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January 4, 2016

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

Subject: **October 2015 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 October 2015 sampling event.

Presented below are site background information, sampling methodology, the potable well monitoring results, and an update to 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 portable 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 2015 sampling also includes monitoring conducted since the March 2015 event. In total, 43 well locations were sampled including one data gap well sampled in July 2015 and 42 wells sampled during October and November 2015. Details of the monitoring event are as follows.

On July 7, 2015, the last data gap well was sampled. This well was sampled after the March 2015 sampling event due to the owners being out-of-town for an extended period of time.

July 7, 2015 Data Gap Well
3911 Blackhawk Court

On October 13, 14, 20, and 27, 2015, a total of 42 samples were collected from the target zone and replacement wells:

October 13, 14, 20, and 27, 2015 Sampling Addresses	
3617 (3621) Viebahn Street	3023 CTH CR (Replacement)
3701 Viebahn Street	3120 CTH CR (Replacement)
3815 Viebahn Street	3322 CTH CR
3817 Viebahn Street	3403 CTH CR (Replacement)
3825 Viebahn Street	3504 CTH CR
4025 Viebahn Street	3523 CTH CR
4101 Viebahn Street	3618 CTH CR
4219 Viebahn Street	3626 (3626B) CTH CR
3121 Hecker Road	4101 CTH CR
3303 Hecker Road	4002 Thunder Ridge Road
3327 Hecker Road	4005 Thunder Ridge Road
3461 (3417) Hecker Road	4010 Thunder Ridge Road
3515 Hecker Road (Replacement)	4027 Thunder Ridge Road
3518 Hecker Road (Replacement)	4101 Thunder Ridge Road
3609 Hecker Road (Replacement)	4111 Thunder Ridge Road
3702 Hecker Road	3921 Blackhawk Court
2716 CTH CR	4004 Silver Creek Road
2717 CTH CR (4141 Viebahn Street)	4159 Silver Creek Road
2734 (2804) CTH CR	3027 Orchard Lane
2916 CTH CR	3128 Orchard Lane
2917 CTH CR	3524 Orchard Lane

On November 27, 2015, two wells were re-sampled to confirm enforcement standard exceedances:

November 27, 2015 Confirmation Sampling Addresses	
2917 CTH CR	4002 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.

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

Samples for 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 2015 sampling event are discussed below. During this period AECOM obtained a total of 45 water samples (not including quality control samples) including 43 initial samples and two confirmation samples.

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 wells sampled. The laboratory analytical reports are provided in Attachment A.

Field Screening Results

Field screening measurements for pH, temperature, conductivity, dissolved oxygen, and oxidation reduction potential provide general indications of water quality. Field screening data are summarized in Table 2.

Laboratory Analytical Results

The laboratory analytical data indicates that contaminant compounds are present in some of the potable well water samples.

The concentration of the COCs found in the potable well water samples were compared to applicable WAC Chapter NR 140 Table 1 Public Health enforcement standards (ESs) and preventive action limits (PALs).

The laboratory analytical results are presented categorically as follows:

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

Potable Wells with NR 140 COC ES Exceedences:
There were a total of 11 potable wells with vinyl chloride ES exceedance’s and detectable concentrations of cis-1,2-dichloroethene below regulatory limits. They are:

ES Exceedances of Vinyl Chloride	
3303 Hecker Road	3617 Viebahn Street
2717 CTH CR (4141 Viebahn St.)	3701 Viebahn Street
2734 (2804) CTH CR	3815 Viebahn Street
2916 CTH CR	4025 Viebahn Street
2917 CTH CR	4101 Viebahn Street
4002 Thunder Ridge Road	

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

Detected COCs with No Regulatory Exceedences:
There were a total of 13 wells that only had a single COC (cis-1,2-dichloroethene) below regulatory limits.

Cis-1,2-dichloroethene Detects	
3327 Hecker Road	4101 Thunder Ridge Road
3461 (3417) Hecker Road	3504 CTH CR
3702 Hecker Road	3618 CTH CR
4159 Silver Creek Road	3817 Viebahn Street
4005 Thunder Ridge Road	3027 Orchard Lane
4010 Thunder Ridge Road	3921 Black Hawk Court
4027 Thunder Ridge Road	

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 sampled wells with all laboratory results. The laboratory analytical reports are provided in Attachment A.

Observed Changes in Analytical Results since the Last Monitoring Event:
The following changes were noted in the analytical results since the March 2015 sampling event:

- The following well went from no detectable VOCs to an vinyl chloride ES exceedance with a cis-1,2-dichloroethene detect below regulatory limits :
    - 3303 Hecker Road
    - 2917 CTH CR

- The following well went from a cis-1,2-dichloroethene detect below regulatory limits to an vinyl chloride ES exceedance with a continued cis-1,2-dichloroethene detect below regulatory limits:
    - 4002 Thunder Ridge Road

- The following wells had a change in vinyl chloride from a PAL exceedance to an ES exceedance with a continued cis-1,2-dichloroethene detect below regulatory limits:
    - 3617 (3621) Viebahn Street
    - 2916 CTH CR

- The following well had a change in vinyl chloride from a PAL exceedance to a non-detect with a continued cis-1,2-dichloroethene detect below regulatory limits:
    - 3504 CTH CR

- The following wells had a change in cis-1,2-dichloroethene from a non-detect below the MDL to above the MDL but below the PAL
    - 3702 Hecker Road
    - 3027 Orchard Lane
    - 3817 Viebahn Street

UPDATES TO POTABLE WELL MONITORING WORK PLAN

The WDNR approved 2015 to 2016 Semi-Annual Potable Well Monitoring Work Plan sampling schedule has been updated to reflect the following:

- Based on the October 2015 analytical results, 2917 CTH CR was re-categorized from a Sentinel Zone Well to a Target Zone Well. Note: this address will also be provided City water as noted below.
- The extension of a City of Manitowoc, Public Utility District, water main along Viebahn Street and south along a section of CTH CR will provide City water to the following nine addresses:
    - 3617(3621) Viebahn Street
    - 3701 Viebahn Street
    - 3815 Viebahn Street
    - 4025 Viebahn Street
    - 4101 Viebahn Street
    - 4141 Viebahn Street (2717 CTH CR)
    - 2734(2804) CTH CR
    - 2916 CTH CR
    - 2917 CTH CR
- Of the nine addresses provided City water, three of them will keep their well for non-potable use and for future groundwater monitoring. The six other potable wells will be abandoned in accordance with State code. The three addresses keeping their wells are:
    - 3617(3621) Viebahn Street
    - 3701 Viebahn Street
    - 4141 Viebahn Street (2717 CTH CR)

The updates are presented on Table 3 and on Figure 3, attached.

SUMMARY

The following is a summary of the impacted wells sampled during the October 2015 potable well monitoring event.

Analytical results indicate NR 140 ES standard exceedances for vinyl chloride in the following 11 wells:

- 3303 Hecker Road
- 2717 CTH CR (4141 Viebahn St.)
- 2734 (2804) CTH CR
- 2916 CTH CR
- 2917 CTH CR
- 4002 Thunder Ridge Road
- 3617 Viebahn Street
- 3701 Viebahn Street
- 3815 Viebahn Street
- 4025 Viebahn Street
- 4101 Viebahn Street

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Analytical results from 13 potable well water samples indicate a single contaminant of concern (cis-1,2-dichloroethene) below regulatory limits:

The second semi-annual potable well monitoring event is scheduled for April 2016. The sampling will be conducted in accordance with the updated 2015 to 2016 Semi-Annual Potable Well Monitoring Work Plan sampling schedule.

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

Yours sincerely,

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Cc: Kathleen M. McDaniel, City Attorney, City of Manitowoc
Dan Koski, Director of Public Infrastructure, City of Manitowoc

Attachments: Tables, Figures, Attachment A: Laboratory Reports

AECOM

Tables:

Table 1
SUMMARY OF CONTAMINANTS DETECTED IN POTABLE WELLS

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

Analyte	ES[1]	PAL[2]	3303 Hecker Rd.						
			10/23/13	11/7/13	6/3/14	6/3/14(DUP)	11/17/14	2/23/15	10/13/15
			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
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
cis-1,2-Dichloroethene	70	7	< 0.38	< 0.38	0.68 J	0.68 J	< 0.38	< 0.45	1.94
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	< 0.18	< 0.18	< 0.18	< 0.17	**0.44 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

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
			Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot	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
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
cis-1,2-Dichloroethene	70	7	**11**	**11.6**	6.4	6.9	5.6	4.3	4.2
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	< 0.18	< 0.18	< 0.18	< 0.17	< 0.17
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

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
			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
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
cis-1,2-Dichloroethene	70	7	2.58	2.15	2.12	1.79	1.49	1.59	1.6
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	< 0.18	< 0.18	< 0.18	< 0.17	< 0.17
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]	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
			Outside Spigot	Outside Spigot	Inside Kitchen	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	NA	< 0.24	< 0.24	< 0.24	< 0.24	< 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
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
cis-1,2-Dichloroethene	70	7	**7.4**	**7.2**	**7.4**	NA	**10**	**7.8**	< 0.38	< 0.38	< 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
Toluene	800	160	< 0.69	< 0.69	< 0.69	NA	< 0.69	< 0.69	< 0.69	< 0.69	< 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
RCRA Metals (mg/L)												
Arsenic	0.01	0.001	NA	NA	NA	**0.0019**	NA	NA	NA	NA	NA	NA
Barium	2	0.4	NA	NA	NA	0.15	NA	NA	NA	NA	NA	NA
Lead	0.015	0.0015	NA	NA	NA	0.00034 J	NA	NA	NA	NA	NA	NA
Mercury	0.002	0.0002	NA	NA	NA	0.000061 J	NA	NA	NA	NA	NA	NA

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

Analyte	ES[1]	PAL[2]	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
			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
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
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
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
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
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
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
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
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

TABLE 1

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

Analyte	ES[1]	PAL[2]	3609 Hecker Rd.												
			Original Potable Well									Replacement Potable Well			
			10/22/13	11/7/13	11/7/13	11/22/13	5/28/14	5/28/14(DUP)	7/11/14	8/25/16	8/25/14(DUP)	9/29/14	11/4/14	2/24/15	10/13/15
			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
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
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
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
cis-1,2-Dichloroethene	70	7	**45**	**45**	**46**	NA	**49**	**49**	**51**	**35**	**36**	< 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
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
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
RCRA Metals (mg/L)															
Arsenic	0.01	0.001	NA	NA	NA	0.00032 J	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
Lead	0.015	0.0015	NA	NA	NA	0.00056 J	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

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)
			Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot
Volatile Organic Compounds (VOCs) (µg/L):									
Benzene	5	0.5	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.44	< 0.44
1,2-Dichloroethane	5	0.5	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.48	< 0.48
1,1-Dichloroethene	7	0.7	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.65	< 0.65
cis-1,2-Dichloroethene	70	7	0.71 J	0.61 J	< 0.38	< 0.38	< 0.38	0.48 J	0.73 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	< 0.18	< 0.18	< 0.18	< 0.17	< 0.17
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

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
			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
1,2-Dichloroethane	5	0.5	< 0.41	< 0.41	< 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	< 0.4	< 0.4	< 0.65	< 0.65
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
trans-1,2-Dichloroethene	100	20	< 0.35	< 0.35	< 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	< 0.69	< 0.69	< 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
RCRA Metals (mg/L)											
Arsenic	0.01	0.001	NA	NA	NA	NA	NA	NA	NA	NA	NA
Barium	2	0.4	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead	0.015	0.0015	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mercury	0.002	0.0002	NA	NA	NA	NA	NA	NA	NA	NA	NA

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

Analyte	ES[1]	PAL[2]	2717 CTH CR(4141 Viebahn St.)						2734(2804) CTH CR						
			8/25/14	9/8/14	9/8/14(DUP)	11/10/14	2/23/15	10/13/15	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	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	< 0.44	< 0.44	< 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	< 0.54	< 0.48	< 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	< 0.65	< 0.65	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.65	< 0.65
cis-1,2-Dichloroethene	70	7	1.4	1.31	1.44	1.3	1.26 J	1.72	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	< 0.54	< 0.54	< 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	< 0.44	< 0.44	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 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**	< 0.18	< 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	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

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

Analyte	ES[1]	PAL[2]	2916 CTH CR								2917 CTH CR				
			2/4/14	5/28/14	8/25/14	11/10/14	11/25/14	3/11/15	3/11/2015 (DUP)	10/13/15	2/4/14	5/30/14	10/13/15	10/27/15	10/27/15 (DUP)
			Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Kitchen Sink	Kitchen Sink	Spigot	Spigot	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	< 0.24	< 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	< 0.41	< 0.41	< 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	< 0.4	< 0.4	< 0.65	< 0.65	< 0.65
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	< 0.38	< 0.38	1.6	1.41	1.67
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	< 0.54	< 0.54	< 0.54
Toluene	800	160	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.44	< 0.44	< 0.44	< 0.69	< 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**	< 0.18	< 0.18	**0.43 J**	**0.37 J**	**0.37 J**
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

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

Analyte	ES[1]	PAL[2]	3023 CTH CR						
			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
			Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot
Volatile Organic Compounds (VOCs) (µg/L):									
Benzene	5	0.5	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.44	< 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
cis-1,2-Dichloroethene	70	7	2.84	2.87	2.34	< 0.38	< 0.38	< 0.45	< 0.45
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	**0.55 J**	**0.41 J**	**0.33 J**	< 0.18	< 0.18	< 0.17	< 0.17
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

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

Analyte	ES[1]	PAL[2]	3120 CTH CR									
			Original Potable Well						Replacement Potable Well			
			1/3/14	2/4/14	5/28/14	5/28/14(DUP)	8/25/14	8/25/14(DUP)	10/8/14	11/4/14	2/23/15	10/13/15
			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
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
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
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
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
Toluene	800	160	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 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
RCRA Metals (mg/L)												
Arsenic	0.01	0.001	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Barium	2	0.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead	0.015	0.0015	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mercury	0.002	0.0002	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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

Analyte	ES[1]	PAL[2]	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
			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
1,2-Dichloroethane	5	0.5	< 0.41	< 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	< 0.4	< 0.65	< 0.65
cis-1,2-Dichloroethene	70	7	1.3	1.67	1.48	1.34	< 0.38	< 0.38	< 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
Toluene	800	160	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 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
RCRA Metals (mg/L)										
Arsenic	0.01	0.001	NA	NA	NA	NA	NA	NA	NA	NA
Barium	2	0.4	NA	NA	NA	NA	NA	NA	NA	NA
Lead	0.015	0.0015	NA	NA	NA	NA	NA	NA	NA	NA
Mercury	0.002	0.0002	NA	NA	NA	NA	NA	NA	NA	NA

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

Analyte	ES[1]	PAL[2]	3504 CTH CR											
			12/5/13	1/6/14	1/6/2014 (DUP)	2/5/14	5/30/14	5/30/14(DUP)	8/25/14	8/25/14(DUP)	11/18/14	11/18/2014 (DUP)	2/23/15	10/14/15
			Outside Spigot	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
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
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
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
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
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
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
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]	3618 CTH CR						4002 Thunder Ridge Rd.				
			1/3/14	5/29/14	8/25/14	11/10/14	2/23/15	10/14/15	1/3/14	8/25/14	10/13/15	10/13/2015 (DUP)	10/27/15
			Kitchen Sink	Kitchen Sink	Kitchen Sink	Kitchen Sink	Kitchen Sink	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	< 0.24	< 0.24	< 0.44	< 0.44	< 0.44
1,2-Dichloroethane	5	0.5	< 0.41	< 0.41	< 0.41	< 0.41	< 0.54	< 0.48	< 0.41	< 0.41	< 0.48	< 0.48	< 0.48
1,1-Dichloroethene	7	0.7	< 0.4	< 0.4	< 0.4	< 0.4	< 0.65	< 0.65	< 0.4	< 0.4	< 0.65	< 0.65	< 0.65
cis-1,2-Dichloroethene	70	7	1.24	1.16 J	0.48 J	0.83 J	0.95 J	0.89 J	1.67	1.29	1.3 J	1.14 J	1.26 J
trans-1,2-Dichloroethene	100	20	< 0.35	< 0.35	< 0.35	< 0.35	< 0.54	< 0.54	< 0.35	< 0.35	< 0.54	< 0.54	< 0.54
Toluene	800	160	< 0.69	< 0.69	< 0.69	< 0.69	< 0.44	< 0.44	< 0.69	< 0.69	< 0.44	< 0.44	< 0.44
Vinyl Chloride	0.2	0.02	< 0.18	< 0.18	< 0.18	< 0.18	< 0.17	< 0.17	< 0.18	< 0.18	< 0.17	**0.2 J**	**0.18 J**
RCRA Metals (mg/L)													
Arsenic	0.01	0.001	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Barium	2	0.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead	0.015	0.0015	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mercury	0.002	0.0002	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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

Analyte	ES[1]	PAL[2]	4005 Thunder Ridge Rd.					4010 Thunder Ridge Rd.			
			5/29/14	8/26/14	11/11/14	2/23/15	10/14/15	5/28/14	8/26/14	2/24/15	10/20/15
			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	< 0.24	< 0.44	< 0.44	< 0.24	< 0.24	< 0.44	< 0.44
1,2-Dichloroethane	5	0.5	< 0.41	< 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	< 0.4	< 0.65	< 0.65	< 0.4	< 0.4	< 0.65	< 0.65
cis-1,2-Dichloroethene	70	7	0.83 J	0.9 J	< 0.38	0.81 J	0.91 J	1.37	1.18 J	1.43	1.27 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
Toluene	800	160	< 0.69	< 0.69	< 0.69	< 0.44	< 0.44	< 0.69	< 0.69	< 0.44	< 0.44
Vinyl Chloride	0.2	0.02	< 0.18	< 0.18	< 0.18	< 0.17	< 0.17	< 0.18	< 0.18	< 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

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

Analyte	ES[1]	PAL[2]	4027 Thunder Ridge Rd.						4101 Thunder Ridge Rd.			
			5/29/14	8/26/14	11/11/14	11/11/14 (DUP)	2/24/15	10/13/15	8/26/14	11/17/14	3/11/15	10/14/15
			Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot	Pressure Tank	Pressure Tank	Outside Spigot	Outside Spigot	Pressure Tank	Outside Spigot
Volatile Organic Compounds (VOCs) (µg/L):												
Benzene	5	0.5	< 0.24	< 0.24	< 0.24	< 0.24	< 0.44	< 0.44	< 0.24	< 0.24	< 0.44	< 0.44
1,2-Dichloroethane	5	0.5	< 0.41	< 0.41	< 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	< 0.4	< 0.4	< 0.65	< 0.65	< 0.4	< 0.4	< 0.65	< 0.65
cis-1,2-Dichloroethene	70	7	0.59 J	0.52 J	0.6 J	0.53 J	0.48 J	0.67 J	0.73 J	0.63 J	0.76 J	0.87 J
trans-1,2-Dichloroethene	100	20	< 0.35	< 0.35	< 0.35	< 0.35	< 0.54	< 0.54	< 0.35	< 0.35	< 0.54	< 0.54
Toluene	800	160	< 0.69	< 0.69	< 0.69	< 0.69	< 0.44	< 0.44	< 0.69	< 0.69	< 0.44	< 0.44
Vinyl Chloride	0.2	0.02	< 0.18	< 0.18	< 0.18	< 0.18	< 0.17	< 0.17	< 0.18	< 0.18	< 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]	4111 Thunder Ridge Rd.				3617 Viebahn St.				
			8/25/14	11/17/14	2/23/15	10/13/15	11/7/14	11/19/14	2/24/15	2/2415 (DUP)	10/13/15
			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	< 0.44	< 0.44	< 0.24	< 0.24	< 0.44	< 0.44	< 0.44
1,2-Dichloroethane	5	0.5	< 0.41	< 0.41	< 0.54	< 0.48	< 0.41	< 0.41	< 0.54	< 0.54	< 0.48
1,1-Dichloroethene	7	0.7	< 0.4	< 0.4	< 0.65	< 0.65	< 0.4	< 0.4	< 0.65	< 0.65	< 0.65
cis-1,2-Dichloroethene	70	7	0.41 J	< 0.38	< 0.45	< 0.45	1.13 J	1.12 J	0.92 J	0.87 J	1.3 J
trans-1,2-Dichloroethene	100	20	< 0.35	< 0.35	< 0.54	< 0.54	< 0.35	< 0.35	< 0.54	< 0.54	< 0.54
Toluene	800	160	< 0.69	< 0.69	< 0.44	< 0.44	< 0.69	< 0.69	< 0.44	< 0.44	< 0.44
Vinyl Chloride	0.2	0.02	< 0.18	< 0.18	< 0.17	< 0.17	**0.48 J**	**0.4 J**	< 0.17	**0.18 J**	**0.23 J**
RCRA Metals (mg/L)											
Arsenic	0.01	0.001	NA	NA	NA	NA	NA	NA	NA	NA	NA
Barium	2	0.4	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead	0.015	0.0015	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mercury	0.002	0.0002	NA	NA	NA	NA	NA	NA	NA	NA	NA

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.							3815 Viebahn St.				
			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)
			Pressure Tank	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	< 0.44	< 0.44	< 0.44	< 0.44	< 0.24	< 0.24	< 0.24	< 0.44	< 0.44
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
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
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 J	1.12 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
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
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**
RCRA Metals (mg/L)														
Arsenic	0.01	0.001	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Barium	2	0.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead	0.015	0.0015	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mercury	0.002	0.0002	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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

Analyte	ES[1]	PAL[2]	3817 Viebahn St.				4025 Viebahn St.				4101 Viebahn St.			
			10/29/14	11/7/14	2/24/15	10/20/15	10/29/14	11/7/14	2/24/15	10/13/15	10/29/14	11/7/15	2/24/15	10/14/15
			Outside Spigot	Outside Spigot	Pressure Tank	Outside Spigot	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank
Volatile Organic Compounds (VOCs) (µg/L):														
Benzene	5	0.5	< 0.24	< 0.24	< 0.44	< 0.44	< 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	< 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	< 0.4	< 0.4	< 0.65	< 0.65
cis-1,2-Dichloroethene	70	7	0.4 J	< 0.38	< 0.45	0.49 J	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	< 0.35	< 0.35	< 0.54	< 0.54
Toluene	800	160	< 0.69	< 0.69	< 0.44	< 0.44	0.95 J	< 0.69	< 0.44	< 0.44	< 0.69	< 0.69	< 0.44	< 0.44
Vinyl Chloride	0.2	0.02	< 0.18	< 0.18	< 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**
RCRA Metals (mg/L)														
Arsenic	0.01	0.001	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Barium	2	0.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead	0.015	0.0015	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mercury	0.002	0.0002	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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

Analyte	ES[1]	PAL[2]	3027 Orchard Ln.						3921 Black Hawk Ct.					
			2/5/14	6/4/14	8/28/14	11/11/14	3/11/15	10/14/15	2/4/14	6/2/14	8/26/14	11/10/14	2/24/15	10/14/15
			Pressure Tank	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	< 0.44	< 0.44	< 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	< 0.54	< 0.48	< 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	< 0.65	< 0.65	< 0.4	< 0.4	< 0.4	< 0.4	< 0.65	< 0.65
cis-1,2-Dichloroethene	70	7	0.47 J	0.39 J	0.49 J	< 0.38	< 0.45	0.59 J	0.87 J	0.97 J	1.14 J	0.65 J	0.93 J	1.04 J
trans-1,2-Dichloroethene	100	20	< 0.35	< 0.35	< 0.35	< 0.35	< 0.54	< 0.54	< 0.35	< 0.35	< 0.35	< 0.35	< 0.54	< 0.54
Toluene	800	160	< 0.69	< 0.69	< 0.69	< 0.69	< 0.44	< 0.44	< 0.69	< 0.69	< 0.69	< 0.69	< 0.44	< 0.44
Vinyl Chloride	0.2	0.02	< 0.18	< 0.18	< 0.18	< 0.18	< 0.17	< 0.17	< 0.18	< 0.18	< 0.18	< 0.18	< 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

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

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

			3114 Hecker Rd.			3121 Hecker Rd.				3303 Hecker Rd.						
			10/22/13	11/8/13	5/28/14	10/22/13	11/7/13	5/28/14	10/14/15	10/23/13	11/7/13	6/3/14	6/3/14(DUP)	11/17/14	2/23/15	10/13/15
Analyte	**ES[1]**	**PAL[2]**	Outside Spigot	Outside Spigot	Outside Spigot	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	< 0.44	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 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
Bromochloromethane	NL	NL	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
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
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
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
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
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
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
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
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
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
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
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
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
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
Dibromomethane	NL	NL	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
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
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
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
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
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-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
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
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
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
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
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
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	< 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
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
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
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
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
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
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
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
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
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
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	< 0.52	< 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	< 0.33	< 0.33	< 0.33	< 0.33	< 0.48	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.48	< 0.48
Tetrachloroethene	5	0.5	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.49	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.74	< 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
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
1,2,3-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
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
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
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
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
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	< 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
1,3,5-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
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
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**
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
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
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

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.						
			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
Analyte	**ES[1]**	**PAL[2]**	Outside Spigot	Outside Spigot	Outside Spigot	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
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)	--	--	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
Conductivity (uS)	--	--	617	443	502	877	635	689	785	585	538	538	538	587	618	531
Temperature (^{o}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
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
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

TABLE 2

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

Analyte	ES[1]	PAL[2]	3320 Hecker Rd.			3327 Hecker Rd.							3461(3417) Hecker Rd.						
			10/22/13	11/7/13	5/28/14	10/23/13	11/7/13	5/28/14	8/25/14	11/10/14	2/23/15	10/14/15	10/24/13	11/12/13	5/30/14	8/26/14	11/10/14	2/24/15	10/13/15
			Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot	Kitchen Sink	Outside Spigot	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	< 0.24	< 0.24	< 0.24	< 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	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 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
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	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.46	< 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	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.46	< 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	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 1.1	< 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	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 1.2	< 1.2
n-Butylbenzene	NL	NL	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 1	< 1	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 1	< 1
Carbon Tetrachloride	5	0.5	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.65	< 0.51	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.65	< 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	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.46	< 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	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.65	< 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	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.43	< 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	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81	< 1.9	< 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	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.4	< 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	< 0.21	< 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	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88	< 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	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 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
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	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.49	< 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	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.52	< 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	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.46	< 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	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.87	< 0.87
1,2-Dichloroethane	5	0.5	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.54	< 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	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 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	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 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	< 0.38	**11**	**11.6**	6.4	6.9	5.6	4.3	4.2	2.58	2.15	2.12	1.79	1.49	1.59	1.6
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	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.54	< 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	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.43	< 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	< 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	< 0.33	< 0.42	< 0.33	< 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
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
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
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	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.44	< 0.44
EDB (1,2-Dibromoethane)	0.05	0.005	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 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	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 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	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 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	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 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	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 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	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 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	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 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	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 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	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 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
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	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.52	< 0.52
1,1,1,2-Tetrachloroethane	70	7	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 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	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.74	< 0.49	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.74	< 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	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.44	< 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	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 1.7	< 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	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 2.7	< 2.7
1,1,1-Trichloroethane	200	40	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 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	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 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	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 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	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 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
1,2,4-Trimethylbenzene	--	--	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 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	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 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	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 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	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.17	< 0.17	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.17	< 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	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 2.2	< 2.2
o-Xylene	--	--	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.9	< 0.9	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.9	< 0.9
Total Xylenes	2,000	400	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.9	< 2.2	< 0.69	< 0.69	< 0.69	< 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

			3320 Hecker Rd.			3327 Hecker Rd.							3461(3417) Hecker Rd.						
			10/22/13	11/7/13	5/28/14	10/23/13	11/7/13	5/28/14	8/25/14	11/10/14	2/23/15	10/14/15	10/24/13	11/12/13	5/30/14	8/26/14	11/10/14	2/24/15	10/13/15
Analyte	**ES[1]**	**PAL[2]**	Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot	Kitchen Sink	Outside Spigot	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
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
Beryllium	0.004	0.0004	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
Chromium	0.1	0.01	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
Iron	0.3	0.15	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
Manganese	0.05	0.025	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
Nickel	0.1	0.02	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
Sliver	0.05	0.01	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
Thallium	0.002	0.0004	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
Poychlorinated Biphenyls (PCBs) (µg/L):																			
Aroclor-1016	--	--	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
Aroclor-1232	--	--	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
Aroclor-1248	--	--	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
Aroclor-1260	--	--	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
Field Screening Measurements																			
pH (IU)	--	--	7.66	7.99	7.78	8.38	7.82	7.81	7.72	8.04	8.13	7.38	7.55	7.27	7.45	7.89	7.81	7.83	7.94
Conductivity (uS)	--	--	598	455	477	620	478	528	603	596	614	590	723	554	562	721	733	771	748
Temperature (^{o}C)	--	--	10.41	9.78	11	10.96	8.62	10.2	12.6	10.35	6.16	11.34	10.5	9.43	11.9	14.1	10.72	7.91	8.25
Dissolved Oxygen (ppm)	--	--	4.03	6.51	0.89	3.22	6.69	1.11	1.89	1.23	4.15	4.78	4.73	17.93	1.53	0.95	2.47	4.12	3.49
Redox Potential (mV)	--	--	56	86.7	50	53.7	93.9	71	146	-14.5	-144.2	16.5	69	91.7	146	237	-112.9	-164.9	-91.6

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
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
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
Bromobenzene	NL	NL	< 0.32	< 0.32	< 0.32	NA	< 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
Bromodichloromethane	0.6	0.06	< 0.37	< 0.37	< 0.37	NA	< 0.37	< 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	< 0.46	< 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
sec-Butylbenzene	NL	NL	< 0.33	< 0.33	< 0.33	NA	< 0.33	< 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	< 1	< 1
Carbon Tetrachloride	5	0.5	< 0.33	< 0.33	< 0.33	NA	< 0.33	< 0.33	< 0.33	< 0.33	< 0.65	< 0.51
Chlorobenzene	NL	NL	< 0.24	< 0.24	< 0.24	NA	< 0.24	< 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	< 0.65	< 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
Chloromethane	3	0.3	**1.02 J**	< 0.81	< 0.81	NA	< 0.81	< 0.81	< 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	< 0.4	< 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
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
Dibromochloromethane	60	6	< 0.22	< 0.22	< 0.22	NA	< 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
1,4-Dichlorobenzene	75	15	< 0.3	< 0.3	< 0.3	NA	< 0.3	< 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	< 0.52	< 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
Dichlorodifluoromethane	1000	200	< 0.44	< 0.44	< 0.44	NA	< 0.44	< 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	< 0.54	< 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-Dichloroethene	7	0.7	< 0.4	< 0.4	< 0.4	NA	< 0.4	< 0.4	< 0.4	< 0.4	< 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
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
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
2,2-Dichloropropane	NL	NL	< 0.36	< 0.36	< 0.36	NA	< 0.36	< 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	< 0.42	< 0.33
1,1-Dichloropropene	NL	NL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
cis-1,3-Dichloropropene	0.4	0.04	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
trans-1,3-Dichloropropene	0.4	0.04	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Di-isopropyl ether	NL	NL	< 0.23	< 0.23	< 0.23	NA	< 0.23	< 0.23	< 0.23	< 0.23	< 0.44	< 0.44
EDB (1,2-Dibromoethane)	0.05	0.005	< 0.44	< 0.44	< 0.44	NA	< 0.44	< 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	< 0.71	< 0.71
Hexachlorobutadiene	NL	NL	< 1.5	< 1.5	< 1.5	NA	< 1.5	< 1.5	< 1.5	< 1.5	< 2.2	< 2.2
Isopropylbenzene	NS	NS	< 0.3	< 0.3	< 0.3	NA	< 0.3	< 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	< 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
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
Naphthalene	100	10	< 1.7	< 1.7	< 1.7	NA	< 1.7	< 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	< 0.77	< 0.77
Styrene	100	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1,2,2-Tetrachloroethane	0.2	0.02	< 0.45	< 0.45	< 0.45	NA	< 0.45	< 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	< 0.48	< 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
Toluene	800	160	< 0.69	< 0.69	< 0.69	NA	< 0.69	< 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	< 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
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
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
Trichloroethene (TCE)	5	0.5	< 0.33	< 0.33	< 0.33	NA	< 0.33	< 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	< 0.87	< 0.87
1,2,3-Trichloropropane	60	12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2,4-Trimethylbenzene	--	--	< 2.2	< 2.2	< 2.2	NA	< 2.2	< 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	< 1.5	< 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
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
m&p-Xylene	--	--	< 0.69	< 0.69	< 0.69	NA	< 0.69	< 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	< 0.9	< 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

TABLE 2

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

Analyte	ES[1]	PAL[2]	3515 Hecker Rd.									
			Original Potable Well						Replacement Potable Well			
			10/22/13	11/7/13	11/7/13	11/22/13	5/28/14	8/28/14	9/29/14	11/4/14	2/23/15	10/14/15
			Outside Spigot	Outside Spigot	Inside Kitchen	Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot	Pressure Tank	Pressure Tank
~~RCRA Metals (mg/L)~~												
Antimony	0.006	0.0012	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Arsenic	0.01	0.001	NA	NA	NA	**0.0019**	NA	NA	NA	NA	NA	NA
Barium	2	0.4	NA	NA	NA	0.15	NA	NA	NA	NA	NA	NA
Beryllium	0.004	0.0004	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium	0.005	0.0005	NA	NA	NA	< 0.00016	NA	NA	NA	NA	NA	NA
Chromium	0.1	0.01	NA	NA	NA	< 0.00054	NA	NA	NA	NA	NA	NA
Copper	1.3	0.13	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Iron	0.3	0.15	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead	0.015	0.0015	NA	NA	NA	0.00034 J	NA	NA	NA	NA	NA	NA
Manganese	0.05	0.025	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mercury	0.002	0.0002	NA	NA	NA	0.000061 J	NA	NA	NA	NA	NA	NA
Nickel	0.1	0.02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Selenium	0.05	0.01	NA	NA	NA	< 0.00038	NA	NA	NA	NA	NA	NA
Sliver	0.05	0.01	NA	NA	NA	< 0.00031	NA	NA	NA	NA	NA	NA
Sodium	increase of 10		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Thallium	0.002	0.0004	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Zinc	5	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Poychlorinated Biphenyls (PCBs) (µg/L):												
Aroclor-1016	--	--	NA	NA	NA	< 0.02	NA	NA	NA	NA	NA	NA
Aroclor-1221	--	--	NA	NA	NA	< 0.024	NA	NA	NA	NA	NA	NA
Aroclor-1232	--	--	NA	NA	NA	< 0.021	NA	NA	NA	NA	NA	NA
Aroclor-1242	--	--	NA	NA	NA	< 0.024	NA	NA	NA	NA	NA	NA
Aroclor-1248	--	--	NA	NA	NA	< 0.014	NA	NA	NA	NA	NA	NA
Aroclor-1254	--	--	NA	NA	NA	< 0.018	NA	NA	NA	NA	NA	NA
Aroclor-1260	--	--	NA	NA	NA	< 0.015	NA	NA	NA	NA	NA	NA
Total PCBs	0.03	0.003	NA	NA	NA	< 0.024	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
Conductivity (uS)	--	--	775	634	616	NM	694	783	NM	NM	2219	2127
Temperature (°C)	--	--	9.56	10.1	10.48	NM	10.6	11.7	NM	NM	7.19	11.73
Dissolved Oxygen (ppm)	--	--	3.81	5.75	5.46	NM	2.13	1.73	NM	NM	5.19	1.85
Redox Potential (mV)	--	--	20.1	74.8	91.8	NM	92	231	NM	NM	-154.6	-51

TABLE 2

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

Analyte	ES[1]	PAL[2]	3518 Hecker Rd.													
			Original Potable Well			Replacement Potable Well										
			10/23/13	11/7/13	11/7/13	3/11/14	3/11/14	3/31/14	4/22/14	5/29/14	5/29/14(DUP)	8/25/14	11/10/14	2/23/15	10/14/15
			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
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
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
Bromochloromethane	NL	NL	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
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
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
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
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
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
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
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
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
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
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
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
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
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
Dibromomethane	NL	NL	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
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
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
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
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
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-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
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
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
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
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
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
1,1-Dichloropropene	NL	NL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
cis-1,3-Dichloropropene	0.4	0.04	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
trans-1,3-Dichloropropene	0.4	0.04	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Di-isopropyl ether	NL	NL	< 0.23	< 2.3	< 2.3	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 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
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
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
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
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
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
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
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
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
Styrene	100	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1,2,2-Tetrachloroethane	0.2	0.02	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.52	< 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
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
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
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
1,2,3-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
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
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
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
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
1,2,3-Trichloropropane	60	12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2,4-Trimethylbenzene	--	--	< 2.2	< 22	< 22	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 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
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
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
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
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
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

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
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
RCRA Metals (mg/L)															
Antimony	0.006	0.0012	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Arsenic	0.01	0.001	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Barium	2	0.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Beryllium	0.004	0.0004	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium	0.005	0.0005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium	0.1	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Copper	1.3	0.13	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Iron	0.3	0.15	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead	0.015	0.0015	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese	0.05	0.025	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mercury	0.002	0.0002	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nickel	0.1	0.02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Selenium	0.05	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sliver	0.05	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sodium	increase of 10		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Thallium	0.002	0.0004	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Zinc	5	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Poychlorinated Biphenyls (PCBs) (µg/L):															
Aroclor-1016	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1221	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1232	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1242	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1248	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1254	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1260	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total PCBs	0.03	0.003	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Field Screening Measurements															
pH (IU)	--	--	6.16	7.48	7.4	NM	NM	NM	NM	7.37	7.37	7.9	7.74	8.00	7.23
Conductivity (uS)	--	--	744	554	554	NM	NM	NM	NM	1571	1571	2080	1942	1948	2078
Temperature (^{o}C)	--	--	9.89	9.36	10.58	NM	NM	NM	NM	11.2	11.2	12.5	10.11	7.33	13.37
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
Redox Potential (mV)	--	--	74.1	92	93.1	NM	NM	NM	NM	-190	-190	178	-109.4	-123.8	-90

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	10/22/13	11/7/13	11/7/13
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	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	< 0.24	< 0.24	< 0.24
Bromobenzene	NL	NL	< 0.32	< 0.32	< 0.32	NA	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 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
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	< 0.37	< 0.37	< 0.37
Bromoform	4.4	0.44	< 0.35	< 0.35	< 0.35	NA	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.46	< 0.46	< 0.35	< 0.35	< 0.35
tert-Butylbenzene	NL	NL	< 0.36	< 0.36	< 0.36	NA	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 1.1	< 1.1	< 0.36	< 0.36	< 0.36
sec-Butylbenzene	NL	NL	< 0.33	< 0.33	< 0.33	NA	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 1.2	< 1.2	< 0.33	< 0.33	< 0.33
n-Butylbenzene	NL	NL	< 0.35	< 0.35	< 0.35	NA	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 1	< 1	< 0.35	< 0.35	< 0.35
Carbon Tetrachloride	5	0.5	< 0.33	< 0.33	< 0.33	NA	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.65	< 0.51	< 0.33	< 0.33	< 0.33
Chlorobenzene	NL	NL	< 0.24	< 0.24	< 0.24	NA	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.46	< 0.46	< 0.24	< 0.24	< 0.24
Chloroethane	400	80	< 0.63	< 0.63	< 0.63	NA	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.65	< 0.65	< 0.63	< 0.63	< 0.63
Chloroform	6	0.6	< 0.28	< 0.28	< 0.28	NA	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.43	< 0.43	< 0.28	< 0.28	< 0.28
Chloromethane	3	0.3	< 0.81	< 0.81	< 0.81	NA	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81	< 1.9	< 1.9	**0.82 J**	< 0.81	< 0.81
2-Chlorotoluene	NL	NL	< 0.21	< 0.21	< 0.21	NA	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.4	< 0.4	< 0.21	< 0.21	< 0.21
4-Chlorotoluene	NL	NL	< 0.21	< 0.21	< 0.21	NA	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.63	< 0.63	< 0.21	< 0.21	< 0.21
1,2-Dibromo-3-chloropropane (DBCP)	0.2	0.02	< 0.88	< 0.88	< 0.88	NA	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88	< 1.4	< 1.4	< 0.88	< 0.88	< 0.88
Dibromochloromethane	60	6	< 0.22	< 0.22	< 0.22	NA	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 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
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	< 0.3	< 0.3	< 0.3
1,3-Dichlorobenzene	600	120	< 0.28	< 0.28	< 0.28	NA	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.52	< 0.52	< 0.28	< 0.28	< 0.28
1,2-Dichlorobenzene	600	60	< 0.36	< 0.36	< 0.36	NA	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.46	< 0.46	< 0.36	< 0.36	< 0.36
Dichlorodifluoromethane	1000	200	< 0.44	< 0.44	< 0.44	NA	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.87	< 0.87	< 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	< 0.41	< 0.41	< 0.41
1,1-Dichloroethane	850	85	< 0.3	< 0.3	< 0.3	NA	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 1.1	< 1.1	< 0.3	< 0.3	< 0.3
1,1-Dichloroethene	7	0.7	< 0.4	< 0.4	< 0.4	NA	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.65	< 0.65	< 0.4	< 0.4	< 0.4
cis-1,2-Dichloroethene	70	7	**45**	**45**	**46**	NA	**49**	**49**	**51**	**35**	**36**	< 0.38	< 0.38	< 0.45	< 0.45	< 0.38	< 0.38	< 0.38
trans-1,2-Dichloroethene	100	20	< 0.35	0.39 J	< 0.35	NA	0.42 J	0.37 J	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.54	< 0.54	< 0.35	< 0.35	< 0.35
1,2-Dichloropropane	5	0.5	< 0.32	< 0.32	< 0.32	NA	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.43	< 0.43	< 0.32	< 0.32	< 0.32
2,2-Dichloropropane	NL	NL	< 0.36	< 0.36	< 0.36	NA	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 3.1	< 3.1	< 0.36	< 0.36	< 0.36
1,3-Dichloropropane	NL	NL	< 0.33	< 0.33	< 0.33	NA	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.42	< 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
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	NA	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.44	< 0.44	< 0.23	< 0.23	< 0.23
EDB (1,2-Dibromoethane)	0.05	0.005	< 0.44	< 0.44	< 0.44	NA	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.63	< 0.63	< 0.44	< 0.44	< 0.44
Ethylbenzene	700	140	< 0.55	< 0.55	< 0.55	NA	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.71	< 0.71	< 0.55	< 0.55	< 0.55
Hexachlorobutadiene	NL	NL	< 1.5	< 1.5	< 1.5	NA	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 2.2	< 2.2	< 1.5	< 1.5	< 1.5
Isopropylbenzene	NS	NS	< 0.3	< 0.3	< 0.3	NA	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.82	< 0.82	< 0.3	< 0.3	< 0.3
p-Isopropyltoluene	NL	NL	< 0.31	< 0.31	< 0.31	NA	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 1.1	< 1.1	< 0.31	< 0.31	< 0.31
Methylene Chloride	5	0.5	**0.82 J**	< 0.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 1.3	< 1.3	< 0.5	< 0.5	< 0.5
Methyl tert-butyl ether (MTBE)	60	12	< 0.23	< 0.23	< 0.23	NA	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 1.1	< 1.1	< 0.23	< 0.23	< 0.23
Naphthalene	100	10	< 1.7	< 1.7	< 1.7	NA	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.6	< 1.6	< 1.7	< 1.7	< 1.7
n-Propylbenzene	NL	NL	< 0.25	< 0.25	< 0.25	NA	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 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
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	< 0.45	< 0.45	< 0.45
1,1,1,2-Tetrachloroethane	70	7	< 0.33	< 0.33	< 0.33	NA	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.48	< 0.48	< 0.33	< 0.33	< 0.33
Tetrachloroethene	5	0.5	< 0.33	< 0.33	< 0.33	NA	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.74	< 0.49	< 0.33	< 0.33	< 0.33
Toluene	800	160	< 0.69	< 0.69	< 0.69	NA	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.44	< 0.44	< 0.69	< 0.69	< 0.69
1,2,4-Trichlorobenzene	70	14	< 0.98	< 0.98	< 0.98	NA	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 1.7	< 1.7	< 0.98	< 0.98	< 0.98
1,2,3-Trichlorobenzene	NL	NL	< 1.8	< 1.8	< 1.8	NA	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 2.7	< 2.7	< 1.8	< 1.8	< 1.8
1,1,1-Trichloroethane	200	40	< 0.33	< 0.33	< 0.33	NA	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.84	< 0.84	< 0.33	< 0.33	< 0.33
1,1,2-Trichloroethane	5	0.5	< 0.34	< 0.34	< 0.34	NA	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.48	< 0.48	< 0.34	< 0.34	< 0.34
Trichloroethene (TCE)	5	0.5	< 0.33	< 0.33	< 0.33	NA	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.47	< 0.47	< 0.33	< 0.33	< 0.33
Trichlorofluoromethane	NL	NL	< 0.71	< 0.71	< 0.71	NA	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 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
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	< 2.2	< 2.2	< 2.2
1,3,5-Trimethylbenzene	--	--	< 1.4	< 1.4	< 1.4	NA	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.5	< 1.5	< 1.4	< 1.4	< 1.4
Total Trimethylbenzene	480	96	< 2.2	< 2.2	< 2.2	NA	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 1.6	< 1.6	< 2.2	< 2.2	< 2.2
Vinyl Chloride	0.2	0.02	**1.0**	**1.09**	**1.02**	NA	**7.40**	**7.60**	**8.60**	**4.60**	**5.20**	< 0.18	< 0.18	< 0.17	< 0.17	< 0.18	< 0.18	< 0.18
m&p-Xylene	--	--	< 0.69	< 0.69	< 0.69	NA	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 2.2	< 2.2	< 0.69	< 0.69	< 0.69
o-Xylene	--	--	< 0.63	< 0.63	< 0.63	NA	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.9	< 0.9	< 0.63	< 0.63	< 0.63
Total Xylenes	2,000	400	< 0.69	< 0.69	< 0.69	NA	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.9	< 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

			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	10/22/13	11/7/13	11/7/13
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	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
Arsenic	0.01	0.001	NA	NA	NA	0.00032 J	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
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	< 0.00016	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
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	0.00056 J	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	< 0.000049	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	< 0.00038	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
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	< 0.02	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
Aroclor-1232	--	--	NA	NA	NA	< 0.021	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
Aroclor-1248	--	--	NA	NA	NA	< 0.014	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
Aroclor-1260	--	--	NA	NA	NA	< 0.015	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
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	7.38	7.77	7.75
Conductivity (uS)	--	--	754	558	614	NM	634	634	983	675	675	NM	2248	2203	2290	782	552	651
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	11.04	10.92	15.5
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	4.54	5.31	1.71
Redox Potential (mV)	--	--	73	95.4	91.6	NM	60	60	131	199	199	NM	-141.9	-118.4	-75	68.4	85.9	119

TABLE 2

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

Analyte	ES[1]	PAL[2]	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	10/14/2015 (DUP)	10/22/13	11/12/13	6/2/14	5/28/14	11/18/14
			Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot
Volatile Organic Compounds (VOCs) (µg/L):																	
Benzene	5	0.5	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.44	< 0.44	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24
Bromobenzene	NL	NL	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.48	< 0.48	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32
Bromochloromethane	NL	NL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	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	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37
Bromoform	4.4	0.44	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.46	< 0.46	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35
tert-Butylbenzene	NL	NL	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 1.1	< 1.1	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36
sec-Butylbenzene	NL	NL	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 1.2	< 1.2	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
n-Butylbenzene	NL	NL	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 1	< 1	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35
Carbon Tetrachloride	5	0.5	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.51	< 0.51	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
Chlorobenzene	NL	NL	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.46	< 0.46	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24
Chloroethane	400	80	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.65	< 0.65	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63
Chloroform	6	0.6	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.43	< 0.43	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28
Chloromethane	3	0.3	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81	< 1.9	< 1.9	**1.48 J**	< 0.81	< 0.81	< 0.81	< 0.81
2-Chlorotoluene	NL	NL	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.4	< 0.4	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21
4-Chlorotoluene	NL	NL	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.63	< 0.63	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21
1,2-Dibromo-3-chloropropane (DBCP)	0.2	0.02	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88	< 1.4	< 1.4	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88
Dibromochloromethane	60	6	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.45	< 0.45	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22
Dibromomethane	NL	NL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	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	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
1,3-Dichlorobenzene	600	120	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.52	< 0.52	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28
1,2-Dichlorobenzene	600	60	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.46	< 0.46	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36
Dichlorodifluoromethane	1000	200	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.87	< 0.87	< 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	< 0.48	< 0.48	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41
1,1-Dichloroethane	850	85	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 1.1	< 1.1	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
1,1-Dichloroethene	7	0.7	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.65	< 0.65	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4
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	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38
trans-1,2-Dichloroethene	100	20	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.54	< 0.54	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35
1,2-Dichloropropane	5	0.5	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.43	< 0.43	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32
2,2-Dichloropropane	NL	NL	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 3.1	< 3.1	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36
1,3-Dichloropropane	NL	NL	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 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	< 0.23	< 0.23	< 0.23	< 0.23	< 0.44	< 0.44	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23
EDB (1,2-Dibromoethane)	0.05	0.005	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.63	< 0.63	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44
Ethylbenzene	700	140	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.71	< 0.71	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55
Hexachlorobutadiene	NL	NL	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 2.2	< 2.2	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5
Isopropylbenzene	NS	NS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.82	< 0.82	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
p-Isopropyltoluene	NL	NL	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 1.1	< 1.1	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31
Methylene Chloride	5	0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 1.3	< 1.3	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Methyl tert-butyl ether (MTBE)	60	12	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 1.1	< 1.1	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23
Naphthalene	100	10	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.6	< 1.6	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7
n-Propylbenzene	NL	NL	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.77	< 0.77	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25
Styrene	100	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	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	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45
1,1,1,2-Tetrachloroethane	70	7	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.48	< 0.48	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
Tetrachloroethene	5	0.5	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.49	< 0.49	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
Toluene	800	160	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.44	< 0.44	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69
1,2,4-Trichlorobenzene	70	14	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 1.7	< 1.7	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98
1,2,3-Trichlorobenzene	NL	NL	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 2.7	< 2.7	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8
1,1,1-Trichloroethane	200	40	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.84	< 0.84	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
1,1,2-Trichloroethane	5	0.5	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.48	< 0.48	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34
Trichloroethene (TCE)	5	0.5	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.47	< 0.47	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
Trichlorofluoromethane	NL	NL	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.87	< 0.87	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71
1,2,3-Trichloropropane	60	12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	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	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2
1,3,5-Trimethylbenzene	--	--	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.5	< 1.5	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4
Total Trimethylbenzene	480	96	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 1.6	< 1.6	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2
Vinyl Chloride	0.2	0.02	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.17	< 0.17	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18
m&p-Xylene	--	--	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 2.2	< 2.2	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69
o-Xylene	--	--	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.9	< 0.9	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63
Total Xylenes	2,000	400	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 2.2	< 2.2	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69

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	10/14/2015 (DUP)	10/22/13	11/12/13	6/2/14	5/28/14	11/18/14
Analyte	**ES[1]**	**PAL[2]**	Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot	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
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)	--	--	7.98	7.75	7.18	7.83	8.28	7.62	7.87	7.87	7.59	7.59	8.03	7.86	7.43	7.97	8.26
Conductivity (uS)	--	--	707	531	576	757	522	552	657	657	635	635	775	529	622	520	654
Temperature (^{o}C)	--	--	10.13	9.63	11.5	9.82	10.58	14	14.1	14.1	12.51	12.51	9.56	10.58	12.1	10.4	10
Dissolved Oxygen (ppm)	--	--	4.53	4.69	2.53	4.73	8.16	4.6	3.77	3.77	6.25	6.25	3.81	7.26	1.22	1.98	7.75
Redox Potential (mV)	--	--	45.1	91.3	137	52.9	100.4	158	245	245	-91.9	-91.9	20.1	87.4	155	112.0	-38.0

TABLE 2

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

Analyte	ES[1]	PAL[2]	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	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	5/30/14	12/5/13	6/4/14
			Pressure Tank	Pressure Tank	Outside Spigot	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	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.44	< 0.44	< 0.24	< 0.24	< 0.24
Bromobenzene	NL	NL	< 0.32	< 0.48	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 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
Bromodichloromethane	0.6	0.06	< 0.37	< 0.46	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.46	< 0.46	< 0.37	< 0.37	< 0.37
Bromoform	4.4	0.44	< 0.35	< 0.46	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.46	< 0.46	< 0.35	< 0.35	< 0.35
tert-Butylbenzene	NL	NL	< 0.36	< 1.1	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 1.1	< 1.1	< 0.36	< 0.36	< 0.36
sec-Butylbenzene	NL	NL	< 0.33	< 1.2	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 1.2	< 1.2	< 0.33	< 0.33	< 0.33
n-Butylbenzene	NL	NL	< 0.35	< 1	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 1	< 1	< 0.35	< 0.35	< 0.35
Carbon Tetrachloride	5	0.5	< 0.33	< 0.51	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.65	< 0.51	< 0.33	< 0.33	< 0.33
Chlorobenzene	NL	NL	< 0.24	< 0.46	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.46	< 0.46	< 0.24	< 0.24	< 0.24
Chloroethane	400	80	< 0.63	< 0.65	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.65	< 0.65	< 0.63	< 0.63	< 0.63
Chloroform	6	0.6	< 0.28	< 0.43	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.43	< 0.43	< 0.28	< 0.28	< 0.28
Chloromethane	3	0.3	< 0.81	< 1.9	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81	< 1.9	< 1.9	< 0.81	< 0.81	< 0.81
2-Chlorotoluene	NL	NL	< 0.21	< 0.4	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.4	< 0.4	< 0.21	< 0.21	< 0.21
4-Chlorotoluene	NL	NL	< 0.21	< 0.63	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 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	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88	< 1.4	< 1.4	< 0.88	< 0.88	< 0.88
Dibromochloromethane	60	6	< 0.22	< 0.45	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 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
1,4-Dichlorobenzene	75	15	< 0.3	< 0.49	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.49	< 0.49	< 0.3	< 0.3	< 0.3
1,3-Dichlorobenzene	600	120	< 0.28	< 0.52	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.52	< 0.52	< 0.28	< 0.28	< 0.28
1,2-Dichlorobenzene	600	60	< 0.36	< 0.46	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.46	< 0.46	< 0.36	< 0.36	< 0.36
Dichlorodifluoromethane	1000	200	< 0.44	< 0.87	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.87	< 0.87	< 0.44	< 0.44	< 0.44
1,2-Dichloroethane	5	0.5	< 0.41	< 0.48	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.54	< 0.48	< 0.41	< 0.41	< 0.41
1,1-Dichloroethane	850	85	< 0.3	< 1.1	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 1.1	< 1.1	< 0.3	< 0.3	< 0.3
1,1-Dichloroethene	7	0.7	< 0.4	< 0.65	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.65	< 0.65	< 0.4	< 0.4	< 0.4
cis-1,2-Dichloroethene	70	7	< 0.38	< 0.45	< 0.38	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	< 0.38	< 0.38	< 0.38
trans-1,2-Dichloroethene	100	20	< 0.35	< 0.54	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.54	< 0.54	< 0.35	< 0.35	< 0.35
1,2-Dichloropropane	5	0.5	< 0.32	< 0.43	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.43	< 0.43	< 0.32	< 0.32	< 0.32
2,2-Dichloropropane	NL	NL	< 0.36	< 3.1	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 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	< 0.42	< 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	< 0.44	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.44	< 0.44	< 0.23	< 0.23	< 0.23
EDB (1,2-Dibromoethane)	0.05	0.005	< 0.44	< 0.63	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.63	< 0.63	< 0.44	< 0.44	< 0.44
Ethylbenzene	700	140	< 0.55	< 0.71	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.71	< 0.71	< 0.55	< 0.55	< 0.55
Hexachlorobutadiene	NL	NL	< 1.5	< 2.2	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 2.2	< 2.2	< 1.5	< 1.5	< 1.5
Isopropylbenzene	NS	NS	< 0.3	< 0.82	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.82	< 0.82	< 0.3	< 0.3	< 0.3
p-Isopropyltoluene	NL	NL	< 0.31	< 1.1	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 1.1	< 1.1	< 0.31	< 0.31	< 0.31
Methylene Chloride	5	0.5	< 0.5	< 1.3	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 1.3	< 1.3	< 0.5	< 0.5	< 0.5
Methyl tert-butyl ether (MTBE)	60	12	< 0.23	< 1.1	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 1.1	< 1.1	< 0.23	< 0.23	< 0.23
Naphthalene	100	10	< 1.7	< 1.6	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.6	< 1.6	< 1.7	< 1.7	< 1.7
n-Propylbenzene	NL	NL	< 0.25	< 0.77	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 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
1,1,2,2-Tetrachloroethane	0.2	0.02	< 0.45	< 0.52	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.52	< 0.52	< 0.45	< 0.45	< 0.45
1,1,1,2-Tetrachloroethane	70	7	< 0.33	< 0.48	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.48	< 0.48	< 0.33	< 0.33	< 0.33
Tetrachloroethene	5	0.5	< 0.33	< 0.49	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.74	< 0.49	< 0.33	< 0.33	< 0.33
Toluene	800	160	< 0.69	< 0.44	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.44	< 0.44	< 0.69	< 0.69	< 0.69
1,2,4-Trichlorobenzene	70	14	< 0.98	< 1.7	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 1.7	< 1.7	< 0.98	< 0.98	< 0.98
1,2,3-Trichlorobenzene	NL	NL	< 1.8	< 2.7	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 2.7	< 2.7	< 1.8	< 1.8	< 1.8
1,1,1-Trichloroethane	200	40	< 0.33	< 0.84	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.84	< 0.84	< 0.33	< 0.33	< 0.33
1,1,2-Trichloroethane	5	0.5	< 0.34	< 0.48	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.48	< 0.48	< 0.34	< 0.34	< 0.34
Trichloroethene (TCE)	5	0.5	< 0.33	< 0.47	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.47	< 0.47	< 0.33	< 0.33	< 0.33
Trichlorofluoromethane	NL	NL	< 0.71	< 0.87	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 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
1,2,4-Trimethylbenzene	--	--	< 2.2	< 1.6	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 1.6	< 1.6	< 2.2	< 2.2	< 2.2
1,3,5-Trimethylbenzene	--	--	< 1.4	< 1.5	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.5	< 1.5	< 1.4	< 1.4	< 1.4
Total Trimethylbenzene	480	96	< 2.2	< 1.6	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 1.6	< 1.6	< 2.2	< 2.2	< 2.2
Vinyl Chloride	0.2	0.02	< 0.18	< 0.17	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.17	< 0.17	< 0.18	< 0.18	< 0.18
m&p-Xylene	--	--	< 0.69	< 2.2	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 2.2	< 2.2	< 0.69	< 0.69	< 0.69
o-Xylene	--	--	< 0.63	< 0.9	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.9	< 0.9	< 0.63	< 0.63	< 0.63
Total Xylenes	2,000	400	< 0.69	< 2.2	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.9	< 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	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	5/30/14	12/5/13	6/4/14
Analyte	ES[1]	PAL[2]	Pressure Tank	Pressure Tank	Outside Spigot	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
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)	--	--	7.96	7.49	7.91	8.75	7.99	7.53	7.53	7.53	7.93	7.93	7.94	7.51	7.11	8.05	7.48
Conductivity (uS)	--	--	826	917	683	979	593	562	562	562	562	562	654	646	835	956	958
Temperature (^{o}C)	--	--	9.68	10.88	12.2	9.8	9.72	12.4	12.4	12.4	11.23	11.23	8.29	12.91	11.4	8.64	11.7
Dissolved Oxygen (ppm)	--	--	2.8	3.87	3.76	2.59	5.87	2.3	2.3	2.3	4.12	4.12	3.56	3.18	4.54	7.32	2.97
Redox Potential (mV)	--	--	65.8	-48.6	117.0	101.0	135.2	146	146	146	-63.9	-63.9	-138.9	-117.7	145.0	87.0	168.0

TABLE 2

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

Analyte	ES[1]	PAL[2]	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
			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
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
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
Bromochloromethane	NL	NL	NA	NA	< 0.15	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
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
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
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
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
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
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
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
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
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
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
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
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
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
Dibromomethane	NL	NL	NA	NA	< 0.15	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
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
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
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
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
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-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
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
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
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
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
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
1,1-Dichloropropene	NL	NL	NA	NA	< 0.15	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
trans-1,3-Dichloropropene	0.4	0.04	NA	NA	< 0.15	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
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
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
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
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
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
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
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
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
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
Styrene	100	10	NA	NA	< 0.15	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
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
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
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
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
1,2,3-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
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
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
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
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
1,2,3-Trichloropropane	60	12	NA	NA	< 0.15	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
1,3,5-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
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
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
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
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
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

TABLE 2

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

Analyte	ES[1]	PAL[2]	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
			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
~~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)	--	--	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
Conductivity (uS)	--	--	789	545	NM	526	534	493	614	576	535	530	588	538	NM	609	540
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
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
Redox Potential (mV)	--	--	105	111	NM	165	86.7	114.5	89	88	69.9	138	83.4	137	NM	81.1	227

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						
			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	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 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	< 0.24	< 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	< 0.32	< 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
Bromodichloromethane	0.6	0.06	< 0.37	< 0.37	< 0.46	< 0.37	< 0.37	< 0.37	< 0.37	< 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	< 0.35	< 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	< 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	< 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	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 1	< 1
Carbon Tetrachloride	5	0.5	< 0.33	< 0.33	< 0.51	< 0.33	< 0.33	< 0.33	< 0.33	< 0.65	< 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	< 0.24	< 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	< 0.63	< 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	< 0.28	< 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	< 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	< 0.21	< 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	< 0.21	< 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	< 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	< 0.22	< 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
1,4-Dichlorobenzene	75	15	< 0.3	< 0.3	< 0.49	< 0.3	< 0.3	< 0.3	< 0.3	< 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	< 0.28	< 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	< 0.36	< 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	< 0.44	< 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	< 0.41	< 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	< 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	< 0.4	< 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	0.77 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	< 0.35	< 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	< 0.32	< 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	< 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	< 0.33	< 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
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	< 0.23	< 0.23	< 0.23	< 0.23	< 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	< 0.44	< 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	< 0.55	< 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	< 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	< 0.3	< 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	< 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	< 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	< 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	< 1.7	< 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	< 0.25	< 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
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	< 0.45	< 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	< 0.33	< 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	< 0.33	< 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	< 0.69	< 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	< 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	< 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	< 0.33	< 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	< 0.34	< 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	< 0.33	< 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	< 0.71	< 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
1,2,4-Trimethylbenzene	--	--	< 2.2	< 2.2	< 1.6	< 2.2	< 2.2	< 2.2	< 2.2	< 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	< 1.4	< 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	< 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**	< 0.18	< 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	< 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	< 0.63	< 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	< 0.69	< 0.69	< 0.69	< 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

			2716 CTH CR			2717 CTH CR(4141 Viebahn St.)						2734(2804) CTH CR						
			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	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 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
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)	--	--	7.59	8.61	7.87	8.03	7.87	7.87	7.95	8.15	7.73	7.32	8.01	7.87	NM	NM	7.96	7.53
Conductivity (uS)	--	--	658	374	409	640	721	721	625	662	621	485	606	661	NM	NM	597	594
Temperature (^{o}C)	--	--	12.83	8.45	11.90	8.03	9.15	9.15	12.28	6.49	13.10	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	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	161	237	-99.4	NM	NM	-133.9	-121.2

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				
			2/4/14	6/3/14	5/29/14	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	2/4/14	5/30/14	10/13/15	10/27/15	10/27/15 (DUP)
Analyte	**ES[1]**	**PAL[2]**	Kitchen Sink	Kitchen Sink	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Kitchen Sink	Kitchen Sink	Spigot	Spigot	Spigot
Volatile Organic Compounds (VOCs) (µg/L):																		
Benzene	5	0.5	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.44	< 0.44	< 0.44	< 0.24	< 0.24	< 0.44	< 0.44	< 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	< 0.32	< 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
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	< 0.37	< 0.37	< 0.46	< 0.46	< 0.46
Bromoform	4.4	0.44	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 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	< 0.36	< 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	< 0.33	< 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	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 1	< 1	< 1	< 0.35	< 0.35	< 1	< 1	< 1
Carbon Tetrachloride	5	0.5	< 0.33	< 0.33	< 0.33	< 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	< 0.24	< 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	< 0.63	< 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	< 0.28	< 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	< 0.81	< 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	< 0.21	< 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	< 0.21	< 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	< 0.88	< 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	< 0.22	< 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
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	< 0.3	< 0.3	< 0.49	< 0.49	< 0.49
1,3-Dichlorobenzene	600	120	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 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	< 0.36	< 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	< 0.44	< 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	< 0.41	< 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	< 0.3	< 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	< 0.4	< 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	< 0.38	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	< 0.35	< 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	< 0.32	< 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	< 0.36	< 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	< 0.33	< 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
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	< 0.23	< 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	< 0.44	< 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	< 0.55	< 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	< 1.5	< 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	< 0.3	< 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	< 0.31	< 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	< 0.5	< 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	< 0.23	< 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	< 1.7	< 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	< 0.25	< 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
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	< 0.45	< 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	< 0.33	< 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	< 0.33	< 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	< 0.69	< 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	< 0.98	< 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	< 1.8	< 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	< 0.33	< 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	< 0.34	< 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	< 0.33	< 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	< 0.71	< 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
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	< 2.2	< 2.2	< 1.6	< 1.6	< 1.6
1,3,5-Trimethylbenzene	--	--	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 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	< 2.2	< 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	< 0.18	**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	< 0.69	< 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	< 0.63	< 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	< 0.69	< 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

Analyte	ES[1]	PAL[2]	2832/2904 CTH CR		2911 CTH CR	2916 CTH CR								2917 CTH CR				
			2/4/14	6/3/14	5/29/14	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	2/4/14	5/30/14	10/13/15	10/27/15	10/27/15 (DUP)
			Kitchen Sink	Kitchen Sink	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Kitchen Sink	Kitchen Sink	Spigot	Spigot	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)	--	--	7.32	7.6	7.19	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	727	396	1329	NM	601	NM	NM	NM	614	962	1709	1134	NM	NM
Temperature (^{o}C)	--	--	6.61	14.50	11.70	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	2.98	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	115	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	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
Analyte	ES[1]	PAL[2]	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
Volatile Organic Compounds (VOCs) (µg/L):																			
Benzene	5	0.5	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.44	< 0.44	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.44	< 0.44
Bromobenzene	NL	NL	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.48	< 0.48	< 0.32	< 0.32	< 0.32	< 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
Bromodichloromethane	0.6	0.06	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.46	< 0.46	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.46	< 0.46
Bromoform	4.4	0.44	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.46	< 0.46	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.46	< 0.46
tert-Butylbenzene	NL	NL	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 1.1	< 1.1	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 1.1	< 1.1
sec-Butylbenzene	NL	NL	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 1.2	< 1.2	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 1.2	< 1.2
n-Butylbenzene	NL	NL	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 1	< 1	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 1	< 1
Carbon Tetrachloride	5	0.5	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.65	< 0.51	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.65	< 0.51
Chlorobenzene	NL	NL	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.46	< 0.46	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.46	< 0.46
Chloroethane	400	80	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.65	< 0.65	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.65	< 0.65
Chloroform	6	0.6	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.43	< 0.43	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.43	< 0.43
Chloromethane	3	0.3	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81	< 1.9	< 1.9	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81	< 1.9	< 1.9
2-Chlorotoluene	NL	NL	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.4	< 0.4	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.4	< 0.4
4-Chlorotoluene	NL	NL	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.63	< 0.63	< 0.21	< 0.21	< 0.21	< 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	< 0.88	< 0.88	< 0.88	< 1.4	< 1.4	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88	< 1.4	< 1.4
Dibromochloromethane	60	6	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.45	< 0.45	< 0.22	< 0.22	< 0.22	< 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
1,4-Dichlorobenzene	75	15	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.49	< 0.49	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.49	< 0.49
1,3-Dichlorobenzene	600	120	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.52	< 0.52	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.52	< 0.52
1,2-Dichlorobenzene	600	60	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.46	< 0.46	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.46	< 0.46
Dichlorodifluoromethane	1000	200	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.87	< 0.87	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.87	< 0.87
1,2-Dichloroethane	5	0.5	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.54	< 0.48	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.54	< 0.48
1,1-Dichloroethane	850	85	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 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-Dichloroethene	7	0.7	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.65	< 0.65	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.65	< 0.65
cis-1,2-Dichloroethene	70	7	2.84	2.87	2.34	< 0.38	< 0.38	< 0.45	< 0.45	2.74	2.86	2.65	2.68	1.89	2.23	< 0.38	< 0.38	< 0.45	< 0.45
trans-1,2-Dichloroethene	100	20	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.54	< 0.54	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.54	< 0.54
1,2-Dichloropropane	5	0.5	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.43	< 0.43	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.43	< 0.43
2,2-Dichloropropane	NL	NL	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 3.1	< 3.1	< 0.36	< 0.36	< 0.36	< 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	< 0.42	< 0.33	< 0.33	< 0.33	< 0.33	< 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
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
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
Di-isopropyl ether	NL	NL	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.44	< 0.44	< 0.23	< 0.23	< 0.23	< 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	< 0.44	< 0.44	< 0.44	< 0.63	< 0.63	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.63	< 0.63
Ethylbenzene	700	140	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.71	< 0.71	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.71	< 0.71
Hexachlorobutadiene	NL	NL	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 2.2	< 2.2	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 2.2	< 2.2
Isopropylbenzene	NS	NS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.82	< 0.82	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.82	< 0.82
p-Isopropyltoluene	NL	NL	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 1.1	< 1.1	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 1.1	< 1.1
Methylene Chloride	5	0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 1.3	< 1.3	< 0.5	< 0.5	< 0.5	< 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	< 0.23	< 0.23	< 0.23	< 1.1	< 1.1	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 1.1	< 1.1
Naphthalene	100	10	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.6	< 1.6	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.6	< 1.6
n-Propylbenzene	NL	NL	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.77	< 0.77	< 0.25	< 0.25	< 0.25	< 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
1,1,2,2-Tetrachloroethane	0.2	0.02	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.52	< 0.52	< 0.45	< 0.45	< 0.45	< 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	< 0.33	< 0.33	< 0.33	< 0.48	< 0.48	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.48	< 0.48
Tetrachloroethene	5	0.5	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.74	< 0.49	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.74	< 0.49
Toluene	800	160	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.44	< 0.44	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.44	< 0.44
1,2,4-Trichlorobenzene	70	14	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 1.7	< 1.7	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 1.7	< 1.7
1,2,3-Trichlorobenzene	NL	NL	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 2.7	< 2.7	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 2.7	< 2.7
1,1,1-Trichloroethane	200	40	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.84	< 0.84	< 0.33	< 0.33	< 0.33	< 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	< 0.34	< 0.34	< 0.34	< 0.48	< 0.48	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.48	< 0.48
Trichloroethene (TCE)	5	0.5	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.47	< 0.47	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.47	< 0.47
Trichlorofluoromethane	NL	NL	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.87	< 0.87	< 0.71	< 0.71	< 0.71	< 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
1,2,4-Trimethylbenzene	--	--	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 1.6	< 1.6	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 1.6	< 1.6
1,3,5-Trimethylbenzene	--	--	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.5	< 1.5	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.5	< 1.5
Total Trimethylbenzene	480	96	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 1.6	< 1.6	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 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	**0.60**	**0.43 J**	**0.35 J**	**0.26 J**	**0.27 J**	**0.24 J**	< 0.18	< 0.18	< 0.17	< 0.17
m&p-Xylene	--	--	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 2.2	< 2.2	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 2.2	< 2.2
o-Xylene	--	--	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.9	< 0.9	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.9	< 0.9
Total Xylenes	2,000	400	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.9	< 2.2	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 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

			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	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
Analyte	**ES[1]**	**PAL[2]**	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
~~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
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
Beryllium	0.004	0.0004	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
Chromium	0.1	0.01	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
Iron	0.3	0.15	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
Manganese	0.05	0.025	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
Nickel	0.1	0.02	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
Sliver	0.05	0.01	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
Thallium	0.002	0.0004	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
Poychlorinated Biphenyls (PCBs) (µg/L):																			
Aroclor-1016	--	--	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
Aroclor-1232	--	--	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
Aroclor-1248	--	--	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
Aroclor-1260	--	--	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
Field Screening Measurements																			
pH (IU)	--	--	7.32	7.42	7.75	NM	7.7	7.64	7.21	7.51	7.38	7.8	7.8	7.91	7.91	NM	7.61	7.79	7.19
Conductivity (uS)	--	--	404	562	619	NM	2352	2286	2337	566	570	616	616	649	649	NM	2177	2051	2119
Temperature (^{o}C)	--	--	9.16	11.10	12.80	NM	10.30	8.17	13.01	8.27	8.04	11.20	11.20	7.91	7.91	NM	10.30	7.94	12.73
Dissolved Oxygen (ppm)	--	--	NM	1.5	0.87	NM	2.21	3.74	2.63	5.32	5.32	4.79	4.79	1.24	1.24	NM	3.21	4.58	2.5
Redox Potential (mV)	--	--	113.2	152	222	NM	-126.3	-112	-68.2	158.1	157.3	111	111	247	247	NM	-135.6	-112.7	-77.4

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	2/26/14	6/2/14	8/26/14	11/10/14	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	Bath Tub	Bath Tub	Outside Spigot	Outside Spigot	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	< 0.24	< 0.24	< 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	< 0.32	< 0.32	< 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
Bromodichloromethane	0.6	0.06	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.46
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	< 0.35	< 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	< 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	< 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	< 0.35	< 0.35	< 1
Carbon Tetrachloride	5	0.5	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.51
Chlorobenzene	NL	NL	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 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	< 0.63	< 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	< 0.28	< 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	< 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	< 0.21	< 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	< 0.21	< 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	< 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	< 0.22	< 0.22	< 0.45
Dibromomethane	NL	NL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,4-Dichlorobenzene	75	15	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.49
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	< 0.28	< 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	< 0.36	< 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	< 0.44	< 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	< 0.41	< 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	< 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	< 0.4	< 0.4	< 0.65
cis-1,2-Dichloroethene	70	7	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38	< 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	< 0.35	< 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	< 0.32	< 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	< 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	< 0.33	< 0.33	< 0.33
1,1-Dichloropropene	NL	NL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
cis-1,3-Dichloropropene	0.4	0.04	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
trans-1,3-Dichloropropene	0.4	0.04	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Di-isopropyl ether	NL	NL	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.44
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	< 0.44	< 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	< 0.55	< 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	< 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	< 0.3	< 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	< 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	< 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	< 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	< 1.7	< 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	< 0.25	< 0.25	< 0.77
Styrene	100	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1,2,2-Tetrachloroethane	0.2	0.02	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.52
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	< 0.33	< 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	< 0.33	< 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	< 0.69	< 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	< 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	< 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	< 0.33	< 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	< 0.34	< 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	< 0.33	< 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	< 0.71	< 0.71	< 0.87
1,2,3-Trichloropropane	60	12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2,4-Trimethylbenzene	--	--	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 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	< 1.4	< 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	< 2.2	< 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	< 0.18	< 0.18	< 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	< 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	< 0.63	< 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	< 0.69	< 0.69	< 2.2

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	2/26/14	6/2/14	8/26/14	11/10/14	1/6/14	6/4/14	8/25/14	11/10/14	10/13/15
			Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Bath Tub	Bath Tub	Outside Spigot	Outside Spigot	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
Arsenic	0.01	0.001	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Barium	2	0.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Beryllium	0.004	0.0004	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium	0.005	0.0005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium	0.1	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Copper	1.3	0.13	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Iron	0.3	0.15	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead	0.015	0.0015	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese	0.05	0.025	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mercury	0.002	0.0002	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nickel	0.1	0.02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Selenium	0.05	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sliver	0.05	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sodium	increase of 10		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Thallium	0.002	0.0004	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Zinc	5	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Poychlorinated Biphenyls (PCBs) (µg/L):															
Aroclor-1016	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1221	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1232	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1242	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1248	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1254	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1260	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total PCBs	0.03	0.003	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Field Screening Measurements															
pH (IU)	--	--	NM	7.66	8.17	7.98	NM	7.93	7.75	7.98	7.82	7.9	8.06	8.06	7.72
Conductivity (uS)	--	--	383	513	653	598	NM	416	765	2750	417	380	475	475	520
Temperature (°C)	--	--	9.24	11.50	13.10	8.69	NM	11.8	11.7	10.63	9.08	12.10	14.40	14.40	11.50
Dissolved Oxygen (ppm)	--	--	NM	2.87	1.91	2.61	NM	2.48	0.57	3.11	5.32	1.3	0.57	0.57	2.02
Redox Potential (mV)	--	--	111.3	170	235	-55.8	NM	87	225	40.3	174.8	151	242	242	-114.7

TABLE 2

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

Analyte	ES[1]	PAL[2]	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	1/3/14	8/26/14	11/10/14	1/6/14	5/30/14	8/25/14	11/18/14
			Kitchen Sink	Kitchen Sink	Kitchen Sink	Kitchen Sink	Kitchen Sink	Kitchen Sink	Kitchen Sink	Kitchen Sink	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	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24
Bromobenzene	NL	NL	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.48	< 0.48	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32
Bromochloromethane	NL	NL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bromodichloromethane	0.6	0.06	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.46	< 0.46	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37
Bromoform	4.4	0.44	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.46	< 0.46	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35
tert-Butylbenzene	NL	NL	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 1.1	< 1.1	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36
sec-Butylbenzene	NL	NL	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 1.2	< 1.2	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
n-Butylbenzene	NL	NL	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 1	< 1	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35
Carbon Tetrachloride	5	0.5	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.65	< 0.51	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
Chlorobenzene	NL	NL	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.46	< 0.46	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24
Chloroethane	400	80	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.65	< 0.65	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63
Chloroform	6	0.6	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.43	< 0.43	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28
Chloromethane	3	0.3	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81	< 1.9	< 1.9	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81
2-Chlorotoluene	NL	NL	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.4	< 0.4	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21
4-Chlorotoluene	NL	NL	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.63	< 0.63	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21
1,2-Dibromo-3-chloropropane (DBCP)	0.2	0.02	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88	< 1.4	< 1.4	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88
Dibromochloromethane	60	6	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.45	< 0.45	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22
Dibromomethane	NL	NL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,4-Dichlorobenzene	75	15	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.49	< 0.49	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
1,3-Dichlorobenzene	600	120	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.52	< 0.52	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28
1,2-Dichlorobenzene	600	60	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.46	< 0.46	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36
Dichlorodifluoromethane	1000	200	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.87	< 0.87	< 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	< 0.54	< 0.48	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41
1,1-Dichloroethane	850	85	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 1.1	< 1.1	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
1,1-Dichloroethene	7	0.7	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.65	< 0.65	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4
cis-1,2-Dichloroethene	70	7	1.3	1.67	1.48	1.34	< 0.38	< 0.38	< 0.45	< 0.45	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38
trans-1,2-Dichloroethene	100	20	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.54	< 0.54	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35
1,2-Dichloropropane	5	0.5	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.43	< 0.43	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32
2,2-Dichloropropane	NL	NL	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 3.1	< 3.1	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36
1,3-Dichloropropane	NL	NL	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.42	< 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
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	< 0.23	< 0.23	< 0.44	< 0.44	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23
EDB (1,2-Dibromoethane)	0.05	0.005	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.63	< 0.63	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44
Ethylbenzene	700	140	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.71	< 0.71	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55
Hexachlorobutadiene	NL	NL	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 2.2	< 2.2	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5
Isopropylbenzene	NS	NS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.82	< 0.82	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
p-Isopropyltoluene	NL	NL	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 1.1	< 1.1	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31
Methylene Chloride	5	0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 1.3	< 1.3	< 0.5	1.56 J	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Methyl tert-butyl ether (MTBE)	60	12	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 1.1	< 1.1	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23
Naphthalene	100	10	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.6	< 1.6	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7
n-Propylbenzene	NL	NL	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.77	< 0.77	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25
Styrene	100	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	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	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45
1,1,1,2-Tetrachloroethane	70	7	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.48	< 0.48	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
Tetrachloroethene	5	0.5	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.74	< 0.49	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
Toluene	800	160	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.44	< 0.44	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69
1,2,4-Trichlorobenzene	70	14	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 1.7	< 1.7	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98
1,2,3-Trichlorobenzene	NL	NL	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 2.7	< 2.7	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8
1,1,1-Trichloroethane	200	40	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.84	< 0.84	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
1,1,2-Trichloroethane	5	0.5	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.48	< 0.48	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34
Trichloroethene (TCE)	5	0.5	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.47	< 0.47	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
Trichlorofluoromethane	NL	NL	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.87	< 0.87	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71
1,2,3-Trichloropropane	60	12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2,4-Trimethylbenzene	--	--	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 1.6	< 1.6	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2
1,3,5-Trimethylbenzene	--	--	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.5	< 1.5	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4
Total Trimethylbenzene	480	96	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 1.6	< 1.6	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2
Vinyl Chloride	0.2	0.02	**0.56 J**	**0.25 J**	**0.22 J**	< 0.18	< 0.18	< 0.18	< 0.17	< 0.17	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18
m&p-Xylene	--	--	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 2.2	< 2.2	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69
o-Xylene	--	--	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.9	< 0.9	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63
Total Xylenes	2,000	400	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.9	< 2.2	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69

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	1/3/14	8/26/14	11/10/14	1/6/14	5/30/14	8/25/14	11/18/14
Analyte	ES[1]	PAL[2]	Kitchen Sink	Kitchen Sink	Kitchen Sink	Kitchen Sink	Kitchen Sink	Kitchen Sink	Kitchen Sink	Kitchen Sink	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
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)	--	--	7.51	7.18	7.64	7.74	NM	7.69	7.66	7.15	7.02	7.98	7.95	7.13	7.62	8.07	8
Conductivity (uS)	--	--	935	682	1060	1094	NM	2528	2436	2361	909	521	512	627	605	633	653
Temperature (^{o}C)	--	--	7.63	8.12	10.50	12.90	NM	11.76	6.99	16.42	8.99	13.60	10.65	8.81	12.30	14.20	10.56
Dissolved Oxygen (ppm)	--	--	6.51	5.01	1.19	3.23	NM	1.49	5.2	1.52	5.52	1.25	2.82	5.32	4.07	2.53	7.38
Redox Potential (mV)	--	--	166.6	32.2	84	236	NM	-219.9	-129.3	-41.4	155.0	238.0	-51.5	142.0	1.3	246.0	-84.2

TABLE 2

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

			3504 CTH CR												3523 CTH CR		
			12/5/13	1/6/14	1/6/2014 (DUP)	2/5/14	5/30/14	5/30/14(DUP)	8/25/14	8/25/14(DUP)	11/18/14	11/18/2014 (DUP)	2/23/15	10/14/15	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
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	< 0.24	< 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	< 0.32	< 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	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 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	< 0.35	< 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	< 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	< 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	< 0.35	< 0.35	< 1
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	< 0.33	< 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	< 0.24	< 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	< 0.63	< 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	< 0.28	< 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	< 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	< 0.21	< 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	< 0.21	< 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	< 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	< 0.22	< 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	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 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	< 0.28	< 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	< 0.36	< 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	< 0.44	< 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	< 0.41	< 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	< 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	< 0.4	< 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	< 0.38	< 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	< 0.35	< 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	< 0.32	< 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	< 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	< 0.33
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	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 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	< 0.44	< 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	< 0.55	< 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	< 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	< 0.3	< 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	< 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	< 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	< 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	< 1.7	< 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	< 0.25	< 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	< 0.33	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 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	< 0.33	< 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	< 0.33	< 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	< 0.69	< 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	< 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	< 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	< 0.33	< 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	< 0.34	< 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	< 0.33	< 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	< 0.71	< 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	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 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	< 1.4	< 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	< 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	< 0.18	< 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	< 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	< 0.63	< 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	< 0.69	< 0.69	< 2.2

TABLE 2

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

Analyte	ES[1]	PAL[2]	3504 CTH CR												3523 CTH CR		
			12/5/13	1/6/14	1/6/2014 (DUP)	2/5/14	5/30/14	5/30/14(DUP)	8/25/14	8/25/14(DUP)	11/18/14	11/18/2014 (DUP)	2/23/15	10/14/15	1/3/14	6/3/14	10/14/15
			Outside Spigot	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
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)	--	--	8.15	7.53	7.53	7.13	7.39	7.39	7.75	7.75	8.05	8.05	7.92	7.5	7.93	7.93	7.5
Conductivity (uS)	--	--	633	636	636	503	586	586	699	699	687	687	715	709	506	506	567
Temperature (°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	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	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	187.0	187.0	-101.9

TABLE 2

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

Analyte	ES[1]	PAL[2]	3533 CTH CR		3611 CTH CR	3618 CTH CR						3626 CTH CR			3627 CTH CR		3904 CTH CR	
			1/6/14	6/3/14	5/30/14	1/3/14	5/29/14	8/25/14	11/10/14	2/23/15	10/14/15	12/5/13	5/30/14	10/14/15	12/5/13	5/29/14	12/5/13	5/28/14
			Basement	Basement	Outside Spigot	Kitchen Sink	Kitchen Sink	Kitchen Sink	Kitchen Sink	Kitchen Sink	Pressure Tank	Bathroom	Bathroom	Bathroom	Basement	Basement	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	< 0.24	< 0.24	< 0.44	< 0.24	< 0.24	< 0.24	< 0.24
Bromobenzene	NL	NL	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.48	< 0.48	< 0.32	< 0.32	< 0.48	< 0.32	< 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
Bromodichloromethane	0.6	0.06	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.46	< 0.46	< 0.37	< 0.37	< 0.46	< 0.37	< 0.37	< 0.37	< 0.37
Bromoform	4.4	0.44	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.46	< 0.46	< 0.35	< 0.35	< 0.46	< 0.35	< 0.35	< 0.35	< 0.35
tert-Butylbenzene	NL	NL	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 1.1	< 1.1	< 0.36	< 0.36	< 1.1	< 0.36	< 0.36	< 0.36	< 0.36
sec-Butylbenzene	NL	NL	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 1.2	< 1.2	< 0.33	< 0.33	< 1.2	< 0.33	< 0.33	< 0.33	< 0.33
n-Butylbenzene	NL	NL	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 1	< 1	< 0.35	< 0.35	< 1	< 0.35	< 0.35	< 0.35	< 0.35
Carbon Tetrachloride	5	0.5	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.65	< 0.51	< 0.33	< 0.33	< 0.51	< 0.33	< 0.33	< 0.33	< 0.33
Chlorobenzene	NL	NL	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.46	< 0.46	< 0.24	< 0.24	< 0.46	< 0.24	< 0.24	< 0.24	< 0.24
Chloroethane	400	80	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.65	< 0.65	< 0.63	< 0.63	< 0.65	< 0.63	< 0.63	< 0.63	< 0.63
Chloroform	6	0.6	0.28 J	0.28 J	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.43	< 0.43	< 0.28	< 0.28	< 0.43	< 0.28	< 0.28	< 0.28	< 0.28
Chloromethane	3	0.3	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81	< 1.9	< 1.9	< 0.81	< 0.81	< 1.9	< 0.81	< 0.81	< 0.81	< 0.81
2-Chlorotoluene	NL	NL	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.4	< 0.4	< 0.21	< 0.21	< 0.4	< 0.21	< 0.21	< 0.21	< 0.21
4-Chlorotoluene	NL	NL	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.63	< 0.63	< 0.21	< 0.21	< 0.63	< 0.21	< 0.21	< 0.21	< 0.21
1,2-Dibromo-3-chloropropane (DBCP)	0.2	0.02	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88	< 1.4	< 1.4	< 0.88	< 0.88	< 1.4	< 0.88	< 0.88	< 0.88	< 0.88
Dibromochloromethane	60	6	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.45	< 0.45	< 0.22	< 0.22	< 0.45	< 0.22	< 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
1,4-Dichlorobenzene	75	15	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.49	< 0.49	< 0.3	< 0.3	< 0.49	< 0.3	< 0.3	< 0.3	< 0.3
1,3-Dichlorobenzene	600	120	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.52	< 0.52	< 0.28	< 0.28	< 0.52	< 0.28	< 0.28	< 0.28	< 0.28
1,2-Dichlorobenzene	600	60	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.46	< 0.46	< 0.36	< 0.36	< 0.46	< 0.36	< 0.36	< 0.36	< 0.36
Dichlorodifluoromethane	1000	200	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.87	< 0.87	< 0.44	< 0.44	< 0.87	< 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	< 0.41	< 0.41	< 0.48	< 0.41	< 0.41	< 0.41	< 0.41
1,1-Dichloroethane	850	85	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 1.1	< 1.1	< 0.3	< 0.3	< 1.1	< 0.3	< 0.3	< 0.3	< 0.3
1,1-Dichloroethene	7	0.7	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.65	< 0.65	< 0.4	< 0.4	< 0.65	< 0.4	< 0.4	< 0.4	< 0.4
cis-1,2-Dichloroethene	70	7	< 0.38	< 0.38	< 0.38	1.24	1.16 J	0.48 J	0.83 J	0.95 J	0.89 J	< 0.38	< 0.38	< 0.45	< 0.38	< 0.38	< 0.38	< 0.38
trans-1,2-Dichloroethene	100	20	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.54	< 0.54	< 0.35	< 0.35	< 0.54	< 0.35	< 0.35	< 0.35	< 0.35
1,2-Dichloropropane	5	0.5	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.43	< 0.43	< 0.32	< 0.32	< 0.43	< 0.32	< 0.32	< 0.32	< 0.32
2,2-Dichloropropane	NL	NL	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 3.1	< 3.1	< 0.36	< 0.36	< 3.1	< 0.36	< 0.36	< 0.36	< 0.36
1,3-Dichloropropane	NL	NL	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.42	< 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
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	< 0.23	< 0.23	< 0.44	< 0.44	< 0.23	< 0.23	< 0.44	< 0.23	< 0.23	< 0.23	< 0.23
EDB (1,2-Dibromoethane)	0.05	0.005	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.63	< 0.63	< 0.44	< 0.44	< 0.63	< 0.44	< 0.44	< 0.44	< 0.44
Ethylbenzene	700	140	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.71	< 0.71	< 0.55	< 0.55	< 0.71	< 0.55	< 0.55	< 0.55	< 0.55
Hexachlorobutadiene	NL	NL	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 2.2	< 2.2	< 1.5	< 1.5	< 2.2	< 1.5	< 1.5	< 1.5	< 1.5
Isopropylbenzene	NS	NS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.82	< 0.82	< 0.3	< 0.3	< 0.82	< 0.3	< 0.3	< 0.3	< 0.3
p-Isopropyltoluene	NL	NL	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 1.1	< 1.1	< 0.31	< 0.31	< 1.1	< 0.31	< 0.31	< 0.31	< 0.31
Methylene Chloride	5	0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 1.3	< 1.3	< 0.5	< 0.5	< 1.3	< 0.5	< 0.5	< 0.5	< 0.5
Methyl tert-butyl ether (MTBE)	60	12	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 1.1	< 1.1	< 0.23	< 0.23	< 1.1	< 0.23	< 0.23	< 0.23	< 0.23
Naphthalene	100	10	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.6	< 1.6	< 1.7	< 1.7	< 1.6	< 1.7	< 1.7	< 1.7	< 1.7
n-Propylbenzene	NL	NL	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.77	< 0.77	< 0.25	< 0.25	< 0.77	< 0.25	< 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
1,1,2,2-Tetrachloroethane	0.2	0.02	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.52	< 0.52	< 0.45	< 0.45	< 0.52	< 0.45	< 0.45	< 0.45	< 0.45
1,1,1,2-Tetrachloroethane	70	7	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.48	< 0.48	< 0.33	< 0.33	< 0.48	< 0.33	< 0.33	< 0.33	< 0.33
Tetrachloroethene	5	0.5	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.74	< 0.49	< 0.33	< 0.33	< 0.49	< 0.33	< 0.33	< 0.33	< 0.33
Toluene	800	160	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.44	< 0.44	< 0.69	< 0.69	< 0.44	< 0.69	< 0.69	< 0.69	< 0.69
1,2,4-Trichlorobenzene	70	14	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 1.7	< 1.7	< 0.98	< 0.98	< 1.7	< 0.98	< 0.98	< 0.98	< 0.98
1,2,3-Trichlorobenzene	NL	NL	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 2.7	< 2.7	< 1.8	< 1.8	< 2.7	< 1.8	< 1.8	< 1.8	< 1.8
1,1,1-Trichloroethane	200	40	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.84	< 0.84	< 0.33	< 0.33	< 0.84	< 0.33	< 0.33	< 0.33	< 0.33
1,1,2-Trichloroethane	5	0.5	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.48	< 0.48	< 0.34	< 0.34	< 0.48	< 0.34	< 0.34	< 0.34	< 0.34
Trichloroethene (TCE)	5	0.5	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.47	< 0.47	< 0.33	< 0.33	< 0.47	< 0.33	< 0.33	< 0.33	< 0.33
Trichlorofluoromethane	NL	NL	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.87	< 0.87	< 0.71	< 0.71	< 0.87	< 0.71	< 0.71	< 0.71	< 0.71
1,2,3-Trichloropropane	60	12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2,4-Trimethylbenzene	--	--	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 1.6	< 1.6	< 2.2	< 2.2	< 1.6	< 2.2	< 2.2	< 2.2	< 2.2
1,3,5-Trimethylbenzene	--	--	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.5	< 1.5	< 1.4	< 1.4	< 1.5	< 1.4	< 1.4	< 1.4	< 1.4
Total Trimethylbenzene	480	96	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 1.6	< 1.6	< 2.2	< 2.2	< 1.6	< 2.2	< 2.2	< 2.2	< 2.2
Vinyl Chloride	0.2	0.02	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.17	< 0.17	< 0.18	< 0.18	< 0.17	< 0.18	< 0.18	< 0.18	< 0.18
m&p-Xylene	--	--	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 2.2	< 2.2	< 0.69	< 0.69	< 2.2	< 0.69	< 0.69	< 0.69	< 0.69
o-Xylene	--	--	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.9	< 0.9	< 0.63	< 0.63	< 0.9	< 0.63	< 0.63	< 0.63	< 0.63
Total Xylenes	2,000	400	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.9	< 2.2	< 0.69	< 0.69	< 2.2	< 0.69	< 0.69	< 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	5/30/14	1/3/14	5/29/14	8/25/14	11/10/14	2/23/15	10/14/15	12/5/13	5/30/14	10/14/15	12/5/13	5/29/14	12/5/13	5/28/14
Analyte	**ES[1]**	**PAL[2]**	Basement	Basement	Outside Spigot	Kitchen Sink	Kitchen Sink	Kitchen Sink	Kitchen Sink	Kitchen Sink	Pressure Tank	Bathroom	Bathroom	Bathroom	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
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)	--	--	7.49	6.84	6.98	7.02	7.8	7.87	7.95	7.95	7.79	8,42	7.58	7.86	8.49	7.5	8.05	7.88
Conductivity (uS)	--	--	739	885	931	543	520	658	674	674	649	519	500	578	655	861	828	905
Temperature (^{o}C)	--	--	9.92	12.50	10.30	9.02	7.80	18.30	11.33	11.33	16.22	8.69	11.98	11.99	12.16	15.1	8.43	11.5
Dissolved Oxygen (ppm)	--	--	5.91	1.85	3.95	5.32	2.24	0.8	1.44	1.44	1.49	5.73	1.83	2.52	4.92	1.46	5.32	3.84
Redox Potential (mV)	--	--	157.2	138	166	147.6	136	238	-102.5	-102.5	-14.7	90.0	143.0	-110.8	91.3	152	96.9	138

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.				
			12/12/13	5/28/14	5/29/14	10/14/15	1/3/14	8/25/14	10/13/15	10/13/2015 (DUP)	10/27/15	5/29/14	8/26/14	11/11/14	2/23/15	10/14/15
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	Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot
Volatile Organic Compounds (VOCs) (µg/L):																
Benzene	5	0.5	< 0.24	< 0.24	< 0.24	< 0.44	< 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	< 0.48	< 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
Bromodichloromethane	0.6	0.06	< 0.37	< 0.37	< 0.37	< 0.46	< 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	< 0.46	< 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	< 1.1	< 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	< 1.2	< 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	< 1	< 0.35	< 0.35	< 1	< 1	< 1	< 0.35	< 0.35	< 0.35	< 1	< 1
Carbon Tetrachloride	5	0.5	< 0.33	< 0.33	< 0.33	< 0.51	< 0.33	< 0.33	< 0.51	< 0.51	< 0.51	< 0.33	< 0.33	< 0.33	< 0.65	< 0.51
Chlorobenzene	NL	NL	< 0.24	< 0.24	< 0.24	< 0.46	< 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	< 0.65	< 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	< 0.43	< 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	< 1.9	< 0.81	< 0.81	< 1.9	< 1.9	< 1.9	< 0.81	< 0.81	< 0.81	< 1.9	< 1.9
2-Chlorotoluene	NL	NL	< 0.21	< 0.21	< 0.21	< 0.4	< 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	< 0.63	< 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	< 1.4	< 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	< 0.45	< 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
1,4-Dichlorobenzene	75	15	< 0.3	< 0.3	< 0.3	< 0.49	< 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	< 0.52	< 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	< 0.46	< 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	< 0.87	< 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	< 0.48	< 0.41	< 0.41	< 0.48	< 0.48	< 0.48	< 0.41	< 0.41	< 0.41	< 0.54	< 0.48
1,1-Dichloroethane	850	85	< 0.3	< 0.3	< 0.3	< 1.1	< 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	< 0.65	< 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	< 0.38	< 0.38	< 0.38	< 0.45	1.67	1.29	1.3 J	1.14 J	1.26 J	0.83 J	0.9 J	< 0.38	0.81 J	0.91 J
trans-1,2-Dichloroethene	100	20	< 0.35	< 0.35	< 0.35	< 0.54	< 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	< 0.43	< 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	< 3.1	< 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	< 0.33	< 0.33	< 0.33	< 0.33	< 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
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	< 0.23	< 0.23	< 0.44	< 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	< 0.63	< 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	< 0.71	< 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	< 2.2	< 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	< 0.82	< 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	< 1.1	< 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	< 0.5	< 0.5	< 0.5	< 1.3	< 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	< 1.1	< 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	< 1.6	< 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	< 0.77	< 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
1,1,2,2-Tetrachloroethane	0.2	0.02	< 0.45	< 0.45	< 0.45	< 0.52	< 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	< 0.48	< 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	< 0.49	< 0.33	< 0.33	< 0.49	< 0.49	< 0.49	< 0.33	< 0.33	< 0.33	< 0.74	< 0.49
Toluene	800	160	< 0.69	< 0.69	< 0.69	< 0.44	< 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	< 1.7	< 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	< 2.7	< 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	< 0.84	< 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	< 0.48	< 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	< 0.47	< 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	< 0.87	< 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
1,2,4-Trimethylbenzene	--	--	< 2.2	< 2.2	< 2.2	< 1.6	< 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	< 1.5	< 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	< 1.6	< 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	< 0.18	< 0.18	< 0.18	< 0.17	< 0.18	< 0.18	< 0.17	**0.2 J**	**0.18 J**	< 0.18	< 0.18	< 0.18	< 0.17	< 0.17
m&p-Xylene	--	--	< 0.69	< 0.69	< 0.69	< 2.2	< 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	< 0.9	< 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	< 2.2	< 0.69	< 0.69	< 2.2	< 2.2	< 2.2	< 0.69	< 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

			4024 CTH CR		4101 CTH CR		4002 Thunder Ridge Rd.					4005 Thunder Ridge Rd.				
			12/12/13	5/28/14	5/29/14	10/14/15	1/3/14	8/25/14	10/13/15	10/13/2015 (DUP)	10/27/15	5/29/14	8/26/14	11/11/14	2/23/15	10/14/15
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	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
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)	--	--	8.32	7.65	7.42	7.65	7.21	7.32	7.45	7.45	NM	7.75	8.06	8.00	8.06	7.23
Conductivity (uS)	--	--	599	565	598	687	583	740	774	774	NM	663	781	774	744	778
Temperature (^{o}C)	--	--	5.6	12.3	12.4	12.93	8.51	13.1	12.74	12.74	NM	12	14.9	9.71	8.1	10.7
Dissolved Oxygen (ppm)	--	--	4.71	1.44	2.3	2.54	5.32	3.49	1.42	1.42	NM	1.43	1.35	1.66	8.33	4.65
Redox Potential (mV)	--	--	99	124	126	-75	159.0	237.0	-135.8	-135.8	NM	122.0	199.0	-120.9	-195.4	-73.6

TABLE 2

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

Analyte	ES[1]	PAL[2]	4010 Thunder Ridge Rd.				4027 Thunder Ridge Rd.						4101 Thunder Ridge Rd.			
			5/28/14	8/26/14	2/24/15	10/20/15	5/29/14	8/26/14	11/11/14	11/11/14 (DUP)	2/24/15	10/13/15	8/26/14	11/17/14	3/11/15	10/14/15
			Outside Spigot	Outside Spigot	Pressure Tank	Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot	Pressure Tank	Pressure Tank	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	< 0.24	< 0.24	< 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	< 0.32	< 0.32	< 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
Bromodichloromethane	0.6	0.06	< 0.37	< 0.37	< 0.46	< 0.46	< 0.37	< 0.37	< 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	< 0.35	< 0.35	< 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	< 0.36	< 0.36	< 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	< 0.33	< 0.33	< 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	< 0.35	< 0.35	< 0.35	< 0.35	< 1	< 1	< 0.35	< 0.35	< 1	< 1
Carbon Tetrachloride	5	0.5	< 0.33	< 0.33	< 0.65	< 0.51	< 0.33	< 0.33	< 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	< 0.24	< 0.24	< 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	< 0.63	< 0.63	< 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	< 0.28	< 0.28	< 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	< 0.81	< 0.81	< 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	< 0.21	< 0.21	< 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	< 0.21	< 0.21	< 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	< 0.88	< 0.88	< 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	< 0.22	< 0.22	< 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
1,4-Dichlorobenzene	75	15	< 0.3	< 0.3	< 0.49	< 0.49	< 0.3	< 0.3	< 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	< 0.28	< 0.28	< 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	< 0.36	< 0.36	< 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	< 0.44	< 0.44	< 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	< 0.48	< 0.41	< 0.41	< 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	< 0.3	< 0.3	< 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	< 0.4	< 0.4	< 0.4	< 0.4	< 0.65	< 0.65	< 0.4	< 0.4	< 0.65	< 0.65
cis-1,2-Dichloroethene	70	7	1.37	1.18 J	1.43	1.27 J	0.59 J	0.52 J	0.6 J	0.53 J	0.48 J	0.67 J	0.73 J	0.63 J	0.76 J	0.87 J
trans-1,2-Dichloroethene	100	20	< 0.35	< 0.35	< 0.54	< 0.54	< 0.35	< 0.35	< 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	< 0.32	< 0.32	< 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	< 0.36	< 0.36	< 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	< 0.33	< 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
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	< 0.23	< 0.44	< 0.44	< 0.23	< 0.23	< 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	< 0.44	< 0.44	< 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	< 0.55	< 0.55	< 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	< 1.5	< 1.5	< 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	< 0.3	< 0.3	< 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	< 0.31	< 0.31	< 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	< 0.5	< 0.5	< 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	< 0.23	< 0.23	< 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	< 1.7	< 1.7	< 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	< 0.25	< 0.25	< 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
1,1,2,2-Tetrachloroethane	0.2	0.02	< 0.45	< 0.45	< 0.52	< 0.52	< 0.45	< 0.45	< 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	< 0.33	< 0.33	< 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	< 0.49	< 0.33	< 0.33	< 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	< 0.69	< 0.69	< 0.69	< 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	< 0.98	< 0.98	< 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	< 1.8	< 1.8	< 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	< 0.33	< 0.33	< 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	< 0.34	< 0.34	< 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	< 0.33	< 0.33	< 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	< 0.71	< 0.71	< 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
1,2,4-Trimethylbenzene	--	--	< 2.2	< 2.2	< 1.6	< 1.6	< 2.2	< 2.2	< 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	< 1.4	< 1.4	< 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	< 2.2	< 2.2	< 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	< 0.18	< 0.18	< 0.18	< 0.18	< 0.17	< 0.17	< 0.18	< 0.18	< 0.17	< 0.17
m&p-Xylene	--	--	< 0.69	< 0.69	< 2.2	< 2.2	< 0.69	< 0.69	< 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	< 0.63	< 0.63	< 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	< 2.2	< 0.69	< 0.69	< 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

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

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 Viebahn St.				
			8/25/14	11/17/14	2/23/15	10/13/15	12/5/13	5/29/14	12/5/13	11/7/14	11/19/14	2/24/15	2/2415 (DUP)	10/13/15
Analyte	**ES[1]**	**PAL[2]**	Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot	Well Pump	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank	Pressure Tank
Volatile Organic Compounds (VOCs) (µg/L):														
Benzene	5	0.5	< 0.24	< 0.24	< 0.44	< 0.44	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.44	< 0.44	< 0.44
Bromobenzene	NL	NL	< 0.32	< 0.32	< 0.48	< 0.48	< 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
Bromodichloromethane	0.6	0.06	< 0.37	< 0.37	< 0.46	< 0.46	< 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	< 0.46	< 0.46	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.46	< 0.46	< 0.46
tert-Butylbenzene	NL	NL	< 0.36	< 0.36	< 1.1	< 1.1	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 1.1	< 1.1	< 1.1
sec-Butylbenzene	NL	NL	< 0.33	< 0.33	< 1.2	< 1.2	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 1.2	< 1.2	< 1.2
n-Butylbenzene	NL	NL	< 0.35	< 0.35	< 1	< 1	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 1	< 1	< 1
Carbon Tetrachloride	5	0.5	< 0.33	< 0.33	< 0.65	< 0.51	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.65	< 0.65	< 0.51
Chlorobenzene	NL	NL	< 0.24	< 0.24	< 0.46	< 0.46	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.46	< 0.46	< 0.46
Chloroethane	400	80	< 0.63	< 0.63	< 0.65	< 0.65	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.65	< 0.65	< 0.65
Chloroform	6	0.6	< 0.28	< 0.28	< 0.43	< 0.43	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.43	< 0.43	< 0.43
Chloromethane	3	0.3	< 0.81	< 0.81	< 1.9	< 1.9	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81	< 1.9	< 1.9	< 1.9
2-Chlorotoluene	NL	NL	< 0.21	< 0.21	< 0.4	< 0.4	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.4	< 0.4	< 0.4
4-Chlorotoluene	NL	NL	< 0.21	< 0.21	< 0.63	< 0.63	< 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	< 1.4	< 1.4	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88	< 1.4	< 1.4	< 1.4
Dibromochloromethane	60	6	< 0.22	< 0.22	< 0.45	< 0.45	< 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
1,4-Dichlorobenzene	75	15	< 0.3	< 0.3	< 0.49	< 0.49	< 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	< 0.52	< 0.52	< 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	< 0.46	< 0.46	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.46	< 0.46	< 0.46
Dichlorodifluoromethane	1000	200	< 0.44	< 0.44	< 0.87	< 0.87	< 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	< 0.54	< 0.48	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.54	< 0.54	< 0.48
1,1-Dichloroethane	850	85	< 0.3	< 0.3	< 1.1	< 1.1	< 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	< 0.65	< 0.65	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.65	< 0.65	< 0.65
cis-1,2-Dichloroethene	70	7	0.41 J	< 0.38	< 0.45	< 0.45	< 0.38	< 0.38	< 0.38	1.13 J	1.12 J	0.92 J	0.87 J	1.3 J
trans-1,2-Dichloroethene	100	20	< 0.35	< 0.35	< 0.54	< 0.54	< 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	< 0.43	< 0.43	< 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	< 3.1	< 3.1	< 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	< 0.42	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.42	< 0.42	< 0.33
1,1-Dichloropropene	NL	NL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
cis-1,3-Dichloropropene	0.4	0.04	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
trans-1,3-Dichloropropene	0.4	0.04	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Di-isopropyl ether	NL	NL	< 0.23	< 0.23	< 0.44	< 0.44	< 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	< 0.63	< 0.63	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.63	< 0.63	< 0.63
Ethylbenzene	700	140	< 0.55	< 0.55	< 0.71	< 0.71	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.71	< 0.71	< 0.71
Hexachlorobutadiene	NL	NL	< 1.5	< 1.5	< 2.2	< 2.2	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 2.2	< 2.2	< 2.2
Isopropylbenzene	NS	NS	< 0.3	< 0.3	< 0.82	< 0.82	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.82	< 0.82	< 0.82
p-Isopropyltoluene	NL	NL	< 0.31	< 0.31	< 1.1	< 1.1	< 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	< 1.3	< 1.3	< 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	< 1.1	< 1.1	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 1.1	< 1.1	< 1.1
Naphthalene	100	10	< 1.7	< 1.7	< 1.6	< 1.6	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.6	< 1.6	< 1.6
n-Propylbenzene	NL	NL	< 0.25	< 0.25	< 0.77	< 0.77	< 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
1,1,2,2-Tetrachloroethane	0.2	0.02	< 0.45	< 0.45	< 0.52	< 0.52	< 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	< 0.48	< 0.48	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.48	< 0.48	< 0.48
Tetrachloroethene	5	0.5	< 0.33	< 0.33	< 0.74	< 0.49	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.74	< 0.74	< 0.49
Toluene	800	160	< 0.69	< 0.69	< 0.44	< 0.44	< 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	< 1.7	< 1.7	< 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	< 2.7	< 2.7	< 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	< 0.84	< 0.84	< 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	< 0.48	< 0.48	< 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	< 0.47	< 0.47	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.47	< 0.47	< 0.47
Trichlorofluoromethane	NL	NL	< 0.71	< 0.71	< 0.87	< 0.87	< 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
1,2,4-Trimethylbenzene	--	--	< 2.2	< 2.2	< 1.6	< 1.6	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 1.6	< 1.6	< 1.6
1,3,5-Trimethylbenzene	--	--	< 1.4	< 1.4	< 1.5	< 1.5	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.5	< 1.5	< 1.5
Total Trimethylbenzene	480	96	< 2.2	< 2.2	< 1.6	< 1.6	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 1.6	< 1.6	< 1.6
Vinyl Chloride	0.2	0.02	< 0.18	< 0.18	< 0.17	< 0.17	< 0.18	< 0.18	< 0.18	**0.48 J**	**0.4 J**	< 0.17	**0.18 J**	**0.23 J**
m&p-Xylene	--	--	< 0.69	< 0.69	< 2.2	< 2.2	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 2.2	< 2.2	< 2.2
o-Xylene	--	--	< 0.63	< 0.63	< 0.9	< 0.9	< 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	< 0.9	< 2.2	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.9	< 0.9	< 2.2

TABLE 2

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

Analyte	ES[1]	PAL[2]	4111 Thunder Ridge Rd.				4127 Thunder Ridge Rd.		3107 Fricke Dr.	3617 Viebahn St.				
			8/25/14	11/17/14	2/23/15	10/13/15	12/5/13	5/29/14	12/5/13	11/7/14	11/19/14	2/24/15	2/2415 (DUP)	10/13/15
			Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot	Outside Spigot	Well Pump	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
Arsenic	0.01	0.001	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Barium	2	0.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Beryllium	0.004	0.0004	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium	0.005	0.0005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium	0.1	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Copper	1.3	0.13	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Iron	0.3	0.15	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead	0.015	0.0015	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese	0.05	0.025	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mercury	0.002	0.0002	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nickel	0.1	0.02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Selenium	0.05	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sliver	0.05	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sodium	increase of 10		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Thallium	0.002	0.0004	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Zinc	5	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Poychlorinated Biphenyls (PCBs) (µg/L):														
Aroclor-1016	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1221	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1232	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1242	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1248	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1254	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1260	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total PCBs	0.03	0.003	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Field Screening Measurements														
pH (IU)	--	--	7.65	7.99	7.98	7.68	8.24	7.32	7.63	8.12	7.99	8.32	8.32	7.39
Conductivity (uS)	--	--	809	786	818	827	1033	1046	561	646	590	511	511	663
Temperature (^{o}C)	--	--	12.8	8.88	7.83	13.73	8.53	11.5	8.58	10.44	9.95	9.00	9.00	12.06
Dissolved Oxygen (ppm)	--	--	0.97	5.9	4.31	1.68	5.21	1.33	5.32	3.7	1.93	3.89	3.89	1.67
Redox Potential (mV)	--	--	236.0	-41.4	-155.3	-120.9	95.0	132.0	80.3	-29.2	-147.6	-185.7	-185.7	-123.4

TABLE 2

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

Analyte	ES[1]	PAL[2]	3701 Viebahn St.							3815 Viebahn St.					3817 Viebahn St.			
			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
			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
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
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
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	< 0.46	< 0.46	< 0.46	< 0.46	< 0.37	< 0.37	< 0.37	< 0.46	< 0.46	< 0.37	< 0.37	< 0.46	< 0.46
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
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
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
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
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
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
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
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
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
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
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
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
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
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	< 0.49	< 0.49	< 0.49	< 0.49	< 0.3	< 0.3	< 0.3	< 0.49	< 0.49	< 0.3	< 0.3	< 0.49	< 0.49
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
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
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
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
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-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
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
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
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
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
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
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	< 0.44	< 0.44	< 0.44	< 0.44	< 0.23	< 0.23	< 0.23	< 0.44	< 0.44	< 0.23	< 0.23	< 0.44	< 0.44
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
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
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
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
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
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
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
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
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
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	< 0.52	< 0.52	< 0.52	< 0.52	< 0.45	< 0.45	< 0.45	< 0.52	< 0.52	< 0.45	< 0.45	< 0.52	< 0.52
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
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
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
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
1,2,3-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
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
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
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
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
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	< 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
1,3,5-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
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
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
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
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
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

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.			
			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
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	Pressure Tank	Outside Spigot	Outside Spigot	Pressure Tank	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)	--	--	8.38	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
Conductivity (uS)	--	--	630	658	658	618	618	624	624	644	561	664	645	645	631	658	746	649
Temperature (^{o}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
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
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

TABLE 2

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

Analyte	ES[1]	PAL[2]	3825 Viebahn St.					4025 Viebahn St.				4101 Viebahn St.			
			10/29/14	11/7/14	2/23/15	2/23/15 (DUP)	10/14/15	10/29/14	11/7/14	2/24/15	10/13/15	10/29/14	11/7/15	2/24/15	10/14/15
			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	< 0.44	< 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	< 0.32	< 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
Bromodichloromethane	0.6	0.06	< 0.37	< 0.37	< 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	< 0.35	< 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	< 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	< 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	< 0.35	< 0.35	< 1	< 1	< 0.35	< 0.35	< 1	< 1
Carbon Tetrachloride	5	0.5	< 0.33	< 0.33	< 0.65	< 0.65	< 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	< 0.24	< 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	< 0.63	< 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	< 0.28	< 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	< 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	< 0.21	< 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	< 0.21	< 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	< 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	< 0.22	< 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
1,4-Dichlorobenzene	75	15	< 0.3	< 0.3	< 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	< 0.28	< 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	< 0.36	< 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	< 0.44	< 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	< 0.41	< 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	< 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	< 0.4	< 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	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	< 0.35	< 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	< 0.32	< 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	< 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	< 0.42	< 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
cis-1,3-Dichloropropene	0.4	0.04	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
trans-1,3-Dichloropropene	0.4	0.04	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Di-isopropyl ether	NL	NL	< 0.23	< 0.23	< 0.44	< 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	< 0.44	< 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	< 0.55	< 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	< 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	< 0.3	< 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	< 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	< 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	< 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	< 1.7	< 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	< 0.25	< 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
1,1,2,2-Tetrachloroethane	0.2	0.02	< 0.45	< 0.45	< 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	< 0.33	< 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	< 0.33	< 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	0.95 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	< 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	< 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	< 0.33	< 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	< 0.34	< 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	< 0.33	< 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	< 0.71	< 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
1,2,4-Trimethylbenzene	--	--	< 2.2	< 2.2	< 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	< 1.4	< 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	< 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	**0.34 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	< 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	< 0.63	< 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	< 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

Analyte	ES[1]	PAL[2]	3825 Viebahn St.					4025 Viebahn St.				4101 Viebahn St.			
			10/29/14	11/7/14	2/23/15	2/23/15 (DUP)	10/14/15	10/29/14	11/7/14	2/24/15	10/13/15	10/29/14	11/7/15	2/24/15	10/14/15
			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
Arsenic	0.01	0.001	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Barium	2	0.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Beryllium	0.004	0.0004	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium	0.005	0.0005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium	0.1	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Copper	1.3	0.13	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Iron	0.3	0.15	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead	0.015	0.0015	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese	0.05	0.025	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mercury	0.002	0.0002	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nickel	0.1	0.02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Selenium	0.05	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sliver	0.05	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sodium	increase of 10		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Thallium	0.002	0.0004	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Zinc	5	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Poychlorinated Biphenyls (PCBs) (µg/L):															
Aroclor-1016	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1221	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1232	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1242	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1248	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1254	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1260	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total PCBs	0.03	0.003	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Field Screening Measurements															
pH (IU)	--	--	7.87	8.21	8.03	8.03	7.67	7.87	8.03	7.92	7.35	7.79	7.99	8.04	7.51
Conductivity (uS)	--	--	674	668	670	670	655	824	629	628	630	644	627	653	624
Temperature (^{o}C)	--	--	10.27	9.86	7.43	7.43	12.83	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	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	-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	2/4/14	6/4/14	10/14/15	7/11/14	2/4/14	6/2/14
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	Outside Spigot	Kitchen Sink	Kitchen Sink
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	< 0.24	< 0.24	< 0.44	< 0.24	< 0.24	< 0.24
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	< 0.32	< 0.32	< 0.48	< 0.32	< 0.32	< 0.32
Bromochloromethane	NL	NL	NA	NA	NA	< 0.15	< 0.15	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	< 0.37	< 0.37	< 0.46	< 0.37	< 0.37	< 0.37
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	< 0.35	< 0.35	< 0.46	< 0.35	< 0.35	< 0.35
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	< 0.36	< 0.36	< 1.1	< 0.36	< 0.36	< 0.36
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	< 0.33	< 0.33	< 1.2	< 0.33	< 0.33	< 0.33
n-Butylbenzene	NL	NL	< 0.35	< 1	< 0.35	< 0.15	< 0.15	< 0.35	< 0.35	< 0.35	< 0.35	< 1	< 1	< 0.35	< 0.35	< 1	< 0.35	< 0.35	< 0.35
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	< 0.33	< 0.33	< 0.51	< 0.33	< 0.33	< 0.33
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	< 0.24	< 0.24	< 0.46	< 0.24	< 0.24	< 0.24
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	< 0.63	< 0.63	< 0.65	< 0.63	< 0.63	< 0.63
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	< 0.28	< 0.28	< 0.43	< 0.28	< 0.28	< 0.28
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	< 0.81	< 0.81	< 1.9	< 0.81	< 0.81	< 0.81
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	< 0.21	< 0.21	< 0.4	< 0.21	< 0.21	< 0.21
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	< 0.21	< 0.21	< 0.63	< 0.21	< 0.21	< 0.21
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	< 0.88	< 0.88	< 1.4	< 0.88	< 0.88	< 0.88
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	< 0.22	< 0.22	< 0.45	< 0.22	< 0.22	< 0.22
Dibromomethane	NL	NL	NA	NA	NA	< 0.15	< 0.15	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	< 0.3	< 0.3	< 0.49	< 0.3	< 0.3	< 0.3
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	< 0.28	< 0.28	< 0.52	< 0.28	< 0.28	< 0.28
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	< 0.36	< 0.36	< 0.46	< 0.36	< 0.36	< 0.36
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	< 0.44	< 0.44	< 0.87	< 0.44	< 0.44	< 0.44
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	< 0.41	< 0.41	< 0.48	< 0.41	< 0.41	< 0.41
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	< 0.3	< 0.3	< 1.1	< 0.3	< 0.3	< 0.3
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	< 0.4	< 0.4	< 0.65	< 0.4	< 0.4	< 0.4
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	< 0.38	< 0.38	< 0.45	< 0.38	< 0.38	< 0.38
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	< 0.35	< 0.35	< 0.54	< 0.35	< 0.35	< 0.35
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	< 0.32	< 0.32	< 0.43	< 0.32	< 0.32	< 0.32
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	< 0.36	< 0.36	< 3.1	< 0.36	< 0.36	< 0.36
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
1,1-Dichloropropene	NL	NL	NA	NA	NA	< 0.15	< 0.15	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
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
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	< 0.23	< 0.23	< 0.44	< 0.23	< 0.23	< 0.23
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	< 0.44	< 0.44	< 0.63	< 0.44	< 0.44	< 0.44
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	< 0.55	< 0.55	< 0.71	< 0.55	< 0.55	< 0.55
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	< 1.5	< 1.5	< 2.2	< 1.5	< 1.5	< 1.5
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	< 0.3	< 0.3	< 0.82	< 0.3	< 0.3	< 0.3
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	< 0.31	< 0.31	< 1.1	< 0.31	< 0.31	< 0.31
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	< 0.5	< 0.5	< 1.3	< 0.5	< 0.5	< 0.5
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	< 0.23	< 0.23	< 1.1	< 0.23	< 0.23	< 0.23
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	< 1.7	< 1.7	< 1.6	< 1.7	< 1.7	< 1.7
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	< 0.25	< 0.25	< 0.77	< 0.25	< 0.25	< 0.25
Styrene	100	10	NA	NA	NA	< 0.15	< 0.15	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	< 0.45	< 0.45	< 0.52	< 0.45	< 0.45	< 0.45
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	< 0.33	< 0.33	< 0.48	< 0.33	< 0.33	< 0.33
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	< 0.33	< 0.33	< 0.49	< 0.33	< 0.33	< 0.33
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	< 0.69	< 0.69	< 0.44	< 0.69	< 0.69	< 0.69
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	< 0.98	< 0.98	< 1.7	< 0.98	< 0.98	< 0.98
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	< 1.8	< 1.8	< 2.7	< 1.8	< 1.8	< 1.8
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	< 0.33	< 0.33	< 0.84	< 0.33	< 0.33	< 0.33
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	< 0.34	< 0.34	< 0.48	< 0.34	< 0.34	< 0.34
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	< 0.33	< 0.33	< 0.47	< 0.33	< 0.33	< 0.33
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	< 0.71	< 0.71	< 0.87	< 0.71	< 0.71	< 0.71
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
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	< 2.2	< 2.2	< 1.6	< 2.2	< 2.2	< 2.2
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	< 1.4	< 1.4	< 1.5	< 1.4	< 1.4	< 1.4
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	< 2.2	< 2.2	< 1.6	< 2.2	< 2.2	< 2.2
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	< 0.18	< 0.18	< 0.17	< 0.18	< 0.18	< 0.18
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	< 0.69	< 0.69	< 2.2	< 0.69	< 0.69	< 0.69
o-Xylene	--	--	< 0.63	< 0.9	< 0.63	< 0.15	< 0.15	< 0.63	< 0.63	< 0.63	< 0.63	< 0.9	< 0.9	< 0.63	< 0.63	< 0.9	< 0.63	< 0.63	< 0.63
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	< 0.69	< 0.69	< 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

Analyte	ES[1]	PAL[2]	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	2/4/14	6/4/14	10/14/15	7/11/14	2/4/14	6/2/14
			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	Outside Spigot	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	NA	NA
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
Beryllium	0.004	0.0004	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
Chromium	0.1	0.01	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
Iron	0.3	0.15	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
Manganese	0.05	0.025	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
Nickel	0.1	0.02	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
Sliver	0.05	0.01	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
Thallium	0.002	0.0004	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
Poychlorinated Biphenyls (PCBs) (µg/L):																			
Aroclor-1016	--	--	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
Aroclor-1232	--	--	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
Aroclor-1248	--	--	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
Aroclor-1260	--	--	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
Field Screening Measurements																			
pH (IU)	--	--	7.45	NM	8.1	NM	NM	7.21	7.25	7.82	8.03	NM	7.88	7.32	7.63	7.61	7.52	7.1	8.06
Conductivity (uS)	--	--	779	NM	571	NM	NM	379	136	921	553	NM	548	603	797	843	1033	454	470
Temperature (^{o}C)	--	--	11.75	NM	11.09	NM	NM	8.5	10.6	10.7	10.29	NM	12.69	8.75	10.4	12.13	13.8	7.1	11.8
Dissolved Oxygen (ppm)	--	--	3.21	NM	4.23	NM	NM	7.42	2.5	1.22	4.06	NM	2.07	NM	1.97	2.26	4.11	6.53	1.23
Redox Potential (mV)	--	--	225	NM	84.5	NM	NM	42.4	136	236	-7.3	NM	-100.6	113.2	117	-106.5	123	123.2	165

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	2/4/14	6/2/14	8/26/14	11/10/14	2/24/15	10/14/15
			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
Volatile Organic Compounds (VOCs) (µg/L):															
Benzene	5	0.5	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.44	< 0.44	< 0.24	< 0.24	< 0.24	< 0.24	< 0.44	< 0.44
Bromobenzene	NL	NL	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.48	< 0.48	< 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
Bromodichloromethane	0.6	0.06	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.46	< 0.46	< 0.37	< 0.37	< 0.37	< 0.37	< 0.46	< 0.46
Bromoform	4.4	0.44	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.46	< 0.46	< 0.35	< 0.35	< 0.35	< 0.35	< 0.46	< 0.46
tert-Butylbenzene	NL	NL	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 1.1	< 1.1	< 0.36	< 0.36	< 0.36	< 0.36	< 1.1	< 1.1
sec-Butylbenzene	NL	NL	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 1.2	< 1.2	< 0.33	< 0.33	< 0.33	< 0.33	< 1.2	< 1.2
n-Butylbenzene	NL	NL	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 1	< 1	< 0.35	< 0.35	< 0.35	< 0.35	< 1	< 1
Carbon Tetrachloride	5	0.5	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.51	< 0.51	< 0.33	< 0.33	< 0.33	< 0.33	< 0.65	< 0.51
Chlorobenzene	NL	NL	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.46	< 0.46	< 0.24	< 0.24	< 0.24	< 0.24	< 0.46	< 0.46
Chloroethane	400	80	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.65	< 0.65	< 0.63	< 0.63	< 0.63	< 0.63	< 0.65	< 0.65
Chloroform	6	0.6	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.43	< 0.43	< 0.28	< 0.28	< 0.28	< 0.28	< 0.43	< 0.43
Chloromethane	3	0.3	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81	< 1.9	< 1.9	< 0.81	< 0.81	< 0.81	< 0.81	< 1.9	< 1.9
2-Chlorotoluene	NL	NL	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.4	< 0.4	< 0.21	< 0.21	< 0.21	< 0.21	< 0.4	< 0.4
4-Chlorotoluene	NL	NL	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.63	< 0.63	< 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	< 0.88	< 0.88	< 0.88	< 1.4	< 1.4	< 0.88	< 0.88	< 0.88	< 0.88	< 1.4	< 1.4
Dibromochloromethane	60	6	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.45	< 0.45	< 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
1,4-Dichlorobenzene	75	15	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.49	< 0.49	< 0.3	< 0.3	< 0.3	< 0.3	< 0.49	< 0.49
1,3-Dichlorobenzene	600	120	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.52	< 0.52	< 0.28	< 0.28	< 0.28	< 0.28	< 0.52	< 0.52
1,2-Dichlorobenzene	600	60	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.46	< 0.46	< 0.36	< 0.36	< 0.36	< 0.36	< 0.46	< 0.46
Dichlorodifluoromethane	1000	200	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.87	< 0.87	< 0.44	< 0.44	< 0.44	< 0.44	< 0.87	< 0.87
1,2-Dichloroethane	5	0.5	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.48	< 0.48	< 0.41	< 0.41	< 0.41	< 0.41	< 0.54	< 0.48
1,1-Dichloroethane	850	85	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 1.1	< 1.1	< 0.3	< 0.3	< 0.3	< 0.3	< 1.1	< 1.1
1,1-Dichloroethene	7	0.7	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.65	< 0.65	< 0.4	< 0.4	< 0.4	< 0.4	< 0.65	< 0.65
cis-1,2-Dichloroethene	70	7	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38	< 0.45	< 0.45	0.87 J	0.97 J	1.14 J	0.65 J	0.93 J	1.04 J
trans-1,2-Dichloroethene	100	20	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.54	< 0.54	< 0.35	< 0.35	< 0.35	< 0.35	< 0.54	< 0.54
1,2-Dichloropropane	5	0.5	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.43	< 0.43	< 0.32	< 0.32	< 0.32	< 0.32	< 0.43	< 0.43
2,2-Dichloropropane	NL	NL	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 3.1	< 3.1	< 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	< 0.33	< 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
cis-1,3-Dichloropropene	0.4	0.04	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
trans-1,3-Dichloropropene	0.4	0.04	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Di-isopropyl ether	NL	NL	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.44	< 0.44	< 0.23	< 0.23	< 0.23	< 0.23	< 0.44	< 0.44
EDB (1,2-Dibromoethane)	0.05	0.005	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.63	< 0.63	< 0.44	< 0.44	< 0.44	< 0.44	< 0.63	< 0.63
Ethylbenzene	700	140	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.71	< 0.71	< 0.55	< 0.55	< 0.55	< 0.55	< 0.71	< 0.71
Hexachlorobutadiene	NL	NL	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 2.2	< 2.2	< 1.5	< 1.5	< 1.5	< 1.5	< 2.2	< 2.2
Isopropylbenzene	NS	NS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.82	< 0.82	< 0.3	< 0.3	< 0.3	< 0.3	< 0.82	< 0.82
p-Isopropyltoluene	NL	NL	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 1.1	< 1.1	< 0.31	< 0.31	< 0.31	< 0.31	< 1.1	< 1.1
Methylene Chloride	5	0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 1.3	< 1.3	< 0.5	< 0.5	< 0.5	< 0.5	< 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	< 0.23	< 0.23	< 0.23	< 0.23	< 1.1	< 1.1
Naphthalene	100	10	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.6	< 1.6	< 1.7	< 1.7	< 1.7	< 1.7	< 1.6	< 1.6
n-Propylbenzene	NL	NL	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.77	< 0.77	< 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
1,1,2,2-Tetrachloroethane	0.2	0.02	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.52	< 0.52	< 0.45	< 0.45	< 0.45	< 0.45	< 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	< 0.33	< 0.33	< 0.33	< 0.33	< 0.48	< 0.48
Tetrachloroethene	5	0.5	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.49	< 0.49	< 0.33	< 0.33	< 0.33	< 0.33	< 0.74	< 0.49
Toluene	800	160	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 0.44	< 0.44	< 0.69	< 0.69	< 0.69	< 0.69	< 0.44	< 0.44
1,2,4-Trichlorobenzene	70	14	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 1.7	< 1.7	< 0.98	< 0.98	< 0.98	< 0.98	< 1.7	< 1.7
1,2,3-Trichlorobenzene	NL	NL	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 2.7	< 2.7	< 1.8	< 1.8	< 1.8	< 1.8	< 2.7	< 2.7
1,1,1-Trichloroethane	200	40	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.84	< 0.84	< 0.33	< 0.33	< 0.33	< 0.33	< 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	< 0.34	< 0.34	< 0.34	< 0.34	< 0.48	< 0.48
Trichloroethene (TCE)	5	0.5	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.47	< 0.47	< 0.33	< 0.33	< 0.33	< 0.33	< 0.47	< 0.47
Trichlorofluoromethane	NL	NL	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.87	< 0.87	< 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
1,2,4-Trimethylbenzene	--	--	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 1.6	< 1.6	< 2.2	< 2.2	< 2.2	< 2.2	< 1.6	< 1.6
1,3,5-Trimethylbenzene	--	--	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.5	< 1.5	< 1.4	< 1.4	< 1.4	< 1.4	< 1.5	< 1.5
Total Trimethylbenzene	480	96	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 1.6	< 1.6	< 2.2	< 2.2	< 2.2	< 2.2	< 1.6	< 1.6
Vinyl Chloride	0.2	0.02	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.17	< 0.17	< 0.18	< 0.18	< 0.18	< 0.18	< 0.17	< 0.17
m&p-Xylene	--	--	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 2.2	< 2.2	< 0.69	< 0.69	< 0.69	< 0.69	< 2.2	< 2.2
o-Xylene	--	--	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.9	< 0.9	< 0.63	< 0.63	< 0.63	< 0.63	< 0.9	< 0.9
Total Xylenes	2,000	400	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69	< 2.2	< 2.2	< 0.69	< 0.69	< 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

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	2/4/14	6/2/14	8/26/14	11/10/14	2/24/15	10/14/15
			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
RCRA Metals (mg/L)															
Antimony	0.006	0.0012	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Arsenic	0.01	0.001	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Barium	2	0.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Beryllium	0.004	0.0004	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium	0.005	0.0005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium	0.1	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Copper	1.3	0.13	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Iron	0.3	0.15	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead	0.015	0.0015	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese	0.05	0.025	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mercury	0.002	0.0002	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nickel	0.1	0.02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Selenium	0.05	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sliver	0.05	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sodium	increase of 10		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Thallium	0.002	0.0004	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Zinc	5	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Poychlorinated Biphenyls (PCBs) (µg/L):															
Aroclor-1016	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1221	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1232	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1242	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1248	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1254	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1260	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total PCBs	0.03	0.003	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Field Screening Measurements															
pH (IU)	--	--	7.21	7.78	7.03	7.41	7.41	7.34	NM	7.21	7.61	7.45	7.95	7.99	7.5
Conductivity (uS)	--	--	514	671	579	672	672	900	NM	468	636	762	754	810	742
Temperature (^{o}C)	--	--	8.96	10.6	9.29	12.1	12.1	12.28	NM	10.06	12.7	14.3	11.85	8.8	13.77
Dissolved Oxygen (ppm)	--	--	5.32	4.99	5.3	1.62	1.62	1.77	NM	NM	2.83	1.34	5.53	7.64	2.48
Redox Potential (mV)	--	--	210.0	111.0	117.3	159.0	159.0	-75.7	NM	100.3	148	206	-27.2	-160.9	-124.6

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

NOTES:

(1) Enforcement Standard from NR140, January 2012.

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

NL - ES or PAL not listed in NR140.

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

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

Table 3
POTABLE WELL MONITORING WORK PLAN

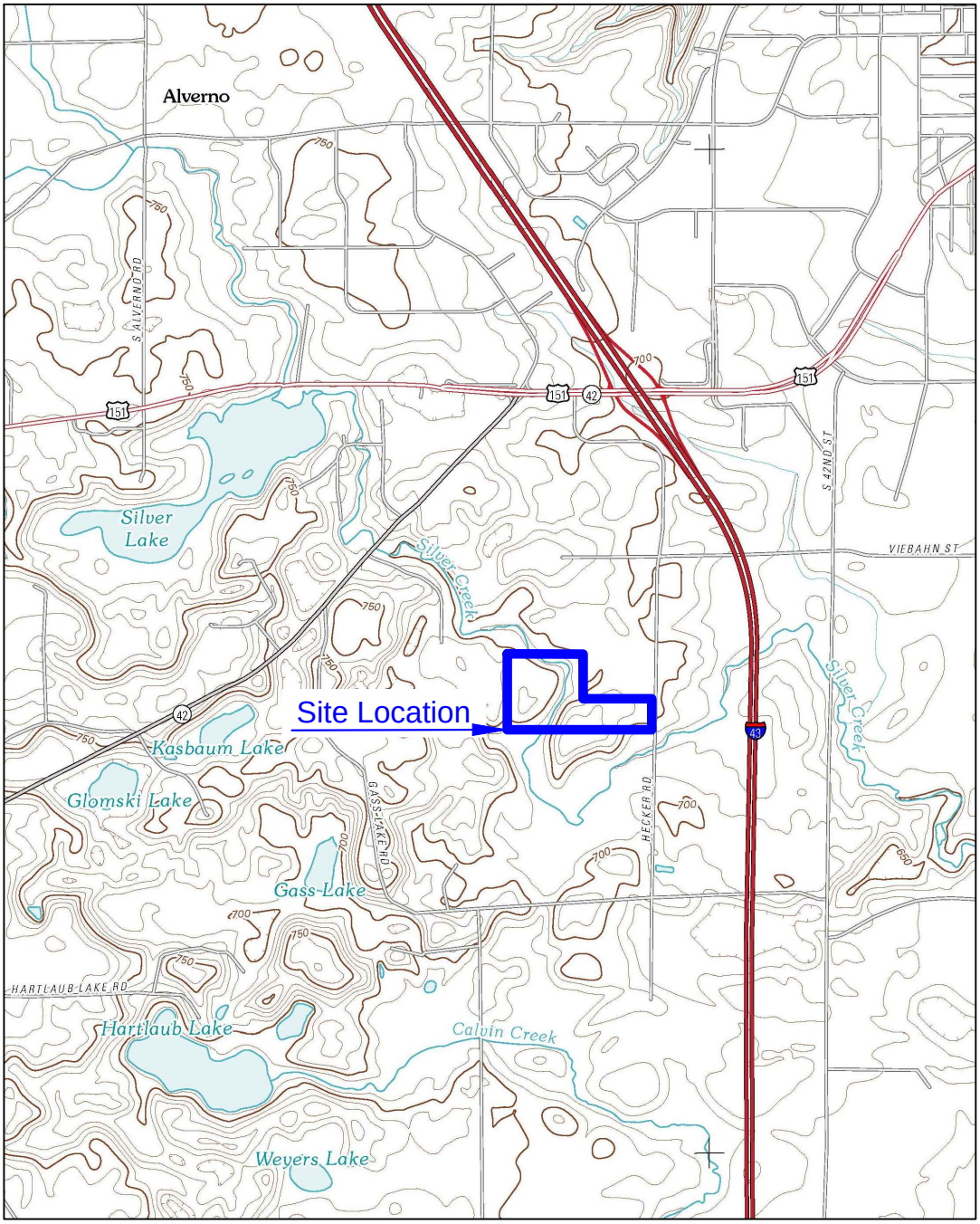
AECOM

TABLE 3
POTABLE WELL MONITORING WORK PLAN
SUMMARY OF SEMI-ANNUAL POTABLE WELL SAMPLING, 2015 to 2016
FORMER TOWN OF NEWTON GRAVEL PIT
MANITOWOC, WISCONSIN

Well Address	1st Event October 2015	2nd Event March 2016	3rd Event October 2016	Notes
Target Zone Wells				
3617(3621) Viebahn St (City Water)	X	X	X	well to be left in-place for non-potable use and sampling
3701 Viebahn St (City Water)	X	X	X	well to be left in-place for non-potable use and sampling
3815 Viebahn St (City Water)	X	no sample - City Water	no sample - City Water	well to be abandoned after connection to City water
3817 Viebahn St	X	X	X	
3825 Viebahn St	X	X	X	
4025 Viebahn St (City Water)	X	no sample - City Water	no sample - City Water	well to be abandoned after connection to City water
4101 Viebahn St (City Water)	X	no sample - City Water	no sample - City Water	well to be abandoned after connection to City water
4141 Viebahn Street (2717 CTH CR) (City Water)	X	X	X	well to be left in-place for non-potable use and sampling
3303 Hecker Rd.	X	X	X	
3327 Hecker Rd.	X	X	X	
3461(3417) Hecker Rd.	X	X	X	
3702 Hecker Rd.	X	X	X	
2734(2804) CTH CR (City Water)	X	no sample - City Water	no sample - City Water	well to be abandoned after connection to City water
2916 CTH CR (City Water)	X	no sample - City Water	no sample - City Water	well to be abandoned after connection to City water
2917 CTH CR (City Water)	moved from Sentinel to Target Zone	no sample - City Water	no sample - City Water	well to be abandoned after connection to City water
3504 CTH CR	X	X	X	future replacement well location
3618 CTH CR	X	X	X	
4002 Thunder Ridge	X	X	X	future replacement well location
4005 Thunder Ridge	X	X	X	
4010 Thunder Ridge	X	X	X	
4027 Thunder Ridge	X	X	X	
4101 Thunder Ridge	X	X	X	
4111 Thunder Ridge	X	X	X	
3921 Black Hawk Ct.	X	X	X	
4159 Silver Creek Rd.	X	X	X	
3027 Orchard Ln.	X	X	X	
Replacement Wells				
3515 Hecker Rd.	X		X	
3518 Hecker Rd.	X		X	
3609 Hecker Rd.	X		X	
3023 CTH CR	X		X	
3120 CTH CR	X		X	
3403 CTH CR	X		X	
Sentinel Zone Wells				
4219 Viebahn St	X			
3121 Hecker Rd.	X			
3320 Hecker Rd.		X		
3625 Hecker Rd.			X	
3720 Hecker Rd.		X		
2706 CTH CR			X	
2716 CTH CR	X			
2832 (2904) CTH CR		X		
2911 CTH CR			X	
3224 CTH CR		X		
3312 CTH CR			X	
3322 CTH CR	X			
3412 CTH CR		X		
3422 CTH CR			X	
3523 CTH CR	X			
3533 CTH CR		X		
3611 CTH CR			X	
3626(3626B) CTH CR	X			
3627 CTH CR		X		
4024 CTH CR			X	
4101 CTH CR	X			
4127 Thunder Ridge Rd.		X		
3911 Blackhawk Ct			X	
3128 Orchard Ln.	X			
3318 Orchard Ln.		X		
3420 Orchard Ln.			X	
3524 Orchard Ln.	X			
3812 Silver Creek		X		
3902 Silver Creek Rd.			X	
4004 Silver Creek Rd.	X			
4156 Silver Creek		X		
Historically Sampled Wells				
5107 Veibahn St.				
2925 Fricke Rd.				
3107 Fricke Rd.				
3610 Gass Lake Rd.				
3609 M&M Ln.				
3717 M&M Ln.				
3804 M&M Ln.				
3114 Hecker Rd.				
3627 Hecker Rd.				
2881 CTH CR				
3904 CTH CR				
4212 Silver Creek 4220 Silver Creek (1 well serves 3 properties) 4236 Silver Creek				1 well serves 3 properties
4314 Silver Creek Rd.				
4315 Silver Creek Rd.				
4609 Silver Creek Rd.				
4620 Silver Creek Rd. (two wells)				2 wells on the property
4752 Silver Creek Rd.				
4808 Silver Creek Rd.				
5202 Silver Creek Rd.				
3523 Orchard Ln.				

Figures:

Figure 1; Site Location
Figure 2; October 2015 Potable Well Sampling Results
Figure 3; Updated 2015 and 2016 Potable Well Summary



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

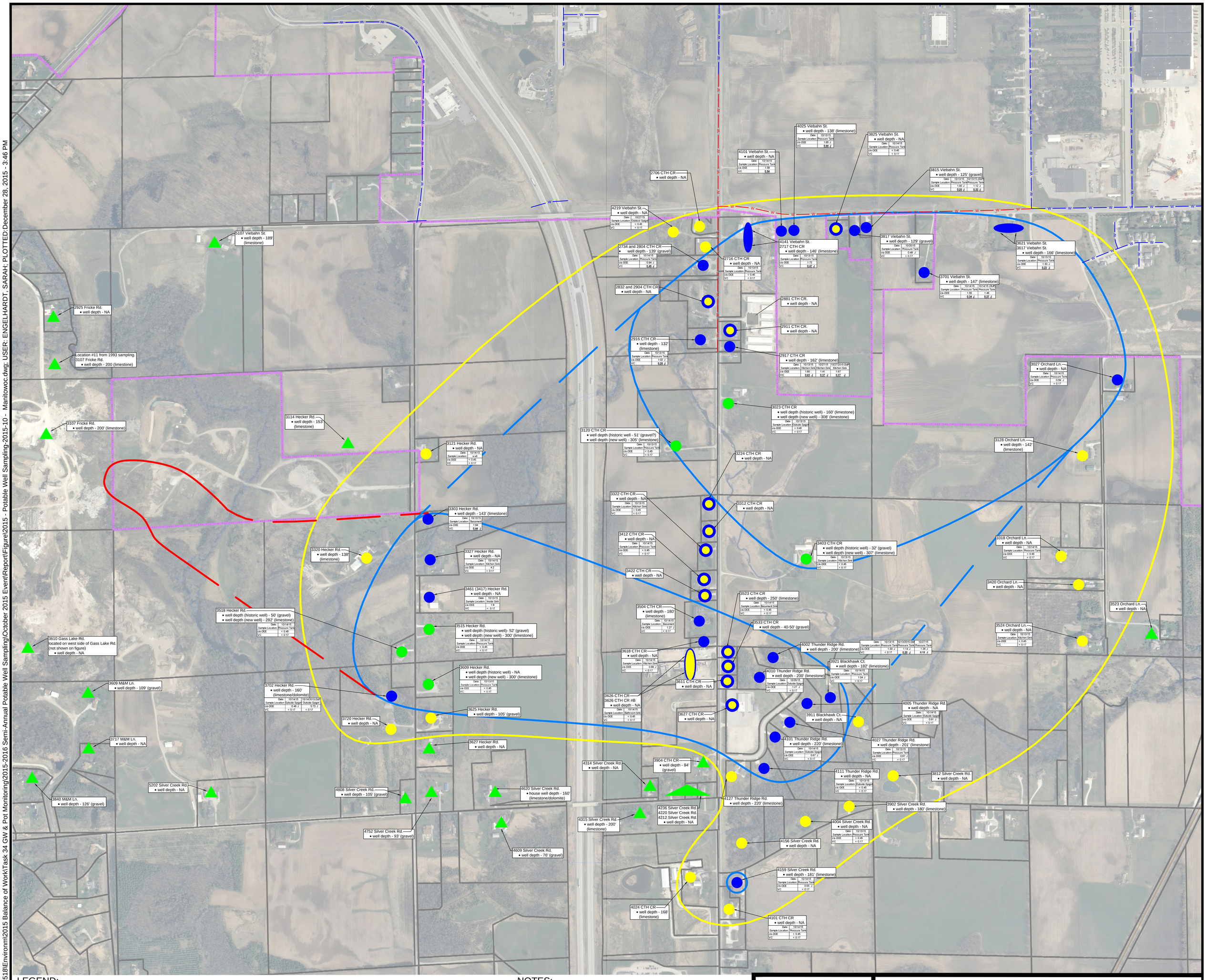
AECOM
Milwaukee Office
1555 RiverCenter Dr
Milwaukee, WI
414.944.6080

FORMER NEWTON GRAVEL PIT

SITE LOCATION

Project Number:	Drawn By:	Date:	Figure No. 1
60311767	SAE	4/14/2015	

File: \\USMWK1FS001\prod\Data\Library\work\82518\Environm\2015 Balance of Work\Task 34 GW & Pot Monitoring\2015-2016 Semi-Annual Potable Well Sampling\2015 - Potable Well Sampling-2015-10 - Manitowoc.dwg; USER: ENGELHARDT, SARAH; PLOTTED:December 28, 2015 - 3:46 PM



LEGEND:

- PROPERTY BOUNDARY
- PROPERTY BOUNDARY - CITY LIMITS
- UTILITIES:
- W -POTABLE WATER SUPPLY (from City of Manitowoc RED = proposed water main)
- 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 2015 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

N

0' 150' 300' 600'
SCALE

AECOM
Milwaukee Office
1555 RiverCenter Dr
Milwaukee, WI
414.944.6080

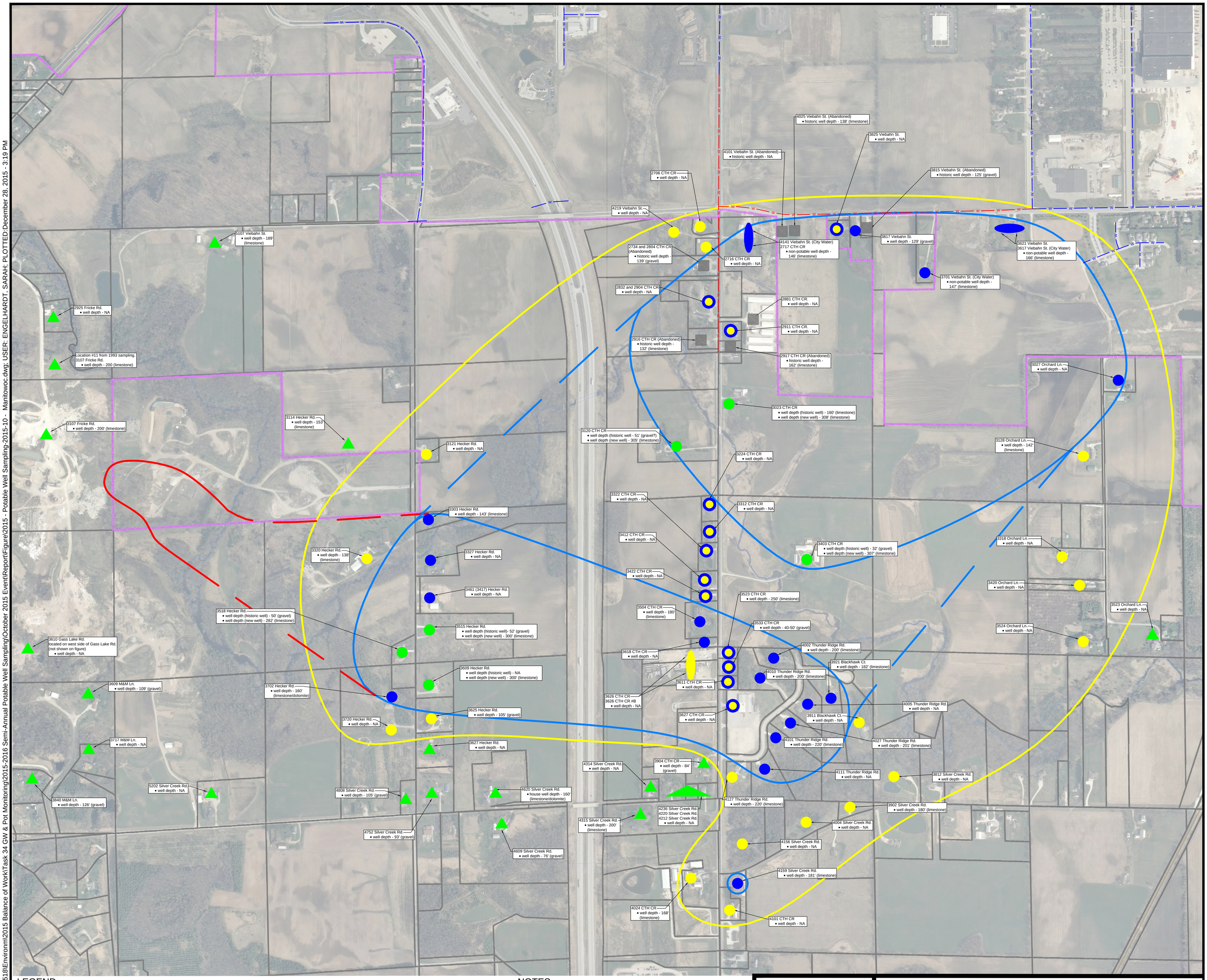
AECOM

FORMER NEWTON GRAVEL PIT

OCTOBER 2015 POTABLE WELL SAMPLING RESULTS

Project Number:	Drawn By:	Date:	Figure No. 2
60311767	SAE	12/28/2015	

File: \\USMWK1FS001\prod\Data\Library\work\82518\Environm\2015 Balance of Work\Task 34 GW & Pot Monitoring\2015-2016 Semi-Annual Potable Well Sampling\October 2015 Event\Report\Figure\2015 - Potable Well Sampling-2015-10 - Manitowoc.dwg; USER: ENGELHARDT, SARAH; PLOTTED:December 28, 2015 - 3:19 PM



LEGEND:

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- UTILITIES:
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- -WITHIN TARGET ZONE
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- WELL OUT OF SERVICE

NOTES:

1. VOCs detected from likely laboratory or sampling cross-contamination not reported on figure.
2. VOC values for October 2015 sampling event reported on figure.
3. Analytical data presented in µg/L.
   - VOCs = Volatile Organic Compounds
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   - VC = Vinyl Chloride
   - **bold** = PAL exceedance
   - **bold and underlined** = ES exceedance
   - PAL = Preventive Action Limit
   - ES = Enforcement Standard

N

0' 150' 300' 600'
SCALE

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FORMER NEWTON GRAVEL PIT

UPDATED 2015 AND 2016 POTABLE WELL SUMMARY

Project Number:	Drawn By:	Date:	
60311767	SAE	12/28/2015	Figure No. 3

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 *14-Jul-15*

Project Name MANITOWOC **Invoice #** E29234
Project #

Lab Code 5029234A
Sample ID 3911 PW
Sample Matrix Water
Sample Date 7/8/2015

	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		7/9/2015	CJR	1
Bromobenzene	< 0.48	ug/l	0.48	1.5	1	8260B		7/9/2015	CJR	1
Bromodichloromethane	< 0.46	ug/l	0.46	1.5	1	8260B		7/9/2015	CJR	1
Bromoform	< 0.46	ug/l	0.46	1.5	1	8260B		7/9/2015	CJR	1
tert-Butylbenzene	< 1.1	ug/l	1.1	3.4	1	8260B		7/9/2015	CJR	1
sec-Butylbenzene	< 1.2	ug/l	1.2	3.8	1	8260B		7/9/2015	CJR	1
n-Butylbenzene	< 1	ug/l	1	3.3	1	8260B		7/9/2015	CJR	1
Carbon Tetrachloride	< 0.51	ug/l	0.51	1.6	1	8260B		7/9/2015	CJR	1
Chlorobenzene	< 0.46	ug/l	0.46	1.4	1	8260B		7/9/2015	CJR	1
Chloroethane	< 0.65	ug/l	0.65	2.1	1	8260B		7/9/2015	CJR	1
Chloroform	< 0.43	ug/l	0.43	1.4	1	8260B		7/9/2015	CJR	1
Chloromethane	< 1.9	ug/l	1.9	6	1	8260B		7/9/2015	CJR	1
2-Chlorotoluene	< 0.4	ug/l	0.4	1.3	1	8260B		7/9/2015	CJR	1
4-Chlorotoluene	< 0.63	ug/l	0.63	2	1	8260B		7/9/2015	CJR	1
1,2-Dibromo-3-chloropropane	< 1.4	ug/l	1.4	4.5	1	8260B		7/9/2015	CJR	1
Dibromochloromethane	< 0.45	ug/l	0.45	1.4	1	8260B		7/9/2015	CJR	1
1,4-Dichlorobenzene	< 0.49	ug/l	0.49	1.6	1	8260B		7/9/2015	CJR	1
1,3-Dichlorobenzene	< 0.52	ug/l	0.52	1.6	1	8260B		7/9/2015	CJR	1
1,2-Dichlorobenzene	< 0.46	ug/l	0.46	1.5	1	8260B		7/9/2015	CJR	1
Dichlorodifluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		7/9/2015	CJR	1
1,2-Dichloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		7/9/2015	CJR	1
1,1-Dichloroethane	< 1.1	ug/l	1.1	3.6	1	8260B		7/9/2015	CJR	1
1,1-Dichloroethene	< 0.65	ug/l	0.65	2.1	1	8260B		7/9/2015	CJR	1
cis-1,2-Dichloroethene	< 0.45	ug/l	0.45	1.4	1	8260B		7/9/2015	CJR	1
trans-1,2-Dichloroethene	< 0.54	ug/l	0.54	1.7	1	8260B		7/9/2015	CJR	1
1,2-Dichloropropane	< 0.43	ug/l	0.43	1.37	1	8260B		7/9/2015	CJR	1
2,2-Dichloropropane	< 3.1	ug/l	3.1	9.8	1	8260B		7/9/2015	CJR	1
1,3-Dichloropropane	< 0.42	ug/l	0.42	1.3	1	8260B		7/9/2015	CJR	1
Di-isopropyl ether	< 0.44	ug/l	0.44	1.4	1	8260B		7/9/2015	CJR	1
EDB (1,2-Dibromoethane)	< 0.63	ug/l	0.63	2	1	8260B		7/9/2015	CJR	1
Ethylbenzene	< 0.71	ug/l	0.71	2.3	1	8260B		7/9/2015	CJR	1
Hexachlorobutadiene	< 2.2	ug/l	2.2	7.1	1	8260B		7/9/2015	CJR	1
Isopropylbenzene	< 0.82	ug/l	0.82	2.6	1	8260B		7/9/2015	CJR	1

Project Name MANITOWOC **Invoice #** E29234
Project #

Lab Code 5029234A
Sample ID 3911 PW
Sample Matrix Water
Sample Date 7/8/2015

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
p-Isopropyltoluene	< 1.1	ug/l	1.1	3.5	1	8260B		7/9/2015	CJR	1
Methylene chloride	< 1.3	ug/l	1.3	4.2	1	8260B		7/9/2015	CJR	1
Methyl tert-butyl ether (MTBE)	< 1.1	ug/l	1.1	3.7	1	8260B		7/9/2015	CJR	1
Naphthalene	< 1.6	ug/l	1.6	5.2	1	8260B		7/9/2015	CJR	1
n-Propylbenzene	< 0.77	ug/l	0.77	2.4	1	8260B		7/9/2015	CJR	1
1,1,2,2-Tetrachloroethane	< 0.52	ug/l	0.52	1.7	1	8260B		7/9/2015	CJR	1
1,1,1,2-Tetrachloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		7/9/2015	CJR	1
Tetrachloroethene	< 0.49	ug/l	0.49	1.5	1	8260B		7/9/2015	CJR	1
Toluene	< 0.44	ug/l	0.44	1.4	1	8260B		7/9/2015	CJR	1
1,2,4-Trichlorobenzene	< 1.7	ug/l	1.7	5.6	1	8260B		7/9/2015	CJR	1
1,2,3-Trichlorobenzene	< 2.7	ug/l	2.7	8.6	1	8260B		7/9/2015	CJR	1
1,1,1-Trichloroethane	< 0.84	ug/l	0.84	2.7	1	8260B		7/9/2015	CJR	1
1,1,2-Trichloroethane	< 0.48	ug/l	0.48	1.52	1	8260B		7/9/2015	CJR	1
Trichloroethene (TCE)	< 0.47	ug/l	0.47	1.5	1	8260B		7/9/2015	CJR	1
Trichlorofluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		7/9/2015	CJR	1
1,2,4-Trimethylbenzene	< 1.6	ug/l	1.6	5	1	8260B		7/9/2015	CJR	1
1,3,5-Trimethylbenzene	< 1.5	ug/l	1.5	4.8	1	8260B		7/9/2015	CJR	1
Vinyl Chloride	< 0.17	ug/l	0.17	0.54	1	8260B		7/9/2015	CJR	1
m&p-Xylene	< 2.2	ug/l	2.2	6.9	1	8260B		7/9/2015	CJR	1
o-Xylene	< 0.9	ug/l	0.9	2.9	1	8260B		7/9/2015	CJR	1
SUR - Toluene-d8	101	REC %			1	8260B		7/9/2015	CJR	1
SUR - 1,2-Dichloroethane-d4	92	REC %			1	8260B		7/9/2015	CJR	1
SUR - 4-Bromofluorobenzene	108	REC %			1	8260B		7/9/2015	CJR	1
SUR - Dibromofluoromethane	98	REC %			1	8260B		7/9/2015	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 279

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) Robert Wesolek

Project (Name / Location): Manitowoc (Newton)

Reports To: Dave Henderson	Invoice To: call Dave Henderson
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
562934A	3911 PW	7/6/15	7:30		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.)

CS#7

Sample Integrity - To be completed by receiving lab.

Method of Shipment: Dutman

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

Cooler seal intact upon receipt: X Yes ____ No

Relinquished By: (sign)	Time	Date	Received By: (sign)	Time	Date
Robert Wesolek	9:00	7/8/15			

Received in Laboratory By: [signature] Time: 8:00 Date: 7/9/15

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 *22-Oct-15*

Project Name NEWTON GRAVEL PIT **Invoice #** E29883
Project # 60135471

Lab Code 5029883A
Sample ID 3461 HECKER
Sample Matrix Water
Sample Date 10/13/2015

	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		10/16/2015	CJR	1
Bromobenzene	< 0.48	ug/l	0.48	1.5	1	8260B		10/16/2015	CJR	1
Bromodichloromethane	< 0.46	ug/l	0.46	1.5	1	8260B		10/16/2015	CJR	1
Bromoform	< 0.46	ug/l	0.46	1.5	1	8260B		10/16/2015	CJR	1
tert-Butylbenzene	< 1.1	ug/l	1.1	3.4	1	8260B		10/16/2015	CJR	1
sec-Butylbenzene	< 1.2	ug/l	1.2	3.8	1	8260B		10/16/2015	CJR	1
n-Butylbenzene	< 1	ug/l	1	3.3	1	8260B		10/16/2015	CJR	1
Carbon Tetrachloride	< 0.51	ug/l	0.51	1.6	1	8260B		10/16/2015	CJR	1
Chlorobenzene	< 0.46	ug/l	0.46	1.4	1	8260B		10/16/2015	CJR	1
Chloroethane	< 0.65	ug/l	0.65	2.1	1	8260B		10/16/2015	CJR	1
Chloroform	< 0.43	ug/l	0.43	1.4	1	8260B		10/16/2015	CJR	1
Chloromethane	< 1.9	ug/l	1.9	6	1	8260B		10/16/2015	CJR	1
2-Chlorotoluene	< 0.4	ug/l	0.4	1.3	1	8260B		10/16/2015	CJR	1
4-Chlorotoluene	< 0.63	ug/l	0.63	2	1	8260B		10/16/2015	CJR	1
1,2-Dibromo-3-chloropropane	< 1.4	ug/l	1.4	4.5	1	8260B		10/16/2015	CJR	1
Dibromochloromethane	< 0.45	ug/l	0.45	1.4	1	8260B		10/16/2015	CJR	1
1,4-Dichlorobenzene	< 0.49	ug/l	0.49	1.6	1	8260B		10/16/2015	CJR	1
1,3-Dichlorobenzene	< 0.52	ug/l	0.52	1.6	1	8260B		10/16/2015	CJR	1
1,2-Dichlorobenzene	< 0.46	ug/l	0.46	1.5	1	8260B		10/16/2015	CJR	1
Dichlorodifluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/16/2015	CJR	1
1,2-Dichloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/16/2015	CJR	1
1,1-Dichloroethane	< 1.1	ug/l	1.1	3.6	1	8260B		10/16/2015	CJR	1
1,1-Dichloroethene	< 0.65	ug/l	0.65	2.1	1	8260B		10/16/2015	CJR	1
cis-1,2-Dichloroethene	1.6	ug/l	0.45	1.4	1	8260B		10/16/2015	CJR	1
trans-1,2-Dichloroethene	< 0.54	ug/l	0.54	1.7	1	8260B		10/16/2015	CJR	1
1,2-Dichloropropane	< 0.43	ug/l	0.43	1.37	1	8260B		10/16/2015	CJR	1
2,2-Dichloropropane	< 3.1	ug/l	3.1	9.8	1	8260B		10/16/2015	CJR	1
1,3-Dichloropropane	< 0.42	ug/l	0.42	1.3	1	8260B		10/16/2015	CJR	1
Di-isopropyl ether	< 0.44	ug/l	0.44	1.4	1	8260B		10/16/2015	CJR	1
EDB (1,2-Dibromoethane)	< 0.63	ug/l	0.63	2	1	8260B		10/16/2015	CJR	1
Ethylbenzene	< 0.71	ug/l	0.71	2.3	1	8260B		10/16/2015	CJR	1
Hexachlorobutadiene	< 2.2	ug/l	2.2	7.1	1	8260B		10/16/2015	CJR	1
Isopropylbenzene	< 0.82	ug/l	0.82	2.6	1	8260B		10/16/2015	CJR	1

Project Name NEWTON GRAVEL PIT **Invoice #** E29883
Project # 60135471

Lab Code 5029883A
Sample ID 3461 HECKER
Sample Matrix Water
Sample Date 10/13/2015

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
p-Isopropyltoluene	< 1.1	ug/l	1.1	3.5	1	8260B		10/16/2015	CJR	1
Methylene chloride	< 1.3	ug/l	1.3	4.2	1	8260B		10/16/2015	CJR	1
Methyl tert-butyl ether (MTBE)	< 1.1	ug/l	1.1	3.7	1	8260B		10/16/2015	CJR	1
Naphthalene	< 1.6	ug/l	1.6	5.2	1	8260B		10/16/2015	CJR	1
n-Propylbenzene	< 0.77	ug/l	0.77	2.4	1	8260B		10/16/2015	CJR	1
1,1,2,2-Tetrachloroethane	< 0.52	ug/l	0.52	1.7	1	8260B		10/16/2015	CJR	1
1,1,1,2-Tetrachloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/16/2015	CJR	1
Tetrachloroethene	< 0.49	ug/l	0.49	1.5	1	8260B		10/16/2015	CJR	1
Toluene	< 0.44	ug/l	0.44	1.4	1	8260B		10/16/2015	CJR	1
1,2,4-Trichlorobenzene	< 1.7	ug/l	1.7	5.6	1	8260B		10/16/2015	CJR	1
1,2,3-Trichlorobenzene	< 2.7	ug/l	2.7	8.6	1	8260B		10/16/2015	CJR	1
1,1,1-Trichloroethane	< 0.84	ug/l	0.84	2.7	1	8260B		10/16/2015	CJR	1
1,1,2-Trichloroethane	< 0.48	ug/l	0.48	1.52	1	8260B		10/16/2015	CJR	1
Trichloroethene (TCE)	< 0.47	ug/l	0.47	1.5	1	8260B		10/16/2015	CJR	1
Trichlorofluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/16/2015	CJR	1
1,2,4-Trimethylbenzene	< 1.6	ug/l	1.6	5	1	8260B		10/16/2015	CJR	1
1,3,5-Trimethylbenzene	< 1.5	ug/l	1.5	4.8	1	8260B		10/16/2015	CJR	1
Vinyl Chloride	< 0.17	ug/l	0.17	0.54	1	8260B		10/16/2015	CJR	1
m&p-Xylene	< 2.2	ug/l	2.2	6.9	1	8260B		10/16/2015	CJR	1
o-Xylene	< 0.9	ug/l	0.9	2.9	1	8260B		10/16/2015	CJR	1
SUR - 1,2-Dichloroethane-d4	95	REC %			1	8260B		10/16/2015	CJR	1
SUR - 4-Bromofluorobenzene	115	REC %			1	8260B		10/16/2015	CJR	1
SUR - Dibromofluoromethane	98	REC %			1	8260B		10/16/2015	CJR	1
SUR - Toluene-d8	106	REC %			1	8260B		10/16/2015	CJR	1

Project Name NEWTON GRAVEL PIT **Invoice #** E29883
Project # 60135471

Lab Code 5029883B
Sample ID 2916 CTH CR
Sample Matrix Water
Sample Date 10/13/2015

	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		10/19/2015	CJR	1
Bromobenzene	< 0.48	ug/l	0.48	1.5	1	8260B		10/19/2015	CJR	1
Bromodichloromethane	< 0.46	ug/l	0.46	1.5	1	8260B		10/19/2015	CJR	1
Bromoform	< 0.46	ug/l	0.46	1.5	1	8260B		10/19/2015	CJR	1
tert-Butylbenzene	< 1.1	ug/l	1.1	3.4	1	8260B		10/19/2015	CJR	1
sec-Butylbenzene	< 1.2	ug/l	1.2	3.8	1	8260B		10/19/2015	CJR	1
n-Butylbenzene	< 1	ug/l	1	3.3	1	8260B		10/19/2015	CJR	1
Carbon Tetrachloride	< 0.51	ug/l	0.51	1.6	1	8260B		10/19/2015	CJR	1
Chlorobenzene	< 0.46	ug/l	0.46	1.4	1	8260B		10/19/2015	CJR	1
Chloroethane	< 0.65	ug/l	0.65	2.1	1	8260B		10/19/2015	CJR	1
Chloroform	< 0.43	ug/l	0.43	1.4	1	8260B		10/19/2015	CJR	1
Chloromethane	< 1.9	ug/l	1.9	6	1	8260B		10/19/2015	CJR	1
2-Chlorotoluene	< 0.4	ug/l	0.4	1.3	1	8260B		10/19/2015	CJR	1
4-Chlorotoluene	< 0.63	ug/l	0.63	2	1	8260B		10/19/2015	CJR	1
1,2-Dibromo-3-chloropropane	< 1.4	ug/l	1.4	4.5	1	8260B		10/19/2015	CJR	1
Dibromochloromethane	< 0.45	ug/l	0.45	1.4	1	8260B		10/19/2015	CJR	1
1,4-Dichlorobenzene	< 0.49	ug/l	0.49	1.6	1	8260B		10/19/2015	CJR	1
1,3-Dichlorobenzene	< 0.52	ug/l	0.52	1.6	1	8260B		10/19/2015	CJR	1
1,2-Dichlorobenzene	< 0.46	ug/l	0.46	1.5	1	8260B		10/19/2015	CJR	1
Dichlorodifluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/19/2015	CJR	1
1,2-Dichloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/19/2015	CJR	1
1,1-Dichloroethane	< 1.1	ug/l	1.1	3.6	1	8260B		10/19/2015	CJR	1
1,1-Dichloroethene	< 0.65	ug/l	0.65	2.1	1	8260B		10/19/2015	CJR	1
cis-1,2-Dichloroethene	1.02 "J"	ug/l	0.45	1.4	1	8260B		10/19/2015	CJR	1
trans-1,2-Dichloroethene	< 0.54	ug/l	0.54	1.7	1	8260B		10/19/2015	CJR	1
1,2-Dichloropropane	< 0.43	ug/l	0.43	1.37	1	8260B		10/19/2015	CJR	1
2,2-Dichloropropane	< 3.1	ug/l	3.1	9.8	1	8260B		10/19/2015	CJR	2
1,3-Dichloropropane	< 0.42	ug/l	0.42	1.3	1	8260B		10/19/2015	CJR	1
Di-isopropyl ether	< 0.44	ug/l	0.44	1.4	1	8260B		10/19/2015	CJR	1
EDB (1,2-Dibromoethane)	< 0.63	ug/l	0.63	2	1	8260B		10/19/2015	CJR	1
Ethylbenzene	< 0.71	ug/l	0.71	2.3	1	8260B		10/19/2015	CJR	1
Hexachlorobutadiene	< 2.2	ug/l	2.2	7.1	1	8260B		10/19/2015	CJR	1
Isopropylbenzene	< 0.82	ug/l	0.82	2.6	1	8260B		10/19/2015	CJR	1
p-Isopropyltoluene	< 1.1	ug/l	1.1	3.5	1	8260B		10/19/2015	CJR	1
Methylene chloride	< 1.3	ug/l	1.3	4.2	1	8260B		10/19/2015	CJR	1
Methyl tert-butyl ether (MTBE)	< 1.1	ug/l	1.1	3.7	1	8260B		10/19/2015	CJR	1
Naphthalene	< 1.6	ug/l	1.6	5.2	1	8260B		10/19/2015	CJR	1
n-Propylbenzene	< 0.77	ug/l	0.77	2.4	1	8260B		10/19/2015	CJR	1
1,1,2,2-Tetrachloroethane	< 0.52	ug/l	0.52	1.7	1	8260B		10/19/2015	CJR	1
1,1,1,2-Tetrachloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/19/2015	CJR	1
Tetrachloroethene	< 0.49	ug/l	0.49	1.5	1	8260B		10/19/2015	CJR	1
Toluene	< 0.44	ug/l	0.44	1.4	1	8260B		10/19/2015	CJR	1
1,2,4-Trichlorobenzene	< 1.7	ug/l	1.7	5.6	1	8260B		10/19/2015	CJR	1
1,2,3-Trichlorobenzene	< 2.7	ug/l	2.7	8.6	1	8260B		10/19/2015	CJR	1
1,1,1-Trichloroethane	< 0.84	ug/l	0.84	2.7	1	8260B		10/19/2015	CJR	1
1,1,2-Trichloroethane	< 0.48	ug/l	0.48	1.52	1	8260B		10/19/2015	CJR	1
Trichloroethene (TCE)	< 0.47	ug/l	0.47	1.5	1	8260B		10/19/2015	CJR	1
Trichlorofluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/19/2015	CJR	1
1,2,4-Trimethylbenzene	< 1.6	ug/l	1.6	5	1	8260B		10/19/2015	CJR	1
1,3,5-Trimethylbenzene	< 1.5	ug/l	1.5	4.8	1	8260B		10/19/2015	CJR	1
Vinyl Chloride	0.26 "J"	ug/l	0.17	0.54	1	8260B		10/19/2015	CJR	1
m&p-Xylene	< 2.2	ug/l	2.2	6.9	1	8260B		10/19/2015	CJR	1
o-Xylene	< 0.9	ug/l	0.9	2.9	1	8260B		10/19/2015	CJR	1
SUR - 1,2-Dichloroethane-d4	95	REC %			1	8260B		10/19/2015	CJR	1
SUR - Toluene-d8	106	REC %			1	8260B		10/19/2015	CJR	1
SUR - 4-Bromofluorobenzene	110	REC %			1	8260B		10/19/2015	CJR	1
SUR - Dibromofluoromethane	102	REC %			1	8260B		10/19/2015	CJR	1

Project Name NEWTON GRAVEL PIT **Invoice #** E29883
Project # 60135471

Lab Code 5029883C
Sample ID 3815 VIEBAHN
Sample Matrix Water
Sample Date 10/13/2015

	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		10/16/2015	CJR	1
Bromobenzene	< 0.48	ug/l	0.48	1.5	1	8260B		10/16/2015	CJR	1
Bromodichloromethane	< 0.46	ug/l	0.46	1.5	1	8260B		10/16/2015	CJR	1
Bromoform	< 0.46	ug/l	0.46	1.5	1	8260B		10/16/2015	CJR	1
tert-Butylbenzene	< 1.1	ug/l	1.1	3.4	1	8260B		10/16/2015	CJR	1
sec-Butylbenzene	< 1.2	ug/l	1.2	3.8	1	8260B		10/16/2015	CJR	1
n-Butylbenzene	< 1	ug/l	1	3.3	1	8260B		10/16/2015	CJR	1
Carbon Tetrachloride	< 0.51	ug/l	0.51	1.6	1	8260B		10/16/2015	CJR	1
Chlorobenzene	< 0.46	ug/l	0.46	1.4	1	8260B		10/16/2015	CJR	1
Chloroethane	< 0.65	ug/l	0.65	2.1	1	8260B		10/16/2015	CJR	1
Chloroform	< 0.43	ug/l	0.43	1.4	1	8260B		10/16/2015	CJR	1
Chloromethane	< 1.9	ug/l	1.9	6	1	8260B		10/16/2015	CJR	1
2-Chlorotoluene	< 0.4	ug/l	0.4	1.3	1	8260B		10/16/2015	CJR	1
4-Chlorotoluene	< 0.63	ug/l	0.63	2	1	8260B		10/16/2015	CJR	1
1,2-Dibromo-3-chloropropane	< 1.4	ug/l	1.4	4.5	1	8260B		10/16/2015	CJR	1
Dibromochloromethane	< 0.45	ug/l	0.45	1.4	1	8260B		10/16/2015	CJR	1
1,4-Dichlorobenzene	< 0.49	ug/l	0.49	1.6	1	8260B		10/16/2015	CJR	1
1,3-Dichlorobenzene	< 0.52	ug/l	0.52	1.6	1	8260B		10/16/2015	CJR	1
1,2-Dichlorobenzene	< 0.46	ug/l	0.46	1.5	1	8260B		10/16/2015	CJR	1
Dichlorodifluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/16/2015	CJR	1
1,2-Dichloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/16/2015	CJR	1
1,1-Dichloroethane	< 1.1	ug/l	1.1	3.6	1	8260B		10/16/2015	CJR	1
1,1-Dichloroethene	< 0.65	ug/l	0.65	2.1	1	8260B		10/16/2015	CJR	1
cis-1,2-Dichloroethene	1.0 "J"	ug/l	0.45	1.4	1	8260B		10/16/2015	CJR	1
trans-1,2-Dichloroethene	< 0.54	ug/l	0.54	1.7	1	8260B		10/16/2015	CJR	1
1,2-Dichloropropane	< 0.43	ug/l	0.43	1.37	1	8260B		10/16/2015	CJR	1
2,2-Dichloropropane	< 3.1	ug/l	3.1	9.8	1	8260B		10/16/2015	CJR	1
1,3-Dichloropropane	< 0.42	ug/l	0.42	1.3	1	8260B		10/16/2015	CJR	1
Di-isopropyl ether	< 0.44	ug/l	0.44	1.4	1	8260B		10/16/2015	CJR	1
EDB (1,2-Dibromoethane)	< 0.63	ug/l	0.63	2	1	8260B		10/16/2015	CJR	1
Ethylbenzene	< 0.71	ug/l	0.71	2.3	1	8260B		10/16/2015	CJR	1
Hexachlorobutadiene	< 2.2	ug/l	2.2	7.1	1	8260B		10/16/2015	CJR	1
Isopropylbenzene	< 0.82	ug/l	0.82	2.6	1	8260B		10/16/2015	CJR	1
p-Isopropyltoluene	< 1.1	ug/l	1.1	3.5	1	8260B		10/16/2015	CJR	1
Methylene chloride	< 1.3	ug/l	1.3	4.2	1	8260B		10/16/2015	CJR	1
Methyl tert-butyl ether (MTBE)	< 1.1	ug/l	1.1	3.7	1	8260B		10/16/2015	CJR	1
Naphthalene	< 1.6	ug/l	1.6	5.2	1	8260B		10/16/2015	CJR	1
n-Propylbenzene	< 0.77	ug/l	0.77	2.4	1	8260B		10/16/2015	CJR	1
1,1,2,2-Tetrachloroethane	< 0.52	ug/l	0.52	1.7	1	8260B		10/16/2015	CJR	1
1,1,1,2-Tetrachloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/16/2015	CJR	1
Tetrachloroethene	< 0.49	ug/l	0.49	1.5	1	8260B		10/16/2015	CJR	1
Toluene	< 0.44	ug/l	0.44	1.4	1	8260B		10/16/2015	CJR	1
1,2,4-Trichlorobenzene	< 1.7	ug/l	1.7	5.6	1	8260B		10/16/2015	CJR	1
1,2,3-Trichlorobenzene	< 2.7	ug/l	2.7	8.6	1	8260B		10/16/2015	CJR	1
1,1,1-Trichloroethane	< 0.84	ug/l	0.84	2.7	1	8260B		10/16/2015	CJR	1
1,1,2-Trichloroethane	< 0.48	ug/l	0.48	1.52	1	8260B		10/16/2015	CJR	1
Trichloroethene (TCE)	< 0.47	ug/l	0.47	1.5	1	8260B		10/16/2015	CJR	1
Trichlorofluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/16/2015	CJR	1
1,2,4-Trimethylbenzene	< 1.6	ug/l	1.6	5	1	8260B		10/16/2015	CJR	1
1,3,5-Trimethylbenzene	< 1.5	ug/l	1.5	4.8	1	8260B		10/16/2015	CJR	1
Vinyl Chloride	0.20 "J"	ug/l	0.17	0.54	1	8260B		10/16/2015	CJR	1
m&p-Xylene	< 2.2	ug/l	2.2	6.9	1	8260B		10/16/2015	CJR	1
o-Xylene	< 0.9	ug/l	0.9	2.9	1	8260B		10/16/2015	CJR	1
SUR - 1,2-Dichloroethane-d4	97	REC %			1	8260B		10/16/2015	CJR	1
SUR - 4-Bromofluorobenzene	115	REC %			1	8260B		10/16/2015	CJR	1
SUR - Dibromofluoromethane	99	REC %			1	8260B		10/16/2015	CJR	1
SUR - Toluene-d8	106	REC %			1	8260B		10/16/2015	CJR	1

Project Name NEWTON GRAVEL PIT **Invoice #** E29883
Project # 60135471

Lab Code 5029883D
Sample ID 3815 VIEBAHN DUP
Sample Matrix Water
Sample Date 10/13/2015

	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		10/16/2015	CJR	1
Bromobenzene	< 0.48	ug/l	0.48	1.5	1	8260B		10/16/2015	CJR	1
Bromodichloromethane	< 0.46	ug/l	0.46	1.5	1	8260B		10/16/2015	CJR	1
Bromoform	< 0.46	ug/l	0.46	1.5	1	8260B		10/16/2015	CJR	1
tert-Butylbenzene	< 1.1	ug/l	1.1	3.4	1	8260B		10/16/2015	CJR	1
sec-Butylbenzene	< 1.2	ug/l	1.2	3.8	1	8260B		10/16/2015	CJR	1
n-Butylbenzene	< 1	ug/l	1	3.3	1	8260B		10/16/2015	CJR	1
Carbon Tetrachloride	< 0.51	ug/l	0.51	1.6	1	8260B		10/16/2015	CJR	1
Chlorobenzene	< 0.46	ug/l	0.46	1.4	1	8260B		10/16/2015	CJR	1
Chloroethane	< 0.65	ug/l	0.65	2.1	1	8260B		10/16/2015	CJR	1
Chloroform	< 0.43	ug/l	0.43	1.4	1	8260B		10/16/2015	CJR	1
Chloromethane	< 1.9	ug/l	1.9	6	1	8260B		10/16/2015	CJR	1
2-Chlorotoluene	< 0.4	ug/l	0.4	1.3	1	8260B		10/16/2015	CJR	1
4-Chlorotoluene	< 0.63	ug/l	0.63	2	1	8260B		10/16/2015	CJR	1
1,2-Dibromo-3-chloropropane	< 1.4	ug/l	1.4	4.5	1	8260B		10/16/2015	CJR	1
Dibromochloromethane	< 0.45	ug/l	0.45	1.4	1	8260B		10/16/2015	CJR	1
1,4-Dichlorobenzene	< 0.49	ug/l	0.49	1.6	1	8260B		10/16/2015	CJR	1
1,3-Dichlorobenzene	< 0.52	ug/l	0.52	1.6	1	8260B		10/16/2015	CJR	1
1,2-Dichlorobenzene	< 0.46	ug/l	0.46	1.5	1	8260B		10/16/2015	CJR	1
Dichlorodifluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/16/2015	CJR	1
1,2-Dichloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/16/2015	CJR	1
1,1-Dichloroethane	< 1.1	ug/l	1.1	3.6	1	8260B		10/16/2015	CJR	1
1,1-Dichloroethene	< 0.65	ug/l	0.65	2.1	1	8260B		10/16/2015	CJR	1
cis-1,2-Dichloroethene	1.12 "J"	ug/l	0.45	1.4	1	8260B		10/16/2015	CJR	1
trans-1,2-Dichloroethene	< 0.54	ug/l	0.54	1.7	1	8260B		10/16/2015	CJR	1
1,2-Dichloropropane	< 0.43	ug/l	0.43	1.37	1	8260B		10/16/2015	CJR	1
2,2-Dichloropropane	< 3.1	ug/l	3.1	9.8	1	8260B		10/16/2015	CJR	1
1,3-Dichloropropane	< 0.42	ug/l	0.42	1.3	1	8260B		10/16/2015	CJR	1
Di-isopropyl ether	< 0.44	ug/l	0.44	1.4	1	8260B		10/16/2015	CJR	1
EDB (1,2-Dibromoethane)	< 0.63	ug/l	0.63	2	1	8260B		10/16/2015	CJR	1
Ethylbenzene	< 0.71	ug/l	0.71	2.3	1	8260B		10/16/2015	CJR	1
Hexachlorobutadiene	< 2.2	ug/l	2.2	7.1	1	8260B		10/16/2015	CJR	1
Isopropylbenzene	< 0.82	ug/l	0.82	2.6	1	8260B		10/16/2015	CJR	1
p-Isopropyltoluene	< 1.1	ug/l	1.1	3.5	1	8260B		10/16/2015	CJR	1
Methylene chloride	< 1.3	ug/l	1.3	4.2	1	8260B		10/16/2015	CJR	1
Methyl tert-butyl ether (MTBE)	< 1.1	ug/l	1.1	3.7	1	8260B		10/16/2015	CJR	1
Naphthalene	< 1.6	ug/l	1.6	5.2	1	8260B		10/16/2015	CJR	1
n-Propylbenzene	< 0.77	ug/l	0.77	2.4	1	8260B		10/16/2015	CJR	1
1,1,2,2-Tetrachloroethane	< 0.52	ug/l	0.52	1.7	1	8260B		10/16/2015	CJR	1
1,1,1,2-Tetrachloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/16/2015	CJR	1
Tetrachloroethene	< 0.49	ug/l	0.49	1.5	1	8260B		10/16/2015	CJR	1
Toluene	< 0.44	ug/l	0.44	1.4	1	8260B		10/16/2015	CJR	1
1,2,4-Trichlorobenzene	< 1.7	ug/l	1.7	5.6	1	8260B		10/16/2015	CJR	1
1,2,3-Trichlorobenzene	< 2.7	ug/l	2.7	8.6	1	8260B		10/16/2015	CJR	1
1,1,1-Trichloroethane	< 0.84	ug/l	0.84	2.7	1	8260B		10/16/2015	CJR	1
1,1,2-Trichloroethane	< 0.48	ug/l	0.48	1.52	1	8260B		10/16/2015	CJR	1
Trichloroethene (TCE)	< 0.47	ug/l	0.47	1.5	1	8260B		10/16/2015	CJR	1
Trichlorofluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/16/2015	CJR	1
1,2,4-Trimethylbenzene	< 1.6	ug/l	1.6	5	1	8260B		10/16/2015	CJR	1
1,3,5-Trimethylbenzene	< 1.5	ug/l	1.5	4.8	1	8260B		10/16/2015	CJR	1
Vinyl Chloride	0.32 "J"	ug/l	0.17	0.54	1	8260B		10/16/2015	CJR	1
m&p-Xylene	< 2.2	ug/l	2.2	6.9	1	8260B		10/16/2015	CJR	1
o-Xylene	< 0.9	ug/l	0.9	2.9	1	8260B		10/16/2015	CJR	1
SUR - Toluene-d8	107	REC %			1	8260B		10/16/2015	CJR	1
SUR - Dibromofluoromethane	98	REC %			1	8260B		10/16/2015	CJR	1
SUR - 4-Bromofluorobenzene	114	REC %			1	8260B		10/16/2015	CJR	1
SUR - 1,2-Dichloroethane-d4	102	REC %			1	8260B		10/16/2015	CJR	1

Project Name NEWTON GRAVEL PIT **Invoice #** E29883
Project # 60135471

Lab Code 5029883E
Sample ID 4025 VIEBAHN
Sample Matrix Water
Sample Date 10/13/2015

	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		10/16/2015	CJR	1
Bromobenzene	< 0.48	ug/l	0.48	1.5	1	8260B		10/16/2015	CJR	1
Bromodichloromethane	< 0.46	ug/l	0.46	1.5	1	8260B		10/16/2015	CJR	1
Bromoform	< 0.46	ug/l	0.46	1.5	1	8260B		10/16/2015	CJR	1
tert-Butylbenzene	< 1.1	ug/l	1.1	3.4	1	8260B		10/16/2015	CJR	1
sec-Butylbenzene	< 1.2	ug/l	1.2	3.8	1	8260B		10/16/2015	CJR	1
n-Butylbenzene	< 1	ug/l	1	3.3	1	8260B		10/16/2015	CJR	1
Carbon Tetrachloride	< 0.51	ug/l	0.51	1.6	1	8260B		10/16/2015	CJR	1
Chlorobenzene	< 0.46	ug/l	0.46	1.4	1	8260B		10/16/2015	CJR	1
Chloroethane	< 0.65	ug/l	0.65	2.1	1	8260B		10/16/2015	CJR	1
Chloroform	< 0.43	ug/l	0.43	1.4	1	8260B		10/16/2015	CJR	1
Chloromethane	< 1.9	ug/l	1.9	6	1	8260B		10/16/2015	CJR	1
2-Chlorotoluene	< 0.4	ug/l	0.4	1.3	1	8260B		10/16/2015	CJR	1
4-Chlorotoluene	< 0.63	ug/l	0.63	2	1	8260B		10/16/2015	CJR	1
1,2-Dibromo-3-chloropropane	< 1.4	ug/l	1.4	4.5	1	8260B		10/16/2015	CJR	1
Dibromochloromethane	< 0.45	ug/l	0.45	1.4	1	8260B		10/16/2015	CJR	1
1,4-Dichlorobenzene	< 0.49	ug/l	0.49	1.6	1	8260B		10/16/2015	CJR	1
1,3-Dichlorobenzene	< 0.52	ug/l	0.52	1.6	1	8260B		10/16/2015	CJR	1
1,2-Dichlorobenzene	< 0.46	ug/l	0.46	1.5	1	8260B		10/16/2015	CJR	1
Dichlorodifluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/16/2015	CJR	1
1,2-Dichloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/16/2015	CJR	1
1,1-Dichloroethane	< 1.1	ug/l	1.1	3.6	1	8260B		10/16/2015	CJR	1
1,1-Dichloroethene	< 0.65	ug/l	0.65	2.1	1	8260B		10/16/2015	CJR	1
cis-1,2-Dichloroethene	1.85	ug/l	0.45	1.4	1	8260B		10/16/2015	CJR	1
trans-1,2-Dichloroethene	< 0.54	ug/l	0.54	1.7	1	8260B		10/16/2015	CJR	1
1,2-Dichloropropane	< 0.43	ug/l	0.43	1.37	1	8260B		10/16/2015	CJR	1
2,2-Dichloropropane	< 3.1	ug/l	3.1	9.8	1	8260B		10/16/2015	CJR	1
1,3-Dichloropropane	< 0.42	ug/l	0.42	1.3	1	8260B		10/16/2015	CJR	1
Di-isopropyl ether	< 0.44	ug/l	0.44	1.4	1	8260B		10/16/2015	CJR	1
EDB (1,2-Dibromoethane)	< 0.63	ug/l	0.63	2	1	8260B		10/16/2015	CJR	1
Ethylbenzene	< 0.71	ug/l	0.71	2.3	1	8260B		10/16/2015	CJR	1
Hexachlorobutadiene	< 2.2	ug/l	2.2	7.1	1	8260B		10/16/2015	CJR	1
Isopropylbenzene	< 0.82	ug/l	0.82	2.6	1	8260B		10/16/2015	CJR	1
p-Isopropyltoluene	< 1.1	ug/l	1.1	3.5	1	8260B		10/16/2015	CJR	1
Methylene chloride	< 1.3	ug/l	1.3	4.2	1	8260B		10/16/2015	CJR	1
Methyl tert-butyl ether (MTBE)	< 1.1	ug/l	1.1	3.7	1	8260B		10/16/2015	CJR	1
Naphthalene	< 1.6	ug/l	1.6	5.2	1	8260B		10/16/2015	CJR	1
n-Propylbenzene	< 0.77	ug/l	0.77	2.4	1	8260B		10/16/2015	CJR	1
1,1,2,2-Tetrachloroethane	< 0.52	ug/l	0.52	1.7	1	8260B		10/16/2015	CJR	1
1,1,1,2-Tetrachloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/16/2015	CJR	1
Tetrachloroethene	< 0.49	ug/l	0.49	1.5	1	8260B		10/16/2015	CJR	1
Toluene	< 0.44	ug/l	0.44	1.4	1	8260B		10/16/2015	CJR	1
1,2,4-Trichlorobenzene	< 1.7	ug/l	1.7	5.6	1	8260B		10/16/2015	CJR	1
1,2,3-Trichlorobenzene	< 2.7	ug/l	2.7	8.6	1	8260B		10/16/2015	CJR	1
1,1,1-Trichloroethane	< 0.84	ug/l	0.84	2.7	1	8260B		10/16/2015	CJR	1
1,1,2-Trichloroethane	< 0.48	ug/l	0.48	1.52	1	8260B		10/16/2015	CJR	1
Trichloroethene (TCE)	< 0.47	ug/l	0.47	1.5	1	8260B		10/16/2015	CJR	1
Trichlorofluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/16/2015	CJR	1
1,2,4-Trimethylbenzene	< 1.6	ug/l	1.6	5	1	8260B		10/16/2015	CJR	1
1,3,5-Trimethylbenzene	< 1.5	ug/l	1.5	4.8	1	8260B		10/16/2015	CJR	1
Vinyl Chloride	0.44 "J"	ug/l	0.17	0.54	1	8260B		10/16/2015	CJR	1
m&p-Xylene	< 2.2	ug/l	2.2	6.9	1	8260B		10/16/2015	CJR	1
o-Xylene	< 0.9	ug/l	0.9	2.9	1	8260B		10/16/2015	CJR	1
SUR - 1,2-Dichloroethane-d4	101	REC %			1	8260B		10/16/2015	CJR	1
SUR - 4-Bromofluorobenzene	109	REC %			1	8260B		10/16/2015	CJR	1
SUR - Dibromofluoromethane	101	REC %			1	8260B		10/16/2015	CJR	1
SUR - Toluene-d8	104	REC %			1	8260B		10/16/2015	CJR	1

Project Name NEWTON GRAVEL PIT **Invoice #** E29883
Project # 60135471

Lab Code 5029883F
Sample ID 3303 HECKER
Sample Matrix Water
Sample Date 10/13/2015

	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		10/16/2015	CJR	1
Bromobenzene	< 0.48	ug/l	0.48	1.5	1	8260B		10/16/2015	CJR	1
Bromodichloromethane	< 0.46	ug/l	0.46	1.5	1	8260B		10/16/2015	CJR	1
Bromoform	< 0.46	ug/l	0.46	1.5	1	8260B		10/16/2015	CJR	1
tert-Butylbenzene	< 1.1	ug/l	1.1	3.4	1	8260B		10/16/2015	CJR	1
sec-Butylbenzene	< 1.2	ug/l	1.2	3.8	1	8260B		10/16/2015	CJR	1
n-Butylbenzene	< 1	ug/l	1	3.3	1	8260B		10/16/2015	CJR	1
Carbon Tetrachloride	< 0.51	ug/l	0.51	1.6	1	8260B		10/16/2015	CJR	1
Chlorobenzene	< 0.46	ug/l	0.46	1.4	1	8260B		10/16/2015	CJR	1
Chloroethane	< 0.65	ug/l	0.65	2.1	1	8260B		10/16/2015	CJR	1
Chloroform	< 0.43	ug/l	0.43	1.4	1	8260B		10/16/2015	CJR	1
Chloromethane	< 1.9	ug/l	1.9	6	1	8260B		10/16/2015	CJR	1
2-Chlorotoluene	< 0.4	ug/l	0.4	1.3	1	8260B		10/16/2015	CJR	1
4-Chlorotoluene	< 0.63	ug/l	0.63	2	1	8260B		10/16/2015	CJR	1
1,2-Dibromo-3-chloropropane	< 1.4	ug/l	1.4	4.5	1	8260B		10/16/2015	CJR	1
Dibromochloromethane	< 0.45	ug/l	0.45	1.4	1	8260B		10/16/2015	CJR	1
1,4-Dichlorobenzene	< 0.49	ug/l	0.49	1.6	1	8260B		10/16/2015	CJR	1
1,3-Dichlorobenzene	< 0.52	ug/l	0.52	1.6	1	8260B		10/16/2015	CJR	1
1,2-Dichlorobenzene	< 0.46	ug/l	0.46	1.5	1	8260B		10/16/2015	CJR	1
Dichlorodifluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/16/2015	CJR	1
1,2-Dichloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/16/2015	CJR	1
1,1-Dichloroethane	< 1.1	ug/l	1.1	3.6	1	8260B		10/16/2015	CJR	1
1,1-Dichloroethene	< 0.65	ug/l	0.65	2.1	1	8260B		10/16/2015	CJR	1
cis-1,2-Dichloroethene	1.94	ug/l	0.45	1.4	1	8260B		10/16/2015	CJR	1
trans-1,2-Dichloroethene	< 0.54	ug/l	0.54	1.7	1	8260B		10/16/2015	CJR	1
1,2-Dichloropropane	< 0.43	ug/l	0.43	1.37	1	8260B		10/16/2015	CJR	1
2,2-Dichloropropane	< 3.1	ug/l	3.1	9.8	1	8260B		10/16/2015	CJR	1
1,3-Dichloropropane	< 0.42	ug/l	0.42	1.3	1	8260B		10/16/2015	CJR	1
Di-isopropyl ether	< 0.44	ug/l	0.44	1.4	1	8260B		10/16/2015	CJR	1
EDB (1,2-Dibromoethane)	< 0.63	ug/l	0.63	2	1	8260B		10/16/2015	CJR	1
Ethylbenzene	< 0.71	ug/l	0.71	2.3	1	8260B		10/16/2015	CJR	1
Hexachlorobutadiene	< 2.2	ug/l	2.2	7.1	1	8260B		10/16/2015	CJR	1
Isopropylbenzene	< 0.82	ug/l	0.82	2.6	1	8260B		10/16/2015	CJR	1
p-Isopropyltoluene	< 1.1	ug/l	1.1	3.5	1	8260B		10/16/2015	CJR	1
Methylene chloride	< 1.3	ug/l	1.3	4.2	1	8260B		10/16/2015	CJR	1
Methyl tert-butyl ether (MTBE)	< 1.1	ug/l	1.1	3.7	1	8260B		10/16/2015	CJR	1
Naphthalene	< 1.6	ug/l	1.6	5.2	1	8260B		10/16/2015	CJR	1
n-Propylbenzene	< 0.77	ug/l	0.77	2.4	1	8260B		10/16/2015	CJR	1
1,1,2,2-Tetrachloroethane	< 0.52	ug/l	0.52	1.7	1	8260B		10/16/2015	CJR	1
1,1,1,2-Tetrachloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/16/2015	CJR	1
Tetrachloroethene	< 0.49	ug/l	0.49	1.5	1	8260B		10/16/2015	CJR	1
Toluene	< 0.44	ug/l	0.44	1.4	1	8260B		10/16/2015	CJR	1
1,2,4-Trichlorobenzene	< 1.7	ug/l	1.7	5.6	1	8260B		10/16/2015	CJR	1
1,2,3-Trichlorobenzene	< 2.7	ug/l	2.7	8.6	1	8260B		10/16/2015	CJR	1
1,1,1-Trichloroethane	< 0.84	ug/l	0.84	2.7	1	8260B		10/16/2015	CJR	1
1,1,2-Trichloroethane	< 0.48	ug/l	0.48	1.52	1	8260B		10/16/2015	CJR	1
Trichloroethene (TCE)	< 0.47	ug/l	0.47	1.5	1	8260B		10/16/2015	CJR	1
Trichlorofluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/16/2015	CJR	1
1,2,4-Trimethylbenzene	< 1.6	ug/l	1.6	5	1	8260B		10/16/2015	CJR	1
1,3,5-Trimethylbenzene	< 1.5	ug/l	1.5	4.8	1	8260B		10/16/2015	CJR	1
Vinyl Chloride	0.44 "J"	ug/l	0.17	0.54	1	8260B		10/16/2015	CJR	1
m&p-Xylene	< 2.2	ug/l	2.2	6.9	1	8260B		10/16/2015	CJR	1
o-Xylene	< 0.9	ug/l	0.9	2.9	1	8260B		10/16/2015	CJR	1
SUR - 4-Bromofluorobenzene	116	REC %			1	8260B		10/16/2015	CJR	1
SUR - Dibromofluoromethane	100	REC %			1	8260B		10/16/2015	CJR	1
SUR - Toluene-d8	107	REC %			1	8260B		10/16/2015	CJR	1
SUR - 1,2-Dichloroethane-d4	104	REC %			1	8260B		10/16/2015	CJR	1

Project Name NEWTON GRAVEL PIT **Invoice #** E29883
Project # 60135471

Lab Code 5029883G
Sample ID 4027 THUNDER
Sample Matrix Water
Sample Date 10/13/2015

	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		10/16/2015	CJR	1
Bromobenzene	< 0.48	ug/l	0.48	1.5	1	8260B		10/16/2015	CJR	1
Bromodichloromethane	< 0.46	ug/l	0.46	1.5	1	8260B		10/16/2015	CJR	1
Bromoform	< 0.46	ug/l	0.46	1.5	1	8260B		10/16/2015	CJR	1
tert-Butylbenzene	< 1.1	ug/l	1.1	3.4	1	8260B		10/16/2015	CJR	1
sec-Butylbenzene	< 1.2	ug/l	1.2	3.8	1	8260B		10/16/2015	CJR	1
n-Butylbenzene	< 1	ug/l	1	3.3	1	8260B		10/16/2015	CJR	1
Carbon Tetrachloride	< 0.51	ug/l	0.51	1.6	1	8260B		10/16/2015	CJR	1
Chlorobenzene	< 0.46	ug/l	0.46	1.4	1	8260B		10/16/2015	CJR	1
Chloroethane	< 0.65	ug/l	0.65	2.1	1	8260B		10/16/2015	CJR	1
Chloroform	< 0.43	ug/l	0.43	1.4	1	8260B		10/16/2015	CJR	1
Chloromethane	< 1.9	ug/l	1.9	6	1	8260B		10/16/2015	CJR	1
2-Chlorotoluene	< 0.4	ug/l	0.4	1.3	1	8260B		10/16/2015	CJR	1
4-Chlorotoluene	< 0.63	ug/l	0.63	2	1	8260B		10/16/2015	CJR	1
1,2-Dibromo-3-chloropropane	< 1.4	ug/l	1.4	4.5	1	8260B		10/16/2015	CJR	1
Dibromochloromethane	< 0.45	ug/l	0.45	1.4	1	8260B		10/16/2015	CJR	1
1,4-Dichlorobenzene	< 0.49	ug/l	0.49	1.6	1	8260B		10/16/2015	CJR	1
1,3-Dichlorobenzene	< 0.52	ug/l	0.52	1.6	1	8260B		10/16/2015	CJR	1
1,2-Dichlorobenzene	< 0.46	ug/l	0.46	1.5	1	8260B		10/16/2015	CJR	1
Dichlorodifluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/16/2015	CJR	1
1,2-Dichloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/16/2015	CJR	1
1,1-Dichloroethane	< 1.1	ug/l	1.1	3.6	1	8260B		10/16/2015	CJR	1
1,1-Dichloroethene	< 0.65	ug/l	0.65	2.1	1	8260B		10/16/2015	CJR	1
cis-1,2-Dichloroethene	0.67 "J"	ug/l	0.45	1.4	1	8260B		10/16/2015	CJR	1
trans-1,2-Dichloroethene	< 0.54	ug/l	0.54	1.7	1	8260B		10/16/2015	CJR	1
1,2-Dichloropropane	< 0.43	ug/l	0.43	1.37	1	8260B		10/16/2015	CJR	1
2,2-Dichloropropane	< 3.1	ug/l	3.1	9.8	1	8260B		10/16/2015	CJR	1
1,3-Dichloropropane	< 0.42	ug/l	0.42	1.3	1	8260B		10/16/2015	CJR	1
Di-isopropyl ether	< 0.44	ug/l	0.44	1.4	1	8260B		10/16/2015	CJR	1
EDB (1,2-Dibromoethane)	< 0.63	ug/l	0.63	2	1	8260B		10/16/2015	CJR	1
Ethylbenzene	< 0.71	ug/l	0.71	2.3	1	8260B		10/16/2015	CJR	1
Hexachlorobutadiene	< 2.2	ug/l	2.2	7.1	1	8260B		10/16/2015	CJR	1
Isopropylbenzene	< 0.82	ug/l	0.82	2.6	1	8260B		10/16/2015	CJR	1
p-Isopropyltoluene	< 1.1	ug/l	1.1	3.5	1	8260B		10/16/2015	CJR	1
Methylene chloride	< 1.3	ug/l	1.3	4.2	1	8260B		10/16/2015	CJR	1
Methyl tert-butyl ether (MTBE)	< 1.1	ug/l	1.1	3.7	1	8260B		10/16/2015	CJR	1
Naphthalene	< 1.6	ug/l	1.6	5.2	1	8260B		10/16/2015	CJR	1
n-Propylbenzene	< 0.77	ug/l	0.77	2.4	1	8260B		10/16/2015	CJR	1
1,1,2,2-Tetrachloroethane	< 0.52	ug/l	0.52	1.7	1	8260B		10/16/2015	CJR	1
1,1,1,2-Tetrachloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/16/2015	CJR	1
Tetrachloroethene	< 0.49	ug/l	0.49	1.5	1	8260B		10/16/2015	CJR	1
Toluene	< 0.44	ug/l	0.44	1.4	1	8260B		10/16/2015	CJR	1
1,2,4-Trichlorobenzene	< 1.7	ug/l	1.7	5.6	1	8260B		10/16/2015	CJR	1
1,2,3-Trichlorobenzene	< 2.7	ug/l	2.7	8.6	1	8260B		10/16/2015	CJR	1
1,1,1-Trichloroethane	< 0.84	ug/l	0.84	2.7	1	8260B		10/16/2015	CJR	1
1,1,2-Trichloroethane	< 0.48	ug/l	0.48	1.52	1	8260B		10/16/2015	CJR	1
Trichloroethene (TCE)	< 0.47	ug/l	0.47	1.5	1	8260B		10/16/2015	CJR	1
Trichlorofluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/16/2015	CJR	1
1,2,4-Trimethylbenzene	< 1.6	ug/l	1.6	5	1	8260B		10/16/2015	CJR	1
1,3,5-Trimethylbenzene	< 1.5	ug/l	1.5	4.8	1	8260B		10/16/2015	CJR	1
Vinyl Chloride	< 0.17	ug/l	0.17	0.54	1	8260B		10/16/2015	CJR	1
m&p-Xylene	< 2.2	ug/l	2.2	6.9	1	8260B		10/16/2015	CJR	1
o-Xylene	< 0.9	ug/l	0.9	2.9	1	8260B		10/16/2015	CJR	1
SUR - 4-Bromofluorobenzene	109	REC %			1	8260B		10/16/2015	CJR	1
SUR - Dibromofluoromethane	103	REC %			1	8260B		10/16/2015	CJR	1
SUR - 1,2-Dichloroethane-d4	96	REC %			1	8260B		10/16/2015	CJR	1
SUR - Toluene-d8	105	REC %			1	8260B		10/16/2015	CJR	1

Project Name NEWTON GRAVEL PIT **Invoice #** E29883
Project # 60135471

Lab Code 5029883H
Sample ID 3617 VIEBAHN
Sample Matrix Water
Sample Date 10/13/2015

	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		10/17/2015	CJR	1
Bromobenzene	< 0.48	ug/l	0.48	1.5	1	8260B		10/17/2015	CJR	1
Bromodichloromethane	< 0.46	ug/l	0.46	1.5	1	8260B		10/17/2015	CJR	1
Bromoform	< 0.46	ug/l	0.46	1.5	1	8260B		10/17/2015	CJR	1
tert-Butylbenzene	< 1.1	ug/l	1.1	3.4	1	8260B		10/17/2015	CJR	1
sec-Butylbenzene	< 1.2	ug/l	1.2	3.8	1	8260B		10/17/2015	CJR	1
n-Butylbenzene	< 1	ug/l	1	3.3	1	8260B		10/17/2015	CJR	1
Carbon Tetrachloride	< 0.51	ug/l	0.51	1.6	1	8260B		10/17/2015	CJR	1
Chlorobenzene	< 0.46	ug/l	0.46	1.4	1	8260B		10/17/2015	CJR	1
Chloroethane	< 0.65	ug/l	0.65	2.1	1	8260B		10/17/2015	CJR	1
Chloroform	< 0.43	ug/l	0.43	1.4	1	8260B		10/17/2015	CJR	1
Chloromethane	< 1.9	ug/l	1.9	6	1	8260B		10/17/2015	CJR	1
2-Chlorotoluene	< 0.4	ug/l	0.4	1.3	1	8260B		10/17/2015	CJR	1
4-Chlorotoluene	< 0.63	ug/l	0.63	2	1	8260B		10/17/2015	CJR	1
1,2-Dibromo-3-chloropropane	< 1.4	ug/l	1.4	4.5	1	8260B		10/17/2015	CJR	1
Dibromochloromethane	< 0.45	ug/l	0.45	1.4	1	8260B		10/17/2015	CJR	1
1,4-Dichlorobenzene	< 0.49	ug/l	0.49	1.6	1	8260B		10/17/2015	CJR	1
1,3-Dichlorobenzene	< 0.52	ug/l	0.52	1.6	1	8260B		10/17/2015	CJR	1
1,2-Dichlorobenzene	< 0.46	ug/l	0.46	1.5	1	8260B		10/17/2015	CJR	1
Dichlorodifluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/17/2015	CJR	1
1,2-Dichloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/17/2015	CJR	1
1,1-Dichloroethane	< 1.1	ug/l	1.1	3.6	1	8260B		10/17/2015	CJR	1
1,1-Dichloroethene	< 0.65	ug/l	0.65	2.1	1	8260B		10/17/2015	CJR	1
cis-1,2-Dichloroethene	1.3 "J"	ug/l	0.45	1.4	1	8260B		10/17/2015	CJR	1
trans-1,2-Dichloroethene	< 0.54	ug/l	0.54	1.7	1	8260B		10/17/2015	CJR	1
1,2-Dichloropropane	< 0.43	ug/l	0.43	1.37	1	8260B		10/17/2015	CJR	1
2,2-Dichloropropane	< 3.1	ug/l	3.1	9.8	1	8260B		10/17/2015	CJR	1
1,3-Dichloropropane	< 0.42	ug/l	0.42	1.3	1	8260B		10/17/2015	CJR	1
Di-isopropyl ether	< 0.44	ug/l	0.44	1.4	1	8260B		10/17/2015	CJR	1
EDB (1,2-Dibromoethane)	< 0.63	ug/l	0.63	2	1	8260B		10/17/2015	CJR	1
Ethylbenzene	< 0.71	ug/l	0.71	2.3	1	8260B		10/17/2015	CJR	1
Hexachlorobutadiene	< 2.2	ug/l	2.2	7.1	1	8260B		10/17/2015	CJR	1
Isopropylbenzene	< 0.82	ug/l	0.82	2.6	1	8260B		10/17/2015	CJR	1
p-Isopropyltoluene	< 1.1	ug/l	1.1	3.5	1	8260B		10/17/2015	CJR	1
Methylene chloride	< 1.3	ug/l	1.3	4.2	1	8260B		10/17/2015	CJR	1
Methyl tert-butyl ether (MTBE)	< 1.1	ug/l	1.1	3.7	1	8260B		10/17/2015	CJR	1
Naphthalene	< 1.6	ug/l	1.6	5.2	1	8260B		10/17/2015	CJR	1
n-Propylbenzene	< 0.77	ug/l	0.77	2.4	1	8260B		10/17/2015	CJR	1
1,1,2,2-Tetrachloroethane	< 0.52	ug/l	0.52	1.7	1	8260B		10/17/2015	CJR	1
1,1,1,2-Tetrachloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/17/2015	CJR	1
Tetrachloroethene	< 0.49	ug/l	0.49	1.5	1	8260B		10/17/2015	CJR	1
Toluene	< 0.44	ug/l	0.44	1.4	1	8260B		10/17/2015	CJR	1
1,2,4-Trichlorobenzene	< 1.7	ug/l	1.7	5.6	1	8260B		10/17/2015	CJR	1
1,2,3-Trichlorobenzene	< 2.7	ug/l	2.7	8.6	1	8260B		10/17/2015	CJR	1
1,1,1-Trichloroethane	< 0.84	ug/l	0.84	2.7	1	8260B		10/17/2015	CJR	1
1,1,2-Trichloroethane	< 0.48	ug/l	0.48	1.52	1	8260B		10/17/2015	CJR	1
Trichloroethene (TCE)	< 0.47	ug/l	0.47	1.5	1	8260B		10/17/2015	CJR	1
Trichlorofluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/17/2015	CJR	1
1,2,4-Trimethylbenzene	< 1.6	ug/l	1.6	5	1	8260B		10/17/2015	CJR	1
1,3,5-Trimethylbenzene	< 1.5	ug/l	1.5	4.8	1	8260B		10/17/2015	CJR	1
Vinyl Chloride	0.23 "J"	ug/l	0.17	0.54	1	8260B		10/17/2015	CJR	1
m&p-Xylene	< 2.2	ug/l	2.2	6.9	1	8260B		10/17/2015	CJR	1
o-Xylene	< 0.9	ug/l	0.9	2.9	1	8260B		10/17/2015	CJR	1
SUR - 1,2-Dichloroethane-d4	99	REC %			1	8260B		10/17/2015	CJR	1
SUR - 4-Bromofluorobenzene	107	REC %			1	8260B		10/17/2015	CJR	1
SUR - Dibromofluoromethane	101	REC %			1	8260B		10/17/2015	CJR	1
SUR - Toluene-d8	106	REC %			1	8260B		10/17/2015	CJR	1

Project Name NEWTON GRAVEL PIT **Invoice #** E29883
Project # 60135471

Lab Code 5029883I
Sample ID 3403 CTH CR
Sample Matrix Water
Sample Date 10/13/2015

	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		10/17/2015	CJR	1
Bromobenzene	< 0.48	ug/l	0.48	1.5	1	8260B		10/17/2015	CJR	1
Bromodichloromethane	< 0.46	ug/l	0.46	1.5	1	8260B		10/17/2015	CJR	1
Bromoform	< 0.46	ug/l	0.46	1.5	1	8260B		10/17/2015	CJR	1
tert-Butylbenzene	< 1.1	ug/l	1.1	3.4	1	8260B		10/17/2015	CJR	1
sec-Butylbenzene	< 1.2	ug/l	1.2	3.8	1	8260B		10/17/2015	CJR	1
n-Butylbenzene	< 1	ug/l	1	3.3	1	8260B		10/17/2015	CJR	1
Carbon Tetrachloride	< 0.51	ug/l	0.51	1.6	1	8260B		10/17/2015	CJR	1
Chlorobenzene	< 0.46	ug/l	0.46	1.4	1	8260B		10/17/2015	CJR	1
Chloroethane	< 0.65	ug/l	0.65	2.1	1	8260B		10/17/2015	CJR	1
Chloroform	< 0.43	ug/l	0.43	1.4	1	8260B		10/17/2015	CJR	1
Chloromethane	< 1.9	ug/l	1.9	6	1	8260B		10/17/2015	CJR	1
2-Chlorotoluene	< 0.4	ug/l	0.4	1.3	1	8260B		10/17/2015	CJR	1
4-Chlorotoluene	< 0.63	ug/l	0.63	2	1	8260B		10/17/2015	CJR	1
1,2-Dibromo-3-chloropropane	< 1.4	ug/l	1.4	4.5	1	8260B		10/17/2015	CJR	1
Dibromochloromethane	< 0.45	ug/l	0.45	1.4	1	8260B		10/17/2015	CJR	1
1,4-Dichlorobenzene	< 0.49	ug/l	0.49	1.6	1	8260B		10/17/2015	CJR	1
1,3-Dichlorobenzene	< 0.52	ug/l	0.52	1.6	1	8260B		10/17/2015	CJR	1
1,2-Dichlorobenzene	< 0.46	ug/l	0.46	1.5	1	8260B		10/17/2015	CJR	1
Dichlorodifluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/17/2015	CJR	1
1,2-Dichloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/17/2015	CJR	1
1,1-Dichloroethane	< 1.1	ug/l	1.1	3.6	1	8260B		10/17/2015	CJR	1
1,1-Dichloroethene	< 0.65	ug/l	0.65	2.1	1	8260B		10/17/2015	CJR	1
cis-1,2-Dichloroethene	< 0.45	ug/l	0.45	1.4	1	8260B		10/17/2015	CJR	1
trans-1,2-Dichloroethene	< 0.54	ug/l	0.54	1.7	1	8260B		10/17/2015	CJR	1
1,2-Dichloropropane	< 0.43	ug/l	0.43	1.37	1	8260B		10/17/2015	CJR	1
2,2-Dichloropropane	< 3.1	ug/l	3.1	9.8	1	8260B		10/17/2015	CJR	1
1,3-Dichloropropane	< 0.42	ug/l	0.42	1.3	1	8260B		10/17/2015	CJR	1
Di-isopropyl ether	< 0.44	ug/l	0.44	1.4	1	8260B		10/17/2015	CJR	1
EDB (1,2-Dibromoethane)	< 0.63	ug/l	0.63	2	1	8260B		10/17/2015	CJR	1
Ethylbenzene	< 0.71	ug/l	0.71	2.3	1	8260B		10/17/2015	CJR	1
Hexachlorobutadiene	< 2.2	ug/l	2.2	7.1	1	8260B		10/17/2015	CJR	1
Isopropylbenzene	< 0.82	ug/l	0.82	2.6	1	8260B		10/17/2015	CJR	1
p-Isopropyltoluene	< 1.1	ug/l	1.1	3.5	1	8260B		10/17/2015	CJR	1
Methylene chloride	< 1.3	ug/l	1.3	4.2	1	8260B		10/17/2015	CJR	1
Methyl tert-butyl ether (MTBE)	< 1.1	ug/l	1.1	3.7	1	8260B		10/17/2015	CJR	1
Naphthalene	< 1.6	ug/l	1.6	5.2	1	8260B		10/17/2015	CJR	1
n-Propylbenzene	< 0.77	ug/l	0.77	2.4	1	8260B		10/17/2015	CJR	1
1,1,2,2-Tetrachloroethane	< 0.52	ug/l	0.52	1.7	1	8260B		10/17/2015	CJR	1
1,1,1,2-Tetrachloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/17/2015	CJR	1
Tetrachloroethene	< 0.49	ug/l	0.49	1.5	1	8260B		10/17/2015	CJR	1
Toluene	< 0.44	ug/l	0.44	1.4	1	8260B		10/17/2015	CJR	1
1,2,4-Trichlorobenzene	< 1.7	ug/l	1.7	5.6	1	8260B		10/17/2015	CJR	1
1,2,3-Trichlorobenzene	< 2.7	ug/l	2.7	8.6	1	8260B		10/17/2015	CJR	1
1,1,1-Trichloroethane	< 0.84	ug/l	0.84	2.7	1	8260B		10/17/2015	CJR	1
1,1,2-Trichloroethane	< 0.48	ug/l	0.48	1.52	1	8260B		10/17/2015	CJR	1
Trichloroethene (TCE)	< 0.47	ug/l	0.47	1.5	1	8260B		10/17/2015	CJR	1
Trichlorofluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/17/2015	CJR	1
1,2,4-Trimethylbenzene	< 1.6	ug/l	1.6	5	1	8260B		10/17/2015	CJR	1
1,3,5-Trimethylbenzene	< 1.5	ug/l	1.5	4.8	1	8260B		10/17/2015	CJR	1
Vinyl Chloride	< 0.17	ug/l	0.17	0.54	1	8260B		10/17/2015	CJR	1
m&p-Xylene	< 2.2	ug/l	2.2	6.9	1	8260B		10/17/2015	CJR	1
o-Xylene	< 0.9	ug/l	0.9	2.9	1	8260B		10/17/2015	CJR	1
SUR - 1,2-Dichloroethane-d4	100	REC %			1	8260B		10/17/2015	CJR	1
SUR - Toluene-d8	107	REC %			1	8260B		10/17/2015	CJR	1
SUR - Dibromofluoromethane	103	REC %			1	8260B		10/17/2015	CJR	1
SUR - 4-Bromofluorobenzene	110	REC %			1	8260B		10/17/2015	CJR	1

Project Name NEWTON GRAVEL PIT **Invoice #** E29883
Project # 60135471

Lab Code 5029883J
Sample ID 3120 CTH CR
Sample Matrix Water
Sample Date 10/13/2015

	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		10/17/2015	CJR	1
Bromobenzene	< 0.48	ug/l	0.48	1.5	1	8260B		10/17/2015	CJR	1
Bromodichloromethane	< 0.46	ug/l	0.46	1.5	1	8260B		10/17/2015	CJR	1
Bromoform	< 0.46	ug/l	0.46	1.5	1	8260B		10/17/2015	CJR	1
tert-Butylbenzene	< 1.1	ug/l	1.1	3.4	1	8260B		10/17/2015	CJR	1
sec-Butylbenzene	< 1.2	ug/l	1.2	3.8	1	8260B		10/17/2015	CJR	1
n-Butylbenzene	< 1	ug/l	1	3.3	1	8260B		10/17/2015	CJR	1
Carbon Tetrachloride	< 0.51	ug/l	0.51	1.6	1	8260B		10/17/2015	CJR	1
Chlorobenzene	< 0.46	ug/l	0.46	1.4	1	8260B		10/17/2015	CJR	1
Chloroethane	< 0.65	ug/l	0.65	2.1	1	8260B		10/17/2015	CJR	1
Chloroform	< 0.43	ug/l	0.43	1.4	1	8260B		10/17/2015	CJR	1
Chloromethane	< 1.9	ug/l	1.9	6	1	8260B		10/17/2015	CJR	1
2-Chlorotoluene	< 0.4	ug/l	0.4	1.3	1	8260B		10/17/2015	CJR	1
4-Chlorotoluene	< 0.63	ug/l	0.63	2	1	8260B		10/17/2015	CJR	1
1,2-Dibromo-3-chloropropane	< 1.4	ug/l	1.4	4.5	1	8260B		10/17/2015	CJR	1
Dibromochloromethane	< 0.45	ug/l	0.45	1.4	1	8260B		10/17/2015	CJR	1
1,4-Dichlorobenzene	< 0.49	ug/l	0.49	1.6	1	8260B		10/17/2015	CJR	1
1,3-Dichlorobenzene	< 0.52	ug/l	0.52	1.6	1	8260B		10/17/2015	CJR	1
1,2-Dichlorobenzene	< 0.46	ug/l	0.46	1.5	1	8260B		10/17/2015	CJR	1
Dichlorodifluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/17/2015	CJR	1
1,2-Dichloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/17/2015	CJR	1
1,1-Dichloroethane	< 1.1	ug/l	1.1	3.6	1	8260B		10/17/2015	CJR	1
1,1-Dichloroethene	< 0.65	ug/l	0.65	2.1	1	8260B		10/17/2015	CJR	1
cis-1,2-Dichloroethene	< 0.45	ug/l	0.45	1.4	1	8260B		10/17/2015	CJR	1
trans-1,2-Dichloroethene	< 0.54	ug/l	0.54	1.7	1	8260B		10/17/2015	CJR	1
1,2-Dichloropropane	< 0.43	ug/l	0.43	1.37	1	8260B		10/17/2015	CJR	1
2,2-Dichloropropane	< 3.1	ug/l	3.1	9.8	1	8260B		10/17/2015	CJR	1
1,3-Dichloropropane	< 0.42	ug/l	0.42	1.3	1	8260B		10/17/2015	CJR	1
Di-isopropyl ether	< 0.44	ug/l	0.44	1.4	1	8260B		10/17/2015	CJR	1
EDB (1,2-Dibromoethane)	< 0.63	ug/l	0.63	2	1	8260B		10/17/2015	CJR	1
Ethylbenzene	< 0.71	ug/l	0.71	2.3	1	8260B		10/17/2015	CJR	1
Hexachlorobutadiene	< 2.2	ug/l	2.2	7.1	1	8260B		10/17/2015	CJR	1
Isopropylbenzene	< 0.82	ug/l	0.82	2.6	1	8260B		10/17/2015	CJR	1
p-Isopropyltoluene	< 1.1	ug/l	1.1	3.5	1	8260B		10/17/2015	CJR	1
Methylene chloride	< 1.3	ug/l	1.3	4.2	1	8260B		10/17/2015	CJR	1
Methyl tert-butyl ether (MTBE)	< 1.1	ug/l	1.1	3.7	1	8260B		10/17/2015	CJR	1
Naphthalene	< 1.6	ug/l	1.6	5.2	1	8260B		10/17/2015	CJR	1
n-Propylbenzene	< 0.77	ug/l	0.77	2.4	1	8260B		10/17/2015	CJR	1
1,1,2,2-Tetrachloroethane	< 0.52	ug/l	0.52	1.7	1	8260B		10/17/2015	CJR	1
1,1,1,2-Tetrachloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/17/2015	CJR	1
Tetrachloroethene	< 0.49	ug/l	0.49	1.5	1	8260B		10/17/2015	CJR	1
Toluene	< 0.44	ug/l	0.44	1.4	1	8260B		10/17/2015	CJR	1
1,2,4-Trichlorobenzene	< 1.7	ug/l	1.7	5.6	1	8260B		10/17/2015	CJR	1
1,2,3-Trichlorobenzene	< 2.7	ug/l	2.7	8.6	1	8260B		10/17/2015	CJR	1
1,1,1-Trichloroethane	< 0.84	ug/l	0.84	2.7	1	8260B		10/17/2015	CJR	1
1,1,2-Trichloroethane	< 0.48	ug/l	0.48	1.52	1	8260B		10/17/2015	CJR	1
Trichloroethene (TCE)	< 0.47	ug/l	0.47	1.5	1	8260B		10/17/2015	CJR	1
Trichlorofluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/17/2015	CJR	1
1,2,4-Trimethylbenzene	< 1.6	ug/l	1.6	5	1	8260B		10/17/2015	CJR	1
1,3,5-Trimethylbenzene	< 1.5	ug/l	1.5	4.8	1	8260B		10/17/2015	CJR	1
Vinyl Chloride	< 0.17	ug/l	0.17	0.54	1	8260B		10/17/2015	CJR	1
m&p-Xylene	< 2.2	ug/l	2.2	6.9	1	8260B		10/17/2015	CJR	1
o-Xylene	< 0.9	ug/l	0.9	2.9	1	8260B		10/17/2015	CJR	1
SUR - 1,2-Dichloroethane-d4	103	REC %			1	8260B		10/17/2015	CJR	1
SUR - 4-Bromofluorobenzene	115	REC %			1	8260B		10/17/2015	CJR	1
SUR - Dibromofluoromethane	106	REC %			1	8260B		10/17/2015	CJR	1
SUR - Toluene-d8	104	REC %			1	8260B		10/17/2015	CJR	1

Project Name NEWTON GRAVEL PIT **Invoice #** E29883
Project # 60135471

Lab Code 5029883K
Sample ID 3524 ORCHARD
Sample Matrix Water
Sample Date 10/13/2015

	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		10/17/2015	CJR	1
Bromobenzene	< 0.48	ug/l	0.48	1.5	1	8260B		10/17/2015	CJR	1
Bromodichloromethane	< 0.46	ug/l	0.46	1.5	1	8260B		10/17/2015	CJR	1
Bromoform	< 0.46	ug/l	0.46	1.5	1	8260B		10/17/2015	CJR	1
tert-Butylbenzene	< 1.1	ug/l	1.1	3.4	1	8260B		10/17/2015	CJR	1
sec-Butylbenzene	< 1.2	ug/l	1.2	3.8	1	8260B		10/17/2015	CJR	1
n-Butylbenzene	< 1	ug/l	1	3.3	1	8260B		10/17/2015	CJR	1
Carbon Tetrachloride	< 0.51	ug/l	0.51	1.6	1	8260B		10/17/2015	CJR	1
Chlorobenzene	< 0.46	ug/l	0.46	1.4	1	8260B		10/17/2015	CJR	1
Chloroethane	< 0.65	ug/l	0.65	2.1	1	8260B		10/17/2015	CJR	1
Chloroform	< 0.43	ug/l	0.43	1.4	1	8260B		10/17/2015	CJR	1
Chloromethane	< 1.9	ug/l	1.9	6	1	8260B		10/17/2015	CJR	1
2-Chlorotoluene	< 0.4	ug/l	0.4	1.3	1	8260B		10/17/2015	CJR	1
4-Chlorotoluene	< 0.63	ug/l	0.63	2	1	8260B		10/17/2015	CJR	1
1,2-Dibromo-3-chloropropane	< 1.4	ug/l	1.4	4.5	1	8260B		10/17/2015	CJR	1
Dibromochloromethane	< 0.45	ug/l	0.45	1.4	1	8260B		10/17/2015	CJR	1
1,4-Dichlorobenzene	< 0.49	ug/l	0.49	1.6	1	8260B		10/17/2015	CJR	1
1,3-Dichlorobenzene	< 0.52	ug/l	0.52	1.6	1	8260B		10/17/2015	CJR	1
1,2-Dichlorobenzene	< 0.46	ug/l	0.46	1.5	1	8260B		10/17/2015	CJR	1
Dichlorodifluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/17/2015	CJR	1
1,2-Dichloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/17/2015	CJR	1
1,1-Dichloroethane	< 1.1	ug/l	1.1	3.6	1	8260B		10/17/2015	CJR	1
1,1-Dichloroethene	< 0.65	ug/l	0.65	2.1	1	8260B		10/17/2015	CJR	1
cis-1,2-Dichloroethene	< 0.45	ug/l	0.45	1.4	1	8260B		10/17/2015	CJR	1
trans-1,2-Dichloroethene	< 0.54	ug/l	0.54	1.7	1	8260B		10/17/2015	CJR	1
1,2-Dichloropropane	< 0.43	ug/l	0.43	1.37	1	8260B		10/17/2015	CJR	1
2,2-Dichloropropane	< 3.1	ug/l	3.1	9.8	1	8260B		10/17/2015	CJR	1
1,3-Dichloropropane	< 0.42	ug/l	0.42	1.3	1	8260B		10/17/2015	CJR	1
Di-isopropyl ether	< 0.44	ug/l	0.44	1.4	1	8260B		10/17/2015	CJR	1
EDB (1,2-Dibromoethane)	< 0.63	ug/l	0.63	2	1	8260B		10/17/2015	CJR	1
Ethylbenzene	< 0.71	ug/l	0.71	2.3	1	8260B		10/17/2015	CJR	1
Hexachlorobutadiene	< 2.2	ug/l	2.2	7.1	1	8260B		10/17/2015	CJR	1
Isopropylbenzene	< 0.82	ug/l	0.82	2.6	1	8260B		10/17/2015	CJR	1
p-Isopropyltoluene	< 1.1	ug/l	1.1	3.5	1	8260B		10/17/2015	CJR	1
Methylene chloride	< 1.3	ug/l	1.3	4.2	1	8260B		10/17/2015	CJR	1
Methyl tert-butyl ether (MTBE)	< 1.1	ug/l	1.1	3.7	1	8260B		10/17/2015	CJR	1
Naphthalene	< 1.6	ug/l	1.6	5.2	1	8260B		10/17/2015	CJR	1
n-Propylbenzene	< 0.77	ug/l	0.77	2.4	1	8260B		10/17/2015	CJR	1
1,1,2,2-Tetrachloroethane	< 0.52	ug/l	0.52	1.7	1	8260B		10/17/2015	CJR	1
1,1,1,2-Tetrachloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/17/2015	CJR	1
Tetrachloroethene	< 0.49	ug/l	0.49	1.5	1	8260B		10/17/2015	CJR	1
Toluene	< 0.44	ug/l	0.44	1.4	1	8260B		10/17/2015	CJR	1
1,2,4-Trichlorobenzene	< 1.7	ug/l	1.7	5.6	1	8260B		10/17/2015	CJR	1
1,2,3-Trichlorobenzene	< 2.7	ug/l	2.7	8.6	1	8260B		10/17/2015	CJR	1
1,1,1-Trichloroethane	< 0.84	ug/l	0.84	2.7	1	8260B		10/17/2015	CJR	1
1,1,2-Trichloroethane	< 0.48	ug/l	0.48	1.52	1	8260B		10/17/2015	CJR	1
Trichloroethene (TCE)	< 0.47	ug/l	0.47	1.5	1	8260B		10/17/2015	CJR	1
Trichlorofluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/17/2015	CJR	1
1,2,4-Trimethylbenzene	< 1.6	ug/l	1.6	5	1	8260B		10/17/2015	CJR	1
1,3,5-Trimethylbenzene	< 1.5	ug/l	1.5	4.8	1	8260B		10/17/2015	CJR	1
Vinyl Chloride	< 0.17	ug/l	0.17	0.54	1	8260B		10/17/2015	CJR	1
m&p-Xylene	< 2.2	ug/l	2.2	6.9	1	8260B		10/17/2015	CJR	1
o-Xylene	< 0.9	ug/l	0.9	2.9	1	8260B		10/17/2015	CJR	1
SUR - Toluene-d8	109	REC %			1	8260B		10/17/2015	CJR	1
SUR - Dibromofluoromethane	104	REC %			1	8260B		10/17/2015	CJR	1
SUR - 1,2-Dichloroethane-d4	103	REC %			1	8260B		10/17/2015	CJR	1
SUR - 4-Bromofluorobenzene	110	REC %			1	8260B		10/17/2015	CJR	1

Project Name NEWTON GRAVEL PIT **Invoice #** E29883
Project # 60135471

Lab Code 5029883L
Sample ID 2917 CTH CR
Sample Matrix Water
Sample Date 10/13/2015

	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		10/19/2015	CJR	1
Bromobenzene	< 0.48	ug/l	0.48	1.5	1	8260B		10/19/2015	CJR	1
Bromodichloromethane	< 0.46	ug/l	0.46	1.5	1	8260B		10/19/2015	CJR	1
Bromoform	< 0.46	ug/l	0.46	1.5	1	8260B		10/19/2015	CJR	1
tert-Butylbenzene	< 1.1	ug/l	1.1	3.4	1	8260B		10/19/2015	CJR	1
sec-Butylbenzene	< 1.2	ug/l	1.2	3.8	1	8260B		10/19/2015	CJR	1
n-Butylbenzene	< 1	ug/l	1	3.3	1	8260B		10/19/2015	CJR	1
Carbon Tetrachloride	< 0.51	ug/l	0.51	1.6	1	8260B		10/19/2015	CJR	1
Chlorobenzene	< 0.46	ug/l	0.46	1.4	1	8260B		10/19/2015	CJR	1
Chloroethane	< 0.65	ug/l	0.65	2.1	1	8260B		10/19/2015	CJR	1
Chloroform	< 0.43	ug/l	0.43	1.4	1	8260B		10/19/2015	CJR	1
Chloromethane	< 1.9	ug/l	1.9	6	1	8260B		10/19/2015	CJR	1
2-Chlorotoluene	< 0.4	ug/l	0.4	1.3	1	8260B		10/19/2015	CJR	1
4-Chlorotoluene	< 0.63	ug/l	0.63	2	1	8260B		10/19/2015	CJR	1
1,2-Dibromo-3-chloropropane	< 1.4	ug/l	1.4	4.5	1	8260B		10/19/2015	CJR	1
Dibromochloromethane	< 0.45	ug/l	0.45	1.4	1	8260B		10/19/2015	CJR	1
1,4-Dichlorobenzene	< 0.49	ug/l	0.49	1.6	1	8260B		10/19/2015	CJR	1
1,3-Dichlorobenzene	< 0.52	ug/l	0.52	1.6	1	8260B		10/19/2015	CJR	1
1,2-Dichlorobenzene	< 0.46	ug/l	0.46	1.5	1	8260B		10/19/2015	CJR	1
Dichlorodifluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/19/2015	CJR	1
1,2-Dichloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/19/2015	CJR	1
1,1-Dichloroethane	< 1.1	ug/l	1.1	3.6	1	8260B		10/19/2015	CJR	1
1,1-Dichloroethene	< 0.65	ug/l	0.65	2.1	1	8260B		10/19/2015	CJR	1
cis-1,2-Dichloroethene	1.6	ug/l	0.45	1.4	1	8260B		10/19/2015	CJR	1
trans-1,2-Dichloroethene	< 0.54	ug/l	0.54	1.7	1	8260B		10/19/2015	CJR	1
1,2-Dichloropropane	< 0.43	ug/l	0.43	1.37	1	8260B		10/19/2015	CJR	1
2,2-Dichloropropane	< 3.1	ug/l	3.1	9.8	1	8260B		10/19/2015	CJR	2
1,3-Dichloropropane	< 0.42	ug/l	0.42	1.3	1	8260B		10/19/2015	CJR	1
Di-isopropyl ether	< 0.44	ug/l	0.44	1.4	1	8260B		10/19/2015	CJR	1
EDB (1,2-Dibromoethane)	< 0.63	ug/l	0.63	2	1	8260B		10/19/2015	CJR	1
Ethylbenzene	< 0.71	ug/l	0.71	2.3	1	8260B		10/19/2015	CJR	1
Hexachlorobutadiene	< 2.2	ug/l	2.2	7.1	1	8260B		10/19/2015	CJR	1
Isopropylbenzene	< 0.82	ug/l	0.82	2.6	1	8260B		10/19/2015	CJR	1
p-Isopropyltoluene	< 1.1	ug/l	1.1	3.5	1	8260B		10/19/2015	CJR	1
Methylene chloride	< 1.3	ug/l	1.3	4.2	1	8260B		10/19/2015	CJR	1
Methyl tert-butyl ether (MTBE)	< 1.1	ug/l	1.1	3.7	1	8260B		10/19/2015	CJR	1
Naphthalene	< 1.6	ug/l	1.6	5.2	1	8260B		10/19/2015	CJR	1
n-Propylbenzene	< 0.77	ug/l	0.77	2.4	1	8260B		10/19/2015	CJR	1
1,1,2,2-Tetrachloroethane	< 0.52	ug/l	0.52	1.7	1	8260B		10/19/2015	CJR	1
1,1,1,2-Tetrachloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/19/2015	CJR	1
Tetrachloroethene	< 0.49	ug/l	0.49	1.5	1	8260B		10/19/2015	CJR	1
Toluene	< 0.44	ug/l	0.44	1.4	1	8260B		10/19/2015	CJR	1
1,2,4-Trichlorobenzene	< 1.7	ug/l	1.7	5.6	1	8260B		10/19/2015	CJR	1
1,2,3-Trichlorobenzene	< 2.7	ug/l	2.7	8.6	1	8260B		10/19/2015	CJR	1
1,1,1-Trichloroethane	< 0.84	ug/l	0.84	2.7	1	8260B		10/19/2015	CJR	1
1,1,2-Trichloroethane	< 0.48	ug/l	0.48	1.52	1	8260B		10/19/2015	CJR	1
Trichloroethene (TCE)	< 0.47	ug/l	0.47	1.5	1	8260B		10/19/2015	CJR	1
Trichlorofluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/19/2015	CJR	1
1,2,4-Trimethylbenzene	< 1.6	ug/l	1.6	5	1	8260B		10/19/2015	CJR	1
1,3,5-Trimethylbenzene	< 1.5	ug/l	1.5	4.8	1	8260B		10/19/2015	CJR	1
Vinyl Chloride	0.43 "J"	ug/l	0.17	0.54	1	8260B		10/19/2015	CJR	1
m&p-Xylene	< 2.2	ug/l	2.2	6.9	1	8260B		10/19/2015	CJR	1
o-Xylene	< 0.9	ug/l	0.9	2.9	1	8260B		10/19/2015	CJR	1
SUR - Toluene-d8	107	REC %			1	8260B		10/19/2015	CJR	1
SUR - 1,2-Dichloroethane-d4	99	REC %			1	8260B		10/19/2015	CJR	1
SUR - 4-Bromofluorobenzene	113	REC %			1	8260B		10/19/2015	CJR	1
SUR - Dibromofluoromethane	104	REC %			1	8260B		10/19/2015	CJR	1

Project Name NEWTON GRAVEL PIT **Invoice #** E29883
Project # 60135471

Lab Code 5029883M
Sample ID 4004 SILVER
Sample Matrix Water
Sample Date 10/13/2015

	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		10/19/2015	CJR	1
Bromobenzene	< 0.48	ug/l	0.48	1.5	1	8260B		10/19/2015	CJR	1
Bromodichloromethane	< 0.46	ug/l	0.46	1.5	1	8260B		10/19/2015	CJR	1
Bromoform	< 0.46	ug/l	0.46	1.5	1	8260B		10/19/2015	CJR	1
tert-Butylbenzene	< 1.1	ug/l	1.1	3.4	1	8260B		10/19/2015	CJR	1
sec-Butylbenzene	< 1.2	ug/l	1.2	3.8	1	8260B		10/19/2015	CJR	1
n-Butylbenzene	< 1	ug/l	1	3.3	1	8260B		10/19/2015	CJR	1
Carbon Tetrachloride	< 0.51	ug/l	0.51	1.6	1	8260B		10/19/2015	CJR	1
Chlorobenzene	< 0.46	ug/l	0.46	1.4	1	8260B		10/19/2015	CJR	1
Chloroethane	< 0.65	ug/l	0.65	2.1	1	8260B		10/19/2015	CJR	1
Chloroform	< 0.43	ug/l	0.43	1.4	1	8260B		10/19/2015	CJR	1
Chloromethane	< 1.9	ug/l	1.9	6	1	8260B		10/19/2015	CJR	1
2-Chlorotoluene	< 0.4	ug/l	0.4	1.3	1	8260B		10/19/2015	CJR	1
4-Chlorotoluene	< 0.63	ug/l	0.63	2	1	8260B		10/19/2015	CJR	1
1,2-Dibromo-3-chloropropane	< 1.4	ug/l	1.4	4.5	1	8260B		10/19/2015	CJR	1
Dibromochloromethane	< 0.45	ug/l	0.45	1.4	1	8260B		10/19/2015	CJR	1
1,4-Dichlorobenzene	< 0.49	ug/l	0.49	1.6	1	8260B		10/19/2015	CJR	1
1,3-Dichlorobenzene	< 0.52	ug/l	0.52	1.6	1	8260B		10/19/2015	CJR	1
1,2-Dichlorobenzene	< 0.46	ug/l	0.46	1.5	1	8260B		10/19/2015	CJR	1
Dichlorodifluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/19/2015	CJR	1
1,2-Dichloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/19/2015	CJR	1
1,1-Dichloroethane	< 1.1	ug/l	1.1	3.6	1	8260B		10/19/2015	CJR	1
1,1-Dichloroethene	< 0.65	ug/l	0.65	2.1	1	8260B		10/19/2015	CJR	1
cis-1,2-Dichloroethene	< 0.45	ug/l	0.45	1.4	1	8260B		10/19/2015	CJR	1
trans-1,2-Dichloroethene	< 0.54	ug/l	0.54	1.7	1	8260B		10/19/2015	CJR	1
1,2-Dichloropropane	< 0.43	ug/l	0.43	1.37	1	8260B		10/19/2015	CJR	1
2,2-Dichloropropane	< 3.1	ug/l	3.1	9.8	1	8260B		10/19/2015	CJR	2
1,3-Dichloropropane	< 0.42	ug/l	0.42	1.3	1	8260B		10/19/2015	CJR	1
Di-isopropyl ether	< 0.44	ug/l	0.44	1.4	1	8260B		10/19/2015	CJR	1
EDB (1,2-Dibromoethane)	< 0.63	ug/l	0.63	2	1	8260B		10/19/2015	CJR	1
Ethylbenzene	< 0.71	ug/l	0.71	2.3	1	8260B		10/19/2015	CJR	1
Hexachlorobutadiene	< 2.2	ug/l	2.2	7.1	1	8260B		10/19/2015	CJR	1
Isopropylbenzene	< 0.82	ug/l	0.82	2.6	1	8260B		10/19/2015	CJR	1
p-Isopropyltoluene	< 1.1	ug/l	1.1	3.5	1	8260B		10/19/2015	CJR	1
Methylene chloride	< 1.3	ug/l	1.3	4.2	1	8260B		10/19/2015	CJR	1
Methyl tert-butyl ether (MTBE)	< 1.1	ug/l	1.1	3.7	1	8260B		10/19/2015	CJR	1
Naphthalene	< 1.6	ug/l	1.6	5.2	1	8260B		10/19/2015	CJR	1
n-Propylbenzene	< 0.77	ug/l	0.77	2.4	1	8260B		10/19/2015	CJR	1
1,1,2,2-Tetrachloroethane	< 0.52	ug/l	0.52	1.7	1	8260B		10/19/2015	CJR	1
1,1,1,2-Tetrachloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/19/2015	CJR	1
Tetrachloroethene	< 0.49	ug/l	0.49	1.5	1	8260B		10/19/2015	CJR	1
Toluene	< 0.44	ug/l	0.44	1.4	1	8260B		10/19/2015	CJR	1
1,2,4-Trichlorobenzene	< 1.7	ug/l	1.7	5.6	1	8260B		10/19/2015	CJR	1
1,2,3-Trichlorobenzene	< 2.7	ug/l	2.7	8.6	1	8260B		10/19/2015	CJR	1
1,1,1-Trichloroethane	< 0.84	ug/l	0.84	2.7	1	8260B		10/19/2015	CJR	1
1,1,2-Trichloroethane	< 0.48	ug/l	0.48	1.52	1	8260B		10/19/2015	CJR	1
Trichloroethene (TCE)	< 0.47	ug/l	0.47	1.5	1	8260B		10/19/2015	CJR	1
Trichlorofluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/19/2015	CJR	1
1,2,4-Trimethylbenzene	< 1.6	ug/l	1.6	5	1	8260B		10/19/2015	CJR	1
1,3,5-Trimethylbenzene	< 1.5	ug/l	1.5	4.8	1	8260B		10/19/2015	CJR	1
Vinyl Chloride	< 0.17	ug/l	0.17	0.54	1	8260B		10/19/2015	CJR	1
m&p-Xylene	< 2.2	ug/l	2.2	6.9	1	8260B		10/19/2015	CJR	1
o-Xylene	< 0.9	ug/l	0.9	2.9	1	8260B		10/19/2015	CJR	1
SUR - 1,2-Dichloroethane-d4	97	REC %			1	8260B		10/19/2015	CJR	1
SUR - 4-Bromofluorobenzene	115	REC %			1	8260B		10/19/2015	CJR	1
SUR - Dibromofluoromethane	100	REC %			1	8260B		10/19/2015	CJR	1
SUR - Toluene-d8	103	REC %			1	8260B		10/19/2015	CJR	1

Project Name NEWTON GRAVEL PIT **Invoice #** E29883
Project # 60135471

Lab Code 5029883N
Sample ID 4002 THUNDER
Sample Matrix Water
Sample Date 10/13/2015

	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		10/19/2015	CJR	1
Bromobenzene	< 0.48	ug/l	0.48	1.5	1	8260B		10/19/2015	CJR	1
Bromodichloromethane	< 0.46	ug/l	0.46	1.5	1	8260B		10/19/2015	CJR	1
Bromoform	< 0.46	ug/l	0.46	1.5	1	8260B		10/19/2015	CJR	1
tert-Butylbenzene	< 1.1	ug/l	1.1	3.4	1	8260B		10/19/2015	CJR	1
sec-Butylbenzene	< 1.2	ug/l	1.2	3.8	1	8260B		10/19/2015	CJR	1
n-Butylbenzene	< 1	ug/l	1	3.3	1	8260B		10/19/2015	CJR	1
Carbon Tetrachloride	< 0.51	ug/l	0.51	1.6	1	8260B		10/19/2015	CJR	1
Chlorobenzene	< 0.46	ug/l	0.46	1.4	1	8260B		10/19/2015	CJR	1
Chloroethane	< 0.65	ug/l	0.65	2.1	1	8260B		10/19/2015	CJR	1
Chloroform	< 0.43	ug/l	0.43	1.4	1	8260B		10/19/2015	CJR	1
Chloromethane	< 1.9	ug/l	1.9	6	1	8260B		10/19/2015	CJR	1
2-Chlorotoluene	< 0.4	ug/l	0.4	1.3	1	8260B		10/19/2015	CJR	1
4-Chlorotoluene	< 0.63	ug/l	0.63	2	1	8260B		10/19/2015	CJR	1
1,2-Dibromo-3-chloropropane	< 1.4	ug/l	1.4	4.5	1	8260B		10/19/2015	CJR	1
Dibromochloromethane	< 0.45	ug/l	0.45	1.4	1	8260B		10/19/2015	CJR	1
1,4-Dichlorobenzene	< 0.49	ug/l	0.49	1.6	1	8260B		10/19/2015	CJR	1
1,3-Dichlorobenzene	< 0.52	ug/l	0.52	1.6	1	8260B		10/19/2015	CJR	1
1,2-Dichlorobenzene	< 0.46	ug/l	0.46	1.5	1	8260B		10/19/2015	CJR	1
Dichlorodifluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/19/2015	CJR	1
1,2-Dichloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/19/2015	CJR	1
1,1-Dichloroethane	< 1.1	ug/l	1.1	3.6	1	8260B		10/19/2015	CJR	1
1,1-Dichloroethene	< 0.65	ug/l	0.65	2.1	1	8260B		10/19/2015	CJR	1
cis-1,2-Dichloroethene	1.3 "J"	ug/l	0.45	1.4	1	8260B		10/19/2015	CJR	1
trans-1,2-Dichloroethene	< 0.54	ug/l	0.54	1.7	1	8260B		10/19/2015	CJR	1
1,2-Dichloropropane	< 0.43	ug/l	0.43	1.37	1	8260B		10/19/2015	CJR	1
2,2-Dichloropropane	< 3.1	ug/l	3.1	9.8	1	8260B		10/19/2015	CJR	2
1,3-Dichloropropane	< 0.42	ug/l	0.42	1.3	1	8260B		10/19/2015	CJR	1
Di-isopropyl ether	< 0.44	ug/l	0.44	1.4	1	8260B		10/19/2015	CJR	1
EDB (1,2-Dibromoethane)	< 0.63	ug/l	0.63	2	1	8260B		10/19/2015	CJR	1
Ethylbenzene	< 0.71	ug/l	0.71	2.3	1	8260B		10/19/2015	CJR	1
Hexachlorobutadiene	< 2.2	ug/l	2.2	7.1	1	8260B		10/19/2015	CJR	1
Isopropylbenzene	< 0.82	ug/l	0.82	2.6	1	8260B		10/19/2015	CJR	1
p-Isopropyltoluene	< 1.1	ug/l	1.1	3.5	1	8260B		10/19/2015	CJR	1
Methylene chloride	< 1.3	ug/l	1.3	4.2	1	8260B		10/19/2015	CJR	1
Methyl tert-butyl ether (MTBE)	< 1.1	ug/l	1.1	3.7	1	8260B		10/19/2015	CJR	1
Naphthalene	< 1.6	ug/l	1.6	5.2	1	8260B		10/19/2015	CJR	1
n-Propylbenzene	< 0.77	ug/l	0.77	2.4	1	8260B		10/19/2015	CJR	1
1,1,2,2-Tetrachloroethane	< 0.52	ug/l	0.52	1.7	1	8260B		10/19/2015	CJR	1
1,1,1,2-Tetrachloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/19/2015	CJR	1
Tetrachloroethene	< 0.49	ug/l	0.49	1.5	1	8260B		10/19/2015	CJR	1
Toluene	< 0.44	ug/l	0.44	1.4	1	8260B		10/19/2015	CJR	1
1,2,4-Trichlorobenzene	< 1.7	ug/l	1.7	5.6	1	8260B		10/19/2015	CJR	1
1,2,3-Trichlorobenzene	< 2.7	ug/l	2.7	8.6	1	8260B		10/19/2015	CJR	1
1,1,1-Trichloroethane	< 0.84	ug/l	0.84	2.7	1	8260B		10/19/2015	CJR	1
1,1,2-Trichloroethane	< 0.48	ug/l	0.48	1.52	1	8260B		10/19/2015	CJR	1
Trichloroethene (TCE)	< 0.47	ug/l	0.47	1.5	1	8260B		10/19/2015	CJR	1
Trichlorofluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/19/2015	CJR	1
1,2,4-Trimethylbenzene	< 1.6	ug/l	1.6	5	1	8260B		10/19/2015	CJR	1
1,3,5-Trimethylbenzene	< 1.5	ug/l	1.5	4.8	1	8260B		10/19/2015	CJR	1
Vinyl Chloride	< 0.17	ug/l	0.17	0.54	1	8260B		10/19/2015	CJR	1
m&p-Xylene	< 2.2	ug/l	2.2	6.9	1	8260B		10/19/2015	CJR	1
o-Xylene	< 0.9	ug/l	0.9	2.9	1	8260B		10/19/2015	CJR	1
SUR - 4-Bromofluorobenzene	112	REC %			1	8260B		10/19/2015	CJR	1
SUR - Dibromofluoromethane	98	REC %			1	8260B		10/19/2015	CJR	1
SUR - Toluene-d8	105	REC %			1	8260B		10/19/2015	CJR	1
SUR - 1,2-Dichloroethane-d4	101	REC %			1	8260B		10/19/2015	CJR	1

Project Name NEWTON GRAVEL PIT **Invoice #** E29883
Project # 60135471

Lab Code 5029883O
Sample ID 4002 THUNDER DUP
Sample Matrix Water
Sample Date 10/13/2015

	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		10/19/2015	CJR	1
Bromobenzene	< 0.48	ug/l	0.48	1.5	1	8260B		10/19/2015	CJR	1
Bromodichloromethane	< 0.46	ug/l	0.46	1.5	1	8260B		10/19/2015	CJR	1
Bromoform	< 0.46	ug/l	0.46	1.5	1	8260B		10/19/2015	CJR	1
tert-Butylbenzene	< 1.1	ug/l	1.1	3.4	1	8260B		10/19/2015	CJR	1
sec-Butylbenzene	< 1.2	ug/l	1.2	3.8	1	8260B		10/19/2015	CJR	1
n-Butylbenzene	< 1	ug/l	1	3.3	1	8260B		10/19/2015	CJR	1
Carbon Tetrachloride	< 0.51	ug/l	0.51	1.6	1	8260B		10/19/2015	CJR	1
Chlorobenzene	< 0.46	ug/l	0.46	1.4	1	8260B		10/19/2015	CJR	1
Chloroethane	< 0.65	ug/l	0.65	2.1	1	8260B		10/19/2015	CJR	1
Chloroform	< 0.43	ug/l	0.43	1.4	1	8260B		10/19/2015	CJR	1
Chloromethane	< 1.9	ug/l	1.9	6	1	8260B		10/19/2015	CJR	1
2-Chlorotoluene	< 0.4	ug/l	0.4	1.3	1	8260B		10/19/2015	CJR	1
4-Chlorotoluene	< 0.63	ug/l	0.63	2	1	8260B		10/19/2015	CJR	1
1,2-Dibromo-3-chloropropane	< 1.4	ug/l	1.4	4.5	1	8260B		10/19/2015	CJR	1
Dibromochloromethane	< 0.45	ug/l	0.45	1.4	1	8260B		10/19/2015	CJR	1
1,4-Dichlorobenzene	< 0.49	ug/l	0.49	1.6	1	8260B		10/19/2015	CJR	1
1,3-Dichlorobenzene	< 0.52	ug/l	0.52	1.6	1	8260B		10/19/2015	CJR	1
1,2-Dichlorobenzene	< 0.46	ug/l	0.46	1.5	1	8260B		10/19/2015	CJR	1
Dichlorodifluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/19/2015	CJR	1
1,2-Dichloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/19/2015	CJR	1
1,1-Dichloroethane	< 1.1	ug/l	1.1	3.6	1	8260B		10/19/2015	CJR	1
1,1-Dichloroethene	< 0.65	ug/l	0.65	2.1	1	8260B		10/19/2015	CJR	1
cis-1,2-Dichloroethene	1.14 "J"	ug/l	0.45	1.4	1	8260B		10/19/2015	CJR	1
trans-1,2-Dichloroethene	< 0.54	ug/l	0.54	1.7	1	8260B		10/19/2015	CJR	1
1,2-Dichloropropane	< 0.43	ug/l	0.43	1.37	1	8260B		10/19/2015	CJR	1
2,2-Dichloropropane	< 3.1	ug/l	3.1	9.8	1	8260B		10/19/2015	CJR	2
1,3-Dichloropropane	< 0.42	ug/l	0.42	1.3	1	8260B		10/19/2015	CJR	1
Di-isopropyl ether	< 0.44	ug/l	0.44	1.4	1	8260B		10/19/2015	CJR	1
EDB (1,2-Dibromoethane)	< 0.63	ug/l	0.63	2	1	8260B		10/19/2015	CJR	1
Ethylbenzene	< 0.71	ug/l	0.71	2.3	1	8260B		10/19/2015	CJR	1
Hexachlorobutadiene	< 2.2	ug/l	2.2	7.1	1	8260B		10/19/2015	CJR	1
Isopropylbenzene	< 0.82	ug/l	0.82	2.6	1	8260B		10/19/2015	CJR	1
p-Isopropyltoluene	< 1.1	ug/l	1.1	3.5	1	8260B		10/19/2015	CJR	1
Methylene chloride	< 1.3	ug/l	1.3	4.2	1	8260B		10/19/2015	CJR	1
Methyl tert-butyl ether (MTBE)	< 1.1	ug/l	1.1	3.7	1	8260B		10/19/2015	CJR	1
Naphthalene	< 1.6	ug/l	1.6	5.2	1	8260B		10/19/2015	CJR	1
n-Propylbenzene	< 0.77	ug/l	0.77	2.4	1	8260B		10/19/2015	CJR	1
1,1,2,2-Tetrachloroethane	< 0.52	ug/l	0.52	1.7	1	8260B		10/19/2015	CJR	1
1,1,1,2-Tetrachloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/19/2015	CJR	1
Tetrachloroethene	< 0.49	ug/l	0.49	1.5	1	8260B		10/19/2015	CJR	1
Toluene	< 0.44	ug/l	0.44	1.4	1	8260B		10/19/2015	CJR	1
1,2,4-Trichlorobenzene	< 1.7	ug/l	1.7	5.6	1	8260B		10/19/2015	CJR	1
1,2,3-Trichlorobenzene	< 2.7	ug/l	2.7	8.6	1	8260B		10/19/2015	CJR	1
1,1,1-Trichloroethane	< 0.84	ug/l	0.84	2.7	1	8260B		10/19/2015	CJR	1
1,1,2-Trichloroethane	< 0.48	ug/l	0.48	1.52	1	8260B		10/19/2015	CJR	1
Trichloroethene (TCE)	< 0.47	ug/l	0.47	1.5	1	8260B		10/19/2015	CJR	1
Trichlorofluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/19/2015	CJR	1
1,2,4-Trimethylbenzene	< 1.6	ug/l	1.6	5	1	8260B		10/19/2015	CJR	1
1,3,5-Trimethylbenzene	< 1.5	ug/l	1.5	4.8	1	8260B		10/19/2015	CJR	1
Vinyl Chloride	0.20 "J"	ug/l	0.17	0.54	1	8260B		10/19/2015	CJR	1
m&p-Xylene	< 2.2	ug/l	2.2	6.9	1	8260B		10/19/2015	CJR	1
o-Xylene	< 0.9	ug/l	0.9	2.9	1	8260B		10/19/2015	CJR	1
SUR - 1,2-Dichloroethane-d4	97	REC %			1	8260B		10/19/2015	CJR	1
SUR - 4-Bromofluorobenzene	119	REC %			1	8260B		10/19/2015	CJR	1
SUR - Dibromofluoromethane	101	REC %			1	8260B		10/19/2015	CJR	1
SUR - Toluene-d8	103	REC %			1	8260B		10/19/2015	CJR	1

Project Name NEWTON GRAVEL PIT **Invoice #** E29883
Project # 60135471

Lab Code 5029883P
Sample ID 3609 HECKER
Sample Matrix Water
Sample Date 10/13/2015

	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		10/19/2015	CJR	1
Bromobenzene	< 0.48	ug/l	0.48	1.5	1	8260B		10/19/2015	CJR	1
Bromodichloromethane	< 0.46	ug/l	0.46	1.5	1	8260B		10/19/2015	CJR	1
Bromoform	< 0.46	ug/l	0.46	1.5	1	8260B		10/19/2015	CJR	1
tert-Butylbenzene	< 1.1	ug/l	1.1	3.4	1	8260B		10/19/2015	CJR	1
sec-Butylbenzene	< 1.2	ug/l	1.2	3.8	1	8260B		10/19/2015	CJR	1
n-Butylbenzene	< 1	ug/l	1	3.3	1	8260B		10/19/2015	CJR	1
Carbon Tetrachloride	< 0.51	ug/l	0.51	1.6	1	8260B		10/19/2015	CJR	1
Chlorobenzene	< 0.46	ug/l	0.46	1.4	1	8260B		10/19/2015	CJR	1
Chloroethane	< 0.65	ug/l	0.65	2.1	1	8260B		10/19/2015	CJR	1
Chloroform	< 0.43	ug/l	0.43	1.4	1	8260B		10/19/2015	CJR	1
Chloromethane	< 1.9	ug/l	1.9	6	1	8260B		10/19/2015	CJR	1
2-Chlorotoluene	< 0.4	ug/l	0.4	1.3	1	8260B		10/19/2015	CJR	1
4-Chlorotoluene	< 0.63	ug/l	0.63	2	1	8260B		10/19/2015	CJR	1
1,2-Dibromo-3-chloropropane	< 1.4	ug/l	1.4	4.5	1	8260B		10/19/2015	CJR	1
Dibromochloromethane	< 0.45	ug/l	0.45	1.4	1	8260B		10/19/2015	CJR	1
1,4-Dichlorobenzene	< 0.49	ug/l	0.49	1.6	1	8260B		10/19/2015	CJR	1
1,3-Dichlorobenzene	< 0.52	ug/l	0.52	1.6	1	8260B		10/19/2015	CJR	1
1,2-Dichlorobenzene	< 0.46	ug/l	0.46	1.5	1	8260B		10/19/2015	CJR	1
Dichlorodifluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/19/2015	CJR	1
1,2-Dichloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/19/2015	CJR	1
1,1-Dichloroethane	< 1.1	ug/l	1.1	3.6	1	8260B		10/19/2015	CJR	1
1,1-Dichloroethene	< 0.65	ug/l	0.65	2.1	1	8260B		10/19/2015	CJR	1
cis-1,2-Dichloroethene	< 0.45	ug/l	0.45	1.4	1	8260B		10/19/2015	CJR	1
trans-1,2-Dichloroethene	< 0.54	ug/l	0.54	1.7	1	8260B		10/19/2015	CJR	1
1,2-Dichloropropane	< 0.43	ug/l	0.43	1.37	1	8260B		10/19/2015	CJR	1
2,2-Dichloropropane	< 3.1	ug/l	3.1	9.8	1	8260B		10/19/2015	CJR	2
1,3-Dichloropropane	< 0.42	ug/l	0.42	1.3	1	8260B		10/19/2015	CJR	1
Di-isopropyl ether	< 0.44	ug/l	0.44	1.4	1	8260B		10/19/2015	CJR	1
EDB (1,2-Dibromoethane)	< 0.63	ug/l	0.63	2	1	8260B		10/19/2015	CJR	1
Ethylbenzene	< 0.71	ug/l	0.71	2.3	1	8260B		10/19/2015	CJR	1
Hexachlorobutadiene	< 2.2	ug/l	2.2	7.1	1	8260B		10/19/2015	CJR	1
Isopropylbenzene	< 0.82	ug/l	0.82	2.6	1	8260B		10/19/2015	CJR	1
p-Isopropyltoluene	< 1.1	ug/l	1.1	3.5	1	8260B		10/19/2015	CJR	1
Methylene chloride	< 1.3	ug/l	1.3	4.2	1	8260B		10/19/2015	CJR	1
Methyl tert-butyl ether (MTBE)	< 1.1	ug/l	1.1	3.7	1	8260B		10/19/2015	CJR	1
Naphthalene	< 1.6	ug/l	1.6	5.2	1	8260B		10/19/2015	CJR	1
n-Propylbenzene	< 0.77	ug/l	0.77	2.4	1	8260B		10/19/2015	CJR	1
1,1,2,2-Tetrachloroethane	< 0.52	ug/l	0.52	1.7	1	8260B		10/19/2015	CJR	1
1,1,1,2-Tetrachloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/19/2015	CJR	1
Tetrachloroethene	< 0.49	ug/l	0.49	1.5	1	8260B		10/19/2015	CJR	1
Toluene	< 0.44	ug/l	0.44	1.4	1	8260B		10/19/2015	CJR	1
1,2,4-Trichlorobenzene	< 1.7	ug/l	1.7	5.6	1	8260B		10/19/2015	CJR	1
1,2,3-Trichlorobenzene	< 2.7	ug/l	2.7	8.6	1	8260B		10/19/2015	CJR	1
1,1,1-Trichloroethane	< 0.84	ug/l	0.84	2.7	1	8260B		10/19/2015	CJR	1
1,1,2-Trichloroethane	< 0.48	ug/l	0.48	1.52	1	8260B		10/19/2015	CJR	1
Trichloroethene (TCE)	< 0.47	ug/l	0.47	1.5	1	8260B		10/19/2015	CJR	1
Trichlorofluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/19/2015	CJR	1
1,2,4-Trimethylbenzene	< 1.6	ug/l	1.6	5	1	8260B		10/19/2015	CJR	1
1,3,5-Trimethylbenzene	< 1.5	ug/l	1.5	4.8	1	8260B		10/19/2015	CJR	1
Vinyl Chloride	< 0.17	ug/l	0.17	0.54	1	8260B		10/19/2015	CJR	1
m&p-Xylene	< 2.2	ug/l	2.2	6.9	1	8260B		10/19/2015	CJR	1
o-Xylene	< 0.9	ug/l	0.9	2.9	1	8260B		10/19/2015	CJR	1
SUR - 1,2-Dichloroethane-d4	93	REC %			1	8260B		10/19/2015	CJR	1
SUR - Toluene-d8	108	REC %			1	8260B		10/19/2015	CJR	1
SUR - 4-Bromofluorobenzene	111	REC %			1	8260B		10/19/2015	CJR	1
SUR - Dibromofluoromethane	99	REC %			1	8260B		10/19/2015	CJR	1

Project Name NEWTON GRAVEL PIT **Invoice #** E29883
Project # 60135471

Lab Code 5029883Q
Sample ID 3023 CTH CR
Sample Matrix Water
Sample Date 10/13/2015

	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		10/19/2015	CJR	1
Bromobenzene	< 0.48	ug/l	0.48	1.5	1	8260B		10/19/2015	CJR	1
Bromodichloromethane	< 0.46	ug/l	0.46	1.5	1	8260B		10/19/2015	CJR	1
Bromoform	< 0.46	ug/l	0.46	1.5	1	8260B		10/19/2015	CJR	1
tert-Butylbenzene	< 1.1	ug/l	1.1	3.4	1	8260B		10/19/2015	CJR	1
sec-Butylbenzene	< 1.2	ug/l	1.2	3.8	1	8260B		10/19/2015	CJR	1
n-Butylbenzene	< 1	ug/l	1	3.3	1	8260B		10/19/2015	CJR	1
Carbon Tetrachloride	< 0.51	ug/l	0.51	1.6	1	8260B		10/19/2015	CJR	1
Chlorobenzene	< 0.46	ug/l	0.46	1.4	1	8260B		10/19/2015	CJR	1
Chloroethane	< 0.65	ug/l	0.65	2.1	1	8260B		10/19/2015	CJR	1
Chloroform	< 0.43	ug/l	0.43	1.4	1	8260B		10/19/2015	CJR	1
Chloromethane	< 1.9	ug/l	1.9	6	1	8260B		10/19/2015	CJR	1
2-Chlorotoluene	< 0.4	ug/l	0.4	1.3	1	8260B		10/19/2015	CJR	1
4-Chlorotoluene	< 0.63	ug/l	0.63	2	1	8260B		10/19/2015	CJR	1
1,2-Dibromo-3-chloropropane	< 1.4	ug/l	1.4	4.5	1	8260B		10/19/2015	CJR	1
Dibromochloromethane	< 0.45	ug/l	0.45	1.4	1	8260B		10/19/2015	CJR	1
1,4-Dichlorobenzene	< 0.49	ug/l	0.49	1.6	1	8260B		10/19/2015	CJR	1
1,3-Dichlorobenzene	< 0.52	ug/l	0.52	1.6	1	8260B		10/19/2015	CJR	1
1,2-Dichlorobenzene	< 0.46	ug/l	0.46	1.5	1	8260B		10/19/2015	CJR	1
Dichlorodifluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/19/2015	CJR	1
1,2-Dichloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/19/2015	CJR	1
1,1-Dichloroethane	< 1.1	ug/l	1.1	3.6	1	8260B		10/19/2015	CJR	1
1,1-Dichloroethene	< 0.65	ug/l	0.65	2.1	1	8260B		10/19/2015	CJR	1
cis-1,2-Dichloroethene	< 0.45	ug/l	0.45	1.4	1	8260B		10/19/2015	CJR	1
trans-1,2-Dichloroethene	< 0.54	ug/l	0.54	1.7	1	8260B		10/19/2015	CJR	1
1,2-Dichloropropane	< 0.43	ug/l	0.43	1.37	1	8260B		10/19/2015	CJR	1
2,2-Dichloropropane	< 3.1	ug/l	3.1	9.8	1	8260B		10/19/2015	CJR	2
1,3-Dichloropropane	< 0.42	ug/l	0.42	1.3	1	8260B		10/19/2015	CJR	1
Di-isopropyl ether	< 0.44	ug/l	0.44	1.4	1	8260B		10/19/2015	CJR	1
EDB (1,2-Dibromoethane)	< 0.63	ug/l	0.63	2	1	8260B		10/19/2015	CJR	1
Ethylbenzene	< 0.71	ug/l	0.71	2.3	1	8260B		10/19/2015	CJR	1
Hexachlorobutadiene	< 2.2	ug/l	2.2	7.1	1	8260B		10/19/2015	CJR	1
Isopropylbenzene	< 0.82	ug/l	0.82	2.6	1	8260B		10/19/2015	CJR	1
p-Isopropyltoluene	< 1.1	ug/l	1.1	3.5	1	8260B		10/19/2015	CJR	1
Methylene chloride	< 1.3	ug/l	1.3	4.2	1	8260B		10/19/2015	CJR	1
Methyl tert-butyl ether (MTBE)	< 1.1	ug/l	1.1	3.7	1	8260B		10/19/2015	CJR	1
Naphthalene	< 1.6	ug/l	1.6	5.2	1	8260B		10/19/2015	CJR	1
n-Propylbenzene	< 0.77	ug/l	0.77	2.4	1	8260B		10/19/2015	CJR	1
1,1,2,2-Tetrachloroethane	< 0.52	ug/l	0.52	1.7	1	8260B		10/19/2015	CJR	1
1,1,1,2-Tetrachloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/19/2015	CJR	1
Tetrachloroethene	< 0.49	ug/l	0.49	1.5	1	8260B		10/19/2015	CJR	1
Toluene	< 0.44	ug/l	0.44	1.4	1	8260B		10/19/2015	CJR	1
1,2,4-Trichlorobenzene	< 1.7	ug/l	1.7	5.6	1	8260B		10/19/2015	CJR	1
1,2,3-Trichlorobenzene	< 2.7	ug/l	2.7	8.6	1	8260B		10/19/2015	CJR	1
1,1,1-Trichloroethane	< 0.84	ug/l	0.84	2.7	1	8260B		10/19/2015	CJR	1
1,1,2-Trichloroethane	< 0.48	ug/l	0.48	1.52	1	8260B		10/19/2015	CJR	1
Trichloroethene (TCE)	< 0.47	ug/l	0.47	1.5	1	8260B		10/19/2015	CJR	1
Trichlorofluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/19/2015	CJR	1
1,2,4-Trimethylbenzene	< 1.6	ug/l	1.6	5	1	8260B		10/19/2015	CJR	1
1,3,5-Trimethylbenzene	< 1.5	ug/l	1.5	4.8	1	8260B		10/19/2015	CJR	1
Vinyl Chloride	< 0.17	ug/l	0.17	0.54	1	8260B		10/19/2015	CJR	1
m&p-Xylene	< 2.2	ug/l	2.2	6.9	1	8260B		10/19/2015	CJR	1
o-Xylene	< 0.9	ug/l	0.9	2.9	1	8260B		10/19/2015	CJR	1
SUR - 1,2-Dichloroethane-d4	101	REC %			1	8260B		10/19/2015	CJR	1
SUR - 4-Bromofluorobenzene	111	REC %			1	8260B		10/19/2015	CJR	1
SUR - Dibromofluoromethane	99	REC %			1	8260B		10/19/2015	CJR	1
SUR - Toluene-d8	104	REC %			1	8260B		10/19/2015	CJR	1

Project Name NEWTON GRAVEL PIT **Invoice #** E29883
Project # 60135471

Lab Code 5029883R
Sample ID 3322 CTH CR
Sample Matrix Water
Sample Date 10/13/2015

	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		10/19/2015	CJR	1
Bromobenzene	< 0.48	ug/l	0.48	1.5	1	8260B		10/19/2015	CJR	1
Bromodichloromethane	< 0.46	ug/l	0.46	1.5	1	8260B		10/19/2015	CJR	1
Bromoform	< 0.46	ug/l	0.46	1.5	1	8260B		10/19/2015	CJR	1
tert-Butylbenzene	< 1.1	ug/l	1.1	3.4	1	8260B		10/19/2015	CJR	1
sec-Butylbenzene	< 1.2	ug/l	1.2	3.8	1	8260B		10/19/2015	CJR	1
n-Butylbenzene	< 1	ug/l	1	3.3	1	8260B		10/19/2015	CJR	1
Carbon Tetrachloride	< 0.51	ug/l	0.51	1.6	1	8260B		10/19/2015	CJR	1
Chlorobenzene	< 0.46	ug/l	0.46	1.4	1	8260B		10/19/2015	CJR	1
Chloroethane	< 0.65	ug/l	0.65	2.1	1	8260B		10/19/2015	CJR	1
Chloroform	< 0.43	ug/l	0.43	1.4	1	8260B		10/19/2015	CJR	1
Chloromethane	< 1.9	ug/l	1.9	6	1	8260B		10/19/2015	CJR	1
2-Chlorotoluene	< 0.4	ug/l	0.4	1.3	1	8260B		10/19/2015	CJR	1
4-Chlorotoluene	< 0.63	ug/l	0.63	2	1	8260B		10/19/2015	CJR	1
1,2-Dibromo-3-chloropropane	< 1.4	ug/l	1.4	4.5	1	8260B		10/19/2015	CJR	1
Dibromochloromethane	< 0.45	ug/l	0.45	1.4	1	8260B		10/19/2015	CJR	1
1,4-Dichlorobenzene	< 0.49	ug/l	0.49	1.6	1	8260B		10/19/2015	CJR	1
1,3-Dichlorobenzene	< 0.52	ug/l	0.52	1.6	1	8260B		10/19/2015	CJR	1
1,2-Dichlorobenzene	< 0.46	ug/l	0.46	1.5	1	8260B		10/19/2015	CJR	1
Dichlorodifluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/19/2015	CJR	1
1,2-Dichloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/19/2015	CJR	1
1,1-Dichloroethane	< 1.1	ug/l	1.1	3.6	1	8260B		10/19/2015	CJR	1
1,1-Dichloroethene	< 0.65	ug/l	0.65	2.1	1	8260B		10/19/2015	CJR	1
cis-1,2-Dichloroethene	< 0.45	ug/l	0.45	1.4	1	8260B		10/19/2015	CJR	1
trans-1,2-Dichloroethene	< 0.54	ug/l	0.54	1.7	1	8260B		10/19/2015	CJR	1
1,2-Dichloropropane	< 0.43	ug/l	0.43	1.37	1	8260B		10/19/2015	CJR	1
2,2-Dichloropropane	< 3.1	ug/l	3.1	9.8	1	8260B		10/19/2015	CJR	2
1,3-Dichloropropane	< 0.42	ug/l	0.42	1.3	1	8260B		10/19/2015	CJR	1
Di-isopropyl ether	< 0.44	ug/l	0.44	1.4	1	8260B		10/19/2015	CJR	1
EDB (1,2-Dibromoethane)	< 0.63	ug/l	0.63	2	1	8260B		10/19/2015	CJR	1
Ethylbenzene	< 0.71	ug/l	0.71	2.3	1	8260B		10/19/2015	CJR	1
Hexachlorobutadiene	< 2.2	ug/l	2.2	7.1	1	8260B		10/19/2015	CJR	1
Isopropylbenzene	< 0.82	ug/l	0.82	2.6	1	8260B		10/19/2015	CJR	1
p-Isopropyltoluene	< 1.1	ug/l	1.1	3.5	1	8260B		10/19/2015	CJR	1
Methylene chloride	< 1.3	ug/l	1.3	4.2	1	8260B		10/19/2015	CJR	1
Methyl tert-butyl ether (MTBE)	< 1.1	ug/l	1.1	3.7	1	8260B		10/19/2015	CJR	1
Naphthalene	< 1.6	ug/l	1.6	5.2	1	8260B		10/19/2015	CJR	1
n-Propylbenzene	< 0.77	ug/l	0.77	2.4	1	8260B		10/19/2015	CJR	1
1,1,2,2-Tetrachloroethane	< 0.52	ug/l	0.52	1.7	1	8260B		10/19/2015	CJR	1
1,1,1,2-Tetrachloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/19/2015	CJR	1
Tetrachloroethene	< 0.49	ug/l	0.49	1.5	1	8260B		10/19/2015	CJR	1
Toluene	< 0.44	ug/l	0.44	1.4	1	8260B		10/19/2015	CJR	1
1,2,4-Trichlorobenzene	< 1.7	ug/l	1.7	5.6	1	8260B		10/19/2015	CJR	1
1,2,3-Trichlorobenzene	< 2.7	ug/l	2.7	8.6	1	8260B		10/19/2015	CJR	1
1,1,1-Trichloroethane	< 0.84	ug/l	0.84	2.7	1	8260B		10/19/2015	CJR	1
1,1,2-Trichloroethane	< 0.48	ug/l	0.48	1.52	1	8260B		10/19/2015	CJR	1
Trichloroethene (TCE)	< 0.47	ug/l	0.47	1.5	1	8260B		10/19/2015	CJR	1
Trichlorofluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/19/2015	CJR	1
1,2,4-Trimethylbenzene	< 1.6	ug/l	1.6	5	1	8260B		10/19/2015	CJR	1
1,3,5-Trimethylbenzene	< 1.5	ug/l	1.5	4.8	1	8260B		10/19/2015	CJR	1
Vinyl Chloride	< 0.17	ug/l	0.17	0.54	1	8260B		10/19/2015	CJR	1
m&p-Xylene	< 2.2	ug/l	2.2	6.9	1	8260B		10/19/2015	CJR	1
o-Xylene	< 0.9	ug/l	0.9	2.9	1	8260B		10/19/2015	CJR	1
SUR - 1,2-Dichloroethane-d4	103	REC %			1	8260B		10/19/2015	CJR	1
SUR - 4-Bromofluorobenzene	112	REC %			1	8260B		10/19/2015	CJR	1
SUR - Dibromofluoromethane	100	REC %			1	8260B		10/19/2015	CJR	1
SUR - Toluene-d8	106	REC %			1	8260B		10/19/2015	CJR	1

Project Name NEWTON GRAVEL PIT **Invoice #** E29883
Project # 60135471

Lab Code 5029883S
Sample ID 4111 THUNDER
Sample Matrix Water
Sample Date 10/13/2015

	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		10/19/2015	CJR	1
Bromobenzene	< 0.48	ug/l	0.48	1.5	1	8260B		10/19/2015	CJR	1
Bromodichloromethane	< 0.46	ug/l	0.46	1.5	1	8260B		10/19/2015	CJR	1
Bromoform	< 0.46	ug/l	0.46	1.5	1	8260B		10/19/2015	CJR	1
tert-Butylbenzene	< 1.1	ug/l	1.1	3.4	1	8260B		10/19/2015	CJR	1
sec-Butylbenzene	< 1.2	ug/l	1.2	3.8	1	8260B		10/19/2015	CJR	1
n-Butylbenzene	< 1	ug/l	1	3.3	1	8260B		10/19/2015	CJR	1
Carbon Tetrachloride	< 0.51	ug/l	0.51	1.6	1	8260B		10/19/2015	CJR	1
Chlorobenzene	< 0.46	ug/l	0.46	1.4	1	8260B		10/19/2015	CJR	1
Chloroethane	< 0.65	ug/l	0.65	2.1	1	8260B		10/19/2015	CJR	1
Chloroform	< 0.43	ug/l	0.43	1.4	1	8260B		10/19/2015	CJR	1
Chloromethane	< 1.9	ug/l	1.9	6	1	8260B		10/19/2015	CJR	1
2-Chlorotoluene	< 0.4	ug/l	0.4	1.3	1	8260B		10/19/2015	CJR	1
4-Chlorotoluene	< 0.63	ug/l	0.63	2	1	8260B		10/19/2015	CJR	1
1,2-Dibromo-3-chloropropane	< 1.4	ug/l	1.4	4.5	1	8260B		10/19/2015	CJR	1
Dibromochloromethane	< 0.45	ug/l	0.45	1.4	1	8260B		10/19/2015	CJR	1
1,4-Dichlorobenzene	< 0.49	ug/l	0.49	1.6	1	8260B		10/19/2015	CJR	1
1,3-Dichlorobenzene	< 0.52	ug/l	0.52	1.6	1	8260B		10/19/2015	CJR	1
1,2-Dichlorobenzene	< 0.46	ug/l	0.46	1.5	1	8260B		10/19/2015	CJR	1
Dichlorodifluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/19/2015	CJR	1
1,2-Dichloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/19/2015	CJR	1
1,1-Dichloroethane	< 1.1	ug/l	1.1	3.6	1	8260B		10/19/2015	CJR	1
1,1-Dichloroethene	< 0.65	ug/l	0.65	2.1	1	8260B		10/19/2015	CJR	1
cis-1,2-Dichloroethene	< 0.45	ug/l	0.45	1.4	1	8260B		10/19/2015	CJR	1
trans-1,2-Dichloroethene	< 0.54	ug/l	0.54	1.7	1	8260B		10/19/2015	CJR	1
1,2-Dichloropropane	< 0.43	ug/l	0.43	1.37	1	8260B		10/19/2015	CJR	1
2,2-Dichloropropane	< 3.1	ug/l	3.1	9.8	1	8260B		10/19/2015	CJR	2
1,3-Dichloropropane	< 0.42	ug/l	0.42	1.3	1	8260B		10/19/2015	CJR	1
Di-isopropyl ether	< 0.44	ug/l	0.44	1.4	1	8260B		10/19/2015	CJR	1
EDB (1,2-Dibromoethane)	< 0.63	ug/l	0.63	2	1	8260B		10/19/2015	CJR	1
Ethylbenzene	< 0.71	ug/l	0.71	2.3	1	8260B		10/19/2015	CJR	1
Hexachlorobutadiene	< 2.2	ug/l	2.2	7.1	1	8260B		10/19/2015	CJR	1
Isopropylbenzene	< 0.82	ug/l	0.82	2.6	1	8260B		10/19/2015	CJR	1
p-Isopropyltoluene	< 1.1	ug/l	1.1	3.5	1	8260B		10/19/2015	CJR	1
Methylene chloride	< 1.3	ug/l	1.3	4.2	1	8260B		10/19/2015	CJR	1
Methyl tert-butyl ether (MTBE)	< 1.1	ug/l	1.1	3.7	1	8260B		10/19/2015	CJR	1
Naphthalene	< 1.6	ug/l	1.6	5.2	1	8260B		10/19/2015	CJR	1
n-Propylbenzene	< 0.77	ug/l	0.77	2.4	1	8260B		10/19/2015	CJR	1
1,1,2,2-Tetrachloroethane	< 0.52	ug/l	0.52	1.7	1	8260B		10/19/2015	CJR	1
1,1,1,2-Tetrachloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/19/2015	CJR	1
Tetrachloroethene	< 0.49	ug/l	0.49	1.5	1	8260B		10/19/2015	CJR	1
Toluene	< 0.44	ug/l	0.44	1.4	1	8260B		10/19/2015	CJR	1
1,2,4-Trichlorobenzene	< 1.7	ug/l	1.7	5.6	1	8260B		10/19/2015	CJR	1
1,2,3-Trichlorobenzene	< 2.7	ug/l	2.7	8.6	1	8260B		10/19/2015	CJR	1
1,1,1-Trichloroethane	< 0.84	ug/l	0.84	2.7	1	8260B		10/19/2015	CJR	1
1,1,2-Trichloroethane	< 0.48	ug/l	0.48	1.52	1	8260B		10/19/2015	CJR	1
Trichloroethene (TCE)	< 0.47	ug/l	0.47	1.5	1	8260B		10/19/2015	CJR	1
Trichlorofluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/19/2015	CJR	1
1,2,4-Trimethylbenzene	< 1.6	ug/l	1.6	5	1	8260B		10/19/2015	CJR	1
1,3,5-Trimethylbenzene	< 1.5	ug/l	1.5	4.8	1	8260B		10/19/2015	CJR	1
Vinyl Chloride	< 0.17	ug/l	0.17	0.54	1	8260B		10/19/2015	CJR	1
m&p-Xylene	< 2.2	ug/l	2.2	6.9	1	8260B		10/19/2015	CJR	1
o-Xylene	< 0.9	ug/l	0.9	2.9	1	8260B		10/19/2015	CJR	1
SUR - Toluene-d8	107	REC %			1	8260B		10/19/2015	CJR	1
SUR - Dibromofluoromethane	98	REC %			1	8260B		10/19/2015	CJR	1
SUR - 4-Bromofluorobenzene	110	REC %			1	8260B		10/19/2015	CJR	1
SUR - 1,2-Dichloroethane-d4	104	REC %			1	8260B		10/19/2015	CJR	1

Project Name NEWTON GRAVEL PIT **Invoice #** E29883
Project # 60135471

Lab Code 5029883T
Sample ID 2716 CTH CR
Sample Matrix Water
Sample Date 10/13/2015

	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		10/20/2015	CJR	1
Bromobenzene	< 0.48	ug/l	0.48	1.5	1	8260B		10/20/2015	CJR	1
Bromodichloromethane	< 0.46	ug/l	0.46	1.5	1	8260B		10/20/2015	CJR	1
Bromoform	< 0.46	ug/l	0.46	1.5	1	8260B		10/20/2015	CJR	1
tert-Butylbenzene	< 1.1	ug/l	1.1	3.4	1	8260B		10/20/2015	CJR	1
sec-Butylbenzene	< 1.2	ug/l	1.2	3.8	1	8260B		10/20/2015	CJR	1
n-Butylbenzene	< 1	ug/l	1	3.3	1	8260B		10/20/2015	CJR	1
Carbon Tetrachloride	< 0.51	ug/l	0.51	1.6	1	8260B		10/20/2015	CJR	1
Chlorobenzene	< 0.46	ug/l	0.46	1.4	1	8260B		10/20/2015	CJR	1
Chloroethane	< 0.65	ug/l	0.65	2.1	1	8260B		10/20/2015	CJR	1
Chloroform	< 0.43	ug/l	0.43	1.4	1	8260B		10/20/2015	CJR	1
Chloromethane	< 1.9	ug/l	1.9	6	1	8260B		10/20/2015	CJR	1
2-Chlorotoluene	< 0.4	ug/l	0.4	1.3	1	8260B		10/20/2015	CJR	1
4-Chlorotoluene	< 0.63	ug/l	0.63	2	1	8260B		10/20/2015	CJR	1
1,2-Dibromo-3-chloropropane	< 1.4	ug/l	1.4	4.5	1	8260B		10/20/2015	CJR	1
Dibromochloromethane	< 0.45	ug/l	0.45	1.4	1	8260B		10/20/2015	CJR	1
1,4-Dichlorobenzene	< 0.49	ug/l	0.49	1.6	1	8260B		10/20/2015	CJR	1
1,3-Dichlorobenzene	< 0.52	ug/l	0.52	1.6	1	8260B		10/20/2015	CJR	1
1,2-Dichlorobenzene	< 0.46	ug/l	0.46	1.5	1	8260B		10/20/2015	CJR	1
Dichlorodifluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/20/2015	CJR	1
1,2-Dichloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/20/2015	CJR	1
1,1-Dichloroethane	< 1.1	ug/l	1.1	3.6	1	8260B		10/20/2015	CJR	1
1,1-Dichloroethene	< 0.65	ug/l	0.65	2.1	1	8260B		10/20/2015	CJR	1
cis-1,2-Dichloroethene	< 0.45	ug/l	0.45	1.4	1	8260B		10/20/2015	CJR	1
trans-1,2-Dichloroethene	< 0.54	ug/l	0.54	1.7	1	8260B		10/20/2015	CJR	1
1,2-Dichloropropane	< 0.43	ug/l	0.43	1.37	1	8260B		10/20/2015	CJR	1
2,2-Dichloropropane	< 3.1	ug/l	3.1	9.8	1	8260B		10/20/2015	CJR	2
1,3-Dichloropropane	< 0.42	ug/l	0.42	1.3	1	8260B		10/20/2015	CJR	1
Di-isopropyl ether	< 0.44	ug/l	0.44	1.4	1	8260B		10/20/2015	CJR	1
EDB (1,2-Dibromoethane)	< 0.63	ug/l	0.63	2	1	8260B		10/20/2015	CJR	1
Ethylbenzene	< 0.71	ug/l	0.71	2.3	1	8260B		10/20/2015	CJR	1
Hexachlorobutadiene	< 2.2	ug/l	2.2	7.1	1	8260B		10/20/2015	CJR	1
Isopropylbenzene	< 0.82	ug/l	0.82	2.6	1	8260B		10/20/2015	CJR	1
p-Isopropyltoluene	< 1.1	ug/l	1.1	3.5	1	8260B		10/20/2015	CJR	1
Methylene chloride	< 1.3	ug/l	1.3	4.2	1	8260B		10/20/2015	CJR	1
Methyl tert-butyl ether (MTBE)	< 1.1	ug/l	1.1	3.7	1	8260B		10/20/2015	CJR	1
Naphthalene	< 1.6	ug/l	1.6	5.2	1	8260B		10/20/2015	CJR	1
n-Propylbenzene	< 0.77	ug/l	0.77	2.4	1	8260B		10/20/2015	CJR	1
1,1,2,2-Tetrachloroethane	< 0.52	ug/l	0.52	1.7	1	8260B		10/20/2015	CJR	1
1,1,1,2-Tetrachloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/20/2015	CJR	1
Tetrachloroethene	< 0.49	ug/l	0.49	1.5	1	8260B		10/20/2015	CJR	1
Toluene	< 0.44	ug/l	0.44	1.4	1	8260B		10/20/2015	CJR	1
1,2,4-Trichlorobenzene	< 1.7	ug/l	1.7	5.6	1	8260B		10/20/2015	CJR	1
1,2,3-Trichlorobenzene	< 2.7	ug/l	2.7	8.6	1	8260B		10/20/2015	CJR	1
1,1,1-Trichloroethane	< 0.84	ug/l	0.84	2.7	1	8260B		10/20/2015	CJR	1
1,1,2-Trichloroethane	< 0.48	ug/l	0.48	1.52	1	8260B		10/20/2015	CJR	1
Trichloroethene (TCE)	< 0.47	ug/l	0.47	1.5	1	8260B		10/20/2015	CJR	1
Trichlorofluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/20/2015	CJR	1
1,2,4-Trimethylbenzene	< 1.6	ug/l	1.6	5	1	8260B		10/20/2015	CJR	1
1,3,5-Trimethylbenzene	< 1.5	ug/l	1.5	4.8	1	8260B		10/20/2015	CJR	1
Vinyl Chloride	< 0.17	ug/l	0.17	0.54	1	8260B		10/20/2015	CJR	1
m&p-Xylene	< 2.2	ug/l	2.2	6.9	1	8260B		10/20/2015	CJR	1
o-Xylene	< 0.9	ug/l	0.9	2.9	1	8260B		10/20/2015	CJR	1
SUR - 1,2-Dichloroethane-d4	102	REC %			1	8260B		10/20/2015	CJR	1
SUR - 4-Bromofluorobenzene	111	REC %			1	8260B		10/20/2015	CJR	1
SUR - Dibromofluoromethane	98	REC %			1	8260B		10/20/2015	CJR	1
SUR - Toluene-d8	107	REC %			1	8260B		10/20/2015	CJR	1

Project Name NEWTON GRAVEL PIT **Invoice #** E29883
Project # 60135471

Lab Code 5029883U
Sample ID 2717 CTH CR
Sample Matrix Water
Sample Date 10/13/2015

	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		10/20/2015	CJR	1
Bromobenzene	< 0.48	ug/l	0.48	1.5	1	8260B		10/20/2015	CJR	1
Bromodichloromethane	< 0.46	ug/l	0.46	1.5	1	8260B		10/20/2015	CJR	1
Bromoform	< 0.46	ug/l	0.46	1.5	1	8260B		10/20/2015	CJR	1
tert-Butylbenzene	< 1.1	ug/l	1.1	3.4	1	8260B		10/20/2015	CJR	1
sec-Butylbenzene	< 1.2	ug/l	1.2	3.8	1	8260B		10/20/2015	CJR	1
n-Butylbenzene	< 1	ug/l	1	3.3	1	8260B		10/20/2015	CJR	1
Carbon Tetrachloride	< 0.51	ug/l	0.51	1.6	1	8260B		10/20/2015	CJR	1
Chlorobenzene	< 0.46	ug/l	0.46	1.4	1	8260B		10/20/2015	CJR	1
Chloroethane	< 0.65	ug/l	0.65	2.1	1	8260B		10/20/2015	CJR	1
Chloroform	< 0.43	ug/l	0.43	1.4	1	8260B		10/20/2015	CJR	1
Chloromethane	< 1.9	ug/l	1.9	6	1	8260B		10/20/2015	CJR	1
2-Chlorotoluene	< 0.4	ug/l	0.4	1.3	1	8260B		10/20/2015	CJR	1
4-Chlorotoluene	< 0.63	ug/l	0.63	2	1	8260B		10/20/2015	CJR	1
1,2-Dibromo-3-chloropropane	< 1.4	ug/l	1.4	4.5	1	8260B		10/20/2015	CJR	1
Dibromochloromethane	< 0.45	ug/l	0.45	1.4	1	8260B		10/20/2015	CJR	1
1,4-Dichlorobenzene	< 0.49	ug/l	0.49	1.6	1	8260B		10/20/2015	CJR	1
1,3-Dichlorobenzene	< 0.52	ug/l	0.52	1.6	1	8260B		10/20/2015	CJR	1
1,2-Dichlorobenzene	< 0.46	ug/l	0.46	1.5	1	8260B		10/20/2015	CJR	1
Dichlorodifluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/20/2015	CJR	1
1,2-Dichloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/20/2015	CJR	1
1,1-Dichloroethane	< 1.1	ug/l	1.1	3.6	1	8260B		10/20/2015	CJR	1
1,1-Dichloroethene	< 0.65	ug/l	0.65	2.1	1	8260B		10/20/2015	CJR	1
cis-1,2-Dichloroethene	1.72	ug/l	0.45	1.4	1	8260B		10/20/2015	CJR	1
trans-1,2-Dichloroethene	< 0.54	ug/l	0.54	1.7	1	8260B		10/20/2015	CJR	1
1,2-Dichloropropane	< 0.43	ug/l	0.43	1.37	1	8260B		10/20/2015	CJR	1
2,2-Dichloropropane	< 3.1	ug/l	3.1	9.8	1	8260B		10/20/2015	CJR	2
1,3-Dichloropropane	< 0.42	ug/l	0.42	1.3	1	8260B		10/20/2015	CJR	1
Di-isopropyl ether	< 0.44	ug/l	0.44	1.4	1	8260B		10/20/2015	CJR	1
EDB (1,2-Dibromoethane)	< 0.63	ug/l	0.63	2	1	8260B		10/20/2015	CJR	1
Ethylbenzene	< 0.71	ug/l	0.71	2.3	1	8260B		10/20/2015	CJR	1
Hexachlorobutadiene	< 2.2	ug/l	2.2	7.1	1	8260B		10/20/2015	CJR	1
Isopropylbenzene	< 0.82	ug/l	0.82	2.6	1	8260B		10/20/2015	CJR	1
p-Isopropyltoluene	< 1.1	ug/l	1.1	3.5	1	8260B		10/20/2015	CJR	1
Methylene chloride	< 1.3	ug/l	1.3	4.2	1	8260B		10/20/2015	CJR	1
Methyl tert-butyl ether (MTBE)	< 1.1	ug/l	1.1	3.7	1	8260B		10/20/2015	CJR	1
Naphthalene	< 1.6	ug/l	1.6	5.2	1	8260B		10/20/2015	CJR	1
n-Propylbenzene	< 0.77	ug/l	0.77	2.4	1	8260B		10/20/2015	CJR	1
1,1,2,2-Tetrachloroethane	< 0.52	ug/l	0.52	1.7	1	8260B		10/20/2015	CJR	1
1,1,1,2-Tetrachloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/20/2015	CJR	1
Tetrachloroethene	< 0.49	ug/l	0.49	1.5	1	8260B		10/20/2015	CJR	1
Toluene	< 0.44	ug/l	0.44	1.4	1	8260B		10/20/2015	CJR	1
1,2,4-Trichlorobenzene	< 1.7	ug/l	1.7	5.6	1	8260B		10/20/2015	CJR	1
1,2,3-Trichlorobenzene	< 2.7	ug/l	2.7	8.6	1	8260B		10/20/2015	CJR	1
1,1,1-Trichloroethane	< 0.84	ug/l	0.84	2.7	1	8260B		10/20/2015	CJR	1
1,1,2-Trichloroethane	< 0.48	ug/l	0.48	1.52	1	8260B		10/20/2015	CJR	1
Trichloroethene (TCE)	< 0.47	ug/l	0.47	1.5	1	8260B		10/20/2015	CJR	1
Trichlorofluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/20/2015	CJR	1
1,2,4-Trimethylbenzene	< 1.6	ug/l	1.6	5	1	8260B		10/20/2015	CJR	1
1,3,5-Trimethylbenzene	< 1.5	ug/l	1.5	4.8	1	8260B		10/20/2015	CJR	1
Vinyl Chloride	0.47 "J"	ug/l	0.17	0.54	1	8260B		10/20/2015	CJR	1
m&p-Xylene	< 2.2	ug/l	2.2	6.9	1	8260B		10/20/2015	CJR	1
o-Xylene	< 0.9	ug/l	0.9	2.9	1	8260B		10/20/2015	CJR	1
SUR - 4-Bromofluorobenzene	113	REC %			1	8260B		10/20/2015	CJR	1
SUR - Dibromofluoromethane	98	REC %			1	8260B		10/20/2015	CJR	1
SUR - 1,2-Dichloroethane-d4	97	REC %			1	8260B		10/20/2015	CJR	1
SUR - Toluene-d8	104	REC %			1	8260B		10/20/2015	CJR	1

Project Name NEWTON GRAVEL PIT **Invoice #** E29883
Project # 60135471

Lab Code 5029883V
Sample ID 3327 HECKER
Sample Matrix Water
Sample Date 10/14/2015

	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		10/20/2015	CJR	1
Bromobenzene	< 0.48	ug/l	0.48	1.5	1	8260B		10/20/2015	CJR	1
Bromodichloromethane	< 0.46	ug/l	0.46	1.5	1	8260B		10/20/2015	CJR	1
Bromoform	< 0.46	ug/l	0.46	1.5	1	8260B		10/20/2015	CJR	1
tert-Butylbenzene	< 1.1	ug/l	1.1	3.4	1	8260B		10/20/2015	CJR	1
sec-Butylbenzene	< 1.2	ug/l	1.2	3.8	1	8260B		10/20/2015	CJR	1
n-Butylbenzene	< 1	ug/l	1	3.3	1	8260B		10/20/2015	CJR	1
Carbon Tetrachloride	< 0.51	ug/l	0.51	1.6	1	8260B		10/20/2015	CJR	1
Chlorobenzene	< 0.46	ug/l	0.46	1.4	1	8260B		10/20/2015	CJR	1
Chloroethane	< 0.65	ug/l	0.65	2.1	1	8260B		10/20/2015	CJR	1
Chloroform	< 0.43	ug/l	0.43	1.4	1	8260B		10/20/2015	CJR	1
Chloromethane	< 1.9	ug/l	1.9	6	1	8260B		10/20/2015	CJR	1
2-Chlorotoluene	< 0.4	ug/l	0.4	1.3	1	8260B		10/20/2015	CJR	1
4-Chlorotoluene	< 0.63	ug/l	0.63	2	1	8260B		10/20/2015	CJR	1
1,2-Dibromo-3-chloropropane	< 1.4	ug/l	1.4	4.5	1	8260B		10/20/2015	CJR	1
Dibromochloromethane	< 0.45	ug/l	0.45	1.4	1	8260B		10/20/2015	CJR	1
1,4-Dichlorobenzene	< 0.49	ug/l	0.49	1.6	1	8260B		10/20/2015	CJR	1
1,3-Dichlorobenzene	< 0.52	ug/l	0.52	1.6	1	8260B		10/20/2015	CJR	1
1,2-Dichlorobenzene	< 0.46	ug/l	0.46	1.5	1	8260B		10/20/2015	CJR	1
Dichlorodifluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/20/2015	CJR	1
1,2-Dichloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/20/2015	CJR	1
1,1-Dichloroethane	< 1.1	ug/l	1.1	3.6	1	8260B		10/20/2015	CJR	1
1,1-Dichloroethene	< 0.65	ug/l	0.65	2.1	1	8260B		10/20/2015	CJR	1
cis-1,2-Dichloroethene	4.2	ug/l	0.45	1.4	1	8260B		10/20/2015	CJR	1
trans-1,2-Dichloroethene	< 0.54	ug/l	0.54	1.7	1	8260B		10/20/2015	CJR	1
1,2-Dichloropropane	< 0.43	ug/l	0.43	1.37	1	8260B		10/20/2015	CJR	1
2,2-Dichloropropane	< 3.1	ug/l	3.1	9.8	1	8260B		10/20/2015	CJR	1
1,3-Dichloropropane	< 0.42	ug/l	0.42	1.3	1	8260B		10/20/2015	CJR	1
Di-isopropyl ether	< 0.44	ug/l	0.44	1.4	1	8260B		10/20/2015	CJR	1
EDB (1,2-Dibromoethane)	< 0.63	ug/l	0.63	2	1	8260B		10/20/2015	CJR	1
Ethylbenzene	< 0.71	ug/l	0.71	2.3	1	8260B		10/20/2015	CJR	1
Hexachlorobutadiene	< 2.2	ug/l	2.2	7.1	1	8260B		10/20/2015	CJR	1
Isopropylbenzene	< 0.82	ug/l	0.82	2.6	1	8260B		10/20/2015	CJR	1
p-Isopropyltoluene	< 1.1	ug/l	1.1	3.5	1	8260B		10/20/2015	CJR	1
Methylene chloride	< 1.3	ug/l	1.3	4.2	1	8260B		10/20/2015	CJR	1
Methyl tert-butyl ether (MTBE)	< 1.1	ug/l	1.1	3.7	1	8260B		10/20/2015	CJR	1
Naphthalene	< 1.6	ug/l	1.6	5.2	1	8260B		10/20/2015	CJR	1
n-Propylbenzene	< 0.77	ug/l	0.77	2.4	1	8260B		10/20/2015	CJR	1
1,1,2,2-Tetrachloroethane	< 0.52	ug/l	0.52	1.7	1	8260B		10/20/2015	CJR	1
1,1,1,2-Tetrachloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/20/2015	CJR	1
Tetrachloroethene	< 0.49	ug/l	0.49	1.5	1	8260B		10/20/2015	CJR	1
Toluene	< 0.44	ug/l	0.44	1.4	1	8260B		10/20/2015	CJR	1
1,2,4-Trichlorobenzene	< 1.7	ug/l	1.7	5.6	1	8260B		10/20/2015	CJR	1
1,2,3-Trichlorobenzene	< 2.7	ug/l	2.7	8.6	1	8260B		10/20/2015	CJR	1
1,1,1-Trichloroethane	< 0.84	ug/l	0.84	2.7	1	8260B		10/20/2015	CJR	1
1,1,2-Trichloroethane	< 0.48	ug/l	0.48	1.52	1	8260B		10/20/2015	CJR	1
Trichloroethene (TCE)	< 0.47	ug/l	0.47	1.5	1	8260B		10/20/2015	CJR	1
Trichlorofluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/20/2015	CJR	1
1,2,4-Trimethylbenzene	< 1.6	ug/l	1.6	5	1	8260B		10/20/2015	CJR	1
1,3,5-Trimethylbenzene	< 1.5	ug/l	1.5	4.8	1	8260B		10/20/2015	CJR	1
Vinyl Chloride	< 0.17	ug/l	0.17	0.54	1	8260B		10/20/2015	CJR	1
m&p-Xylene	< 2.2	ug/l	2.2	6.9	1	8260B		10/20/2015	CJR	1
o-Xylene	< 0.9	ug/l	0.9	2.9	1	8260B		10/20/2015	CJR	1
SUR - 1,2-Dichloroethane-d4	95	REC %			1	8260B		10/20/2015	CJR	1
SUR - 4-Bromofluorobenzene	104	REC %			1	8260B		10/20/2015	CJR	1
SUR - Dibromofluoromethane	106	REC %			1	8260B		10/20/2015	CJR	1
SUR - Toluene-d8	89	REC %			1	8260B		10/20/2015	CJR	1

Project Name NEWTON GRAVEL PIT **Invoice #** E29883
Project # 60135471

Lab Code 5029883W
Sample ID 4005 THUNDER
Sample Matrix Water
Sample Date 10/14/2015

	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		10/20/2015	CJR	1
Bromobenzene	< 0.48	ug/l	0.48	1.5	1	8260B		10/20/2015	CJR	1
Bromodichloromethane	< 0.46	ug/l	0.46	1.5	1	8260B		10/20/2015	CJR	1
Bromoform	< 0.46	ug/l	0.46	1.5	1	8260B		10/20/2015	CJR	1
tert-Butylbenzene	< 1.1	ug/l	1.1	3.4	1	8260B		10/20/2015	CJR	1
sec-Butylbenzene	< 1.2	ug/l	1.2	3.8	1	8260B		10/20/2015	CJR	1
n-Butylbenzene	< 1	ug/l	1	3.3	1	8260B		10/20/2015	CJR	1
Carbon Tetrachloride	< 0.51	ug/l	0.51	1.6	1	8260B		10/20/2015	CJR	1
Chlorobenzene	< 0.46	ug/l	0.46	1.4	1	8260B		10/20/2015	CJR	1
Chloroethane	< 0.65	ug/l	0.65	2.1	1	8260B		10/20/2015	CJR	1
Chloroform	< 0.43	ug/l	0.43	1.4	1	8260B		10/20/2015	CJR	1
Chloromethane	< 1.9	ug/l	1.9	6	1	8260B		10/20/2015	CJR	1
2-Chlorotoluene	< 0.4	ug/l	0.4	1.3	1	8260B		10/20/2015	CJR	1
4-Chlorotoluene	< 0.63	ug/l	0.63	2	1	8260B		10/20/2015	CJR	1
1,2-Dibromo-3-chloropropane	< 1.4	ug/l	1.4	4.5	1	8260B		10/20/2015	CJR	1
Dibromochloromethane	< 0.45	ug/l	0.45	1.4	1	8260B		10/20/2015	CJR	1
1,4-Dichlorobenzene	< 0.49	ug/l	0.49	1.6	1	8260B		10/20/2015	CJR	1
1,3-Dichlorobenzene	< 0.52	ug/l	0.52	1.6	1	8260B		10/20/2015	CJR	1
1,2-Dichlorobenzene	< 0.46	ug/l	0.46	1.5	1	8260B		10/20/2015	CJR	1
Dichlorodifluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/20/2015	CJR	1
1,2-Dichloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/20/2015	CJR	1
1,1-Dichloroethane	< 1.1	ug/l	1.1	3.6	1	8260B		10/20/2015	CJR	1
1,1-Dichloroethene	< 0.65	ug/l	0.65	2.1	1	8260B		10/20/2015	CJR	1
cis-1,2-Dichloroethene	0.91 "J"	ug/l	0.45	1.4	1	8260B		10/20/2015	CJR	1
trans-1,2-Dichloroethene	< 0.54	ug/l	0.54	1.7	1	8260B		10/20/2015	CJR	1
1,2-Dichloropropane	< 0.43	ug/l	0.43	1.37	1	8260B		10/20/2015	CJR	1
2,2-Dichloropropane	< 3.1	ug/l	3.1	9.8	1	8260B		10/20/2015	CJR	2
1,3-Dichloropropane	< 0.42	ug/l	0.42	1.3	1	8260B		10/20/2015	CJR	1
Di-isopropyl ether	< 0.44	ug/l	0.44	1.4	1	8260B		10/20/2015	CJR	1
EDB (1,2-Dibromoethane)	< 0.63	ug/l	0.63	2	1	8260B		10/20/2015	CJR	1
Ethylbenzene	< 0.71	ug/l	0.71	2.3	1	8260B		10/20/2015	CJR	1
Hexachlorobutadiene	< 2.2	ug/l	2.2	7.1	1	8260B		10/20/2015	CJR	1
Isopropylbenzene	< 0.82	ug/l	0.82	2.6	1	8260B		10/20/2015	CJR	1
p-Isopropyltoluene	< 1.1	ug/l	1.1	3.5	1	8260B		10/20/2015	CJR	1
Methylene chloride	< 1.3	ug/l	1.3	4.2	1	8260B		10/20/2015	CJR	1
Methyl tert-butyl ether (MTBE)	< 1.1	ug/l	1.1	3.7	1	8260B		10/20/2015	CJR	1
Naphthalene	< 1.6	ug/l	1.6	5.2	1	8260B		10/20/2015	CJR	1
n-Propylbenzene	< 0.77	ug/l	0.77	2.4	1	8260B		10/20/2015	CJR	1
1,1,2,2-Tetrachloroethane	< 0.52	ug/l	0.52	1.7	1	8260B		10/20/2015	CJR	1
1,1,1,2-Tetrachloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/20/2015	CJR	1
Tetrachloroethene	< 0.49	ug/l	0.49	1.5	1	8260B		10/20/2015	CJR	1
Toluene	< 0.44	ug/l	0.44	1.4	1	8260B		10/20/2015	CJR	1
1,2,4-Trichlorobenzene	< 1.7	ug/l	1.7	5.6	1	8260B		10/20/2015	CJR	1
1,2,3-Trichlorobenzene	< 2.7	ug/l	2.7	8.6	1	8260B		10/20/2015	CJR	1
1,1,1-Trichloroethane	< 0.84	ug/l	0.84	2.7	1	8260B		10/20/2015	CJR	1
1,1,2-Trichloroethane	< 0.48	ug/l	0.48	1.52	1	8260B		10/20/2015	CJR	1
Trichloroethene (TCE)	< 0.47	ug/l	0.47	1.5	1	8260B		10/20/2015	CJR	1
Trichlorofluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/20/2015	CJR	1
1,2,4-Trimethylbenzene	< 1.6	ug/l	1.6	5	1	8260B		10/20/2015	CJR	1
1,3,5-Trimethylbenzene	< 1.5	ug/l	1.5	4.8	1	8260B		10/20/2015	CJR	1
Vinyl Chloride	< 0.17	ug/l	0.17	0.54	1	8260B		10/20/2015	CJR	1
m&p-Xylene	< 2.2	ug/l	2.2	6.9	1	8260B		10/20/2015	CJR	1
o-Xylene	< 0.9	ug/l	0.9	2.9	1	8260B		10/20/2015	CJR	1
SUR - 1,2-Dichloroethane-d4	99	REC %			1	8260B		10/20/2015	CJR	1
SUR - Dibromofluoromethane	100	REC %			1	8260B		10/20/2015	CJR	1
SUR - Toluene-d8	104	REC %			1	8260B		10/20/2015	CJR	1
SUR - 4-Bromofluorobenzene	110	REC %			1	8260B		10/20/2015	CJR	1

Project Name NEWTON GRAVEL PIT **Invoice #** E29883
Project # 60135471

Lab Code 5029883X
Sample ID 4101 THUNDER
Sample Matrix Water
Sample Date 10/14/2015

	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		10/20/2015	CJR	1
Bromobenzene	< 0.48	ug/l	0.48	1.5	1	8260B		10/20/2015	CJR	1
Bromodichloromethane	< 0.46	ug/l	0.46	1.5	1	8260B		10/20/2015	CJR	1
Bromoform	< 0.46	ug/l	0.46	1.5	1	8260B		10/20/2015	CJR	1
tert-Butylbenzene	< 1.1	ug/l	1.1	3.4	1	8260B		10/20/2015	CJR	1
sec-Butylbenzene	< 1.2	ug/l	1.2	3.8	1	8260B		10/20/2015	CJR	1
n-Butylbenzene	< 1	ug/l	1	3.3	1	8260B		10/20/2015	CJR	1
Carbon Tetrachloride	< 0.51	ug/l	0.51	1.6	1	8260B		10/20/2015	CJR	1
Chlorobenzene	< 0.46	ug/l	0.46	1.4	1	8260B		10/20/2015	CJR	1
Chloroethane	< 0.65	ug/l	0.65	2.1	1	8260B		10/20/2015	CJR	1
Chloroform	< 0.43	ug/l	0.43	1.4	1	8260B		10/20/2015	CJR	1
Chloromethane	< 1.9	ug/l	1.9	6	1	8260B		10/20/2015	CJR	1
2-Chlorotoluene	< 0.4	ug/l	0.4	1.3	1	8260B		10/20/2015	CJR	1
4-Chlorotoluene	< 0.63	ug/l	0.63	2	1	8260B		10/20/2015	CJR	1
1,2-Dibromo-3-chloropropane	< 1.4	ug/l	1.4	4.5	1	8260B		10/20/2015	CJR	1
Dibromochloromethane	< 0.45	ug/l	0.45	1.4	1	8260B		10/20/2015	CJR	1
1,4-Dichlorobenzene	< 0.49	ug/l	0.49	1.6	1	8260B		10/20/2015	CJR	1
1,3-Dichlorobenzene	< 0.52	ug/l	0.52	1.6	1	8260B		10/20/2015	CJR	1
1,2-Dichlorobenzene	< 0.46	ug/l	0.46	1.5	1	8260B		10/20/2015	CJR	1
Dichlorodifluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/20/2015	CJR	1
1,2-Dichloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/20/2015	CJR	1
1,1-Dichloroethane	< 1.1	ug/l	1.1	3.6	1	8260B		10/20/2015	CJR	1
1,1-Dichloroethene	< 0.65	ug/l	0.65	2.1	1	8260B		10/20/2015	CJR	1
cis-1,2-Dichloroethene	0.87 "J"	ug/l	0.45	1.4	1	8260B		10/20/2015	CJR	1
trans-1,2-Dichloroethene	< 0.54	ug/l	0.54	1.7	1	8260B		10/20/2015	CJR	1
1,2-Dichloropropane	< 0.43	ug/l	0.43	1.37	1	8260B		10/20/2015	CJR	1
2,2-Dichloropropane	< 3.1	ug/l	3.1	9.8	1	8260B		10/20/2015	CJR	2
1,3-Dichloropropane	< 0.42	ug/l	0.42	1.3	1	8260B		10/20/2015	CJR	1
Di-isopropyl ether	< 0.44	ug/l	0.44	1.4	1	8260B		10/20/2015	CJR	1
EDB (1,2-Dibromoethane)	< 0.63	ug/l	0.63	2	1	8260B		10/20/2015	CJR	1
Ethylbenzene	< 0.71	ug/l	0.71	2.3	1	8260B		10/20/2015	CJR	1
Hexachlorobutadiene	< 2.2	ug/l	2.2	7.1	1	8260B		10/20/2015	CJR	1
Isopropylbenzene	< 0.82	ug/l	0.82	2.6	1	8260B		10/20/2015	CJR	1
p-Isopropyltoluene	< 1.1	ug/l	1.1	3.5	1	8260B		10/20/2015	CJR	1
Methylene chloride	< 1.3	ug/l	1.3	4.2	1	8260B		10/20/2015	CJR	1
Methyl tert-butyl ether (MTBE)	< 1.1	ug/l	1.1	3.7	1	8260B		10/20/2015	CJR	1
Naphthalene	< 1.6	ug/l	1.6	5.2	1	8260B		10/20/2015	CJR	1
n-Propylbenzene	< 0.77	ug/l	0.77	2.4	1	8260B		10/20/2015	CJR	1
1,1,2,2-Tetrachloroethane	< 0.52	ug/l	0.52	1.7	1	8260B		10/20/2015	CJR	1
1,1,1,2-Tetrachloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/20/2015	CJR	1
Tetrachloroethene	< 0.49	ug/l	0.49	1.5	1	8260B		10/20/2015	CJR	1
Toluene	< 0.44	ug/l	0.44	1.4	1	8260B		10/20/2015	CJR	1
1,2,4-Trichlorobenzene	< 1.7	ug/l	1.7	5.6	1	8260B		10/20/2015	CJR	1
1,2,3-Trichlorobenzene	< 2.7	ug/l	2.7	8.6	1	8260B		10/20/2015	CJR	1
1,1,1-Trichloroethane	< 0.84	ug/l	0.84	2.7	1	8260B		10/20/2015	CJR	1
1,1,2-Trichloroethane	< 0.48	ug/l	0.48	1.52	1	8260B		10/20/2015	CJR	1
Trichloroethene (TCE)	< 0.47	ug/l	0.47	1.5	1	8260B		10/20/2015	CJR	1
Trichlorofluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/20/2015	CJR	1
1,2,4-Trimethylbenzene	< 1.6	ug/l	1.6	5	1	8260B		10/20/2015	CJR	1
1,3,5-Trimethylbenzene	< 1.5	ug/l	1.5	4.8	1	8260B		10/20/2015	CJR	1
Vinyl Chloride	< 0.17	ug/l	0.17	0.54	1	8260B		10/20/2015	CJR	1
m&p-Xylene	< 2.2	ug/l	2.2	6.9	1	8260B		10/20/2015	CJR	1
o-Xylene	< 0.9	ug/l	0.9	2.9	1	8260B		10/20/2015	CJR	1
SUR - Toluene-d8	104	REC %			1	8260B		10/20/2015	CJR	1
SUR - Dibromofluoromethane	101	REC %			1	8260B		10/20/2015	CJR	1
SUR - 4-Bromofluorobenzene	110	REC %			1	8260B		10/20/2015	CJR	1
SUR - 1,2-Dichloroethane-d4	95	REC %			1	8260B		10/20/2015	CJR	1

Project Name NEWTON GRAVEL PIT **Invoice #** E29883
Project # 60135471

Lab Code 5029883Y
Sample ID 3701 VIEBAHN
Sample Matrix Water
Sample Date 10/14/2015

	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		10/20/2015	CJR	1
Bromobenzene	< 0.48	ug/l	0.48	1.5	1	8260B		10/20/2015	CJR	1
Bromodichloromethane	< 0.46	ug/l	0.46	1.5	1	8260B		10/20/2015	CJR	1
Bromoform	< 0.46	ug/l	0.46	1.5	1	8260B		10/20/2015	CJR	1
tert-Butylbenzene	< 1.1	ug/l	1.1	3.4	1	8260B		10/20/2015	CJR	1
sec-Butylbenzene	< 1.2	ug/l	1.2	3.8	1	8260B		10/20/2015	CJR	1
n-Butylbenzene	< 1	ug/l	1	3.3	1	8260B		10/20/2015	CJR	1
Carbon Tetrachloride	< 0.51	ug/l	0.51	1.6	1	8260B		10/20/2015	CJR	1
Chlorobenzene	< 0.46	ug/l	0.46	1.4	1	8260B		10/20/2015	CJR	1
Chloroethane	< 0.65	ug/l	0.65	2.1	1	8260B		10/20/2015	CJR	1
Chloroform	< 0.43	ug/l	0.43	1.4	1	8260B		10/20/2015	CJR	1
Chloromethane	< 1.9	ug/l	1.9	6	1	8260B		10/20/2015	CJR	1
2-Chlorotoluene	< 0.4	ug/l	0.4	1.3	1	8260B		10/20/2015	CJR	1
4-Chlorotoluene	< 0.63	ug/l	0.63	2	1	8260B		10/20/2015	CJR	1
1,2-Dibromo-3-chloropropane	< 1.4	ug/l	1.4	4.5	1	8260B		10/20/2015	CJR	1
Dibromochloromethane	< 0.45	ug/l	0.45	1.4	1	8260B		10/20/2015	CJR	1
1,4-Dichlorobenzene	< 0.49	ug/l	0.49	1.6	1	8260B		10/20/2015	CJR	1
1,3-Dichlorobenzene	< 0.52	ug/l	0.52	1.6	1	8260B		10/20/2015	CJR	1
1,2-Dichlorobenzene	< 0.46	ug/l	0.46	1.5	1	8260B		10/20/2015	CJR	1
Dichlorodifluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/20/2015	CJR	1
1,2-Dichloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/20/2015	CJR	1
1,1-Dichloroethane	< 1.1	ug/l	1.1	3.6	1	8260B		10/20/2015	CJR	1
1,1-Dichloroethene	< 0.65	ug/l	0.65	2.1	1	8260B		10/20/2015	CJR	1
cis-1,2-Dichloroethene	1.55	ug/l	0.45	1.4	1	8260B		10/20/2015	CJR	1
trans-1,2-Dichloroethene	< 0.54	ug/l	0.54	1.7	1	8260B		10/20/2015	CJR	1
1,2-Dichloropropane	< 0.43	ug/l	0.43	1.37	1	8260B		10/20/2015	CJR	1
2,2-Dichloropropane	< 3.1	ug/l	3.1	9.8	1	8260B		10/20/2015	CJR	1
1,3-Dichloropropane	< 0.42	ug/l	0.42	1.3	1	8260B		10/20/2015	CJR	1
Di-isopropyl ether	< 0.44	ug/l	0.44	1.4	1	8260B		10/20/2015	CJR	1
EDB (1,2-Dibromoethane)	< 0.63	ug/l	0.63	2	1	8260B		10/20/2015	CJR	1
Ethylbenzene	< 0.71	ug/l	0.71	2.3	1	8260B		10/20/2015	CJR	1
Hexachlorobutadiene	< 2.2	ug/l	2.2	7.1	1	8260B		10/20/2015	CJR	1
Isopropylbenzene	< 0.82	ug/l	0.82	2.6	1	8260B		10/20/2015	CJR	1
p-Isopropyltoluene	< 1.1	ug/l	1.1	3.5	1	8260B		10/20/2015	CJR	1
Methylene chloride	< 1.3	ug/l	1.3	4.2	1	8260B		10/20/2015	CJR	1
Methyl tert-butyl ether (MTBE)	< 1.1	ug/l	1.1	3.7	1	8260B		10/20/2015	CJR	1
Naphthalene	< 1.6	ug/l	1.6	5.2	1	8260B		10/20/2015	CJR	1
n-Propylbenzene	< 0.77	ug/l	0.77	2.4	1	8260B		10/20/2015	CJR	1
1,1,2,2-Tetrachloroethane	< 0.52	ug/l	0.52	1.7	1	8260B		10/20/2015	CJR	1
1,1,1,2-Tetrachloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/20/2015	CJR	1
Tetrachloroethene	< 0.49	ug/l	0.49	1.5	1	8260B		10/20/2015	CJR	1
Toluene	< 0.44	ug/l	0.44	1.4	1	8260B		10/20/2015	CJR	1
1,2,4-Trichlorobenzene	< 1.7	ug/l	1.7	5.6	1	8260B		10/20/2015	CJR	1
1,2,3-Trichlorobenzene	< 2.7	ug/l	2.7	8.6	1	8260B		10/20/2015	CJR	1
1,1,1-Trichloroethane	< 0.84	ug/l	0.84	2.7	1	8260B		10/20/2015	CJR	1
1,1,2-Trichloroethane	< 0.48	ug/l	0.48	1.52	1	8260B		10/20/2015	CJR	1
Trichloroethene (TCE)	< 0.47	ug/l	0.47	1.5	1	8260B		10/20/2015	CJR	1
Trichlorofluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/20/2015	CJR	1
1,2,4-Trimethylbenzene	< 1.6	ug/l	1.6	5	1	8260B		10/20/2015	CJR	1
1,3,5-Trimethylbenzene	< 1.5	ug/l	1.5	4.8	1	8260B		10/20/2015	CJR	1
Vinyl Chloride	0.34 "J"	ug/l	0.17	0.54	1	8260B		10/20/2015	CJR	1
m&p-Xylene	< 2.2	ug/l	2.2	6.9	1	8260B		10/20/2015	CJR	1
o-Xylene	< 0.9	ug/l	0.9	2.9	1	8260B		10/20/2015	CJR	1
SUR - 1,2-Dichloroethane-d4	110	REC %			1	8260B		10/20/2015	CJR	1
SUR - 4-Bromofluorobenzene	100	REC %			1	8260B		10/20/2015	CJR	1
SUR - Dibromofluoromethane	108	REC %			1	8260B		10/20/2015	CJR	1
SUR - Toluene-d8	91	REC %			1	8260B		10/20/2015	CJR	1

Project Name NEWTON GRAVEL PIT **Invoice #** E29883
Project # 60135471

Lab Code 5029883Z
Sample ID 3701 VIEBAHN DUP
Sample Matrix Water
Sample Date 10/14/2015

	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		10/20/2015	CJR	1
Bromobenzene	< 0.48	ug/l	0.48	1.5	1	8260B		10/20/2015	CJR	1
Bromodichloromethane	< 0.46	ug/l	0.46	1.5	1	8260B		10/20/2015	CJR	1
Bromoform	< 0.46	ug/l	0.46	1.5	1	8260B		10/20/2015	CJR	1
tert-Butylbenzene	< 1.1	ug/l	1.1	3.4	1	8260B		10/20/2015	CJR	1
sec-Butylbenzene	< 1.2	ug/l	1.2	3.8	1	8260B		10/20/2015	CJR	1
n-Butylbenzene	< 1	ug/l	1	3.3	1	8260B		10/20/2015	CJR	1
Carbon Tetrachloride	< 0.51	ug/l	0.51	1.6	1	8260B		10/20/2015	CJR	1
Chlorobenzene	< 0.46	ug/l	0.46	1.4	1	8260B		10/20/2015	CJR	1
Chloroethane	< 0.65	ug/l	0.65	2.1	1	8260B		10/20/2015	CJR	1
Chloroform	< 0.43	ug/l	0.43	1.4	1	8260B		10/20/2015	CJR	1
Chloromethane	< 1.9	ug/l	1.9	6	1	8260B		10/20/2015	CJR	1
2-Chlorotoluene	< 0.4	ug/l	0.4	1.3	1	8260B		10/20/2015	CJR	1
4-Chlorotoluene	< 0.63	ug/l	0.63	2	1	8260B		10/20/2015	CJR	1
1,2-Dibromo-3-chloropropane	< 1.4	ug/l	1.4	4.5	1	8260B		10/20/2015	CJR	1
Dibromochloromethane	< 0.45	ug/l	0.45	1.4	1	8260B		10/20/2015	CJR	1
1,4-Dichlorobenzene	< 0.49	ug/l	0.49	1.6	1	8260B		10/20/2015	CJR	1
1,3-Dichlorobenzene	< 0.52	ug/l	0.52	1.6	1	8260B		10/20/2015	CJR	1
1,2-Dichlorobenzene	< 0.46	ug/l	0.46	1.5	1	8260B		10/20/2015	CJR	1
Dichlorodifluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/20/2015	CJR	1
1,2-Dichloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/20/2015	CJR	1
1,1-Dichloroethane	< 1.1	ug/l	1.1	3.6	1	8260B		10/20/2015	CJR	1
1,1-Dichloroethene	< 0.65	ug/l	0.65	2.1	1	8260B		10/20/2015	CJR	1
cis-1,2-Dichloroethene	1.48	ug/l	0.45	1.4	1	8260B		10/20/2015	CJR	1
trans-1,2-Dichloroethene	< 0.54	ug/l	0.54	1.7	1	8260B		10/20/2015	CJR	1
1,2-Dichloropropane	< 0.43	ug/l	0.43	1.37	1	8260B		10/20/2015	CJR	1
2,2-Dichloropropane	< 3.1	ug/l	3.1	9.8	1	8260B		10/20/2015	CJR	1
1,3-Dichloropropane	< 0.42	ug/l	0.42	1.3	1	8260B		10/20/2015	CJR	1
Di-isopropyl ether	< 0.44	ug/l	0.44	1.4	1	8260B		10/20/2015	CJR	1
EDB (1,2-Dibromoethane)	< 0.63	ug/l	0.63	2	1	8260B		10/20/2015	CJR	1
Ethylbenzene	< 0.71	ug/l	0.71	2.3	1	8260B		10/20/2015	CJR	1
Hexachlorobutadiene	< 2.2	ug/l	2.2	7.1	1	8260B		10/20/2015	CJR	1
Isopropylbenzene	< 0.82	ug/l	0.82	2.6	1	8260B		10/20/2015	CJR	1
p-Isopropyltoluene	< 1.1	ug/l	1.1	3.5	1	8260B		10/20/2015	CJR	1
Methylene chloride	< 1.3	ug/l	1.3	4.2	1	8260B		10/20/2015	CJR	1
Methyl tert-butyl ether (MTBE)	< 1.1	ug/l	1.1	3.7	1	8260B		10/20/2015	CJR	1
Naphthalene	< 1.6	ug/l	1.6	5.2	1	8260B		10/20/2015	CJR	1
n-Propylbenzene	< 0.77	ug/l	0.77	2.4	1	8260B		10/20/2015	CJR	1
1,1,2,2-Tetrachloroethane	< 0.52	ug/l	0.52	1.7	1	8260B		10/20/2015	CJR	1
1,1,1,2-Tetrachloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/20/2015	CJR	1
Tetrachloroethene	< 0.49	ug/l	0.49	1.5	1	8260B		10/20/2015	CJR	1
Toluene	< 0.44	ug/l	0.44	1.4	1	8260B		10/20/2015	CJR	1
1,2,4-Trichlorobenzene	< 1.7	ug/l	1.7	5.6	1	8260B		10/20/2015	CJR	1
1,2,3-Trichlorobenzene	< 2.7	ug/l	2.7	8.6	1	8260B		10/20/2015	CJR	1
1,1,1-Trichloroethane	< 0.84	ug/l	0.84	2.7	1	8260B		10/20/2015	CJR	1
1,1,2-Trichloroethane	< 0.48	ug/l	0.48	1.52	1	8260B		10/20/2015	CJR	1
Trichloroethene (TCE)	< 0.47	ug/l	0.47	1.5	1	8260B		10/20/2015	CJR	1
Trichlorofluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/20/2015	CJR	1
1,2,4-Trimethylbenzene	< 1.6	ug/l	1.6	5	1	8260B		10/20/2015	CJR	1
1,3,5-Trimethylbenzene	< 1.5	ug/l	1.5	4.8	1	8260B		10/20/2015	CJR	1
Vinyl Chloride	0.37 "J"	ug/l	0.17	0.54	1	8260B		10/20/2015	CJR	1
m&p-Xylene	< 2.2	ug/l	2.2	6.9	1	8260B		10/20/2015	CJR	1
o-Xylene	< 0.9	ug/l	0.9	2.9	1	8260B		10/20/2015	CJR	1
SUR - 1,2-Dichloroethane-d4	119	REC %			1	8260B		10/20/2015	CJR	1
SUR - 4-Bromofluorobenzene	103	REC %			1	8260B		10/20/2015	CJR	1
SUR - Dibromofluoromethane	106	REC %			1	8260B		10/20/2015	CJR	1
SUR - Toluene-d8	90	REC %			1	8260B		10/20/2015	CJR	1

Project Name NEWTON GRAVEL PIT **Invoice #** E29883
Project # 60135471

Lab Code 529883AA
Sample ID 4101 VIEBAHN
Sample Matrix Water
Sample Date 10/14/2015

	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		10/20/2015	CJR	1
Bromobenzene	< 0.48	ug/l	0.48	1.5	1	8260B		10/20/2015	CJR	1
Bromodichloromethane	< 0.46	ug/l	0.46	1.5	1	8260B		10/20/2015	CJR	1
Bromoform	< 0.46	ug/l	0.46	1.5	1	8260B		10/20/2015	CJR	1
tert-Butylbenzene	< 1.1	ug/l	1.1	3.4	1	8260B		10/20/2015	CJR	1
sec-Butylbenzene	< 1.2	ug/l	1.2	3.8	1	8260B		10/20/2015	CJR	1
n-Butylbenzene	< 1	ug/l	1	3.3	1	8260B		10/20/2015	CJR	1
Carbon Tetrachloride	< 0.51	ug/l	0.51	1.6	1	8260B		10/20/2015	CJR	1
Chlorobenzene	< 0.46	ug/l	0.46	1.4	1	8260B		10/20/2015	CJR	1
Chloroethane	< 0.65	ug/l	0.65	2.1	1	8260B		10/20/2015	CJR	1
Chloroform	< 0.43	ug/l	0.43	1.4	1	8260B		10/20/2015	CJR	1
Chloromethane	< 1.9	ug/l	1.9	6	1	8260B		10/20/2015	CJR	1
2-Chlorotoluene	< 0.4	ug/l	0.4	1.3	1	8260B		10/20/2015	CJR	1
4-Chlorotoluene	< 0.63	ug/l	0.63	2	1	8260B		10/20/2015	CJR	1
1,2-Dibromo-3-chloropropane	< 1.4	ug/l	1.4	4.5	1	8260B		10/20/2015	CJR	1
Dibromochloromethane	< 0.45	ug/l	0.45	1.4	1	8260B		10/20/2015	CJR	1
1,4-Dichlorobenzene	< 0.49	ug/l	0.49	1.6	1	8260B		10/20/2015	CJR	1
1,3-Dichlorobenzene	< 0.52	ug/l	0.52	1.6	1	8260B		10/20/2015	CJR	1
1,2-Dichlorobenzene	< 0.46	ug/l	0.46	1.5	1	8260B		10/20/2015	CJR	1
Dichlorodifluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/20/2015	CJR	1
1,2-Dichloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/20/2015	CJR	1
1,1-Dichloroethane	< 1.1	ug/l	1.1	3.6	1	8260B		10/20/2015	CJR	1
1,1-Dichloroethene	< 0.65	ug/l	0.65	2.1	1	8260B		10/20/2015	CJR	1
cis-1,2-Dichloroethene	1.59	ug/l	0.45	1.4	1	8260B		10/20/2015	CJR	1
trans-1,2-Dichloroethene	< 0.54	ug/l	0.54	1.7	1	8260B		10/20/2015	CJR	1
1,2-Dichloropropane	< 0.43	ug/l	0.43	1.37	1	8260B		10/20/2015	CJR	1
2,2-Dichloropropane	< 3.1	ug/l	3.1	9.8	1	8260B		10/20/2015	CJR	1
1,3-Dichloropropane	< 0.42	ug/l	0.42	1.3	1	8260B		10/20/2015	CJR	1
Di-isopropyl ether	< 0.44	ug/l	0.44	1.4	1	8260B		10/20/2015	CJR	1
EDB (1,2-Dibromoethane)	< 0.63	ug/l	0.63	2	1	8260B		10/20/2015	CJR	1
Ethylbenzene	< 0.71	ug/l	0.71	2.3	1	8260B		10/20/2015	CJR	1
Hexachlorobutadiene	< 2.2	ug/l	2.2	7.1	1	8260B		10/20/2015	CJR	1
Isopropylbenzene	< 0.82	ug/l	0.82	2.6	1	8260B		10/20/2015	CJR	1
p-Isopropyltoluene	< 1.1	ug/l	1.1	3.5	1	8260B		10/20/2015	CJR	1
Methylene chloride	< 1.3	ug/l	1.3	4.2	1	8260B		10/20/2015	CJR	1
Methyl tert-butyl ether (MTBE)	< 1.1	ug/l	1.1	3.7	1	8260B		10/20/2015	CJR	1
Naphthalene	< 1.6	ug/l	1.6	5.2	1	8260B		10/20/2015	CJR	1
n-Propylbenzene	< 0.77	ug/l	0.77	2.4	1	8260B		10/20/2015	CJR	1
1,1,2,2-Tetrachloroethane	< 0.52	ug/l	0.52	1.7	1	8260B		10/20/2015	CJR	1
1,1,1,2-Tetrachloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/20/2015	CJR	1
Tetrachloroethene	< 0.49	ug/l	0.49	1.5	1	8260B		10/20/2015	CJR	1
Toluene	< 0.44	ug/l	0.44	1.4	1	8260B		10/20/2015	CJR	1
1,2,4-Trichlorobenzene	< 1.7	ug/l	1.7	5.6	1	8260B		10/20/2015	CJR	1
1,2,3-Trichlorobenzene	< 2.7	ug/l	2.7	8.6	1	8260B		10/20/2015	CJR	1
1,1,1-Trichloroethane	< 0.84	ug/l	0.84	2.7	1	8260B		10/20/2015	CJR	1
1,1,2-Trichloroethane	< 0.48	ug/l	0.48	1.52	1	8260B		10/20/2015	CJR	1
Trichloroethene (TCE)	< 0.47	ug/l	0.47	1.5	1	8260B		10/20/2015	CJR	1
Trichlorofluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/20/2015	CJR	1
1,2,4-Trimethylbenzene	< 1.6	ug/l	1.6	5	1	8260B		10/20/2015	CJR	1
1,3,5-Trimethylbenzene	< 1.5	ug/l	1.5	4.8	1	8260B		10/20/2015	CJR	1
Vinyl Chloride	0.54	ug/l	0.17	0.54	1	8260B		10/20/2015	CJR	1
m&p-Xylene	< 2.2	ug/l	2.2	6.9	1	8260B		10/20/2015	CJR	1
o-Xylene	< 0.9	ug/l	0.9	2.9	1	8260B		10/20/2015	CJR	1
SUR - 1,2-Dichloroethane-d4	98	REC %			1	8260B		10/20/2015	CJR	1
SUR - 4-Bromofluorobenzene	102	REC %			1	8260B		10/20/2015	CJR	1
SUR - Dibromofluoromethane	106	REC %			1	8260B		10/20/2015	CJR	1
SUR - Toluene-d8	95	REC %			1	8260B		10/20/2015	CJR	1

Project Name NEWTON GRAVEL PIT **Invoice #** E29883
Project # 60135471

Lab Code 529883BB
Sample ID 3921 BLACKHAWK
Sample Matrix Water
Sample Date 10/14/2015

	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		10/20/2015	CJR	1
Bromobenzene	< 0.48	ug/l	0.48	1.5	1	8260B		10/20/2015	CJR	1
Bromodichloromethane	< 0.46	ug/l	0.46	1.5	1	8260B		10/20/2015	CJR	1
Bromoform	< 0.46	ug/l	0.46	1.5	1	8260B		10/20/2015	CJR	1
tert-Butylbenzene	< 1.1	ug/l	1.1	3.4	1	8260B		10/20/2015	CJR	1
sec-Butylbenzene	< 1.2	ug/l	1.2	3.8	1	8260B		10/20/2015	CJR	1
n-Butylbenzene	< 1	ug/l	1	3.3	1	8260B		10/20/2015	CJR	1
Carbon Tetrachloride	< 0.51	ug/l	0.51	1.6	1	8260B		10/20/2015	CJR	1
Chlorobenzene	< 0.46	ug/l	0.46	1.4	1	8260B		10/20/2015	CJR	1
Chloroethane	< 0.65	ug/l	0.65	2.1	1	8260B		10/20/2015	CJR	1
Chloroform	< 0.43	ug/l	0.43	1.4	1	8260B		10/20/2015	CJR	1
Chloromethane	< 1.9	ug/l	1.9	6	1	8260B		10/20/2015	CJR	1
2-Chlorotoluene	< 0.4	ug/l	0.4	1.3	1	8260B		10/20/2015	CJR	1
4-Chlorotoluene	< 0.63	ug/l	0.63	2	1	8260B		10/20/2015	CJR	1
1,2-Dibromo-3-chloropropane	< 1.4	ug/l	1.4	4.5	1	8260B		10/20/2015	CJR	1
Dibromochloromethane	< 0.45	ug/l	0.45	1.4	1	8260B		10/20/2015	CJR	1
1,4-Dichlorobenzene	< 0.49	ug/l	0.49	1.6	1	8260B		10/20/2015	CJR	1
1,3-Dichlorobenzene	< 0.52	ug/l	0.52	1.6	1	8260B		10/20/2015	CJR	1
1,2-Dichlorobenzene	< 0.46	ug/l	0.46	1.5	1	8260B		10/20/2015	CJR	1
Dichlorodifluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/20/2015	CJR	1
1,2-Dichloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/20/2015	CJR	1
1,1-Dichloroethane	< 1.1	ug/l	1.1	3.6	1	8260B		10/20/2015	CJR	1
1,1-Dichloroethene	< 0.65	ug/l	0.65	2.1	1	8260B		10/20/2015	CJR	1
cis-1,2-Dichloroethene	1.04 "J"	ug/l	0.45	1.4	1	8260B		10/20/2015	CJR	1
trans-1,2-Dichloroethene	< 0.54	ug/l	0.54	1.7	1	8260B		10/20/2015	CJR	1
1,2-Dichloropropane	< 0.43	ug/l	0.43	1.37	1	8260B		10/20/2015	CJR	1
2,2-Dichloropropane	< 3.1	ug/l	3.1	9.8	1	8260B		10/20/2015	CJR	1
1,3-Dichloropropane	< 0.42	ug/l	0.42	1.3	1	8260B		10/20/2015	CJR	1
Di-isopropyl ether	< 0.44	ug/l	0.44	1.4	1	8260B		10/20/2015	CJR	1
EDB (1,2-Dibromoethane)	< 0.63	ug/l	0.63	2	1	8260B		10/20/2015	CJR	1
Ethylbenzene	< 0.71	ug/l	0.71	2.3	1	8260B		10/20/2015	CJR	1
Hexachlorobutadiene	< 2.2	ug/l	2.2	7.1	1	8260B		10/20/2015	CJR	1
Isopropylbenzene	< 0.82	ug/l	0.82	2.6	1	8260B		10/20/2015	CJR	1
p-Isopropyltoluene	< 1.1	ug/l	1.1	3.5	1	8260B		10/20/2015	CJR	1
Methylene chloride	< 1.3	ug/l	1.3	4.2	1	8260B		10/20/2015	CJR	1
Methyl tert-butyl ether (MTBE)	< 1.1	ug/l	1.1	3.7	1	8260B		10/20/2015	CJR	1
Naphthalene	< 1.6	ug/l	1.6	5.2	1	8260B		10/20/2015	CJR	1
n-Propylbenzene	< 0.77	ug/l	0.77	2.4	1	8260B		10/20/2015	CJR	1
1,1,2,2-Tetrachloroethane	< 0.52	ug/l	0.52	1.7	1	8260B		10/20/2015	CJR	1
1,1,1,2-Tetrachloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/20/2015	CJR	1
Tetrachloroethene	< 0.49	ug/l	0.49	1.5	1	8260B		10/20/2015	CJR	1
Toluene	< 0.44	ug/l	0.44	1.4	1	8260B		10/20/2015	CJR	1
1,2,4-Trichlorobenzene	< 1.7	ug/l	1.7	5.6	1	8260B		10/20/2015	CJR	1
1,2,3-Trichlorobenzene	< 2.7	ug/l	2.7	8.6	1	8260B		10/20/2015	CJR	1
1,1,1-Trichloroethane	< 0.84	ug/l	0.84	2.7	1	8260B		10/20/2015	CJR	1
1,1,2-Trichloroethane	< 0.48	ug/l	0.48	1.52	1	8260B		10/20/2015	CJR	1
Trichloroethene (TCE)	< 0.47	ug/l	0.47	1.5	1	8260B		10/20/2015	CJR	1
Trichlorofluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/20/2015	CJR	1
1,2,4-Trimethylbenzene	< 1.6	ug/l	1.6	5	1	8260B		10/20/2015	CJR	1
1,3,5-Trimethylbenzene	< 1.5	ug/l	1.5	4.8	1	8260B		10/20/2015	CJR	1
Vinyl Chloride	< 0.17	ug/l	0.17	0.54	1	8260B		10/20/2015	CJR	1
m&p-Xylene	< 2.2	ug/l	2.2	6.9	1	8260B		10/20/2015	CJR	1
o-Xylene	< 0.9	ug/l	0.9	2.9	1	8260B		10/20/2015	CJR	1
SUR - 1,2-Dichloroethane-d4	108	REC %			1	8260B		10/20/2015	CJR	1
SUR - 4-Bromofluorobenzene	102	REC %			1	8260B		10/20/2015	CJR	1
SUR - Dibromofluoromethane	109	REC %			1	8260B		10/20/2015	CJR	1
SUR - Toluene-d8	93	REC %			1	8260B		10/20/2015	CJR	1

Project Name NEWTON GRAVEL PIT **Invoice #** E29883
Project # 60135471

Lab Code 529883CC
Sample ID 3515 HECKER
Sample Matrix Water
Sample Date 10/14/2015

	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		10/20/2015	CJR	1
Bromobenzene	< 0.48	ug/l	0.48	1.5	1	8260B		10/20/2015	CJR	1
Bromodichloromethane	< 0.46	ug/l	0.46	1.5	1	8260B		10/20/2015	CJR	1
Bromoform	< 0.46	ug/l	0.46	1.5	1	8260B		10/20/2015	CJR	1
tert-Butylbenzene	< 1.1	ug/l	1.1	3.4	1	8260B		10/20/2015	CJR	1
sec-Butylbenzene	< 1.2	ug/l	1.2	3.8	1	8260B		10/20/2015	CJR	1
n-Butylbenzene	< 1	ug/l	1	3.3	1	8260B		10/20/2015	CJR	1
Carbon Tetrachloride	< 0.51	ug/l	0.51	1.6	1	8260B		10/20/2015	CJR	1
Chlorobenzene	< 0.46	ug/l	0.46	1.4	1	8260B		10/20/2015	CJR	1
Chloroethane	< 0.65	ug/l	0.65	2.1	1	8260B		10/20/2015	CJR	1
Chloroform	< 0.43	ug/l	0.43	1.4	1	8260B		10/20/2015	CJR	1
Chloromethane	< 1.9	ug/l	1.9	6	1	8260B		10/20/2015	CJR	1
2-Chlorotoluene	< 0.4	ug/l	0.4	1.3	1	8260B		10/20/2015	CJR	1
4-Chlorotoluene	< 0.63	ug/l	0.63	2	1	8260B		10/20/2015	CJR	1
1,2-Dibromo-3-chloropropane	< 1.4	ug/l	1.4	4.5	1	8260B		10/20/2015	CJR	1
Dibromochloromethane	< 0.45	ug/l	0.45	1.4	1	8260B		10/20/2015	CJR	1
1,4-Dichlorobenzene	< 0.49	ug/l	0.49	1.6	1	8260B		10/20/2015	CJR	1
1,3-Dichlorobenzene	< 0.52	ug/l	0.52	1.6	1	8260B		10/20/2015	CJR	1
1,2-Dichlorobenzene	< 0.46	ug/l	0.46	1.5	1	8260B		10/20/2015	CJR	1
Dichlorodifluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/20/2015	CJR	1
1,2-Dichloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/20/2015	CJR	1
1,1-Dichloroethane	< 1.1	ug/l	1.1	3.6	1	8260B		10/20/2015	CJR	1
1,1-Dichloroethene	< 0.65	ug/l	0.65	2.1	1	8260B		10/20/2015	CJR	1
cis-1,2-Dichloroethene	< 0.45	ug/l	0.45	1.4	1	8260B		10/20/2015	CJR	1
trans-1,2-Dichloroethene	< 0.54	ug/l	0.54	1.7	1	8260B		10/20/2015	CJR	1
1,2-Dichloropropane	< 0.43	ug/l	0.43	1.37	1	8260B		10/20/2015	CJR	1
2,2-Dichloropropane	< 3.1	ug/l	3.1	9.8	1	8260B		10/20/2015	CJR	1
1,3-Dichloropropane	< 0.42	ug/l	0.42	1.3	1	8260B		10/20/2015	CJR	1
Di-isopropyl ether	< 0.44	ug/l	0.44	1.4	1	8260B		10/20/2015	CJR	1
EDB (1,2-Dibromoethane)	< 0.63	ug/l	0.63	2	1	8260B		10/20/2015	CJR	1
Ethylbenzene	< 0.71	ug/l	0.71	2.3	1	8260B		10/20/2015	CJR	1
Hexachlorobutadiene	< 2.2	ug/l	2.2	7.1	1	8260B		10/20/2015	CJR	1
Isopropylbenzene	< 0.82	ug/l	0.82	2.6	1	8260B		10/20/2015	CJR	1
p-Isopropyltoluene	< 1.1	ug/l	1.1	3.5	1	8260B		10/20/2015	CJR	1
Methylene chloride	< 1.3	ug/l	1.3	4.2	1	8260B		10/20/2015	CJR	1
Methyl tert-butyl ether (MTBE)	< 1.1	ug/l	1.1	3.7	1	8260B		10/20/2015	CJR	1
Naphthalene	< 1.6	ug/l	1.6	5.2	1	8260B		10/20/2015	CJR	1
n-Propylbenzene	< 0.77	ug/l	0.77	2.4	1	8260B		10/20/2015	CJR	1
1,1,2,2-Tetrachloroethane	< 0.52	ug/l	0.52	1.7	1	8260B		10/20/2015	CJR	1
1,1,1,2-Tetrachloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/20/2015	CJR	1
Tetrachloroethene	< 0.49	ug/l	0.49	1.5	1	8260B		10/20/2015	CJR	1
Toluene	< 0.44	ug/l	0.44	1.4	1	8260B		10/20/2015	CJR	1
1,2,4-Trichlorobenzene	< 1.7	ug/l	1.7	5.6	1	8260B		10/20/2015	CJR	1
1,2,3-Trichlorobenzene	< 2.7	ug/l	2.7	8.6	1	8260B		10/20/2015	CJR	1
1,1,1-Trichloroethane	< 0.84	ug/l	0.84	2.7	1	8260B		10/20/2015	CJR	1
1,1,2-Trichloroethane	< 0.48	ug/l	0.48	1.52	1	8260B		10/20/2015	CJR	1
Trichloroethene (TCE)	< 0.47	ug/l	0.47	1.5	1	8260B		10/20/2015	CJR	1
Trichlorofluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/20/2015	CJR	1
1,2,4-Trimethylbenzene	< 1.6	ug/l	1.6	5	1	8260B		10/20/2015	CJR	1
1,3,5-Trimethylbenzene	< 1.5	ug/l	1.5	4.8	1	8260B		10/20/2015	CJR	1
Vinyl Chloride	< 0.17	ug/l	0.17	0.54	1	8260B		10/20/2015	CJR	1
m&p-Xylene	< 2.2	ug/l	2.2	6.9	1	8260B		10/20/2015	CJR	1
o-Xylene	< 0.9	ug/l	0.9	2.9	1	8260B		10/20/2015	CJR	1
SUR - 1,2-Dichloroethane-d4	118	REC %			1	8260B		10/20/2015	CJR	1
SUR - 4-Bromofluorobenzene	103	REC %			1	8260B		10/20/2015	CJR	1
SUR - Dibromofluoromethane	114	REC %			1	8260B		10/20/2015	CJR	1
SUR - Toluene-d8	90	REC %			1	8260B		10/20/2015	CJR	1

Project Name NEWTON GRAVEL PIT **Invoice #** E29883
Project # 60135471

Lab Code 529883DD
Sample ID 3518 HECKER
Sample Matrix Water
Sample Date 10/14/2015

	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		10/20/2015	CJR	1
Bromobenzene	< 0.48	ug/l	0.48	1.5	1	8260B		10/20/2015	CJR	1
Bromodichloromethane	< 0.46	ug/l	0.46	1.5	1	8260B		10/20/2015	CJR	1
Bromoform	< 0.46	ug/l	0.46	1.5	1	8260B		10/20/2015	CJR	1
tert-Butylbenzene	< 1.1	ug/l	1.1	3.4	1	8260B		10/20/2015	CJR	1
sec-Butylbenzene	< 1.2	ug/l	1.2	3.8	1	8260B		10/20/2015	CJR	1
n-Butylbenzene	< 1	ug/l	1	3.3	1	8260B		10/20/2015	CJR	1
Carbon Tetrachloride	< 0.51	ug/l	0.51	1.6	1	8260B		10/20/2015	CJR	1
Chlorobenzene	< 0.46	ug/l	0.46	1.4	1	8260B		10/20/2015	CJR	1
Chloroethane	< 0.65	ug/l	0.65	2.1	1	8260B		10/20/2015	CJR	1
Chloroform	< 0.43	ug/l	0.43	1.4	1	8260B		10/20/2015	CJR	1
Chloromethane	< 1.9	ug/l	1.9	6	1	8260B		10/20/2015	CJR	1
2-Chlorotoluene	< 0.4	ug/l	0.4	1.3	1	8260B		10/20/2015	CJR	1
4-Chlorotoluene	< 0.63	ug/l	0.63	2	1	8260B		10/20/2015	CJR	1
1,2-Dibromo-3-chloropropane	< 1.4	ug/l	1.4	4.5	1	8260B		10/20/2015	CJR	1
Dibromochloromethane	< 0.45	ug/l	0.45	1.4	1	8260B		10/20/2015	CJR	1
1,4-Dichlorobenzene	< 0.49	ug/l	0.49	1.6	1	8260B		10/20/2015	CJR	1
1,3-Dichlorobenzene	< 0.52	ug/l	0.52	1.6	1	8260B		10/20/2015	CJR	1
1,2-Dichlorobenzene	< 0.46	ug/l	0.46	1.5	1	8260B		10/20/2015	CJR	1
Dichlorodifluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/20/2015	CJR	1
1,2-Dichloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/20/2015	CJR	1
1,1-Dichloroethane	< 1.1	ug/l	1.1	3.6	1	8260B		10/20/2015	CJR	1
1,1-Dichloroethene	< 0.65	ug/l	0.65	2.1	1	8260B		10/20/2015	CJR	1
cis-1,2-Dichloroethene	< 0.45	ug/l	0.45	1.4	1	8260B		10/20/2015	CJR	1
trans-1,2-Dichloroethene	< 0.54	ug/l	0.54	1.7	1	8260B		10/20/2015	CJR	1
1,2-Dichloropropane	< 0.43	ug/l	0.43	1.37	1	8260B		10/20/2015	CJR	1
2,2-Dichloropropane	< 3.1	ug/l	3.1	9.8	1	8260B		10/20/2015	CJR	1
1,3-Dichloropropane	< 0.42	ug/l	0.42	1.3	1	8260B		10/20/2015	CJR	1
Di-isopropyl ether	< 0.44	ug/l	0.44	1.4	1	8260B		10/20/2015	CJR	1
EDB (1,2-Dibromoethane)	< 0.63	ug/l	0.63	2	1	8260B		10/20/2015	CJR	1
Ethylbenzene	< 0.71	ug/l	0.71	2.3	1	8260B		10/20/2015	CJR	1
Hexachlorobutadiene	< 2.2	ug/l	2.2	7.1	1	8260B		10/20/2015	CJR	1
Isopropylbenzene	< 0.82	ug/l	0.82	2.6	1	8260B		10/20/2015	CJR	1
p-Isopropyltoluene	< 1.1	ug/l	1.1	3.5	1	8260B		10/20/2015	CJR	1
Methylene chloride	< 1.3	ug/l	1.3	4.2	1	8260B		10/20/2015	CJR	1
Methyl tert-butyl ether (MTBE)	< 1.1	ug/l	1.1	3.7	1	8260B		10/20/2015	CJR	1
Naphthalene	< 1.6	ug/l	1.6	5.2	1	8260B		10/20/2015	CJR	1
n-Propylbenzene	< 0.77	ug/l	0.77	2.4	1	8260B		10/20/2015	CJR	1
1,1,2,2-Tetrachloroethane	< 0.52	ug/l	0.52	1.7	1	8260B		10/20/2015	CJR	1
1,1,1,2-Tetrachloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/20/2015	CJR	1
Tetrachloroethene	< 0.49	ug/l	0.49	1.5	1	8260B		10/20/2015	CJR	1
Toluene	< 0.44	ug/l	0.44	1.4	1	8260B		10/20/2015	CJR	1
1,2,4-Trichlorobenzene	< 1.7	ug/l	1.7	5.6	1	8260B		10/20/2015	CJR	1
1,2,3-Trichlorobenzene	< 2.7	ug/l	2.7	8.6	1	8260B		10/20/2015	CJR	1
1,1,1-Trichloroethane	< 0.84	ug/l	0.84	2.7	1	8260B		10/20/2015	CJR	1
1,1,2-Trichloroethane	< 0.48	ug/l	0.48	1.52	1	8260B		10/20/2015	CJR	1
Trichloroethene (TCE)	< 0.47	ug/l	0.47	1.5	1	8260B		10/20/2015	CJR	1
Trichlorofluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/20/2015	CJR	1
1,2,4-Trimethylbenzene	< 1.6	ug/l	1.6	5	1	8260B		10/20/2015	CJR	1
1,3,5-Trimethylbenzene	< 1.5	ug/l	1.5	4.8	1	8260B		10/20/2015	CJR	1
Vinyl Chloride	< 0.17	ug/l	0.17	0.54	1	8260B		10/20/2015	CJR	1
m&p-Xylene	< 2.2	ug/l	2.2	6.9	1	8260B		10/20/2015	CJR	1
o-Xylene	< 0.9	ug/l	0.9	2.9	1	8260B		10/20/2015	CJR	1
SUR - Toluene-d8	92	REC %			1	8260B		10/20/2015	CJR	1
SUR - 1,2-Dichloroethane-d4	103	REC %			1	8260B		10/20/2015	CJR	1
SUR - 4-Bromofluorobenzene	109	REC %			1	8260B		10/20/2015	CJR	1
SUR - Dibromofluoromethane	107	REC %			1	8260B		10/20/2015	CJR	1

Project Name NEWTON GRAVEL PIT **Invoice #** E29883
Project # 60135471

Lab Code 529883EE
Sample ID 3121 HECKER
Sample Matrix Water
Sample Date 10/14/2015

	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		10/20/2015	CJR	1
Bromobenzene	< 0.48	ug/l	0.48	1.5	1	8260B		10/20/2015	CJR	1
Bromodichloromethane	< 0.46	ug/l	0.46	1.5	1	8260B		10/20/2015	CJR	1
Bromoform	< 0.46	ug/l	0.46	1.5	1	8260B		10/20/2015	CJR	1
tert-Butylbenzene	< 1.1	ug/l	1.1	3.4	1	8260B		10/20/2015	CJR	1
sec-Butylbenzene	< 1.2	ug/l	1.2	3.8	1	8260B		10/20/2015	CJR	1
n-Butylbenzene	< 1	ug/l	1	3.3	1	8260B		10/20/2015	CJR	1
Carbon Tetrachloride	< 0.51	ug/l	0.51	1.6	1	8260B		10/20/2015	CJR	1
Chlorobenzene	< 0.46	ug/l	0.46	1.4	1	8260B		10/20/2015	CJR	1
Chloroethane	< 0.65	ug/l	0.65	2.1	1	8260B		10/20/2015	CJR	1
Chloroform	< 0.43	ug/l	0.43	1.4	1	8260B		10/20/2015	CJR	1
Chloromethane	< 1.9	ug/l	1.9	6	1	8260B		10/20/2015	CJR	1
2-Chlorotoluene	< 0.4	ug/l	0.4	1.3	1	8260B		10/20/2015	CJR	1
4-Chlorotoluene	< 0.63	ug/l	0.63	2	1	8260B		10/20/2015	CJR	1
1,2-Dibromo-3-chloropropane	< 1.4	ug/l	1.4	4.5	1	8260B		10/20/2015	CJR	1
Dibromochloromethane	< 0.45	ug/l	0.45	1.4	1	8260B		10/20/2015	CJR	1
1,4-Dichlorobenzene	< 0.49	ug/l	0.49	1.6	1	8260B		10/20/2015	CJR	1
1,3-Dichlorobenzene	< 0.52	ug/l	0.52	1.6	1	8260B		10/20/2015	CJR	1
1,2-Dichlorobenzene	< 0.46	ug/l	0.46	1.5	1	8260B		10/20/2015	CJR	1
Dichlorodifluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/20/2015	CJR	1
1,2-Dichloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/20/2015	CJR	1
1,1-Dichloroethane	< 1.1	ug/l	1.1	3.6	1	8260B		10/20/2015	CJR	1
1,1-Dichloroethene	< 0.65	ug/l	0.65	2.1	1	8260B		10/20/2015	CJR	1
cis-1,2-Dichloroethene	< 0.45	ug/l	0.45	1.4	1	8260B		10/20/2015	CJR	1
trans-1,2-Dichloroethene	< 0.54	ug/l	0.54	1.7	1	8260B		10/20/2015	CJR	1
1,2-Dichloropropane	< 0.43	ug/l	0.43	1.37	1	8260B		10/20/2015	CJR	1
2,2-Dichloropropane	< 3.1	ug/l	3.1	9.8	1	8260B		10/20/2015	CJR	1
1,3-Dichloropropane	< 0.42	ug/l	0.42	1.3	1	8260B		10/20/2015	CJR	1
Di-isopropyl ether	< 0.44	ug/l	0.44	1.4	1	8260B		10/20/2015	CJR	1
EDB (1,2-Dibromoethane)	< 0.63	ug/l	0.63	2	1	8260B		10/20/2015	CJR	1
Ethylbenzene	< 0.71	ug/l	0.71	2.3	1	8260B		10/20/2015	CJR	1
Hexachlorobutadiene	< 2.2	ug/l	2.2	7.1	1	8260B		10/20/2015	CJR	1
Isopropylbenzene	< 0.82	ug/l	0.82	2.6	1	8260B		10/20/2015	CJR	1
p-Isopropyltoluene	< 1.1	ug/l	1.1	3.5	1	8260B		10/20/2015	CJR	1
Methylene chloride	< 1.3	ug/l	1.3	4.2	1	8260B		10/20/2015	CJR	1
Methyl tert-butyl ether (MTBE)	< 1.1	ug/l	1.1	3.7	1	8260B		10/20/2015	CJR	1
Naphthalene	< 1.6	ug/l	1.6	5.2	1	8260B		10/20/2015	CJR	1
n-Propylbenzene	< 0.77	ug/l	0.77	2.4	1	8260B		10/20/2015	CJR	1
1,1,2,2-Tetrachloroethane	< 0.52	ug/l	0.52	1.7	1	8260B		10/20/2015	CJR	1
1,1,1,2-Tetrachloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/20/2015	CJR	1
Tetrachloroethene	< 0.49	ug/l	0.49	1.5	1	8260B		10/20/2015	CJR	1
Toluene	< 0.44	ug/l	0.44	1.4	1	8260B		10/20/2015	CJR	1
1,2,4-Trichlorobenzene	< 1.7	ug/l	1.7	5.6	1	8260B		10/20/2015	CJR	1
1,2,3-Trichlorobenzene	< 2.7	ug/l	2.7	8.6	1	8260B		10/20/2015	CJR	1
1,1,1-Trichloroethane	< 0.84	ug/l	0.84	2.7	1	8260B		10/20/2015	CJR	1
1,1,2-Trichloroethane	< 0.48	ug/l	0.48	1.52	1	8260B		10/20/2015	CJR	1
Trichloroethene (TCE)	< 0.47	ug/l	0.47	1.5	1	8260B		10/20/2015	CJR	1
Trichlorofluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/20/2015	CJR	1
1,2,4-Trimethylbenzene	< 1.6	ug/l	1.6	5	1	8260B		10/20/2015	CJR	1
1,3,5-Trimethylbenzene	< 1.5	ug/l	1.5	4.8	1	8260B		10/20/2015	CJR	1
Vinyl Chloride	< 0.17	ug/l	0.17	0.54	1	8260B		10/20/2015	CJR	1
m&p-Xylene	< 2.2	ug/l	2.2	6.9	1	8260B		10/20/2015	CJR	1
o-Xylene	< 0.9	ug/l	0.9	2.9	1	8260B		10/20/2015	CJR	1
SUR - Toluene-d8	91	REC %			1	8260B		10/20/2015	CJR	1
SUR - 1,2-Dichloroethane-d4	99	REC %			1	8260B		10/20/2015	CJR	1
SUR - 4-Bromofluorobenzene	100	REC %			1	8260B		10/20/2015	CJR	1
SUR - Dibromofluoromethane	106	REC %			1	8260B		10/20/2015	CJR	1

Project Name NEWTON GRAVEL PIT **Invoice #** E29883
Project # 60135471

Lab Code 529883FF
Sample ID 3523 CTH CR
Sample Matrix Water
Sample Date 10/14/2015

	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		10/20/2015	CJR	1
Bromobenzene	< 0.48	ug/l	0.48	1.5	1	8260B		10/20/2015	CJR	1
Bromodichloromethane	< 0.46	ug/l	0.46	1.5	1	8260B		10/20/2015	CJR	1
Bromoform	< 0.46	ug/l	0.46	1.5	1	8260B		10/20/2015	CJR	1
tert-Butylbenzene	< 1.1	ug/l	1.1	3.4	1	8260B		10/20/2015	CJR	1
sec-Butylbenzene	< 1.2	ug/l	1.2	3.8	1	8260B		10/20/2015	CJR	1
n-Butylbenzene	< 1	ug/l	1	3.3	1	8260B		10/20/2015	CJR	1
Carbon Tetrachloride	< 0.51	ug/l	0.51	1.6	1	8260B		10/20/2015	CJR	1
Chlorobenzene	< 0.46	ug/l	0.46	1.4	1	8260B		10/20/2015	CJR	1
Chloroethane	< 0.65	ug/l	0.65	2.1	1	8260B		10/20/2015	CJR	1
Chloroform	< 0.43	ug/l	0.43	1.4	1	8260B		10/20/2015	CJR	1
Chloromethane	< 1.9	ug/l	1.9	6	1	8260B		10/20/2015	CJR	1
2-Chlorotoluene	< 0.4	ug/l	0.4	1.3	1	8260B		10/20/2015	CJR	1
4-Chlorotoluene	< 0.63	ug/l	0.63	2	1	8260B		10/20/2015	CJR	1
1,2-Dibromo-3-chloropropane	< 1.4	ug/l	1.4	4.5	1	8260B		10/20/2015	CJR	1
Dibromochloromethane	< 0.45	ug/l	0.45	1.4	1	8260B		10/20/2015	CJR	1
1,4-Dichlorobenzene	< 0.49	ug/l	0.49	1.6	1	8260B		10/20/2015	CJR	1
1,3-Dichlorobenzene	< 0.52	ug/l	0.52	1.6	1	8260B		10/20/2015	CJR	1
1,2-Dichlorobenzene	< 0.46	ug/l	0.46	1.5	1	8260B		10/20/2015	CJR	1
Dichlorodifluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/20/2015	CJR	1
1,2-Dichloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/20/2015	CJR	1
1,1-Dichloroethane	< 1.1	ug/l	1.1	3.6	1	8260B		10/20/2015	CJR	1
1,1-Dichloroethene	< 0.65	ug/l	0.65	2.1	1	8260B		10/20/2015	CJR	1
cis-1,2-Dichloroethene	< 0.45	ug/l	0.45	1.4	1	8260B		10/20/2015	CJR	1
trans-1,2-Dichloroethene	< 0.54	ug/l	0.54	1.7	1	8260B		10/20/2015	CJR	1
1,2-Dichloropropane	< 0.43	ug/l	0.43	1.37	1	8260B		10/20/2015	CJR	1
2,2-Dichloropropane	< 3.1	ug/l	3.1	9.8	1	8260B		10/20/2015	CJR	1
1,3-Dichloropropane	< 0.42	ug/l	0.42	1.3	1	8260B		10/20/2015	CJR	1
Di-isopropyl ether	< 0.44	ug/l	0.44	1.4	1	8260B		10/20/2015	CJR	1
EDB (1,2-Dibromoethane)	< 0.63	ug/l	0.63	2	1	8260B		10/20/2015	CJR	1
Ethylbenzene	< 0.71	ug/l	0.71	2.3	1	8260B		10/20/2015	CJR	1
Hexachlorobutadiene	< 2.2	ug/l	2.2	7.1	1	8260B		10/20/2015	CJR	1
Isopropylbenzene	< 0.82	ug/l	0.82	2.6	1	8260B		10/20/2015	CJR	1
p-Isopropyltoluene	< 1.1	ug/l	1.1	3.5	1	8260B		10/20/2015	CJR	1
Methylene chloride	< 1.3	ug/l	1.3	4.2	1	8260B		10/20/2015	CJR	1
Methyl tert-butyl ether (MTBE)	< 1.1	ug/l	1.1	3.7	1	8260B		10/20/2015	CJR	1
Naphthalene	< 1.6	ug/l	1.6	5.2	1	8260B		10/20/2015	CJR	1
n-Propylbenzene	< 0.77	ug/l	0.77	2.4	1	8260B		10/20/2015	CJR	1
1,1,2,2-Tetrachloroethane	< 0.52	ug/l	0.52	1.7	1	8260B		10/20/2015	CJR	1
1,1,1,2-Tetrachloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/20/2015	CJR	1
Tetrachloroethene	< 0.49	ug/l	0.49	1.5	1	8260B		10/20/2015	CJR	1
Toluene	< 0.44	ug/l	0.44	1.4	1	8260B		10/20/2015	CJR	1
1,2,4-Trichlorobenzene	< 1.7	ug/l	1.7	5.6	1	8260B		10/20/2015	CJR	1
1,2,3-Trichlorobenzene	< 2.7	ug/l	2.7	8.6	1	8260B		10/20/2015	CJR	1
1,1,1-Trichloroethane	< 0.84	ug/l	0.84	2.7	1	8260B		10/20/2015	CJR	1
1,1,2-Trichloroethane	< 0.48	ug/l	0.48	1.52	1	8260B		10/20/2015	CJR	1
Trichloroethene (TCE)	< 0.47	ug/l	0.47	1.5	1	8260B		10/20/2015	CJR	1
Trichlorofluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/20/2015	CJR	1
1,2,4-Trimethylbenzene	< 1.6	ug/l	1.6	5	1	8260B		10/20/2015	CJR	1
1,3,5-Trimethylbenzene	< 1.5	ug/l	1.5	4.8	1	8260B		10/20/2015	CJR	1
Vinyl Chloride	< 0.17	ug/l	0.17	0.54	1	8260B		10/20/2015	CJR	1
m&p-Xylene	< 2.2	ug/l	2.2	6.9	1	8260B		10/20/2015	CJR	1
o-Xylene	< 0.9	ug/l	0.9	2.9	1	8260B		10/20/2015	CJR	1
SUR - Dibromofluoromethane	109	REC %			1	8260B		10/20/2015	CJR	1
SUR - Toluene-d8	91	REC %			1	8260B		10/20/2015	CJR	1
SUR - 4-Bromofluorobenzene	106	REC %			1	8260B		10/20/2015	CJR	1
SUR - 1,2-Dichloroethane-d4	107	REC %			1	8260B		10/20/2015	CJR	1

Project Name NEWTON GRAVEL PIT **Invoice #** E29883
Project # 60135471

Lab Code 529883GG
Sample ID 3504 CTH CR
Sample Matrix Water
Sample Date 10/14/2015

	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		10/20/2015	CJR	1
Bromobenzene	< 0.48	ug/l	0.48	1.5	1	8260B		10/20/2015	CJR	1
Bromodichloromethane	< 0.46	ug/l	0.46	1.5	1	8260B		10/20/2015	CJR	1
Bromoform	< 0.46	ug/l	0.46	1.5	1	8260B		10/20/2015	CJR	1
tert-Butylbenzene	< 1.1	ug/l	1.1	3.4	1	8260B		10/20/2015	CJR	1
sec-Butylbenzene	< 1.2	ug/l	1.2	3.8	1	8260B		10/20/2015	CJR	1
n-Butylbenzene	< 1	ug/l	1	3.3	1	8260B		10/20/2015	CJR	1
Carbon Tetrachloride	< 0.51	ug/l	0.51	1.6	1	8260B		10/20/2015	CJR	1
Chlorobenzene	< 0.46	ug/l	0.46	1.4	1	8260B		10/20/2015	CJR	1
Chloroethane	< 0.65	ug/l	0.65	2.1	1	8260B		10/20/2015	CJR	1
Chloroform	< 0.43	ug/l	0.43	1.4	1	8260B		10/20/2015	CJR	1
Chloromethane	< 1.9	ug/l	1.9	6	1	8260B		10/20/2015	CJR	1
2-Chlorotoluene	< 0.4	ug/l	0.4	1.3	1	8260B		10/20/2015	CJR	1
4-Chlorotoluene	< 0.63	ug/l	0.63	2	1	8260B		10/20/2015	CJR	1
1,2-Dibromo-3-chloropropane	< 1.4	ug/l	1.4	4.5	1	8260B		10/20/2015	CJR	1
Dibromochloromethane	< 0.45	ug/l	0.45	1.4	1	8260B		10/20/2015	CJR	1
1,4-Dichlorobenzene	< 0.49	ug/l	0.49	1.6	1	8260B		10/20/2015	CJR	1
1,3-Dichlorobenzene	< 0.52	ug/l	0.52	1.6	1	8260B		10/20/2015	CJR	1
1,2-Dichlorobenzene	< 0.46	ug/l	0.46	1.5	1	8260B		10/20/2015	CJR	1
Dichlorodifluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/20/2015	CJR	1
1,2-Dichloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/20/2015	CJR	1
1,1-Dichloroethane	< 1.1	ug/l	1.1	3.6	1	8260B		10/20/2015	CJR	1
1,1-Dichloroethene	< 0.65	ug/l	0.65	2.1	1	8260B		10/20/2015	CJR	1
cis-1,2-Dichloroethene	1.27 "J"	ug/l	0.45	1.4	1	8260B		10/20/2015	CJR	1
trans-1,2-Dichloroethene	< 0.54	ug/l	0.54	1.7	1	8260B		10/20/2015	CJR	1
1,2-Dichloropropane	< 0.43	ug/l	0.43	1.37	1	8260B		10/20/2015	CJR	1
2,2-Dichloropropane	< 3.1	ug/l	3.1	9.8	1	8260B		10/20/2015	CJR	1
1,3-Dichloropropane	< 0.42	ug/l	0.42	1.3	1	8260B		10/20/2015	CJR	1
Di-isopropyl ether	< 0.44	ug/l	0.44	1.4	1	8260B		10/20/2015	CJR	1
EDB (1,2-Dibromoethane)	< 0.63	ug/l	0.63	2	1	8260B		10/20/2015	CJR	1
Ethylbenzene	< 0.71	ug/l	0.71	2.3	1	8260B		10/20/2015	CJR	1
Hexachlorobutadiene	< 2.2	ug/l	2.2	7.1	1	8260B		10/20/2015	CJR	1
Isopropylbenzene	< 0.82	ug/l	0.82	2.6	1	8260B		10/20/2015	CJR	1
p-Isopropyltoluene	< 1.1	ug/l	1.1	3.5	1	8260B		10/20/2015	CJR	1
Methylene chloride	< 1.3	ug/l	1.3	4.2	1	8260B		10/20/2015	CJR	1
Methyl tert-butyl ether (MTBE)	< 1.1	ug/l	1.1	3.7	1	8260B		10/20/2015	CJR	1
Naphthalene	< 1.6	ug/l	1.6	5.2	1	8260B		10/20/2015	CJR	1
n-Propylbenzene	< 0.77	ug/l	0.77	2.4	1	8260B		10/20/2015	CJR	1
1,1,2,2-Tetrachloroethane	< 0.52	ug/l	0.52	1.7	1	8260B		10/20/2015	CJR	1
1,1,1,2-Tetrachloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/20/2015	CJR	1
Tetrachloroethene	< 0.49	ug/l	0.49	1.5	1	8260B		10/20/2015	CJR	1
Toluene	< 0.44	ug/l	0.44	1.4	1	8260B		10/20/2015	CJR	1
1,2,4-Trichlorobenzene	< 1.7	ug/l	1.7	5.6	1	8260B		10/20/2015	CJR	1
1,2,3-Trichlorobenzene	< 2.7	ug/l	2.7	8.6	1	8260B		10/20/2015	CJR	1
1,1,1-Trichloroethane	< 0.84	ug/l	0.84	2.7	1	8260B		10/20/2015	CJR	1
1,1,2-Trichloroethane	< 0.48	ug/l	0.48	1.52	1	8260B		10/20/2015	CJR	1
Trichloroethene (TCE)	< 0.47	ug/l	0.47	1.5	1	8260B		10/20/2015	CJR	1
Trichlorofluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/20/2015	CJR	1
1,2,4-Trimethylbenzene	< 1.6	ug/l	1.6	5	1	8260B		10/20/2015	CJR	1
1,3,5-Trimethylbenzene	< 1.5	ug/l	1.5	4.8	1	8260B		10/20/2015	CJR	1
Vinyl Chloride	< 0.17	ug/l	0.17	0.54	1	8260B		10/20/2015	CJR	1
m&p-Xylene	< 2.2	ug/l	2.2	6.9	1	8260B		10/20/2015	CJR	1
o-Xylene	< 0.9	ug/l	0.9	2.9	1	8260B		10/20/2015	CJR	1
SUR - 4-Bromofluorobenzene	96	REC %			1	8260B		10/20/2015	CJR	1
SUR - Dibromofluoromethane	109	REC %			1	8260B		10/20/2015	CJR	1
SUR - 1,2-Dichloroethane-d4	113	REC %			1	8260B		10/20/2015	CJR	1
SUR - Toluene-d8	89	REC %			1	8260B		10/20/2015	CJR	1

Project Name NEWTON GRAVEL PIT **Invoice #** E29883
Project # 60135471

Lab Code 529883HH
Sample ID 3702 HECKER
Sample Matrix Water
Sample Date 10/14/2015

	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		10/20/2015	CJR	1
Bromobenzene	< 0.48	ug/l	0.48	1.5	1	8260B		10/20/2015	CJR	1
Bromodichloromethane	< 0.46	ug/l	0.46	1.5	1	8260B		10/20/2015	CJR	1
Bromoform	< 0.46	ug/l	0.46	1.5	1	8260B		10/20/2015	CJR	1
tert-Butylbenzene	< 1.1	ug/l	1.1	3.4	1	8260B		10/20/2015	CJR	1
sec-Butylbenzene	< 1.2	ug/l	1.2	3.8	1	8260B		10/20/2015	CJR	1
n-Butylbenzene	< 1	ug/l	1	3.3	1	8260B		10/20/2015	CJR	1
Carbon Tetrachloride	< 0.51	ug/l	0.51	1.6	1	8260B		10/20/2015	CJR	1
Chlorobenzene	< 0.46	ug/l	0.46	1.4	1	8260B		10/20/2015	CJR	1
Chloroethane	< 0.65	ug/l	0.65	2.1	1	8260B		10/20/2015	CJR	1
Chloroform	< 0.43	ug/l	0.43	1.4	1	8260B		10/20/2015	CJR	1
Chloromethane	< 1.9	ug/l	1.9	6	1	8260B		10/20/2015	CJR	1
2-Chlorotoluene	< 0.4	ug/l	0.4	1.3	1	8260B		10/20/2015	CJR	1
4-Chlorotoluene	< 0.63	ug/l	0.63	2	1	8260B		10/20/2015	CJR	1
1,2-Dibromo-3-chloropropane	< 1.4	ug/l	1.4	4.5	1	8260B		10/20/2015	CJR	1
Dibromochloromethane	< 0.45	ug/l	0.45	1.4	1	8260B		10/20/2015	CJR	1
1,4-Dichlorobenzene	< 0.49	ug/l	0.49	1.6	1	8260B		10/20/2015	CJR	1
1,3-Dichlorobenzene	< 0.52	ug/l	0.52	1.6	1	8260B		10/20/2015	CJR	1
1,2-Dichlorobenzene	< 0.46	ug/l	0.46	1.5	1	8260B		10/20/2015	CJR	1
Dichlorodifluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/20/2015	CJR	1
1,2-Dichloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/20/2015	CJR	1
1,1-Dichloroethane	< 1.1	ug/l	1.1	3.6	1	8260B		10/20/2015	CJR	1
1,1-Dichloroethene	< 0.65	ug/l	0.65	2.1	1	8260B		10/20/2015	CJR	1
cis-1,2-Dichloroethene	0.48 "J"	ug/l	0.45	1.4	1	8260B		10/20/2015	CJR	1
trans-1,2-Dichloroethene	< 0.54	ug/l	0.54	1.7	1	8260B		10/20/2015	CJR	1
1,2-Dichloropropane	< 0.43	ug/l	0.43	1.37	1	8260B		10/20/2015	CJR	1
2,2-Dichloropropane	< 3.1	ug/l	3.1	9.8	1	8260B		10/20/2015	CJR	1
1,3-Dichloropropane	< 0.42	ug/l	0.42	1.3	1	8260B		10/20/2015	CJR	1
Di-isopropyl ether	< 0.44	ug/l	0.44	1.4	1	8260B		10/20/2015	CJR	1
EDB (1,2-Dibromoethane)	< 0.63	ug/l	0.63	2	1	8260B		10/20/2015	CJR	1
Ethylbenzene	< 0.71	ug/l	0.71	2.3	1	8260B		10/20/2015	CJR	1
Hexachlorobutadiene	< 2.2	ug/l	2.2	7.1	1	8260B		10/20/2015	CJR	1
Isopropylbenzene	< 0.82	ug/l	0.82	2.6	1	8260B		10/20/2015	CJR	1
p-Isopropyltoluene	< 1.1	ug/l	1.1	3.5	1	8260B		10/20/2015	CJR	1
Methylene chloride	< 1.3	ug/l	1.3	4.2	1	8260B		10/20/2015	CJR	1
Methyl tert-butyl ether (MTBE)	< 1.1	ug/l	1.1	3.7	1	8260B		10/20/2015	CJR	1
Naphthalene	< 1.6	ug/l	1.6	5.2	1	8260B		10/20/2015	CJR	1
n-Propylbenzene	< 0.77	ug/l	0.77	2.4	1	8260B		10/20/2015	CJR	1
1,1,2,2-Tetrachloroethane	< 0.52	ug/l	0.52	1.7	1	8260B		10/20/2015	CJR	1
1,1,1,2-Tetrachloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/20/2015	CJR	1
Tetrachloroethene	< 0.49	ug/l	0.49	1.5	1	8260B		10/20/2015	CJR	1
Toluene	< 0.44	ug/l	0.44	1.4	1	8260B		10/20/2015	CJR	1
1,2,4-Trichlorobenzene	< 1.7	ug/l	1.7	5.6	1	8260B		10/20/2015	CJR	1
1,2,3-Trichlorobenzene	< 2.7	ug/l	2.7	8.6	1	8260B		10/20/2015	CJR	1
1,1,1-Trichloroethane	< 0.84	ug/l	0.84	2.7	1	8260B		10/20/2015	CJR	1
1,1,2-Trichloroethane	< 0.48	ug/l	0.48	1.52	1	8260B		10/20/2015	CJR	1
Trichloroethene (TCE)	< 0.47	ug/l	0.47	1.5	1	8260B		10/20/2015	CJR	1
Trichlorofluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/20/2015	CJR	1
1,2,4-Trimethylbenzene	< 1.6	ug/l	1.6	5	1	8260B		10/20/2015	CJR	1
1,3,5-Trimethylbenzene	< 1.5	ug/l	1.5	4.8	1	8260B		10/20/2015	CJR	1
Vinyl Chloride	< 0.17	ug/l	0.17	0.54	1	8260B		10/20/2015	CJR	1
m&p-Xylene	< 2.2	ug/l	2.2	6.9	1	8260B		10/20/2015	CJR	1
o-Xylene	< 0.9	ug/l	0.9	2.9	1	8260B		10/20/2015	CJR	1
SUR - 1,2-Dichloroethane-d4	92	REC %			1	8260B		10/20/2015	CJR	1
SUR - Toluene-d8	92	REC %			1	8260B		10/20/2015	CJR	1
SUR - 4-Bromofluorobenzene	105	REC %			1	8260B		10/20/2015	CJR	1
SUR - Dibromofluoromethane	105	REC %			1	8260B		10/20/2015	CJR	1

Project Name NEWTON GRAVEL PIT **Invoice #** E29883
Project # 60135471

Lab Code 529883II
Sample ID 3702 HECKER DUP
Sample Matrix Water
Sample Date 10/14/2015

	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		10/20/2015	CJR	1
Bromobenzene	< 0.48	ug/l	0.48	1.5	1	8260B		10/20/2015	CJR	1
Bromodichloromethane	< 0.46	ug/l	0.46	1.5	1	8260B		10/20/2015	CJR	1
Bromoform	< 0.46	ug/l	0.46	1.5	1	8260B		10/20/2015	CJR	1
tert-Butylbenzene	< 1.1	ug/l	1.1	3.4	1	8260B		10/20/2015	CJR	1
sec-Butylbenzene	< 1.2	ug/l	1.2	3.8	1	8260B		10/20/2015	CJR	1
n-Butylbenzene	< 1	ug/l	1	3.3	1	8260B		10/20/2015	CJR	1
Carbon Tetrachloride	< 0.51	ug/l	0.51	1.6	1	8260B		10/20/2015	CJR	1
Chlorobenzene	< 0.46	ug/l	0.46	1.4	1	8260B		10/20/2015	CJR	1
Chloroethane	< 0.65	ug/l	0.65	2.1	1	8260B		10/20/2015	CJR	1
Chloroform	< 0.43	ug/l	0.43	1.4	1	8260B		10/20/2015	CJR	1
Chloromethane	< 1.9	ug/l	1.9	6	1	8260B		10/20/2015	CJR	1
2-Chlorotoluene	< 0.4	ug/l	0.4	1.3	1	8260B		10/20/2015	CJR	1
4-Chlorotoluene	< 0.63	ug/l	0.63	2	1	8260B		10/20/2015	CJR	1
1,2-Dibromo-3-chloropropane	< 1.4	ug/l	1.4	4.5	1	8260B		10/20/2015	CJR	1
Dibromochloromethane	< 0.45	ug/l	0.45	1.4	1	8260B		10/20/2015	CJR	1
1,4-Dichlorobenzene	< 0.49	ug/l	0.49	1.6	1	8260B		10/20/2015	CJR	1
1,3-Dichlorobenzene	< 0.52	ug/l	0.52	1.6	1	8260B		10/20/2015	CJR	1
1,2-Dichlorobenzene	< 0.46	ug/l	0.46	1.5	1	8260B		10/20/2015	CJR	1
Dichlorodifluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/20/2015	CJR	1
1,2-Dichloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/20/2015	CJR	1
1,1-Dichloroethane	< 1.1	ug/l	1.1	3.6	1	8260B		10/20/2015	CJR	1
1,1-Dichloroethene	< 0.65	ug/l	0.65	2.1	1	8260B		10/20/2015	CJR	1
cis-1,2-Dichloroethene	0.73 "J"	ug/l	0.45	1.4	1	8260B		10/20/2015	CJR	1
trans-1,2-Dichloroethene	< 0.54	ug/l	0.54	1.7	1	8260B		10/20/2015	CJR	1
1,2-Dichloropropane	< 0.43	ug/l	0.43	1.37	1	8260B		10/20/2015	CJR	1
2,2-Dichloropropane	< 3.1	ug/l	3.1	9.8	1	8260B		10/20/2015	CJR	1
1,3-Dichloropropane	< 0.42	ug/l	0.42	1.3	1	8260B		10/20/2015	CJR	1
Di-isopropyl ether	< 0.44	ug/l	0.44	1.4	1	8260B		10/20/2015	CJR	1
EDB (1,2-Dibromoethane)	< 0.63	ug/l	0.63	2	1	8260B		10/20/2015	CJR	1
Ethylbenzene	< 0.71	ug/l	0.71	2.3	1	8260B		10/20/2015	CJR	1
Hexachlorobutadiene	< 2.2	ug/l	2.2	7.1	1	8260B		10/20/2015	CJR	1
Isopropylbenzene	< 0.82	ug/l	0.82	2.6	1	8260B		10/20/2015	CJR	1
p-Isopropyltoluene	< 1.1	ug/l	1.1	3.5	1	8260B		10/20/2015	CJR	1
Methylene chloride	< 1.3	ug/l	1.3	4.2	1	8260B		10/20/2015	CJR	1
Methyl tert-butyl ether (MTBE)	< 1.1	ug/l	1.1	3.7	1	8260B		10/20/2015	CJR	1
Naphthalene	< 1.6	ug/l	1.6	5.2	1	8260B		10/20/2015	CJR	1
n-Propylbenzene	< 0.77	ug/l	0.77	2.4	1	8260B		10/20/2015	CJR	1
1,1,2,2-Tetrachloroethane	< 0.52	ug/l	0.52	1.7	1	8260B		10/20/2015	CJR	1
1,1,1,2-Tetrachloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/20/2015	CJR	1
Tetrachloroethene	< 0.49	ug/l	0.49	1.5	1	8260B		10/20/2015	CJR	1
Toluene	< 0.44	ug/l	0.44	1.4	1	8260B		10/20/2015	CJR	1
1,2,4-Trichlorobenzene	< 1.7	ug/l	1.7	5.6	1	8260B		10/20/2015	CJR	1
1,2,3-Trichlorobenzene	< 2.7	ug/l	2.7	8.6	1	8260B		10/20/2015	CJR	1
1,1,1-Trichloroethane	< 0.84	ug/l	0.84	2.7	1	8260B		10/20/2015	CJR	1
1,1,2-Trichloroethane	< 0.48	ug/l	0.48	1.52	1	8260B		10/20/2015	CJR	1
Trichloroethene (TCE)	< 0.47	ug/l	0.47	1.5	1	8260B		10/20/2015	CJR	1
Trichlorofluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/20/2015	CJR	1
1,2,4-Trimethylbenzene	< 1.6	ug/l	1.6	5	1	8260B		10/20/2015	CJR	1
1,3,5-Trimethylbenzene	< 1.5	ug/l	1.5	4.8	1	8260B		10/20/2015	CJR	1
Vinyl Chloride	< 0.17	ug/l	0.17	0.54	1	8260B		10/20/2015	CJR	1
m&p-Xylene	< 2.2	ug/l	2.2	6.9	1	8260B		10/20/2015	CJR	1
o-Xylene	< 0.9	ug/l	0.9	2.9	1	8260B		10/20/2015	CJR	1
SUR - 1,2-Dichloroethane-d4	105	REC %			1	8260B		10/20/2015	CJR	1
SUR - Toluene-d8	91	REC %			1	8260B		10/20/2015	CJR	1
SUR - 4-Bromofluorobenzene	95	REC %			1	8260B		10/20/2015	CJR	1
SUR - Dibromofluoromethane	117	REC %			1	8260B		10/20/2015	CJR	1

Project Name NEWTON GRAVEL PIT **Invoice #** E29883
Project # 60135471

Lab Code 529883JJ
Sample ID 4101 CTH CR
Sample Matrix Water
Sample Date 10/14/2015

	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		10/20/2015	CJR	1
Bromobenzene	< 0.48	ug/l	0.48	1.5	1	8260B		10/20/2015	CJR	1
Bromodichloromethane	< 0.46	ug/l	0.46	1.5	1	8260B		10/20/2015	CJR	1
Bromoform	< 0.46	ug/l	0.46	1.5	1	8260B		10/20/2015	CJR	1
tert-Butylbenzene	< 1.1	ug/l	1.1	3.4	1	8260B		10/20/2015	CJR	1
sec-Butylbenzene	< 1.2	ug/l	1.2	3.8	1	8260B		10/20/2015	CJR	1
n-Butylbenzene	< 1	ug/l	1	3.3	1	8260B		10/20/2015	CJR	1
Carbon Tetrachloride	< 0.51	ug/l	0.51	1.6	1	8260B		10/20/2015	CJR	1
Chlorobenzene	< 0.46	ug/l	0.46	1.4	1	8260B		10/20/2015	CJR	1
Chloroethane	< 0.65	ug/l	0.65	2.1	1	8260B		10/20/2015	CJR	1
Chloroform	< 0.43	ug/l	0.43	1.4	1	8260B		10/20/2015	CJR	1
Chloromethane	< 1.9	ug/l	1.9	6	1	8260B		10/20/2015	CJR	1
2-Chlorotoluene	< 0.4	ug/l	0.4	1.3	1	8260B		10/20/2015	CJR	1
4-Chlorotoluene	< 0.63	ug/l	0.63	2	1	8260B		10/20/2015	CJR	1
1,2-Dibromo-3-chloropropane	< 1.4	ug/l	1.4	4.5	1	8260B		10/20/2015	CJR	1
Dibromochloromethane	< 0.45	ug/l	0.45	1.4	1	8260B		10/20/2015	CJR	1
1,4-Dichlorobenzene	< 0.49	ug/l	0.49	1.6	1	8260B		10/20/2015	CJR	1
1,3-Dichlorobenzene	< 0.52	ug/l	0.52	1.6	1	8260B		10/20/2015	CJR	1
1,2-Dichlorobenzene	< 0.46	ug/l	0.46	1.5	1	8260B		10/20/2015	CJR	1
Dichlorodifluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/20/2015	CJR	1
1,2-Dichloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/20/2015	CJR	1
1,1-Dichloroethane	< 1.1	ug/l	1.1	3.6	1	8260B		10/20/2015	CJR	1
1,1-Dichloroethene	< 0.65	ug/l	0.65	2.1	1	8260B		10/20/2015	CJR	1
cis-1,2-Dichloroethene	< 0.45	ug/l	0.45	1.4	1	8260B		10/20/2015	CJR	1
trans-1,2-Dichloroethene	< 0.54	ug/l	0.54	1.7	1	8260B		10/20/2015	CJR	1
1,2-Dichloropropane	< 0.43	ug/l	0.43	1.37	1	8260B		10/20/2015	CJR	1
2,2-Dichloropropane	< 3.1	ug/l	3.1	9.8	1	8260B		10/20/2015	CJR	1
1,3-Dichloropropane	< 0.42	ug/l	0.42	1.3	1	8260B		10/20/2015	CJR	1
Di-isopropyl ether	< 0.44	ug/l	0.44	1.4	1	8260B		10/20/2015	CJR	1
EDB (1,2-Dibromoethane)	< 0.63	ug/l	0.63	2	1	8260B		10/20/2015	CJR	1
Ethylbenzene	< 0.71	ug/l	0.71	2.3	1	8260B		10/20/2015	CJR	1
Hexachlorobutadiene	< 2.2	ug/l	2.2	7.1	1	8260B		10/20/2015	CJR	1
Isopropylbenzene	< 0.82	ug/l	0.82	2.6	1	8260B		10/20/2015	CJR	1
p-Isopropyltoluene	< 1.1	ug/l	1.1	3.5	1	8260B		10/20/2015	CJR	1
Methylene chloride	< 1.3	ug/l	1.3	4.2	1	8260B		10/20/2015	CJR	1
Methyl tert-butyl ether (MTBE)	< 1.1	ug/l	1.1	3.7	1	8260B		10/20/2015	CJR	1
Naphthalene	< 1.6	ug/l	1.6	5.2	1	8260B		10/20/2015	CJR	1
n-Propylbenzene	< 0.77	ug/l	0.77	2.4	1	8260B		10/20/2015	CJR	1
1,1,2,2-Tetrachloroethane	< 0.52	ug/l	0.52	1.7	1	8260B		10/20/2015	CJR	1
1,1,1,2-Tetrachloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/20/2015	CJR	1
Tetrachloroethene	< 0.49	ug/l	0.49	1.5	1	8260B		10/20/2015	CJR	1
Toluene	< 0.44	ug/l	0.44	1.4	1	8260B		10/20/2015	CJR	1
1,2,4-Trichlorobenzene	< 1.7	ug/l	1.7	5.6	1	8260B		10/20/2015	CJR	1
1,2,3-Trichlorobenzene	< 2.7	ug/l	2.7	8.6	1	8260B		10/20/2015	CJR	1
1,1,1-Trichloroethane	< 0.84	ug/l	0.84	2.7	1	8260B		10/20/2015	CJR	1
1,1,2-Trichloroethane	< 0.48	ug/l	0.48	1.52	1	8260B		10/20/2015	CJR	1
Trichloroethene (TCE)	< 0.47	ug/l	0.47	1.5	1	8260B		10/20/2015	CJR	1
Trichlorofluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/20/2015	CJR	1
1,2,4-Trimethylbenzene	< 1.6	ug/l	1.6	5	1	8260B		10/20/2015	CJR	1
1,3,5-Trimethylbenzene	< 1.5	ug/l	1.5	4.8	1	8260B		10/20/2015	CJR	1
Vinyl Chloride	< 0.17	ug/l	0.17	0.54	1	8260B		10/20/2015	CJR	1
m&p-Xylene	< 2.2	ug/l	2.2	6.9	1	8260B		10/20/2015	CJR	1
o-Xylene	< 0.9	ug/l	0.9	2.9	1	8260B		10/20/2015	CJR	1
SUR - Toluene-d8	94	REC %			1	8260B		10/20/2015	CJR	1
SUR - Dibromofluoromethane	112	REC %			1	8260B		10/20/2015	CJR	1
SUR - 1,2-Dichloroethane-d4	110	REC %			1	8260B		10/20/2015	CJR	1
SUR - 4-Bromofluorobenzene	100	REC %			1	8260B		10/20/2015	CJR	1

Project Name NEWTON GRAVEL PIT **Invoice #** E29883
Project # 60135471

Lab Code 529883KK
Sample ID 3626 CTH CR
Sample Matrix Water
Sample Date 10/14/2015

	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		10/20/2015	CJR	1
Bromobenzene	< 0.48	ug/l	0.48	1.5	1	8260B		10/20/2015	CJR	1
Bromodichloromethane	< 0.46	ug/l	0.46	1.5	1	8260B		10/20/2015	CJR	1
Bromoform	< 0.46	ug/l	0.46	1.5	1	8260B		10/20/2015	CJR	1
tert-Butylbenzene	< 1.1	ug/l	1.1	3.4	1	8260B		10/20/2015	CJR	1
sec-Butylbenzene	< 1.2	ug/l	1.2	3.8	1	8260B		10/20/2015	CJR	1
n-Butylbenzene	< 1	ug/l	1	3.3	1	8260B		10/20/2015	CJR	1
Carbon Tetrachloride	< 0.51	ug/l	0.51	1.6	1	8260B		10/20/2015	CJR	1
Chlorobenzene	< 0.46	ug/l	0.46	1.4	1	8260B		10/20/2015	CJR	1
Chloroethane	< 0.65	ug/l	0.65	2.1	1	8260B		10/20/2015	CJR	1
Chloroform	< 0.43	ug/l	0.43	1.4	1	8260B		10/20/2015	CJR	1
Chloromethane	< 1.9	ug/l	1.9	6	1	8260B		10/20/2015	CJR	1
2-Chlorotoluene	< 0.4	ug/l	0.4	1.3	1	8260B		10/20/2015	CJR	1
4-Chlorotoluene	< 0.63	ug/l	0.63	2	1	8260B		10/20/2015	CJR	1
1,2-Dibromo-3-chloropropane	< 1.4	ug/l	1.4	4.5	1	8260B		10/20/2015	CJR	1
Dibromochloromethane	< 0.45	ug/l	0.45	1.4	1	8260B		10/20/2015	CJR	1
1,4-Dichlorobenzene	< 0.49	ug/l	0.49	1.6	1	8260B		10/20/2015	CJR	1
1,3-Dichlorobenzene	< 0.52	ug/l	0.52	1.6	1	8260B		10/20/2015	CJR	1
1,2-Dichlorobenzene	< 0.46	ug/l	0.46	1.5	1	8260B		10/20/2015	CJR	1
Dichlorodifluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/20/2015	CJR	1
1,2-Dichloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/20/2015	CJR	1
1,1-Dichloroethane	< 1.1	ug/l	1.1	3.6	1	8260B		10/20/2015	CJR	1
1,1-Dichloroethene	< 0.65	ug/l	0.65	2.1	1	8260B		10/20/2015	CJR	1
cis-1,2-Dichloroethene	< 0.45	ug/l	0.45	1.4	1	8260B		10/20/2015	CJR	1
trans-1,2-Dichloroethene	< 0.54	ug/l	0.54	1.7	1	8260B		10/20/2015	CJR	1
1,2-Dichloropropane	< 0.43	ug/l	0.43	1.37	1	8260B		10/20/2015	CJR	1
2,2-Dichloropropane	< 3.1	ug/l	3.1	9.8	1	8260B		10/20/2015	CJR	1
1,3-Dichloropropane	< 0.42	ug/l	0.42	1.3	1	8260B		10/20/2015	CJR	1
Di-isopropyl ether	< 0.44	ug/l	0.44	1.4	1	8260B		10/20/2015	CJR	1
EDB (1,2-Dibromoethane)	< 0.63	ug/l	0.63	2	1	8260B		10/20/2015	CJR	1
Ethylbenzene	< 0.71	ug/l	0.71	2.3	1	8260B		10/20/2015	CJR	1
Hexachlorobutadiene	< 2.2	ug/l	2.2	7.1	1	8260B		10/20/2015	CJR	1
Isopropylbenzene	< 0.82	ug/l	0.82	2.6	1	8260B		10/20/2015	CJR	1
p-Isopropyltoluene	< 1.1	ug/l	1.1	3.5	1	8260B		10/20/2015	CJR	1
Methylene chloride	< 1.3	ug/l	1.3	4.2	1	8260B		10/20/2015	CJR	1
Methyl tert-butyl ether (MTBE)	< 1.1	ug/l	1.1	3.7	1	8260B		10/20/2015	CJR	1
Naphthalene	< 1.6	ug/l	1.6	5.2	1	8260B		10/20/2015	CJR	1
n-Propylbenzene	< 0.77	ug/l	0.77	2.4	1	8260B		10/20/2015	CJR	1
1,1,2,2-Tetrachloroethane	< 0.52	ug/l	0.52	1.7	1	8260B		10/20/2015	CJR	1
1,1,1,2-Tetrachloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/20/2015	CJR	1
Tetrachloroethene	< 0.49	ug/l	0.49	1.5	1	8260B		10/20/2015	CJR	1
Toluene	< 0.44	ug/l	0.44	1.4	1	8260B		10/20/2015	CJR	1
1,2,4-Trichlorobenzene	< 1.7	ug/l	1.7	5.6	1	8260B		10/20/2015	CJR	1
1,2,3-Trichlorobenzene	< 2.7	ug/l	2.7	8.6	1	8260B		10/20/2015	CJR	1
1,1,1-Trichloroethane	< 0.84	ug/l	0.84	2.7	1	8260B		10/20/2015	CJR	1
1,1,2-Trichloroethane	< 0.48	ug/l	0.48	1.52	1	8260B		10/20/2015	CJR	1
Trichloroethene (TCE)	< 0.47	ug/l	0.47	1.5	1	8260B		10/20/2015	CJR	1
Trichlorofluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/20/2015	CJR	1
1,2,4-Trimethylbenzene	< 1.6	ug/l	1.6	5	1	8260B		10/20/2015	CJR	1
1,3,5-Trimethylbenzene	< 1.5	ug/l	1.5	4.8	1	8260B		10/20/2015	CJR	1
Vinyl Chloride	< 0.17	ug/l	0.17	0.54	1	8260B		10/20/2015	CJR	1
m&p-Xylene	< 2.2	ug/l	2.2	6.9	1	8260B		10/20/2015	CJR	1
o-Xylene	< 0.9	ug/l	0.9	2.9	1	8260B		10/20/2015	CJR	1
SUR - 4-Bromofluorobenzene	102	REC %			1	8260B		10/20/2015	CJR	1
SUR - Dibromofluoromethane	97	REC %			1	8260B		10/20/2015	CJR	1
SUR - Toluene-d8	94	REC %			1	8260B		10/20/2015	CJR	1
SUR - 1,2-Dichloroethane-d4	104	REC %			1	8260B		10/20/2015	CJR	1

Project Name NEWTON GRAVEL PIT **Invoice #** E29883
Project # 60135471

Lab Code 529883LL
Sample ID 2734 CTH CR
Sample Matrix Water
Sample Date 10/14/2015

	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		10/20/2015	CJR	1
Bromobenzene	< 0.48	ug/l	0.48	1.5	1	8260B		10/20/2015	CJR	1
Bromodichloromethane	< 0.46	ug/l	0.46	1.5	1	8260B		10/20/2015	CJR	1
Bromoform	< 0.46	ug/l	0.46	1.5	1	8260B		10/20/2015	CJR	1
tert-Butylbenzene	< 1.1	ug/l	1.1	3.4	1	8260B		10/20/2015	CJR	1
sec-Butylbenzene	< 1.2	ug/l	1.2	3.8	1	8260B		10/20/2015	CJR	1
n-Butylbenzene	< 1	ug/l	1	3.3	1	8260B		10/20/2015	CJR	1
Carbon Tetrachloride	< 0.51	ug/l	0.51	1.6	1	8260B		10/20/2015	CJR	1
Chlorobenzene	< 0.46	ug/l	0.46	1.4	1	8260B		10/20/2015	CJR	1
Chloroethane	< 0.65	ug/l	0.65	2.1	1	8260B		10/20/2015	CJR	1
Chloroform	< 0.43	ug/l	0.43	1.4	1	8260B		10/20/2015	CJR	1
Chloromethane	< 1.9	ug/l	1.9	6	1	8260B		10/20/2015	CJR	1
2-Chlorotoluene	< 0.4	ug/l	0.4	1.3	1	8260B		10/20/2015	CJR	1
4-Chlorotoluene	< 0.63	ug/l	0.63	2	1	8260B		10/20/2015	CJR	1
1,2-Dibromo-3-chloropropane	< 1.4	ug/l	1.4	4.5	1	8260B		10/20/2015	CJR	1
Dibromochloromethane	< 0.45	ug/l	0.45	1.4	1	8260B		10/20/2015	CJR	1
1,4-Dichlorobenzene	< 0.49	ug/l	0.49	1.6	1	8260B		10/20/2015	CJR	1
1,3-Dichlorobenzene	< 0.52	ug/l	0.52	1.6	1	8260B		10/20/2015	CJR	1
1,2-Dichlorobenzene	< 0.46	ug/l	0.46	1.5	1	8260B		10/20/2015	CJR	1
Dichlorodifluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/20/2015	CJR	1
1,2-Dichloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/20/2015	CJR	1
1,1-Dichloroethane	< 1.1	ug/l	1.1	3.6	1	8260B		10/20/2015	CJR	1
1,1-Dichloroethene	< 0.65	ug/l	0.65	2.1	1	8260B		10/20/2015	CJR	1
cis-1,2-Dichloroethene	0.94 "J"	ug/l	0.45	1.4	1	8260B		10/20/2015	CJR	1
trans-1,2-Dichloroethene	< 0.54	ug/l	0.54	1.7	1	8260B		10/20/2015	CJR	1
1,2-Dichloropropane	< 0.43	ug/l	0.43	1.37	1	8260B		10/20/2015	CJR	1
2,2-Dichloropropane	< 3.1	ug/l	3.1	9.8	1	8260B		10/20/2015	CJR	1
1,3-Dichloropropane	< 0.42	ug/l	0.42	1.3	1	8260B		10/20/2015	CJR	1
Di-isopropyl ether	< 0.44	ug/l	0.44	1.4	1	8260B		10/20/2015	CJR	1
EDB (1,2-Dibromoethane)	< 0.63	ug/l	0.63	2	1	8260B		10/20/2015	CJR	1
Ethylbenzene	< 0.71	ug/l	0.71	2.3	1	8260B		10/20/2015	CJR	1
Hexachlorobutadiene	< 2.2	ug/l	2.2	7.1	1	8260B		10/20/2015	CJR	1
Isopropylbenzene	< 0.82	ug/l	0.82	2.6	1	8260B		10/20/2015	CJR	1
p-Isopropyltoluene	< 1.1	ug/l	1.1	3.5	1	8260B		10/20/2015	CJR	1
Methylene chloride	< 1.3	ug/l	1.3	4.2	1	8260B		10/20/2015	CJR	1
Methyl tert-butyl ether (MTBE)	< 1.1	ug/l	1.1	3.7	1	8260B		10/20/2015	CJR	1
Naphthalene	< 1.6	ug/l	1.6	5.2	1	8260B		10/20/2015	CJR	1
n-Propylbenzene	< 0.77	ug/l	0.77	2.4	1	8260B		10/20/2015	CJR	1
1,1,2,2-Tetrachloroethane	< 0.52	ug/l	0.52	1.7	1	8260B		10/20/2015	CJR	1
1,1,1,2-Tetrachloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/20/2015	CJR	1
Tetrachloroethene	< 0.49	ug/l	0.49	1.5	1	8260B		10/20/2015	CJR	1
Toluene	< 0.44	ug/l	0.44	1.4	1	8260B		10/20/2015	CJR	1
1,2,4-Trichlorobenzene	< 1.7	ug/l	1.7	5.6	1	8260B		10/20/2015	CJR	1
1,2,3-Trichlorobenzene	< 2.7	ug/l	2.7	8.6	1	8260B		10/20/2015	CJR	1
1,1,1-Trichloroethane	< 0.84	ug/l	0.84	2.7	1	8260B		10/20/2015	CJR	1
1,1,2-Trichloroethane	< 0.48	ug/l	0.48	1.52	1	8260B		10/20/2015	CJR	1
Trichloroethene (TCE)	< 0.47	ug/l	0.47	1.5	1	8260B		10/20/2015	CJR	1
Trichlorofluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/20/2015	CJR	1
1,2,4-Trimethylbenzene	< 1.6	ug/l	1.6	5	1	8260B		10/20/2015	CJR	1
1,3,5-Trimethylbenzene	< 1.5	ug/l	1.5	4.8	1	8260B		10/20/2015	CJR	1
Vinyl Chloride	0.45 "J"	ug/l	0.17	0.54	1	8260B		10/20/2015	CJR	1
m&p-Xylene	< 2.2	ug/l	2.2	6.9	1	8260B		10/20/2015	CJR	1
o-Xylene	< 0.9	ug/l	0.9	2.9	1	8260B		10/20/2015	CJR	1
SUR - 1,2-Dichloroethane-d4	119	REC %			1	8260B		10/20/2015	CJR	1
SUR - 4-Bromofluorobenzene	101	REC %			1	8260B		10/20/2015	CJR	1
SUR - Dibromofluoromethane	112	REC %			1	8260B		10/20/2015	CJR	1
SUR - Toluene-d8	93	REC %			1	8260B		10/20/2015	CJR	1

Project Name NEWTON GRAVEL PIT **Invoice #** E29883
Project # 60135471

Lab Code 529883MM
Sample ID 3825 VIEBAHN
Sample Matrix Water
Sample Date 10/14/2015

	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		10/21/2015	CJR	1
Bromobenzene	< 0.48	ug/l	0.48	1.5	1	8260B		10/21/2015	CJR	1
Bromodichloromethane	< 0.46	ug/l	0.46	1.5	1	8260B		10/21/2015	CJR	1
Bromoform	< 0.46	ug/l	0.46	1.5	1	8260B		10/21/2015	CJR	1
tert-Butylbenzene	< 1.1	ug/l	1.1	3.4	1	8260B		10/21/2015	CJR	1
sec-Butylbenzene	< 1.2	ug/l	1.2	3.8	1	8260B		10/21/2015	CJR	1
n-Butylbenzene	< 1	ug/l	1	3.3	1	8260B		10/21/2015	CJR	1
Carbon Tetrachloride	< 0.51	ug/l	0.51	1.6	1	8260B		10/21/2015	CJR	1
Chlorobenzene	< 0.46	ug/l	0.46	1.4	1	8260B		10/21/2015	CJR	1
Chloroethane	< 0.65	ug/l	0.65	2.1	1	8260B		10/21/2015	CJR	1
Chloroform	< 0.43	ug/l	0.43	1.4	1	8260B		10/21/2015	CJR	1
Chloromethane	< 1.9	ug/l	1.9	6	1	8260B		10/21/2015	CJR	1
2-Chlorotoluene	< 0.4	ug/l	0.4	1.3	1	8260B		10/21/2015	CJR	1
4-Chlorotoluene	< 0.63	ug/l	0.63	2	1	8260B		10/21/2015	CJR	1
1,2-Dibromo-3-chloropropane	< 1.4	ug/l	1.4	4.5	1	8260B		10/21/2015	CJR	1
Dibromochloromethane	< 0.45	ug/l	0.45	1.4	1	8260B		10/21/2015	CJR	1
1,4-Dichlorobenzene	< 0.49	ug/l	0.49	1.6	1	8260B		10/21/2015	CJR	1
1,3-Dichlorobenzene	< 0.52	ug/l	0.52	1.6	1	8260B		10/21/2015	CJR	1
1,2-Dichlorobenzene	< 0.46	ug/l	0.46	1.5	1	8260B		10/21/2015	CJR	1
Dichlorodifluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/21/2015	CJR	1
1,2-Dichloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/21/2015	CJR	1
1,1-Dichloroethane	< 1.1	ug/l	1.1	3.6	1	8260B		10/21/2015	CJR	1
1,1-Dichloroethene	< 0.65	ug/l	0.65	2.1	1	8260B		10/21/2015	CJR	1
cis-1,2-Dichloroethene	< 0.45	ug/l	0.45	1.4	1	8260B		10/21/2015	CJR	1
trans-1,2-Dichloroethene	< 0.54	ug/l	0.54	1.7	1	8260B		10/21/2015	CJR	1
1,2-Dichloropropane	< 0.43	ug/l	0.43	1.37	1	8260B		10/21/2015	CJR	1
2,2-Dichloropropane	< 3.1	ug/l	3.1	9.8	1	8260B		10/21/2015	CJR	1
1,3-Dichloropropane	< 0.42	ug/l	0.42	1.3	1	8260B		10/21/2015	CJR	1
Di-isopropyl ether	< 0.44	ug/l	0.44	1.4	1	8260B		10/21/2015	CJR	1
EDB (1,2-Dibromoethane)	< 0.63	ug/l	0.63	2	1	8260B		10/21/2015	CJR	1
Ethylbenzene	< 0.71	ug/l	0.71	2.3	1	8260B		10/21/2015	CJR	1
Hexachlorobutadiene	< 2.2	ug/l	2.2	7.1	1	8260B		10/21/2015	CJR	1
Isopropylbenzene	< 0.82	ug/l	0.82	2.6	1	8260B		10/21/2015	CJR	1
p-Isopropyltoluene	< 1.1	ug/l	1.1	3.5	1	8260B		10/21/2015	CJR	1
Methylene chloride	< 1.3	ug/l	1.3	4.2	1	8260B		10/21/2015	CJR	1
Methyl tert-butyl ether (MTBE)	< 1.1	ug/l	1.1	3.7	1	8260B		10/21/2015	CJR	1
Naphthalene	< 1.6	ug/l	1.6	5.2	1	8260B		10/21/2015	CJR	1
n-Propylbenzene	< 0.77	ug/l	0.77	2.4	1	8260B		10/21/2015	CJR	1
1,1,2,2-Tetrachloroethane	< 0.52	ug/l	0.52	1.7	1	8260B		10/21/2015	CJR	1
1,1,1,2-Tetrachloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/21/2015	CJR	1
Tetrachloroethene	< 0.49	ug/l	0.49	1.5	1	8260B		10/21/2015	CJR	1
Toluene	< 0.44	ug/l	0.44	1.4	1	8260B		10/21/2015	CJR	1
1,2,4-Trichlorobenzene	< 1.7	ug/l	1.7	5.6	1	8260B		10/21/2015	CJR	1
1,2,3-Trichlorobenzene	< 2.7	ug/l	2.7	8.6	1	8260B		10/21/2015	CJR	1
1,1,1-Trichloroethane	< 0.84	ug/l	0.84	2.7	1	8260B		10/21/2015	CJR	1
1,1,2-Trichloroethane	< 0.48	ug/l	0.48	1.52	1	8260B		10/21/2015	CJR	1
Trichloroethene (TCE)	< 0.47	ug/l	0.47	1.5	1	8260B		10/21/2015	CJR	1
Trichlorofluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/21/2015	CJR	1
1,2,4-Trimethylbenzene	< 1.6	ug/l	1.6	5	1	8260B		10/21/2015	CJR	1
1,3,5-Trimethylbenzene	< 1.5	ug/l	1.5	4.8	1	8260B		10/21/2015	CJR	1
Vinyl Chloride	< 0.17	ug/l	0.17	0.54	1	8260B		10/21/2015	CJR	1
m&p-Xylene	< 2.2	ug/l	2.2	6.9	1	8260B		10/21/2015	CJR	1
o-Xylene	< 0.9	ug/l	0.9	2.9	1	8260B		10/21/2015	CJR	1
SUR - 1,2-Dichloroethane-d4	115	REC %			1	8260B		10/21/2015	CJR	1
SUR - 4-Bromofluorobenzene	97	REC %			1	8260B		10/21/2015	CJR	1
SUR - Dibromofluoromethane	111	REC %			1	8260B		10/21/2015	CJR	1
SUR - Toluene-d8	95	REC %			1	8260B		10/21/2015	CJR	1

Project Name NEWTON GRAVEL PIT **Invoice #** E29883
Project # 60135471

Lab Code 529883NN
Sample ID 3027 ORCHARD
Sample Matrix Water
Sample Date 10/14/2015

	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		10/21/2015	CJR	1
Bromobenzene	< 0.48	ug/l	0.48	1.5	1	8260B		10/21/2015	CJR	1
Bromodichloromethane	< 0.46	ug/l	0.46	1.5	1	8260B		10/21/2015	CJR	1
Bromoform	< 0.46	ug/l	0.46	1.5	1	8260B		10/21/2015	CJR	1
tert-Butylbenzene	< 1.1	ug/l	1.1	3.4	1	8260B		10/21/2015	CJR	1
sec-Butylbenzene	< 1.2	ug/l	1.2	3.8	1	8260B		10/21/2015	CJR	1
n-Butylbenzene	< 1	ug/l	1	3.3	1	8260B		10/21/2015	CJR	1
Carbon Tetrachloride	< 0.51	ug/l	0.51	1.6	1	8260B		10/21/2015	CJR	1
Chlorobenzene	< 0.46	ug/l	0.46	1.4	1	8260B		10/21/2015	CJR	1
Chloroethane	< 0.65	ug/l	0.65	2.1	1	8260B		10/21/2015	CJR	1
Chloroform	< 0.43	ug/l	0.43	1.4	1	8260B		10/21/2015	CJR	1
Chloromethane	< 1.9	ug/l	1.9	6	1	8260B		10/21/2015	CJR	1
2-Chlorotoluene	< 0.4	ug/l	0.4	1.3	1	8260B		10/21/2015	CJR	1
4-Chlorotoluene	< 0.63	ug/l	0.63	2	1	8260B		10/21/2015	CJR	1
1,2-Dibromo-3-chloropropane	< 1.4	ug/l	1.4	4.5	1	8260B		10/21/2015	CJR	1
Dibromochloromethane	< 0.45	ug/l	0.45	1.4	1	8260B		10/21/2015	CJR	1
1,4-Dichlorobenzene	< 0.49	ug/l	0.49	1.6	1	8260B		10/21/2015	CJR	1
1,3-Dichlorobenzene	< 0.52	ug/l	0.52	1.6	1	8260B		10/21/2015	CJR	1
1,2-Dichlorobenzene	< 0.46	ug/l	0.46	1.5	1	8260B		10/21/2015	CJR	1
Dichlorodifluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/21/2015	CJR	1
1,2-Dichloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/21/2015	CJR	1
1,1-Dichloroethane	< 1.1	ug/l	1.1	3.6	1	8260B		10/21/2015	CJR	1
1,1-Dichloroethene	< 0.65	ug/l	0.65	2.1	1	8260B		10/21/2015	CJR	1
cis-1,2-Dichloroethene	0.59 "J"	ug/l	0.45	1.4	1	8260B		10/21/2015	CJR	1
trans-1,2-Dichloroethene	< 0.54	ug/l	0.54	1.7	1	8260B		10/21/2015	CJR	1
1,2-Dichloropropane	< 0.43	ug/l	0.43	1.37	1	8260B		10/21/2015	CJR	1
2,2-Dichloropropane	< 3.1	ug/l	3.1	9.8	1	8260B		10/21/2015	CJR	1
1,3-Dichloropropane	< 0.42	ug/l	0.42	1.3	1	8260B		10/21/2015	CJR	1
Di-isopropyl ether	< 0.44	ug/l	0.44	1.4	1	8260B		10/21/2015	CJR	1
EDB (1,2-Dibromoethane)	< 0.63	ug/l	0.63	2	1	8260B		10/21/2015	CJR	1
Ethylbenzene	< 0.71	ug/l	0.71	2.3	1	8260B		10/21/2015	CJR	1
Hexachlorobutadiene	< 2.2	ug/l	2.2	7.1	1	8260B		10/21/2015	CJR	1
Isopropylbenzene	< 0.82	ug/l	0.82	2.6	1	8260B		10/21/2015	CJR	1
p-Isopropyltoluene	< 1.1	ug/l	1.1	3.5	1	8260B		10/21/2015	CJR	1
Methylene chloride	< 1.3	ug/l	1.3	4.2	1	8260B		10/21/2015	CJR	1
Methyl tert-butyl ether (MTBE)	< 1.1	ug/l	1.1	3.7	1	8260B		10/21/2015	CJR	1
Naphthalene	< 1.6	ug/l	1.6	5.2	1	8260B		10/21/2015	CJR	1
n-Propylbenzene	< 0.77	ug/l	0.77	2.4	1	8260B		10/21/2015	CJR	1
1,1,2,2-Tetrachloroethane	< 0.52	ug/l	0.52	1.7	1	8260B		10/21/2015	CJR	1
1,1,1,2-Tetrachloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/21/2015	CJR	1
Tetrachloroethene	< 0.49	ug/l	0.49	1.5	1	8260B		10/21/2015	CJR	1
Toluene	< 0.44	ug/l	0.44	1.4	1	8260B		10/21/2015	CJR	1
1,2,4-Trichlorobenzene	< 1.7	ug/l	1.7	5.6	1	8260B		10/21/2015	CJR	1
1,2,3-Trichlorobenzene	< 2.7	ug/l	2.7	8.6	1	8260B		10/21/2015	CJR	1
1,1,1-Trichloroethane	< 0.84	ug/l	0.84	2.7	1	8260B		10/21/2015	CJR	1
1,1,2-Trichloroethane	< 0.48	ug/l	0.48	1.52	1	8260B		10/21/2015	CJR	1
Trichloroethene (TCE)	< 0.47	ug/l	0.47	1.5	1	8260B		10/21/2015	CJR	1
Trichlorofluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/21/2015	CJR	1
1,2,4-Trimethylbenzene	< 1.6	ug/l	1.6	5	1	8260B		10/21/2015	CJR	1
1,3,5-Trimethylbenzene	< 1.5	ug/l	1.5	4.8	1	8260B		10/21/2015	CJR	1
Vinyl Chloride	< 0.17	ug/l	0.17	0.54	1	8260B		10/21/2015	CJR	1
m&p-Xylene	< 2.2	ug/l	2.2	6.9	1	8260B		10/21/2015	CJR	1
o-Xylene	< 0.9	ug/l	0.9	2.9	1	8260B		10/21/2015	CJR	1
SUR - 1,2-Dichloroethane-d4	98	REC %			1	8260B		10/21/2015	CJR	1
SUR - 4-Bromofluorobenzene	104	REC %			1	8260B		10/21/2015	CJR	1
SUR - Dibromofluoromethane	108	REC %			1	8260B		10/21/2015	CJR	1
SUR - Toluene-d8	92	REC %			1	8260B		10/21/2015	CJR	1

Project Name NEWTON GRAVEL PIT **Invoice #** E29883
Project # 60135471

Lab Code 529883OO
Sample ID 3618 CTH CR
Sample Matrix Water
Sample Date 10/14/2015

	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		10/21/2015	CJR	1
Bromobenzene	< 0.48	ug/l	0.48	1.5	1	8260B		10/21/2015	CJR	1
Bromodichloromethane	< 0.46	ug/l	0.46	1.5	1	8260B		10/21/2015	CJR	1
Bromoform	< 0.46	ug/l	0.46	1.5	1	8260B		10/21/2015	CJR	1
tert-Butylbenzene	< 1.1	ug/l	1.1	3.4	1	8260B		10/21/2015	CJR	1
sec-Butylbenzene	< 1.2	ug/l	1.2	3.8	1	8260B		10/21/2015	CJR	1
n-Butylbenzene	< 1	ug/l	1	3.3	1	8260B		10/21/2015	CJR	1
Carbon Tetrachloride	< 0.51	ug/l	0.51	1.6	1	8260B		10/21/2015	CJR	1
Chlorobenzene	< 0.46	ug/l	0.46	1.4	1	8260B		10/21/2015	CJR	1
Chloroethane	< 0.65	ug/l	0.65	2.1	1	8260B		10/21/2015	CJR	1
Chloroform	< 0.43	ug/l	0.43	1.4	1	8260B		10/21/2015	CJR	1
Chloromethane	< 1.9	ug/l	1.9	6	1	8260B		10/21/2015	CJR	1
2-Chlorotoluene	< 0.4	ug/l	0.4	1.3	1	8260B		10/21/2015	CJR	1
4-Chlorotoluene	< 0.63	ug/l	0.63	2	1	8260B		10/21/2015	CJR	1
1,2-Dibromo-3-chloropropane	< 1.4	ug/l	1.4	4.5	1	8260B		10/21/2015	CJR	1
Dibromochloromethane	< 0.45	ug/l	0.45	1.4	1	8260B		10/21/2015	CJR	1
1,4-Dichlorobenzene	< 0.49	ug/l	0.49	1.6	1	8260B		10/21/2015	CJR	1
1,3-Dichlorobenzene	< 0.52	ug/l	0.52	1.6	1	8260B		10/21/2015	CJR	1
1,2-Dichlorobenzene	< 0.46	ug/l	0.46	1.5	1	8260B		10/21/2015	CJR	1
Dichlorodifluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/21/2015	CJR	1
1,2-Dichloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/21/2015	CJR	1
1,1-Dichloroethane	< 1.1	ug/l	1.1	3.6	1	8260B		10/21/2015	CJR	1
1,1-Dichloroethene	< 0.65	ug/l	0.65	2.1	1	8260B		10/21/2015	CJR	1
cis-1,2-Dichloroethene	0.89 "J"	ug/l	0.45	1.4	1	8260B		10/21/2015	CJR	1
trans-1,2-Dichloroethene	< 0.54	ug/l	0.54	1.7	1	8260B		10/21/2015	CJR	1
1,2-Dichloropropane	< 0.43	ug/l	0.43	1.37	1	8260B		10/21/2015	CJR	1
2,2-Dichloropropane	< 3.1	ug/l	3.1	9.8	1	8260B		10/21/2015	CJR	1
1,3-Dichloropropane	< 0.42	ug/l	0.42	1.3	1	8260B		10/21/2015	CJR	1
Di-isopropyl ether	< 0.44	ug/l	0.44	1.4	1	8260B		10/21/2015	CJR	1
EDB (1,2-Dibromoethane)	< 0.63	ug/l	0.63	2	1	8260B		10/21/2015	CJR	1
Ethylbenzene	< 0.71	ug/l	0.71	2.3	1	8260B		10/21/2015	CJR	1
Hexachlorobutadiene	< 2.2	ug/l	2.2	7.1	1	8260B		10/21/2015	CJR	1
Isopropylbenzene	< 0.82	ug/l	0.82	2.6	1	8260B		10/21/2015	CJR	1
p-Isopropyltoluene	< 1.1	ug/l	1.1	3.5	1	8260B		10/21/2015	CJR	1
Methylene chloride	< 1.3	ug/l	1.3	4.2	1	8260B		10/21/2015	CJR	1
Methyl tert-butyl ether (MTBE)	< 1.1	ug/l	1.1	3.7	1	8260B		10/21/2015	CJR	1
Naphthalene	< 1.6	ug/l	1.6	5.2	1	8260B		10/21/2015	CJR	1
n-Propylbenzene	< 0.77	ug/l	0.77	2.4	1	8260B		10/21/2015	CJR	1
1,1,2,2-Tetrachloroethane	< 0.52	ug/l	0.52	1.7	1	8260B		10/21/2015	CJR	1
1,1,1,2-Tetrachloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/21/2015	CJR	1
Tetrachloroethene	< 0.49	ug/l	0.49	1.5	1	8260B		10/21/2015	CJR	1
Toluene	< 0.44	ug/l	0.44	1.4	1	8260B		10/21/2015	CJR	1
1,2,4-Trichlorobenzene	< 1.7	ug/l	1.7	5.6	1	8260B		10/21/2015	CJR	1
1,2,3-Trichlorobenzene	< 2.7	ug/l	2.7	8.6	1	8260B		10/21/2015	CJR	1
1,1,1-Trichloroethane	< 0.84	ug/l	0.84	2.7	1	8260B		10/21/2015	CJR	1
1,1,2-Trichloroethane	< 0.48	ug/l	0.48	1.52	1	8260B		10/21/2015	CJR	1
Trichloroethene (TCE)	< 0.47	ug/l	0.47	1.5	1	8260B		10/21/2015	CJR	1
Trichlorofluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/21/2015	CJR	1
1,2,4-Trimethylbenzene	< 1.6	ug/l	1.6	5	1	8260B		10/21/2015	CJR	1
1,3,5-Trimethylbenzene	< 1.5	ug/l	1.5	4.8	1	8260B		10/21/2015	CJR	1
Vinyl Chloride	< 0.17	ug/l	0.17	0.54	1	8260B		10/21/2015	CJR	1
m&p-Xylene	< 2.2	ug/l	2.2	6.9	1	8260B		10/21/2015	CJR	1
o-Xylene	< 0.9	ug/l	0.9	2.9	1	8260B		10/21/2015	CJR	1
SUR - 1,2-Dichloroethane-d4	104	REC %			1	8260B		10/21/2015	CJR	1
SUR - 4-Bromofluorobenzene	104	REC %			1	8260B		10/21/2015	CJR	1
SUR - Dibromofluoromethane	104	REC %			1	8260B		10/21/2015	CJR	1
SUR - Toluene-d8	88	REC %			1	8260B		10/21/2015	CJR	1

Project Name NEWTON GRAVEL PIT **Invoice #** E29883
Project # 60135471

Lab Code 529883PP
Sample ID 4159 SILVER
Sample Matrix Water
Sample Date 10/14/2015

	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		10/21/2015	CJR	1
Bromobenzene	< 0.48	ug/l	0.48	1.5	1	8260B		10/21/2015	CJR	1
Bromodichloromethane	< 0.46	ug/l	0.46	1.5	1	8260B		10/21/2015	CJR	1
Bromoform	< 0.46	ug/l	0.46	1.5	1	8260B		10/21/2015	CJR	1
tert-Butylbenzene	< 1.1	ug/l	1.1	3.4	1	8260B		10/21/2015	CJR	1
sec-Butylbenzene	< 1.2	ug/l	1.2	3.8	1	8260B		10/21/2015	CJR	1
n-Butylbenzene	< 1	ug/l	1	3.3	1	8260B		10/21/2015	CJR	1
Carbon Tetrachloride	< 0.51	ug/l	0.51	1.6	1	8260B		10/21/2015	CJR	1
Chlorobenzene	< 0.46	ug/l	0.46	1.4	1	8260B		10/21/2015	CJR	1
Chloroethane	< 0.65	ug/l	0.65	2.1	1	8260B		10/21/2015	CJR	1
Chloroform	< 0.43	ug/l	0.43	1.4	1	8260B		10/21/2015	CJR	1
Chloromethane	< 1.9	ug/l	1.9	6	1	8260B		10/21/2015	CJR	1
2-Chlorotoluene	< 0.4	ug/l	0.4	1.3	1	8260B		10/21/2015	CJR	1
4-Chlorotoluene	< 0.63	ug/l	0.63	2	1	8260B		10/21/2015	CJR	1
1,2-Dibromo-3-chloropropane	< 1.4	ug/l	1.4	4.5	1	8260B		10/21/2015	CJR	1
Dibromochloromethane	< 0.45	ug/l	0.45	1.4	1	8260B		10/21/2015	CJR	1
1,4-Dichlorobenzene	< 0.49	ug/l	0.49	1.6	1	8260B		10/21/2015	CJR	1
1,3-Dichlorobenzene	< 0.52	ug/l	0.52	1.6	1	8260B		10/21/2015	CJR	1
1,2-Dichlorobenzene	< 0.46	ug/l	0.46	1.5	1	8260B		10/21/2015	CJR	1
Dichlorodifluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/21/2015	CJR	1
1,2-Dichloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/21/2015	CJR	1
1,1-Dichloroethane	< 1.1	ug/l	1.1	3.6	1	8260B		10/21/2015	CJR	1
1,1-Dichloroethene	< 0.65	ug/l	0.65	2.1	1	8260B		10/21/2015	CJR	1
cis-1,2-Dichloroethene	0.55 "J"	ug/l	0.45	1.4	1	8260B		10/21/2015	CJR	1
trans-1,2-Dichloroethene	< 0.54	ug/l	0.54	1.7	1	8260B		10/21/2015	CJR	1
1,2-Dichloropropane	< 0.43	ug/l	0.43	1.37	1	8260B		10/21/2015	CJR	1
2,2-Dichloropropane	< 3.1	ug/l	3.1	9.8	1	8260B		10/21/2015	CJR	1
1,3-Dichloropropane	< 0.42	ug/l	0.42	1.3	1	8260B		10/21/2015	CJR	1
Di-isopropyl ether	< 0.44	ug/l	0.44	1.4	1	8260B		10/21/2015	CJR	1
EDB (1,2-Dibromoethane)	< 0.63	ug/l	0.63	2	1	8260B		10/21/2015	CJR	1
Ethylbenzene	< 0.71	ug/l	0.71	2.3	1	8260B		10/21/2015	CJR	1
Hexachlorobutadiene	< 2.2	ug/l	2.2	7.1	1	8260B		10/21/2015	CJR	1
Isopropylbenzene	< 0.82	ug/l	0.82	2.6	1	8260B		10/21/2015	CJR	1
p-Isopropyltoluene	< 1.1	ug/l	1.1	3.5	1	8260B		10/21/2015	CJR	1
Methylene chloride	< 1.3	ug/l	1.3	4.2	1	8260B		10/21/2015	CJR	1
Methyl tert-butyl ether (MTBE)	< 1.1	ug/l	1.1	3.7	1	8260B		10/21/2015	CJR	1
Naphthalene	< 1.6	ug/l	1.6	5.2	1	8260B		10/21/2015	CJR	1
n-Propylbenzene	< 0.77	ug/l	0.77	2.4	1	8260B		10/21/2015	CJR	1
1,1,2,2-Tetrachloroethane	< 0.52	ug/l	0.52	1.7	1	8260B		10/21/2015	CJR	1
1,1,1,2-Tetrachloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/21/2015	CJR	1
Tetrachloroethene	< 0.49	ug/l	0.49	1.5	1	8260B		10/21/2015	CJR	1
Toluene	< 0.44	ug/l	0.44	1.4	1	8260B		10/21/2015	CJR	1
1,2,4-Trichlorobenzene	< 1.7	ug/l	1.7	5.6	1	8260B		10/21/2015	CJR	1
1,2,3-Trichlorobenzene	< 2.7	ug/l	2.7	8.6	1	8260B		10/21/2015	CJR	1
1,1,1-Trichloroethane	< 0.84	ug/l	0.84	2.7	1	8260B		10/21/2015	CJR	1
1,1,2-Trichloroethane	< 0.48	ug/l	0.48	1.52	1	8260B		10/21/2015	CJR	1
Trichloroethene (TCE)	< 0.47	ug/l	0.47	1.5	1	8260B		10/21/2015	CJR	1
Trichlorofluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/21/2015	CJR	1
1,2,4-Trimethylbenzene	< 1.6	ug/l	1.6	5	1	8260B		10/21/2015	CJR	1
1,3,5-Trimethylbenzene	< 1.5	ug/l	1.5	4.8	1	8260B		10/21/2015	CJR	1
Vinyl Chloride	< 0.17	ug/l	0.17	0.54	1	8260B		10/21/2015	CJR	1
m&p-Xylene	< 2.2	ug/l	2.2	6.9	1	8260B		10/21/2015	CJR	1
o-Xylene	< 0.9	ug/l	0.9	2.9	1	8260B		10/21/2015	CJR	1
SUR - 1,2-Dichloroethane-d4	100	REC %			1	8260B		10/21/2015	CJR	1
SUR - 4-Bromofluorobenzene	102	REC %			1	8260B		10/21/2015	CJR	1
SUR - Dibromofluoromethane	109	REC %			1	8260B		10/21/2015	CJR	1
SUR - Toluene-d8	90	REC %			1	8260B		10/21/2015	CJR	1

Project Name NEWTON GRAVEL PIT **Invoice #** E29883
Project # 60135471

Lab Code 529883QQ
Sample ID 3128 ORCHARD
Sample Matrix Water
Sample Date 10/14/2015

	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		10/21/2015	CJR	1
Bromobenzene	< 0.48	ug/l	0.48	1.5	1	8260B		10/21/2015	CJR	1
Bromodichloromethane	< 0.46	ug/l	0.46	1.5	1	8260B		10/21/2015	CJR	1
Bromoform	< 0.46	ug/l	0.46	1.5	1	8260B		10/21/2015	CJR	1
tert-Butylbenzene	< 1.1	ug/l	1.1	3.4	1	8260B		10/21/2015	CJR	1
sec-Butylbenzene	< 1.2	ug/l	1.2	3.8	1	8260B		10/21/2015	CJR	1
n-Butylbenzene	< 1	ug/l	1	3.3	1	8260B		10/21/2015	CJR	1
Carbon Tetrachloride	< 0.51	ug/l	0.51	1.6	1	8260B		10/21/2015	CJR	1
Chlorobenzene	< 0.46	ug/l	0.46	1.4	1	8260B		10/21/2015	CJR	1
Chloroethane	< 0.65	ug/l	0.65	2.1	1	8260B		10/21/2015	CJR	1
Chloroform	< 0.43	ug/l	0.43	1.4	1	8260B		10/21/2015	CJR	1
Chloromethane	< 1.9	ug/l	1.9	6	1	8260B		10/21/2015	CJR	1
2-Chlorotoluene	< 0.4	ug/l	0.4	1.3	1	8260B		10/21/2015	CJR	1
4-Chlorotoluene	< 0.63	ug/l	0.63	2	1	8260B		10/21/2015	CJR	1
1,2-Dibromo-3-chloropropane	< 1.4	ug/l	1.4	4.5	1	8260B		10/21/2015	CJR	1
Dibromochloromethane	< 0.45	ug/l	0.45	1.4	1	8260B		10/21/2015	CJR	1
1,4-Dichlorobenzene	< 0.49	ug/l	0.49	1.6	1	8260B		10/21/2015	CJR	1
1,3-Dichlorobenzene	< 0.52	ug/l	0.52	1.6	1	8260B		10/21/2015	CJR	1
1,2-Dichlorobenzene	< 0.46	ug/l	0.46	1.5	1	8260B		10/21/2015	CJR	1
Dichlorodifluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/21/2015	CJR	1
1,2-Dichloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/21/2015	CJR	1
1,1-Dichloroethane	< 1.1	ug/l	1.1	3.6	1	8260B		10/21/2015	CJR	1
1,1-Dichloroethene	< 0.65	ug/l	0.65	2.1	1	8260B		10/21/2015	CJR	1
cis-1,2-Dichloroethene	< 0.45	ug/l	0.45	1.4	1	8260B		10/21/2015	CJR	1
trans-1,2-Dichloroethene	< 0.54	ug/l	0.54	1.7	1	8260B		10/21/2015	CJR	1
1,2-Dichloropropane	< 0.43	ug/l	0.43	1.37	1	8260B		10/21/2015	CJR	1
2,2-Dichloropropane	< 3.1	ug/l	3.1	9.8	1	8260B		10/21/2015	CJR	1
1,3-Dichloropropane	< 0.42	ug/l	0.42	1.3	1	8260B		10/21/2015	CJR	1
Di-isopropyl ether	< 0.44	ug/l	0.44	1.4	1	8260B		10/21/2015	CJR	1
EDB (1,2-Dibromoethane)	< 0.63	ug/l	0.63	2	1	8260B		10/21/2015	CJR	1
Ethylbenzene	< 0.71	ug/l	0.71	2.3	1	8260B		10/21/2015	CJR	1
Hexachlorobutadiene	< 2.2	ug/l	2.2	7.1	1	8260B		10/21/2015	CJR	1
Isopropylbenzene	< 0.82	ug/l	0.82	2.6	1	8260B		10/21/2015	CJR	1
p-Isopropyltoluene	< 1.1	ug/l	1.1	3.5	1	8260B		10/21/2015	CJR	1
Methylene chloride	< 1.3	ug/l	1.3	4.2	1	8260B		10/21/2015	CJR	1
Methyl tert-butyl ether (MTBE)	< 1.1	ug/l	1.1	3.7	1	8260B		10/21/2015	CJR	1
Naphthalene	< 1.6	ug/l	1.6	5.2	1	8260B		10/21/2015	CJR	1
n-Propylbenzene	< 0.77	ug/l	0.77	2.4	1	8260B		10/21/2015	CJR	1
1,1,2,2-Tetrachloroethane	< 0.52	ug/l	0.52	1.7	1	8260B		10/21/2015	CJR	1
1,1,1,2-Tetrachloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/21/2015	CJR	1
Tetrachloroethene	< 0.49	ug/l	0.49	1.5	1	8260B		10/21/2015	CJR	1
Toluene	< 0.44	ug/l	0.44	1.4	1	8260B		10/21/2015	CJR	1
1,2,4-Trichlorobenzene	< 1.7	ug/l	1.7	5.6	1	8260B		10/21/2015	CJR	1
1,2,3-Trichlorobenzene	< 2.7	ug/l	2.7	8.6	1	8260B		10/21/2015	CJR	1
1,1,1-Trichloroethane	< 0.84	ug/l	0.84	2.7	1	8260B		10/21/2015	CJR	1
1,1,2-Trichloroethane	< 0.48	ug/l	0.48	1.52	1	8260B		10/21/2015	CJR	1
Trichloroethene (TCE)	< 0.47	ug/l	0.47	1.5	1	8260B		10/21/2015	CJR	1
Trichlorofluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/21/2015	CJR	1
1,2,4-Trimethylbenzene	< 1.6	ug/l	1.6	5	1	8260B		10/21/2015	CJR	1
1,3,5-Trimethylbenzene	< 1.5	ug/l	1.5	4.8	1	8260B		10/21/2015	CJR	1
Vinyl Chloride	< 0.17	ug/l	0.17	0.54	1	8260B		10/21/2015	CJR	1
m&p-Xylene	< 2.2	ug/l	2.2	6.9	1	8260B		10/21/2015	CJR	1
o-Xylene	< 0.9	ug/l	0.9	2.9	1	8260B		10/21/2015	CJR	1
SUR - Toluene-d8	91	REC %			1	8260B		10/21/2015	CJR	1
SUR - 1,2-Dichloroethane-d4	111	REC %			1	8260B		10/21/2015	CJR	1
SUR - 4-Bromofluorobenzene	102	REC %			1	8260B		10/21/2015	CJR	1
SUR - Dibromofluoromethane	108	REC %			1	8260B		10/21/2015	CJR	1

Project Name NEWTON GRAVEL PIT **Invoice #** E29883
Project # 60135471

Lab Code 529883RR
Sample ID TRIP BLANK
Sample Matrix Water
Sample Date 10/14/2015

	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		10/21/2015	CJR	1
Bromobenzene	< 0.48	ug/l	0.48	1.5	1	8260B		10/21/2015	CJR	1
Bromodichloromethane	< 0.46	ug/l	0.46	1.5	1	8260B		10/21/2015	CJR	1
Bromoform	< 0.46	ug/l	0.46	1.5	1	8260B		10/21/2015	CJR	1
tert-Butylbenzene	< 1.1	ug/l	1.1	3.4	1	8260B		10/21/2015	CJR	1
sec-Butylbenzene	< 1.2	ug/l	1.2	3.8	1	8260B		10/21/2015	CJR	1
n-Butylbenzene	< 1	ug/l	1	3.3	1	8260B		10/21/2015	CJR	1
Carbon Tetrachloride	< 0.51	ug/l	0.51	1.6	1	8260B		10/21/2015	CJR	1
Chlorobenzene	< 0.46	ug/l	0.46	1.4	1	8260B		10/21/2015	CJR	1
Chloroethane	< 0.65	ug/l	0.65	2.1	1	8260B		10/21/2015	CJR	1
Chloroform	< 0.43	ug/l	0.43	1.4	1	8260B		10/21/2015	CJR	1
Chloromethane	< 1.9	ug/l	1.9	6	1	8260B		10/21/2015	CJR	1
2-Chlorotoluene	< 0.4	ug/l	0.4	1.3	1	8260B		10/21/2015	CJR	1
4-Chlorotoluene	< 0.63	ug/l	0.63	2	1	8260B		10/21/2015	CJR	1
1,2-Dibromo-3-chloropropane	< 1.4	ug/l	1.4	4.5	1	8260B		10/21/2015	CJR	1
Dibromochloromethane	< 0.45	ug/l	0.45	1.4	1	8260B		10/21/2015	CJR	1
1,4-Dichlorobenzene	< 0.49	ug/l	0.49	1.6	1	8260B		10/21/2015	CJR	1
1,3-Dichlorobenzene	< 0.52	ug/l	0.52	1.6	1	8260B		10/21/2015	CJR	1
1,2-Dichlorobenzene	< 0.46	ug/l	0.46	1.5	1	8260B		10/21/2015	CJR	1
Dichlorodifluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/21/2015	CJR	1
1,2-Dichloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/21/2015	CJR	1
1,1-Dichloroethane	< 1.1	ug/l	1.1	3.6	1	8260B		10/21/2015	CJR	1
1,1-Dichloroethene	< 0.65	ug/l	0.65	2.1	1	8260B		10/21/2015	CJR	1
cis-1,2-Dichloroethene	< 0.45	ug/l	0.45	1.4	1	8260B		10/21/2015	CJR	1
trans-1,2-Dichloroethene	< 0.54	ug/l	0.54	1.7	1	8260B		10/21/2015	CJR	1
1,2-Dichloropropane	< 0.43	ug/l	0.43	1.37	1	8260B		10/21/2015	CJR	1
2,2-Dichloropropane	< 3.1	ug/l	3.1	9.8	1	8260B		10/21/2015	CJR	1
1,3-Dichloropropane	< 0.42	ug/l	0.42	1.3	1	8260B		10/21/2015	CJR	1
Di-isopropyl ether	< 0.44	ug/l	0.44	1.4	1	8260B		10/21/2015	CJR	1
EDB (1,2-Dibromoethane)	< 0.63	ug/l	0.63	2	1	8260B		10/21/2015	CJR	1
Ethylbenzene	< 0.71	ug/l	0.71	2.3	1	8260B		10/21/2015	CJR	1
Hexachlorobutadiene	< 2.2	ug/l	2.2	7.1	1	8260B		10/21/2015	CJR	1
Isopropylbenzene	< 0.82	ug/l	0.82	2.6	1	8260B		10/21/2015	CJR	1
p-Isopropyltoluene	< 1.1	ug/l	1.1	3.5	1	8260B		10/21/2015	CJR	1
Methylene chloride	< 1.3	ug/l	1.3	4.2	1	8260B		10/21/2015	CJR	1
Methyl tert-butyl ether (MTBE)	< 1.1	ug/l	1.1	3.7	1	8260B		10/21/2015	CJR	1
Naphthalene	< 1.6	ug/l	1.6	5.2	1	8260B		10/21/2015	CJR	1
n-Propylbenzene	< 0.77	ug/l	0.77	2.4	1	8260B		10/21/2015	CJR	1
1,1,2,2-Tetrachloroethane	< 0.52	ug/l	0.52	1.7	1	8260B		10/21/2015	CJR	1
1,1,1,2-Tetrachloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/21/2015	CJR	1
Tetrachloroethene	< 0.49	ug/l	0.49	1.5	1	8260B		10/21/2015	CJR	1
Toluene	< 0.44	ug/l	0.44	1.4	1	8260B		10/21/2015	CJR	1
1,2,4-Trichlorobenzene	< 1.7	ug/l	1.7	5.6	1	8260B		10/21/2015	CJR	1
1,2,3-Trichlorobenzene	< 2.7	ug/l	2.7	8.6	1	8260B		10/21/2015	CJR	1
1,1,1-Trichloroethane	< 0.84	ug/l	0.84	2.7	1	8260B		10/21/2015	CJR	1
1,1,2-Trichloroethane	< 0.48	ug/l	0.48	1.52	1	8260B		10/21/2015	CJR	1
Trichloroethene (TCE)	< 0.47	ug/l	0.47	1.5	1	8260B		10/21/2015	CJR	1
Trichlorofluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/21/2015	CJR	1
1,2,4-Trimethylbenzene	< 1.6	ug/l	1.6	5	1	8260B		10/21/2015	CJR	1
1,3,5-Trimethylbenzene	< 1.5	ug/l	1.5	4.8	1	8260B		10/21/2015	CJR	1
Vinyl Chloride	< 0.17	ug/l	0.17	0.54	1	8260B		10/21/2015	CJR	1
m&p-Xylene	< 2.2	ug/l	2.2	6.9	1	8260B		10/21/2015	CJR	1
o-Xylene	< 0.9	ug/l	0.9	2.9	1	8260B		10/21/2015	CJR	1
SUR - Toluene-d8	88	REC %			1	8260B		10/21/2015	CJR	1
SUR - 1,2-Dichloroethane-d4	112	REC %			1	8260B		10/21/2015	CJR	1
SUR - 4-Bromofluorobenzene	97	REC %			1	8260B		10/21/2015	CJR	1
SUR - Dibromofluoromethane	107	REC %			1	8260B		10/21/2015	CJR	1

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

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

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

Authorized Signature

CHAIN OF STODY RECORD

Synergy Environmental Lab, Inc.

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

Chain # Nº 2920

Page 1 of 5

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 / Manitowoc, WI

Reports To: DAVE Henderson	Invoice To: DAVE Henderson
Company AECOM	Company AECOM
Address 1556 N. RiverCenter 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
5029883 A	3461 Hecker	10/13/15	825		X	N	3	GW	HCl													X		
B	2916 CTH CR	10/13/15	845		X	N	9	GW	HCl													X		
C	3815 Viebahn	10/13/15	915		X	N	3	GW	HCl													X		
D	3815 Viebahn DUP	10/13/15	915		X	N	3	GW	HCl													X		
E	4025 Viebahn	10/13/15	945		X	N	3	GW	HCl													X		
F	3303 Hecker	10/13/15	1015		X	N	3	GW	HCl													X		
G	4027 Thunder	10/13/15	1045		X	N	3	GW	HCl													X		
H	3617 Viebahn	10/13/15	1115		X	N	3	GW	HCl													X		
I	3403 CTH CR	10/13/15	1145		X	N	3	GW	HCl													X		
J	3120 CTH CR	10/13/15	1215		X	N	3	GW	HCl													X		

Analysis Requested | Other Analysis

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

Analysis per Contract

Sample Integrity - To be completed by receiving lab.

Method of Shipment:

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

Cooler seal intact upon receipt: X Yes ____ No

Relinquished By: (sign)	Time	Date	Received By: (sign)	Time	Date
	0800	10/15/15			

Received in Laboratory By: Time: 8:00 Date: 10/16/15

CHAIN OF CUSTODY RECORD

Synergy Environmental Lab, Inc.

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

Chain # No 292[illegible]

Page 2 of 5

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 / Manitowoc, WI

Reports To: Dave Henderson	Invoice To: Dave Henderson
Company AECOM	Company AECOM
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
502988[illegible]	3524 Orchard	10/13/15	1245		X	N	3	GW	HCl													X		
L	2917 CTH CR	10/13/15	1315		X	N	3	GW	HCl													X		
M	4004 Silver	10/13/15	1345		X	N	3	GW	HCl													X		
N	4002 Thunder	10/13/15	1415		X	N	3	GW	HCl													X		
O	4002 Thunder DUP	10/13/15	1415		X	N	3	GW	HCl													X		
P	3609 Hecker	10/13/15	1445		X	N	3	GW	HCl													X		
Q	3023 CTH CR	10/13/15	1545		X	N	3	GW	HCl													X		
R	3322 CTH CR	10/13/15	1615		X	N	3	GW	HCl													X		
S	4111 Thunder	10/13/15	1715		X	N	~~X~~3	GW	HCl													X		
T	2716 CTH CR	10/13/15	1745		X	N	3	GW	HCl													X		

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

Analysis per Contract

Sample Integrity - To be completed by receiving lab.

Method of Shipment:

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

Cooler seal intact upon receipt: X Yes ____ No

Relinquished By: (sign)	Time	Date	Received By: (sign)	Time	Date
	0800	10/15/15			

Received in Laboratory By: Time: 8:00 Date: 10/16/15

CHAIN OF CUSTODY RECORD

Synergy Environmental Lab, Inc.

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Chain # No 2920

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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 / Manitowoc, WI

Reports To: DAVE HENDERSON	Invoice To: DAVE Henderson
Company AECOM	Company AECOM
Address 1555 N. RiverCenter Dr. STE 214	Address SAME
City State Zip Milwaukee, WI 53212	City State Zip
Phone 414-944-6090	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
5029083 U	2717 CTH CR	10/13/15	1815		x	N	3	GW	HCl													X		
V	3327 Hecker	10/14/15	0825		x	N	~~3~~ 4	GW	HCl													x		
W	4005 Thunder	10/14/15	0845		x	N	3	GW	HCl													x		
X	4101 Thunder	10/14/15	0855		x	N	3	GW	HCl													x		
Y	3701 Victoria	10/14/15	0915		x	N	3	GW	HCl													x		
Z	3701 Victoria DUP	10/14/15	0915		x	N	3	GW	HCl													x		
AA	4101 Victoria	10/14/15	0945		x	N	3	GW	HCl													x		
BB	3921 Blackhawk	10/14/15	1015		x	N	3	GW	HCl													x		
CC	3515 Hecker	10/14/15	1045		x	N	3	GW	HCl													x		
DD	3518 Hecker	10/14/15	1115		x	N	3	GW	HCl													x		

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

Analysis per Contract

Sample Integrity - To be completed by receiving lab.

Method of Shipment: Driven

Temp. of Temp. Blank ____ °C On Ice x

Cooler seal intact upon receipt: x Yes ____ No

Relinquished By: (sign)	Time	Date	Received By: (sign)	Time	Date
	0800	10/15/15			

Received in Laboratory By: [signature] Time 8:30 Date: 10/16/15

CHAIN OF CUSTODY RECORD

Synergy Environmental Lab, Inc.

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Chain # No 2921

Page 4 of 5

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

Reports To: DAVE Henderson	Invoice To: DAVE Henderson
Company AECOM	Company AECOM
Address 1555 N. RiverCenter Dr. STE 214	Address SAME
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
529883 EE	3121 Hecker	10/14/15	1145		x	N	3	GW	HCl													X		
FF	3573 CTH CR	10/14/15	1215		X	N	3	GW	HCl													X		
GG	5504 CTH CR	10/14/15	1245		x	N	3	GW	HCl													X		
HH	3702 Hecker	10/14/15	1315		x	N	3	GW	HCl													X		
II	3702 Hecker DUP	10/14/15	1315		x	N	3	GW	HCl													X		
JJ	4101 CTH CR	10/14/15	1445		x	N	3	GW	HCl													X		
KK	3626 CTH CR	10/14/15	1515		X	N	3	GW	HCl													X		
LL	2734 CTH CR	10/14/15	1545		X	N	3	GW	HCl													X		
MM	3825 Viebahn	10/14/15	1615		X	N	3	GW	HCl													X		
NN	3027 Orchard	10/14/15	1645		x	N	3	GW	HCl													X		

Analysis Requested | Other Analysis

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

Analysis per Contract

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
	0800	10/15/15			

Received in Laboratory By: Time: 8:00 Date: 10/16/15

CHAIN OF STODY RECORD

Synergy Environmental Lab, Inc.

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

Chain # № 292

Page 5 of 5

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, Manitowoc, WI

Reports To: DAVE Henderson	Invoice To: DAVE Henderson
Company AECOM	Company SAME
Address 1555 N. River Center Dr. STE 214	Address
City State Zip Milwaukee, WI 53212	City State Zip
Phone 414-944-6190	Phone
FAX 414-944-6081	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
529883000	3618 CTH CR	10/14/15	1715		X	N	3	GW	HCl													X		
PP	4159 Silver	10/14/15	1745		X	N	3	GW	HCl													X		
GG	5128 Orchard	10/14/15	1815		X	N	3	GW	HCl													X		
RR	Trip Blank	10/2/15	0800		X	N	2	GW	HCl													X		

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

Analysis per Contract

Sample Integrity - To be completed by receiving lab.

Method of Shipment:

Temp. of Temp. Blank ___ °C On Ice: X

Cooler seal intact upon receipt: X Yes ___ No

Relinquished By: (sign)	Time	Date	Received By: (sign)	Time	Date
	0800	10/15/15			

Received in Laboratory By: Time: 8:00 Date: 10/16/15

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 *23-Oct-15*

Project Name NEWTON GRAVEL PIT
Project # 60135471
Invoice # E29910

Lab Code 5029910A
Sample ID 4010 THUNDER
Sample Matrix Water
Sample Date 10/20/2015

	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		10/22/2015	CJR	1
Bromobenzene	< 0.48	ug/l	0.48	1.5	1	8260B		10/22/2015	CJR	1
Bromodichloromethane	< 0.46	ug/l	0.46	1.5	1	8260B		10/22/2015	CJR	1
Bromoform	< 0.46	ug/l	0.46	1.5	1	8260B		10/22/2015	CJR	1
tert-Butylbenzene	< 1.1	ug/l	1.1	3.4	1	8260B		10/22/2015	CJR	1
sec-Butylbenzene	< 1.2	ug/l	1.2	3.8	1	8260B		10/22/2015	CJR	1
n-Butylbenzene	< 1	ug/l	1	3.3	1	8260B		10/22/2015	CJR	1
Carbon Tetrachloride	< 0.51	ug/l	0.51	1.6	1	8260B		10/22/2015	CJR	1
Chlorobenzene	< 0.46	ug/l	0.46	1.4	1	8260B		10/22/2015	CJR	1
Chloroethane	< 0.65	ug/l	0.65	2.1	1	8260B		10/22/2015	CJR	1
Chloroform	< 0.43	ug/l	0.43	1.4	1	8260B		10/22/2015	CJR	1
Chloromethane	< 1.9	ug/l	1.9	6	1	8260B		10/22/2015	CJR	1
2-Chlorotoluene	< 0.4	ug/l	0.4	1.3	1	8260B		10/22/2015	CJR	1
4-Chlorotoluene	< 0.63	ug/l	0.63	2	1	8260B		10/22/2015	CJR	1
1,2-Dibromo-3-chloropropane	< 1.4	ug/l	1.4	4.5	1	8260B		10/22/2015	CJR	1
Dibromochloromethane	< 0.45	ug/l	0.45	1.4	1	8260B		10/22/2015	CJR	1
1,4-Dichlorobenzene	< 0.49	ug/l	0.49	1.6	1	8260B		10/22/2015	CJR	1
1,3-Dichlorobenzene	< 0.52	ug/l	0.52	1.6	1	8260B		10/22/2015	CJR	1
1,2-Dichlorobenzene	< 0.46	ug/l	0.46	1.5	1	8260B		10/22/2015	CJR	1
Dichlorodifluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/22/2015	CJR	1
1,2-Dichloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/22/2015	CJR	1
1,1-Dichloroethane	< 1.1	ug/l	1.1	3.6	1	8260B		10/22/2015	CJR	1
1,1-Dichloroethene	< 0.65	ug/l	0.65	2.1	1	8260B		10/22/2015	CJR	1
cis-1,2-Dichloroethene	1.27 "J"	ug/l	0.45	1.4	1	8260B		10/22/2015	CJR	1
trans-1,2-Dichloroethene	< 0.54	ug/l	0.54	1.7	1	8260B		10/22/2015	CJR	1
1,2-Dichloropropane	< 0.43	ug/l	0.43	1.37	1	8260B		10/22/2015	CJR	1
2,2-Dichloropropane	< 3.1	ug/l	3.1	9.8	1	8260B		10/22/2015	CJR	1
1,3-Dichloropropane	< 0.42	ug/l	0.42	1.3	1	8260B		10/22/2015	CJR	1
Di-isopropyl ether	< 0.44	ug/l	0.44	1.4	1	8260B		10/22/2015	CJR	1
EDB (1,2-Dibromoethane)	< 0.63	ug/l	0.63	2	1	8260B		10/22/2015	CJR	1
Ethylbenzene	< 0.71	ug/l	0.71	2.3	1	8260B		10/22/2015	CJR	1
Hexachlorobutadiene	< 2.2	ug/l	2.2	7.1	1	8260B		10/22/2015	CJR	1
Isopropylbenzene	< 0.82	ug/l	0.82	2.6	1	8260B		10/22/2015	CJR	1

Project Name NEWTON GRAVEL PIT **Invoice #** E29910
Project # 60135471

Lab Code 5029910A
Sample ID 4010 THUNDER
Sample Matrix Water
Sample Date 10/20/2015

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
p-Isopropyltoluene	< 1.1	ug/l	1.1	3.5	1	8260B		10/22/2015	CJR	1
Methylene chloride	< 1.3	ug/l	1.3	4.2	1	8260B		10/22/2015	CJR	1
Methyl tert-butyl ether (MTBE)	< 1.1	ug/l	1.1	3.7	1	8260B		10/22/2015	CJR	1
Naphthalene	< 1.6	ug/l	1.6	5.2	1	8260B		10/22/2015	CJR	1
n-Propylbenzene	< 0.77	ug/l	0.77	2.4	1	8260B		10/22/2015	CJR	1
1,1,2,2-Tetrachloroethane	< 0.52	ug/l	0.52	1.7	1	8260B		10/22/2015	CJR	1
1,1,1,2-Tetrachloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/22/2015	CJR	1
Tetrachloroethene	< 0.49	ug/l	0.49	1.5	1	8260B		10/22/2015	CJR	1
Toluene	< 0.44	ug/l	0.44	1.4	1	8260B		10/22/2015	CJR	1
1,2,4-Trichlorobenzene	< 1.7	ug/l	1.7	5.6	1	8260B		10/22/2015	CJR	1
1,2,3-Trichlorobenzene	< 2.7	ug/l	2.7	8.6	1	8260B		10/22/2015	CJR	1
1,1,1-Trichloroethane	< 0.84	ug/l	0.84	2.7	1	8260B		10/22/2015	CJR	1
1,1,2-Trichloroethane	< 0.48	ug/l	0.48	1.52	1	8260B		10/22/2015	CJR	1
Trichloroethene (TCE)	< 0.47	ug/l	0.47	1.5	1	8260B		10/22/2015	CJR	1
Trichlorofluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/22/2015	CJR	1
1,2,4-Trimethylbenzene	< 1.6	ug/l	1.6	5	1	8260B		10/22/2015	CJR	1
1,3,5-Trimethylbenzene	< 1.5	ug/l	1.5	4.8	1	8260B		10/22/2015	CJR	1
Vinyl Chloride	< 0.17	ug/l	0.17	0.54	1	8260B		10/22/2015	CJR	1
m&p-Xylene	< 2.2	ug/l	2.2	6.9	1	8260B		10/22/2015	CJR	1
o-Xylene	< 0.9	ug/l	0.9	2.9	1	8260B		10/22/2015	CJR	1
SUR - Dibromofluoromethane	102	REC %			1	8260B		10/22/2015	CJR	1
SUR - 1,2-Dichloroethane-d4	95	REC %			1	8260B		10/22/2015	CJR	1
SUR - 4-Bromofluorobenzene	115	REC %			1	8260B		10/22/2015	CJR	1
SUR - Toluene-d8	102	REC %			1	8260B		10/22/2015	CJR	1

Project Name NEWTON GRAVEL PIT **Invoice #** E29910
Project # 60135471

Lab Code 5029910B
Sample ID 3817 VIEBAHN
Sample Matrix Water
Sample Date 10/20/2015

	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		10/22/2015	CJR	1
Bromobenzene	< 0.48	ug/l	0.48	1.5	1	8260B		10/22/2015	CJR	1
Bromodichloromethane	< 0.46	ug/l	0.46	1.5	1	8260B		10/22/2015	CJR	1
Bromoform	< 0.46	ug/l	0.46	1.5	1	8260B		10/22/2015	CJR	1
tert-Butylbenzene	< 1.1	ug/l	1.1	3.4	1	8260B		10/22/2015	CJR	1
sec-Butylbenzene	< 1.2	ug/l	1.2	3.8	1	8260B		10/22/2015	CJR	1
n-Butylbenzene	< 1	ug/l	1	3.3	1	8260B		10/22/2015	CJR	1
Carbon Tetrachloride	< 0.51	ug/l	0.51	1.6	1	8260B		10/22/2015	CJR	1
Chlorobenzene	< 0.46	ug/l	0.46	1.4	1	8260B		10/22/2015	CJR	1
Chloroethane	< 0.65	ug/l	0.65	2.1	1	8260B		10/22/2015	CJR	1
Chloroform	< 0.43	ug/l	0.43	1.4	1	8260B		10/22/2015	CJR	1
Chloromethane	< 1.9	ug/l	1.9	6	1	8260B		10/22/2015	CJR	1
2-Chlorotoluene	< 0.4	ug/l	0.4	1.3	1	8260B		10/22/2015	CJR	1
4-Chlorotoluene	< 0.63	ug/l	0.63	2	1	8260B		10/22/2015	CJR	1
1,2-Dibromo-3-chloropropane	< 1.4	ug/l	1.4	4.5	1	8260B		10/22/2015	CJR	1
Dibromochloromethane	< 0.45	ug/l	0.45	1.4	1	8260B		10/22/2015	CJR	1
1,4-Dichlorobenzene	< 0.49	ug/l	0.49	1.6	1	8260B		10/22/2015	CJR	1
1,3-Dichlorobenzene	< 0.52	ug/l	0.52	1.6	1	8260B		10/22/2015	CJR	1
1,2-Dichlorobenzene	< 0.46	ug/l	0.46	1.5	1	8260B		10/22/2015	CJR	1
Dichlorodifluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/22/2015	CJR	1
1,2-Dichloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/22/2015	CJR	1
1,1-Dichloroethane	< 1.1	ug/l	1.1	3.6	1	8260B		10/22/2015	CJR	1
1,1-Dichloroethene	< 0.65	ug/l	0.65	2.1	1	8260B		10/22/2015	CJR	1
cis-1,2-Dichloroethene	0.49 "J"	ug/l	0.45	1.4	1	8260B		10/22/2015	CJR	1
trans-1,2-Dichloroethene	< 0.54	ug/l	0.54	1.7	1	8260B		10/22/2015	CJR	1
1,2-Dichloropropane	< 0.43	ug/l	0.43	1.37	1	8260B		10/22/2015	CJR	1
2,2-Dichloropropane	< 3.1	ug/l	3.1	9.8	1	8260B		10/22/2015	CJR	1
1,3-Dichloropropane	< 0.42	ug/l	0.42	1.3	1	8260B		10/22/2015	CJR	1
Di-isopropyl ether	< 0.44	ug/l	0.44	1.4	1	8260B		10/22/2015	CJR	1
EDB (1,2-Dibromoethane)	< 0.63	ug/l	0.63	2	1	8260B		10/22/2015	CJR	1
Ethylbenzene	< 0.71	ug/l	0.71	2.3	1	8260B		10/22/2015	CJR	1
Hexachlorobutadiene	< 2.2	ug/l	2.2	7.1	1	8260B		10/22/2015	CJR	1
Isopropylbenzene	< 0.82	ug/l	0.82	2.6	1	8260B		10/22/2015	CJR	1
p-Isopropyltoluene	< 1.1	ug/l	1.1	3.5	1	8260B		10/22/2015	CJR	1
Methylene chloride	< 1.3	ug/l	1.3	4.2	1	8260B		10/22/2015	CJR	1
Methyl tert-butyl ether (MTBE)	< 1.1	ug/l	1.1	3.7	1	8260B		10/22/2015	CJR	1
Naphthalene	< 1.6	ug/l	1.6	5.2	1	8260B		10/22/2015	CJR	1
n-Propylbenzene	< 0.77	ug/l	0.77	2.4	1	8260B		10/22/2015	CJR	1
1,1,2,2-Tetrachloroethane	< 0.52	ug/l	0.52	1.7	1	8260B		10/22/2015	CJR	1
1,1,1,2-Tetrachloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/22/2015	CJR	1
Tetrachloroethene	< 0.49	ug/l	0.49	1.5	1	8260B		10/22/2015	CJR	1
Toluene	< 0.44	ug/l	0.44	1.4	1	8260B		10/22/2015	CJR	1
1,2,4-Trichlorobenzene	< 1.7	ug/l	1.7	5.6	1	8260B		10/22/2015	CJR	1
1,2,3-Trichlorobenzene	< 2.7	ug/l	2.7	8.6	1	8260B		10/22/2015	CJR	1
1,1,1-Trichloroethane	< 0.84	ug/l	0.84	2.7	1	8260B		10/22/2015	CJR	1
1,1,2-Trichloroethane	< 0.48	ug/l	0.48	1.52	1	8260B		10/22/2015	CJR	1
Trichloroethene (TCE)	< 0.47	ug/l	0.47	1.5	1	8260B		10/22/2015	CJR	1
Trichlorofluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/22/2015	CJR	1
1,2,4-Trimethylbenzene	< 1.6	ug/l	1.6	5	1	8260B		10/22/2015	CJR	1
1,3,5-Trimethylbenzene	< 1.5	ug/l	1.5	4.8	1	8260B		10/22/2015	CJR	1
Vinyl Chloride	< 0.17	ug/l	0.17	0.54	1	8260B		10/22/2015	CJR	1
m&p-Xylene	< 2.2	ug/l	2.2	6.9	1	8260B		10/22/2015	CJR	1
o-Xylene	< 0.9	ug/l	0.9	2.9	1	8260B		10/22/2015	CJR	1
SUR - Toluene-d8	103	REC %			1	8260B		10/22/2015	CJR	1
SUR - 1,2-Dichloroethane-d4	95	REC %			1	8260B		10/22/2015	CJR	1
SUR - 4-Bromofluorobenzene	111	REC %			1	8260B		10/22/2015	CJR	1
SUR - Dibromofluoromethane	99	REC %			1	8260B		10/22/2015	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 279

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) Jordan Jones

Project (Name / Location): Newtons Gravel Pit / Manitowoc WI

Reports To: DAVE Henderson	Invoice To: DAVE Henderson
Company AECOM	Company SAME
Address 1555 N. RiverCenter Dr. STE 214	Address
City State Zip Milwaukee, WI 53212	City State Zip
Phone 414-944-6190	Phone
FAX 414-944-6081	FAX

Lab I.D.	Sample I.D.	Collection Date	Collection Time	Comp	Grab	Filtered Y/N	No. of Containers	Sample Type (Matrix)*	Preservation
502-99101	4010 S. Thordal	10/20/15	1545		X	N	3	GW	HCl
B	3017 Viebahn	10/20/15			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	

Other Analysis

PID/FID

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

Analysis per Contract

Sample Integrity - To be completed by receiving lab.

Method of Shipment: Durham

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

Cooler seal intact upon receipt: X Yes ____ No

Relinquished By: (sign)	Time	Date	Received By: (sign)	Time	Date
Jordan Jones	0800	10/21/15			

Received in Laboratory By: Christopher Rowe Time: 8:00 Date: 10/22/15

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 *30-Oct-15*

Project Name NEWTON GRAVEL PIT **Invoice #** E29948
Project # 60135471

Lab Code 5029948A
Sample ID 4219 VIEBAHN
Sample Matrix Water
Sample Date 10/27/2015

	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		10/29/2015	CJR	1
Bromobenzene	< 0.48	ug/l	0.48	1.5	1	8260B		10/29/2015	CJR	1
Bromodichloromethane	< 0.46	ug/l	0.46	1.5	1	8260B		10/29/2015	CJR	1
Bromoform	< 0.46	ug/l	0.46	1.5	1	8260B		10/29/2015	CJR	1
tert-Butylbenzene	< 1.1	ug/l	1.1	3.4	1	8260B		10/29/2015	CJR	1
sec-Butylbenzene	< 1.2	ug/l	1.2	3.8	1	8260B		10/29/2015	CJR	1
n-Butylbenzene	< 1	ug/l	1	3.3	1	8260B		10/29/2015	CJR	1
Carbon Tetrachloride	< 0.51	ug/l	0.51	1.6	1	8260B		10/29/2015	CJR	1
Chlorobenzene	< 0.46	ug/l	0.46	1.4	1	8260B		10/29/2015	CJR	1
Chloroethane	< 0.65	ug/l	0.65	2.1	1	8260B		10/29/2015	CJR	1
Chloroform	< 0.43	ug/l	0.43	1.4	1	8260B		10/29/2015	CJR	1
Chloromethane	< 1.9	ug/l	1.9	6	1	8260B		10/29/2015	CJR	1
2-Chlorotoluene	< 0.4	ug/l	0.4	1.3	1	8260B		10/29/2015	CJR	1
4-Chlorotoluene	< 0.63	ug/l	0.63	2	1	8260B		10/29/2015	CJR	1
1,2-Dibromo-3-chloropropane	< 1.4	ug/l	1.4	4.5	1	8260B		10/29/2015	CJR	1
Dibromochloromethane	< 0.45	ug/l	0.45	1.4	1	8260B		10/29/2015	CJR	1
1,4-Dichlorobenzene	< 0.49	ug/l	0.49	1.6	1	8260B		10/29/2015	CJR	1
1,3-Dichlorobenzene	< 0.52	ug/l	0.52	1.6	1	8260B		10/29/2015	CJR	1
1,2-Dichlorobenzene	< 0.46	ug/l	0.46	1.5	1	8260B		10/29/2015	CJR	1
Dichlorodifluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/29/2015	CJR	1
1,2-Dichloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/29/2015	CJR	1
1,1-Dichloroethane	< 1.1	ug/l	1.1	3.6	1	8260B		10/29/2015	CJR	1
1,1-Dichloroethene	< 0.65	ug/l	0.65	2.1	1	8260B		10/29/2015	CJR	1
cis-1,2-Dichloroethene	< 0.45	ug/l	0.45	1.4	1	8260B		10/29/2015	CJR	1
trans-1,2-Dichloroethene	< 0.54	ug/l	0.54	1.7	1	8260B		10/29/2015	CJR	1
1,2-Dichloropropane	< 0.43	ug/l	0.43	1.37	1	8260B		10/29/2015	CJR	1
2,2-Dichloropropane	< 3.1	ug/l	3.1	9.8	1	8260B		10/29/2015	CJR	1
1,3-Dichloropropane	< 0.42	ug/l	0.42	1.3	1	8260B		10/29/2015	CJR	1
Di-isopropyl ether	< 0.44	ug/l	0.44	1.4	1	8260B		10/29/2015	CJR	1
EDB (1,2-Dibromoethane)	< 0.63	ug/l	0.63	2	1	8260B		10/29/2015	CJR	1
Ethylbenzene	< 0.71	ug/l	0.71	2.3	1	8260B		10/29/2015	CJR	1
Hexachlorobutadiene	< 2.2	ug/l	2.2	7.1	1	8260B		10/29/2015	CJR	1
Isopropylbenzene	< 0.82	ug/l	0.82	2.6	1	8260B		10/29/2015	CJR	1

Project Name NEWTON GRAVEL PIT **Invoice #** E29948
Project # 60135471

Lab Code 5029948A
Sample ID 4219 VIEBAHN
Sample Matrix Water
Sample Date 10/27/2015

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
p-Isopropyltoluene	< 1.1	ug/l	1.1	3.5	1	8260B		10/29/2015	CJR	1
Methylene chloride	< 1.3	ug/l	1.3	4.2	1	8260B		10/29/2015	CJR	1
Methyl tert-butyl ether (MTBE)	< 1.1	ug/l	1.1	3.7	1	8260B		10/29/2015	CJR	1
Naphthalene	< 1.6	ug/l	1.6	5.2	1	8260B		10/29/2015	CJR	1
n-Propylbenzene	< 0.77	ug/l	0.77	2.4	1	8260B		10/29/2015	CJR	1
1,1,2,2-Tetrachloroethane	< 0.52	ug/l	0.52	1.7	1	8260B		10/29/2015	CJR	1
1,1,1,2-Tetrachloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/29/2015	CJR	1
Tetrachloroethene	< 0.49	ug/l	0.49	1.5	1	8260B		10/29/2015	CJR	1
Toluene	< 0.44	ug/l	0.44	1.4	1	8260B		10/29/2015	CJR	1
1,2,4-Trichlorobenzene	< 1.7	ug/l	1.7	5.6	1	8260B		10/29/2015	CJR	1
1,2,3-Trichlorobenzene	< 2.7	ug/l	2.7	8.6	1	8260B		10/29/2015	CJR	1
1,1,1-Trichloroethane	< 0.84	ug/l	0.84	2.7	1	8260B		10/29/2015	CJR	1
1,1,2-Trichloroethane	< 0.48	ug/l	0.48	1.52	1	8260B		10/29/2015	CJR	1
Trichloroethene (TCE)	< 0.47	ug/l	0.47	1.5	1	8260B		10/29/2015	CJR	1
Trichlorofluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/29/2015	CJR	1
1,2,4-Trimethylbenzene	< 1.6	ug/l	1.6	5	1	8260B		10/29/2015	CJR	1
1,3,5-Trimethylbenzene	< 1.5	ug/l	1.5	4.8	1	8260B		10/29/2015	CJR	1
Vinyl Chloride	< 0.17	ug/l	0.17	0.54	1	8260B		10/29/2015	CJR	1
m&p-Xylene	< 2.2	ug/l	2.2	6.9	1	8260B		10/29/2015	CJR	1
o-Xylene	< 0.9	ug/l	0.9	2.9	1	8260B		10/29/2015	CJR	1
SUR - Toluene-d8	111	REC %			1	8260B		10/29/2015	CJR	1
SUR - Dibromofluoromethane	98	REC %			1	8260B		10/29/2015	CJR	1
SUR - 4-Bromofluorobenzene	121	REC %			1	8260B		10/29/2015	CJR	1
SUR - 1,2-Dichloroethane-d4	98	REC %			1	8260B		10/29/2015	CJR	1

Project Name NEWTON GRAVEL PIT **Invoice #** E29948
Project # 60135471

Lab Code 5029948B
Sample ID 4002 THUNDER
Sample Matrix Water
Sample Date 10/27/2015

	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		10/29/2015	CJR	1
Bromobenzene	< 0.48	ug/l	0.48	1.5	1	8260B		10/29/2015	CJR	1
Bromodichloromethane	< 0.46	ug/l	0.46	1.5	1	8260B		10/29/2015	CJR	1
Bromoform	< 0.46	ug/l	0.46	1.5	1	8260B		10/29/2015	CJR	1
tert-Butylbenzene	< 1.1	ug/l	1.1	3.4	1	8260B		10/29/2015	CJR	1
sec-Butylbenzene	< 1.2	ug/l	1.2	3.8	1	8260B		10/29/2015	CJR	1
n-Butylbenzene	< 1	ug/l	1	3.3	1	8260B		10/29/2015	CJR	1
Carbon Tetrachloride	< 0.51	ug/l	0.51	1.6	1	8260B		10/29/2015	CJR	1
Chlorobenzene	< 0.46	ug/l	0.46	1.4	1	8260B		10/29/2015	CJR	1
Chloroethane	< 0.65	ug/l	0.65	2.1	1	8260B		10/29/2015	CJR	1
Chloroform	< 0.43	ug/l	0.43	1.4	1	8260B		10/29/2015	CJR	1
Chloromethane	< 1.9	ug/l	1.9	6	1	8260B		10/29/2015	CJR	1
2-Chlorotoluene	< 0.4	ug/l	0.4	1.3	1	8260B		10/29/2015	CJR	1
4-Chlorotoluene	< 0.63	ug/l	0.63	2	1	8260B		10/29/2015	CJR	1
1,2-Dibromo-3-chloropropane	< 1.4	ug/l	1.4	4.5	1	8260B		10/29/2015	CJR	1
Dibromochloromethane	< 0.45	ug/l	0.45	1.4	1	8260B		10/29/2015	CJR	1
1,4-Dichlorobenzene	< 0.49	ug/l	0.49	1.6	1	8260B		10/29/2015	CJR	1
1,3-Dichlorobenzene	< 0.52	ug/l	0.52	1.6	1	8260B		10/29/2015	CJR	1
1,2-Dichlorobenzene	< 0.46	ug/l	0.46	1.5	1	8260B		10/29/2015	CJR	1
Dichlorodifluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/29/2015	CJR	1
1,2-Dichloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/29/2015	CJR	1
1,1-Dichloroethane	< 1.1	ug/l	1.1	3.6	1	8260B		10/29/2015	CJR	1
1,1-Dichloroethene	< 0.65	ug/l	0.65	2.1	1	8260B		10/29/2015	CJR	1
cis-1,2-Dichloroethene	1.26 "J"	ug/l	0.45	1.4	1	8260B		10/29/2015	CJR	1
trans-1,2-Dichloroethene	< 0.54	ug/l	0.54	1.7	1	8260B		10/29/2015	CJR	1
1,2-Dichloropropane	< 0.43	ug/l	0.43	1.37	1	8260B		10/29/2015	CJR	1
2,2-Dichloropropane	< 3.1	ug/l	3.1	9.8	1	8260B		10/29/2015	CJR	1
1,3-Dichloropropane	< 0.42	ug/l	0.42	1.3	1	8260B		10/29/2015	CJR	1
Di-isopropyl ether	< 0.44	ug/l	0.44	1.4	1	8260B		10/29/2015	CJR	1
EDB (1,2-Dibromoethane)	< 0.63	ug/l	0.63	2	1	8260B		10/29/2015	CJR	1
Ethylbenzene	< 0.71	ug/l	0.71	2.3	1	8260B		10/29/2015	CJR	1
Hexachlorobutadiene	< 2.2	ug/l	2.2	7.1	1	8260B		10/29/2015	CJR	1
Isopropylbenzene	< 0.82	ug/l	0.82	2.6	1	8260B		10/29/2015	CJR	1
p-Isopropyltoluene	< 1.1	ug/l	1.1	3.5	1	8260B		10/29/2015	CJR	1
Methylene chloride	< 1.3	ug/l	1.3	4.2	1	8260B		10/29/2015	CJR	1
Methyl tert-butyl ether (MTBE)	< 1.1	ug/l	1.1	3.7	1	8260B		10/29/2015	CJR	1
Naphthalene	< 1.6	ug/l	1.6	5.2	1	8260B		10/29/2015	CJR	1
n-Propylbenzene	< 0.77	ug/l	0.77	2.4	1	8260B		10/29/2015	CJR	1
1,1,2,2-Tetrachloroethane	< 0.52	ug/l	0.52	1.7	1	8260B		10/29/2015	CJR	1
1,1,1,2-Tetrachloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/29/2015	CJR	1
Tetrachloroethene	< 0.49	ug/l	0.49	1.5	1	8260B		10/29/2015	CJR	1
Toluene	< 0.44	ug/l	0.44	1.4	1	8260B		10/29/2015	CJR	1
1,2,4-Trichlorobenzene	< 1.7	ug/l	1.7	5.6	1	8260B		10/29/2015	CJR	1
1,2,3-Trichlorobenzene	< 2.7	ug/l	2.7	8.6	1	8260B		10/29/2015	CJR	1
1,1,1-Trichloroethane	< 0.84	ug/l	0.84	2.7	1	8260B		10/29/2015	CJR	1
1,1,2-Trichloroethane	< 0.48	ug/l	0.48	1.52	1	8260B		10/29/2015	CJR	1
Trichloroethene (TCE)	< 0.47	ug/l	0.47	1.5	1	8260B		10/29/2015	CJR	1
Trichlorofluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/29/2015	CJR	1
1,2,4-Trimethylbenzene	< 1.6	ug/l	1.6	5	1	8260B		10/29/2015	CJR	1
1,3,5-Trimethylbenzene	< 1.5	ug/l	1.5	4.8	1	8260B		10/29/2015	CJR	1
Vinyl Chloride	0.18 "J"	ug/l	0.17	0.54	1	8260B		10/29/2015	CJR	1
m&p-Xylene	< 2.2	ug/l	2.2	6.9	1	8260B		10/29/2015	CJR	1
o-Xylene	< 0.9	ug/l	0.9	2.9	1	8260B		10/29/2015	CJR	1
SUR - 1,2-Dichloroethane-d4	99	REC %			1	8260B		10/29/2015	CJR	1
SUR - 4-Bromofluorobenzene	122	REC %			1	8260B		10/29/2015	CJR	1
SUR - Dibromofluoromethane	98	REC %			1	8260B		10/29/2015	CJR	1
SUR - Toluene-d8	111	REC %			1	8260B		10/29/2015	CJR	1

Project Name NEWTON GRAVEL PIT **Invoice #** E29948
Project # 60135471

Lab Code 5029948C
Sample ID 2917 CTH CR
Sample Matrix Water
Sample Date 10/27/2015

	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		10/29/2015	CJR	1
Bromobenzene	< 0.48	ug/l	0.48	1.5	1	8260B		10/29/2015	CJR	1
Bromodichloromethane	< 0.46	ug/l	0.46	1.5	1	8260B		10/29/2015	CJR	1
Bromoform	< 0.46	ug/l	0.46	1.5	1	8260B		10/29/2015	CJR	1
tert-Butylbenzene	< 1.1	ug/l	1.1	3.4	1	8260B		10/29/2015	CJR	1
sec-Butylbenzene	< 1.2	ug/l	1.2	3.8	1	8260B		10/29/2015	CJR	1
n-Butylbenzene	< 1	ug/l	1	3.3	1	8260B		10/29/2015	CJR	1
Carbon Tetrachloride	< 0.51	ug/l	0.51	1.6	1	8260B		10/29/2015	CJR	1
Chlorobenzene	< 0.46	ug/l	0.46	1.4	1	8260B		10/29/2015	CJR	1
Chloroethane	< 0.65	ug/l	0.65	2.1	1	8260B		10/29/2015	CJR	1
Chloroform	< 0.43	ug/l	0.43	1.4	1	8260B		10/29/2015	CJR	1
Chloromethane	< 1.9	ug/l	1.9	6	1	8260B		10/29/2015	CJR	1
2-Chlorotoluene	< 0.4	ug/l	0.4	1.3	1	8260B		10/29/2015	CJR	1
4-Chlorotoluene	< 0.63	ug/l	0.63	2	1	8260B		10/29/2015	CJR	1
1,2-Dibromo-3-chloropropane	< 1.4	ug/l	1.4	4.5	1	8260B		10/29/2015	CJR	1
Dibromochloromethane	< 0.45	ug/l	0.45	1.4	1	8260B		10/29/2015	CJR	1
1,4-Dichlorobenzene	< 0.49	ug/l	0.49	1.6	1	8260B		10/29/2015	CJR	1
1,3-Dichlorobenzene	< 0.52	ug/l	0.52	1.6	1	8260B		10/29/2015	CJR	1
1,2-Dichlorobenzene	< 0.46	ug/l	0.46	1.5	1	8260B		10/29/2015	CJR	1
Dichlorodifluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/29/2015	CJR	1
1,2-Dichloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/29/2015	CJR	1
1,1-Dichloroethane	< 1.1	ug/l	1.1	3.6	1	8260B		10/29/2015	CJR	1
1,1-Dichloroethene	< 0.65	ug/l	0.65	2.1	1	8260B		10/29/2015	CJR	1
cis-1,2-Dichloroethene	1.41	ug/l	0.45	1.4	1	8260B		10/29/2015	CJR	1
trans-1,2-Dichloroethene	< 0.54	ug/l	0.54	1.7	1	8260B		10/29/2015	CJR	1
1,2-Dichloropropane	< 0.43	ug/l	0.43	1.37	1	8260B		10/29/2015	CJR	1
2,2-Dichloropropane	< 3.1	ug/l	3.1	9.8	1	8260B		10/29/2015	CJR	1
1,3-Dichloropropane	< 0.42	ug/l	0.42	1.3	1	8260B		10/29/2015	CJR	1
Di-isopropyl ether	< 0.44	ug/l	0.44	1.4	1	8260B		10/29/2015	CJR	1
EDB (1,2-Dibromoethane)	< 0.63	ug/l	0.63	2	1	8260B		10/29/2015	CJR	1
Ethylbenzene	< 0.71	ug/l	0.71	2.3	1	8260B		10/29/2015	CJR	1
Hexachlorobutadiene	< 2.2	ug/l	2.2	7.1	1	8260B		10/29/2015	CJR	1
Isopropylbenzene	< 0.82	ug/l	0.82	2.6	1	8260B		10/29/2015	CJR	1
p-Isopropyltoluene	< 1.1	ug/l	1.1	3.5	1	8260B		10/29/2015	CJR	1
Methylene chloride	< 1.3	ug/l	1.3	4.2	1	8260B		10/29/2015	CJR	1
Methyl tert-butyl ether (MTBE)	< 1.1	ug/l	1.1	3.7	1	8260B		10/29/2015	CJR	1
Naphthalene	< 1.6	ug/l	1.6	5.2	1	8260B		10/29/2015	CJR	1
n-Propylbenzene	< 0.77	ug/l	0.77	2.4	1	8260B		10/29/2015	CJR	1
1,1,2,2-Tetrachloroethane	< 0.52	ug/l	0.52	1.7	1	8260B		10/29/2015	CJR	1
1,1,1,2-Tetrachloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/29/2015	CJR	1
Tetrachloroethene	< 0.49	ug/l	0.49	1.5	1	8260B		10/29/2015	CJR	1
Toluene	< 0.44	ug/l	0.44	1.4	1	8260B		10/29/2015	CJR	1
1,2,4-Trichlorobenzene	< 1.7	ug/l	1.7	5.6	1	8260B		10/29/2015	CJR	1
1,2,3-Trichlorobenzene	< 2.7	ug/l	2.7	8.6	1	8260B		10/29/2015	CJR	1
1,1,1-Trichloroethane	< 0.84	ug/l	0.84	2.7	1	8260B		10/29/2015	CJR	1
1,1,2-Trichloroethane	< 0.48	ug/l	0.48	1.52	1	8260B		10/29/2015	CJR	1
Trichloroethene (TCE)	< 0.47	ug/l	0.47	1.5	1	8260B		10/29/2015	CJR	1
Trichlorofluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/29/2015	CJR	1
1,2,4-Trimethylbenzene	< 1.6	ug/l	1.6	5	1	8260B		10/29/2015	CJR	1
1,3,5-Trimethylbenzene	< 1.5	ug/l	1.5	4.8	1	8260B		10/29/2015	CJR	1
Vinyl Chloride	0.37 "J"	ug/l	0.17	0.54	1	8260B		10/29/2015	CJR	1
m&p-Xylene	< 2.2	ug/l	2.2	6.9	1	8260B		10/29/2015	CJR	1
o-Xylene	< 0.9	ug/l	0.9	2.9	1	8260B		10/29/2015	CJR	1
SUR - 1,2-Dichloroethane-d4	94	REC %			1	8260B		10/29/2015	CJR	1
SUR - Toluene-d8	100	REC %			1	8260B		10/29/2015	CJR	1
SUR - 4-Bromofluorobenzene	112	REC %			1	8260B		10/29/2015	CJR	1
SUR - Dibromofluoromethane	81	REC %			1	8260B		10/29/2015	CJR	1

Project Name NEWTON GRAVEL PIT **Invoice #** E29948
Project # 60135471

Lab Code 5029948D
Sample ID 2917 CTH CR DUP
Sample Matrix Water
Sample Date 10/27/2015

	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		10/29/2015	CJR	1
Bromobenzene	< 0.48	ug/l	0.48	1.5	1	8260B		10/29/2015	CJR	1
Bromodichloromethane	< 0.46	ug/l	0.46	1.5	1	8260B		10/29/2015	CJR	1
Bromoform	< 0.46	ug/l	0.46	1.5	1	8260B		10/29/2015	CJR	1
tert-Butylbenzene	< 1.1	ug/l	1.1	3.4	1	8260B		10/29/2015	CJR	1
sec-Butylbenzene	< 1.2	ug/l	1.2	3.8	1	8260B		10/29/2015	CJR	1
n-Butylbenzene	< 1	ug/l	1	3.3	1	8260B		10/29/2015	CJR	1
Carbon Tetrachloride	< 0.51	ug/l	0.51	1.6	1	8260B		10/29/2015	CJR	1
Chlorobenzene	< 0.46	ug/l	0.46	1.4	1	8260B		10/29/2015	CJR	1
Chloroethane	< 0.65	ug/l	0.65	2.1	1	8260B		10/29/2015	CJR	1
Chloroform	< 0.43	ug/l	0.43	1.4	1	8260B		10/29/2015	CJR	1
Chloromethane	< 1.9	ug/l	1.9	6	1	8260B		10/29/2015	CJR	1
2-Chlorotoluene	< 0.4	ug/l	0.4	1.3	1	8260B		10/29/2015	CJR	1
4-Chlorotoluene	< 0.63	ug/l	0.63	2	1	8260B		10/29/2015	CJR	1
1,2-Dibromo-3-chloropropane	< 1.4	ug/l	1.4	4.5	1	8260B		10/29/2015	CJR	1
Dibromochloromethane	< 0.45	ug/l	0.45	1.4	1	8260B		10/29/2015	CJR	1
1,4-Dichlorobenzene	< 0.49	ug/l	0.49	1.6	1	8260B		10/29/2015	CJR	1
1,3-Dichlorobenzene	< 0.52	ug/l	0.52	1.6	1	8260B		10/29/2015	CJR	1
1,2-Dichlorobenzene	< 0.46	ug/l	0.46	1.5	1	8260B		10/29/2015	CJR	1
Dichlorodifluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/29/2015	CJR	1
1,2-Dichloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/29/2015	CJR	1
1,1-Dichloroethane	< 1.1	ug/l	1.1	3.6	1	8260B		10/29/2015	CJR	1
1,1-Dichloroethene	< 0.65	ug/l	0.65	2.1	1	8260B		10/29/2015	CJR	1
cis-1,2-Dichloroethene	1.67	ug/l	0.45	1.4	1	8260B		10/29/2015	CJR	1
trans-1,2-Dichloroethene	< 0.54	ug/l	0.54	1.7	1	8260B		10/29/2015	CJR	1
1,2-Dichloropropane	< 0.43	ug/l	0.43	1.37	1	8260B		10/29/2015	CJR	1
2,2-Dichloropropane	< 3.1	ug/l	3.1	9.8	1	8260B		10/29/2015	CJR	1
1,3-Dichloropropane	< 0.42	ug/l	0.42	1.3	1	8260B		10/29/2015	CJR	1
Di-isopropyl ether	< 0.44	ug/l	0.44	1.4	1	8260B		10/29/2015	CJR	1
EDB (1,2-Dibromoethane)	< 0.63	ug/l	0.63	2	1	8260B		10/29/2015	CJR	1
Ethylbenzene	< 0.71	ug/l	0.71	2.3	1	8260B		10/29/2015	CJR	1
Hexachlorobutadiene	< 2.2	ug/l	2.2	7.1	1	8260B		10/29/2015	CJR	1
Isopropylbenzene	< 0.82	ug/l	0.82	2.6	1	8260B		10/29/2015	CJR	1
p-Isopropyltoluene	< 1.1	ug/l	1.1	3.5	1	8260B		10/29/2015	CJR	1
Methylene chloride	< 1.3	ug/l	1.3	4.2	1	8260B		10/29/2015	CJR	1
Methyl tert-butyl ether (MTBE)	< 1.1	ug/l	1.1	3.7	1	8260B		10/29/2015	CJR	1
Naphthalene	< 1.6	ug/l	1.6	5.2	1	8260B		10/29/2015	CJR	1
n-Propylbenzene	< 0.77	ug/l	0.77	2.4	1	8260B		10/29/2015	CJR	1
1,1,2,2-Tetrachloroethane	< 0.52	ug/l	0.52	1.7	1	8260B		10/29/2015	CJR	1
1,1,1,2-Tetrachloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/29/2015	CJR	1
Tetrachloroethene	< 0.49	ug/l	0.49	1.5	1	8260B		10/29/2015	CJR	1
Toluene	< 0.44	ug/l	0.44	1.4	1	8260B		10/29/2015	CJR	1
1,2,4-Trichlorobenzene	< 1.7	ug/l	1.7	5.6	1	8260B		10/29/2015	CJR	1
1,2,3-Trichlorobenzene	< 2.7	ug/l	2.7	8.6	1	8260B		10/29/2015	CJR	1
1,1,1-Trichloroethane	< 0.84	ug/l	0.84	2.7	1	8260B		10/29/2015	CJR	1
1,1,2-Trichloroethane	< 0.48	ug/l	0.48	1.52	1	8260B		10/29/2015	CJR	1
Trichloroethene (TCE)	< 0.47	ug/l	0.47	1.5	1	8260B		10/29/2015	CJR	1
Trichlorofluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/29/2015	CJR	1
1,2,4-Trimethylbenzene	< 1.6	ug/l	1.6	5	1	8260B		10/29/2015	CJR	1
1,3,5-Trimethylbenzene	< 1.5	ug/l	1.5	4.8	1	8260B		10/29/2015	CJR	1
Vinyl Chloride	0.37 "J"	ug/l	0.17	0.54	1	8260B		10/29/2015	CJR	1
m&p-Xylene	< 2.2	ug/l	2.2	6.9	1	8260B		10/29/2015	CJR	1
o-Xylene	< 0.9	ug/l	0.9	2.9	1	8260B		10/29/2015	CJR	1
SUR - 1,2-Dichloroethane-d4	96	REC %			1	8260B		10/29/2015	CJR	1
SUR - 4-Bromofluorobenzene	119	REC %			1	8260B		10/29/2015	CJR	1
SUR - Dibromofluoromethane	98	REC %			1	8260B		10/29/2015	CJR	1
SUR - Toluene-d8	113	REC %			1	8260B		10/29/2015	CJR	1

Project Name NEWTON GRAVEL PIT **Invoice #** E29948
Project # 60135471

Lab Code 5029948E
Sample ID TRIP BLANK
Sample Matrix Water
Sample Date 10/27/2015

	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		10/29/2015	CJR	1
Bromobenzene	< 0.48	ug/l	0.48	1.5	1	8260B		10/29/2015	CJR	1
Bromodichloromethane	< 0.46	ug/l	0.46	1.5	1	8260B		10/29/2015	CJR	1
Bromoform	< 0.46	ug/l	0.46	1.5	1	8260B		10/29/2015	CJR	1
tert-Butylbenzene	< 1.1	ug/l	1.1	3.4	1	8260B		10/29/2015	CJR	1
sec-Butylbenzene	< 1.2	ug/l	1.2	3.8	1	8260B		10/29/2015	CJR	1
n-Butylbenzene	< 1	ug/l	1	3.3	1	8260B		10/29/2015	CJR	1
Carbon Tetrachloride	< 0.51	ug/l	0.51	1.6	1	8260B		10/29/2015	CJR	1
Chlorobenzene	< 0.46	ug/l	0.46	1.4	1	8260B		10/29/2015	CJR	1
Chloroethane	< 0.65	ug/l	0.65	2.1	1	8260B		10/29/2015	CJR	1
Chloroform	< 0.43	ug/l	0.43	1.4	1	8260B		10/29/2015	CJR	1
Chloromethane	< 1.9	ug/l	1.9	6	1	8260B		10/29/2015	CJR	1
2-Chlorotoluene	< 0.4	ug/l	0.4	1.3	1	8260B		10/29/2015	CJR	1
4-Chlorotoluene	< 0.63	ug/l	0.63	2	1	8260B		10/29/2015	CJR	1
1,2-Dibromo-3-chloropropane	< 1.4	ug/l	1.4	4.5	1	8260B		10/29/2015	CJR	1
Dibromochloromethane	< 0.45	ug/l	0.45	1.4	1	8260B		10/29/2015	CJR	1
1,4-Dichlorobenzene	< 0.49	ug/l	0.49	1.6	1	8260B		10/29/2015	CJR	1
1,3-Dichlorobenzene	< 0.52	ug/l	0.52	1.6	1	8260B		10/29/2015	CJR	1
1,2-Dichlorobenzene	< 0.46	ug/l	0.46	1.5	1	8260B		10/29/2015	CJR	1
Dichlorodifluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/29/2015	CJR	1
1,2-Dichloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/29/2015	CJR	1
1,1-Dichloroethane	< 1.1	ug/l	1.1	3.6	1	8260B		10/29/2015	CJR	1
1,1-Dichloroethene	< 0.65	ug/l	0.65	2.1	1	8260B		10/29/2015	CJR	1
cis-1,2-Dichloroethene	< 0.45	ug/l	0.45	1.4	1	8260B		10/29/2015	CJR	1
trans-1,2-Dichloroethene	< 0.54	ug/l	0.54	1.7	1	8260B		10/29/2015	CJR	1
1,2-Dichloropropane	< 0.43	ug/l	0.43	1.37	1	8260B		10/29/2015	CJR	1
2,2-Dichloropropane	< 3.1	ug/l	3.1	9.8	1	8260B		10/29/2015	CJR	1
1,3-Dichloropropane	< 0.42	ug/l	0.42	1.3	1	8260B		10/29/2015	CJR	1
Di-isopropyl ether	< 0.44	ug/l	0.44	1.4	1	8260B		10/29/2015	CJR	1
EDB (1,2-Dibromoethane)	< 0.63	ug/l	0.63	2	1	8260B		10/29/2015	CJR	1
Ethylbenzene	< 0.71	ug/l	0.71	2.3	1	8260B		10/29/2015	CJR	1
Hexachlorobutadiene	< 2.2	ug/l	2.2	7.1	1	8260B		10/29/2015	CJR	1
Isopropylbenzene	< 0.82	ug/l	0.82	2.6	1	8260B		10/29/2015	CJR	1
p-Isopropyltoluene	< 1.1	ug/l	1.1	3.5	1	8260B		10/29/2015	CJR	1
Methylene chloride	1.72 "J"	ug/l	1.3	4.2	1	8260B		10/29/2015	CJR	1
Methyl tert-butyl ether (MTBE)	< 1.1	ug/l	1.1	3.7	1	8260B		10/29/2015	CJR	1
Naphthalene	< 1.6	ug/l	1.6	5.2	1	8260B		10/29/2015	CJR	1
n-Propylbenzene	< 0.77	ug/l	0.77	2.4	1	8260B		10/29/2015	CJR	1
1,1,2,2-Tetrachloroethane	< 0.52	ug/l	0.52	1.7	1	8260B		10/29/2015	CJR	1
1,1,1,2-Tetrachloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/29/2015	CJR	1
Tetrachloroethene	< 0.49	ug/l	0.49	1.5	1	8260B		10/29/2015	CJR	1
Toluene	< 0.44	ug/l	0.44	1.4	1	8260B		10/29/2015	CJR	1
1,2,4-Trichlorobenzene	< 1.7	ug/l	1.7	5.6	1	8260B		10/29/2015	CJR	1
1,2,3-Trichlorobenzene	< 2.7	ug/l	2.7	8.6	1	8260B		10/29/2015	CJR	1
1,1,1-Trichloroethane	< 0.84	ug/l	0.84	2.7	1	8260B		10/29/2015	CJR	1
1,1,2-Trichloroethane	< 0.48	ug/l	0.48	1.52	1	8260B		10/29/2015	CJR	1
Trichloroethene (TCE)	< 0.47	ug/l	0.47	1.5	1	8260B		10/29/2015	CJR	1
Trichlorofluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/29/2015	CJR	1
1,2,4-Trimethylbenzene	< 1.6	ug/l	1.6	5	1	8260B		10/29/2015	CJR	1
1,3,5-Trimethylbenzene	< 1.5	ug/l	1.5	4.8	1	8260B		10/29/2015	CJR	1
Vinyl Chloride	< 0.17	ug/l	0.17	0.54	1	8260B		10/29/2015	CJR	1
m&p-Xylene	< 2.2	ug/l	2.2	6.9	1	8260B		10/29/2015	CJR	1
o-Xylene	< 0.9	ug/l	0.9	2.9	1	8260B		10/29/2015	CJR	1
SUR - Toluene-d8	104	REC %			1	8260B		10/29/2015	CJR	1
SUR - 1,2-Dichloroethane-d4	96	REC %			1	8260B		10/29/2015	CJR	1
SUR - 4-Bromofluorobenzene	112	REC %			1	8260B		10/29/2015	CJR	1
SUR - Dibromofluoromethane	99	REC %			1	8260B		10/29/2015	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 STODY RECORD

Synergy
Environmental Lab, Inc.

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

Chain # № 2790

Page 1 of 1

Sample Handling Request
X Rush Analysis Date Required 24hr
(Rushes accepted only with prior authorization)
____ Normal Turn Around

Lab I.D. #

Account No. : | Quote No.:

Project #: 60135471

Sampler: (signature) Jordan

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

Reports To: Dave Henderson	Invoice To: DAVE Henderson
Company AECOM	Company SAME
Address 1555 RiverCenter Dr. STE 214	Address
City State Zip Milwaukee, WI 53212	City State Zip
Phone 414-944-6190	Phone
FAX 414-944-6081	FAX

Analysis Requested | **Other Analysis**

Lab I.D.	Sample I.D.	Collection Date	Collection Time	Comp	Grab	Filtered Y/N	No. of Containers	Sample Type (Matrix)*	Preservation	DRO (Mod DRO Sep 95)	GRO (Mod GRO Sep 95)	LEAD	NITRATE/NITRITE	OIL & GREASE	PAH (EPA 8270)	PCB	PVOC (EPA 8021)	PVOC + NAPHTHALENE	SULFATE	TOTAL SUSPENDED SOLIDS	VOC DW (EPA 542.2)	VOC (EPA 8260)	8-RCRA METALS	PID/FID
5029948 A	4219 Vilbahn	10/27/15	1545		x	N	3	GW	HCl													X		
B	4002 Thunder	10/27/15	1615		x	N	3	GW	HCl													X		
C	2917 CTH CR	10/27/15	1645		x	N	3	GW	HCl													X		
D	2917 CTH CR DUP	10/27/15	1645		x	N	3	GW	HCl													X		
E	Trip Blank	10/27/15	1500		x	N	2	GW	HCl													X		

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

Analysis per Contract
24 hr. turn

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

Relinquished By: (sign)	Time	Date	Received By: (sign)	Time	Date
Jordan	0815	10/28/15			

Received in Laboratory By: [signature] Time: 8:00 Date: 10/29/15

AECOM
1555 N. RiverCenter Drive, Suite 214
Milwaukee, WI 53212

414.944.6080 tel
414.944.6081 fax

Letter of Transmittal

Attention:	Mr. Tauren Beggs Hydrogeologist, WDNR 2984 Shawano Ave Green Bay, WI 54313	Date:	1/04/16
Project reference:	Former Newton Pit BRRTS No. 02-36-000268	Project number:	60135471

We are sending you the following:

Number of originals:	Number of copies:	Description:
One	Zero	October 2015 Semi-Annual Potable Well Monitoring Letter Report

Mr. Beggs,

Attached is the October 2015 Semi-Annual Potable Well Monitoring Letter Report for the Former Town of Newton Gravel Pit, Manitowoc Wisconsin.

Please let me know if you have any questions.

Thank you.

David Henderson, P.E.
Senior Project Manager
D 414.944.6190 C 414.429.8304
dave.henderson@aecom.com

Cc: Kathleen M. McDaniel, City Attorney, City of Manitowoc
Dan Koski, Director of Public Infrastructure, City of Manitowoc
Elizabeth Heinen, Drinking Water Specialist, WDNR