	0.71	2.3	1	8260B		11/18/2014	CJR	1
1,2,4-Trimethylbenzene	< 2.2	ug/l	2.2	6.9	1	8260B		11/18/2014	CJR	1
1,3,5-Trimethylbenzene	< 1.4	ug/l	1.4	4.5	1	8260B		11/18/2014	CJR	1
Vinyl Chloride	< 0.18	ug/l	0.18	0.57	1	8260B		11/18/2014	CJR	1
m&p-Xylene	< 0.69	ug/l	0.69	2.2	1	8260B		11/18/2014	CJR	1
o-Xylene	< 0.63	ug/l	0.63	2	1	8260B		11/18/2014	CJR	1
SUR - 4-Bromofluorobenzene	116	REC %			1	8260B		11/18/2014	CJR	1
SUR - Dibromofluoromethane	112	REC %			1	8260B		11/18/2014	CJR	1
SUR - Toluene-d8	99	REC %			1	8260B		11/18/2014	CJR	1
SUR - 1,2-Dichloroethane-d4	106	REC %			1	8260B		11/18/2014	CJR	1

Project Name FMR NEWTON GRAVEL PIT **Invoice #** E28074
Project #

Lab Code 5028074O
Sample ID 4027 THUNDER DUP
Sample Matrix Water
Sample Date 11/11/2014

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
VOC's										
Benzene	< 0.24	ug/l	0.24	0.77	1	8260B		11/18/2014	CJR	1
Bromobenzene	< 0.32	ug/l	0.32	1	1	8260B		11/18/2014	CJR	1
Bromodichloromethane	< 0.37	ug/l	0.37	1.2	1	8260B		11/18/2014	CJR	1
Bromoform	< 0.35	ug/l	0.35	1.1	1	8260B		11/18/2014	CJR	1
tert-Butylbenzene	< 0.36	ug/l	0.36	1.2	1	8260B		11/18/2014	CJR	1
sec-Butylbenzene	< 0.33	ug/l	0.33	1	1	8260B		11/18/2014	CJR	1
n-Butylbenzene	< 0.35	ug/l	0.35	1.1	1	8260B		11/18/2014	CJR	1
Carbon Tetrachloride	< 0.33	ug/l	0.33	1.1	1	8260B		11/18/2014	CJR	1
Chlorobenzene	< 0.24	ug/l	0.24	0.77	1	8260B		11/18/2014	CJR	1
Chloroethane	< 0.63	ug/l	0.63	2	1	8260B		11/18/2014	CJR	1
Chloroform	< 0.28	ug/l	0.28	0.88	1	8260B		11/18/2014	CJR	1
Chloromethane	< 0.81	ug/l	0.81	2.6	1	8260B		11/18/2014	CJR	1
2-Chlorotoluene	< 0.21	ug/l	0.21	0.66	1	8260B		11/18/2014	CJR	1
4-Chlorotoluene	< 0.21	ug/l	0.21	0.68	1	8260B		11/18/2014	CJR	1
1,2-Dibromo-3-chloropropane	< 0.88	ug/l	0.88	2.8	1	8260B		11/18/2014	CJR	1
Dibromochloromethane	< 0.22	ug/l	0.22	0.7	1	8260B		11/18/2014	CJR	1
1,4-Dichlorobenzene	< 0.3	ug/l	0.3	0.96	1	8260B		11/18/2014	CJR	1
1,3-Dichlorobenzene	< 0.28	ug/l	0.28	0.89	1	8260B		11/18/2014	CJR	1
1,2-Dichlorobenzene	< 0.36	ug/l	0.36	1.2	1	8260B		11/18/2014	CJR	1
Dichlorodifluoromethane	< 0.44	ug/l	0.44	1.4	1	8260B		11/18/2014	CJR	1
1,2-Dichloroethane	< 0.41	ug/l	0.41	1.3	1	8260B		11/18/2014	CJR	1
1,1-Dichloroethane	< 0.3	ug/l	0.3	0.97	1	8260B		11/18/2014	CJR	1
1,1-Dichloroethene	< 0.4	ug/l	0.4	1.3	1	8260B		11/18/2014	CJR	1
cis-1,2-Dichloroethene	0.53 "J"	ug/l	0.38	1.2	1	8260B		11/18/2014	CJR	1
trans-1,2-Dichloroethene	< 0.35	ug/l	0.35	1.1	1	8260B		11/18/2014	CJR	1
1,2-Dichloropropane	< 0.32	ug/l	0.32	1	1	8260B		11/18/2014	CJR	1
2,2-Dichloropropane	< 0.36	ug/l	0.36	1.2	1	8260B		11/18/2014	CJR	1
1,3-Dichloropropane	< 0.33	ug/l	0.33	1	1	8260B		11/18/2014	CJR	1
Di-isopropyl ether	< 0.23	ug/l	0.23	0.73	1	8260B		11/18/2014	CJR	1
EDB (1,2-Dibromoethane)	< 0.44	ug/l	0.44	1.4	1	8260B		11/18/2014	CJR	1
Ethylbenzene	< 0.55	ug/l	0.55	1.7	1	8260B		11/18/2014	CJR	1
Hexachlorobutadiene	< 1.5	ug/l	1.5	4.8	1	8260B		11/18/2014	CJR	1
Isopropylbenzene	< 0.3	ug/l	0.3	0.96	1	8260B		11/18/2014	CJR	1
p-Isopropyltoluene	< 0.31	ug/l	0.31	0.98	1	8260B		11/18/2014	CJR	1
Methylene chloride	< 0.5	ug/l	0.5	1.6	1	8260B		11/18/2014	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.23	ug/l	0.23	0.74	1	8260B		11/18/2014	CJR	1
Naphthalene	< 1.7	ug/l	1.7	5.5	1	8260B		11/18/2014	CJR	1
n-Propylbenzene	< 0.25	ug/l	0.25	0.81	1	8260B		11/18/2014	CJR	1
1,1,2,2-Tetrachloroethane	< 0.45	ug/l	0.45	1.4	1	8260B		11/18/2014	CJR	1
1,1,1,2-Tetrachloroethane	< 0.33	ug/l	0.33	1.1	1	8260B		11/18/2014	CJR	1
Tetrachloroethene	< 0.33	ug/l	0.33	1.1	1	8260B		11/18/2014	CJR	1
Toluene	< 0.69	ug/l	0.69	2.2	1	8260B		11/18/2014	CJR	1
1,2,4-Trichlorobenzene	< 0.98	ug/l	0.98	3.1	1	8260B		11/18/2014	CJR	1
1,2,3-Trichlorobenzene	< 1.8	ug/l	1.8	5.8	1	8260B		11/18/2014	CJR	1
1,1,1-Trichloroethane	< 0.33	ug/l	0.33	1	1	8260B		11/18/2014	CJR	1
1,1,2-Trichloroethane	< 0.34	ug/l	0.34	1.1	1	8260B		11/18/2014	CJR	1
Trichloroethene (TCE)	< 0.33	ug/l	0.33	1	1	8260B		11/18/2014	CJR	1
Trichlorofluoromethane	< 0.71	ug/l	0.71	2.3	1	8260B		11/18/2014	CJR	1
1,2,4-Trimethylbenzene	< 2.2	ug/l	2.2	6.9	1	8260B		11/18/2014	CJR	1
1,3,5-Trimethylbenzene	< 1.4	ug/l	1.4	4.5	1	8260B		11/18/2014	CJR	1
Vinyl Chloride	< 0.18	ug/l	0.18	0.57	1	8260B		11/18/2014	CJR	1
m&p-Xylene	< 0.69	ug/l	0.69	2.2	1	8260B		11/18/2014	CJR	1
o-Xylene	< 0.63	ug/l	0.63	2	1	8260B		11/18/2014	CJR	1
SUR - 1,2-Dichloroethane-d4	96	REC %			1	8260B		11/18/2014	CJR	1
SUR - 4-Bromofluorobenzene	108	REC %			1	8260B		11/18/2014	CJR	1
SUR - Dibromofluoromethane	105	REC %			1	8260B		11/18/2014	CJR	1
SUR - Toluene-d8	91	REC %			1	8260B		11/18/2014	CJR	1

Project Name FMR NEWTON GRAVEL PIT **Invoice #** E28074
Project #

Lab Code 5028074P
Sample ID 3027 ORCHARD
Sample Matrix Water
Sample Date 11/11/2014

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
VOC's										
Benzene	< 0.24	ug/l	0.24	0.77	1	8260B		11/18/2014	CJR	1
Bromobenzene	< 0.32	ug/l	0.32	1	1	8260B		11/18/2014	CJR	1
Bromodichloromethane	< 0.37	ug/l	0.37	1.2	1	8260B		11/18/2014	CJR	1
Bromoform	< 0.35	ug/l	0.35	1.1	1	8260B		11/18/2014	CJR	1
tert-Butylbenzene	< 0.36	ug/l	0.36	1.2	1	8260B		11/18/2014	CJR	1
sec-Butylbenzene	< 0.33	ug/l	0.33	1	1	8260B		11/18/2014	CJR	1
n-Butylbenzene	< 0.35	ug/l	0.35	1.1	1	8260B		11/18/2014	CJR	1
Carbon Tetrachloride	< 0.33	ug/l	0.33	1.1	1	8260B		11/18/2014	CJR	1
Chlorobenzene	< 0.24	ug/l	0.24	0.77	1	8260B		11/18/2014	CJR	1
Chloroethane	< 0.63	ug/l	0.63	2	1	8260B		11/18/2014	CJR	1
Chloroform	< 0.28	ug/l	0.28	0.88	1	8260B		11/18/2014	CJR	1
Chloromethane	< 0.81	ug/l	0.81	2.6	1	8260B		11/18/2014	CJR	1
2-Chlorotoluene	< 0.21	ug/l	0.21	0.66	1	8260B		11/18/2014	CJR	1
4-Chlorotoluene	< 0.21	ug/l	0.21	0.68	1	8260B		11/18/2014	CJR	1
1,2-Dibromo-3-chloropropane	< 0.88	ug/l	0.88	2.8	1	8260B		11/18/2014	CJR	1
Dibromochloromethane	< 0.22	ug/l	0.22	0.7	1	8260B		11/18/2014	CJR	1
1,4-Dichlorobenzene	< 0.3	ug/l	0.3	0.96	1	8260B		11/18/2014	CJR	1
1,3-Dichlorobenzene	< 0.28	ug/l	0.28	0.89	1	8260B		11/18/2014	CJR	1
1,2-Dichlorobenzene	< 0.36	ug/l	0.36	1.2	1	8260B		11/18/2014	CJR	1
Dichlorodifluoromethane	< 0.44	ug/l	0.44	1.4	1	8260B		11/18/2014	CJR	1
1,2-Dichloroethane	< 0.41	ug/l	0.41	1.3	1	8260B		11/18/2014	CJR	1
1,1-Dichloroethane	< 0.3	ug/l	0.3	0.97	1	8260B		11/18/2014	CJR	1
1,1-Dichloroethene	< 0.4	ug/l	0.4	1.3	1	8260B		11/18/2014	CJR	1
cis-1,2-Dichloroethene	< 0.38	ug/l	0.38	1.2	1	8260B		11/18/2014	CJR	1
trans-1,2-Dichloroethene	< 0.35	ug/l	0.35	1.1	1	8260B		11/18/2014	CJR	1
1,2-Dichloropropane	< 0.32	ug/l	0.32	1	1	8260B		11/18/2014	CJR	1
2,2-Dichloropropane	< 0.36	ug/l	0.36	1.2	1	8260B		11/18/2014	CJR	1
1,3-Dichloropropane	< 0.33	ug/l	0.33	1	1	8260B		11/18/2014	CJR	1
Di-isopropyl ether	< 0.23	ug/l	0.23	0.73	1	8260B		11/18/2014	CJR	1
EDB (1,2-Dibromoethane)	< 0.44	ug/l	0.44	1.4	1	8260B		11/18/2014	CJR	1
Ethylbenzene	< 0.55	ug/l	0.55	1.7	1	8260B		11/18/2014	CJR	1
Hexachlorobutadiene	< 1.5	ug/l	1.5	4.8	1	8260B		11/18/2014	CJR	1
Isopropylbenzene	< 0.3	ug/l	0.3	0.96	1	8260B		11/18/2014	CJR	1
p-Isopropyltoluene	< 0.31	ug/l	0.31	0.98	1	8260B		11/18/2014	CJR	1
Methylene chloride	< 0.5	ug/l	0.5	1.6	1	8260B		11/18/2014	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.23	ug/l	0.23	0.74	1	8260B		11/18/2014	CJR	1
Naphthalene	< 1.7	ug/l	1.7	5.5	1	8260B		11/18/2014	CJR	1
n-Propylbenzene	< 0.25	ug/l	0.25	0.81	1	8260B		11/18/2014	CJR	1
1,1,2,2-Tetrachloroethane	< 0.45	ug/l	0.45	1.4	1	8260B		11/18/2014	CJR	1
1,1,1,2-Tetrachloroethane	< 0.33	ug/l	0.33	1.1	1	8260B		11/18/2014	CJR	1
Tetrachloroethene	< 0.33	ug/l	0.33	1.1	1	8260B		11/18/2014	CJR	1
Toluene	< 0.69	ug/l	0.69	2.2	1	8260B		11/18/2014	CJR	1
1,2,4-Trichlorobenzene	< 0.98	ug/l	0.98	3.1	1	8260B		11/18/2014	CJR	1
1,2,3-Trichlorobenzene	< 1.8	ug/l	1.8	5.8	1	8260B		11/18/2014	CJR	1
1,1,1-Trichloroethane	< 0.33	ug/l	0.33	1	1	8260B		11/18/2014	CJR	1
1,1,2-Trichloroethane	< 0.34	ug/l	0.34	1.1	1	8260B		11/18/2014	CJR	1
Trichloroethene (TCE)	< 0.33	ug/l	0.33	1	1	8260B		11/18/2014	CJR	1
Trichlorofluoromethane	< 0.71	ug/l	0.71	2.3	1	8260B		11/18/2014	CJR	1
1,2,4-Trimethylbenzene	< 2.2	ug/l	2.2	6.9	1	8260B		11/18/2014	CJR	1
1,3,5-Trimethylbenzene	< 1.4	ug/l	1.4	4.5	1	8260B		11/18/2014	CJR	1
Vinyl Chloride	< 0.18	ug/l	0.18	0.57	1	8260B		11/18/2014	CJR	1
m&p-Xylene	< 0.69	ug/l	0.69	2.2	1	8260B		11/18/2014	CJR	1
o-Xylene	< 0.63	ug/l	0.63	2	1	8260B		11/18/2014	CJR	1
SUR - 1,2-Dichloroethane-d4	106	REC %			1	8260B		11/18/2014	CJR	1
SUR - 4-Bromofluorobenzene	114	REC %			1	8260B		11/18/2014	CJR	1
SUR - Dibromofluoromethane	96	REC %			1	8260B		11/18/2014	CJR	1
SUR - Toluene-d8	101	REC %			1	8260B		11/18/2014	CJR	1

Project Name FMR NEWTON GRAVEL PIT **Invoice #** E28074
Project #

Lab Code 5028074Q
Sample ID 4005 THUNDER
Sample Matrix Water
Sample Date 11/11/2014

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
VOC's										
Benzene	< 0.24	ug/l	0.24	0.77	1	8260B		11/18/2014	CJR	1
Bromobenzene	< 0.32	ug/l	0.32	1	1	8260B		11/18/2014	CJR	1
Bromodichloromethane	< 0.37	ug/l	0.37	1.2	1	8260B		11/18/2014	CJR	1
Bromoform	< 0.35	ug/l	0.35	1.1	1	8260B		11/18/2014	CJR	1
tert-Butylbenzene	< 0.36	ug/l	0.36	1.2	1	8260B		11/18/2014	CJR	1
sec-Butylbenzene	< 0.33	ug/l	0.33	1	1	8260B		11/18/2014	CJR	1
n-Butylbenzene	< 0.35	ug/l	0.35	1.1	1	8260B		11/18/2014	CJR	1
Carbon Tetrachloride	< 0.33	ug/l	0.33	1.1	1	8260B		11/18/2014	CJR	1
Chlorobenzene	< 0.24	ug/l	0.24	0.77	1	8260B		11/18/2014	CJR	1
Chloroethane	< 0.63	ug/l	0.63	2	1	8260B		11/18/2014	CJR	1
Chloroform	< 0.28	ug/l	0.28	0.88	1	8260B		11/18/2014	CJR	1
Chloromethane	< 0.81	ug/l	0.81	2.6	1	8260B		11/18/2014	CJR	1
2-Chlorotoluene	< 0.21	ug/l	0.21	0.66	1	8260B		11/18/2014	CJR	1
4-Chlorotoluene	< 0.21	ug/l	0.21	0.68	1	8260B		11/18/2014	CJR	1
1,2-Dibromo-3-chloropropane	< 0.88	ug/l	0.88	2.8	1	8260B		11/18/2014	CJR	1
Dibromochloromethane	< 0.22	ug/l	0.22	0.7	1	8260B		11/18/2014	CJR	1
1,4-Dichlorobenzene	< 0.3	ug/l	0.3	0.96	1	8260B		11/18/2014	CJR	1
1,3-Dichlorobenzene	< 0.28	ug/l	0.28	0.89	1	8260B		11/18/2014	CJR	1
1,2-Dichlorobenzene	< 0.36	ug/l	0.36	1.2	1	8260B		11/18/2014	CJR	1
Dichlorodifluoromethane	< 0.44	ug/l	0.44	1.4	1	8260B		11/18/2014	CJR	1
1,2-Dichloroethane	< 0.41	ug/l	0.41	1.3	1	8260B		11/18/2014	CJR	1
1,1-Dichloroethane	< 0.3	ug/l	0.3	0.97	1	8260B		11/18/2014	CJR	1
1,1-Dichloroethene	< 0.4	ug/l	0.4	1.3	1	8260B		11/18/2014	CJR	1
cis-1,2-Dichloroethene	< 0.38	ug/l	0.38	1.2	1	8260B		11/18/2014	CJR	1
trans-1,2-Dichloroethene	< 0.35	ug/l	0.35	1.1	1	8260B		11/18/2014	CJR	1
1,2-Dichloropropane	< 0.32	ug/l	0.32	1	1	8260B		11/18/2014	CJR	1
2,2-Dichloropropane	< 0.36	ug/l	0.36	1.2	1	8260B		11/18/2014	CJR	8
1,3-Dichloropropane	< 0.33	ug/l	0.33	1	1	8260B		11/18/2014	CJR	1
Di-isopropyl ether	< 0.23	ug/l	0.23	0.73	1	8260B		11/18/2014	CJR	1
EDB (1,2-Dibromoethane)	< 0.44	ug/l	0.44	1.4	1	8260B		11/18/2014	CJR	1
Ethylbenzene	< 0.55	ug/l	0.55	1.7	1	8260B		11/18/2014	CJR	1
Hexachlorobutadiene	< 1.5	ug/l	1.5	4.8	1	8260B		11/18/2014	CJR	1
Isopropylbenzene	< 0.3	ug/l	0.3	0.96	1	8260B		11/18/2014	CJR	1
p-Isopropyltoluene	< 0.31	ug/l	0.31	0.98	1	8260B		11/18/2014	CJR	1
Methylene chloride	< 0.5	ug/l	0.5	1.6	1	8260B		11/18/2014	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.23	ug/l	0.23	0.74	1	8260B		11/18/2014	CJR	1
Naphthalene	< 1.7	ug/l	1.7	5.5	1	8260B		11/18/2014	CJR	1
n-Propylbenzene	< 0.25	ug/l	0.25	0.81	1	8260B		11/18/2014	CJR	1
1,1,2,2-Tetrachloroethane	< 0.45	ug/l	0.45	1.4	1	8260B		11/18/2014	CJR	1
1,1,1,2-Tetrachloroethane	< 0.33	ug/l	0.33	1.1	1	8260B		11/18/2014	CJR	1
Tetrachloroethene	< 0.33	ug/l	0.33	1.1	1	8260B		11/18/2014	CJR	1
Toluene	< 0.69	ug/l	0.69	2.2	1	8260B		11/18/2014	CJR	1
1,2,4-Trichlorobenzene	< 0.98	ug/l	0.98	3.1	1	8260B		11/18/2014	CJR	1
1,2,3-Trichlorobenzene	< 1.8	ug/l	1.8	5.8	1	8260B		11/18/2014	CJR	1
1,1,1-Trichloroethane	< 0.33	ug/l	0.33	1	1	8260B		11/18/2014	CJR	1
1,1,2-Trichloroethane	< 0.34	ug/l	0.34	1.1	1	8260B		11/18/2014	CJR	1
Trichloroethene (TCE)	< 0.33	ug/l	0.33	1	1	8260B		11/18/2014	CJR	1
Trichlorofluoromethane	< 0.71	ug/l	0.71	2.3	1	8260B		11/18/2014	CJR	1
1,2,4-Trimethylbenzene	< 2.2	ug/l	2.2	6.9	1	8260B		11/18/2014	CJR	1
1,3,5-Trimethylbenzene	< 1.4	ug/l	1.4	4.5	1	8260B		11/18/2014	CJR	1
Vinyl Chloride	< 0.18	ug/l	0.18	0.57	1	8260B		11/18/2014	CJR	1
m&p-Xylene	< 0.69	ug/l	0.69	2.2	1	8260B		11/18/2014	CJR	1
o-Xylene	< 0.63	ug/l	0.63	2	1	8260B		11/18/2014	CJR	1
SUR - Toluene-d8	102	REC %			1	8260B		11/18/2014	CJR	1
SUR - 1,2-Dichloroethane-d4	116	REC %			1	8260B		11/18/2014	CJR	1
SUR - 4-Bromofluorobenzene	120	REC %			1	8260B		11/18/2014	CJR	1
SUR - Dibromofluoromethane	95	REC %			1	8260B		11/18/2014	CJR	1

Project Name FMR NEWTON GRAVEL PIT **Invoice #** E28074
Project #

Lab Code 5028074R
Sample ID 3702 HECKER
Sample Matrix Water
Sample Date 11/13/2014

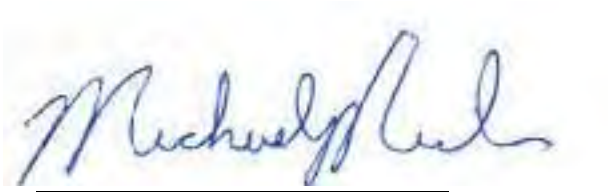
	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
VOC's										
Benzene	< 0.24	ug/l	0.24	0.77	1	8260B		11/18/2014	CJR	1
Bromobenzene	< 0.32	ug/l	0.32	1	1	8260B		11/18/2014	CJR	1
Bromodichloromethane	< 0.37	ug/l	0.37	1.2	1	8260B		11/18/2014	CJR	1
Bromoform	< 0.35	ug/l	0.35	1.1	1	8260B		11/18/2014	CJR	1
tert-Butylbenzene	< 0.36	ug/l	0.36	1.2	1	8260B		11/18/2014	CJR	1
sec-Butylbenzene	< 0.33	ug/l	0.33	1	1	8260B		11/18/2014	CJR	1
n-Butylbenzene	< 0.35	ug/l	0.35	1.1	1	8260B		11/18/2014	CJR	1
Carbon Tetrachloride	< 0.33	ug/l	0.33	1.1	1	8260B		11/18/2014	CJR	1
Chlorobenzene	< 0.24	ug/l	0.24	0.77	1	8260B		11/18/2014	CJR	1
Chloroethane	< 0.63	ug/l	0.63	2	1	8260B		11/18/2014	CJR	1
Chloroform	< 0.28	ug/l	0.28	0.88	1	8260B		11/18/2014	CJR	1
Chloromethane	< 0.81	ug/l	0.81	2.6	1	8260B		11/18/2014	CJR	1
2-Chlorotoluene	< 0.21	ug/l	0.21	0.66	1	8260B		11/18/2014	CJR	1
4-Chlorotoluene	< 0.21	ug/l	0.21	0.68	1	8260B		11/18/2014	CJR	1
1,2-Dibromo-3-chloropropane	< 0.88	ug/l	0.88	2.8	1	8260B		11/18/2014	CJR	1
Dibromochloromethane	< 0.22	ug/l	0.22	0.7	1	8260B		11/18/2014	CJR	1
1,4-Dichlorobenzene	< 0.3	ug/l	0.3	0.96	1	8260B		11/18/2014	CJR	1
1,3-Dichlorobenzene	< 0.28	ug/l	0.28	0.89	1	8260B		11/18/2014	CJR	1
1,2-Dichlorobenzene	< 0.36	ug/l	0.36	1.2	1	8260B		11/18/2014	CJR	1
Dichlorodifluoromethane	< 0.44	ug/l	0.44	1.4	1	8260B		11/18/2014	CJR	1
1,2-Dichloroethane	< 0.41	ug/l	0.41	1.3	1	8260B		11/18/2014	CJR	1
1,1-Dichloroethane	< 0.3	ug/l	0.3	0.97	1	8260B		11/18/2014	CJR	1
1,1-Dichloroethene	< 0.4	ug/l	0.4	1.3	1	8260B		11/18/2014	CJR	1
cis-1,2-Dichloroethene	< 0.38	ug/l	0.38	1.2	1	8260B		11/18/2014	CJR	1
trans-1,2-Dichloroethene	< 0.35	ug/l	0.35	1.1	1	8260B		11/18/2014	CJR	1
1,2-Dichloropropane	< 0.32	ug/l	0.32	1	1	8260B		11/18/2014	CJR	1
2,2-Dichloropropane	< 0.36	ug/l	0.36	1.2	1	8260B		11/18/2014	CJR	8
1,3-Dichloropropane	< 0.33	ug/l	0.33	1	1	8260B		11/18/2014	CJR	1
Di-isopropyl ether	< 0.23	ug/l	0.23	0.73	1	8260B		11/18/2014	CJR	1
EDB (1,2-Dibromoethane)	< 0.44	ug/l	0.44	1.4	1	8260B		11/18/2014	CJR	1
Ethylbenzene	< 0.55	ug/l	0.55	1.7	1	8260B		11/18/2014	CJR	1
Hexachlorobutadiene	< 1.5	ug/l	1.5	4.8	1	8260B		11/18/2014	CJR	1
Isopropylbenzene	< 0.3	ug/l	0.3	0.96	1	8260B		11/18/2014	CJR	1
p-Isopropyltoluene	< 0.31	ug/l	0.31	0.98	1	8260B		11/18/2014	CJR	1
Methylene chloride	< 0.5	ug/l	0.5	1.6	1	8260B		11/18/2014	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.23	ug/l	0.23	0.74	1	8260B		11/18/2014	CJR	1
Naphthalene	< 1.7	ug/l	1.7	5.5	1	8260B		11/18/2014	CJR	1
n-Propylbenzene	< 0.25	ug/l	0.25	0.81	1	8260B		11/18/2014	CJR	1
1,1,2,2-Tetrachloroethane	< 0.45	ug/l	0.45	1.4	1	8260B		11/18/2014	CJR	1
1,1,1,2-Tetrachloroethane	< 0.33	ug/l	0.33	1.1	1	8260B		11/18/2014	CJR	1
Tetrachloroethene	< 0.33	ug/l	0.33	1.1	1	8260B		11/18/2014	CJR	1
Toluene	< 0.69	ug/l	0.69	2.2	1	8260B		11/18/2014	CJR	1
1,2,4-Trichlorobenzene	< 0.98	ug/l	0.98	3.1	1	8260B		11/18/2014	CJR	1
1,2,3-Trichlorobenzene	< 1.8	ug/l	1.8	5.8	1	8260B		11/18/2014	CJR	1
1,1,1-Trichloroethane	< 0.33	ug/l	0.33	1	1	8260B		11/18/2014	CJR	1
1,1,2-Trichloroethane	< 0.34	ug/l	0.34	1.1	1	8260B		11/18/2014	CJR	1
Trichloroethene (TCE)	< 0.33	ug/l	0.33	1	1	8260B		11/18/2014	CJR	1
Trichlorofluoromethane	< 0.71	ug/l	0.71	2.3	1	8260B		11/18/2014	CJR	1
1,2,4-Trimethylbenzene	< 2.2	ug/l	2.2	6.9	1	8260B		11/18/2014	CJR	1
1,3,5-Trimethylbenzene	< 1.4	ug/l	1.4	4.5	1	8260B		11/18/2014	CJR	1
Vinyl Chloride	< 0.18	ug/l	0.18	0.57	1	8260B		11/18/2014	CJR	1
m&p-Xylene	< 0.69	ug/l	0.69	2.2	1	8260B		11/18/2014	CJR	1
o-Xylene	< 0.63	ug/l	0.63	2	1	8260B		11/18/2014	CJR	1
SUR - Toluene-d8	100	REC %			1	8260B		11/18/2014	CJR	1
SUR - 1,2-Dichloroethane-d4	94	REC %			1	8260B		11/18/2014	CJR	1
SUR - 4-Bromofluorobenzene	108	REC %			1	8260B		11/18/2014	CJR	1
SUR - Dibromofluoromethane	101	REC %			1	8260B		11/18/2014	CJR	1

"J" Flag: Analyte detected between LOD and LOQ LOD Limit of Detection LOQ Limit of Quantitation

Code	*Comment*
1	Laboratory QC within limits.
8	Closing calibration standard not within established limits.

All solid sample results reported on a dry weight basis unless otherwise indicated. All LOD's and LOQ's are adjusted for dilutions but not dry weight. Subcontracted results are denoted by SUB in the analyst field.

Authorized Signature



CHAIN OF JSTODY RECORD

Synergy

Environmental Lab, Inc.

1990 Prospect Ct. • Appleton, WI 54914
920-830-2455 • FAX 920-733-0631

Chain # № 310

Page 1 of 1

Sample Handling Request
____ Rush Analysis Date Required ____
(Rushes accepted only with prior authorization)
X Normal Turn Around

Lab I.D. #	
Account No. :	**Quote No.:**
Project #:	
Sampler: (signature)	
Project (Name / Location):	Former Newton Gravel Pit
Reports To:	DAVE HENDERSON
Company	AECOM
Address	1555 N. RiverCenter Dr. STE 214
City State Zip	Milwaukee, WI 53212
Phone	414-944-6190
FAX	414-944-6081
Invoice To:	DAVE HENDERSON
Company	SAME
Address	
City State Zip	
Phone	
FAX	

Analysis Requested | **Other Analysis**

Lab I.D.	Sample I.D.	Collection Date	Collection Time	Comp	Grab	Filtered Y/N	No. of Containers	Sample Type (Matrix)*	Preservation	DRO (Mod DRO Sep 95)	GRO (Mod GRO Sep 95)	LEAD	NITRATE/NITRITE	OIL & GREASE	PAH (EPA 8270)	PCB	PVOC (EPA 8021)	PVOC + NAPHTHALENE	SULFATE	TOTAL SUSPENDED SOLIDS	VOC DW (EPA 542.2)	VOC (EPA 8260)	8-RCRA METALS	PID/FID
502807-4 A	3312 CTH CR	11/10/14	915		X	N	3	~~HETGW~~	HCl													X		
B	3921 Blackhawk	11/10/14	945		X	N	3	GW	HCl													X		
C	2916 CTH CR	11/10/14	1020		X	N	3	GW	HCl													X		
D	3412 CTH CR	11/10/14	1045		X	N	3	GW	HCl													X		
E	4159 Silver	11/10/14	1115		X	N	3	GW	HCl													X		
F	4159 Silver DUP	11/10/14	1115		X	N	3	GW	HCl													X		
G	3518 Hacker	11/10/14	1415		X	N	3	GW	HCl													X		
H	3618 CTH CR	11/10/14	1515		X	N	3	GW	HCl													X		
I	3322 CTH CR	11/10/14	1615		X	N	3	GW	HCl													X		
J	2714 CTH CR	11/10/14	1715		X	N	3	GW	HCl													X		

Comments/Special Instructions (*Specify groundwater "GW", Drinking Water "DW", Waste Water "WW", Soil "S", Air "A", Oil, Sludge etc.)

Analysis per Contract
Seperate lab reports per Sample I.D.

Sample Integrity - To be completed by receiving lab.
Method of Shipment: Fedex
Temp. of Temp. Blank ____ °C On Ice: X
Cooler seal intact upon receipt: X Yes ____ No

Relinquished By: (sign)	Time ⟷ Date	Received By: (sign)	Time ⟷ Date
	11/13/14 1900		11/13/14 1900
Tony A Schultz	11/14/14 0830		

Received in Laboratory By: [signature] Time: 10:00 Date: 11/15/14

CHAIN OF JSTODY RECORD

Synergy Environmental Lab, Inc.

1990 Prospect Ct. • Appleton, WI 54914
920-830-2455 • FAX 920-733-0631

Chain # Nº 310

Page 2 of 2

Sample Handling Request
_____ Rush Analysis Date Required _____
(Rushes accepted only with prior authorization)
X Normal Turn Around

Lab I.D. #	
Account No. :	Quote No.:
Project #:	
Sampler: (signature)	
Project (Name / Location):	Former Newton Gravel Pit / Manitowoc, WI

Reports To: DAVE HENDERSON	Invoice To: DAVE HENDERSON
Company AECOM	Company SAME
Address 1555 N. RiverCenter Dr. STE 214	Address
City State Zip Milwaukee, WI 53212	City State Zip
Phone 414-944-6180	Phone
FAX 414-944-6081	FAX

Analysis Requested | **Other Analysis**

Lab I.D.	Sample I.D.	Collection Date	Collection Time	Comp	Grab	Filtered Y/N	No. of Containers	Sample Type (Matrix)*	Preservation	DRO (Mod DRO Sep 95)	GRO (Mod GRO Sep 95)	LEAD	NITRATE/NITRITE	OIL & GREASE	PAH (EPA 8270)	PCB	PVOC (EPA 8021)	PVOC + NAPHTHALENE	SULFATE	TOTAL SUSPENDED SOLIDS	VOC DW (EPA 542.2)	VOC (EPA 8260)	8-RCRA METALS	PID/FID
502807-K	3327 Hecker	11/10/14	1645		X	N	3	GW	HCl													X		
L	3461 Hecker	11/10/14	1545		X	N	3	GW	HCl													X		
M	2734 CTH CR	11/10/14	1445		X	N	3	GW	HCl													X		
N	4027 Thunder	11/11/14	915		X	N	3	GW	HCl													X		
O	4027 Thunder Dup	11/11/14	915		X	N	3	GW	HCl													X		
P	3027 Orchard	11/11/14	945		X	N	3	GW	HCl													X		
	~~3702 Hecker~~	~~11/11/14~~	~~1045~~		X	N	3	GW	HCl													X		JRJ
Q	4005 Thunder	11/11/14	1015		X	N	3	GW	HCl													X		
R	3702 Hecker	11/13/14	1545		X	N	3	GW	HCl													X		
					X	N		GW	HCl													X		SRS

Comments/Special Instructions (*Specify groundwater "GW", Drinking Water "DW", Waste Water "WW", Soil "S", Air "A", Oil, Sludge etc.)

Analysis per contract.
Seperate lab report per Sample I.D.

Sample Integrity - To be completed by receiving lab.
Method of Shipment: Driven
Temp. of Temp. Blank ____ °C On Ice: X
Cooler seal intact upon receipt: X Yes ____ No

Relinquished By: (sign)	Time	Date	Received By: (sign)	Time	Date
	11/13/14	1900	Tony A Eckert	1900	11/13/14
Tony A Eckert	11/14/14	0830			

Received in Laboratory By: Christopher Rose Time: 10:00 Date: 11/15/14

Synergy Environmental Lab, INC.

1990 Prospect Ct., Appleton, WI 54914 *P 920-830-2455 * F 920-733-0631

DAVE HENDERSON
AECOM
1555 N RIVER CENTER DRIVE
MILWAUKEE, WI 53212

Report Date *26-Nov-14*

Project Name FMR NEWTON GRAVEL PIT **Invoice #** E28103
Project #

Lab Code 5028103A
Sample ID 3303 HECKER
Sample Matrix Water
Sample Date 11/17/2014

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
VOC's										
Benzene	< 0.24	ug/l	0.24	0.77	1	8260B		11/22/2014	CJR	1
Bromobenzene	< 0.32	ug/l	0.32	1	1	8260B		11/22/2014	CJR	1
Bromodichloromethane	< 0.37	ug/l	0.37	1.2	1	8260B		11/22/2014	CJR	1
Bromoform	< 0.35	ug/l	0.35	1.1	1	8260B		11/22/2014	CJR	1
tert-Butylbenzene	< 0.36	ug/l	0.36	1.2	1	8260B		11/22/2014	CJR	1
sec-Butylbenzene	< 0.33	ug/l	0.33	1	1	8260B		11/22/2014	CJR	1
n-Butylbenzene	< 0.35	ug/l	0.35	1.1	1	8260B		11/22/2014	CJR	1
Carbon Tetrachloride	< 0.33	ug/l	0.33	1.1	1	8260B		11/22/2014	CJR	1
Chlorobenzene	< 0.24	ug/l	0.24	0.77	1	8260B		11/22/2014	CJR	1
Chloroethane	< 0.63	ug/l	0.63	2	1	8260B		11/22/2014	CJR	1
Chloroform	< 0.28	ug/l	0.28	0.88	1	8260B		11/22/2014	CJR	1
Chloromethane	< 0.81	ug/l	0.81	2.6	1	8260B		11/22/2014	CJR	1
2-Chlorotoluene	< 0.21	ug/l	0.21	0.66	1	8260B		11/22/2014	CJR	1
4-Chlorotoluene	< 0.21	ug/l	0.21	0.68	1	8260B		11/22/2014	CJR	1
1,2-Dibromo-3-chloropropane	< 0.88	ug/l	0.88	2.8	1	8260B		11/22/2014	CJR	1
Dibromochloromethane	< 0.22	ug/l	0.22	0.7	1	8260B		11/22/2014	CJR	1
1,4-Dichlorobenzene	< 0.3	ug/l	0.3	0.96	1	8260B		11/22/2014	CJR	1
1,3-Dichlorobenzene	< 0.28	ug/l	0.28	0.89	1	8260B		11/22/2014	CJR	1
1,2-Dichlorobenzene	< 0.36	ug/l	0.36	1.2	1	8260B		11/22/2014	CJR	1
Dichlorodifluoromethane	< 0.44	ug/l	0.44	1.4	1	8260B		11/22/2014	CJR	1
1,2-Dichloroethane	< 0.41	ug/l	0.41	1.3	1	8260B		11/22/2014	CJR	1
1,1-Dichloroethane	< 0.3	ug/l	0.3	0.97	1	8260B		11/22/2014	CJR	1
1,1-Dichloroethene	< 0.4	ug/l	0.4	1.3	1	8260B		11/22/2014	CJR	1
cis-1,2-Dichloroethene	< 0.38	ug/l	0.38	1.2	1	8260B		11/22/2014	CJR	1
trans-1,2-Dichloroethene	< 0.35	ug/l	0.35	1.1	1	8260B		11/22/2014	CJR	1
1,2-Dichloropropane	< 0.32	ug/l	0.32	1	1	8260B		11/22/2014	CJR	1
2,2-Dichloropropane	< 0.36	ug/l	0.36	1.2	1	8260B		11/22/2014	CJR	4 8
1,3-Dichloropropane	< 0.33	ug/l	0.33	1	1	8260B		11/22/2014	CJR	1
Di-isopropyl ether	< 0.23	ug/l	0.23	0.73	1	8260B		11/22/2014	CJR	1
EDB (1,2-Dibromoethane)	< 0.44	ug/l	0.44	1.4	1	8260B		11/22/2014	CJR	1
Ethylbenzene	< 0.55	ug/l	0.55	1.7	1	8260B		11/22/2014	CJR	1
Hexachlorobutadiene	< 1.5	ug/l	1.5	4.8	1	8260B		11/22/2014	CJR	1
Isopropylbenzene	< 0.3	ug/l	0.3	0.96	1	8260B		11/22/2014	CJR	1

Project Name FMR NEWTON GRAVEL PIT **Invoice #** E28103
Project #

Lab Code 5028103A
Sample ID 3303 HECKER
Sample Matrix Water
Sample Date 11/17/2014

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
p-Isopropyltoluene	< 0.31	ug/l	0.31	0.98	1	8260B		11/22/2014	CJR	1
Methylene chloride	< 0.5	ug/l	0.5	1.6	1	8260B		11/22/2014	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.23	ug/l	0.23	0.74	1	8260B		11/22/2014	CJR	1
Naphthalene	< 1.7	ug/l	1.7	5.5	1	8260B		11/22/2014	CJR	1
n-Propylbenzene	< 0.25	ug/l	0.25	0.81	1	8260B		11/22/2014	CJR	1
1,1,2,2-Tetrachloroethane	< 0.45	ug/l	0.45	1.4	1	8260B		11/22/2014	CJR	1
1,1,1,2-Tetrachloroethane	< 0.33	ug/l	0.33	1.1	1	8260B		11/22/2014	CJR	1
Tetrachloroethene	< 0.33	ug/l	0.33	1.1	1	8260B		11/22/2014	CJR	1
Toluene	< 0.69	ug/l	0.69	2.2	1	8260B		11/22/2014	CJR	1
1,2,4-Trichlorobenzene	< 0.98	ug/l	0.98	3.1	1	8260B		11/22/2014	CJR	1
1,2,3-Trichlorobenzene	< 1.8	ug/l	1.8	5.8	1	8260B		11/22/2014	CJR	1
1,1,1-Trichloroethane	< 0.33	ug/l	0.33	1	1	8260B		11/22/2014	CJR	1
1,1,2-Trichloroethane	< 0.34	ug/l	0.34	1.1	1	8260B		11/22/2014	CJR	1
Trichloroethene (TCE)	< 0.33	ug/l	0.33	1	1	8260B		11/22/2014	CJR	1
Trichlorofluoromethane	< 0.71	ug/l	0.71	2.3	1	8260B		11/22/2014	CJR	1
1,2,4-Trimethylbenzene	< 2.2	ug/l	2.2	6.9	1	8260B		11/22/2014	CJR	1
1,3,5-Trimethylbenzene	< 1.4	ug/l	1.4	4.5	1	8260B		11/22/2014	CJR	1
Vinyl Chloride	< 0.18	ug/l	0.18	0.57	1	8260B		11/22/2014	CJR	1
m&p-Xylene	< 0.69	ug/l	0.69	2.2	1	8260B		11/22/2014	CJR	1
o-Xylene	< 0.63	ug/l	0.63	2	1	8260B		11/22/2014	CJR	1
SUR - 4-Bromofluorobenzene	96	REC %			1	8260B		11/22/2014	CJR	1
SUR - Dibromofluoromethane	87	REC %			1	8260B		11/22/2014	CJR	1
SUR - Toluene-d8	95	REC %			1	8260B		11/22/2014	CJR	1
SUR - 1,2-Dichloroethane-d4	94	REC %			1	8260B		11/22/2014	CJR	1

Project Name FMR NEWTON GRAVEL PIT **Invoice #** E28103
Project #

Lab Code 5028103B
Sample ID 3224 CTH CR
Sample Matrix Water
Sample Date 11/17/2014

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
VOC's										
Benzene	< 0.24	ug/l	0.24	0.77	1	8260B		11/22/2014	CJR	1
Bromobenzene	< 0.32	ug/l	0.32	1	1	8260B		11/22/2014	CJR	1
Bromodichloromethane	< 0.37	ug/l	0.37	1.2	1	8260B		11/22/2014	CJR	1
Bromoform	< 0.35	ug/l	0.35	1.1	1	8260B		11/22/2014	CJR	1
tert-Butylbenzene	< 0.36	ug/l	0.36	1.2	1	8260B		11/22/2014	CJR	1
sec-Butylbenzene	< 0.33	ug/l	0.33	1	1	8260B		11/22/2014	CJR	1
n-Butylbenzene	< 0.35	ug/l	0.35	1.1	1	8260B		11/22/2014	CJR	1
Carbon Tetrachloride	< 0.33	ug/l	0.33	1.1	1	8260B		11/22/2014	CJR	1
Chlorobenzene	< 0.24	ug/l	0.24	0.77	1	8260B		11/22/2014	CJR	1
Chloroethane	< 0.63	ug/l	0.63	2	1	8260B		11/22/2014	CJR	1
Chloroform	< 0.28	ug/l	0.28	0.88	1	8260B		11/22/2014	CJR	1
Chloromethane	< 0.81	ug/l	0.81	2.6	1	8260B		11/22/2014	CJR	1
2-Chlorotoluene	< 0.21	ug/l	0.21	0.66	1	8260B		11/22/2014	CJR	1
4-Chlorotoluene	< 0.21	ug/l	0.21	0.68	1	8260B		11/22/2014	CJR	1
1,2-Dibromo-3-chloropropane	< 0.88	ug/l	0.88	2.8	1	8260B		11/22/2014	CJR	1
Dibromochloromethane	< 0.22	ug/l	0.22	0.7	1	8260B		11/22/2014	CJR	1
1,4-Dichlorobenzene	< 0.3	ug/l	0.3	0.96	1	8260B		11/22/2014	CJR	1
1,3-Dichlorobenzene	< 0.28	ug/l	0.28	0.89	1	8260B		11/22/2014	CJR	1
1,2-Dichlorobenzene	< 0.36	ug/l	0.36	1.2	1	8260B		11/22/2014	CJR	1
Dichlorodifluoromethane	< 0.44	ug/l	0.44	1.4	1	8260B		11/22/2014	CJR	1
1,2-Dichloroethane	< 0.41	ug/l	0.41	1.3	1	8260B		11/22/2014	CJR	1
1,1-Dichloroethane	< 0.3	ug/l	0.3	0.97	1	8260B		11/22/2014	CJR	1
1,1-Dichloroethene	< 0.4	ug/l	0.4	1.3	1	8260B		11/22/2014	CJR	1
cis-1,2-Dichloroethene	< 0.38	ug/l	0.38	1.2	1	8260B		11/22/2014	CJR	1
trans-1,2-Dichloroethene	< 0.35	ug/l	0.35	1.1	1	8260B		11/22/2014	CJR	1
1,2-Dichloropropane	< 0.32	ug/l	0.32	1	1	8260B		11/22/2014	CJR	1
2,2-Dichloropropane	< 0.36	ug/l	0.36	1.2	1	8260B		11/22/2014	CJR	4 8
1,3-Dichloropropane	< 0.33	ug/l	0.33	1	1	8260B		11/22/2014	CJR	1
Di-isopropyl ether	< 0.23	ug/l	0.23	0.73	1	8260B		11/22/2014	CJR	1
EDB (1,2-Dibromoethane)	< 0.44	ug/l	0.44	1.4	1	8260B		11/22/2014	CJR	1
Ethylbenzene	< 0.55	ug/l	0.55	1.7	1	8260B		11/22/2014	CJR	1
Hexachlorobutadiene	< 1.5	ug/l	1.5	4.8	1	8260B		11/22/2014	CJR	1
Isopropylbenzene	< 0.3	ug/l	0.3	0.96	1	8260B		11/22/2014	CJR	1
p-Isopropyltoluene	< 0.31	ug/l	0.31	0.98	1	8260B		11/22/2014	CJR	1
Methylene chloride	< 0.5	ug/l	0.5	1.6	1	8260B		11/22/2014	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.23	ug/l	0.23	0.74	1	8260B		11/22/2014	CJR	1
Naphthalene	< 1.7	ug/l	1.7	5.5	1	8260B		11/22/2014	CJR	1
n-Propylbenzene	< 0.25	ug/l	0.25	0.81	1	8260B		11/22/2014	CJR	1
1,1,2,2-Tetrachloroethane	< 0.45	ug/l	0.45	1.4	1	8260B		11/22/2014	CJR	1
1,1,1,2-Tetrachloroethane	< 0.33	ug/l	0.33	1.1	1	8260B		11/22/2014	CJR	1
Tetrachloroethene	< 0.33	ug/l	0.33	1.1	1	8260B		11/22/2014	CJR	1
Toluene	< 0.69	ug/l	0.69	2.2	1	8260B		11/22/2014	CJR	1
1,2,4-Trichlorobenzene	< 0.98	ug/l	0.98	3.1	1	8260B		11/22/2014	CJR	1
1,2,3-Trichlorobenzene	< 1.8	ug/l	1.8	5.8	1	8260B		11/22/2014	CJR	1
1,1,1-Trichloroethane	< 0.33	ug/l	0.33	1	1	8260B		11/22/2014	CJR	1
1,1,2-Trichloroethane	< 0.34	ug/l	0.34	1.1	1	8260B		11/22/2014	CJR	1
Trichloroethene (TCE)	< 0.33	ug/l	0.33	1	1	8260B		11/22/2014	CJR	1
Trichlorofluoromethane	< 0.71	ug/l	0.71	2.3	1	8260B		11/22/2014	CJR	1
1,2,4-Trimethylbenzene	< 2.2	ug/l	2.2	6.9	1	8260B		11/22/2014	CJR	1
1,3,5-Trimethylbenzene	< 1.4	ug/l	1.4	4.5	1	8260B		11/22/2014	CJR	1
Vinyl Chloride	< 0.18	ug/l	0.18	0.57	1	8260B		11/22/2014	CJR	1
m&p-Xylene	< 0.69	ug/l	0.69	2.2	1	8260B		11/22/2014	CJR	1
o-Xylene	< 0.63	ug/l	0.63	2	1	8260B		11/22/2014	CJR	1
SUR - 1,2-Dichloroethane-d4	97	REC %			1	8260B		11/22/2014	CJR	1
SUR - 4-Bromofluorobenzene	94	REC %			1	8260B		11/22/2014	CJR	1
SUR - Dibromofluoromethane	85	REC %			1	8260B		11/22/2014	CJR	1
SUR - Toluene-d8	96	REC %			1	8260B		11/22/2014	CJR	1

Project Name FMR NEWTON GRAVEL PIT **Invoice #** E28103
Project #

Lab Code 5028103C
Sample ID 4111 THUNDER
Sample Matrix Water
Sample Date 11/17/2014

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
VOC's										
Benzene	< 0.24	ug/l	0.24	0.77	1	8260B		11/22/2014	CJR	1
Bromobenzene	< 0.32	ug/l	0.32	1	1	8260B		11/22/2014	CJR	1
Bromodichloromethane	< 0.37	ug/l	0.37	1.2	1	8260B		11/22/2014	CJR	1
Bromoform	< 0.35	ug/l	0.35	1.1	1	8260B		11/22/2014	CJR	1
tert-Butylbenzene	< 0.36	ug/l	0.36	1.2	1	8260B		11/22/2014	CJR	1
sec-Butylbenzene	< 0.33	ug/l	0.33	1	1	8260B		11/22/2014	CJR	1
n-Butylbenzene	< 0.35	ug/l	0.35	1.1	1	8260B		11/22/2014	CJR	1
Carbon Tetrachloride	< 0.33	ug/l	0.33	1.1	1	8260B		11/22/2014	CJR	1
Chlorobenzene	< 0.24	ug/l	0.24	0.77	1	8260B		11/22/2014	CJR	1
Chloroethane	< 0.63	ug/l	0.63	2	1	8260B		11/22/2014	CJR	1
Chloroform	< 0.28	ug/l	0.28	0.88	1	8260B		11/22/2014	CJR	1
Chloromethane	< 0.81	ug/l	0.81	2.6	1	8260B		11/22/2014	CJR	1
2-Chlorotoluene	< 0.21	ug/l	0.21	0.66	1	8260B		11/22/2014	CJR	1
4-Chlorotoluene	< 0.21	ug/l	0.21	0.68	1	8260B		11/22/2014	CJR	1
1,2-Dibromo-3-chloropropane	< 0.88	ug/l	0.88	2.8	1	8260B		11/22/2014	CJR	1
Dibromochloromethane	< 0.22	ug/l	0.22	0.7	1	8260B		11/22/2014	CJR	1
1,4-Dichlorobenzene	< 0.3	ug/l	0.3	0.96	1	8260B		11/22/2014	CJR	1
1,3-Dichlorobenzene	< 0.28	ug/l	0.28	0.89	1	8260B		11/22/2014	CJR	1
1,2-Dichlorobenzene	< 0.36	ug/l	0.36	1.2	1	8260B		11/22/2014	CJR	1
Dichlorodifluoromethane	< 0.44	ug/l	0.44	1.4	1	8260B		11/22/2014	CJR	1
1,2-Dichloroethane	< 0.41	ug/l	0.41	1.3	1	8260B		11/22/2014	CJR	1
1,1-Dichloroethane	< 0.3	ug/l	0.3	0.97	1	8260B		11/22/2014	CJR	1
1,1-Dichloroethene	< 0.4	ug/l	0.4	1.3	1	8260B		11/22/2014	CJR	1
cis-1,2-Dichloroethene	< 0.38	ug/l	0.38	1.2	1	8260B		11/22/2014	CJR	1
trans-1,2-Dichloroethene	< 0.35	ug/l	0.35	1.1	1	8260B		11/22/2014	CJR	1
1,2-Dichloropropane	< 0.32	ug/l	0.32	1	1	8260B		11/22/2014	CJR	1
2,2-Dichloropropane	< 0.36	ug/l	0.36	1.2	1	8260B		11/22/2014	CJR	4 8
1,3-Dichloropropane	< 0.33	ug/l	0.33	1	1	8260B		11/22/2014	CJR	1
Di-isopropyl ether	< 0.23	ug/l	0.23	0.73	1	8260B		11/22/2014	CJR	1
EDB (1,2-Dibromoethane)	< 0.44	ug/l	0.44	1.4	1	8260B		11/22/2014	CJR	1
Ethylbenzene	< 0.55	ug/l	0.55	1.7	1	8260B		11/22/2014	CJR	1
Hexachlorobutadiene	< 1.5	ug/l	1.5	4.8	1	8260B		11/22/2014	CJR	1
Isopropylbenzene	< 0.3	ug/l	0.3	0.96	1	8260B		11/22/2014	CJR	1
p-Isopropyltoluene	< 0.31	ug/l	0.31	0.98	1	8260B		11/22/2014	CJR	1
Methylene chloride	< 0.5	ug/l	0.5	1.6	1	8260B		11/22/2014	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.23	ug/l	0.23	0.74	1	8260B		11/22/2014	CJR	1
Naphthalene	< 1.7	ug/l	1.7	5.5	1	8260B		11/22/2014	CJR	1
n-Propylbenzene	< 0.25	ug/l	0.25	0.81	1	8260B		11/22/2014	CJR	1
1,1,2,2-Tetrachloroethane	< 0.45	ug/l	0.45	1.4	1	8260B		11/22/2014	CJR	1
1,1,1,2-Tetrachloroethane	< 0.33	ug/l	0.33	1.1	1	8260B		11/22/2014	CJR	1
Tetrachloroethene	< 0.33	ug/l	0.33	1.1	1	8260B		11/22/2014	CJR	1
Toluene	< 0.69	ug/l	0.69	2.2	1	8260B		11/22/2014	CJR	1
1,2,4-Trichlorobenzene	< 0.98	ug/l	0.98	3.1	1	8260B		11/22/2014	CJR	1
1,2,3-Trichlorobenzene	< 1.8	ug/l	1.8	5.8	1	8260B		11/22/2014	CJR	1
1,1,1-Trichloroethane	< 0.33	ug/l	0.33	1	1	8260B		11/22/2014	CJR	1
1,1,2-Trichloroethane	< 0.34	ug/l	0.34	1.1	1	8260B		11/22/2014	CJR	1
Trichloroethene (TCE)	< 0.33	ug/l	0.33	1	1	8260B		11/22/2014	CJR	1
Trichlorofluoromethane	< 0.71	ug/l	0.71	2.3	1	8260B		11/22/2014	CJR	1
1,2,4-Trimethylbenzene	< 2.2	ug/l	2.2	6.9	1	8260B		11/22/2014	CJR	1
1,3,5-Trimethylbenzene	< 1.4	ug/l	1.4	4.5	1	8260B		11/22/2014	CJR	1
Vinyl Chloride	< 0.18	ug/l	0.18	0.57	1	8260B		11/22/2014	CJR	1
m&p-Xylene	< 0.69	ug/l	0.69	2.2	1	8260B		11/22/2014	CJR	1
o-Xylene	< 0.63	ug/l	0.63	2	1	8260B		11/22/2014	CJR	1
SUR - Toluene-d8	94	REC %			1	8260B		11/22/2014	CJR	1
SUR - 1,2-Dichloroethane-d4	97	REC %			1	8260B		11/22/2014	CJR	1
SUR - 4-Bromofluorobenzene	96	REC %			1	8260B		11/22/2014	CJR	1
SUR - Dibromofluoromethane	90	REC %			1	8260B		11/22/2014	CJR	1

Project Name FMR NEWTON GRAVEL PIT **Invoice #** E28103
Project #

Lab Code 5028103D
Sample ID 4101 THUNDER
Sample Matrix Water
Sample Date 11/17/2014

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
VOC's										
Benzene	< 0.24	ug/l	0.24	0.77	1	8260B		11/22/2014	CJR	1
Bromobenzene	< 0.32	ug/l	0.32	1	1	8260B		11/22/2014	CJR	1
Bromodichloromethane	< 0.37	ug/l	0.37	1.2	1	8260B		11/22/2014	CJR	1
Bromoform	< 0.35	ug/l	0.35	1.1	1	8260B		11/22/2014	CJR	1
tert-Butylbenzene	< 0.36	ug/l	0.36	1.2	1	8260B		11/22/2014	CJR	1
sec-Butylbenzene	< 0.33	ug/l	0.33	1	1	8260B		11/22/2014	CJR	1
n-Butylbenzene	< 0.35	ug/l	0.35	1.1	1	8260B		11/22/2014	CJR	1
Carbon Tetrachloride	< 0.33	ug/l	0.33	1.1	1	8260B		11/22/2014	CJR	1
Chlorobenzene	< 0.24	ug/l	0.24	0.77	1	8260B		11/22/2014	CJR	1
Chloroethane	< 0.63	ug/l	0.63	2	1	8260B		11/22/2014	CJR	1
Chloroform	< 0.28	ug/l	0.28	0.88	1	8260B		11/22/2014	CJR	1
Chloromethane	< 0.81	ug/l	0.81	2.6	1	8260B		11/22/2014	CJR	1
2-Chlorotoluene	< 0.21	ug/l	0.21	0.66	1	8260B		11/22/2014	CJR	1
4-Chlorotoluene	< 0.21	ug/l	0.21	0.68	1	8260B		11/22/2014	CJR	1
1,2-Dibromo-3-chloropropane	< 0.88	ug/l	0.88	2.8	1	8260B		11/22/2014	CJR	1
Dibromochloromethane	< 0.22	ug/l	0.22	0.7	1	8260B		11/22/2014	CJR	1
1,4-Dichlorobenzene	< 0.3	ug/l	0.3	0.96	1	8260B		11/22/2014	CJR	1
1,3-Dichlorobenzene	< 0.28	ug/l	0.28	0.89	1	8260B		11/22/2014	CJR	1
1,2-Dichlorobenzene	< 0.36	ug/l	0.36	1.2	1	8260B		11/22/2014	CJR	1
Dichlorodifluoromethane	< 0.44	ug/l	0.44	1.4	1	8260B		11/22/2014	CJR	1
1,2-Dichloroethane	< 0.41	ug/l	0.41	1.3	1	8260B		11/22/2014	CJR	1
1,1-Dichloroethane	< 0.3	ug/l	0.3	0.97	1	8260B		11/22/2014	CJR	1
1,1-Dichloroethene	< 0.4	ug/l	0.4	1.3	1	8260B		11/22/2014	CJR	1
cis-1,2-Dichloroethene	0.63 "J"	ug/l	0.38	1.2	1	8260B		11/22/2014	CJR	1
trans-1,2-Dichloroethene	< 0.35	ug/l	0.35	1.1	1	8260B		11/22/2014	CJR	1
1,2-Dichloropropane	< 0.32	ug/l	0.32	1	1	8260B		11/22/2014	CJR	1
2,2-Dichloropropane	< 0.36	ug/l	0.36	1.2	1	8260B		11/22/2014	CJR	4 8
1,3-Dichloropropane	< 0.33	ug/l	0.33	1	1	8260B		11/22/2014	CJR	1
Di-isopropyl ether	< 0.23	ug/l	0.23	0.73	1	8260B		11/22/2014	CJR	1
EDB (1,2-Dibromoethane)	< 0.44	ug/l	0.44	1.4	1	8260B		11/22/2014	CJR	1
Ethylbenzene	< 0.55	ug/l	0.55	1.7	1	8260B		11/22/2014	CJR	1
Hexachlorobutadiene	< 1.5	ug/l	1.5	4.8	1	8260B		11/22/2014	CJR	1
Isopropylbenzene	< 0.3	ug/l	0.3	0.96	1	8260B		11/22/2014	CJR	1
p-Isopropyltoluene	< 0.31	ug/l	0.31	0.98	1	8260B		11/22/2014	CJR	1
Methylene chloride	< 0.5	ug/l	0.5	1.6	1	8260B		11/22/2014	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.23	ug/l	0.23	0.74	1	8260B		11/22/2014	CJR	1
Naphthalene	< 1.7	ug/l	1.7	5.5	1	8260B		11/22/2014	CJR	1
n-Propylbenzene	< 0.25	ug/l	0.25	0.81	1	8260B		11/22/2014	CJR	1
1,1,2,2-Tetrachloroethane	< 0.45	ug/l	0.45	1.4	1	8260B		11/22/2014	CJR	1
1,1,1,2-Tetrachloroethane	< 0.33	ug/l	0.33	1.1	1	8260B		11/22/2014	CJR	1
Tetrachloroethene	< 0.33	ug/l	0.33	1.1	1	8260B		11/22/2014	CJR	1
Toluene	< 0.69	ug/l	0.69	2.2	1	8260B		11/22/2014	CJR	1
1,2,4-Trichlorobenzene	< 0.98	ug/l	0.98	3.1	1	8260B		11/22/2014	CJR	1
1,2,3-Trichlorobenzene	< 1.8	ug/l	1.8	5.8	1	8260B		11/22/2014	CJR	1
1,1,1-Trichloroethane	< 0.33	ug/l	0.33	1	1	8260B		11/22/2014	CJR	1
1,1,2-Trichloroethane	< 0.34	ug/l	0.34	1.1	1	8260B		11/22/2014	CJR	1
Trichloroethene (TCE)	< 0.33	ug/l	0.33	1	1	8260B		11/22/2014	CJR	1
Trichlorofluoromethane	< 0.71	ug/l	0.71	2.3	1	8260B		11/22/2014	CJR	1
1,2,4-Trimethylbenzene	< 2.2	ug/l	2.2	6.9	1	8260B		11/22/2014	CJR	1
1,3,5-Trimethylbenzene	< 1.4	ug/l	1.4	4.5	1	8260B		11/22/2014	CJR	1
Vinyl Chloride	< 0.18	ug/l	0.18	0.57	1	8260B		11/22/2014	CJR	1
m&p-Xylene	< 0.69	ug/l	0.69	2.2	1	8260B		11/22/2014	CJR	1
o-Xylene	< 0.63	ug/l	0.63	2	1	8260B		11/22/2014	CJR	1
SUR - 4-Bromofluorobenzene	97	REC %			1	8260B		11/22/2014	CJR	1
SUR - Dibromofluoromethane	85	REC %			1	8260B		11/22/2014	CJR	1
SUR - Toluene-d8	96	REC %			1	8260B		11/22/2014	CJR	1
SUR - 1,2-Dichloroethane-d4	93	REC %			1	8260B		11/22/2014	CJR	1

Project Name FMR NEWTON GRAVEL PIT **Invoice #** E28103
Project #

Lab Code 5028103E
Sample ID 3422 CTH CR
Sample Matrix Water
Sample Date 11/18/2014

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
VOC's										
Benzene	< 0.24	ug/l	0.24	0.77	1	8260B		11/22/2014	CJR	1
Bromobenzene	< 0.32	ug/l	0.32	1	1	8260B		11/22/2014	CJR	1
Bromodichloromethane	< 0.37	ug/l	0.37	1.2	1	8260B		11/22/2014	CJR	1
Bromoform	< 0.35	ug/l	0.35	1.1	1	8260B		11/22/2014	CJR	1
tert-Butylbenzene	< 0.36	ug/l	0.36	1.2	1	8260B		11/22/2014	CJR	1
sec-Butylbenzene	< 0.33	ug/l	0.33	1	1	8260B		11/22/2014	CJR	1
n-Butylbenzene	< 0.35	ug/l	0.35	1.1	1	8260B		11/22/2014	CJR	1
Carbon Tetrachloride	< 0.33	ug/l	0.33	1.1	1	8260B		11/22/2014	CJR	1
Chlorobenzene	< 0.24	ug/l	0.24	0.77	1	8260B		11/22/2014	CJR	1
Chloroethane	< 0.63	ug/l	0.63	2	1	8260B		11/22/2014	CJR	1
Chloroform	< 0.28	ug/l	0.28	0.88	1	8260B		11/22/2014	CJR	1
Chloromethane	< 0.81	ug/l	0.81	2.6	1	8260B		11/22/2014	CJR	1
2-Chlorotoluene	< 0.21	ug/l	0.21	0.66	1	8260B		11/22/2014	CJR	1
4-Chlorotoluene	< 0.21	ug/l	0.21	0.68	1	8260B		11/22/2014	CJR	1
1,2-Dibromo-3-chloropropane	< 0.88	ug/l	0.88	2.8	1	8260B		11/22/2014	CJR	1
Dibromochloromethane	< 0.22	ug/l	0.22	0.7	1	8260B		11/22/2014	CJR	1
1,4-Dichlorobenzene	< 0.3	ug/l	0.3	0.96	1	8260B		11/22/2014	CJR	1
1,3-Dichlorobenzene	< 0.28	ug/l	0.28	0.89	1	8260B		11/22/2014	CJR	1
1,2-Dichlorobenzene	< 0.36	ug/l	0.36	1.2	1	8260B		11/22/2014	CJR	1
Dichlorodifluoromethane	< 0.44	ug/l	0.44	1.4	1	8260B		11/22/2014	CJR	1
1,2-Dichloroethane	< 0.41	ug/l	0.41	1.3	1	8260B		11/22/2014	CJR	1
1,1-Dichloroethane	< 0.3	ug/l	0.3	0.97	1	8260B		11/22/2014	CJR	1
1,1-Dichloroethene	< 0.4	ug/l	0.4	1.3	1	8260B		11/22/2014	CJR	1
cis-1,2-Dichloroethene	< 0.38	ug/l	0.38	1.2	1	8260B		11/22/2014	CJR	1
trans-1,2-Dichloroethene	< 0.35	ug/l	0.35	1.1	1	8260B		11/22/2014	CJR	1
1,2-Dichloropropane	< 0.32	ug/l	0.32	1	1	8260B		11/22/2014	CJR	1
2,2-Dichloropropane	< 0.36	ug/l	0.36	1.2	1	8260B		11/22/2014	CJR	4 8
1,3-Dichloropropane	< 0.33	ug/l	0.33	1	1	8260B		11/22/2014	CJR	1
Di-isopropyl ether	< 0.23	ug/l	0.23	0.73	1	8260B		11/22/2014	CJR	1
EDB (1,2-Dibromoethane)	< 0.44	ug/l	0.44	1.4	1	8260B		11/22/2014	CJR	1
Ethylbenzene	< 0.55	ug/l	0.55	1.7	1	8260B		11/22/2014	CJR	1
Hexachlorobutadiene	< 1.5	ug/l	1.5	4.8	1	8260B		11/22/2014	CJR	1
Isopropylbenzene	< 0.3	ug/l	0.3	0.96	1	8260B		11/22/2014	CJR	1
p-Isopropyltoluene	< 0.31	ug/l	0.31	0.98	1	8260B		11/22/2014	CJR	1
Methylene chloride	< 0.5	ug/l	0.5	1.6	1	8260B		11/22/2014	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.23	ug/l	0.23	0.74	1	8260B		11/22/2014	CJR	1
Naphthalene	< 1.7	ug/l	1.7	5.5	1	8260B		11/22/2014	CJR	1
n-Propylbenzene	< 0.25	ug/l	0.25	0.81	1	8260B		11/22/2014	CJR	1
1,1,2,2-Tetrachloroethane	< 0.45	ug/l	0.45	1.4	1	8260B		11/22/2014	CJR	1
1,1,1,2-Tetrachloroethane	< 0.33	ug/l	0.33	1.1	1	8260B		11/22/2014	CJR	1
Tetrachloroethene	< 0.33	ug/l	0.33	1.1	1	8260B		11/22/2014	CJR	1
Toluene	< 0.69	ug/l	0.69	2.2	1	8260B		11/22/2014	CJR	1
1,2,4-Trichlorobenzene	< 0.98	ug/l	0.98	3.1	1	8260B		11/22/2014	CJR	1
1,2,3-Trichlorobenzene	< 1.8	ug/l	1.8	5.8	1	8260B		11/22/2014	CJR	1
1,1,1-Trichloroethane	< 0.33	ug/l	0.33	1	1	8260B		11/22/2014	CJR	1
1,1,2-Trichloroethane	< 0.34	ug/l	0.34	1.1	1	8260B		11/22/2014	CJR	1
Trichloroethene (TCE)	< 0.33	ug/l	0.33	1	1	8260B		11/22/2014	CJR	1
Trichlorofluoromethane	< 0.71	ug/l	0.71	2.3	1	8260B		11/22/2014	CJR	1
1,2,4-Trimethylbenzene	< 2.2	ug/l	2.2	6.9	1	8260B		11/22/2014	CJR	1
1,3,5-Trimethylbenzene	< 1.4	ug/l	1.4	4.5	1	8260B		11/22/2014	CJR	1
Vinyl Chloride	< 0.18	ug/l	0.18	0.57	1	8260B		11/22/2014	CJR	1
m&p-Xylene	< 0.69	ug/l	0.69	2.2	1	8260B		11/22/2014	CJR	1
o-Xylene	< 0.63	ug/l	0.63	2	1	8260B		11/22/2014	CJR	1
SUR - 1,2-Dichloroethane-d4	97	REC %			1	8260B		11/22/2014	CJR	1
SUR - 4-Bromofluorobenzene	93	REC %			1	8260B		11/22/2014	CJR	1
SUR - Dibromofluoromethane	86	REC %			1	8260B		11/22/2014	CJR	1
SUR - Toluene-d8	95	REC %			1	8260B		11/22/2014	CJR	1

Project Name FMR NEWTON GRAVEL PIT **Invoice #** E28103
Project #

Lab Code 5028103F
Sample ID 4004 SILVER
Sample Matrix Water
Sample Date 11/18/2014

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
VOC's										
Benzene	< 0.24	ug/l	0.24	0.77	1	8260B		11/22/2014	CJR	1
Bromobenzene	< 0.32	ug/l	0.32	1	1	8260B		11/22/2014	CJR	1
Bromodichloromethane	< 0.37	ug/l	0.37	1.2	1	8260B		11/22/2014	CJR	1
Bromoform	< 0.35	ug/l	0.35	1.1	1	8260B		11/22/2014	CJR	1
tert-Butylbenzene	< 0.36	ug/l	0.36	1.2	1	8260B		11/22/2014	CJR	1
sec-Butylbenzene	< 0.33	ug/l	0.33	1	1	8260B		11/22/2014	CJR	1
n-Butylbenzene	< 0.35	ug/l	0.35	1.1	1	8260B		11/22/2014	CJR	1
Carbon Tetrachloride	< 0.33	ug/l	0.33	1.1	1	8260B		11/22/2014	CJR	1
Chlorobenzene	< 0.24	ug/l	0.24	0.77	1	8260B		11/22/2014	CJR	1
Chloroethane	< 0.63	ug/l	0.63	2	1	8260B		11/22/2014	CJR	1
Chloroform	< 0.28	ug/l	0.28	0.88	1	8260B		11/22/2014	CJR	1
Chloromethane	< 0.81	ug/l	0.81	2.6	1	8260B		11/22/2014	CJR	1
2-Chlorotoluene	< 0.21	ug/l	0.21	0.66	1	8260B		11/22/2014	CJR	1
4-Chlorotoluene	< 0.21	ug/l	0.21	0.68	1	8260B		11/22/2014	CJR	1
1,2-Dibromo-3-chloropropane	< 0.88	ug/l	0.88	2.8	1	8260B		11/22/2014	CJR	1
Dibromochloromethane	< 0.22	ug/l	0.22	0.7	1	8260B		11/22/2014	CJR	1
1,4-Dichlorobenzene	< 0.3	ug/l	0.3	0.96	1	8260B		11/22/2014	CJR	1
1,3-Dichlorobenzene	< 0.28	ug/l	0.28	0.89	1	8260B		11/22/2014	CJR	1
1,2-Dichlorobenzene	< 0.36	ug/l	0.36	1.2	1	8260B		11/22/2014	CJR	1
Dichlorodifluoromethane	< 0.44	ug/l	0.44	1.4	1	8260B		11/22/2014	CJR	1
1,2-Dichloroethane	< 0.41	ug/l	0.41	1.3	1	8260B		11/22/2014	CJR	1
1,1-Dichloroethane	< 0.3	ug/l	0.3	0.97	1	8260B		11/22/2014	CJR	1
1,1-Dichloroethene	< 0.4	ug/l	0.4	1.3	1	8260B		11/22/2014	CJR	1
cis-1,2-Dichloroethene	< 0.38	ug/l	0.38	1.2	1	8260B		11/22/2014	CJR	1
trans-1,2-Dichloroethene	< 0.35	ug/l	0.35	1.1	1	8260B		11/22/2014	CJR	1
1,2-Dichloropropane	< 0.32	ug/l	0.32	1	1	8260B		11/22/2014	CJR	1
2,2-Dichloropropane	< 0.36	ug/l	0.36	1.2	1	8260B		11/22/2014	CJR	4 8
1,3-Dichloropropane	< 0.33	ug/l	0.33	1	1	8260B		11/22/2014	CJR	1
Di-isopropyl ether	< 0.23	ug/l	0.23	0.73	1	8260B		11/22/2014	CJR	1
EDB (1,2-Dibromoethane)	< 0.44	ug/l	0.44	1.4	1	8260B		11/22/2014	CJR	1
Ethylbenzene	< 0.55	ug/l	0.55	1.7	1	8260B		11/22/2014	CJR	1
Hexachlorobutadiene	< 1.5	ug/l	1.5	4.8	1	8260B		11/22/2014	CJR	1
Isopropylbenzene	< 0.3	ug/l	0.3	0.96	1	8260B		11/22/2014	CJR	1
p-Isopropyltoluene	< 0.31	ug/l	0.31	0.98	1	8260B		11/22/2014	CJR	1
Methylene chloride	< 0.5	ug/l	0.5	1.6	1	8260B		11/22/2014	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.23	ug/l	0.23	0.74	1	8260B		11/22/2014	CJR	1
Naphthalene	< 1.7	ug/l	1.7	5.5	1	8260B		11/22/2014	CJR	1
n-Propylbenzene	< 0.25	ug/l	0.25	0.81	1	8260B		11/22/2014	CJR	1
1,1,2,2-Tetrachloroethane	< 0.45	ug/l	0.45	1.4	1	8260B		11/22/2014	CJR	1
1,1,1,2-Tetrachloroethane	< 0.33	ug/l	0.33	1.1	1	8260B		11/22/2014	CJR	1
Tetrachloroethene	< 0.33	ug/l	0.33	1.1	1	8260B		11/22/2014	CJR	1
Toluene	< 0.69	ug/l	0.69	2.2	1	8260B		11/22/2014	CJR	1
1,2,4-Trichlorobenzene	< 0.98	ug/l	0.98	3.1	1	8260B		11/22/2014	CJR	1
1,2,3-Trichlorobenzene	< 1.8	ug/l	1.8	5.8	1	8260B		11/22/2014	CJR	1
1,1,1-Trichloroethane	< 0.33	ug/l	0.33	1	1	8260B		11/22/2014	CJR	1
1,1,2-Trichloroethane	< 0.34	ug/l	0.34	1.1	1	8260B		11/22/2014	CJR	1
Trichloroethene (TCE)	< 0.33	ug/l	0.33	1	1	8260B		11/22/2014	CJR	1
Trichlorofluoromethane	< 0.71	ug/l	0.71	2.3	1	8260B		11/22/2014	CJR	1
1,2,4-Trimethylbenzene	< 2.2	ug/l	2.2	6.9	1	8260B		11/22/2014	CJR	1
1,3,5-Trimethylbenzene	< 1.4	ug/l	1.4	4.5	1	8260B		11/22/2014	CJR	1
Vinyl Chloride	< 0.18	ug/l	0.18	0.57	1	8260B		11/22/2014	CJR	1
m&p-Xylene	< 0.69	ug/l	0.69	2.2	1	8260B		11/22/2014	CJR	1
o-Xylene	< 0.63	ug/l	0.63	2	1	8260B		11/22/2014	CJR	1
SUR - Dibromofluoromethane	89	REC %			1	8260B		11/22/2014	CJR	1
SUR - 1,2-Dichloroethane-d4	94	REC %			1	8260B		11/22/2014	CJR	1
SUR - 4-Bromofluorobenzene	94	REC %			1	8260B		11/22/2014	CJR	1
SUR - Toluene-d8	95	REC %			1	8260B		11/22/2014	CJR	1

Project Name FMR NEWTON GRAVEL PIT **Invoice #** E28103
Project #

Lab Code 5028103G
Sample ID 3504 CTH CR
Sample Matrix Water
Sample Date 11/18/2014

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
VOC's										
Benzene	< 0.24	ug/l	0.24	0.77	1	8260B		11/22/2014	CJR	1
Bromobenzene	< 0.32	ug/l	0.32	1	1	8260B		11/22/2014	CJR	1
Bromodichloromethane	< 0.37	ug/l	0.37	1.2	1	8260B		11/22/2014	CJR	1
Bromoform	< 0.35	ug/l	0.35	1.1	1	8260B		11/22/2014	CJR	1
tert-Butylbenzene	< 0.36	ug/l	0.36	1.2	1	8260B		11/22/2014	CJR	1
sec-Butylbenzene	< 0.33	ug/l	0.33	1	1	8260B		11/22/2014	CJR	1
n-Butylbenzene	< 0.35	ug/l	0.35	1.1	1	8260B		11/22/2014	CJR	1
Carbon Tetrachloride	< 0.33	ug/l	0.33	1.1	1	8260B		11/22/2014	CJR	1
Chlorobenzene	< 0.24	ug/l	0.24	0.77	1	8260B		11/22/2014	CJR	1
Chloroethane	< 0.63	ug/l	0.63	2	1	8260B		11/22/2014	CJR	1
Chloroform	< 0.28	ug/l	0.28	0.88	1	8260B		11/22/2014	CJR	1
Chloromethane	< 0.81	ug/l	0.81	2.6	1	8260B		11/22/2014	CJR	1
2-Chlorotoluene	< 0.21	ug/l	0.21	0.66	1	8260B		11/22/2014	CJR	1
4-Chlorotoluene	< 0.21	ug/l	0.21	0.68	1	8260B		11/22/2014	CJR	1
1,2-Dibromo-3-chloropropane	< 0.88	ug/l	0.88	2.8	1	8260B		11/22/2014	CJR	1
Dibromochloromethane	< 0.22	ug/l	0.22	0.7	1	8260B		11/22/2014	CJR	1
1,4-Dichlorobenzene	< 0.3	ug/l	0.3	0.96	1	8260B		11/22/2014	CJR	1
1,3-Dichlorobenzene	< 0.28	ug/l	0.28	0.89	1	8260B		11/22/2014	CJR	1
1,2-Dichlorobenzene	< 0.36	ug/l	0.36	1.2	1	8260B		11/22/2014	CJR	1
Dichlorodifluoromethane	< 0.44	ug/l	0.44	1.4	1	8260B		11/22/2014	CJR	1
1,2-Dichloroethane	< 0.41	ug/l	0.41	1.3	1	8260B		11/22/2014	CJR	1
1,1-Dichloroethane	< 0.3	ug/l	0.3	0.97	1	8260B		11/22/2014	CJR	1
1,1-Dichloroethene	< 0.4	ug/l	0.4	1.3	1	8260B		11/22/2014	CJR	1
cis-1,2-Dichloroethene	1.41	ug/l	0.38	1.2	1	8260B		11/22/2014	CJR	1
trans-1,2-Dichloroethene	< 0.35	ug/l	0.35	1.1	1	8260B		11/22/2014	CJR	1
1,2-Dichloropropane	< 0.32	ug/l	0.32	1	1	8260B		11/22/2014	CJR	1
2,2-Dichloropropane	< 0.36	ug/l	0.36	1.2	1	8260B		11/22/2014	CJR	4 8
1,3-Dichloropropane	< 0.33	ug/l	0.33	1	1	8260B		11/22/2014	CJR	1
Di-isopropyl ether	< 0.23	ug/l	0.23	0.73	1	8260B		11/22/2014	CJR	1
EDB (1,2-Dibromoethane)	< 0.44	ug/l	0.44	1.4	1	8260B		11/22/2014	CJR	1
Ethylbenzene	< 0.55	ug/l	0.55	1.7	1	8260B		11/22/2014	CJR	1
Hexachlorobutadiene	< 1.5	ug/l	1.5	4.8	1	8260B		11/22/2014	CJR	1
Isopropylbenzene	< 0.3	ug/l	0.3	0.96	1	8260B		11/22/2014	CJR	1
p-Isopropyltoluene	< 0.31	ug/l	0.31	0.98	1	8260B		11/22/2014	CJR	1
Methylene chloride	< 0.5	ug/l	0.5	1.6	1	8260B		11/22/2014	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.23	ug/l	0.23	0.74	1	8260B		11/22/2014	CJR	1
Naphthalene	< 1.7	ug/l	1.7	5.5	1	8260B		11/22/2014	CJR	1
n-Propylbenzene	< 0.25	ug/l	0.25	0.81	1	8260B		11/22/2014	CJR	1
1,1,2,2-Tetrachloroethane	< 0.45	ug/l	0.45	1.4	1	8260B		11/22/2014	CJR	1
1,1,1,2-Tetrachloroethane	< 0.33	ug/l	0.33	1.1	1	8260B		11/22/2014	CJR	1
Tetrachloroethene	< 0.33	ug/l	0.33	1.1	1	8260B		11/22/2014	CJR	1
Toluene	< 0.69	ug/l	0.69	2.2	1	8260B		11/22/2014	CJR	1
1,2,4-Trichlorobenzene	< 0.98	ug/l	0.98	3.1	1	8260B		11/22/2014	CJR	1
1,2,3-Trichlorobenzene	< 1.8	ug/l	1.8	5.8	1	8260B		11/22/2014	CJR	1
1,1,1-Trichloroethane	< 0.33	ug/l	0.33	1	1	8260B		11/22/2014	CJR	1
1,1,2-Trichloroethane	< 0.34	ug/l	0.34	1.1	1	8260B		11/22/2014	CJR	1
Trichloroethene (TCE)	< 0.33	ug/l	0.33	1	1	8260B		11/22/2014	CJR	1
Trichlorofluoromethane	< 0.71	ug/l	0.71	2.3	1	8260B		11/22/2014	CJR	1
1,2,4-Trimethylbenzene	< 2.2	ug/l	2.2	6.9	1	8260B		11/22/2014	CJR	1
1,3,5-Trimethylbenzene	< 1.4	ug/l	1.4	4.5	1	8260B		11/22/2014	CJR	1
Vinyl Chloride	< 0.18	ug/l	0.18	0.57	1	8260B		11/22/2014	CJR	1
m&p-Xylene	< 0.69	ug/l	0.69	2.2	1	8260B		11/22/2014	CJR	1
o-Xylene	< 0.63	ug/l	0.63	2	1	8260B		11/22/2014	CJR	1
SUR - 4-Bromofluorobenzene	96	REC %			1	8260B		11/22/2014	CJR	1
SUR - Dibromofluoromethane	85	REC %			1	8260B		11/22/2014	CJR	1
SUR - Toluene-d8	95	REC %			1	8260B		11/22/2014	CJR	1
SUR - 1,2-Dichloroethane-d4	100	REC %			1	8260B		11/22/2014	CJR	1

Project Name FMR NEWTON GRAVEL PIT **Invoice #** E28103
Project #

Lab Code 5028103H
Sample ID 3504 CTH CR DUP
Sample Matrix Water
Sample Date 11/18/2014

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
VOC's										
Benzene	< 0.24	ug/l	0.24	0.77	1	8260B		11/22/2014	CJR	1
Bromobenzene	< 0.32	ug/l	0.32	1	1	8260B		11/22/2014	CJR	1
Bromodichloromethane	< 0.37	ug/l	0.37	1.2	1	8260B		11/22/2014	CJR	1
Bromoform	< 0.35	ug/l	0.35	1.1	1	8260B		11/22/2014	CJR	1
tert-Butylbenzene	< 0.36	ug/l	0.36	1.2	1	8260B		11/22/2014	CJR	1
sec-Butylbenzene	< 0.33	ug/l	0.33	1	1	8260B		11/22/2014	CJR	1
n-Butylbenzene	< 0.35	ug/l	0.35	1.1	1	8260B		11/22/2014	CJR	1
Carbon Tetrachloride	< 0.33	ug/l	0.33	1.1	1	8260B		11/22/2014	CJR	1
Chlorobenzene	< 0.24	ug/l	0.24	0.77	1	8260B		11/22/2014	CJR	1
Chloroethane	< 0.63	ug/l	0.63	2	1	8260B		11/22/2014	CJR	1
Chloroform	< 0.28	ug/l	0.28	0.88	1	8260B		11/22/2014	CJR	1
Chloromethane	< 0.81	ug/l	0.81	2.6	1	8260B		11/22/2014	CJR	1
2-Chlorotoluene	< 0.21	ug/l	0.21	0.66	1	8260B		11/22/2014	CJR	1
4-Chlorotoluene	< 0.21	ug/l	0.21	0.68	1	8260B		11/22/2014	CJR	1
1,2-Dibromo-3-chloropropane	< 0.88	ug/l	0.88	2.8	1	8260B		11/22/2014	CJR	1
Dibromochloromethane	< 0.22	ug/l	0.22	0.7	1	8260B		11/22/2014	CJR	1
1,4-Dichlorobenzene	< 0.3	ug/l	0.3	0.96	1	8260B		11/22/2014	CJR	1
1,3-Dichlorobenzene	< 0.28	ug/l	0.28	0.89	1	8260B		11/22/2014	CJR	1
1,2-Dichlorobenzene	< 0.36	ug/l	0.36	1.2	1	8260B		11/22/2014	CJR	1
Dichlorodifluoromethane	< 0.44	ug/l	0.44	1.4	1	8260B		11/22/2014	CJR	1
1,2-Dichloroethane	< 0.41	ug/l	0.41	1.3	1	8260B		11/22/2014	CJR	1
1,1-Dichloroethane	< 0.3	ug/l	0.3	0.97	1	8260B		11/22/2014	CJR	1
1,1-Dichloroethene	< 0.4	ug/l	0.4	1.3	1	8260B		11/22/2014	CJR	1
cis-1,2-Dichloroethene	1.26	ug/l	0.38	1.2	1	8260B		11/22/2014	CJR	1
trans-1,2-Dichloroethene	< 0.35	ug/l	0.35	1.1	1	8260B		11/22/2014	CJR	1
1,2-Dichloropropane	< 0.32	ug/l	0.32	1	1	8260B		11/22/2014	CJR	1
2,2-Dichloropropane	< 0.36	ug/l	0.36	1.2	1	8260B		11/22/2014	CJR	4 8
1,3-Dichloropropane	< 0.33	ug/l	0.33	1	1	8260B		11/22/2014	CJR	1
Di-isopropyl ether	< 0.23	ug/l	0.23	0.73	1	8260B		11/22/2014	CJR	1
EDB (1,2-Dibromoethane)	< 0.44	ug/l	0.44	1.4	1	8260B		11/22/2014	CJR	1
Ethylbenzene	< 0.55	ug/l	0.55	1.7	1	8260B		11/22/2014	CJR	1
Hexachlorobutadiene	< 1.5	ug/l	1.5	4.8	1	8260B		11/22/2014	CJR	1
Isopropylbenzene	< 0.3	ug/l	0.3	0.96	1	8260B		11/22/2014	CJR	1
p-Isopropyltoluene	< 0.31	ug/l	0.31	0.98	1	8260B		11/22/2014	CJR	1
Methylene chloride	< 0.5	ug/l	0.5	1.6	1	8260B		11/22/2014	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.23	ug/l	0.23	0.74	1	8260B		11/22/2014	CJR	1
Naphthalene	< 1.7	ug/l	1.7	5.5	1	8260B		11/22/2014	CJR	1
n-Propylbenzene	< 0.25	ug/l	0.25	0.81	1	8260B		11/22/2014	CJR	1
1,1,2,2-Tetrachloroethane	< 0.45	ug/l	0.45	1.4	1	8260B		11/22/2014	CJR	1
1,1,1,2-Tetrachloroethane	< 0.33	ug/l	0.33	1.1	1	8260B		11/22/2014	CJR	1
Tetrachloroethene	< 0.33	ug/l	0.33	1.1	1	8260B		11/22/2014	CJR	1
Toluene	< 0.69	ug/l	0.69	2.2	1	8260B		11/22/2014	CJR	1
1,2,4-Trichlorobenzene	< 0.98	ug/l	0.98	3.1	1	8260B		11/22/2014	CJR	1
1,2,3-Trichlorobenzene	< 1.8	ug/l	1.8	5.8	1	8260B		11/22/2014	CJR	1
1,1,1-Trichloroethane	< 0.33	ug/l	0.33	1	1	8260B		11/22/2014	CJR	1
1,1,2-Trichloroethane	< 0.34	ug/l	0.34	1.1	1	8260B		11/22/2014	CJR	1
Trichloroethene (TCE)	< 0.33	ug/l	0.33	1	1	8260B		11/22/2014	CJR	1
Trichlorofluoromethane	< 0.71	ug/l	0.71	2.3	1	8260B		11/22/2014	CJR	1
1,2,4-Trimethylbenzene	< 2.2	ug/l	2.2	6.9	1	8260B		11/22/2014	CJR	1
1,3,5-Trimethylbenzene	< 1.4	ug/l	1.4	4.5	1	8260B		11/22/2014	CJR	1
Vinyl Chloride	0.18 "J"	ug/l	0.18	0.57	1	8260B		11/22/2014	CJR	1
m&p-Xylene	< 0.69	ug/l	0.69	2.2	1	8260B		11/22/2014	CJR	1
o-Xylene	< 0.63	ug/l	0.63	2	1	8260B		11/22/2014	CJR	1
SUR - 1,2-Dichloroethane-d4	92	REC %			1	8260B		11/22/2014	CJR	1
SUR - 4-Bromofluorobenzene	107	REC %			1	8260B		11/22/2014	CJR	1
SUR - Dibromofluoromethane	87	REC %			1	8260B		11/22/2014	CJR	1
SUR - Toluene-d8	96	REC %			1	8260B		11/22/2014	CJR	1

Project Name FMR NEWTON GRAVEL PIT **Invoice #** E28103
Project #

Lab Code 5028103I
Sample ID 3902 SILVER
Sample Matrix Water
Sample Date 11/18/2014

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
VOC's										
Benzene	< 0.24	ug/l	0.24	0.77	1	8260B		11/22/2014	CJR	1
Bromobenzene	< 0.32	ug/l	0.32	1	1	8260B		11/22/2014	CJR	1
Bromodichloromethane	< 0.37	ug/l	0.37	1.2	1	8260B		11/22/2014	CJR	1
Bromoform	< 0.35	ug/l	0.35	1.1	1	8260B		11/22/2014	CJR	1
tert-Butylbenzene	< 0.36	ug/l	0.36	1.2	1	8260B		11/22/2014	CJR	1
sec-Butylbenzene	< 0.33	ug/l	0.33	1	1	8260B		11/22/2014	CJR	1
n-Butylbenzene	< 0.35	ug/l	0.35	1.1	1	8260B		11/22/2014	CJR	1
Carbon Tetrachloride	< 0.33	ug/l	0.33	1.1	1	8260B		11/22/2014	CJR	1
Chlorobenzene	< 0.24	ug/l	0.24	0.77	1	8260B		11/22/2014	CJR	1
Chloroethane	< 0.63	ug/l	0.63	2	1	8260B		11/22/2014	CJR	1
Chloroform	< 0.28	ug/l	0.28	0.88	1	8260B		11/22/2014	CJR	1
Chloromethane	< 0.81	ug/l	0.81	2.6	1	8260B		11/22/2014	CJR	1
2-Chlorotoluene	< 0.21	ug/l	0.21	0.66	1	8260B		11/22/2014	CJR	1
4-Chlorotoluene	< 0.21	ug/l	0.21	0.68	1	8260B		11/22/2014	CJR	1
1,2-Dibromo-3-chloropropane	< 0.88	ug/l	0.88	2.8	1	8260B		11/22/2014	CJR	1
Dibromochloromethane	< 0.22	ug/l	0.22	0.7	1	8260B		11/22/2014	CJR	1
1,4-Dichlorobenzene	< 0.3	ug/l	0.3	0.96	1	8260B		11/22/2014	CJR	1
1,3-Dichlorobenzene	< 0.28	ug/l	0.28	0.89	1	8260B		11/22/2014	CJR	1
1,2-Dichlorobenzene	< 0.36	ug/l	0.36	1.2	1	8260B		11/22/2014	CJR	1
Dichlorodifluoromethane	< 0.44	ug/l	0.44	1.4	1	8260B		11/22/2014	CJR	1
1,2-Dichloroethane	< 0.41	ug/l	0.41	1.3	1	8260B		11/22/2014	CJR	1
1,1-Dichloroethane	< 0.3	ug/l	0.3	0.97	1	8260B		11/22/2014	CJR	1
1,1-Dichloroethene	< 0.4	ug/l	0.4	1.3	1	8260B		11/22/2014	CJR	1
cis-1,2-Dichloroethene	< 0.38	ug/l	0.38	1.2	1	8260B		11/22/2014	CJR	1
trans-1,2-Dichloroethene	< 0.35	ug/l	0.35	1.1	1	8260B		11/22/2014	CJR	1
1,2-Dichloropropane	< 0.32	ug/l	0.32	1	1	8260B		11/22/2014	CJR	1
2,2-Dichloropropane	< 0.36	ug/l	0.36	1.2	1	8260B		11/22/2014	CJR	4 8
1,3-Dichloropropane	< 0.33	ug/l	0.33	1	1	8260B		11/22/2014	CJR	1
Di-isopropyl ether	< 0.23	ug/l	0.23	0.73	1	8260B		11/22/2014	CJR	1
EDB (1,2-Dibromoethane)	< 0.44	ug/l	0.44	1.4	1	8260B		11/22/2014	CJR	1
Ethylbenzene	< 0.55	ug/l	0.55	1.7	1	8260B		11/22/2014	CJR	1
Hexachlorobutadiene	< 1.5	ug/l	1.5	4.8	1	8260B		11/22/2014	CJR	1
Isopropylbenzene	< 0.3	ug/l	0.3	0.96	1	8260B		11/22/2014	CJR	1
p-Isopropyltoluene	< 0.31	ug/l	0.31	0.98	1	8260B		11/22/2014	CJR	1
Methylene chloride	< 0.5	ug/l	0.5	1.6	1	8260B		11/22/2014	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.23	ug/l	0.23	0.74	1	8260B		11/22/2014	CJR	1
Naphthalene	< 1.7	ug/l	1.7	5.5	1	8260B		11/22/2014	CJR	1
n-Propylbenzene	< 0.25	ug/l	0.25	0.81	1	8260B		11/22/2014	CJR	1
1,1,2,2-Tetrachloroethane	< 0.45	ug/l	0.45	1.4	1	8260B		11/22/2014	CJR	1
1,1,1,2-Tetrachloroethane	< 0.33	ug/l	0.33	1.1	1	8260B		11/22/2014	CJR	1
Tetrachloroethene	< 0.33	ug/l	0.33	1.1	1	8260B		11/22/2014	CJR	1
Toluene	< 0.69	ug/l	0.69	2.2	1	8260B		11/22/2014	CJR	1
1,2,4-Trichlorobenzene	< 0.98	ug/l	0.98	3.1	1	8260B		11/22/2014	CJR	1
1,2,3-Trichlorobenzene	< 1.8	ug/l	1.8	5.8	1	8260B		11/22/2014	CJR	1
1,1,1-Trichloroethane	< 0.33	ug/l	0.33	1	1	8260B		11/22/2014	CJR	1
1,1,2-Trichloroethane	< 0.34	ug/l	0.34	1.1	1	8260B		11/22/2014	CJR	1
Trichloroethene (TCE)	< 0.33	ug/l	0.33	1	1	8260B		11/22/2014	CJR	1
Trichlorofluoromethane	< 0.71	ug/l	0.71	2.3	1	8260B		11/22/2014	CJR	1
1,2,4-Trimethylbenzene	< 2.2	ug/l	2.2	6.9	1	8260B		11/22/2014	CJR	1
1,3,5-Trimethylbenzene	< 1.4	ug/l	1.4	4.5	1	8260B		11/22/2014	CJR	1
Vinyl Chloride	< 0.18	ug/l	0.18	0.57	1	8260B		11/22/2014	CJR	1
m&p-Xylene	< 0.69	ug/l	0.69	2.2	1	8260B		11/22/2014	CJR	1
o-Xylene	< 0.63	ug/l	0.63	2	1	8260B		11/22/2014	CJR	1
SUR - Toluene-d8	93	REC %			1	8260B		11/22/2014	CJR	1
SUR - 1,2-Dichloroethane-d4	99	REC %			1	8260B		11/22/2014	CJR	1
SUR - 4-Bromofluorobenzene	94	REC %			1	8260B		11/22/2014	CJR	1
SUR - Dibromofluoromethane	87	REC %			1	8260B		11/22/2014	CJR	1

Project Name FMR NEWTON GRAVEL PIT **Invoice #** E28103
Project #

Lab Code 5028103J
Sample ID 2716 CTH CR
Sample Matrix Water
Sample Date 11/18/2014

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
VOC's										
Benzene	< 0.24	ug/l	0.24	0.77	1	8260B		11/22/2014	CJR	1
Bromobenzene	< 0.32	ug/l	0.32	1	1	8260B		11/22/2014	CJR	1
Bromodichloromethane	< 0.37	ug/l	0.37	1.2	1	8260B		11/22/2014	CJR	1
Bromoform	< 0.35	ug/l	0.35	1.1	1	8260B		11/22/2014	CJR	1
tert-Butylbenzene	< 0.36	ug/l	0.36	1.2	1	8260B		11/22/2014	CJR	1
sec-Butylbenzene	< 0.33	ug/l	0.33	1	1	8260B		11/22/2014	CJR	1
n-Butylbenzene	< 0.35	ug/l	0.35	1.1	1	8260B		11/22/2014	CJR	1
Carbon Tetrachloride	< 0.33	ug/l	0.33	1.1	1	8260B		11/22/2014	CJR	1
Chlorobenzene	< 0.24	ug/l	0.24	0.77	1	8260B		11/22/2014	CJR	1
Chloroethane	< 0.63	ug/l	0.63	2	1	8260B		11/22/2014	CJR	1
Chloroform	< 0.28	ug/l	0.28	0.88	1	8260B		11/22/2014	CJR	1
Chloromethane	< 0.81	ug/l	0.81	2.6	1	8260B		11/22/2014	CJR	1
2-Chlorotoluene	< 0.21	ug/l	0.21	0.66	1	8260B		11/22/2014	CJR	1
4-Chlorotoluene	< 0.21	ug/l	0.21	0.68	1	8260B		11/22/2014	CJR	1
1,2-Dibromo-3-chloropropane	< 0.88	ug/l	0.88	2.8	1	8260B		11/22/2014	CJR	1
Dibromochloromethane	< 0.22	ug/l	0.22	0.7	1	8260B		11/22/2014	CJR	1
1,4-Dichlorobenzene	< 0.3	ug/l	0.3	0.96	1	8260B		11/22/2014	CJR	1
1,3-Dichlorobenzene	< 0.28	ug/l	0.28	0.89	1	8260B		11/22/2014	CJR	1
1,2-Dichlorobenzene	< 0.36	ug/l	0.36	1.2	1	8260B		11/22/2014	CJR	1
Dichlorodifluoromethane	< 0.44	ug/l	0.44	1.4	1	8260B		11/22/2014	CJR	1
1,2-Dichloroethane	< 0.41	ug/l	0.41	1.3	1	8260B		11/22/2014	CJR	1
1,1-Dichloroethane	< 0.3	ug/l	0.3	0.97	1	8260B		11/22/2014	CJR	1
1,1-Dichloroethene	< 0.4	ug/l	0.4	1.3	1	8260B		11/22/2014	CJR	1
cis-1,2-Dichloroethene	< 0.38	ug/l	0.38	1.2	1	8260B		11/22/2014	CJR	1
trans-1,2-Dichloroethene	< 0.35	ug/l	0.35	1.1	1	8260B		11/22/2014	CJR	1
1,2-Dichloropropane	< 0.32	ug/l	0.32	1	1	8260B		11/22/2014	CJR	1
2,2-Dichloropropane	< 0.36	ug/l	0.36	1.2	1	8260B		11/22/2014	CJR	4 8
1,3-Dichloropropane	< 0.33	ug/l	0.33	1	1	8260B		11/22/2014	CJR	1
Di-isopropyl ether	< 0.23	ug/l	0.23	0.73	1	8260B		11/22/2014	CJR	1
EDB (1,2-Dibromoethane)	< 0.44	ug/l	0.44	1.4	1	8260B		11/22/2014	CJR	1
Ethylbenzene	< 0.55	ug/l	0.55	1.7	1	8260B		11/22/2014	CJR	1
Hexachlorobutadiene	< 1.5	ug/l	1.5	4.8	1	8260B		11/22/2014	CJR	1
Isopropylbenzene	< 0.3	ug/l	0.3	0.96	1	8260B		11/22/2014	CJR	1
p-Isopropyltoluene	< 0.31	ug/l	0.31	0.98	1	8260B		11/22/2014	CJR	1
Methylene chloride	< 0.5	ug/l	0.5	1.6	1	8260B		11/22/2014	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.23	ug/l	0.23	0.74	1	8260B		11/22/2014	CJR	1
Naphthalene	< 1.7	ug/l	1.7	5.5	1	8260B		11/22/2014	CJR	1
n-Propylbenzene	< 0.25	ug/l	0.25	0.81	1	8260B		11/22/2014	CJR	1
1,1,2,2-Tetrachloroethane	< 0.45	ug/l	0.45	1.4	1	8260B		11/22/2014	CJR	1
1,1,1,2-Tetrachloroethane	< 0.33	ug/l	0.33	1.1	1	8260B		11/22/2014	CJR	1
Tetrachloroethene	< 0.33	ug/l	0.33	1.1	1	8260B		11/22/2014	CJR	1
Toluene	< 0.69	ug/l	0.69	2.2	1	8260B		11/22/2014	CJR	1
1,2,4-Trichlorobenzene	< 0.98	ug/l	0.98	3.1	1	8260B		11/22/2014	CJR	1
1,2,3-Trichlorobenzene	< 1.8	ug/l	1.8	5.8	1	8260B		11/22/2014	CJR	1
1,1,1-Trichloroethane	< 0.33	ug/l	0.33	1	1	8260B		11/22/2014	CJR	1
1,1,2-Trichloroethane	< 0.34	ug/l	0.34	1.1	1	8260B		11/22/2014	CJR	1
Trichloroethene (TCE)	< 0.33	ug/l	0.33	1	1	8260B		11/22/2014	CJR	1
Trichlorofluoromethane	< 0.71	ug/l	0.71	2.3	1	8260B		11/22/2014	CJR	1
1,2,4-Trimethylbenzene	< 2.2	ug/l	2.2	6.9	1	8260B		11/22/2014	CJR	1
1,3,5-Trimethylbenzene	< 1.4	ug/l	1.4	4.5	1	8260B		11/22/2014	CJR	1
Vinyl Chloride	< 0.18	ug/l	0.18	0.57	1	8260B		11/22/2014	CJR	1
m&p-Xylene	< 0.69	ug/l	0.69	2.2	1	8260B		11/22/2014	CJR	1
o-Xylene	< 0.63	ug/l	0.63	2	1	8260B		11/22/2014	CJR	1
SUR - 4-Bromofluorobenzene	94	REC %			1	8260B		11/22/2014	CJR	1
SUR - Dibromofluoromethane	88	REC %			1	8260B		11/22/2014	CJR	1
SUR - Toluene-d8	102	REC %			1	8260B		11/22/2014	CJR	1
SUR - 1,2-Dichloroethane-d4	95	REC %			1	8260B		11/22/2014	CJR	1

Project Name FMR NEWTON GRAVEL PIT **Invoice #** E28103
Project #

Lab Code 5028103K
Sample ID 3815 VIEBAHN
Sample Matrix Water
Sample Date 11/19/2014

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
VOC's										
Benzene	< 0.24	ug/l	0.24	0.77	1	8260B		11/24/2014	CJR	1
Bromobenzene	< 0.32	ug/l	0.32	1	1	8260B		11/24/2014	CJR	1
Bromodichloromethane	< 0.37	ug/l	0.37	1.2	1	8260B		11/24/2014	CJR	1
Bromoform	< 0.35	ug/l	0.35	1.1	1	8260B		11/24/2014	CJR	1
tert-Butylbenzene	< 0.36	ug/l	0.36	1.2	1	8260B		11/24/2014	CJR	1
sec-Butylbenzene	< 0.33	ug/l	0.33	1	1	8260B		11/24/2014	CJR	1
n-Butylbenzene	< 0.35	ug/l	0.35	1.1	1	8260B		11/24/2014	CJR	1
Carbon Tetrachloride	< 0.33	ug/l	0.33	1.1	1	8260B		11/24/2014	CJR	1
Chlorobenzene	< 0.24	ug/l	0.24	0.77	1	8260B		11/24/2014	CJR	1
Chloroethane	< 0.63	ug/l	0.63	2	1	8260B		11/24/2014	CJR	1
Chloroform	< 0.28	ug/l	0.28	0.88	1	8260B		11/24/2014	CJR	1
Chloromethane	< 0.81	ug/l	0.81	2.6	1	8260B		11/24/2014	CJR	1
2-Chlorotoluene	< 0.21	ug/l	0.21	0.66	1	8260B		11/24/2014	CJR	1
4-Chlorotoluene	< 0.21	ug/l	0.21	0.68	1	8260B		11/24/2014	CJR	1
1,2-Dibromo-3-chloropropane	< 0.88	ug/l	0.88	2.8	1	8260B		11/24/2014	CJR	1
Dibromochloromethane	< 0.22	ug/l	0.22	0.7	1	8260B		11/24/2014	CJR	1
1,4-Dichlorobenzene	< 0.3	ug/l	0.3	0.96	1	8260B		11/24/2014	CJR	1
1,3-Dichlorobenzene	< 0.28	ug/l	0.28	0.89	1	8260B		11/24/2014	CJR	1
1,2-Dichlorobenzene	< 0.36	ug/l	0.36	1.2	1	8260B		11/24/2014	CJR	1
Dichlorodifluoromethane	< 0.44	ug/l	0.44	1.4	1	8260B		11/24/2014	CJR	1
1,2-Dichloroethane	< 0.41	ug/l	0.41	1.3	1	8260B		11/24/2014	CJR	1
1,1-Dichloroethane	< 0.3	ug/l	0.3	0.97	1	8260B		11/24/2014	CJR	1
1,1-Dichloroethene	< 0.4	ug/l	0.4	1.3	1	8260B		11/24/2014	CJR	1
cis-1,2-Dichloroethene	0.94 "J"	ug/l	0.38	1.2	1	8260B		11/24/2014	CJR	1
trans-1,2-Dichloroethene	< 0.35	ug/l	0.35	1.1	1	8260B		11/24/2014	CJR	1
1,2-Dichloropropane	< 0.32	ug/l	0.32	1	1	8260B		11/24/2014	CJR	1
2,2-Dichloropropane	< 0.36	ug/l	0.36	1.2	1	8260B		11/24/2014	CJR	4 8
1,3-Dichloropropane	< 0.33	ug/l	0.33	1	1	8260B		11/24/2014	CJR	1
Di-isopropyl ether	< 0.23	ug/l	0.23	0.73	1	8260B		11/24/2014	CJR	1
EDB (1,2-Dibromoethane)	< 0.44	ug/l	0.44	1.4	1	8260B		11/24/2014	CJR	1
Ethylbenzene	< 0.55	ug/l	0.55	1.7	1	8260B		11/24/2014	CJR	1
Hexachlorobutadiene	< 1.5	ug/l	1.5	4.8	1	8260B		11/24/2014	CJR	1
Isopropylbenzene	< 0.3	ug/l	0.3	0.96	1	8260B		11/24/2014	CJR	1
p-Isopropyltoluene	< 0.31	ug/l	0.31	0.98	1	8260B		11/24/2014	CJR	1
Methylene chloride	< 0.5	ug/l	0.5	1.6	1	8260B		11/24/2014	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.23	ug/l	0.23	0.74	1	8260B		11/24/2014	CJR	1
Naphthalene	< 1.7	ug/l	1.7	5.5	1	8260B		11/24/2014	CJR	1
n-Propylbenzene	< 0.25	ug/l	0.25	0.81	1	8260B		11/24/2014	CJR	1
1,1,2,2-Tetrachloroethane	< 0.45	ug/l	0.45	1.4	1	8260B		11/24/2014	CJR	1
1,1,1,2-Tetrachloroethane	< 0.33	ug/l	0.33	1.1	1	8260B		11/24/2014	CJR	1
Tetrachloroethene	< 0.33	ug/l	0.33	1.1	1	8260B		11/24/2014	CJR	1
Toluene	< 0.69	ug/l	0.69	2.2	1	8260B		11/24/2014	CJR	1
1,2,4-Trichlorobenzene	< 0.98	ug/l	0.98	3.1	1	8260B		11/24/2014	CJR	1
1,2,3-Trichlorobenzene	< 1.8	ug/l	1.8	5.8	1	8260B		11/24/2014	CJR	1
1,1,1-Trichloroethane	< 0.33	ug/l	0.33	1	1	8260B		11/24/2014	CJR	1
1,1,2-Trichloroethane	< 0.34	ug/l	0.34	1.1	1	8260B		11/24/2014	CJR	1
Trichloroethene (TCE)	< 0.33	ug/l	0.33	1	1	8260B		11/24/2014	CJR	1
Trichlorofluoromethane	< 0.71	ug/l	0.71	2.3	1	8260B		11/24/2014	CJR	1
1,2,4-Trimethylbenzene	< 2.2	ug/l	2.2	6.9	1	8260B		11/24/2014	CJR	1
1,3,5-Trimethylbenzene	< 1.4	ug/l	1.4	4.5	1	8260B		11/24/2014	CJR	1
Vinyl Chloride	0.31 "J"	ug/l	0.18	0.57	1	8260B		11/24/2014	CJR	1
m&p-Xylene	< 0.69	ug/l	0.69	2.2	1	8260B		11/24/2014	CJR	1
o-Xylene	< 0.63	ug/l	0.63	2	1	8260B		11/24/2014	CJR	1
SUR - 1,2-Dichloroethane-d4	98	REC %			1	8260B		11/24/2014	CJR	1
SUR - 4-Bromofluorobenzene	104	REC %			1	8260B		11/24/2014	CJR	1
SUR - Dibromofluoromethane	94	REC %			1	8260B		11/24/2014	CJR	1
SUR - Toluene-d8	95	REC %			1	8260B		11/24/2014	CJR	1

Project Name FMR NEWTON GRAVEL PIT **Invoice #** E28103
Project #

Lab Code 5028103L
Sample ID 3617 VIEBAHN
Sample Matrix Water
Sample Date 11/19/2014

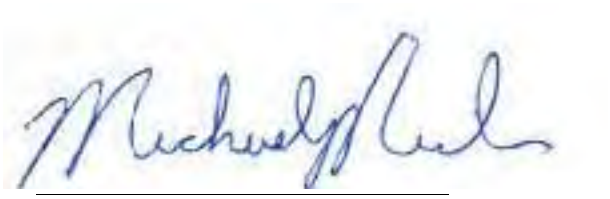
	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
VOC's										
Benzene	< 0.24	ug/l	0.24	0.77	1	8260B		11/24/2014	CJR	1
Bromobenzene	< 0.32	ug/l	0.32	1	1	8260B		11/24/2014	CJR	1
Bromodichloromethane	< 0.37	ug/l	0.37	1.2	1	8260B		11/24/2014	CJR	1
Bromoform	< 0.35	ug/l	0.35	1.1	1	8260B		11/24/2014	CJR	1
tert-Butylbenzene	< 0.36	ug/l	0.36	1.2	1	8260B		11/24/2014	CJR	1
sec-Butylbenzene	< 0.33	ug/l	0.33	1	1	8260B		11/24/2014	CJR	1
n-Butylbenzene	< 0.35	ug/l	0.35	1.1	1	8260B		11/24/2014	CJR	1
Carbon Tetrachloride	< 0.33	ug/l	0.33	1.1	1	8260B		11/24/2014	CJR	1
Chlorobenzene	< 0.24	ug/l	0.24	0.77	1	8260B		11/24/2014	CJR	1
Chloroethane	< 0.63	ug/l	0.63	2	1	8260B		11/24/2014	CJR	1
Chloroform	< 0.28	ug/l	0.28	0.88	1	8260B		11/24/2014	CJR	1
Chloromethane	< 0.81	ug/l	0.81	2.6	1	8260B		11/24/2014	CJR	1
2-Chlorotoluene	< 0.21	ug/l	0.21	0.66	1	8260B		11/24/2014	CJR	1
4-Chlorotoluene	< 0.21	ug/l	0.21	0.68	1	8260B		11/24/2014	CJR	1
1,2-Dibromo-3-chloropropane	< 0.88	ug/l	0.88	2.8	1	8260B		11/24/2014	CJR	1
Dibromochloromethane	< 0.22	ug/l	0.22	0.7	1	8260B		11/24/2014	CJR	1
1,4-Dichlorobenzene	< 0.3	ug/l	0.3	0.96	1	8260B		11/24/2014	CJR	1
1,3-Dichlorobenzene	< 0.28	ug/l	0.28	0.89	1	8260B		11/24/2014	CJR	1
1,2-Dichlorobenzene	< 0.36	ug/l	0.36	1.2	1	8260B		11/24/2014	CJR	1
Dichlorodifluoromethane	< 0.44	ug/l	0.44	1.4	1	8260B		11/24/2014	CJR	1
1,2-Dichloroethane	< 0.41	ug/l	0.41	1.3	1	8260B		11/24/2014	CJR	1
1,1-Dichloroethane	< 0.3	ug/l	0.3	0.97	1	8260B		11/24/2014	CJR	1
1,1-Dichloroethene	< 0.4	ug/l	0.4	1.3	1	8260B		11/24/2014	CJR	1
cis-1,2-Dichloroethene	1.12 "J"	ug/l	0.38	1.2	1	8260B		11/24/2014	CJR	1
trans-1,2-Dichloroethene	< 0.35	ug/l	0.35	1.1	1	8260B		11/24/2014	CJR	1
1,2-Dichloropropane	< 0.32	ug/l	0.32	1	1	8260B		11/24/2014	CJR	1
2,2-Dichloropropane	< 0.36	ug/l	0.36	1.2	1	8260B		11/24/2014	CJR	4 8
1,3-Dichloropropane	< 0.33	ug/l	0.33	1	1	8260B		11/24/2014	CJR	1
Di-isopropyl ether	< 0.23	ug/l	0.23	0.73	1	8260B		11/24/2014	CJR	1
EDB (1,2-Dibromoethane)	< 0.44	ug/l	0.44	1.4	1	8260B		11/24/2014	CJR	1
Ethylbenzene	< 0.55	ug/l	0.55	1.7	1	8260B		11/24/2014	CJR	1
Hexachlorobutadiene	< 1.5	ug/l	1.5	4.8	1	8260B		11/24/2014	CJR	1
Isopropylbenzene	< 0.3	ug/l	0.3	0.96	1	8260B		11/24/2014	CJR	1
p-Isopropyltoluene	< 0.31	ug/l	0.31	0.98	1	8260B		11/24/2014	CJR	1
Methylene chloride	< 0.5	ug/l	0.5	1.6	1	8260B		11/24/2014	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.23	ug/l	0.23	0.74	1	8260B		11/24/2014	CJR	1
Naphthalene	< 1.7	ug/l	1.7	5.5	1	8260B		11/24/2014	CJR	1
n-Propylbenzene	< 0.25	ug/l	0.25	0.81	1	8260B		11/24/2014	CJR	1
1,1,2,2-Tetrachloroethane	< 0.45	ug/l	0.45	1.4	1	8260B		11/24/2014	CJR	1
1,1,1,2-Tetrachloroethane	< 0.33	ug/l	0.33	1.1	1	8260B		11/24/2014	CJR	1
Tetrachloroethene	< 0.33	ug/l	0.33	1.1	1	8260B		11/24/2014	CJR	1
Toluene	< 0.69	ug/l	0.69	2.2	1	8260B		11/24/2014	CJR	1
1,2,4-Trichlorobenzene	< 0.98	ug/l	0.98	3.1	1	8260B		11/24/2014	CJR	1
1,2,3-Trichlorobenzene	< 1.8	ug/l	1.8	5.8	1	8260B		11/24/2014	CJR	1
1,1,1-Trichloroethane	< 0.33	ug/l	0.33	1	1	8260B		11/24/2014	CJR	1
1,1,2-Trichloroethane	< 0.34	ug/l	0.34	1.1	1	8260B		11/24/2014	CJR	1
Trichloroethene (TCE)	< 0.33	ug/l	0.33	1	1	8260B		11/24/2014	CJR	1
Trichlorofluoromethane	< 0.71	ug/l	0.71	2.3	1	8260B		11/24/2014	CJR	1
1,2,4-Trimethylbenzene	< 2.2	ug/l	2.2	6.9	1	8260B		11/24/2014	CJR	1
1,3,5-Trimethylbenzene	< 1.4	ug/l	1.4	4.5	1	8260B		11/24/2014	CJR	1
Vinyl Chloride	0.40 "J"	ug/l	0.18	0.57	1	8260B		11/24/2014	CJR	1
m&p-Xylene	< 0.69	ug/l	0.69	2.2	1	8260B		11/24/2014	CJR	1
o-Xylene	< 0.63	ug/l	0.63	2	1	8260B		11/24/2014	CJR	1
SUR - Toluene-d8	96	REC %			1	8260B		11/24/2014	CJR	1
SUR - 1,2-Dichloroethane-d4	91	REC %			1	8260B		11/24/2014	CJR	1
SUR - 4-Bromofluorobenzene	103	REC %			1	8260B		11/24/2014	CJR	1
SUR - Dibromofluoromethane	92	REC %			1	8260B		11/24/2014	CJR	1

"J" Flag: Analyte detected between LOD and LOQ LOD Limit of Detection LOQ Limit of Quantitation

Code	*Comment*
1	Laboratory QC within limits.
4	The continuing calibration standard not within established limits.
8	Closing calibration standard not within established limits.

All solid sample results reported on a dry weight basis unless otherwise indicated. All LOD's and LOQ's are adjusted for dilutions but not dry weight. Subcontracted results are denoted by SUB in the analyst field.

Authorized Signature



CHAIN OF CUSTODY RECORD

Synergy
Environmental Lab, Inc.

1990 Prospect Ct. • Appleton, WI 54914
920-830-2455 • FAX 920-733-0631

Chain # Nº 3100

Page 3 of 2

Sample Handling Request
_____ Rush Analysis Date Required _____
(Rushes accepted only with prior authorization)
X Normal Turn Around

Lab I.D. #

Account No. : | **Quote No.:**

Project #:

Sampler: (signature)

Project (Name / Location): Former Newton Gravel Pit / Manitowoc, WI

Reports To: DAVE HENDERSON	Invoice To: DAVE HENDERSON
Company AECOM	Company SAME
Address 1555 N RiverCenter STE 214	Address
City State Zip Milwaukee WI 53212	City State Zip
Phone 414-944-6190	Phone
FAX 414-944-6081	FAX

Analysis Requested | **Other Analysis**

Lab I.D.	Sample I.D.	Collection Date	Collection Time	Comp	Grab	Filtered Y/N	No. of Containers	Sample Type (Matrix)*	Preservation	DRO (Mod DRO Sep 95)	GRO (Mod GRO Sep 95)	LEAD	NITRATE/NITRITE	OIL & GREASE	PAH (EPA 8270)	PCB	PVOC (EPA 8021)	PVOC + NAPHTHALENE	SULFATE	TOTAL SUSPENDED SOLIDS	VOC DW (EPA 542.2)	VOC (EPA 8260)	8-RCRA METALS	PID/FID
562 8103A	3303 Hecker	11/17/14	15:45		X	N	3	GW	HCL													X		
B	3224 CTH CR	11/17/14	16:15		X	N	3	GW	HCl													X		
C	4111 Thunder	11/17/14	16:45		X	N	3	GW	HCl													X		
D	4101 Thunder	11/17/14	17:00		X	N	3	GW	HCl													X		
E	3422 CTH CR	11/18/14	1445		X	N	3	GW	HCl													X		
F	4004 Silver	11/18/14	1515		X	N	3	GW	HCl													X		
G	3504 CTH CR	11/18/14	1545		X	N	3	GW	HCl													X		
H	3504 CTH CR DUP	11/18/14	1545		X	N	3	GW	HCl													X		
I	3902 Silver	11/18/14	1615		X	N	3	GW	HCl													X		
J	2716 CTH CR	11/18/14	1715		X	N	3	GW	HCl													X		

Comments/Special Instructions (*Specify groundwater "GW", Drinking Water "DW", Waste Water "WW", Soil "S", Air "A", Oil, Sludge etc.)

Analysis per Contract, Sepate lab report per sample ID

Sample Integrity - To be completed by receiving lab.

Method of Shipment: Pendens

Temp. of Temp. Blank ___ °C On Ice: X

Cooler seal intact upon receipt: X Yes ___ No

Relinquished By: (sign)	Time	Date	Received By: (sign)	Time	Date
	0800	11/20/14			

Received in Laboratory By: Time: 8:00 Date: 11/21/14

CHAIN OF CUSTODY RECORD

Synergy

Environmental Lab, Inc.

1990 Prospect Ct. • Appleton, WI 54914
920-830-2455 • FAX 920-733-0631

Chain # Nº 310

Page 2 of 2

Sample Handling Request
_____ Rush Analysis Date Required _____
(Rushes accepted only with prior authorization)
_X_ Normal Turn Around

Lab I.D. #	
Account No. :	Quote No.:
Project #:	
Sampler: (signature)	
Project (Name / Location):	Former Newton Gravel Pit / Manitowoc, WI
Reports To: DAVE HENDERSON	Invoice To: DAVE HENDERSON
Company AECOM	Company SAME
Address 1555 N River Center STE 214	Address
City State Zip Milwaukee WI 53212	City State Zip
Phone 414-944-6190	Phone
FAX 414-944-6081	FAX

Lab I.D.	Sample I.D.	Collection Date	Collection Time	Comp	Grab	Filtered Y/N	No. of Containers	Sample Type (Matrix)*	Preservation	DRO (Mod DRO Sep 95)	GRO (Mod GRO Sep 95)	LEAD	NITRATE/NITRITE	OIL & GREASE	PAH (EPA 8270)	PCB	PVOC (EPA 8021)	PVOC + NAPHTHALENE	SULFATE	TOTAL SUSPENDED SOLIDS	VOC DW (EPA 542.2)	VOC (EPA 8260)	8-RCRA METALS	PID/FID
502810321	3815 Viebahn	11/19/14	845		X	N	3	GW	HCl													X		
L	3617 Viebahn	11/19/14	1045		X	N	3	GW	HCl													X		

Analysis Requested | **Other Analysis**

Comments/Special Instructions (*Specify groundwater "GW", Drinking Water "DW", Waste Water "WW", Soil "S", Air "A", Oil, Sludge etc.)

Analysis, per Contract, Seperate lab report per sample ID

Sample Integrity - To be completed by receiving lab.
Method of Shipment: Driver
Temp. of Temp. Blank ___ °C On Ice X
Cooler seal intact upon receipt: X Yes ___ No

Relinquished By: (sign)	Time	Date	Received By: (sign)	Time	Date
	0800	11/20/14			

Received in Laboratory By: _____ Time: 8:00 Date: 11/21/14

Synergy Environmental Lab, INC.

1990 Prospect Ct., Appleton, WI 54914 *P 920-830-2455 * F 920-733-0631

DAVE HENDERSON
AECOM
1555 N RIVER CENTER DRIVE
MILWAUKEE, WI 53212

Report Date *02-Dec-14*

Project Name MANITOWOC (NEWTON) **Invoice #** E28129
Project # 60311767

Lab Code 5028129A
Sample ID 2916 PW 2916 CTH CR
Sample Matrix Water
Sample Date 11/25/2014

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
VOC's										
Benzene	< 0.24	ug/l	0.24	0.77	1	8260B		12/1/2014	CJR	1
Bromobenzene	< 0.32	ug/l	0.32	1	1	8260B		12/1/2014	CJR	1
Bromodichloromethane	< 0.37	ug/l	0.37	1.2	1	8260B		12/1/2014	CJR	1
Bromoform	< 0.35	ug/l	0.35	1.1	1	8260B		12/1/2014	CJR	1
tert-Butylbenzene	< 0.36	ug/l	0.36	1.2	1	8260B		12/1/2014	CJR	1
sec-Butylbenzene	< 0.33	ug/l	0.33	1	1	8260B		12/1/2014	CJR	1
n-Butylbenzene	< 0.35	ug/l	0.35	1.1	1	8260B		12/1/2014	CJR	1
Carbon Tetrachloride	< 0.33	ug/l	0.33	1.1	1	8260B		12/1/2014	CJR	1
Chlorobenzene	< 0.24	ug/l	0.24	0.77	1	8260B		12/1/2014	CJR	1
Chloroethane	< 0.63	ug/l	0.63	2	1	8260B		12/1/2014	CJR	1
Chloroform	< 0.28	ug/l	0.28	0.88	1	8260B		12/1/2014	CJR	1
Chloromethane	< 0.81	ug/l	0.81	2.6	1	8260B		12/1/2014	CJR	1
2-Chlorotoluene	< 0.21	ug/l	0.21	0.66	1	8260B		12/1/2014	CJR	1
4-Chlorotoluene	< 0.21	ug/l	0.21	0.68	1	8260B		12/1/2014	CJR	1
1,2-Dibromo-3-chloropropane	< 0.88	ug/l	0.88	2.8	1	8260B		12/1/2014	CJR	1
Dibromochloromethane	< 0.22	ug/l	0.22	0.7	1	8260B		12/1/2014	CJR	1
1,4-Dichlorobenzene	< 0.3	ug/l	0.3	0.96	1	8260B		12/1/2014	CJR	1
1,3-Dichlorobenzene	< 0.28	ug/l	0.28	0.89	1	8260B		12/1/2014	CJR	1
1,2-Dichlorobenzene	< 0.36	ug/l	0.36	1.2	1	8260B		12/1/2014	CJR	1
Dichlorodifluoromethane	< 0.44	ug/l	0.44	1.4	1	8260B		12/1/2014	CJR	1
1,2-Dichloroethane	< 0.41	ug/l	0.41	1.3	1	8260B		12/1/2014	CJR	1
1,1-Dichloroethane	< 0.3	ug/l	0.3	0.97	1	8260B		12/1/2014	CJR	1
1,1-Dichloroethene	< 0.4	ug/l	0.4	1.3	1	8260B		12/1/2014	CJR	1
cis-1,2-Dichloroethene	0.82 "J"	ug/l	0.38	1.2	1	8260B		12/1/2014	CJR	1
trans-1,2-Dichloroethene	< 0.35	ug/l	0.35	1.1	1	8260B		12/1/2014	CJR	1
1,2-Dichloropropane	< 0.32	ug/l	0.32	1	1	8260B		12/1/2014	CJR	1
2,2-Dichloropropane	< 0.36	ug/l	0.36	1.2	1	8260B		12/1/2014	CJR	1
1,3-Dichloropropane	< 0.33	ug/l	0.33	1	1	8260B		12/1/2014	CJR	1
Di-isopropyl ether	< 0.23	ug/l	0.23	0.73	1	8260B		12/1/2014	CJR	1
EDB (1,2-Dibromoethane)	< 0.44	ug/l	0.44	1.4	1	8260B		12/1/2014	CJR	1
Ethylbenzene	< 0.55	ug/l	0.55	1.7	1	8260B		12/1/2014	CJR	1
Hexachlorobutadiene	< 1.5	ug/l	1.5	4.8	1	8260B		12/1/2014	CJR	1
Isopropylbenzene	< 0.3	ug/l	0.3	0.96	1	8260B		12/1/2014	CJR	1

Project Name MANITOWOC (NEWTON) **Invoice #** E28129
Project # 60311767

Lab Code 5028129A
Sample ID 2916 PW 2916 CTH CR
Sample Matrix Water
Sample Date 11/25/2014

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
p-Isopropyltoluene	< 0.31	ug/l	0.31	0.98	1	8260B		12/1/2014	CJR	1
Methylene chloride	< 0.5	ug/l	0.5	1.6	1	8260B		12/1/2014	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.23	ug/l	0.23	0.74	1	8260B		12/1/2014	CJR	1
Naphthalene	< 1.7	ug/l	1.7	5.5	1	8260B		12/1/2014	CJR	1
n-Propylbenzene	< 0.25	ug/l	0.25	0.81	1	8260B		12/1/2014	CJR	1
1,1,2,2-Tetrachloroethane	< 0.45	ug/l	0.45	1.4	1	8260B		12/1/2014	CJR	1
1,1,1,2-Tetrachloroethane	< 0.33	ug/l	0.33	1.1	1	8260B		12/1/2014	CJR	1
Tetrachloroethene	< 0.33	ug/l	0.33	1.1	1	8260B		12/1/2014	CJR	1
Toluene	< 0.69	ug/l	0.69	2.2	1	8260B		12/1/2014	CJR	1
1,2,4-Trichlorobenzene	< 0.98	ug/l	0.98	3.1	1	8260B		12/1/2014	CJR	1
1,2,3-Trichlorobenzene	< 1.8	ug/l	1.8	5.8	1	8260B		12/1/2014	CJR	1
1,1,1-Trichloroethane	< 0.33	ug/l	0.33	1	1	8260B		12/1/2014	CJR	1
1,1,2-Trichloroethane	< 0.34	ug/l	0.34	1.1	1	8260B		12/1/2014	CJR	1
Trichloroethene (TCE)	< 0.33	ug/l	0.33	1	1	8260B		12/1/2014	CJR	1
Trichlorofluoromethane	< 0.71	ug/l	0.71	2.3	1	8260B		12/1/2014	CJR	1
1,2,4-Trimethylbenzene	< 2.2	ug/l	2.2	6.9	1	8260B		12/1/2014	CJR	1
1,3,5-Trimethylbenzene	< 1.4	ug/l	1.4	4.5	1	8260B		12/1/2014	CJR	1
Vinyl Chloride	0.37 "J"	ug/l	0.18	0.57	1	8260B		12/1/2014	CJR	1
m&p-Xylene	< 0.69	ug/l	0.69	2.2	1	8260B		12/1/2014	CJR	1
o-Xylene	< 0.63	ug/l	0.63	2	1	8260B		12/1/2014	CJR	1
SUR - 4-Bromofluorobenzene	106	REC %			1	8260B		12/1/2014	CJR	1
SUR - Dibromofluoromethane	101	REC %			1	8260B		12/1/2014	CJR	1
SUR - Toluene-d8	101	REC %			1	8260B		12/1/2014	CJR	1
SUR - 1,2-Dichloroethane-d4	108	REC %			1	8260B		12/1/2014	CJR	1

Project Name MANITOWOC (NEWTON) **Invoice #** E28129
Project # 60311767

Lab Code 5028129B
Sample ID 2734 PW 2734 CTH CR
Sample Matrix Water
Sample Date 11/25/2014

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
VOC's										
Benzene	< 0.24	ug/l	0.24	0.77	1	8260B		12/1/2014	CJR	1
Bromobenzene	< 0.32	ug/l	0.32	1	1	8260B		12/1/2014	CJR	1
Bromodichloromethane	< 0.37	ug/l	0.37	1.2	1	8260B		12/1/2014	CJR	1
Bromoform	< 0.35	ug/l	0.35	1.1	1	8260B		12/1/2014	CJR	1
tert-Butylbenzene	< 0.36	ug/l	0.36	1.2	1	8260B		12/1/2014	CJR	1
sec-Butylbenzene	< 0.33	ug/l	0.33	1	1	8260B		12/1/2014	CJR	1
n-Butylbenzene	< 0.35	ug/l	0.35	1.1	1	8260B		12/1/2014	CJR	1
Carbon Tetrachloride	< 0.33	ug/l	0.33	1.1	1	8260B		12/1/2014	CJR	1
Chlorobenzene	< 0.24	ug/l	0.24	0.77	1	8260B		12/1/2014	CJR	1
Chloroethane	< 0.63	ug/l	0.63	2	1	8260B		12/1/2014	CJR	1
Chloroform	< 0.28	ug/l	0.28	0.88	1	8260B		12/1/2014	CJR	1
Chloromethane	< 0.81	ug/l	0.81	2.6	1	8260B		12/1/2014	CJR	1
2-Chlorotoluene	< 0.21	ug/l	0.21	0.66	1	8260B		12/1/2014	CJR	1
4-Chlorotoluene	< 0.21	ug/l	0.21	0.68	1	8260B		12/1/2014	CJR	1
1,2-Dibromo-3-chloropropane	< 0.88	ug/l	0.88	2.8	1	8260B		12/1/2014	CJR	1
Dibromochloromethane	< 0.22	ug/l	0.22	0.7	1	8260B		12/1/2014	CJR	1
1,4-Dichlorobenzene	< 0.3	ug/l	0.3	0.96	1	8260B		12/1/2014	CJR	1
1,3-Dichlorobenzene	< 0.28	ug/l	0.28	0.89	1	8260B		12/1/2014	CJR	1
1,2-Dichlorobenzene	< 0.36	ug/l	0.36	1.2	1	8260B		12/1/2014	CJR	1
Dichlorodifluoromethane	< 0.44	ug/l	0.44	1.4	1	8260B		12/1/2014	CJR	1
1,2-Dichloroethane	< 0.41	ug/l	0.41	1.3	1	8260B		12/1/2014	CJR	1
1,1-Dichloroethane	< 0.3	ug/l	0.3	0.97	1	8260B		12/1/2014	CJR	1
1,1-Dichloroethene	< 0.4	ug/l	0.4	1.3	1	8260B		12/1/2014	CJR	1
cis-1,2-Dichloroethene	0.93 "J"	ug/l	0.38	1.2	1	8260B		12/1/2014	CJR	1
trans-1,2-Dichloroethene	< 0.35	ug/l	0.35	1.1	1	8260B		12/1/2014	CJR	1
1,2-Dichloropropane	< 0.32	ug/l	0.32	1	1	8260B		12/1/2014	CJR	1
2,2-Dichloropropane	< 0.36	ug/l	0.36	1.2	1	8260B		12/1/2014	CJR	1
1,3-Dichloropropane	< 0.33	ug/l	0.33	1	1	8260B		12/1/2014	CJR	1
Di-isopropyl ether	< 0.23	ug/l	0.23	0.73	1	8260B		12/1/2014	CJR	1
EDB (1,2-Dibromoethane)	< 0.44	ug/l	0.44	1.4	1	8260B		12/1/2014	CJR	1
Ethylbenzene	< 0.55	ug/l	0.55	1.7	1	8260B		12/1/2014	CJR	1
Hexachlorobutadiene	< 1.5	ug/l	1.5	4.8	1	8260B		12/1/2014	CJR	1
Isopropylbenzene	< 0.3	ug/l	0.3	0.96	1	8260B		12/1/2014	CJR	1
p-Isopropyltoluene	< 0.31	ug/l	0.31	0.98	1	8260B		12/1/2014	CJR	1
Methylene chloride	< 0.5	ug/l	0.5	1.6	1	8260B		12/1/2014	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.23	ug/l	0.23	0.74	1	8260B		12/1/2014	CJR	1
Naphthalene	< 1.7	ug/l	1.7	5.5	1	8260B		12/1/2014	CJR	1
n-Propylbenzene	< 0.25	ug/l	0.25	0.81	1	8260B		12/1/2014	CJR	1
1,1,2,2-Tetrachloroethane	< 0.45	ug/l	0.45	1.4	1	8260B		12/1/2014	CJR	1
1,1,1,2-Tetrachloroethane	< 0.33	ug/l	0.33	1.1	1	8260B		12/1/2014	CJR	1
Tetrachloroethene	< 0.33	ug/l	0.33	1.1	1	8260B		12/1/2014	CJR	1
Toluene	< 0.69	ug/l	0.69	2.2	1	8260B		12/1/2014	CJR	1
1,2,4-Trichlorobenzene	< 0.98	ug/l	0.98	3.1	1	8260B		12/1/2014	CJR	1
1,2,3-Trichlorobenzene	< 1.8	ug/l	1.8	5.8	1	8260B		12/1/2014	CJR	1
1,1,1-Trichloroethane	< 0.33	ug/l	0.33	1	1	8260B		12/1/2014	CJR	1
1,1,2-Trichloroethane	< 0.34	ug/l	0.34	1.1	1	8260B		12/1/2014	CJR	1
Trichloroethene (TCE)	< 0.33	ug/l	0.33	1	1	8260B		12/1/2014	CJR	1
Trichlorofluoromethane	< 0.71	ug/l	0.71	2.3	1	8260B		12/1/2014	CJR	1
1,2,4-Trimethylbenzene	< 2.2	ug/l	2.2	6.9	1	8260B		12/1/2014	CJR	1
1,3,5-Trimethylbenzene	< 1.4	ug/l	1.4	4.5	1	8260B		12/1/2014	CJR	1
Vinyl Chloride	0.38 "J"	ug/l	0.18	0.57	1	8260B		12/1/2014	CJR	1
m&p-Xylene	< 0.69	ug/l	0.69	2.2	1	8260B		12/1/2014	CJR	1
o-Xylene	< 0.63	ug/l	0.63	2	1	8260B		12/1/2014	CJR	1
SUR - 1,2-Dichloroethane-d4	97	REC %			1	8260B		12/1/2014	CJR	1
SUR - 4-Bromofluorobenzene	108	REC %			1	8260B		12/1/2014	CJR	1
SUR - Dibromofluoromethane	108	REC %			1	8260B		12/1/2014	CJR	1
SUR - Toluene-d8	100	REC %			1	8260B		12/1/2014	CJR	1

Project Name MANITOWOC (NEWTON) **Invoice #** E28129
Project # 60311767

Lab Code 5028129C
Sample ID 2734 PW DUP 2734 CTH CR
Sample Matrix Water
Sample Date 11/25/2014

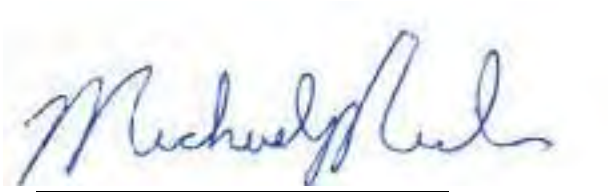
	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
VOC's										
Benzene	< 0.24	ug/l	0.24	0.77	1	8260B		12/2/2014	CJR	1
Bromobenzene	< 0.32	ug/l	0.32	1	1	8260B		12/2/2014	CJR	1
Bromodichloromethane	< 0.37	ug/l	0.37	1.2	1	8260B		12/2/2014	CJR	1
Bromoform	< 0.35	ug/l	0.35	1.1	1	8260B		12/2/2014	CJR	1
tert-Butylbenzene	< 0.36	ug/l	0.36	1.2	1	8260B		12/2/2014	CJR	1
sec-Butylbenzene	< 0.33	ug/l	0.33	1	1	8260B		12/2/2014	CJR	1
n-Butylbenzene	< 0.35	ug/l	0.35	1.1	1	8260B		12/2/2014	CJR	1
Carbon Tetrachloride	< 0.33	ug/l	0.33	1.1	1	8260B		12/2/2014	CJR	1
Chlorobenzene	< 0.24	ug/l	0.24	0.77	1	8260B		12/2/2014	CJR	1
Chloroethane	< 0.63	ug/l	0.63	2	1	8260B		12/2/2014	CJR	1
Chloroform	< 0.28	ug/l	0.28	0.88	1	8260B		12/2/2014	CJR	1
Chloromethane	24.3	ug/l	0.81	2.6	1	8260B		12/2/2014	CJR	1
2-Chlorotoluene	< 0.21	ug/l	0.21	0.66	1	8260B		12/2/2014	CJR	1
4-Chlorotoluene	< 0.21	ug/l	0.21	0.68	1	8260B		12/2/2014	CJR	1
1,2-Dibromo-3-chloropropane	< 0.88	ug/l	0.88	2.8	1	8260B		12/2/2014	CJR	1
Dibromochloromethane	< 0.22	ug/l	0.22	0.7	1	8260B		12/2/2014	CJR	1
1,4-Dichlorobenzene	< 0.3	ug/l	0.3	0.96	1	8260B		12/2/2014	CJR	1
1,3-Dichlorobenzene	< 0.28	ug/l	0.28	0.89	1	8260B		12/2/2014	CJR	1
1,2-Dichlorobenzene	< 0.36	ug/l	0.36	1.2	1	8260B		12/2/2014	CJR	1
Dichlorodifluoromethane	< 0.44	ug/l	0.44	1.4	1	8260B		12/2/2014	CJR	1
1,2-Dichloroethane	< 0.41	ug/l	0.41	1.3	1	8260B		12/2/2014	CJR	1
1,1-Dichloroethane	< 0.3	ug/l	0.3	0.97	1	8260B		12/2/2014	CJR	1
1,1-Dichloroethene	< 0.4	ug/l	0.4	1.3	1	8260B		12/2/2014	CJR	1
cis-1,2-Dichloroethene	1.02 "J"	ug/l	0.38	1.2	1	8260B		12/2/2014	CJR	1
trans-1,2-Dichloroethene	< 0.35	ug/l	0.35	1.1	1	8260B		12/2/2014	CJR	1
1,2-Dichloropropane	< 0.32	ug/l	0.32	1	1	8260B		12/2/2014	CJR	1
2,2-Dichloropropane	< 0.36	ug/l	0.36	1.2	1	8260B		12/2/2014	CJR	1
1,3-Dichloropropane	< 0.33	ug/l	0.33	1	1	8260B		12/2/2014	CJR	1
Di-isopropyl ether	< 0.23	ug/l	0.23	0.73	1	8260B		12/2/2014	CJR	1
EDB (1,2-Dibromoethane)	< 0.44	ug/l	0.44	1.4	1	8260B		12/2/2014	CJR	1
Ethylbenzene	< 0.55	ug/l	0.55	1.7	1	8260B		12/2/2014	CJR	1
Hexachlorobutadiene	< 1.5	ug/l	1.5	4.8	1	8260B		12/2/2014	CJR	1
Isopropylbenzene	< 0.3	ug/l	0.3	0.96	1	8260B		12/2/2014	CJR	1
p-Isopropyltoluene	< 0.31	ug/l	0.31	0.98	1	8260B		12/2/2014	CJR	1
Methylene chloride	< 0.5	ug/l	0.5	1.6	1	8260B		12/2/2014	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.23	ug/l	0.23	0.74	1	8260B		12/2/2014	CJR	1
Naphthalene	< 1.7	ug/l	1.7	5.5	1	8260B		12/2/2014	CJR	1
n-Propylbenzene	< 0.25	ug/l	0.25	0.81	1	8260B		12/2/2014	CJR	1
1,1,2,2-Tetrachloroethane	< 0.45	ug/l	0.45	1.4	1	8260B		12/2/2014	CJR	1
1,1,1,2-Tetrachloroethane	< 0.33	ug/l	0.33	1.1	1	8260B		12/2/2014	CJR	1
Tetrachloroethene	< 0.33	ug/l	0.33	1.1	1	8260B		12/2/2014	CJR	1
Toluene	< 0.69	ug/l	0.69	2.2	1	8260B		12/2/2014	CJR	1
1,2,4-Trichlorobenzene	< 0.98	ug/l	0.98	3.1	1	8260B		12/2/2014	CJR	1
1,2,3-Trichlorobenzene	< 1.8	ug/l	1.8	5.8	1	8260B		12/2/2014	CJR	1
1,1,1-Trichloroethane	< 0.33	ug/l	0.33	1	1	8260B		12/2/2014	CJR	1
1,1,2-Trichloroethane	< 0.34	ug/l	0.34	1.1	1	8260B		12/2/2014	CJR	1
Trichloroethene (TCE)	< 0.33	ug/l	0.33	1	1	8260B		12/2/2014	CJR	1
Trichlorofluoromethane	< 0.71	ug/l	0.71	2.3	1	8260B		12/2/2014	CJR	1
1,2,4-Trimethylbenzene	< 2.2	ug/l	2.2	6.9	1	8260B		12/2/2014	CJR	1
1,3,5-Trimethylbenzene	< 1.4	ug/l	1.4	4.5	1	8260B		12/2/2014	CJR	1
Vinyl Chloride	0.43 "J"	ug/l	0.18	0.57	1	8260B		12/2/2014	CJR	1
m&p-Xylene	< 0.69	ug/l	0.69	2.2	1	8260B		12/2/2014	CJR	1
o-Xylene	< 0.63	ug/l	0.63	2	1	8260B		12/2/2014	CJR	1
SUR - Toluene-d8	104	REC %			1	8260B		12/2/2014	CJR	1
SUR - 1,2-Dichloroethane-d4	99	REC %			1	8260B		12/2/2014	CJR	1
SUR - 4-Bromofluorobenzene	97	REC %			1	8260B		12/2/2014	CJR	1
SUR - Dibromofluoromethane	103	REC %			1	8260B		12/2/2014	CJR	1

"J" Flag: Analyte detected between LOD and LOQ LOD Limit of Detection LOQ Limit of Quantitation

Code	*Comment*
1	Laboratory QC within limits.

All solid sample results reported on a dry weight basis unless otherwise indicated. All LOD's and LOQ's are adjusted for dilutions but not dry weight. Subcontracted results are denoted by SUB in the analyst field.

Authorized Signature



AECOM

Chain of Custody

Client Information

Company: AECOM
Address: 1555 N. River Center Dr, Ste 214
City/State/Zip: Milwaukee, WI 53212
Phone: 414-944-6190 Fax: 414-944-6081
Email: dave.henderson@AECOM.com

Project Information

Project Name: Manitowoc (Newton)
Project Number: 60311767
Project Location: Manitowoc, WI State: WI
Report To: Dave Henderson
Invoice To:

Requested Due Date/TAT: Norma	Date Sampled	Time Sampled	G = Grab C = Composite	field filtered	Matrix Code see bottom of page for codes	Preservatives and # of Containers							Analyze For:								Lab ID or Additional Comments
Sample ID						HNO3	HCL	NaOH	H2SO4	Methanol	None	Other	VOC								
2916 PW	11/25/14	8:30	G	N	PW		X						X							502	8129 A
2734 PW	↓	8:50	G	N	PW		X						X								B
2734 PW Dup	↓	8:50	G	N	PW		X						X								C
Both Addresses																					
CTH CR																					

MATRIX (CODE)
Drinking Water (DW), Water (W), Waste Water (WW), Product (P), Soil/Solid (S), Sludge (SL), Oil (OL), Wipe (WP), Air (AR), Other (OT), Tissue (TS)

Special Instructions:

Relinquished By: Robert Weigel	Date:	11/25/14	Time:	12:00pm	Received By:		Date:	11/26/14	Time:	8:00
Relinquished By:	Date:		Time:		Received By:		Date:		Time:	
Relinquished By:	Date:		Time:		Received By:		Date:		Time:	

Sample Condition: Temp in C Received on ice (Y) N Custody Sealed Cooler (Y) N Sample Intact (Y) N

C:\Documents and Settings\reneel\Local Settings\Temporary Internet Files\Content.Outlook\JLFAX53O\Chain of Custody Form