

Wisconsin Public Service Corporation

700 North Adams Street
P.O. Box 19001
Green Bay, WI 54307-9001

www.wisconsinpublicservice.com

May 12, 2017

Ms. Margaret Gielniewski
USEPA Region 5 – SR6J
77 W. Jackson Boulevard
Chicago, Illinois 60604-3590

**SUBJECT: April, 2017 Monthly Progress Report – Former Marinette MGP
Wisconsin Public Service Corporation
CERCLA Docket No. V-W-06-C-847
Spill Site ID – B5BT**

Dear Ms. Gielniewski:

Please find enclosed the monthly progress report for the Wisconsin Public Service Corporation's former manufactured gas plant site in Marinette, WI. If you have any questions, please contact me at your convenience at (414) 221-2156 or frank.dombrowski@we-energies.com.

Sincerely,

A handwritten signature in cursive script, appearing to read 'Frank Dombrowski'.

Frank Dombrowski
Principal Environmental Consultant
WEC Energy Group - Business Services
Environmental Dept.

Enclosure

cc: Mr. William Fitzpatrick, WDNR (hardcopy and email)
Ms. Cheryl Bougie, WDNR (hardcopy and email)
Ms. Jennifer Knoepfle, CH2M (hardcopy and email)
Ms. Kristin DuFresne, WDNR (hardcopy and email)



OBG | There's a Way

May 15, 2017

Mr. Frank Dombrowski
WEC Business Services, LLC
333 W. Everett Street, A231
Milwaukee, WI 53203
(via email only)

Subject: April 2017 Monthly Progress Report
Marinette Former MGP, Marinette, Wisconsin
Wisconsin Public Service Corporation (WPSC)
CERCLA Docket No. V-W-06-C-847, Site Spill ID – B5BT, CERCLIS ID – WIN000509952
NRT Project No. 1549

Dear Mr. Dombrowski:

Natural Resource Technology, Inc. (NRT), an OBG Company, is providing this Monthly Progress Report for the WPSC Marinette Former Manufactured Gas Plant (MGP).

1) PROGRESS MADE DURING THE PAST MONTH

- FS Report Revision 2 Revised ARAR Table Resubmittal 1 was transmitted to USEPA on April 5, 2017
- Completed April groundwater sampling event on April 3, 2017
- Received USEPA comments on ARAR Table Resubmittal 1 on May 3, 2017

2) ANALYTICAL AND OTHER TESTING RESULTS RECEIVED

- Results of April groundwater monitoring and a site map have been attached to this letter report

3) PROJECTED WORK

WPSC ACTIONS

- Prepare FS Report Revision 2 Revised ARAR Table Resubmittal 2
- Prepare for submittal of FS Report revision 3, pending USEPA review of February 24, 2017 response to comment letter

USEPA ACTIONS

- Review FS Report Revision 2 Revised ARAR Table Resubmittal 2 and February 24, 2017 response to comment letter



234 W. Florida Street, Fifth Floor
Milwaukee, WI 53204



p 414-837-3607
f 414-837-3608



NRT | AN OBG COMPANY
obg.com/nrt

4) ANTICIPATED SCHEDULE

| Deliverable or Milestone | Target Date | Actual Date |
|---|--|--|
| Submitted Completion Report – Rev 0 | May 12, 2009 | May 11, 2009 |
| <i>For a listing of all work activities between May 11, 2009 and April 14, 2015, please see the July 2015 Monthly Progress Report</i> | | |
| 2015 semi-annual groundwater sampling | April and October 2015 | April 14, 2015 and October 27, 2015 |
| Complete Bathymetric Survey of Sand Layer | April 2015 | April 27, 2015 |
| Received USEPA Approval of RI Report Rev 2 | March 2015 | March 30, 2015 |
| Receive USEPA comments on Alternatives Array | May 7, 2015 | May 15, 2015 |
| Submit summary of Bathymetry survey in Residual Sand Cover Monitoring Results letter report | June 30, 2015 | July 2, 2015 |
| Submit FS Report Revision 0 | July 13, 2015 | July 10, 2015 |
| Receive USEPA comments Residual Sand Cover Monitoring Results letter | | July 27, 2015 |
| Receive USEPA comments on FS Revision 0 | | September 4, 2015 |
| Receive USEPA comments on ARAR Table | February 16, 2016 | |
| Submit FS Report Revision 1 without ARAR Table | February 18, 2016 | February 18, 2016 |
| Submit revised ARAR Table | March 18, 2016 | March 8, 2016 |
| Receive USEPA comments on FS Revision 1 | | March 25, 2016 |
| 2016 semi-annual groundwater sampling | April and October 2016 | April 13, 2016 and October 19, 2016 |
| Submit FS Report Revision 2 | May 23, 2016 | May 20, 2016 |
| Technical Memo 3 Supplemental VI Evaluation | November 2016 | November 16, 2016. |
| Receive USEPA comments on FS Revision 2 | | November 15, 2016 |
| Meeting to discuss FS Rev 2 comments | February 1, 2017 | |
| Meeting to discuss program sediment approach | TBD | |
| 2017 semi-annual groundwater sampling | April and October 2017 | April 3, 2017 |
| Submit FS Report Rev 2 response to comment letter | February 24, 2017 | February 24, 2017 |
| Submit FS Report Rev 3 | TBD, pending USEPA comment on RTC letter | |
| Submit updated ARAR table Resubmittal 1 | April 2017 | April 5, 2017 |
| Receive USEPA comments on ARAR Resubmittal 1 | May 3, 2017 | |
| ARAR Table Resubmittal 2 | May 2017 | |

5) PROBLEMS OR POTENTIAL PROBLEMS ENCOUNTERED

- None

6) ACTUAL OR PLANNED RESOLUTION OF PROBLEMS OR POTENTIAL PROBLEMS

- None



Please contact the undersigned if you should have any questions regarding the content of this progress report.

Sincerely,
NRT | An OBG Company



Brian G. Hennings, PG
Senior Hydrogeologist



Jennifer M. Hagen, PE
Principal Engineer

Enclosures: Site Map
April 2017 Groundwater Results Summary Tables

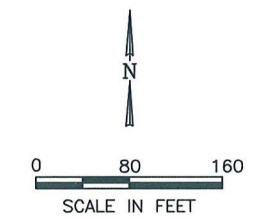
For distribution to: Ms. Margaret Gielniewski (electronic copy)
Ms. Kristin DuFresne, WDNR (hardcopy and electronic)
Mr. Bill Fitzpatrick, WDNR (hardcopy and electronic)
Ms. Cheryl Bougie, WDNR (hardcopy and electronic)
Ms. Jennifer Knoepfle, CH2M (electronic copy)

Jan 21, 2015 1:52pm PLOTTED BY: ddada SAVED BY: ddada
 Y:\ACADData\Projects\1549\1549 Marine\17-5 RI Report_Rev2\1549-175-806.dwg -Layout1
 IMAGES:
 XREFS: Y:\ACADData\Projects\1549\1549 Marine\17-5 RI Report_Rev1\XREF\1549-175-Base_2.dwg



| | | |
|--|-------|---------------------------------|
| | MW312 | MONITORING WELL |
| | P302 | PIEZOMETER |
| | MW2 | ABANDONED MONITORING WELL |
| | P301 | ABANDONED PIEZOMETER |
| | SG02 | SOIL GAS PROBE |
| | G | GAS LINE |
| | W | WATER LINE |
| | E | ELECTRICAL LINE |
| | OEL | OVERHEAD ELECTRIC LINE |
| | SAN | SANITARY SEWER LINE |
| | STM | STORM SEWER LINE |
| | UEL | UNDERGROUND ELECTRIC LINE |
| | | FORMER SLOUGH |
| | | FORMER MGP PROPERTY LINE (1923) |
| | | FORMER MGP STRUCTURE |
| | | EXISTING STRUCTURE |

NOTE:
 SAMPLING LOCATIONS IN BLUE WERE COMPLETED AS PART OF REMEDIAL INVESTIGATION ACTIVITIES IN 2012/2013/2014.



- SOURCE NOTES:**
1. THIS DRAWING WAS DEVELOPED FROM A MAP BY THE CITY OF MARINETTE.
 2. PORTIONS OF THE DRAWING ARE FROM A DIGITAL FILE FROM STS CONSULTANTS, LTD. CONSULTING ENGINEERS, GREEN BAY, WISCONSIN, PROJECT NUMBER 26936, REVISED JANUARY 2001. HYDROGRAPHIC SURVEY OF RIVER WAS PERFORMED BY AYRES AND ASSOCIATES ON JULY 24-26, 2001. VERTICAL CONTROL IS U.S.G.S. DATUM. BUILDING AND STREET LOCATIONS NORTH OF RAILROAD TRACKS WERE SUPPLIED BY MARINETTE MARINE CORPORATION.
 3. PORTIONS OF THIS DRAWING ARE FROM HYDRO-SEARCH DRAWING.
 4. EXISTING STRUCTURES AND UTILITIES FROM FOTH & VAN DYKE ENGINEERS/ARCHITECTS, GRADING PLAN, DIGITAL FILE 7m755606.DWG, RECORD DRAWING REVISIONS 2/22/00 AND FROM SMET CONSTRUCTION SERVICES PDF DRAWING SET "MARINETTE MARINE BLDG 32 OUTFITTING", SHEET C1.1, DATED APRIL 24, 2012.
 5. WELL LOCATIONS FROM A SURVEY BY WPSC DATED OCTOBER 8, 2003, REVISED OCTOBER 31, 2003.
 6. VERTICAL CONTROL IS NAVD88 DATUM
 7. BRICK INTERCEPTOR SEWER REPLACEMENT TAKEN FROM DRAWING BY AYRES ASSOCIATES, GREEN BAY, WISCONSIN, JOB NO. 16-0189.10, DRAWING NO. P101, SHEET NO. 7, DATED 3/14/03.
 8. MONITORING WELLS MW2R, MW3R, MW307R INSTALLED OCTOBER 2004 AND MW308, MW310, P305 INSTALLED JUNE 2004. SURVEYED BY WPSC IN JANUARY 2005, (NAVD88, MARINETTE COUNTY COORDINATES).
 9. POSTORINO USTs WERE IDENTIFIED IN AYRES ASSOCIATES SITE ASSESSMENT AND REMEDIAL ACTION OPTIONS REPORT, CITY OF MARINETTE PROPERTY 500 MANN STREET MARINETTE WISCONSIN 54143 DATED AUGUST 2010.
 10. BOOM LANDING SITE WAS DEVELOPED FROM A SURVEY DONE BY WISCONSIN PUBLIC SERVICE BY KJR BOOM LANDING SITE FEATURES DEVELOPED FROM A SURVEY ON 08/14/12, DRAWING "BOOM LANDING 8.12". THE CHANNEL LIMITS AND PORTIONS OF THE SHORELINE ARE FROM U.S. ARMY CORP'S OF ENGINEERS DRAWING "CONDITION OF CHANNEL-SEP. 2008", SHEET 4 OF 4.
 11. HORIZONTAL DATUM IS MARINETTE COUNTY COORDINATE SYSTEM, UNITS=US FOOT.
 12. SOME OFF-SITE UPLAND FEATURES DIGITIZED FROM BING MAPS AERIAL. © 2012 MICROSOFT CORPORATION.
 13. BM-SG IS LOCATED ON TOP OF SHEETPILE WALL EAST OF BOAT RAMP.
 14. SAMPLING LOCATIONS SB352 THROUGH SB370 COLLECTED BY NRT, OCTOBER 2014.

| | | | |
|--------------|-----|--------------|----------|
| DRAWN BY: | DMD | DATE: | 11/13/14 |
| CHECKED BY: | NDK | DATE: | 11/24/14 |
| APPROVED BY: | BGH | DATE: | 01/21/15 |
| DRAWING NO: | | 1549-175-B06 | |
| REFERENCE: | | | |

Site Map



PROJECT NO.
 1549/17.5

FIGURE NO.
 1

April 2017 Groundwater Sample Results - VOCs

Wisconsin Public Service Corporation - Marinette Former MGP, Marinette, Wisconsin
 CERCLIS ID -WIN000509952

| Sample Location | Sample Date | BTEX | BTEX | BTEX | BTEX | BTEX | BTEX |
|---------------------------|-------------|----------|--------------|----------|----------------|-----------|----------------|
| | | Benzene | Ethylbenzene | Toluene | Xylenes, m + p | Xylene, o | Xylenes, Total |
| Reporting Units: | | (µg/L) | (µg/L) | (µg/L) | (µg/L) | (µg/L) | (µg/L) |
| 040317001 MW305 | 04/03/2017 | < 0.50 U | < 0.50 U | < 0.50 U | < 1.0 U | < 0.50 U | < 1.5 U |
| 040317002 MW302 | 04/03/2017 | < 0.50 U | < 0.50 U | < 0.50 U | < 1.0 U | < 0.50 U | < 1.5 U |
| 040317003 MW304 | 04/03/2017 | 45.9 | < 0.50 U | 0.94 J | 2.3 | 4 | 6.3 |
| 040317004 MW304 QA/QC1 | 04/03/2017 | 56.5 | 0.86 J | 1.2 | 3.1 | 5.3 | 8.4 |
| 040317005 MW303 | 04/03/2017 | < 0.50 U | < 0.50 U | < 0.50 U | < 1.0 U | < 0.50 U | < 1.5 U |
| 040317006 MW313 | 04/03/2017 | < 0.50 U | < 0.50 U | < 0.50 U | < 1.0 U | < 0.50 U | < 1.5 U |
| 040317007 MW05 | 04/03/2017 | < 0.50 U | < 0.50 U | < 0.50 U | < 1.0 U | < 0.50 U | < 1.5 U |
| 040317008 MW308 | 04/03/2017 | < 0.50 U | < 0.50 U | < 0.50 U | < 1.0 U | < 0.50 U | < 1.5 U |
| 040317009 MW308 QA/QC2 | 04/03/2017 | < 0.50 U | < 0.50 U | < 0.50 U | < 1.0 U | < 0.50 U | < 1.5 U |
| 040317010 MW03R | 04/03/2017 | < 0.50 U | < 0.50 U | < 0.50 U | < 1.0 U | < 0.50 U | < 1.5 U |
| 040317011 MW306 | 04/03/2017 | < 0.50 U | 1.6 | < 0.50 U | 2.5 | 9.5 | 12.1 |
| 040417012 MW307R | 04/04/2017 | < 0.50 U | < 0.50 U | < 0.50 U | < 1.0 U | < 0.50 U | < 1.5 U |
| 040417013 MW311 | 04/04/2017 | 215 | 141 | 14.7 J | 22.2 J | 67.1 | 89.3 |
| 040417014 MW310 | 04/04/2017 | < 0.50 U | < 0.50 U | < 0.50 U | < 1.0 U | < 0.50 U | < 1.5 U |
| 040417015 MW312 | 04/04/2017 | < 0.50 U | < 0.50 U | < 0.50 U | < 1.0 U | < 0.50 U | < 1.5 U |
| 040417016 MW01R | 04/04/2017 | < 0.50 U | < 0.50 U | < 0.50 U | < 1.0 U | < 0.50 U | < 1.5 U |
| 040417017 Equipment Blank | 04/04/2017 | < 0.50 U | < 0.50 U | < 0.50 U | < 1.0 U | < 0.50 U | < 1.5 U |
| 040417018 Trip Blank | 04/04/2017 | < 0.50 U | < 0.50 U | < 0.50 U | < 1.0 U | < 0.50 U | < 1.5 U |
| 040417019 BM301 | 04/04/2017 | -- | -- | -- | -- | -- | -- |
| 040417020 P302 | 04/03/2017 | -- | -- | -- | -- | -- | -- |
| 040417021 P305 | 04/03/2017 | -- | -- | -- | -- | -- | -- |
| 040417022 P303 | 04/03/2017 | -- | -- | -- | -- | -- | -- |
| 040417023 P304 | 04/03/2017 | -- | -- | -- | -- | -- | -- |

[O:ECK 5/9/17 C:KLS 5/9/17 C:SRB 5/10/17]

Notes:

- = Analysis not performed
- < = Concentration is less than reported limit
- J = Estimated concentration at or above the LOD and below the LOQ.
- U = Not detected
- Definitions for additional data qualifiers can be found in associated laboratory reports.
- QA/QC = Quality Control Field Duplicate Sample
- BTEX = Benzene, Toluene, Ethylbenzene and Xylene
- VOC = Volatile Organic Compound
- µg/L = micrograms per liter

April 2017 Groundwater Sample Results - PAHs

Wisconsin Public Service Corporation - Marinette Former MGP, Marinette, Wisconsin
 CERCLIS ID -WIN000509952

| Sample Location | Sample Date | TPAH | PAH | PAH | PAH | PAH | PAH | PAH | PAH | PAH | PAH | PAH | PAH | PAH | PAH | PAH | PAH | PAH | PAH | |
|---------------------------|-------------|-------------------------|---------------------|---------------------|--------------|----------------|------------|--------------------|----------------|----------------------|----------------------|----------------------|-----------|-----------------------|--------------|------------|------------------------|-------------|--------------|------------|
| | | PAH, Total ¹ | 1-Methylnaphthalene | 2-Methylnaphthalene | Acenaphthene | Acenaphthylene | Anthracene | Benzo(a)anthracene | Benzo(a)pyrene | Benzo(b)fluoranthene | Benzo(g,h,i)perylene | Benzo(k)fluoranthene | Chrysene | Dibenz(a,h)anthracene | Fluoranthene | Fluorene | Indeno(1,2,3-cd)pyrene | Naphthalene | Phenanthrene | Pyrene |
| Reporting Units: | | (µg/L) | (µg/L) | (µg/L) | (µg/L) | (µg/L) | (µg/L) | (µg/L) | (µg/L) | (µg/L) | (µg/L) | (µg/L) | (µg/L) | (µg/L) | (µg/L) | (µg/L) | (µg/L) | (µg/L) | (µg/L) | (µg/L) |
| 040317001 MW305 | 04/03/2017 | 0.046 | < 0.0059 U | 0.0050 J | < 0.0061 U | < 0.0050 U | < 0.010 U | < 0.0076 U | < 0.011 U | < 0.0057 U | < 0.0068 U | < 0.0076 U | < 0.013 U | < 0.010 U | < 0.011 U | < 0.0080 U | < 0.018 U | < 0.018 U | < 0.014 U | < 0.0076 U |
| 040317002 MW302 | 04/03/2017 | 0.14 | < 0.0066 U | < 0.0054 U | < 0.0067 U | < 0.0055 U | < 0.012 U | < 0.0084 U | < 0.012 U | 0.011 J | < 0.0075 U | < 0.0084 U | < 0.014 U | < 0.011 U | 0.019 J | < 0.0089 U | < 0.020 U | < 0.020 U | 0.023 J | 0.023 J |
| 040317003 MW304 | 04/03/2017 | 18.8 | 1.3 | 0.053 | 0.93 | 0.064 | 0.065 | < 0.0088 U | < 0.012 U | < 0.0067 U | < 0.0079 U | < 0.0088 U | < 0.015 U | < 0.012 U | < 0.012 U | 0.016 J | < 0.021 U | 16.3 | 0.017 J | < 0.0089 U |
| 040317004 MW304 QA/QC1 | 04/03/2017 | 17.3 | 1.2 | 0.027 J | 0.87 | 0.06 | 0.072 | < 0.0086 U | < 0.012 U | < 0.0065 U | < 0.0077 U | < 0.0086 U | < 0.015 U | < 0.011 U | < 0.012 U | 0.013 J | < 0.020 U | 15 | 0.018 J | < 0.0087 U |
| 040317005 MW303 | 04/03/2017 | 0.23 | 0.011 J | 0.012 J | 0.027 J | 0.0066 J | 0.033 J | < 0.0080 U | < 0.011 U | 0.014 J | 0.0084 J | 0.012 J | < 0.014 U | < 0.011 U | 0.012 J | < 0.0085 U | < 0.019 U | 0.039 J | 0.019 J | 0.022 J |
| 040317006 MW313 | 04/03/2017 | 0.16 | 0.0084 J | < 0.0049 U | 0.026 J | < 0.0050 U | 0.020 J | < 0.0076 U | < 0.011 U | 0.0096 J | < 0.0068 U | < 0.0076 U | < 0.013 U | < 0.010 U | 0.011 J | < 0.0081 U | < 0.018 U | 0.037 J | < 0.014 U | 0.0090 J |
| 040317007 MW05 | 04/03/2017 | 0.037 | < 0.0058 U | < 0.0049 U | < 0.0060 U | < 0.0049 U | < 0.010 U | < 0.0075 U | < 0.010 U | < 0.0057 U | < 0.0067 U | < 0.0075 U | < 0.013 U | < 0.0099 U | < 0.011 U | < 0.0079 U | < 0.017 U | < 0.018 U | < 0.014 U | < 0.0076 U |
| 040317008 MW308 | 04/03/2017 | 0.059 | < 0.0066 U | < 0.0054 U | < 0.0067 U | < 0.0055 U | < 0.012 U | < 0.0084 U | < 0.012 U | 0.0072 J | < 0.0075 U | < 0.0084 U | < 0.014 U | < 0.011 U | < 0.012 U | < 0.0089 U | < 0.020 U | < 0.020 U | < 0.015 U | 0.0098 J |
| 040317009 MW308 QA/QC2 | 04/03/2017 | 0.053 | < 0.0062 U | 0.0067 J | < 0.0064 U | < 0.0052 U | < 0.011 U | < 0.0079 U | < 0.011 U | < 0.0060 U | < 0.0071 U | < 0.0079 U | < 0.014 U | < 0.011 U | < 0.011 U | < 0.0084 U | < 0.019 U | 0.022 J | < 0.015 U | < 0.0081 U |
| 040317010 MW03R | 04/03/2017 | 0.15 | < 0.0066 U | < 0.0055 U | 0.0071 J | < 0.0056 U | 0.018 J | < 0.0085 U | < 0.012 U | 0.015 J | 0.010 J | 0.014 J | < 0.015 U | < 0.011 U | 0.016 J | < 0.0090 U | < 0.020 U | < 0.021 U | < 0.015 U | 0.021 J |
| 040317011 MW306 | 04/03/2017 | 0.45 | 0.074 | < 0.0056 U | 0.17 | 0.012 J | < 0.012 U | < 0.0087 U | < 0.012 U | < 0.0066 U | < 0.0078 U | < 0.0087 U | < 0.015 U | < 0.012 U | < 0.012 U | < 0.0092 U | < 0.020 U | < 0.021 U | < 0.016 U | 0.15 |
| 040417012 MW307R | 04/04/2017 | 3.1 | 0.21 | 0.0068 J | 1.6 | 0.066 | 0.09 | < 0.0078 U | 0.013 J | 0.033 | 0.017 J | 0.029 J | 0.048 J | < 0.010 U | 0.21 | 0.26 | < 0.018 U | 0.073 J | 0.22 | 0.2 |
| 040417013 MW311 | 04/04/2017 | 884 | 90.6 | 25.2 | 81.1 | 1.5 | 5.3 | < 0.39 U | < 0.54 U | < 0.30 U | < 0.35 U | < 0.39 U | < 0.67 U | < 0.52 U | 1.9 J | 17.1 | < 0.91 U | 640 | 20 | 1.9 J |
| 040417014 MW310 | 04/04/2017 | 6.3 | 0.24 | 0.0088 J | 4.2 | 0.058 | 0.084 | < 0.0084 U | < 0.012 U | < 0.0064 U | < 0.0075 U | < 0.0084 U | < 0.014 U | < 0.011 U | 0.094 | 1.1 | < 0.020 U | 0.23 | 0.060 J | 0.08 |
| 040417015 MW312 | 04/04/2017 | 0.44 | 0.022 J | 0.011 J | 0.17 | 0.0096 J | 0.030 J | < 0.0083 U | < 0.012 U | < 0.0063 U | < 0.0075 U | < 0.0083 U | < 0.014 U | < 0.011 U | 0.038 J | 0.054 | < 0.019 U | 0.038 J | 0.017 J | 0.046 |
| 040417016 MW01R | 04/04/2017 | 0.051 | < 0.0061 U | < 0.0051 U | 0.0082 J | < 0.0052 U | < 0.011 U | < 0.0079 U | < 0.011 U | < 0.0060 U | < 0.0071 U | < 0.0079 U | < 0.014 U | < 0.010 U | < 0.011 U | < 0.0083 U | < 0.018 U | 0.021 J | < 0.014 U | 0.0082 J |
| 040417017 Equipment Blank | 04/04/2017 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 040417018 Trip Blank | 04/04/2017 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 040417019 BM301 | 04/04/2017 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 040417020 P302 | 04/03/2017 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 040417021 P305 | 04/03/2017 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 040417022 P303 | 04/03/2017 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 040417023 P304 | 04/03/2017 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |

[O:ECK 5/9/17 C:KLS 5/9/17 C:SRB 5/10/17

Notes:

-- = Analysis not performed
 < = Concentration is less than reported limit
 J = Estimated concentration at or above the LOD and below the LOQ.
 U = Not detected
 Definitions for additional data qualifiers can be found in associated laboratory reports.

QA/QC = Quality Control Field Duplicate Sample
 PAH = Polycyclic Aromatic Hydrocarbons
 TPAH = Total PAHs
 µg/L = micrograms per liter

1. Total PAHs were calculated by the laboratory using the following protocol:

- The Lab divided the summed internal on-column values by the initial volume to calculate Total PAHs.
- The list of 18 PAHs used by the laboratory here are as follows: 1-Methylnaphthalene, 2-Methylnaphthalene, Acenaphthene, Acenaphthylene, Anthracene, Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)fluoranthene, Benzo(g,h,i)perylene, Benzo(k)fluoranthene, Chrysene, Dibenz(a,h)anthracene, Fluoranthene, Fluorene, Indeno(1,2,3-cd)pyrene, Naphthalene, Phenanthrene and Pyrene.

| Sample Location | Sample Date | Metal | Metal | Metal | Metal | Metal | Metal | Metal | Metal | Metal | Inorganic | Inorganic | Inorganic | Inorganic | Field RNA | Field RNA | Field RNA | Field RNA | Field RNA | Field RNA | |
|---------------------------|-------------|---------------------|---------------------|-------------------|-----------------|----------------------|-------------------|-------------------|---------------------|-----------------|-------------------|-----------|----------------------------|----------------|------------------|-----------------------|-------------------------------|------------|-----------------------------|--------------------|-------------------------|
| | | Aluminum, Dissolved | Antimony, Dissolved | Copper, Dissolved | Iron, Dissolved | Manganese, Dissolved | Nickel, Dissolved | Silver, Dissolved | Vanadium, Dissolved | Zinc, Dissolved | Alkalinity, Total | Methane | Nitrogen, NO2 + NO3, Total | Sulfate, Total | Dissolved oxygen | Groundwater, depth to | Oxidation Reduction Potential | pH, Field | Specific Conductance, Field | Temperature, Water | Turbidity, Quantitative |
| Reporting Units: | | (µg/L) | (µg/L) | (µg/L) | (µg/L) | (µg/L) | (µg/L) | (µg/L) | (µg/L) | (µg/L) | (mg/L) | (µg/L) | (mg/L) | (mg/L) | (mg/l) | (feet) | (millivolts) | (pH units) | (mmhos/cm) | (deg c) | (NTU) |
| 040317001 MW305 | 04/03/2017 | < 68.7 U | 0.077 J | 2.5 | 391 | 0.28 J | 0.49 J | < 0.016 U | 0.28 J | 7.7 J | 297 | < 1.4 U | 9.6 | 167 | 3.03 | 14.46 | 272 | 7.63 | 2.66 | 8.71 | 1.5 |
| 040317002 MW302 | 04/03/2017 | < 68.7 U | 0.43 J | 3.6 | 41.0 J | 0.27 J | 1.4 | < 0.016 U | 0.41 J | 6.8 J | 265 | < 1.4 U | 5.3 | 78.4 | 2.89 | 11.20 | 200 | 8.10 | 2.05 | 6.96 | 2.6 |
| 040317003 MW304 | 04/03/2017 | < 68.7 U | 3 | 5.1 | 68.6 J | 112 | 1.3 | < 0.016 U | 3.9 | < 3.1 U | 347 | 183 | 0.33 J | 45.7 | 3.58 | 6.22 | 248 | 8.20 | 0.929 | 6.38 | 4.5 |
| 040317004 MW304 QA/QC1 | 04/03/2017 | < 68.7 U | 3 | 4.9 | 71.9 J | 121 | 1.4 | < 0.016 U | 3.9 | < 3.1 U | 284 | 118 | 0.32 J | 45.5 | 3.58 | 6.22 | 248 | 8.20 | 0.929 | 6.38 | 4.5 |
| 040317005 MW303 | 04/03/2017 | < 68.7 U | 0.41 J | 4.6 | 806 | 682 | 2.1 | < 0.016 U | 0.51 J | 3.4 J | 441 | 202 | 4.5 | 307 | 0.98 | 3.85 | 33 | 7.88 | 1.97 | 8.95 | 31.0 |
| 040317006 MW313 | 04/03/2017 | < 68.7 U | 1.2 | 5.6 | 1,530 | 185 | 2.1 | < 0.016 U | 0.94 J | 83.8 J | 287 | 2,720 | 6.4 | 104 | 0.73 | 3.47 | 18 | 7.57 | 0.890 | 7.17 | 30.0 |
| 040317007 MW05 | 04/03/2017 | < 68.7 U | 0.28 J | 2.5 | < 10.0 U | 251 | 1.1 | 0.057 J | 0.29 J | 4.0 J | 352 | < 1.4 U | 1.6 J | 125 | 0.75 | 6.92 | 45 | 8.06 | 1.95 | 8.94 | 14.5 |
| 040317008 MW308 | 04/03/2017 | < 68.7 U | 0.18 J | 2.2 | 5,430 | 2,250 | 6.6 | 0.019 J | 0.64 J | 117 | 618 | 16.4 | 0.60 J | 584 | 0.92 | 5.94 | 77 | 7.45 | 7.12 | 8.56 | 13.1 |
| 040317009 MW308 QA/QC2 | 04/03/2017 | < 68.7 U | 0.12 J | 2.5 | 5,120 | 2,190 | 7.4 | < 0.016 U | 0.52 J | 116 | 630 | 22.3 | < 0.58 U | 544 | 0.92 | 5.94 | 77 | 7.45 | 7.12 | 8.56 | 13.1 |
| 040317010 MW03R | 04/03/2017 | < 68.7 U | 0.64 J | 4.6 | 21.3 J | 2.9 | 1.2 | < 0.016 U | 1.2 | 18.2 | 379 | < 1.4 U | 10.7 | 154 | 5.09 | 4.65 | 33 | 7.72 | 1.185 | 7.35 | 19.1 |
| 040317011 MW306 | 04/03/2017 | < 68.7 U | 0.089 J | 0.37 J | 11,200 | 405 | 0.45 J | < 0.016 U | 1.9 | < 3.1 U | 151 | 2,330 | < 0.58 U | < 5.0 U | 0.90 | 3.50 | -77 | 7.95 | 0.826 | 6.43 | 9.4 |
| 040417012 MW307R | 04/04/2017 | < 68.7 U | < 0.073 U | < 0.26 U | 39,100 | 439 | 0.38 J | < 0.016 U | < 0.15 U | < 3.1 U | 400 | 9,280 | < 0.58 U | < 5.0 U | 0.74 | 4.18 | -152 | 8.46 | 1.076 | 5.88 | 4.5 |
| 040417013 MW311 | 04/04/2017 | < 68.7 U | < 0.073 U | < 0.26 U | 32,200 | 1,190 | 0.52 J | < 0.016 U | 1.6 | < 3.1 U | 882 | 4,450 | < 0.58 U | < 5.0 U | 0.69 | 4.73 | -140 | 8.31 | 3.24 | 6.71 | 8.5 |
| 040417014 MW310 | 04/04/2017 | < 68.7 U | < 0.073 U | < 0.26 U | 36,300 | 1,560 | 0.37 J | < 0.016 U | 4.4 | < 3.1 U | 584 | 1,610 | < 0.58 U | 26.4 | 0.44 | 5.06 | -166 | 7.82 | 2.54 | 9.07 | 25.8 |
| 040417015 MW312 | 04/04/2017 | < 68.7 U | < 0.073 U | < 0.26 U | 9,120 | 637 | 0.31 J | < 0.016 U | 0.46 J | < 3.1 U | 734 | 22,800 | < 0.58 U | < 5.0 U | 0.50 | 2.41 | -109 | 7.92 | 1.61 | 7.64 | 7.8 |
| 040417016 MW01R | 04/04/2017 | < 68.7 U | 0.14 J | < 0.26 U | 9,720 | 1,110 | 0.74 J | < 0.016 U | 0.69 J | < 3.1 U | 671 | 12,700 | < 0.58 U | < 5.0 U | 0.79 | 3.20 | -87 | 8.79 | 1.345 | 5.17 | 3.3 |
| 040417017 Equipment Blank | 04/04/2017 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 040417018 Trip Blank | 04/04/2017 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 040417019 BM301 | 04/04/2017 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 2.74 | -- | -- | -- | -- | -- |
| 040417020 P302 | 04/03/2017 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 12.33 | -- | -- | -- | -- | -- |
| 040417021 P305 | 04/03/2017 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 6.29 | -- | -- | -- | -- | -- |
| 040417022 P303 | 04/03/2017 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 31.56 | -- | -- | -- | -- | -- |
| 040417023 P304 | 04/03/2017 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 32.34 | -- | -- | -- | -- | -- |

[O:ECK 5/9/17 C:KLS 5/9/17 C:SRB 5/10/17]

Notes:

-- = Analysis not performed
 < = Concentration is less than reported limit
 J = Estimated concentration at or above the LOD and below the LOQ.
 U = Not detected
 Definitions for additional data qualifiers can be found in associated laboratory reports.
 QA/QC = Quality Control Field Duplicate Sample
 RNA = Remediation by Natural Attenuation (lab and field)

deg C = degrees Celsius
 mg/L = milligrams per liter
 µg/L = micrograms per liter
 mmhos/cm = millimhos per centimeter
 NTU = Nephelometric Turbidity Unit