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March 6, 2017

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

Subject: October 2016 Semi-Annual 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 Semi-Annual Potable Well Monitoring Letter Report for wells in the vicinity of the Former Town of Newton Gravel Pit site (See Figure1). The report provides the results from the October 2016 sampling event.

Presented below are site background information, sampling methodology, the potable well monitoring results, and updated information on the Semi-Annual Potable Well Monitoring Work Plan.

BACKGROUND INFORMATION

Regular monitoring has been ongoing since November 2013, when volatile organic compounds (VOCs) were discovered in private potable wells near the Former Town of Newton Gravel Pit. The most recent sampling was conducted in accordance with the Wisconsin Department of Natural Resources (WDNR) approved 2015 to 2016 Semi-Annual Potable Well Monitoring Work Plan. The Work Plan grouped 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 regulatory standard exceedances of 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.

SAMPLING METHODOLOGY

The October 2016 sampling also includes monitoring conducted since the March 2016 event. In total, 46 water samples, excluding quality control samples, were obtained from 35 wells. Details of the monitoring event are as follows.

On May 23, 2016 after the replacement well was installed at 4002 Thunder Ridge Road the first sampling event on the new well was completed.

May 23, 2016 Target Zone Well Sampling Address
4002 Thunder Ridge Road (replacement)

In June 2016 the second and third rounds of sampling on the replacement well at 4002 Thunder Ridge Road was completed.

June 2 and 23, 2016 Target Zone Well Sampling Address
4002 Thunder Ridge Road (replacement)

On August 8, 2016 the first sampling event was completed on the replacement well at 3303 Hecker Road.

August 8, 2016 Target Zone Well Sampling Address
3303 Hecker Road (replacement)

On September 26, 2016 the second sampling event on the replacement well at 3303 Hecker Road was completed.

September 26, 2016 Target Zone Well Sampling Address
3303 Hecker Road (replacement)

In October 2016, a total of 32 wells (a total of 35 samples with quality control sampling) were collected from the target zone and sentinel zone wells:

October 5, 6, 7, 10 and 11, 2016 Sentinel and Target Zone Wells Sampling Addresses	
3817 Viebahn Street	3422 CTH CR
3825 Viebahn Street	3504 CTH CR
3327 Hecker Road	3611 CTH CR
3461 (3417) Hecker Road	3618 CTH CR
3515 Hecker Road	4024 CTH CR
3518 Hecker Road	4002 Thunder Ridge Road
3609 Hecker Road	4005 Thunder Ridge Road
3625 Hecker Road	4010 Thunder Ridge Road
3702 Hecker Road	4027 Thunder Ridge Road
2706 CTH CR	4111 Thunder Ridge Road
2717 CTH CR (4141 Viebahn Street)	3911 Blackhawk Court
2911 CTH CR	3921 Blackhawk Court
3023 CTH CR	3902 Silver Creek Road
3120 CTH CR	4159 Silver Creek Road
3312 CTH CR	3027 Orchard Lane
3403 CTH CR	3420 Orchard Lane

On October 24, 2016, confirmation samples were taken at 4005 and 4010 Thunder Ridge Road and the property owner was present at 3318 Orchard Lane to allow sampling. Additionally, the first sampling event on the replacement well at 3504 CTH CR and the third sampling event on the replacement well at 3303 Hecker Road were completed.

October 24, 2016 Sentinel and Target Zone Wells Sampling Addresses	
3303 Hecker Road (replacement)	4010 Thunder Ridge Road (confirm)
3504 CTH CR (replacement)	3318 Orchard Lane
4005 Thunder Ridge Road (confirm)	

On November 8, 2016, an additional replacement well sample was obtained at 3303 Hecker Road, 4101 Thunder Ridge Road was sampled, the second sampling event on the replacement well at 3504 CTH CR was completed, and a second confirmation sample was obtained at 4005 Thunder Ridge Road.

November 8, 2016 Sentinel and Target Zone Wells Sampling Addresses	
3303 Hecker Road (replacement)	4005 Thunder Ridge Road (confirm)
3504 CTH CR (replacement)	4101 Thunder Ridge Road

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.

Samples for 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.

MONITORING RESULTS

The results for the October 2016 sampling events are discussed below. During this period AECOM obtained a total of 46 water samples (not including quality control samples) from 35 wells.

A summary of the sampled wells with detected laboratory analytical results is presented on Table 1 and on Figure 2. Table 2 provides a summary of the analytical results for all wells sampled. The laboratory analytical reports are provided in Attachment A.

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

Potable Wells with NR 140 COC ES Exceedances:
There were two (2) potable wells with a vinyl chloride ES exceedances and detectable concentrations of cis-1,2-dichloroethene (cis-1,2-dce) below regulatory (PAL) limits. They are:

ES Exceedance of Vinyl Chloride
4005 Thunder Ridge
4010 Thunder Ridge

Non Potable Well with NR 140 COC ES Exceedance:

ES Exceedance of Vinyl Chloride
2717 CTH CR (4141 Viebahn Street)

Potable Wells with NR 140 COC PAL Exceedances:
There were no wells that had a PAL exceedance for vinyl chloride or cis-1,2-dce.

PAL Exceedances of Vinyl Chloride or cis-1,2-dce
No wells with PAL exceedances

Detected COCs with No Regulatory Exceedances:
There were a total of 12 potable wells that only had a single COC (cis-1,2-dce) below regulatory (PAL) limits.

Cis-1,2-dichloroethene Detects	
3921 Blackhawk Court	3702 Hecker Road
3911 Blackhawk Court	3027 Orchard Lane
3504 CTH CR	4159 Silver Creek Road
3618 CTH CR	4027 Thunder Ridge Road
3327 Hecker Road	4111 Thunder Ridge Road
3461 (3417) Hecker Road	3817 Viebahn Street

Additionally, the October 24, 2016, analytical results for the replacement well sample at 3303 Hecker Road indicated carbon disulfide at 6.8 ug/l, which is below the NR 140 PAL of 200 ug/l.

A summary of the sampled wells with detectable COC laboratory results is presented on Table 1 and on Figure 2. Table 2 provides a summary of the analytical results for all sampled wells. The laboratory analytical reports are provided in Attachment A.

OBSERVED CHANGES SINCE LAST MONITORING EVENT

Since the March 2016 sampling event three new replacement wells have been installed and sampled. There are currently a total of nine replacement potable wells. The new wells are located at:

- 3303 Hecker Road
- 4002 Thunder Ridge Road
- 3504 CTH CR

The following changes were noted in the analytical results since the March 2016 sampling event:

- The following wells had a change from a vinyl chloride non-detect to an ES exceedance with a continued cis-1,2-dce detect below regulatory limits:
    - 4005 Thunder Ridge Road. The first and second confirmation sample at 4005 Thunder Ridge did not verify the vinyl chloride detect.
    - 4010 Thunder Ridge Road. The first confirmation sample verified the vinyl chloride ES exceedance.

- The non-potable well at 2717 CTH CR(4141 Viebahn Street) continues to be used as a groundwater monitoring well. The well had a change in vinyl chloride and cis-1,2-dce from non-detectable levels to a vinyl chloride ES exceedance and a cis-1,2-dce detect. This well has historically had consistent vinyl chloride ES exceedances and cis-1,2-dce detects.

- The following wells had a change in cic-1,2-dce from a non-detect to a detect above the laboratory method detection limit(MDL) but below the PAL with continued non-detect of vinyl chloride. These wells have historically had cis-1,2-dce detects.
    - 3702 Hecker Road
    - 4111 Thunder Ridge Road
    - 3817 Viebahn Street
    - 3027 Orchard Lane

- The following well had a change in cic-1,2-dce from a non-detect to a detect above the laboratory method detection limit(MDL) but below the PAL with continued non-detect of vinyl chloride.
    - 3911 Black Hawk Court

- On October 24, 2016, a replacement well sampling event was conducted at 3303 Hecker Road. The sample results had a detect of carbon disulfide at 6.8 ug/l, which is below the NR 141 PAL of 200 ug/l. This was the third sampling event (of three) for the replacement well. The first two rounds of samples had no detectable VOCs. These results require some explanation. First, some site specific and sample methodology background information.

    - Carbon disulfide is not a COC associated with the Newton Pit site and as an anthropogenic compound; it has not been detected in samples associated with the Newton Pit site.

    - The residence at 3303 Hecker Road is has been vacant for some time. The replacement well work included a new pressure tank, piping, hose bib, and sampling valve all located in a rustic partial-basement. The home owner keeps the new plumbing system equipment in the basement isolated, by a valve, from the plumbing in the balance of the house. Therefore, water sits stagnant in the pressure tank, which is downstream from the hose bib and a sampling valve. Additionally, there is a groundwater spring that actively flows through the basement.

    - During VOC water sampling it is common practice to obtain three 40 ml vials of water for the sample. The lab usually only runs one of the sample vials, the other two are backup.

  Upon receipt of the initial sample results, we requested the laboratory test the remaining two sample vials. The analytical results from these vials were; 2.6 ug/l and <1.0 ug/l. The analytical results from the three vials can be interpreted to indicate decreasing carbon disulfide concentrations between the vials, possibly indicating that the compound was “flushed” during the sample process. In this scenario the compound could be present in, on, or around the sample faucet.

  The well was resampled on November 8, 2016. During this sampling event additional precautions were taken to purge the pressure tank and to flush both the hose bib and the sampling valve. The analytical results for this event indicated no VOC detects.

Limited research[1] into possible sources of carbon disulfide indicates that carbon disulfide can be naturally occurring from "marsh" environments. Please note that the basement of 3303 Hecker Road has an active "spring" draining through it. It is possible that the carbon disulfide is naturally occurring from the spring and, as such, is a background detect.

Based on this information, it is possible that the single carbon disulfide detect at 3303 Hecker Road is indicative of background conditions external to the replacement potable well. It is anticipated that the replacement well at 3303 Hecker Road will continue to be sampled as part of the area wide potable well monitoring effort.

UPDATES TO POTABLE WELL MONITORING WORK PLAN

The October 2016 monitoring is the final scheduled event associated with the WDNR approved the 2015 to 2016 Semi-Annual Potable Well Monitoring Work Plan. AECOM anticipates preparing a new potable well monitoring work plan for submittal to the WDNR during the spring of 2017.

SUMMARY

The following is a summary of the October 2016 potable well monitoring event.

Analytical results indicate a NR 140 ES exceedance for vinyl chloride at 4005 Thunder Ridge Road and 4010 Thunder Ridge Road.

Analytical results from 12 potable well water samples indicate a single contaminant of concern (cis-1,2-dce) below regulatory (PAL) limits.

The non-potable well at 2717 CTH CR(4141 Viebahn Street) continues to exhibit an vinyl chloride ES exceedance and a cis-1,2-dce detect.

The carbon disulfide detect at 3303 Hecker Road may be a naturally occurring background compound.

Nine replacement potable wells continue to have no VOC detects above laboratory MDLs.

All other monitored wells (11 wells) had no VOC detects above laboratory MDLs.

This sampling event represents the final event associated with the WDNR approved 2015 to 2016 Semi-Annual Potable Well Monitoring Work Plan sampling schedule.

[1] Public Health Statement, Carbon Disulfide, CAS#: 75-15-0; U.S. Department of Health and Human Services, Public Health Service, Agency for Toxic Substances and Disease Registry, August 1996.

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

Yours sincerely,

AECOM Technical Services, Inc.

Sarah Day
Project Scientist

David Henderson
Senior Project Manager

Cc: Kathleen M. McDaniel, City Attorney, City of Manitowoc
Dan Koski, Director of Public Infrastructure, City of Manitowoc
JaNelle Merry, Water Supply Specialist, WDNR

Attachments: Tables, Figures, Attachment A: Laboratory Reports, Attachment B: ATSDR Report

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Tables:

Table 1, Summary of Contaminates Detected in Potable Wells
Table 2, Summary of Contaminates Analyzed in Potable Wells
(Table 2 provided only on electric (CD) copy of report)

Table 1
SUMMARY OF CONTAMINANTS DETECTED IN POTABLE WELLS

TABLE 1

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

			3303 Hecker Rd.													
			Original Potable Well								Replacement Potable Well					
			10/23/13	11/7/13	6/3/14	6/3/14(DUP)	11/17/14	2/23/15	10/13/15	3/30/16	8/8/16	9/26/16	10/24/16			11/8/16
Analyte	**ES[1]**	**PAL[2]**	Basement	Basement	Basement	Basement	Basement	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	< 0.44	< 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	< 0.54	< 0.48	< 0.48	< 0.48	< 0.48	< 0.48	< 0.48	< 0.48	< 0.48
1,1-Dichloroethene	7	0.7	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65
Carbon Disulfide	1000	200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
cis-1,2-Dichloroethene	70	7	< 0.38	< 0.38	0.68 J	0.68 J	< 0.38	< 0.45	1.94	2.53	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45
trans-1,2-Dichloroethene	100	20	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.54	< 0.54	< 0.54	< 0.54	< 0.54	< 0.54	< 0.54	< 0.54	< 0.54
Toluene	800	160	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44
Vinyl Chloride	0.2	0.02	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.17	**0.44 J**	**0.51 J**	< 0.17	< 0.17	< 0.17	< 0.17	< 0.17	< 0.17
RCRA Metals (mg/L)																
Arsenic	0.01	0.001	NA	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	NA
Lead	0.015	0.0015	NA	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	NA

TABLE 1

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

Analyte	ES[1]	PAL[2]	3327 Hecker Rd.								
			10/23/13	11/7/13	5/28/14	8/25/14	11/10/14	2/23/15	10/14/15	3/31/16	10/5/16
			Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot	Kitchen Sink	Outside Spigot	Kitchen Sink	Outside Spigot
Volatile Organic Compounds (VOCs) (µg/L):											
Benzene	5	0.5	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.44	< 0.44	< 0.44	< 0.44
1,2-Dichloroethane	5	0.5	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.54	< 0.48	< 0.48	< 0.48
1,1-Dichloroethene	7	0.7	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.65	< 0.65	< 0.65	< 0.65
Carbon Disulfide	1000	200	NA	NA	NA	NA	NA	NA	NA	NA	NA
cis-1,2-Dichloroethene	70	7	**11**	**11.6**	6.4	6.9	5.6	4.3	4.2	3.2	3.3
trans-1,2-Dichloroethene	100	20	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.54	< 0.54	< 0.54	< 0.54
Toluene	800	160	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.44	< 0.44	< 0.44	< 0.44
Vinyl Chloride	0.2	0.02	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.17	< 0.17	< 0.17	< 0.17
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

TABLE 1

SUMMARY OF CONTAMINATES DETECTED 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	2/24/15	10/13/15	3/30/16	3/30/16 (DUP)	10/6/16	10/6/16 (DUP)
			Inside Sink	Inside Sink	Inside Sink	Inside Sink	Inside Sink	Inside Sink	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	< 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	< 0.54	< 0.48	< 0.48	< 0.48	< 0.48	< 0.48
1,1-Dichloroethene	7	0.7	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65
Carbon Disulfide	1000	200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
cis-1,2-Dichloroethene	70	7	2.58	2.15	2.12	1.79	1.49	1.59	1.6	1.66	1.74	1.23 J	1.51
trans-1,2-Dichloroethene	100	20	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.54	< 0.54	< 0.54	< 0.54	< 0.54	< 0.54
Toluene	800	160	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44
Vinyl Chloride	0.2	0.02	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.17	< 0.17	< 0.17	< 0.17	< 0.17	< 0.17
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

TABLE 1

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

			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	2/23/15	10/14/15	10/5/16
Analyte	**ES[1]**	**PAL[2]**	Outside Spigot	Outside Spigot	Inside Kitchen	Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot	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	< 0.44	< 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	< 0.54	< 0.48	< 0.48
1,1-Dichloroethene	7	0.7	< 0.4	< 0.4	< 0.4	NA	< 0.4	< 0.4	< 0.4	< 0.4	< 0.65	< 0.65	< 0.65
Carbon Disulfide	1000	200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
cis-1,2-Dichloroethene	70	7	**7.4**	**7.2**	**7.4**	NA	**10**	**7.8**	< 0.38	< 0.38	< 0.45	< 0.45	< 0.45
trans-1,2-Dichloroethene	100	20	< 0.35	< 0.35	< 0.35	NA	< 0.35	< 0.35	< 0.35	< 0.35	< 0.54	< 0.54	< 0.54
Toluene	800	160	< 0.69	< 0.69	< 0.69	NA	< 0.69	< 0.69	< 0.69	< 0.69	< 0.44	< 0.44	< 0.44
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	< 0.17	< 0.17	< 0.17
RCRA Metals (mg/L)													
Arsenic	0.01	0.001	NA	NA	NA	**0.0019**	NA	NA	NA	NA	NA	NA	NA
Barium	2	0.4	NA	NA	NA	0.15	NA	NA	NA	NA	NA	NA	NA
Lead	0.015	0.0015	NA	NA	NA	0.00034 J	NA	NA	NA	NA	NA	NA	NA
Mercury	0.002	0.0002	NA	NA	NA	0.000061 J	NA	NA	NA	NA	NA	NA	NA

TABLE 1

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

			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	2/23/15	10/14/15	10/6/16
Analyte	**ES[1]**	**PAL[2]**	Outside Spigot	Outside Spigot	Inside Kitchen	Outside Spigot	Duplicate	Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot	Pressure Tank	Pressure Tank	Pressure Tank
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	< 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	< 0.54	< 0.48	< 0.48
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	< 0.65	< 0.65	< 0.65
Carbon Disulfide	1000	200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
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	< 0.45	< 0.45	< 0.45
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	< 0.54	< 0.54	< 0.54
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	< 0.44	< 0.44	< 0.44
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	< 0.17	< 0.17	< 0.17
RCRA Metals (mg/L)																
Arsenic	0.01	0.001	NA	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	NA
Lead	0.015	0.0015	NA	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	NA

TABLE 1

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

			3609 Hecker Rd.													
			Original Potable Well									Replacement Potable Well				
			10/22/13	11/7/13	11/7/13	11/22/13	5/28/14	5/28/14(DUP)	7/11/14	8/25/16	8/25/14(DUP)	9/29/14	11/4/14	2/24/15	10/13/15	10/5/16
Analyte	**ES[1]**	**PAL[2]**	Outside Spigot	Outside Spigot	Inside Kitchen	Outside Spigot	Ouside Spigot	Ouside 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	NA	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 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	< 0.54	< 0.48	< 0.48
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	< 0.65	< 0.65	< 0.65
Carbon Disulfide	1000	200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
cis-1,2-Dichloroethene	70	7	**45**	**45**	**46**	NA	**49**	**49**	**51**	**35**	**36**	< 0.38	< 0.38	< 0.45	< 0.45	< 0.45
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	< 0.54	< 0.54	< 0.54
Toluene	800	160	< 0.69	< 0.69	< 0.69	NA	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.44	< 0.44	< 0.44
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	< 0.17	< 0.17	< 0.17
RCRA Metals (mg/L)																
Arsenic	0.01	0.001	NA	NA	NA	0.00032 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Barium	2	0.4	NA	NA	NA	0.065	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	NA	NA	NA
Mercury	0.002	0.0002	NA	NA	NA	< 0.000049	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

TABLE 1

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

Analyte	ES[1]	PAL[2]	3702 Hecker Rd.								
			10/22/13	11/12/13	6/3/14	8/25/14	11/13/14	10/14/15	10/14/2015 (DUP)	3/31/16	10/11/16
			Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot	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	< 0.44	< 0.44	< 0.44	< 0.44
1,2-Dichloroethane	5	0.5	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.48	< 0.48	< 0.48	< 0.48
1,1-Dichloroethene	7	0.7	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.65	< 0.65	< 0.65	< 0.65
Carbon Disulfide	1000	200	NA	NA	NA	NA	NA	NA	NA	NA	NA
cis-1,2-Dichloroethene	70	7	0.71 J	0.61 J	< 0.38	< 0.38	< 0.38	0.48 J	0.73 J	< 0.45	1.04 J
trans-1,2-Dichloroethene	100	20	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.54	< 0.54	< 0.54	< 0.54
Toluene	800	160	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.44	< 0.44	< 0.44	< 0.44
Vinyl Chloride	0.2	0.02	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.17	< 0.17	< 0.17	< 0.17
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

TABLE 1

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

Analyte	ES[1]	PAL[2]	4159 Silver Creek Rd										
			12/12/13	1/6/14	6/4/14	6/4/14(DUP)	9/8/14	11/10/14	11/10/14 (DUP)	2/23/15	10/14/15	3/30/16	10/10/16
			Pressure Tank	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	< 0.44	< 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	< 0.54	< 0.48	< 0.48	< 0.48
1,1-Dichloroethene	7	0.7	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.65	< 0.65	< 0.65	< 0.65
Carbon Disulfide	1000	200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
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	0.56 J	0.55 J	0.59 J	0.78 J
trans-1,2-Dichloroethene	100	20	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.54	< 0.54	< 0.54	< 0.54
Toluene	800	160	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.44	< 0.44	< 0.44	< 0.44
Vinyl Chloride	0.2	0.02	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.17	< 0.17	< 0.17	< 0.17
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

TABLE 1

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

			2717 CTH CR(4141 Viebahn St.)								
			Original Potable Well							Non-Potable Well	
Analyte	ES[1]	PAL[2]	8/25/14	9/8/14	9/8/14(DUP)	11/10/14	2/23/15	10/13/15	City Water Provided December 2016	3/31/16	10/6/16
			Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank		Garage Faucet	Garage Faucet
Volatile Organic Compounds (VOCs) (µg/L):											
Benzene	5	0.5	< 0.24	< 0.24	< 0.24	< 0.24	< 0.44	< 0.44		< 0.44	< 0.44
1,2-Dichloroethane	5	0.5	< 0.41	< 0.41	< 0.41	< 0.41	< 0.54	< 0.48		< 0.48	< 0.48
1,1-Dichloroethene	7	0.7	< 0.4	< 0.4	< 0.4	< 0.4	< 0.65	< 0.65		< 0.65	< 0.65
Carbon Disulfide	1000	200	NA	NA	NA	NA	NA	NA		NA	NA
cis-1,2-Dichloroethene	70	7	1.4	1.31	1.44	1.3	1.26 J	1.72		< 0.45	1.53
trans-1,2-Dichloroethene	100	20	< 0.35	< 0.35	< 0.35	< 0.35	< 0.54	< 0.54		< 0.54	< 0.54
Toluene	800	160	< 0.69	< 0.69	< 0.69	< 0.69	< 0.44	< 0.44		< 0.44	< 0.44
Vinyl Chloride	0.2	0.02	**0.21 J**	**0.29 J**	**0.31 J**	**0.39 J**	**0.35 J**	**0.47 J**		< 0.17	**0.32 J**
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

TABLE 1

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

Analyte	ES[1]	PAL[2]	2734(2804) CTH CR							
			Original Potable Well							Well Abandoned, City Water Provided December 2016
			6/3/14	8/25/14	11/10/14	11/25/14	11/25/14 (DUP)	2/24/15	10/14/15	
			Garage Spigot	Garage Spigot	Garage Spigot	Garage Spigot	Garage 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	< 0.44	< 0.44	
1,2-Dichloroethane	5	0.5	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.54	< 0.48	
1,1-Dichloroethene	7	0.7	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.65	< 0.65	
Carbon Disulfide	1000	200	NA	NA	NA	NA	NA	NA	NA	
cis-1,2-Dichloroethene	70	7	0.77 J	0.77 J	0.63 J	0.93 J	1.02 J	0.7 J	0.94 J	
trans-1,2-Dichloroethene	100	20	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.54	< 0.54	
Toluene	800	160	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.44	< 0.44	
Vinyl Chloride	0.2	0.02	< 0.18	< 0.18	**0.26 J**	**0.38 J**	**0.43 J**	**0.2 J**	**0.45 J**	
RCRA Metals (mg/L)										
Arsenic	0.01	0.001	NA	NA	NA	NA	NA	NA	NA	
Barium	2	0.4	NA	NA	NA	NA	NA	NA	NA	
Lead	0.015	0.0015	NA	NA	NA	NA	NA	NA	NA	
Mercury	0.002	0.0002	NA	NA	NA	NA	NA	NA	NA	

TABLE 1

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

Analyte	ES[1]	PAL[2]	2916 CTH CR							
			Original Potable Well							Well Abandoned, City Water Provided December 2016
			2/4/14	5/28/14	8/25/14	11/10/14	11/25/14	3/11/15	3/11/2015 (DUP)	10/13/15
			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	< 0.44	< 0.44	< 0.44
1,2-Dichloroethane	5	0.5	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.54	< 0.54	< 0.48
1,1-Dichloroethene	7	0.7	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.65	< 0.65	< 0.65
Carbon Disulfide	1000	200	NA	NA	NA	NA	NA	NA	NA	NA
cis-1,2-Dichloroethene	70	7	0.97 J	0.9 J	1.02 J	0.74 J	0.82 J	0.75 J	0.8 J	1.02 J
trans-1,2-Dichloroethene	100	20	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.54	< 0.54	< 0.54
Toluene	800	160	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.44	< 0.44	< 0.44
Vinyl Chloride	0.2	0.02	**0.18 J**	< 0.18	< 0.18	**0.28 J**	**0.37 J**	< 0.17	**0.18 J**	**0.26 J**
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

TABLE 1

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

			2917 CTH CR						3023 CTH CR							
			Original Potable Well						Original Potable Well			Replacement Potable Well				
			2/4/14	5/30/14	10/13/15	10/27/15	10/27/15 (DUP)		2/4/14	6/2/14	8/25/14	10/8/14	11/4/14	2/24/15	10/13/15	10/5/16
Analyte	**ES[1]**	**PAL[2]**	Kitchen Sink	Kitchen Sink	Spigot	Spigot	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	< 0.44	< 0.44	< 0.44		< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.44	< 0.44	< 0.44
1,2-Dichloroethane	5	0.5	< 0.41	< 0.41	< 0.48	< 0.48	< 0.48		< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.54	< 0.48	< 0.48
1,1-Dichloroethene	7	0.7	< 0.4	< 0.4	< 0.65	< 0.65	< 0.65		< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.65	< 0.65	< 0.65
Carbon Disulfide	1000	200	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA	NA	NA
cis-1,2-Dichloroethene	70	7	< 0.38	< 0.38	1.6	1.41	1.67		2.84	2.87	2.34	< 0.38	< 0.38	< 0.45	< 0.45	< 0.45
trans-1,2-Dichloroethene	100	20	< 0.35	< 0.35	< 0.54	< 0.54	< 0.54		< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.54	< 0.54	< 0.54
Toluene	800	160	< 0.69	< 0.69	< 0.44	< 0.44	< 0.44		< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.44	< 0.44	< 0.44
Vinyl Chloride	0.2	0.02	< 0.18	< 0.18	**0.43 J**	**0.37 J**	**0.37 J**		**0.55 J**	**0.41 J**	**0.33 J**	< 0.18	< 0.18	< 0.17	< 0.17	< 0.17
RCRA Metals (mg/L)																
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
Lead	0.015	0.0015	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

Well Abandoned, City Water Provided December 2016

TABLE 1

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

			3120 CTH CR										
			Original Potable Well						Replacement Potable Well				
			1/3/14	2/4/14	5/28/14	5/28/14(DUP)	8/25/14	8/25/14(DUP)	10/8/14	11/4/14	2/23/15	10/13/15	10/6/16
Analyte	**ES[1]**	**PAL[2]**	Pressure Tank	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	< 0.44	< 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	< 0.54	< 0.48	< 0.48
1,1-Dichloroethene	7	0.7	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.65	< 0.65	< 0.65
Carbon Disulfide	1000	200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
cis-1,2-Dichloroethene	70	7	2.74	2.86	2.65	2.68	1.89	2.23	< 0.38	< 0.38	< 0.45	< 0.45	< 0.45
trans-1,2-Dichloroethene	100	20	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.54	< 0.54	< 0.54
Toluene	800	160	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.44	< 0.44	< 0.44
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	< 0.17	< 0.17	< 0.17
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

TABLE 1

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	2/23/15	10/13/15	10/5/16
			Kitchen Sink	Kitchen Sink	Kitchen Sink	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	< 0.44	< 0.44	< 0.44
1,2-Dichloroethane	5	0.5	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.54	< 0.48	< 0.48
1,1-Dichloroethene	7	0.7	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.65	< 0.65	< 0.65
Carbon Disulfide	1000	200	NA	NA	NA	NA	NA	NA	NA	NA	NA
cis-1,2-Dichloroethene	70	7	1.3	1.67	1.48	1.34	< 0.38	< 0.38	< 0.45	< 0.45	< 0.45
trans-1,2-Dichloroethene	100	20	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.54	< 0.54	< 0.54
Toluene	800	160	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.44	< 0.44	< 0.44
Vinyl Chloride	0.2	0.02	**0.56 J**	**0.25 J**	**0.22 J**	< 0.18	< 0.18	< 0.18	< 0.17	< 0.17	< 0.17
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

TABLE 1

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

			3504 CTH CR																
			Original Potable Well															Replacement Potable Well	
			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)	2/23/15	10/14/15	3/31/16	3/31/2016 (DUP)	10/11/16	10/24/16	11/8/16
Analyte	**ES[1]**	**PAL[2]**	Outside Spigot	Basement	Basement	Basement	Basement	Basement	Basement	Basement	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	< 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	< 0.54	< 0.48	< 0.48	< 0.48	< 0.48	< 0.48	< 0.48
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	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65
Carbon Disulfide	1000	200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
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	1.19 J	1.27 J	0.76 J	0.91 J	1.17 J	< 0.45	< 0.45
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	< 0.54	< 0.54	< 0.54	< 0.54	< 0.54	< 0.54	< 0.54
Toluene	800	160	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44
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**	**0.17 J**	< 0.17	< 0.17	< 0.17	< 0.17	< 0.17	< 0.17
RCRA Metals (mg/L)																			
Arsenic	0.01	0.001	NA	NA	NA	NA	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	NA	NA	NA	NA
Lead	0.015	0.0015	NA	NA	NA	NA	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	NA	NA	NA	NA

TABLE 1

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

Analyte	ES[1]	PAL[2]	3618 CTH CR							
			1/3/14	5/29/14	8/25/14	11/10/14	2/23/15	10/14/15	3/30/16	10/6/16
			Kitchen Sink	Kitchen Sink	Kitchen Sink	Kitchen Sink	Kitchen Sink	Pressure Tank	Kitchen Sink	Kitchen Sink
Volatile Organic Compounds (VOCs) (µg/L):										
Benzene	5	0.5	< 0.24	< 0.24	< 0.24	< 0.24	< 0.44	< 0.44	< 0.44	< 0.44
1,2-Dichloroethane	5	0.5	< 0.41	< 0.41	< 0.41	< 0.41	< 0.54	< 0.48	< 0.48	< 0.48
1,1-Dichloroethene	7	0.7	< 0.4	< 0.4	< 0.4	< 0.4	< 0.65	< 0.65	< 0.65	< 0.65
Carbon Disulfide	1000	200	NA	NA	NA	NA	NA	NA	NA	NA
cis-1,2-Dichloroethene	70	7	1.24	1.16 J	0.48 J	0.83 J	0.95 J	0.89 J	1.06 J	0.88 J
trans-1,2-Dichloroethene	100	20	< 0.35	< 0.35	< 0.35	< 0.35	< 0.54	< 0.54	< 0.54	< 0.54
Toluene	800	160	< 0.69	< 0.69	< 0.69	< 0.69	< 0.44	< 0.44	< 0.44	< 0.44
Vinyl Chloride	0.2	0.02	< 0.18	< 0.18	< 0.18	< 0.18	< 0.17	< 0.17	< 0.17	< 0.17
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

TABLE 1

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

Analyte	ES[1]	PAL[2]	4002 Thunder Ridge Rd.										
			Original Potable Well							Replacement Potable Well			
			1/3/14	8/25/14	10/13/15	10/13/2015 (DUP)	10/27/15	3/31/16	3/31/16 (DUP)	5/23/16	6/2/16	6/23/16	10/5/16
			Pressure Tank	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	< 0.44	< 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	< 0.48	< 0.48	< 0.48	< 0.48	< 0.48	< 0.48	< 0.48	< 0.48	< 0.48
1,1-Dichloroethene	7	0.7	< 0.4	< 0.4	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65
Carbon Disulfide	1000	200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
cis-1,2-Dichloroethene	70	7	1.67	1.29	1.3 J	1.14 J	1.26 J	0.68 J	1.03 J	< 0.45	< 0.45	< 0.45	< 0.45
trans-1,2-Dichloroethene	100	20	< 0.35	< 0.35	< 0.54	< 0.54	< 0.54	< 0.54	< 0.54	< 0.54	< 0.54	< 0.54	< 0.54
Toluene	800	160	< 0.69	< 0.69	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44
Vinyl Chloride	0.2	0.02	< 0.18	< 0.18	< 0.17	**0.2 J**	**0.18 J**	< 0.17	< 0.17	< 0.17	< 0.17	< 0.17	< 0.17
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

TABLE 1

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

			4005 Thunder Ridge Rd.									4010 Thunder Ridge Rd.						
			5/29/14	**8/26/14**	**11/11/14**	**2/23/15**	**10/14/15**	**3/30/16**	**10/10/16**	**10/24/16**	**11/8/16**	**5/28/14**	**8/26/14**	**2/24/15**	**10/20/15**	**3/31/16**	**10/7/16**	**10/24/16**
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	Pressure Tank	Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot
Volatile Organic Compounds (VOCs) (µg/L):																		
Benzene	5	0.5	< 0.24	< 0.24	< 0.24	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.24	< 0.24	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44
1,2-Dichloroethane	5	0.5	< 0.41	< 0.41	< 0.41	< 0.54	< 0.48	< 0.48	< 0.48	< 0.48	< 0.48	< 0.41	< 0.41	< 0.54	< 0.48	< 0.48	< 0.48	< 0.48
1,1-Dichloroethene	7	0.7	< 0.4	< 0.4	< 0.4	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65	< 0.4	< 0.4	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65
Carbon Disulfide	1000	200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
cis-1,2-Dichloroethene	70	7	0.83 J	0.9 J	< 0.38	0.81 J	0.91 J	0.97 J	1.35 J	1.1 J	0.66 J	1.37	1.18 J	1.43	1.27 J	1.47 J	1.27 J	1.42
trans-1,2-Dichloroethene	100	20	< 0.35	< 0.35	< 0.35	< 0.54	< 0.54	< 0.54	< 0.54	< 0.54	< 0.54	< 0.35	< 0.35	< 0.54	< 0.54	< 0.54	< 0.54	< 0.54
Toluene	800	160	< 0.69	< 0.69	< 0.69	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.69	< 0.69	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44
Vinyl Chloride	0.2	0.02	< 0.18	< 0.18	< 0.18	< 0.17	< 0.17	< 0.17	**0.29 J**	< 0.17	< 0.17	< 0.18	< 0.18	< 0.17	< 0.17	< 0.17	**0.27 J**	**0.20 J**
RCRA Metals (mg/L)																		
Arsenic	0.01	0.001	NA	NA	NA	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	NA	NA	NA
Lead	0.015	0.0015	NA	NA	NA	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	NA	NA	NA

TABLE 1

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

Analyte	ES[1]	PAL[2]	4027 Thunder Ridge Rd.								
			5/29/14	**8/26/14**	**11/11/14**	**11/11/14 (DUP)**	**2/24/15**	**10/13/15**	**3/31/16**	**10/6/16**	**10/6/16 (DUP)**
			Outside Spigot	Outside Spigot	Outside Spigot	Outside 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	< 0.24	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44
1,2-Dichloroethane	5	0.5	< 0.41	< 0.41	< 0.41	< 0.41	< 0.54	< 0.48	< 0.48	< 0.48	< 0.48
1,1-Dichloroethene	7	0.7	< 0.4	< 0.4	< 0.4	< 0.4	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65
Carbon Disulfide	1000	200	NA	NA	NA	NA	NA	NA	NA	NA	NA
cis-1,2-Dichloroethene	70	7	0.59 J	0.52 J	0.6 J	0.53 J	0.48 J	0.67 J	0.71 J	0.77 J	0.96 J
trans-1,2-Dichloroethene	100	20	< 0.35	< 0.35	< 0.35	< 0.35	< 0.54	< 0.54	< 0.54	< 0.54	< 0.54
Toluene	800	160	< 0.69	< 0.69	< 0.69	< 0.69	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44
Vinyl Chloride	0.2	0.02	< 0.18	< 0.18	< 0.18	< 0.18	< 0.17	< 0.17	< 0.17	< 0.17	< 0.17
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

TABLE 1

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

Analyte	ES[1]	PAL[2]	4101 Thunder Ridge Rd.						4111 Thunder Ridge Rd.					
			8/26/14	11/17/14	3/11/15	10/14/15	3/30/16	11/8/16	8/25/14	11/17/14	2/23/15	10/13/15	3/30/16	10/10/16
			Outside Spigot	Outside Spigot	Pressure Tank	Outside Spigot	Outside Spigot	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	< 0.44	< 0.44	< 0.44	< 0.44	< 0.24	< 0.24	< 0.44	< 0.44	< 0.44	< 0.44
1,2-Dichloroethane	5	0.5	< 0.41	< 0.41	< 0.54	< 0.48	< 0.48	< 0.48	< 0.41	< 0.41	< 0.54	< 0.48	< 0.48	< 0.48
1,1-Dichloroethene	7	0.7	< 0.4	< 0.4	< 0.65	< 0.65	< 0.65	< 0.65	< 0.4	< 0.4	< 0.65	< 0.65	< 0.65	< 0.65
Carbon Disulfide	1000	200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
cis-1,2-Dichloroethene	70	7	0.73 J	0.63 J	0.76 J	0.87 J	0.71 J	1.02 J	0.41 J	< 0.38	< 0.45	< 0.45	< 0.45	0.56 J
trans-1,2-Dichloroethene	100	20	< 0.35	< 0.35	< 0.54	< 0.54	< 0.54	< 0.54	< 0.35	< 0.35	< 0.54	< 0.54	< 0.54	< 0.54
Toluene	800	160	< 0.69	< 0.69	< 0.44	< 0.44	< 0.44	< 0.44	< 0.69	< 0.69	< 0.44	< 0.44	< 0.44	< 0.44
Vinyl Chloride	0.2	0.02	< 0.18	< 0.18	< 0.17	< 0.17	< 0.17	< 0.17	< 0.18	< 0.18	< 0.17	< 0.17	< 0.17	< 0.17
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

TABLE 1

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

Analyte	ES[1]	PAL[2]	3617(3621) Viebahn St.					
			11/7/14	11/19/14	2/24/15	2/2415 (DUP)	10/13/15	3/30/16
			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	< 0.44	< 0.44	< 0.44	< 0.44
1,2-Dichloroethane	5	0.5	< 0.41	< 0.41	< 0.54	< 0.54	< 0.48	< 0.48
1,1-Dichloroethene	7	0.7	< 0.4	< 0.4	< 0.65	< 0.65	< 0.65	< 0.65
Carbon Disulfide	1000	200	NA	NA	NA	NA	NA	NA
cis-1,2-Dichloroethene	70	7	1.13 J	1.12 J	0.92 J	0.87 J	1.3 J	1.12 J
trans-1,2-Dichloroethene	100	20	< 0.35	< 0.35	< 0.54	< 0.54	< 0.54	< 0.54
Toluene	800	160	< 0.69	< 0.69	< 0.44	< 0.44	< 0.44	< 0.44
Vinyl Chloride	0.2	0.02	**0.48 J**	**0.4 J**	< 0.17	**0.18 J**	**0.23 J**	< 0.17
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

TABLE 1

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

Analyte	ES[1]	PAL[2]	3701 Viebahn St.						
			Original Potable Well						
			10/29/14	11/7/14	11/7/14 (DUP)	2/23/15	2/23/15 (DUP)	10/14/15	10/14/2015 (DUP)
			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	< 0.44	< 0.44	< 0.44	< 0.44
1,2-Dichloroethane	5	0.5	< 0.41	< 0.41	< 0.41	< 0.54	< 0.54	< 0.48	< 0.48
1,1-Dichloroethene	7	0.7	< 0.4	< 0.4	< 0.4	< 0.65	< 0.65	< 0.65	< 0.65
Carbon Disulfide	1000	200	NA	NA	NA	NA	NA	NA	NA
cis-1,2-Dichloroethene	70	7	1.23	1.18 J	1.29	1.31 J	1.09 J	1.55	1.48
trans-1,2-Dichloroethene	100	20	< 0.35	< 0.35	< 0.35	< 0.54	< 0.54	< 0.54	< 0.54
Toluene	800	160	< 0.69	< 0.69	< 0.69	< 0.44	< 0.44	< 0.44	< 0.44
Vinyl Chloride	0.2	0.02	**0.29 J**	**0.32 J**	**0.49 J**	**0.31 J**	**0.33 J**	**0.34 J**	**0.37 J**
RCRA Metals (mg/L)									
Arsenic	0.01	0.001	NA	NA	NA	NA	NA	NA	NA
Barium	2	0.4	NA	NA	NA	NA	NA	NA	NA
Lead	0.015	0.0015	NA	NA	NA	NA	NA	NA	NA
Mercury	0.002	0.0002	NA	NA	NA	NA	NA	NA	NA

Well Abandoned, City Water Provided December 2016

TABLE 1

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

Analyte	ES[1]	PAL[2]	3815 Viebahn St.						3817 Viebahn St.					
			Original Potable Well					Well Abandoned. City Water Provided December 2016						
			11/7/14	11/19/14	2/23/15	10/13/15	10/13/15 (DUP)		10/29/14	11/7/14	2/24/15	10/20/15	3/31/16	10/6/16
			Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank		Outside Spigot	Outside Spigot	Pressure Tank	Outside Spigot	Outside Spigot	Outside Spigot
Volatile Organic Compounds (VOCs) (µg/L):														
Benzene	5	0.5	< 0.24	< 0.24	< 0.24	< 0.44	< 0.44		< 0.24	< 0.24	< 0.44	< 0.44	< 0.44	< 0.44
1,2-Dichloroethane	5	0.5	< 0.41	< 0.41	< 0.41	< 0.48	< 0.48		< 0.41	< 0.41	< 0.54	< 0.48	< 0.48	< 0.48
1,1-Dichloroethene	7	0.7	< 0.4	< 0.4	< 0.4	< 0.65	< 0.65		< 0.4	< 0.4	< 0.65	< 0.65	< 0.65	< 0.65
Carbon Disulfide	1000	200	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA
cis-1,2-Dichloroethene	70	7	0.74 J	0.94 J	0.90 J	1 J	1.12 J		0.4 J	< 0.38	< 0.45	0.49 J	< 0.45	0.47 J
trans-1,2-Dichloroethene	100	20	< 0.35	< 0.35	< 0.35	< 0.54	< 0.54		< 0.35	< 0.35	< 0.54	< 0.54	< 0.54	< 0.54
Toluene	800	160	< 0.69	< 0.69	< 0.69	< 0.44	< 0.44		< 0.69	< 0.69	< 0.44	< 0.44	< 0.44	< 0.44
Vinyl Chloride	0.2	0.02	**0.33 J**	**0.31 J**	**0.25 J**	**0.2 J**	**0.32 J**		< 0.18	< 0.18	< 0.17	< 0.17	< 0.17	< 0.17
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

TABLE 1

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

Analyte	ES[1]	PAL[2]	4025 Viebahn St.					4101 Viebahn St.				
			Original Potable Well				Well Abandoned, City Water Provided December 2016	Original Potable Well				Well Abandoned, City Water Provided December 2016
			10/29/14	11/7/14	2/24/15	10/13/15		10/29/14	11/7/15	2/24/15	10/14/15	
			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	< 0.44	< 0.44		< 0.24	< 0.24	< 0.44	< 0.44	
1,2-Dichloroethane	5	0.5	< 0.41	< 0.41	< 0.54	< 0.48		< 0.41	< 0.41	< 0.54	< 0.48	
1,1-Dichloroethene	7	0.7	< 0.4	< 0.4	< 0.65	< 0.65		< 0.4	< 0.4	< 0.65	< 0.65	
Carbon Disulfide	1000	200	NA	NA	NA	NA		NA	NA	NA	NA	
cis-1,2-Dichloroethene	70	7	1.38	1.46	1.11 J	1.85		1.48	1.13 J	1.24 J	1.59 J	
trans-1,2-Dichloroethene	100	20	< 0.35	< 0.35	< 0.54	< 0.54		< 0.35	< 0.35	< 0.54	< 0.54	
Toluene	800	160	0.95 J	< 0.69	< 0.44	< 0.44		< 0.69	< 0.69	< 0.44	< 0.44	
Vinyl Chloride	0.2	0.02	**0.34 J**	**0.31 J**	**0.32 J**	**0.44 J**		**0.38 J**	**0.39 J**	**0.43 J**	**0.54**	
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	

TABLE 1

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

Analyte	ES[1]	PAL[2]	3027 Orchard Ln.								3911 Black Hawk Ct.	
			2/5/14	6/4/14	8/28/14	11/11/14	3/11/15	10/14/15	3/31/16	10/6/16	7/8/15	10/6/16
			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	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44
1,2-Dichloroethane	5	0.5	< 0.41	< 0.41	< 0.41	< 0.41	< 0.54	< 0.48	< 0.48	< 0.48	< 0.48	< 0.48
1,1-Dichloroethene	7	0.7	< 0.4	< 0.4	< 0.4	< 0.4	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65
Carbon Disulfide	1000	200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
cis-1,2-Dichloroethene	70	7	0.47 J	0.39 J	0.49 J	< 0.38	< 0.45	0.59 J	< 0.45	0.46 J	< 0.45	0.59 J
trans-1,2-Dichloroethene	100	20	< 0.35	< 0.35	< 0.35	< 0.35	< 0.54	< 0.54	< 0.54	< 0.54	< 0.54	< 0.54
Toluene	800	160	< 0.69	< 0.69	< 0.69	< 0.69	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44
Vinyl Chloride	0.2	0.02	< 0.18	< 0.18	< 0.18	< 0.18	< 0.17	< 0.17	< 0.17	< 0.17	< 0.17	< 0.17
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

TABLE 1

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

Analyte	ES[1]	PAL[2]	3921 Black Hawk Ct.							
			2/4/14	6/2/14	8/26/14	11/10/14	2/24/15	10/14/15	3/31/16	10/5/16
			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	< 0.44	< 0.44	< 0.44	< 0.44
1,2-Dichloroethane	5	0.5	< 0.41	< 0.41	< 0.41	< 0.41	< 0.54	< 0.48	< 0.48	< 0.48
1,1-Dichloroethene	7	0.7	< 0.4	< 0.4	< 0.4	< 0.4	< 0.65	< 0.65	< 0.65	< 0.65
Carbon Disulfide	1000	200	NA	NA	NA	NA	NA	NA	NA	NA
cis-1,2-Dichloroethene	70	7	0.87 J	0.97 J	1.14 J	0.65 J	0.93 J	1.04 J	0.71 J	0.63 J
trans-1,2-Dichloroethene	100	20	< 0.35	< 0.35	< 0.35	< 0.35	< 0.54	< 0.54	< 0.54	< 0.54
Toluene	800	160	< 0.69	< 0.69	< 0.69	< 0.69	< 0.44	< 0.44	< 0.44	< 0.44
Vinyl Chloride	0.2	0.02	< 0.18	< 0.18	< 0.18	< 0.18	< 0.17	< 0.17	< 0.17	< 0.17
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

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 2
SUMMARY OF CONTAMINATES ANALYZED IN POTABLE WELLS
(Table 2 provided on CD copy of report)

TABLE 2

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

			3114 Hecker Rd.			3121 Hecker Rd.				3303 Hecker Rd.													
										Original Potable Well								Replacement Potable Well					
			10/22/13	11/8/13	5/28/14	10/22/13	11/7/13	5/28/14	10/14/15	10/23/13	11/7/13	6/3/14	6/3/14(DUP)	11/17/14	2/23/15	10/13/15	3/30/16	8/8/16	9/26/16	10/24/16			11/8/16
Analyte	ES[1]	PAL[2]	Outside Spigot	Outside Spigot	Outside Spigot	Basement	Basement	Basement	Basement	Basement	Basement	Basement	Basement	Basement	Basement	Basement	Basement	Basement	Basement	Basement	Basement	Basement	Basement
																				Vial #1	Vial #2	Vial #3	
Volatile Organic Compounds (VOCs) (µg/L):																							
Benzene	5	0.5	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.44	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44
Bromobenzene	NL	NL	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.48	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.48	< 0.48	< 0.48	< 0.48	< 0.48	< 0.48	< 0.48	< 0.48	< 0.48
Bromochloromethane	NL	NL	NA	NA	NA	NA	NA	NA	NA	NA	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	< 0.46	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46
Bromoform	4.4	0.44	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.46	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46
tert-Butylbenzene	NL	NL	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 1.1	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1
sec-Butylbenzene	NL	NL	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 1.2	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2
n-Butylbenzene	NL	NL	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 1	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Carbon Disulfide	1000	200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.8	< 1.0	2.6 J	< 1.0
Carbon Tetrachloride	5	0.5	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.51	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.65	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51
Chlorobenzene	NL	NL	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.46	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46
Chloroethane	400	80	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.65	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65
Chloroform	6	0.6	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.43	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.43	< 0.43	< 0.43	< 0.43	< 0.43	< 0.43	< 0.43	< 0.43	< 0.43
Chloromethane	3	0.3	**1.36 J**	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81	< 1.9	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81	< 1.9	< 1.9	< 1.9	< 1.9	< 1.9	< 1.9	< 1.9	< 1.9	< 1.9
2-Chlorotoluene	NL	NL	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.4	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4
4-Chlorotoluene	NL	NL	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.63	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63
1,2-Dibromo-3-chloropropane (DBCP)	0.2	0.02	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88	< 1.4	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4
Dibromochloromethane	60	6	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.45	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45
Dibromomethane	NL	NL	NA	NA	NA	NA	NA	NA	NA	NA	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	< 0.49	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49
1,3-Dichlorobenzene	600	120	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.52	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.52	< 0.52	< 0.52	< 0.52	< 0.52	< 0.52	< 0.52	< 0.52	< 0.52
1,2-Dichlorobenzene	600	60	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.46	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46
Dichlorodifluoromethane	1000	200	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.87	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.87	< 0.87	< 0.87	< 0.87	< 0.87	< 0.87	< 0.87	< 0.87	< 0.87
1,2-Dichloroethane	5	0.5	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.48	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.54	< 0.48	< 0.48	< 0.48	< 0.48	< 0.48	< 0.48	< 0.48	< 0.48
1,1-Dichloroethane	850	85	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 1.1	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1
1,1-Dichloroethene	7	0.7	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.65	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65
cis-1,2-Dichloroethene	70	7	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38	< 0.45	< 0.38	< 0.38	0.68 J	0.68 J	< 0.38	< 0.45	1.94	2.53	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45
trans-1,2-Dichloroethene	100	20	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.54	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.54	< 0.54	< 0.54	< 0.54	< 0.54	< 0.54	< 0.54	< 0.54	< 0.54
1,2-Dichloropropane	5	0.5	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.43	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.43	< 0.43	< 0.43	< 0.43	< 0.43	< 0.43	< 0.43	< 0.43	< 0.43
2,2-Dichloropropane	NL	NL	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 3.1	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 3.1	< 3.1	< 3.1	< 3.1	< 3.1	< 3.1	< 3.1	< 3.1	< 3.1
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	< 0.42	< 0.33	< 0.33	< 0.42	< 0.42	< 0.42	< 0.42	< 0.42	< 0.42
1,1-Dichloropropene	NL	NL	NA	NA	NA	NA	NA	NA	NA	NA	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	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	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	< 0.44	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44
EDB (1,2-Dibromoethane)	0.05	0.005	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.63	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63
Ethylbenzene	700	140	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.71	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71
Hexachlorobutadiene	NL	NL	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 2.2	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2
Isopropylbenzene	NS	NS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.82	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.82	< 0.82	< 0.82	< 0.82	< 0.82	< 0.82	< 0.82	< 0.82	< 0.82
p-Isopropyltoluene	NL	NL	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 1.1	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1
Methylene Chloride	5	0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 1.3	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 1.3	< 1.3	< 1.3	< 1.3	< 1.3	< 1.3	< 1.3	< 1.3	< 1.3
Methyl tert-butyl ether (MTBE)	60	12	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 1.1	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1
Naphthalene	100	10	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.6	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6
n-Propylbenzene	NL	NL	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.77	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.77	< 0.77	< 0.77	< 0.77	< 0.77	< 0.77	< 0.77	< 0.77	< 0.77
Styrene	100	10	NA	NA	NA	NA	NA	NA	NA	NA	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	< 0.52	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.52	< 0.52	< 0.52	< 0.52	< 0.52	< 0.52	< 0.52	< 0.52	< 0.52
1,1,1,2-Tetrachloroethane	70	7	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.48	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.48	< 0.48	< 0.48	< 0.48	< 0.48	< 0.48	< 0.48	< 0.48	< 0.48
Tetrachloroethene	5	0.5	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.49	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.74	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49
Toluene	800	160	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.44	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44
1,2,4-Trichlorobenzene	70	14	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 1.7	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7
1,2,3-Trichlorobenzene	NL	NL	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 2.7	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 2.7	< 2.7	< 2.7	< 2.7	< 2.7	< 2.7	< 2.7	< 2.7	< 2.7
1,1,1-Trichloroethane	200	40	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.84	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.84	< 0.84	< 0.84	< 0.84	< 0.84	< 0.84	< 0.84	< 0.84	< 0.84
1,1,2-Trichloroethane	5	0.5	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.48	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.48	< 0.48	< 0.48	< 0.48	< 0.48	< 0.48	< 0.48	< 0.48	< 0.48
Trichloroethene (TCE)	5	0.5	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.47	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.47	< 0.47	< 0.47	< 0.47	< 0.47	< 0.47	< 0.47	< 0.47	< 0.47
Trichlorofluoromethane	NL	NL	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.87	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.87	< 0.87	< 0.87	< 0.87	< 0.87	< 0.87	< 0.87	< 0.87	< 0.87
1,2,3-Trichloropropane	60	12	NA	NA	NA	NA	NA	NA	NA	NA	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	< 1.6	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6
1,3,5-Trimethylbenzene	--	--	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.5	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5
Total Trimethylbenzene	480	96	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 1.6	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6
Vinyl Chloride	0.2	0.02	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.17	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.17	**0.44 J**	**0.51 J**	< 0.17	< 0.17	< 0.17	< 0.17	< 0.17	< 0.17
m&p-Xylene	--	--	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 2.2	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2
o-Xylene	--	--	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.9	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.9	< 0.9	< 0.9	< 0.9	< 0.9	< 0.9	< 0.9	< 0.9	< 0.9
Total Xylenes	2,000	400	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 2.2	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.9	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2

TABLE 2

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

			3114 Hecker Rd.			3121 Hecker Rd.				3303 Hecker Rd.														
										Original Potable Well								Replacement Potable Well					
			10/22/13	11/8/13	5/28/14	10/22/13	11/7/13	5/28/14	10/14/15	10/23/13	11/7/13	6/3/14	6/3/14(DUP)	11/17/14	2/23/15	10/13/15	3/30/16	8/8/16	9/26/16	10/24/16				11/8/16
Analyte	ES[1]	PAL[2]	Outside Spigot	Outside Spigot	Outside Spigot	Basement	Basement	Basement	Basement	Basement	Basement	Basement	Basement	Basement	Basement	Basement	Basement	Basement	Basement	Basement	Basement	Basement	Basement
RCRA Metals (mg/L)																								
Antimony	0.006	0.0012	NA	NA	NA	NA	NA	NA	NA	NA	NA	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1221	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	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	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1242	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	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	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1254	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	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	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	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	7.37	8.13	7.32	7.32	7.32	7.85	8.04	7.43	NM	NM	NM	NM	NM	NM	NM	NM
Conductivity (uS)	--	--	617	443	502	877	635	689	785	585	538	538	538	587	618	531	NM	NM	NM	NM	NM	NM	NM	NM
Temperature (^{0}C)	--	--	10.54	10.09	10.5	9.72	10.25	10.4	11.73	9.69	10.31	10.31	10.31	8.83	7.31	11.19	NM	NM	NM	NM	NM	NM	NM	NM
Dissolved Oxygen (ppm)	--	--	4.11	150.31	1.3	4.22	8.42	2.2	2.34	4.22	2.41	2.41	2.41	6.84	7.1	6.69	NM	NM	NM	NM	NM	NM	NM	NM
Redox Potential (mV)	--	--	20.2	90.5	70	90.1	95.7	38	-65.8	62	76.4	76.4	76.4	9.2	-131.9	-58.2	NM	NM	NM	NM	NM	NM	NM	NM

TABLE 2

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

			3320 Hecker Rd.				3327 Hecker Rd.									3461(3417) Hecker Rd.										
			10/22/13	11/7/13	5/28/14	3/30/16	10/23/13	11/7/13	5/28/14	8/25/14	11/10/14	2/23/15	10/14/15	3/31/16	10/5/16	10/24/13	11/12/13	5/30/14	8/26/14	11/10/14	2/24/15	10/13/15	3/30/16	3/30/16 (DUP)	10/6/16	10/6/16 (DUP)
Analyte	**ES[1]**	**PAL[2]**	Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot	Kitchen Sink	Outside Spigot	Kitchen Sink	Outside Spigot	Inside Sink	Inside Sink	Inside Sink	Inside Sink	Inside Sink	Inside Sink	Inside Sink	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	< 0.44	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.44	< 0.44	< 0.44	< 0.44	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44
Bromobenzene	NL	NL	< 0.32	< 0.32	< 0.32	< 0.48	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.48	< 0.48	< 0.48	< 0.48	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.48	< 0.48	< 0.48	< 0.48	< 0.48	< 0.48	< 0.48
Bromochloromethane	NL	NL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bromodichloromethane	0.6	0.06	< 0.37	< 0.37	< 0.37	< 0.46	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.46	< 0.46	< 0.46	< 0.46	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46
Bromoform	4.4	0.44	< 0.35	< 0.35	< 0.35	< 0.46	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.46	< 0.46	< 0.46	< 0.46	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46
tert-Butylbenzene	NL	NL	< 0.36	< 0.36	< 0.36	< 1.1	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 1.1	< 1.1	< 1.1	< 1.1	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1
sec-Butylbenzene	NL	NL	< 0.33	< 0.33	< 0.33	< 1.2	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 1.2	< 1.2	< 1.2	< 1.2	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2
n-Butylbenzene	NL	NL	< 0.35	< 0.35	< 0.35	< 1	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 1	< 1	< 1	< 1	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Carbon Disulfide	1000	200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Carbon Tetrachloride	5	0.5	< 0.33	< 0.33	< 0.33	< 0.51	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.65	< 0.51	< 0.51	< 0.51	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.65	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51
Chlorobenzene	NL	NL	< 0.24	< 0.24	< 0.24	< 0.46	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.46	< 0.46	< 0.46	< 0.46	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46
Chloroethane	400	80	< 0.63	< 0.63	< 0.63	< 0.65	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.65	< 0.65	< 0.65	< 0.65	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65
Chloroform	6	0.6	< 0.28	< 0.28	< 0.28	< 0.43	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.43	< 0.43	< 0.43	< 0.43	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.43	< 0.43	< 0.43	< 0.43	< 0.43	< 0.43	< 0.43
Chloromethane	3	0.3	< 0.81	< 0.81	< 0.81	< 1.9	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81	< 1.9	< 1.9	< 1.9	< 1.9	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81	< 1.9	< 1.9	< 1.9	< 1.9	< 1.9	< 1.9	< 1.9
2-Chlorotoluene	NL	NL	< 0.21	< 0.21	< 0.21	< 0.4	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.4	< 0.4	< 0.4	< 0.4	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4
4-Chlorotoluene	NL	NL	< 0.21	< 0.21	< 0.21	< 0.63	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.63	< 0.63	< 0.63	< 0.63	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63
1,2-Dibromo-3-chloropropane (DBCP)	0.2	0.02	< 0.88	< 0.88	< 0.88	< 1.4	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88	< 1.4	< 1.4	< 1.4	< 1.4	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4
Dibromochloromethane	60	6	< 0.22	< 0.22	< 0.22	< 0.45	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.45	< 0.45	< 0.45	< 0.45	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45
Dibromomethane	NL	NL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,4-Dichlorobenzene	75	15	< 0.3	< 0.3	< 0.3	< 0.49	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.49	< 0.49	< 0.49	< 0.49	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49
1,3-Dichlorobenzene	600	120	< 0.28	< 0.28	< 0.28	< 0.52	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.52	< 0.52	< 0.52	< 0.52	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.52	< 0.52	< 0.52	< 0.52	< 0.52	< 0.52	< 0.52
1,2-Dichlorobenzene	600	60	< 0.36	< 0.36	< 0.36	< 0.46	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.46	< 0.46	< 0.46	< 0.46	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46
Dichlorodifluoromethane	1000	200	< 0.44	< 0.44	< 0.44	< 0.87	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.87	< 0.87	< 0.87	< 0.87	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.87	< 0.87	< 0.87	< 0.87	< 0.87	< 0.87	< 0.87
1,2-Dichloroethane	5	0.5	< 0.41	< 0.41	< 0.41	< 0.48	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.54	< 0.48	< 0.48	< 0.48	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.54	< 0.48	< 0.48	< 0.48	< 0.48	< 0.48	< 0.48
1,1-Dichloroethane	850	85	< 0.3	< 0.3	< 0.3	< 1.1	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 1.1	< 1.1	< 1.1	< 1.1	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1
1,1-Dichloroethene	7	0.7	< 0.4	< 0.4	< 0.4	< 0.65	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.65	< 0.65	< 0.65	< 0.65	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65
cis-1,2-Dichloroethene	70	7	< 0.38	< 0.38	< 0.38	< 0.45	**11**	**11.6**	6.4	6.9	5.6	4.3	4.2	3.2	3.3	2.58	2.15	2.12	1.79	1.49	1.59	1.6	1.66	1.74	1.23 J	1.51
trans-1,2-Dichloroethene	100	20	< 0.35	< 0.35	< 0.35	< 0.54	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.54	< 0.54	< 0.54	< 0.54	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.54	< 0.54	< 0.54	< 0.54	< 0.54	< 0.54	< 0.54
1,2-Dichloropropane	5	0.5	< 0.32	< 0.32	< 0.32	< 0.43	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.43	< 0.43	< 0.43	< 0.43	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.43	< 0.43	< 0.43	< 0.43	< 0.43	< 0.43	< 0.43
2,2-Dichloropropane	NL	NL	< 0.36	< 0.36	< 0.36	< 3.1	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 3.1	< 3.1	< 3.1	< 3.1	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 3.1	< 3.1	< 3.1	< 3.1	< 3.1	< 3.1	< 3.1
1,3-Dichloropropane	NL	NL	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.42	< 0.33	< 0.33	< 0.42	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.42	< 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	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	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	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Di-isopropyl ether	NL	NL	< 0.23	< 0.23	< 0.23	< 0.44	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.44	< 0.44	< 0.44	< 0.44	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44
EDB (1,2-Dibromoethane)	0.05	0.005	< 0.44	< 0.44	< 0.44	< 0.63	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.63	< 0.63	< 0.63	< 0.63	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63
Ethylbenzene	700	140	< 0.55	< 0.55	< 0.55	< 0.71	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.71	< 0.71	< 0.71	< 0.71	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71
Hexachlorobutadiene	NL	NL	< 1.5	< 1.5	< 1.5	< 2.2	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 2.2	< 2.2	< 2.2	< 2.2	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2
Isopropylbenzene	NS	NS	< 0.3	< 0.3	< 0.3	< 0.82	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.82	< 0.82	< 0.82	< 0.82	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.82	< 0.82	< 0.82	< 0.82	< 0.82	< 0.82	< 0.82
p-Isopropyltoluene	NL	NL	< 0.31	< 0.31	< 0.31	< 1.1	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 1.1	< 1.1	< 1.1	< 1.1	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1
Methylene Chloride	5	0.5	< 0.5	< 0.5	< 0.5	< 1.3	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 1.3	< 1.3	< 1.3	< 1.3	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 1.3	< 1.3	< 1.3	< 1.3	< 1.3	< 1.3	< 1.3
Methyl tert-butyl ether (MTBE)	60	12	< 0.23	< 0.23	< 0.23	< 1.1	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 1.1	< 1.1	< 1.1	< 1.1	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1
Naphthalene	100	10	< 1.7	< 1.7	< 1.7	< 1.6	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.6	< 1.6	< 1.6	< 1.6	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6
n-Propylbenzene	NL	NL	< 0.25	< 0.25	< 0.25	< 0.77	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.77	< 0.77	< 0.77	< 0.77	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.77	< 0.77	< 0.77	< 0.77	< 0.77	< 0.77	< 0.77
Styrene	100	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1,2,2-Tetrachloroethane	0.2	0.02	< 0.45	< 0.45	< 0.45	< 0.52	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.52	< 0.52	< 0.52	< 0.52	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.52	< 0.52	< 0.52	< 0.52	< 0.52	< 0.52	< 0.52
1,1,1,2-Tetrachloroethane	70	7	< 0.33	< 0.33	< 0.33	< 0.48	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.48	< 0.48	< 0.48	< 0.48	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.48	< 0.48	< 0.48	< 0.48	< 0.48	< 0.48	< 0.48
Tetrachloroethene	5	0.5	< 0.33	< 0.33	< 0.33	< 0.49	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.74	< 0.49	< 0.49	< 0.49	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.74	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49
Toluene	800	160	< 0.69	< 0.69	< 0.69	< 0.44	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.44	< 0.44	< 0.44	< 0.44	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44
1,2,4-Trichlorobenzene	70	14	< 0.98	< 0.98	< 0.98	< 1.7	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 1.7	< 1.7	< 1.7	< 1.7	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7
1,2,3-Trichlorobenzene	NL	NL	< 1.8	< 1.8	< 1.8	< 2.7	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 2.7	< 2.7	< 2.7	< 2.7	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 2.7	< 2.7	< 2.7	< 2.7	< 2.7	< 2.7	< 2.7
1,1,1-Trichloroethane	200	40	< 0.33	< 0.33	< 0.33	< 0.84	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.84	< 0.84	< 0.84	< 0.84	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.84	< 0.84	< 0.84	< 0.84	< 0.84	< 0.84	< 0.84
1,1,2-Trichloroethane	5	0.5	< 0.34	< 0.34	< 0.34	< 0.48	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.48	< 0.48	< 0.48	< 0.48	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.48	< 0.48	< 0.48	< 0.48	< 0.48	< 0.48	< 0.48
Trichloroethene (TCE)	5	0.5	< 0.33	< 0.33	< 0.33	< 0.47	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.47	< 0.47	< 0.47	< 0.47	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.47	< 0.47	< 0.47	< 0.47	< 0.47	< 0.47	< 0.47
Trichlorofluoromethane	NL	NL	< 0.71	< 0.71	< 0.71	< 0.87	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.87	< 0.87	< 0.87	< 0.87	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.87	< 0.87	< 0.87	< 0.87	< 0.87	< 0.87	< 0.87
1,2,3-Trichloropropane	60	12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2,4-Trimethylbenzene	--	--	< 2.2	< 2.2	< 2.2	< 1.6	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 1.6	< 1.6	< 1.6	< 1.6	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6
1,3,5-Trimethylbenzene	--	--	< 1.4	< 1.4	< 1.4	< 1.5	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.5	< 1.5	< 1.5	< 1.5	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5
Total Trimethylbenzene	480	96	< 2.2	< 2.2	< 2.2	< 1.6	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 1.6	< 1.6	< 1.6	< 1.6	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6
Vinyl Chloride	0.2	0.02	< 0.18	< 0.18	< 0.18	< 0.17	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.17	< 0.17	< 0.17	< 0.17	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.17	< 0.17	< 0.17	< 0.17	< 0.17	< 0.17	< 0.17
m&p-Xylene	--	--	< 0.69	< 0.69	< 0.69	< 2.2	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 2.2	< 2.2	< 2.2	< 2.2	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2
o-Xylene	--	--	< 0.63	< 0.63	< 0.63	< 0.9	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.9	< 0.9	< 0.9	< 0.9	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.9	< 0.9	< 0.9	< 0.9	< 0.9	< 0.9	< 0.9
Total Xylenes	2,000	400	< 0.69	< 0.69	< 0.69	< 2.2	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.9	< 2.2	< 2.2	< 2.2	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.9	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2

TABLE 2

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

			3320 Hecker Rd.				3327 Hecker Rd.									3461(3417) Hecker Rd.										
			10/22/13	11/7/13	5/28/14	3/30/16	10/23/13	11/7/13	5/28/14	8/25/14	11/10/14	2/23/15	10/14/15	3/31/16	10/5/16	10/24/13	11/12/13	5/30/14	8/26/14	11/10/14	2/24/15	10/13/15	3/30/16	3/30/16 (DUP)	10/6/16	10/6/16 (DUP)
Analyte	ES[1]	PAL[2]	Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot	Kitchen Sink	Outside Spigot	Kitchen Sink	Outside Spigot	Inside Sink	Inside Sink	Inside Sink	Inside Sink	Inside Sink	Inside Sink	Inside Sink	Inside Sink	Inside Sink	Inside Sink	Inside Sink	Inside Sink
~~RCRA Metals (mg/L)~~																											
Antimony	0.006	0.0012	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Field Screening Measurements																											
pH (IU)	--	--	7.66	7.99	7.78	NM	8.38	7.82	7.81	7.72	8.04	8.13	7.38	NM		7.55	7.27	7.45	7.89	7.81	7.83	7.94	NM	NM	NM	NM
Conductivity (uS)	--	--	598	455	477	NM	620	478	528	603	596	614	590	NM		723	554	562	721	733	771	748	NM	NM	NM	NM
Temperature (^{0}C)	--	--	10.41	9.78	11	NM	10.96	8.62	10.2	12.6	10.35	6.16	11.34	NM		10.5	9.43	11.9	14.1	10.72	7.91	8.25	NM	NM	NM	NM
Dissolved Oxygen (ppm)	--	--	4.03	6.51	0.89	NM	3.22	6.69	1.11	1.89	1.23	4.15	4.78	NM		4.73	17.93	1.53	0.95	2.47	4.12	3.49	NM	NM	NM	NM
Redox Potential (mV)	--	--	56	86.7	50	NM	53.7	93.9	71	146	-14.5	-144.2	16.5	NM		69	91.7	146	237	-112.9	-164.9	-91.6	NM	NM	NM	NM

TABLE 2

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

			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	2/23/15	10/14/15	10/5/16
Analyte	**ES[1]**	**PAL[2]**	Outside Spigot	Outside Spigot	Inside Kitchen	Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot	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	< 0.44	< 0.44	< 0.44
Bromobenzene	NL	NL	< 0.32	< 0.32	< 0.32	NA	< 0.32	< 0.32	< 0.32	< 0.32	< 0.48	< 0.48	< 0.48
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	< 0.46	< 0.46	< 0.46
Bromoform	4.4	0.44	< 0.35	< 0.35	< 0.35	NA	< 0.35	< 0.35	< 0.35	< 0.35	< 0.46	< 0.46	< 0.46
tert-Butylbenzene	NL	NL	< 0.36	< 0.36	< 0.36	NA	< 0.36	< 0.36	< 0.36	< 0.36	< 1.1	< 1.1	< 1.1
sec-Butylbenzene	NL	NL	< 0.33	< 0.33	< 0.33	NA	< 0.33	< 0.33	< 0.33	< 0.33	< 1.2	< 1.2	< 1.2
n-Butylbenzene	NL	NL	< 0.35	< 0.35	< 0.35	NA	< 0.35	< 0.35	< 0.35	< 0.35	< 1	< 1	< 1
Carbon Disulfide	1000	200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Carbon Tetrachloride	5	0.5	< 0.33	< 0.33	< 0.33	NA	< 0.33	< 0.33	< 0.33	< 0.33	< 0.65	< 0.51	< 0.51
Chlorobenzene	NL	NL	< 0.24	< 0.24	< 0.24	NA	< 0.24	< 0.24	< 0.24	< 0.24	< 0.46	< 0.46	< 0.46
Chloroethane	400	80	< 0.63	< 0.63	< 0.63	NA	< 0.63	< 0.63	< 0.63	< 0.63	< 0.65	< 0.65	< 0.65
Chloroform	6	0.6	< 0.28	< 0.28	< 0.28	NA	< 0.28	< 0.28	< 0.28	< 0.28	< 0.43	< 0.43	< 0.43
Chloromethane	3	0.3	**1.02 J**	< 0.81	< 0.81	NA	< 0.81	< 0.81	< 0.81	< 0.81	< 1.9	< 1.9	< 1.9
2-Chlorotoluene	NL	NL	< 0.21	< 0.21	< 0.21	NA	< 0.21	< 0.21	< 0.21	< 0.21	< 0.4	< 0.4	< 0.4
4-Chlorotoluene	NL	NL	< 0.21	< 0.21	< 0.21	NA	< 0.21	< 0.21	< 0.21	< 0.21	< 0.63	< 0.63	< 0.63
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	< 1.4	< 1.4	< 1.4
Dibromochloromethane	60	6	< 0.22	< 0.22	< 0.22	NA	< 0.22	< 0.22	< 0.22	< 0.22	< 0.45	< 0.45	< 0.45
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	< 0.49	< 0.49	< 0.49
1,3-Dichlorobenzene	600	120	< 0.28	< 0.28	< 0.28	NA	< 0.28	< 0.28	< 0.28	< 0.28	< 0.52	< 0.52	< 0.52
1,2-Dichlorobenzene	600	60	< 0.36	< 0.36	< 0.36	NA	< 0.36	< 0.36	< 0.36	< 0.36	< 0.46	< 0.46	< 0.46
Dichlorodifluoromethane	1000	200	< 0.44	< 0.44	< 0.44	NA	< 0.44	< 0.44	< 0.44	< 0.44	< 0.87	< 0.87	< 0.87
1,2-Dichloroethane	5	0.5	< 0.41	< 0.41	< 0.41	NA	< 0.41	< 0.41	< 0.41	< 0.41	< 0.54	< 0.48	< 0.48
1,1-Dichloroethane	850	85	< 0.3	< 0.3	< 0.3	NA	< 0.3	< 0.3	< 0.3	< 0.3	< 1.1	< 1.1	< 1.1
1,1-Dichloroethene	7	0.7	< 0.4	< 0.4	< 0.4	NA	< 0.4	< 0.4	< 0.4	< 0.4	< 0.65	< 0.65	< 0.65
cis-1,2-Dichloroethene	70	7	**7.4**	**7.2**	**7.4**	NA	**10**	**7.8**	< 0.38	< 0.38	< 0.45	< 0.45	< 0.45
trans-1,2-Dichloroethene	100	20	< 0.35	< 0.35	< 0.35	NA	< 0.35	< 0.35	< 0.35	< 0.35	< 0.54	< 0.54	< 0.54
1,2-Dichloropropane	5	0.5	< 0.32	< 0.32	< 0.32	NA	< 0.32	< 0.32	< 0.32	< 0.32	< 0.43	< 0.43	< 0.43
2,2-Dichloropropane	NL	NL	< 0.36	< 0.36	< 0.36	NA	< 0.36	< 0.36	< 0.36	< 0.36	< 3.1	< 3.1	< 3.1
1,3-Dichloropropane	NL	NL	< 0.33	< 0.33	< 0.33	NA	< 0.33	< 0.33	< 0.33	< 0.33	< 0.42	< 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	< 0.44	< 0.44	< 0.44
EDB (1,2-Dibromoethane)	0.05	0.005	< 0.44	< 0.44	< 0.44	NA	< 0.44	< 0.44	< 0.44	< 0.44	< 0.63	< 0.63	< 0.63
Ethylbenzene	700	140	< 0.55	< 0.55	< 0.55	NA	< 0.55	< 0.55	< 0.55	< 0.55	< 0.71	< 0.71	< 0.71
Hexachlorobutadiene	NL	NL	< 1.5	< 1.5	< 1.5	NA	< 1.5	< 1.5	< 1.5	< 1.5	< 2.2	< 2.2	< 2.2
Isopropylbenzene	NS	NS	< 0.3	< 0.3	< 0.3	NA	< 0.3	< 0.3	< 0.3	< 0.3	< 0.82	< 0.82	< 0.82
p-Isopropyltoluene	NL	NL	< 0.31	< 0.31	< 0.31	NA	< 0.31	< 0.31	< 0.31	< 0.31	< 1.1	< 1.1	< 1.1
Methylene Chloride	5	0.5	< 0.5	< 0.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 1.3	< 1.3	< 1.3
Methyl tert-butyl ether (MTBE)	60	12	< 0.23	< 0.23	< 0.23	NA	< 0.23	< 0.23	< 0.23	< 0.23	< 1.1	< 1.1	< 1.1
Naphthalene	100	10	< 1.7	< 1.7	< 1.7	NA	< 1.7	< 1.7	< 1.7	< 1.7	< 1.6	< 1.6	< 1.6
n-Propylbenzene	NL	NL	< 0.25	< 0.25	< 0.25	NA	< 0.25	< 0.25	< 0.25	< 0.25	< 0.77	< 0.77	< 0.77
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	< 0.52	< 0.52	< 0.52
1,1,1,2-Tetrachloroethane	70	7	< 0.33	< 0.33	< 0.33	NA	< 0.33	< 0.33	< 0.33	< 0.33	< 0.48	< 0.48	< 0.48
Tetrachloroethene	5	0.5	< 0.33	< 0.33	< 0.33	NA	< 0.33	< 0.33	< 0.33	< 0.33	< 0.74	< 0.49	< 0.49
Toluene	800	160	< 0.69	< 0.69	< 0.69	NA	< 0.69	< 0.69	< 0.69	< 0.69	< 0.44	< 0.44	< 0.44
1,2,4-Trichlorobenzene	70	14	< 0.98	< 0.98	< 0.98	NA	< 0.98	< 0.98	< 0.98	< 0.98	< 1.7	< 1.7	< 1.7
1,2,3-Trichlorobenzene	NL	NL	< 1.8	< 1.8	< 1.8	NA	< 1.8	< 1.8	< 1.8	< 1.8	< 2.7	< 2.7	< 2.7
1,1,1-Trichloroethane	200	40	< 0.33	< 0.33	< 0.33	NA	< 0.33	< 0.33	< 0.33	< 0.33	< 0.84	< 0.84	< 0.84
1,1,2-Trichloroethane	5	0.5	< 0.34	< 0.34	< 0.34	NA	< 0.34	< 0.34	< 0.34	< 0.34	< 0.48	< 0.48	< 0.48
Trichloroethene (TCE)	5	0.5	< 0.33	< 0.33	< 0.33	NA	< 0.33	< 0.33	< 0.33	< 0.33	< 0.47	< 0.47	< 0.47
Trichlorofluoromethane	NL	NL	< 0.71	< 0.71	< 0.71	NA	< 0.71	< 0.71	< 0.71	< 0.71	< 0.87	< 0.87	< 0.87
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	< 1.6	< 1.6	< 1.6
1,3,5-Trimethylbenzene	--	--	< 1.4	< 1.4	< 1.4	NA	< 1.4	< 1.4	< 1.4	< 1.4	< 1.5	< 1.5	< 1.5
Total Trimethylbenzene	480	96	< 2.2	< 2.2	< 2.2	NA	< 2.2	< 2.2	< 2.2	< 2.2	< 1.6	< 1.6	< 1.6
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	< 0.17	< 0.17	< 0.17
m&p-Xylene	--	--	< 0.69	< 0.69	< 0.69	NA	< 0.69	< 0.69	< 0.69	< 0.69	< 2.2	< 2.2	< 2.2
o-Xylene	--	--	< 0.63	< 0.63	< 0.63	NA	< 0.63	< 0.63	< 0.63	< 0.63	< 0.9	< 0.9	< 0.9
Total Xylenes	2,000	400	< 0.69	< 0.69	< 0.69	NA	< 0.69	< 0.69	< 0.69	< 0.69	< 0.9	< 2.2	< 2.2

TABLE 2

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

			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	2/23/15	10/14/15	10/5/16
Analyte	**ES[1]**	**PAL[2]**	Outside Spigot	Outside Spigot	Inside Kitchen	Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot	Pressure Tank	Pressure Tank	Pressure Tank
~~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	**0.0019**	NA	NA	NA	NA	NA	NA	NA
Barium	2	0.4	NA	NA	NA	0.15	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	0.00034 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	0.000061 J	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)	--	--	8.02	7.77	7.44	NM	7.75	7.97	NM	NM	7.81	7.16	NM
Conductivity (uS)	--	--	775	634	616	NM	694	783	NM	NM	2219	2127	NM
Temperature (^{o}C)	--	--	9.56	10.1	10.48	NM	10.6	11.7	NM	NM	7.19	11.73	NM
Dissolved Oxygen (ppm)	--	--	3.81	5.75	5.46	NM	2.13	1.73	NM	NM	5.19	1.85	NM
Redox Potential (mV)	--	--	20.1	74.8	91.8	NM	92	231	NM	NM	-154.6	-51	NM

TABLE 2

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

			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	2/23/15	10/14/15	10/6/16
Analyte	ES[1]	PAL[2]	Outside Spigot	Outside Spigot	Inside Kitchen	Outside Spigot	Duplicate	Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot	Pressure Tank	Pressure Tank	Pressure Tank
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	< 0.44	< 0.44	< 0.44
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	< 0.48	< 0.48	< 0.48
Bromochloromethane	NL	NL	NA	NA	NA	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	< 0.46	< 0.46	< 0.46
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	< 0.46	< 0.46	< 0.46
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	< 1.1	< 1.1	< 1.1
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	< 1.2	< 1.2	< 1.2
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	< 1	< 1	< 1
Carbon Disulfide	1000	200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
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	< 0.65	< 0.51	< 0.51
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	< 0.46	< 0.46	< 0.46
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	< 0.65	< 0.65	< 0.65
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	< 0.43	< 0.43	< 0.43
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	< 1.9	< 1.9	< 1.9
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	< 0.4	< 0.4	< 0.4
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	< 0.63	< 0.63	< 0.63
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	< 1.4	< 1.4	< 1.4
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	< 0.45	< 0.45	< 0.45
Dibromomethane	NL	NL	NA	NA	NA	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	< 0.49	< 0.49	< 0.49
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	< 0.52	< 0.52	< 0.52
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	< 0.46	< 0.46	< 0.46
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	< 0.87	< 0.87	< 0.87
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	< 0.54	< 0.48	< 0.48
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	< 1.1	< 1.1
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	< 0.65	< 0.65	< 0.65
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	< 0.45	< 0.45	< 0.45
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	< 0.54	< 0.54	< 0.54
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	< 0.43	< 0.43	< 0.43
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	< 3.1	< 3.1	< 3.1
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	< 0.42	< 0.33	< 0.42
1,1-Dichloropropene	NL	NL	NA	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	NA
trans-1,3-Dichloropropene	0.4	0.04	NA	NA	NA	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	< 0.44	< 0.44	< 0.44
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	< 0.63	< 0.63	< 0.63
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	< 0.71	< 0.71	< 0.71
Hexachlorobutadiene	NL	NL	< 1.5	< 15	< 15	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 2.2	< 2.2	< 2.2
Isopropylbenzene	NS	NS	< 0.3	< 3	< 3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.82	< 0.82	< 0.82
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	< 1.1	< 1.1	< 1.1
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	< 1.3	< 1.3	< 1.3
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	< 1.1	< 1.1	< 1.1
Naphthalene	100	10	< 1.7	< 17	< 17	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.6	< 1.6	< 1.6
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	< 0.77	< 0.77	< 0.77
Styrene	100	10	NA	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	< 0.52	< 0.52	< 0.52
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	< 0.48	< 0.48	< 0.48
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	< 0.74	< 0.49	< 0.49
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	< 0.44	< 0.44	< 0.44
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	< 1.7	< 1.7	< 1.7
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	< 2.7	< 2.7	< 2.7
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	< 0.84	< 0.84	< 0.84
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	< 0.48	< 0.48	< 0.48
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	< 0.47	< 0.47	< 0.47
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	< 0.87	< 0.87	< 0.87
1,2,3-Trichloropropane	60	12	NA	NA	NA	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	< 1.6	< 1.6	< 1.6
1,3,5-Trimethylbenzene	--	--	< 1.4	< 14	< 14	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.5	< 1.5	< 1.5
Total Trimethylbenzene	480	96	< 2.2	< 22	< 22	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 1.6	< 1.6	< 1.6
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	< 0.17	< 0.17	< 0.17
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	< 2.2	< 2.2	< 2.2
o-Xylene	--	--	< 0.63	< 6.3	< 6.3	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.9	< 0.9	< 0.9
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	< 0.9	< 2.2	< 2.2

TABLE 2

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

			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	2/23/15	10/14/15	10/6/16
Analyte	ES[1]	PAL[2]	Outside Spigot	Outside Spigot	Inside Kitchen	Outside Spigot	Duplicate	Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot	Pressure Tank	Pressure Tank	Pressure Tank
~~RCRA Metals (mg/L)~~																
Antimony	0.006	0.0012	NA	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	NA
Barium	2	0.4	NA	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	NA
Cadmium	0.005	0.0005	NA	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	NA
Copper	1.3	0.13	NA	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	NA
Lead	0.015	0.0015	NA	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	NA
Mercury	0.002	0.0002	NA	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	NA
Selenium	0.05	0.01	NA	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	NA
Sodium	increase of 10		NA	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	NA
Zinc	5	2.5	NA	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	NA
Aroclor-1221	--	--	NA	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	NA
Aroclor-1242	--	--	NA	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	NA
Aroclor-1254	--	--	NA	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	NA
Total PCBs	0.03	0.003	NA	NA	NA	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	8.00	7.23	NM
Conductivity (uS)	--	--	744	554	554	NM	NM	NM	NM	1571	1571	2080	1942	1948	2078	NM
Temperature (^{0}C)	--	--	9.89	9.36	10.58	NM	NM	NM	NM	11.2	11.2	12.5	10.11	7.33	13.37	NM
Dissolved Oxygen (ppm)	--	--	3.21	3.32	3.85	NM	NM	NM	NM	3.87	3.87	1.22	1.93	4.83	1.37	NM
Redox Potential (mV)	--	--	74.1	92	93.1	NM	NM	NM	NM	-190	-190	178	-109.4	-123.8	-90	NM

TABLE 2

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

			3609 Hecker Rd.													3625 Hecker Rd.				
			Original Potable Well								Replacement Potable Well									
			10/22/13	11/7/13	11/7/13	11/22/13	5/28/14	5/28/14(DUP)	7/11/14	8/25/16	8/25/14(DUP)	9/29/14	11/4/14	2/24/15	10/13/15	10/5/16	10/22/13	11/7/13	11/7/13	10/5/16	10/5/16(DUP)
Analyte	ES[1]	PAL[2]	Outside Spigot	Outside Spigot	Inside Kitchen	Outside Spigot	Ouside Spigot	Ouside Spigot	Pressure Tank	Pressure Tank	Pressure Tank	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	NA	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.44	< 0.44	< 0.44	< 0.24	< 0.24	< 0.24	< 0.44	< 0.44
Bromobenzene	NL	NL	< 0.32	< 0.32	< 0.32	NA	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.48	< 0.48	< 0.48	< 0.32	< 0.32	< 0.32	< 0.48	< 0.48
Bromochloromethane	NL	NL	NA	NA	NA	NA	NA	NA	NA	NA	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	< 0.46	< 0.46	< 0.46	< 0.37	< 0.37	< 0.37	< 0.46	< 0.46
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	< 0.46	< 0.46	< 0.46	< 0.35	< 0.35	< 0.35	< 0.46	< 0.46
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	< 1.1	< 1.1	< 1.1	< 0.36	< 0.36	< 0.36	< 1.1	< 1.1
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	< 1.2	< 1.2	< 1.2	< 0.33	< 0.33	< 0.33	< 1.2	< 1.2
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	< 1	< 1	< 1	< 0.35	< 0.35	< 0.35	< 1	< 1
Carbon Disulfide	1000	200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
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	< 0.65	< 0.51	< 0.51	< 0.33	< 0.33	< 0.33	< 0.51	< 0.51
Chlorobenzene	NL	NL	< 0.24	< 0.24	< 0.24	NA	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.46	< 0.46	< 0.46	< 0.24	< 0.24	< 0.24	< 0.46	< 0.46
Chloroethane	400	80	< 0.63	< 0.63	< 0.63	NA	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.65	< 0.65	< 0.65	< 0.63	< 0.63	< 0.63	< 0.65	< 0.65
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	< 0.43	< 0.43	< 0.43	< 0.28	< 0.28	< 0.28	< 0.43	< 0.43
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	< 1.9	< 1.9	< 1.9	**0.82 J**	< 0.81	< 0.81	< 1.9	< 1.9
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	< 0.4	< 0.4	< 0.4	< 0.21	< 0.21	< 0.21	< 0.4	< 0.4
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	< 0.63	< 0.63	< 0.63	< 0.21	< 0.21	< 0.21	< 0.63	< 0.63
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	< 1.4	< 1.4	< 1.4	< 0.88	< 0.88	< 0.88	< 1.4	< 1.4
Dibromochloromethane	60	6	< 0.22	< 0.22	< 0.22	NA	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.45	< 0.45	< 0.45	< 0.22	< 0.22	< 0.22	< 0.45	< 0.45
Dibromomethane	NL	NL	NA	NA	NA	NA	NA	NA	NA	NA	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	< 0.49	< 0.49	< 0.49	< 0.3	< 0.3	< 0.3	< 0.49	< 0.49
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	< 0.52	< 0.52	< 0.52	< 0.28	< 0.28	< 0.28	< 0.52	< 0.52
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	< 0.46	< 0.46	< 0.46	< 0.36	< 0.36	< 0.36	< 0.46	< 0.46
Dichlorodifluoromethane	1000	200	< 0.44	< 0.44	< 0.44	NA	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.87	< 0.87	< 0.87	< 0.44	< 0.44	< 0.44	< 0.87	< 0.87
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	< 0.54	< 0.48	< 0.48	< 0.41	< 0.41	< 0.41	< 0.48	< 0.48
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	< 1.1	< 1.1	< 0.3	< 0.3	< 0.3	< 1.1	< 1.1
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	< 0.65	< 0.65	< 0.65	< 0.4	< 0.4	< 0.4	< 0.65	< 0.65
cis-1,2-Dichloroethene	70	7	**45**	**45**	**46**	NA	**49**	**49**	**51**	**35**	**36**	< 0.38	< 0.38	< 0.45	< 0.45	< 0.45	< 0.38	< 0.38	< 0.38	< 0.45	< 0.45
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	< 0.54	< 0.54	< 0.54	< 0.35	< 0.35	< 0.35	< 0.54	< 0.54
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	< 0.43	< 0.43	< 0.43	< 0.32	< 0.32	< 0.32	< 0.43	< 0.43
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	< 3.1	< 3.1	< 3.1	< 0.36	< 0.36	< 0.36	< 3.1	< 3.1
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	< 0.42	< 0.33	< 0.42	< 0.33	< 0.33	< 0.33	< 0.42	< 0.42
1,1-Dichloropropene	NL	NL	NA	NA	NA	NA	NA	NA	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	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	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	< 0.44	< 0.44	< 0.44	< 0.23	< 0.23	< 0.23	< 0.44	< 0.44
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	< 0.63	< 0.63	< 0.63	< 0.44	< 0.44	< 0.44	< 0.63	< 0.63
Ethylbenzene	700	140	< 0.55	< 0.55	< 0.55	NA	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.71	< 0.71	< 0.71	< 0.55	< 0.55	< 0.55	< 0.71	< 0.71
Hexachlorobutadiene	NL	NL	< 1.5	< 1.5	< 1.5	NA	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 2.2	< 2.2	< 2.2	< 1.5	< 1.5	< 1.5	< 2.2	< 2.2
Isopropylbenzene	NS	NS	< 0.3	< 0.3	< 0.3	NA	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.82	< 0.82	< 0.82	< 0.3	< 0.3	< 0.3	< 0.82	< 0.82
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	< 1.1	< 1.1	< 1.1	< 0.31	< 0.31	< 0.31	< 1.1	< 1.1
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	< 1.3	< 1.3	< 1.3	< 0.5	< 0.5	< 0.5	< 1.3	< 1.3
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	< 1.1	< 1.1	< 1.1	< 0.23	< 0.23	< 0.23	< 1.1	< 1.1
Naphthalene	100	10	< 1.7	< 1.7	< 1.7	NA	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.6	< 1.6	< 1.6	< 1.7	< 1.7	< 1.7	< 1.6	< 1.6
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	< 0.77	< 0.77	< 0.77	< 0.25	< 0.25	< 0.25	< 0.77	< 0.77
Styrene	100	10	NA	NA	NA	NA	NA	NA	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	NA	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.52	< 0.52	< 0.52	< 0.45	< 0.45	< 0.45	< 0.52	< 0.52
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	< 0.48	< 0.48	< 0.48	< 0.33	< 0.33	< 0.33	< 0.48	< 0.48
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	< 0.74	< 0.49	< 0.49	< 0.33	< 0.33	< 0.33	< 0.49	< 0.49
Toluene	800	160	< 0.69	< 0.69	< 0.69	NA	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.44	< 0.44	< 0.44	< 0.69	< 0.69	< 0.69	< 0.44	< 0.44
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	< 1.7	< 1.7	< 1.7	< 0.98	< 0.98	< 0.98	< 1.7	< 1.7
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	< 2.7	< 2.7	< 2.7	< 1.8	< 1.8	< 1.8	< 2.7	< 2.7
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	< 0.84	< 0.84	< 0.84	< 0.33	< 0.33	< 0.33	< 0.84	< 0.84
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	< 0.48	< 0.48	< 0.48	< 0.34	< 0.34	< 0.34	< 0.48	< 0.48
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	< 0.47	< 0.47	< 0.47	< 0.33	< 0.33	< 0.33	< 0.47	< 0.47
Trichlorofluoromethane	NL	NL	< 0.71	< 0.71	< 0.71	NA	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.87	< 0.87	< 0.87	< 0.71	< 0.71	< 0.71	< 0.87	< 0.87
1,2,3-Trichloropropane	60	12	NA	NA	NA	NA	NA	NA	NA	NA	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	< 1.6	< 1.6	< 1.6	< 2.2	< 2.2	< 2.2	< 1.6	< 1.6
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	< 1.5	< 1.5	< 1.5	< 1.4	< 1.4	< 1.4	< 1.5	< 1.5
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	< 1.6	< 1.6	< 1.6	< 2.2	< 2.2	< 2.2	< 1.6	< 1.6
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	< 0.17	< 0.17	< 0.17	< 0.18	< 0.18	< 0.18	< 0.17	< 0.17
m&p-Xylene	--	--	< 0.69	< 0.69	< 0.69	NA	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 2.2	< 2.2	< 2.2	< 0.69	< 0.69	< 0.69	< 2.2	< 2.2
o-Xylene	--	--	< 0.63	< 0.63	< 0.63	NA	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.9	< 0.9	< 0.9	< 0.63	< 0.63	< 0.63	< 0.9	< 0.9
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	< 0.9	< 2.2	< 2.2	< 0.69	< 0.69	< 0.69	< 2.2	< 2.2

TABLE 2

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

			3609 Hecker Rd.													3625 Hecker Rd.				
			Original Potable Well									Replacement Potable Well									
			10/22/13	11/7/13	11/7/13	11/22/13	5/28/14	5/28/14(DUP)	7/11/14	8/25/16	8/25/14(DUP)	9/29/14	11/4/14	2/24/15	10/13/15	10/5/16	10/22/13	11/7/13	11/7/13	10/5/16	10/5/16(DUP)
Analyte	ES[1]	PAL[2]	Outside Spigot	Outside Spigot	Inside Kitchen	Outside Spigot	Ouside Spigot	Ouside Spigot	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot
~~RCRA Metals (mg/L)~~																					
Antimony	0.006	0.0012	NA	NA	NA	NA	NA	NA	NA	NA	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	NA	NA	NA	NA	NA	NA	NA	NA
Barium	2	0.4	NA	NA	NA	0.065	NA	NA	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	NA	NA	NA	NA	NA	NA
Cadmium	0.005	0.0005	NA	NA	NA	< 0.00016	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium	0.1	0.01	NA	NA	NA	< 0.00054	NA	NA	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	NA	NA	NA	NA	NA	NA
Iron	0.3	0.15	NA	NA	NA	NA	NA	NA	NA	NA	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	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	NA	NA	NA	NA	NA	NA
Mercury	0.002	0.0002	NA	NA	NA	< 0.000049	NA	NA	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	NA	NA	NA	NA	NA	NA
Selenium	0.05	0.01	NA	NA	NA	< 0.00038	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sliver	0.05	0.01	NA	NA	NA	< 0.00031	NA	NA	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	NA	NA	NA	NA	NA	NA
Thallium	0.002	0.0004	NA	NA	NA	NA	NA	NA	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	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	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1221	--	--	NA	NA	NA	< 0.024	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1232	--	--	NA	NA	NA	< 0.021	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1242	--	--	NA	NA	NA	< 0.024	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1248	--	--	NA	NA	NA	< 0.014	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1254	--	--	NA	NA	NA	< 0.018	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1260	--	--	NA	NA	NA	< 0.015	NA	NA	NA	NA	NA	NA	NA	NA	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	NA	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	7.72	7.17	NM	7.38	7.77	7.75	NM	NM
Conductivity (uS)	--	--	754	558	614	NM	634	634	983	675	675	NM	2248	2203	2290	NM	782	552	651	NM	NM
Temperature (^{o}C)	--	--	10.53	9.99	12.84	NM	11.1	11.1	15.2	12.4	12.4	NM	10.69	7.01	7.17	NM	11.04	10.92	15.5	NM	NM
Dissolved Oxygen (ppm)	--	--	4.02	3.9	4.14	NM	1.43	1.43	2.11	2.79	2.79	NM	3.42	7.78	1.92	NM	4.54	5.31	1.71	NM	NM
Redox Potential (mV)	--	--	73	95.4	91.6	NM	60	60	131	199	199	NM	-141.9	-118.4	-75	NM	68.4	85.9	119	NM	NM

TABLE 2

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

			3627 Hecker Rd.			3702 Hecker Rd.									3720 Hecker Rd.				3812 Silver Creek Rd		3902 Silver Creek Rd	
			10/23/13	11/7/13	5/29/14	10/22/13	11/12/13	6/3/14	8/25/14	11/13/14	10/14/15	10/14/15 (DUP)	3/31/16	10/11/16	10/22/13	11/12/13	6/2/14	3/31/16	5/28/14	1/14/16	11/18/14	10/10/16
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	Pressure Tank	Pressure Tank	Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot	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	< 0.44	< 0.44	< 0.44	< 0.44	< 0.24	< 0.24	< 0.24	< 0.44	< 0.24	< 0.44	< 0.24	< 0.44
Bromobenzene	NL	NL	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.48	< 0.48	< 0.48	< 0.48	< 0.32	< 0.32	< 0.32	< 0.48	< 0.32	< 0.48	< 0.32	< 0.48
Bromochloromethane	NL	NL	NA	NA	NA	NA	NA	NA	NA	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	< 0.46	< 0.46	< 0.46	< 0.46	< 0.37	< 0.37	< 0.37	< 0.46	< 0.37	< 0.46	< 0.37	< 0.46
Bromoform	4.4	0.44	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.46	< 0.46	< 0.46	< 0.46	< 0.35	< 0.35	< 0.35	< 0.46	< 0.35	< 0.46	< 0.35	< 0.46
tert-Butylbenzene	NL	NL	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 1.1	< 1.1	< 1.1	< 1.1	< 0.36	< 0.36	< 0.36	< 1.1	< 0.36	< 1.1	< 0.36	< 1.1
sec-Butylbenzene	NL	NL	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 1.2	< 1.2	< 1.2	< 1.2	< 0.33	< 0.33	< 0.33	< 1.2	< 0.33	< 1.2	< 0.33	< 1.2
n-Butylbenzene	NL	NL	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 1	< 1	< 1	< 1	< 0.35	< 0.35	< 0.35	< 1	< 0.35	< 1	< 0.35	< 1
Carbon Disulfide	1000	200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Carbon Tetrachloride	5	0.5	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.51	< 0.51	< 0.51	< 0.51	< 0.33	< 0.33	< 0.33	< 0.51	< 0.33	< 0.51	< 0.33	< 0.51
Chlorobenzene	NL	NL	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.46	< 0.46	< 0.46	< 0.46	< 0.24	< 0.24	< 0.24	< 0.46	< 0.24	< 0.46	< 0.24	< 0.46
Chloroethane	400	80	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.65	< 0.65	< 0.65	< 0.65	< 0.63	< 0.63	< 0.63	< 0.65	< 0.63	< 0.65	< 0.63	< 0.65
Chloroform	6	0.6	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.43	< 0.43	< 0.43	< 0.43	< 0.28	< 0.28	< 0.28	< 0.43	< 0.28	< 0.43	< 0.28	< 0.43
Chloromethane	3	0.3	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81	< 1.9	< 1.9	< 1.9	< 1.9	**1.48 J**	< 0.81	< 0.81	< 1.9	< 0.81	< 1.9	< 0.81	< 1.9
2-Chlorotoluene	NL	NL	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.4	< 0.4	< 0.4	< 0.4	< 0.21	< 0.21	< 0.21	< 0.4	< 0.21	< 0.4	< 0.21	< 0.4
4-Chlorotoluene	NL	NL	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.63	< 0.63	< 0.63	< 0.63	< 0.21	< 0.21	< 0.21	< 0.63	< 0.21	< 0.63	< 0.21	< 0.63
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	< 1.4	< 1.4	< 1.4	< 1.4	< 0.88	< 0.88	< 0.88	< 1.4	< 0.88	< 1.4	< 0.88	< 1.4
Dibromochloromethane	60	6	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.45	< 0.45	< 0.45	< 0.45	< 0.22	< 0.22	< 0.22	< 0.45	< 0.22	< 0.45	< 0.22	< 0.45
Dibromomethane	NL	NL	NA	NA	NA	NA	NA	NA	NA	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	< 0.49	< 0.49	< 0.49	< 0.49	< 0.3	< 0.3	< 0.3	< 0.49	< 0.3	< 0.49	< 0.3	< 0.49
1,3-Dichlorobenzene	600	120	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.52	< 0.52	< 0.52	< 0.52	< 0.28	< 0.28	< 0.28	< 0.52	< 0.28	< 0.52	< 0.28	< 0.52
1,2-Dichlorobenzene	600	60	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.46	< 0.46	< 0.46	< 0.46	< 0.36	< 0.36	< 0.36	< 0.46	< 0.36	< 0.46	< 0.36	< 0.46
Dichlorodifluoromethane	1000	200	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.87	< 0.87	< 0.87	< 0.87	< 0.44	< 0.44	< 0.44	< 0.87	< 0.44	< 0.87	< 0.44	< 0.87
1,2-Dichloroethane	5	0.5	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.48	< 0.48	< 0.48	< 0.48	< 0.41	< 0.41	< 0.41	< 0.48	< 0.41	< 0.48	< 0.41	< 0.48
1,1-Dichloroethane	850	85	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 1.1	< 1.1	< 1.1	< 1.1	< 0.3	< 0.3	< 0.3	< 1.1	< 0.3	< 1.1	< 0.3	< 1.1
1,1-Dichloroethene	7	0.7	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.65	< 0.65	< 0.65	< 0.65	< 0.4	< 0.4	< 0.4	< 0.65	< 0.4	< 0.65	< 0.4	< 0.65
cis-1,2-Dichloroethene	70	7	< 0.38	< 0.38	< 0.38	0.71 J	0.61 J	< 0.38	< 0.38	< 0.38	0.48 J	0.73 J	< 0.45	1.04 J	< 0.38	< 0.38	< 0.38	< 0.45	< 0.38	< 0.45	< 0.38	< 0.45
trans-1,2-Dichloroethene	100	20	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.54	< 0.54	< 0.54	< 0.54	< 0.35	< 0.35	< 0.35	< 0.54	< 0.35	< 0.54	< 0.35	< 0.54
1,2-Dichloropropane	5	0.5	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.43	< 0.43	< 0.43	< 0.43	< 0.32	< 0.32	< 0.32	< 0.43	< 0.32	< 0.43	< 0.32	< 0.43
2,2-Dichloropropane	NL	NL	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 3.1	< 3.1	< 3.1	< 3.1	< 0.36	< 0.36	< 0.36	< 3.1	< 0.36	< 3.1	< 0.36	< 3.1
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	< 0.42	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.42
1,1-Dichloropropene	NL	NL	NA	NA	NA	NA	NA	NA	NA	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	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	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	< 0.44	< 0.44	< 0.44	< 0.44	< 0.23	< 0.23	< 0.23	< 0.44	< 0.23	< 0.44	< 0.23	< 0.44
EDB (1,2-Dibromoethane)	0.05	0.005	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.63	< 0.63	< 0.63	< 0.63	< 0.44	< 0.44	< 0.44	< 0.63	< 0.44	< 0.63	< 0.44	< 0.63
Ethylbenzene	700	140	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.71	< 0.71	< 0.71	< 0.71	< 0.55	< 0.55	< 0.55	< 0.71	< 0.55	< 0.71	< 0.55	< 0.71
Hexachlorobutadiene	NL	NL	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 2.2	< 2.2	< 2.2	< 2.2	< 1.5	< 1.5	< 1.5	< 2.2	< 1.5	< 2.2	< 1.5	< 2.2
Isopropylbenzene	NS	NS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.82	< 0.82	< 0.82	< 0.82	< 0.3	< 0.3	< 0.3	< 0.82	< 0.3	< 0.82	< 0.3	< 0.82
p-Isopropyltoluene	NL	NL	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 1.1	< 1.1	< 1.1	< 1.1	< 0.31	< 0.31	< 0.31	< 1.1	< 0.31	< 1.1	< 0.31	< 1.1
Methylene Chloride	5	0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 1.3	< 1.3	< 1.3	< 1.3	< 0.5	< 0.5	< 0.5	< 1.3	< 0.5	< 1.3	< 0.5	< 1.3
Methyl tert-butyl ether (MTBE)	60	12	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 1.1	< 1.1	< 1.1	< 1.1	< 0.23	< 0.23	< 0.23	< 1.1	< 0.23	< 1.1	< 0.23	< 1.1
Naphthalene	100	10	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.6	< 1.6	< 1.6	< 1.6	< 1.7	< 1.7	< 1.7	< 1.6	< 1.7	< 1.6	< 1.7	< 1.6
n-Propylbenzene	NL	NL	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.77	< 0.77	< 0.77	< 0.77	< 0.25	< 0.25	< 0.25	< 0.77	< 0.25	< 0.77	< 0.25	< 0.77
Styrene	100	10	NA	NA	NA	NA	NA	NA	NA	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	< 0.52	< 0.52	< 0.52	< 0.52	< 0.45	< 0.45	< 0.45	< 0.52	< 0.45	< 0.52	< 0.45	< 0.52
1,1,1,2-Tetrachloroethane	70	7	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.48	< 0.48	< 0.48	< 0.48	< 0.33	< 0.33	< 0.33	< 0.48	< 0.33	< 0.48	< 0.33	< 0.48
Tetrachloroethene	5	0.5	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.49	< 0.49	< 0.49	< 0.49	< 0.33	< 0.33	< 0.33	< 0.49	< 0.33	< 0.49	< 0.33	< 0.49
Toluene	800	160	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.44	< 0.44	< 0.44	< 0.44	< 0.69	< 0.69	< 0.69	< 0.44	< 0.69	< 0.44	< 0.69	< 0.44
1,2,4-Trichlorobenzene	70	14	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 1.7	< 1.7	< 1.7	< 1.7	< 0.98	< 0.98	< 0.98	< 1.7	< 0.98	< 1.7	< 0.98	< 1.7
1,2,3-Trichlorobenzene	NL	NL	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 2.7	< 2.7	< 2.7	< 2.7	< 1.8	< 1.8	< 1.8	< 2.7	< 1.8	< 2.7	< 1.8	< 2.7
1,1,1-Trichloroethane	200	40	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.84	< 0.84	< 0.84	< 0.84	< 0.33	< 0.33	< 0.33	< 0.84	< 0.33	< 0.84	< 0.33	< 0.84
1,1,2-Trichloroethane	5	0.5	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.48	< 0.48	< 0.48	< 0.48	< 0.34	< 0.34	< 0.34	< 0.48	< 0.34	< 0.48	< 0.34	< 0.48
Trichloroethene (TCE)	5	0.5	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.47	< 0.47	< 0.47	< 0.47	< 0.33	< 0.33	< 0.33	< 0.47	< 0.33	< 0.47	< 0.33	< 0.47
Trichlorofluoromethane	NL	NL	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.87	< 0.87	< 0.87	< 0.87	< 0.71	< 0.71	< 0.71	< 0.87	< 0.71	< 0.87	< 0.71	< 0.87
1,2,3-Trichloropropane	60	12	NA	NA	NA	NA	NA	NA	NA	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	< 1.6	< 1.6	< 1.6	< 1.6	< 2.2	< 2.2	< 2.2	< 1.6	< 2.2	< 1.6	< 2.2	< 1.6
1,3,5-Trimethylbenzene	--	--	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.5	< 1.5	< 1.5	< 1.5	< 1.4	< 1.4	< 1.4	< 1.5	< 1.4	< 1.5	< 1.4	< 1.5
Total Trimethylbenzene	480	96	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 1.6	< 1.6	< 1.6	< 1.6	< 2.2	< 2.2	< 2.2	< 1.6	< 2.2	< 1.6	< 2.2	< 1.6
Vinyl Chloride	0.2	0.02	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.17	< 0.17	< 0.17	< 0.17	< 0.18	< 0.18	< 0.18	< 0.17	< 0.18	< 0.17	< 0.18	< 0.17
m&p-Xylene	--	--	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 2.2	< 2.2	< 2.2	< 2.2	< 0.69	< 0.69	< 0.69	< 2.2	< 0.69	< 2.2	< 0.69	< 2.2
o-Xylene	--	--	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.9	< 0.9	< 0.9	< 0.9	< 0.63	< 0.63	< 0.63	< 0.9	< 0.63	< 0.9	< 0.63	< 0.9
Total Xylenes	2,000	400	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 2.2	< 2.2	< 2.2	< 2.2	< 0.69	< 0.69	< 0.69	< 2.2	< 0.69	< 2.2	< 0.69	< 2.2

TABLE 2

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

			3627 Hecker Rd.			3702 Hecker Rd.									3720 Hecker Rd.				3812 Silver Creek Rd		3902 Silver Creek Rd	
			10/23/13	11/7/13	5/29/14	10/22/13	11/12/13	6/3/14	8/25/14	11/13/14	10/14/15	10/14/15 (DUP)	3/31/16	10/11/16	10/22/13	11/12/13	6/2/14	3/31/16	5/28/14	1/14/16	11/18/14	10/10/16
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	Pressure Tank	Pressure Tank	Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot	Pressure Tank
~~RCRA Metals (mg/L)~~																						
Antimony	0.006	0.0012	NA	NA	NA	NA	NA	NA	NA	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	NA	NA	NA	NA	NA	NA	NA
Barium	2	0.4	NA	NA	NA	NA	NA	NA	NA	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	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	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	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	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	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	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	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	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	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	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	NA	NA	NA	NA	NA	NA	NA
Sodium	increase of 10		NA	NA	NA	NA	NA	NA	NA	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	NA	NA	NA	NA	NA	NA	NA
Zinc	5	2.5	NA	NA	NA	NA	NA	NA	NA	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	NA	NA	NA	NA	NA	NA	NA
Aroclor-1221	--	--	NA	NA	NA	NA	NA	NA	NA	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	NA	NA	NA	NA	NA	NA	NA
Aroclor-1242	--	--	NA	NA	NA	NA	NA	NA	NA	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	NA	NA	NA	NA	NA	NA	NA
Aroclor-1254	--	--	NA	NA	NA	NA	NA	NA	NA	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	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	NA	NA	NA	NA	NA	NA	NA
Field Screening Measurements																						
pH (IU)	--	--	7.98	7.75	7.18	7.83	8.28	7.62	7.87	7.87	7.59	7.59	NM	NM	8.03	7.86	7.43	NM	7.97	NM	8.26	NM
Conductivity (uS)	--	--	707	531	576	757	522	552	657	657	635	635	NM	NM	775	529	622	NM	520	NM	654	NM
Temperature (^{0}C)	--	--	10.13	9.63	11.5	9.82	10.58	14	14.1	14.1	12.51	12.51	NM	NM	9.56	10.58	12.1	NM	10.4	NM	10	NM
Dissolved Oxygen (ppm)	--	--	4.53	4.69	2.53	4.73	8.16	4.6	3.77	3.77	6.25	6.25	NM	NM	3.81	7.26	1.22	NM	1.98	NM	7.75	NM
Redox Potential (mV)	--	--	45.1	91.3	137	52.9	100.4	158	245	245	-91.9	-91.9	NM	NM	20.1	87.4	155	NM	112.0	NM	-38.0	NM

TABLE 2

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

			4004 Silver Creek Rd		4156 Silver Creek Rd		4159 Silver Creek Rd										4220 Silver Creek Rd	4314 Silver Creek Rd	
			11/18/14	10/13/15	5/28/14	3/30/16	12/12/13	1/6/14	6/4/14	6/4/14(DUP)	9/8/14	11/10/14	11/10/14 (DUP)	2/23/15	10/14/15	3/30/16	10/10/16	5/30/14	12/5/13	6/4/14
Analyte	**ES[1]**	**PAL[2]**	Pressure Tank	Pressure Tank	Outside Spigot	Kitchen Sink	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	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	< 0.44	< 0.24	< 0.44	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.44	< 0.44	< 0.44	< 0.44	< 0.24	< 0.24	< 0.24
Bromobenzene	NL	NL	< 0.32	< 0.48	< 0.32	< 0.48	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.48	< 0.48	< 0.48	< 0.48	< 0.32	< 0.32	< 0.32
Bromochloromethane	NL	NL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bromodichloromethane	0.6	0.06	< 0.37	< 0.46	< 0.37	< 0.46	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.46	< 0.46	< 0.46	< 0.46	< 0.37	< 0.37	< 0.37
Bromoform	4.4	0.44	< 0.35	< 0.46	< 0.35	< 0.46	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.46	< 0.46	< 0.46	< 0.46	< 0.35	< 0.35	< 0.35
tert-Butylbenzene	NL	NL	< 0.36	< 1.1	< 0.36	< 1.1	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 1.1	< 1.1	< 1.1	< 1.1	< 0.36	< 0.36	< 0.36
sec-Butylbenzene	NL	NL	< 0.33	< 1.2	< 0.33	< 1.2	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 1.2	< 1.2	< 1.2	< 1.2	< 0.33	< 0.33	< 0.33
n-Butylbenzene	NL	NL	< 0.35	< 1	< 0.35	< 1	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 1	< 1	< 1	< 1	< 0.35	< 0.35	< 0.35
Carbon Disulfide	1000	200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Carbon Tetrachloride	5	0.5	< 0.33	< 0.51	< 0.33	< 0.51	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.65	< 0.51	< 0.51	< 0.51	< 0.33	< 0.33	< 0.33
Chlorobenzene	NL	NL	< 0.24	< 0.46	< 0.24	< 0.46	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.46	< 0.46	< 0.46	< 0.46	< 0.24	< 0.24	< 0.24
Chloroethane	400	80	< 0.63	< 0.65	< 0.63	< 0.65	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.65	< 0.65	< 0.65	< 0.65	< 0.63	< 0.63	< 0.63
Chloroform	6	0.6	< 0.28	< 0.43	< 0.28	< 0.43	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.43	< 0.43	< 0.43	< 0.43	< 0.28	< 0.28	< 0.28
Chloromethane	3	0.3	< 0.81	< 1.9	< 0.81	< 1.9	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81	< 1.9	< 1.9	< 1.9	< 1.9	< 0.81	< 0.81	< 0.81
2-Chlorotoluene	NL	NL	< 0.21	< 0.4	< 0.21	< 0.4	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.4	< 0.4	< 0.4	< 0.4	< 0.21	< 0.21	< 0.21
4-Chlorotoluene	NL	NL	< 0.21	< 0.63	< 0.21	< 0.63	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.63	< 0.63	< 0.63	< 0.63	< 0.21	< 0.21	< 0.21
1,2-Dibromo-3-chloropropane (DBCP)	0.2	0.02	< 0.88	< 1.4	< 0.88	< 1.4	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88	< 1.4	< 1.4	< 1.4	< 1.4	< 0.88	< 0.88	< 0.88
Dibromochloromethane	60	6	< 0.22	< 0.45	< 0.22	< 0.45	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.45	< 0.45	< 0.45	< 0.45	< 0.22	< 0.22	< 0.22
Dibromomethane	NL	NL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,4-Dichlorobenzene	75	15	< 0.3	< 0.49	< 0.3	< 0.49	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.49	< 0.49	< 0.49	< 0.49	< 0.3	< 0.3	< 0.3
1,3-Dichlorobenzene	600	120	< 0.28	< 0.52	< 0.28	< 0.52	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.52	< 0.52	< 0.52	< 0.52	< 0.28	< 0.28	< 0.28
1,2-Dichlorobenzene	600	60	< 0.36	< 0.46	< 0.36	< 0.46	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.46	< 0.46	< 0.46	< 0.46	< 0.36	< 0.36	< 0.36
Dichlorodifluoromethane	1000	200	< 0.44	< 0.87	< 0.44	< 0.87	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.87	< 0.87	< 0.87	< 0.87	< 0.44	< 0.44	< 0.44
1,2-Dichloroethane	5	0.5	< 0.41	< 0.48	< 0.41	< 0.48	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.54	< 0.48	< 0.48	< 0.48	< 0.41	< 0.41	< 0.41
1,1-Dichloroethane	850	85	< 0.3	< 1.1	< 0.3	< 1.1	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 1.1	< 1.1	< 1.1	< 1.1	< 0.3	< 0.3	< 0.3
1,1-Dichloroethene	7	0.7	< 0.4	< 0.65	< 0.4	< 0.65	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.65	< 0.65	< 0.65	< 0.65	< 0.4	< 0.4	< 0.4
cis-1,2-Dichloroethene	70	7	< 0.38	< 0.45	< 0.38	< 0.45	0.49 J	0.73 J	0.72 J	0.64 J	0.54 J	0.59 J	0.52 J	0.56 J	0.55 J	0.59 J	0.78 J	< 0.38	< 0.38	< 0.38
trans-1,2-Dichloroethene	100	20	< 0.35	< 0.54	< 0.35	< 0.54	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.54	< 0.54	< 0.54	< 0.54	< 0.35	< 0.35	< 0.35
1,2-Dichloropropane	5	0.5	< 0.32	< 0.43	< 0.32	< 0.43	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.43	< 0.43	< 0.43	< 0.43	< 0.32	< 0.32	< 0.32
2,2-Dichloropropane	NL	NL	< 0.36	< 3.1	< 0.36	< 3.1	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 3.1	< 3.1	< 3.1	< 3.1	< 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	< 0.42	< 0.33	< 0.33	< 0.42	< 0.33	< 0.33	< 0.33
1,1-Dichloropropene	NL	NL	NA	NA	NA	NA	NA	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	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	NA	NA	NA	NA	NA
Di-isopropyl ether	NL	NL	< 0.23	< 0.44	< 0.23	< 0.44	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.44	< 0.44	< 0.44	< 0.44	< 0.23	< 0.23	< 0.23
EDB (1,2-Dibromoethane)	0.05	0.005	< 0.44	< 0.63	< 0.44	< 0.63	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.63	< 0.63	< 0.63	< 0.63	< 0.44	< 0.44	< 0.44
Ethylbenzene	700	140	< 0.55	< 0.71	< 0.55	< 0.71	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.71	< 0.71	< 0.71	< 0.71	< 0.55	< 0.55	< 0.55
Hexachlorobutadiene	NL	NL	< 1.5	< 2.2	< 1.5	< 2.2	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 2.2	< 2.2	< 2.2	< 2.2	< 1.5	< 1.5	< 1.5
Isopropylbenzene	NS	NS	< 0.3	< 0.82	< 0.3	< 0.82	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.82	< 0.82	< 0.82	< 0.82	< 0.3	< 0.3	< 0.3
p-Isopropyltoluene	NL	NL	< 0.31	< 1.1	< 0.31	< 1.1	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 1.1	< 1.1	< 1.1	< 1.1	< 0.31	< 0.31	< 0.31
Methylene Chloride	5	0.5	< 0.5	< 1.3	< 0.5	< 1.3	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 1.3	< 1.3	< 1.3	< 1.3	< 0.5	< 0.5	< 0.5
Methyl tert-butyl ether (MTBE)	60	12	< 0.23	< 1.1	< 0.23	< 1.1	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 1.1	< 1.1	< 1.1	< 1.1	< 0.23	< 0.23	< 0.23
Naphthalene	100	10	< 1.7	< 1.6	< 1.7	< 1.6	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.6	< 1.6	< 1.6	< 1.6	< 1.7	< 1.7	< 1.7
n-Propylbenzene	NL	NL	< 0.25	< 0.77	< 0.25	< 0.77	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.77	< 0.77	< 0.77	< 0.77	< 0.25	< 0.25	< 0.25
Styrene	100	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1,2,2-Tetrachloroethane	0.2	0.02	< 0.45	< 0.52	< 0.45	< 0.52	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.52	< 0.52	< 0.52	< 0.52	< 0.45	< 0.45	< 0.45
1,1,1,2-Tetrachloroethane	70	7	< 0.33	< 0.48	< 0.33	< 0.48	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.48	< 0.48	< 0.48	< 0.48	< 0.33	< 0.33	< 0.33
Tetrachloroethene	5	0.5	< 0.33	< 0.49	< 0.33	< 0.49	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.74	< 0.49	< 0.49	< 0.49	< 0.33	< 0.33	< 0.33
Toluene	800	160	< 0.69	< 0.44	< 0.69	< 0.44	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.44	< 0.44	< 0.44	< 0.44	< 0.69	< 0.69	< 0.69
1,2,4-Trichlorobenzene	70	14	< 0.98	< 1.7	< 0.98	< 1.7	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 1.7	< 1.7	< 1.7	< 1.7	< 0.98	< 0.98	< 0.98
1,2,3-Trichlorobenzene	NL	NL	< 1.8	< 2.7	< 1.8	< 2.7	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 2.7	< 2.7	< 2.7	< 2.7	< 1.8	< 1.8	< 1.8
1,1,1-Trichloroethane	200	40	< 0.33	< 0.84	< 0.33	< 0.84	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.84	< 0.84	< 0.84	< 0.84	< 0.33	< 0.33	< 0.33
1,1,2-Trichloroethane	5	0.5	< 0.34	< 0.48	< 0.34	< 0.48	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.48	< 0.48	< 0.48	< 0.48	< 0.34	< 0.34	< 0.34
Trichloroethene (TCE)	5	0.5	< 0.33	< 0.47	< 0.33	< 0.47	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.47	< 0.47	< 0.47	< 0.47	< 0.33	< 0.33	< 0.33
Trichlorofluoromethane	NL	NL	< 0.71	< 0.87	< 0.71	< 0.87	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.87	< 0.87	< 0.87	< 0.87	< 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	NA	NA	NA	NA	NA
1,2,4-Trimethylbenzene	--	--	< 2.2	< 1.6	< 2.2	< 1.6	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 1.6	< 1.6	< 1.6	< 1.6	< 2.2	< 2.2	< 2.2
1,3,5-Trimethylbenzene	--	--	< 1.4	< 1.5	< 1.4	< 1.5	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.5	< 1.5	< 1.5	< 1.5	< 1.4	< 1.4	< 1.4
Total Trimethylbenzene	480	96	< 2.2	< 1.6	< 2.2	< 1.6	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 1.6	< 1.6	< 1.6	< 1.6	< 2.2	< 2.2	< 2.2
Vinyl Chloride	0.2	0.02	< 0.18	< 0.17	< 0.18	< 0.17	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.17	< 0.17	< 0.17	< 0.17	< 0.18	< 0.18	< 0.18
m&p-Xylene	--	--	< 0.69	< 2.2	< 0.69	< 2.2	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 2.2	< 2.2	< 2.2	< 2.2	< 0.69	< 0.69	< 0.69
o-Xylene	--	--	< 0.63	< 0.9	< 0.63	< 0.9	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.9	< 0.9	< 0.9	< 0.9	< 0.63	< 0.63	< 0.63
Total Xylenes	2,000	400	< 0.69	< 2.2	< 0.69	< 2.2	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.9	< 2.2	< 2.2	< 2.2	< 0.69	< 0.69	< 0.69

TABLE 2

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

			4004 Silver Creek Rd		4156 Silver Creek Rd		4159 Silver Creek Rd											4220 Silver Creek Rd	4314 Silver Creek Rd	
			11/18/14	10/13/15	5/28/14	3/30/16	12/12/13	1/6/14	6/4/14	6/4/14(DUP)	9/8/14	11/10/14	11/10/14 (DUP)	2/23/15	10/14/15	3/30/16	10/10/16	5/30/14	12/5/13	6/4/14
Analyte	**ES[1]**	**PAL[2]**	Pressure Tank	Pressure Tank	Outside Spigot	Kitchen Sink	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Kitchen Sink	Pump Spigot	Pump Spigot
~~RCRA Metals (mg/L)~~																				
Antimony	0.006	0.0012	NA	NA	NA	NA	NA	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	NA	NA	NA	NA	NA
Barium	2	0.4	NA	NA	NA	NA	NA	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	NA	NA	NA	NA	NA
Cadmium	0.005	0.0005	NA	NA	NA	NA	NA	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	NA	NA	NA	NA	NA
Copper	1.3	0.13	NA	NA	NA	NA	NA	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	NA	NA	NA	NA	NA
Lead	0.015	0.0015	NA	NA	NA	NA	NA	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	NA	NA	NA	NA	NA
Mercury	0.002	0.0002	NA	NA	NA	NA	NA	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	NA	NA	NA	NA	NA
Selenium	0.05	0.01	NA	NA	NA	NA	NA	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	NA	NA	NA	NA	NA
Sodium	increase of 10		NA	NA	NA	NA	NA	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	NA	NA	NA	NA	NA
Zinc	5	2.5	NA	NA	NA	NA	NA	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	NA	NA	NA	NA	NA
Aroclor-1221	--	--	NA	NA	NA	NA	NA	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	NA	NA	NA	NA	NA
Aroclor-1242	--	--	NA	NA	NA	NA	NA	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	NA	NA	NA	NA	NA
Aroclor-1254	--	--	NA	NA	NA	NA	NA	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	NA	NA	NA	NA	NA
Total PCBs	0.03	0.003	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Field Screening Measurements																				
pH (IU)	--	--	7.96	7.49	7.91	NM	8.75	7.99	7.53	7.53	7.53	7.93	7.93	7.94	7.51	NM	NM	7.11	8.05	7.48
Conductivity (uS)	--	--	826	917	683	NM	979	593	562	562	562	562	562	654	646	NM	NM	835	956	958
Temperature (^{o}C)	--	--	9.68	10.88	12.2	NM	9.8	9.72	12.4	12.4	12.4	11.23	11.23	8.29	12.91	NM	NM	11.4	8.64	11.7
Dissolved Oxygen (ppm)	--	--	2.8	3.87	3.76	NM	2.59	5.87	2.3	2.3	2.3	4.12	4.12	3.56	3.18	NM	NM	4.54	7.32	2.97
Redox Potential (mV)	--	--	65.8	-48.6	117.0	NM	101.0	135.2	146	146	146	-63.9	-63.9	-138.9	-117.7	NM	NM	145.0	87.0	168.0

TABLE 2

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		4808 Silver Creek Rd		5202 Silver Creek Rd.		2706 CTH CR	
			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	12/5/13	5/30/14	1/9/08	12/5/13	8/26/14	10/5/16
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	Pump Spigot	Pump Spigot	Hose Bib	Inside Barn	Outside Spigot	Outside Spigot
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	< 0.24	< 0.24	< 0.47	< 0.24	< 0.24	< 0.44
Bromobenzene	NL	NL	< 0.32	< 0.32	< 0.15	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.36	< 0.32	< 0.32	< 0.48
Bromochloromethane	NL	NL	NA	NA	< 0.15	NA	NA	NA	NA	NA	NA	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	< 0.37	< 0.37	< 0.5	< 0.37	< 0.37	< 0.46
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	< 0.35	< 0.35	< 0.38	< 0.35	< 0.35	< 0.46
tert-Butylbenzene	NL	NL	< 0.36	< 0.36	< 0.15	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.34	< 0.36	< 0.36	< 1.1
sec-Butylbenzene	NL	NL	< 0.33	< 0.33	< 0.15	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.36	< 0.33	< 0.33	< 1.2
n-Butylbenzene	NL	NL	< 0.35	< 0.35	< 0.15	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.52	< 0.35	< 0.35	< 1
Carbon Disulfide	1000	200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
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	< 0.33	< 0.33	< 0.46	< 0.33	< 0.33	< 0.51
Chlorobenzene	NL	NL	< 0.24	< 0.24	< 0.15	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.31	< 0.24	< 0.24	< 0.46
Chloroethane	400	80	< 0.63	< 0.63	< 0.15	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.47	< 0.63	< 0.63	< 0.65
Chloroform	6	0.6	< 0.28	< 0.28	< 0.15	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.48	< 0.28	< 0.28	< 0.43
Chloromethane	3	0.3	< 0.81	< 0.81	< 0.15	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81	< 1	< 0.81	< 0.81	< 1.9
2-Chlorotoluene	NL	NL	< 0.21	< 0.21	< 0.15	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.49	< 0.21	< 0.21	< 0.4
4-Chlorotoluene	NL	NL	< 0.21	< 0.21	< 0.15	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.38	< 0.21	< 0.21	< 0.63
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	< 0.88	< 0.88	< 1.4	< 0.88	< 0.88	< 1.4
Dibromochloromethane	60	6	< 0.22	< 0.22	< 0.15	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.32	< 0.22	< 0.22	< 0.45
Dibromomethane	NL	NL	NA	NA	< 0.15	NA	NA	NA	NA	NA	NA	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	< 0.3	< 0.3	< 0.33	< 0.3	< 0.3	< 0.49
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	< 0.28	< 0.28	< 0.3	< 0.28	< 0.28	< 0.52
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	< 0.36	< 0.36	< 0.35	< 0.36	< 0.36	< 0.46
Dichlorodifluoromethane	1000	200	< 0.44	< 0.44	< 0.20	< 0.44	< 0.44	< 0.44	< 0.44	0.45 J	< 0.44	< 0.44	< 0.44	< 0.44	< 0.46	< 0.44	< 0.44	< 0.87
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	< 0.41	< 0.41	< 0.45	< 0.41	< 0.41	< 0.48
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	< 0.3	< 0.3	< 0.56	< 0.3	< 0.3	< 1.1
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	< 0.4	< 0.4	< 0.64	< 0.4	< 0.4	< 0.65
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	< 0.38	< 0.38	< 0.7	< 0.38	< 0.38	< 0.45
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	< 0.35	< 0.35	< 0.95	< 0.35	< 0.35	< 0.54
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	< 0.32	< 0.32	< 0.47	< 0.32	< 0.32	< 0.43
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	< 0.36	< 0.36	< 0.98	< 0.36	< 0.36	< 3.1
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	< 0.33	< 0.33	< 0.39	< 0.33	< 0.33	< 0.42
1,1-Dichloropropene	NL	NL	NA	NA	< 0.15	NA	NA	NA	NA	NA	NA	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	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	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	< 0.23	< 0.23	< 1.3	< 0.23	< 0.23	< 0.44
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	< 0.44	< 0.44	< 0.49	< 0.44	< 0.44	< 0.63
Ethylbenzene	700	140	< 0.55	< 0.55	< 0.15	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.38	< 0.55	< 0.55	< 0.71
Hexachlorobutadiene	NL	NL	< 1.5	< 1.5	< 0.15	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 2.2
Isopropylbenzene	NS	NS	< 0.3	< 0.3	< 0.15	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.48	< 0.3	< 0.3	< 0.82
p-Isopropyltoluene	NL	NL	< 0.31	< 0.31	< 0.15	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 0.35	< 0.31	< 0.31	< 1.1
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	< 0.5	< 0.5	< 0.69	< 0.5	< 0.5	< 1.3
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	< 0.23	< 0.23	< 0.52	< 0.23	< 0.23	< 1.1
Naphthalene	100	10	< 1.7	< 1.7	< 0.15	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.8	< 1.7	< 1.7	< 1.6
n-Propylbenzene	NL	NL	< 0.25	< 0.25	< 0.15	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.38	< 0.25	< 0.25	< 0.77
Styrene	100	10	NA	NA	< 0.15	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	< 0.20	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.75	< 0.45	< 0.45	< 0.52
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	< 0.33	< 0.33	< 0.65	< 0.33	< 0.33	< 0.48
Tetrachloroethene	5	0.5	< 0.33	< 0.33	< 0.15	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.52	< 0.33	< 0.33	< 0.49
Toluene	800	160	< 0.69	< 0.69	< 0.15	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.46	< 0.69	< 0.69	< 0.44
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	< 0.98	< 0.98	< 1.5	< 0.98	< 0.98	< 1.7
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	< 1.8	< 1.8	< 1.6	< 1.8	< 1.8	< 2.7
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	< 0.33	< 0.33	< 0.5	< 0.33	< 0.33	< 0.84
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	< 0.34	< 0.34	< 0.5	< 0.34	< 0.34	< 0.48
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	< 0.33	< 0.33	< 0.44	< 0.33	< 0.33	< 0.47
Trichlorofluoromethane	NL	NL	< 0.71	< 0.71	< 0.15	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.61	< 0.71	< 0.71	< 0.87
1,2,3-Trichloropropane	60	12	NA	NA	< 0.15	NA	NA	NA	NA	NA	NA	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	< 2.2	< 2.2	< 1.2	< 2.2	< 2.2	< 1.6
1,3,5-Trimethylbenzene	--	--	< 1.4	< 1.4	< 0.15	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 0.37	< 1.4	< 1.4	< 1.5
Total Trimethylbenzene	480	96	< 2.2	< 2.2	< 0.15	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 1.2	< 2.2	< 2.2	< 1.6
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	< 0.18	< 0.18	< 0.2	< 0.18	< 0.18	< 0.17
m&p-Xylene	--	--	< 0.69	< 0.69	< 0.15	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.67	< 0.69	< 0.69	< 2.2
o-Xylene	--	--	< 0.63	< 0.63	< 0.15	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.32	< 0.63	< 0.63	< 0.9
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	< 0.69	< 0.69	< 0.67	< 0.69	< 0.69	< 2.2

TABLE 2

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		4808 Silver Creek Rd		5202 Silver Creek Rd.		2706 CTH CR	
			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	12/5/13	5/30/14	1/9/08	12/5/13	8/26/14	10/5/16
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	Pump Spigot	Pump Spigot	Hose Bib	Inside Barn	Outside Spigot	Outside Spigot
~~RCRA Metals (mg/L)~~																		
Antimony	0.006	0.0012	NA	NA	NA	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	NA	NA	NA
Barium	2	0.4	NA	NA	NA	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	NA	NA	NA
Cadmium	0.005	0.0005	NA	NA	NA	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	NA	NA	NA
Copper	1.3	0.13	NA	NA	NA	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	NA	NA	NA
Lead	0.015	0.0015	NA	NA	NA	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	NA	NA	NA
Mercury	0.002	0.0002	NA	NA	NA	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	NA	NA	NA
Selenium	0.05	0.01	NA	NA	NA	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	NA	NA	NA
Sodium	increase of 10		NA	NA	NA	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	NA	NA	NA
Zinc	5	2.5	NA	NA	NA	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	NA	NA	NA
Aroclor-1221	--	--	NA	NA	NA	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	NA	NA	NA
Aroclor-1242	--	--	NA	NA	NA	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	NA	NA	NA
Aroclor-1254	--	--	NA	NA	NA	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	NA	NA	NA
Total PCBs	0.03	0.003	NA	NA	NA	NA	NA	NA	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	6.54	7.69	NM	8.72	7.59	NM
Conductivity (uS)	--	--	789	545	NM	526	534	493	614	576	535	530	588	538	NM	609	540	NM
Temperature (^{o}C)	--	--	6.8	12.3	NM	12.4	10.58	8.23	10.2	8.2	12.19	12.1	8.93	11.4	NM	7.50	14.20	NM
Dissolved Oxygen (ppm)	--	--	4.01	1.91	NM	2.61	10.33	3.49	0.99	4.3	5.22	1.21	7.21	1.58	NM	5.32	1.76	NM
Redox Potential (mV)	--	--	105	111	NM	165	86.7	114.5	89	88	69.9	138	83.4	137	NM	81.1	227	NM

TABLE 2

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

			2716 CTH CR			2717 CTH CR(4141 Viebahn St.)								2734(2804) CTH CR							
						Original Potable Well						Non-Potable Well		Original Potable Well							
			9/8/14	11/18/14	10/13/15	8/25/14	9/8/14	9/8/14(DUP)	11/10/14	2/23/15	10/13/15	3/31/16	10/6/16	6/3/14	8/25/14	11/10/14	11/25/14	11/25/14 (DUP)	2/24/15	10/14/15	
Analyte	ES[1]	PAL[2]	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Garage Faucet	Garage Faucet	Garage Spigot	Garage Spigot	Garage Spigot	Garage Spigot	Garage Spigot	Pressure Tank	Pressure Tank	
Volatile Organic Compounds (VOCs) (µg/L):																					
Benzene	5	0.5	< 0.24	< 0.24	< 0.44	< 0.24	< 0.24	< 0.24	< 0.24	< 0.44	< 0.44	< 0.44	< 0.44	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.44	< 0.44	
Bromobenzene	NL	NL	< 0.32	< 0.32	< 0.48	< 0.32	< 0.32	< 0.32	< 0.32	< 0.48	< 0.48	< 0.48	< 0.48	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.48	< 0.48	
Bromochloromethane	NL	NL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Bromodichloromethane	0.6	0.06	< 0.37	< 0.37	< 0.46	< 0.37	< 0.37	< 0.37	< 0.37	< 0.46	< 0.46	< 0.46	< 0.46	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.46	< 0.46	
Bromoform	4.4	0.44	< 0.35	< 0.35	< 0.46	< 0.35	< 0.35	< 0.35	< 0.35	< 0.46	< 0.46	< 0.46	< 0.46	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.46	< 0.46	
tert-Butylbenzene	NL	NL	< 0.36	< 0.36	< 1.1	< 0.36	< 0.36	< 0.36	< 0.36	< 1.1	< 1.1	< 1.1	< 1.1	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 1.1	< 1.1	
sec-Butylbenzene	NL	NL	< 0.33	< 0.33	< 1.2	< 0.33	< 0.33	< 0.33	< 0.33	< 1.2	< 1.2	< 1.2	< 1.2	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 1.2	< 1.2	
n-Butylbenzene	NL	NL	< 0.35	< 0.35	< 1	< 0.35	< 0.35	< 0.35	< 0.35	< 1	< 1	< 1	< 1	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 1	< 1	
Carbon Disulfide	1000	200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Carbon Tetrachloride	5	0.5	< 0.33	< 0.33	< 0.51	< 0.33	< 0.33	< 0.33	< 0.33	< 0.65	< 0.51	< 0.51	< 0.51	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.65	< 0.51	
Chlorobenzene	NL	NL	< 0.24	< 0.24	< 0.46	< 0.24	< 0.24	< 0.24	< 0.24	< 0.46	< 0.46	< 0.46	< 0.46	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.46	< 0.46	
Chloroethane	400	80	< 0.63	< 0.63	< 0.65	< 0.63	< 0.63	< 0.63	< 0.63	< 0.65	< 0.65	< 0.65	< 0.65	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.65	< 0.65	
Chloroform	6	0.6	< 0.28	< 0.28	< 0.43	< 0.28	< 0.28	< 0.28	< 0.28	< 0.43	< 0.43	< 0.43	< 0.43	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.43	< 0.43	
Chloromethane	3	0.3	< 0.81	< 0.81	< 1.9	< 0.81	< 0.81	< 0.81	< 0.81	< 1.9	< 1.9	< 1.9	< 1.9	< 0.81	< 0.81	< 0.81	< 0.81	24.3	< 1.9	< 1.9	
2-Chlorotoluene	NL	NL	< 0.21	< 0.21	< 0.4	< 0.21	< 0.21	< 0.21	< 0.21	< 0.4	< 0.4	< 0.4	< 0.4	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.4	< 0.4	
4-Chlorotoluene	NL	NL	< 0.21	< 0.21	< 0.63	< 0.21	< 0.21	< 0.21	< 0.21	< 0.63	< 0.63	< 0.63	< 0.63	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.63	< 0.63	
1,2-Dibromo-3-chloropropane (DBCP)	0.2	0.02	< 0.88	< 0.88	< 1.4	< 0.88	< 0.88	< 0.88	< 0.88	< 1.4	< 1.4	< 1.4	< 1.4	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88	< 1.4	< 1.4	
Dibromochloromethane	60	6	< 0.22	< 0.22	< 0.45	< 0.22	< 0.22	< 0.22	< 0.22	< 0.45	< 0.45	< 0.45	< 0.45	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.45	< 0.45	
Dibromomethane	NL	NL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
1,4-Dichlorobenzene	75	15	< 0.3	< 0.3	< 0.49	< 0.3	< 0.3	< 0.3	< 0.3	< 0.49	< 0.49	< 0.49	< 0.49	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.49	< 0.49	
1,3-Dichlorobenzene	600	120	< 0.28	< 0.28	< 0.52	< 0.28	< 0.28	< 0.28	< 0.28	< 0.52	< 0.52	< 0.52	< 0.52	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.52	< 0.52	
1,2-Dichlorobenzene	600	60	< 0.36	< 0.36	< 0.46	< 0.36	< 0.36	< 0.36	< 0.36	< 0.46	< 0.46	< 0.46	< 0.46	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.46	< 0.46	
Dichlorodifluoromethane	1000	200	< 0.44	< 0.44	< 0.87	< 0.44	< 0.44	< 0.44	< 0.44	< 0.87	< 0.87	< 0.87	< 0.87	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.87	< 0.87	
1,2-Dichloroethane	5	0.5	< 0.41	< 0.41	< 0.48	< 0.41	< 0.41	< 0.41	< 0.41	< 0.54	< 0.48	< 0.48	< 0.48	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.54	< 0.48	
1,1-Dichloroethane	850	85	< 0.3	< 0.3	< 1.1	< 0.3	< 0.3	< 0.3	< 0.3	< 1.1	< 1.1	< 1.1	< 1.1	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 1.1	< 1.1	
1,1-Dichloroethene	7	0.7	< 0.4	< 0.4	< 0.65	< 0.4	< 0.4	< 0.4	< 0.4	< 0.65	< 0.65	< 0.65	< 0.65	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.65	< 0.65	
cis-1,2-Dichloroethene	70	7	< 0.38	< 0.38	< 0.45	1.4	1.31	1.44	1.3	1.26 J	1.72	< 0.45	1.53	0.77 J	0.77 J	0.63 J	0.93 J	1.02 J	0.7 J	0.94 J	
trans-1,2-Dichloroethene	100	20	< 0.35	< 0.35	< 0.54	< 0.35	< 0.35	< 0.35	< 0.35	< 0.54	< 0.54	< 0.54	< 0.54	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.54	< 0.54	
1,2-Dichloropropane	5	0.5	< 0.32	< 0.32	< 0.43	< 0.32	< 0.32	< 0.32	< 0.32	< 0.43	< 0.43	< 0.43	< 0.43	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.43	< 0.43	
2,2-Dichloropropane	NL	NL	< 0.36	< 0.36	< 3.1	< 0.36	< 0.36	< 0.36	< 0.36	< 3.1	< 3.1	< 3.1	< 3.1	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 3.1	< 3.1	
1,3-Dichloropropane	NL	NL	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.42	< 0.33	< 0.33	< 0.42	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.42	< 0.33	
1,1-Dichloropropene	NL	NL	NA	NA	NA	NA	NA	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	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	NA	NA	NA	NA	NA	
Di-isopropyl ether	NL	NL	< 0.23	< 0.23	< 0.44	< 0.23	< 0.23	< 0.23	< 0.23	< 0.44	< 0.44	< 0.44	< 0.44	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.44	< 0.44	
EDB (1,2-Dibromoethane)	0.05	0.005	< 0.44	< 0.44	< 0.63	< 0.44	< 0.44	< 0.44	< 0.44	< 0.63	< 0.63	< 0.63	< 0.63	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.63	< 0.63	
Ethylbenzene	700	140	< 0.55	< 0.55	< 0.71	< 0.55	< 0.55	< 0.55	< 0.55	< 0.71	< 0.71	< 0.71	< 0.71	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.71	< 0.71	
Hexachlorobutadiene	NL	NL	< 1.5	< 1.5	< 2.2	< 1.5	< 1.5	< 1.5	< 1.5	< 2.2	< 2.2	< 2.2	< 2.2	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 2.2	< 2.2	
Isopropylbenzene	NS	NS	< 0.3	< 0.3	< 0.82	< 0.3	< 0.3	< 0.3	< 0.3	< 0.82	< 0.82	< 0.82	< 0.82	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.82	< 0.82	
p-Isopropyltoluene	NL	NL	< 0.31	< 0.31	< 1.1	< 0.31	< 0.31	< 0.31	< 0.31	< 1.1	< 1.1	< 1.1	< 1.1	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 1.1	< 1.1	
Methylene Chloride	5	0.5	< 0.5	< 0.5	< 1.3	< 0.5	< 0.5	< 0.5	< 0.5	< 1.3	< 1.3	< 1.3	< 1.3	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 1.3	< 1.3	
Methyl tert-butyl ether (MTBE)	60	12	< 0.23	< 0.23	< 1.1	< 0.23	< 0.23	< 0.23	< 0.23	< 1.1	< 1.1	< 1.1	< 1.1	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 1.1	< 1.1	
Naphthalene	100	10	< 1.7	< 1.7	< 1.6	< 1.7	< 1.7	< 1.7	< 1.7	< 1.6	< 1.6	< 1.6	< 1.6	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.6	< 1.6	
n-Propylbenzene	NL	NL	< 0.25	< 0.25	< 0.77	< 0.25	< 0.25	< 0.25	< 0.25	< 0.77	< 0.77	< 0.77	< 0.77	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.77	< 0.77	
Styrene	100	10	NA	NA	NA	NA	NA	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	< 0.52	< 0.45	< 0.45	< 0.45	< 0.45	< 0.52	< 0.52	< 0.52	< 0.52	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.52	< 0.52	
1,1,1,2-Tetrachloroethane	70	7	< 0.33	< 0.33	< 0.48	< 0.33	< 0.33	< 0.33	< 0.33	< 0.48	< 0.48	< 0.48	< 0.48	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.48	< 0.48	
Tetrachloroethene	5	0.5	< 0.33	< 0.33	< 0.49	< 0.33	< 0.33	< 0.33	< 0.33	< 0.74	< 0.49	< 0.49	< 0.49	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.74	< 0.49	
Toluene	800	160	< 0.69	< 0.69	< 0.44	< 0.69	< 0.69	< 0.69	< 0.69	< 0.44	< 0.44	< 0.44	< 0.44	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.44	< 0.44	
1,2,4-Trichlorobenzene	70	14	< 0.98	< 0.98	< 1.7	< 0.98	< 0.98	< 0.98	< 0.98	< 1.7	< 1.7	< 1.7	< 1.7	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 1.7	< 1.7	
1,2,3-Trichlorobenzene	NL	NL	< 1.8	< 1.8	< 2.7	< 1.8	< 1.8	< 1.8	< 1.8	< 2.7	< 2.7	< 2.7	< 2.7	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 2.7	< 2.7	
1,1,1-Trichloroethane	200	40	< 0.33	< 0.33	< 0.84	< 0.33	< 0.33	< 0.33	< 0.33	< 0.84	< 0.84	< 0.84	< 0.84	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.84	< 0.84	
1,1,2-Trichloroethane	5	0.5	< 0.34	< 0.34	< 0.48	< 0.34	< 0.34	< 0.34	< 0.34	< 0.48	< 0.48	< 0.48	< 0.48	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.48	< 0.48	
Trichloroethene (TCE)	5	0.5	< 0.33	< 0.33	< 0.47	< 0.33	< 0.33	< 0.33	< 0.33	< 0.47	< 0.47	< 0.47	< 0.47	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.47	< 0.47	
Trichlorofluoromethane	NL	NL	< 0.71	< 0.71	< 0.87	< 0.71	< 0.71	< 0.71	< 0.71	< 0.87	< 0.87	< 0.87	< 0.87	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.87	< 0.87	
1,2,3-Trichloropropane	60	12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
1,2,4-Trimethylbenzene	--	--	< 2.2	< 2.2	< 1.6	< 2.2	< 2.2	< 2.2	< 2.2	< 1.6	< 1.6	< 1.6	< 1.6	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 1.6	< 1.6	
1,3,5-Trimethylbenzene	--	--	< 1.4	< 1.4	< 1.5	< 1.4	< 1.4	< 1.4	< 1.4	< 1.5	< 1.5	< 1.5	< 1.5	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.5	< 1.5	
Total Trimethylbenzene	480	96	< 2.2	< 2.2	< 1.6	< 2.2	< 2.2	< 2.2	< 2.2	< 1.6	< 1.6	< 1.6	< 1.6	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 1.6	< 1.6	
Vinyl Chloride	0.2	0.02	< 0.18	< 0.18	< 0.17	**0.21 J**	**0.29 J**	**0.31 J**	**0.39 J**	**0.35 J**	**0.47 J**	< 0.17	**0.32 J**	< 0.18	< 0.18	**0.26 J**	**0.38 J**	**0.43 J**	**0.2 J**	**0.45 J**	
m&p-Xylene	--	--	< 0.69	< 0.69	< 2.2	< 0.69	< 0.69	< 0.69	< 0.69	< 2.2	< 2.2	< 2.2	< 2.2	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 2.2	< 2.2	
o-Xylene	--	--	< 0.63	< 0.63	< 0.9	< 0.63	< 0.63	< 0.63	< 0.63	< 0.9	< 0.9	< 0.9	< 0.9	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.9	< 0.9	
Total Xylenes	2,000	400	< 0.69	< 0.69	< 2.2	< 0.69	< 0.69	< 0.69	< 0.69	< 0.9	< 2.2	< 2.2	< 2.2	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.9	< 2.2	

City Water Provided December 2015

Well Abandoned, City Water Provided December 2015

TABLE 2

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

			2716 CTH CR			2717 CTH CR(4141 Viebahn St.)								2734(2804) CTH CR						
						Original Potable Well						Non-Potable Well		Original Potable Well						
Analyte	ES[1]	PAL[2]	9/8/14	11/18/14	10/13/15	8/25/14	9/8/14	9/8/14(DUP)	11/10/14	2/23/15	10/13/15	3/31/16	10/6/16	6/3/14	8/25/14	11/10/14	11/25/14	11/25/14 (DUP)	2/24/15	10/14/15
			Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Garage Faucet	Garage Faucet	Garage Spigot	Garage Spigot	Garage Spigot	Garage Spigot	Garage Spigot	Pressure Tank	Pressure Tank
~~RCRA Metals (mg/L)~~																				
Antimony	0.006	0.0012	NA	NA	NA	NA	NA	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	NA	NA	NA	NA	NA
Barium	2	0.4	NA	NA	NA	NA	NA	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	NA	NA	NA	NA	NA
Cadmium	0.005	0.0005	NA	NA	NA	NA	NA	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	NA	NA	NA	NA	NA
Copper	1.3	0.13	NA	NA	NA	NA	NA	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	NA	NA	NA	NA	NA
Lead	0.015	0.0015	NA	NA	NA	NA	NA	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	NA	NA	NA	NA	NA
Mercury	0.002	0.0002	NA	NA	NA	NA	NA	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	NA	NA	NA	NA	NA
Selenium	0.05	0.01	NA	NA	NA	NA	NA	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	NA	NA	NA	NA	NA
Sodium	increase of 10		NA	NA	NA	NA	NA	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	NA	NA	NA	NA	NA
Zinc	5	2.5	NA	NA	NA	NA	NA	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	NA	NA	NA	NA	NA
Aroclor-1221	--	--	NA	NA	NA	NA	NA	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	NA	NA	NA	NA	NA
Aroclor-1242	--	--	NA	NA	NA	NA	NA	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	NA	NA	NA	NA	NA
Aroclor-1254	--	--	NA	NA	NA	NA	NA	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	NA	NA	NA	NA	NA
Total PCBs	0.03	0.003	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Field Screening Measurements																				
pH (IU)	--	--	7.59	8.61	7.87	8.03	7.87	7.87	7.95	8.15	7.73	NM	NM	7.32	8.01	7.87	NM	NM	7.96	7.53
Conductivity (uS)	--	--	658	374	409	640	721	721	625	662	621	NM	NM	485	606	661	NM	NM	597	594
Temperature (^{0}C)	--	--	12.83	8.45	11.90	8.03	9.15	9.15	12.28	6.49	13.10	NM	NM	12.20	15.50	10.42	NM	NM	6.11	13.10
Dissolved Oxygen (ppm)	--	--	2.11	7.32	5.22	2.28	1.73	1.73	3.39	4.63	1.45	NM	NM	0.97	0.96	1.79	NM	NM	6.15	1.01
Redox Potential (mV)	--	--	131	20.6	-91	239	221	221	-65	-162.7	-113.4	NM	NM	161	237	-99.4	NM	NM	-133.9	-121.2

City Water Provided December 2015

Well Abandoned, City Water Provided December 2015

TABLE 2

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

			2832&2904 CTH CR			2911 CTH CR		2916 CTH CR								2917 CTH CR					
								Original Potable Well								Original Potable Well					
Analyte	ES[1]	PAL[2]	2/4/14 Kitchen Sink	6/3/14 Kitchen Sink	3/30/16 Kitchen Sink	5/29/14 Pressure Tank	10/7/16 Pressure Tank	2/4/14 Pressure Tank	5/28/14 Pressure Tank	8/25/14 Pressure Tank	11/10/14 Pressure Tank	11/25/14 Pressure Tank	3/11/15 Pressure Tank	3/11/2015 (DUP) Pressure Tank	10/13/15 Pressure Tank	2/4/14 Kitchen Sink	5/30/14 Kitchen Sink	10/13/15 Spigot	10/27/15 Spigot	10/27/15 (DUP) Spigot	Well Abandoned, City Water Provided December 2015
Volatile Organic Compounds (VOCs) (µg/L):																					
Benzene	5	0.5	< 0.24	< 0.24	< 0.44	< 0.24	< 0.44	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.44	< 0.44	< 0.44	< 0.24	< 0.24	< 0.44	< 0.44	< 0.44	
Bromobenzene	NL	NL	< 0.32	< 0.32	< 0.48	< 0.32	< 0.48	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.48	< 0.48	< 0.48	< 0.32	< 0.32	< 0.48	< 0.48	< 0.48	
Bromochloromethane	NL	NL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Bromodichloromethane	0.6	0.06	< 0.37	< 0.37	< 0.46	< 0.37	< 0.46	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.46	< 0.46	< 0.46	< 0.37	< 0.37	< 0.46	< 0.46	< 0.46	
Bromoform	4.4	0.44	< 0.35	< 0.35	< 0.46	< 0.35	< 0.46	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.46	< 0.46	< 0.46	< 0.35	< 0.35	< 0.46	< 0.46	< 0.46	
tert-Butylbenzene	NL	NL	< 0.36	< 0.36	< 1.1	< 0.36	< 1.1	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 1.1	< 1.1	< 1.1	< 0.36	< 0.36	< 1.1	< 1.1	< 1.1	
sec-Butylbenzene	NL	NL	< 0.33	< 0.33	< 1.2	< 0.33	< 1.2	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 1.2	< 1.2	< 1.2	< 0.33	< 0.33	< 1.2	< 1.2	< 1.2	
n-Butylbenzene	NL	NL	< 0.35	< 0.35	< 1	< 0.35	< 1	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 1	< 1	< 1	< 0.35	< 0.35	< 1	< 1	< 1	
Carbon Disulfide	1000	200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Carbon Tetrachloride	5	0.5	< 0.33	< 0.33	< 0.51	< 0.33	< 0.51	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.65	< 0.65	< 0.51	< 0.33	< 0.33	< 0.51	< 0.51	< 0.51	
Chlorobenzene	NL	NL	< 0.24	< 0.24	< 0.46	< 0.24	< 0.46	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.46	< 0.46	< 0.46	< 0.24	< 0.24	< 0.46	< 0.46	< 0.46	
Chloroethane	400	80	< 0.63	< 0.63	< 0.65	< 0.63	< 0.65	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.65	< 0.65	< 0.65	< 0.63	< 0.63	< 0.65	< 0.65	< 0.65	
Chloroform	6	0.6	< 0.28	< 0.28	< 0.43	< 0.28	< 0.43	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.43	< 0.43	< 0.43	< 0.28	< 0.28	< 0.43	< 0.43	< 0.43	
Chloromethane	3	0.3	< 0.81	< 0.81	< 1.9	< 0.81	< 1.9	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81	< 1.9	< 1.9	< 1.9	< 0.81	< 0.81	< 1.9	< 1.9	< 1.9	
2-Chlorotoluene	NL	NL	< 0.21	< 0.21	< 0.4	< 0.21	< 0.4	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.4	< 0.4	< 0.4	< 0.21	< 0.21	< 0.4	< 0.4	< 0.4	
4-Chlorotoluene	NL	NL	< 0.21	< 0.21	< 0.63	< 0.21	< 0.63	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.63	< 0.63	< 0.63	< 0.21	< 0.21	< 0.63	< 0.63	< 0.63	
1,2-Dibromo-3-chloropropane (DBCP)	0.2	0.02	< 0.88	< 0.88	< 1.4	< 0.88	< 1.4	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88	< 1.4	< 1.4	< 1.4	< 0.88	< 0.88	< 1.4	< 1.4	< 1.4	
Dibromochloromethane	60	6	< 0.22	< 0.22	< 0.45	< 0.22	< 0.45	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.45	< 0.45	< 0.45	< 0.22	< 0.22	< 0.45	< 0.45	< 0.45	
Dibromomethane	NL	NL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
1,4-Dichlorobenzene	75	15	< 0.3	< 0.3	< 0.49	< 0.3	< 0.49	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.49	< 0.49	< 0.49	< 0.3	< 0.3	< 0.49	< 0.49	< 0.49	
1,3-Dichlorobenzene	600	120	< 0.28	< 0.28	< 0.52	< 0.28	< 0.52	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.52	< 0.52	< 0.52	< 0.28	< 0.28	< 0.52	< 0.52	< 0.52	
1,2-Dichlorobenzene	600	60	< 0.36	< 0.36	< 0.46	< 0.36	< 0.46	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.46	< 0.46	< 0.46	< 0.36	< 0.36	< 0.46	< 0.46	< 0.46	
Dichlorodifluoromethane	1000	200	< 0.44	< 0.44	< 0.87	< 0.44	< 0.87	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.87	< 0.87	< 0.87	< 0.44	< 0.44	< 0.87	< 0.87	< 0.87	
1,2-Dichloroethane	5	0.5	< 0.41	< 0.41	< 0.48	< 0.41	< 0.48	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.54	< 0.54	< 0.48	< 0.41	< 0.41	< 0.48	< 0.48	< 0.48	
1,1-Dichloroethane	850	85	< 0.3	< 0.3	< 1.1	< 0.3	< 1.1	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 1.1	< 1.1	< 1.1	< 0.3	< 0.3	< 1.1	< 1.1	< 1.1	
1,1-Dichloroethene	7	0.7	< 0.4	< 0.4	< 0.65	< 0.4	< 0.65	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.65	< 0.65	< 0.65	< 0.4	< 0.4	< 0.65	< 0.65	< 0.65	
cis-1,2-Dichloroethene	70	7	< 0.38	< 0.38	< 0.45	< 0.38	< 0.45	0.97 J	0.9 J	1.02 J	0.74 J	0.82 J	0.75 J	0.8 J	1.02 J	< 0.38	< 0.38	1.6	1.41	1.67	
trans-1,2-Dichloroethene	100	20	< 0.35	< 0.35	< 0.54	< 0.35	< 0.54	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.54	< 0.54	< 0.54	< 0.35	< 0.35	< 0.54	< 0.54	< 0.54	
1,2-Dichloropropane	5	0.5	< 0.32	< 0.32	< 0.43	< 0.32	< 0.43	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.43	< 0.43	< 0.43	< 0.32	< 0.32	< 0.43	< 0.43	< 0.43	
2,2-Dichloropropane	NL	NL	< 0.36	< 0.36	< 3.1	< 0.36	< 3.1	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 3.1	< 3.1	< 3.1	< 0.36	< 0.36	< 3.1	< 3.1	< 3.1	
1,3-Dichloropropane	NL	NL	< 0.33	< 0.33	< 0.33	< 0.33	< 0.42	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.42	< 0.42	< 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	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	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	NA	NA	NA	NA	NA	
Di-isopropyl ether	NL	NL	< 0.23	< 0.23	< 0.44	< 0.23	< 0.44	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.44	< 0.44	< 0.44	< 0.23	< 0.23	< 0.44	< 0.44	< 0.44	
EDB (1,2-Dibromoethane)	0.05	0.005	< 0.44	< 0.44	< 0.63	< 0.44	< 0.63	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.63	< 0.63	< 0.63	< 0.44	< 0.44	< 0.63	< 0.63	< 0.63	
Ethylbenzene	700	140	< 0.55	< 0.55	< 0.71	< 0.55	< 0.71	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.71	< 0.71	< 0.71	< 0.55	< 0.55	< 0.71	< 0.71	< 0.71	
Hexachlorobutadiene	NL	NL	< 1.5	< 1.5	< 2.2	< 1.5	< 2.2	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 2.2	< 2.2	< 2.2	< 1.5	< 1.5	< 2.2	< 2.2	< 2.2	
Isopropylbenzene	NS	NS	< 0.3	< 0.3	< 0.82	< 0.3	< 0.82	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.82	< 0.82	< 0.82	< 0.3	< 0.3	< 0.82	< 0.82	< 0.82	
p-Isopropyltoluene	NL	NL	< 0.31	< 0.31	< 1.1	< 0.31	< 1.1	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 1.1	< 1.1	< 1.1	< 0.31	< 0.31	< 1.1	< 1.1	< 1.1	
Methylene Chloride	5	0.5	< 0.5	< 0.5	< 1.3	< 0.5	< 1.3	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 1.3	< 1.3	< 1.3	< 0.5	< 0.5	< 1.3	< 1.3	< 1.3	
Methyl tert-butyl ether (MTBE)	60	12	< 0.23	< 0.23	< 1.1	< 0.23	< 1.1	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 1.1	< 1.1	< 1.1	< 0.23	< 0.23	< 1.1	< 1.1	< 1.1	
Naphthalene	100	10	< 1.7	< 1.7	< 1.6	< 1.7	< 1.6	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.6	< 1.6	< 1.6	< 1.7	< 1.7	< 1.6	< 1.6	< 1.6	
n-Propylbenzene	NL	NL	< 0.25	< 0.25	< 0.77	< 0.25	< 0.77	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.77	< 0.77	< 0.77	< 0.25	< 0.25	< 0.77	< 0.77	< 0.77	
Styrene	100	10	NA	NA	NA	NA	NA	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	< 0.52	< 0.45	< 0.52	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.52	< 0.52	< 0.52	< 0.45	< 0.45	< 0.52	< 0.52	< 0.52	
1,1,1,2-Tetrachloroethane	70	7	< 0.33	< 0.33	< 0.48	< 0.33	< 0.48	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.48	< 0.48	< 0.48	< 0.33	< 0.33	< 0.48	< 0.48	< 0.48	
Tetrachloroethene	5	0.5	< 0.33	< 0.33	< 0.49	< 0.33	< 0.49	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.74	< 0.74	< 0.49	< 0.33	< 0.33	< 0.49	< 0.49	< 0.49	
Toluene	800	160	< 0.69	< 0.69	< 0.44	< 0.69	< 0.44	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.44	< 0.44	< 0.44	< 0.69	< 0.69	< 0.44	< 0.44	< 0.44	
1,2,4-Trichlorobenzene	70	14	< 0.98	< 0.98	< 1.7	< 0.98	< 1.7	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 1.7	< 1.7	< 1.7	< 0.98	< 0.98	< 1.7	< 1.7	< 1.7	
1,2,3-Trichlorobenzene	NL	NL	< 1.8	< 1.8	< 2.7	< 1.8	< 2.7	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 2.7	< 2.7	< 2.7	< 1.8	< 1.8	< 2.7	< 2.7	< 2.7	
1,1,1-Trichloroethane	200	40	< 0.33	< 0.33	< 0.84	< 0.33	< 0.84	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.84	< 0.84	< 0.84	< 0.33	< 0.33	< 0.84	< 0.84	< 0.84	
1,1,2-Trichloroethane	5	0.5	< 0.34	< 0.34	< 0.48	< 0.34	< 0.48	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.48	< 0.48	< 0.48	< 0.34	< 0.34	< 0.48	< 0.48	< 0.48	
Trichloroethene (TCE)	5	0.5	< 0.33	< 0.33	< 0.47	< 0.33	< 0.47	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.47	< 0.47	< 0.47	< 0.33	< 0.33	< 0.47	< 0.47	< 0.47	
Trichlorofluoromethane	NL	NL	< 0.71	< 0.71	< 0.87	< 0.71	< 0.87	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.87	< 0.87	< 0.87	< 0.71	< 0.71	< 0.87	< 0.87	< 0.87	
1,2,3-Trichloropropane	60	12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
1,2,4-Trimethylbenzene	--	--	< 2.2	< 2.2	< 1.6	< 2.2	< 1.6	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 1.6	< 1.6	< 1.6	< 2.2	< 2.2	< 1.6	< 1.6	< 1.6	
1,3,5-Trimethylbenzene	--	--	< 1.4	< 1.4	< 1.5	< 1.4	< 1.5	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.5	< 1.5	< 1.5	< 1.4	< 1.4	< 1.5	< 1.5	< 1.5	
Total Trimethylbenzene	480	96	< 2.2	< 2.2	< 1.6	< 2.2	< 1.6	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 1.6	< 1.6	< 1.6	< 2.2	< 2.2	< 1.6	< 1.6	< 1.6	
Vinyl Chloride	0.2	0.02	< 0.18	< 0.18	< 0.17	< 0.18	< 0.17	**0.18 J**	< 0.18	< 0.18	**0.28 J**	**0.37 J**	< 0.17	**0.18 J**	**0.26 J**	< 0.18	< 0.18	**0.43 J**	**0.37 J**	**0.37 J**	
m&p-Xylene	--	--	< 0.69	< 0.69	< 2.2	< 0.69	< 2.2	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 2.2	< 2.2	< 2.2	< 0.69	< 0.69	< 2.2	< 2.2	< 2.2	
o-Xylene	--	--	< 0.63	< 0.63	< 0.9	< 0.63	< 0.9	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.9	< 0.9	< 0.9	< 0.63	< 0.63	< 0.9	< 0.9	< 0.9	
Total Xylenes	2,000	400	< 0.69	< 0.69	< 2.2	< 0.69	< 2.2	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.9	< 0.9	< 2.2	< 0.69	< 0.69	< 2.2	< 2.2	< 2.2	

TABLE 2

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

			2832&2904 CTH CR			2911 CTH CR		2916 CTH CR									2917 CTH CR					
								Original Potable Well									Original Potable Well					
Analyte	ES[1]	PAL[2]	2/4/14 Kitchen Sink	6/3/14 Kitchen Sink	3/30/16 Kitchen Sink	5/29/14 Pressure Tank	10/7/16 Pressure Tank	2/4/14 Pressure Tank	5/28/14 Pressure Tank	8/25/14 Pressure Tank	11/10/14 Pressure Tank	11/25/14 Pressure Tank	3/11/15 Pressure Tank	3/11/2015 (DUP) Pressure Tank	10/13/15 Pressure Tank	Well Abandoned, City Water Provided December 2015	2/4/14 Kitchen Sink	5/30/14 Kitchen Sink	10/13/15 Spigot	10/27/15 Spigot	10/27/15 (DUP) Spigot	Well Abandoned, City Water Provided December 2015
~~RCRA Metals (mg/L)~~																						
Antimony	0.006	0.0012	NA	NA	NA	NA	NA	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		NA	NA	NA	NA	NA	
Barium	2	0.4	NA	NA	NA	NA	NA	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		NA	NA	NA	NA	NA	
Cadmium	0.005	0.0005	NA	NA	NA	NA	NA	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		NA	NA	NA	NA	NA	
Copper	1.3	0.13	NA	NA	NA	NA	NA	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		NA	NA	NA	NA	NA	
Lead	0.015	0.0015	NA	NA	NA	NA	NA	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		NA	NA	NA	NA	NA	
Mercury	0.002	0.0002	NA	NA	NA	NA	NA	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		NA	NA	NA	NA	NA	
Selenium	0.05	0.01	NA	NA	NA	NA	NA	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		NA	NA	NA	NA	NA	
Sodium	increase of 10		NA	NA	NA	NA	NA	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		NA	NA	NA	NA	NA	
Zinc	5	2.5	NA	NA	NA	NA	NA	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		NA	NA	NA	NA	NA	
Aroclor-1221	--	--	NA	NA	NA	NA	NA	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		NA	NA	NA	NA	NA	
Aroclor-1242	--	--	NA	NA	NA	NA	NA	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		NA	NA	NA	NA	NA	
Aroclor-1254	--	--	NA	NA	NA	NA	NA	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		NA	NA	NA	NA	NA	
Total PCBs	0.03	0.003	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	
Field Screening Measurements																						
pH (IU)	--	--	7.32	7.6	NM	7.19	NM	7.35	12.6	7.53	7.91	NM	NM	NM	7.58		7.32	7.82	7.39	NM	NM	
Conductivity (uS)	--	--	411	588	NM	727	NM	396	1329	NM	601	NM	NM	NM	614		962	1709	1134	NM	NM	
Temperature (^{0}C)	--	--	6.61	14.50	NM	11.70	NM	9.60	12.60	11.50	10.50	NM	NM	NM	11.98		9.01	11.90	12.32	NM	NM	
Dissolved Oxygen (ppm)	--	--	NM	2.35	NM	2.98	NM	5.32	1.5	1.73	1.64	NM	NM	NM	4.4		NM	1.22	1.49	NM	NM	
Redox Potential (mV)	--	--	95.2	167	NM	115	NM	110	121	138	-85.3	NM	NM	NM	-104.5		113.2	134	-135.9	NM	NM	

TABLE 2

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	2/24/15	10/13/15	10/5/16	1/3/14	2/4/14	5/28/14	5/28/14(DUP)	8/25/14	8/25/14(DUP)	10/8/14	11/4/14	2/23/15	10/13/15	10/6/16
Analyte	**ES[1]**	**PAL[2]**	Outside Spigot	Outside Spigot	Outside Spigot	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	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	< 0.44	< 0.44	< 0.44	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.44	< 0.44	< 0.44
Bromobenzene	NL	NL	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.48	< 0.48	< 0.48	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.48	< 0.48	< 0.48
Bromochloromethane	NL	NL	NA	NA	NA	NA	NA	NA	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	< 0.46	< 0.46	< 0.46	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.46	< 0.46	< 0.46
Bromoform	4.4	0.44	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.46	< 0.46	< 0.46	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.46	< 0.46	< 0.46
tert-Butylbenzene	NL	NL	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 1.1	< 1.1	< 1.1	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 1.1	< 1.1	< 1.1
sec-Butylbenzene	NL	NL	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 1.2	< 1.2	< 1.2	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 1.2	< 1.2	< 1.2
n-Butylbenzene	NL	NL	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 1	< 1	< 1	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 1	< 1	< 1
Carbon Disulfide	1000	200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Carbon Tetrachloride	5	0.5	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.65	< 0.51	< 0.51	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.65	< 0.51	< 0.51
Chlorobenzene	NL	NL	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.46	< 0.46	< 0.46	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.46	< 0.46	< 0.46
Chloroethane	400	80	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.65	< 0.65	< 0.65	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.65	< 0.65	< 0.65
Chloroform	6	0.6	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.43	< 0.43	< 0.43	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.43	< 0.43	< 0.43
Chloromethane	3	0.3	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81	< 1.9	< 1.9	< 1.9	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81	< 1.9	< 1.9	< 1.9
2-Chlorotoluene	NL	NL	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.4	< 0.4	< 0.4	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.4	< 0.4	< 0.4
4-Chlorotoluene	NL	NL	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.63	< 0.63	< 0.63	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.63	< 0.63	< 0.63
1,2-Dibromo-3-chloropropane (DBCP)	0.2	0.02	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88	< 1.4	< 1.4	< 1.4	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88	< 1.4	< 1.4	< 1.4
Dibromochloromethane	60	6	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.45	< 0.45	< 0.45	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.45	< 0.45	< 0.45
Dibromomethane	NL	NL	NA	NA	NA	NA	NA	NA	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	< 0.49	< 0.49	< 0.49	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.49	< 0.49	< 0.49
1,3-Dichlorobenzene	600	120	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.52	< 0.52	< 0.52	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.52	< 0.52	< 0.52
1,2-Dichlorobenzene	600	60	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.46	< 0.46	< 0.46	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.46	< 0.46	< 0.46
Dichlorodifluoromethane	1000	200	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.87	< 0.87	< 0.87	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.87	< 0.87	< 0.87
1,2-Dichloroethane	5	0.5	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.54	< 0.48	< 0.48	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.54	< 0.48	< 0.48
1,1-Dichloroethane	850	85	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 1.1	< 1.1	< 1.1	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 1.1	< 1.1	< 1.1
1,1-Dichloroethene	7	0.7	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.65	< 0.65	< 0.65	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.65	< 0.65	< 0.65
cis-1,2-Dichloroethene	70	7	2.84	2.87	2.34	< 0.38	< 0.38	< 0.45	< 0.45	< 0.45	2.74	2.86	2.65	2.68	1.89	2.23	< 0.38	< 0.38	< 0.45	< 0.45	< 0.45
trans-1,2-Dichloroethene	100	20	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.54	< 0.54	< 0.54	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.54	< 0.54	< 0.54
1,2-Dichloropropane	5	0.5	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.43	< 0.43	< 0.43	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.43	< 0.43	< 0.43
2,2-Dichloropropane	NL	NL	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 3.1	< 3.1	< 3.1	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 3.1	< 3.1	< 3.1
1,3-Dichloropropane	NL	NL	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.42	< 0.33	< 0.42	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.42	< 0.33	< 0.42
1,1-Dichloropropene	NL	NL	NA	NA	NA	NA	NA	NA	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	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	NA	NA	NA	NA	NA	NA
Di-isopropyl ether	NL	NL	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.44	< 0.44	< 0.44	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.44	< 0.44	< 0.44
EDB (1,2-Dibromoethane)	0.05	0.005	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.63	< 0.63	< 0.63	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.63	< 0.63	< 0.63
Ethylbenzene	700	140	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.71	< 0.71	< 0.71	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.71	< 0.71	< 0.71
Hexachlorobutadiene	NL	NL	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 2.2	< 2.2	< 2.2	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 2.2	< 2.2	< 2.2
Isopropylbenzene	NS	NS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.82	< 0.82	< 0.82	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.82	< 0.82	< 0.82
p-Isopropyltoluene	NL	NL	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 1.1	< 1.1	< 1.1	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 1.1	< 1.1	< 1.1
Methylene Chloride	5	0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 1.3	< 1.3	< 1.3	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 1.3	< 1.3	< 1.3
Methyl tert-butyl ether (MTBE)	60	12	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 1.1	< 1.1	< 1.1	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 1.1	< 1.1	< 1.1
Naphthalene	100	10	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.6	< 1.6	< 1.6	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.6	< 1.6	< 1.6
n-Propylbenzene	NL	NL	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.77	< 0.77	< 0.77	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.77	< 0.77	< 0.77
Styrene	100	10	NA	NA	NA	NA	NA	NA	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	< 0.52	< 0.52	< 0.52	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.52	< 0.52	< 0.52
1,1,1,2-Tetrachloroethane	70	7	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.48	< 0.48	< 0.48	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.48	< 0.48	< 0.48
Tetrachloroethene	5	0.5	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.74	< 0.49	< 0.49	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.74	< 0.49	< 0.49
Toluene	800	160	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.44	< 0.44	< 0.44	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.44	< 0.44	< 0.44
1,2,4-Trichlorobenzene	70	14	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 1.7	< 1.7	< 1.7	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 1.7	< 1.7	< 1.7
1,2,3-Trichlorobenzene	NL	NL	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 2.7	< 2.7	< 2.7	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 2.7	< 2.7	< 2.7
1,1,1-Trichloroethane	200	40	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.84	< 0.84	< 0.84	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.84	< 0.84	< 0.84
1,1,2-Trichloroethane	5	0.5	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.48	< 0.48	< 0.48	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.48	< 0.48	< 0.48
Trichloroethene (TCE)	5	0.5	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.47	< 0.47	< 0.47	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.47	< 0.47	< 0.47
Trichlorofluoromethane	NL	NL	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.87	< 0.87	< 0.87	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.87	< 0.87	< 0.87
1,2,3-Trichloropropane	60	12	NA	NA	NA	NA	NA	NA	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	< 1.6	< 1.6	< 1.6	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 1.6	< 1.6	< 1.6
1,3,5-Trimethylbenzene	--	--	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.5	< 1.5	< 1.5	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.5	< 1.5	< 1.5
Total Trimethylbenzene	480	96	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 1.6	< 1.6	< 1.6	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 1.6	< 1.6	< 1.6
Vinyl Chloride	0.2	0.02	**0.55 J**	**0.41 J**	**0.33 J**	< 0.18	< 0.18	< 0.17	< 0.17	< 0.17	**0.60**	**0.43 J**	**0.35 J**	**0.26 J**	**0.27 J**	**0.24 J**	< 0.18	< 0.18	< 0.17	< 0.17	< 0.17
m&p-Xylene	--	--	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 2.2	< 2.2	< 2.2	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 2.2	< 2.2	< 2.2
o-Xylene	--	--	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.9	< 0.9	< 0.9	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.9	< 0.9	< 0.9
Total Xylenes	2,000	400	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.9	< 2.2	< 2.2	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.9	< 2.2	< 2.2

TABLE 2

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	2/24/15	10/13/15	10/5/16	1/3/14	2/4/14	5/28/14	5/28/14(DUP)	8/25/14	8/25/14(DUP)	10/8/14	11/4/14	2/23/15	10/13/15	10/6/16
Analyte	ES[1]	PAL[2]	Outside Spigot	Outside Spigot	Outside Spigot	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	Pressure Tank	Pressure Tank	Pressure Tank
~~RCRA Metals (mg/L)~~																					
Antimony	0.006	0.0012	NA	NA	NA	NA	NA	NA	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	NA	NA	NA	NA	NA	NA
Barium	2	0.4	NA	NA	NA	NA	NA	NA	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	NA	NA	NA	NA	NA	NA
Cadmium	0.005	0.0005	NA	NA	NA	NA	NA	NA	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	NA	NA	NA	NA	NA	NA
Copper	1.3	0.13	NA	NA	NA	NA	NA	NA	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	NA	NA	NA	NA	NA	NA
Lead	0.015	0.0015	NA	NA	NA	NA	NA	NA	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	NA	NA	NA	NA	NA	NA
Mercury	0.002	0.0002	NA	NA	NA	NA	NA	NA	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	NA	NA	NA	NA	NA	NA
Selenium	0.05	0.01	NA	NA	NA	NA	NA	NA	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	NA	NA	NA	NA	NA	NA
Sodium	increase of 10		NA	NA	NA	NA	NA	NA	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	NA	NA	NA	NA	NA	NA
Zinc	5	2.5	NA	NA	NA	NA	NA	NA	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	NA	NA	NA	NA	NA	NA
Aroclor-1221	--	--	NA	NA	NA	NA	NA	NA	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	NA	NA	NA	NA	NA	NA
Aroclor-1242	--	--	NA	NA	NA	NA	NA	NA	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	NA	NA	NA	NA	NA	NA
Aroclor-1254	--	--	NA	NA	NA	NA	NA	NA	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	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	NA	NA	NA	NA	NA	NA
Field Screening Measurements																					
pH (IU)	--	--	7.32	7.42	7.75	NM	7.7	7.64	7.21	NM	7.51	7.38	7.8	7.8	7.91	7.91	NM	7.61	7.79	7.19	NM
Conductivity (uS)	--	--	404	562	619	NM	2352	2286	2337	NM	566	570	616	616	649	649	NM	2177	2051	2119	NM
Temperature (^{0}C)	--	--	9.16	11.10	12.80	NM	10.30	8.17	13.01	NM	8.27	8.04	11.20	11.20	7.91	7.91	NM	10.30	7.94	12.73	NM
Dissolved Oxygen (ppm)	--	--	NM	1.5	0.87	NM	2.21	3.74	2.63	NM	5.32	5.32	4.79	4.79	1.24	1.24	NM	3.21	4.58	2.5	NM
Redox Potential (mV)	--	--	113.2	152	222	NM	-126.3	-112	-68.2	NM	158.1	157.3	111	111	247	247	NM	-135.6	-112.7	-77.4	NM

TABLE 2

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

Analyte	ES[1]	PAL[2]	3224 CTH CR					3312 CTH CR					3322 CTH CR				
			2/4/14	6/4/14	8/25/14	11/17/14	3/31/16	2/26/14	6/2/14	8/26/14	11/10/14	10/5/16	1/6/14	6/4/14	8/25/14	11/10/14	10/13/15
			Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Bath Tub	Bath Tub	Outside Spigot	Outside Spigot	Bath Tub	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	< 0.44	< 0.24	< 0.24	< 0.24	< 0.24	< 0.44	< 0.24	< 0.24	< 0.24	< 0.24	< 0.44
Bromobenzene	NL	NL	< 0.32	< 0.32	< 0.32	< 0.32	< 0.48	< 0.32	< 0.32	< 0.32	< 0.32	< 0.48	< 0.32	< 0.32	< 0.32	< 0.32	< 0.48
Bromochloromethane	NL	NL	NA	NA	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	< 0.46	< 0.37	< 0.37	< 0.37	< 0.37	< 0.46	< 0.37	< 0.37	< 0.37	< 0.37	< 0.46
Bromoform	4.4	0.44	< 0.35	< 0.35	< 0.35	< 0.35	< 0.46	< 0.35	< 0.35	< 0.35	< 0.35	< 0.46	< 0.35	< 0.35	< 0.35	< 0.35	< 0.46
tert-Butylbenzene	NL	NL	< 0.36	< 0.36	< 0.36	< 0.36	< 1.1	< 0.36	< 0.36	< 0.36	< 0.36	< 1.1	< 0.36	< 0.36	< 0.36	< 0.36	< 1.1
sec-Butylbenzene	NL	NL	< 0.33	< 0.33	< 0.33	< 0.33	< 1.2	< 0.33	< 0.33	< 0.33	< 0.33	< 1.2	< 0.33	< 0.33	< 0.33	< 0.33	< 1.2
n-Butylbenzene	NL	NL	< 0.35	< 0.35	< 0.35	< 0.35	< 1	< 0.35	< 0.35	< 0.35	< 0.35	< 1	< 0.35	< 0.35	< 0.35	< 0.35	< 1
Carbon Disulfide	1000	200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Carbon Tetrachloride	5	0.5	< 0.33	< 0.33	< 0.33	< 0.33	< 0.51	< 0.33	< 0.33	< 0.33	< 0.33	< 0.51	< 0.33	< 0.33	< 0.33	< 0.33	< 0.51
Chlorobenzene	NL	NL	< 0.24	< 0.24	< 0.24	< 0.24	< 0.46	< 0.24	< 0.24	< 0.24	< 0.24	< 0.46	< 0.24	< 0.24	< 0.24	< 0.24	< 0.46
Chloroethane	400	80	< 0.63	< 0.63	< 0.63	< 0.63	< 0.65	< 0.63	< 0.63	< 0.63	< 0.63	< 0.65	< 0.63	< 0.63	< 0.63	< 0.63	< 0.65
Chloroform	6	0.6	< 0.28	< 0.28	< 0.28	< 0.28	< 0.43	< 0.28	< 0.28	< 0.28	< 0.28	< 0.43	< 0.28	< 0.28	< 0.28	< 0.28	< 0.43
Chloromethane	3	0.3	< 0.81	< 0.81	< 0.81	< 0.81	< 1.9	< 0.81	< 0.81	< 0.81	< 0.81	< 1.9	< 0.81	< 0.81	< 0.81	< 0.81	< 1.9
2-Chlorotoluene	NL	NL	< 0.21	< 0.21	< 0.21	< 0.21	< 0.4	< 0.21	< 0.21	< 0.21	< 0.21	< 0.4	< 0.21	< 0.21	< 0.21	< 0.21	< 0.4
4-Chlorotoluene	NL	NL	< 0.21	< 0.21	< 0.21	< 0.21	< 0.63	< 0.21	< 0.21	< 0.21	< 0.21	< 0.63	< 0.21	< 0.21	< 0.21	< 0.21	< 0.63
1,2-Dibromo-3-chloropropane (DBCP)	0.2	0.02	< 0.88	< 0.88	< 0.88	< 0.88	< 1.4	< 0.88	< 0.88	< 0.88	< 0.88	< 1.4	< 0.88	< 0.88	< 0.88	< 0.88	< 1.4
Dibromochloromethane	60	6	< 0.22	< 0.22	< 0.22	< 0.22	< 0.45	< 0.22	< 0.22	< 0.22	< 0.22	< 0.45	< 0.22	< 0.22	< 0.22	< 0.22	< 0.45
Dibromomethane	NL	NL	NA	NA	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	< 0.49	< 0.3	< 0.3	< 0.3	< 0.3	< 0.49	< 0.3	< 0.3	< 0.3	< 0.3	< 0.49
1,3-Dichlorobenzene	600	120	< 0.28	< 0.28	< 0.28	< 0.28	< 0.52	< 0.28	< 0.28	< 0.28	< 0.28	< 0.52	< 0.28	< 0.28	< 0.28	< 0.28	< 0.52
1,2-Dichlorobenzene	600	60	< 0.36	< 0.36	< 0.36	< 0.36	< 0.46	< 0.36	< 0.36	< 0.36	< 0.36	< 0.46	< 0.36	< 0.36	< 0.36	< 0.36	< 0.46
Dichlorodifluoromethane	1000	200	< 0.44	< 0.44	< 0.44	< 0.44	< 0.87	< 0.44	< 0.44	< 0.44	< 0.44	< 0.87	< 0.44	< 0.44	< 0.44	< 0.44	< 0.87
1,2-Dichloroethane	5	0.5	< 0.41	< 0.41	< 0.41	< 0.41	< 0.48	< 0.41	< 0.41	< 0.41	< 0.41	< 0.48	< 0.41	< 0.41	< 0.41	< 0.41	< 0.48
1,1-Dichloroethane	850	85	< 0.3	< 0.3	< 0.3	< 0.3	< 1.1	< 0.3	< 0.3	< 0.3	< 0.3	< 1.1	< 0.3	< 0.3	< 0.3	< 0.3	< 1.1
1,1-Dichloroethene	7	0.7	< 0.4	< 0.4	< 0.4	< 0.4	< 0.65	< 0.4	< 0.4	< 0.4	< 0.4	< 0.65	< 0.4	< 0.4	< 0.4	< 0.4	< 0.65
cis-1,2-Dichloroethene	70	7	< 0.38	< 0.38	< 0.38	< 0.38	< 0.45	< 0.38	< 0.38	< 0.38	< 0.38	< 0.45	< 0.38	< 0.38	< 0.38	< 0.38	< 0.45
trans-1,2-Dichloroethene	100	20	< 0.35	< 0.35	< 0.35	< 0.35	< 0.54	< 0.35	< 0.35	< 0.35	< 0.35	< 0.54	< 0.35	< 0.35	< 0.35	< 0.35	< 0.54
1,2-Dichloropropane	5	0.5	< 0.32	< 0.32	< 0.32	< 0.32	< 0.43	< 0.32	< 0.32	< 0.32	< 0.32	< 0.43	< 0.32	< 0.32	< 0.32	< 0.32	< 0.43
2,2-Dichloropropane	NL	NL	< 0.36	< 0.36	< 0.36	< 0.36	< 3.1	< 0.36	< 0.36	< 0.36	< 0.36	< 3.1	< 0.36	< 0.36	< 0.36	< 0.36	< 3.1
1,3-Dichloropropane	NL	NL	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.42	< 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	NA	NA
cis-1,3-Dichloropropene	0.4	0.04	NA	NA	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	NA	NA
Di-isopropyl ether	NL	NL	< 0.23	< 0.23	< 0.23	< 0.23	< 0.44	< 0.23	< 0.23	< 0.23	< 0.23	< 0.44	< 0.23	< 0.23	< 0.23	< 0.23	< 0.44
EDB (1,2-Dibromoethane)	0.05	0.005	< 0.44	< 0.44	< 0.44	< 0.44	< 0.63	< 0.44	< 0.44	< 0.44	< 0.44	< 0.63	< 0.44	< 0.44	< 0.44	< 0.44	< 0.63
Ethylbenzene	700	140	< 0.55	< 0.55	< 0.55	< 0.55	< 0.71	< 0.55	< 0.55	< 0.55	< 0.55	< 0.71	< 0.55	< 0.55	< 0.55	< 0.55	< 0.71
Hexachlorobutadiene	NL	NL	< 1.5	< 1.5	< 1.5	< 1.5	< 2.2	< 1.5	< 1.5	< 1.5	< 1.5	< 2.2	< 1.5	< 1.5	< 1.5	< 1.5	< 2.2
Isopropylbenzene	NS	NS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.82	< 0.3	< 0.3	< 0.3	< 0.3	< 0.82	< 0.3	< 0.3	< 0.3	< 0.3	< 0.82
p-Isopropyltoluene	NL	NL	< 0.31	< 0.31	< 0.31	< 0.31	< 1.1	< 0.31	< 0.31	< 0.31	< 0.31	< 1.1	< 0.31	< 0.31	< 0.31	< 0.31	< 1.1
Methylene Chloride	5	0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 1.3	< 0.5	< 0.5	< 0.5	< 0.5	< 1.3	< 0.5	< 0.5	< 0.5	< 0.5	< 1.3
Methyl tert-butyl ether (MTBE)	60	12	< 0.23	< 0.23	< 0.23	< 0.23	< 1.1	< 0.23	< 0.23	< 0.23	< 0.23	< 1.1	< 0.23	< 0.23	< 0.23	< 0.23	< 1.1
Naphthalene	100	10	< 1.7	< 1.7	< 1.7	< 1.7	< 1.6	< 1.7	< 1.7	< 1.7	< 1.7	< 1.6	< 1.7	< 1.7	< 1.7	< 1.7	< 1.6
n-Propylbenzene	NL	NL	< 0.25	< 0.25	< 0.25	< 0.25	< 0.77	< 0.25	< 0.25	< 0.25	< 0.25	< 0.77	< 0.25	< 0.25	< 0.25	< 0.25	< 0.77
Styrene	100	10	NA	NA	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	< 0.52	< 0.45	< 0.45	< 0.45	< 0.45	< 0.52	< 0.45	< 0.45	< 0.45	< 0.45	< 0.52
1,1,1,2-Tetrachloroethane	70	7	< 0.33	< 0.33	< 0.33	< 0.33	< 0.48	< 0.33	< 0.33	< 0.33	< 0.33	< 0.48	< 0.33	< 0.33	< 0.33	< 0.33	< 0.48
Tetrachloroethene	5	0.5	< 0.33	< 0.33	< 0.33	< 0.33	< 0.49	< 0.33	< 0.33	< 0.33	< 0.33	< 0.49	< 0.33	< 0.33	< 0.33	< 0.33	< 0.49
Toluene	800	160	< 0.69	< 0.69	< 0.69	< 0.69	< 0.44	< 0.69	< 0.69	< 0.69	< 0.69	< 0.44	< 0.69	< 0.69	< 0.69	< 0.69	< 0.44
1,2,4-Trichlorobenzene	70	14	< 0.98	< 0.98	< 0.98	< 0.98	< 1.7	< 0.98	< 0.98	< 0.98	< 0.98	< 1.7	< 0.98	< 0.98	< 0.98	< 0.98	< 1.7
1,2,3-Trichlorobenzene	NL	NL	< 1.8	< 1.8	< 1.8	< 1.8	< 2.7	< 1.8	< 1.8	< 1.8	< 1.8	< 2.7	< 1.8	< 1.8	< 1.8	< 1.8	< 2.7
1,1,1-Trichloroethane	200	40	< 0.33	< 0.33	< 0.33	< 0.33	< 0.84	< 0.33	< 0.33	< 0.33	< 0.33	< 0.84	< 0.33	< 0.33	< 0.33	< 0.33	< 0.84
1,1,2-Trichloroethane	5	0.5	< 0.34	< 0.34	< 0.34	< 0.34	< 0.48	< 0.34	< 0.34	< 0.34	< 0.34	< 0.48	< 0.34	< 0.34	< 0.34	< 0.34	< 0.48
Trichloroethene (TCE)	5	0.5	< 0.33	< 0.33	< 0.33	< 0.33	< 0.47	< 0.33	< 0.33	< 0.33	< 0.33	< 0.47	< 0.33	< 0.33	< 0.33	< 0.33	< 0.47
Trichlorofluoromethane	NL	NL	< 0.71	< 0.71	< 0.71	< 0.71	< 0.87	< 0.71	< 0.71	< 0.71	< 0.71	< 0.87	< 0.71	< 0.71	< 0.71	< 0.71	< 0.87
1,2,3-Trichloropropane	60	12	NA	NA	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	< 1.6	< 2.2	< 2.2	< 2.2	< 2.2	< 1.6	< 2.2	< 2.2	< 2.2	< 2.2	< 1.6
1,3,5-Trimethylbenzene	--	--	< 1.4	< 1.4	< 1.4	< 1.4	< 1.5	< 1.4	< 1.4	< 1.4	< 1.4	< 1.5	< 1.4	< 1.4	< 1.4	< 1.4	< 1.5
Total Trimethylbenzene	480	96	< 2.2	< 2.2	< 2.2	< 2.2	< 1.6	< 2.2	< 2.2	< 2.2	< 2.2	< 1.6	< 2.2	< 2.2	< 2.2	< 2.2	< 1.6
Vinyl Chloride	0.2	0.02	< 0.18	< 0.18	< 0.18	< 0.18	< 0.17	< 0.18	< 0.18	< 0.18	< 0.18	< 0.17	< 0.18	< 0.18	< 0.18	< 0.18	< 0.17
m&p-Xylene	--	--	< 0.69	< 0.69	< 0.69	< 0.69	< 2.2	< 0.69	< 0.69	< 0.69	< 0.69	< 2.2	< 0.69	< 0.69	< 0.69	< 0.69	< 2.2
o-Xylene	--	--	< 0.63	< 0.63	< 0.63	< 0.63	< 0.9	< 0.63	< 0.63	< 0.63	< 0.63	< 0.9	< 0.63	< 0.63	< 0.63	< 0.63	< 0.9
Total Xylenes	2,000	400	< 0.69	< 0.69	< 0.69	< 0.69	< 2.2	< 0.69	< 0.69	< 0.69	< 0.69	< 2.2	< 0.69	< 0.69	< 0.69	< 0.69	< 2.2

TABLE 2

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	3/31/16	2/26/14	6/2/14	8/26/14	11/10/14	10/5/16	1/6/14	6/4/14	8/25/14	11/10/14	10/13/15
Analyte	ES[1]	PAL[2]	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Bath Tub	Bath Tub	Outside Spigot	Outside Spigot	Bath Tub	Kitchen Sink	Kitchen Sink	Kitchen Sink	Kitchen Sink	Kitchen Sink
~~RCRA Metals (mg/L)~~																	
Antimony	0.006	0.0012	NA	NA	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	NA	NA
Barium	2	0.4	NA	NA	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	NA	NA
Cadmium	0.005	0.0005	NA	NA	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	NA	NA
Copper	1.3	0.13	NA	NA	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	NA	NA
Lead	0.015	0.0015	NA	NA	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	NA	NA
Mercury	0.002	0.0002	NA	NA	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	NA	NA
Selenium	0.05	0.01	NA	NA	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	NA	NA
Sodium	increase of 10		NA	NA	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	NA	NA
Zinc	5	2.5	NA	NA	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	NA	NA
Aroclor-1221	--	--	NA	NA	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	NA	NA
Aroclor-1242	--	--	NA	NA	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	NA	NA
Aroclor-1254	--	--	NA	NA	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	NA	NA
Total PCBs	0.03	0.003	NA	NA	NA	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	NM	7.93	7.75	7.98	NM	7.82	7.9	8.06	8.06	7.72
Conductivity (uS)	--	--	383	513	653	598	NM	NM	416	765	2750	NM	417	380	475	475	520
Temperature (^{o}C)	--	--	9.24	11.50	13.10	8.69	NM	NM	11.8	11.7	10.63	NM	9.08	12.10	14.40	14.40	11.50
Dissolved Oxygen (ppm)	--	--	NM	2.87	1.91	2.61	NM	NM	2.48	0.57	3.11	NM	5.32	1.3	0.57	0.57	2.02
Redox Potential (mV)	--	--	111.3	170	235	-55.8	NM	NM	87	225	40.3	NM	174.8	151	242	242	-114.7

TABLE 2

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

			3403 CTH CR									3412 CTH CR				3422 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	2/23/15	10/13/15	10/5/16	1/3/14	8/26/14	11/10/14	3/31/16	1/6/14	5/30/14	8/25/14	11/18/14	10/5/16
Analyte	ES[1]	PAL[2]	Kitchen Sink	Kitchen Sink	Kitchen Sink	Kitchen Sink	Kitchen Sink	Kitchen Sink	Kitchen Sink	Kitchen Sink	Outside Spigot	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	< 0.44	< 0.44	< 0.44	< 0.24	< 0.24	< 0.24	< 0.44	< 0.24	< 0.24	< 0.24	< 0.24	< 0.44
Bromobenzene	NL	NL	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.48	< 0.48	< 0.48	< 0.32	< 0.32	< 0.32	< 0.48	< 0.32	< 0.32	< 0.32	< 0.32	< 0.48
Bromochloromethane	NL	NL	NA	NA	NA	NA	NA	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	< 0.46	< 0.46	< 0.46	< 0.37	< 0.37	< 0.37	< 0.46	< 0.37	< 0.37	< 0.37	< 0.37	< 0.46
Bromoform	4.4	0.44	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.46	< 0.46	< 0.46	< 0.35	< 0.35	< 0.35	< 0.46	< 0.35	< 0.35	< 0.35	< 0.35	< 0.46
tert-Butylbenzene	NL	NL	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 1.1	< 1.1	< 1.1	< 0.36	< 0.36	< 0.36	< 1.1	< 0.36	< 0.36	< 0.36	< 0.36	< 1.1
sec-Butylbenzene	NL	NL	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 1.2	< 1.2	< 1.2	< 0.33	< 0.33	< 0.33	< 1.2	< 0.33	< 0.33	< 0.33	< 0.33	< 1.2
n-Butylbenzene	NL	NL	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 1	< 1	< 1	< 0.35	< 0.35	< 0.35	< 1	< 0.35	< 0.35	< 0.35	< 0.35	< 1
Carbon Disulfide	1000	200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Carbon Tetrachloride	5	0.5	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.65	< 0.51	< 0.51	< 0.33	< 0.33	< 0.33	< 0.51	< 0.33	< 0.33	< 0.33	< 0.33	< 0.51
Chlorobenzene	NL	NL	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.46	< 0.46	< 0.46	< 0.24	< 0.24	< 0.24	< 0.46	< 0.24	< 0.24	< 0.24	< 0.24	< 0.46
Chloroethane	400	80	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.65	< 0.65	< 0.65	< 0.63	< 0.63	< 0.63	< 0.65	< 0.63	< 0.63	< 0.63	< 0.63	< 0.65
Chloroform	6	0.6	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.43	< 0.43	< 0.43	< 0.28	< 0.28	< 0.28	< 0.43	< 0.28	< 0.28	< 0.28	< 0.28	< 0.43
Chloromethane	3	0.3	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81	< 1.9	< 1.9	< 1.9	< 0.81	< 0.81	< 0.81	< 1.9	< 0.81	< 0.81	< 0.81	< 0.81	< 1.9
2-Chlorotoluene	NL	NL	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.4	< 0.4	< 0.4	< 0.21	< 0.21	< 0.21	< 0.4	< 0.21	< 0.21	< 0.21	< 0.21	< 0.4
4-Chlorotoluene	NL	NL	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.63	< 0.63	< 0.63	< 0.21	< 0.21	< 0.21	< 0.63	< 0.21	< 0.21	< 0.21	< 0.21	< 0.63
1,2-Dibromo-3-chloropropane (DBCP)	0.2	0.02	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88	< 1.4	< 1.4	< 1.4	< 0.88	< 0.88	< 0.88	< 1.4	< 0.88	< 0.88	< 0.88	< 0.88	< 1.4
Dibromochloromethane	60	6	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.45	< 0.45	< 0.45	< 0.22	< 0.22	< 0.22	< 0.45	< 0.22	< 0.22	< 0.22	< 0.22	< 0.45
Dibromomethane	NL	NL	NA	NA	NA	NA	NA	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	< 0.49	< 0.49	< 0.49	< 0.3	< 0.3	< 0.3	< 0.49	< 0.3	< 0.3	< 0.3	< 0.3	< 0.49
1,3-Dichlorobenzene	600	120	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.52	< 0.52	< 0.52	< 0.28	< 0.28	< 0.28	< 0.52	< 0.28	< 0.28	< 0.28	< 0.28	< 0.52
1,2-Dichlorobenzene	600	60	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.46	< 0.46	< 0.46	< 0.36	< 0.36	< 0.36	< 0.46	< 0.36	< 0.36	< 0.36	< 0.36	< 0.46
Dichlorodifluoromethane	1000	200	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.87	< 0.87	< 0.87	< 0.44	< 0.44	< 0.44	< 0.87	< 0.44	< 0.44	< 0.44	< 0.44	< 0.87
1,2-Dichloroethane	5	0.5	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.54	< 0.48	< 0.48	< 0.41	< 0.41	< 0.41	< 0.48	< 0.41	< 0.41	< 0.41	< 0.41	< 0.48
1,1-Dichloroethane	850	85	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 1.1	< 1.1	< 1.1	< 0.3	< 0.3	< 0.3	< 1.1	< 0.3	< 0.3	< 0.3	< 0.3	< 1.1
1,1-Dichloroethene	7	0.7	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.65	< 0.65	< 0.65	< 0.4	< 0.4	< 0.4	< 0.65	< 0.4	< 0.4	< 0.4	< 0.4	< 0.65
cis-1,2-Dichloroethene	70	7	1.3	1.67	1.48	1.34	< 0.38	< 0.38	< 0.45	< 0.45	< 0.45	< 0.38	< 0.38	< 0.38	< 0.45	< 0.38	< 0.38	< 0.38	< 0.38	< 0.45
trans-1,2-Dichloroethene	100	20	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.54	< 0.54	< 0.54	< 0.35	< 0.35	< 0.35	< 0.54	< 0.35	< 0.35	< 0.35	< 0.35	< 0.54
1,2-Dichloropropane	5	0.5	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.43	< 0.43	< 0.43	< 0.32	< 0.32	< 0.32	< 0.43	< 0.32	< 0.32	< 0.32	< 0.32	< 0.43
2,2-Dichloropropane	NL	NL	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 3.1	< 3.1	< 3.1	< 0.36	< 0.36	< 0.36	< 3.1	< 0.36	< 0.36	< 0.36	< 0.36	< 3.1
1,3-Dichloropropane	NL	NL	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.42	< 0.33	< 0.42	< 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	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	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	NA	NA	NA	NA	NA
Di-isopropyl ether	NL	NL	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.44	< 0.44	< 0.44	< 0.23	< 0.23	< 0.23	< 0.44	< 0.23	< 0.23	< 0.23	< 0.23	< 0.44
EDB (1,2-Dibromoethane)	0.05	0.005	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.63	< 0.63	< 0.63	< 0.44	< 0.44	< 0.44	< 0.63	< 0.44	< 0.44	< 0.44	< 0.44	< 0.63
Ethylbenzene	700	140	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.71	< 0.71	< 0.71	< 0.55	< 0.55	< 0.55	< 0.71	< 0.55	< 0.55	< 0.55	< 0.55	< 0.71
Hexachlorobutadiene	NL	NL	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 2.2	< 2.2	< 2.2	< 1.5	< 1.5	< 1.5	< 2.2	< 1.5	< 1.5	< 1.5	< 1.5	< 2.2
Isopropylbenzene	NS	NS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.82	< 0.82	< 0.82	< 0.3	< 0.3	< 0.3	< 0.82	< 0.3	< 0.3	< 0.3	< 0.3	< 0.82
p-Isopropyltoluene	NL	NL	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 1.1	< 1.1	< 1.1	< 0.31	< 0.31	< 0.31	< 1.1	< 0.31	< 0.31	< 0.31	< 0.31	< 1.1
Methylene Chloride	5	0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 1.3	< 1.3	< 1.3	< 0.5	1.56 J	< 0.5	< 1.3	< 0.5	< 0.5	< 0.5	< 0.5	< 1.3
Methyl tert-butyl ether (MTBE)	60	12	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 1.1	< 1.1	< 1.1	< 0.23	< 0.23	< 0.23	< 1.1	< 0.23	< 0.23	< 0.23	< 0.23	< 1.1
Naphthalene	100	10	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.6	< 1.6	< 1.6	< 1.7	< 1.7	< 1.7	< 1.6	< 1.7	< 1.7	< 1.7	< 1.7	< 1.6
n-Propylbenzene	NL	NL	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.77	< 0.77	< 0.77	< 0.25	< 0.25	< 0.25	< 0.77	< 0.25	< 0.25	< 0.25	< 0.25	< 0.77
Styrene	100	10	NA	NA	NA	NA	NA	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	< 0.52	< 0.52	< 0.52	< 0.45	< 0.45	< 0.45	< 0.52	< 0.45	< 0.45	< 0.45	< 0.45	< 0.52
1,1,1,2-Tetrachloroethane	70	7	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.48	< 0.48	< 0.48	< 0.33	< 0.33	< 0.33	< 0.48	< 0.33	< 0.33	< 0.33	< 0.33	< 0.48
Tetrachloroethene	5	0.5	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.74	< 0.49	< 0.49	< 0.33	< 0.33	< 0.33	< 0.49	< 0.33	< 0.33	< 0.33	< 0.33	< 0.49
Toluene	800	160	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.44	< 0.44	< 0.44	< 0.69	< 0.69	< 0.69	< 0.44	< 0.69	< 0.69	< 0.69	< 0.69	< 0.44
1,2,4-Trichlorobenzene	70	14	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 1.7	< 1.7	< 1.7	< 0.98	< 0.98	< 0.98	< 1.7	< 0.98	< 0.98	< 0.98	< 0.98	< 1.7
1,2,3-Trichlorobenzene	NL	NL	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 2.7	< 2.7	< 2.7	< 1.8	< 1.8	< 1.8	< 2.7	< 1.8	< 1.8	< 1.8	< 1.8	< 2.7
1,1,1-Trichloroethane	200	40	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.84	< 0.84	< 0.84	< 0.33	< 0.33	< 0.33	< 0.84	< 0.33	< 0.33	< 0.33	< 0.33	< 0.84
1,1,2-Trichloroethane	5	0.5	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.48	< 0.48	< 0.48	< 0.34	< 0.34	< 0.34	< 0.48	< 0.34	< 0.34	< 0.34	< 0.34	< 0.48
Trichloroethene (TCE)	5	0.5	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.47	< 0.47	< 0.47	< 0.33	< 0.33	< 0.33	< 0.47	< 0.33	< 0.33	< 0.33	< 0.33	< 0.47
Trichlorofluoromethane	NL	NL	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.87	< 0.87	< 0.87	< 0.71	< 0.71	< 0.71	< 0.87	< 0.71	< 0.71	< 0.71	< 0.71	< 0.87
1,2,3-Trichloropropane	60	12	NA	NA	NA	NA	NA	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	< 1.6	< 1.6	< 1.6	< 2.2	< 2.2	< 2.2	< 1.6	< 2.2	< 2.2	< 2.2	< 2.2	< 1.6
1,3,5-Trimethylbenzene	--	--	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.5	< 1.5	< 1.5	< 1.4	< 1.4	< 1.4	< 1.5	< 1.4	< 1.4	< 1.4	< 1.4	< 1.5
Total Trimethylbenzene	480	96	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 1.6	< 1.6	< 1.6	< 2.2	< 2.2	< 2.2	< 1.6	< 2.2	< 2.2	< 2.2	< 2.2	< 1.6
Vinyl Chloride	0.2	0.02	**0.56 J**	**0.25 J**	**0.22 J**	< 0.18	< 0.18	< 0.18	< 0.17	< 0.17	< 0.17	< 0.18	< 0.18	< 0.18	< 0.17	< 0.18	< 0.18	< 0.18	< 0.18	< 0.17
m&p-Xylene	--	--	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 2.2	< 2.2	< 2.2	< 0.69	< 0.69	< 0.69	< 2.2	< 0.69	< 0.69	< 0.69	< 0.69	< 2.2
o-Xylene	--	--	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.9	< 0.9	< 0.9	< 0.63	< 0.63	< 0.63	< 0.9	< 0.63	< 0.63	< 0.63	< 0.63	< 0.9
Total Xylenes	2,000	400	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.9	< 2.2	< 2.2	< 0.69	< 0.69	< 0.69	< 2.2	< 0.69	< 0.69	< 0.69	< 0.69	< 2.2

TABLE 2

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

			3403 CTH CR									3412 CTH CR				3422 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	2/23/15	10/13/15	10/5/16	1/3/14	8/26/14	11/10/14	3/31/16	1/6/14	5/30/14	8/25/14	11/18/14	10/5/16
Analyte	**ES[1]**	**PAL[2]**	Kitchen Sink	Kitchen Sink	Kitchen Sink	Kitchen Sink	Kitchen Sink	Kitchen Sink	Kitchen Sink	Kitchen Sink	Outside Spigot	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank
~~RCRA Metals (mg/L)~~																				
Antimony	0.006	0.0012	NA	NA	NA	NA	NA	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	NA	NA	NA	NA	NA
Barium	2	0.4	NA	NA	NA	NA	NA	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	NA	NA	NA	NA	NA
Cadmium	0.005	0.0005	NA	NA	NA	NA	NA	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	NA	NA	NA	NA	NA
Copper	1.3	0.13	NA	NA	NA	NA	NA	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	NA	NA	NA	NA	NA
Lead	0.015	0.0015	NA	NA	NA	NA	NA	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	NA	NA	NA	NA	NA
Mercury	0.002	0.0002	NA	NA	NA	NA	NA	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	NA	NA	NA	NA	NA
Selenium	0.05	0.01	NA	NA	NA	NA	NA	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	NA	NA	NA	NA	NA
Sodium	increase of 10		NA	NA	NA	NA	NA	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	NA	NA	NA	NA	NA
Zinc	5	2.5	NA	NA	NA	NA	NA	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	NA	NA	NA	NA	NA
Aroclor-1221	--	--	NA	NA	NA	NA	NA	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	NA	NA	NA	NA	NA
Aroclor-1242	--	--	NA	NA	NA	NA	NA	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	NA	NA	NA	NA	NA
Aroclor-1254	--	--	NA	NA	NA	NA	NA	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	NA	NA	NA	NA	NA
Total PCBs	0.03	0.003	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Field Screening Measurements																				
pH (IU)	--	--	7.51	7.18	7.64	7.74	NM	7.69	7.66	7.15	NM	7.02	7.98	7.95	NM	7.13	7.62	8.07	8	NM
Conductivity (uS)	--	--	935	682	1060	1094	NM	2528	2436	2361	NM	909	521	512	NM	627	605	633	653	NM
Temperature (^{o}C)	--	--	7.63	8.12	10.50	12.90	NM	11.76	6.99	16.42	NM	8.99	13.60	10.65	NM	8.81	12.30	14.20	10.56	NM
Dissolved Oxygen (ppm)	--	--	6.51	5.01	1.19	3.23	NM	1.49	5.2	1.52	NM	5.52	1.25	2.82	NM	5.32	4.07	2.53	7.38	NM
Redox Potential (mV)	--	--	166.6	32.2	84	236	NM	-219.9	-129.3	-41.4	NM	155.0	238.0	-51.5	NM	142.0	1.3	246.0	-84.2	NM

TABLE 2

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

			3504 CTH CR																3523 CTH CR		
			Original Potable Well														Replacement Potable Well				
			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)	2/23/15	10/14/15	3/31/16	3/31/2016 (DUP)	10/11/16	10/24/16	11/8/16	1/3/14	6/3/14	10/14/15
Analyte	ES[1]	PAL[2]	Outside Spigot	Basement	Basement	Basement	Basement	Basement	Basement	Basement	Basement	Basement	Basement	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	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.24	< 0.24	< 0.44
Bromobenzene	NL	NL	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.48	< 0.48	< 0.48	< 0.48	< 0.48	< 0.48	< 0.48	< 0.32	< 0.32	< 0.48
Bromochloromethane	NL	NL	NA	NA	NA	NA	NA	NA	NA	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	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.37	< 0.37	< 0.46
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	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.35	< 0.35	< 0.46
tert-Butylbenzene	NL	NL	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1	< 0.36	< 0.36	< 1.1
sec-Butylbenzene	NL	NL	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	< 0.33	< 0.33	< 1.2
n-Butylbenzene	NL	NL	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 0.35	< 0.35	< 1
Carbon Disulfide	1000	200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
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	< 0.65	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.33	< 0.33	< 0.51
Chlorobenzene	NL	NL	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.24	< 0.24	< 0.46
Chloroethane	400	80	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65	< 0.63	< 0.63	< 0.65
Chloroform	6	0.6	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.43	< 0.43	< 0.43	< 0.43	< 0.43	< 0.43	< 0.43	< 0.28	< 0.28	< 0.43
Chloromethane	3	0.3	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81	< 1.9	< 1.9	< 1.9	< 1.9	< 1.9	< 1.9	< 1.9	< 0.81	< 0.81	< 1.9
2-Chlorotoluene	NL	NL	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.21	< 0.21	< 0.4
4-Chlorotoluene	NL	NL	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.21	< 0.21	< 0.63
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	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 0.88	< 0.88	< 1.4
Dibromochloromethane	60	6	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.22	< 0.22	< 0.45
Dibromomethane	NL	NL	NA	NA	NA	NA	NA	NA	NA	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	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.3	< 0.3	< 0.49
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	< 0.52	< 0.52	< 0.52	< 0.52	< 0.52	< 0.52	< 0.52	< 0.28	< 0.28	< 0.52
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	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.36	< 0.36	< 0.46
Dichlorodifluoromethane	1000	200	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.87	< 0.87	< 0.87	< 0.87	< 0.87	< 0.87	< 0.87	< 0.44	< 0.44	< 0.87
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	< 0.54	< 0.48	< 0.48	< 0.48	< 0.48	< 0.48	< 0.48	< 0.41	< 0.41	< 0.48
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	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1	< 0.3	< 0.3	< 1.1
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	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65	< 0.4	< 0.4	< 0.65
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	1.19 J	1.27 J	0.76 J	0.91 J	1.17 J	< 0.45	< 0.45	< 0.38	< 0.38	< 0.45
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	< 0.54	< 0.54	< 0.54	< 0.54	< 0.54	< 0.54	< 0.54	< 0.35	< 0.35	< 0.54
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	< 0.43	< 0.43	< 0.43	< 0.43	< 0.43	< 0.43	< 0.43	< 0.32	< 0.32	< 0.43
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	< 3.1	< 3.1	< 3.1	< 3.1	< 3.1	< 3.1	< 3.1	< 0.36	< 0.36	< 3.1
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	< 0.42	< 0.33	< 0.33	< 0.33	< 0.42	< 0.42	< 0.42	< 0.33	< 0.33	< 0.33
1,1-Dichloropropene	NL	NL	NA	NA	NA	NA	NA	NA	NA	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	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	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	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.23	< 0.23	< 0.44
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	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.44	< 0.44	< 0.63
Ethylbenzene	700	140	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.55	< 0.55	< 0.71
Hexachlorobutadiene	NL	NL	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 1.5	< 1.5	< 2.2
Isopropylbenzene	NS	NS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.82	< 0.82	< 0.82	< 0.82	< 0.82	< 0.82	< 0.82	< 0.3	< 0.3	< 0.82
p-Isopropyltoluene	NL	NL	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1	< 0.31	< 0.31	< 1.1
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	< 1.3	< 1.3	< 1.3	< 1.3	< 1.3	< 1.3	< 1.3	< 0.5	< 0.5	< 1.3
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	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1	< 0.23	< 0.23	< 1.1
Naphthalene	100	10	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6	< 1.7	< 1.7	< 1.6
n-Propylbenzene	NL	NL	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.77	< 0.77	< 0.77	< 0.77	< 0.77	< 0.77	< 0.77	< 0.25	< 0.25	< 0.77
Styrene	100	10	NA	NA	NA	NA	NA	NA	NA	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	< 0.33	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.52	< 0.52	< 0.52	< 0.52	< 0.52	< 0.52	< 0.52	< 0.45	< 0.45	< 0.52
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	< 0.48	< 0.48	< 0.48	< 0.48	< 0.48	< 0.48	< 0.48	< 0.33	< 0.33	< 0.48
Tetrachloroethene	5	0.5	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.74	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.33	< 0.33	< 0.49
Toluene	800	160	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.69	< 0.69	< 0.44
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	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 0.98	< 0.98	< 1.7
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	< 2.7	< 2.7	< 2.7	< 2.7	< 2.7	< 2.7	< 2.7	< 1.8	< 1.8	< 2.7
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	< 0.84	< 0.84	< 0.84	< 0.84	< 0.84	< 0.84	< 0.84	< 0.33	< 0.33	< 0.84
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	< 0.48	< 0.48	< 0.48	< 0.48	< 0.48	< 0.48	< 0.48	< 0.34	< 0.34	< 0.48
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	< 0.47	< 0.47	< 0.47	< 0.47	< 0.47	< 0.47	< 0.47	< 0.33	< 0.33	< 0.47
Trichlorofluoromethane	NL	NL	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.87	< 0.87	< 0.87	< 0.87	< 0.87	< 0.87	< 0.87	< 0.71	< 0.71	< 0.87
1,2,3-Trichloropropane	60	12	NA	NA	NA	NA	NA	NA	NA	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	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6	< 2.2	< 2.2	< 1.6
1,3,5-Trimethylbenzene	--	--	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.4	< 1.4	< 1.5
Total Trimethylbenzene	480	96	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6	< 2.2	< 2.2	< 1.6
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**	**0.17 J**	< 0.17	< 0.17	< 0.17	< 0.17	< 0.17	< 0.17	< 0.18	< 0.18	< 0.17
m&p-Xylene	--	--	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 0.69	< 0.69	< 2.2
o-Xylene	--	--	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.9	< 0.9	< 0.9	< 0.9	< 0.9	< 0.9	< 0.9	< 0.63	< 0.63	< 0.9
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	< 0.9	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 0.69	< 0.69	< 2.2

TABLE 2

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

			3504 CTH CR																3523 CTH CR		
			Original Potable Well														Replacement Potable Well				
			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)	2/23/15	10/14/15	3/31/16	3/31/2016 (DUP)	10/11/16	10/24/16	11/8/16	1/3/14	6/3/14	10/14/15
Analyte	**ES[1]**	**PAL[2]**	Outside Spigot	Basement	Basement	Basement	Basement	Basement	Basement	Basement	Basement	Basement	Basement	Basement	Basement	Basement	Basement	Basement	Basement	Basement	Basement	Basement
~~RCRA Metals (mg/L)~~																						
Antimony	0.006	0.0012	NA	NA	NA	NA	NA	NA	NA	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	NA	NA	NA	NA	NA	NA	NA
Barium	2	0.4	NA	NA	NA	NA	NA	NA	NA	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	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	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	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	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	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	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	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	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	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	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	NA	NA	NA	NA	NA	NA	NA
Sodium	increase of 10		NA	NA	NA	NA	NA	NA	NA	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	NA	NA	NA	NA	NA	NA	NA
Zinc	5	2.5	NA	NA	NA	NA	NA	NA	NA	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	NA	NA	NA	NA	NA	NA	NA
Aroclor-1221	--	--	NA	NA	NA	NA	NA	NA	NA	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	NA	NA	NA	NA	NA	NA	NA
Aroclor-1242	--	--	NA	NA	NA	NA	NA	NA	NA	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	NA	NA	NA	NA	NA	NA	NA
Aroclor-1254	--	--	NA	NA	NA	NA	NA	NA	NA	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	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	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	7.92	7.5	NM	NM	NM	NM	NM	7.93	7.93	7.5
Conductivity (uS)	--	--	633	636	636	503	586	586	699	699	687	687	715	709	NM	NM	NM	NM	NM	506	506	567
Temperature (^{o}C)	--	--	12.49	9.07	9.07	11.49	12.1	12.1	13.8	13.8	9.79	9.79	8.25	12.19	NM	NM	NM	NM	NM	11.71	11.71	11.29
Dissolved Oxygen (ppm)	--	--	4.58	7.70	7.70	5.06	2.30	2.30	2.42	2.42	5.33	5.33	4.71	4.46	NM	NM	NM	NM	NM	2.96	2.96	4.69
Redox Potential (mV)	--	--	75.3	124.4	124.4	38.2	144.0	144.0	242.0	242.0	-100.7	-100.7	-122.8	-109.5	NM	NM	NM	NM	NM	187.0	187.0	-101.9

TABLE 2

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

			3533 CTH CR			3611 CTH CR		3618 CTH CR								3626 CTH CR			3627 CTH CR			3904 CTH CR	
			1/6/14	6/3/14	3/30/16	5/30/14	10/5/16	1/3/14	5/29/14	8/25/14	11/10/14	2/23/15	10/14/15	3/30/16	10/6/16	12/5/13	5/30/14	10/14/15	12/5/13	5/29/14	3/30/16	12/5/13	5/28/14
Analyte	**ES[1]**	**PAL[2]**	Basement	Basement	Basement	Outside Spigot	Outside Spigot	Kitchen Sink	Kitchen Sink	Kitchen Sink	Kitchen Sink	Kitchen Sink	Pressure Tank	Kitchen Sink	Kitchen Sink	Bathroom	Bathroom	Bathroom	Basement	Basement	Basement	Pressure Tank	Pressure Tank
Volatile Organic Compounds (VOCs) (µg/L):																							
Benzene	5	0.5	< 0.24	< 0.24	< 0.44	< 0.24	< 0.44	< 0.24	< 0.24	< 0.24	< 0.24	< 0.44	< 0.44	< 0.44	< 0.44	< 0.24	< 0.24	< 0.44	< 0.24	< 0.24	< 0.44	< 0.24	< 0.24
Bromobenzene	NL	NL	< 0.32	< 0.32	< 0.48	< 0.32	< 0.48	< 0.32	< 0.32	< 0.32	< 0.32	< 0.48	< 0.48	< 0.48	< 0.48	< 0.32	< 0.32	< 0.48	< 0.32	< 0.32	< 0.48	< 0.32	< 0.32
Bromochloromethane	NL	NL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bromodichloromethane	0.6	0.06	< 0.37	< 0.37	< 0.46	< 0.37	< 0.46	< 0.37	< 0.37	< 0.37	< 0.37	< 0.46	< 0.46	< 0.46	< 0.46	< 0.37	< 0.37	< 0.46	< 0.37	< 0.37	< 0.46	< 0.37	< 0.37
Bromoform	4.4	0.44	< 0.35	< 0.35	< 0.46	< 0.35	< 0.46	< 0.35	< 0.35	< 0.35	< 0.35	< 0.46	< 0.46	< 0.46	< 0.46	< 0.35	< 0.35	< 0.46	< 0.35	< 0.35	< 0.46	< 0.35	< 0.35
tert-Butylbenzene	NL	NL	< 0.36	< 0.36	< 1.1	< 0.36	< 1.1	< 0.36	< 0.36	< 0.36	< 0.36	< 1.1	< 1.1	< 1.1	< 1.1	< 0.36	< 0.36	< 1.1	< 0.36	< 0.36	< 1.1	< 0.36	< 0.36
sec-Butylbenzene	NL	NL	< 0.33	< 0.33	< 1.2	< 0.33	< 1.2	< 0.33	< 0.33	< 0.33	< 0.33	< 1.2	< 1.2	< 1.2	< 1.2	< 0.33	< 0.33	< 1.2	< 0.33	< 0.33	< 1.2	< 0.33	< 0.33
n-Butylbenzene	NL	NL	< 0.35	< 0.35	< 1	< 0.35	< 1	< 0.35	< 0.35	< 0.35	< 0.35	< 1	< 1	< 1	< 1	< 0.35	< 0.35	< 1	< 0.35	< 0.35	< 1	< 0.35	< 0.35
Carbon Disulfide	1000	200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Carbon Tetrachloride	5	0.5	< 0.33	< 0.33	< 0.51	< 0.33	< 0.51	< 0.33	< 0.33	< 0.33	< 0.33	< 0.65	< 0.51	< 0.51	< 0.51	< 0.33	< 0.33	< 0.51	< 0.33	< 0.33	< 0.51	< 0.33	< 0.33
Chlorobenzene	NL	NL	< 0.24	< 0.24	< 0.46	< 0.24	< 0.46	< 0.24	< 0.24	< 0.24	< 0.24	< 0.46	< 0.46	< 0.46	< 0.46	< 0.24	< 0.24	< 0.46	< 0.24	< 0.24	< 0.46	< 0.24	< 0.24
Chloroethane	400	80	< 0.63	< 0.63	< 0.65	< 0.63	< 0.65	< 0.63	< 0.63	< 0.63	< 0.63	< 0.65	< 0.65	< 0.65	< 0.65	< 0.63	< 0.63	< 0.65	< 0.63	< 0.63	< 0.65	< 0.63	< 0.63
Chloroform	6	0.6	0.28 J	0.28 J	< 0.43	< 0.28	< 0.43	< 0.28	< 0.28	< 0.28	< 0.28	< 0.43	< 0.43	< 0.43	< 0.43	< 0.28	< 0.28	< 0.43	< 0.28	< 0.28	< 0.43	< 0.28	< 0.28
Chloromethane	3	0.3	< 0.81	< 0.81	< 1.9	< 0.81	< 1.9	< 0.81	< 0.81	< 0.81	< 0.81	< 1.9	< 1.9	< 1.9	< 1.9	< 0.81	< 0.81	< 1.9	< 0.81	< 0.81	< 1.9	< 0.81	< 0.81
2-Chlorotoluene	NL	NL	< 0.21	< 0.21	< 0.4	< 0.21	< 0.4	< 0.21	< 0.21	< 0.21	< 0.21	< 0.4	< 0.4	< 0.4	< 0.4	< 0.21	< 0.21	< 0.4	< 0.21	< 0.21	< 0.4	< 0.21	< 0.21
4-Chlorotoluene	NL	NL	< 0.21	< 0.21	< 0.63	< 0.21	< 0.63	< 0.21	< 0.21	< 0.21	< 0.21	< 0.63	< 0.63	< 0.63	< 0.63	< 0.21	< 0.21	< 0.63	< 0.21	< 0.21	< 0.63	< 0.21	< 0.21
1,2-Dibromo-3-chloropropane (DBCP)	0.2	0.02	< 0.88	< 0.88	< 1.4	< 0.88	< 1.4	< 0.88	< 0.88	< 0.88	< 0.88	< 1.4	< 1.4	< 1.4	< 1.4	< 0.88	< 0.88	< 1.4	< 0.88	< 0.88	< 1.4	< 0.88	< 0.88
Dibromochloromethane	60	6	< 0.22	< 0.22	< 0.45	< 0.22	< 0.45	< 0.22	< 0.22	< 0.22	< 0.22	< 0.45	< 0.45	< 0.45	< 0.45	< 0.22	< 0.22	< 0.45	< 0.22	< 0.22	< 0.45	< 0.22	< 0.22
Dibromomethane	NL	NL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,4-Dichlorobenzene	75	15	< 0.3	< 0.3	< 0.49	< 0.3	< 0.49	< 0.3	< 0.3	< 0.3	< 0.3	< 0.49	< 0.49	< 0.49	< 0.49	< 0.3	< 0.3	< 0.49	< 0.3	< 0.3	< 0.49	< 0.3	< 0.3
1,3-Dichlorobenzene	600	120	< 0.28	< 0.28	< 0.52	< 0.28	< 0.52	< 0.28	< 0.28	< 0.28	< 0.28	< 0.52	< 0.52	< 0.52	< 0.52	< 0.28	< 0.28	< 0.52	< 0.28	< 0.28	< 0.52	< 0.28	< 0.28
1,2-Dichlorobenzene	600	60	< 0.36	< 0.36	< 0.46	< 0.36	< 0.46	< 0.36	< 0.36	< 0.36	< 0.36	< 0.46	< 0.46	< 0.46	< 0.46	< 0.36	< 0.36	< 0.46	< 0.36	< 0.36	< 0.46	< 0.36	< 0.36
Dichlorodifluoromethane	1000	200	< 0.44	< 0.44	< 0.87	< 0.44	< 0.87	< 0.44	< 0.44	< 0.44	< 0.44	< 0.87	< 0.87	< 0.87	< 0.87	< 0.44	< 0.44	< 0.87	< 0.44	< 0.44	< 0.87	< 0.44	< 0.44
1,2-Dichloroethane	5	0.5	< 0.41	< 0.41	< 0.48	< 0.41	< 0.48	< 0.41	< 0.41	< 0.41	< 0.41	< 0.54	< 0.48	< 0.48	< 0.48	< 0.41	< 0.41	< 0.48	< 0.41	< 0.41	< 0.48	< 0.41	< 0.41
1,1-Dichloroethane	850	85	< 0.3	< 0.3	< 1.1	< 0.3	< 1.1	< 0.3	< 0.3	< 0.3	< 0.3	< 1.1	< 1.1	< 1.1	< 1.1	< 0.3	< 0.3	< 1.1	< 0.3	< 0.3	< 1.1	< 0.3	< 0.3
1,1-Dichloroethene	7	0.7	< 0.4	< 0.4	< 0.65	< 0.4	< 0.65	< 0.4	< 0.4	< 0.4	< 0.4	< 0.65	< 0.65	< 0.65	< 0.65	< 0.4	< 0.4	< 0.65	< 0.4	< 0.4	< 0.65	< 0.4	< 0.4
cis-1,2-Dichloroethene	70	7	< 0.38	< 0.38	< 0.45	< 0.38	< 0.45	1.24	1.16 J	0.48 J	0.83 J	0.95 J	0.89 J	1.06 J	0.88 J	< 0.38	< 0.38	< 0.45	< 0.38	< 0.38	< 0.45	< 0.38	< 0.38
trans-1,2-Dichloroethene	100	20	< 0.35	< 0.35	< 0.54	< 0.35	< 0.54	< 0.35	< 0.35	< 0.35	< 0.35	< 0.54	< 0.54	< 0.54	< 0.54	< 0.35	< 0.35	< 0.54	< 0.35	< 0.35	< 0.54	< 0.35	< 0.35
1,2-Dichloropropane	5	0.5	< 0.32	< 0.32	< 0.43	< 0.32	< 0.43	< 0.32	< 0.32	< 0.32	< 0.32	< 0.43	< 0.43	< 0.43	< 0.43	< 0.32	< 0.32	< 0.43	< 0.32	< 0.32	< 0.43	< 0.32	< 0.32
2,2-Dichloropropane	NL	NL	< 0.36	< 0.36	< 3.1	< 0.36	< 3.1	< 0.36	< 0.36	< 0.36	< 0.36	< 3.1	< 3.1	< 3.1	< 3.1	< 0.36	< 0.36	< 3.1	< 0.36	< 0.36	< 3.1	< 0.36	< 0.36
1,3-Dichloropropane	NL	NL	< 0.33	< 0.33	< 0.33	< 0.33	< 0.42	< 0.33	< 0.33	< 0.33	< 0.33	< 0.42	< 0.33	< 0.33	< 0.42	< 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	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	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	NA	NA	NA	NA	NA	NA	NA	NA
Di-isopropyl ether	NL	NL	< 0.23	< 0.23	< 0.44	< 0.23	< 0.44	< 0.23	< 0.23	< 0.23	< 0.23	< 0.44	< 0.44	< 0.44	< 0.44	< 0.23	< 0.23	< 0.44	< 0.23	< 0.23	< 0.44	< 0.23	< 0.23
EDB (1,2-Dibromoethane)	0.05	0.005	< 0.44	< 0.44	< 0.63	< 0.44	< 0.63	< 0.44	< 0.44	< 0.44	< 0.44	< 0.63	< 0.63	< 0.63	< 0.63	< 0.44	< 0.44	< 0.63	< 0.44	< 0.44	< 0.63	< 0.44	< 0.44
Ethylbenzene	700	140	< 0.55	< 0.55	< 0.71	< 0.55	< 0.71	< 0.55	< 0.55	< 0.55	< 0.55	< 0.71	< 0.71	< 0.71	< 0.71	< 0.55	< 0.55	< 0.71	< 0.55	< 0.55	< 0.71	< 0.55	< 0.55
Hexachlorobutadiene	NL	NL	< 1.5	< 1.5	< 2.2	< 1.5	< 2.2	< 1.5	< 1.5	< 1.5	< 1.5	< 2.2	< 2.2	< 2.2	< 2.2	< 1.5	< 1.5	< 2.2	< 1.5	< 1.5	< 2.2	< 1.5	< 1.5
Isopropylbenzene	NS	NS	< 0.3	< 0.3	< 0.82	< 0.3	< 0.82	< 0.3	< 0.3	< 0.3	< 0.3	< 0.82	< 0.82	< 0.82	< 0.82	< 0.3	< 0.3	< 0.82	< 0.3	< 0.3	< 0.82	< 0.3	< 0.3
p-Isopropyltoluene	NL	NL	< 0.31	< 0.31	< 1.1	< 0.31	< 1.1	< 0.31	< 0.31	< 0.31	< 0.31	< 1.1	< 1.1	< 1.1	< 1.1	< 0.31	< 0.31	< 1.1	< 0.31	< 0.31	< 1.1	< 0.31	< 0.31
Methylene Chloride	5	0.5	< 0.5	< 0.5	< 1.3	< 0.5	< 1.3	< 0.5	< 0.5	< 0.5	< 0.5	< 1.3	< 1.3	< 1.3	< 1.3	< 0.5	< 0.5	< 1.3	< 0.5	< 0.5	< 1.3	< 0.5	< 0.5
Methyl tert-butyl ether (MTBE)	60	12	< 0.23	< 0.23	< 1.1	< 0.23	< 1.1	< 0.23	< 0.23	< 0.23	< 0.23	< 1.1	< 1.1	< 1.1	< 1.1	< 0.23	< 0.23	< 1.1	< 0.23	< 0.23	< 1.1	< 0.23	< 0.23
Naphthalene	100	10	< 1.7	< 1.7	< 1.6	< 1.7	< 1.6	< 1.7	< 1.7	< 1.7	< 1.7	< 1.6	< 1.6	< 1.6	< 1.6	< 1.7	< 1.7	< 1.6	< 1.7	< 1.7	< 1.6	< 1.7	< 1.7
n-Propylbenzene	NL	NL	< 0.25	< 0.25	< 0.77	< 0.25	< 0.77	< 0.25	< 0.25	< 0.25	< 0.25	< 0.77	< 0.77	< 0.77	< 0.77	< 0.25	< 0.25	< 0.77	< 0.25	< 0.25	< 0.77	< 0.25	< 0.25
Styrene	100	10	NA	NA	NA	NA	NA	NA	NA	NA	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	< 0.52	< 0.45	< 0.52	< 0.45	< 0.45	< 0.45	< 0.45	< 0.52	< 0.52	< 0.52	< 0.52	< 0.45	< 0.45	< 0.52	< 0.45	< 0.45	< 0.52	< 0.45	< 0.45
1,1,1,2-Tetrachloroethane	70	7	< 0.33	< 0.33	< 0.48	< 0.33	< 0.48	< 0.33	< 0.33	< 0.33	< 0.33	< 0.48	< 0.48	< 0.48	< 0.48	< 0.33	< 0.33	< 0.48	< 0.33	< 0.33	< 0.48	< 0.33	< 0.33
Tetrachloroethene	5	0.5	< 0.33	< 0.33	< 0.49	< 0.33	< 0.49	< 0.33	< 0.33	< 0.33	< 0.33	< 0.74	< 0.49	< 0.49	< 0.49	< 0.33	< 0.33	< 0.49	< 0.33	< 0.33	< 0.49	< 0.33	< 0.33
Toluene	800	160	< 0.69	< 0.69	< 0.44	< 0.69	< 0.44	< 0.69	< 0.69	< 0.69	< 0.69	< 0.44	< 0.44	< 0.44	< 0.44	< 0.69	< 0.69	< 0.44	< 0.69	< 0.69	< 0.44	< 0.69	< 0.69
1,2,4-Trichlorobenzene	70	14	< 0.98	< 0.98	< 1.7	< 0.98	< 1.7	< 0.98	< 0.98	< 0.98	< 0.98	< 1.7	< 1.7	< 1.7	< 1.7	< 0.98	< 0.98	< 1.7	< 0.98	< 0.98	< 1.7	< 0.98	< 0.98
1,2,3-Trichlorobenzene	NL	NL	< 1.8	< 1.8	< 2.7	< 1.8	< 2.7	< 1.8	< 1.8	< 1.8	< 1.8	< 2.7	< 2.7	< 2.7	< 2.7	< 1.8	< 1.8	< 2.7	< 1.8	< 1.8	< 2.7	< 1.8	< 1.8
1,1,1-Trichloroethane	200	40	< 0.33	< 0.33	< 0.84	< 0.33	< 0.84	< 0.33	< 0.33	< 0.33	< 0.33	< 0.84	< 0.84	< 0.84	< 0.84	< 0.33	< 0.33	< 0.84	< 0.33	< 0.33	< 0.84	< 0.33	< 0.33
1,1,2-Trichloroethane	5	0.5	< 0.34	< 0.34	< 0.48	< 0.34	< 0.48	< 0.34	< 0.34	< 0.34	< 0.34	< 0.48	< 0.48	< 0.48	< 0.48	< 0.34	< 0.34	< 0.48	< 0.34	< 0.34	< 0.48	< 0.34	< 0.34
Trichloroethene (TCE)	5	0.5	< 0.33	< 0.33	< 0.47	< 0.33	< 0.47	< 0.33	< 0.33	< 0.33	< 0.33	< 0.47	< 0.47	< 0.47	< 0.47	< 0.33	< 0.33	< 0.47	< 0.33	< 0.33	< 0.47	< 0.33	< 0.33
Trichlorofluoromethane	NL	NL	< 0.71	< 0.71	< 0.87	< 0.71	< 0.87	< 0.71	< 0.71	< 0.71	< 0.71	< 0.87	< 0.87	< 0.87	< 0.87	< 0.71	< 0.71	< 0.87	< 0.71	< 0.71	< 0.87	< 0.71	< 0.71
1,2,3-Trichloropropane	60	12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2,4-Trimethylbenzene	--	--	< 2.2	< 2.2	< 1.6	< 2.2	< 1.6	< 2.2	< 2.2	< 2.2	< 2.2	< 1.6	< 1.6	< 1.6	< 1.6	< 2.2	< 2.2	< 1.6	< 2.2	< 2.2	< 1.6	< 2.2	< 2.2
1,3,5-Trimethylbenzene	--	--	< 1.4	< 1.4	< 1.5	< 1.4	< 1.5	< 1.4	< 1.4	< 1.4	< 1.4	< 1.5	< 1.5	< 1.5	< 1.5	< 1.4	< 1.4	< 1.5	< 1.4	< 1.4	< 1.5	< 1.4	< 1.4
Total Trimethylbenzene	480	96	< 2.2	< 2.2	< 1.6	< 2.2	< 1.6	< 2.2	< 2.2	< 2.2	< 2.2	< 1.6	< 1.6	< 1.6	< 1.6	< 2.2	< 2.2	< 1.6	< 2.2	< 2.2	< 1.6	< 2.2	< 2.2
Vinyl Chloride	0.2	0.02	< 0.18	< 0.18	< 0.17	< 0.18	< 0.17	< 0.18	< 0.18	< 0.18	< 0.18	< 0.17	< 0.17	< 0.17	< 0.17	< 0.18	< 0.18	< 0.17	< 0.18	< 0.18	< 0.17	< 0.18	< 0.18
m&p-Xylene	--	--	< 0.69	< 0.69	< 2.2	< 0.69	< 2.2	< 0.69	< 0.69	< 0.69	< 0.69	< 2.2	< 2.2	< 2.2	< 2.2	< 0.69	< 0.69	< 2.2	< 0.69	< 0.69	< 2.2	< 0.69	< 0.69
o-Xylene	--	--	< 0.63	< 0.63	< 0.9	< 0.63	< 0.9	< 0.63	< 0.63	< 0.63	< 0.63	< 0.9	< 0.9	< 0.9	< 0.9	< 0.63	< 0.63	< 0.9	< 0.63	< 0.63	< 0.9	< 0.63	< 0.63
Total Xylenes	2,000	400	< 0.69	< 0.69	< 2.2	< 0.69	< 2.2	< 0.69	< 0.69	< 0.69	< 0.69	< 0.9	< 2.2	< 2.2	< 2.2	< 0.69	< 0.69	< 2.2	< 0.69	< 0.69	< 2.2	< 0.69	< 0.69

TABLE 2

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

			3533 CTH CR			3611 CTH CR		3618 CTH CR								3626 CTH CR			3627 CTH CR			3904 CTH CR	
			1/6/14	6/3/14	3/30/16	5/30/14	10/5/16	1/3/14	5/29/14	8/25/14	11/10/14	2/23/15	10/14/15	3/30/16	10/6/16	12/5/13	5/30/14	10/14/15	12/5/13	5/29/14	3/30/16	12/5/13	5/28/14
Analyte	**ES[1]**	**PAL[2]**	Basement	Basement	Basement	Outside Spigot	Outside Spigot	Kitchen Sink	Kitchen Sink	Kitchen Sink	Kitchen Sink	Kitchen Sink	Pressure Tank	Kitchen Sink	Kitchen Sink	Bathroom	Bathroom	Bathroom	Basement	Basement	Basement	Pressure Tank	Pressure Tank
~~RCRA Metals (mg/L)~~																							
Antimony	0.006	0.0012	NA	NA	NA	NA	NA	NA	NA	NA	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1221	--	--	NA	NA	NA	NA	NA	NA	NA	NA	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	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1242	--	--	NA	NA	NA	NA	NA	NA	NA	NA	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	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1254	--	--	NA	NA	NA	NA	NA	NA	NA	NA	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	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	NA	NA	NA	NA	NA	NA	NA	NA
Field Screening Measurements																							
pH (IU)	--	--	7.49	6.84	NM	6.98	NM	7.02	7.8	7.87	7.95	7.95	7.79	NM	NM	8,42	7.58	7.86	8.49	7.5	NM	8.05	7.88
Conductivity (uS)	--	--	739	885	NM	931	NM	543	520	658	674	674	649	NM	NM	519	500	578	655	861	NM	828	905
Temperature (^{0}C)	--	--	9.92	12.50	NM	10.30	NM	9.02	7.80	18.30	11.33	11.33	16.22	NM	NM	8.69	11.98	11.99	12.16	15.1	NM	8.43	11.5
Dissolved Oxygen (ppm)	--	--	5.91	1.85	NM	3.95	NM	5.32	2.24	0.8	1.44	1.44	1.49	NM	NM	5.73	1.83	2.52	4.92	1.46	NM	5.32	3.84
Redox Potential (mV)	--	--	157.2	138	NM	166	NM	147.6	136	238	-102.5	-102.5	-14.7	NM	NM	90.0	143.0	-110.8	91.3	152	NM	96.9	138

TABLE 2

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

Analyte	ES[1]	PAL[2]	4024 CTH CR			4101 CTH CR		4002 Thunder Ridge Rd.										4005 Thunder Ridge Rd.								
								Original Potable Well							Replacement Potable Well											
			12/12/13	5/28/14	10/6/16	5/29/14	10/14/15	1/3/14	8/25/14	10/13/15	10/13/2015 (DUP)	10/27/15	3/31/16	3/31/16 (DUP)	5/23/16	6/2/16	6/23/16	10/5/16	5/29/14	8/26/14	11/11/14	2/23/15	10/14/15	3/30/16	10/10/16	10/24/16	11/8/16
			Spigot in Barn	Spigot in Barn	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	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	< 0.44	< 0.24	< 0.44	< 0.24	< 0.24	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.24	< 0.24	< 0.24	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44
Bromobenzene	NL	NL	< 0.32	< 0.32	< 0.48	< 0.32	< 0.48	< 0.32	< 0.32	< 0.48	< 0.48	< 0.48	< 0.48	< 0.48	< 0.48	< 0.48	< 0.48	< 0.48	< 0.32	< 0.32	< 0.32	< 0.48	< 0.48	< 0.48	< 0.48	< 0.48	< 0.48
Bromochloromethane	NL	NL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bromodichloromethane	0.6	0.06	< 0.37	< 0.37	< 0.46	< 0.37	< 0.46	< 0.37	< 0.37	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.37	< 0.37	< 0.37	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46
Bromoform	4.4	0.44	< 0.35	< 0.35	< 0.46	< 0.35	< 0.46	< 0.35	< 0.35	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.35	< 0.35	< 0.35	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46
tert-Butylbenzene	NL	NL	< 0.36	< 0.36	< 1.1	< 0.36	< 1.1	< 0.36	< 0.36	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1	< 0.36	< 0.36	< 0.36	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1
sec-Butylbenzene	NL	NL	< 0.33	< 0.33	< 1.2	< 0.33	< 1.2	< 0.33	< 0.33	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	< 0.33	< 0.33	< 0.33	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2
n-Butylbenzene	NL	NL	< 0.35	< 0.35	< 1	< 0.35	< 1	< 0.35	< 0.35	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 0.35	< 0.35	< 0.35	< 1	< 1	< 1	< 1	< 1	< 1
Carbon Disulfide	1000	200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Carbon Tetrachloride	5	0.5	< 0.33	< 0.33	< 0.51	< 0.33	< 0.51	< 0.33	< 0.33	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.33	< 0.33	< 0.33	< 0.65	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51
Chlorobenzene	NL	NL	< 0.24	< 0.24	< 0.46	< 0.24	< 0.46	< 0.24	< 0.24	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.24	< 0.24	< 0.24	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46
Chloroethane	400	80	< 0.63	< 0.63	< 0.65	< 0.63	< 0.65	< 0.63	< 0.63	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65	< 0.63	< 0.63	< 0.63	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65
Chloroform	6	0.6	< 0.28	< 0.28	< 0.43	< 0.28	< 0.43	< 0.28	< 0.28	< 0.43	< 0.43	< 0.43	< 0.43	< 0.43	< 0.43	< 0.43	< 0.43	< 0.43	< 0.28	< 0.28	< 0.28	< 0.43	< 0.43	< 0.43	< 0.43	< 0.43	< 0.43
Chloromethane	3	0.3	< 0.81	< 0.81	< 1.9	< 0.81	< 1.9	< 0.81	< 0.81	< 1.9	< 1.9	< 1.9	< 1.9	< 1.9	< 1.9	< 1.9	< 1.9	< 1.9	< 0.81	< 0.81	< 0.81	< 1.9	< 1.9	< 1.9	< 1.9	< 1.9	< 1.9
2-Chlorotoluene	NL	NL	< 0.21	< 0.21	< 0.4	< 0.21	< 0.4	< 0.21	< 0.21	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.21	< 0.21	< 0.21	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4
4-Chlorotoluene	NL	NL	< 0.21	< 0.21	< 0.63	< 0.21	< 0.63	< 0.21	< 0.21	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.21	< 0.21	< 0.21	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63
1,2-Dibromo-3-chloropropane (DBCP)	0.2	0.02	< 0.88	< 0.88	< 1.4	< 0.88	< 1.4	< 0.88	< 0.88	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 0.88	< 0.88	< 0.88	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4
Dibromochloromethane	60	6	< 0.22	< 0.22	< 0.45	< 0.22	< 0.45	< 0.22	< 0.22	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.22	< 0.22	< 0.22	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45
Dibromomethane	NL	NL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,4-Dichlorobenzene	75	15	< 0.3	< 0.3	< 0.49	< 0.3	< 0.49	< 0.3	< 0.3	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.3	< 0.3	< 0.3	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49
1,3-Dichlorobenzene	600	120	< 0.28	< 0.28	< 0.52	< 0.28	< 0.52	< 0.28	< 0.28	< 0.52	< 0.52	< 0.52	< 0.52	< 0.52	< 0.52	< 0.52	< 0.52	< 0.52	< 0.28	< 0.28	< 0.28	< 0.52	< 0.52	< 0.52	< 0.52	< 0.52	< 0.52
1,2-Dichlorobenzene	600	60	< 0.36	< 0.36	< 0.46	< 0.36	< 0.46	< 0.36	< 0.36	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.36	< 0.36	< 0.36	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46
Dichlorodifluoromethane	1000	200	< 0.44	< 0.44	< 0.87	< 0.44	< 0.87	< 0.44	< 0.44	< 0.87	< 0.87	< 0.87	< 0.87	< 0.87	< 0.87	< 0.87	< 0.87	< 0.87	< 0.44	< 0.44	< 0.44	< 0.87	< 0.87	< 0.87	< 0.87	< 0.87	< 0.87
1,2-Dichloroethane	5	0.5	< 0.41	< 0.41	< 0.48	< 0.41	< 0.48	< 0.41	< 0.41	< 0.48	< 0.48	< 0.48	< 0.48	< 0.48	< 0.48	< 0.48	< 0.48	< 0.48	< 0.41	< 0.41	< 0.41	< 0.54	< 0.48	< 0.48	< 0.48	< 0.48	< 0.48
1,1-Dichloroethane	850	85	< 0.3	< 0.3	< 1.1	< 0.3	< 1.1	< 0.3	< 0.3	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1	< 0.3	< 0.3	< 0.3	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1
1,1-Dichloroethene	7	0.7	< 0.4	< 0.4	< 0.65	< 0.4	< 0.65	< 0.4	< 0.4	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65	< 0.4	< 0.4	< 0.4	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65
cis-1,2-Dichloroethene	70	7	< 0.38	< 0.38	< 0.45	< 0.38	< 0.45	1.67	1.29	1.3 J	1.14 J	1.26 J	0.68 J	1.03 J	< 0.45	< 0.45	< 0.45	< 0.45	0.83 J	0.9 J	< 0.38	0.81 J	0.91 J	0.97 J	1.35 J	1.1 J	0.66 J
trans-1,2-Dichloroethene	100	20	< 0.35	< 0.35	< 0.54	< 0.35	< 0.54	< 0.35	< 0.35	< 0.54	< 0.54	< 0.54	< 0.54	< 0.54	< 0.54	< 0.54	< 0.54	< 0.54	< 0.35	< 0.35	< 0.35	< 0.54	< 0.54	< 0.54	< 0.54	< 0.54	< 0.54
1,2-Dichloropropane	5	0.5	< 0.32	< 0.32	< 0.43	< 0.32	< 0.43	< 0.32	< 0.32	< 0.43	< 0.43	< 0.43	< 0.43	< 0.43	< 0.43	< 0.43	< 0.43	< 0.43	< 0.32	< 0.32	< 0.32	< 0.43	< 0.43	< 0.43	< 0.43	< 0.43	< 0.43
2,2-Dichloropropane	NL	NL	< 0.36	< 0.36	< 3.1	< 0.36	< 3.1	< 0.36	< 0.36	< 3.1	< 3.1	< 3.1	< 3.1	< 3.1	< 3.1	< 3.1	< 3.1	< 3.1	< 0.36	< 0.36	< 0.36	< 3.1	< 3.1	< 3.1	< 3.1	< 3.1	< 3.1
1,3-Dichloropropane	NL	NL	< 0.33	< 0.33	< 0.42	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.42	< 0.42	< 0.42	< 0.42	< 0.33	< 0.33	< 0.33	< 0.42	< 0.33	< 0.33	< 0.42	< 0.42	< 0.42
1,1-Dichloropropene	NL	NL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
cis-1,3-Dichloropropene	0.4	0.04	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
trans-1,3-Dichloropropene	0.4	0.04	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Di-isopropyl ether	NL	NL	< 0.23	< 0.23	< 0.44	< 0.23	< 0.44	< 0.23	< 0.23	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.23	< 0.23	< 0.23	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44
EDB (1,2-Dibromoethane)	0.05	0.005	< 0.44	< 0.44	< 0.63	< 0.44	< 0.63	< 0.44	< 0.44	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.44	< 0.44	< 0.44	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63
Ethylbenzene	700	140	< 0.55	< 0.55	< 0.71	< 0.55	< 0.71	< 0.55	< 0.55	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.55	< 0.55	< 0.55	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71
Hexachlorobutadiene	NL	NL	< 1.5	< 1.5	< 2.2	< 1.5	< 2.2	< 1.5	< 1.5	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 1.5	< 1.5	< 1.5	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2
Isopropylbenzene	NS	NS	< 0.3	< 0.3	< 0.82	< 0.3	< 0.82	< 0.3	< 0.3	< 0.82	< 0.82	< 0.82	< 0.82	< 0.82	< 0.82	< 0.82	< 0.82	< 0.82	< 0.3	< 0.3	< 0.3	< 0.82	< 0.82	< 0.82	< 0.82	< 0.82	< 0.82
p-Isopropyltoluene	NL	NL	< 0.31	< 0.31	< 1.1	< 0.31	< 1.1	< 0.31	< 0.31	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1	< 0.31	< 0.31	< 0.31	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1
Methylene Chloride	5	0.5	< 0.5	< 0.5	< 1.3	< 0.5	< 1.3	< 0.5	< 0.5	< 1.3	< 1.3	< 1.3	< 1.3	< 1.3	< 1.3	< 1.3	< 1.3	< 1.3	< 0.5	< 0.5	< 0.5	< 1.3	< 1.3	< 1.3	< 1.3	< 1.3	< 1.3
Methyl tert-butyl ether (MTBE)	60	12	< 0.23	< 0.23	< 1.1	< 0.23	< 1.1	< 0.23	< 0.23	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1	< 0.23	< 0.23	< 0.23	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1
Naphthalene	100	10	< 1.7	< 1.7	< 1.6	< 1.7	< 1.6	< 1.7	< 1.7	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6	< 1.7	< 1.7	< 1.7	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6
n-Propylbenzene	NL	NL	< 0.25	< 0.25	< 0.77	< 0.25	< 0.77	< 0.25	< 0.25	< 0.77	< 0.77	< 0.77	< 0.77	< 0.77	< 0.77	< 0.77	< 0.77	< 0.77	< 0.25	< 0.25	< 0.25	< 0.77	< 0.77	< 0.77	< 0.77	< 0.77	< 0.77
Styrene	100	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1,2,2-Tetrachloroethane	0.2	0.02	< 0.45	< 0.45	< 0.52	< 0.45	< 0.52	< 0.45	< 0.45	< 0.52	< 0.52	< 0.52	< 0.52	< 0.52	< 0.52	< 0.52	< 0.52	< 0.52	< 0.45	< 0.45	< 0.45	< 0.52	< 0.52	< 0.52	< 0.52	< 0.52	< 0.52
1,1,1,2-Tetrachloroethane	70	7	< 0.33	< 0.33	< 0.48	< 0.33	< 0.48	< 0.33	< 0.33	< 0.48	< 0.48	< 0.48	< 0.48	< 0.48	< 0.48	< 0.48	< 0.48	< 0.48	< 0.33	< 0.33	< 0.33	< 0.48	< 0.48	< 0.48	< 0.48	< 0.48	< 0.48
Tetrachloroethene	5	0.5	< 0.33	< 0.33	< 0.49	< 0.33	< 0.49	< 0.33	< 0.33	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.33	< 0.33	< 0.33	< 0.74	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49
Toluene	800	160	< 0.69	< 0.69	< 0.44	< 0.69	< 0.44	< 0.69	< 0.69	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.69	< 0.69	< 0.69	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44
1,2,4-Trichlorobenzene	70	14	< 0.98	< 0.98	< 1.7	< 0.98	< 1.7	< 0.98	< 0.98	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 0.98	< 0.98	< 0.98	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7
1,2,3-Trichlorobenzene	NL	NL	< 1.8	< 1.8	< 2.7	< 1.8	< 2.7	< 1.8	< 1.8	< 2.7	< 2.7	< 2.7	< 2.7	< 2.7	< 2.7	< 2.7	< 2.7	< 2.7	< 1.8	< 1.8	< 1.8	< 2.7	< 2.7	< 2.7	< 2.7	< 2.7	< 2.7
1,1,1-Trichloroethane	200	40	< 0.33	< 0.33	< 0.84	< 0.33	< 0.84	< 0.33	< 0.33	< 0.84	< 0.84	< 0.84	< 0.84	< 0.84	< 0.84	< 0.84	< 0.84	< 0.84	< 0.33	< 0.33	< 0.33	< 0.84	< 0.84	< 0.84	< 0.84	< 0.84	< 0.84
1,1,2-Trichloroethane	5	0.5	< 0.34	< 0.34	< 0.48	< 0.34	< 0.48	< 0.34	< 0.34	< 0.48	< 0.48	< 0.48	< 0.48	< 0.48	< 0.48	< 0.48	< 0.48	< 0.48	< 0.34	< 0.34	< 0.34	< 0.48	< 0.48	< 0.48	< 0.48	< 0.48	< 0.48
Trichloroethene (TCE)	5	0.5	< 0.33	< 0.33	< 0.47	< 0.33	< 0.47	< 0.33	< 0.33	< 0.47	< 0.47	< 0.47	< 0.47	< 0.47	< 0.47	< 0.47	< 0.47	< 0.47	< 0.33	< 0.33	< 0.33	< 0.47	< 0.47	< 0.47	< 0.47	< 0.47	< 0.47
Trichlorofluoromethane	NL	NL	< 0.71	< 0.71	< 0.87	< 0.71	< 0.87	< 0.71	< 0.71	< 0.87	< 0.87	< 0.87	< 0.87	< 0.87	< 0.87	< 0.87	< 0.87	< 0.87	< 0.71	< 0.71	< 0.71	< 0.87	< 0.87	< 0.87	< 0.87	< 0.87	< 0.87
1,2,3-Trichloropropane	60	12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2,4-Trimethylbenzene	--	--	< 2.2	< 2.2	< 1.6	< 2.2	< 1.6	< 2.2	< 2.2	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6	< 2.2	< 2.2	< 2.2	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6
1,3,5-Trimethylbenzene	--	--	< 1.4	< 1.4	< 1.5	< 1.4	< 1.5	< 1.4	< 1.4	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.4	< 1.4	< 1.4	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5
Total Trimethylbenzene	480	96	< 2.2	< 2.2	< 1.6	< 2.2	< 1.6	< 2.2	< 2.2	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6	< 2.2	< 2.2	< 2.2	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6
Vinyl Chloride	0.2	0.02	< 0.18	< 0.18	< 0.17	< 0.18	< 0.17	< 0.18	< 0.18	< 0.17	**0.2 J**	< 0.17	< 0.17	< 0.17	< 0.17	< 0.17	< 0.17	< 0.17	< 0.18	< 0.18	< 0.18	< 0.17	< 0.17	< 0.17	**0.29 J**	< 0.17	< 0.17
m&p-Xylene	--	--	< 0.69	< 0.69	< 2.2	< 0.69	< 2.2	< 0.69	< 0.69	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 0.69	< 0.69	< 0.69	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2
o-Xylene	--	--	< 0.63	< 0.63	< 0.9	< 0.63	< 0.9	< 0.63	< 0.63	< 0.9	< 0.9	< 0.9	< 0.9	< 0.9	< 0.9	< 0.9	< 0.9	< 0.9	< 0.63	< 0.63	< 0.63	< 0.9	< 0.9	< 0.9	< 0.9	< 0.9	< 0.9
Total Xylenes	2,000	400	< 0.69	< 0.69	< 2.2	< 0.69	< 2.2	< 0.69	< 0.69	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 0.69	< 0.69	< 0.69	< 0.9	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2

TABLE 2

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

			4024 CTH CR			4101 CTH CR		4002 Thunder Ridge Rd.											4005 Thunder Ridge Rd.								
								Original Potable Well							Replacement Potable Well												
			12/12/13	5/28/14	10/6/16	5/29/14	10/14/15	1/3/14	8/25/14	10/13/15	10/13/2015 (DUP)	10/27/15	3/31/16	3/31/16 (DUP)	5/23/16	6/2/16	6/23/16	10/5/16	5/29/14	8/26/14	11/11/14	2/23/15	10/14/15	3/30/16	10/10/16	10/24/16	11/8/16
Analyte	ES[1]	PAL[2]	Spigot in Barn	Spigot in Barn	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot
~~RCRA Metals (mg/L)~~																											
Antimony	0.006	0.0012	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Arsenic	0.01	0.001	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Barium	2	0.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Beryllium	0.004	0.0004	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium	0.005	0.0005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium	0.1	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Copper	1.3	0.13	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Iron	0.3	0.15	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead	0.015	0.0015	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese	0.05	0.025	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mercury	0.002	0.0002	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nickel	0.1	0.02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Selenium	0.05	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sliver	0.05	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sodium	increase of 10		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Thallium	0.002	0.0004	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Zinc	5	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Poychlorinated Biphenyls (PCBs) (µg/L):																											
Aroclor-1016	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1221	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1232	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1242	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1248	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1254	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1260	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total PCBs	0.03	0.003	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Field Screening Measurements																											
pH (IU)	--	--	8.32	7.65	NM	7.42	7.65	7.21	7.32	7.45	7.45	NM	NM	NM	NM	NM	NM	NM	7.75	8.06	8.00	8.06	7.23	NM	NM	NM	NM
Conductivity (uS)	--	--	599	565	NM	598	687	583	740	774	774	NM	NM	NM	NM	NM	NM	NM	663	781	774	744	778	NM	NM	NM	NM
Temperature (^{o}C)	--	--	5.6	12.3	NM	12.4	12.93	8.51	13.1	12.74	12.74	NM	NM	NM	NM	NM	NM	NM	12	14.9	9.71	8.1	10.7	NM	NM	NM	NM
Dissolved Oxygen (ppm)	--	--	4.71	1.44	NM	2.3	2.54	5.32	3.49	1.42	1.42	NM	NM	NM	NM	NM	NM	NM	1.43	1.35	1.66	8.33	4.65	NM	NM	NM	NM
Redox Potential (mV)	--	--	99	124	NM	126	-75	159.0	237.0	-135.8	-135.8	NM	NM	NM	NM	NM	NM	NM	122.0	199.0	-120.9	-195.4	-73.6	NM	NM	NM	NM

TABLE 2

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

			4010 Thunder Ridge Rd.							4027 Thunder Ridge Rd.									4101 Thunder Ridge Rd.					
			5/28/14	8/26/14	2/24/15	10/20/15	3/31/16	10/7/16	10/24/16	5/29/14	8/26/14	11/11/14	11/11/14 (DUP)	2/24/15	10/13/15	3/31/16	10/6/16	10/6/16 (DUP)	8/26/14	11/17/14	3/11/15	10/14/15	3/30/16	11/8/16
Analyte	**ES[1]**	**PAL[2]**	Outside Spigot	Outside Spigot	Pressure Tank	Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Outside Spigot	Outside Spigot	Pressure Tank	Outside Spigot	Outside Spigot	Outside Spigot
Volatile Organic Compounds (VOCs) (µg/L):																								
Benzene	5	0.5	< 0.24	< 0.24	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.24	< 0.24	< 0.24	< 0.24	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.24	< 0.24	< 0.44	< 0.44	< 0.44	< 0.44
Bromobenzene	NL	NL	< 0.32	< 0.32	< 0.48	< 0.48	< 0.48	< 0.48	< 0.48	< 0.32	< 0.32	< 0.32	< 0.32	< 0.48	< 0.48	< 0.48	< 0.48	< 0.48	< 0.32	< 0.32	< 0.48	< 0.48	< 0.48	< 0.48
Bromochloromethane	NL	NL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bromodichloromethane	0.6	0.06	< 0.37	< 0.37	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.37	< 0.37	< 0.37	< 0.37	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.37	< 0.37	< 0.46	< 0.46	< 0.46	< 0.46
Bromoform	4.4	0.44	< 0.35	< 0.35	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.35	< 0.35	< 0.35	< 0.35	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.35	< 0.35	< 0.46	< 0.46	< 0.46	< 0.46
tert-Butylbenzene	NL	NL	< 0.36	< 0.36	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1	< 0.36	< 0.36	< 0.36	< 0.36	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1	< 0.36	< 0.36	< 1.1	< 1.1	< 1.1	< 1.1
sec-Butylbenzene	NL	NL	< 0.33	< 0.33	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	< 0.33	< 0.33	< 0.33	< 0.33	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	< 0.33	< 0.33	< 1.2	< 1.2	< 1.2	< 1.2
n-Butylbenzene	NL	NL	< 0.35	< 0.35	< 1	< 1	< 1	< 1	< 1	< 0.35	< 0.35	< 0.35	< 0.35	< 1	< 1	< 1	< 1	< 1	< 0.35	< 0.35	< 1	< 1	< 1	< 1
Carbon Disulfide	1000	200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Carbon Tetrachloride	5	0.5	< 0.33	< 0.33	< 0.65	< 0.51	< 0.51	< 0.51	< 0.51	< 0.33	< 0.33	< 0.33	< 0.33	< 0.65	< 0.51	< 0.51	< 0.51	< 0.51	< 0.33	< 0.33	< 0.65	< 0.51	< 0.51	< 0.51
Chlorobenzene	NL	NL	< 0.24	< 0.24	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.24	< 0.24	< 0.24	< 0.24	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.24	< 0.24	< 0.46	< 0.46	< 0.46	< 0.46
Chloroethane	400	80	< 0.63	< 0.63	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65	< 0.63	< 0.63	< 0.63	< 0.63	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65	< 0.63	< 0.63	< 0.65	< 0.65	< 0.65	< 0.65
Chloroform	6	0.6	< 0.28	< 0.28	< 0.43	< 0.43	< 0.43	< 0.43	< 0.43	< 0.28	< 0.28	< 0.28	< 0.28	< 0.43	< 0.43	< 0.43	< 0.43	< 0.43	< 0.28	< 0.28	< 0.43	< 0.43	< 0.43	< 0.43
Chloromethane	3	0.3	< 0.81	< 0.81	< 1.9	< 1.9	< 1.9	< 1.9	< 1.9	< 0.81	< 0.81	< 0.81	< 0.81	< 1.9	< 1.9	< 1.9	< 1.9	< 1.9	< 0.81	< 0.81	< 1.9	< 1.9	< 1.9	< 1.9
2-Chlorotoluene	NL	NL	< 0.21	< 0.21	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.21	< 0.21	< 0.21	< 0.21	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.21	< 0.21	< 0.4	< 0.4	< 0.4	< 0.4
4-Chlorotoluene	NL	NL	< 0.21	< 0.21	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.21	< 0.21	< 0.21	< 0.21	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.21	< 0.21	< 0.63	< 0.63	< 0.63	< 0.63
1,2-Dibromo-3-chloropropane (DBCP)	0.2	0.02	< 0.88	< 0.88	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 0.88	< 0.88	< 0.88	< 0.88	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 0.88	< 0.88	< 1.4	< 1.4	< 1.4	< 1.4
Dibromochloromethane	60	6	< 0.22	< 0.22	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.22	< 0.22	< 0.22	< 0.22	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.22	< 0.22	< 0.45	< 0.45	< 0.45	< 0.45
Dibromomethane	NL	NL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,4-Dichlorobenzene	75	15	< 0.3	< 0.3	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.3	< 0.3	< 0.3	< 0.3	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.3	< 0.3	< 0.49	< 0.49	< 0.49	< 0.49
1,3-Dichlorobenzene	600	120	< 0.28	< 0.28	< 0.52	< 0.52	< 0.52	< 0.52	< 0.52	< 0.28	< 0.28	< 0.28	< 0.28	< 0.52	< 0.52	< 0.52	< 0.52	< 0.52	< 0.28	< 0.28	< 0.52	< 0.52	< 0.52	< 0.52
1,2-Dichlorobenzene	600	60	< 0.36	< 0.36	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.36	< 0.36	< 0.36	< 0.36	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.36	< 0.36	< 0.46	< 0.46	< 0.46	< 0.46
Dichlorodifluoromethane	1000	200	< 0.44	< 0.44	< 0.87	< 0.87	< 0.87	< 0.87	< 0.87	< 0.44	< 0.44	< 0.44	< 0.44	< 0.87	< 0.87	< 0.87	< 0.87	< 0.87	< 0.44	< 0.44	< 0.87	< 0.87	< 0.87	< 0.87
1,2-Dichloroethane	5	0.5	< 0.41	< 0.41	< 0.54	< 0.48	< 0.48	< 0.48	< 0.48	< 0.41	< 0.41	< 0.41	< 0.41	< 0.54	< 0.48	< 0.48	< 0.48	< 0.48	< 0.41	< 0.41	< 0.54	< 0.48	< 0.48	< 0.48
1,1-Dichloroethane	850	85	< 0.3	< 0.3	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1	< 0.3	< 0.3	< 0.3	< 0.3	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1	< 0.3	< 0.3	< 1.1	< 1.1	< 1.1	< 1.1
1,1-Dichloroethene	7	0.7	< 0.4	< 0.4	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65	< 0.4	< 0.4	< 0.4	< 0.4	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65	< 0.4	< 0.4	< 0.65	< 0.65	< 0.65	< 0.65
cis-1,2-Dichloroethene	70	7	1.37	1.18 J	1.43	1.27 J	1.47 J	1.27 J	1.42	0.59 J	0.52 J	0.6 J	0.53 J	0.48 J	0.67 J	0.71 J	0.77 J	0.96 J	0.73 J	0.63 J	0.76 J	0.87 J	0.71 J	1.02 J
trans-1,2-Dichloroethene	100	20	< 0.35	< 0.35	< 0.54	< 0.54	< 0.54	< 0.54	< 0.54	< 0.35	< 0.35	< 0.35	< 0.35	< 0.54	< 0.54	< 0.54	< 0.54	< 0.54	< 0.35	< 0.35	< 0.54	< 0.54	< 0.54	< 0.54
1,2-Dichloropropane	5	0.5	< 0.32	< 0.32	< 0.43	< 0.43	< 0.43	< 0.43	< 0.43	< 0.32	< 0.32	< 0.32	< 0.32	< 0.43	< 0.43	< 0.43	< 0.43	< 0.43	< 0.32	< 0.32	< 0.43	< 0.43	< 0.43	< 0.43
2,2-Dichloropropane	NL	NL	< 0.36	< 0.36	< 3.1	< 3.1	< 3.1	< 3.1	< 3.1	< 0.36	< 0.36	< 0.36	< 0.36	< 3.1	< 3.1	< 3.1	< 3.1	< 3.1	< 0.36	< 0.36	< 3.1	< 3.1	< 3.1	< 3.1
1,3-Dichloropropane	NL	NL	< 0.33	< 0.33	< 0.42	< 0.33	< 0.33	< 0.42	< 0.42	< 0.33	< 0.33	< 0.33	< 0.33	< 0.42	< 0.33	< 0.33	< 0.42	< 0.42	< 0.33	< 0.33	< 0.42	< 0.33	< 0.33	< 0.33
1,1-Dichloropropene	NL	NL	NA	NA	NA	NA	NA	NA	NA	NA	NA	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	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	NA	NA	NA	NA	NA	NA	NA	NA	NA
Di-isopropyl ether	NL	NL	< 0.23	< 0.23	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.23	< 0.23	< 0.23	< 0.23	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.23	< 0.23	< 0.44	< 0.44	< 0.44	< 0.44
EDB (1,2-Dibromoethane)	0.05	0.005	< 0.44	< 0.44	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.44	< 0.44	< 0.44	< 0.44	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.44	< 0.44	< 0.63	< 0.63	< 0.63	< 0.63
Ethylbenzene	700	140	< 0.55	< 0.55	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.55	< 0.55	< 0.55	< 0.55	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.55	< 0.55	< 0.71	< 0.71	< 0.71	< 0.71
Hexachlorobutadiene	NL	NL	< 1.5	< 1.5	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 1.5	< 1.5	< 1.5	< 1.5	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 1.5	< 1.5	< 2.2	< 2.2	< 2.2	< 2.2
Isopropylbenzene	NS	NS	< 0.3	< 0.3	< 0.82	< 0.82	< 0.82	< 0.82	< 0.82	< 0.3	< 0.3	< 0.3	< 0.3	< 0.82	< 0.82	< 0.82	< 0.82	< 0.82	< 0.3	< 0.3	< 0.82	< 0.82	< 0.82	< 0.82
p-Isopropyltoluene	NL	NL	< 0.31	< 0.31	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1	< 0.31	< 0.31	< 0.31	< 0.31	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1	< 0.31	< 0.31	< 1.1	< 1.1	< 1.1	< 1.1
Methylene Chloride	5	0.5	< 0.5	< 0.5	< 1.3	< 1.3	< 1.3	< 1.3	< 1.3	< 0.5	< 0.5	< 0.5	< 0.5	< 1.3	< 1.3	< 1.3	< 1.3	< 1.3	< 0.5	< 0.5	< 1.3	< 1.3	< 1.3	< 1.3
Methyl tert-butyl ether (MTBE)	60	12	< 0.23	< 0.23	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1	< 0.23	< 0.23	< 0.23	< 0.23	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1	< 0.23	< 0.23	< 1.1	< 1.1	< 1.1	< 1.1
Naphthalene	100	10	< 1.7	< 1.7	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6	< 1.7	< 1.7	< 1.7	< 1.7	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6	< 1.7	< 1.7	< 1.6	< 1.6	< 1.6	< 1.6
n-Propylbenzene	NL	NL	< 0.25	< 0.25	< 0.77	< 0.77	< 0.77	< 0.77	< 0.77	< 0.25	< 0.25	< 0.25	< 0.25	< 0.77	< 0.77	< 0.77	< 0.77	< 0.77	< 0.25	< 0.25	< 0.77	< 0.77	< 0.77	< 0.77
Styrene	100	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	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	< 0.52	< 0.52	< 0.52	< 0.52	< 0.52	< 0.45	< 0.45	< 0.45	< 0.45	< 0.52	< 0.52	< 0.52	< 0.52	< 0.52	< 0.45	< 0.45	< 0.52	< 0.52	< 0.52	< 0.52
1,1,1,2-Tetrachloroethane	70	7	< 0.33	< 0.33	< 0.48	< 0.48	< 0.48	< 0.48	< 0.48	< 0.33	< 0.33	< 0.33	< 0.33	< 0.48	< 0.48	< 0.48	< 0.48	< 0.48	< 0.33	< 0.33	< 0.48	< 0.48	< 0.48	< 0.48
Tetrachloroethene	5	0.5	< 0.33	< 0.33	< 0.74	< 0.49	< 0.49	< 0.49	< 0.49	< 0.33	< 0.33	< 0.33	< 0.33	< 0.74	< 0.49	< 0.49	< 0.49	< 0.49	< 0.33	< 0.33	< 0.74	< 0.49	< 0.49	< 0.49
Toluene	800	160	< 0.69	< 0.69	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.69	< 0.69	< 0.69	< 0.69	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.69	< 0.69	< 0.44	< 0.44	< 0.44	< 0.44
1,2,4-Trichlorobenzene	70	14	< 0.98	< 0.98	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 0.98	< 0.98	< 0.98	< 0.98	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 0.98	< 0.98	< 1.7	< 1.7	< 1.7	< 1.7
1,2,3-Trichlorobenzene	NL	NL	< 1.8	< 1.8	< 2.7	< 2.7	< 2.7	< 2.7	< 2.7	< 1.8	< 1.8	< 1.8	< 1.8	< 2.7	< 2.7	< 2.7	< 2.7	< 2.7	< 1.8	< 1.8	< 2.7	< 2.7	< 2.7	< 2.7
1,1,1-Trichloroethane	200	40	< 0.33	< 0.33	< 0.84	< 0.84	< 0.84	< 0.84	< 0.84	< 0.33	< 0.33	< 0.33	< 0.33	< 0.84	< 0.84	< 0.84	< 0.84	< 0.84	< 0.33	< 0.33	< 0.84	< 0.84	< 0.84	< 0.84
1,1,2-Trichloroethane	5	0.5	< 0.34	< 0.34	< 0.48	< 0.48	< 0.48	< 0.48	< 0.48	< 0.34	< 0.34	< 0.34	< 0.34	< 0.48	< 0.48	< 0.48	< 0.48	< 0.48	< 0.34	< 0.34	< 0.48	< 0.48	< 0.48	< 0.48
Trichloroethene (TCE)	5	0.5	< 0.33	< 0.33	< 0.47	< 0.47	< 0.47	< 0.47	< 0.47	< 0.33	< 0.33	< 0.33	< 0.33	< 0.47	< 0.47	< 0.47	< 0.47	< 0.47	< 0.33	< 0.33	< 0.47	< 0.47	< 0.47	< 0.47
Trichlorofluoromethane	NL	NL	< 0.71	< 0.71	< 0.87	< 0.87	< 0.87	< 0.87	< 0.87	< 0.71	< 0.71	< 0.71	< 0.71	< 0.87	< 0.87	< 0.87	< 0.87	< 0.87	< 0.71	< 0.71	< 0.87	< 0.87	< 0.87	< 0.87
1,2,3-Trichloropropane	60	12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2,4-Trimethylbenzene	--	--	< 2.2	< 2.2	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6	< 2.2	< 2.2	< 2.2	< 2.2	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6	< 2.2	< 2.2	< 1.6	< 1.6	< 1.6	< 1.6
1,3,5-Trimethylbenzene	--	--	< 1.4	< 1.4	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.4	< 1.4	< 1.4	< 1.4	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.4	< 1.4	< 1.5	< 1.5	< 1.5	< 1.5
Total Trimethylbenzene	480	96	< 2.2	< 2.2	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6	< 2.2	< 2.2	< 2.2	< 2.2	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6	< 2.2	< 2.2	< 1.6	< 1.6	< 1.6	< 1.6
Vinyl Chloride	0.2	0.02	< 0.18	< 0.18	< 0.17	< 0.17	< 0.17	**0.27 J**	**0.20 J**	< 0.18	< 0.18	< 0.18	< 0.18	< 0.17	< 0.17	< 0.17	< 0.17	< 0.17	< 0.18	< 0.18	< 0.17	< 0.17	< 0.17	< 0.17
m&p-Xylene	--	--	< 0.69	< 0.69	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 0.69	< 0.69	< 0.69	< 0.69	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 0.69	< 0.69	< 2.2	< 2.2	< 2.2	< 2.2
o-Xylene	--	--	< 0.63	< 0.63	< 0.9	< 0.9	< 0.9	< 0.9	< 0.9	< 0.63	< 0.63	< 0.63	< 0.63	< 0.9	< 0.9	< 0.9	< 0.9	< 0.9	< 0.63	< 0.63	< 0.9	< 0.9	< 0.9	< 0.9
Total Xylenes	2,000	400	< 0.69	< 0.69	< 0.9	< 2.2	< 2.2	< 2.2	< 2.2	< 0.69	< 0.69	< 0.69	< 0.69	< 0.9	< 2.2	< 2.2	< 2.2	< 2.2	< 0.69	< 0.69	< 0.9	< 2.2	< 2.2	< 2.2

TABLE 2

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

			4010 Thunder Ridge Rd.							4027 Thunder Ridge Rd.									4101 Thunder Ridge Rd.					
			5/28/14	8/26/14	2/24/15	10/20/15	3/31/16	10/7/16	10/24/16	5/29/14	8/26/14	11/11/14	11/11/14 (DUP)	2/24/15	10/13/15	3/31/16	10/6/16	10/6/16 (DUP)	8/26/14	11/17/14	3/11/15	10/14/15	3/30/16	11/8/16
Analyte	**ES[1]**	**PAL[2]**	Outside Spigot	Outside Spigot	Pressure Tank	Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Outside Spigot	Outside Spigot	Pressure Tank	Outside Spigot	Outside Spigot	Outside Spigot
~~RCRA Metals (mg/L)~~																								
Antimony	0.006	0.0012	NA	NA	NA	NA	NA	NA	NA	NA	NA	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1221	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	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	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1242	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	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	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1254	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	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	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	NA	NA	NA	NA	NA	NA	NA	NA	NA
Field Screening Measurements																								
pH (IU)	--	--	7.97	7.85	8.15	7.71	NM	NM	NM	7.52	7.43	7.95	7.95	7.94	7.25	NM	NM	NM	7.75	7.7	NM	6.91	NM	NM
Conductivity (uS)	--	--	687	742	746	0.762	NM	NM	NM	702	837	890	890	1928	820	NM	NM	NM	836	777	NM	846	NM	NM
Temperature (^{o}C)	--	--	14.2	13.3	8.83	12.79	NM	NM	NM	12	13	11.13	11.13	8.09	11.61	NM	NM	NM	15.4	9.74	NM	10.58	NM	NM
Dissolved Oxygen (ppm)	--	--	0.99	2.35	6.62	4.18	NM	NM	NM	2.1	1.96	3.25	3.25	4.48	3.29	NM	NM	NM	1.4	1.24	NM	3.21	NM	NM
Redox Potential (mV)	--	--	118.0	245.0	-158.0	-99.1	NM	NM	NM	132.0	229.0	-109.8	-109.8	-150.9	-79.9	NM	NM	NM	236.0	-33.7	NM	-66.8	NM	NM

TABLE 2

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

			4111 Thunder Ridge Rd.						4127 Thunder Ridge Rd.			3107 Fricke Dr.	3617(3621) Viebahn St.					
			8/25/14	11/17/14	2/23/15	10/13/15	3/30/16	10/10/16	12/5/13	5/29/14	3/30/16	12/5/13	11/7/14	11/19/14	2/24/15	2/2415 (DUP)	10/13/15	3/30/16
Analyte	**ES[1]**	**PAL[2]**	Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot	Pressure Tank	Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot	Well Pump	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	< 0.44	< 0.44	< 0.44	< 0.44	< 0.24	< 0.24	< 0.44	< 0.24	< 0.24	< 0.24	< 0.44	< 0.44	< 0.44	< 0.44
Bromobenzene	NL	NL	< 0.32	< 0.32	< 0.48	< 0.48	< 0.48	< 0.48	< 0.32	< 0.32	< 0.48	< 0.32	< 0.32	< 0.32	< 0.48	< 0.48	< 0.48	< 0.48
Bromochloromethane	NL	NL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bromodichloromethane	0.6	0.06	< 0.37	< 0.37	< 0.46	< 0.46	< 0.46	< 0.46	< 0.37	< 0.37	< 0.46	< 0.37	< 0.37	< 0.37	< 0.46	< 0.46	< 0.46	< 0.46
Bromoform	4.4	0.44	< 0.35	< 0.35	< 0.46	< 0.46	< 0.46	< 0.46	< 0.35	< 0.35	< 0.46	< 0.35	< 0.35	< 0.35	< 0.46	< 0.46	< 0.46	< 0.46
tert-Butylbenzene	NL	NL	< 0.36	< 0.36	< 1.1	< 1.1	< 1.1	< 1.1	< 0.36	< 0.36	< 1.1	< 0.36	< 0.36	< 0.36	< 1.1	< 1.1	< 1.1	< 1.1
sec-Butylbenzene	NL	NL	< 0.33	< 0.33	< 1.2	< 1.2	< 1.2	< 1.2	< 0.33	< 0.33	< 1.2	< 0.33	< 0.33	< 0.33	< 1.2	< 1.2	< 1.2	< 1.2
n-Butylbenzene	NL	NL	< 0.35	< 0.35	< 1	< 1	< 1	< 1	< 0.35	< 0.35	< 1	< 0.35	< 0.35	< 0.35	< 1	< 1	< 1	< 1
Carbon Disulfide	1000	200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Carbon Tetrachloride	5	0.5	< 0.33	< 0.33	< 0.65	< 0.51	< 0.51	< 0.51	< 0.33	< 0.33	< 0.51	< 0.33	< 0.33	< 0.33	< 0.65	< 0.65	< 0.51	< 0.51
Chlorobenzene	NL	NL	< 0.24	< 0.24	< 0.46	< 0.46	< 0.46	< 0.46	< 0.24	< 0.24	< 0.46	< 0.24	< 0.24	< 0.24	< 0.46	< 0.46	< 0.46	< 0.46
Chloroethane	400	80	< 0.63	< 0.63	< 0.65	< 0.65	< 0.65	< 0.65	< 0.63	< 0.63	< 0.65	< 0.63	< 0.63	< 0.63	< 0.65	< 0.65	< 0.65	< 0.65
Chloroform	6	0.6	< 0.28	< 0.28	< 0.43	< 0.43	< 0.43	< 0.43	< 0.28	< 0.28	< 0.43	< 0.28	< 0.28	< 0.28	< 0.43	< 0.43	< 0.43	< 0.43
Chloromethane	3	0.3	< 0.81	< 0.81	< 1.9	< 1.9	< 1.9	< 1.9	< 0.81	< 0.81	< 1.9	< 0.81	< 0.81	< 0.81	< 1.9	< 1.9	< 1.9	< 1.9
2-Chlorotoluene	NL	NL	< 0.21	< 0.21	< 0.4	< 0.4	< 0.4	< 0.4	< 0.21	< 0.21	< 0.4	< 0.21	< 0.21	< 0.21	< 0.4	< 0.4	< 0.4	< 0.4
4-Chlorotoluene	NL	NL	< 0.21	< 0.21	< 0.63	< 0.63	< 0.63	< 0.63	< 0.21	< 0.21	< 0.63	< 0.21	< 0.21	< 0.21	< 0.63	< 0.63	< 0.63	< 0.63
1,2-Dibromo-3-chloropropane (DBCP)	0.2	0.02	< 0.88	< 0.88	< 1.4	< 1.4	< 1.4	< 1.4	< 0.88	< 0.88	< 1.4	< 0.88	< 0.88	< 0.88	< 1.4	< 1.4	< 1.4	< 1.4
Dibromochloromethane	60	6	< 0.22	< 0.22	< 0.45	< 0.45	< 0.45	< 0.45	< 0.22	< 0.22	< 0.45	< 0.22	< 0.22	< 0.22	< 0.45	< 0.45	< 0.45	< 0.45
Dibromomethane	NL	NL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,4-Dichlorobenzene	75	15	< 0.3	< 0.3	< 0.49	< 0.49	< 0.49	< 0.49	< 0.3	< 0.3	< 0.49	< 0.3	< 0.3	< 0.3	< 0.49	< 0.49	< 0.49	< 0.49
1,3-Dichlorobenzene	600	120	< 0.28	< 0.28	< 0.52	< 0.52	< 0.52	< 0.52	< 0.28	< 0.28	< 0.52	< 0.28	< 0.28	< 0.28	< 0.52	< 0.52	< 0.52	< 0.52
1,2-Dichlorobenzene	600	60	< 0.36	< 0.36	< 0.46	< 0.46	< 0.46	< 0.46	< 0.36	< 0.36	< 0.46	< 0.36	< 0.36	< 0.36	< 0.46	< 0.46	< 0.46	< 0.46
Dichlorodifluoromethane	1000	200	< 0.44	< 0.44	< 0.87	< 0.87	< 0.87	< 0.87	< 0.44	< 0.44	< 0.87	< 0.44	< 0.44	< 0.44	< 0.87	< 0.87	< 0.87	< 0.87
1,2-Dichloroethane	5	0.5	< 0.41	< 0.41	< 0.54	< 0.48	< 0.48	< 0.48	< 0.41	< 0.41	< 0.48	< 0.41	< 0.41	< 0.41	< 0.54	< 0.54	< 0.48	< 0.48
1,1-Dichloroethane	850	85	< 0.3	< 0.3	< 1.1	< 1.1	< 1.1	< 1.1	< 0.3	< 0.3	< 1.1	< 0.3	< 0.3	< 0.3	< 1.1	< 1.1	< 1.1	< 1.1
1,1-Dichloroethene	7	0.7	< 0.4	< 0.4	< 0.65	< 0.65	< 0.65	< 0.65	< 0.4	< 0.4	< 0.65	< 0.4	< 0.4	< 0.4	< 0.65	< 0.65	< 0.65	< 0.65
cis-1,2-Dichloroethene	70	7	0.41 J	< 0.38	< 0.45	< 0.45	< 0.45	0.56 J	< 0.38	< 0.38	< 0.45	< 0.38	1.13 J	1.12 J	0.92 J	0.87 J	1.3 J	1.12 J
trans-1,2-Dichloroethene	100	20	< 0.35	< 0.35	< 0.54	< 0.54	< 0.54	< 0.54	< 0.35	< 0.35	< 0.54	< 0.35	< 0.35	< 0.35	< 0.54	< 0.54	< 0.54	< 0.54
1,2-Dichloropropane	5	0.5	< 0.32	< 0.32	< 0.43	< 0.43	< 0.43	< 0.43	< 0.32	< 0.32	< 0.43	< 0.32	< 0.32	< 0.32	< 0.43	< 0.43	< 0.43	< 0.43
2,2-Dichloropropane	NL	NL	< 0.36	< 0.36	< 3.1	< 3.1	< 3.1	< 3.1	< 0.36	< 0.36	< 3.1	< 0.36	< 0.36	< 0.36	< 3.1	< 3.1	< 3.1	< 3.1
1,3-Dichloropropane	NL	NL	< 0.33	< 0.33	< 0.42	< 0.33	< 0.33	0.42	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.42	< 0.42	< 0.33	< 0.33
1,1-Dichloropropene	NL	NL	NA	NA	NA	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	NA	NA	NA
trans-1,3-Dichloropropene	0.4	0.04	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Di-isopropyl ether	NL	NL	< 0.23	< 0.23	< 0.44	< 0.44	< 0.44	< 0.44	< 0.23	< 0.23	< 0.44	< 0.23	< 0.23	< 0.23	< 0.44	< 0.44	< 0.44	< 0.44
EDB (1,2-Dibromoethane)	0.05	0.005	< 0.44	< 0.44	< 0.63	< 0.63	< 0.63	< 0.63	< 0.44	< 0.44	< 0.63	< 0.44	< 0.44	< 0.44	< 0.63	< 0.63	< 0.63	< 0.63
Ethylbenzene	700	140	< 0.55	< 0.55	< 0.71	< 0.71	< 0.71	< 0.71	< 0.55	< 0.55	< 0.71	< 0.55	< 0.55	< 0.55	< 0.71	< 0.71	< 0.71	< 0.71
Hexachlorobutadiene	NL	NL	< 1.5	< 1.5	< 2.2	< 2.2	< 2.2	< 2.2	< 1.5	< 1.5	< 2.2	< 1.5	< 1.5	< 1.5	< 2.2	< 2.2	< 2.2	< 2.2
Isopropylbenzene	NS	NS	< 0.3	< 0.3	< 0.82	< 0.82	< 0.82	< 0.82	< 0.3	< 0.3	< 0.82	< 0.3	< 0.3	< 0.3	< 0.82	< 0.82	< 0.82	< 0.82
p-Isopropyltoluene	NL	NL	< 0.31	< 0.31	< 1.1	< 1.1	< 1.1	< 1.1	< 0.31	< 0.31	< 1.1	< 0.31	< 0.31	< 0.31	< 1.1	< 1.1	< 1.1	< 1.1
Methylene Chloride	5	0.5	< 0.5	< 0.5	< 1.3	< 1.3	< 1.3	< 1.3	< 0.5	< 0.5	< 1.3	< 0.5	< 0.5	< 0.5	< 1.3	< 1.3	< 1.3	< 1.3
Methyl tert-butyl ether (MTBE)	60	12	< 0.23	< 0.23	< 1.1	< 1.1	< 1.1	< 1.1	< 0.23	< 0.23	< 1.1	< 0.23	< 0.23	< 0.23	< 1.1	< 1.1	< 1.1	< 1.1
Naphthalene	100	10	< 1.7	< 1.7	< 1.6	< 1.6	< 1.6	< 1.6	< 1.7	< 1.7	< 1.6	< 1.7	< 1.7	< 1.7	< 1.6	< 1.6	< 1.6	< 1.6
n-Propylbenzene	NL	NL	< 0.25	< 0.25	< 0.77	< 0.77	< 0.77	< 0.77	< 0.25	< 0.25	< 0.77	< 0.25	< 0.25	< 0.25	< 0.77	< 0.77	< 0.77	< 0.77
Styrene	100	10	NA	NA	NA	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	< 0.52	< 0.52	< 0.52	< 0.52	< 0.45	< 0.45	< 0.52	< 0.45	< 0.45	< 0.45	< 0.52	< 0.52	< 0.52	< 0.52
1,1,1,2-Tetrachloroethane	70	7	< 0.33	< 0.33	< 0.48	< 0.48	< 0.48	< 0.48	< 0.33	< 0.33	< 0.48	< 0.33	< 0.33	< 0.33	< 0.48	< 0.48	< 0.48	< 0.48
Tetrachloroethene	5	0.5	< 0.33	< 0.33	< 0.74	< 0.49	< 0.49	< 0.49	< 0.33	< 0.33	< 0.49	< 0.33	< 0.33	< 0.33	< 0.74	< 0.74	< 0.49	< 0.49
Toluene	800	160	< 0.69	< 0.69	< 0.44	< 0.44	< 0.44	< 0.44	< 0.69	< 0.69	< 0.44	< 0.69	< 0.69	< 0.69	< 0.44	< 0.44	< 0.44	< 0.44
1,2,4-Trichlorobenzene	70	14	< 0.98	< 0.98	< 1.7	< 1.7	< 1.7	< 1.7	< 0.98	< 0.98	< 1.7	< 0.98	< 0.98	< 0.98	< 1.7	< 1.7	< 1.7	< 1.7
1,2,3-Trichlorobenzene	NL	NL	< 1.8	< 1.8	< 2.7	< 2.7	< 2.7	< 2.7	< 1.8	< 1.8	< 2.7	< 1.8	< 1.8	< 1.8	< 2.7	< 2.7	< 2.7	< 2.7
1,1,1-Trichloroethane	200	40	< 0.33	< 0.33	< 0.84	< 0.84	< 0.84	< 0.84	< 0.33	< 0.33	< 0.84	< 0.33	< 0.33	< 0.33	< 0.84	< 0.84	< 0.84	< 0.84
1,1,2-Trichloroethane	5	0.5	< 0.34	< 0.34	< 0.48	< 0.48	< 0.48	< 0.48	< 0.34	< 0.34	< 0.48	< 0.34	< 0.34	< 0.34	< 0.48	< 0.48	< 0.48	< 0.48
Trichloroethene (TCE)	5	0.5	< 0.33	< 0.33	< 0.47	< 0.47	< 0.47	< 0.47	< 0.33	< 0.33	< 0.47	< 0.33	< 0.33	< 0.33	< 0.47	< 0.47	< 0.47	< 0.47
Trichlorofluoromethane	NL	NL	< 0.71	< 0.71	< 0.87	< 0.87	< 0.87	< 0.87	< 0.71	< 0.71	< 0.87	< 0.71	< 0.71	< 0.71	< 0.87	< 0.87	< 0.87	< 0.87
1,2,3-Trichloropropane	60	12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2,4-Trimethylbenzene	--	--	< 2.2	< 2.2	< 1.6	< 1.6	< 1.6	< 1.6	< 2.2	< 2.2	< 1.6	< 2.2	< 2.2	< 2.2	< 1.6	< 1.6	< 1.6	< 1.6
1,3,5-Trimethylbenzene	--	--	< 1.4	< 1.4	< 1.5	< 1.5	< 1.5	< 1.5	< 1.4	< 1.4	< 1.5	< 1.4	< 1.4	< 1.4	< 1.5	< 1.5	< 1.5	< 1.5
Total Trimethylbenzene	480	96	< 2.2	< 2.2	< 1.6	< 1.6	< 1.6	< 1.6	< 2.2	< 2.2	< 1.6	< 2.2	< 2.2	< 2.2	< 1.6	< 1.6	< 1.6	< 1.6
Vinyl Chloride	0.2	0.02	< 0.18	< 0.18	< 0.17	< 0.17	< 0.17	< 0.17	< 0.18	< 0.18	< 0.17	< 0.18	**0.48 J**	**0.4 J**	< 0.17	**0.18 J**	**0.23 J**	< 0.17
m&p-Xylene	--	--	< 0.69	< 0.69	< 2.2	< 2.2	< 2.2	< 2.2	< 0.69	< 0.69	< 2.2	< 0.69	< 0.69	< 0.69	< 2.2	< 2.2	< 2.2	< 2.2
o-Xylene	--	--	< 0.63	< 0.63	< 0.9	< 0.9	< 0.9	< 0.9	< 0.63	< 0.63	< 0.9	< 0.63	< 0.63	< 0.63	< 0.9	< 0.9	< 0.9	< 0.9
Total Xylenes	2,000	400	< 0.69	< 0.69	< 0.9	< 2.2	< 2.2	< 2.2	< 0.69	< 0.69	< 2.2	< 0.69	< 0.69	< 0.69	< 0.9	< 0.9	< 2.2	< 2.2

TABLE 2

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

			4111 Thunder Ridge Rd.						4127 Thunder Ridge Rd.			3107 Fricke Dr.	3617(3621) Viebahn St.					
			8/25/14	11/17/14	2/23/15	10/13/15	3/30/16	10/10/16	12/5/13	5/29/14	3/30/16	12/5/13	11/7/14	11/19/14	2/24/15	2/2415 (DUP)	10/13/15	3/30/16
Analyte	**ES[1]**	**PAL[2]**	Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot	Pressure Tank	Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot	Well Pump	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank
~~RCRA Metals (mg/L)~~																		
Antimony	0.006	0.0012	NA	NA	NA	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	NA	NA	NA
Barium	2	0.4	NA	NA	NA	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	NA	NA	NA
Cadmium	0.005	0.0005	NA	NA	NA	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	NA	NA	NA
Copper	1.3	0.13	NA	NA	NA	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	NA	NA	NA
Lead	0.015	0.0015	NA	NA	NA	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	NA	NA	NA
Mercury	0.002	0.0002	NA	NA	NA	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	NA	NA	NA
Selenium	0.05	0.01	NA	NA	NA	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	NA	NA	NA
Sodium	increase of 10		NA	NA	NA	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	NA	NA	NA
Zinc	5	2.5	NA	NA	NA	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	NA	NA	NA
Aroclor-1221	--	--	NA	NA	NA	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	NA	NA	NA
Aroclor-1242	--	--	NA	NA	NA	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	NA	NA	NA
Aroclor-1254	--	--	NA	NA	NA	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	NA	NA	NA
Total PCBs	0.03	0.003	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Field Screening Measurements																		
pH (IU)	--	--	7.65	7.99	7.98	7.68	NM	NM	8.24	7.32	NM	7.63	8.12	7.99	8.32	8.32	7.39	NM
Conductivity (uS)	--	--	809	786	818	827	NM	NM	1033	1046	NM	561	646	590	511	511	663	NM
Temperature (^{0}C)	--	--	12.8	8.88	7.83	13.73	NM	NM	8.53	11.5	NM	8.58	10.44	9.95	9.00	9.00	12.06	NM
Dissolved Oxygen (ppm)	--	--	0.97	5.9	4.31	1.68	NM	NM	5.21	1.33	NM	5.32	3.7	1.93	3.89	3.89	1.67	NM
Redox Potential (mV)	--	--	236.0	-41.4	-155.3	-120.9	NM	NM	95.0	132.0	NM	80.3	-29.2	-147.6	-185.7	-185.7	-123.4	NM

TABLE 2

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

			3701 Viebahn St.								3815 Viebahn St.						3817 Viebahn St.					
			Original Potable Well								Original Potable Well											
Analyte	ES[1]	PAL[2]	10/29/14	11/7/14	11/7/14 (DUP)	2/23/15	2/23/15 (DUP)	10/14/15	10/14/2015 (DUP)		11/7/14	11/19/14	2/23/15	10/13/15	10/13/15 (DUP)		10/29/14	11/7/14	2/24/15	10/20/15	3/31/16	10/6/16
			Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank		Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank		Outside Spigot	Outside Spigot	Pressure Tank	Outside Spigot	Outside Spigot	Outside Spigot
Volatile Organic Compounds (VOCs) (µg/L):																						
Benzene	5	0.5	< 0.24	< 0.24	< 0.24	< 0.44	< 0.44	< 0.44	< 0.44		< 0.24	< 0.24	< 0.24	< 0.44	< 0.44		< 0.24	< 0.24	< 0.44	< 0.44	< 0.44	< 0.44
Bromobenzene	NL	NL	< 0.32	< 0.32	< 0.32	< 0.48	< 0.48	< 0.48	< 0.48		< 0.32	< 0.32	< 0.32	< 0.48	< 0.48		< 0.32	< 0.32	< 0.48	< 0.48	< 0.48	< 0.48
Bromochloromethane	NL	NL	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA
Bromodichloromethane	0.6	0.06	< 0.37	< 0.37	< 0.37	< 0.46	< 0.46	< 0.46	< 0.46		< 0.37	< 0.37	< 0.37	< 0.46	< 0.46		< 0.37	< 0.37	< 0.46	< 0.46	< 0.46	< 0.46
Bromoform	4.4	0.44	< 0.35	< 0.35	< 0.35	< 0.46	< 0.46	< 0.46	< 0.46		< 0.35	< 0.35	< 0.35	< 0.46	< 0.46		< 0.35	< 0.35	< 0.46	< 0.46	< 0.46	< 0.46
tert-Butylbenzene	NL	NL	< 0.36	< 0.36	< 0.36	< 1.1	< 1.1	< 1.1	< 1.1		< 0.36	< 0.36	< 0.36	< 1.1	< 1.1		< 0.36	< 0.36	< 1.1	< 1.1	< 1.1	< 1.1
sec-Butylbenzene	NL	NL	< 0.33	< 0.33	< 0.33	< 1.2	< 1.2	< 1.2	< 1.2		< 0.33	< 0.33	< 0.33	< 1.2	< 1.2		< 0.33	< 0.33	< 1.2	< 1.2	< 1.2	< 1.2
n-Butylbenzene	NL	NL	< 0.35	< 0.35	< 0.35	< 1	< 1	< 1	< 1		< 0.35	< 0.35	< 0.35	< 1	< 1		< 0.35	< 0.35	< 1	< 1	< 1	< 1
Carbon Disulfide	1000	200	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA
Carbon Tetrachloride	5	0.5	< 0.33	< 0.33	< 0.33	< 0.65	< 0.65	< 0.51	< 0.51		< 0.33	< 0.33	< 0.33	< 0.51	< 0.51		< 0.33	< 0.33	< 0.65	< 0.51	< 0.51	< 0.51
Chlorobenzene	NL	NL	< 0.24	< 0.24	< 0.24	< 0.46	< 0.46	< 0.46	< 0.46		< 0.24	< 0.24	< 0.24	< 0.46	< 0.46		< 0.24	< 0.24	< 0.46	< 0.46	< 0.46	< 0.46
Chloroethane	400	80	< 0.63	< 0.63	< 0.63	< 0.65	< 0.65	< 0.65	< 0.65		< 0.63	< 0.63	< 0.63	< 0.65	< 0.65		< 0.63	< 0.63	< 0.65	< 0.65	< 0.65	< 0.65
Chloroform	6	0.6	< 0.28	< 0.28	< 0.28	< 0.43	< 0.43	< 0.43	< 0.43		< 0.28	< 0.28	< 0.28	< 0.43	< 0.43		< 0.28	< 0.28	< 0.43	< 0.43	< 0.43	< 0.43
Chloromethane	3	0.3	< 0.81	< 0.81	< 0.81	< 1.9	< 1.9	< 1.9	< 1.9		< 0.81	< 0.81	< 0.81	< 1.9	< 1.9		< 0.81	< 0.81	< 1.9	< 1.9	< 1.9	< 1.9
2-Chlorotoluene	NL	NL	< 0.21	< 0.21	< 0.21	< 0.4	< 0.4	< 0.4	< 0.4		< 0.21	< 0.21	< 0.21	< 0.4	< 0.4		< 0.21	< 0.21	< 0.4	< 0.4	< 0.4	< 0.4
4-Chlorotoluene	NL	NL	< 0.21	< 0.21	< 0.21	< 0.63	< 0.63	< 0.63	< 0.63		< 0.21	< 0.21	< 0.21	< 0.63	< 0.63		< 0.21	< 0.21	< 0.63	< 0.63	< 0.63	< 0.63
1,2-Dibromo-3-chloropropane (DBCP)	0.2	0.02	< 0.88	< 0.88	< 0.88	< 1.4	< 1.4	< 1.4	< 1.4		< 0.88	< 0.88	< 0.88	< 1.4	< 1.4		< 0.88	< 0.88	< 1.4	< 1.4	< 1.4	< 1.4
Dibromochloromethane	60	6	< 0.22	< 0.22	< 0.22	< 0.45	< 0.45	< 0.45	< 0.45		< 0.22	< 0.22	< 0.22	< 0.45	< 0.45		< 0.22	< 0.22	< 0.45	< 0.45	< 0.45	< 0.45
Dibromomethane	NL	NL	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA
1,4-Dichlorobenzene	75	15	< 0.3	< 0.3	< 0.3	< 0.49	< 0.49	< 0.49	< 0.49		< 0.3	< 0.3	< 0.3	< 0.49	< 0.49		< 0.3	< 0.3	< 0.49	< 0.49	< 0.49	< 0.49
1,3-Dichlorobenzene	600	120	< 0.28	< 0.28	< 0.28	< 0.52	< 0.52	< 0.52	< 0.52		< 0.28	< 0.28	< 0.28	< 0.52	< 0.52		< 0.28	< 0.28	< 0.52	< 0.52	< 0.52	< 0.52
1,2-Dichlorobenzene	600	60	< 0.36	< 0.36	< 0.36	< 0.46	< 0.46	< 0.46	< 0.46		< 0.36	< 0.36	< 0.36	< 0.46	< 0.46		< 0.36	< 0.36	< 0.46	< 0.46	< 0.46	< 0.46
Dichlorodifluoromethane	1000	200	< 0.44	< 0.44	< 0.44	< 0.87	< 0.87	< 0.87	< 0.87		< 0.44	< 0.44	< 0.44	< 0.87	< 0.87		< 0.44	< 0.44	< 0.87	< 0.87	< 0.87	< 0.87
1,2-Dichloroethane	5	0.5	< 0.41	< 0.41	< 0.41	< 0.54	< 0.54	< 0.48	< 0.48		< 0.41	< 0.41	< 0.41	< 0.48	< 0.48		< 0.41	< 0.41	< 0.54	< 0.48	< 0.48	< 0.48
1,1-Dichloroethane	850	85	< 0.3	< 0.3	< 0.3	< 1.1	< 1.1	< 1.1	< 1.1		< 0.3	< 0.3	< 0.3	< 1.1	< 1.1		< 0.3	< 0.3	< 1.1	< 1.1	< 1.1	< 1.1
1,1-Dichloroethene	7	0.7	< 0.4	< 0.4	< 0.4	< 0.65	< 0.65	< 0.65	< 0.65		< 0.4	< 0.4	< 0.4	< 0.65	< 0.65		< 0.4	< 0.4	< 0.65	< 0.65	< 0.65	< 0.65
cis-1,2-Dichloroethene	70	7	1.23	1.18 J	1.29	1.31 J	1.09 J	1.55	1.48		0.74 J	0.94 J	0.90 J	1.0 J	1.12 J		0.4 J	0.38	0.45	0.49 J	0.45 J	0.47 J
trans-1,2-Dichloroethene	100	20	< 0.35	< 0.35	< 0.35	< 0.54	< 0.54	< 0.54	< 0.54		< 0.35	< 0.35	< 0.35	< 0.54	< 0.54		< 0.35	< 0.35	< 0.54	< 0.54	< 0.54	< 0.54
1,2-Dichloropropane	5	0.5	< 0.32	< 0.32	< 0.32	< 0.43	< 0.43	< 0.43	< 0.43		< 0.32	< 0.32	< 0.32	< 0.43	< 0.43		< 0.32	< 0.32	< 0.43	< 0.43	< 0.43	< 0.43
2,2-Dichloropropane	NL	NL	< 0.36	< 0.36	< 0.36	< 3.1	< 3.1	< 3.1	< 3.1		< 0.36	< 0.36	< 0.36	< 3.1	< 3.1		< 0.36	< 0.36	< 3.1	< 3.1	< 3.1	< 3.1
1,3-Dichloropropane	NL	NL	< 0.33	< 0.33	< 0.33	< 0.42	< 0.42	< 0.33	< 0.33		< 0.33	< 0.33	< 0.33	< 0.33	< 0.33		< 0.33	< 0.33	< 0.42	< 0.33	< 0.33	< 0.33
1,1-Dichloropropene	NL	NL	NA	NA	NA	NA	NA	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	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	NA	NA	NA	NA	NA
Di-isopropyl ether	NL	NL	< 0.23	< 0.23	< 0.23	< 0.44	< 0.44	< 0.44	< 0.44		< 0.23	< 0.23	< 0.23	< 0.44	< 0.44		< 0.23	< 0.23	< 0.44	< 0.44	< 0.44	< 0.44
EDB (1,2-Dibromoethane)	0.05	0.005	< 0.44	< 0.44	< 0.44	< 0.63	< 0.63	< 0.63	< 0.63		< 0.44	< 0.44	< 0.44	< 0.63	< 0.63		< 0.44	< 0.44	< 0.63	< 0.63	< 0.63	< 0.63
Ethylbenzene	700	140	< 0.55	< 0.55	< 0.55	< 0.71	< 0.71	< 0.71	< 0.71		< 0.55	< 0.55	< 0.55	< 0.71	< 0.71		< 0.55	< 0.55	< 0.71	< 0.71	< 0.71	< 0.71
Hexachlorobutadiene	NL	NL	< 1.5	< 1.5	< 1.5	< 2.2	< 2.2	< 2.2	< 2.2		< 1.5	< 1.5	< 1.5	< 2.2	< 2.2		< 1.5	< 1.5	< 2.2	< 2.2	< 2.2	< 2.2
Isopropylbenzene	NS	NS	< 0.3	< 0.3	< 0.3	< 0.82	< 0.82	< 0.82	< 0.82		< 0.3	< 0.3	< 0.3	< 0.82	< 0.82		< 0.3	< 0.3	< 0.82	< 0.82	< 0.82	< 0.82
p-Isopropyltoluene	NL	NL	< 0.31	< 0.31	< 0.31	< 1.1	< 1.1	< 1.1	< 1.1		< 0.31	< 0.31	< 0.31	< 1.1	< 1.1		< 0.31	< 0.31	< 1.1	< 1.1	< 1.1	< 1.1
Methylene Chloride	5	0.5	1.5 J	1.17 J	1.12 J	< 1.3	< 1.3	< 1.3	< 1.3		< 0.5	< 0.5	< 0.5	< 1.3	< 1.3		< 0.5	< 0.5	< 1.3	< 1.3	< 1.3	< 1.3
Methyl tert-butyl ether (MTBE)	60	12	< 0.23	< 0.23	< 0.23	< 1.1	< 1.1	< 1.1	< 1.1		< 0.23	< 0.23	< 0.23	< 1.1	< 1.1		< 0.23	< 0.23	< 1.1	< 1.1	< 1.1	< 1.1
Naphthalene	100	10	< 1.7	< 1.7	< 1.7	< 1.6	< 1.6	< 1.6	< 1.6		< 1.7	< 1.7	< 1.7	< 1.6	< 1.6		< 1.7	< 1.7	< 1.6	< 1.6	< 1.6	< 1.6
n-Propylbenzene	NL	NL	< 0.25	< 0.25	< 0.25	< 0.77	< 0.77	< 0.77	< 0.77		< 0.25	< 0.25	< 0.25	< 0.77	< 0.77		< 0.25	< 0.25	< 0.77	< 0.77	< 0.77	< 0.77
Styrene	100	10	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA
1,1,1,2,2-Tetrachloroethane	0.2	0.02	< 0.45	< 0.45	< 0.45	< 0.52	< 0.52	< 0.52	< 0.52		< 0.45	< 0.45	< 0.45	< 0.52	< 0.52		< 0.45	< 0.45	< 0.52	< 0.52	< 0.52	< 0.52
1,1,1,2-Tetrachloroethane	70	7	< 0.33	< 0.33	< 0.33	< 0.48	< 0.48	< 0.48	< 0.48		< 0.33	< 0.33	< 0.33	< 0.48	< 0.48		< 0.33	< 0.33	< 0.48	< 0.48	< 0.48	< 0.48
Tetrachloroethene	5	0.5	< 0.33	< 0.33	< 0.33	< 0.74	< 0.74	< 0.49	< 0.49		< 0.33	< 0.33	< 0.33	< 0.49	< 0.49		< 0.33	< 0.33	< 0.74	< 0.49	< 0.49	< 0.49
Toluene	800	160	< 0.69	< 0.69	< 0.69	< 0.44	< 0.44	< 0.44	< 0.44		< 0.69	< 0.69	< 0.69	< 0.44	< 0.44		< 0.69	< 0.69	< 0.44	< 0.44	< 0.44	< 0.44
1,2,4-Trichlorobenzene	70	14	< 0.98	< 0.98	< 0.98	< 1.7	< 1.7	< 1.7	< 1.7		< 0.98	< 0.98	< 0.98	< 1.7	< 1.7		< 0.98	< 0.98	< 1.7	< 1.7	< 1.7	< 1.7
1,2,3-Trichlorobenzene	NL	NL	< 1.8	< 1.8	< 1.8	< 2.7	< 2.7	< 2.7	< 2.7		< 1.8	< 1.8	< 1.8	< 2.7	< 2.7		< 1.8	< 1.8	< 2.7	< 2.7	< 2.7	< 2.7
1,1,1-Trichloroethane	200	40	< 0.33	< 0.33	< 0.33	< 0.84	< 0.84	< 0.84	< 0.84		< 0.33	< 0.33	< 0.33	< 0.84	< 0.84		< 0.33	< 0.33	< 0.84	< 0.84	< 0.84	< 0.84
1,1,2-Trichloroethane	5	0.5	< 0.34	< 0.34	< 0.34	< 0.48	< 0.48	< 0.48	< 0.48		< 0.34	< 0.34	< 0.34	< 0.48	< 0.48		< 0.34	< 0.34	< 0.48	< 0.48	< 0.48	< 0.48
Trichloroethene (TCE)	5	0.5	< 0.33	< 0.33	< 0.33	< 0.47	< 0.47	< 0.47	< 0.47		< 0.33	< 0.33	< 0.33	< 0.47	< 0.47		< 0.33	< 0.33	< 0.47	< 0.47	< 0.47	< 0.47
Trichlorofluoromethane	NL	NL	< 0.71	< 0.71	< 0.71	< 0.87	< 0.87	< 0.87	< 0.87		< 0.71	< 0.71	< 0.71	< 0.87	< 0.87		< 0.71	< 0.71	< 0.87	< 0.87	< 0.87	< 0.87
1,2,3-Trichloropropane	60	12	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA
1,2,4-Trimethylbenzene	--	--	< 2.2	< 2.2	< 2.2	< 1.6	< 1.6	< 1.6	< 1.6		< 2.2	< 2.2	< 2.2	< 1.6	< 1.6		< 2.2	< 2.2	< 1.6	< 1.6	< 1.6	< 1.6
1,3,5-Trimethylbenzene	--	--	< 1.4	< 1.4	< 1.4	< 1.5	< 1.5	< 1.5	< 1.5		< 1.4	< 1.4	< 1.4	< 1.5	< 1.5		< 1.4	< 1.4	< 1.5	< 1.5	< 1.5	< 1.5
Total Trimethylbenzene	480	96	< 2.2	< 2.2	< 2.2	< 1.6	< 1.6	< 1.6	< 1.6		< 2.2	< 2.2	< 2.2	< 1.6	< 1.6		< 2.2	< 2.2	< 1.6	< 1.6	< 1.6	< 1.6
Vinyl Chloride	0.2	0.02	**0.29 J**	**0.32 J**	**0.49 J**	**0.31 J**	**0.33 J**	**0.34 J**	**0.37 J**		**0.33 J**	**0.31 J**	**0.25 J**	**0.2 J**	**0.32 J**		< 0.18	< 0.18	< 0.17	< 0.17	< 0.17	< 0.17
m&p-Xylene	--	--	< 0.69	< 0.69	< 0.69	< 2.2	< 2.2	< 2.2	< 2.2		< 0.69	< 0.69	< 0.69	< 2.2	< 2.2		< 0.69	< 0.69	< 2.2	< 2.2	< 2.2	< 2.2
o-Xylene	--	--	< 0.63	< 0.63	< 0.63	< 0.9	< 0.9	< 0.9	< 0.9		< 0.63	< 0.63	< 0.63	< 0.9	< 0.9		< 0.63	< 0.63	< 0.9	< 0.9	< 0.9	< 0.9
Total Xylenes	2,000	400	< 0.69	< 0.69	< 0.69	< 0.9	< 0.9	< 2.2	< 2.2		< 0.69	< 0.69	< 0.69	< 2.2	< 2.2		< 0.69	< 0.69	< 0.9	< 2.2	< 2.2	< 2.2

Well Abandoned, City Water Provided December 2015

Well Abandoned, City Water Provided December 2015

TABLE 2

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

			3701 Viebahn St.								3815 Viebahn St.						3817 Viebahn St.					
			Original Potable Well								Original Potable Well											
Analyte	ES[1]	PAL[2]	10/29/14	11/7/14	11/7/14 (DUP)	2/23/15	2/23/15 (DUP)	10/14/15	10/14/2015 (DUP)	Well Abandoned, City Water Provided December 2015	11/7/14	11/19/14	2/23/15	10/13/15	10/13/15 (DUP)	Well Abandoned, City Water Provided December 2015	10/29/14	11/7/14	2/24/15	10/20/15	3/31/16	10/6/16
			Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank		Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank		Outside Spigot	Outside Spigot	Pressure Tank	Outside Spigot	Outside Spigot	Outside Spigot
~~RCRA Metals (mg/L)~~																						
Antimony	0.006	0.0012	NA	NA	NA	NA	NA	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	NA	NA	NA	NA	NA
Barium	2	0.4	NA	NA	NA	NA	NA	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	NA	NA	NA	NA	NA
Cadmium	0.005	0.0005	NA	NA	NA	NA	NA	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	NA	NA	NA	NA	NA
Copper	1.3	0.13	NA	NA	NA	NA	NA	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	NA	NA	NA	NA	NA
Lead	0.015	0.0015	NA	NA	NA	NA	NA	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	NA	NA	NA	NA	NA
Mercury	0.002	0.0002	NA	NA	NA	NA	NA	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	NA	NA	NA	NA	NA
Selenium	0.05	0.01	NA	NA	NA	NA	NA	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	NA	NA	NA	NA	NA
Sodium	increase of 10		NA	NA	NA	NA	NA	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	NA	NA	NA	NA	NA
Zinc	5	2.5	NA	NA	NA	NA	NA	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	NA	NA	NA	NA	NA
Aroclor-1221	--	--	NA	NA	NA	NA	NA	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	NA	NA	NA	NA	NA
Aroclor-1242	--	--	NA	NA	NA	NA	NA	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	NA	NA	NA	NA	NA
Aroclor-1254	--	--	NA	NA	NA	NA	NA	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	NA	NA	NA	NA	NA
Total PCBs	0.03	0.003	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA
Field Screening Measurements																						
pH (IU)	--	--	8.38	7.76	7.76	8.04	8.04	7.32	7.32		8.01	7.63	7.68	7.43	7.43		7.83	8.31	8.13	8.27	NM	NM
Conductivity (uS)	--	--	630	658	658	618	618	624	624		644	561	664	645	645		631	658	746	649	NM	NM
Temperature (^{0}C)	--	--	10.13	9.68	9.68	7.31	7.31	10.57	10.57		10.05	8.58	7.84	11.71	11.71		10.85	10.42	9.47	13.03	NM	NM
Dissolved Oxygen (ppm)	--	--	6.51	4.68	4.68	7.1	7.1	3.3	3.3		2.54	5.32	3.51	5.54	5.54		3.22	3.37	2.72	8.4	NM	NM
Redox Potential (mV)	--	--	-58.3	13.3	13.3	-131.9	-131.9	-90.3	-90.3		21.5	80.3	-113.7	-66.5	-66.5		-95.3	14	-158.6	-42.5	NM	NM

TABLE 2

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

			3825 Viebahn St.							4025 Viebahn St.					4101 Viebahn St.				
										Original Potable Well					Original Potable Well				
			10/29/14	11/7/14	2/23/15	2/23/15 (DUP)	10/14/15	3/31/16	10/6/16	10/29/14	11/7/14	2/24/15	10/13/15		10/29/14	11/7/15	2/24/15	10/14/15	
Analyte	ES[1]	PAL[2]	Outside Spigot	Outside Spigot	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Well Abandoned, City Water Provided December 2015	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Well Abandoned, City Water Provided December 2015
Volatile Organic Compounds (VOCs) (µg/L):																			
Benzene	5	0.5	< 0.24	< 0.24	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.24	< 0.24	< 0.44	< 0.44		< 0.24	< 0.24	< 0.44	< 0.44	
Bromobenzene	NL	NL	< 0.32	< 0.32	< 0.48	< 0.48	< 0.48	< 0.48	< 0.48	< 0.32	< 0.32	< 0.48	< 0.48		< 0.32	< 0.32	< 0.48	< 0.48	
Bromochloromethane	NL	NL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	
Bromodichloromethane	0.6	0.06	< 0.37	< 0.37	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.37	< 0.37	< 0.46	< 0.46		< 0.37	< 0.37	< 0.46	< 0.46	
Bromoform	4.4	0.44	< 0.35	< 0.35	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.35	< 0.35	< 0.46	< 0.46		< 0.35	< 0.35	< 0.46	< 0.46	
tert-Butylbenzene	NL	NL	< 0.36	< 0.36	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1	< 0.36	< 0.36	< 1.1	< 1.1		< 0.36	< 0.36	< 1.1	< 1.1	
sec-Butylbenzene	NL	NL	< 0.33	< 0.33	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	< 0.33	< 0.33	< 1.2	< 1.2		< 0.33	< 0.33	< 1.2	< 1.2	
n-Butylbenzene	NL	NL	< 0.35	< 0.35	< 1	< 1	< 1	< 1	< 1	< 0.35	< 0.35	< 1	< 1		< 0.35	< 0.35	< 1	< 1	
Carbon Disulfide	1000	200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	
Carbon Tetrachloride	5	0.5	< 0.33	< 0.33	< 0.65	< 0.65	< 0.51	< 0.51	< 0.51	< 0.33	< 0.33	< 0.65	< 0.51		< 0.33	< 0.33	< 0.65	< 0.51	
Chlorobenzene	NL	NL	< 0.24	< 0.24	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.24	< 0.24	< 0.46	< 0.46		< 0.24	< 0.24	< 0.46	< 0.46	
Chloroethane	400	80	< 0.63	< 0.63	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65	< 0.63	< 0.63	< 0.65	< 0.65		< 0.63	< 0.63	< 0.65	< 0.65	
Chloroform	6	0.6	< 0.28	< 0.28	< 0.43	< 0.43	< 0.43	< 0.43	< 0.43	< 0.28	< 0.28	< 0.43	< 0.43		< 0.28	< 0.28	< 0.43	< 0.43	
Chloromethane	3	0.3	< 0.81	< 0.81	< 1.9	< 1.9	< 1.9	< 1.9	< 1.9	< 0.81	< 0.81	< 1.9	< 1.9		< 0.81	< 0.81	< 1.9	< 1.9	
2-Chlorotoluene	NL	NL	< 0.21	< 0.21	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.21	< 0.21	< 0.4	< 0.4		< 0.21	< 0.21	< 0.4	< 0.4	
4-Chlorotoluene	NL	NL	< 0.21	< 0.21	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.21	< 0.21	< 0.63	< 0.63		< 0.21	< 0.21	< 0.63	< 0.63	
1,2-Dibromo-3-chloropropane (DBCP)	0.2	0.02	< 0.88	< 0.88	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 0.88	< 0.88	< 1.4	< 1.4		< 0.88	< 0.88	< 1.4	< 1.4	
Dibromochloromethane	60	6	< 0.22	< 0.22	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.22	< 0.22	< 0.45	< 0.45		< 0.22	< 0.22	< 0.45	< 0.45	
Dibromomethane	NL	NL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	
1,4-Dichlorobenzene	75	15	< 0.3	< 0.3	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.3	< 0.3	< 0.49	< 0.49		< 0.3	< 0.3	< 0.49	< 0.49	
1,3-Dichlorobenzene	600	120	< 0.28	< 0.28	< 0.52	< 0.52	< 0.52	< 0.52	< 0.52	< 0.28	< 0.28	< 0.52	< 0.52		< 0.28	< 0.28	< 0.52	< 0.52	
1,2-Dichlorobenzene	600	60	< 0.36	< 0.36	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.36	< 0.36	< 0.46	< 0.46		< 0.36	< 0.36	< 0.46	< 0.46	
Dichlorodifluoromethane	1000	200	< 0.44	< 0.44	< 0.87	< 0.87	< 0.87	< 0.87	< 0.87	< 0.44	< 0.44	< 0.87	< 0.87		< 0.44	< 0.44	< 0.87	< 0.87	
1,2-Dichloroethane	5	0.5	< 0.41	< 0.41	< 0.54	< 0.54	< 0.48	< 0.48	< 0.48	< 0.41	< 0.41	< 0.54	< 0.48		< 0.41	< 0.41	< 0.54	< 0.48	
1,1-Dichloroethane	850	85	< 0.3	< 0.3	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1	< 0.3	< 0.3	< 1.1	< 1.1		< 0.3	< 0.3	< 1.1	< 1.1	
1,1-Dichloroethene	7	0.7	< 0.4	< 0.4	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65	< 0.4	< 0.4	< 0.65	< 0.65		< 0.4	< 0.4	< 0.65	< 0.65	
cis-1,2-Dichloroethene	70	7	< 0.38	< 0.38	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	1.38	1.46	1.11 J	1.85		1.48	1.13 J	1.24 J	1.59 J	
trans-1,2-Dichloroethene	100	20	< 0.35	< 0.35	< 0.54	< 0.54	< 0.54	< 0.54	< 0.54	< 0.35	< 0.35	< 0.54	< 0.54		< 0.35	< 0.35	< 0.54	< 0.54	
1,2-Dichloropropane	5	0.5	< 0.32	< 0.32	< 0.43	< 0.43	< 0.43	< 0.43	< 0.43	< 0.32	< 0.32	< 0.43	< 0.43		< 0.32	< 0.32	< 0.43	< 0.43	
2,2-Dichloropropane	NL	NL	< 0.36	< 0.36	< 3.1	< 3.1	< 3.1	< 3.1	< 3.1	< 0.36	< 0.36	< 3.1	< 3.1		< 0.36	< 0.36	< 3.1	< 3.1	
1,3-Dichloropropane	NL	NL	< 0.33	< 0.33	< 0.42	< 0.42	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.42	< 0.33		< 0.33	< 0.33	< 0.42	< 0.33	
1,1-Dichloropropene	NL	NL	NA	NA	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	NA	NA	
trans-1,3-Dichloropropene	0.4	0.04	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	
Di-isopropyl ether	NL	NL	< 0.23	< 0.23	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.23	< 0.23	< 0.44	< 0.44		< 0.23	< 0.23	< 0.44	< 0.44	
EDB (1,2-Dibromoethane)	0.05	0.005	< 0.44	< 0.44	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.44	< 0.44	< 0.63	< 0.63		< 0.44	< 0.44	< 0.63	< 0.63	
Ethylbenzene	700	140	< 0.55	< 0.55	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.55	< 0.55	< 0.71	< 0.71		< 0.55	< 0.55	< 0.71	< 0.71	
Hexachlorobutadiene	NL	NL	< 1.5	< 1.5	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 1.5	< 1.5	< 2.2	< 2.2		< 1.5	< 1.5	< 2.2	< 2.2	
Isopropylbenzene	NS	NS	< 0.3	< 0.3	< 0.82	< 0.82	< 0.82	< 0.82	< 0.82	< 0.3	< 0.3	< 0.82	< 0.82		< 0.3	< 0.3	< 0.82	< 0.82	
p-Isopropyltoluene	NL	NL	< 0.31	< 0.31	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1	< 0.31	< 0.31	< 1.1	< 1.1		< 0.31	< 0.31	< 1.1	< 1.1	
Methylene Chloride	5	0.5	< 0.5	< 0.5	< 1.3	< 1.3	< 1.3	< 1.3	< 1.3	< 0.5	< 0.5	< 1.3	< 1.3		< 0.5	< 0.5	< 1.3	< 1.3	
Methyl tert-butyl ether (MTBE)	60	12	< 0.23	< 0.23	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1	< 0.23	< 0.23	< 1.1	< 1.1		< 0.23	< 0.23	< 1.1	< 1.1	
Naphthalene	100	10	< 1.7	< 1.7	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6	< 1.7	< 1.7	< 1.6	< 1.6		< 1.7	< 1.7	< 1.6	< 1.6	
n-Propylbenzene	NL	NL	< 0.25	< 0.25	< 0.77	< 0.77	< 0.77	< 0.77	< 0.77	< 0.25	< 0.25	< 0.77	< 0.77		< 0.25	< 0.25	< 0.77	< 0.77	
Styrene	100	10	NA	NA	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	< 0.52	< 0.52	< 0.52	< 0.52	< 0.52	< 0.45	< 0.45	< 0.52	< 0.52		< 0.45	< 0.45	< 0.52	< 0.52	
1,1,1,2-Tetrachloroethane	70	7	< 0.33	< 0.33	< 0.48	< 0.48	< 0.48	< 0.48	< 0.48	< 0.33	< 0.33	< 0.48	< 0.48		< 0.33	< 0.33	< 0.48	< 0.48	
Tetrachloroethene	5	0.5	< 0.33	< 0.33	< 0.74	< 0.74	< 0.49	< 0.49	< 0.49	< 0.33	< 0.33	< 0.74	< 0.49		< 0.33	< 0.33	< 0.74	< 0.49	
Toluene	800	160	< 0.69	< 0.69	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	0.95 J	< 0.69	< 0.44	< 0.44		< 0.69	< 0.69	< 0.44	< 0.44	
1,2,4-Trichlorobenzene	70	14	< 0.98	< 0.98	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 0.98	< 0.98	< 1.7	< 1.7		< 0.98	< 0.98	< 1.7	< 1.7	
1,2,3-Trichlorobenzene	NL	NL	< 1.8	< 1.8	< 2.7	< 2.7	< 2.7	< 2.7	< 2.7	< 1.8	< 1.8	< 2.7	< 2.7		< 1.8	< 1.8	< 2.7	< 2.7	
1,1,1-Trichloroethane	200	40	< 0.33	< 0.33	< 0.84	< 0.84	< 0.84	< 0.84	< 0.84	< 0.33	< 0.33	< 0.84	< 0.84		< 0.33	< 0.33	< 0.84	< 0.84	
1,1,2-Trichloroethane	5	0.5	< 0.34	< 0.34	< 0.48	< 0.48	< 0.48	< 0.48	< 0.48	< 0.34	< 0.34	< 0.48	< 0.48		< 0.34	< 0.34	< 0.48	< 0.48	
Trichloroethene (TCE)	5	0.5	< 0.33	< 0.33	< 0.47	< 0.47	< 0.47	< 0.47	< 0.47	< 0.33	< 0.33	< 0.47	< 0.47		< 0.33	< 0.33	< 0.47	< 0.47	
Trichlorofluoromethane	NL	NL	< 0.71	< 0.71	< 0.87	< 0.87	< 0.87	< 0.87	< 0.87	< 0.71	< 0.71	< 0.87	< 0.87		< 0.71	< 0.71	< 0.87	< 0.87	
1,2,3-Trichloropropane	60	12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	
1,2,4-Trimethylbenzene	--	--	< 2.2	< 2.2	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6	< 2.2	< 2.2	< 1.6	< 1.6		< 2.2	< 2.2	< 1.6	< 1.6	
1,3,5-Trimethylbenzene	--	--	< 1.4	< 1.4	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.4	< 1.4	< 1.5	< 1.5		< 1.4	< 1.4	< 1.5	< 1.5	
Total Trimethylbenzene	480	96	< 2.2	< 2.2	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6	< 2.2	< 2.2	< 1.6	< 1.6		< 2.2	< 2.2	< 1.6	< 1.6	
Vinyl Chloride	0.2	0.02	< 0.18	< 0.18	< 0.17	< 0.17	< 0.17	< 0.17	< 0.17	**0.34 J**	**0.31 J**	**0.32 J**	**0.44 J**		**0.38 J**	**0.39 J**	**0.43 J**	**0.54**	
m&p-Xylene	--	--	< 0.69	< 0.69	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 0.69	< 0.69	< 2.2	< 2.2		< 0.69	< 0.69	< 2.2	< 2.2	
o-Xylene	--	--	< 0.63	< 0.63	< 0.9	< 0.9	< 0.9	< 0.9	< 0.9	< 0.63	< 0.63	< 0.9	< 0.9		< 0.63	< 0.63	< 0.9	< 0.9	
Total Xylenes	2,000	400	< 0.69	< 0.69	< 0.9	< 0.9	< 2.2	< 2.2	< 2.2	< 0.69	< 0.69	< 0.9	< 2.2		< 0.69	< 0.69	< 0.9	< 2.2	

TABLE 2

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

			3825 Viebahn St.							4025 Viebahn St.					4101 Viebahn St.				
										Original Potable Well					Original Potable Well				
			10/29/14	11/7/14	2/23/15	2/23/15 (DUP)	10/14/15	3/31/16	10/6/16	10/29/14	11/7/14	2/24/15	10/13/15		10/29/14	11/7/15	2/24/15	10/14/15	
Analyte	ES[1]	PAL[2]	Outside Spigot	Outside Spigot	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Well Abandoned, City Water Provided December 2015	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Well Abandoned, City Water Provided December 2015
~~RCRA Metals (mg/L)~~																			
Antimony	0.006	0.0012	NA	NA	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	NA	NA	
Barium	2	0.4	NA	NA	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	NA	NA	
Cadmium	0.005	0.0005	NA	NA	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	NA	NA	
Copper	1.3	0.13	NA	NA	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	NA	NA	
Lead	0.015	0.0015	NA	NA	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	NA	NA	
Mercury	0.002	0.0002	NA	NA	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	NA	NA	
Selenium	0.05	0.01	NA	NA	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	NA	NA	
Sodium	increase of 10		NA	NA	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	NA	NA	
Zinc	5	2.5	NA	NA	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	NA	NA	
Aroclor-1221	--	--	NA	NA	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	NA	NA	
Aroclor-1242	--	--	NA	NA	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	NA	NA	
Aroclor-1254	--	--	NA	NA	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	NA	NA	
Total PCBs	0.03	0.003	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	
Field Screening Measurements																			
pH (IU)	--	--	7.87	8.21	8.03	8.03	7.67	NM	NM	7.87	8.03	7.92	7.35		7.79	7.99	8.04	7.51	
Conductivity (uS)	--	--	674	668	670	670	655	NM	NM	824	629	628	630		644	627	653	624	
Temperature (^{0}C)	--	--	10.27	9.86	7.43	7.43	12.83	NM	NM	10.89	10.23	8.86	11.43		11.17	10.87	8.99	12.21	
Dissolved Oxygen (ppm)	--	--	2.94	6.05	4.32	4.32	1.16	NM	NM	2.45	3.11	4.78	2.38		2.31	3.21	4.05	2.11	
Redox Potential (mV)	--	--	-104.5	-21.3	-120.7	-120.7	-116.2	NM	NM	-104.9	-2.2	-126.9	-86.3		-91.1	-22.3	-151.7	-114.3	

TABLE 2

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

			4219 Viebahn St.		5107 Viebahn St.	3609 M&M Ln.		3027 Orchard Ln.								3128 Orchard Ln.			3318 Orchard Ln.		3420 Orchard Ln.		
			9/8/14	10/27/15	12/5/13	12/4/13	12/16/13	2/5/14	6/4/14	8/28/14	11/11/14	3/11/15	10/14/15	3/31/16	10/6/16	2/4/14	6/4/14	10/14/15	7/11/14	10/24/16	2/4/14	6/2/14	10/6/16
Analyte	ES[1]	PAL[2]	Outside Spigot	Outside Spigot	Well Pump	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Outside Spigot	Outside Spigot	Kitchen Sink	Kitchen Sink	Outside Spigot
Volatile Organic Compounds (VOCs) (µg/L):																							
Benzene	5	0.5	< 0.24	< 0.44	< 0.24	< 0.15	< 0.15	< 0.24	< 0.24	< 0.24	< 0.24	< 0.44	< 0.44	< 0.44	< 0.44	< 0.24	< 0.24	< 0.44	< 0.24	< 0.44	< 0.24	< 0.24	< 0.44
Bromobenzene	NL	NL	< 0.32	< 0.48	< 0.32	< 0.15	< 0.15	< 0.32	< 0.32	< 0.32	< 0.32	< 0.48	< 0.48	< 0.48	< 0.48	< 0.32	< 0.32	< 0.48	< 0.32	< 0.48	< 0.32	< 0.32	< 0.48
Bromochloromethane	NL	NL	NA	NA	NA	< 0.15	< 0.15	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bromodichloromethane	0.6	0.06	< 0.37	< 0.46	< 0.37	< 0.15	< 0.15	< 0.37	< 0.37	< 0.37	< 0.37	< 0.46	< 0.46	< 0.46	< 0.46	< 0.37	< 0.37	< 0.46	< 0.37	< 0.46	< 0.37	< 0.37	< 0.46
Bromoform	4.4	0.44	< 0.35	< 0.46	< 0.35	< 0.15	< 0.15	< 0.35	< 0.35	< 0.35	< 0.35	< 0.46	< 0.46	< 0.46	< 0.46	< 0.35	< 0.35	< 0.46	< 0.35	< 0.46	< 0.35	< 0.35	< 0.46
tert-Butylbenzene	NL	NL	< 0.36	< 1.1	< 0.36	< 0.15	< 0.15	< 0.36	< 0.36	< 0.36	< 0.36	< 1.1	< 1.1	< 1.1	< 1.1	< 0.36	< 0.36	< 1.1	< 0.36	< 1.1	< 0.36	< 0.36	< 1.1
sec-Butylbenzene	NL	NL	< 0.33	< 1.2	< 0.33	< 0.15	< 0.15	< 0.33	< 0.33	< 0.33	< 0.33	< 1.2	< 1.2	< 1.2	< 1.2	< 0.33	< 0.33	< 1.2	< 0.33	< 1.2	< 0.33	< 0.33	< 1.2
n-Butylbenzene	NL	NL	< 0.35	< 1	< 0.35	< 0.15	< 0.15	< 0.35	< 0.35	< 0.35	< 0.35	< 1	< 1	< 1	< 1	< 0.35	< 0.35	< 1	< 0.35	< 1	< 0.35	< 0.35	< 1
Carbon Disulfide	1000	200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Carbon Tetrachloride	5	0.5	< 0.33	< 0.51	< 0.33	< 0.15	< 0.15	< 0.33	< 0.33	< 0.33	< 0.33	< 0.65	< 0.51	< 0.51	< 0.51	< 0.33	< 0.33	< 0.51	< 0.33	< 0.51	< 0.33	< 0.33	< 0.51
Chlorobenzene	NL	NL	< 0.24	< 0.46	< 0.24	< 0.15	< 0.15	< 0.24	< 0.24	< 0.24	< 0.24	< 0.46	< 0.46	< 0.46	< 0.46	< 0.24	< 0.24	< 0.46	< 0.24	< 0.46	< 0.24	< 0.24	< 0.46
Chloroethane	400	80	< 0.63	< 0.65	< 0.63	< 0.15	< 0.15	< 0.63	< 0.63	< 0.63	< 0.63	< 0.65	< 0.65	< 0.65	< 0.65	< 0.63	< 0.63	< 0.65	< 0.63	< 0.65	< 0.63	< 0.63	< 0.65
Chloroform	6	0.6	< 0.28	< 0.43	< 0.28	< 0.15	< 0.15	< 0.28	< 0.28	< 0.28	< 0.28	< 0.43	< 0.43	< 0.43	< 0.43	< 0.28	< 0.28	< 0.43	< 0.28	< 0.43	< 0.28	< 0.28	< 0.43
Chloromethane	3	0.3	< 0.81	< 1.9	< 0.81	< 0.15	< 0.15	< 0.81	< 0.81	< 0.81	< 0.81	< 1.9	< 1.9	< 1.9	< 1.9	< 0.81	< 0.81	< 1.9	< 0.81	< 1.9	< 0.81	< 0.81	< 1.9
2-Chlorotoluene	NL	NL	< 0.21	< 0.4	< 0.21	< 0.15	< 0.15	< 0.21	< 0.21	< 0.21	< 0.21	< 0.4	< 0.4	< 0.4	< 0.4	< 0.21	< 0.21	< 0.4	< 0.21	< 0.4	< 0.21	< 0.21	< 0.4
4-Chlorotoluene	NL	NL	< 0.21	< 0.63	< 0.21	< 0.15	< 0.15	< 0.21	< 0.21	< 0.21	< 0.21	< 0.63	< 0.63	< 0.63	< 0.63	< 0.21	< 0.21	< 0.63	< 0.21	< 0.63	< 0.21	< 0.21	< 0.63
1,2-Dibromo-3-chloropropane (DBCP)	0.2	0.02	< 0.88	< 1.4	< 0.88	< 0.20	< 0.20	< 0.88	< 0.88	< 0.88	< 0.88	< 1.4	< 1.4	< 1.4	< 1.4	< 0.88	< 0.88	< 1.4	< 0.88	< 1.4	< 0.88	< 0.88	< 1.4
Dibromochloromethane	60	6	< 0.22	< 0.45	< 0.22	< 0.15	< 0.15	< 0.22	< 0.22	< 0.22	< 0.22	< 0.45	< 0.45	< 0.45	< 0.45	< 0.22	< 0.22	< 0.45	< 0.22	< 0.45	< 0.22	< 0.22	< 0.45
Dibromomethane	NL	NL	NA	NA	NA	< 0.15	< 0.15	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,4-Dichlorobenzene	75	15	< 0.3	< 0.49	< 0.3	< 0.15	< 0.15	< 0.3	< 0.3	< 0.3	< 0.3	< 0.49	< 0.49	< 0.49	< 0.49	< 0.3	< 0.3	< 0.49	< 0.3	< 0.49	< 0.3	< 0.3	< 0.49
1,3-Dichlorobenzene	600	120	< 0.28	< 0.52	< 0.28	< 0.15	< 0.15	< 0.28	< 0.28	< 0.28	< 0.28	< 0.52	< 0.52	< 0.52	< 0.52	< 0.28	< 0.28	< 0.52	< 0.28	< 0.52	< 0.28	< 0.28	< 0.52
1,2-Dichlorobenzene	600	60	< 0.36	< 0.46	< 0.36	< 0.15	< 0.15	< 0.36	< 0.36	< 0.36	< 0.36	< 0.46	< 0.46	< 0.46	< 0.46	< 0.36	< 0.36	< 0.46	< 0.36	< 0.46	< 0.36	< 0.36	< 0.46
Dichlorodifluoromethane	1000	200	< 0.44	< 0.87	< 0.44	< 0.20	< 0.20	< 0.44	< 0.44	< 0.44	< 0.44	< 0.87	< 0.87	< 0.87	< 0.87	< 0.44	< 0.44	< 0.87	< 0.44	< 0.87	< 0.44	< 0.44	< 0.87
1,2-Dichloroethane	5	0.5	< 0.41	< 0.48	< 0.41	< 0.15	< 0.15	< 0.41	< 0.41	< 0.41	< 0.41	< 0.54	< 0.48	< 0.48	< 0.48	< 0.41	< 0.41	< 0.48	< 0.41	< 0.48	< 0.41	< 0.41	< 0.48
1,1-Dichloroethane	850	85	< 0.3	< 1.1	< 0.3	< 0.15	< 0.15	< 0.3	< 0.3	< 0.3	< 0.3	< 1.1	< 1.1	< 1.1	< 1.1	< 0.3	< 0.3	< 1.1	< 0.3	< 1.1	< 0.3	< 0.3	< 1.1
1,1-Dichloroethene	7	0.7	< 0.4	< 0.65	< 0.4	< 0.15	< 0.15	< 0.4	< 0.4	< 0.4	< 0.4	< 0.65	< 0.65	< 0.65	< 0.65	< 0.4	< 0.4	< 0.65	< 0.4	< 0.65	< 0.4	< 0.4	< 0.65
cis-1,2-Dichloroethene	70	7	< 0.38	< 0.45	< 0.38	< 0.15	< 0.15	0.47 J	0.39 J	0.49 J	< 0.38	< 0.45	0.59 J	< 0.45	0.46 J	< 0.38	< 0.38	< 0.45	< 0.38	< 0.45	< 0.38	< 0.38	< 0.45
trans-1,2-Dichloroethene	100	20	< 0.35	< 0.54	< 0.35	< 0.15	< 0.15	< 0.35	< 0.35	< 0.35	< 0.35	< 0.54	< 0.54	< 0.54	< 0.54	< 0.35	< 0.35	< 0.54	< 0.35	< 0.54	< 0.35	< 0.35	< 0.54
1,2-Dichloropropane	5	0.5	< 0.32	< 0.43	< 0.32	< 0.15	< 0.15	< 0.32	< 0.32	< 0.32	< 0.32	< 0.43	< 0.43	< 0.43	< 0.43	< 0.32	< 0.32	< 0.43	< 0.32	< 0.43	< 0.32	< 0.32	< 0.43
2,2-Dichloropropane	NL	NL	< 0.36	< 3.1	< 0.36	< 0.15	< 0.15	< 0.36	< 0.36	< 0.36	< 0.36	< 3.1	< 3.1	< 3.1	< 3.1	< 0.36	< 0.36	< 3.1	< 0.36	< 3.1	< 0.36	< 0.36	< 3.1
1,3-Dichloropropane	NL	NL	< 0.33	< 0.33	< 0.33	< 0.15	< 0.15	< 0.33	< 0.33	< 0.33	< 0.33	< 0.42	< 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	< 0.15	< 0.15	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
cis-1,3-Dichloropropene	0.4	0.04	NA	NA	NA	< 0.15	< 0.15	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
trans-1,3-Dichloropropene	0.4	0.04	NA	NA	NA	< 0.15	< 0.15	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Di-isopropyl ether	NL	NL	< 0.23	< 0.44	< 0.23	NA	NA	< 0.23	< 0.23	< 0.23	< 0.23	< 0.44	< 0.44	< 0.44	< 0.44	< 0.23	< 0.23	< 0.44	< 0.23	< 0.44	< 0.23	< 0.23	< 0.44
EDB (1,2-Dibromoethane)	0.05	0.005	< 0.44	< 0.63	< 0.44	< 0.15	< 0.15	< 0.44	< 0.44	< 0.44	< 0.44	< 0.63	< 0.63	< 0.63	< 0.63	< 0.44	< 0.44	< 0.63	< 0.44	< 0.63	< 0.44	< 0.44	< 0.63
Ethylbenzene	700	140	< 0.55	< 0.71	< 0.55	< 0.15	< 0.15	< 0.55	< 0.55	< 0.55	< 0.55	< 0.71	< 0.71	< 0.71	< 0.71	< 0.55	< 0.55	< 0.71	< 0.55	< 0.71	< 0.55	< 0.55	< 0.71
Hexachlorobutadiene	NL	NL	< 1.5	< 2.2	< 1.5	< 0.15	< 0.15	< 1.5	< 1.5	< 1.5	< 1.5	< 2.2	< 2.2	< 2.2	< 2.2	< 1.5	< 1.5	< 2.2	< 1.5	< 2.2	< 1.5	< 1.5	< 2.2
Isopropylbenzene	NS	NS	< 0.3	< 0.82	< 0.3	< 0.15	< 0.15	< 0.3	< 0.3	< 0.3	< 0.3	< 0.82	< 0.82	< 0.82	< 0.82	< 0.3	< 0.3	< 0.82	< 0.3	< 0.82	< 0.3	< 0.3	< 0.82
p-Isopropyltoluene	NL	NL	< 0.31	< 1.1	< 0.31	< 0.15	< 0.15	< 0.31	< 0.31	< 0.31	< 0.31	< 1.1	< 1.1	< 1.1	< 1.1	< 0.31	< 0.31	< 1.1	< 0.31	< 1.1	< 0.31	< 0.31	< 1.1
Methylene Chloride	5	0.5	< 0.5	< 1.3	< 0.5	< 0.15	< 0.15	< 0.5	< 0.5	< 0.5	< 0.5	< 1.3	< 1.3	< 1.3	< 1.3	< 0.5	< 0.5	< 1.3	< 0.5	< 1.3	< 0.5	< 0.5	< 1.3
Methyl tert-butyl ether (MTBE)	60	12	< 0.23	< 1.1	< 0.23	< 0.15	< 0.15	< 0.23	< 0.23	< 0.23	< 0.23	< 1.1	< 1.1	< 1.1	< 1.1	< 0.23	< 0.23	< 1.1	< 0.23	< 1.1	< 0.23	< 0.23	< 1.1
Naphthalene	100	10	< 1.7	< 1.6	< 1.7	< 0.15	< 0.15	< 1.7	< 1.7	< 1.7	< 1.7	< 1.6	< 1.6	< 1.6	< 1.6	< 1.7	< 1.7	< 1.6	< 1.7	< 1.6	< 1.7	< 1.7	< 1.6
n-Propylbenzene	NL	NL	< 0.25	< 0.77	< 0.25	< 0.15	< 0.15	< 0.25	< 0.25	< 0.25	< 0.25	< 0.77	< 0.77	< 0.77	< 0.77	< 0.25	< 0.25	< 0.77	< 0.25	< 0.77	< 0.25	< 0.25	< 0.77
Styrene	100	10	NA	NA	NA	< 0.15	< 0.15	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1,2,2-Tetrachloroethane	0.2	0.02	< 0.45	< 0.52	< 0.45	< 0.20	< 0.20	< 0.45	< 0.45	< 0.45	< 0.45	< 0.52	< 0.52	< 0.52	< 0.52	< 0.45	< 0.45	< 0.52	< 0.45	< 0.52	< 0.45	< 0.45	< 0.52
1,1,1,2-Tetrachloroethane	70	7	< 0.33	< 0.48	< 0.33	< 0.15	< 0.15	< 0.33	< 0.33	< 0.33	< 0.33	< 0.48	< 0.48	< 0.48	< 0.48	< 0.33	< 0.33	< 0.48	< 0.33	< 0.48	< 0.33	< 0.33	< 0.48
Tetrachloroethene	5	0.5	< 0.33	< 0.49	< 0.33	< 0.15	< 0.15	< 0.33	< 0.33	< 0.33	< 0.33	< 0.74	< 0.49	< 0.49	< 0.49	< 0.33	< 0.33	< 0.49	< 0.33	< 0.49	< 0.33	< 0.33	< 0.49
Toluene	800	160	< 0.69	< 0.44	< 0.69	< 0.15	< 0.15	< 0.69	< 0.69	< 0.69	< 0.69	< 0.44	< 0.44	< 0.44	< 0.44	< 0.69	< 0.69	< 0.44	< 0.69	< 0.44	< 0.69	< 0.69	< 0.44
1,2,4-Trichlorobenzene	70	14	< 0.98	< 1.7	< 0.98	< 0.15	< 0.15	< 0.98	< 0.98	< 0.98	< 0.98	< 1.7	< 1.7	< 1.7	< 1.7	< 0.98	< 0.98	< 1.7	< 0.98	< 1.7	< 0.98	< 0.98	< 1.7
1,2,3-Trichlorobenzene	NL	NL	< 1.8	< 2.7	< 1.8	< 0.15	< 0.15	< 1.8	< 1.8	< 1.8	< 1.8	< 2.7	< 2.7	< 2.7	< 2.7	< 1.8	< 1.8	< 2.7	< 1.8	< 2.7	< 1.8	< 1.8	< 2.7
1,1,1-Trichloroethane	200	40	< 0.33	< 0.84	< 0.33	< 0.15	< 0.15	< 0.33	< 0.33	< 0.33	< 0.33	< 0.84	< 0.84	< 0.84	< 0.84	< 0.33	< 0.33	< 0.84	< 0.33	< 0.84	< 0.33	< 0.33	< 0.84
1,1,2-Trichloroethane	5	0.5	< 0.34	< 0.48	< 0.34	< 0.15	< 0.15	< 0.34	< 0.34	< 0.34	< 0.34	< 0.48	< 0.48	< 0.48	< 0.48	< 0.34	< 0.34	< 0.48	< 0.34	< 0.48	< 0.34	< 0.34	< 0.48
Trichloroethene (TCE)	5	0.5	< 0.33	< 0.47	< 0.33	< 0.15	< 0.15	< 0.33	< 0.33	< 0.33	< 0.33	< 0.47	< 0.47	< 0.47	< 0.47	< 0.33	< 0.33	< 0.47	< 0.33	< 0.47	< 0.33	< 0.33	< 0.47
Trichlorofluoromethane	NL	NL	< 0.71	< 0.87	< 0.71	< 0.15	< 0.15	< 0.71	< 0.71	< 0.71	< 0.71	< 0.87	< 0.87	< 0.87	< 0.87	< 0.71	< 0.71	< 0.87	< 0.71	< 0.87	< 0.71	< 0.71	< 0.87
1,2,3-Trichloropropane	60	12	NA	NA	NA	< 0.15	< 0.15	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2,4-Trimethylbenzene	--	--	< 2.2	< 1.6	< 2.2	< 0.15	< 0.15	< 2.2	< 2.2	< 2.2	< 2.2	< 1.6	< 1.6	< 1.6	< 1.6	< 2.2	< 2.2	< 1.6	< 2.2	< 1.6	< 2.2	< 2.2	< 1.6
1,3,5-Trimethylbenzene	--	--	< 1.4	< 1.5	< 1.4	< 0.15	< 0.15	< 1.4	< 1.4	< 1.4	< 1.4	< 1.5	< 1.5	< 1.5	< 1.5	< 1.4	< 1.4	< 1.5	< 1.4	< 1.5	< 1.4	< 1.4	< 1.5
Total Trimethylbenzene	480	96	< 2.2	< 1.6	< 2.2	< 0.15	< 0.15	< 2.2	< 2.2	< 2.2	< 2.2	< 1.6	< 1.6	< 1.6	< 1.6	< 2.2	< 2.2	< 1.6	< 2.2	< 1.6	< 2.2	< 2.2	< 1.6
Vinyl Chloride	0.2	0.02	< 0.18	< 0.17	< 0.18	< 0.20	< 0.20	< 0.18	< 0.18	< 0.18	< 0.18	< 0.17	< 0.17	< 0.17	< 0.17	< 0.18	< 0.18	< 0.17	< 0.18	< 0.17	< 0.18	< 0.18	< 0.17
m&p-Xylene	--	--	< 0.69	< 2.2	< 0.69	< 0.15	< 0.15	< 0.69	< 0.69	< 0.69	< 0.69	< 2.2	< 2.2	< 2.2	< 2.2	< 0.69	< 0.69	< 2.2	< 0.69	< 2.2	< 0.69	< 0.69	< 2.2
o-Xylene	--	--	< 0.63	< 0.9	< 0.63	< 0.15	< 0.15	< 0.63	< 0.63	< 0.63	< 0.63	< 0.9	< 0.9	< 0.9	< 0.9	< 0.63	< 0.63	< 0.9	< 0.63	< 0.9	< 0.63	< 0.63	< 0.9
Total Xylenes	2,000	400	< 0.69	< 2.2	< 0.69	< 0.15	< 0.15	< 0.69	< 0.69	< 0.69	< 0.69	< 0.9	< 2.2	< 2.2	< 2.2	< 0.69	< 0.69	< 2.2	< 0.69	< 2.2	< 0.69	< 0.69	< 2.2

TABLE 2

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

			4219 Viebahn St.		5107 Viebahn St.	3609 M&M Ln.		3027 Orchard Ln.								3128 Orchard Ln.			3318 Orchard Ln.		3420 Orchard Ln.		
			9/8/14	10/27/15	12/5/13	12/4/13	12/16/13	2/5/14	6/4/14	8/28/14	11/11/14	3/11/15	10/14/15	3/31/16	10/6/16	2/4/14	6/4/14	10/14/15	7/11/14	10/24/16	2/4/14	6/2/14	10/6/16
Analyte	**ES[1]**	**PAL[2]**	Outside Spigot	Outside Spigot	Well Pump	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Outside Spigot	Outside Spigot	Kitchen Sink	Kitchen Sink	Outside Spigot
~~**RCRA Metals (mg/L)**~~																							
Antimony	0.006	0.0012	NA	NA	NA	NA	NA	NA	NA	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	NA	NA	NA	NA		NA	NA	NA
Barium	2	0.4	NA	NA	NA	NA	NA	NA	NA	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	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	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	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	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	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	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	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	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	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	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	NA	NA	NA	NA		NA	NA	NA
Sodium	increase of 10		NA	NA	NA	NA	NA	NA	NA	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	NA	NA	NA	NA		NA	NA	NA
Zinc	5	2.5	NA	NA	NA	NA	NA	NA	NA	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	NA	NA	NA	NA		NA	NA	NA
Aroclor-1221	--	--	NA	NA	NA	NA	NA	NA	NA	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	NA	NA	NA	NA		NA	NA	NA
Aroclor-1242	--	--	NA	NA	NA	NA	NA	NA	NA	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	NA	NA	NA	NA		NA	NA	NA
Aroclor-1254	--	--	NA	NA	NA	NA	NA	NA	NA	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	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	NA	NA	NA	NA		NA	NA	NA
Field Screening Measurements																							
pH (IU)	--	--	7.45	NM	8.1	NM	NM	7.21	7.25	7.82	8.03	NM	7.88	NM	NM	7.32	7.63	7.61	7.52		7.1	8.06	NM
Conductivity (uS)	--	--	779	NM	571	NM	NM	379	136	921	553	NM	548	NM	NM	603	797	843	1033		454	470	NM
Temperature (^{0}C)	--	--	11.75	NM	11.09	NM	NM	8.5	10.6	10.7	10.29	NM	12.69	NM	NM	8.75	10.4	12.13	13.8		7.1	11.8	NM
Dissolved Oxygen (ppm)	--	--	3.21	NM	4.23	NM	NM	7.42	2.5	1.22	4.06	NM	2.07	NM	NM	NM	1.97	2.26	4.11		6.53	1.23	NM
Redox Potential (mV)	--	--	225	NM	84.5	NM	NM	42.4	136	236	-7.3	NM	-100.6	NM	NM	113.2	117	-106.5	123		123.2	165	NM

TABLE 2

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

Analyte	ES[1]	PAL[2]	3523 Orchard Ln.		3524 Orchard Ln.				3911 Black Hawk Ct.		3921 Black Hawk Ct.							
			2/4/14	5/28/14	2/4/14	6/2/14	6/2/2014(DUP)	10/13/15	7/8/15	10/6/16	2/4/14	6/2/14	8/26/14	11/10/14	2/24/15	10/14/15	3/31/16	10/5/16
			Kitchen Sink	Kitchen Sink	Kitchen Sink	Kitchen Sink	Kitchen Sink	Kitchen Sink	Spigot	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	< 0.44	< 0.44	< 0.44	< 0.24	< 0.24	< 0.24	< 0.24	< 0.44	< 0.44	< 0.44	< 0.44
Bromobenzene	NL	NL	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.48	< 0.48	< 0.48	< 0.32	< 0.32	< 0.32	< 0.32	< 0.48	< 0.48	< 0.48	< 0.48
Bromochloromethane	NL	NL	NA	NA	NA	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	< 0.46	< 0.46	< 0.46	< 0.37	< 0.37	< 0.37	< 0.37	< 0.46	< 0.46	< 0.46	< 0.46
Bromoform	4.4	0.44	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.46	< 0.46	< 0.46	< 0.35	< 0.35	< 0.35	< 0.35	< 0.46	< 0.46	< 0.46	< 0.46
tert-Butylbenzene	NL	NL	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 1.1	< 1.1	< 1.1	< 0.36	< 0.36	< 0.36	< 0.36	< 1.1	< 1.1	< 1.1	< 1.1
sec-Butylbenzene	NL	NL	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 1.2	< 1.2	< 1.2	< 0.33	< 0.33	< 0.33	< 0.33	< 1.2	< 1.2	< 1.2	< 1.2
n-Butylbenzene	NL	NL	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 1	< 1	< 1	< 0.35	< 0.35	< 0.35	< 0.35	< 1	< 1	< 1	< 1
Carbon Disulfide	1000	200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Carbon Tetrachloride	5	0.5	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.51	< 0.51	< 0.51	< 0.33	< 0.33	< 0.33	< 0.33	< 0.65	< 0.51	< 0.51	< 0.51
Chlorobenzene	NL	NL	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.46	< 0.46	< 0.46	< 0.24	< 0.24	< 0.24	< 0.24	< 0.46	< 0.46	< 0.46	< 0.46
Chloroethane	400	80	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.65	< 0.65	< 0.65	< 0.63	< 0.63	< 0.63	< 0.63	< 0.65	< 0.65	< 0.65	< 0.65
Chloroform	6	0.6	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.43	< 0.43	< 0.43	< 0.28	< 0.28	< 0.28	< 0.28	< 0.43	< 0.43	< 0.43	< 0.43
Chloromethane	3	0.3	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81	< 1.9	< 1.9	< 1.9	< 0.81	< 0.81	< 0.81	< 0.81	< 1.9	< 1.9	< 1.9	< 1.9
2-Chlorotoluene	NL	NL	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.4	< 0.4	< 0.4	< 0.21	< 0.21	< 0.21	< 0.21	< 0.4	< 0.4	< 0.4	< 0.4
4-Chlorotoluene	NL	NL	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.63	< 0.63	< 0.63	< 0.21	< 0.21	< 0.21	< 0.21	< 0.63	< 0.63	< 0.63	< 0.63
1,2-Dibromo-3-chloropropane (DBCP)	0.2	0.02	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88	< 1.4	< 1.4	< 1.4	< 0.88	< 0.88	< 0.88	< 0.88	< 1.4	< 1.4	< 1.4	< 1.4
Dibromochloromethane	60	6	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.45	< 0.45	< 0.45	< 0.22	< 0.22	< 0.22	< 0.22	< 0.45	< 0.45	< 0.45	< 0.45
Dibromomethane	NL	NL	NA	NA	NA	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	< 0.49	< 0.49	< 0.49	< 0.3	< 0.3	< 0.3	< 0.3	< 0.49	< 0.49	< 0.49	< 0.49
1,3-Dichlorobenzene	600	120	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.52	< 0.52	< 0.52	< 0.28	< 0.28	< 0.28	< 0.28	< 0.52	< 0.52	< 0.52	< 0.52
1,2-Dichlorobenzene	600	60	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.46	< 0.46	< 0.46	< 0.36	< 0.36	< 0.36	< 0.36	< 0.46	< 0.46	< 0.46	< 0.46
Dichlorodifluoromethane	1000	200	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.87	< 0.87	< 0.87	< 0.44	< 0.44	< 0.44	< 0.44	< 0.87	< 0.87	< 0.87	< 0.87
1,2-Dichloroethane	5	0.5	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.48	< 0.48	< 0.48	< 0.41	< 0.41	< 0.41	< 0.41	< 0.54	< 0.48	< 0.48	< 0.48
1,1-Dichloroethane	850	85	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 1.1	< 1.1	< 1.1	< 0.3	< 0.3	< 0.3	< 0.3	< 1.1	< 1.1	< 1.1	< 1.1
1,1-Dichloroethene	7	0.7	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.65	< 0.65	< 0.65	< 0.4	< 0.4	< 0.4	< 0.4	< 0.65	< 0.65	< 0.65	< 0.65
cis-1,2-Dichloroethene	70	7	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38	< 0.45	< 0.45	0.59 J	0.87 J	0.97 J	1.14 J	0.65 J	0.93 J	1.04 J	0.71 J	0.63 J
trans-1,2-Dichloroethene	100	20	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.54	< 0.54	< 0.54	< 0.35	< 0.35	< 0.35	< 0.35	< 0.54	< 0.54	< 0.54	< 0.54
1,2-Dichloropropane	5	0.5	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.43	< 0.43	< 0.43	< 0.32	< 0.32	< 0.32	< 0.32	< 0.43	< 0.43	< 0.43	< 0.43
2,2-Dichloropropane	NL	NL	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 3.1	< 3.1	< 3.1	< 0.36	< 0.36	< 0.36	< 0.36	< 3.1	< 3.1	< 3.1	< 3.1
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	< 0.42	< 0.33	< 0.33	< 0.42
1,1-Dichloropropene	NL	NL	NA	NA	NA	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	NA	NA	NA
trans-1,3-Dichloropropene	0.4	0.04	NA	NA	NA	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	< 0.44	< 0.44	< 0.44	< 0.23	< 0.23	< 0.23	< 0.23	< 0.44	< 0.44	< 0.44	< 0.44
EDB (1,2-Dibromoethane)	0.05	0.005	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.63	< 0.63	< 0.63	< 0.44	< 0.44	< 0.44	< 0.44	< 0.63	< 0.63	< 0.63	< 0.63
Ethylbenzene	700	140	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.71	< 0.71	< 0.71	< 0.55	< 0.55	< 0.55	< 0.55	< 0.71	< 0.71	< 0.71	< 0.71
Hexachlorobutadiene	NL	NL	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 2.2	< 2.2	< 2.2	< 1.5	< 1.5	< 1.5	< 1.5	< 2.2	< 2.2	< 2.2	< 2.2
Isopropylbenzene	NS	NS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.82	< 0.82	< 0.82	< 0.3	< 0.3	< 0.3	< 0.3	< 0.82	< 0.82	< 0.82	< 0.82
p-Isopropyltoluene	NL	NL	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 1.1	< 1.1	< 1.1	< 0.31	< 0.31	< 0.31	< 0.31	< 1.1	< 1.1	< 1.1	< 1.1
Methylene Chloride	5	0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 1.3	< 1.3	< 1.3	< 0.5	< 0.5	< 0.5	< 0.5	< 1.3	< 1.3	< 1.3	< 1.3
Methyl tert-butyl ether (MTBE)	60	12	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 1.1	< 1.1	< 1.1	< 0.23	< 0.23	< 0.23	< 0.23	< 1.1	< 1.1	< 1.1	< 1.1
Naphthalene	100	10	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.6	< 1.6	< 1.6	< 1.7	< 1.7	< 1.7	< 1.7	< 1.6	< 1.6	< 1.6	< 1.6
n-Propylbenzene	NL	NL	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.77	< 0.77	< 0.77	< 0.25	< 0.25	< 0.25	< 0.25	< 0.77	< 0.77	< 0.77	< 0.77
Styrene	100	10	NA	NA	NA	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	< 0.52	< 0.52	< 0.52	< 0.45	< 0.45	< 0.45	< 0.45	< 0.52	< 0.52	< 0.52	< 0.52
1,1,1,2-Tetrachloroethane	70	7	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.48	< 0.48	< 0.48	< 0.33	< 0.33	< 0.33	< 0.33	< 0.48	< 0.48	< 0.48	< 0.48
Tetrachloroethene	5	0.5	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.49	< 0.49	< 0.49	< 0.33	< 0.33	< 0.33	< 0.33	< 0.74	< 0.49	< 0.49	< 0.49
Toluene	800	160	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.44	< 0.44	< 0.44	< 0.69	< 0.69	< 0.69	< 0.69	< 0.44	< 0.44	< 0.44	< 0.44
1,2,4-Trichlorobenzene	70	14	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 1.7	< 1.7	< 1.7	< 0.98	< 0.98	< 0.98	< 0.98	< 1.7	< 1.7	< 1.7	< 1.7
1,2,3-Trichlorobenzene	NL	NL	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 2.7	< 2.7	< 2.7	< 1.8	< 1.8	< 1.8	< 1.8	< 2.7	< 2.7	< 2.7	< 2.7
1,1,1-Trichloroethane	200	40	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.84	< 0.84	< 0.84	< 0.33	< 0.33	< 0.33	< 0.33	< 0.84	< 0.84	< 0.84	< 0.84
1,1,2-Trichloroethane	5	0.5	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.48	< 0.48	< 0.48	< 0.34	< 0.34	< 0.34	< 0.34	< 0.48	< 0.48	< 0.48	< 0.48
Trichloroethene (TCE)	5	0.5	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.47	< 0.47	< 0.47	< 0.33	< 0.33	< 0.33	< 0.33	< 0.47	< 0.47	< 0.47	< 0.47
Trichlorofluoromethane	NL	NL	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.87	< 0.87	< 0.87	< 0.71	< 0.71	< 0.71	< 0.71	< 0.87	< 0.87	< 0.87	< 0.87
1,2,3-Trichloropropane	60	12	NA	NA	NA	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	< 1.6	< 1.6	< 1.6	< 2.2	< 2.2	< 2.2	< 2.2	< 1.6	< 1.6	< 1.6	< 1.6
1,3,5-Trimethylbenzene	--	--	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.5	< 1.5	< 1.5	< 1.4	< 1.4	< 1.4	< 1.4	< 1.5	< 1.5	< 1.5	< 1.5
Total Trimethylbenzene	480	96	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 1.6	< 1.6	< 1.6	< 2.2	< 2.2	< 2.2	< 2.2	< 1.6	< 1.6	< 1.6	< 1.6
Vinyl Chloride	0.2	0.02	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.17	< 0.17	< 0.17	< 0.18	< 0.18	< 0.18	< 0.18	< 0.17	< 0.17	< 0.17	< 0.17
m&p-Xylene	--	--	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 2.2	< 2.2	< 2.2	< 0.69	< 0.69	< 0.69	< 0.69	< 2.2	< 2.2	< 2.2	< 2.2
o-Xylene	--	--	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.9	< 0.9	< 0.9	< 0.63	< 0.63	< 0.63	< 0.63	< 0.9	< 0.9	< 0.9	< 0.9
Total Xylenes	2,000	400	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 2.2	< 2.2	< 2.2	< 0.69	< 0.69	< 0.69	< 0.69	< 0.9	< 2.2	< 2.2	< 2.2

TABLE 2

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

			3523 Orchard Ln.		3524 Orchard Ln.				3911 Black Hawk Ct.		3921 Black Hawk Ct.							
			2/4/14	5/28/14	2/4/14	6/2/14	6/2/2014(DUP)	10/13/15	7/8/15	10/6/16	2/4/14	6/2/14	8/26/14	11/10/14	2/24/15	10/14/15	3/31/16	10/5/16
Analyte	**ES[1]**	**PAL[2]**	Kitchen Sink	Kitchen Sink	Kitchen Sink	Kitchen Sink	Kitchen Sink	Kitchen Sink	Spigot	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank
~~RCRA Metals (mg/L)~~																		
Antimony	0.006	0.0012	NA	NA	NA	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	NA	NA	NA
Barium	2	0.4	NA	NA	NA	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	NA	NA	NA
Cadmium	0.005	0.0005	NA	NA	NA	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	NA	NA	NA
Copper	1.3	0.13	NA	NA	NA	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	NA	NA	NA
Lead	0.015	0.0015	NA	NA	NA	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	NA	NA	NA
Mercury	0.002	0.0002	NA	NA	NA	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	NA	NA	NA
Selenium	0.05	0.01	NA	NA	NA	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	NA	NA	NA
Sodium	increase of 10		NA	NA	NA	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	NA	NA	NA
Zinc	5	2.5	NA	NA	NA	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	NA	NA	NA
Aroclor-1221	--	--	NA	NA	NA	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	NA	NA	NA
Aroclor-1242	--	--	NA	NA	NA	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	NA	NA	NA
Aroclor-1254	--	--	NA	NA	NA	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	NA	NA	NA
Total PCBs	0.03	0.003	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Field Screening Measurements																		
pH (IU)	--	--	7.21	7.78	7.03	7.41	7.41	7.34	NM	NM	7.21	7.61	7.45	7.95	7.99	7.5	NM	NM
Conductivity (uS)	--	--	514	671	579	672	672	900	NM	NM	468	636	762	754	810	742	NM	NM
Temperature (^{0}C)	--	--	8.96	10.6	9.29	12.1	12.1	12.28	NM	NM	10.06	12.7	14.3	11.85	8.8	13.77	NM	NM
Dissolved Oxygen (ppm)	--	--	5.32	4.99	5.3	1.62	1.62	1.77	NM	NM	NM	2.83	1.34	5.53	7.64	2.48	NM	NM
Redox Potential (mV)	--	--	210.0	111.0	117.3	159.0	159.0	-75.7	NM	NM	100.3	148	206	-27.2	-160.9	-124.6	NM	NM

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.

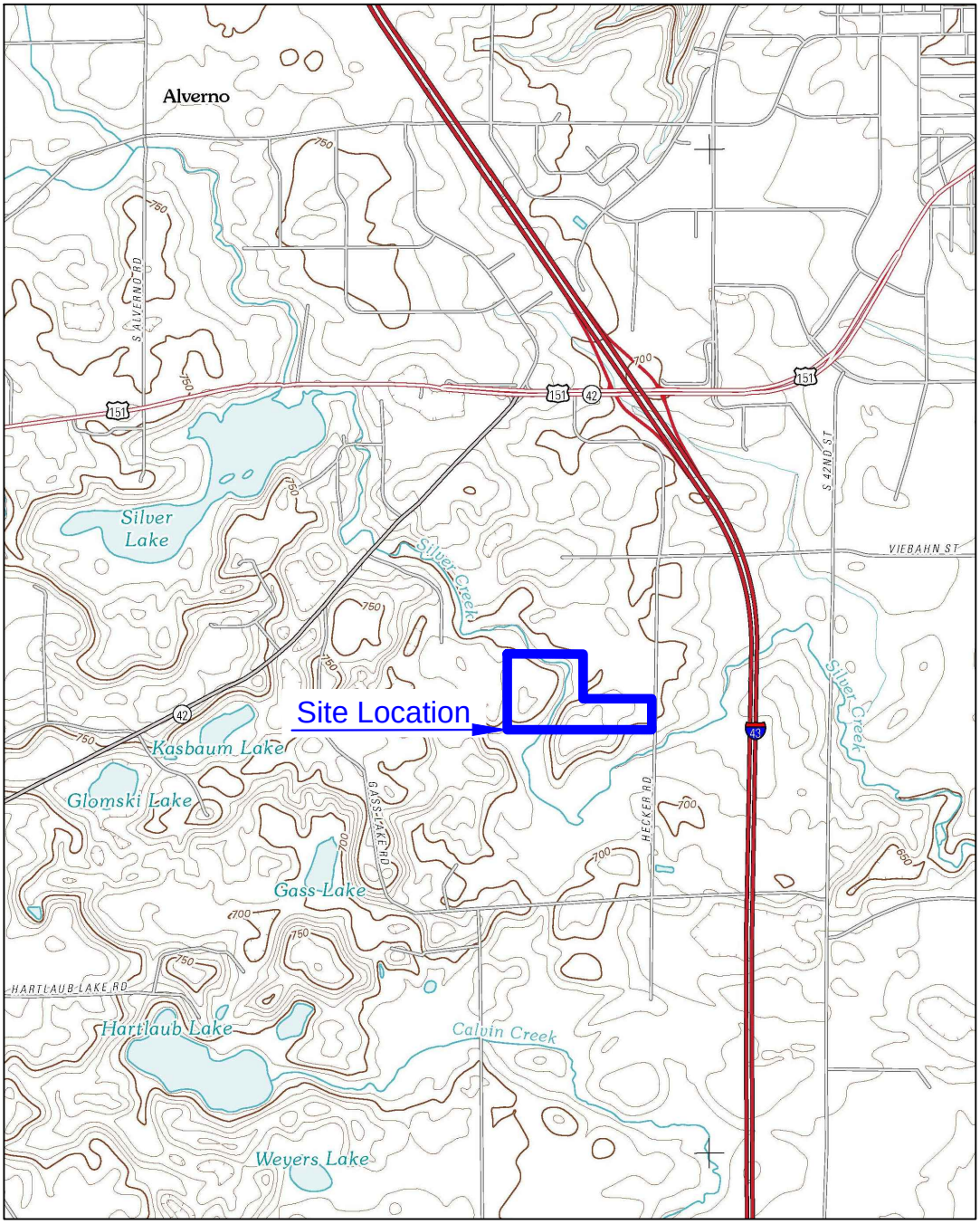
NL - ES or PAL not listed in NR140.

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.

Figures:

Figure 1; Site Location
Figure 2; March 2016 Potable Well Sampling Results



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. 1
60311767	SAE	4/14/2015	

SPECIAL WELL CASING DEPTH AREA

FORMER NEWTON GRAVEL PIT

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 (historic well) - 143' (limestone)
• well depth (new well) - 303' (limestone)

Date:	10/24/16	11/8/16
Sample Location:	Basement	Basement
cis-DCE	< 0.45	< 0.45
VC	< 0.17	< 0.17

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

3327 Hecker Rd.
• well depth - NA

Date:	10/5/16
Sample Location:	Outside Spigot
cis-DCE	3.3
VC	< 0.17

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

Date:	10/6/16	10/6/16 (DUP)
Sample Location:	Inside Sink	Inside Sink
cis-DCE	1.23 J	1.51
VC	< 0.17	< 0.17

3518 Hecker Rd.
• well depth (historic well) - 50' (gravel)
• well depth (new well) - 282' (limestone)

Date:	10/6/16
Sample Location:	Pressure Tank
cis-DCE	< 0.45
VC	< 0.17

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

Date:	10/5/16
Sample Location:	Pressure Tank
cis-DCE	< 0.45
VC	< 0.17

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

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

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

Date:	10/5/16
Sample Location:	Pressure Tank
cis-DCE	< 0.45
VC	< 0.17

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

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

Date:	10/5/16	10/5/16(DUP)
Sample Location:	Outside Spigot	Outside Spigot
cis-DCE	< 0.45	< 0.45
VC	< 0.17	< 0.17

3720 Hecker Rd.
• well depth - NA

Date:	10/11/16
Sample Location:	Pressure Tank
cis-DCE	1.04 J
VC	< 0.17

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. (City Water)
• abandoned well depth - 138' (limestone)

3825 Viebahn St.
• well depth - NA

Date:	10/6/16
Sample Location:	Pressure Tank
cis-DCE	< 0.45
VC	< 0.17

4101 Viebahn St. (City Water)
• abandoned well depth - NA

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

2706 CTH CR
• well depth - NA

4219 Viebahn St.
• well depth - NA

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

2716 CTH CR
• well depth - NA

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

Date:	10/10/16
Sample Location:	Pressure Tank
cis-DCE	0.78 J
VC	< 0.17

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

Date:	10/6/16
Sample Location:	Outside Spigot
cis-DCE	0.47 J
VC	< 0.17

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

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

2832 and 2904 CTH CR
• well depth - NA

2881 CTH CR. (Not In Use)
• well depth - NA

2911 CTH CR.
• well depth - NA

Date:	10/7/16
Sample Location:	Pressure Tank
cis-DCE	< 0.45
VC	< 0.17

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

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

3027 Orchard Ln.
• well depth - NA

Date:	10/6/16
Sample Location:	Pressure Tank
cis-DCE	0.46 J
VC	< 0.17

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

Date:	10/5/16
Sample Location:	Outside Spigot
cis-DCE	< 0.45
VC	< 0.17

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

Date:	10/6/16
Sample Location:	Pressure Tank
cis-DCE	< 0.45
VC	< 0.17

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

Date:	10/5/16
Sample Location:	Bath Tub
cis-DCE	< 0.45
VC	< 0.17

3412 CTH CR
• well depth - NA

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

Date:	10/5/16
Sample Location:	Outside Spigot
cis-DCE	< 0.45
VC	< 0.17

3318 Orchard Ln.
• well depth - NA

Date:	10/24/16
Sample Location:	Outside Spigot
cis-DCE	< 0.45
VC	< 0.17

3422 CTH CR
• well depth - NA

Date:	10/5/16
Sample Location:	Pressure Tank
cis-DCE	< 0.45
VC	< 0.17

3420 Orchard Ln.
• well depth - NA

Date:	10/6/16
Sample Location:	Outside Spigot
cis-DCE	< 0.45
VC	< 0.17

3504 CTH CR
• well depth (historic well) - 180' (limestone)
• well depth (new well) - 320' (limestone)

Date:	Historic Well 10/11/16	Replacement Well 10/24/16	11/8/16
Sample Location:	Basement	Basement	Basement
cis-DCE	1.17 J	< 0.45	< 0.45
VC	< 0.17	< 0.17	< 0.17

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

3523 Orchard Ln.
• well depth - NA

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

3524 Orchard Ln.
• well depth - NA

3618 CTH CR
• well depth - NA

Date:	10/6/16
Sample Location:	Kitchen Sink
cis-DCE	0.88 J
VC	< 0.17

4002 Thunder Ridge Rd.
• well depth (historic well) - 200' (limestone)
• well depth (new well) - 420' (limestone)

Date:	10/5/16
Sample Location:	Pressure Tank
cis-DCE	< 0.45
VC	< 0.17

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

Date:	10/5/16
Sample Location:	Pressure Tank
cis-DCE	0.63 J
VC	< 0.17

3611 CTH CR
• well depth - NA

Date:	10/5/16
Sample Location:	Outside Spigot
cis-DCE	< 0.45
VC	< 0.17

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

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

Date:	10/7/16	10/24/16
Sample Location:	Outside Spigot	Outside Spigot
cis-DCE	1.27 J	1.42
VC	0.27 J	0.20 J

4005 Thunder Ridge Rd.
• well depth - NA

Date:	10/10/16	10/24/16	11/8/16
Sample Location:	Outside Spigot	Outside Spigot	Outside Spigot
cis-DCE	1.35 J	1.1 J	0.66 J
VC	0.29 J	< 0.17	< 0.17

3627 CTH CR
• well depth - NA

3911 Blackhawk Ct.
• well depth - 180' (limestone)

Date:	10/6/16
Sample Location:	Pressure Tank
cis-DCE	0.59 J
VC	< 0.17

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

Date:	11/8/16
Sample Location:	Outside Spigot
cis-DCE	1.02 J
VC	< 0.17

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

Date:	10/6/16	10/6/16 (DUP)
Sample Location:	Pressure Tank	Pressure Tank
cis-DCE	0.77 J	0.96 J
VC	< 0.17	< 0.17

4314 Silver Creek Rd.
• well depth - NA

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

4111 Thunder Ridge Rd.
• well depth - 220' (limestone)

Date:	10/10/16
Sample Location:	Outside Spigot
cis-DCE	0.56 J
VC	< 0.17

3812 Silver Creek Rd.
• well depth - NA

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

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

Date:	10/10/16
Sample Location:	Pressure Tank
cis-DCE	< 0.45
VC	< 0.17

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

Date:	3/30/16
Sample Location:	Kitchen Sink
cis-DCE	< 0.45
VC	< 0.17

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

Date:	10/10/16
Sample Location:	Pressure Tank
cis-DCE	0.78 J
VC	< 0.17

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

Date:	10/6/16
Sample Location:	Pressure Tank
cis-DCE	< 0.45
VC	< 0.17

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
- WELL OUT OF SERVICE

NOTES:

1. VOCs detected from likely laboratory or sampling cross-contamination not reported on figure.
2. VOC values for October 2016 sampling event reported on figure.
3. Analytical data presented in µg/L.
   - 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

0' 150' 300' 600'
SCALE

AECOM
Milwaukee Office
1555 RiverCenter Dr
Milwaukee, WI
414.944.6080

AECOM

FORMER NEWTON GRAVEL PIT

OCTOBER 2016 POTABLE WELL SAMPLING RESULTS

Project Number: 60311767
Drawn By: SAE
Date: 1/16/2017

Figure No. 2

Attachment A:

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 *25-May-16*

Project Name MANITOWOC
Project # 60311767
Invoice # E31100

Lab Code 5031100A
Sample ID 4002TRPW
Sample Matrix Water
Sample Date 5/23/2016

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
VOC's										
Benzene	< 0.44	ug/l	0.44	1.4	1	8260B		5/24/2016	CJR	1
Bromobenzene	< 0.48	ug/l	0.48	1.5	1	8260B		5/24/2016	CJR	1
Bromodichloromethane	< 0.46	ug/l	0.46	1.5	1	8260B		5/24/2016	CJR	1
Bromoform	< 0.46	ug/l	0.46	1.5	1	8260B		5/24/2016	CJR	1
tert-Butylbenzene	< 1.1	ug/l	1.1	3.4	1	8260B		5/24/2016	CJR	1
sec-Butylbenzene	< 1.2	ug/l	1.2	3.8	1	8260B		5/24/2016	CJR	1
n-Butylbenzene	< 1	ug/l	1	3.3	1	8260B		5/24/2016	CJR	1
Carbon Tetrachloride	< 0.51	ug/l	0.51	1.6	1	8260B		5/24/2016	CJR	1
Chlorobenzene	< 0.46	ug/l	0.46	1.4	1	8260B		5/24/2016	CJR	1
Chloroethane	< 0.65	ug/l	0.65	2.1	1	8260B		5/24/2016	CJR	1
Chloroform	< 0.43	ug/l	0.43	1.4	1	8260B		5/24/2016	CJR	1
Chloromethane	< 1.9	ug/l	1.9	6	1	8260B		5/24/2016	CJR	1
2-Chlorotoluene	< 0.4	ug/l	0.4	1.3	1	8260B		5/24/2016	CJR	1
4-Chlorotoluene	< 0.63	ug/l	0.63	2	1	8260B		5/24/2016	CJR	1
1,2-Dibromo-3-chloropropane	< 1.4	ug/l	1.4	4.5	1	8260B		5/24/2016	CJR	1
Dibromochloromethane	< 0.45	ug/l	0.45	1.4	1	8260B		5/24/2016	CJR	1
1,4-Dichlorobenzene	< 0.49	ug/l	0.49	1.6	1	8260B		5/24/2016	CJR	1
1,3-Dichlorobenzene	< 0.52	ug/l	0.52	1.6	1	8260B		5/24/2016	CJR	1
1,2-Dichlorobenzene	< 0.46	ug/l	0.46	1.5	1	8260B		5/24/2016	CJR	1
Dichlorodifluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		5/24/2016	CJR	1
1,2-Dichloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		5/24/2016	CJR	1
1,1-Dichloroethane	< 1.1	ug/l	1.1	3.6	1	8260B		5/24/2016	CJR	1
1,1-Dichloroethene	< 0.65	ug/l	0.65	2.1	1	8260B		5/24/2016	CJR	1
cis-1,2-Dichloroethene	< 0.45	ug/l	0.45	1.4	1	8260B		5/24/2016	CJR	1
trans-1,2-Dichloroethene	< 0.54	ug/l	0.54	1.7	1	8260B		5/24/2016	CJR	1
1,2-Dichloropropane	< 0.43	ug/l	0.43	1.37	1	8260B		5/24/2016	CJR	1
2,2-Dichloropropane	< 3.1	ug/l	3.1	9.8	1	8260B		5/24/2016	CJR	1
1,3-Dichloropropane	< 0.42	ug/l	0.42	1.3	1	8260B		5/24/2016	CJR	1
Di-isopropyl ether	< 0.44	ug/l	0.44	1.4	1	8260B		5/24/2016	CJR	1
EDB (1,2-Dibromoethane)	< 0.63	ug/l	0.63	2	1	8260B		5/24/2016	CJR	1
Ethylbenzene	< 0.71	ug/l	0.71	2.3	1	8260B		5/24/2016	CJR	1
Hexachlorobutadiene	< 2.2	ug/l	2.2	7.1	1	8260B		5/24/2016	CJR	1
Isopropylbenzene	< 0.82	ug/l	0.82	2.6	1	8260B		5/24/2016	CJR	1

Project Name MANITOWOC **Invoice #** E31100
Project # 60311767

Lab Code 5031100A
Sample ID 4002TRPW
Sample Matrix Water
Sample Date 5/23/2016

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
p-Isopropyltoluene	< 1.1	ug/l	1.1	3.5	1	8260B		5/24/2016	CJR	1
Methylene chloride	< 1.3	ug/l	1.3	4.2	1	8260B		5/24/2016	CJR	1
Methyl tert-butyl ether (MTBE)	< 1.1	ug/l	1.1	3.7	1	8260B		5/24/2016	CJR	1
Naphthalene	< 1.6	ug/l	1.6	5.2	1	8260B		5/24/2016	CJR	1
n-Propylbenzene	< 0.77	ug/l	0.77	2.4	1	8260B		5/24/2016	CJR	1
1,1,2,2-Tetrachloroethane	< 0.52	ug/l	0.52	1.7	1	8260B		5/24/2016	CJR	1
1,1,1,2-Tetrachloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		5/24/2016	CJR	1
Tetrachloroethene	< 0.49	ug/l	0.49	1.5	1	8260B		5/24/2016	CJR	1
Toluene	< 0.44	ug/l	0.44	1.4	1	8260B		5/24/2016	CJR	1
1,2,4-Trichlorobenzene	< 1.7	ug/l	1.7	5.6	1	8260B		5/24/2016	CJR	1
1,2,3-Trichlorobenzene	< 2.7	ug/l	2.7	8.6	1	8260B		5/24/2016	CJR	1
1,1,1-Trichloroethane	< 0.84	ug/l	0.84	2.7	1	8260B		5/24/2016	CJR	1
1,1,2-Trichloroethane	< 0.48	ug/l	0.48	1.52	1	8260B		5/24/2016	CJR	1
Trichloroethene (TCE)	< 0.47	ug/l	0.47	1.5	1	8260B		5/24/2016	CJR	1
Trichlorofluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		5/24/2016	CJR	1
1,2,4-Trimethylbenzene	< 1.6	ug/l	1.6	5	1	8260B		5/24/2016	CJR	1
1,3,5-Trimethylbenzene	< 1.5	ug/l	1.5	4.8	1	8260B		5/24/2016	CJR	1
Vinyl Chloride	< 0.17	ug/l	0.17	0.54	1	8260B		5/24/2016	CJR	1
m&p-Xylene	< 2.2	ug/l	2.2	6.9	1	8260B		5/24/2016	CJR	1
o-Xylene	< 0.9	ug/l	0.9	2.9	1	8260B		5/24/2016	CJR	1
SUR - Toluene-d8	101	REC %			1	8260B		5/24/2016	CJR	1
SUR - 1,2-Dichloroethane-d4	98	REC %			1	8260B		5/24/2016	CJR	1
SUR - 4-Bromofluorobenzene	110	REC %			1	8260B		5/24/2016	CJR	1
SUR - Dibromofluoromethane	97	REC %			1	8260B		5/24/2016	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

CHAIN OF CUSTODY RECORD

Synergy

Environmental Lab, Inc.

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

Chain # Nº 270[illegible]

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 #: 60311767	
Sampler: (signature) RobertWoodford	
Project (Name / Location): Manitowoc (Newton)	

Reports To: Dave Henderson	Invoice To: call Dave Henderson
Company AECOM	Company
Address 1555 N. RiverCenter Dr Ste 314	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
503100A	4002TRPW	5/23/16	7:45		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.)

Sample Integrity - To be completed by receiving lab.

Method of Shipment: Sm

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
X RobertWoodford	9:30	5/23/16			

Received in Laboratory By: _____ Time: 830 Date: 5/24/16

Synergy Environmental Lab, INC.

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

DAVE HENDERSON
AECOM
1555 N RIVERCENTER DRIVE
MILWAUKEE, WI 53212

Report Date *10-Jun-16*

Project Name NEWTON PIT **Invoice #** E31160
Project # 60135471

Lab Code 5031160A
Sample ID 4002 THUNDER RI
Sample Matrix Water
Sample Date 6/2/2016

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
VOC's										
Benzene	< 0.44	ug/l	0.44	1.4	1	8260B		6/9/2016	CJR	1
Bromobenzene	< 0.48	ug/l	0.48	1.5	1	8260B		6/9/2016	CJR	1
Bromodichloromethane	< 0.46	ug/l	0.46	1.5	1	8260B		6/9/2016	CJR	1
Bromoform	< 0.46	ug/l	0.46	1.5	1	8260B		6/9/2016	CJR	1
tert-Butylbenzene	< 1.1	ug/l	1.1	3.4	1	8260B		6/9/2016	CJR	1
sec-Butylbenzene	< 1.2	ug/l	1.2	3.8	1	8260B		6/9/2016	CJR	1
n-Butylbenzene	< 1	ug/l	1	3.3	1	8260B		6/9/2016	CJR	1
Carbon Tetrachloride	< 0.51	ug/l	0.51	1.6	1	8260B		6/9/2016	CJR	1
Chlorobenzene	< 0.46	ug/l	0.46	1.4	1	8260B		6/9/2016	CJR	1
Chloroethane	< 0.65	ug/l	0.65	2.1	1	8260B		6/9/2016	CJR	1
Chloroform	< 0.43	ug/l	0.43	1.4	1	8260B		6/9/2016	CJR	1
Chloromethane	< 1.9	ug/l	1.9	6	1	8260B		6/9/2016	CJR	1
2-Chlorotoluene	< 0.4	ug/l	0.4	1.3	1	8260B		6/9/2016	CJR	1
4-Chlorotoluene	< 0.63	ug/l	0.63	2	1	8260B		6/9/2016	CJR	1
1,2-Dibromo-3-chloropropane	< 1.4	ug/l	1.4	4.5	1	8260B		6/9/2016	CJR	1
Dibromochloromethane	< 0.45	ug/l	0.45	1.4	1	8260B		6/9/2016	CJR	1
1,4-Dichlorobenzene	< 0.49	ug/l	0.49	1.6	1	8260B		6/9/2016	CJR	1
1,3-Dichlorobenzene	< 0.52	ug/l	0.52	1.6	1	8260B		6/9/2016	CJR	1
1,2-Dichlorobenzene	< 0.46	ug/l	0.46	1.5	1	8260B		6/9/2016	CJR	1
Dichlorodifluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		6/9/2016	CJR	1
1,2-Dichloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		6/9/2016	CJR	1
1,1-Dichloroethane	< 1.1	ug/l	1.1	3.6	1	8260B		6/9/2016	CJR	1
1,1-Dichloroethene	< 0.65	ug/l	0.65	2.1	1	8260B		6/9/2016	CJR	1
cis-1,2-Dichloroethene	< 0.45	ug/l	0.45	1.4	1	8260B		6/9/2016	CJR	1
trans-1,2-Dichloroethene	< 0.54	ug/l	0.54	1.7	1	8260B		6/9/2016	CJR	1
1,2-Dichloropropane	< 0.43	ug/l	0.43	1.37	1	8260B		6/9/2016	CJR	1
2,2-Dichloropropane	< 3.1	ug/l	3.1	9.8	1	8260B		6/9/2016	CJR	1
1,3-Dichloropropane	< 0.42	ug/l	0.42	1.3	1	8260B		6/9/2016	CJR	1
Di-isopropyl ether	< 0.44	ug/l	0.44	1.4	1	8260B		6/9/2016	CJR	1
EDB (1,2-Dibromoethane)	< 0.63	ug/l	0.63	2	1	8260B		6/9/2016	CJR	1
Ethylbenzene	< 0.71	ug/l	0.71	2.3	1	8260B		6/9/2016	CJR	1
Hexachlorobutadiene	< 2.2	ug/l	2.2	7.1	1	8260B		6/9/2016	CJR	1
Isopropylbenzene	< 0.82	ug/l	0.82	2.6	1	8260B		6/9/2016	CJR	1

Project Name NEWTON PIT **Invoice #** E31160
Project # 60135471

Lab Code 5031160A
Sample ID 4002 THUNDER RI
Sample Matrix Water
Sample Date 6/2/2016

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
p-Isopropyltoluene	< 1.1	ug/l	1.1	3.5	1	8260B		6/9/2016	CJR	1
Methylene chloride	< 1.3	ug/l	1.3	4.2	1	8260B		6/9/2016	CJR	1
Methyl tert-butyl ether (MTBE)	< 1.1	ug/l	1.1	3.7	1	8260B		6/9/2016	CJR	1
Naphthalene	< 1.6	ug/l	1.6	5.2	1	8260B		6/9/2016	CJR	1
n-Propylbenzene	< 0.77	ug/l	0.77	2.4	1	8260B		6/9/2016	CJR	1
1,1,2,2-Tetrachloroethane	< 0.52	ug/l	0.52	1.7	1	8260B		6/9/2016	CJR	1
1,1,1,2-Tetrachloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		6/9/2016	CJR	1
Tetrachloroethene	< 0.49	ug/l	0.49	1.5	1	8260B		6/9/2016	CJR	1
Toluene	< 0.44	ug/l	0.44	1.4	1	8260B		6/9/2016	CJR	1
1,2,4-Trichlorobenzene	< 1.7	ug/l	1.7	5.6	1	8260B		6/9/2016	CJR	1
1,2,3-Trichlorobenzene	< 2.7	ug/l	2.7	8.6	1	8260B		6/9/2016	CJR	1
1,1,1-Trichloroethane	< 0.84	ug/l	0.84	2.7	1	8260B		6/9/2016	CJR	1
1,1,2-Trichloroethane	< 0.48	ug/l	0.48	1.52	1	8260B		6/9/2016	CJR	1
Trichloroethene (TCE)	< 0.47	ug/l	0.47	1.5	1	8260B		6/9/2016	CJR	1
Trichlorofluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		6/9/2016	CJR	1
1,2,4-Trimethylbenzene	< 1.6	ug/l	1.6	5	1	8260B		6/9/2016	CJR	1
1,3,5-Trimethylbenzene	< 1.5	ug/l	1.5	4.8	1	8260B		6/9/2016	CJR	1
Vinyl Chloride	< 0.17	ug/l	0.17	0.54	1	8260B		6/9/2016	CJR	1
m&p-Xylene	< 2.2	ug/l	2.2	6.9	1	8260B		6/9/2016	CJR	1
o-Xylene	< 0.9	ug/l	0.9	2.9	1	8260B		6/9/2016	CJR	1
SUR - Dibromofluoromethane	99	REC %			1	8260B		6/9/2016	CJR	1
SUR - 1,2-Dichloroethane-d4	97	REC %			1	8260B		6/9/2016	CJR	1
SUR - 4-Bromofluorobenzene	111	REC %			1	8260B		6/9/2016	CJR	1
SUR - Toluene-d8	95	REC %			1	8260B		6/9/2016	CJR	1

CHAIN OF CUSTODY RECORD

Synergy

Environmental Lab, Inc.

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

Chain # No 2704

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 #: 60135471	
Sampler: (signature) DSH	

Project (Name / Location): Newton Pit - Portable			
Reports To: Dave Henderson		Invoice To: Same	
Company	AECOM	Company	
Address	1555 N Rivercenter	Address	
City State Zip	Milw WI 53212	City State Zip	
Phone	414 429 8304	Phone	
FAX		FAX	

Lab I.D.	Sample I.D.	Collection Date	Collection Time	Comp	Grab	Filtered Y/N	No. of Containers	Sample Type (Matrix)*	Preservation
503160A	4002 Thunder Ridge	6/2/16	245		X	N	3	GW	HCL

Analysis Requested | **Other Analysis**

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
												X										

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

Sample Integrity - To be completed by receiving lab.
Method of Shipment: Sm
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
D.S. Henderson		6/3/16			

Received in Laboratory By: [signature] Time: 10:00 Date: 6/4/16

Synergy Environmental Lab, INC.

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

Dave Henderson
AECOM
1555 N RIVERCENTER DRIVE
MILWAUKEE, WI 53212

Report Date *08-Jul-16*

Project Name NEWTON PIT-POTABLE **Invoice #** E31285
Project # 60135471

Lab Code 5031285A
Sample ID RAW H2O
Sample Matrix Water
Sample Date 6/23/2016

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Inorganic										
Metals										
Iron, Total	14.5	mg/l	0.04	0.14	1	200.7		6/28/2016	CWT	1
Organic										
VOC's										
Benzene	< 0.44	ug/l	0.44	1.4	1	8260B		6/30/2016	CJR	1
Bromobenzene	< 0.48	ug/l	0.48	1.5	1	8260B		6/30/2016	CJR	1
Bromodichloromethane	< 0.46	ug/l	0.46	1.5	1	8260B		6/30/2016	CJR	1
Bromoform	< 0.46	ug/l	0.46	1.5	1	8260B		6/30/2016	CJR	1
tert-Butylbenzene	< 1.1	ug/l	1.1	3.4	1	8260B		6/30/2016	CJR	1
sec-Butylbenzene	< 1.2	ug/l	1.2	3.8	1	8260B		6/30/2016	CJR	1
n-Butylbenzene	< 1	ug/l	1	3.3	1	8260B		6/30/2016	CJR	1
Carbon Tetrachloride	< 0.51	ug/l	0.51	1.6	1	8260B		6/30/2016	CJR	1
Chlorobenzene	< 0.46	ug/l	0.46	1.4	1	8260B		6/30/2016	CJR	1
Chloroethane	< 0.65	ug/l	0.65	2.1	1	8260B		6/30/2016	CJR	1
Chloroform	< 0.43	ug/l	0.43	1.4	1	8260B		6/30/2016	CJR	1
Chloromethane	< 1.9	ug/l	1.9	6	1	8260B		6/30/2016	CJR	1
2-Chlorotoluene	< 0.4	ug/l	0.4	1.3	1	8260B		6/30/2016	CJR	1
4-Chlorotoluene	< 0.63	ug/l	0.63	2	1	8260B		6/30/2016	CJR	1
1,2-Dibromo-3-chloropropane	< 1.4	ug/l	1.4	4.5	1	8260B		6/30/2016	CJR	1
Dibromochloromethane	< 0.45	ug/l	0.45	1.4	1	8260B		6/30/2016	CJR	1
1,4-Dichlorobenzene	< 0.49	ug/l	0.49	1.6	1	8260B		6/30/2016	CJR	1
1,3-Dichlorobenzene	< 0.52	ug/l	0.52	1.6	1	8260B		6/30/2016	CJR	1
1,2-Dichlorobenzene	< 0.46	ug/l	0.46	1.5	1	8260B		6/30/2016	CJR	1
Dichlorodifluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		6/30/2016	CJR	1
1,2-Dichloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		6/30/2016	CJR	1
1,1-Dichloroethane	< 1.1	ug/l	1.1	3.6	1	8260B		6/30/2016	CJR	1
1,1-Dichloroethene	< 0.65	ug/l	0.65	2.1	1	8260B		6/30/2016	CJR	1
cis-1,2-Dichloroethene	< 0.45	ug/l	0.45	1.4	1	8260B		6/30/2016	CJR	1
trans-1,2-Dichloroethene	< 0.54	ug/l	0.54	1.7	1	8260B		6/30/2016	CJR	1
1,2-Dichloropropane	< 0.43	ug/l	0.43	1.37	1	8260B		6/30/2016	CJR	1
2,2-Dichloropropane	< 3.1	ug/l	3.1	9.8	1	8260B		6/30/2016	CJR	1
1,3-Dichloropropane	< 0.42	ug/l	0.42	1.3	1	8260B		6/30/2016	CJR	1
Di-isopropyl ether	< 0.44	ug/l	0.44	1.4	1	8260B		6/30/2016	CJR	1

Project Name NEWTON PIT-POTABLE **Invoice #** E31285
Project # 60135471

Lab Code 5031285A
Sample ID RAW H2O
Sample Matrix Water
Sample Date 6/23/2016

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
EDB (1,2-Dibromoethane)	< 0.63	ug/l	0.63	2	1	8260B		6/30/2016	CJR	1
Ethylbenzene	< 0.71	ug/l	0.71	2.3	1	8260B		6/30/2016	CJR	1
Hexachlorobutadiene	< 2.2	ug/l	2.2	7.1	1	8260B		6/30/2016	CJR	1
Isopropylbenzene	< 0.82	ug/l	0.82	2.6	1	8260B		6/30/2016	CJR	1
p-Isopropyltoluene	< 1.1	ug/l	1.1	3.5	1	8260B		6/30/2016	CJR	1
Methylene chloride	< 1.3	ug/l	1.3	4.2	1	8260B		6/30/2016	CJR	1
Methyl tert-butyl ether (MTBE)	< 1.1	ug/l	1.1	3.7	1	8260B		6/30/2016	CJR	1
Naphthalene	< 1.6	ug/l	1.6	5.2	1	8260B		6/30/2016	CJR	1
n-Propylbenzene	< 0.77	ug/l	0.77	2.4	1	8260B		6/30/2016	CJR	1
1,1,2,2-Tetrachloroethane	< 0.52	ug/l	0.52	1.7	1	8260B		6/30/2016	CJR	1
1,1,1,2-Tetrachloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		6/30/2016	CJR	1
Tetrachloroethene	< 0.49	ug/l	0.49	1.5	1	8260B		6/30/2016	CJR	1
Toluene	< 0.44	ug/l	0.44	1.4	1	8260B		6/30/2016	CJR	1
1,2,4-Trichlorobenzene	< 1.7	ug/l	1.7	5.6	1	8260B		6/30/2016	CJR	1
1,2,3-Trichlorobenzene	< 2.7	ug/l	2.7	8.6	1	8260B		6/30/2016	CJR	1
1,1,1-Trichloroethane	< 0.84	ug/l	0.84	2.7	1	8260B		6/30/2016	CJR	1
1,1,2-Trichloroethane	< 0.48	ug/l	0.48	1.52	1	8260B		6/30/2016	CJR	1
Trichloroethene (TCE)	< 0.47	ug/l	0.47	1.5	1	8260B		6/30/2016	CJR	1
Trichlorofluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		6/30/2016	CJR	1
1,2,4-Trimethylbenzene	< 1.6	ug/l	1.6	5	1	8260B		6/30/2016	CJR	1
1,3,5-Trimethylbenzene	< 1.5	ug/l	1.5	4.8	1	8260B		6/30/2016	CJR	1
Vinyl Chloride	< 0.17	ug/l	0.17	0.54	1	8260B		6/30/2016	CJR	1
m&p-Xylene	< 2.2	ug/l	2.2	6.9	1	8260B		6/30/2016	CJR	1
o-Xylene	< 0.9	ug/l	0.9	2.9	1	8260B		6/30/2016	CJR	1
SUR - 4-Bromofluorobenzene	104	REC %			1	8260B		6/30/2016	CJR	1
SUR - Dibromofluoromethane	94	REC %			1	8260B		6/30/2016	CJR	1
SUR - 1,2-Dichloroethane-d4	97	REC %			1	8260B		6/30/2016	CJR	1
SUR - Toluene-d8	82	REC %			1	8260B		6/30/2016	CJR	1
Wet Chemistry										
General										
Hardness, Total Unfiltered	1753	mg/l	0.18	0.54	2	200.7		7/1/2016	CWT	1
Solids, Total Dissolved	2450	mg/l	20	20	1	2540c		6/30/2016	BLE	1

Lab Code 5031285B
Sample ID POST SOFT/FE
Sample Matrix Water
Sample Date 6/23/2016

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Inorganic										
Metals										
Iron, Total	0.24	mg/l	0.04	0.14	1	200.7		6/28/2016	CWT	1
Wet Chemistry										
General										
Hardness, Total Unfiltered	38.6	mg/l	0.09	0.27	1	200.7		6/28/2016	CWT	1
Solids, Total Dissolved	2386	mg/l	20	20	1	2540c		6/30/2016	BLE	1

Project Name NEWTON PIT-POTABLE **Invoice #** E31285
Project # 60135471

Lab Code 5031285C
Sample ID POST RO
Sample Matrix Water
Sample Date 6/23/2016

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Inorganic										
Metals										
Iron, Total	< 0.04	mg/l	0.04	0.14	1	200.7		6/28/2016	CWT	1
Wet Chemistry										
General										
Hardness, Total Unfiltered	5.09	mg/l	0.09	0.27	1	200.7		6/28/2016	CWT	1
Solids, Total Dissolved	270	mg/l	20	20	1	2540c		6/30/2016	BLE	1

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

Code	*Comment*
1	Laboratory QC within limits.

BLE denotes sub contract lab - Certification #445023150

CWT denotes sub contract lab - Certification #445126660

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 # Nº 284

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 #: 60135471

Sampler: (signature) DSH

Project (Name / Location): Newton Pit - Portable

Reports To: DAVE HENDERSON	Invoice To: SAME
Company AECOM	Company
Address 1555 N Rivercenter	Address
City State Zip Milw 53212	City State Zip
Phone 414 429 8304	Phone
FAX	FAX

Lab I.D.	Sample I.D.	Collection Date	Collection Time	Comp	Grab	Filtered Y/N	No. of Containers	Sample Type (Matrix)*	Preservation
503128SA	RAW H20	6/23/16	4:25		X	N		GW	
B	POST soft/Fe		4:30		X	N		GW	
C	POST RO		4:35		X	N		GW	

Analysis Requested | **Other Analysis**

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	TDS	Iron	Hardness					PID/ FID
												X		X	X	X					
														X	X	X					
														X	X	X					

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

4002 Thunder Ridge

Sample Integrity - To be completed by receiving lab.

Method of Shipment: Sm

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
D.S. Henderson	10:44	6/24/16		10:44	6/24/16

Received in Laboratory By: Time: 12:00 Date: 6/25/16

Synergy Environmental Lab, INC.

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

DAVE HENDERSON
AECOM
1555 N RIVERCENTER DRIVE
MILWAUKEE, WI 53212

Report Date *12-Aug-16*

Project Name MANITOWOC
Project # 60311767
Invoice # E31515

Lab Code 5031515A
Sample ID 3303 HRPW
Sample Matrix Water
Sample Date 8/8/2016

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
VOC's										
Benzene	< 0.44	ug/l	0.44	1.4	1	8260B		8/9/2016	CJR	1
Bromobenzene	< 0.48	ug/l	0.48	1.5	1	8260B		8/9/2016	CJR	1
Bromodichloromethane	< 0.46	ug/l	0.46	1.5	1	8260B		8/9/2016	CJR	1
Bromoform	< 0.46	ug/l	0.46	1.5	1	8260B		8/9/2016	CJR	1
tert-Butylbenzene	< 1.1	ug/l	1.1	3.4	1	8260B		8/9/2016	CJR	1
sec-Butylbenzene	< 1.2	ug/l	1.2	3.8	1	8260B		8/9/2016	CJR	1
n-Butylbenzene	< 1	ug/l	1	3.3	1	8260B		8/9/2016	CJR	1
Carbon Tetrachloride	< 0.51	ug/l	0.51	1.6	1	8260B		8/9/2016	CJR	1
Chlorobenzene	< 0.46	ug/l	0.46	1.4	1	8260B		8/9/2016	CJR	1
Chloroethane	< 0.65	ug/l	0.65	2.1	1	8260B		8/9/2016	CJR	1
Chloroform	< 0.43	ug/l	0.43	1.4	1	8260B		8/9/2016	CJR	1
Chloromethane	< 1.9	ug/l	1.9	6	1	8260B		8/9/2016	CJR	1
2-Chlorotoluene	< 0.4	ug/l	0.4	1.3	1	8260B		8/9/2016	CJR	1
4-Chlorotoluene	< 0.63	ug/l	0.63	2	1	8260B		8/9/2016	CJR	1
1,2-Dibromo-3-chloropropane	< 1.4	ug/l	1.4	4.5	1	8260B		8/9/2016	CJR	1
Dibromochloromethane	< 0.45	ug/l	0.45	1.4	1	8260B		8/9/2016	CJR	1
1,4-Dichlorobenzene	< 0.49	ug/l	0.49	1.6	1	8260B		8/9/2016	CJR	1
1,3-Dichlorobenzene	< 0.52	ug/l	0.52	1.6	1	8260B		8/9/2016	CJR	1
1,2-Dichlorobenzene	< 0.46	ug/l	0.46	1.5	1	8260B		8/9/2016	CJR	1
Dichlorodifluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		8/9/2016	CJR	1
1,2-Dichloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		8/9/2016	CJR	1
1,1-Dichloroethane	< 1.1	ug/l	1.1	3.6	1	8260B		8/9/2016	CJR	1
1,1-Dichloroethene	< 0.65	ug/l	0.65	2.1	1	8260B		8/9/2016	CJR	1
cis-1,2-Dichloroethene	< 0.45	ug/l	0.45	1.4	1	8260B		8/9/2016	CJR	1
trans-1,2-Dichloroethene	< 0.54	ug/l	0.54	1.7	1	8260B		8/9/2016	CJR	1
1,2-Dichloropropane	< 0.43	ug/l	0.43	1.37	1	8260B		8/9/2016	CJR	1
2,2-Dichloropropane	< 3.1	ug/l	3.1	9.8	1	8260B		8/9/2016	CJR	1
1,3-Dichloropropane	< 0.42	ug/l	0.42	1.3	1	8260B		8/9/2016	CJR	1
Di-isopropyl ether	< 0.44	ug/l	0.44	1.4	1	8260B		8/9/2016	CJR	1
EDB (1,2-Dibromoethane)	< 0.63	ug/l	0.63	2	1	8260B		8/9/2016	CJR	1
Ethylbenzene	< 0.71	ug/l	0.71	2.3	1	8260B		8/9/2016	CJR	1
Hexachlorobutadiene	< 2.2	ug/l	2.2	7.1	1	8260B		8/9/2016	CJR	1
Isopropylbenzene	< 0.82	ug/l	0.82	2.6	1	8260B		8/9/2016	CJR	1

Project Name MANITOWOC **Invoice #** E31515
Project # 60311767

Lab Code 5031515A
Sample ID 3303 HRPW
Sample Matrix Water
Sample Date 8/8/2016

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
p-Isopropyltoluene	< 1.1	ug/l	1.1	3.5	1	8260B		8/9/2016	CJR	1
Methylene chloride	< 1.3	ug/l	1.3	4.2	1	8260B		8/9/2016	CJR	1
Methyl tert-butyl ether (MTBE)	< 1.1	ug/l	1.1	3.7	1	8260B		8/9/2016	CJR	1
Naphthalene	< 1.6	ug/l	1.6	5.2	1	8260B		8/9/2016	CJR	1
n-Propylbenzene	< 0.77	ug/l	0.77	2.4	1	8260B		8/9/2016	CJR	1
1,1,2,2-Tetrachloroethane	< 0.52	ug/l	0.52	1.7	1	8260B		8/9/2016	CJR	1
1,1,1,2-Tetrachloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		8/9/2016	CJR	1
Tetrachloroethene	< 0.49	ug/l	0.49	1.5	1	8260B		8/9/2016	CJR	1
Toluene	< 0.44	ug/l	0.44	1.4	1	8260B		8/9/2016	CJR	1
1,2,4-Trichlorobenzene	< 1.7	ug/l	1.7	5.6	1	8260B		8/9/2016	CJR	1
1,2,3-Trichlorobenzene	< 2.7	ug/l	2.7	8.6	1	8260B		8/9/2016	CJR	1
1,1,1-Trichloroethane	< 0.84	ug/l	0.84	2.7	1	8260B		8/9/2016	CJR	1
1,1,2-Trichloroethane	< 0.48	ug/l	0.48	1.52	1	8260B		8/9/2016	CJR	1
Trichloroethene (TCE)	< 0.47	ug/l	0.47	1.5	1	8260B		8/9/2016	CJR	1
Trichlorofluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		8/9/2016	CJR	1
1,2,4-Trimethylbenzene	< 1.6	ug/l	1.6	5	1	8260B		8/9/2016	CJR	1
1,3,5-Trimethylbenzene	< 1.5	ug/l	1.5	4.8	1	8260B		8/9/2016	CJR	1
Vinyl Chloride	< 0.17	ug/l	0.17	0.54	1	8260B		8/9/2016	CJR	1
m&p-Xylene	< 2.2	ug/l	2.2	6.9	1	8260B		8/9/2016	CJR	1
o-Xylene	< 0.9	ug/l	0.9	2.9	1	8260B		8/9/2016	CJR	1
SUR - Toluene-d8	100	REC %			1	8260B		8/9/2016	CJR	1
SUR - 1,2-Dichloroethane-d4	96	REC %			1	8260B		8/9/2016	CJR	1
SUR - 4-Bromofluorobenzene	104	REC %			1	8260B		8/9/2016	CJR	1
SUR - Dibromofluoromethane	96	REC %			1	8260B		8/9/2016	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

CHAIN OF CUSTODY RECORD

Synergy
Environmental Lab, Inc.

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

Chain # Nº 270

Page ____ of ____

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

Lab I.D. #	
Account No. :	**Quote No.:**
Project #: 60311767	
Sampler: (signature) Robert Wesegah	
Project (Name / Location): Manitowoc (Newton)	
Reports To: Dave Henderson	Invoice To:
Company AECOM	Company
Address 1555 N. River Center Dr. Ste 214	Address
City State Zip Milwaukee, WI 53212	City State Zip
Phone 414-944-6190	Phone
FAX 414-944-6081	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
503515A	3303HRPW	8/8/16	8:45		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.)

Sample Integrity - To be completed by receiving lab.
Method of Shipment: Courier
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
Robert Wesegah	10:00	8/8/16			

Received in Laboratory By: [signature] Time: 8:00 Date: 8/9/16

Synergy Environmental Lab, INC.

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

DAVE HENDERSON
AECOM
1555 N RIVERCENTER DRIVE
MILWAUKEE, WI 53212

Report Date *07-Oct-16*

Project Name NEWTON PIT
Project # 60135471.

Invoice # E31812

Lab Code 5031812A
Sample ID 3303 HECKER
Sample Matrix Water
Sample Date 9/26/2016

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
VOC's										
Benzene	< 0.44	ug/l	0.44	1.4	1	8260B		10/6/2016	CJR	1
Bromobenzene	< 0.48	ug/l	0.48	1.5	1	8260B		10/6/2016	CJR	1
Bromodichloromethane	< 0.46	ug/l	0.46	1.5	1	8260B		10/6/2016	CJR	1
Bromoform	< 0.46	ug/l	0.46	1.5	1	8260B		10/6/2016	CJR	1
tert-Butylbenzene	< 1.1	ug/l	1.1	3.4	1	8260B		10/6/2016	CJR	1
sec-Butylbenzene	< 1.2	ug/l	1.2	3.8	1	8260B		10/6/2016	CJR	1
n-Butylbenzene	< 1	ug/l	1	3.3	1	8260B		10/6/2016	CJR	1
Carbon Tetrachloride	< 0.51	ug/l	0.51	1.6	1	8260B		10/6/2016	CJR	1
Chlorobenzene	< 0.46	ug/l	0.46	1.4	1	8260B		10/6/2016	CJR	1
Chloroethane	< 0.65	ug/l	0.65	2.1	1	8260B		10/6/2016	CJR	1
Chloroform	< 0.43	ug/l	0.43	1.4	1	8260B		10/6/2016	CJR	1
Chloromethane	< 1.9	ug/l	1.9	6	1	8260B		10/6/2016	CJR	1
2-Chlorotoluene	< 0.4	ug/l	0.4	1.3	1	8260B		10/6/2016	CJR	1
4-Chlorotoluene	< 0.63	ug/l	0.63	2	1	8260B		10/6/2016	CJR	1
1,2-Dibromo-3-chloropropane	< 1.4	ug/l	1.4	4.5	1	8260B		10/6/2016	CJR	1
Dibromochloromethane	< 0.45	ug/l	0.45	1.4	1	8260B		10/6/2016	CJR	1
1,4-Dichlorobenzene	< 0.49	ug/l	0.49	1.6	1	8260B		10/6/2016	CJR	1
1,3-Dichlorobenzene	< 0.52	ug/l	0.52	1.6	1	8260B		10/6/2016	CJR	1
1,2-Dichlorobenzene	< 0.46	ug/l	0.46	1.5	1	8260B		10/6/2016	CJR	1
Dichlorodifluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/6/2016	CJR	1
1,2-Dichloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/6/2016	CJR	1
1,1-Dichloroethane	< 1.1	ug/l	1.1	3.6	1	8260B		10/6/2016	CJR	1
1,1-Dichloroethene	< 0.65	ug/l	0.65	2.1	1	8260B		10/6/2016	CJR	1
cis-1,2-Dichloroethene	< 0.45	ug/l	0.45	1.4	1	8260B		10/6/2016	CJR	1
trans-1,2-Dichloroethene	< 0.54	ug/l	0.54	1.7	1	8260B		10/6/2016	CJR	1
1,2-Dichloropropane	< 0.43	ug/l	0.43	1.37	1	8260B		10/6/2016	CJR	1
2,2-Dichloropropane	< 3.1	ug/l	3.1	9.8	1	8260B		10/6/2016	CJR	1
1,3-Dichloropropane	< 0.42	ug/l	0.42	1.3	1	8260B		10/6/2016	CJR	1
Di-isopropyl ether	< 0.44	ug/l	0.44	1.4	1	8260B		10/6/2016	CJR	1
EDB (1,2-Dibromoethane)	< 0.63	ug/l	0.63	2	1	8260B		10/6/2016	CJR	1
Ethylbenzene	< 0.71	ug/l	0.71	2.3	1	8260B		10/6/2016	CJR	1
Hexachlorobutadiene	< 2.2	ug/l	2.2	7.1	1	8260B		10/6/2016	CJR	1
Isopropylbenzene	< 0.82	ug/l	0.82	2.6	1	8260B		10/6/2016	CJR	1

Project Name NEWTON PIT **Invoice #** E31812
Project # 60135471.

Lab Code 5031812A
Sample ID 3303 HECKER
Sample Matrix Water
Sample Date 9/26/2016

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
p-Isopropyltoluene	< 1.1	ug/l	1.1	3.5	1	8260B		10/6/2016	CJR	1
Methylene chloride	< 1.3	ug/l	1.3	4.2	1	8260B		10/6/2016	CJR	1
Methyl tert-butyl ether (MTBE)	< 1.1	ug/l	1.1	3.7	1	8260B		10/6/2016	CJR	1
Naphthalene	< 1.6	ug/l	1.6	5.2	1	8260B		10/6/2016	CJR	1
n-Propylbenzene	< 0.77	ug/l	0.77	2.4	1	8260B		10/6/2016	CJR	1
1,1,2,2-Tetrachloroethane	< 0.52	ug/l	0.52	1.7	1	8260B		10/6/2016	CJR	1
1,1,1,2-Tetrachloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/6/2016	CJR	1
Tetrachloroethene	< 0.49	ug/l	0.49	1.5	1	8260B		10/6/2016	CJR	1
Toluene	< 0.44	ug/l	0.44	1.4	1	8260B		10/6/2016	CJR	1
1,2,4-Trichlorobenzene	< 1.7	ug/l	1.7	5.6	1	8260B		10/6/2016	CJR	1
1,2,3-Trichlorobenzene	< 2.7	ug/l	2.7	8.6	1	8260B		10/6/2016	CJR	1
1,1,1-Trichloroethane	< 0.84	ug/l	0.84	2.7	1	8260B		10/6/2016	CJR	1
1,1,2-Trichloroethane	< 0.48	ug/l	0.48	1.52	1	8260B		10/6/2016	CJR	1
Trichloroethene (TCE)	< 0.47	ug/l	0.47	1.5	1	8260B		10/6/2016	CJR	1
Trichlorofluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/6/2016	CJR	1
1,2,4-Trimethylbenzene	< 1.6	ug/l	1.6	5	1	8260B		10/6/2016	CJR	1
1,3,5-Trimethylbenzene	< 1.5	ug/l	1.5	4.8	1	8260B		10/6/2016	CJR	1
Vinyl Chloride	< 0.17	ug/l	0.17	0.54	1	8260B		10/6/2016	CJR	1
m&p-Xylene	< 2.2	ug/l	2.2	6.9	1	8260B		10/6/2016	CJR	1
o-Xylene	< 0.9	ug/l	0.9	2.9	1	8260B		10/6/2016	CJR	1
SUR - Toluene-d8	100	REC %			1	8260B		10/6/2016	CJR	1
SUR - 1,2-Dichloroethane-d4	107	REC %			1	8260B		10/6/2016	CJR	1
SUR - 4-Bromofluorobenzene	95	REC %			1	8260B		10/6/2016	CJR	1
SUR - Dibromofluoromethane	106	REC %			1	8260B		10/6/2016	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

CHAIN OF CUSTODY RECORD

12:25
12:40

Synergy Environmental Lab, Inc.

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

Chain # Nº 2705

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 #: 60135471

Sampler: (signature) D.S. Henderson

Project (Name / Location): Newton Pit

Reports To: DAVE Henderson	Invoice To: Same
Company AECOM	Company
Address 1555 River Center	Address
City State Zip Milw WI 53212	City State Zip
Phone ~~530~~ 414 429 8304	Phone
FAX	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
503181ZA	3303 Hecker	9/26	12:40		a	N	3	GW	HCl													X		

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

Sample Integrity - To be completed by receiving lab.

Method of Shipment: Sm

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
D.S. Henderson					

Received in Laboratory By: [signature] Time: 10:00 Date: 10/1/16

Synergy Environmental Lab, INC.

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

DAVE HENDERSON
AECOM
1555 N RIVERCENTER DRIVE
MILWAUKEE, WI 53212

Report Date *19-Oct-16*

Project Name NEWTON GRAVEL PIT **Invoice #** E31859
Project # 60135471

Lab Code 5031859A
Sample ID 3515 HECKER RD
Sample Matrix Water
Sample Date 10/5/2016

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
VOC's										
Benzene	< 0.44	ug/l	0.44	1.4	1	8260B		10/13/2016	CJR	1
Bromobenzene	< 0.48	ug/l	0.48	1.5	1	8260B		10/13/2016	CJR	1
Bromodichloromethane	< 0.46	ug/l	0.46	1.5	1	8260B		10/13/2016	CJR	1
Bromoform	< 0.46	ug/l	0.46	1.5	1	8260B		10/13/2016	CJR	1
tert-Butylbenzene	< 1.1	ug/l	1.1	3.4	1	8260B		10/13/2016	CJR	1
sec-Butylbenzene	< 1.2	ug/l	1.2	3.8	1	8260B		10/13/2016	CJR	1
n-Butylbenzene	< 1	ug/l	1	3.3	1	8260B		10/13/2016	CJR	1
Carbon Tetrachloride	< 0.51	ug/l	0.51	1.6	1	8260B		10/13/2016	CJR	1
Chlorobenzene	< 0.46	ug/l	0.46	1.4	1	8260B		10/13/2016	CJR	1
Chloroethane	< 0.65	ug/l	0.65	2.1	1	8260B		10/13/2016	CJR	1
Chloroform	< 0.43	ug/l	0.43	1.4	1	8260B		10/13/2016	CJR	1
Chloromethane	< 1.9	ug/l	1.9	6	1	8260B		10/13/2016	CJR	1
2-Chlorotoluene	< 0.4	ug/l	0.4	1.3	1	8260B		10/13/2016	CJR	1
4-Chlorotoluene	< 0.63	ug/l	0.63	2	1	8260B		10/13/2016	CJR	1
1,2-Dibromo-3-chloropropane	< 1.4	ug/l	1.4	4.5	1	8260B		10/13/2016	CJR	1
Dibromochloromethane	< 0.45	ug/l	0.45	1.4	1	8260B		10/13/2016	CJR	1
1,4-Dichlorobenzene	< 0.49	ug/l	0.49	1.6	1	8260B		10/13/2016	CJR	1
1,3-Dichlorobenzene	< 0.52	ug/l	0.52	1.6	1	8260B		10/13/2016	CJR	1
1,2-Dichlorobenzene	< 0.46	ug/l	0.46	1.5	1	8260B		10/13/2016	CJR	1
Dichlorodifluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/13/2016	CJR	1
1,2-Dichloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/13/2016	CJR	1
1,1-Dichloroethane	< 1.1	ug/l	1.1	3.6	1	8260B		10/13/2016	CJR	1
1,1-Dichloroethene	< 0.65	ug/l	0.65	2.1	1	8260B		10/13/2016	CJR	1
cis-1,2-Dichloroethene	< 0.45	ug/l	0.45	1.4	1	8260B		10/13/2016	CJR	1
trans-1,2-Dichloroethene	< 0.54	ug/l	0.54	1.7	1	8260B		10/13/2016	CJR	1
1,2-Dichloropropane	< 0.43	ug/l	0.43	1.37	1	8260B		10/13/2016	CJR	1
2,2-Dichloropropane	< 3.1	ug/l	3.1	9.8	1	8260B		10/13/2016	CJR	1
1,3-Dichloropropane	< 0.42	ug/l	0.42	1.3	1	8260B		10/13/2016	CJR	1
Di-isopropyl ether	< 0.44	ug/l	0.44	1.4	1	8260B		10/13/2016	CJR	1
EDB (1,2-Dibromoethane)	< 0.63	ug/l	0.63	2	1	8260B		10/13/2016	CJR	1
Ethylbenzene	< 0.71	ug/l	0.71	2.3	1	8260B		10/13/2016	CJR	1
Hexachlorobutadiene	< 2.2	ug/l	2.2	7.1	1	8260B		10/13/2016	CJR	1
Isopropylbenzene	< 0.82	ug/l	0.82	2.6	1	8260B		10/13/2016	CJR	1

Project Name NEWTON GRAVEL PIT **Invoice #** E31859
Project # 60135471

Lab Code 5031859A
Sample ID 3515 HECKER RD
Sample Matrix Water
Sample Date 10/5/2016

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
p-Isopropyltoluene	< 1.1	ug/l	1.1	3.5	1	8260B		10/13/2016	CJR	1
Methylene chloride	< 1.3	ug/l	1.3	4.2	1	8260B		10/13/2016	CJR	1
Methyl tert-butyl ether (MTBE)	< 1.1	ug/l	1.1	3.7	1	8260B		10/13/2016	CJR	1
Naphthalene	< 1.6	ug/l	1.6	5.2	1	8260B		10/13/2016	CJR	1
n-Propylbenzene	< 0.77	ug/l	0.77	2.4	1	8260B		10/13/2016	CJR	1
1,1,2,2-Tetrachloroethane	< 0.52	ug/l	0.52	1.7	1	8260B		10/13/2016	CJR	1
1,1,1,2-Tetrachloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/13/2016	CJR	1
Tetrachloroethene	< 0.49	ug/l	0.49	1.5	1	8260B		10/13/2016	CJR	1
Toluene	< 0.44	ug/l	0.44	1.4	1	8260B		10/13/2016	CJR	1
1,2,4-Trichlorobenzene	< 1.7	ug/l	1.7	5.6	1	8260B		10/13/2016	CJR	1
1,2,3-Trichlorobenzene	< 2.7	ug/l	2.7	8.6	1	8260B		10/13/2016	CJR	1
1,1,1-Trichloroethane	< 0.84	ug/l	0.84	2.7	1	8260B		10/13/2016	CJR	1
1,1,2-Trichloroethane	< 0.48	ug/l	0.48	1.52	1	8260B		10/13/2016	CJR	1
Trichloroethene (TCE)	< 0.47	ug/l	0.47	1.5	1	8260B		10/13/2016	CJR	1
Trichlorofluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/13/2016	CJR	1
1,2,4-Trimethylbenzene	< 1.6	ug/l	1.6	5	1	8260B		10/13/2016	CJR	1
1,3,5-Trimethylbenzene	< 1.5	ug/l	1.5	4.8	1	8260B		10/13/2016	CJR	1
Vinyl Chloride	< 0.17	ug/l	0.17	0.54	1	8260B		10/13/2016	CJR	1
m&p-Xylene	< 2.2	ug/l	2.2	6.9	1	8260B		10/13/2016	CJR	1
o-Xylene	< 0.9	ug/l	0.9	2.9	1	8260B		10/13/2016	CJR	1
SUR - 1,2-Dichloroethane-d4	102	REC %			1	8260B		10/13/2016	CJR	1
SUR - 4-Bromofluorobenzene	98	REC %			1	8260B		10/13/2016	CJR	1
SUR - Dibromofluoromethane	94	REC %			1	8260B		10/13/2016	CJR	1
SUR - Toluene-d8	104	REC %			1	8260B		10/13/2016	CJR	1

Project Name NEWTON GRAVEL PIT **Invoice #** E31859
Project # 60135471

Lab Code 5031859B
Sample ID 3609 HECKER RD
Sample Matrix Water
Sample Date 10/5/2016

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
VOC's										
Benzene	< 0.44	ug/l	0.44	1.4	1	8260B		10/13/2016	CJR	1
Bromobenzene	< 0.48	ug/l	0.48	1.5	1	8260B		10/13/2016	CJR	1
Bromodichloromethane	< 0.46	ug/l	0.46	1.5	1	8260B		10/13/2016	CJR	1
Bromoform	< 0.46	ug/l	0.46	1.5	1	8260B		10/13/2016	CJR	1
tert-Butylbenzene	< 1.1	ug/l	1.1	3.4	1	8260B		10/13/2016	CJR	1
sec-Butylbenzene	< 1.2	ug/l	1.2	3.8	1	8260B		10/13/2016	CJR	1
n-Butylbenzene	< 1	ug/l	1	3.3	1	8260B		10/13/2016	CJR	1
Carbon Tetrachloride	< 0.51	ug/l	0.51	1.6	1	8260B		10/13/2016	CJR	1
Chlorobenzene	< 0.46	ug/l	0.46	1.4	1	8260B		10/13/2016	CJR	1
Chloroethane	< 0.65	ug/l	0.65	2.1	1	8260B		10/13/2016	CJR	1
Chloroform	< 0.43	ug/l	0.43	1.4	1	8260B		10/13/2016	CJR	1
Chloromethane	< 1.9	ug/l	1.9	6	1	8260B		10/13/2016	CJR	1
2-Chlorotoluene	< 0.4	ug/l	0.4	1.3	1	8260B		10/13/2016	CJR	1
4-Chlorotoluene	< 0.63	ug/l	0.63	2	1	8260B		10/13/2016	CJR	1
1,2-Dibromo-3-chloropropane	< 1.4	ug/l	1.4	4.5	1	8260B		10/13/2016	CJR	1
Dibromochloromethane	< 0.45	ug/l	0.45	1.4	1	8260B		10/13/2016	CJR	1
1,4-Dichlorobenzene	< 0.49	ug/l	0.49	1.6	1	8260B		10/13/2016	CJR	1
1,3-Dichlorobenzene	< 0.52	ug/l	0.52	1.6	1	8260B		10/13/2016	CJR	1
1,2-Dichlorobenzene	< 0.46	ug/l	0.46	1.5	1	8260B		10/13/2016	CJR	1
Dichlorodifluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/13/2016	CJR	1
1,2-Dichloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/13/2016	CJR	1
1,1-Dichloroethane	< 1.1	ug/l	1.1	3.6	1	8260B		10/13/2016	CJR	1
1,1-Dichloroethene	< 0.65	ug/l	0.65	2.1	1	8260B		10/13/2016	CJR	1
cis-1,2-Dichloroethene	< 0.45	ug/l	0.45	1.4	1	8260B		10/13/2016	CJR	1
trans-1,2-Dichloroethene	< 0.54	ug/l	0.54	1.7	1	8260B		10/13/2016	CJR	1
1,2-Dichloropropane	< 0.43	ug/l	0.43	1.37	1	8260B		10/13/2016	CJR	1
2,2-Dichloropropane	< 3.1	ug/l	3.1	9.8	1	8260B		10/13/2016	CJR	1
1,3-Dichloropropane	< 0.42	ug/l	0.42	1.3	1	8260B		10/13/2016	CJR	1
Di-isopropyl ether	< 0.44	ug/l	0.44	1.4	1	8260B		10/13/2016	CJR	1
EDB (1,2-Dibromoethane)	< 0.63	ug/l	0.63	2	1	8260B		10/13/2016	CJR	1
Ethylbenzene	< 0.71	ug/l	0.71	2.3	1	8260B		10/13/2016	CJR	1
Hexachlorobutadiene	< 2.2	ug/l	2.2	7.1	1	8260B		10/13/2016	CJR	1
Isopropylbenzene	< 0.82	ug/l	0.82	2.6	1	8260B		10/13/2016	CJR	1
p-Isopropyltoluene	< 1.1	ug/l	1.1	3.5	1	8260B		10/13/2016	CJR	1
Methylene chloride	< 1.3	ug/l	1.3	4.2	1	8260B		10/13/2016	CJR	1
Methyl tert-butyl ether (MTBE)	< 1.1	ug/l	1.1	3.7	1	8260B		10/13/2016	CJR	1
Naphthalene	< 1.6	ug/l	1.6	5.2	1	8260B		10/13/2016	CJR	1
n-Propylbenzene	< 0.77	ug/l	0.77	2.4	1	8260B		10/13/2016	CJR	1
1,1,2,2-Tetrachloroethane	< 0.52	ug/l	0.52	1.7	1	8260B		10/13/2016	CJR	1
1,1,1,2-Tetrachloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/13/2016	CJR	1
Tetrachloroethene	< 0.49	ug/l	0.49	1.5	1	8260B		10/13/2016	CJR	1
Toluene	< 0.44	ug/l	0.44	1.4	1	8260B		10/13/2016	CJR	1
1,2,4-Trichlorobenzene	< 1.7	ug/l	1.7	5.6	1	8260B		10/13/2016	CJR	1
1,2,3-Trichlorobenzene	< 2.7	ug/l	2.7	8.6	1	8260B		10/13/2016	CJR	1
1,1,1-Trichloroethane	< 0.84	ug/l	0.84	2.7	1	8260B		10/13/2016	CJR	1
1,1,2-Trichloroethane	< 0.48	ug/l	0.48	1.52	1	8260B		10/13/2016	CJR	1
Trichloroethene (TCE)	< 0.47	ug/l	0.47	1.5	1	8260B		10/13/2016	CJR	1
Trichlorofluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/13/2016	CJR	1
1,2,4-Trimethylbenzene	< 1.6	ug/l	1.6	5	1	8260B		10/13/2016	CJR	1
1,3,5-Trimethylbenzene	< 1.5	ug/l	1.5	4.8	1	8260B		10/13/2016	CJR	1
Vinyl Chloride	< 0.17	ug/l	0.17	0.54	1	8260B		10/13/2016	CJR	1
m&p-Xylene	< 2.2	ug/l	2.2	6.9	1	8260B		10/13/2016	CJR	1
o-Xylene	< 0.9	ug/l	0.9	2.9	1	8260B		10/13/2016	CJR	1
SUR - 1,2-Dichloroethane-d4	96	REC %			1	8260B		10/13/2016	CJR	1
SUR - Toluene-d8	104	REC %			1	8260B		10/13/2016	CJR	1
SUR - 4-Bromofluorobenzene	99	REC %			1	8260B		10/13/2016	CJR	1
SUR - Dibromofluoromethane	94	REC %			1	8260B		10/13/2016	CJR	1

Project Name NEWTON GRAVEL PIT **Invoice #** E31859
Project # 60135471

Lab Code 5031859C
Sample ID 3422 CTH CR
Sample Matrix Water
Sample Date 10/5/2016

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
VOC's										
Benzene	< 0.44	ug/l	0.44	1.4	1	8260B		10/13/2016	CJR	1
Bromobenzene	< 0.48	ug/l	0.48	1.5	1	8260B		10/13/2016	CJR	1
Bromodichloromethane	< 0.46	ug/l	0.46	1.5	1	8260B		10/13/2016	CJR	1
Bromoform	< 0.46	ug/l	0.46	1.5	1	8260B		10/13/2016	CJR	1
tert-Butylbenzene	< 1.1	ug/l	1.1	3.4	1	8260B		10/13/2016	CJR	1
sec-Butylbenzene	< 1.2	ug/l	1.2	3.8	1	8260B		10/13/2016	CJR	1
n-Butylbenzene	< 1	ug/l	1	3.3	1	8260B		10/13/2016	CJR	1
Carbon Tetrachloride	< 0.51	ug/l	0.51	1.6	1	8260B		10/13/2016	CJR	1
Chlorobenzene	< 0.46	ug/l	0.46	1.4	1	8260B		10/13/2016	CJR	1
Chloroethane	< 0.65	ug/l	0.65	2.1	1	8260B		10/13/2016	CJR	1
Chloroform	< 0.43	ug/l	0.43	1.4	1	8260B		10/13/2016	CJR	1
Chloromethane	< 1.9	ug/l	1.9	6	1	8260B		10/13/2016	CJR	1
2-Chlorotoluene	< 0.4	ug/l	0.4	1.3	1	8260B		10/13/2016	CJR	1
4-Chlorotoluene	< 0.63	ug/l	0.63	2	1	8260B		10/13/2016	CJR	1
1,2-Dibromo-3-chloropropane	< 1.4	ug/l	1.4	4.5	1	8260B		10/13/2016	CJR	1
Dibromochloromethane	< 0.45	ug/l	0.45	1.4	1	8260B		10/13/2016	CJR	1
1,4-Dichlorobenzene	< 0.49	ug/l	0.49	1.6	1	8260B		10/13/2016	CJR	1
1,3-Dichlorobenzene	< 0.52	ug/l	0.52	1.6	1	8260B		10/13/2016	CJR	1
1,2-Dichlorobenzene	< 0.46	ug/l	0.46	1.5	1	8260B		10/13/2016	CJR	1
Dichlorodifluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/13/2016	CJR	1
1,2-Dichloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/13/2016	CJR	1
1,1-Dichloroethane	< 1.1	ug/l	1.1	3.6	1	8260B		10/13/2016	CJR	1
1,1-Dichloroethene	< 0.65	ug/l	0.65	2.1	1	8260B		10/13/2016	CJR	1
cis-1,2-Dichloroethene	< 0.45	ug/l	0.45	1.4	1	8260B		10/13/2016	CJR	1
trans-1,2-Dichloroethene	< 0.54	ug/l	0.54	1.7	1	8260B		10/13/2016	CJR	1
1,2-Dichloropropane	< 0.43	ug/l	0.43	1.37	1	8260B		10/13/2016	CJR	1
2,2-Dichloropropane	< 3.1	ug/l	3.1	9.8	1	8260B		10/13/2016	CJR	1
1,3-Dichloropropane	< 0.42	ug/l	0.42	1.3	1	8260B		10/13/2016	CJR	1
Di-isopropyl ether	< 0.44	ug/l	0.44	1.4	1	8260B		10/13/2016	CJR	1
EDB (1,2-Dibromoethane)	< 0.63	ug/l	0.63	2	1	8260B		10/13/2016	CJR	1
Ethylbenzene	< 0.71	ug/l	0.71	2.3	1	8260B		10/13/2016	CJR	1
Hexachlorobutadiene	< 2.2	ug/l	2.2	7.1	1	8260B		10/13/2016	CJR	1
Isopropylbenzene	< 0.82	ug/l	0.82	2.6	1	8260B		10/13/2016	CJR	1
p-Isopropyltoluene	< 1.1	ug/l	1.1	3.5	1	8260B		10/13/2016	CJR	1
Methylene chloride	< 1.3	ug/l	1.3	4.2	1	8260B		10/13/2016	CJR	1
Methyl tert-butyl ether (MTBE)	< 1.1	ug/l	1.1	3.7	1	8260B		10/13/2016	CJR	1
Naphthalene	< 1.6	ug/l	1.6	5.2	1	8260B		10/13/2016	CJR	1
n-Propylbenzene	< 0.77	ug/l	0.77	2.4	1	8260B		10/13/2016	CJR	1
1,1,2,2-Tetrachloroethane	< 0.52	ug/l	0.52	1.7	1	8260B		10/13/2016	CJR	1
1,1,1,2-Tetrachloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/13/2016	CJR	1
Tetrachloroethene	< 0.49	ug/l	0.49	1.5	1	8260B		10/13/2016	CJR	1
Toluene	< 0.44	ug/l	0.44	1.4	1	8260B		10/13/2016	CJR	1
1,2,4-Trichlorobenzene	< 1.7	ug/l	1.7	5.6	1	8260B		10/13/2016	CJR	1
1,2,3-Trichlorobenzene	< 2.7	ug/l	2.7	8.6	1	8260B		10/13/2016	CJR	1
1,1,1-Trichloroethane	< 0.84	ug/l	0.84	2.7	1	8260B		10/13/2016	CJR	1
1,1,2-Trichloroethane	< 0.48	ug/l	0.48	1.52	1	8260B		10/13/2016	CJR	1
Trichloroethene (TCE)	< 0.47	ug/l	0.47	1.5	1	8260B		10/13/2016	CJR	1
Trichlorofluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/13/2016	CJR	1
1,2,4-Trimethylbenzene	< 1.6	ug/l	1.6	5	1	8260B		10/13/2016	CJR	1
1,3,5-Trimethylbenzene	< 1.5	ug/l	1.5	4.8	1	8260B		10/13/2016	CJR	1
Vinyl Chloride	< 0.17	ug/l	0.17	0.54	1	8260B		10/13/2016	CJR	1
m&p-Xylene	< 2.2	ug/l	2.2	6.9	1	8260B		10/13/2016	CJR	1
o-Xylene	< 0.9	ug/l	0.9	2.9	1	8260B		10/13/2016	CJR	1
SUR - 1,2-Dichloroethane-d4	95	REC %			1	8260B		10/13/2016	CJR	1
SUR - 4-Bromofluorobenzene	99	REC %			1	8260B		10/13/2016	CJR	1
SUR - Dibromofluoromethane	88	REC %			1	8260B		10/13/2016	CJR	1
SUR - Toluene-d8	105	REC %			1	8260B		10/13/2016	CJR	1

Project Name NEWTON GRAVEL PIT **Invoice #** E31859
Project # 60135471

Lab Code 5031859D
Sample ID 3921 BLACK HAW
Sample Matrix Water
Sample Date 10/5/2016

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
VOC's										
Benzene	< 0.44	ug/l	0.44	1.4	1	8260B		10/13/2016	CJR	1
Bromobenzene	< 0.48	ug/l	0.48	1.5	1	8260B		10/13/2016	CJR	1
Bromodichloromethane	< 0.46	ug/l	0.46	1.5	1	8260B		10/13/2016	CJR	1
Bromoform	< 0.46	ug/l	0.46	1.5	1	8260B		10/13/2016	CJR	1
tert-Butylbenzene	< 1.1	ug/l	1.1	3.4	1	8260B		10/13/2016	CJR	1
sec-Butylbenzene	< 1.2	ug/l	1.2	3.8	1	8260B		10/13/2016	CJR	1
n-Butylbenzene	< 1	ug/l	1	3.3	1	8260B		10/13/2016	CJR	1
Carbon Tetrachloride	< 0.51	ug/l	0.51	1.6	1	8260B		10/13/2016	CJR	1
Chlorobenzene	< 0.46	ug/l	0.46	1.4	1	8260B		10/13/2016	CJR	1
Chloroethane	< 0.65	ug/l	0.65	2.1	1	8260B		10/13/2016	CJR	1
Chloroform	< 0.43	ug/l	0.43	1.4	1	8260B		10/13/2016	CJR	1
Chloromethane	< 1.9	ug/l	1.9	6	1	8260B		10/13/2016	CJR	1
2-Chlorotoluene	< 0.4	ug/l	0.4	1.3	1	8260B		10/13/2016	CJR	1
4-Chlorotoluene	< 0.63	ug/l	0.63	2	1	8260B		10/13/2016	CJR	1
1,2-Dibromo-3-chloropropane	< 1.4	ug/l	1.4	4.5	1	8260B		10/13/2016	CJR	1
Dibromochloromethane	< 0.45	ug/l	0.45	1.4	1	8260B		10/13/2016	CJR	1
1,4-Dichlorobenzene	< 0.49	ug/l	0.49	1.6	1	8260B		10/13/2016	CJR	1
1,3-Dichlorobenzene	< 0.52	ug/l	0.52	1.6	1	8260B		10/13/2016	CJR	1
1,2-Dichlorobenzene	< 0.46	ug/l	0.46	1.5	1	8260B		10/13/2016	CJR	1
Dichlorodifluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/13/2016	CJR	1
1,2-Dichloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/13/2016	CJR	1
1,1-Dichloroethane	< 1.1	ug/l	1.1	3.6	1	8260B		10/13/2016	CJR	1
1,1-Dichloroethene	< 0.65	ug/l	0.65	2.1	1	8260B		10/13/2016	CJR	1
cis-1,2-Dichloroethene	0.63 "J"	ug/l	0.45	1.4	1	8260B		10/13/2016	CJR	1
trans-1,2-Dichloroethene	< 0.54	ug/l	0.54	1.7	1	8260B		10/13/2016	CJR	1
1,2-Dichloropropane	< 0.43	ug/l	0.43	1.37	1	8260B		10/13/2016	CJR	1
2,2-Dichloropropane	< 3.1	ug/l	3.1	9.8	1	8260B		10/13/2016	CJR	1
1,3-Dichloropropane	< 0.42	ug/l	0.42	1.3	1	8260B		10/13/2016	CJR	1
Di-isopropyl ether	< 0.44	ug/l	0.44	1.4	1	8260B		10/13/2016	CJR	1
EDB (1,2-Dibromoethane)	< 0.63	ug/l	0.63	2	1	8260B		10/13/2016	CJR	1
Ethylbenzene	< 0.71	ug/l	0.71	2.3	1	8260B		10/13/2016	CJR	1
Hexachlorobutadiene	< 2.2	ug/l	2.2	7.1	1	8260B		10/13/2016	CJR	1
Isopropylbenzene	< 0.82	ug/l	0.82	2.6	1	8260B		10/13/2016	CJR	1
p-Isopropyltoluene	< 1.1	ug/l	1.1	3.5	1	8260B		10/13/2016	CJR	1
Methylene chloride	< 1.3	ug/l	1.3	4.2	1	8260B		10/13/2016	CJR	1
Methyl tert-butyl ether (MTBE)	< 1.1	ug/l	1.1	3.7	1	8260B		10/13/2016	CJR	1
Naphthalene	< 1.6	ug/l	1.6	5.2	1	8260B		10/13/2016	CJR	1
n-Propylbenzene	< 0.77	ug/l	0.77	2.4	1	8260B		10/13/2016	CJR	1
1,1,2,2-Tetrachloroethane	< 0.52	ug/l	0.52	1.7	1	8260B		10/13/2016	CJR	1
1,1,1,2-Tetrachloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/13/2016	CJR	1
Tetrachloroethene	< 0.49	ug/l	0.49	1.5	1	8260B		10/13/2016	CJR	1
Toluene	< 0.44	ug/l	0.44	1.4	1	8260B		10/13/2016	CJR	1
1,2,4-Trichlorobenzene	< 1.7	ug/l	1.7	5.6	1	8260B		10/13/2016	CJR	1
1,2,3-Trichlorobenzene	< 2.7	ug/l	2.7	8.6	1	8260B		10/13/2016	CJR	1
1,1,1-Trichloroethane	< 0.84	ug/l	0.84	2.7	1	8260B		10/13/2016	CJR	1
1,1,2-Trichloroethane	< 0.48	ug/l	0.48	1.52	1	8260B		10/13/2016	CJR	1
Trichloroethene (TCE)	< 0.47	ug/l	0.47	1.5	1	8260B		10/13/2016	CJR	1
Trichlorofluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/13/2016	CJR	1
1,2,4-Trimethylbenzene	< 1.6	ug/l	1.6	5	1	8260B		10/13/2016	CJR	1
1,3,5-Trimethylbenzene	< 1.5	ug/l	1.5	4.8	1	8260B		10/13/2016	CJR	1
Vinyl Chloride	< 0.17	ug/l	0.17	0.54	1	8260B		10/13/2016	CJR	1
m&p-Xylene	< 2.2	ug/l	2.2	6.9	1	8260B		10/13/2016	CJR	1
o-Xylene	< 0.9	ug/l	0.9	2.9	1	8260B		10/13/2016	CJR	1
SUR - 1,2-Dichloroethane-d4	101	REC %			1	8260B		10/13/2016	CJR	1
SUR - 4-Bromofluorobenzene	94	REC %			1	8260B		10/13/2016	CJR	1
SUR - Dibromofluoromethane	88	REC %			1	8260B		10/13/2016	CJR	1
SUR - Toluene-d8	105	REC %			1	8260B		10/13/2016	CJR	1

Project Name NEWTON GRAVEL PIT **Invoice #** E31859
Project # 60135471

Lab Code 5031859E
Sample ID 3403 CTH CR
Sample Matrix Water
Sample Date 10/5/2016

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
VOC's										
Benzene	< 0.44	ug/l	0.44	1.4	1	8260B		10/13/2016	CJR	1
Bromobenzene	< 0.48	ug/l	0.48	1.5	1	8260B		10/13/2016	CJR	1
Bromodichloromethane	< 0.46	ug/l	0.46	1.5	1	8260B		10/13/2016	CJR	1
Bromoform	< 0.46	ug/l	0.46	1.5	1	8260B		10/13/2016	CJR	1
tert-Butylbenzene	< 1.1	ug/l	1.1	3.4	1	8260B		10/13/2016	CJR	1
sec-Butylbenzene	< 1.2	ug/l	1.2	3.8	1	8260B		10/13/2016	CJR	1
n-Butylbenzene	< 1	ug/l	1	3.3	1	8260B		10/13/2016	CJR	1
Carbon Tetrachloride	< 0.51	ug/l	0.51	1.6	1	8260B		10/13/2016	CJR	1
Chlorobenzene	< 0.46	ug/l	0.46	1.4	1	8260B		10/13/2016	CJR	1
Chloroethane	< 0.65	ug/l	0.65	2.1	1	8260B		10/13/2016	CJR	1
Chloroform	< 0.43	ug/l	0.43	1.4	1	8260B		10/13/2016	CJR	1
Chloromethane	< 1.9	ug/l	1.9	6	1	8260B		10/13/2016	CJR	1
2-Chlorotoluene	< 0.4	ug/l	0.4	1.3	1	8260B		10/13/2016	CJR	1
4-Chlorotoluene	< 0.63	ug/l	0.63	2	1	8260B		10/13/2016	CJR	1
1,2-Dibromo-3-chloropropane	< 1.4	ug/l	1.4	4.5	1	8260B		10/13/2016	CJR	1
Dibromochloromethane	< 0.45	ug/l	0.45	1.4	1	8260B		10/13/2016	CJR	1
1,4-Dichlorobenzene	< 0.49	ug/l	0.49	1.6	1	8260B		10/13/2016	CJR	1
1,3-Dichlorobenzene	< 0.52	ug/l	0.52	1.6	1	8260B		10/13/2016	CJR	1
1,2-Dichlorobenzene	< 0.46	ug/l	0.46	1.5	1	8260B		10/13/2016	CJR	1
Dichlorodifluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/13/2016	CJR	1
1,2-Dichloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/13/2016	CJR	1
1,1-Dichloroethane	< 1.1	ug/l	1.1	3.6	1	8260B		10/13/2016	CJR	1
1,1-Dichloroethene	< 0.65	ug/l	0.65	2.1	1	8260B		10/13/2016	CJR	1
cis-1,2-Dichloroethene	< 0.45	ug/l	0.45	1.4	1	8260B		10/13/2016	CJR	1
trans-1,2-Dichloroethene	< 0.54	ug/l	0.54	1.7	1	8260B		10/13/2016	CJR	1
1,2-Dichloropropane	< 0.43	ug/l	0.43	1.37	1	8260B		10/13/2016	CJR	1
2,2-Dichloropropane	< 3.1	ug/l	3.1	9.8	1	8260B		10/13/2016	CJR	1
1,3-Dichloropropane	< 0.42	ug/l	0.42	1.3	1	8260B		10/13/2016	CJR	1
Di-isopropyl ether	< 0.44	ug/l	0.44	1.4	1	8260B		10/13/2016	CJR	1
EDB (1,2-Dibromoethane)	< 0.63	ug/l	0.63	2	1	8260B		10/13/2016	CJR	1
Ethylbenzene	< 0.71	ug/l	0.71	2.3	1	8260B		10/13/2016	CJR	1
Hexachlorobutadiene	< 2.2	ug/l	2.2	7.1	1	8260B		10/13/2016	CJR	1
Isopropylbenzene	< 0.82	ug/l	0.82	2.6	1	8260B		10/13/2016	CJR	1
p-Isopropyltoluene	< 1.1	ug/l	1.1	3.5	1	8260B		10/13/2016	CJR	1
Methylene chloride	< 1.3	ug/l	1.3	4.2	1	8260B		10/13/2016	CJR	1
Methyl tert-butyl ether (MTBE)	< 1.1	ug/l	1.1	3.7	1	8260B		10/13/2016	CJR	1
Naphthalene	< 1.6	ug/l	1.6	5.2	1	8260B		10/13/2016	CJR	1
n-Propylbenzene	< 0.77	ug/l	0.77	2.4	1	8260B		10/13/2016	CJR	1
1,1,2,2-Tetrachloroethane	< 0.52	ug/l	0.52	1.7	1	8260B		10/13/2016	CJR	1
1,1,1,2-Tetrachloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/13/2016	CJR	1
Tetrachloroethene	< 0.49	ug/l	0.49	1.5	1	8260B		10/13/2016	CJR	1
Toluene	< 0.44	ug/l	0.44	1.4	1	8260B		10/13/2016	CJR	1
1,2,4-Trichlorobenzene	< 1.7	ug/l	1.7	5.6	1	8260B		10/13/2016	CJR	1
1,2,3-Trichlorobenzene	< 2.7	ug/l	2.7	8.6	1	8260B		10/13/2016	CJR	1
1,1,1-Trichloroethane	< 0.84	ug/l	0.84	2.7	1	8260B		10/13/2016	CJR	1
1,1,2-Trichloroethane	< 0.48	ug/l	0.48	1.52	1	8260B		10/13/2016	CJR	1
Trichloroethene (TCE)	< 0.47	ug/l	0.47	1.5	1	8260B		10/13/2016	CJR	1
Trichlorofluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/13/2016	CJR	1
1,2,4-Trimethylbenzene	< 1.6	ug/l	1.6	5	1	8260B		10/13/2016	CJR	1
1,3,5-Trimethylbenzene	< 1.5	ug/l	1.5	4.8	1	8260B		10/13/2016	CJR	1
Vinyl Chloride	< 0.17	ug/l	0.17	0.54	1	8260B		10/13/2016	CJR	1
m&p-Xylene	< 2.2	ug/l	2.2	6.9	1	8260B		10/13/2016	CJR	1
o-Xylene	< 0.9	ug/l	0.9	2.9	1	8260B		10/13/2016	CJR	1
SUR - Toluene-d8	104	REC %			1	8260B		10/13/2016	CJR	1
SUR - 1,2-Dichloroethane-d4	103	REC %			1	8260B		10/13/2016	CJR	1
SUR - 4-Bromofluorobenzene	98	REC %			1	8260B		10/13/2016	CJR	1
SUR - Dibromofluoromethane	93	REC %			1	8260B		10/13/2016	CJR	1

Project Name NEWTON GRAVEL PIT **Invoice #** E31859
Project # 60135471

Lab Code 5031859F
Sample ID 2706 CTH CR
Sample Matrix Water
Sample Date 10/5/2016

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
VOC's										
Benzene	< 0.44	ug/l	0.44	1.4	1	8260B		10/13/2016	CJR	1
Bromobenzene	< 0.48	ug/l	0.48	1.5	1	8260B		10/13/2016	CJR	1
Bromodichloromethane	< 0.46	ug/l	0.46	1.5	1	8260B		10/13/2016	CJR	1
Bromoform	< 0.46	ug/l	0.46	1.5	1	8260B		10/13/2016	CJR	1
tert-Butylbenzene	< 1.1	ug/l	1.1	3.4	1	8260B		10/13/2016	CJR	1
sec-Butylbenzene	< 1.2	ug/l	1.2	3.8	1	8260B		10/13/2016	CJR	1
n-Butylbenzene	< 1	ug/l	1	3.3	1	8260B		10/13/2016	CJR	1
Carbon Tetrachloride	< 0.51	ug/l	0.51	1.6	1	8260B		10/13/2016	CJR	1
Chlorobenzene	< 0.46	ug/l	0.46	1.4	1	8260B		10/13/2016	CJR	1
Chloroethane	< 0.65	ug/l	0.65	2.1	1	8260B		10/13/2016	CJR	1
Chloroform	< 0.43	ug/l	0.43	1.4	1	8260B		10/13/2016	CJR	1
Chloromethane	< 1.9	ug/l	1.9	6	1	8260B		10/13/2016	CJR	1
2-Chlorotoluene	< 0.4	ug/l	0.4	1.3	1	8260B		10/13/2016	CJR	1
4-Chlorotoluene	< 0.63	ug/l	0.63	2	1	8260B		10/13/2016	CJR	1
1,2-Dibromo-3-chloropropane	< 1.4	ug/l	1.4	4.5	1	8260B		10/13/2016	CJR	1
Dibromochloromethane	< 0.45	ug/l	0.45	1.4	1	8260B		10/13/2016	CJR	1
1,4-Dichlorobenzene	< 0.49	ug/l	0.49	1.6	1	8260B		10/13/2016	CJR	1
1,3-Dichlorobenzene	< 0.52	ug/l	0.52	1.6	1	8260B		10/13/2016	CJR	1
1,2-Dichlorobenzene	< 0.46	ug/l	0.46	1.5	1	8260B		10/13/2016	CJR	1
Dichlorodifluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/13/2016	CJR	1
1,2-Dichloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/13/2016	CJR	1
1,1-Dichloroethane	< 1.1	ug/l	1.1	3.6	1	8260B		10/13/2016	CJR	1
1,1-Dichloroethene	< 0.65	ug/l	0.65	2.1	1	8260B		10/13/2016	CJR	1
cis-1,2-Dichloroethene	< 0.45	ug/l	0.45	1.4	1	8260B		10/13/2016	CJR	1
trans-1,2-Dichloroethene	< 0.54	ug/l	0.54	1.7	1	8260B		10/13/2016	CJR	1
1,2-Dichloropropane	< 0.43	ug/l	0.43	1.37	1	8260B		10/13/2016	CJR	1
2,2-Dichloropropane	< 3.1	ug/l	3.1	9.8	1	8260B		10/13/2016	CJR	1
1,3-Dichloropropane	< 0.42	ug/l	0.42	1.3	1	8260B		10/13/2016	CJR	1
Di-isopropyl ether	< 0.44	ug/l	0.44	1.4	1	8260B		10/13/2016	CJR	1
EDB (1,2-Dibromoethane)	< 0.63	ug/l	0.63	2	1	8260B		10/13/2016	CJR	1
Ethylbenzene	< 0.71	ug/l	0.71	2.3	1	8260B		10/13/2016	CJR	1
Hexachlorobutadiene	< 2.2	ug/l	2.2	7.1	1	8260B		10/13/2016	CJR	1
Isopropylbenzene	< 0.82	ug/l	0.82	2.6	1	8260B		10/13/2016	CJR	1
p-Isopropyltoluene	< 1.1	ug/l	1.1	3.5	1	8260B		10/13/2016	CJR	1
Methylene chloride	< 1.3	ug/l	1.3	4.2	1	8260B		10/13/2016	CJR	1
Methyl tert-butyl ether (MTBE)	< 1.1	ug/l	1.1	3.7	1	8260B		10/13/2016	CJR	1
Naphthalene	< 1.6	ug/l	1.6	5.2	1	8260B		10/13/2016	CJR	1
n-Propylbenzene	< 0.77	ug/l	0.77	2.4	1	8260B		10/13/2016	CJR	1
1,1,2,2-Tetrachloroethane	< 0.52	ug/l	0.52	1.7	1	8260B		10/13/2016	CJR	1
1,1,1,2-Tetrachloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/13/2016	CJR	1
Tetrachloroethene	< 0.49	ug/l	0.49	1.5	1	8260B		10/13/2016	CJR	1
Toluene	< 0.44	ug/l	0.44	1.4	1	8260B		10/13/2016	CJR	1
1,2,4-Trichlorobenzene	< 1.7	ug/l	1.7	5.6	1	8260B		10/13/2016	CJR	1
1,2,3-Trichlorobenzene	< 2.7	ug/l	2.7	8.6	1	8260B		10/13/2016	CJR	1
1,1,1-Trichloroethane	< 0.84	ug/l	0.84	2.7	1	8260B		10/13/2016	CJR	1
1,1,2-Trichloroethane	< 0.48	ug/l	0.48	1.52	1	8260B		10/13/2016	CJR	1
Trichloroethene (TCE)	< 0.47	ug/l	0.47	1.5	1	8260B		10/13/2016	CJR	1
Trichlorofluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/13/2016	CJR	1
1,2,4-Trimethylbenzene	< 1.6	ug/l	1.6	5	1	8260B		10/13/2016	CJR	1
1,3,5-Trimethylbenzene	< 1.5	ug/l	1.5	4.8	1	8260B		10/13/2016	CJR	1
Vinyl Chloride	< 0.17	ug/l	0.17	0.54	1	8260B		10/13/2016	CJR	1
m&p-Xylene	< 2.2	ug/l	2.2	6.9	1	8260B		10/13/2016	CJR	1
o-Xylene	< 0.9	ug/l	0.9	2.9	1	8260B		10/13/2016	CJR	1
SUR - 1,2-Dichloroethane-d4	99	REC %			1	8260B		10/13/2016	CJR	1
SUR - 4-Bromofluorobenzene	97	REC %			1	8260B		10/13/2016	CJR	1
SUR - Dibromofluoromethane	95	REC %			1	8260B		10/13/2016	CJR	1
SUR - Toluene-d8	105	REC %			1	8260B		10/13/2016	CJR	1

Project Name NEWTON GRAVEL PIT **Invoice #** E31859
Project # 60135471

Lab Code 5031859G
Sample ID 3611 CTH CR
Sample Matrix Water
Sample Date 10/5/2016

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
VOC's										
Benzene	< 0.44	ug/l	0.44	1.4	1	8260B		10/13/2016	CJR	1
Bromobenzene	< 0.48	ug/l	0.48	1.5	1	8260B		10/13/2016	CJR	1
Bromodichloromethane	< 0.46	ug/l	0.46	1.5	1	8260B		10/13/2016	CJR	1
Bromoform	< 0.46	ug/l	0.46	1.5	1	8260B		10/13/2016	CJR	1
tert-Butylbenzene	< 1.1	ug/l	1.1	3.4	1	8260B		10/13/2016	CJR	1
sec-Butylbenzene	< 1.2	ug/l	1.2	3.8	1	8260B		10/13/2016	CJR	1
n-Butylbenzene	< 1	ug/l	1	3.3	1	8260B		10/13/2016	CJR	1
Carbon Tetrachloride	< 0.51	ug/l	0.51	1.6	1	8260B		10/13/2016	CJR	1
Chlorobenzene	< 0.46	ug/l	0.46	1.4	1	8260B		10/13/2016	CJR	1
Chloroethane	< 0.65	ug/l	0.65	2.1	1	8260B		10/13/2016	CJR	1
Chloroform	< 0.43	ug/l	0.43	1.4	1	8260B		10/13/2016	CJR	1
Chloromethane	< 1.9	ug/l	1.9	6	1	8260B		10/13/2016	CJR	1
2-Chlorotoluene	< 0.4	ug/l	0.4	1.3	1	8260B		10/13/2016	CJR	1
4-Chlorotoluene	< 0.63	ug/l	0.63	2	1	8260B		10/13/2016	CJR	1
1,2-Dibromo-3-chloropropane	< 1.4	ug/l	1.4	4.5	1	8260B		10/13/2016	CJR	1
Dibromochloromethane	< 0.45	ug/l	0.45	1.4	1	8260B		10/13/2016	CJR	1
1,4-Dichlorobenzene	< 0.49	ug/l	0.49	1.6	1	8260B		10/13/2016	CJR	1
1,3-Dichlorobenzene	< 0.52	ug/l	0.52	1.6	1	8260B		10/13/2016	CJR	1
1,2-Dichlorobenzene	< 0.46	ug/l	0.46	1.5	1	8260B		10/13/2016	CJR	1
Dichlorodifluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/13/2016	CJR	1
1,2-Dichloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/13/2016	CJR	1
1,1-Dichloroethane	< 1.1	ug/l	1.1	3.6	1	8260B		10/13/2016	CJR	1
1,1-Dichloroethene	< 0.65	ug/l	0.65	2.1	1	8260B		10/13/2016	CJR	1
cis-1,2-Dichloroethene	< 0.45	ug/l	0.45	1.4	1	8260B		10/13/2016	CJR	1
trans-1,2-Dichloroethene	< 0.54	ug/l	0.54	1.7	1	8260B		10/13/2016	CJR	1
1,2-Dichloropropane	< 0.43	ug/l	0.43	1.37	1	8260B		10/13/2016	CJR	1
2,2-Dichloropropane	< 3.1	ug/l	3.1	9.8	1	8260B		10/13/2016	CJR	1
1,3-Dichloropropane	< 0.42	ug/l	0.42	1.3	1	8260B		10/13/2016	CJR	1
Di-isopropyl ether	< 0.44	ug/l	0.44	1.4	1	8260B		10/13/2016	CJR	1
EDB (1,2-Dibromoethane)	< 0.63	ug/l	0.63	2	1	8260B		10/13/2016	CJR	1
Ethylbenzene	< 0.71	ug/l	0.71	2.3	1	8260B		10/13/2016	CJR	1
Hexachlorobutadiene	< 2.2	ug/l	2.2	7.1	1	8260B		10/13/2016	CJR	1
Isopropylbenzene	< 0.82	ug/l	0.82	2.6	1	8260B		10/13/2016	CJR	1
p-Isopropyltoluene	< 1.1	ug/l	1.1	3.5	1	8260B		10/13/2016	CJR	1
Methylene chloride	< 1.3	ug/l	1.3	4.2	1	8260B		10/13/2016	CJR	1
Methyl tert-butyl ether (MTBE)	< 1.1	ug/l	1.1	3.7	1	8260B		10/13/2016	CJR	1
Naphthalene	< 1.6	ug/l	1.6	5.2	1	8260B		10/13/2016	CJR	1
n-Propylbenzene	< 0.77	ug/l	0.77	2.4	1	8260B		10/13/2016	CJR	1
1,1,2,2-Tetrachloroethane	< 0.52	ug/l	0.52	1.7	1	8260B		10/13/2016	CJR	1
1,1,1,2-Tetrachloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/13/2016	CJR	1
Tetrachloroethene	< 0.49	ug/l	0.49	1.5	1	8260B		10/13/2016	CJR	1
Toluene	< 0.44	ug/l	0.44	1.4	1	8260B		10/13/2016	CJR	1
1,2,4-Trichlorobenzene	< 1.7	ug/l	1.7	5.6	1	8260B		10/13/2016	CJR	1
1,2,3-Trichlorobenzene	< 2.7	ug/l	2.7	8.6	1	8260B		10/13/2016	CJR	1
1,1,1-Trichloroethane	< 0.84	ug/l	0.84	2.7	1	8260B		10/13/2016	CJR	1
1,1,2-Trichloroethane	< 0.48	ug/l	0.48	1.52	1	8260B		10/13/2016	CJR	1
Trichloroethene (TCE)	< 0.47	ug/l	0.47	1.5	1	8260B		10/13/2016	CJR	1
Trichlorofluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/13/2016	CJR	1
1,2,4-Trimethylbenzene	< 1.6	ug/l	1.6	5	1	8260B		10/13/2016	CJR	1
1,3,5-Trimethylbenzene	< 1.5	ug/l	1.5	4.8	1	8260B		10/13/2016	CJR	1
Vinyl Chloride	< 0.17	ug/l	0.17	0.54	1	8260B		10/13/2016	CJR	1
m&p-Xylene	< 2.2	ug/l	2.2	6.9	1	8260B		10/13/2016	CJR	1
o-Xylene	< 0.9	ug/l	0.9	2.9	1	8260B		10/13/2016	CJR	1
SUR - 1,2-Dichloroethane-d4	96	REC %			1	8260B		10/13/2016	CJR	1
SUR - Toluene-d8	104	REC %			1	8260B		10/13/2016	CJR	1
SUR - 4-Bromofluorobenzene	95	REC %			1	8260B		10/13/2016	CJR	1
SUR - Dibromofluoromethane	93	REC %			1	8260B		10/13/2016	CJR	1

Project Name NEWTON GRAVEL PIT **Invoice #** E31859
Project # 60135471

Lab Code 5031859H
Sample ID 3625 HECKER RD
Sample Matrix Water
Sample Date 10/5/2016

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
VOC's										
Benzene	< 0.44	ug/l	0.44	1.4	1	8260B		10/13/2016	CJR	1
Bromobenzene	< 0.48	ug/l	0.48	1.5	1	8260B		10/13/2016	CJR	1
Bromodichloromethane	< 0.46	ug/l	0.46	1.5	1	8260B		10/13/2016	CJR	1
Bromoform	< 0.46	ug/l	0.46	1.5	1	8260B		10/13/2016	CJR	1
tert-Butylbenzene	< 1.1	ug/l	1.1	3.4	1	8260B		10/13/2016	CJR	1
sec-Butylbenzene	< 1.2	ug/l	1.2	3.8	1	8260B		10/13/2016	CJR	1
n-Butylbenzene	< 1	ug/l	1	3.3	1	8260B		10/13/2016	CJR	1
Carbon Tetrachloride	< 0.51	ug/l	0.51	1.6	1	8260B		10/13/2016	CJR	1
Chlorobenzene	< 0.46	ug/l	0.46	1.4	1	8260B		10/13/2016	CJR	1
Chloroethane	< 0.65	ug/l	0.65	2.1	1	8260B		10/13/2016	CJR	1
Chloroform	< 0.43	ug/l	0.43	1.4	1	8260B		10/13/2016	CJR	1
Chloromethane	< 1.9	ug/l	1.9	6	1	8260B		10/13/2016	CJR	1
2-Chlorotoluene	< 0.4	ug/l	0.4	1.3	1	8260B		10/13/2016	CJR	1
4-Chlorotoluene	< 0.63	ug/l	0.63	2	1	8260B		10/13/2016	CJR	1
1,2-Dibromo-3-chloropropane	< 1.4	ug/l	1.4	4.5	1	8260B		10/13/2016	CJR	1
Dibromochloromethane	< 0.45	ug/l	0.45	1.4	1	8260B		10/13/2016	CJR	1
1,4-Dichlorobenzene	< 0.49	ug/l	0.49	1.6	1	8260B		10/13/2016	CJR	1
1,3-Dichlorobenzene	< 0.52	ug/l	0.52	1.6	1	8260B		10/13/2016	CJR	1
1,2-Dichlorobenzene	< 0.46	ug/l	0.46	1.5	1	8260B		10/13/2016	CJR	1
Dichlorodifluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/13/2016	CJR	1
1,2-Dichloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/13/2016	CJR	1
1,1-Dichloroethane	< 1.1	ug/l	1.1	3.6	1	8260B		10/13/2016	CJR	1
1,1-Dichloroethene	< 0.65	ug/l	0.65	2.1	1	8260B		10/13/2016	CJR	1
cis-1,2-Dichloroethene	< 0.45	ug/l	0.45	1.4	1	8260B		10/13/2016	CJR	1
trans-1,2-Dichloroethene	< 0.54	ug/l	0.54	1.7	1	8260B		10/13/2016	CJR	1
1,2-Dichloropropane	< 0.43	ug/l	0.43	1.37	1	8260B		10/13/2016	CJR	1
2,2-Dichloropropane	< 3.1	ug/l	3.1	9.8	1	8260B		10/13/2016	CJR	1
1,3-Dichloropropane	< 0.42	ug/l	0.42	1.3	1	8260B		10/13/2016	CJR	1
Di-isopropyl ether	< 0.44	ug/l	0.44	1.4	1	8260B		10/13/2016	CJR	1
EDB (1,2-Dibromoethane)	< 0.63	ug/l	0.63	2	1	8260B		10/13/2016	CJR	1
Ethylbenzene	< 0.71	ug/l	0.71	2.3	1	8260B		10/13/2016	CJR	1
Hexachlorobutadiene	< 2.2	ug/l	2.2	7.1	1	8260B		10/13/2016	CJR	1
Isopropylbenzene	< 0.82	ug/l	0.82	2.6	1	8260B		10/13/2016	CJR	1
p-Isopropyltoluene	< 1.1	ug/l	1.1	3.5	1	8260B		10/13/2016	CJR	1
Methylene chloride	< 1.3	ug/l	1.3	4.2	1	8260B		10/13/2016	CJR	1
Methyl tert-butyl ether (MTBE)	< 1.1	ug/l	1.1	3.7	1	8260B		10/13/2016	CJR	1
Naphthalene	< 1.6	ug/l	1.6	5.2	1	8260B		10/13/2016	CJR	1
n-Propylbenzene	< 0.77	ug/l	0.77	2.4	1	8260B		10/13/2016	CJR	1
1,1,2,2-Tetrachloroethane	< 0.52	ug/l	0.52	1.7	1	8260B		10/13/2016	CJR	1
1,1,1,2-Tetrachloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/13/2016	CJR	1
Tetrachloroethene	< 0.49	ug/l	0.49	1.5	1	8260B		10/13/2016	CJR	1
Toluene	< 0.44	ug/l	0.44	1.4	1	8260B		10/13/2016	CJR	1
1,2,4-Trichlorobenzene	< 1.7	ug/l	1.7	5.6	1	8260B		10/13/2016	CJR	1
1,2,3-Trichlorobenzene	< 2.7	ug/l	2.7	8.6	1	8260B		10/13/2016	CJR	1
1,1,1-Trichloroethane	< 0.84	ug/l	0.84	2.7	1	8260B		10/13/2016	CJR	1
1,1,2-Trichloroethane	< 0.48	ug/l	0.48	1.52	1	8260B		10/13/2016	CJR	1
Trichloroethene (TCE)	< 0.47	ug/l	0.47	1.5	1	8260B		10/13/2016	CJR	1
Trichlorofluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/13/2016	CJR	1
1,2,4-Trimethylbenzene	< 1.6	ug/l	1.6	5	1	8260B		10/13/2016	CJR	1
1,3,5-Trimethylbenzene	< 1.5	ug/l	1.5	4.8	1	8260B		10/13/2016	CJR	1
Vinyl Chloride	< 0.17	ug/l	0.17	0.54	1	8260B		10/13/2016	CJR	1
m&p-Xylene	< 2.2	ug/l	2.2	6.9	1	8260B		10/13/2016	CJR	1
o-Xylene	< 0.9	ug/l	0.9	2.9	1	8260B		10/13/2016	CJR	1
SUR - 1,2-Dichloroethane-d4	100	REC %			1	8260B		10/13/2016	CJR	1
SUR - 4-Bromofluorobenzene	98	REC %			1	8260B		10/13/2016	CJR	1
SUR - Dibromofluoromethane	91	REC %			1	8260B		10/13/2016	CJR	1
SUR - Toluene-d8	104	REC %			1	8260B		10/13/2016	CJR	1

Project Name NEWTON GRAVEL PIT **Invoice #** E31859
Project # 60135471

Lab Code 5031859I
Sample ID 3625 HECKER RD D
Sample Matrix Water
Sample Date 10/5/2016

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
VOC's										
Benzene	< 0.44	ug/l	0.44	1.4	1	8260B		10/13/2016	CJR	1
Bromobenzene	< 0.48	ug/l	0.48	1.5	1	8260B		10/13/2016	CJR	1
Bromodichloromethane	< 0.46	ug/l	0.46	1.5	1	8260B		10/13/2016	CJR	1
Bromoform	< 0.46	ug/l	0.46	1.5	1	8260B		10/13/2016	CJR	1
tert-Butylbenzene	< 1.1	ug/l	1.1	3.4	1	8260B		10/13/2016	CJR	1
sec-Butylbenzene	< 1.2	ug/l	1.2	3.8	1	8260B		10/13/2016	CJR	1
n-Butylbenzene	< 1	ug/l	1	3.3	1	8260B		10/13/2016	CJR	1
Carbon Tetrachloride	< 0.51	ug/l	0.51	1.6	1	8260B		10/13/2016	CJR	1
Chlorobenzene	< 0.46	ug/l	0.46	1.4	1	8260B		10/13/2016	CJR	1
Chloroethane	< 0.65	ug/l	0.65	2.1	1	8260B		10/13/2016	CJR	1
Chloroform	< 0.43	ug/l	0.43	1.4	1	8260B		10/13/2016	CJR	1
Chloromethane	< 1.9	ug/l	1.9	6	1	8260B		10/13/2016	CJR	1
2-Chlorotoluene	< 0.4	ug/l	0.4	1.3	1	8260B		10/13/2016	CJR	1
4-Chlorotoluene	< 0.63	ug/l	0.63	2	1	8260B		10/13/2016	CJR	1
1,2-Dibromo-3-chloropropane	< 1.4	ug/l	1.4	4.5	1	8260B		10/13/2016	CJR	1
Dibromochloromethane	< 0.45	ug/l	0.45	1.4	1	8260B		10/13/2016	CJR	1
1,4-Dichlorobenzene	< 0.49	ug/l	0.49	1.6	1	8260B		10/13/2016	CJR	1
1,3-Dichlorobenzene	< 0.52	ug/l	0.52	1.6	1	8260B		10/13/2016	CJR	1
1,2-Dichlorobenzene	< 0.46	ug/l	0.46	1.5	1	8260B		10/13/2016	CJR	1
Dichlorodifluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/13/2016	CJR	1
1,2-Dichloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/13/2016	CJR	1
1,1-Dichloroethane	< 1.1	ug/l	1.1	3.6	1	8260B		10/13/2016	CJR	1
1,1-Dichloroethene	< 0.65	ug/l	0.65	2.1	1	8260B		10/13/2016	CJR	1
cis-1,2-Dichloroethene	< 0.45	ug/l	0.45	1.4	1	8260B		10/13/2016	CJR	1
trans-1,2-Dichloroethene	< 0.54	ug/l	0.54	1.7	1	8260B		10/13/2016	CJR	1
1,2-Dichloropropane	< 0.43	ug/l	0.43	1.37	1	8260B		10/13/2016	CJR	1
2,2-Dichloropropane	< 3.1	ug/l	3.1	9.8	1	8260B		10/13/2016	CJR	1
1,3-Dichloropropane	< 0.42	ug/l	0.42	1.3	1	8260B		10/13/2016	CJR	1
Di-isopropyl ether	< 0.44	ug/l	0.44	1.4	1	8260B		10/13/2016	CJR	1
EDB (1,2-Dibromoethane)	< 0.63	ug/l	0.63	2	1	8260B		10/13/2016	CJR	1
Ethylbenzene	< 0.71	ug/l	0.71	2.3	1	8260B		10/13/2016	CJR	1
Hexachlorobutadiene	< 2.2	ug/l	2.2	7.1	1	8260B		10/13/2016	CJR	1
Isopropylbenzene	< 0.82	ug/l	0.82	2.6	1	8260B		10/13/2016	CJR	1
p-Isopropyltoluene	< 1.1	ug/l	1.1	3.5	1	8260B		10/13/2016	CJR	1
Methylene chloride	< 1.3	ug/l	1.3	4.2	1	8260B		10/13/2016	CJR	1
Methyl tert-butyl ether (MTBE)	< 1.1	ug/l	1.1	3.7	1	8260B		10/13/2016	CJR	1
Naphthalene	< 1.6	ug/l	1.6	5.2	1	8260B		10/13/2016	CJR	1
n-Propylbenzene	< 0.77	ug/l	0.77	2.4	1	8260B		10/13/2016	CJR	1
1,1,2,2-Tetrachloroethane	< 0.52	ug/l	0.52	1.7	1	8260B		10/13/2016	CJR	1
1,1,1,2-Tetrachloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/13/2016	CJR	1
Tetrachloroethene	< 0.49	ug/l	0.49	1.5	1	8260B		10/13/2016	CJR	1
Toluene	< 0.44	ug/l	0.44	1.4	1	8260B		10/13/2016	CJR	1
1,2,4-Trichlorobenzene	< 1.7	ug/l	1.7	5.6	1	8260B		10/13/2016	CJR	1
1,2,3-Trichlorobenzene	< 2.7	ug/l	2.7	8.6	1	8260B		10/13/2016	CJR	1
1,1,1-Trichloroethane	< 0.84	ug/l	0.84	2.7	1	8260B		10/13/2016	CJR	1
1,1,2-Trichloroethane	< 0.48	ug/l	0.48	1.52	1	8260B		10/13/2016	CJR	1
Trichloroethene (TCE)	< 0.47	ug/l	0.47	1.5	1	8260B		10/13/2016	CJR	1
Trichlorofluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/13/2016	CJR	1
1,2,4-Trimethylbenzene	< 1.6	ug/l	1.6	5	1	8260B		10/13/2016	CJR	1
1,3,5-Trimethylbenzene	< 1.5	ug/l	1.5	4.8	1	8260B		10/13/2016	CJR	1
Vinyl Chloride	< 0.17	ug/l	0.17	0.54	1	8260B		10/13/2016	CJR	1
m&p-Xylene	< 2.2	ug/l	2.2	6.9	1	8260B		10/13/2016	CJR	1
o-Xylene	< 0.9	ug/l	0.9	2.9	1	8260B		10/13/2016	CJR	1
SUR - Toluene-d8	105	REC %			1	8260B		10/13/2016	CJR	1
SUR - Dibromofluoromethane	91	REC %			1	8260B		10/13/2016	CJR	1
SUR - 4-Bromofluorobenzene	99	REC %			1	8260B		10/13/2016	CJR	1
SUR - 1,2-Dichloroethane-d4	104	REC %			1	8260B		10/13/2016	CJR	1

Project Name NEWTON GRAVEL PIT **Invoice #** E31859
Project # 60135471

Lab Code 5031859J
Sample ID 3312 CTH CR
Sample Matrix Water
Sample Date 10/5/2016

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
VOC's										
Benzene	< 0.44	ug/l	0.44	1.4	1	8260B		10/13/2016	CJR	1
Bromobenzene	< 0.48	ug/l	0.48	1.5	1	8260B		10/13/2016	CJR	1
Bromodichloromethane	< 0.46	ug/l	0.46	1.5	1	8260B		10/13/2016	CJR	1
Bromoform	< 0.46	ug/l	0.46	1.5	1	8260B		10/13/2016	CJR	1
tert-Butylbenzene	< 1.1	ug/l	1.1	3.4	1	8260B		10/13/2016	CJR	1
sec-Butylbenzene	< 1.2	ug/l	1.2	3.8	1	8260B		10/13/2016	CJR	1
n-Butylbenzene	< 1	ug/l	1	3.3	1	8260B		10/13/2016	CJR	1
Carbon Tetrachloride	< 0.51	ug/l	0.51	1.6	1	8260B		10/13/2016	CJR	1
Chlorobenzene	< 0.46	ug/l	0.46	1.4	1	8260B		10/13/2016	CJR	1
Chloroethane	< 0.65	ug/l	0.65	2.1	1	8260B		10/13/2016	CJR	1
Chloroform	< 0.43	ug/l	0.43	1.4	1	8260B		10/13/2016	CJR	1
Chloromethane	< 1.9	ug/l	1.9	6	1	8260B		10/13/2016	CJR	1
2-Chlorotoluene	< 0.4	ug/l	0.4	1.3	1	8260B		10/13/2016	CJR	1
4-Chlorotoluene	< 0.63	ug/l	0.63	2	1	8260B		10/13/2016	CJR	1
1,2-Dibromo-3-chloropropane	< 1.4	ug/l	1.4	4.5	1	8260B		10/13/2016	CJR	1
Dibromochloromethane	< 0.45	ug/l	0.45	1.4	1	8260B		10/13/2016	CJR	1
1,4-Dichlorobenzene	< 0.49	ug/l	0.49	1.6	1	8260B		10/13/2016	CJR	1
1,3-Dichlorobenzene	< 0.52	ug/l	0.52	1.6	1	8260B		10/13/2016	CJR	1
1,2-Dichlorobenzene	< 0.46	ug/l	0.46	1.5	1	8260B		10/13/2016	CJR	1
Dichlorodifluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/13/2016	CJR	1
1,2-Dichloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/13/2016	CJR	1
1,1-Dichloroethane	< 1.1	ug/l	1.1	3.6	1	8260B		10/13/2016	CJR	1
1,1-Dichloroethene	< 0.65	ug/l	0.65	2.1	1	8260B		10/13/2016	CJR	1
cis-1,2-Dichloroethene	< 0.45	ug/l	0.45	1.4	1	8260B		10/13/2016	CJR	1
trans-1,2-Dichloroethene	< 0.54	ug/l	0.54	1.7	1	8260B		10/13/2016	CJR	1
1,2-Dichloropropane	< 0.43	ug/l	0.43	1.37	1	8260B		10/13/2016	CJR	1
2,2-Dichloropropane	< 3.1	ug/l	3.1	9.8	1	8260B		10/13/2016	CJR	1
1,3-Dichloropropane	< 0.42	ug/l	0.42	1.3	1	8260B		10/13/2016	CJR	1
Di-isopropyl ether	< 0.44	ug/l	0.44	1.4	1	8260B		10/13/2016	CJR	1
EDB (1,2-Dibromoethane)	< 0.63	ug/l	0.63	2	1	8260B		10/13/2016	CJR	1
Ethylbenzene	< 0.71	ug/l	0.71	2.3	1	8260B		10/13/2016	CJR	1
Hexachlorobutadiene	< 2.2	ug/l	2.2	7.1	1	8260B		10/13/2016	CJR	1
Isopropylbenzene	< 0.82	ug/l	0.82	2.6	1	8260B		10/13/2016	CJR	1
p-Isopropyltoluene	< 1.1	ug/l	1.1	3.5	1	8260B		10/13/2016	CJR	1
Methylene chloride	< 1.3	ug/l	1.3	4.2	1	8260B		10/13/2016	CJR	1
Methyl tert-butyl ether (MTBE)	< 1.1	ug/l	1.1	3.7	1	8260B		10/13/2016	CJR	1
Naphthalene	< 1.6	ug/l	1.6	5.2	1	8260B		10/13/2016	CJR	1
n-Propylbenzene	< 0.77	ug/l	0.77	2.4	1	8260B		10/13/2016	CJR	1
1,1,2,2-Tetrachloroethane	< 0.52	ug/l	0.52	1.7	1	8260B		10/13/2016	CJR	1
1,1,1,2-Tetrachloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/13/2016	CJR	1
Tetrachloroethene	< 0.49	ug/l	0.49	1.5	1	8260B		10/13/2016	CJR	1
Toluene	< 0.44	ug/l	0.44	1.4	1	8260B		10/13/2016	CJR	1
1,2,4-Trichlorobenzene	< 1.7	ug/l	1.7	5.6	1	8260B		10/13/2016	CJR	1
1,2,3-Trichlorobenzene	< 2.7	ug/l	2.7	8.6	1	8260B		10/13/2016	CJR	1
1,1,1-Trichloroethane	< 0.84	ug/l	0.84	2.7	1	8260B		10/13/2016	CJR	1
1,1,2-Trichloroethane	< 0.48	ug/l	0.48	1.52	1	8260B		10/13/2016	CJR	1
Trichloroethene (TCE)	< 0.47	ug/l	0.47	1.5	1	8260B		10/13/2016	CJR	1
Trichlorofluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/13/2016	CJR	1
1,2,4-Trimethylbenzene	< 1.6	ug/l	1.6	5	1	8260B		10/13/2016	CJR	1
1,3,5-Trimethylbenzene	< 1.5	ug/l	1.5	4.8	1	8260B		10/13/2016	CJR	1
Vinyl Chloride	< 0.17	ug/l	0.17	0.54	1	8260B		10/13/2016	CJR	1
m&p-Xylene	< 2.2	ug/l	2.2	6.9	1	8260B		10/13/2016	CJR	1
o-Xylene	< 0.9	ug/l	0.9	2.9	1	8260B		10/13/2016	CJR	1
SUR - 1,2-Dichloroethane-d4	100	REC %			1	8260B		10/13/2016	CJR	1
SUR - 4-Bromofluorobenzene	99	REC %			1	8260B		10/13/2016	CJR	1
SUR - Dibromofluoromethane	93	REC %			1	8260B		10/13/2016	CJR	1
SUR - Toluene-d8	105	REC %			1	8260B		10/13/2016	CJR	1

Project Name NEWTON GRAVEL PIT **Invoice #** E31859
Project # 60135471

Lab Code 5031859K
Sample ID 3327 HECKER RD
Sample Matrix Water
Sample Date 10/5/2016

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
VOC's										
Benzene	< 0.44	ug/l	0.44	1.4	1	8260B		10/13/2016	CJR	1
Bromobenzene	< 0.48	ug/l	0.48	1.5	1	8260B		10/13/2016	CJR	1
Bromodichloromethane	< 0.46	ug/l	0.46	1.5	1	8260B		10/13/2016	CJR	1
Bromoform	< 0.46	ug/l	0.46	1.5	1	8260B		10/13/2016	CJR	1
tert-Butylbenzene	< 1.1	ug/l	1.1	3.4	1	8260B		10/13/2016	CJR	1
sec-Butylbenzene	< 1.2	ug/l	1.2	3.8	1	8260B		10/13/2016	CJR	1
n-Butylbenzene	< 1	ug/l	1	3.3	1	8260B		10/13/2016	CJR	1
Carbon Tetrachloride	< 0.51	ug/l	0.51	1.6	1	8260B		10/13/2016	CJR	1
Chlorobenzene	< 0.46	ug/l	0.46	1.4	1	8260B		10/13/2016	CJR	1
Chloroethane	< 0.65	ug/l	0.65	2.1	1	8260B		10/13/2016	CJR	1
Chloroform	< 0.43	ug/l	0.43	1.4	1	8260B		10/13/2016	CJR	1
Chloromethane	< 1.9	ug/l	1.9	6	1	8260B		10/13/2016	CJR	1
2-Chlorotoluene	< 0.4	ug/l	0.4	1.3	1	8260B		10/13/2016	CJR	1
4-Chlorotoluene	< 0.63	ug/l	0.63	2	1	8260B		10/13/2016	CJR	1
1,2-Dibromo-3-chloropropane	< 1.4	ug/l	1.4	4.5	1	8260B		10/13/2016	CJR	1
Dibromochloromethane	< 0.45	ug/l	0.45	1.4	1	8260B		10/13/2016	CJR	1
1,4-Dichlorobenzene	< 0.49	ug/l	0.49	1.6	1	8260B		10/13/2016	CJR	1
1,3-Dichlorobenzene	< 0.52	ug/l	0.52	1.6	1	8260B		10/13/2016	CJR	1
1,2-Dichlorobenzene	< 0.46	ug/l	0.46	1.5	1	8260B		10/13/2016	CJR	1
Dichlorodifluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/13/2016	CJR	1
1,2-Dichloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/13/2016	CJR	1
1,1-Dichloroethane	< 1.1	ug/l	1.1	3.6	1	8260B		10/13/2016	CJR	1
1,1-Dichloroethene	< 0.65	ug/l	0.65	2.1	1	8260B		10/13/2016	CJR	1
cis-1,2-Dichloroethene	3.3	ug/l	0.45	1.4	1	8260B		10/13/2016	CJR	1
trans-1,2-Dichloroethene	< 0.54	ug/l	0.54	1.7	1	8260B		10/13/2016	CJR	1
1,2-Dichloropropane	< 0.43	ug/l	0.43	1.37	1	8260B		10/13/2016	CJR	1
2,2-Dichloropropane	< 3.1	ug/l	3.1	9.8	1	8260B		10/13/2016	CJR	1
1,3-Dichloropropane	< 0.42	ug/l	0.42	1.3	1	8260B		10/13/2016	CJR	1
Di-isopropyl ether	< 0.44	ug/l	0.44	1.4	1	8260B		10/13/2016	CJR	1
EDB (1,2-Dibromoethane)	< 0.63	ug/l	0.63	2	1	8260B		10/13/2016	CJR	1
Ethylbenzene	< 0.71	ug/l	0.71	2.3	1	8260B		10/13/2016	CJR	1
Hexachlorobutadiene	< 2.2	ug/l	2.2	7.1	1	8260B		10/13/2016	CJR	1
Isopropylbenzene	< 0.82	ug/l	0.82	2.6	1	8260B		10/13/2016	CJR	1
p-Isopropyltoluene	< 1.1	ug/l	1.1	3.5	1	8260B		10/13/2016	CJR	1
Methylene chloride	< 1.3	ug/l	1.3	4.2	1	8260B		10/13/2016	CJR	1
Methyl tert-butyl ether (MTBE)	< 1.1	ug/l	1.1	3.7	1	8260B		10/13/2016	CJR	1
Naphthalene	< 1.6	ug/l	1.6	5.2	1	8260B		10/13/2016	CJR	1
n-Propylbenzene	< 0.77	ug/l	0.77	2.4	1	8260B		10/13/2016	CJR	1
1,1,2,2-Tetrachloroethane	< 0.52	ug/l	0.52	1.7	1	8260B		10/13/2016	CJR	1
1,1,1,2-Tetrachloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/13/2016	CJR	1
Tetrachloroethene	< 0.49	ug/l	0.49	1.5	1	8260B		10/13/2016	CJR	1
Toluene	< 0.44	ug/l	0.44	1.4	1	8260B		10/13/2016	CJR	1
1,2,4-Trichlorobenzene	< 1.7	ug/l	1.7	5.6	1	8260B		10/13/2016	CJR	1
1,2,3-Trichlorobenzene	< 2.7	ug/l	2.7	8.6	1	8260B		10/13/2016	CJR	1
1,1,1-Trichloroethane	< 0.84	ug/l	0.84	2.7	1	8260B		10/13/2016	CJR	1
1,1,2-Trichloroethane	< 0.48	ug/l	0.48	1.52	1	8260B		10/13/2016	CJR	1
Trichloroethene (TCE)	< 0.47	ug/l	0.47	1.5	1	8260B		10/13/2016	CJR	1
Trichlorofluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/13/2016	CJR	1
1,2,4-Trimethylbenzene	< 1.6	ug/l	1.6	5	1	8260B		10/13/2016	CJR	1
1,3,5-Trimethylbenzene	< 1.5	ug/l	1.5	4.8	1	8260B		10/13/2016	CJR	1
Vinyl Chloride	< 0.17	ug/l	0.17	0.54	1	8260B		10/13/2016	CJR	1
m&p-Xylene	< 2.2	ug/l	2.2	6.9	1	8260B		10/13/2016	CJR	1
o-Xylene	< 0.9	ug/l	0.9	2.9	1	8260B		10/13/2016	CJR	1
SUR - 4-Bromofluorobenzene	95	REC %			1	8260B		10/13/2016	CJR	1
SUR - Dibromofluoromethane	89	REC %			1	8260B		10/13/2016	CJR	1
SUR - Toluene-d8	102	REC %			1	8260B		10/13/2016	CJR	1
SUR - 1,2-Dichloroethane-d4	103	REC %			1	8260B		10/13/2016	CJR	1

Project Name NEWTON GRAVEL PIT **Invoice #** E31859
Project # 60135471

Lab Code 5031859L
Sample ID 3023 CTH CR
Sample Matrix Water
Sample Date 10/5/2016

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
VOC's										
Benzene	< 0.44	ug/l	0.44	1.4	1	8260B		10/13/2016	CJR	1
Bromobenzene	< 0.48	ug/l	0.48	1.5	1	8260B		10/13/2016	CJR	1
Bromodichloromethane	< 0.46	ug/l	0.46	1.5	1	8260B		10/13/2016	CJR	1
Bromoform	< 0.46	ug/l	0.46	1.5	1	8260B		10/13/2016	CJR	1
tert-Butylbenzene	< 1.1	ug/l	1.1	3.4	1	8260B		10/13/2016	CJR	1
sec-Butylbenzene	< 1.2	ug/l	1.2	3.8	1	8260B		10/13/2016	CJR	1
n-Butylbenzene	< 1	ug/l	1	3.3	1	8260B		10/13/2016	CJR	1
Carbon Tetrachloride	< 0.51	ug/l	0.51	1.6	1	8260B		10/13/2016	CJR	1
Chlorobenzene	< 0.46	ug/l	0.46	1.4	1	8260B		10/13/2016	CJR	1
Chloroethane	< 0.65	ug/l	0.65	2.1	1	8260B		10/13/2016	CJR	1
Chloroform	< 0.43	ug/l	0.43	1.4	1	8260B		10/13/2016	CJR	1
Chloromethane	< 1.9	ug/l	1.9	6	1	8260B		10/13/2016	CJR	1
2-Chlorotoluene	< 0.4	ug/l	0.4	1.3	1	8260B		10/13/2016	CJR	1
4-Chlorotoluene	< 0.63	ug/l	0.63	2	1	8260B		10/13/2016	CJR	1
1,2-Dibromo-3-chloropropane	< 1.4	ug/l	1.4	4.5	1	8260B		10/13/2016	CJR	1
Dibromochloromethane	< 0.45	ug/l	0.45	1.4	1	8260B		10/13/2016	CJR	1
1,4-Dichlorobenzene	< 0.49	ug/l	0.49	1.6	1	8260B		10/13/2016	CJR	1
1,3-Dichlorobenzene	< 0.52	ug/l	0.52	1.6	1	8260B		10/13/2016	CJR	1
1,2-Dichlorobenzene	< 0.46	ug/l	0.46	1.5	1	8260B		10/13/2016	CJR	1
Dichlorodifluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/13/2016	CJR	1
1,2-Dichloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/13/2016	CJR	1
1,1-Dichloroethane	< 1.1	ug/l	1.1	3.6	1	8260B		10/13/2016	CJR	1
1,1-Dichloroethene	< 0.65	ug/l	0.65	2.1	1	8260B		10/13/2016	CJR	1
cis-1,2-Dichloroethene	< 0.45	ug/l	0.45	1.4	1	8260B		10/13/2016	CJR	1
trans-1,2-Dichloroethene	< 0.54	ug/l	0.54	1.7	1	8260B		10/13/2016	CJR	1
1,2-Dichloropropane	< 0.43	ug/l	0.43	1.37	1	8260B		10/13/2016	CJR	1
2,2-Dichloropropane	< 3.1	ug/l	3.1	9.8	1	8260B		10/13/2016	CJR	1
1,3-Dichloropropane	< 0.42	ug/l	0.42	1.3	1	8260B		10/13/2016	CJR	1
Di-isopropyl ether	< 0.44	ug/l	0.44	1.4	1	8260B		10/13/2016	CJR	1
EDB (1,2-Dibromoethane)	< 0.63	ug/l	0.63	2	1	8260B		10/13/2016	CJR	1
Ethylbenzene	< 0.71	ug/l	0.71	2.3	1	8260B		10/13/2016	CJR	1
Hexachlorobutadiene	< 2.2	ug/l	2.2	7.1	1	8260B		10/13/2016	CJR	1
Isopropylbenzene	< 0.82	ug/l	0.82	2.6	1	8260B		10/13/2016	CJR	1
p-Isopropyltoluene	< 1.1	ug/l	1.1	3.5	1	8260B		10/13/2016	CJR	1
Methylene chloride	< 1.3	ug/l	1.3	4.2	1	8260B		10/13/2016	CJR	1
Methyl tert-butyl ether (MTBE)	< 1.1	ug/l	1.1	3.7	1	8260B		10/13/2016	CJR	1
Naphthalene	< 1.6	ug/l	1.6	5.2	1	8260B		10/13/2016	CJR	1
n-Propylbenzene	< 0.77	ug/l	0.77	2.4	1	8260B		10/13/2016	CJR	1
1,1,2,2-Tetrachloroethane	< 0.52	ug/l	0.52	1.7	1	8260B		10/13/2016	CJR	1
1,1,1,2-Tetrachloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/13/2016	CJR	1
Tetrachloroethene	< 0.49	ug/l	0.49	1.5	1	8260B		10/13/2016	CJR	1
Toluene	< 0.44	ug/l	0.44	1.4	1	8260B		10/13/2016	CJR	1
1,2,4-Trichlorobenzene	< 1.7	ug/l	1.7	5.6	1	8260B		10/13/2016	CJR	1
1,2,3-Trichlorobenzene	< 2.7	ug/l	2.7	8.6	1	8260B		10/13/2016	CJR	1
1,1,1-Trichloroethane	< 0.84	ug/l	0.84	2.7	1	8260B		10/13/2016	CJR	1
1,1,2-Trichloroethane	< 0.48	ug/l	0.48	1.52	1	8260B		10/13/2016	CJR	1
Trichloroethene (TCE)	< 0.47	ug/l	0.47	1.5	1	8260B		10/13/2016	CJR	1
Trichlorofluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/13/2016	CJR	1
1,2,4-Trimethylbenzene	< 1.6	ug/l	1.6	5	1	8260B		10/13/2016	CJR	1
1,3,5-Trimethylbenzene	< 1.5	ug/l	1.5	4.8	1	8260B		10/13/2016	CJR	1
Vinyl Chloride	< 0.17	ug/l	0.17	0.54	1	8260B		10/13/2016	CJR	1
m&p-Xylene	< 2.2	ug/l	2.2	6.9	1	8260B		10/13/2016	CJR	1
o-Xylene	< 0.9	ug/l	0.9	2.9	1	8260B		10/13/2016	CJR	1
SUR - Dibromofluoromethane	93	REC %			1	8260B		10/13/2016	CJR	1
SUR - Toluene-d8	104	REC %			1	8260B		10/13/2016	CJR	1
SUR - 4-Bromofluorobenzene	95	REC %			1	8260B		10/13/2016	CJR	1
SUR - 1,2-Dichloroethane-d4	95	REC %			1	8260B		10/13/2016	CJR	1

Project Name NEWTON GRAVEL PIT **Invoice #** E31859
Project # 60135471

Lab Code 5031859M
Sample ID 4002 THUNDER RI
Sample Matrix Water
Sample Date 10/5/2016

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
VOC's										
Benzene	< 0.44	ug/l	0.44	1.4	1	8260B		10/13/2016	CJR	1
Bromobenzene	< 0.48	ug/l	0.48	1.5	1	8260B		10/13/2016	CJR	1
Bromodichloromethane	< 0.46	ug/l	0.46	1.5	1	8260B		10/13/2016	CJR	1
Bromoform	< 0.46	ug/l	0.46	1.5	1	8260B		10/13/2016	CJR	1
tert-Butylbenzene	< 1.1	ug/l	1.1	3.4	1	8260B		10/13/2016	CJR	1
sec-Butylbenzene	< 1.2	ug/l	1.2	3.8	1	8260B		10/13/2016	CJR	1
n-Butylbenzene	< 1	ug/l	1	3.3	1	8260B		10/13/2016	CJR	1
Carbon Tetrachloride	< 0.51	ug/l	0.51	1.6	1	8260B		10/13/2016	CJR	1
Chlorobenzene	< 0.46	ug/l	0.46	1.4	1	8260B		10/13/2016	CJR	1
Chloroethane	< 0.65	ug/l	0.65	2.1	1	8260B		10/13/2016	CJR	1
Chloroform	< 0.43	ug/l	0.43	1.4	1	8260B		10/13/2016	CJR	1
Chloromethane	< 1.9	ug/l	1.9	6	1	8260B		10/13/2016	CJR	1
2-Chlorotoluene	< 0.4	ug/l	0.4	1.3	1	8260B		10/13/2016	CJR	1
4-Chlorotoluene	< 0.63	ug/l	0.63	2	1	8260B		10/13/2016	CJR	1
1,2-Dibromo-3-chloropropane	< 1.4	ug/l	1.4	4.5	1	8260B		10/13/2016	CJR	1
Dibromochloromethane	< 0.45	ug/l	0.45	1.4	1	8260B		10/13/2016	CJR	1
1,4-Dichlorobenzene	< 0.49	ug/l	0.49	1.6	1	8260B		10/13/2016	CJR	1
1,3-Dichlorobenzene	< 0.52	ug/l	0.52	1.6	1	8260B		10/13/2016	CJR	1
1,2-Dichlorobenzene	< 0.46	ug/l	0.46	1.5	1	8260B		10/13/2016	CJR	1
Dichlorodifluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/13/2016	CJR	1
1,2-Dichloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/13/2016	CJR	1
1,1-Dichloroethane	< 1.1	ug/l	1.1	3.6	1	8260B		10/13/2016	CJR	1
1,1-Dichloroethene	< 0.65	ug/l	0.65	2.1	1	8260B		10/13/2016	CJR	1
cis-1,2-Dichloroethene	< 0.45	ug/l	0.45	1.4	1	8260B		10/13/2016	CJR	1
trans-1,2-Dichloroethene	< 0.54	ug/l	0.54	1.7	1	8260B		10/13/2016	CJR	1
1,2-Dichloropropane	< 0.43	ug/l	0.43	1.37	1	8260B		10/13/2016	CJR	1
2,2-Dichloropropane	< 3.1	ug/l	3.1	9.8	1	8260B		10/13/2016	CJR	1
1,3-Dichloropropane	< 0.42	ug/l	0.42	1.3	1	8260B		10/13/2016	CJR	1
Di-isopropyl ether	< 0.44	ug/l	0.44	1.4	1	8260B		10/13/2016	CJR	1
EDB (1,2-Dibromoethane)	< 0.63	ug/l	0.63	2	1	8260B		10/13/2016	CJR	1
Ethylbenzene	< 0.71	ug/l	0.71	2.3	1	8260B		10/13/2016	CJR	1
Hexachlorobutadiene	< 2.2	ug/l	2.2	7.1	1	8260B		10/13/2016	CJR	1
Isopropylbenzene	< 0.82	ug/l	0.82	2.6	1	8260B		10/13/2016	CJR	1
p-Isopropyltoluene	< 1.1	ug/l	1.1	3.5	1	8260B		10/13/2016	CJR	1
Methylene chloride	< 1.3	ug/l	1.3	4.2	1	8260B		10/13/2016	CJR	1
Methyl tert-butyl ether (MTBE)	< 1.1	ug/l	1.1	3.7	1	8260B		10/13/2016	CJR	1
Naphthalene	< 1.6	ug/l	1.6	5.2	1	8260B		10/13/2016	CJR	1
n-Propylbenzene	< 0.77	ug/l	0.77	2.4	1	8260B		10/13/2016	CJR	1
1,1,2,2-Tetrachloroethane	< 0.52	ug/l	0.52	1.7	1	8260B		10/13/2016	CJR	1
1,1,1,2-Tetrachloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/13/2016	CJR	1
Tetrachloroethene	< 0.49	ug/l	0.49	1.5	1	8260B		10/13/2016	CJR	1
Toluene	< 0.44	ug/l	0.44	1.4	1	8260B		10/13/2016	CJR	1
1,2,4-Trichlorobenzene	< 1.7	ug/l	1.7	5.6	1	8260B		10/13/2016	CJR	1
1,2,3-Trichlorobenzene	< 2.7	ug/l	2.7	8.6	1	8260B		10/13/2016	CJR	1
1,1,1-Trichloroethane	< 0.84	ug/l	0.84	2.7	1	8260B		10/13/2016	CJR	1
1,1,2-Trichloroethane	< 0.48	ug/l	0.48	1.52	1	8260B		10/13/2016	CJR	1
Trichloroethene (TCE)	< 0.47	ug/l	0.47	1.5	1	8260B		10/13/2016	CJR	1
Trichlorofluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/13/2016	CJR	1
1,2,4-Trimethylbenzene	< 1.6	ug/l	1.6	5	1	8260B		10/13/2016	CJR	1
1,3,5-Trimethylbenzene	< 1.5	ug/l	1.5	4.8	1	8260B		10/13/2016	CJR	1
Vinyl Chloride	< 0.17	ug/l	0.17	0.54	1	8260B		10/13/2016	CJR	1
m&p-Xylene	< 2.2	ug/l	2.2	6.9	1	8260B		10/13/2016	CJR	1
o-Xylene	< 0.9	ug/l	0.9	2.9	1	8260B		10/13/2016	CJR	1
SUR - 1,2-Dichloroethane-d4	99	REC %			1	8260B		10/13/2016	CJR	1
SUR - 4-Bromofluorobenzene	96	REC %			1	8260B		10/13/2016	CJR	1
SUR - Dibromofluoromethane	89	REC %			1	8260B		10/13/2016	CJR	1
SUR - Toluene-d8	106	REC %			1	8260B		10/13/2016	CJR	1

Project Name NEWTON GRAVEL PIT **Invoice #** E31859
Project # 60135471

Lab Code 5031859N
Sample ID 4027 THUNDER RI
Sample Matrix Water
Sample Date 10/6/2016

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
VOC's										
Benzene	< 0.44	ug/l	0.44	1.4	1	8260B		10/13/2016	CJR	1
Bromobenzene	< 0.48	ug/l	0.48	1.5	1	8260B		10/13/2016	CJR	1
Bromodichloromethane	< 0.46	ug/l	0.46	1.5	1	8260B		10/13/2016	CJR	1
Bromoform	< 0.46	ug/l	0.46	1.5	1	8260B		10/13/2016	CJR	1
tert-Butylbenzene	< 1.1	ug/l	1.1	3.4	1	8260B		10/13/2016	CJR	1
sec-Butylbenzene	< 1.2	ug/l	1.2	3.8	1	8260B		10/13/2016	CJR	1
n-Butylbenzene	< 1	ug/l	1	3.3	1	8260B		10/13/2016	CJR	1
Carbon Tetrachloride	< 0.51	ug/l	0.51	1.6	1	8260B		10/13/2016	CJR	1
Chlorobenzene	< 0.46	ug/l	0.46	1.4	1	8260B		10/13/2016	CJR	1
Chloroethane	< 0.65	ug/l	0.65	2.1	1	8260B		10/13/2016	CJR	1
Chloroform	< 0.43	ug/l	0.43	1.4	1	8260B		10/13/2016	CJR	1
Chloromethane	< 1.9	ug/l	1.9	6	1	8260B		10/13/2016	CJR	1
2-Chlorotoluene	< 0.4	ug/l	0.4	1.3	1	8260B		10/13/2016	CJR	1
4-Chlorotoluene	< 0.63	ug/l	0.63	2	1	8260B		10/13/2016	CJR	1
1,2-Dibromo-3-chloropropane	< 1.4	ug/l	1.4	4.5	1	8260B		10/13/2016	CJR	1
Dibromochloromethane	< 0.45	ug/l	0.45	1.4	1	8260B		10/13/2016	CJR	1
1,4-Dichlorobenzene	< 0.49	ug/l	0.49	1.6	1	8260B		10/13/2016	CJR	1
1,3-Dichlorobenzene	< 0.52	ug/l	0.52	1.6	1	8260B		10/13/2016	CJR	1
1,2-Dichlorobenzene	< 0.46	ug/l	0.46	1.5	1	8260B		10/13/2016	CJR	1
Dichlorodifluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/13/2016	CJR	1
1,2-Dichloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/13/2016	CJR	1
1,1-Dichloroethane	< 1.1	ug/l	1.1	3.6	1	8260B		10/13/2016	CJR	1
1,1-Dichloroethene	< 0.65	ug/l	0.65	2.1	1	8260B		10/13/2016	CJR	1
cis-1,2-Dichloroethene	0.96 "J"	ug/l	0.45	1.4	1	8260B		10/13/2016	CJR	1
trans-1,2-Dichloroethene	< 0.54	ug/l	0.54	1.7	1	8260B		10/13/2016	CJR	1
1,2-Dichloropropane	< 0.43	ug/l	0.43	1.37	1	8260B		10/13/2016	CJR	1
2,2-Dichloropropane	< 3.1	ug/l	3.1	9.8	1	8260B		10/13/2016	CJR	1
1,3-Dichloropropane	< 0.42	ug/l	0.42	1.3	1	8260B		10/13/2016	CJR	1
Di-isopropyl ether	< 0.44	ug/l	0.44	1.4	1	8260B		10/13/2016	CJR	1
EDB (1,2-Dibromoethane)	< 0.63	ug/l	0.63	2	1	8260B		10/13/2016	CJR	1
Ethylbenzene	< 0.71	ug/l	0.71	2.3	1	8260B		10/13/2016	CJR	1
Hexachlorobutadiene	< 2.2	ug/l	2.2	7.1	1	8260B		10/13/2016	CJR	1
Isopropylbenzene	< 0.82	ug/l	0.82	2.6	1	8260B		10/13/2016	CJR	1
p-Isopropyltoluene	< 1.1	ug/l	1.1	3.5	1	8260B		10/13/2016	CJR	1
Methylene chloride	< 1.3	ug/l	1.3	4.2	1	8260B		10/13/2016	CJR	1
Methyl tert-butyl ether (MTBE)	< 1.1	ug/l	1.1	3.7	1	8260B		10/13/2016	CJR	1
Naphthalene	< 1.6	ug/l	1.6	5.2	1	8260B		10/13/2016	CJR	1
n-Propylbenzene	< 0.77	ug/l	0.77	2.4	1	8260B		10/13/2016	CJR	1
1,1,2,2-Tetrachloroethane	< 0.52	ug/l	0.52	1.7	1	8260B		10/13/2016	CJR	1
1,1,1,2-Tetrachloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/13/2016	CJR	1
Tetrachloroethene	< 0.49	ug/l	0.49	1.5	1	8260B		10/13/2016	CJR	1
Toluene	< 0.44	ug/l	0.44	1.4	1	8260B		10/13/2016	CJR	1
1,2,4-Trichlorobenzene	< 1.7	ug/l	1.7	5.6	1	8260B		10/13/2016	CJR	1
1,2,3-Trichlorobenzene	< 2.7	ug/l	2.7	8.6	1	8260B		10/13/2016	CJR	1
1,1,1-Trichloroethane	< 0.84	ug/l	0.84	2.7	1	8260B		10/13/2016	CJR	1
1,1,2-Trichloroethane	< 0.48	ug/l	0.48	1.52	1	8260B		10/13/2016	CJR	1
Trichloroethene (TCE)	< 0.47	ug/l	0.47	1.5	1	8260B		10/13/2016	CJR	1
Trichlorofluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/13/2016	CJR	1
1,2,4-Trimethylbenzene	< 1.6	ug/l	1.6	5	1	8260B		10/13/2016	CJR	1
1,3,5-Trimethylbenzene	< 1.5	ug/l	1.5	4.8	1	8260B		10/13/2016	CJR	1
Vinyl Chloride	< 0.17	ug/l	0.17	0.54	1	8260B		10/13/2016	CJR	1
m&p-Xylene	< 2.2	ug/l	2.2	6.9	1	8260B		10/13/2016	CJR	1
o-Xylene	< 0.9	ug/l	0.9	2.9	1	8260B		10/13/2016	CJR	1
SUR - 1,2-Dichloroethane-d4	99	REC %			1	8260B		10/13/2016	CJR	1
SUR - Toluene-d8	104	REC %			1	8260B		10/13/2016	CJR	1
SUR - Dibromofluoromethane	90	REC %			1	8260B		10/13/2016	CJR	1
SUR - 4-Bromofluorobenzene	97	REC %			1	8260B		10/13/2016	CJR	1

Project Name NEWTON GRAVEL PIT **Invoice #** E31859
Project # 60135471

Lab Code 5031859O
Sample ID 4027 THUNDER RI
Sample Matrix Water
Sample Date 10/6/2016

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
VOC's										
Benzene	< 0.44	ug/l	0.44	1.4	1	8260B		10/13/2016	CJR	1
Bromobenzene	< 0.48	ug/l	0.48	1.5	1	8260B		10/13/2016	CJR	1
Bromodichloromethane	< 0.46	ug/l	0.46	1.5	1	8260B		10/13/2016	CJR	1
Bromoform	< 0.46	ug/l	0.46	1.5	1	8260B		10/13/2016	CJR	1
tert-Butylbenzene	< 1.1	ug/l	1.1	3.4	1	8260B		10/13/2016	CJR	1
sec-Butylbenzene	< 1.2	ug/l	1.2	3.8	1	8260B		10/13/2016	CJR	1
n-Butylbenzene	< 1	ug/l	1	3.3	1	8260B		10/13/2016	CJR	1
Carbon Tetrachloride	< 0.51	ug/l	0.51	1.6	1	8260B		10/13/2016	CJR	1
Chlorobenzene	< 0.46	ug/l	0.46	1.4	1	8260B		10/13/2016	CJR	1
Chloroethane	< 0.65	ug/l	0.65	2.1	1	8260B		10/13/2016	CJR	1
Chloroform	< 0.43	ug/l	0.43	1.4	1	8260B		10/13/2016	CJR	1
Chloromethane	< 1.9	ug/l	1.9	6	1	8260B		10/13/2016	CJR	1
2-Chlorotoluene	< 0.4	ug/l	0.4	1.3	1	8260B		10/13/2016	CJR	1
4-Chlorotoluene	< 0.63	ug/l	0.63	2	1	8260B		10/13/2016	CJR	1
1,2-Dibromo-3-chloropropane	< 1.4	ug/l	1.4	4.5	1	8260B		10/13/2016	CJR	1
Dibromochloromethane	< 0.45	ug/l	0.45	1.4	1	8260B		10/13/2016	CJR	1
1,4-Dichlorobenzene	< 0.49	ug/l	0.49	1.6	1	8260B		10/13/2016	CJR	1
1,3-Dichlorobenzene	< 0.52	ug/l	0.52	1.6	1	8260B		10/13/2016	CJR	1
1,2-Dichlorobenzene	< 0.46	ug/l	0.46	1.5	1	8260B		10/13/2016	CJR	1
Dichlorodifluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/13/2016	CJR	1
1,2-Dichloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/13/2016	CJR	1
1,1-Dichloroethane	< 1.1	ug/l	1.1	3.6	1	8260B		10/13/2016	CJR	1
1,1-Dichloroethene	< 0.65	ug/l	0.65	2.1	1	8260B		10/13/2016	CJR	1
cis-1,2-Dichloroethene	0.77 "J"	ug/l	0.45	1.4	1	8260B		10/13/2016	CJR	1
trans-1,2-Dichloroethene	< 0.54	ug/l	0.54	1.7	1	8260B		10/13/2016	CJR	1
1,2-Dichloropropane	< 0.43	ug/l	0.43	1.37	1	8260B		10/13/2016	CJR	1
2,2-Dichloropropane	< 3.1	ug/l	3.1	9.8	1	8260B		10/13/2016	CJR	1
1,3-Dichloropropane	< 0.42	ug/l	0.42	1.3	1	8260B		10/13/2016	CJR	1
Di-isopropyl ether	< 0.44	ug/l	0.44	1.4	1	8260B		10/13/2016	CJR	1
EDB (1,2-Dibromoethane)	< 0.63	ug/l	0.63	2	1	8260B		10/13/2016	CJR	1
Ethylbenzene	< 0.71	ug/l	0.71	2.3	1	8260B		10/13/2016	CJR	1
Hexachlorobutadiene	< 2.2	ug/l	2.2	7.1	1	8260B		10/13/2016	CJR	1
Isopropylbenzene	< 0.82	ug/l	0.82	2.6	1	8260B		10/13/2016	CJR	1
p-Isopropyltoluene	< 1.1	ug/l	1.1	3.5	1	8260B		10/13/2016	CJR	1
Methylene chloride	< 1.3	ug/l	1.3	4.2	1	8260B		10/13/2016	CJR	1
Methyl tert-butyl ether (MTBE)	< 1.1	ug/l	1.1	3.7	1	8260B		10/13/2016	CJR	1
Naphthalene	< 1.6	ug/l	1.6	5.2	1	8260B		10/13/2016	CJR	1
n-Propylbenzene	< 0.77	ug/l	0.77	2.4	1	8260B		10/13/2016	CJR	1
1,1,2,2-Tetrachloroethane	< 0.52	ug/l	0.52	1.7	1	8260B		10/13/2016	CJR	1
1,1,1,2-Tetrachloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/13/2016	CJR	1
Tetrachloroethene	< 0.49	ug/l	0.49	1.5	1	8260B		10/13/2016	CJR	1
Toluene	< 0.44	ug/l	0.44	1.4	1	8260B		10/13/2016	CJR	1
1,2,4-Trichlorobenzene	< 1.7	ug/l	1.7	5.6	1	8260B		10/13/2016	CJR	1
1,2,3-Trichlorobenzene	< 2.7	ug/l	2.7	8.6	1	8260B		10/13/2016	CJR	1
1,1,1-Trichloroethane	< 0.84	ug/l	0.84	2.7	1	8260B		10/13/2016	CJR	1
1,1,2-Trichloroethane	< 0.48	ug/l	0.48	1.52	1	8260B		10/13/2016	CJR	1
Trichloroethene (TCE)	< 0.47	ug/l	0.47	1.5	1	8260B		10/13/2016	CJR	1
Trichlorofluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/13/2016	CJR	1
1,2,4-Trimethylbenzene	< 1.6	ug/l	1.6	5	1	8260B		10/13/2016	CJR	1
1,3,5-Trimethylbenzene	< 1.5	ug/l	1.5	4.8	1	8260B		10/13/2016	CJR	1
Vinyl Chloride	< 0.17	ug/l	0.17	0.54	1	8260B		10/13/2016	CJR	1
m&p-Xylene	< 2.2	ug/l	2.2	6.9	1	8260B		10/13/2016	CJR	1
o-Xylene	< 0.9	ug/l	0.9	2.9	1	8260B		10/13/2016	CJR	1
SUR - 1,2-Dichloroethane-d4	102	REC %			1	8260B		10/13/2016	CJR	1
SUR - 4-Bromofluorobenzene	98	REC %			1	8260B		10/13/2016	CJR	1
SUR - Dibromofluoromethane	93	REC %			1	8260B		10/13/2016	CJR	1
SUR - Toluene-d8	104	REC %			1	8260B		10/13/2016	CJR	1

Project Name NEWTON GRAVEL PIT **Invoice #** E31859
Project # 60135471

Lab Code 5031859P
Sample ID 3618 CTH CR
Sample Matrix Water
Sample Date 10/6/2016

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
VOC's										
Benzene	< 0.44	ug/l	0.44	1.4	1	8260B		10/13/2016	CJR	1
Bromobenzene	< 0.48	ug/l	0.48	1.5	1	8260B		10/13/2016	CJR	1
Bromodichloromethane	< 0.46	ug/l	0.46	1.5	1	8260B		10/13/2016	CJR	1
Bromoform	< 0.46	ug/l	0.46	1.5	1	8260B		10/13/2016	CJR	1
tert-Butylbenzene	< 1.1	ug/l	1.1	3.4	1	8260B		10/13/2016	CJR	1
sec-Butylbenzene	< 1.2	ug/l	1.2	3.8	1	8260B		10/13/2016	CJR	1
n-Butylbenzene	< 1	ug/l	1	3.3	1	8260B		10/13/2016	CJR	1
Carbon Tetrachloride	< 0.51	ug/l	0.51	1.6	1	8260B		10/13/2016	CJR	1
Chlorobenzene	< 0.46	ug/l	0.46	1.4	1	8260B		10/13/2016	CJR	1
Chloroethane	< 0.65	ug/l	0.65	2.1	1	8260B		10/13/2016	CJR	1
Chloroform	< 0.43	ug/l	0.43	1.4	1	8260B		10/13/2016	CJR	1
Chloromethane	< 1.9	ug/l	1.9	6	1	8260B		10/13/2016	CJR	1
2-Chlorotoluene	< 0.4	ug/l	0.4	1.3	1	8260B		10/13/2016	CJR	1
4-Chlorotoluene	< 0.63	ug/l	0.63	2	1	8260B		10/13/2016	CJR	1
1,2-Dibromo-3-chloropropane	< 1.4	ug/l	1.4	4.5	1	8260B		10/13/2016	CJR	1
Dibromochloromethane	< 0.45	ug/l	0.45	1.4	1	8260B		10/13/2016	CJR	1
1,4-Dichlorobenzene	< 0.49	ug/l	0.49	1.6	1	8260B		10/13/2016	CJR	1
1,3-Dichlorobenzene	< 0.52	ug/l	0.52	1.6	1	8260B		10/13/2016	CJR	1
1,2-Dichlorobenzene	< 0.46	ug/l	0.46	1.5	1	8260B		10/13/2016	CJR	1
Dichlorodifluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/13/2016	CJR	1
1,2-Dichloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/13/2016	CJR	1
1,1-Dichloroethane	< 1.1	ug/l	1.1	3.6	1	8260B		10/13/2016	CJR	1
1,1-Dichloroethene	< 0.65	ug/l	0.65	2.1	1	8260B		10/13/2016	CJR	1
cis-1,2-Dichloroethene	0.88 "J"	ug/l	0.45	1.4	1	8260B		10/13/2016	CJR	1
trans-1,2-Dichloroethene	< 0.54	ug/l	0.54	1.7	1	8260B		10/13/2016	CJR	1
1,2-Dichloropropane	< 0.43	ug/l	0.43	1.37	1	8260B		10/13/2016	CJR	1
2,2-Dichloropropane	< 3.1	ug/l	3.1	9.8	1	8260B		10/13/2016	CJR	1
1,3-Dichloropropane	< 0.42	ug/l	0.42	1.3	1	8260B		10/13/2016	CJR	1
Di-isopropyl ether	< 0.44	ug/l	0.44	1.4	1	8260B		10/13/2016	CJR	1
EDB (1,2-Dibromoethane)	< 0.63	ug/l	0.63	2	1	8260B		10/13/2016	CJR	1
Ethylbenzene	< 0.71	ug/l	0.71	2.3	1	8260B		10/13/2016	CJR	1
Hexachlorobutadiene	< 2.2	ug/l	2.2	7.1	1	8260B		10/13/2016	CJR	1
Isopropylbenzene	< 0.82	ug/l	0.82	2.6	1	8260B		10/13/2016	CJR	1
p-Isopropyltoluene	< 1.1	ug/l	1.1	3.5	1	8260B		10/13/2016	CJR	1
Methylene chloride	< 1.3	ug/l	1.3	4.2	1	8260B		10/13/2016	CJR	1
Methyl tert-butyl ether (MTBE)	< 1.1	ug/l	1.1	3.7	1	8260B		10/13/2016	CJR	1
Naphthalene	< 1.6	ug/l	1.6	5.2	1	8260B		10/13/2016	CJR	1
n-Propylbenzene	< 0.77	ug/l	0.77	2.4	1	8260B		10/13/2016	CJR	1
1,1,2,2-Tetrachloroethane	< 0.52	ug/l	0.52	1.7	1	8260B		10/13/2016	CJR	1
1,1,1,2-Tetrachloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/13/2016	CJR	1
Tetrachloroethene	< 0.49	ug/l	0.49	1.5	1	8260B		10/13/2016	CJR	1
Toluene	< 0.44	ug/l	0.44	1.4	1	8260B		10/13/2016	CJR	1
1,2,4-Trichlorobenzene	< 1.7	ug/l	1.7	5.6	1	8260B		10/13/2016	CJR	1
1,2,3-Trichlorobenzene	< 2.7	ug/l	2.7	8.6	1	8260B		10/13/2016	CJR	1
1,1,1-Trichloroethane	< 0.84	ug/l	0.84	2.7	1	8260B		10/13/2016	CJR	1
1,1,2-Trichloroethane	< 0.48	ug/l	0.48	1.52	1	8260B		10/13/2016	CJR	1
Trichloroethene (TCE)	< 0.47	ug/l	0.47	1.5	1	8260B		10/13/2016	CJR	1
Trichlorofluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/13/2016	CJR	1
1,2,4-Trimethylbenzene	< 1.6	ug/l	1.6	5	1	8260B		10/13/2016	CJR	1
1,3,5-Trimethylbenzene	< 1.5	ug/l	1.5	4.8	1	8260B		10/13/2016	CJR	1
Vinyl Chloride	< 0.17	ug/l	0.17	0.54	1	8260B		10/13/2016	CJR	1
m&p-Xylene	< 2.2	ug/l	2.2	6.9	1	8260B		10/13/2016	CJR	1
o-Xylene	< 0.9	ug/l	0.9	2.9	1	8260B		10/13/2016	CJR	1
SUR - Toluene-d8	105	REC %			1	8260B		10/13/2016	CJR	1
SUR - Dibromofluoromethane	91	REC %			1	8260B		10/13/2016	CJR	1
SUR - 1,2-Dichloroethane-d4	105	REC %			1	8260B		10/13/2016	CJR	1
SUR - 4-Bromofluorobenzene	94	REC %			1	8260B		10/13/2016	CJR	1

Project Name NEWTON GRAVEL PIT **Invoice #** E31859
Project # 60135471

Lab Code 5031859Q
Sample ID 3518 HECKER
Sample Matrix Water
Sample Date 10/6/2016

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
VOC's										
Benzene	< 0.44	ug/l	0.44	1.4	1	8260B		10/14/2016	CJR	1
Bromobenzene	< 0.48	ug/l	0.48	1.5	1	8260B		10/14/2016	CJR	1
Bromodichloromethane	< 0.46	ug/l	0.46	1.5	1	8260B		10/14/2016	CJR	1
Bromoform	< 0.46	ug/l	0.46	1.5	1	8260B		10/14/2016	CJR	1
tert-Butylbenzene	< 1.1	ug/l	1.1	3.4	1	8260B		10/14/2016	CJR	1
sec-Butylbenzene	< 1.2	ug/l	1.2	3.8	1	8260B		10/14/2016	CJR	1
n-Butylbenzene	< 1	ug/l	1	3.3	1	8260B		10/14/2016	CJR	1
Carbon Tetrachloride	< 0.51	ug/l	0.51	1.6	1	8260B		10/14/2016	CJR	1
Chlorobenzene	< 0.46	ug/l	0.46	1.4	1	8260B		10/14/2016	CJR	1
Chloroethane	< 0.65	ug/l	0.65	2.1	1	8260B		10/14/2016	CJR	1
Chloroform	< 0.43	ug/l	0.43	1.4	1	8260B		10/14/2016	CJR	1
Chloromethane	< 1.9	ug/l	1.9	6	1	8260B		10/14/2016	CJR	1
2-Chlorotoluene	< 0.4	ug/l	0.4	1.3	1	8260B		10/14/2016	CJR	1
4-Chlorotoluene	< 0.63	ug/l	0.63	2	1	8260B		10/14/2016	CJR	1
1,2-Dibromo-3-chloropropane	< 1.4	ug/l	1.4	4.5	1	8260B		10/14/2016	CJR	1
Dibromochloromethane	< 0.45	ug/l	0.45	1.4	1	8260B		10/14/2016	CJR	1
1,4-Dichlorobenzene	< 0.49	ug/l	0.49	1.6	1	8260B		10/14/2016	CJR	1
1,3-Dichlorobenzene	< 0.52	ug/l	0.52	1.6	1	8260B		10/14/2016	CJR	1
1,2-Dichlorobenzene	< 0.46	ug/l	0.46	1.5	1	8260B		10/14/2016	CJR	1
Dichlorodifluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/14/2016	CJR	1
1,2-Dichloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/14/2016	CJR	1
1,1-Dichloroethane	< 1.1	ug/l	1.1	3.6	1	8260B		10/14/2016	CJR	1
1,1-Dichloroethene	< 0.65	ug/l	0.65	2.1	1	8260B		10/14/2016	CJR	1
cis-1,2-Dichloroethene	< 0.45	ug/l	0.45	1.4	1	8260B		10/14/2016	CJR	1
trans-1,2-Dichloroethene	< 0.54	ug/l	0.54	1.7	1	8260B		10/14/2016	CJR	1
1,2-Dichloropropane	< 0.43	ug/l	0.43	1.37	1	8260B		10/14/2016	CJR	1
2,2-Dichloropropane	< 3.1	ug/l	3.1	9.8	1	8260B		10/14/2016	CJR	1
1,3-Dichloropropane	< 0.42	ug/l	0.42	1.3	1	8260B		10/14/2016	CJR	1
Di-isopropyl ether	< 0.44	ug/l	0.44	1.4	1	8260B		10/14/2016	CJR	1
EDB (1,2-Dibromoethane)	< 0.63	ug/l	0.63	2	1	8260B		10/14/2016	CJR	1
Ethylbenzene	< 0.71	ug/l	0.71	2.3	1	8260B		10/14/2016	CJR	1
Hexachlorobutadiene	< 2.2	ug/l	2.2	7.1	1	8260B		10/14/2016	CJR	1
Isopropylbenzene	< 0.82	ug/l	0.82	2.6	1	8260B		10/14/2016	CJR	1
p-Isopropyltoluene	< 1.1	ug/l	1.1	3.5	1	8260B		10/14/2016	CJR	1
Methylene chloride	< 1.3	ug/l	1.3	4.2	1	8260B		10/14/2016	CJR	1
Methyl tert-butyl ether (MTBE)	< 1.1	ug/l	1.1	3.7	1	8260B		10/14/2016	CJR	1
Naphthalene	< 1.6	ug/l	1.6	5.2	1	8260B		10/14/2016	CJR	1
n-Propylbenzene	< 0.77	ug/l	0.77	2.4	1	8260B		10/14/2016	CJR	1
1,1,2,2-Tetrachloroethane	< 0.52	ug/l	0.52	1.7	1	8260B		10/14/2016	CJR	1
1,1,1,2-Tetrachloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/14/2016	CJR	1
Tetrachloroethene	< 0.49	ug/l	0.49	1.5	1	8260B		10/14/2016	CJR	1
Toluene	< 0.44	ug/l	0.44	1.4	1	8260B		10/14/2016	CJR	1
1,2,4-Trichlorobenzene	< 1.7	ug/l	1.7	5.6	1	8260B		10/14/2016	CJR	1
1,2,3-Trichlorobenzene	< 2.7	ug/l	2.7	8.6	1	8260B		10/14/2016	CJR	1
1,1,1-Trichloroethane	< 0.84	ug/l	0.84	2.7	1	8260B		10/14/2016	CJR	1
1,1,2-Trichloroethane	< 0.48	ug/l	0.48	1.52	1	8260B		10/14/2016	CJR	1
Trichloroethene (TCE)	< 0.47	ug/l	0.47	1.5	1	8260B		10/14/2016	CJR	1
Trichlorofluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/14/2016	CJR	1
1,2,4-Trimethylbenzene	< 1.6	ug/l	1.6	5	1	8260B		10/14/2016	CJR	1
1,3,5-Trimethylbenzene	< 1.5	ug/l	1.5	4.8	1	8260B		10/14/2016	CJR	1
Vinyl Chloride	< 0.17	ug/l	0.17	0.54	1	8260B		10/14/2016	CJR	1
m&p-Xylene	< 2.2	ug/l	2.2	6.9	1	8260B		10/14/2016	CJR	1
o-Xylene	< 0.9	ug/l	0.9	2.9	1	8260B		10/14/2016	CJR	1
SUR - Toluene-d8	106	REC %			1	8260B		10/14/2016	CJR	1
SUR - 1,2-Dichloroethane-d4	101	REC %			1	8260B		10/14/2016	CJR	1
SUR - 4-Bromofluorobenzene	97	REC %			1	8260B		10/14/2016	CJR	1
SUR - Dibromofluoromethane	89	REC %			1	8260B		10/14/2016	CJR	1

Project Name NEWTON GRAVEL PIT **Invoice #** E31859
Project # 60135471

Lab Code 5031859R
Sample ID 3120 CTH CR
Sample Matrix Water
Sample Date 10/6/2016

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
VOC's										
Benzene	< 0.44	ug/l	0.44	1.4	1	8260B		10/14/2016	CJR	1
Bromobenzene	< 0.48	ug/l	0.48	1.5	1	8260B		10/14/2016	CJR	1
Bromodichloromethane	< 0.46	ug/l	0.46	1.5	1	8260B		10/14/2016	CJR	1
Bromoform	< 0.46	ug/l	0.46	1.5	1	8260B		10/14/2016	CJR	1
tert-Butylbenzene	< 1.1	ug/l	1.1	3.4	1	8260B		10/14/2016	CJR	1
sec-Butylbenzene	< 1.2	ug/l	1.2	3.8	1	8260B		10/14/2016	CJR	1
n-Butylbenzene	< 1	ug/l	1	3.3	1	8260B		10/14/2016	CJR	1
Carbon Tetrachloride	< 0.51	ug/l	0.51	1.6	1	8260B		10/14/2016	CJR	1
Chlorobenzene	< 0.46	ug/l	0.46	1.4	1	8260B		10/14/2016	CJR	1
Chloroethane	< 0.65	ug/l	0.65	2.1	1	8260B		10/14/2016	CJR	1
Chloroform	< 0.43	ug/l	0.43	1.4	1	8260B		10/14/2016	CJR	1
Chloromethane	< 1.9	ug/l	1.9	6	1	8260B		10/14/2016	CJR	1
2-Chlorotoluene	< 0.4	ug/l	0.4	1.3	1	8260B		10/14/2016	CJR	1
4-Chlorotoluene	< 0.63	ug/l	0.63	2	1	8260B		10/14/2016	CJR	1
1,2-Dibromo-3-chloropropane	< 1.4	ug/l	1.4	4.5	1	8260B		10/14/2016	CJR	1
Dibromochloromethane	< 0.45	ug/l	0.45	1.4	1	8260B		10/14/2016	CJR	1
1,4-Dichlorobenzene	< 0.49	ug/l	0.49	1.6	1	8260B		10/14/2016	CJR	1
1,3-Dichlorobenzene	< 0.52	ug/l	0.52	1.6	1	8260B		10/14/2016	CJR	1
1,2-Dichlorobenzene	< 0.46	ug/l	0.46	1.5	1	8260B		10/14/2016	CJR	1
Dichlorodifluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/14/2016	CJR	1
1,2-Dichloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/14/2016	CJR	1
1,1-Dichloroethane	< 1.1	ug/l	1.1	3.6	1	8260B		10/14/2016	CJR	1
1,1-Dichloroethene	< 0.65	ug/l	0.65	2.1	1	8260B		10/14/2016	CJR	1
cis-1,2-Dichloroethene	< 0.45	ug/l	0.45	1.4	1	8260B		10/14/2016	CJR	1
trans-1,2-Dichloroethene	< 0.54	ug/l	0.54	1.7	1	8260B		10/14/2016	CJR	1
1,2-Dichloropropane	< 0.43	ug/l	0.43	1.37	1	8260B		10/14/2016	CJR	1
2,2-Dichloropropane	< 3.1	ug/l	3.1	9.8	1	8260B		10/14/2016	CJR	1
1,3-Dichloropropane	< 0.42	ug/l	0.42	1.3	1	8260B		10/14/2016	CJR	1
Di-isopropyl ether	< 0.44	ug/l	0.44	1.4	1	8260B		10/14/2016	CJR	1
EDB (1,2-Dibromoethane)	< 0.63	ug/l	0.63	2	1	8260B		10/14/2016	CJR	1
Ethylbenzene	< 0.71	ug/l	0.71	2.3	1	8260B		10/14/2016	CJR	1
Hexachlorobutadiene	< 2.2	ug/l	2.2	7.1	1	8260B		10/14/2016	CJR	1
Isopropylbenzene	< 0.82	ug/l	0.82	2.6	1	8260B		10/14/2016	CJR	1
p-Isopropyltoluene	< 1.1	ug/l	1.1	3.5	1	8260B		10/14/2016	CJR	1
Methylene chloride	< 1.3	ug/l	1.3	4.2	1	8260B		10/14/2016	CJR	1
Methyl tert-butyl ether (MTBE)	< 1.1	ug/l	1.1	3.7	1	8260B		10/14/2016	CJR	1
Naphthalene	< 1.6	ug/l	1.6	5.2	1	8260B		10/14/2016	CJR	1
n-Propylbenzene	< 0.77	ug/l	0.77	2.4	1	8260B		10/14/2016	CJR	1
1,1,2,2-Tetrachloroethane	< 0.52	ug/l	0.52	1.7	1	8260B		10/14/2016	CJR	1
1,1,1,2-Tetrachloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/14/2016	CJR	1
Tetrachloroethene	< 0.49	ug/l	0.49	1.5	1	8260B		10/14/2016	CJR	1
Toluene	< 0.44	ug/l	0.44	1.4	1	8260B		10/14/2016	CJR	1
1,2,4-Trichlorobenzene	< 1.7	ug/l	1.7	5.6	1	8260B		10/14/2016	CJR	1
1,2,3-Trichlorobenzene	< 2.7	ug/l	2.7	8.6	1	8260B		10/14/2016	CJR	1
1,1,1-Trichloroethane	< 0.84	ug/l	0.84	2.7	1	8260B		10/14/2016	CJR	1
1,1,2-Trichloroethane	< 0.48	ug/l	0.48	1.52	1	8260B		10/14/2016	CJR	1
Trichloroethene (TCE)	< 0.47	ug/l	0.47	1.5	1	8260B		10/14/2016	CJR	1
Trichlorofluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/14/2016	CJR	1
1,2,4-Trimethylbenzene	< 1.6	ug/l	1.6	5	1	8260B		10/14/2016	CJR	1
1,3,5-Trimethylbenzene	< 1.5	ug/l	1.5	4.8	1	8260B		10/14/2016	CJR	1
Vinyl Chloride	< 0.17	ug/l	0.17	0.54	1	8260B		10/14/2016	CJR	1
m&p-Xylene	< 2.2	ug/l	2.2	6.9	1	8260B		10/14/2016	CJR	1
o-Xylene	< 0.9	ug/l	0.9	2.9	1	8260B		10/14/2016	CJR	1
SUR - 1,2-Dichloroethane-d4	101	REC %			1	8260B		10/14/2016	CJR	1
SUR - 4-Bromofluorobenzene	97	REC %			1	8260B		10/14/2016	CJR	1
SUR - Dibromofluoromethane	92	REC %			1	8260B		10/14/2016	CJR	1
SUR - Toluene-d8	103	REC %			1	8260B		10/14/2016	CJR	1

Project Name NEWTON GRAVEL PIT **Invoice #** E31859
Project # 60135471

Lab Code 5031859S
Sample ID 3911 BLACKHAWK
Sample Matrix Water
Sample Date 10/6/2016

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
VOC's										
Benzene	< 0.44	ug/l	0.44	1.4	1	8260B		10/14/2016	CJR	1
Bromobenzene	< 0.48	ug/l	0.48	1.5	1	8260B		10/14/2016	CJR	1
Bromodichloromethane	< 0.46	ug/l	0.46	1.5	1	8260B		10/14/2016	CJR	1
Bromoform	< 0.46	ug/l	0.46	1.5	1	8260B		10/14/2016	CJR	1
tert-Butylbenzene	< 1.1	ug/l	1.1	3.4	1	8260B		10/14/2016	CJR	1
sec-Butylbenzene	< 1.2	ug/l	1.2	3.8	1	8260B		10/14/2016	CJR	1
n-Butylbenzene	< 1	ug/l	1	3.3	1	8260B		10/14/2016	CJR	1
Carbon Tetrachloride	< 0.51	ug/l	0.51	1.6	1	8260B		10/14/2016	CJR	1
Chlorobenzene	< 0.46	ug/l	0.46	1.4	1	8260B		10/14/2016	CJR	1
Chloroethane	< 0.65	ug/l	0.65	2.1	1	8260B		10/14/2016	CJR	1
Chloroform	< 0.43	ug/l	0.43	1.4	1	8260B		10/14/2016	CJR	1
Chloromethane	< 1.9	ug/l	1.9	6	1	8260B		10/14/2016	CJR	1
2-Chlorotoluene	< 0.4	ug/l	0.4	1.3	1	8260B		10/14/2016	CJR	1
4-Chlorotoluene	< 0.63	ug/l	0.63	2	1	8260B		10/14/2016	CJR	1
1,2-Dibromo-3-chloropropane	< 1.4	ug/l	1.4	4.5	1	8260B		10/14/2016	CJR	1
Dibromochloromethane	< 0.45	ug/l	0.45	1.4	1	8260B		10/14/2016	CJR	1
1,4-Dichlorobenzene	< 0.49	ug/l	0.49	1.6	1	8260B		10/14/2016	CJR	1
1,3-Dichlorobenzene	< 0.52	ug/l	0.52	1.6	1	8260B		10/14/2016	CJR	1
1,2-Dichlorobenzene	< 0.46	ug/l	0.46	1.5	1	8260B		10/14/2016	CJR	1
Dichlorodifluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/14/2016	CJR	1
1,2-Dichloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/14/2016	CJR	1
1,1-Dichloroethane	< 1.1	ug/l	1.1	3.6	1	8260B		10/14/2016	CJR	1
1,1-Dichloroethene	< 0.65	ug/l	0.65	2.1	1	8260B		10/14/2016	CJR	1
cis-1,2-Dichloroethene	0.59 "J"	ug/l	0.45	1.4	1	8260B		10/14/2016	CJR	1
trans-1,2-Dichloroethene	< 0.54	ug/l	0.54	1.7	1	8260B		10/14/2016	CJR	1
1,2-Dichloropropane	< 0.43	ug/l	0.43	1.37	1	8260B		10/14/2016	CJR	1
2,2-Dichloropropane	< 3.1	ug/l	3.1	9.8	1	8260B		10/14/2016	CJR	1
1,3-Dichloropropane	< 0.42	ug/l	0.42	1.3	1	8260B		10/14/2016	CJR	1
Di-isopropyl ether	< 0.44	ug/l	0.44	1.4	1	8260B		10/14/2016	CJR	1
EDB (1,2-Dibromoethane)	< 0.63	ug/l	0.63	2	1	8260B		10/14/2016	CJR	1
Ethylbenzene	< 0.71	ug/l	0.71	2.3	1	8260B		10/14/2016	CJR	1
Hexachlorobutadiene	< 2.2	ug/l	2.2	7.1	1	8260B		10/14/2016	CJR	1
Isopropylbenzene	< 0.82	ug/l	0.82	2.6	1	8260B		10/14/2016	CJR	1
p-Isopropyltoluene	< 1.1	ug/l	1.1	3.5	1	8260B		10/14/2016	CJR	1
Methylene chloride	< 1.3	ug/l	1.3	4.2	1	8260B		10/14/2016	CJR	1
Methyl tert-butyl ether (MTBE)	< 1.1	ug/l	1.1	3.7	1	8260B		10/14/2016	CJR	1
Naphthalene	< 1.6	ug/l	1.6	5.2	1	8260B		10/14/2016	CJR	1
n-Propylbenzene	< 0.77	ug/l	0.77	2.4	1	8260B		10/14/2016	CJR	1
1,1,2,2-Tetrachloroethane	< 0.52	ug/l	0.52	1.7	1	8260B		10/14/2016	CJR	1
1,1,1,2-Tetrachloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/14/2016	CJR	1
Tetrachloroethene	< 0.49	ug/l	0.49	1.5	1	8260B		10/14/2016	CJR	1
Toluene	< 0.44	ug/l	0.44	1.4	1	8260B		10/14/2016	CJR	1
1,2,4-Trichlorobenzene	< 1.7	ug/l	1.7	5.6	1	8260B		10/14/2016	CJR	1
1,2,3-Trichlorobenzene	< 2.7	ug/l	2.7	8.6	1	8260B		10/14/2016	CJR	1
1,1,1-Trichloroethane	< 0.84	ug/l	0.84	2.7	1	8260B		10/14/2016	CJR	1
1,1,2-Trichloroethane	< 0.48	ug/l	0.48	1.52	1	8260B		10/14/2016	CJR	1
Trichloroethene (TCE)	< 0.47	ug/l	0.47	1.5	1	8260B		10/14/2016	CJR	1
Trichlorofluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/14/2016	CJR	1
1,2,4-Trimethylbenzene	< 1.6	ug/l	1.6	5	1	8260B		10/14/2016	CJR	1
1,3,5-Trimethylbenzene	< 1.5	ug/l	1.5	4.8	1	8260B		10/14/2016	CJR	1
Vinyl Chloride	< 0.17	ug/l	0.17	0.54	1	8260B		10/14/2016	CJR	1
m&p-Xylene	< 2.2	ug/l	2.2	6.9	1	8260B		10/14/2016	CJR	1
o-Xylene	< 0.9	ug/l	0.9	2.9	1	8260B		10/14/2016	CJR	1
SUR - Dibromofluoromethane	96	REC %			1	8260B		10/14/2016	CJR	1
SUR - 4-Bromofluorobenzene	98	REC %			1	8260B		10/14/2016	CJR	1
SUR - 1,2-Dichloroethane-d4	101	REC %			1	8260B		10/14/2016	CJR	1
SUR - Toluene-d8	105	REC %			1	8260B		10/14/2016	CJR	1

Project Name NEWTON GRAVEL PIT **Invoice #** E31859
Project # 60135471

Lab Code 5031859T
Sample ID 3420 ORCHARD
Sample Matrix Water
Sample Date 10/6/2016

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
VOC's										
Benzene	< 0.44	ug/l	0.44	1.4	1	8260B		10/14/2016	CJR	1
Bromobenzene	< 0.48	ug/l	0.48	1.5	1	8260B		10/14/2016	CJR	1
Bromodichloromethane	< 0.46	ug/l	0.46	1.5	1	8260B		10/14/2016	CJR	1
Bromoform	< 0.46	ug/l	0.46	1.5	1	8260B		10/14/2016	CJR	1
tert-Butylbenzene	< 1.1	ug/l	1.1	3.4	1	8260B		10/14/2016	CJR	1
sec-Butylbenzene	< 1.2	ug/l	1.2	3.8	1	8260B		10/14/2016	CJR	1
n-Butylbenzene	< 1	ug/l	1	3.3	1	8260B		10/14/2016	CJR	1
Carbon Tetrachloride	< 0.51	ug/l	0.51	1.6	1	8260B		10/14/2016	CJR	1
Chlorobenzene	< 0.46	ug/l	0.46	1.4	1	8260B		10/14/2016	CJR	1
Chloroethane	< 0.65	ug/l	0.65	2.1	1	8260B		10/14/2016	CJR	1
Chloroform	< 0.43	ug/l	0.43	1.4	1	8260B		10/14/2016	CJR	1
Chloromethane	< 1.9	ug/l	1.9	6	1	8260B		10/14/2016	CJR	1
2-Chlorotoluene	< 0.4	ug/l	0.4	1.3	1	8260B		10/14/2016	CJR	1
4-Chlorotoluene	< 0.63	ug/l	0.63	2	1	8260B		10/14/2016	CJR	1
1,2-Dibromo-3-chloropropane	< 1.4	ug/l	1.4	4.5	1	8260B		10/14/2016	CJR	1
Dibromochloromethane	< 0.45	ug/l	0.45	1.4	1	8260B		10/14/2016	CJR	1
1,4-Dichlorobenzene	< 0.49	ug/l	0.49	1.6	1	8260B		10/14/2016	CJR	1
1,3-Dichlorobenzene	< 0.52	ug/l	0.52	1.6	1	8260B		10/14/2016	CJR	1
1,2-Dichlorobenzene	< 0.46	ug/l	0.46	1.5	1	8260B		10/14/2016	CJR	1
Dichlorodifluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/14/2016	CJR	1
1,2-Dichloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/14/2016	CJR	1
1,1-Dichloroethane	< 1.1	ug/l	1.1	3.6	1	8260B		10/14/2016	CJR	1
1,1-Dichloroethene	< 0.65	ug/l	0.65	2.1	1	8260B		10/14/2016	CJR	1
cis-1,2-Dichloroethene	< 0.45	ug/l	0.45	1.4	1	8260B		10/14/2016	CJR	1
trans-1,2-Dichloroethene	< 0.54	ug/l	0.54	1.7	1	8260B		10/14/2016	CJR	1
1,2-Dichloropropane	< 0.43	ug/l	0.43	1.37	1	8260B		10/14/2016	CJR	1
2,2-Dichloropropane	< 3.1	ug/l	3.1	9.8	1	8260B		10/14/2016	CJR	1
1,3-Dichloropropane	< 0.42	ug/l	0.42	1.3	1	8260B		10/14/2016	CJR	1
Di-isopropyl ether	< 0.44	ug/l	0.44	1.4	1	8260B		10/14/2016	CJR	1
EDB (1,2-Dibromoethane)	< 0.63	ug/l	0.63	2	1	8260B		10/14/2016	CJR	1
Ethylbenzene	< 0.71	ug/l	0.71	2.3	1	8260B		10/14/2016	CJR	1
Hexachlorobutadiene	< 2.2	ug/l	2.2	7.1	1	8260B		10/14/2016	CJR	1
Isopropylbenzene	< 0.82	ug/l	0.82	2.6	1	8260B		10/14/2016	CJR	1
p-Isopropyltoluene	< 1.1	ug/l	1.1	3.5	1	8260B		10/14/2016	CJR	1
Methylene chloride	< 1.3	ug/l	1.3	4.2	1	8260B		10/14/2016	CJR	1
Methyl tert-butyl ether (MTBE)	< 1.1	ug/l	1.1	3.7	1	8260B		10/14/2016	CJR	1
Naphthalene	< 1.6	ug/l	1.6	5.2	1	8260B		10/14/2016	CJR	1
n-Propylbenzene	< 0.77	ug/l	0.77	2.4	1	8260B		10/14/2016	CJR	1
1,1,2,2-Tetrachloroethane	< 0.52	ug/l	0.52	1.7	1	8260B		10/14/2016	CJR	1
1,1,1,2-Tetrachloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/14/2016	CJR	1
Tetrachloroethene	< 0.49	ug/l	0.49	1.5	1	8260B		10/14/2016	CJR	1
Toluene	< 0.44	ug/l	0.44	1.4	1	8260B		10/14/2016	CJR	1
1,2,4-Trichlorobenzene	< 1.7	ug/l	1.7	5.6	1	8260B		10/14/2016	CJR	1
1,2,3-Trichlorobenzene	< 2.7	ug/l	2.7	8.6	1	8260B		10/14/2016	CJR	1
1,1,1-Trichloroethane	< 0.84	ug/l	0.84	2.7	1	8260B		10/14/2016	CJR	1
1,1,2-Trichloroethane	< 0.48	ug/l	0.48	1.52	1	8260B		10/14/2016	CJR	1
Trichloroethene (TCE)	< 0.47	ug/l	0.47	1.5	1	8260B		10/14/2016	CJR	1
Trichlorofluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/14/2016	CJR	1
1,2,4-Trimethylbenzene	< 1.6	ug/l	1.6	5	1	8260B		10/14/2016	CJR	1
1,3,5-Trimethylbenzene	< 1.5	ug/l	1.5	4.8	1	8260B		10/14/2016	CJR	1
Vinyl Chloride	< 0.17	ug/l	0.17	0.54	1	8260B		10/14/2016	CJR	1
m&p-Xylene	< 2.2	ug/l	2.2	6.9	1	8260B		10/14/2016	CJR	1
o-Xylene	< 0.9	ug/l	0.9	2.9	1	8260B		10/14/2016	CJR	1
SUR - 1,2-Dichloroethane-d4	102	REC %			1	8260B		10/14/2016	CJR	1
SUR - 4-Bromofluorobenzene	100	REC %			1	8260B		10/14/2016	CJR	1
SUR - Dibromofluoromethane	94	REC %			1	8260B		10/14/2016	CJR	1
SUR - Toluene-d8	104	REC %			1	8260B		10/14/2016	CJR	1

Project Name NEWTON GRAVEL PIT **Invoice #** E31859
Project # 60135471

Lab Code 5031859U
Sample ID 2717 CTH CR
Sample Matrix Water
Sample Date 10/6/2016

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
VOC's										
Benzene	< 0.44	ug/l	0.44	1.4	1	8260B		10/14/2016	CJR	1
Bromobenzene	< 0.48	ug/l	0.48	1.5	1	8260B		10/14/2016	CJR	1
Bromodichloromethane	< 0.46	ug/l	0.46	1.5	1	8260B		10/14/2016	CJR	1
Bromoform	< 0.46	ug/l	0.46	1.5	1	8260B		10/14/2016	CJR	1
tert-Butylbenzene	< 1.1	ug/l	1.1	3.4	1	8260B		10/14/2016	CJR	1
sec-Butylbenzene	< 1.2	ug/l	1.2	3.8	1	8260B		10/14/2016	CJR	1
n-Butylbenzene	< 1	ug/l	1	3.3	1	8260B		10/14/2016	CJR	1
Carbon Tetrachloride	< 0.51	ug/l	0.51	1.6	1	8260B		10/14/2016	CJR	1
Chlorobenzene	< 0.46	ug/l	0.46	1.4	1	8260B		10/14/2016	CJR	1
Chloroethane	< 0.65	ug/l	0.65	2.1	1	8260B		10/14/2016	CJR	1
Chloroform	< 0.43	ug/l	0.43	1.4	1	8260B		10/14/2016	CJR	1
Chloromethane	< 1.9	ug/l	1.9	6	1	8260B		10/14/2016	CJR	1
2-Chlorotoluene	< 0.4	ug/l	0.4	1.3	1	8260B		10/14/2016	CJR	1
4-Chlorotoluene	< 0.63	ug/l	0.63	2	1	8260B		10/14/2016	CJR	1
1,2-Dibromo-3-chloropropane	< 1.4	ug/l	1.4	4.5	1	8260B		10/14/2016	CJR	1
Dibromochloromethane	< 0.45	ug/l	0.45	1.4	1	8260B		10/14/2016	CJR	1
1,4-Dichlorobenzene	< 0.49	ug/l	0.49	1.6	1	8260B		10/14/2016	CJR	1
1,3-Dichlorobenzene	< 0.52	ug/l	0.52	1.6	1	8260B		10/14/2016	CJR	1
1,2-Dichlorobenzene	< 0.46	ug/l	0.46	1.5	1	8260B		10/14/2016	CJR	1
Dichlorodifluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/14/2016	CJR	1
1,2-Dichloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/14/2016	CJR	1
1,1-Dichloroethane	< 1.1	ug/l	1.1	3.6	1	8260B		10/14/2016	CJR	1
1,1-Dichloroethene	< 0.65	ug/l	0.65	2.1	1	8260B		10/14/2016	CJR	1
cis-1,2-Dichloroethene	1.53	ug/l	0.45	1.4	1	8260B		10/14/2016	CJR	1
trans-1,2-Dichloroethene	< 0.54	ug/l	0.54	1.7	1	8260B		10/14/2016	CJR	1
1,2-Dichloropropane	< 0.43	ug/l	0.43	1.37	1	8260B		10/14/2016	CJR	1
2,2-Dichloropropane	< 3.1	ug/l	3.1	9.8	1	8260B		10/14/2016	CJR	1
1,3-Dichloropropane	< 0.42	ug/l	0.42	1.3	1	8260B		10/14/2016	CJR	1
Di-isopropyl ether	< 0.44	ug/l	0.44	1.4	1	8260B		10/14/2016	CJR	1
EDB (1,2-Dibromoethane)	< 0.63	ug/l	0.63	2	1	8260B		10/14/2016	CJR	1
Ethylbenzene	< 0.71	ug/l	0.71	2.3	1	8260B		10/14/2016	CJR	1
Hexachlorobutadiene	< 2.2	ug/l	2.2	7.1	1	8260B		10/14/2016	CJR	1
Isopropylbenzene	< 0.82	ug/l	0.82	2.6	1	8260B		10/14/2016	CJR	1
p-Isopropyltoluene	< 1.1	ug/l	1.1	3.5	1	8260B		10/14/2016	CJR	1
Methylene chloride	< 1.3	ug/l	1.3	4.2	1	8260B		10/14/2016	CJR	1
Methyl tert-butyl ether (MTBE)	< 1.1	ug/l	1.1	3.7	1	8260B		10/14/2016	CJR	1
Naphthalene	< 1.6	ug/l	1.6	5.2	1	8260B		10/14/2016	CJR	1
n-Propylbenzene	< 0.77	ug/l	0.77	2.4	1	8260B		10/14/2016	CJR	1
1,1,2,2-Tetrachloroethane	< 0.52	ug/l	0.52	1.7	1	8260B		10/14/2016	CJR	1
1,1,1,2-Tetrachloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/14/2016	CJR	1
Tetrachloroethene	< 0.49	ug/l	0.49	1.5	1	8260B		10/14/2016	CJR	1
Toluene	< 0.44	ug/l	0.44	1.4	1	8260B		10/14/2016	CJR	1
1,2,4-Trichlorobenzene	< 1.7	ug/l	1.7	5.6	1	8260B		10/14/2016	CJR	1
1,2,3-Trichlorobenzene	< 2.7	ug/l	2.7	8.6	1	8260B		10/14/2016	CJR	1
1,1,1-Trichloroethane	< 0.84	ug/l	0.84	2.7	1	8260B		10/14/2016	CJR	1
1,1,2-Trichloroethane	< 0.48	ug/l	0.48	1.52	1	8260B		10/14/2016	CJR	1
Trichloroethene (TCE)	< 0.47	ug/l	0.47	1.5	1	8260B		10/14/2016	CJR	1
Trichlorofluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/14/2016	CJR	1
1,2,4-Trimethylbenzene	< 1.6	ug/l	1.6	5	1	8260B		10/14/2016	CJR	1
1,3,5-Trimethylbenzene	< 1.5	ug/l	1.5	4.8	1	8260B		10/14/2016	CJR	1
Vinyl Chloride	0.32 "J"	ug/l	0.17	0.54	1	8260B		10/14/2016	CJR	1
m&p-Xylene	< 2.2	ug/l	2.2	6.9	1	8260B		10/14/2016	CJR	1
o-Xylene	< 0.9	ug/l	0.9	2.9	1	8260B		10/14/2016	CJR	1
SUR - 1,2-Dichloroethane-d4	102	REC %			1	8260B		10/14/2016	CJR	1
SUR - Toluene-d8	106	REC %			1	8260B		10/14/2016	CJR	1
SUR - 4-Bromofluorobenzene	100	REC %			1	8260B		10/14/2016	CJR	1
SUR - Dibromofluoromethane	89	REC %			1	8260B		10/14/2016	CJR	1

Project Name NEWTON GRAVEL PIT **Invoice #** E31859
Project # 60135471

Lab Code 5031859V
Sample ID 3825 VIEBAHN
Sample Matrix Water
Sample Date 10/6/2016

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
VOC's										
Benzene	< 0.44	ug/l	0.44	1.4	1	8260B		10/14/2016	CJR	1
Bromobenzene	< 0.48	ug/l	0.48	1.5	1	8260B		10/14/2016	CJR	1
Bromodichloromethane	< 0.46	ug/l	0.46	1.5	1	8260B		10/14/2016	CJR	1
Bromoform	< 0.46	ug/l	0.46	1.5	1	8260B		10/14/2016	CJR	1
tert-Butylbenzene	< 1.1	ug/l	1.1	3.4	1	8260B		10/14/2016	CJR	1
sec-Butylbenzene	< 1.2	ug/l	1.2	3.8	1	8260B		10/14/2016	CJR	1
n-Butylbenzene	< 1	ug/l	1	3.3	1	8260B		10/14/2016	CJR	1
Carbon Tetrachloride	< 0.51	ug/l	0.51	1.6	1	8260B		10/14/2016	CJR	1
Chlorobenzene	< 0.46	ug/l	0.46	1.4	1	8260B		10/14/2016	CJR	1
Chloroethane	< 0.65	ug/l	0.65	2.1	1	8260B		10/14/2016	CJR	1
Chloroform	< 0.43	ug/l	0.43	1.4	1	8260B		10/14/2016	CJR	1
Chloromethane	< 1.9	ug/l	1.9	6	1	8260B		10/14/2016	CJR	1
2-Chlorotoluene	< 0.4	ug/l	0.4	1.3	1	8260B		10/14/2016	CJR	1
4-Chlorotoluene	< 0.63	ug/l	0.63	2	1	8260B		10/14/2016	CJR	1
1,2-Dibromo-3-chloropropane	< 1.4	ug/l	1.4	4.5	1	8260B		10/14/2016	CJR	1
Dibromochloromethane	< 0.45	ug/l	0.45	1.4	1	8260B		10/14/2016	CJR	1
1,4-Dichlorobenzene	< 0.49	ug/l	0.49	1.6	1	8260B		10/14/2016	CJR	1
1,3-Dichlorobenzene	< 0.52	ug/l	0.52	1.6	1	8260B		10/14/2016	CJR	1
1,2-Dichlorobenzene	< 0.46	ug/l	0.46	1.5	1	8260B		10/14/2016	CJR	1
Dichlorodifluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/14/2016	CJR	1
1,2-Dichloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/14/2016	CJR	1
1,1-Dichloroethane	< 1.1	ug/l	1.1	3.6	1	8260B		10/14/2016	CJR	1
1,1-Dichloroethene	< 0.65	ug/l	0.65	2.1	1	8260B		10/14/2016	CJR	1
cis-1,2-Dichloroethene	< 0.45	ug/l	0.45	1.4	1	8260B		10/14/2016	CJR	1
trans-1,2-Dichloroethene	< 0.54	ug/l	0.54	1.7	1	8260B		10/14/2016	CJR	1
1,2-Dichloropropane	< 0.43	ug/l	0.43	1.37	1	8260B		10/14/2016	CJR	1
2,2-Dichloropropane	< 3.1	ug/l	3.1	9.8	1	8260B		10/14/2016	CJR	1
1,3-Dichloropropane	< 0.42	ug/l	0.42	1.3	1	8260B		10/14/2016	CJR	1
Di-isopropyl ether	< 0.44	ug/l	0.44	1.4	1	8260B		10/14/2016	CJR	1
EDB (1,2-Dibromoethane)	< 0.63	ug/l	0.63	2	1	8260B		10/14/2016	CJR	1
Ethylbenzene	< 0.71	ug/l	0.71	2.3	1	8260B		10/14/2016	CJR	1
Hexachlorobutadiene	< 2.2	ug/l	2.2	7.1	1	8260B		10/14/2016	CJR	1
Isopropylbenzene	< 0.82	ug/l	0.82	2.6	1	8260B		10/14/2016	CJR	1
p-Isopropyltoluene	< 1.1	ug/l	1.1	3.5	1	8260B		10/14/2016	CJR	1
Methylene chloride	< 1.3	ug/l	1.3	4.2	1	8260B		10/14/2016	CJR	1
Methyl tert-butyl ether (MTBE)	< 1.1	ug/l	1.1	3.7	1	8260B		10/14/2016	CJR	1
Naphthalene	< 1.6	ug/l	1.6	5.2	1	8260B		10/14/2016	CJR	1
n-Propylbenzene	< 0.77	ug/l	0.77	2.4	1	8260B		10/14/2016	CJR	1
1,1,2,2-Tetrachloroethane	< 0.52	ug/l	0.52	1.7	1	8260B		10/14/2016	CJR	1
1,1,1,2-Tetrachloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/14/2016	CJR	1
Tetrachloroethene	< 0.49	ug/l	0.49	1.5	1	8260B		10/14/2016	CJR	1
Toluene	< 0.44	ug/l	0.44	1.4	1	8260B		10/14/2016	CJR	1
1,2,4-Trichlorobenzene	< 1.7	ug/l	1.7	5.6	1	8260B		10/14/2016	CJR	1
1,2,3-Trichlorobenzene	< 2.7	ug/l	2.7	8.6	1	8260B		10/14/2016	CJR	1
1,1,1-Trichloroethane	< 0.84	ug/l	0.84	2.7	1	8260B		10/14/2016	CJR	1
1,1,2-Trichloroethane	< 0.48	ug/l	0.48	1.52	1	8260B		10/14/2016	CJR	1
Trichloroethene (TCE)	< 0.47	ug/l	0.47	1.5	1	8260B		10/14/2016	CJR	1
Trichlorofluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/14/2016	CJR	1
1,2,4-Trimethylbenzene	< 1.6	ug/l	1.6	5	1	8260B		10/14/2016	CJR	1
1,3,5-Trimethylbenzene	< 1.5	ug/l	1.5	4.8	1	8260B		10/14/2016	CJR	1
Vinyl Chloride	< 0.17	ug/l	0.17	0.54	1	8260B		10/14/2016	CJR	1
m&p-Xylene	< 2.2	ug/l	2.2	6.9	1	8260B		10/14/2016	CJR	1
o-Xylene	< 0.9	ug/l	0.9	2.9	1	8260B		10/14/2016	CJR	1
SUR - 1,2-Dichloroethane-d4	100	REC %			1	8260B		10/14/2016	CJR	1
SUR - 4-Bromofluorobenzene	94	REC %			1	8260B		10/14/2016	CJR	1
SUR - Dibromofluoromethane	88	REC %			1	8260B		10/14/2016	CJR	1
SUR - Toluene-d8	105	REC %			1	8260B		10/14/2016	CJR	1

Project Name NEWTON GRAVEL PIT **Invoice #** E31859
Project # 60135471

Lab Code 5031859W
Sample ID 4024 CTH CR
Sample Matrix Water
Sample Date 10/6/2016

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
VOC's										
Benzene	< 0.44	ug/l	0.44	1.4	1	8260B		10/14/2016	CJR	1
Bromobenzene	< 0.48	ug/l	0.48	1.5	1	8260B		10/14/2016	CJR	1
Bromodichloromethane	< 0.46	ug/l	0.46	1.5	1	8260B		10/14/2016	CJR	1
Bromoform	< 0.46	ug/l	0.46	1.5	1	8260B		10/14/2016	CJR	1
tert-Butylbenzene	< 1.1	ug/l	1.1	3.4	1	8260B		10/14/2016	CJR	1
sec-Butylbenzene	< 1.2	ug/l	1.2	3.8	1	8260B		10/14/2016	CJR	1
n-Butylbenzene	< 1	ug/l	1	3.3	1	8260B		10/14/2016	CJR	1
Carbon Tetrachloride	< 0.51	ug/l	0.51	1.6	1	8260B		10/14/2016	CJR	1
Chlorobenzene	< 0.46	ug/l	0.46	1.4	1	8260B		10/14/2016	CJR	1
Chloroethane	< 0.65	ug/l	0.65	2.1	1	8260B		10/14/2016	CJR	1
Chloroform	< 0.43	ug/l	0.43	1.4	1	8260B		10/14/2016	CJR	1
Chloromethane	< 1.9	ug/l	1.9	6	1	8260B		10/14/2016	CJR	1
2-Chlorotoluene	< 0.4	ug/l	0.4	1.3	1	8260B		10/14/2016	CJR	1
4-Chlorotoluene	< 0.63	ug/l	0.63	2	1	8260B		10/14/2016	CJR	1
1,2-Dibromo-3-chloropropane	< 1.4	ug/l	1.4	4.5	1	8260B		10/14/2016	CJR	1
Dibromochloromethane	< 0.45	ug/l	0.45	1.4	1	8260B		10/14/2016	CJR	1
1,4-Dichlorobenzene	< 0.49	ug/l	0.49	1.6	1	8260B		10/14/2016	CJR	1
1,3-Dichlorobenzene	< 0.52	ug/l	0.52	1.6	1	8260B		10/14/2016	CJR	1
1,2-Dichlorobenzene	< 0.46	ug/l	0.46	1.5	1	8260B		10/14/2016	CJR	1
Dichlorodifluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/14/2016	CJR	1
1,2-Dichloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/14/2016	CJR	1
1,1-Dichloroethane	< 1.1	ug/l	1.1	3.6	1	8260B		10/14/2016	CJR	1
1,1-Dichloroethene	< 0.65	ug/l	0.65	2.1	1	8260B		10/14/2016	CJR	1
cis-1,2-Dichloroethene	< 0.45	ug/l	0.45	1.4	1	8260B		10/14/2016	CJR	1
trans-1,2-Dichloroethene	< 0.54	ug/l	0.54	1.7	1	8260B		10/14/2016	CJR	1
1,2-Dichloropropane	< 0.43	ug/l	0.43	1.37	1	8260B		10/14/2016	CJR	1
2,2-Dichloropropane	< 3.1	ug/l	3.1	9.8	1	8260B		10/14/2016	CJR	1
1,3-Dichloropropane	< 0.42	ug/l	0.42	1.3	1	8260B		10/14/2016	CJR	1
Di-isopropyl ether	< 0.44	ug/l	0.44	1.4	1	8260B		10/14/2016	CJR	1
EDB (1,2-Dibromoethane)	< 0.63	ug/l	0.63	2	1	8260B		10/14/2016	CJR	1
Ethylbenzene	< 0.71	ug/l	0.71	2.3	1	8260B		10/14/2016	CJR	1
Hexachlorobutadiene	< 2.2	ug/l	2.2	7.1	1	8260B		10/14/2016	CJR	1
Isopropylbenzene	< 0.82	ug/l	0.82	2.6	1	8260B		10/14/2016	CJR	1
p-Isopropyltoluene	< 1.1	ug/l	1.1	3.5	1	8260B		10/14/2016	CJR	1
Methylene chloride	< 1.3	ug/l	1.3	4.2	1	8260B		10/14/2016	CJR	1
Methyl tert-butyl ether (MTBE)	< 1.1	ug/l	1.1	3.7	1	8260B		10/14/2016	CJR	1
Naphthalene	< 1.6	ug/l	1.6	5.2	1	8260B		10/14/2016	CJR	1
n-Propylbenzene	< 0.77	ug/l	0.77	2.4	1	8260B		10/14/2016	CJR	1
1,1,2,2-Tetrachloroethane	< 0.52	ug/l	0.52	1.7	1	8260B		10/14/2016	CJR	1
1,1,1,2-Tetrachloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/14/2016	CJR	1
Tetrachloroethene	< 0.49	ug/l	0.49	1.5	1	8260B		10/14/2016	CJR	1
Toluene	< 0.44	ug/l	0.44	1.4	1	8260B		10/14/2016	CJR	1
1,2,4-Trichlorobenzene	< 1.7	ug/l	1.7	5.6	1	8260B		10/14/2016	CJR	1
1,2,3-Trichlorobenzene	< 2.7	ug/l	2.7	8.6	1	8260B		10/14/2016	CJR	1
1,1,1-Trichloroethane	< 0.84	ug/l	0.84	2.7	1	8260B		10/14/2016	CJR	1
1,1,2-Trichloroethane	< 0.48	ug/l	0.48	1.52	1	8260B		10/14/2016	CJR	1
Trichloroethene (TCE)	< 0.47	ug/l	0.47	1.5	1	8260B		10/14/2016	CJR	1
Trichlorofluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/14/2016	CJR	1
1,2,4-Trimethylbenzene	< 1.6	ug/l	1.6	5	1	8260B		10/14/2016	CJR	1
1,3,5-Trimethylbenzene	< 1.5	ug/l	1.5	4.8	1	8260B		10/14/2016	CJR	1
Vinyl Chloride	< 0.17	ug/l	0.17	0.54	1	8260B		10/14/2016	CJR	1
m&p-Xylene	< 2.2	ug/l	2.2	6.9	1	8260B		10/14/2016	CJR	1
o-Xylene	< 0.9	ug/l	0.9	2.9	1	8260B		10/14/2016	CJR	1
SUR - 4-Bromofluorobenzene	98	REC %			1	8260B		10/14/2016	CJR	1
SUR - Dibromofluoromethane	95	REC %			1	8260B		10/14/2016	CJR	1
SUR - Toluene-d8	104	REC %			1	8260B		10/14/2016	CJR	1
SUR - 1,2-Dichloroethane-d4	101	REC %			1	8260B		10/14/2016	CJR	1

Project Name NEWTON GRAVEL PIT **Invoice #** E31859
Project # 60135471

Lab Code 5031859X
Sample ID 3417 HECKER
Sample Matrix Water
Sample Date 10/6/2016

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
VOC's										
Benzene	< 0.44	ug/l	0.44	1.4	1	8260B		10/14/2016	CJR	1
Bromobenzene	< 0.48	ug/l	0.48	1.5	1	8260B		10/14/2016	CJR	1
Bromodichloromethane	< 0.46	ug/l	0.46	1.5	1	8260B		10/14/2016	CJR	1
Bromoform	< 0.46	ug/l	0.46	1.5	1	8260B		10/14/2016	CJR	1
tert-Butylbenzene	< 1.1	ug/l	1.1	3.4	1	8260B		10/14/2016	CJR	1
sec-Butylbenzene	< 1.2	ug/l	1.2	3.8	1	8260B		10/14/2016	CJR	1
n-Butylbenzene	< 1	ug/l	1	3.3	1	8260B		10/14/2016	CJR	1
Carbon Tetrachloride	< 0.51	ug/l	0.51	1.6	1	8260B		10/14/2016	CJR	1
Chlorobenzene	< 0.46	ug/l	0.46	1.4	1	8260B		10/14/2016	CJR	1
Chloroethane	< 0.65	ug/l	0.65	2.1	1	8260B		10/14/2016	CJR	1
Chloroform	< 0.43	ug/l	0.43	1.4	1	8260B		10/14/2016	CJR	1
Chloromethane	< 1.9	ug/l	1.9	6	1	8260B		10/14/2016	CJR	1
2-Chlorotoluene	< 0.4	ug/l	0.4	1.3	1	8260B		10/14/2016	CJR	1
4-Chlorotoluene	< 0.63	ug/l	0.63	2	1	8260B		10/14/2016	CJR	1
1,2-Dibromo-3-chloropropane	< 1.4	ug/l	1.4	4.5	1	8260B		10/14/2016	CJR	1
Dibromochloromethane	< 0.45	ug/l	0.45	1.4	1	8260B		10/14/2016	CJR	1
1,4-Dichlorobenzene	< 0.49	ug/l	0.49	1.6	1	8260B		10/14/2016	CJR	1
1,3-Dichlorobenzene	< 0.52	ug/l	0.52	1.6	1	8260B		10/14/2016	CJR	1
1,2-Dichlorobenzene	< 0.46	ug/l	0.46	1.5	1	8260B		10/14/2016	CJR	1
Dichlorodifluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/14/2016	CJR	1
1,2-Dichloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/14/2016	CJR	1
1,1-Dichloroethane	< 1.1	ug/l	1.1	3.6	1	8260B		10/14/2016	CJR	1
1,1-Dichloroethene	< 0.65	ug/l	0.65	2.1	1	8260B		10/14/2016	CJR	1
cis-1,2-Dichloroethene	1.23 "J"	ug/l	0.45	1.4	1	8260B		10/14/2016	CJR	1
trans-1,2-Dichloroethene	< 0.54	ug/l	0.54	1.7	1	8260B		10/14/2016	CJR	1
1,2-Dichloropropane	< 0.43	ug/l	0.43	1.37	1	8260B		10/14/2016	CJR	1
2,2-Dichloropropane	< 3.1	ug/l	3.1	9.8	1	8260B		10/14/2016	CJR	1
1,3-Dichloropropane	< 0.42	ug/l	0.42	1.3	1	8260B		10/14/2016	CJR	1
Di-isopropyl ether	< 0.44	ug/l	0.44	1.4	1	8260B		10/14/2016	CJR	1
EDB (1,2-Dibromoethane)	< 0.63	ug/l	0.63	2	1	8260B		10/14/2016	CJR	1
Ethylbenzene	< 0.71	ug/l	0.71	2.3	1	8260B		10/14/2016	CJR	1
Hexachlorobutadiene	< 2.2	ug/l	2.2	7.1	1	8260B		10/14/2016	CJR	1
Isopropylbenzene	< 0.82	ug/l	0.82	2.6	1	8260B		10/14/2016	CJR	1
p-Isopropyltoluene	< 1.1	ug/l	1.1	3.5	1	8260B		10/14/2016	CJR	1
Methylene chloride	< 1.3	ug/l	1.3	4.2	1	8260B		10/14/2016	CJR	1
Methyl tert-butyl ether (MTBE)	< 1.1	ug/l	1.1	3.7	1	8260B		10/14/2016	CJR	1
Naphthalene	< 1.6	ug/l	1.6	5.2	1	8260B		10/14/2016	CJR	1
n-Propylbenzene	< 0.77	ug/l	0.77	2.4	1	8260B		10/14/2016	CJR	1
1,1,2,2-Tetrachloroethane	< 0.52	ug/l	0.52	1.7	1	8260B		10/14/2016	CJR	1
1,1,1,2-Tetrachloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/14/2016	CJR	1
Tetrachloroethene	< 0.49	ug/l	0.49	1.5	1	8260B		10/14/2016	CJR	1
Toluene	< 0.44	ug/l	0.44	1.4	1	8260B		10/14/2016	CJR	1
1,2,4-Trichlorobenzene	< 1.7	ug/l	1.7	5.6	1	8260B		10/14/2016	CJR	1
1,2,3-Trichlorobenzene	< 2.7	ug/l	2.7	8.6	1	8260B		10/14/2016	CJR	1
1,1,1-Trichloroethane	< 0.84	ug/l	0.84	2.7	1	8260B		10/14/2016	CJR	1
1,1,2-Trichloroethane	< 0.48	ug/l	0.48	1.52	1	8260B		10/14/2016	CJR	1
Trichloroethene (TCE)	< 0.47	ug/l	0.47	1.5	1	8260B		10/14/2016	CJR	1
Trichlorofluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/14/2016	CJR	1
1,2,4-Trimethylbenzene	< 1.6	ug/l	1.6	5	1	8260B		10/14/2016	CJR	1
1,3,5-Trimethylbenzene	< 1.5	ug/l	1.5	4.8	1	8260B		10/14/2016	CJR	1
Vinyl Chloride	< 0.17	ug/l	0.17	0.54	1	8260B		10/14/2016	CJR	1
m&p-Xylene	< 2.2	ug/l	2.2	6.9	1	8260B		10/14/2016	CJR	1
o-Xylene	< 0.9	ug/l	0.9	2.9	1	8260B		10/14/2016	CJR	1
SUR - 1,2-Dichloroethane-d4	99	REC %			1	8260B		10/14/2016	CJR	1
SUR - 4-Bromofluorobenzene	100	REC %			1	8260B		10/14/2016	CJR	1
SUR - Dibromofluoromethane	92	REC %			1	8260B		10/14/2016	CJR	1
SUR - Toluene-d8	103	REC %			1	8260B		10/14/2016	CJR	1

Project Name NEWTON GRAVEL PIT **Invoice #** E31859
Project # 60135471

Lab Code 5031859Y
Sample ID 3417 HECKER DUP
Sample Matrix Water
Sample Date 10/6/2016

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
VOC's										
Benzene	< 0.44	ug/l	0.44	1.4	1	8260B		10/14/2016	CJR	1
Bromobenzene	< 0.48	ug/l	0.48	1.5	1	8260B		10/14/2016	CJR	1
Bromodichloromethane	< 0.46	ug/l	0.46	1.5	1	8260B		10/14/2016	CJR	1
Bromoform	< 0.46	ug/l	0.46	1.5	1	8260B		10/14/2016	CJR	1
tert-Butylbenzene	< 1.1	ug/l	1.1	3.4	1	8260B		10/14/2016	CJR	1
sec-Butylbenzene	< 1.2	ug/l	1.2	3.8	1	8260B		10/14/2016	CJR	1
n-Butylbenzene	< 1	ug/l	1	3.3	1	8260B		10/14/2016	CJR	1
Carbon Tetrachloride	< 0.51	ug/l	0.51	1.6	1	8260B		10/14/2016	CJR	1
Chlorobenzene	< 0.46	ug/l	0.46	1.4	1	8260B		10/14/2016	CJR	1
Chloroethane	< 0.65	ug/l	0.65	2.1	1	8260B		10/14/2016	CJR	1
Chloroform	< 0.43	ug/l	0.43	1.4	1	8260B		10/14/2016	CJR	1
Chloromethane	< 1.9	ug/l	1.9	6	1	8260B		10/14/2016	CJR	1
2-Chlorotoluene	< 0.4	ug/l	0.4	1.3	1	8260B		10/14/2016	CJR	1
4-Chlorotoluene	< 0.63	ug/l	0.63	2	1	8260B		10/14/2016	CJR	1
1,2-Dibromo-3-chloropropane	< 1.4	ug/l	1.4	4.5	1	8260B		10/14/2016	CJR	1
Dibromochloromethane	< 0.45	ug/l	0.45	1.4	1	8260B		10/14/2016	CJR	1
1,4-Dichlorobenzene	< 0.49	ug/l	0.49	1.6	1	8260B		10/14/2016	CJR	1
1,3-Dichlorobenzene	< 0.52	ug/l	0.52	1.6	1	8260B		10/14/2016	CJR	1
1,2-Dichlorobenzene	< 0.46	ug/l	0.46	1.5	1	8260B		10/14/2016	CJR	1
Dichlorodifluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/14/2016	CJR	1
1,2-Dichloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/14/2016	CJR	1
1,1-Dichloroethane	< 1.1	ug/l	1.1	3.6	1	8260B		10/14/2016	CJR	1
1,1-Dichloroethene	< 0.65	ug/l	0.65	2.1	1	8260B		10/14/2016	CJR	1
cis-1,2-Dichloroethene	1.51	ug/l	0.45	1.4	1	8260B		10/14/2016	CJR	1
trans-1,2-Dichloroethene	< 0.54	ug/l	0.54	1.7	1	8260B		10/14/2016	CJR	1
1,2-Dichloropropane	< 0.43	ug/l	0.43	1.37	1	8260B		10/14/2016	CJR	1
2,2-Dichloropropane	< 3.1	ug/l	3.1	9.8	1	8260B		10/14/2016	CJR	1
1,3-Dichloropropane	< 0.42	ug/l	0.42	1.3	1	8260B		10/14/2016	CJR	1
Di-isopropyl ether	< 0.44	ug/l	0.44	1.4	1	8260B		10/14/2016	CJR	1
EDB (1,2-Dibromoethane)	< 0.63	ug/l	0.63	2	1	8260B		10/14/2016	CJR	1
Ethylbenzene	< 0.71	ug/l	0.71	2.3	1	8260B		10/14/2016	CJR	1
Hexachlorobutadiene	< 2.2	ug/l	2.2	7.1	1	8260B		10/14/2016	CJR	1
Isopropylbenzene	< 0.82	ug/l	0.82	2.6	1	8260B		10/14/2016	CJR	1
p-Isopropyltoluene	< 1.1	ug/l	1.1	3.5	1	8260B		10/14/2016	CJR	1
Methylene chloride	< 1.3	ug/l	1.3	4.2	1	8260B		10/14/2016	CJR	1
Methyl tert-butyl ether (MTBE)	< 1.1	ug/l	1.1	3.7	1	8260B		10/14/2016	CJR	1
Naphthalene	< 1.6	ug/l	1.6	5.2	1	8260B		10/14/2016	CJR	1
n-Propylbenzene	< 0.77	ug/l	0.77	2.4	1	8260B		10/14/2016	CJR	1
1,1,2,2-Tetrachloroethane	< 0.52	ug/l	0.52	1.7	1	8260B		10/14/2016	CJR	1
1,1,1,2-Tetrachloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/14/2016	CJR	1
Tetrachloroethene	< 0.49	ug/l	0.49	1.5	1	8260B		10/14/2016	CJR	1
Toluene	< 0.44	ug/l	0.44	1.4	1	8260B		10/14/2016	CJR	1
1,2,4-Trichlorobenzene	< 1.7	ug/l	1.7	5.6	1	8260B		10/14/2016	CJR	1
1,2,3-Trichlorobenzene	< 2.7	ug/l	2.7	8.6	1	8260B		10/14/2016	CJR	1
1,1,1-Trichloroethane	< 0.84	ug/l	0.84	2.7	1	8260B		10/14/2016	CJR	1
1,1,2-Trichloroethane	< 0.48	ug/l	0.48	1.52	1	8260B		10/14/2016	CJR	1
Trichloroethene (TCE)	< 0.47	ug/l	0.47	1.5	1	8260B		10/14/2016	CJR	1
Trichlorofluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/14/2016	CJR	1
1,2,4-Trimethylbenzene	< 1.6	ug/l	1.6	5	1	8260B		10/14/2016	CJR	1
1,3,5-Trimethylbenzene	< 1.5	ug/l	1.5	4.8	1	8260B		10/14/2016	CJR	1
Vinyl Chloride	< 0.17	ug/l	0.17	0.54	1	8260B		10/14/2016	CJR	1
m&p-Xylene	< 2.2	ug/l	2.2	6.9	1	8260B		10/14/2016	CJR	1
o-Xylene	< 0.9	ug/l	0.9	2.9	1	8260B		10/14/2016	CJR	1
SUR - 1,2-Dichloroethane-d4	98	REC %			1	8260B		10/14/2016	CJR	1
SUR - 4-Bromofluorobenzene	98	REC %			1	8260B		10/14/2016	CJR	1
SUR - Dibromofluoromethane	89	REC %			1	8260B		10/14/2016	CJR	1
SUR - Toluene-d8	102	REC %			1	8260B		10/14/2016	CJR	1

Project Name NEWTON GRAVEL PIT **Invoice #** E31859
Project # 60135471

Lab Code 5031859Z
Sample ID 3027 ORCHARD
Sample Matrix Water
Sample Date 10/6/2016

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
VOC's										
Benzene	< 0.44	ug/l	0.44	1.4	1	8260B		10/14/2016	CJR	1
Bromobenzene	< 0.48	ug/l	0.48	1.5	1	8260B		10/14/2016	CJR	1
Bromodichloromethane	< 0.46	ug/l	0.46	1.5	1	8260B		10/14/2016	CJR	1
Bromoform	< 0.46	ug/l	0.46	1.5	1	8260B		10/14/2016	CJR	1
tert-Butylbenzene	< 1.1	ug/l	1.1	3.4	1	8260B		10/14/2016	CJR	1
sec-Butylbenzene	< 1.2	ug/l	1.2	3.8	1	8260B		10/14/2016	CJR	1
n-Butylbenzene	< 1	ug/l	1	3.3	1	8260B		10/14/2016	CJR	1
Carbon Tetrachloride	< 0.51	ug/l	0.51	1.6	1	8260B		10/14/2016	CJR	1
Chlorobenzene	< 0.46	ug/l	0.46	1.4	1	8260B		10/14/2016	CJR	1
Chloroethane	< 0.65	ug/l	0.65	2.1	1	8260B		10/14/2016	CJR	1
Chloroform	< 0.43	ug/l	0.43	1.4	1	8260B		10/14/2016	CJR	1
Chloromethane	< 1.9	ug/l	1.9	6	1	8260B		10/14/2016	CJR	1
2-Chlorotoluene	< 0.4	ug/l	0.4	1.3	1	8260B		10/14/2016	CJR	1
4-Chlorotoluene	< 0.63	ug/l	0.63	2	1	8260B		10/14/2016	CJR	1
1,2-Dibromo-3-chloropropane	< 1.4	ug/l	1.4	4.5	1	8260B		10/14/2016	CJR	1
Dibromochloromethane	< 0.45	ug/l	0.45	1.4	1	8260B		10/14/2016	CJR	1
1,4-Dichlorobenzene	< 0.49	ug/l	0.49	1.6	1	8260B		10/14/2016	CJR	1
1,3-Dichlorobenzene	< 0.52	ug/l	0.52	1.6	1	8260B		10/14/2016	CJR	1
1,2-Dichlorobenzene	< 0.46	ug/l	0.46	1.5	1	8260B		10/14/2016	CJR	1
Dichlorodifluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/14/2016	CJR	1
1,2-Dichloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/14/2016	CJR	1
1,1-Dichloroethane	< 1.1	ug/l	1.1	3.6	1	8260B		10/14/2016	CJR	1
1,1-Dichloroethene	< 0.65	ug/l	0.65	2.1	1	8260B		10/14/2016	CJR	1
cis-1,2-Dichloroethene	0.46 "J"	ug/l	0.45	1.4	1	8260B		10/14/2016	CJR	1
trans-1,2-Dichloroethene	< 0.54	ug/l	0.54	1.7	1	8260B		10/14/2016	CJR	1
1,2-Dichloropropane	< 0.43	ug/l	0.43	1.37	1	8260B		10/14/2016	CJR	1
2,2-Dichloropropane	< 3.1	ug/l	3.1	9.8	1	8260B		10/14/2016	CJR	1
1,3-Dichloropropane	< 0.42	ug/l	0.42	1.3	1	8260B		10/14/2016	CJR	1
Di-isopropyl ether	< 0.44	ug/l	0.44	1.4	1	8260B		10/14/2016	CJR	1
EDB (1,2-Dibromoethane)	< 0.63	ug/l	0.63	2	1	8260B		10/14/2016	CJR	1
Ethylbenzene	< 0.71	ug/l	0.71	2.3	1	8260B		10/14/2016	CJR	1
Hexachlorobutadiene	< 2.2	ug/l	2.2	7.1	1	8260B		10/14/2016	CJR	1
Isopropylbenzene	< 0.82	ug/l	0.82	2.6	1	8260B		10/14/2016	CJR	1
p-Isopropyltoluene	< 1.1	ug/l	1.1	3.5	1	8260B		10/14/2016	CJR	1
Methylene chloride	< 1.3	ug/l	1.3	4.2	1	8260B		10/14/2016	CJR	1
Methyl tert-butyl ether (MTBE)	< 1.1	ug/l	1.1	3.7	1	8260B		10/14/2016	CJR	1
Naphthalene	< 1.6	ug/l	1.6	5.2	1	8260B		10/14/2016	CJR	1
n-Propylbenzene	< 0.77	ug/l	0.77	2.4	1	8260B		10/14/2016	CJR	1
1,1,2,2-Tetrachloroethane	< 0.52	ug/l	0.52	1.7	1	8260B		10/14/2016	CJR	1
1,1,1,2-Tetrachloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/14/2016	CJR	1
Tetrachloroethene	< 0.49	ug/l	0.49	1.5	1	8260B		10/14/2016	CJR	1
Toluene	< 0.44	ug/l	0.44	1.4	1	8260B		10/14/2016	CJR	1
1,2,4-Trichlorobenzene	< 1.7	ug/l	1.7	5.6	1	8260B		10/14/2016	CJR	1
1,2,3-Trichlorobenzene	< 2.7	ug/l	2.7	8.6	1	8260B		10/14/2016	CJR	1
1,1,1-Trichloroethane	< 0.84	ug/l	0.84	2.7	1	8260B		10/14/2016	CJR	1
1,1,2-Trichloroethane	< 0.48	ug/l	0.48	1.52	1	8260B		10/14/2016	CJR	1
Trichloroethene (TCE)	< 0.47	ug/l	0.47	1.5	1	8260B		10/14/2016	CJR	1
Trichlorofluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/14/2016	CJR	1
1,2,4-Trimethylbenzene	< 1.6	ug/l	1.6	5	1	8260B		10/14/2016	CJR	1
1,3,5-Trimethylbenzene	< 1.5	ug/l	1.5	4.8	1	8260B		10/14/2016	CJR	1
Vinyl Chloride	< 0.17	ug/l	0.17	0.54	1	8260B		10/14/2016	CJR	1
m&p-Xylene	< 2.2	ug/l	2.2	6.9	1	8260B		10/14/2016	CJR	1
o-Xylene	< 0.9	ug/l	0.9	2.9	1	8260B		10/14/2016	CJR	1
SUR - Toluene-d8	104	REC %			1	8260B		10/14/2016	CJR	1
SUR - 1,2-Dichloroethane-d4	103	REC %			1	8260B		10/14/2016	CJR	1
SUR - 4-Bromofluorobenzene	97	REC %			1	8260B		10/14/2016	CJR	1
SUR - Dibromofluoromethane	93	REC %			1	8260B		10/14/2016	CJR	1

Project Name NEWTON GRAVEL PIT **Invoice #** E31859
Project # 60135471

Lab Code 531859AA
Sample ID 3817 VIEBAHN
Sample Matrix Water
Sample Date 10/6/2016

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
VOC's										
Benzene	< 0.44	ug/l	0.44	1.4	1	8260B		10/14/2016	CJR	1
Bromobenzene	< 0.48	ug/l	0.48	1.5	1	8260B		10/14/2016	CJR	1
Bromodichloromethane	< 0.46	ug/l	0.46	1.5	1	8260B		10/14/2016	CJR	1
Bromoform	< 0.46	ug/l	0.46	1.5	1	8260B		10/14/2016	CJR	1
tert-Butylbenzene	< 1.1	ug/l	1.1	3.4	1	8260B		10/14/2016	CJR	1
sec-Butylbenzene	< 1.2	ug/l	1.2	3.8	1	8260B		10/14/2016	CJR	1
n-Butylbenzene	< 1	ug/l	1	3.3	1	8260B		10/14/2016	CJR	1
Carbon Tetrachloride	< 0.51	ug/l	0.51	1.6	1	8260B		10/14/2016	CJR	1
Chlorobenzene	< 0.46	ug/l	0.46	1.4	1	8260B		10/14/2016	CJR	1
Chloroethane	< 0.65	ug/l	0.65	2.1	1	8260B		10/14/2016	CJR	1
Chloroform	< 0.43	ug/l	0.43	1.4	1	8260B		10/14/2016	CJR	1
Chloromethane	< 1.9	ug/l	1.9	6	1	8260B		10/14/2016	CJR	1
2-Chlorotoluene	< 0.4	ug/l	0.4	1.3	1	8260B		10/14/2016	CJR	1
4-Chlorotoluene	< 0.63	ug/l	0.63	2	1	8260B		10/14/2016	CJR	1
1,2-Dibromo-3-chloropropane	< 1.4	ug/l	1.4	4.5	1	8260B		10/14/2016	CJR	1
Dibromochloromethane	< 0.45	ug/l	0.45	1.4	1	8260B		10/14/2016	CJR	1
1,4-Dichlorobenzene	< 0.49	ug/l	0.49	1.6	1	8260B		10/14/2016	CJR	1
1,3-Dichlorobenzene	< 0.52	ug/l	0.52	1.6	1	8260B		10/14/2016	CJR	1
1,2-Dichlorobenzene	< 0.46	ug/l	0.46	1.5	1	8260B		10/14/2016	CJR	1
Dichlorodifluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/14/2016	CJR	1
1,2-Dichloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/14/2016	CJR	1
1,1-Dichloroethane	< 1.1	ug/l	1.1	3.6	1	8260B		10/14/2016	CJR	1
1,1-Dichloroethene	< 0.65	ug/l	0.65	2.1	1	8260B		10/14/2016	CJR	1
cis-1,2-Dichloroethene	0.47 "J"	ug/l	0.45	1.4	1	8260B		10/14/2016	CJR	1
trans-1,2-Dichloroethene	< 0.54	ug/l	0.54	1.7	1	8260B		10/14/2016	CJR	1
1,2-Dichloropropane	< 0.43	ug/l	0.43	1.37	1	8260B		10/14/2016	CJR	1
2,2-Dichloropropane	< 3.1	ug/l	3.1	9.8	1	8260B		10/14/2016	CJR	1
1,3-Dichloropropane	< 0.42	ug/l	0.42	1.3	1	8260B		10/14/2016	CJR	1
Di-isopropyl ether	< 0.44	ug/l	0.44	1.4	1	8260B		10/14/2016	CJR	1
EDB (1,2-Dibromoethane)	< 0.63	ug/l	0.63	2	1	8260B		10/14/2016	CJR	1
Ethylbenzene	< 0.71	ug/l	0.71	2.3	1	8260B		10/14/2016	CJR	1
Hexachlorobutadiene	< 2.2	ug/l	2.2	7.1	1	8260B		10/14/2016	CJR	1
Isopropylbenzene	< 0.82	ug/l	0.82	2.6	1	8260B		10/14/2016	CJR	1
p-Isopropyltoluene	< 1.1	ug/l	1.1	3.5	1	8260B		10/14/2016	CJR	1
Methylene chloride	< 1.3	ug/l	1.3	4.2	1	8260B		10/14/2016	CJR	1
Methyl tert-butyl ether (MTBE)	< 1.1	ug/l	1.1	3.7	1	8260B		10/14/2016	CJR	1
Naphthalene	< 1.6	ug/l	1.6	5.2	1	8260B		10/14/2016	CJR	1
n-Propylbenzene	< 0.77	ug/l	0.77	2.4	1	8260B		10/14/2016	CJR	1
1,1,2,2-Tetrachloroethane	< 0.52	ug/l	0.52	1.7	1	8260B		10/14/2016	CJR	1
1,1,1,2-Tetrachloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/14/2016	CJR	1
Tetrachloroethene	< 0.49	ug/l	0.49	1.5	1	8260B		10/14/2016	CJR	1
Toluene	< 0.44	ug/l	0.44	1.4	1	8260B		10/14/2016	CJR	1
1,2,4-Trichlorobenzene	< 1.7	ug/l	1.7	5.6	1	8260B		10/14/2016	CJR	1
1,2,3-Trichlorobenzene	< 2.7	ug/l	2.7	8.6	1	8260B		10/14/2016	CJR	1
1,1,1-Trichloroethane	< 0.84	ug/l	0.84	2.7	1	8260B		10/14/2016	CJR	1
1,1,2-Trichloroethane	< 0.48	ug/l	0.48	1.52	1	8260B		10/14/2016	CJR	1
Trichloroethene (TCE)	< 0.47	ug/l	0.47	1.5	1	8260B		10/14/2016	CJR	1
Trichlorofluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/14/2016	CJR	1
1,2,4-Trimethylbenzene	< 1.6	ug/l	1.6	5	1	8260B		10/14/2016	CJR	1
1,3,5-Trimethylbenzene	< 1.5	ug/l	1.5	4.8	1	8260B		10/14/2016	CJR	1
Vinyl Chloride	< 0.17	ug/l	0.17	0.54	1	8260B		10/14/2016	CJR	1
m&p-Xylene	< 2.2	ug/l	2.2	6.9	1	8260B		10/14/2016	CJR	1
o-Xylene	< 0.9	ug/l	0.9	2.9	1	8260B		10/14/2016	CJR	1
SUR - 1,2-Dichloroethane-d4	102	REC %			1	8260B		10/14/2016	CJR	1
SUR - 4-Bromofluorobenzene	97	REC %			1	8260B		10/14/2016	CJR	1
SUR - Dibromofluoromethane	88	REC %			1	8260B		10/14/2016	CJR	1
SUR - Toluene-d8	104	REC %			1	8260B		10/14/2016	CJR	1

Project Name NEWTON GRAVEL PIT **Invoice #** E31859
Project # 60135471

Lab Code 531859BB
Sample ID 4010 THUNDER RI
Sample Matrix Water
Sample Date 10/7/2016

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
VOC's										
Benzene	< 0.44	ug/l	0.44	1.4	1	8260B		10/14/2016	CJR	1
Bromobenzene	< 0.48	ug/l	0.48	1.5	1	8260B		10/14/2016	CJR	1
Bromodichloromethane	< 0.46	ug/l	0.46	1.5	1	8260B		10/14/2016	CJR	1
Bromoform	< 0.46	ug/l	0.46	1.5	1	8260B		10/14/2016	CJR	1
tert-Butylbenzene	< 1.1	ug/l	1.1	3.4	1	8260B		10/14/2016	CJR	1
sec-Butylbenzene	< 1.2	ug/l	1.2	3.8	1	8260B		10/14/2016	CJR	1
n-Butylbenzene	< 1	ug/l	1	3.3	1	8260B		10/14/2016	CJR	1
Carbon Tetrachloride	< 0.51	ug/l	0.51	1.6	1	8260B		10/14/2016	CJR	1
Chlorobenzene	< 0.46	ug/l	0.46	1.4	1	8260B		10/14/2016	CJR	1
Chloroethane	< 0.65	ug/l	0.65	2.1	1	8260B		10/14/2016	CJR	1
Chloroform	< 0.43	ug/l	0.43	1.4	1	8260B		10/14/2016	CJR	1
Chloromethane	< 1.9	ug/l	1.9	6	1	8260B		10/14/2016	CJR	1
2-Chlorotoluene	< 0.4	ug/l	0.4	1.3	1	8260B		10/14/2016	CJR	1
4-Chlorotoluene	< 0.63	ug/l	0.63	2	1	8260B		10/14/2016	CJR	1
1,2-Dibromo-3-chloropropane	< 1.4	ug/l	1.4	4.5	1	8260B		10/14/2016	CJR	1
Dibromochloromethane	< 0.45	ug/l	0.45	1.4	1	8260B		10/14/2016	CJR	1
1,4-Dichlorobenzene	< 0.49	ug/l	0.49	1.6	1	8260B		10/14/2016	CJR	1
1,3-Dichlorobenzene	< 0.52	ug/l	0.52	1.6	1	8260B		10/14/2016	CJR	1
1,2-Dichlorobenzene	< 0.46	ug/l	0.46	1.5	1	8260B		10/14/2016	CJR	1
Dichlorodifluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/14/2016	CJR	1
1,2-Dichloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/14/2016	CJR	1
1,1-Dichloroethane	< 1.1	ug/l	1.1	3.6	1	8260B		10/14/2016	CJR	1
1,1-Dichloroethene	< 0.65	ug/l	0.65	2.1	1	8260B		10/14/2016	CJR	1
cis-1,2-Dichloroethene	1.27 "J"	ug/l	0.45	1.4	1	8260B		10/14/2016	CJR	1
trans-1,2-Dichloroethene	< 0.54	ug/l	0.54	1.7	1	8260B		10/14/2016	CJR	1
1,2-Dichloropropane	< 0.43	ug/l	0.43	1.37	1	8260B		10/14/2016	CJR	1
2,2-Dichloropropane	< 3.1	ug/l	3.1	9.8	1	8260B		10/14/2016	CJR	1
1,3-Dichloropropane	< 0.42	ug/l	0.42	1.3	1	8260B		10/14/2016	CJR	1
Di-isopropyl ether	< 0.44	ug/l	0.44	1.4	1	8260B		10/14/2016	CJR	1
EDB (1,2-Dibromoethane)	< 0.63	ug/l	0.63	2	1	8260B		10/14/2016	CJR	1
Ethylbenzene	< 0.71	ug/l	0.71	2.3	1	8260B		10/14/2016	CJR	1
Hexachlorobutadiene	< 2.2	ug/l	2.2	7.1	1	8260B		10/14/2016	CJR	1
Isopropylbenzene	< 0.82	ug/l	0.82	2.6	1	8260B		10/14/2016	CJR	1
p-Isopropyltoluene	< 1.1	ug/l	1.1	3.5	1	8260B		10/14/2016	CJR	1
Methylene chloride	< 1.3	ug/l	1.3	4.2	1	8260B		10/14/2016	CJR	1
Methyl tert-butyl ether (MTBE)	< 1.1	ug/l	1.1	3.7	1	8260B		10/14/2016	CJR	1
Naphthalene	< 1.6	ug/l	1.6	5.2	1	8260B		10/14/2016	CJR	1
n-Propylbenzene	< 0.77	ug/l	0.77	2.4	1	8260B		10/14/2016	CJR	1
1,1,2,2-Tetrachloroethane	< 0.52	ug/l	0.52	1.7	1	8260B		10/14/2016	CJR	1
1,1,1,2-Tetrachloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/14/2016	CJR	1
Tetrachloroethene	< 0.49	ug/l	0.49	1.5	1	8260B		10/14/2016	CJR	1
Toluene	< 0.44	ug/l	0.44	1.4	1	8260B		10/14/2016	CJR	1
1,2,4-Trichlorobenzene	< 1.7	ug/l	1.7	5.6	1	8260B		10/14/2016	CJR	1
1,2,3-Trichlorobenzene	< 2.7	ug/l	2.7	8.6	1	8260B		10/14/2016	CJR	1
1,1,1-Trichloroethane	< 0.84	ug/l	0.84	2.7	1	8260B		10/14/2016	CJR	1
1,1,2-Trichloroethane	< 0.48	ug/l	0.48	1.52	1	8260B		10/14/2016	CJR	1
Trichloroethene (TCE)	< 0.47	ug/l	0.47	1.5	1	8260B		10/14/2016	CJR	1
Trichlorofluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/14/2016	CJR	1
1,2,4-Trimethylbenzene	< 1.6	ug/l	1.6	5	1	8260B		10/14/2016	CJR	1
1,3,5-Trimethylbenzene	< 1.5	ug/l	1.5	4.8	1	8260B		10/14/2016	CJR	1
Vinyl Chloride	0.27 "J"	ug/l	0.17	0.54	1	8260B		10/14/2016	CJR	1
m&p-Xylene	< 2.2	ug/l	2.2	6.9	1	8260B		10/14/2016	CJR	1
o-Xylene	< 0.9	ug/l	0.9	2.9	1	8260B		10/14/2016	CJR	1
SUR - Toluene-d8	104	REC %			1	8260B		10/14/2016	CJR	1
SUR - 1,2-Dichloroethane-d4	98	REC %			1	8260B		10/14/2016	CJR	1
SUR - 4-Bromofluorobenzene	98	REC %			1	8260B		10/14/2016	CJR	1
SUR - Dibromofluoromethane	89	REC %			1	8260B		10/14/2016	CJR	1

Project Name NEWTON GRAVEL PIT **Invoice #** E31859
Project # 60135471

Lab Code 531859CC
Sample ID 2911 CTH CR
Sample Matrix Water
Sample Date 10/7/2016

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
VOC's										
Benzene	< 0.44	ug/l	0.44	1.4	1	8260B		10/14/2016	CJR	1
Bromobenzene	< 0.48	ug/l	0.48	1.5	1	8260B		10/14/2016	CJR	1
Bromodichloromethane	< 0.46	ug/l	0.46	1.5	1	8260B		10/14/2016	CJR	1
Bromoform	< 0.46	ug/l	0.46	1.5	1	8260B		10/14/2016	CJR	1
tert-Butylbenzene	< 1.1	ug/l	1.1	3.4	1	8260B		10/14/2016	CJR	1
sec-Butylbenzene	< 1.2	ug/l	1.2	3.8	1	8260B		10/14/2016	CJR	1
n-Butylbenzene	< 1	ug/l	1	3.3	1	8260B		10/14/2016	CJR	1
Carbon Tetrachloride	< 0.51	ug/l	0.51	1.6	1	8260B		10/14/2016	CJR	1
Chlorobenzene	< 0.46	ug/l	0.46	1.4	1	8260B		10/14/2016	CJR	1
Chloroethane	< 0.65	ug/l	0.65	2.1	1	8260B		10/14/2016	CJR	1
Chloroform	< 0.43	ug/l	0.43	1.4	1	8260B		10/14/2016	CJR	1
Chloromethane	< 1.9	ug/l	1.9	6	1	8260B		10/14/2016	CJR	1
2-Chlorotoluene	< 0.4	ug/l	0.4	1.3	1	8260B		10/14/2016	CJR	1
4-Chlorotoluene	< 0.63	ug/l	0.63	2	1	8260B		10/14/2016	CJR	1
1,2-Dibromo-3-chloropropane	< 1.4	ug/l	1.4	4.5	1	8260B		10/14/2016	CJR	1
Dibromochloromethane	< 0.45	ug/l	0.45	1.4	1	8260B		10/14/2016	CJR	1
1,4-Dichlorobenzene	< 0.49	ug/l	0.49	1.6	1	8260B		10/14/2016	CJR	1
1,3-Dichlorobenzene	< 0.52	ug/l	0.52	1.6	1	8260B		10/14/2016	CJR	1
1,2-Dichlorobenzene	< 0.46	ug/l	0.46	1.5	1	8260B		10/14/2016	CJR	1
Dichlorodifluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/14/2016	CJR	1
1,2-Dichloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/14/2016	CJR	1
1,1-Dichloroethane	< 1.1	ug/l	1.1	3.6	1	8260B		10/14/2016	CJR	1
1,1-Dichloroethene	< 0.65	ug/l	0.65	2.1	1	8260B		10/14/2016	CJR	1
cis-1,2-Dichloroethene	< 0.45	ug/l	0.45	1.4	1	8260B		10/14/2016	CJR	1
trans-1,2-Dichloroethene	< 0.54	ug/l	0.54	1.7	1	8260B		10/14/2016	CJR	1
1,2-Dichloropropane	< 0.43	ug/l	0.43	1.37	1	8260B		10/14/2016	CJR	1
2,2-Dichloropropane	< 3.1	ug/l	3.1	9.8	1	8260B		10/14/2016	CJR	1
1,3-Dichloropropane	< 0.42	ug/l	0.42	1.3	1	8260B		10/14/2016	CJR	1
Di-isopropyl ether	< 0.44	ug/l	0.44	1.4	1	8260B		10/14/2016	CJR	1
EDB (1,2-Dibromoethane)	< 0.63	ug/l	0.63	2	1	8260B		10/14/2016	CJR	1
Ethylbenzene	< 0.71	ug/l	0.71	2.3	1	8260B		10/14/2016	CJR	1
Hexachlorobutadiene	< 2.2	ug/l	2.2	7.1	1	8260B		10/14/2016	CJR	1
Isopropylbenzene	< 0.82	ug/l	0.82	2.6	1	8260B		10/14/2016	CJR	1
p-Isopropyltoluene	< 1.1	ug/l	1.1	3.5	1	8260B		10/14/2016	CJR	1
Methylene chloride	< 1.3	ug/l	1.3	4.2	1	8260B		10/14/2016	CJR	1
Methyl tert-butyl ether (MTBE)	< 1.1	ug/l	1.1	3.7	1	8260B		10/14/2016	CJR	1
Naphthalene	< 1.6	ug/l	1.6	5.2	1	8260B		10/14/2016	CJR	1
n-Propylbenzene	< 0.77	ug/l	0.77	2.4	1	8260B		10/14/2016	CJR	1
1,1,2,2-Tetrachloroethane	< 0.52	ug/l	0.52	1.7	1	8260B		10/14/2016	CJR	1
1,1,1,2-Tetrachloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/14/2016	CJR	1
Tetrachloroethene	< 0.49	ug/l	0.49	1.5	1	8260B		10/14/2016	CJR	1
Toluene	< 0.44	ug/l	0.44	1.4	1	8260B		10/14/2016	CJR	1
1,2,4-Trichlorobenzene	< 1.7	ug/l	1.7	5.6	1	8260B		10/14/2016	CJR	1
1,2,3-Trichlorobenzene	< 2.7	ug/l	2.7	8.6	1	8260B		10/14/2016	CJR	1
1,1,1-Trichloroethane	< 0.84	ug/l	0.84	2.7	1	8260B		10/14/2016	CJR	1
1,1,2-Trichloroethane	< 0.48	ug/l	0.48	1.52	1	8260B		10/14/2016	CJR	1
Trichloroethene (TCE)	< 0.47	ug/l	0.47	1.5	1	8260B		10/14/2016	CJR	1
Trichlorofluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/14/2016	CJR	1
1,2,4-Trimethylbenzene	< 1.6	ug/l	1.6	5	1	8260B		10/14/2016	CJR	1
1,3,5-Trimethylbenzene	< 1.5	ug/l	1.5	4.8	1	8260B		10/14/2016	CJR	1
Vinyl Chloride	< 0.17	ug/l	0.17	0.54	1	8260B		10/14/2016	CJR	1
m&p-Xylene	< 2.2	ug/l	2.2	6.9	1	8260B		10/14/2016	CJR	1
o-Xylene	< 0.9	ug/l	0.9	2.9	1	8260B		10/14/2016	CJR	1
SUR - 1,2-Dichloroethane-d4	102	REC %			1	8260B		10/14/2016	CJR	1
SUR - 4-Bromofluorobenzene	97	REC %			1	8260B		10/14/2016	CJR	1
SUR - Dibromofluoromethane	93	REC %			1	8260B		10/14/2016	CJR	1
SUR - Toluene-d8	105	REC %			1	8260B		10/14/2016	CJR	1

Project Name NEWTON GRAVEL PIT **Invoice #** E31859
Project # 60135471

Lab Code 531859DD
Sample ID TRIP BLANK
Sample Matrix Water
Sample Date 10/7/2016

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
VOC's										
Benzene	< 0.44	ug/l	0.44	1.4	1	8260B		10/14/2016	CJR	1
Bromobenzene	< 0.48	ug/l	0.48	1.5	1	8260B		10/14/2016	CJR	1
Bromodichloromethane	< 0.46	ug/l	0.46	1.5	1	8260B		10/14/2016	CJR	1
Bromoform	< 0.46	ug/l	0.46	1.5	1	8260B		10/14/2016	CJR	1
tert-Butylbenzene	< 1.1	ug/l	1.1	3.4	1	8260B		10/14/2016	CJR	1
sec-Butylbenzene	< 1.2	ug/l	1.2	3.8	1	8260B		10/14/2016	CJR	1
n-Butylbenzene	< 1	ug/l	1	3.3	1	8260B		10/14/2016	CJR	1
Carbon Tetrachloride	< 0.51	ug/l	0.51	1.6	1	8260B		10/14/2016	CJR	1
Chlorobenzene	< 0.46	ug/l	0.46	1.4	1	8260B		10/14/2016	CJR	1
Chloroethane	< 0.65	ug/l	0.65	2.1	1	8260B		10/14/2016	CJR	1
Chloroform	< 0.43	ug/l	0.43	1.4	1	8260B		10/14/2016	CJR	1
Chloromethane	< 1.9	ug/l	1.9	6	1	8260B		10/14/2016	CJR	1
2-Chlorotoluene	< 0.4	ug/l	0.4	1.3	1	8260B		10/14/2016	CJR	1
4-Chlorotoluene	< 0.63	ug/l	0.63	2	1	8260B		10/14/2016	CJR	1
1,2-Dibromo-3-chloropropane	< 1.4	ug/l	1.4	4.5	1	8260B		10/14/2016	CJR	1
Dibromochloromethane	< 0.45	ug/l	0.45	1.4	1	8260B		10/14/2016	CJR	1
1,4-Dichlorobenzene	< 0.49	ug/l	0.49	1.6	1	8260B		10/14/2016	CJR	1
1,3-Dichlorobenzene	< 0.52	ug/l	0.52	1.6	1	8260B		10/14/2016	CJR	1
1,2-Dichlorobenzene	< 0.46	ug/l	0.46	1.5	1	8260B		10/14/2016	CJR	1
Dichlorodifluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/14/2016	CJR	1
1,2-Dichloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/14/2016	CJR	1
1,1-Dichloroethane	< 1.1	ug/l	1.1	3.6	1	8260B		10/14/2016	CJR	1
1,1-Dichloroethene	< 0.65	ug/l	0.65	2.1	1	8260B		10/14/2016	CJR	1
cis-1,2-Dichloroethene	< 0.45	ug/l	0.45	1.4	1	8260B		10/14/2016	CJR	1
trans-1,2-Dichloroethene	< 0.54	ug/l	0.54	1.7	1	8260B		10/14/2016	CJR	1
1,2-Dichloropropane	< 0.43	ug/l	0.43	1.37	1	8260B		10/14/2016	CJR	1
2,2-Dichloropropane	< 3.1	ug/l	3.1	9.8	1	8260B		10/14/2016	CJR	1
1,3-Dichloropropane	< 0.42	ug/l	0.42	1.3	1	8260B		10/14/2016	CJR	1
Di-isopropyl ether	< 0.44	ug/l	0.44	1.4	1	8260B		10/14/2016	CJR	1
EDB (1,2-Dibromoethane)	< 0.63	ug/l	0.63	2	1	8260B		10/14/2016	CJR	1
Ethylbenzene	< 0.71	ug/l	0.71	2.3	1	8260B		10/14/2016	CJR	1
Hexachlorobutadiene	< 2.2	ug/l	2.2	7.1	1	8260B		10/14/2016	CJR	1
Isopropylbenzene	< 0.82	ug/l	0.82	2.6	1	8260B		10/14/2016	CJR	1
p-Isopropyltoluene	< 1.1	ug/l	1.1	3.5	1	8260B		10/14/2016	CJR	1
Methylene chloride	< 1.3	ug/l	1.3	4.2	1	8260B		10/14/2016	CJR	1
Methyl tert-butyl ether (MTBE)	< 1.1	ug/l	1.1	3.7	1	8260B		10/14/2016	CJR	1
Naphthalene	< 1.6	ug/l	1.6	5.2	1	8260B		10/14/2016	CJR	1
n-Propylbenzene	< 0.77	ug/l	0.77	2.4	1	8260B		10/14/2016	CJR	1
1,1,2,2-Tetrachloroethane	< 0.52	ug/l	0.52	1.7	1	8260B		10/14/2016	CJR	1
1,1,1,2-Tetrachloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/14/2016	CJR	1
Tetrachloroethene	< 0.49	ug/l	0.49	1.5	1	8260B		10/14/2016	CJR	1
Toluene	< 0.44	ug/l	0.44	1.4	1	8260B		10/14/2016	CJR	1
1,2,4-Trichlorobenzene	< 1.7	ug/l	1.7	5.6	1	8260B		10/14/2016	CJR	1
1,2,3-Trichlorobenzene	< 2.7	ug/l	2.7	8.6	1	8260B		10/14/2016	CJR	1
1,1,1-Trichloroethane	< 0.84	ug/l	0.84	2.7	1	8260B		10/14/2016	CJR	1
1,1,2-Trichloroethane	< 0.48	ug/l	0.48	1.52	1	8260B		10/14/2016	CJR	1
Trichloroethene (TCE)	< 0.47	ug/l	0.47	1.5	1	8260B		10/14/2016	CJR	1
Trichlorofluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/14/2016	CJR	1
1,2,4-Trimethylbenzene	< 1.6	ug/l	1.6	5	1	8260B		10/14/2016	CJR	1
1,3,5-Trimethylbenzene	< 1.5	ug/l	1.5	4.8	1	8260B		10/14/2016	CJR	1
Vinyl Chloride	< 0.17	ug/l	0.17	0.54	1	8260B		10/14/2016	CJR	1
m&p-Xylene	< 2.2	ug/l	2.2	6.9	1	8260B		10/14/2016	CJR	1
o-Xylene	< 0.9	ug/l	0.9	2.9	1	8260B		10/14/2016	CJR	1
SUR - Toluene-d8	106	REC %			1	8260B		10/14/2016	CJR	1
SUR - 1,2-Dichloroethane-d4	102	REC %			1	8260B		10/14/2016	CJR	1
SUR - 4-Bromofluorobenzene	99	REC %			1	8260B		10/14/2016	CJR	1
SUR - Dibromofluoromethane	90	REC %			1	8260B		10/14/2016	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

CHAIN OF CUSTODY RECORD

Synergy
Environmental Lab, Inc.

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

Chain # Nº 291

Page 1 of 3

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 #: 60135471

Sampler: (signature) Adam Piring / Sarah E Day

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

Reports To: Dave Hendersen	Invoice To: Dave Henderson
Company AECOM	Company (See Left)
Address 1555 N. RiverCenter Dr. STE 214	Address
City State Zip Milwaukee, WI 53212	City State Zip
Phone 414-944-6190	Phone
FAX	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
503859A	3515 Hecker Rd	10/5/16	0850		x	N	3	GW	HCl													X		
B	3609 Hecker Rd	10/5/16	0915		x	N	3	GW	HCl													X		
C	3422 CTH CR	10/5/16	0950		x	N	3	GW	HCl													X		
D	3921 Black Hawk	10/5/16	1012		x	N	3	GW	HCl													X		
E	3403 CTH CR	10/5/16	1040		x	N	3	GW	HCl													X		
F	2706 CTH CR	10/5/16	1110		x	N	3	GW	HCl													X		
G	3611 CTH CR	10/5/16	1126		x	N	3	GW	HCl													X		
H	3625 HeckerRd	10/5/16	1415		x	N	3	GW	HCl													X		
I	3625 Hecker DUP	10/5/16	1415		x	N	3	GW	HCl													X		
J	3312 CTH CR	10/5/16	1440		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.)
Potable well samples on their own report

Sample Integrity - To be completed by receiving lab.
Method of Shipment: Sm
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
Adam Piring	1100	10/7/16			

Received in Laboratory By: [signature] Time: 1600 Date: 10/8/16

CHAIN OF CUSTODY RECORD

Synergy Environmental Lab, Inc.

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920-830-2455 • FAX 920-733-0631

Chain # Nº 291[illegible]

Page 2 of 3

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) Chris Priebe / Sarah E Day

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

Reports To: Dave Henderson	Invoice To: Dave Henderson
Company AECOM	Company [SEE LEFT]
Address 1555 N. RiverCenter Dr. STE 214	Address
City State Zip Milwaukee, WI 53212	City State Zip
Phone 414-944-6190	Phone
FAX	FAX

Lab I.D.	Sample I.D.	Collection Date	Collection Time	Comp	Grab	Filtered Y/N	No. of Containers	Sample Type (Matrix)*	Preservation
502857 K	3327 Heckered	10/5/16	1510		X	N	3	GW	HCl
L	3023 CTH CR	10/5/16	1545		X	N	3	GW	HCl
M	4002 Thunder Ridge	10/5/16	1825		X	N	3	GW	HCl
N	4027 Thunder Ridge	10/6/16	0915		X	N	3	GW	HCl
O	4027 Thunder Ridge DUP	10/6/16	0915		X	N	3	GW	HCl
P	3618 CTH CR	10/6/16	0945		X	N	3	GW	HCl
Q	3518 Hecker	10/6/16	1015		X	N	3	GW	HCl
R	3120 CTH CR	10/6/16	1045		X	N	3	GW	HCl
S	3911 Blackhawk	10/6/16	1108		X	N	3	GW	HCl
T	3420 Orchard	10/6/16	1100		X	N	3	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	
												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.)
Potable well samples on their own report

Sample Integrity - To be completed by receiving lab.
Method of Shipment: Sun
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
Chris Priebe	1100	10/7/16			

Received in Laboratory By: [signature] Time: 10:00 Date: 10/8/16

CHAIN OF CUSTODY RECORD

Synergy
Environmental Lab, Inc.

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920-830-2455 • FAX 920-733-0631

Chain # Nº 291[illegible]

Page 3 of 3

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) Chad Pinz / Sarah E Day

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

Reports To: Dave Henderson	Invoice To: Dave Henderson
Company AECOM	Company
Address 1555 N. RiverCenter Dr. STE 214	Address
City State Zip Milwaukee, WI 53212	City State Zip
Phone 414-944-6190	Phone
FAX	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
Sa1859U	2717 CTH CR	10/6/16	1615		x	N	3	GW	HCl													x		
V	3825 Viebahn	10/6/16	1640		x	N	3	GW	HCl													x		
W	4024 CTH CR	10/6/16	1710		x	N	3	GW	HCl													x		
X	3417 Hecker	10/6/16	1727		x	N	3	GW	HCl													x		
Y	3417 Hecker Dup	10/6/16	1727		x	N	3	GW	HCl													x		
Z	3027 Orchard	10/6/16	1755		x	N	3	GW	HCl													x		
AA	3817 Viebahn	10/6/16	1815		x	N	3	GW	HCl													x		
BB	4010 Thunder Ridge	10/7/16	0910		x	N	3	GW	HCl													x		
CC	2911 CTH CR	10/7/16	0945		x	N	3	GW	HCl													x		
DD	Trip Blank	—	—		x	N	2	GW/QA	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.)

Potable well samples on their own report

Sample Integrity - To be completed by receiving lab.

Method of Shipment: Sun

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
Chad Pinz	1100	10/7/16			

Received in Laboratory By: [signature] Time: 10:00 Date: 10/8/16

Synergy Environmental Lab, INC.

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

DAVE HENDERSON
AECOM
1555 N RIVERCENTER DRIVE
MILWAUKEE, WI 53212

Report Date *19-Oct-16*

Project Name NEWTON GRAVEL PIT **Invoice #** E31870
Project # 60135471

Lab Code 5031870A
Sample ID 4111 THUNDER RI
Sample Matrix Water
Sample Date 10/10/2016

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
VOC's										
Benzene	< 0.44	ug/l	0.44	1.4	1	8260B		10/17/2016	CJR	1
Bromobenzene	< 0.48	ug/l	0.48	1.5	1	8260B		10/17/2016	CJR	1
Bromodichloromethane	< 0.46	ug/l	0.46	1.5	1	8260B		10/17/2016	CJR	1
Bromoform	< 0.46	ug/l	0.46	1.5	1	8260B		10/17/2016	CJR	1
tert-Butylbenzene	< 1.1	ug/l	1.1	3.4	1	8260B		10/17/2016	CJR	1
sec-Butylbenzene	< 1.2	ug/l	1.2	3.8	1	8260B		10/17/2016	CJR	1
n-Butylbenzene	< 1	ug/l	1	3.3	1	8260B		10/17/2016	CJR	1
Carbon Tetrachloride	< 0.51	ug/l	0.51	1.6	1	8260B		10/17/2016	CJR	1
Chlorobenzene	< 0.46	ug/l	0.46	1.4	1	8260B		10/17/2016	CJR	1
Chloroethane	< 0.65	ug/l	0.65	2.1	1	8260B		10/17/2016	CJR	1
Chloroform	< 0.43	ug/l	0.43	1.4	1	8260B		10/17/2016	CJR	1
Chloromethane	< 1.9	ug/l	1.9	6	1	8260B		10/17/2016	CJR	1
2-Chlorotoluene	< 0.4	ug/l	0.4	1.3	1	8260B		10/17/2016	CJR	1
4-Chlorotoluene	< 0.63	ug/l	0.63	2	1	8260B		10/17/2016	CJR	1
1,2-Dibromo-3-chloropropane	< 1.4	ug/l	1.4	4.5	1	8260B		10/17/2016	CJR	1
Dibromochloromethane	< 0.45	ug/l	0.45	1.4	1	8260B		10/17/2016	CJR	1
1,4-Dichlorobenzene	< 0.49	ug/l	0.49	1.6	1	8260B		10/17/2016	CJR	1
1,3-Dichlorobenzene	< 0.52	ug/l	0.52	1.6	1	8260B		10/17/2016	CJR	1
1,2-Dichlorobenzene	< 0.46	ug/l	0.46	1.5	1	8260B		10/17/2016	CJR	1
Dichlorodifluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/17/2016	CJR	1
1,2-Dichloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/17/2016	CJR	1
1,1-Dichloroethane	< 1.1	ug/l	1.1	3.6	1	8260B		10/17/2016	CJR	1
1,1-Dichloroethene	< 0.65	ug/l	0.65	2.1	1	8260B		10/17/2016	CJR	1
cis-1,2-Dichloroethene	0.56 "J"	ug/l	0.45	1.4	1	8260B		10/17/2016	CJR	1
trans-1,2-Dichloroethene	< 0.54	ug/l	0.54	1.7	1	8260B		10/17/2016	CJR	1
1,2-Dichloropropane	< 0.43	ug/l	0.43	1.37	1	8260B		10/17/2016	CJR	1
2,2-Dichloropropane	< 3.1	ug/l	3.1	9.8	1	8260B		10/17/2016	CJR	1
1,3-Dichloropropane	< 0.42	ug/l	0.42	1.3	1	8260B		10/17/2016	CJR	1
Di-isopropyl ether	< 0.44	ug/l	0.44	1.4	1	8260B		10/17/2016	CJR	1
EDB (1,2-Dibromoethane)	< 0.63	ug/l	0.63	2	1	8260B		10/17/2016	CJR	1
Ethylbenzene	< 0.71	ug/l	0.71	2.3	1	8260B		10/17/2016	CJR	1
Hexachlorobutadiene	< 2.2	ug/l	2.2	7.1	1	8260B		10/17/2016	CJR	1
Isopropylbenzene	< 0.82	ug/l	0.82	2.6	1	8260B		10/17/2016	CJR	1

Project Name NEWTON GRAVEL PIT **Invoice #** E31870
Project # 60135471

Lab Code 5031870A
Sample ID 4111 THUNDER RI
Sample Matrix Water
Sample Date 10/10/2016

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
p-Isopropyltoluene	< 1.1	ug/l	1.1	3.5	1	8260B		10/17/2016	CJR	1
Methylene chloride	< 1.3	ug/l	1.3	4.2	1	8260B		10/17/2016	CJR	1
Methyl tert-butyl ether (MTBE)	< 1.1	ug/l	1.1	3.7	1	8260B		10/17/2016	CJR	1
Naphthalene	< 1.6	ug/l	1.6	5.2	1	8260B		10/17/2016	CJR	1
n-Propylbenzene	< 0.77	ug/l	0.77	2.4	1	8260B		10/17/2016	CJR	1
1,1,2,2-Tetrachloroethane	< 0.52	ug/l	0.52	1.7	1	8260B		10/17/2016	CJR	1
1,1,1,2-Tetrachloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/17/2016	CJR	1
Tetrachloroethene	< 0.49	ug/l	0.49	1.5	1	8260B		10/17/2016	CJR	1
Toluene	< 0.44	ug/l	0.44	1.4	1	8260B		10/17/2016	CJR	1
1,2,4-Trichlorobenzene	< 1.7	ug/l	1.7	5.6	1	8260B		10/17/2016	CJR	1
1,2,3-Trichlorobenzene	< 2.7	ug/l	2.7	8.6	1	8260B		10/17/2016	CJR	1
1,1,1-Trichloroethane	< 0.84	ug/l	0.84	2.7	1	8260B		10/17/2016	CJR	1
1,1,2-Trichloroethane	< 0.48	ug/l	0.48	1.52	1	8260B		10/17/2016	CJR	1
Trichloroethene (TCE)	< 0.47	ug/l	0.47	1.5	1	8260B		10/17/2016	CJR	1
Trichlorofluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/17/2016	CJR	1
1,2,4-Trimethylbenzene	< 1.6	ug/l	1.6	5	1	8260B		10/17/2016	CJR	1
1,3,5-Trimethylbenzene	< 1.5	ug/l	1.5	4.8	1	8260B		10/17/2016	CJR	1
Vinyl Chloride	< 0.17	ug/l	0.17	0.54	1	8260B		10/17/2016	CJR	1
m&p-Xylene	< 2.2	ug/l	2.2	6.9	1	8260B		10/17/2016	CJR	1
o-Xylene	< 0.9	ug/l	0.9	2.9	1	8260B		10/17/2016	CJR	1
SUR - 4-Bromofluorobenzene	96	REC %			1	8260B		10/17/2016	CJR	1
SUR - Dibromofluoromethane	99	REC %			1	8260B		10/17/2016	CJR	1
SUR - Toluene-d8	102	REC %			1	8260B		10/17/2016	CJR	1
SUR - 1,2-Dichloroethane-d4	100	REC %			1	8260B		10/17/2016	CJR	1

Project Name NEWTON GRAVEL PIT **Invoice #** E31870
Project # 60135471

Lab Code 5031870B
Sample ID 4159 SILVER CREE
Sample Matrix Water
Sample Date 10/10/2016

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
VOC's										
Benzene	< 0.44	ug/l	0.44	1.4	1	8260B		10/17/2016	CJR	1
Bromobenzene	< 0.48	ug/l	0.48	1.5	1	8260B		10/17/2016	CJR	1
Bromodichloromethane	< 0.46	ug/l	0.46	1.5	1	8260B		10/17/2016	CJR	1
Bromoform	< 0.46	ug/l	0.46	1.5	1	8260B		10/17/2016	CJR	1
tert-Butylbenzene	< 1.1	ug/l	1.1	3.4	1	8260B		10/17/2016	CJR	1
sec-Butylbenzene	< 1.2	ug/l	1.2	3.8	1	8260B		10/17/2016	CJR	1
n-Butylbenzene	< 1	ug/l	1	3.3	1	8260B		10/17/2016	CJR	1
Carbon Tetrachloride	< 0.51	ug/l	0.51	1.6	1	8260B		10/17/2016	CJR	1
Chlorobenzene	< 0.46	ug/l	0.46	1.4	1	8260B		10/17/2016	CJR	1
Chloroethane	< 0.65	ug/l	0.65	2.1	1	8260B		10/17/2016	CJR	1
Chloroform	< 0.43	ug/l	0.43	1.4	1	8260B		10/17/2016	CJR	1
Chloromethane	< 1.9	ug/l	1.9	6	1	8260B		10/17/2016	CJR	1
2-Chlorotoluene	< 0.4	ug/l	0.4	1.3	1	8260B		10/17/2016	CJR	1
4-Chlorotoluene	< 0.63	ug/l	0.63	2	1	8260B		10/17/2016	CJR	1
1,2-Dibromo-3-chloropropane	< 1.4	ug/l	1.4	4.5	1	8260B		10/17/2016	CJR	1
Dibromochloromethane	< 0.45	ug/l	0.45	1.4	1	8260B		10/17/2016	CJR	1
1,4-Dichlorobenzene	< 0.49	ug/l	0.49	1.6	1	8260B		10/17/2016	CJR	1
1,3-Dichlorobenzene	< 0.52	ug/l	0.52	1.6	1	8260B		10/17/2016	CJR	1
1,2-Dichlorobenzene	< 0.46	ug/l	0.46	1.5	1	8260B		10/17/2016	CJR	1
Dichlorodifluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/17/2016	CJR	1
1,2-Dichloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/17/2016	CJR	1
1,1-Dichloroethane	< 1.1	ug/l	1.1	3.6	1	8260B		10/17/2016	CJR	1
1,1-Dichloroethene	< 0.65	ug/l	0.65	2.1	1	8260B		10/17/2016	CJR	1
cis-1,2-Dichloroethene	0.78 "J"	ug/l	0.45	1.4	1	8260B		10/17/2016	CJR	1
trans-1,2-Dichloroethene	< 0.54	ug/l	0.54	1.7	1	8260B		10/17/2016	CJR	1
1,2-Dichloropropane	< 0.43	ug/l	0.43	1.37	1	8260B		10/17/2016	CJR	1
2,2-Dichloropropane	< 3.1	ug/l	3.1	9.8	1	8260B		10/17/2016	CJR	1
1,3-Dichloropropane	< 0.42	ug/l	0.42	1.3	1	8260B		10/17/2016	CJR	1
Di-isopropyl ether	< 0.44	ug/l	0.44	1.4	1	8260B		10/17/2016	CJR	1
EDB (1,2-Dibromoethane)	< 0.63	ug/l	0.63	2	1	8260B		10/17/2016	CJR	1
Ethylbenzene	< 0.71	ug/l	0.71	2.3	1	8260B		10/17/2016	CJR	1
Hexachlorobutadiene	< 2.2	ug/l	2.2	7.1	1	8260B		10/17/2016	CJR	1
Isopropylbenzene	< 0.82	ug/l	0.82	2.6	1	8260B		10/17/2016	CJR	1
p-Isopropyltoluene	< 1.1	ug/l	1.1	3.5	1	8260B		10/17/2016	CJR	1
Methylene chloride	< 1.3	ug/l	1.3	4.2	1	8260B		10/17/2016	CJR	1
Methyl tert-butyl ether (MTBE)	< 1.1	ug/l	1.1	3.7	1	8260B		10/17/2016	CJR	1
Naphthalene	< 1.6	ug/l	1.6	5.2	1	8260B		10/17/2016	CJR	1
n-Propylbenzene	< 0.77	ug/l	0.77	2.4	1	8260B		10/17/2016	CJR	1
1,1,2,2-Tetrachloroethane	< 0.52	ug/l	0.52	1.7	1	8260B		10/17/2016	CJR	1
1,1,1,2-Tetrachloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/17/2016	CJR	1
Tetrachloroethene	< 0.49	ug/l	0.49	1.5	1	8260B		10/17/2016	CJR	1
Toluene	< 0.44	ug/l	0.44	1.4	1	8260B		10/17/2016	CJR	1
1,2,4-Trichlorobenzene	< 1.7	ug/l	1.7	5.6	1	8260B		10/17/2016	CJR	1
1,2,3-Trichlorobenzene	< 2.7	ug/l	2.7	8.6	1	8260B		10/17/2016	CJR	1
1,1,1-Trichloroethane	< 0.84	ug/l	0.84	2.7	1	8260B		10/17/2016	CJR	1
1,1,2-Trichloroethane	< 0.48	ug/l	0.48	1.52	1	8260B		10/17/2016	CJR	1
Trichloroethene (TCE)	< 0.47	ug/l	0.47	1.5	1	8260B		10/17/2016	CJR	1
Trichlorofluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/17/2016	CJR	1
1,2,4-Trimethylbenzene	< 1.6	ug/l	1.6	5	1	8260B		10/17/2016	CJR	1
1,3,5-Trimethylbenzene	< 1.5	ug/l	1.5	4.8	1	8260B		10/17/2016	CJR	1
Vinyl Chloride	< 0.17	ug/l	0.17	0.54	1	8260B		10/17/2016	CJR	1
m&p-Xylene	< 2.2	ug/l	2.2	6.9	1	8260B		10/17/2016	CJR	1
o-Xylene	< 0.9	ug/l	0.9	2.9	1	8260B		10/17/2016	CJR	1
SUR - 1,2-Dichloroethane-d4	102	REC %			1	8260B		10/17/2016	CJR	1
SUR - 4-Bromofluorobenzene	94	REC %			1	8260B		10/17/2016	CJR	1
SUR - Dibromofluoromethane	106	REC %			1	8260B		10/17/2016	CJR	1
SUR - Toluene-d8	97	REC %			1	8260B		10/17/2016	CJR	1

Project Name NEWTON GRAVEL PIT **Invoice #** E31870
Project # 60135471

Lab Code 5031870C
Sample ID 3902 SILVER CREE
Sample Matrix Water
Sample Date 10/10/2016

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
VOC's										
Benzene	< 0.44	ug/l	0.44	1.4	1	8260B		10/17/2016	CJR	1
Bromobenzene	< 0.48	ug/l	0.48	1.5	1	8260B		10/17/2016	CJR	1
Bromodichloromethane	< 0.46	ug/l	0.46	1.5	1	8260B		10/17/2016	CJR	1
Bromoform	< 0.46	ug/l	0.46	1.5	1	8260B		10/17/2016	CJR	1
tert-Butylbenzene	< 1.1	ug/l	1.1	3.4	1	8260B		10/17/2016	CJR	1
sec-Butylbenzene	< 1.2	ug/l	1.2	3.8	1	8260B		10/17/2016	CJR	1
n-Butylbenzene	< 1	ug/l	1	3.3	1	8260B		10/17/2016	CJR	1
Carbon Tetrachloride	< 0.51	ug/l	0.51	1.6	1	8260B		10/17/2016	CJR	1
Chlorobenzene	< 0.46	ug/l	0.46	1.4	1	8260B		10/17/2016	CJR	1
Chloroethane	< 0.65	ug/l	0.65	2.1	1	8260B		10/17/2016	CJR	1
Chloroform	< 0.43	ug/l	0.43	1.4	1	8260B		10/17/2016	CJR	1
Chloromethane	< 1.9	ug/l	1.9	6	1	8260B		10/17/2016	CJR	1
2-Chlorotoluene	< 0.4	ug/l	0.4	1.3	1	8260B		10/17/2016	CJR	1
4-Chlorotoluene	< 0.63	ug/l	0.63	2	1	8260B		10/17/2016	CJR	1
1,2-Dibromo-3-chloropropane	< 1.4	ug/l	1.4	4.5	1	8260B		10/17/2016	CJR	1
Dibromochloromethane	< 0.45	ug/l	0.45	1.4	1	8260B		10/17/2016	CJR	1
1,4-Dichlorobenzene	< 0.49	ug/l	0.49	1.6	1	8260B		10/17/2016	CJR	1
1,3-Dichlorobenzene	< 0.52	ug/l	0.52	1.6	1	8260B		10/17/2016	CJR	1
1,2-Dichlorobenzene	< 0.46	ug/l	0.46	1.5	1	8260B		10/17/2016	CJR	1
Dichlorodifluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/17/2016	CJR	1
1,2-Dichloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/17/2016	CJR	1
1,1-Dichloroethane	< 1.1	ug/l	1.1	3.6	1	8260B		10/17/2016	CJR	1
1,1-Dichloroethene	< 0.65	ug/l	0.65	2.1	1	8260B		10/17/2016	CJR	1
cis-1,2-Dichloroethene	< 0.45	ug/l	0.45	1.4	1	8260B		10/17/2016	CJR	1
trans-1,2-Dichloroethene	< 0.54	ug/l	0.54	1.7	1	8260B		10/17/2016	CJR	1
1,2-Dichloropropane	< 0.43	ug/l	0.43	1.37	1	8260B		10/17/2016	CJR	1
2,2-Dichloropropane	< 3.1	ug/l	3.1	9.8	1	8260B		10/17/2016	CJR	1
1,3-Dichloropropane	< 0.42	ug/l	0.42	1.3	1	8260B		10/17/2016	CJR	1
Di-isopropyl ether	< 0.44	ug/l	0.44	1.4	1	8260B		10/17/2016	CJR	1
EDB (1,2-Dibromoethane)	< 0.63	ug/l	0.63	2	1	8260B		10/17/2016	CJR	1
Ethylbenzene	< 0.71	ug/l	0.71	2.3	1	8260B		10/17/2016	CJR	1
Hexachlorobutadiene	< 2.2	ug/l	2.2	7.1	1	8260B		10/17/2016	CJR	1
Isopropylbenzene	< 0.82	ug/l	0.82	2.6	1	8260B		10/17/2016	CJR	1
p-Isopropyltoluene	< 1.1	ug/l	1.1	3.5	1	8260B		10/17/2016	CJR	1
Methylene chloride	< 1.3	ug/l	1.3	4.2	1	8260B		10/17/2016	CJR	1
Methyl tert-butyl ether (MTBE)	< 1.1	ug/l	1.1	3.7	1	8260B		10/17/2016	CJR	1
Naphthalene	< 1.6	ug/l	1.6	5.2	1	8260B		10/17/2016	CJR	1
n-Propylbenzene	< 0.77	ug/l	0.77	2.4	1	8260B		10/17/2016	CJR	1
1,1,2,2-Tetrachloroethane	< 0.52	ug/l	0.52	1.7	1	8260B		10/17/2016	CJR	1
1,1,1,2-Tetrachloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/17/2016	CJR	1
Tetrachloroethene	< 0.49	ug/l	0.49	1.5	1	8260B		10/17/2016	CJR	1
Toluene	< 0.44	ug/l	0.44	1.4	1	8260B		10/17/2016	CJR	1
1,2,4-Trichlorobenzene	< 1.7	ug/l	1.7	5.6	1	8260B		10/17/2016	CJR	1
1,2,3-Trichlorobenzene	< 2.7	ug/l	2.7	8.6	1	8260B		10/17/2016	CJR	1
1,1,1-Trichloroethane	< 0.84	ug/l	0.84	2.7	1	8260B		10/17/2016	CJR	1
1,1,2-Trichloroethane	< 0.48	ug/l	0.48	1.52	1	8260B		10/17/2016	CJR	1
Trichloroethene (TCE)	< 0.47	ug/l	0.47	1.5	1	8260B		10/17/2016	CJR	1
Trichlorofluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/17/2016	CJR	1
1,2,4-Trimethylbenzene	< 1.6	ug/l	1.6	5	1	8260B		10/17/2016	CJR	1
1,3,5-Trimethylbenzene	< 1.5	ug/l	1.5	4.8	1	8260B		10/17/2016	CJR	1
Vinyl Chloride	< 0.17	ug/l	0.17	0.54	1	8260B		10/17/2016	CJR	1
m&p-Xylene	< 2.2	ug/l	2.2	6.9	1	8260B		10/17/2016	CJR	1
o-Xylene	< 0.9	ug/l	0.9	2.9	1	8260B		10/17/2016	CJR	1
SUR - Dibromofluoromethane	104	REC %			1	8260B		10/17/2016	CJR	1
SUR - 1,2-Dichloroethane-d4	106	REC %			1	8260B		10/17/2016	CJR	1
SUR - 4-Bromofluorobenzene	101	REC %			1	8260B		10/17/2016	CJR	1
SUR - Toluene-d8	96	REC %			1	8260B		10/17/2016	CJR	1

Project Name NEWTON GRAVEL PIT **Invoice #** E31870
Project # 60135471

Lab Code 5031870D
Sample ID 4005 THUNDER RI
Sample Matrix Water
Sample Date 10/10/2016

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
VOC's										
Benzene	< 0.44	ug/l	0.44	1.4	1	8260B		10/17/2016	CJR	1
Bromobenzene	< 0.48	ug/l	0.48	1.5	1	8260B		10/17/2016	CJR	1
Bromodichloromethane	< 0.46	ug/l	0.46	1.5	1	8260B		10/17/2016	CJR	1
Bromoform	< 0.46	ug/l	0.46	1.5	1	8260B		10/17/2016	CJR	1
tert-Butylbenzene	< 1.1	ug/l	1.1	3.4	1	8260B		10/17/2016	CJR	1
sec-Butylbenzene	< 1.2	ug/l	1.2	3.8	1	8260B		10/17/2016	CJR	1
n-Butylbenzene	< 1	ug/l	1	3.3	1	8260B		10/17/2016	CJR	1
Carbon Tetrachloride	< 0.51	ug/l	0.51	1.6	1	8260B		10/17/2016	CJR	1
Chlorobenzene	< 0.46	ug/l	0.46	1.4	1	8260B		10/17/2016	CJR	1
Chloroethane	< 0.65	ug/l	0.65	2.1	1	8260B		10/17/2016	CJR	1
Chloroform	< 0.43	ug/l	0.43	1.4	1	8260B		10/17/2016	CJR	1
Chloromethane	< 1.9	ug/l	1.9	6	1	8260B		10/17/2016	CJR	1
2-Chlorotoluene	< 0.4	ug/l	0.4	1.3	1	8260B		10/17/2016	CJR	1
4-Chlorotoluene	< 0.63	ug/l	0.63	2	1	8260B		10/17/2016	CJR	1
1,2-Dibromo-3-chloropropane	< 1.4	ug/l	1.4	4.5	1	8260B		10/17/2016	CJR	1
Dibromochloromethane	< 0.45	ug/l	0.45	1.4	1	8260B		10/17/2016	CJR	1
1,4-Dichlorobenzene	< 0.49	ug/l	0.49	1.6	1	8260B		10/17/2016	CJR	1
1,3-Dichlorobenzene	< 0.52	ug/l	0.52	1.6	1	8260B		10/17/2016	CJR	1
1,2-Dichlorobenzene	< 0.46	ug/l	0.46	1.5	1	8260B		10/17/2016	CJR	1
Dichlorodifluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/17/2016	CJR	1
1,2-Dichloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/17/2016	CJR	1
1,1-Dichloroethane	< 1.1	ug/l	1.1	3.6	1	8260B		10/17/2016	CJR	1
1,1-Dichloroethene	< 0.65	ug/l	0.65	2.1	1	8260B		10/17/2016	CJR	1
cis-1,2-Dichloroethene	1.35 "J"	ug/l	0.45	1.4	1	8260B		10/17/2016	CJR	1
trans-1,2-Dichloroethene	< 0.54	ug/l	0.54	1.7	1	8260B		10/17/2016	CJR	1
1,2-Dichloropropane	< 0.43	ug/l	0.43	1.37	1	8260B		10/17/2016	CJR	1
2,2-Dichloropropane	< 3.1	ug/l	3.1	9.8	1	8260B		10/17/2016	CJR	1
1,3-Dichloropropane	< 0.42	ug/l	0.42	1.3	1	8260B		10/17/2016	CJR	1
Di-isopropyl ether	< 0.44	ug/l	0.44	1.4	1	8260B		10/17/2016	CJR	1
EDB (1,2-Dibromoethane)	< 0.63	ug/l	0.63	2	1	8260B		10/17/2016	CJR	1
Ethylbenzene	< 0.71	ug/l	0.71	2.3	1	8260B		10/17/2016	CJR	1
Hexachlorobutadiene	< 2.2	ug/l	2.2	7.1	1	8260B		10/17/2016	CJR	1
Isopropylbenzene	< 0.82	ug/l	0.82	2.6	1	8260B		10/17/2016	CJR	1
p-Isopropyltoluene	< 1.1	ug/l	1.1	3.5	1	8260B		10/17/2016	CJR	1
Methylene chloride	< 1.3	ug/l	1.3	4.2	1	8260B		10/17/2016	CJR	1
Methyl tert-butyl ether (MTBE)	< 1.1	ug/l	1.1	3.7	1	8260B		10/17/2016	CJR	1
Naphthalene	< 1.6	ug/l	1.6	5.2	1	8260B		10/17/2016	CJR	1
n-Propylbenzene	< 0.77	ug/l	0.77	2.4	1	8260B		10/17/2016	CJR	1
1,1,2,2-Tetrachloroethane	< 0.52	ug/l	0.52	1.7	1	8260B		10/17/2016	CJR	1
1,1,1,2-Tetrachloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/17/2016	CJR	1
Tetrachloroethene	< 0.49	ug/l	0.49	1.5	1	8260B		10/17/2016	CJR	1
Toluene	< 0.44	ug/l	0.44	1.4	1	8260B		10/17/2016	CJR	1
1,2,4-Trichlorobenzene	< 1.7	ug/l	1.7	5.6	1	8260B		10/17/2016	CJR	1
1,2,3-Trichlorobenzene	< 2.7	ug/l	2.7	8.6	1	8260B		10/17/2016	CJR	1
1,1,1-Trichloroethane	< 0.84	ug/l	0.84	2.7	1	8260B		10/17/2016	CJR	1
1,1,2-Trichloroethane	< 0.48	ug/l	0.48	1.52	1	8260B		10/17/2016	CJR	1
Trichloroethene (TCE)	< 0.47	ug/l	0.47	1.5	1	8260B		10/17/2016	CJR	1
Trichlorofluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/17/2016	CJR	1
1,2,4-Trimethylbenzene	< 1.6	ug/l	1.6	5	1	8260B		10/17/2016	CJR	1
1,3,5-Trimethylbenzene	< 1.5	ug/l	1.5	4.8	1	8260B		10/17/2016	CJR	1
Vinyl Chloride	0.29 "J"	ug/l	0.17	0.54	1	8260B		10/17/2016	CJR	1
m&p-Xylene	< 2.2	ug/l	2.2	6.9	1	8260B		10/17/2016	CJR	1
o-Xylene	< 0.9	ug/l	0.9	2.9	1	8260B		10/17/2016	CJR	1
SUR - 4-Bromofluorobenzene	92	REC %			1	8260B		10/17/2016	CJR	1
SUR - Dibromofluoromethane	106	REC %			1	8260B		10/17/2016	CJR	1
SUR - Toluene-d8	96	REC %			1	8260B		10/17/2016	CJR	1
SUR - 1,2-Dichloroethane-d4	105	REC %			1	8260B		10/17/2016	CJR	1

Project Name NEWTON GRAVEL PIT **Invoice #** E31870
Project # 60135471

Lab Code 5031870E
Sample ID 3504 CTH CR
Sample Matrix Water
Sample Date 10/11/2016

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
VOC's										
Benzene	< 0.44	ug/l	0.44	1.4	1	8260B		10/17/2016	CJR	1
Bromobenzene	< 0.48	ug/l	0.48	1.5	1	8260B		10/17/2016	CJR	1
Bromodichloromethane	< 0.46	ug/l	0.46	1.5	1	8260B		10/17/2016	CJR	1
Bromoform	< 0.46	ug/l	0.46	1.5	1	8260B		10/17/2016	CJR	1
tert-Butylbenzene	< 1.1	ug/l	1.1	3.4	1	8260B		10/17/2016	CJR	1
sec-Butylbenzene	< 1.2	ug/l	1.2	3.8	1	8260B		10/17/2016	CJR	1
n-Butylbenzene	< 1	ug/l	1	3.3	1	8260B		10/17/2016	CJR	1
Carbon Tetrachloride	< 0.51	ug/l	0.51	1.6	1	8260B		10/17/2016	CJR	1
Chlorobenzene	< 0.46	ug/l	0.46	1.4	1	8260B		10/17/2016	CJR	1
Chloroethane	< 0.65	ug/l	0.65	2.1	1	8260B		10/17/2016	CJR	1
Chloroform	< 0.43	ug/l	0.43	1.4	1	8260B		10/17/2016	CJR	1
Chloromethane	< 1.9	ug/l	1.9	6	1	8260B		10/17/2016	CJR	1
2-Chlorotoluene	< 0.4	ug/l	0.4	1.3	1	8260B		10/17/2016	CJR	1
4-Chlorotoluene	< 0.63	ug/l	0.63	2	1	8260B		10/17/2016	CJR	1
1,2-Dibromo-3-chloropropane	< 1.4	ug/l	1.4	4.5	1	8260B		10/17/2016	CJR	1
Dibromochloromethane	< 0.45	ug/l	0.45	1.4	1	8260B		10/17/2016	CJR	1
1,4-Dichlorobenzene	< 0.49	ug/l	0.49	1.6	1	8260B		10/17/2016	CJR	1
1,3-Dichlorobenzene	< 0.52	ug/l	0.52	1.6	1	8260B		10/17/2016	CJR	1
1,2-Dichlorobenzene	< 0.46	ug/l	0.46	1.5	1	8260B		10/17/2016	CJR	1
Dichlorodifluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/17/2016	CJR	1
1,2-Dichloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/17/2016	CJR	1
1,1-Dichloroethane	< 1.1	ug/l	1.1	3.6	1	8260B		10/17/2016	CJR	1
1,1-Dichloroethene	< 0.65	ug/l	0.65	2.1	1	8260B		10/17/2016	CJR	1
cis-1,2-Dichloroethene	1.17 "J"	ug/l	0.45	1.4	1	8260B		10/17/2016	CJR	1
trans-1,2-Dichloroethene	< 0.54	ug/l	0.54	1.7	1	8260B		10/17/2016	CJR	1
1,2-Dichloropropane	< 0.43	ug/l	0.43	1.37	1	8260B		10/17/2016	CJR	1
2,2-Dichloropropane	< 3.1	ug/l	3.1	9.8	1	8260B		10/17/2016	CJR	1
1,3-Dichloropropane	< 0.42	ug/l	0.42	1.3	1	8260B		10/17/2016	CJR	1
Di-isopropyl ether	< 0.44	ug/l	0.44	1.4	1	8260B		10/17/2016	CJR	1
EDB (1,2-Dibromoethane)	< 0.63	ug/l	0.63	2	1	8260B		10/17/2016	CJR	1
Ethylbenzene	< 0.71	ug/l	0.71	2.3	1	8260B		10/17/2016	CJR	1
Hexachlorobutadiene	< 2.2	ug/l	2.2	7.1	1	8260B		10/17/2016	CJR	1
Isopropylbenzene	< 0.82	ug/l	0.82	2.6	1	8260B		10/17/2016	CJR	1
p-Isopropyltoluene	< 1.1	ug/l	1.1	3.5	1	8260B		10/17/2016	CJR	1
Methylene chloride	< 1.3	ug/l	1.3	4.2	1	8260B		10/17/2016	CJR	1
Methyl tert-butyl ether (MTBE)	< 1.1	ug/l	1.1	3.7	1	8260B		10/17/2016	CJR	1
Naphthalene	< 1.6	ug/l	1.6	5.2	1	8260B		10/17/2016	CJR	1
n-Propylbenzene	< 0.77	ug/l	0.77	2.4	1	8260B		10/17/2016	CJR	1
1,1,2,2-Tetrachloroethane	< 0.52	ug/l	0.52	1.7	1	8260B		10/17/2016	CJR	1
1,1,1,2-Tetrachloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/17/2016	CJR	1
Tetrachloroethene	< 0.49	ug/l	0.49	1.5	1	8260B		10/17/2016	CJR	1
Toluene	< 0.44	ug/l	0.44	1.4	1	8260B		10/17/2016	CJR	1
1,2,4-Trichlorobenzene	< 1.7	ug/l	1.7	5.6	1	8260B		10/17/2016	CJR	1
1,2,3-Trichlorobenzene	< 2.7	ug/l	2.7	8.6	1	8260B		10/17/2016	CJR	1
1,1,1-Trichloroethane	< 0.84	ug/l	0.84	2.7	1	8260B		10/17/2016	CJR	1
1,1,2-Trichloroethane	< 0.48	ug/l	0.48	1.52	1	8260B		10/17/2016	CJR	1
Trichloroethene (TCE)	< 0.47	ug/l	0.47	1.5	1	8260B		10/17/2016	CJR	1
Trichlorofluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/17/2016	CJR	1
1,2,4-Trimethylbenzene	< 1.6	ug/l	1.6	5	1	8260B		10/17/2016	CJR	1
1,3,5-Trimethylbenzene	< 1.5	ug/l	1.5	4.8	1	8260B		10/17/2016	CJR	1
Vinyl Chloride	< 0.17	ug/l	0.17	0.54	1	8260B		10/17/2016	CJR	1
m&p-Xylene	< 2.2	ug/l	2.2	6.9	1	8260B		10/17/2016	CJR	1
o-Xylene	< 0.9	ug/l	0.9	2.9	1	8260B		10/17/2016	CJR	1
SUR - 1,2-Dichloroethane-d4	112	REC %			1	8260B		10/17/2016	CJR	1
SUR - 4-Bromofluorobenzene	99	REC %			1	8260B		10/17/2016	CJR	1
SUR - Dibromofluoromethane	109	REC %			1	8260B		10/17/2016	CJR	1
SUR - Toluene-d8	95	REC %			1	8260B		10/17/2016	CJR	1

Project Name NEWTON GRAVEL PIT **Invoice #** E31870
Project # 60135471

Lab Code 5031870F
Sample ID 3702 HECKER
Sample Matrix Water
Sample Date 10/11/2016

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
VOC's										
Benzene	< 0.44	ug/l	0.44	1.4	1	8260B		10/17/2016	CJR	1
Bromobenzene	< 0.48	ug/l	0.48	1.5	1	8260B		10/17/2016	CJR	1
Bromodichloromethane	< 0.46	ug/l	0.46	1.5	1	8260B		10/17/2016	CJR	1
Bromoform	< 0.46	ug/l	0.46	1.5	1	8260B		10/17/2016	CJR	1
tert-Butylbenzene	< 1.1	ug/l	1.1	3.4	1	8260B		10/17/2016	CJR	1
sec-Butylbenzene	< 1.2	ug/l	1.2	3.8	1	8260B		10/17/2016	CJR	1
n-Butylbenzene	< 1	ug/l	1	3.3	1	8260B		10/17/2016	CJR	1
Carbon Tetrachloride	< 0.51	ug/l	0.51	1.6	1	8260B		10/17/2016	CJR	1
Chlorobenzene	< 0.46	ug/l	0.46	1.4	1	8260B		10/17/2016	CJR	1
Chloroethane	< 0.65	ug/l	0.65	2.1	1	8260B		10/17/2016	CJR	1
Chloroform	< 0.43	ug/l	0.43	1.4	1	8260B		10/17/2016	CJR	1
Chloromethane	< 1.9	ug/l	1.9	6	1	8260B		10/17/2016	CJR	1
2-Chlorotoluene	< 0.4	ug/l	0.4	1.3	1	8260B		10/17/2016	CJR	1
4-Chlorotoluene	< 0.63	ug/l	0.63	2	1	8260B		10/17/2016	CJR	1
1,2-Dibromo-3-chloropropane	< 1.4	ug/l	1.4	4.5	1	8260B		10/17/2016	CJR	1
Dibromochloromethane	< 0.45	ug/l	0.45	1.4	1	8260B		10/17/2016	CJR	1
1,4-Dichlorobenzene	< 0.49	ug/l	0.49	1.6	1	8260B		10/17/2016	CJR	1
1,3-Dichlorobenzene	< 0.52	ug/l	0.52	1.6	1	8260B		10/17/2016	CJR	1
1,2-Dichlorobenzene	< 0.46	ug/l	0.46	1.5	1	8260B		10/17/2016	CJR	1
Dichlorodifluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/17/2016	CJR	1
1,2-Dichloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/17/2016	CJR	1
1,1-Dichloroethane	< 1.1	ug/l	1.1	3.6	1	8260B		10/17/2016	CJR	1
1,1-Dichloroethene	< 0.65	ug/l	0.65	2.1	1	8260B		10/17/2016	CJR	1
cis-1,2-Dichloroethene	1.04 "J"	ug/l	0.45	1.4	1	8260B		10/17/2016	CJR	1
trans-1,2-Dichloroethene	< 0.54	ug/l	0.54	1.7	1	8260B		10/17/2016	CJR	1
1,2-Dichloropropane	< 0.43	ug/l	0.43	1.37	1	8260B		10/17/2016	CJR	1
2,2-Dichloropropane	< 3.1	ug/l	3.1	9.8	1	8260B		10/17/2016	CJR	1
1,3-Dichloropropane	< 0.42	ug/l	0.42	1.3	1	8260B		10/17/2016	CJR	1
Di-isopropyl ether	< 0.44	ug/l	0.44	1.4	1	8260B		10/17/2016	CJR	1
EDB (1,2-Dibromoethane)	< 0.63	ug/l	0.63	2	1	8260B		10/17/2016	CJR	1
Ethylbenzene	< 0.71	ug/l	0.71	2.3	1	8260B		10/17/2016	CJR	1
Hexachlorobutadiene	< 2.2	ug/l	2.2	7.1	1	8260B		10/17/2016	CJR	1
Isopropylbenzene	< 0.82	ug/l	0.82	2.6	1	8260B		10/17/2016	CJR	1
p-Isopropyltoluene	< 1.1	ug/l	1.1	3.5	1	8260B		10/17/2016	CJR	1
Methylene chloride	< 1.3	ug/l	1.3	4.2	1	8260B		10/17/2016	CJR	1
Methyl tert-butyl ether (MTBE)	< 1.1	ug/l	1.1	3.7	1	8260B		10/17/2016	CJR	1
Naphthalene	< 1.6	ug/l	1.6	5.2	1	8260B		10/17/2016	CJR	1
n-Propylbenzene	< 0.77	ug/l	0.77	2.4	1	8260B		10/17/2016	CJR	1
1,1,2,2-Tetrachloroethane	< 0.52	ug/l	0.52	1.7	1	8260B		10/17/2016	CJR	1
1,1,1,2-Tetrachloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/17/2016	CJR	1
Tetrachloroethene	< 0.49	ug/l	0.49	1.5	1	8260B		10/17/2016	CJR	1
Toluene	< 0.44	ug/l	0.44	1.4	1	8260B		10/17/2016	CJR	1
1,2,4-Trichlorobenzene	< 1.7	ug/l	1.7	5.6	1	8260B		10/17/2016	CJR	1
1,2,3-Trichlorobenzene	< 2.7	ug/l	2.7	8.6	1	8260B		10/17/2016	CJR	1
1,1,1-Trichloroethane	< 0.84	ug/l	0.84	2.7	1	8260B		10/17/2016	CJR	1
1,1,2-Trichloroethane	< 0.48	ug/l	0.48	1.52	1	8260B		10/17/2016	CJR	1
Trichloroethene (TCE)	< 0.47	ug/l	0.47	1.5	1	8260B		10/17/2016	CJR	1
Trichlorofluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/17/2016	CJR	1
1,2,4-Trimethylbenzene	< 1.6	ug/l	1.6	5	1	8260B		10/17/2016	CJR	1
1,3,5-Trimethylbenzene	< 1.5	ug/l	1.5	4.8	1	8260B		10/17/2016	CJR	1
Vinyl Chloride	< 0.17	ug/l	0.17	0.54	1	8260B		10/17/2016	CJR	1
m&p-Xylene	< 2.2	ug/l	2.2	6.9	1	8260B		10/17/2016	CJR	1
o-Xylene	< 0.9	ug/l	0.9	2.9	1	8260B		10/17/2016	CJR	1
SUR - Toluene-d8	98	REC %			1	8260B		10/17/2016	CJR	1
SUR - 1,2-Dichloroethane-d4	111	REC %			1	8260B		10/17/2016	CJR	1
SUR - 4-Bromofluorobenzene	97	REC %			1	8260B		10/17/2016	CJR	1
SUR - Dibromofluoromethane	105	REC %			1	8260B		10/17/2016	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

CHAIN OF CUSTODY RECORD

Synergy Environmental Lab, Inc.

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

Chain # № 271

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 #: 60135471

Sampler: (signature)

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

Reports To: Dave Henderson	Invoice To: Dave Henderson
Company AECOM	Company [See Left]
Address 1555 N. RiverCenter Dr. STE 214	Address
City State Zip Milwaukee, WI 53212	City State Zip
Phone 414-944-6190	Phone
FAX	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
503870 A	4111 Thunder Ridge	10/10/16	1600		X	N	3	GW	HCl													X		
B	4159 Silver Creek	10/10/16	1640		X	N	3	GW	HCl													X		
C	3902 Silver Creek	10/9/16	1700		X	N	3	GW	HCl													X		
D	4005 Thunder Ridge	10/10/16	1720		X	N	3	GW	HCl													X		
E	3504 CTH CR	10/11/16	0915		X	N	3	GW	HCl													X		
F	3702 Hecker	10/11/16	0940		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.)

Potable wells only. Separate analytical report.

Sample Integrity - To be completed by receiving lab.
Method of Shipment: Sm
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
	1530	10/11/16			

Received in Laboratory By: Time: 840 Date: 10/12/16

Synergy Environmental Lab, INC.

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

DAVE HENDERSON
AECOM
1555 N RIVERCENTER DRIVE
MILWAUKEE, WI 53212

Report Date *07-Nov-16*

Project Name NEWTON PIT **Invoice #** E31968
Project #

Lab Code 5031968A
Sample ID 3303 HECKER
Sample Matrix Water
Sample Date 10/24/2016

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Inorganic										
Metals										
Iron, Total	28.9	mg/l	0.04	0.14	1	200.7		11/1/2016	CWT	1
Organic										
VOC's										
Benzene	< 0.44	ug/l	0.44	1.4	1	8260B		10/26/2016	CJR	1
Bromobenzene	< 0.48	ug/l	0.48	1.5	1	8260B		10/26/2016	CJR	1
Bromodichloromethane	< 0.46	ug/l	0.46	1.5	1	8260B		10/26/2016	CJR	1
Bromoform	< 0.46	ug/l	0.46	1.5	1	8260B		10/26/2016	CJR	1
tert-Butylbenzene	< 1.1	ug/l	1.1	3.4	1	8260B		10/26/2016	CJR	1
sec-Butylbenzene	< 1.2	ug/l	1.2	3.8	1	8260B		10/26/2016	CJR	1
n-Butylbenzene	< 1	ug/l	1	3.3	1	8260B		10/26/2016	CJR	1
Carbon Disulfide	6.8	ug/l	1	3.2	1	8260B		10/26/2016	CJR	1
Carbon Tetrachloride	< 0.51	ug/l	0.51	1.6	1	8260B		10/26/2016	CJR	1
Chlorobenzene	< 0.46	ug/l	0.46	1.4	1	8260B		10/26/2016	CJR	1
Chloroethane	< 0.65	ug/l	0.65	2.1	1	8260B		10/26/2016	CJR	1
Chloroform	< 0.43	ug/l	0.43	1.4	1	8260B		10/26/2016	CJR	1
Chloromethane	< 1.9	ug/l	1.9	6	1	8260B		10/26/2016	CJR	1
2-Chlorotoluene	< 0.4	ug/l	0.4	1.3	1	8260B		10/26/2016	CJR	1
4-Chlorotoluene	< 0.63	ug/l	0.63	2	1	8260B		10/26/2016	CJR	1
1,2-Dibromo-3-chloropropane	< 1.4	ug/l	1.4	4.5	1	8260B		10/26/2016	CJR	1
Dibromochloromethane	< 0.45	ug/l	0.45	1.4	1	8260B		10/26/2016	CJR	1
1,4-Dichlorobenzene	< 0.49	ug/l	0.49	1.6	1	8260B		10/26/2016	CJR	1
1,3-Dichlorobenzene	< 0.52	ug/l	0.52	1.6	1	8260B		10/26/2016	CJR	1
1,2-Dichlorobenzene	< 0.46	ug/l	0.46	1.5	1	8260B		10/26/2016	CJR	1
Dichlorodifluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/26/2016	CJR	1
1,2-Dichloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/26/2016	CJR	1
1,1-Dichloroethane	< 1.1	ug/l	1.1	3.6	1	8260B		10/26/2016	CJR	1
1,1-Dichloroethene	< 0.65	ug/l	0.65	2.1	1	8260B		10/26/2016	CJR	1
cis-1,2-Dichloroethene	< 0.45	ug/l	0.45	1.4	1	8260B		10/26/2016	CJR	1
trans-1,2-Dichloroethene	< 0.54	ug/l	0.54	1.7	1	8260B		10/26/2016	CJR	1
1,2-Dichloropropane	< 0.43	ug/l	0.43	1.37	1	8260B		10/26/2016	CJR	1
2,2-Dichloropropane	< 3.1	ug/l	3.1	9.8	1	8260B		10/26/2016	CJR	1
1,3-Dichloropropane	< 0.42	ug/l	0.42	1.3	1	8260B		10/26/2016	CJR	1

Project Name NEWTON PIT **Invoice #** E31968
Project #

Lab Code 5031968A
Sample ID 3303 HECKER
Sample Matrix Water
Sample Date 10/24/2016

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Di-isopropyl ether	< 0.44	ug/l	0.44	1.4	1	8260B		10/26/2016	CJR	1
EDB (1,2-Dibromoethane)	< 0.63	ug/l	0.63	2	1	8260B		10/26/2016	CJR	1
Ethylbenzene	< 0.71	ug/l	0.71	2.3	1	8260B		10/26/2016	CJR	1
Hexachlorobutadiene	< 2.2	ug/l	2.2	7.1	1	8260B		10/26/2016	CJR	1
Isopropylbenzene	< 0.82	ug/l	0.82	2.6	1	8260B		10/26/2016	CJR	1
p-Isopropyltoluene	< 1.1	ug/l	1.1	3.5	1	8260B		10/26/2016	CJR	1
Methylene chloride	< 1.3	ug/l	1.3	4.2	1	8260B		10/26/2016	CJR	1
Methyl tert-butyl ether (MTBE)	< 1.1	ug/l	1.1	3.7	1	8260B		10/26/2016	CJR	1
Naphthalene	< 1.6	ug/l	1.6	5.2	1	8260B		10/26/2016	CJR	1
n-Propylbenzene	< 0.77	ug/l	0.77	2.4	1	8260B		10/26/2016	CJR	1
1,1,2,2-Tetrachloroethane	< 0.52	ug/l	0.52	1.7	1	8260B		10/26/2016	CJR	1
1,1,1,2-Tetrachloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/26/2016	CJR	1
Tetrachloroethene	< 0.49	ug/l	0.49	1.5	1	8260B		10/26/2016	CJR	1
Toluene	< 0.44	ug/l	0.44	1.4	1	8260B		10/26/2016	CJR	1
1,2,4-Trichlorobenzene	< 1.7	ug/l	1.7	5.6	1	8260B		10/26/2016	CJR	1
1,2,3-Trichlorobenzene	< 2.7	ug/l	2.7	8.6	1	8260B		10/26/2016	CJR	1
1,1,1-Trichloroethane	< 0.84	ug/l	0.84	2.7	1	8260B		10/26/2016	CJR	1
1,1,2-Trichloroethane	< 0.48	ug/l	0.48	1.52	1	8260B		10/26/2016	CJR	1
Trichloroethene (TCE)	< 0.47	ug/l	0.47	1.5	1	8260B		10/26/2016	CJR	1
Trichlorofluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/26/2016	CJR	1
1,2,4-Trimethylbenzene	< 1.6	ug/l	1.6	5	1	8260B		10/26/2016	CJR	1
1,3,5-Trimethylbenzene	< 1.5	ug/l	1.5	4.8	1	8260B		10/26/2016	CJR	1
Vinyl Chloride	< 0.17	ug/l	0.17	0.54	1	8260B		10/26/2016	CJR	1
m&p-Xylene	< 2.2	ug/l	2.2	6.9	1	8260B		10/26/2016	CJR	1
o-Xylene	< 0.9	ug/l	0.9	2.9	1	8260B		10/26/2016	CJR	1
SUR - 1,2-Dichloroethane-d4	94	REC %			1	8260B		10/26/2016	CJR	1
SUR - 4-Bromofluorobenzene	98	REC %			1	8260B		10/26/2016	CJR	1
SUR - Dibromofluoromethane	90	REC %			1	8260B		10/26/2016	CJR	1
SUR - Toluene-d8	104	REC %			1	8260B		10/26/2016	CJR	1
Wet Chemistry										
General										
Hardness, Total Unfiltered	1374	mg/l	0.09	0.27	1	200.7		11/1/2016	CWT	1
Solids, Total Dissolved	2003	mg/l	20	20	1	2540c		11/1/2016	BLE	1

Project Name NEWTON PIT **Invoice #** E31968
Project #

Lab Code 5031968B
Sample ID 4010 THUNDER
Sample Matrix Water
Sample Date 10/24/2016

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
VOC's										
Benzene	< 0.44	ug/l	0.44	1.4	1	8260B		10/26/2016	CJR	1
Bromobenzene	< 0.48	ug/l	0.48	1.5	1	8260B		10/26/2016	CJR	1
Bromodichloromethane	< 0.46	ug/l	0.46	1.5	1	8260B		10/26/2016	CJR	1
Bromoform	< 0.46	ug/l	0.46	1.5	1	8260B		10/26/2016	CJR	1
tert-Butylbenzene	< 1.1	ug/l	1.1	3.4	1	8260B		10/26/2016	CJR	1
sec-Butylbenzene	< 1.2	ug/l	1.2	3.8	1	8260B		10/26/2016	CJR	1
n-Butylbenzene	< 1	ug/l	1	3.3	1	8260B		10/26/2016	CJR	1
Carbon Tetrachloride	< 0.51	ug/l	0.51	1.6	1	8260B		10/26/2016	CJR	1
Chlorobenzene	< 0.46	ug/l	0.46	1.4	1	8260B		10/26/2016	CJR	1
Chloroethane	< 0.65	ug/l	0.65	2.1	1	8260B		10/26/2016	CJR	1
Chloroform	< 0.43	ug/l	0.43	1.4	1	8260B		10/26/2016	CJR	1
Chloromethane	< 1.9	ug/l	1.9	6	1	8260B		10/26/2016	CJR	1
2-Chlorotoluene	< 0.4	ug/l	0.4	1.3	1	8260B		10/26/2016	CJR	1
4-Chlorotoluene	< 0.63	ug/l	0.63	2	1	8260B		10/26/2016	CJR	1
1,2-Dibromo-3-chloropropane	< 1.4	ug/l	1.4	4.5	1	8260B		10/26/2016	CJR	1
Dibromochloromethane	< 0.45	ug/l	0.45	1.4	1	8260B		10/26/2016	CJR	1
1,4-Dichlorobenzene	< 0.49	ug/l	0.49	1.6	1	8260B		10/26/2016	CJR	1
1,3-Dichlorobenzene	< 0.52	ug/l	0.52	1.6	1	8260B		10/26/2016	CJR	1
1,2-Dichlorobenzene	< 0.46	ug/l	0.46	1.5	1	8260B		10/26/2016	CJR	1
Dichlorodifluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/26/2016	CJR	1
1,2-Dichloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/26/2016	CJR	1
1,1-Dichloroethane	< 1.1	ug/l	1.1	3.6	1	8260B		10/26/2016	CJR	1
1,1-Dichloroethene	< 0.65	ug/l	0.65	2.1	1	8260B		10/26/2016	CJR	1
cis-1,2-Dichloroethene	1.42	ug/l	0.45	1.4	1	8260B		10/26/2016	CJR	1
trans-1,2-Dichloroethene	< 0.54	ug/l	0.54	1.7	1	8260B		10/26/2016	CJR	1
1,2-Dichloropropane	< 0.43	ug/l	0.43	1.37	1	8260B		10/26/2016	CJR	1
2,2-Dichloropropane	< 3.1	ug/l	3.1	9.8	1	8260B		10/26/2016	CJR	1
1,3-Dichloropropane	< 0.42	ug/l	0.42	1.3	1	8260B		10/26/2016	CJR	1
Di-isopropyl ether	< 0.44	ug/l	0.44	1.4	1	8260B		10/26/2016	CJR	1
EDB (1,2-Dibromoethane)	< 0.63	ug/l	0.63	2	1	8260B		10/26/2016	CJR	1
Ethylbenzene	< 0.71	ug/l	0.71	2.3	1	8260B		10/26/2016	CJR	1
Hexachlorobutadiene	< 2.2	ug/l	2.2	7.1	1	8260B		10/26/2016	CJR	1
Isopropylbenzene	< 0.82	ug/l	0.82	2.6	1	8260B		10/26/2016	CJR	1
p-Isopropyltoluene	< 1.1	ug/l	1.1	3.5	1	8260B		10/26/2016	CJR	1
Methylene chloride	< 1.3	ug/l	1.3	4.2	1	8260B		10/26/2016	CJR	1
Methyl tert-butyl ether (MTBE)	< 1.1	ug/l	1.1	3.7	1	8260B		10/26/2016	CJR	1
Naphthalene	< 1.6	ug/l	1.6	5.2	1	8260B		10/26/2016	CJR	1
n-Propylbenzene	< 0.77	ug/l	0.77	2.4	1	8260B		10/26/2016	CJR	1
1,1,2,2-Tetrachloroethane	< 0.52	ug/l	0.52	1.7	1	8260B		10/26/2016	CJR	1
1,1,1,2-Tetrachloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/26/2016	CJR	1
Tetrachloroethene	< 0.49	ug/l	0.49	1.5	1	8260B		10/26/2016	CJR	1
Toluene	< 0.44	ug/l	0.44	1.4	1	8260B		10/26/2016	CJR	1
1,2,4-Trichlorobenzene	< 1.7	ug/l	1.7	5.6	1	8260B		10/26/2016	CJR	1
1,2,3-Trichlorobenzene	< 2.7	ug/l	2.7	8.6	1	8260B		10/26/2016	CJR	1
1,1,1-Trichloroethane	< 0.84	ug/l	0.84	2.7	1	8260B		10/26/2016	CJR	1
1,1,2-Trichloroethane	< 0.48	ug/l	0.48	1.52	1	8260B		10/26/2016	CJR	1
Trichloroethene (TCE)	< 0.47	ug/l	0.47	1.5	1	8260B		10/26/2016	CJR	1
Trichlorofluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/26/2016	CJR	1
1,2,4-Trimethylbenzene	< 1.6	ug/l	1.6	5	1	8260B		10/26/2016	CJR	1
1,3,5-Trimethylbenzene	< 1.5	ug/l	1.5	4.8	1	8260B		10/26/2016	CJR	1
Vinyl Chloride	0.20 "J"	ug/l	0.17	0.54	1	8260B		10/26/2016	CJR	1
m&p-Xylene	< 2.2	ug/l	2.2	6.9	1	8260B		10/26/2016	CJR	1
o-Xylene	< 0.9	ug/l	0.9	2.9	1	8260B		10/26/2016	CJR	1
SUR - 4-Bromofluorobenzene	100	REC %			1	8260B		10/26/2016	CJR	1
SUR - Dibromofluoromethane	89	REC %			1	8260B		10/26/2016	CJR	1
SUR - Toluene-d8	102	REC %			1	8260B		10/26/2016	CJR	1
SUR - 1,2-Dichloroethane-d4	104	REC %			1	8260B		10/26/2016	CJR	1

Project Name NEWTON PIT **Invoice #** E31968
Project #

Lab Code 5031968C
Sample ID 4005 THUNDER
Sample Matrix Water
Sample Date 10/24/2016

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
VOC's										
Benzene	< 0.44	ug/l	0.44	1.4	1	8260B		10/26/2016	CJR	1
Bromobenzene	< 0.48	ug/l	0.48	1.5	1	8260B		10/26/2016	CJR	1
Bromodichloromethane	< 0.46	ug/l	0.46	1.5	1	8260B		10/26/2016	CJR	1
Bromoform	< 0.46	ug/l	0.46	1.5	1	8260B		10/26/2016	CJR	1
tert-Butylbenzene	< 1.1	ug/l	1.1	3.4	1	8260B		10/26/2016	CJR	1
sec-Butylbenzene	< 1.2	ug/l	1.2	3.8	1	8260B		10/26/2016	CJR	1
n-Butylbenzene	< 1	ug/l	1	3.3	1	8260B		10/26/2016	CJR	1
Carbon Tetrachloride	< 0.51	ug/l	0.51	1.6	1	8260B		10/26/2016	CJR	1
Chlorobenzene	< 0.46	ug/l	0.46	1.4	1	8260B		10/26/2016	CJR	1
Chloroethane	< 0.65	ug/l	0.65	2.1	1	8260B		10/26/2016	CJR	1
Chloroform	< 0.43	ug/l	0.43	1.4	1	8260B		10/26/2016	CJR	1
Chloromethane	< 1.9	ug/l	1.9	6	1	8260B		10/26/2016	CJR	1
2-Chlorotoluene	< 0.4	ug/l	0.4	1.3	1	8260B		10/26/2016	CJR	1
4-Chlorotoluene	< 0.63	ug/l	0.63	2	1	8260B		10/26/2016	CJR	1
1,2-Dibromo-3-chloropropane	< 1.4	ug/l	1.4	4.5	1	8260B		10/26/2016	CJR	1
Dibromochloromethane	< 0.45	ug/l	0.45	1.4	1	8260B		10/26/2016	CJR	1
1,4-Dichlorobenzene	< 0.49	ug/l	0.49	1.6	1	8260B		10/26/2016	CJR	1
1,3-Dichlorobenzene	< 0.52	ug/l	0.52	1.6	1	8260B		10/26/2016	CJR	1
1,2-Dichlorobenzene	< 0.46	ug/l	0.46	1.5	1	8260B		10/26/2016	CJR	1
Dichlorodifluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/26/2016	CJR	1
1,2-Dichloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/26/2016	CJR	1
1,1-Dichloroethane	< 1.1	ug/l	1.1	3.6	1	8260B		10/26/2016	CJR	1
1,1-Dichloroethene	< 0.65	ug/l	0.65	2.1	1	8260B		10/26/2016	CJR	1
cis-1,2-Dichloroethene	1.1 "J"	ug/l	0.45	1.4	1	8260B		10/26/2016	CJR	1
trans-1,2-Dichloroethene	< 0.54	ug/l	0.54	1.7	1	8260B		10/26/2016	CJR	1
1,2-Dichloropropane	< 0.43	ug/l	0.43	1.37	1	8260B		10/26/2016	CJR	1
2,2-Dichloropropane	< 3.1	ug/l	3.1	9.8	1	8260B		10/26/2016	CJR	1
1,3-Dichloropropane	< 0.42	ug/l	0.42	1.3	1	8260B		10/26/2016	CJR	1
Di-isopropyl ether	< 0.44	ug/l	0.44	1.4	1	8260B		10/26/2016	CJR	1
EDB (1,2-Dibromoethane)	< 0.63	ug/l	0.63	2	1	8260B		10/26/2016	CJR	1
Ethylbenzene	< 0.71	ug/l	0.71	2.3	1	8260B		10/26/2016	CJR	1
Hexachlorobutadiene	< 2.2	ug/l	2.2	7.1	1	8260B		10/26/2016	CJR	1
Isopropylbenzene	< 0.82	ug/l	0.82	2.6	1	8260B		10/26/2016	CJR	1
p-Isopropyltoluene	< 1.1	ug/l	1.1	3.5	1	8260B		10/26/2016	CJR	1
Methylene chloride	< 1.3	ug/l	1.3	4.2	1	8260B		10/26/2016	CJR	1
Methyl tert-butyl ether (MTBE)	< 1.1	ug/l	1.1	3.7	1	8260B		10/26/2016	CJR	1
Naphthalene	< 1.6	ug/l	1.6	5.2	1	8260B		10/26/2016	CJR	1
n-Propylbenzene	< 0.77	ug/l	0.77	2.4	1	8260B		10/26/2016	CJR	1
1,1,2,2-Tetrachloroethane	< 0.52	ug/l	0.52	1.7	1	8260B		10/26/2016	CJR	1
1,1,1,2-Tetrachloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/26/2016	CJR	1
Tetrachloroethene	< 0.49	ug/l	0.49	1.5	1	8260B		10/26/2016	CJR	1
Toluene	< 0.44	ug/l	0.44	1.4	1	8260B		10/26/2016	CJR	1
1,2,4-Trichlorobenzene	< 1.7	ug/l	1.7	5.6	1	8260B		10/26/2016	CJR	1
1,2,3-Trichlorobenzene	< 2.7	ug/l	2.7	8.6	1	8260B		10/26/2016	CJR	1
1,1,1-Trichloroethane	< 0.84	ug/l	0.84	2.7	1	8260B		10/26/2016	CJR	1
1,1,2-Trichloroethane	< 0.48	ug/l	0.48	1.52	1	8260B		10/26/2016	CJR	1
Trichloroethene (TCE)	< 0.47	ug/l	0.47	1.5	1	8260B		10/26/2016	CJR	1
Trichlorofluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/26/2016	CJR	1
1,2,4-Trimethylbenzene	< 1.6	ug/l	1.6	5	1	8260B		10/26/2016	CJR	1
1,3,5-Trimethylbenzene	< 1.5	ug/l	1.5	4.8	1	8260B		10/26/2016	CJR	1
Vinyl Chloride	< 0.17	ug/l	0.17	0.54	1	8260B		10/26/2016	CJR	1
m&p-Xylene	< 2.2	ug/l	2.2	6.9	1	8260B		10/26/2016	CJR	1
o-Xylene	< 0.9	ug/l	0.9	2.9	1	8260B		10/26/2016	CJR	1
SUR - 1,2-Dichloroethane-d4	103	REC %			1	8260B		10/26/2016	CJR	1
SUR - 4-Bromofluorobenzene	99	REC %			1	8260B		10/26/2016	CJR	1
SUR - Dibromofluoromethane	85	REC %			1	8260B		10/26/2016	CJR	1
SUR - Toluene-d8	103	REC %			1	8260B		10/26/2016	CJR	1

Project Name NEWTON PIT **Invoice #** E31968
Project #

Lab Code 5031968D
Sample ID 3504 CTH CR
Sample Matrix Water
Sample Date 10/24/2016

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
VOC's										
Benzene	< 0.44	ug/l	0.44	1.4	1	8260B		10/26/2016	CJR	1
Bromobenzene	< 0.48	ug/l	0.48	1.5	1	8260B		10/26/2016	CJR	1
Bromodichloromethane	< 0.46	ug/l	0.46	1.5	1	8260B		10/26/2016	CJR	1
Bromoform	< 0.46	ug/l	0.46	1.5	1	8260B		10/26/2016	CJR	1
tert-Butylbenzene	< 1.1	ug/l	1.1	3.4	1	8260B		10/26/2016	CJR	1
sec-Butylbenzene	< 1.2	ug/l	1.2	3.8	1	8260B		10/26/2016	CJR	1
n-Butylbenzene	< 1	ug/l	1	3.3	1	8260B		10/26/2016	CJR	1
Carbon Tetrachloride	< 0.51	ug/l	0.51	1.6	1	8260B		10/26/2016	CJR	1
Chlorobenzene	< 0.46	ug/l	0.46	1.4	1	8260B		10/26/2016	CJR	1
Chloroethane	< 0.65	ug/l	0.65	2.1	1	8260B		10/26/2016	CJR	1
Chloroform	< 0.43	ug/l	0.43	1.4	1	8260B		10/26/2016	CJR	1
Chloromethane	< 1.9	ug/l	1.9	6	1	8260B		10/26/2016	CJR	1
2-Chlorotoluene	< 0.4	ug/l	0.4	1.3	1	8260B		10/26/2016	CJR	1
4-Chlorotoluene	< 0.63	ug/l	0.63	2	1	8260B		10/26/2016	CJR	1
1,2-Dibromo-3-chloropropane	< 1.4	ug/l	1.4	4.5	1	8260B		10/26/2016	CJR	1
Dibromochloromethane	< 0.45	ug/l	0.45	1.4	1	8260B		10/26/2016	CJR	1
1,4-Dichlorobenzene	< 0.49	ug/l	0.49	1.6	1	8260B		10/26/2016	CJR	1
1,3-Dichlorobenzene	< 0.52	ug/l	0.52	1.6	1	8260B		10/26/2016	CJR	1
1,2-Dichlorobenzene	< 0.46	ug/l	0.46	1.5	1	8260B		10/26/2016	CJR	1
Dichlorodifluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/26/2016	CJR	1
1,2-Dichloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/26/2016	CJR	1
1,1-Dichloroethane	< 1.1	ug/l	1.1	3.6	1	8260B		10/26/2016	CJR	1
1,1-Dichloroethene	< 0.65	ug/l	0.65	2.1	1	8260B		10/26/2016	CJR	1
cis-1,2-Dichloroethene	< 0.45	ug/l	0.45	1.4	1	8260B		10/26/2016	CJR	1
trans-1,2-Dichloroethene	< 0.54	ug/l	0.54	1.7	1	8260B		10/26/2016	CJR	1
1,2-Dichloropropane	< 0.43	ug/l	0.43	1.37	1	8260B		10/26/2016	CJR	1
2,2-Dichloropropane	< 3.1	ug/l	3.1	9.8	1	8260B		10/26/2016	CJR	1
1,3-Dichloropropane	< 0.42	ug/l	0.42	1.3	1	8260B		10/26/2016	CJR	1
Di-isopropyl ether	< 0.44	ug/l	0.44	1.4	1	8260B		10/26/2016	CJR	1
EDB (1,2-Dibromoethane)	< 0.63	ug/l	0.63	2	1	8260B		10/26/2016	CJR	1
Ethylbenzene	< 0.71	ug/l	0.71	2.3	1	8260B		10/26/2016	CJR	1
Hexachlorobutadiene	< 2.2	ug/l	2.2	7.1	1	8260B		10/26/2016	CJR	1
Isopropylbenzene	< 0.82	ug/l	0.82	2.6	1	8260B		10/26/2016	CJR	1
p-Isopropyltoluene	< 1.1	ug/l	1.1	3.5	1	8260B		10/26/2016	CJR	1
Methylene chloride	< 1.3	ug/l	1.3	4.2	1	8260B		10/26/2016	CJR	1
Methyl tert-butyl ether (MTBE)	< 1.1	ug/l	1.1	3.7	1	8260B		10/26/2016	CJR	1
Naphthalene	< 1.6	ug/l	1.6	5.2	1	8260B		10/26/2016	CJR	1
n-Propylbenzene	< 0.77	ug/l	0.77	2.4	1	8260B		10/26/2016	CJR	1
1,1,2,2-Tetrachloroethane	< 0.52	ug/l	0.52	1.7	1	8260B		10/26/2016	CJR	1
1,1,1,2-Tetrachloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/26/2016	CJR	1
Tetrachloroethene	< 0.49	ug/l	0.49	1.5	1	8260B		10/26/2016	CJR	1
Toluene	< 0.44	ug/l	0.44	1.4	1	8260B		10/26/2016	CJR	1
1,2,4-Trichlorobenzene	< 1.7	ug/l	1.7	5.6	1	8260B		10/26/2016	CJR	1
1,2,3-Trichlorobenzene	< 2.7	ug/l	2.7	8.6	1	8260B		10/26/2016	CJR	1
1,1,1-Trichloroethane	< 0.84	ug/l	0.84	2.7	1	8260B		10/26/2016	CJR	1
1,1,2-Trichloroethane	< 0.48	ug/l	0.48	1.52	1	8260B		10/26/2016	CJR	1
Trichloroethene (TCE)	< 0.47	ug/l	0.47	1.5	1	8260B		10/26/2016	CJR	1
Trichlorofluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/26/2016	CJR	1
1,2,4-Trimethylbenzene	< 1.6	ug/l	1.6	5	1	8260B		10/26/2016	CJR	1
1,3,5-Trimethylbenzene	< 1.5	ug/l	1.5	4.8	1	8260B		10/26/2016	CJR	1
Vinyl Chloride	< 0.17	ug/l	0.17	0.54	1	8260B		10/26/2016	CJR	1
m&p-Xylene	< 2.2	ug/l	2.2	6.9	1	8260B		10/26/2016	CJR	1
o-Xylene	< 0.9	ug/l	0.9	2.9	1	8260B		10/26/2016	CJR	1
SUR - 1,2-Dichloroethane-d4	100	REC %			1	8260B		10/26/2016	CJR	1
SUR - 4-Bromofluorobenzene	100	REC %			1	8260B		10/26/2016	CJR	1
SUR - Dibromofluoromethane	86	REC %			1	8260B		10/26/2016	CJR	1
SUR - Toluene-d8	103	REC %			1	8260B		10/26/2016	CJR	1

Project Name NEWTON PIT **Invoice #** E31968
Project #

Lab Code 5031968E
Sample ID 3318 ORCHARD
Sample Matrix Water
Sample Date 10/24/2016

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
VOC's										
Benzene	< 0.44	ug/l	0.44	1.4	1	8260B		10/26/2016	CJR	1
Bromobenzene	< 0.48	ug/l	0.48	1.5	1	8260B		10/26/2016	CJR	1
Bromodichloromethane	< 0.46	ug/l	0.46	1.5	1	8260B		10/26/2016	CJR	1
Bromoform	< 0.46	ug/l	0.46	1.5	1	8260B		10/26/2016	CJR	1
tert-Butylbenzene	< 1.1	ug/l	1.1	3.4	1	8260B		10/26/2016	CJR	1
sec-Butylbenzene	< 1.2	ug/l	1.2	3.8	1	8260B		10/26/2016	CJR	1
n-Butylbenzene	< 1	ug/l	1	3.3	1	8260B		10/26/2016	CJR	1
Carbon Tetrachloride	< 0.51	ug/l	0.51	1.6	1	8260B		10/26/2016	CJR	1
Chlorobenzene	< 0.46	ug/l	0.46	1.4	1	8260B		10/26/2016	CJR	1
Chloroethane	< 0.65	ug/l	0.65	2.1	1	8260B		10/26/2016	CJR	1
Chloroform	< 0.43	ug/l	0.43	1.4	1	8260B		10/26/2016	CJR	1
Chloromethane	< 1.9	ug/l	1.9	6	1	8260B		10/26/2016	CJR	1
2-Chlorotoluene	< 0.4	ug/l	0.4	1.3	1	8260B		10/26/2016	CJR	1
4-Chlorotoluene	< 0.63	ug/l	0.63	2	1	8260B		10/26/2016	CJR	1
1,2-Dibromo-3-chloropropane	< 1.4	ug/l	1.4	4.5	1	8260B		10/26/2016	CJR	1
Dibromochloromethane	< 0.45	ug/l	0.45	1.4	1	8260B		10/26/2016	CJR	1
1,4-Dichlorobenzene	< 0.49	ug/l	0.49	1.6	1	8260B		10/26/2016	CJR	1
1,3-Dichlorobenzene	< 0.52	ug/l	0.52	1.6	1	8260B		10/26/2016	CJR	1
1,2-Dichlorobenzene	< 0.46	ug/l	0.46	1.5	1	8260B		10/26/2016	CJR	1
Dichlorodifluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/26/2016	CJR	1
1,2-Dichloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/26/2016	CJR	1
1,1-Dichloroethane	< 1.1	ug/l	1.1	3.6	1	8260B		10/26/2016	CJR	1
1,1-Dichloroethene	< 0.65	ug/l	0.65	2.1	1	8260B		10/26/2016	CJR	1
cis-1,2-Dichloroethene	< 0.45	ug/l	0.45	1.4	1	8260B		10/26/2016	CJR	1
trans-1,2-Dichloroethene	< 0.54	ug/l	0.54	1.7	1	8260B		10/26/2016	CJR	1
1,2-Dichloropropane	< 0.43	ug/l	0.43	1.37	1	8260B		10/26/2016	CJR	1
2,2-Dichloropropane	< 3.1	ug/l	3.1	9.8	1	8260B		10/26/2016	CJR	1
1,3-Dichloropropane	< 0.42	ug/l	0.42	1.3	1	8260B		10/26/2016	CJR	1
Di-isopropyl ether	< 0.44	ug/l	0.44	1.4	1	8260B		10/26/2016	CJR	1
EDB (1,2-Dibromoethane)	< 0.63	ug/l	0.63	2	1	8260B		10/26/2016	CJR	1
Ethylbenzene	< 0.71	ug/l	0.71	2.3	1	8260B		10/26/2016	CJR	1
Hexachlorobutadiene	< 2.2	ug/l	2.2	7.1	1	8260B		10/26/2016	CJR	1
Isopropylbenzene	< 0.82	ug/l	0.82	2.6	1	8260B		10/26/2016	CJR	1
p-Isopropyltoluene	< 1.1	ug/l	1.1	3.5	1	8260B		10/26/2016	CJR	1
Methylene chloride	< 1.3	ug/l	1.3	4.2	1	8260B		10/26/2016	CJR	1
Methyl tert-butyl ether (MTBE)	< 1.1	ug/l	1.1	3.7	1	8260B		10/26/2016	CJR	1
Naphthalene	< 1.6	ug/l	1.6	5.2	1	8260B		10/26/2016	CJR	1
n-Propylbenzene	< 0.77	ug/l	0.77	2.4	1	8260B		10/26/2016	CJR	1
1,1,2,2-Tetrachloroethane	< 0.52	ug/l	0.52	1.7	1	8260B		10/26/2016	CJR	1
1,1,1,2-Tetrachloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/26/2016	CJR	1
Tetrachloroethene	< 0.49	ug/l	0.49	1.5	1	8260B		10/26/2016	CJR	1
Toluene	< 0.44	ug/l	0.44	1.4	1	8260B		10/26/2016	CJR	1
1,2,4-Trichlorobenzene	< 1.7	ug/l	1.7	5.6	1	8260B		10/26/2016	CJR	1
1,2,3-Trichlorobenzene	< 2.7	ug/l	2.7	8.6	1	8260B		10/26/2016	CJR	1
1,1,1-Trichloroethane	< 0.84	ug/l	0.84	2.7	1	8260B		10/26/2016	CJR	1
1,1,2-Trichloroethane	< 0.48	ug/l	0.48	1.52	1	8260B		10/26/2016	CJR	1
Trichloroethene (TCE)	< 0.47	ug/l	0.47	1.5	1	8260B		10/26/2016	CJR	1
Trichlorofluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/26/2016	CJR	1
1,2,4-Trimethylbenzene	< 1.6	ug/l	1.6	5	1	8260B		10/26/2016	CJR	1
1,3,5-Trimethylbenzene	< 1.5	ug/l	1.5	4.8	1	8260B		10/26/2016	CJR	1
Vinyl Chloride	< 0.17	ug/l	0.17	0.54	1	8260B		10/26/2016	CJR	1
m&p-Xylene	< 2.2	ug/l	2.2	6.9	1	8260B		10/26/2016	CJR	1
o-Xylene	< 0.9	ug/l	0.9	2.9	1	8260B		10/26/2016	CJR	1
SUR - 1,2-Dichloroethane-d4	105	REC %			1	8260B		10/26/2016	CJR	1
SUR - 4-Bromofluorobenzene	96	REC %			1	8260B		10/26/2016	CJR	1
SUR - Dibromofluoromethane	91	REC %			1	8260B		10/26/2016	CJR	1
SUR - Toluene-d8	101	REC %			1	8260B		10/26/2016	CJR	1

Project Name NEWTON PIT **Invoice #** E31968
Project #

Lab Code 5031968F
Sample ID 3303 HECKER vial 2
Sample Matrix Water
Sample Date 10/24/2016

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
VOC's										
Benzene	< 0.44	ug/l	0.44	1.4	1	8260B		10/27/2016	CJR	1
Bromobenzene	< 0.48	ug/l	0.48	1.5	1	8260B		10/27/2016	CJR	1
Bromodichloromethane	< 0.46	ug/l	0.46	1.5	1	8260B		10/27/2016	CJR	1
Bromoform	< 0.46	ug/l	0.46	1.5	1	8260B		10/27/2016	CJR	1
tert-Butylbenzene	< 1.1	ug/l	1.1	3.4	1	8260B		10/27/2016	CJR	1
sec-Butylbenzene	< 1.2	ug/l	1.2	3.8	1	8260B		10/27/2016	CJR	1
n-Butylbenzene	< 1	ug/l	1	3.3	1	8260B		10/27/2016	CJR	1
Carbon Disulfide	< 1.0	ug/l	1	3.2	1	8260B		10/27/2016	CJR	1
Carbon Tetrachloride	< 0.51	ug/l	0.51	1.6	1	8260B		10/27/2016	CJR	1
Chlorobenzene	< 0.46	ug/l	0.46	1.4	1	8260B		10/27/2016	CJR	1
Chloroethane	< 0.65	ug/l	0.65	2.1	1	8260B		10/27/2016	CJR	1
Chloroform	< 0.43	ug/l	0.43	1.4	1	8260B		10/27/2016	CJR	1
Chloromethane	< 1.9	ug/l	1.9	6	1	8260B		10/27/2016	CJR	1
2-Chlorotoluene	< 0.4	ug/l	0.4	1.3	1	8260B		10/27/2016	CJR	1
4-Chlorotoluene	< 0.63	ug/l	0.63	2	1	8260B		10/27/2016	CJR	1
1,2-Dibromo-3-chloropropane	< 1.4	ug/l	1.4	4.5	1	8260B		10/27/2016	CJR	1
Dibromochloromethane	< 0.45	ug/l	0.45	1.4	1	8260B		10/27/2016	CJR	1
1,4-Dichlorobenzene	< 0.49	ug/l	0.49	1.6	1	8260B		10/27/2016	CJR	1
1,3-Dichlorobenzene	< 0.52	ug/l	0.52	1.6	1	8260B		10/27/2016	CJR	1
1,2-Dichlorobenzene	< 0.46	ug/l	0.46	1.5	1	8260B		10/27/2016	CJR	1
Dichlorodifluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/27/2016	CJR	1
1,2-Dichloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/27/2016	CJR	1
1,1-Dichloroethane	< 1.1	ug/l	1.1	3.6	1	8260B		10/27/2016	CJR	1
1,1-Dichloroethene	< 0.65	ug/l	0.65	2.1	1	8260B		10/27/2016	CJR	1
cis-1,2-Dichloroethene	< 0.45	ug/l	0.45	1.4	1	8260B		10/27/2016	CJR	1
trans-1,2-Dichloroethene	< 0.54	ug/l	0.54	1.7	1	8260B		10/27/2016	CJR	1
1,2-Dichloropropane	< 0.43	ug/l	0.43	1.37	1	8260B		10/27/2016	CJR	1
2,2-Dichloropropane	< 3.1	ug/l	3.1	9.8	1	8260B		10/27/2016	CJR	1
1,3-Dichloropropane	< 0.42	ug/l	0.42	1.3	1	8260B		10/27/2016	CJR	1
Di-isopropyl ether	< 0.44	ug/l	0.44	1.4	1	8260B		10/27/2016	CJR	1
EDB (1,2-Dibromoethane)	< 0.63	ug/l	0.63	2	1	8260B		10/27/2016	CJR	1
Ethylbenzene	< 0.71	ug/l	0.71	2.3	1	8260B		10/27/2016	CJR	1
Hexachlorobutadiene	< 2.2	ug/l	2.2	7.1	1	8260B		10/27/2016	CJR	1
Isopropylbenzene	< 0.82	ug/l	0.82	2.6	1	8260B		10/27/2016	CJR	1
p-Isopropyltoluene	< 1.1	ug/l	1.1	3.5	1	8260B		10/27/2016	CJR	1
Methylene chloride	< 1.3	ug/l	1.3	4.2	1	8260B		10/27/2016	CJR	1
Methyl tert-butyl ether (MTBE)	< 1.1	ug/l	1.1	3.7	1	8260B		10/27/2016	CJR	1
Naphthalene	< 1.6	ug/l	1.6	5.2	1	8260B		10/27/2016	CJR	1
n-Propylbenzene	< 0.77	ug/l	0.77	2.4	1	8260B		10/27/2016	CJR	1
1,1,2,2-Tetrachloroethane	< 0.52	ug/l	0.52	1.7	1	8260B		10/27/2016	CJR	1
1,1,1,2-Tetrachloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/27/2016	CJR	1
Tetrachloroethene	< 0.49	ug/l	0.49	1.5	1	8260B		10/27/2016	CJR	1
Toluene	< 0.44	ug/l	0.44	1.4	1	8260B		10/27/2016	CJR	1
1,2,4-Trichlorobenzene	< 1.7	ug/l	1.7	5.6	1	8260B		10/27/2016	CJR	1
1,2,3-Trichlorobenzene	< 2.7	ug/l	2.7	8.6	1	8260B		10/27/2016	CJR	1
1,1,1-Trichloroethane	< 0.84	ug/l	0.84	2.7	1	8260B		10/27/2016	CJR	1
1,1,2-Trichloroethane	< 0.48	ug/l	0.48	1.52	1	8260B		10/27/2016	CJR	1
Trichloroethene (TCE)	< 0.47	ug/l	0.47	1.5	1	8260B		10/27/2016	CJR	1
Trichlorofluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/27/2016	CJR	1
1,2,4-Trimethylbenzene	< 1.6	ug/l	1.6	5	1	8260B		10/27/2016	CJR	1
1,3,5-Trimethylbenzene	< 1.5	ug/l	1.5	4.8	1	8260B		10/27/2016	CJR	1
Vinyl Chloride	< 0.17	ug/l	0.17	0.54	1	8260B		10/27/2016	CJR	1
m&p-Xylene	< 2.2	ug/l	2.2	6.9	1	8260B		10/27/2016	CJR	1
o-Xylene	< 0.9	ug/l	0.9	2.9	1	8260B		10/27/2016	CJR	1
SUR - 1,2-Dichloroethane-d4	99	REC %			1	8260B		10/27/2016	CJR	1
SUR - 4-Bromofluorobenzene	97	REC %			1	8260B		10/27/2016	CJR	1
SUR - Dibromofluoromethane	93	REC %			1	8260B		10/27/2016	CJR	1

Project Name NEWTON PIT **Invoice #** E31968
Project #

Lab Code 5031968F
Sample ID 3303 HECKER vial 2
Sample Matrix Water
Sample Date 10/24/2016

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
SUR - Toluene-d8	102	REC %			1	8260B		10/27/2016	CJR	1

Project Name NEWTON PIT **Invoice #** E31968
Project #

Lab Code 5031968G
Sample ID 3303 HECKER vial 3
Sample Matrix Water
Sample Date 10/24/2016

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
VOC's										
Benzene	< 0.44	ug/l	0.44	1.4	1	8260B		10/28/2016	CJR	1
Bromobenzene	< 0.48	ug/l	0.48	1.5	1	8260B		10/28/2016	CJR	1
Bromodichloromethane	< 0.46	ug/l	0.46	1.5	1	8260B		10/28/2016	CJR	1
Bromoform	< 0.46	ug/l	0.46	1.5	1	8260B		10/28/2016	CJR	1
tert-Butylbenzene	< 1.1	ug/l	1.1	3.4	1	8260B		10/28/2016	CJR	1
sec-Butylbenzene	< 1.2	ug/l	1.2	3.8	1	8260B		10/28/2016	CJR	1
n-Butylbenzene	< 1	ug/l	1	3.3	1	8260B		10/28/2016	CJR	1
Carbon Disulfide	2.6 "J"	ug/l	1	3.2	1	8260B		10/28/2016	CJR	1
Carbon Tetrachloride	< 0.51	ug/l	0.51	1.6	1	8260B		10/28/2016	CJR	1
Chlorobenzene	< 0.46	ug/l	0.46	1.4	1	8260B		10/28/2016	CJR	1
Chloroethane	< 0.65	ug/l	0.65	2.1	1	8260B		10/28/2016	CJR	1
Chloroform	< 0.43	ug/l	0.43	1.4	1	8260B		10/28/2016	CJR	1
Chloromethane	< 1.9	ug/l	1.9	6	1	8260B		10/28/2016	CJR	1
2-Chlorotoluene	< 0.4	ug/l	0.4	1.3	1	8260B		10/28/2016	CJR	1
4-Chlorotoluene	< 0.63	ug/l	0.63	2	1	8260B		10/28/2016	CJR	1
1,2-Dibromo-3-chloropropane	< 1.4	ug/l	1.4	4.5	1	8260B		10/28/2016	CJR	1
Dibromochloromethane	< 0.45	ug/l	0.45	1.4	1	8260B		10/28/2016	CJR	1
1,4-Dichlorobenzene	< 0.49	ug/l	0.49	1.6	1	8260B		10/28/2016	CJR	1
1,3-Dichlorobenzene	< 0.52	ug/l	0.52	1.6	1	8260B		10/28/2016	CJR	1
1,2-Dichlorobenzene	< 0.46	ug/l	0.46	1.5	1	8260B		10/28/2016	CJR	1
Dichlorodifluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/28/2016	CJR	1
1,2-Dichloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/28/2016	CJR	1
1,1-Dichloroethane	< 1.1	ug/l	1.1	3.6	1	8260B		10/28/2016	CJR	1
1,1-Dichloroethene	< 0.65	ug/l	0.65	2.1	1	8260B		10/28/2016	CJR	1
cis-1,2-Dichloroethene	< 0.45	ug/l	0.45	1.4	1	8260B		10/28/2016	CJR	1
trans-1,2-Dichloroethene	< 0.54	ug/l	0.54	1.7	1	8260B		10/28/2016	CJR	1
1,2-Dichloropropane	< 0.43	ug/l	0.43	1.37	1	8260B		10/28/2016	CJR	1
2,2-Dichloropropane	< 3.1	ug/l	3.1	9.8	1	8260B		10/28/2016	CJR	1
1,3-Dichloropropane	< 0.42	ug/l	0.42	1.3	1	8260B		10/28/2016	CJR	1
Di-isopropyl ether	< 0.44	ug/l	0.44	1.4	1	8260B		10/28/2016	CJR	1
EDB (1,2-Dibromoethane)	< 0.63	ug/l	0.63	2	1	8260B		10/28/2016	CJR	1
Ethylbenzene	< 0.71	ug/l	0.71	2.3	1	8260B		10/28/2016	CJR	1
Hexachlorobutadiene	< 2.2	ug/l	2.2	7.1	1	8260B		10/28/2016	CJR	1
Isopropylbenzene	< 0.82	ug/l	0.82	2.6	1	8260B		10/28/2016	CJR	1
p-Isopropyltoluene	< 1.1	ug/l	1.1	3.5	1	8260B		10/28/2016	CJR	1
Methylene chloride	< 1.3	ug/l	1.3	4.2	1	8260B		10/28/2016	CJR	1
Methyl tert-butyl ether (MTBE)	< 1.1	ug/l	1.1	3.7	1	8260B		10/28/2016	CJR	1
Naphthalene	< 1.6	ug/l	1.6	5.2	1	8260B		10/28/2016	CJR	1
n-Propylbenzene	< 0.77	ug/l	0.77	2.4	1	8260B		10/28/2016	CJR	1
1,1,2,2-Tetrachloroethane	< 0.52	ug/l	0.52	1.7	1	8260B		10/28/2016	CJR	1
1,1,1,2-Tetrachloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/28/2016	CJR	1
Tetrachloroethene	< 0.49	ug/l	0.49	1.5	1	8260B		10/28/2016	CJR	1
Toluene	< 0.44	ug/l	0.44	1.4	1	8260B		10/28/2016	CJR	1
1,2,4-Trichlorobenzene	< 1.7	ug/l	1.7	5.6	1	8260B		10/28/2016	CJR	1
1,2,3-Trichlorobenzene	< 2.7	ug/l	2.7	8.6	1	8260B		10/28/2016	CJR	1
1,1,1-Trichloroethane	< 0.84	ug/l	0.84	2.7	1	8260B		10/28/2016	CJR	1
1,1,2-Trichloroethane	< 0.48	ug/l	0.48	1.52	1	8260B		10/28/2016	CJR	1
Trichloroethene (TCE)	< 0.47	ug/l	0.47	1.5	1	8260B		10/28/2016	CJR	1
Trichlorofluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/28/2016	CJR	1
1,2,4-Trimethylbenzene	< 1.6	ug/l	1.6	5	1	8260B		10/28/2016	CJR	1
1,3,5-Trimethylbenzene	< 1.5	ug/l	1.5	4.8	1	8260B		10/28/2016	CJR	1
Vinyl Chloride	< 0.17	ug/l	0.17	0.54	1	8260B		10/28/2016	CJR	1
m&p-Xylene	< 2.2	ug/l	2.2	6.9	1	8260B		10/28/2016	CJR	1
o-Xylene	< 0.9	ug/l	0.9	2.9	1	8260B		10/28/2016	CJR	1
SUR - Toluene-d8	102	REC %			1	8260B		10/28/2016	CJR	1
SUR - 1,2-Dichloroethane-d4	102	REC %			1	8260B		10/28/2016	CJR	1
SUR - 4-Bromofluorobenzene	99	REC %			1	8260B		10/28/2016	CJR	1

Project Name NEWTON PIT **Invoice #** E31968
Project #

Lab Code 5031968G
Sample ID 3303 HECKER vial 3
Sample Matrix Water
Sample Date 10/24/2016

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
SUR - Dibromofluoromethane	87	REC %			1	8260B		10/28/2016	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.

BLE denotes sub contract lab - Certification #445023150

CWT denotes sub contract lab - Certification #445126660

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 2950

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) D.S. Henderson

Project (Name / Location): Newton Pit

Reports To: DAVE HENDERSON	Invoice To: SAME
Company AECOM	Company
Address 1555 Riverview	Address
City State Zip Milw	City State Zip
Phone 414 429 8304	Phone
FAX	FAX

Lab I.D.	Sample I.D.	Collection Date	Collection Time	Comp	Grab	Filtered Y/N	No. of Containers	Sample Type (Matrix)*	Preservation
S03196 A	3303 Hecker	10/24	2:40		X	N	5	GW	
B	4010 Thunder		~~2:55~~ 3:20				3		
C	4005 Thunder		→	3:33			3		
D	3504 CTH CR			4:14			3		
E	3318 orchard				X	X	3	X	

Analysis Requested / **Other Analysis**

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	Hardness	Iron	TDS	PID/ FID
												X		X	X	X	
												X					
												X					
												X					
												X					

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

Sample Integrity - To be completed by receiving lab.

Method of Shipment: Sm

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
D.S. Henderson					

Received in Laboratory By: [signature] Time: 8:00 Date: 10/26/16

Synergy Environmental Lab, INC.

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

DAVE HENDERSON
AECOM
1555 N RIVERCENTER DRIVE
MILWAUKEE, WI 53212

Report Date *18-Nov-16*

Project Name NEWTON PIT
Project # 60135471
Invoice # E32056

Lab Code 5032056A
Sample ID 4005 THUNDER
Sample Matrix Water
Sample Date 11/8/2016

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
VOC's										
Benzene	< 0.44	ug/l	0.44	1.4	1	8260B		11/14/2016	CJR	1
Bromobenzene	< 0.48	ug/l	0.48	1.5	1	8260B		11/14/2016	CJR	1
Bromodichloromethane	< 0.46	ug/l	0.46	1.5	1	8260B		11/14/2016	CJR	1
Bromoform	< 0.46	ug/l	0.46	1.5	1	8260B		11/14/2016	CJR	1
tert-Butylbenzene	< 1.1	ug/l	1.1	3.4	1	8260B		11/14/2016	CJR	1
sec-Butylbenzene	< 1.2	ug/l	1.2	3.8	1	8260B		11/14/2016	CJR	1
n-Butylbenzene	< 1	ug/l	1	3.3	1	8260B		11/14/2016	CJR	1
Carbon Tetrachloride	< 0.51	ug/l	0.51	1.6	1	8260B		11/14/2016	CJR	1
Chlorobenzene	< 0.46	ug/l	0.46	1.4	1	8260B		11/14/2016	CJR	1
Chloroethane	< 0.65	ug/l	0.65	2.1	1	8260B		11/14/2016	CJR	1
Chloroform	< 0.43	ug/l	0.43	1.4	1	8260B		11/14/2016	CJR	1
Chloromethane	< 1.9	ug/l	1.9	6	1	8260B		11/14/2016	CJR	1
2-Chlorotoluene	< 0.4	ug/l	0.4	1.3	1	8260B		11/14/2016	CJR	1
4-Chlorotoluene	< 0.63	ug/l	0.63	2	1	8260B		11/14/2016	CJR	1
1,2-Dibromo-3-chloropropane	< 1.4	ug/l	1.4	4.5	1	8260B		11/14/2016	CJR	1
Dibromochloromethane	< 0.45	ug/l	0.45	1.4	1	8260B		11/14/2016	CJR	1
1,4-Dichlorobenzene	< 0.49	ug/l	0.49	1.6	1	8260B		11/14/2016	CJR	1
1,3-Dichlorobenzene	< 0.52	ug/l	0.52	1.6	1	8260B		11/14/2016	CJR	1
1,2-Dichlorobenzene	< 0.46	ug/l	0.46	1.5	1	8260B		11/14/2016	CJR	1
Dichlorodifluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		11/14/2016	CJR	1
1,2-Dichloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		11/14/2016	CJR	1
1,1-Dichloroethane	< 1.1	ug/l	1.1	3.6	1	8260B		11/14/2016	CJR	1
1,1-Dichloroethene	< 0.65	ug/l	0.65	2.1	1	8260B		11/14/2016	CJR	1
cis-1,2-Dichloroethene	0.66 "J"	ug/l	0.45	1.4	1	8260B		11/14/2016	CJR	1
trans-1,2-Dichloroethene	< 0.54	ug/l	0.54	1.7	1	8260B		11/14/2016	CJR	1
1,2-Dichloropropane	< 0.43	ug/l	0.43	1.37	1	8260B		11/14/2016	CJR	1
2,2-Dichloropropane	< 3.1	ug/l	3.1	9.8	1	8260B		11/14/2016	CJR	1
1,3-Dichloropropane	< 0.42	ug/l	0.42	1.3	1	8260B		11/14/2016	CJR	1
Di-isopropyl ether	< 0.44	ug/l	0.44	1.4	1	8260B		11/14/2016	CJR	1
EDB (1,2-Dibromoethane)	< 0.63	ug/l	0.63	2	1	8260B		11/14/2016	CJR	1
Ethylbenzene	< 0.71	ug/l	0.71	2.3	1	8260B		11/14/2016	CJR	1
Hexachlorobutadiene	< 2.2	ug/l	2.2	7.1	1	8260B		11/14/2016	CJR	1
Isopropylbenzene	< 0.82	ug/l	0.82	2.6	1	8260B		11/14/2016	CJR	1

Project Name NEWTON PIT **Invoice #** E32056
Project # 60135471

Lab Code 5032056A
Sample ID 4005 THUNDER
Sample Matrix Water
Sample Date 11/8/2016

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
p-Isopropyltoluene	< 1.1	ug/l	1.1	3.5	1	8260B		11/14/2016	CJR	1
Methylene chloride	< 1.3	ug/l	1.3	4.2	1	8260B		11/14/2016	CJR	1
Methyl tert-butyl ether (MTBE)	< 1.1	ug/l	1.1	3.7	1	8260B		11/14/2016	CJR	1
Naphthalene	< 1.6	ug/l	1.6	5.2	1	8260B		11/14/2016	CJR	1
n-Propylbenzene	< 0.77	ug/l	0.77	2.4	1	8260B		11/14/2016	CJR	1
1,1,2,2-Tetrachloroethane	< 0.52	ug/l	0.52	1.7	1	8260B		11/14/2016	CJR	1
1,1,1,2-Tetrachloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		11/14/2016	CJR	1
Tetrachloroethene	< 0.49	ug/l	0.49	1.5	1	8260B		11/14/2016	CJR	1
Toluene	< 0.44	ug/l	0.44	1.4	1	8260B		11/14/2016	CJR	1
1,2,4-Trichlorobenzene	< 1.7	ug/l	1.7	5.6	1	8260B		11/14/2016	CJR	1
1,2,3-Trichlorobenzene	< 2.7	ug/l	2.7	8.6	1	8260B		11/14/2016	CJR	1
1,1,1-Trichloroethane	< 0.84	ug/l	0.84	2.7	1	8260B		11/14/2016	CJR	1
1,1,2-Trichloroethane	< 0.48	ug/l	0.48	1.52	1	8260B		11/14/2016	CJR	1
Trichloroethene (TCE)	< 0.47	ug/l	0.47	1.5	1	8260B		11/14/2016	CJR	1
Trichlorofluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		11/14/2016	CJR	1
1,2,4-Trimethylbenzene	< 1.6	ug/l	1.6	5	1	8260B		11/14/2016	CJR	1
1,3,5-Trimethylbenzene	< 1.5	ug/l	1.5	4.8	1	8260B		11/14/2016	CJR	1
Vinyl Chloride	< 0.17	ug/l	0.17	0.54	1	8260B		11/14/2016	CJR	1
m&p-Xylene	< 2.2	ug/l	2.2	6.9	1	8260B		11/14/2016	CJR	1
o-Xylene	< 0.9	ug/l	0.9	2.9	1	8260B		11/14/2016	CJR	1
SUR - Toluene-d8	107	REC %			1	8260B		11/14/2016	CJR	1
SUR - 1,2-Dichloroethane-d4	99	REC %			1	8260B		11/14/2016	CJR	1
SUR - 4-Bromofluorobenzene	97	REC %			1	8260B		11/14/2016	CJR	1
SUR - Dibromofluoromethane	102	REC %			1	8260B		11/14/2016	CJR	1

Project Name NEWTON PIT **Invoice #** E32056
Project # 60135471

Lab Code 5032056B
Sample ID 4101 THUNDER
Sample Matrix Water
Sample Date 11/8/2016

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
VOC's										
Benzene	< 0.44	ug/l	0.44	1.4	1	8260B		11/16/2016	CJR	1
Bromobenzene	< 0.48	ug/l	0.48	1.5	1	8260B		11/16/2016	CJR	1
Bromodichloromethane	< 0.46	ug/l	0.46	1.5	1	8260B		11/16/2016	CJR	1
Bromoform	< 0.46	ug/l	0.46	1.5	1	8260B		11/16/2016	CJR	1
tert-Butylbenzene	< 1.1	ug/l	1.1	3.4	1	8260B		11/16/2016	CJR	1
sec-Butylbenzene	< 1.2	ug/l	1.2	3.8	1	8260B		11/16/2016	CJR	1
n-Butylbenzene	< 1	ug/l	1	3.3	1	8260B		11/16/2016	CJR	1
Carbon Tetrachloride	< 0.51	ug/l	0.51	1.6	1	8260B		11/16/2016	CJR	1
Chlorobenzene	< 0.46	ug/l	0.46	1.4	1	8260B		11/16/2016	CJR	1
Chloroethane	< 0.65	ug/l	0.65	2.1	1	8260B		11/16/2016	CJR	1
Chloroform	< 0.43	ug/l	0.43	1.4	1	8260B		11/16/2016	CJR	1
Chloromethane	< 1.9	ug/l	1.9	6	1	8260B		11/16/2016	CJR	1
2-Chlorotoluene	< 0.4	ug/l	0.4	1.3	1	8260B		11/16/2016	CJR	1
4-Chlorotoluene	< 0.63	ug/l	0.63	2	1	8260B		11/16/2016	CJR	1
1,2-Dibromo-3-chloropropane	< 1.4	ug/l	1.4	4.5	1	8260B		11/16/2016	CJR	1
Dibromochloromethane	< 0.45	ug/l	0.45	1.4	1	8260B		11/16/2016	CJR	1
1,4-Dichlorobenzene	< 0.49	ug/l	0.49	1.6	1	8260B		11/16/2016	CJR	1
1,3-Dichlorobenzene	< 0.52	ug/l	0.52	1.6	1	8260B		11/16/2016	CJR	1
1,2-Dichlorobenzene	< 0.46	ug/l	0.46	1.5	1	8260B		11/16/2016	CJR	1
Dichlorodifluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		11/16/2016	CJR	1
1,2-Dichloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		11/16/2016	CJR	1
1,1-Dichloroethane	< 1.1	ug/l	1.1	3.6	1	8260B		11/16/2016	CJR	1
1,1-Dichloroethene	< 0.65	ug/l	0.65	2.1	1	8260B		11/16/2016	CJR	1
cis-1,2-Dichloroethene	1.02 "J"	ug/l	0.45	1.4	1	8260B		11/16/2016	CJR	1
trans-1,2-Dichloroethene	< 0.54	ug/l	0.54	1.7	1	8260B		11/16/2016	CJR	1
1,2-Dichloropropane	< 0.43	ug/l	0.43	1.37	1	8260B		11/16/2016	CJR	1
2,2-Dichloropropane	< 3.1	ug/l	3.1	9.8	1	8260B		11/16/2016	CJR	1
1,3-Dichloropropane	< 0.42	ug/l	0.42	1.3	1	8260B		11/16/2016	CJR	1
Di-isopropyl ether	< 0.44	ug/l	0.44	1.4	1	8260B		11/16/2016	CJR	1
EDB (1,2-Dibromoethane)	< 0.63	ug/l	0.63	2	1	8260B		11/16/2016	CJR	1
Ethylbenzene	< 0.71	ug/l	0.71	2.3	1	8260B		11/16/2016	CJR	1
Hexachlorobutadiene	< 2.2	ug/l	2.2	7.1	1	8260B		11/16/2016	CJR	1
Isopropylbenzene	< 0.82	ug/l	0.82	2.6	1	8260B		11/16/2016	CJR	1
p-Isopropyltoluene	< 1.1	ug/l	1.1	3.5	1	8260B		11/16/2016	CJR	1
Methylene chloride	< 1.3	ug/l	1.3	4.2	1	8260B		11/16/2016	CJR	1
Methyl tert-butyl ether (MTBE)	< 1.1	ug/l	1.1	3.7	1	8260B		11/16/2016	CJR	1
Naphthalene	< 1.6	ug/l	1.6	5.2	1	8260B		11/16/2016	CJR	1
n-Propylbenzene	< 0.77	ug/l	0.77	2.4	1	8260B		11/16/2016	CJR	1
1,1,2,2-Tetrachloroethane	< 0.52	ug/l	0.52	1.7	1	8260B		11/16/2016	CJR	1
1,1,1,2-Tetrachloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		11/16/2016	CJR	1
Tetrachloroethene	< 0.49	ug/l	0.49	1.5	1	8260B		11/16/2016	CJR	1
Toluene	< 0.44	ug/l	0.44	1.4	1	8260B		11/16/2016	CJR	1
1,2,4-Trichlorobenzene	< 1.7	ug/l	1.7	5.6	1	8260B		11/16/2016	CJR	1
1,2,3-Trichlorobenzene	< 2.7	ug/l	2.7	8.6	1	8260B		11/16/2016	CJR	1
1,1,1-Trichloroethane	< 0.84	ug/l	0.84	2.7	1	8260B		11/16/2016	CJR	1
1,1,2-Trichloroethane	< 0.48	ug/l	0.48	1.52	1	8260B		11/16/2016	CJR	1
Trichloroethene (TCE)	< 0.47	ug/l	0.47	1.5	1	8260B		11/16/2016	CJR	1
Trichlorofluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		11/16/2016	CJR	1
1,2,4-Trimethylbenzene	< 1.6	ug/l	1.6	5	1	8260B		11/16/2016	CJR	1
1,3,5-Trimethylbenzene	< 1.5	ug/l	1.5	4.8	1	8260B		11/16/2016	CJR	1
Vinyl Chloride	< 0.17	ug/l	0.17	0.54	1	8260B		11/16/2016	CJR	1
m&p-Xylene	< 2.2	ug/l	2.2	6.9	1	8260B		11/16/2016	CJR	1
o-Xylene	< 0.9	ug/l	0.9	2.9	1	8260B		11/16/2016	CJR	1
SUR - Toluene-d8	93	REC %			1	8260B		11/16/2016	CJR	1
SUR - 1,2-Dichloroethane-d4	108	REC %			1	8260B		11/16/2016	CJR	1
SUR - 4-Bromofluorobenzene	99	REC %			1	8260B		11/16/2016	CJR	1
SUR - Dibromofluoromethane	105	REC %			1	8260B		11/16/2016	CJR	1

Project Name NEWTON PIT **Invoice #** E32056
Project # 60135471

Lab Code 5032056C
Sample ID 3504 CTH CR
Sample Matrix Water
Sample Date 11/8/2016

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
VOC's										
Benzene	< 0.44	ug/l	0.44	1.4	1	8260B		11/14/2016	CJR	1
Bromobenzene	< 0.48	ug/l	0.48	1.5	1	8260B		11/14/2016	CJR	1
Bromodichloromethane	< 0.46	ug/l	0.46	1.5	1	8260B		11/14/2016	CJR	1
Bromoform	< 0.46	ug/l	0.46	1.5	1	8260B		11/14/2016	CJR	1
tert-Butylbenzene	< 1.1	ug/l	1.1	3.4	1	8260B		11/14/2016	CJR	1
sec-Butylbenzene	< 1.2	ug/l	1.2	3.8	1	8260B		11/14/2016	CJR	1
n-Butylbenzene	< 1	ug/l	1	3.3	1	8260B		11/14/2016	CJR	1
Carbon Tetrachloride	< 0.51	ug/l	0.51	1.6	1	8260B		11/14/2016	CJR	1
Chlorobenzene	< 0.46	ug/l	0.46	1.4	1	8260B		11/14/2016	CJR	1
Chloroethane	< 0.65	ug/l	0.65	2.1	1	8260B		11/14/2016	CJR	1
Chloroform	< 0.43	ug/l	0.43	1.4	1	8260B		11/14/2016	CJR	1
Chloromethane	< 1.9	ug/l	1.9	6	1	8260B		11/14/2016	CJR	1
2-Chlorotoluene	< 0.4	ug/l	0.4	1.3	1	8260B		11/14/2016	CJR	1
4-Chlorotoluene	< 0.63	ug/l	0.63	2	1	8260B		11/14/2016	CJR	1
1,2-Dibromo-3-chloropropane	< 1.4	ug/l	1.4	4.5	1	8260B		11/14/2016	CJR	1
Dibromochloromethane	< 0.45	ug/l	0.45	1.4	1	8260B		11/14/2016	CJR	1
1,4-Dichlorobenzene	< 0.49	ug/l	0.49	1.6	1	8260B		11/14/2016	CJR	1
1,3-Dichlorobenzene	< 0.52	ug/l	0.52	1.6	1	8260B		11/14/2016	CJR	1
1,2-Dichlorobenzene	< 0.46	ug/l	0.46	1.5	1	8260B		11/14/2016	CJR	1
Dichlorodifluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		11/14/2016	CJR	1
1,2-Dichloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		11/14/2016	CJR	1
1,1-Dichloroethane	< 1.1	ug/l	1.1	3.6	1	8260B		11/14/2016	CJR	1
1,1-Dichloroethene	< 0.65	ug/l	0.65	2.1	1	8260B		11/14/2016	CJR	1
cis-1,2-Dichloroethene	< 0.45	ug/l	0.45	1.4	1	8260B		11/14/2016	CJR	1
trans-1,2-Dichloroethene	< 0.54	ug/l	0.54	1.7	1	8260B		11/14/2016	CJR	1
1,2-Dichloropropane	< 0.43	ug/l	0.43	1.37	1	8260B		11/14/2016	CJR	1
2,2-Dichloropropane	< 3.1	ug/l	3.1	9.8	1	8260B		11/14/2016	CJR	1
1,3-Dichloropropane	< 0.42	ug/l	0.42	1.3	1	8260B		11/14/2016	CJR	1
Di-isopropyl ether	< 0.44	ug/l	0.44	1.4	1	8260B		11/14/2016	CJR	1
EDB (1,2-Dibromoethane)	< 0.63	ug/l	0.63	2	1	8260B		11/14/2016	CJR	1
Ethylbenzene	< 0.71	ug/l	0.71	2.3	1	8260B		11/14/2016	CJR	1
Hexachlorobutadiene	< 2.2	ug/l	2.2	7.1	1	8260B		11/14/2016	CJR	1
Isopropylbenzene	< 0.82	ug/l	0.82	2.6	1	8260B		11/14/2016	CJR	1
p-Isopropyltoluene	< 1.1	ug/l	1.1	3.5	1	8260B		11/14/2016	CJR	1
Methylene chloride	< 1.3	ug/l	1.3	4.2	1	8260B		11/14/2016	CJR	1
Methyl tert-butyl ether (MTBE)	< 1.1	ug/l	1.1	3.7	1	8260B		11/14/2016	CJR	1
Naphthalene	< 1.6	ug/l	1.6	5.2	1	8260B		11/14/2016	CJR	1
n-Propylbenzene	< 0.77	ug/l	0.77	2.4	1	8260B		11/14/2016	CJR	1
1,1,2,2-Tetrachloroethane	< 0.52	ug/l	0.52	1.7	1	8260B		11/14/2016	CJR	1
1,1,1,2-Tetrachloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		11/14/2016	CJR	1
Tetrachloroethene	< 0.49	ug/l	0.49	1.5	1	8260B		11/14/2016	CJR	1
Toluene	< 0.44	ug/l	0.44	1.4	1	8260B		11/14/2016	CJR	1
1,2,4-Trichlorobenzene	< 1.7	ug/l	1.7	5.6	1	8260B		11/14/2016	CJR	1
1,2,3-Trichlorobenzene	< 2.7	ug/l	2.7	8.6	1	8260B		11/14/2016	CJR	1
1,1,1-Trichloroethane	< 0.84	ug/l	0.84	2.7	1	8260B		11/14/2016	CJR	1
1,1,2-Trichloroethane	< 0.48	ug/l	0.48	1.52	1	8260B		11/14/2016	CJR	1
Trichloroethene (TCE)	< 0.47	ug/l	0.47	1.5	1	8260B		11/14/2016	CJR	1
Trichlorofluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		11/14/2016	CJR	1
1,2,4-Trimethylbenzene	< 1.6	ug/l	1.6	5	1	8260B		11/14/2016	CJR	1
1,3,5-Trimethylbenzene	< 1.5	ug/l	1.5	4.8	1	8260B		11/14/2016	CJR	1
Vinyl Chloride	< 0.17	ug/l	0.17	0.54	1	8260B		11/14/2016	CJR	1
m&p-Xylene	< 2.2	ug/l	2.2	6.9	1	8260B		11/14/2016	CJR	1
o-Xylene	< 0.9	ug/l	0.9	2.9	1	8260B		11/14/2016	CJR	1
SUR - Toluene-d8	105	REC %			1	8260B		11/14/2016	CJR	1
SUR - 1,2-Dichloroethane-d4	97	REC %			1	8260B		11/14/2016	CJR	1
SUR - 4-Bromofluorobenzene	97	REC %			1	8260B		11/14/2016	CJR	1
SUR - Dibromofluoromethane	103	REC %			1	8260B		11/14/2016	CJR	1

Project Name NEWTON PIT **Invoice #** E32056
Project # 60135471

Lab Code 5032056D
Sample ID 3303 HECKER
Sample Matrix Water
Sample Date 11/8/2016

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
VOC's										
Benzene	< 0.44	ug/l	0.44	1.4	1	8260B		11/14/2016	CJR	1
Bromobenzene	< 0.48	ug/l	0.48	1.5	1	8260B		11/14/2016	CJR	1
Bromodichloromethane	< 0.46	ug/l	0.46	1.5	1	8260B		11/14/2016	CJR	1
Bromoform	< 0.46	ug/l	0.46	1.5	1	8260B		11/14/2016	CJR	1
tert-Butylbenzene	< 1.1	ug/l	1.1	3.4	1	8260B		11/14/2016	CJR	1
sec-Butylbenzene	< 1.2	ug/l	1.2	3.8	1	8260B		11/14/2016	CJR	1
n-Butylbenzene	< 1	ug/l	1	3.3	1	8260B		11/14/2016	CJR	1
Carbon Disulfide	< 1.0	ug/l	1	3.2	1	8260B		11/14/2016	CJR	1
Carbon Tetrachloride	< 0.51	ug/l	0.51	1.6	1	8260B		11/14/2016	CJR	1
Chlorobenzene	< 0.46	ug/l	0.46	1.4	1	8260B		11/14/2016	CJR	1
Chloroethane	< 0.65	ug/l	0.65	2.1	1	8260B		11/14/2016	CJR	1
Chloroform	< 0.43	ug/l	0.43	1.4	1	8260B		11/14/2016	CJR	1
Chloromethane	< 1.9	ug/l	1.9	6	1	8260B		11/14/2016	CJR	1
2-Chlorotoluene	< 0.4	ug/l	0.4	1.3	1	8260B		11/14/2016	CJR	1
4-Chlorotoluene	< 0.63	ug/l	0.63	2	1	8260B		11/14/2016	CJR	1
1,2-Dibromo-3-chloropropane	< 1.4	ug/l	1.4	4.5	1	8260B		11/14/2016	CJR	1
Dibromochloromethane	< 0.45	ug/l	0.45	1.4	1	8260B		11/14/2016	CJR	1
1,4-Dichlorobenzene	< 0.49	ug/l	0.49	1.6	1	8260B		11/14/2016	CJR	1
1,3-Dichlorobenzene	< 0.52	ug/l	0.52	1.6	1	8260B		11/14/2016	CJR	1
1,2-Dichlorobenzene	< 0.46	ug/l	0.46	1.5	1	8260B		11/14/2016	CJR	1
Dichlorodifluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		11/14/2016	CJR	1
1,2-Dichloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		11/14/2016	CJR	1
1,1-Dichloroethane	< 1.1	ug/l	1.1	3.6	1	8260B		11/14/2016	CJR	1
1,1-Dichloroethene	< 0.65	ug/l	0.65	2.1	1	8260B		11/14/2016	CJR	1
cis-1,2-Dichloroethene	< 0.45	ug/l	0.45	1.4	1	8260B		11/14/2016	CJR	1
trans-1,2-Dichloroethene	< 0.54	ug/l	0.54	1.7	1	8260B		11/14/2016	CJR	1
1,2-Dichloropropane	< 0.43	ug/l	0.43	1.37	1	8260B		11/14/2016	CJR	1
2,2-Dichloropropane	< 3.1	ug/l	3.1	9.8	1	8260B		11/14/2016	CJR	1
1,3-Dichloropropane	< 0.42	ug/l	0.42	1.3	1	8260B		11/14/2016	CJR	1
Di-isopropyl ether	< 0.44	ug/l	0.44	1.4	1	8260B		11/14/2016	CJR	1
EDB (1,2-Dibromoethane)	< 0.63	ug/l	0.63	2	1	8260B		11/14/2016	CJR	1
Ethylbenzene	< 0.71	ug/l	0.71	2.3	1	8260B		11/14/2016	CJR	1
Hexachlorobutadiene	< 2.2	ug/l	2.2	7.1	1	8260B		11/14/2016	CJR	1
Isopropylbenzene	< 0.82	ug/l	0.82	2.6	1	8260B		11/14/2016	CJR	1
p-Isopropyltoluene	< 1.1	ug/l	1.1	3.5	1	8260B		11/14/2016	CJR	1
Methylene chloride	< 1.3	ug/l	1.3	4.2	1	8260B		11/14/2016	CJR	1
Methyl tert-butyl ether (MTBE)	< 1.1	ug/l	1.1	3.7	1	8260B		11/14/2016	CJR	1
Naphthalene	< 1.6	ug/l	1.6	5.2	1	8260B		11/14/2016	CJR	1
n-Propylbenzene	< 0.77	ug/l	0.77	2.4	1	8260B		11/14/2016	CJR	1
1,1,2,2-Tetrachloroethane	< 0.52	ug/l	0.52	1.7	1	8260B		11/14/2016	CJR	1
1,1,1,2-Tetrachloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		11/14/2016	CJR	1
Tetrachloroethene	< 0.49	ug/l	0.49	1.5	1	8260B		11/14/2016	CJR	1
Toluene	< 0.44	ug/l	0.44	1.4	1	8260B		11/14/2016	CJR	1
1,2,4-Trichlorobenzene	< 1.7	ug/l	1.7	5.6	1	8260B		11/14/2016	CJR	1
1,2,3-Trichlorobenzene	< 2.7	ug/l	2.7	8.6	1	8260B		11/14/2016	CJR	1
1,1,1-Trichloroethane	< 0.84	ug/l	0.84	2.7	1	8260B		11/14/2016	CJR	1
1,1,2-Trichloroethane	< 0.48	ug/l	0.48	1.52	1	8260B		11/14/2016	CJR	1
Trichloroethene (TCE)	< 0.47	ug/l	0.47	1.5	1	8260B		11/14/2016	CJR	1
Trichlorofluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		11/14/2016	CJR	1
1,2,4-Trimethylbenzene	< 1.6	ug/l	1.6	5	1	8260B		11/14/2016	CJR	1
1,3,5-Trimethylbenzene	< 1.5	ug/l	1.5	4.8	1	8260B		11/14/2016	CJR	1
Vinyl Chloride	< 0.17	ug/l	0.17	0.54	1	8260B		11/14/2016	CJR	1
m&p-Xylene	< 2.2	ug/l	2.2	6.9	1	8260B		11/14/2016	CJR	1
o-Xylene	< 0.9	ug/l	0.9	2.9	1	8260B		11/14/2016	CJR	1
SUR - Toluene-d8	109	REC %			1	8260B		11/14/2016	CJR	1
SUR - 1,2-Dichloroethane-d4	95	REC %			1	8260B		11/14/2016	CJR	1
SUR - 4-Bromofluorobenzene	98	REC %			1	8260B		11/14/2016	CJR	1

Project Name NEWTON PIT **Invoice #** E32056
Project # 60135471

Lab Code 5032056D
Sample ID 3303 HECKER
Sample Matrix Water
Sample Date 11/8/2016

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
SUR - Dibromofluoromethane	106	REC %			1	8260B		11/14/2016	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

CHAIN OF CUSTODY RECORD

Synergy
Environmental Lab, Inc.

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

Chain # No 2807

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 #: 60135471

Sampler: (signature) D.S. Henderson

Project (Name / Location): Newton Pit

Reports To: DAVE HENDERSON	Invoice To: SAME
Company AECOM	Company
Address 1555 N Rivercenter Dr	Address
City State Zip Milw WI 53212	City State Zip
Phone 414 429 8304	Phone
FAX	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
5032056A	4005 Thunder	11/8/16	9:46		X	N	3	GW	HCl													X		
B	4101 Thunder		9:26																			X		
C	3504 CTH CR		10:24																			X		
D	3303 Hecker		11:25																			X		

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

Sample Integrity - To be completed by receiving lab.
Method of Shipment: SM
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
D.S. Henderson					

Received in Laboratory By: [signature] Time: 8:00 Date: 11/10/16

Attachment B:

ATSDR Report

PUBLIC HEALTH STATEMENT
CARBON DISULFIDE
CAS#: 75-15-0

Division of Toxicology **August 1996**

This Public Health Statement is the summary chapter from the Toxicological Profile for Carbon Disulfide. It is one in a series of Public Health Statements about hazardous substances and their health effects. A shorter version, the ToxFAQs™ is also available. This information is important because this substance may harm you. The effects of exposure to any hazardous substance depend on the dose, the duration, how you are exposed, personal traits and habits, and whether other chemicals are present. For more information, call the ATSDR Information Center at 1-888-422-8737.

This public health statement tells you about carbon disulfide and the effects of exposure.

The Environmental Protection Agency (EPA) identifies the most serious hazardous waste sites in the nation. These sites make up the National Priorities List (NPL) and are the sites targeted for long-term federal cleanup. Carbon disulfide has been found in at least 200 of the 1,430 current or former NPL sites. However, it's unknown how many NPL sites have been evaluated for this substance. As more sites are evaluated, the sites with carbon disulfide may increase. This information is important because exposure to this substance may harm you and because these sites may be sources of exposure.

When a substance is released from a large area, such as an industrial plant, or from a container, such as a drum or bottle, it enters the environment. This release does not always lead to exposure. You can be exposed to a substance only when you come into contact with it. You may be exposed by breathing, eating, or drinking the substances or by skin contact.

If you are exposed to carbon disulfide, many factors determine whether you'll be harmed. These factors include the dose (how much), the duration (how long), and how you come in contact with it. You must also consider the other chemicals you're exposed to and your age, sex, diet, family traits, life-style, and state of health.

1.1 WHAT IS CARBON DISULFIDE?

Pure carbon disulfide is a colorless liquid with a pleasant odor that smells sweet. The impure carbon disulfide that is usually used in most industrial processes, however, is a yellowish liquid with an unpleasant odor like that of rotting radishes. Carbon disulfide evaporates at room temperature, and the vapor is more than twice as heavy as air. Carbon disulfide easily explodes in air and also catches fire very easily.

In nature, small amounts of carbon disulfide are found in gases released to the earth's surface, for example, in volcanic eruptions or over marshes. Microorganisms in the soil can also produce gas containing carbon disulfide. Commercial carbon disulfide is made by combining carbon and sulfur at very high temperatures. Several industries use carbon disulfide as a raw material to make such things as rayon, cellophane, and carbon tetrachloride. Currently, the largest user of this chemical is the viscose rayon industry. Carbon disulfide is also used to dissolve rubber to produce tires and as a raw material to make some pesticides.

1.2 WHAT HAPPENS TO CARBON DISULFIDE WHEN IT ENTERS THE ENVIRONMENT?

Carbon disulfide evaporates rapidly when released to the environment. The amount of carbon disulfide released into the air through natural processes is difficult to judge because it is in such small amounts in nature. This also makes it hard to monitor carbon disulfide and to explain how it behaves when it comes into contact with other compounds. Most carbon disulfide in the air and in surface water is from manufacturing and processing activities. However, it is found naturally in coastal and ocean waters. Carbon disulfide has also been found in the groundwater and soil at some EPA research sites around the country, but the number of research sites that have carbon disulfide is small.

Once released to the environment, carbon disulfide moves quickly to the air. Once in the air, carbon disulfide stays close to the ground because it is heavier than the surrounding air. It is estimated that carbon disulfide will break down into simpler components after approximately 12 days. Carbon disulfide moves through soils fairly quickly. Carbon disulfide accidentally released to soils normally evaporates rapidly. However, since carbon disulfide does not bind tightly to soils, the amount that does not evaporate can easily move down through the soil into groundwater. Since it is very mobile, it is not likely to stay in the soil long enough to be broken down. It does not remain very long in water either because it evaporates within minutes. However, if dissolved in water, it is relatively stable and is not easily broken down. It is estimated that carbon disulfide is not taken up in significant amounts by the organisms living in water.

1.3 HOW MIGHT I BE EXPOSED TO CARBON DISULFIDE?

Carbon disulfide can enter your body if you breath air, drink water, or eat foods that contain it. You can also be exposed by skin contact with soil, water, or other substances that contain it. Oceans are a major natural source. The amount of carbon disulfide found in the air from natural sources such as volcanoes is so low that good measurements are not available from many areas. One measurement shows that carbon disulfide produced by marshes contributes less than 8% of the sulfur in the upper atmosphere.

Small amounts of carbon disulfide can enter the air by evaporation and as a by-product of several manufacturing processes. It is not clear how long carbon disulfide stays in the air. Estimates range from 1 to 10 weeks. The people most often exposed to carbon disulfide are workers in plants that use carbon disulfide in their manufacturing processes. The main way they are exposed is through the air, and secondarily the skin. Carbon disulfide has also been found in small amounts in some drinking water in the United States.

1.4 HOW CAN CARBON DISULFIDE ENTER AND LEAVE MY BODY?

Most people are exposed to carbon disulfide by breathing air that contains it. Carbon disulfide easily and rapidly enters your bloodstream through the lungs. Carbon disulfide can also enter your body through your skin, or by eating or drinking foods that are contaminated with the chemical. About 10-30% of carbon disulfide that the body absorbs leaves through the lungs; less than 1% leaves in the urine. The rest of the absorbed carbon disulfide (70-

90%) is changed in the body and leaves the body in the urine in the form of other chemicals. Small amounts of carbon disulfide also leave the body in sweat and saliva.

1.5 HOW CAN CARBON DISULFIDE AFFECT MY HEALTH?

At very high levels (10,000 parts of carbon disulfide per million parts [ppm] of air), carbon disulfide may be life threatening because of its effects on the nervous system. Studies in animals show that high levels of carbon disulfide can damage the heart. People who breathed carbon disulfide near an accident involving a railroad car showed changes in breathing and some chest pains. Among workers who breathed about 8 ppm, some developed very slight changes in their nerves. Some workers who breathed more than 20 ppm during working hours for at least 6 months had headaches, tiredness, and trouble sleeping. However, the workers may have been exposed to other chemicals besides carbon disulfide. The current standard for exposure in the workplace is 20 ppm over an 8-hour day and a 5-day work week.

Studies in animals indicate that carbon disulfide can affect the normal functions of the brain, liver, and heart. However, the amount of carbon disulfide in the air to which animals in these studies were exposed was much higher than the amounts in the air that the general public usually breathes. The brains, livers, and hearts of the animals were affected only after breathing air that contained carbon disulfide for days, months, or years. After pregnant rats breathed 225 ppm carbon disulfide in the air, some of the newborn rats died or had birth defects.

There is no information on health effects in people who eat food or drink water contaminated with carbon disulfide. Animals fed food that contained carbon disulfide developed liver and heart disease, and some showed abnormal behavior. These amounts, however, were very much higher than those that occur in drinking water supplies. When pregnant animals received large doses of carbon disulfide in their diet, some of the newborns died or had birth defects.

Skin contact with spilt carbon disulfide can lead to burns at the contact site. In studies that examined the harmful effects of skin contact with carbon disulfide, workers in a rayon plant who handled fibers made with carbon disulfide for more than 14 days developed blisters on their fingers. Rabbits developed blisters and ulcers on the treated areas of their ears.

1.6 IS THERE A MEDICAL TEST TO DETERMINE WHETHER I HAVE BEEN EXPOSED TO CARBON DISULFIDE?

Carbon disulfide itself can be measured in breath, urine, and blood. It breaks down in the body into other chemical substances called metabolites. These substances can be found and measured in the urine. After carbon disulfide enters your body, these substances reach higher levels than normally found. One chemical test using urine can be done to tell whether the levels of these breakdown substances from carbon disulfide are higher than normal. This test requires special equipment and is not routinely available in a doctor's office. The test is not specific for carbon disulfide exposure because other chemicals can also produce these metabolites. Therefore, it cannot be used to find out exactly how much carbon disulfide you were exposed to or to

predict whether you'll be harmed. Also, the test can only be used if you have breathed in at least 16 ppm; this test can be used for determining longer term exposure to carbon disulfide. A second test based on a specific metabolite is more sensitive and specific. It also requires special equipment and cannot tell you exactly how much carbon disulfide you were exposed to or predict whether you'll be harmed. Carbon disulfide leaves the body quickly in the breath and in the urine.

1.7 WHAT RECOMMENDATIONS HAS THE FEDERAL GOVERNMENT MADE TO PROTECT HUMAN HEALTH?

The federal government has set regulations to protect individuals from the possible health effects of eating, drinking, or breathing carbon disulfide. The EPA suggested that taking into your body each day an amount equal to 0.1 mg (milligram) of carbon disulfide per kg (kilogram) of your body weight is not likely to cause any significant (noncancer) harmful health effects.

The Occupational Safety and Health Administration (OSHA) regulates levels of carbon disulfide in the workplace. OSHA requires that workroom air contain no more than an average of 20 ppm of carbon disulfide over an 8-hour working shift for 5 consecutive days in a work week.

The National Institute for Occupational Safety and Health (NIOSH) recommends that the average workroom air levels of carbon disulfide not exceed 1 ppm over a 10-hour period.

1.8 WHERE CAN I GET MORE INFORMATION?

If you have any more questions or concerns, please contact your community or state health or environmental quality department or:

Agency for Toxic Substances and Disease Registry
Division of Toxicology
1600 Clifton Road NE, Mailstop F-32
Atlanta, GA 30333

Information line and technical assistance:

Phone: 888-422-8737
FAX: (770)-488-4178

ATSDR can also tell you the location of occupational and environmental health clinics. These clinics specialize in recognizing, evaluating, and treating illnesses resulting from exposure to hazardous substances.

To order toxicological profiles, contact:

National Technical Information Service
5285 Port Royal Road
Springfield, VA 22161
Phone: 800-553-6847 or 703-605-6000

Reference

Agency for Toxic Substances and Disease Registry (ATSDR). 1996. Toxicological profile for carbon disulfide. Atlanta, GA: U.S. Department of Health and Human Services, Public Health Service.