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VIA FEDERAL EXPRESS

August 18, 2015

Erich Weissbart, P.G.
Land and Chemicals Division
U.S. Environmental Protection Agency, Region III
701 Mapes Road
Fort Meade, MD 20755

Re: Quarterly Status Report No. 6
Kop-Flex Voluntary Cleanup Site #31, Hanover, Maryland

Dear Erich:

On behalf of EMERSUB 16 LLC, a subsidiary of Emerson Electric Co., WSP Corp. is submitting this progress report describing the investigation and remediation activities conducted in the second quarter 2015 at the Kop-Flex Voluntary Cleanup Program (VCP) site in Hanover, Maryland. The report also describes the activities planned for the third quarter 2015. If you have any questions, please do not hesitate to contact us at 703-709-6500.

Sincerely yours,

Robert E. Johnson, PhD.
Senior Technical Manager

REJ:kjb
k:\emerson\kop-flex\reporting\status reports\mde reports\2015\3705_0715rejrep_kopflex_progress_rpt_6_final.docx

cc/encl.: Mr. Stephen Clarke, Emerson Electric Co.
Ms. Richelle Hanson, Maryland Department of the Environment

Enclosures

Progress Report No. 6
Kop-Flex VCP Site #31

April 2015 through June 2015

Site Name:	Former Kop-Flex Facility
Site Address:	7565 Harmans Road Hanover, Maryland 21076
Consultant:	WSP USA Corp.
Address:	11190 Sunrise Valley Dr., Suite 300 Reston, Virginia 20191
Phone No.:	(703) 709-6500
Site Coordinator:	Eric Johnson
Alternate:	Jim Bulman

1.0 Onsite Activities

The following activities were conducted during the Second Quarter 2015.

- On May 13, 2015, an updated Site-Specific Risk Assessment (SSRA) for the former Kop-Flex facility was submitted to the Maryland Department of the Environment (MDE). Pursuant to MDE's request, the previous (2009) SSRA was updated to incorporate (1) the results of investigation and remediation activities conducted after 2009, (2) the change in future property use from industrial to commercial, and (3) the current toxicity information and risk characterization methods.

  MDE provided technical comments on the updated SSRA via electronic mail on June 12, 2015. WSP and Emerson reviewed the comments and revised the risk assessment accordingly. The revised SSRA document, which included responses to the comments, was submitted to MDE in early July 2015.

- A Response Action Plan (RAP) for the onsite area was prepared and submitted to MDE and U.S. Environmental Protection Agency (EPA), Region III on June 2, 2015. The RAP describes the proposed remedial actions for addressing volatile organic compounds (VOCs) present in the soil and groundwater on the Kop-Flex property. The plan also includes supporting plans (e.g., Soil Management Plan and Groundwater Monitoring Plan) to be followed during the implementation of the proposed remedial activities.

- All onsite monitoring wells and offsite well MW-24D on the adjoining Williams-Scotsman property, were sampled the week of June 15, 2015. This sampling event was a continuation of the semi-annual groundwater monitoring activities at the Kop-Flex VCP site.

  A synoptic round of water level measurements was obtained at the beginning of the sampling activities. A contour map of the groundwater surface, or water table, for the surficial (unconfined) zone at the former Kop-Flex facility is shown in Figure 1. The hydraulic head contours indicate a generally westward flow direction toward Stony Run, which is consistent with the evaluation of previous hydrologic data from this portion of the aquifer system. Figure 2 depicts the potentiometric surface contours for the deeper (semi-confined) portion of the Lower Patapsco aquifer based on the contouring of water level data from both on and offsite wells. The hydraulic head data indicates a generally south-southeast flow path for groundwater in the deeper semi-confined zone.

The analytical results for the June 2015 groundwater monitoring event are summarized in Table 1. Historical data (2009 to June 2015) for the onsite monitoring wells are summarized in Table 2. (Copies of the laboratory reports for these samples are provided in Enclosure A.) For wells completed in the surficial (unconfined) zone north and west of the former manufacturing building, the VOC distribution indicated by the June 2015 analytical results is similar to data from previous sampling events (Figure 3). The shallow (MW-07) and intermediate-depth (MW-18 and MW-39) perimeter wells continue to show no VOCs at levels of concern. Even though the 1,4-dioxane concentration in the MW-03 sample (7.5 micrograms per liter [µg/l]) is slightly above the MDE risk-based level, evaluation of the sampling results indicate site-related COCs are not migrating offsite in the surficial portion of the aquifer. The VOC distribution in the surficial zone east of the building is also generally consistent with previous monitoring results (Figure 3). Total VOC concentrations in samples from shallow and intermediate-depth wells immediately east of the former manufacturing building are similar to historical levels, and reflect the temporal fluctuation in constituent concentrations in the aquifer. The continued decrease in VOC concentrations at the MW-15 location may reflect biotic and abiotic degradation activity associated with the emulsified zero-valent iron injection in 2013 (Table 2). Samples from wells south of the building (MW-01, MW-06, MW-14 and MW-17) showed non-detect levels for 1,4-dioxane and site-related chlorinated VOCs. For deeper wells screened in the semi-confined portion of the Lower Patapsco aquifer, the VOC concentrations for the June 2015 samples are similar to historical levels (Figure 4). The only notable exception is the sample collected from well MW-17D near the southeast corner of the building, where the concentrations of chlorinated VOCs and 1,4-dioxane continue to show a noticeable reduction compared to historical data (Table 2). The decrease in VOC concentrations at this well location could be linked to mass removal during the pumping test activities conducted in the spring of 2014.

- As part of the June 2015 semi-annual monitoring event, field data were collected from Stony Run to determine the discharge for the reach of this stream on the Kop-Flex property. The hydrologic data were obtained at three times during the field activities and included measurements of stream stage using a staff gage and flow velocity. Evaluation of the hydrologic measurements indicates discharge values for Stony Run ranging between 3.7 cubic feet per second (cfs), which equates to 1,650 gallons per minute (gpm), to 5.7 cfs, or 2,560 gpm.

- A public informational meeting involving representatives of Emerson, WSP, MDE, and the property developer (Trammell Crow) was convened on June 24, 2015, at the Anne Arundel Community College at Arundel Mills campus in Hanover, Maryland to (1) obtain public input concerning the RAP submitted to MDE in early June, and (2) provide an overview of the offsite investigation results since the last public meeting and proposed future activities for the offsite area.

  Following the public informational meeting, a conference call between WSP and MDE project team members was held on June 26, 2015, to discuss potential community involvement activities for the site. Based on this discussion, WSP and Emerson agreed to provide MDE with a compendium of public involvement activities to be implemented during future investigation and remediation work.

2.0 Offsite Activities

2.1 Offsite Groundwater Monitoring Program

- An Offsite Groundwater Monitoring Plan was prepared and submitted to MDE and USEPA Region III on June 18, 2015. This groundwater monitoring plan described the proposed response action for the VOC-affected groundwater in the offsite area. The objectives of the monitoring program will be to (1) gather additional groundwater quality data to evaluate the distribution of site-related VOCs in the aquifer system hydraulically downgradient of the former Kop-Flex facility, and (2) assess trends in the VOC concentrations at each monitoring point.

- The recently installed offsite monitoring wells were sampled the week of June 22, 2015, as requested by MDE. The analytical results are summarized in Table 3, and historical sampling data for the offsite wells are provided in Table 4. (A copy of the laboratory report for these samples is provided in Enclosure A.) No site-related VOCs were detected in the samples from the two shallow wells (MW-25-40 and MW-28-45) in the unconfined portion of the Lower Patapsco aquifer. For the deep wells completed in the semi-confined portion of the Lower Patapsco aquifer, 1,1-dichloroethene (DCE), 1,2-dichloroethane, trichloroethene, and 1,4-dioxane were detected at levels above the MDE groundwater quality criteria in the sample from well MW-25-130, which is located in the northeastern portion of the Harmans Woods neighborhood south of the Maryland Route 100 (Table 3 and Figure 5). Lower concentrations of these site-related VOCs were present in the sample from the deeper well (MW-25-192) at this location, which is consistent with the vertical distribution of constituents determined from previous groundwater investigations. The sampling data for the deep monitoring wells located further south of MW-25 indicated non-detect to very low concentrations of the site-related VOCs (Figure 5). The 1,1-DCE concentration in the sample from well MW-28-210 (12.8 µg/l) is slightly above the applicable groundwater quality standard. In addition, 1,4-dioxane was detected at a concentration of 6.8 µg/l the sample from the deeper of the two wells at the MW-33 location (MW-33-295) (Table 1). The groundwater sample from the shallower of the two wells at the MW-33 location had non-detect levels for the site-related VOCs.

2.2 Residential Well Sampling

- On June 22, 2015, a water sample was collected from the potable well at 763 Donaldson Avenue, which is located in the Phase 3 sampling area. This well had not been previously sampled due to the inability to schedule a sampling appointment with the homeowner.

  The analytical results for this residential well sample were received on July 9, 2015. Copies of the laboratory reporting sheets for this sample are included in the certified analytical report provided in Enclosure B. No site-related VOCs were detected above the applicable groundwater comparative criteria in the well sample.

3.0 Planned Activities for Next Reporting Period (July 2015 – September 2015)

3.1 Onsite Activities

- Review any comments issued by MDE and USEPA on the RAP submitted in early June 2015.

- Submit additional information to MDE for the review of the Water Appropriation and Use Permit application.

3.2 Offsite Activities

- Review any comments issued by MDE and USEPA on the Offsite Groundwater Monitoring Plan submitted in mid-June 2015.

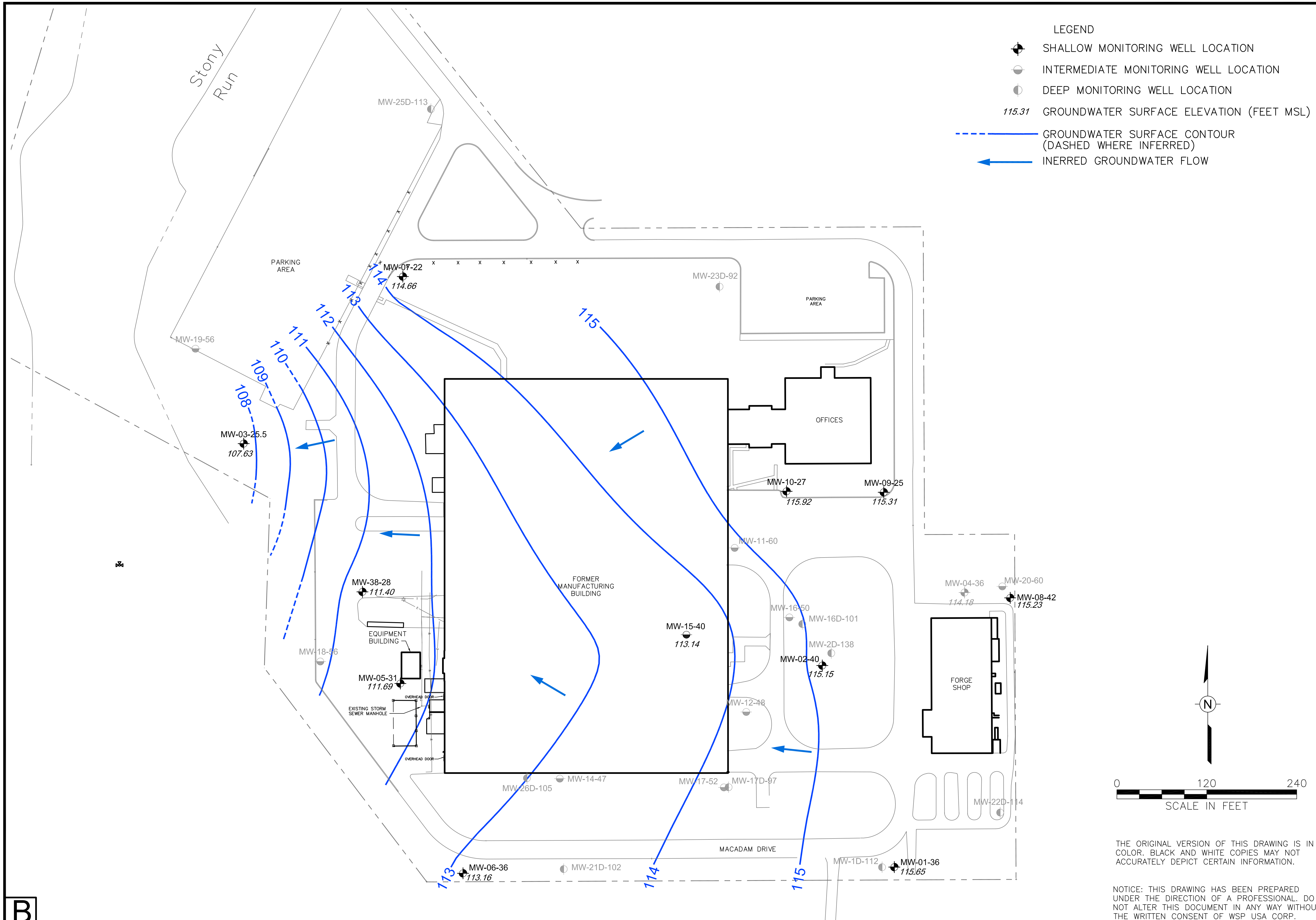
- Conduct the third quarter 2015 sampling of the offsite monitoring wells in the residential areas south of Maryland Route 100.

- Collect semi-annual water samples from the following potable wells in the Severn area:
  - 7740 Twin Oaks Road
  - 7932 Andorick Drive
  - 854 Reece Road

4.0 Key Personnel Changes

- There were no changes to key project personnel during the reporting period.

Figures



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Checked: RJW 7/23/2015
Approved:
DWG Name: 00003705-250

FORMER KOP-FLEX FACILITY
HANOVER, MARYLAND
PREPARED FOR
EMERSON
ST. LOUIS, MISSOURI

Figure 1

GROUNDWATER SURFACE CONTOUR MAP
SURFICIAL (UNCONFINED) PORTION OF AQUIFER
JUNE 2015

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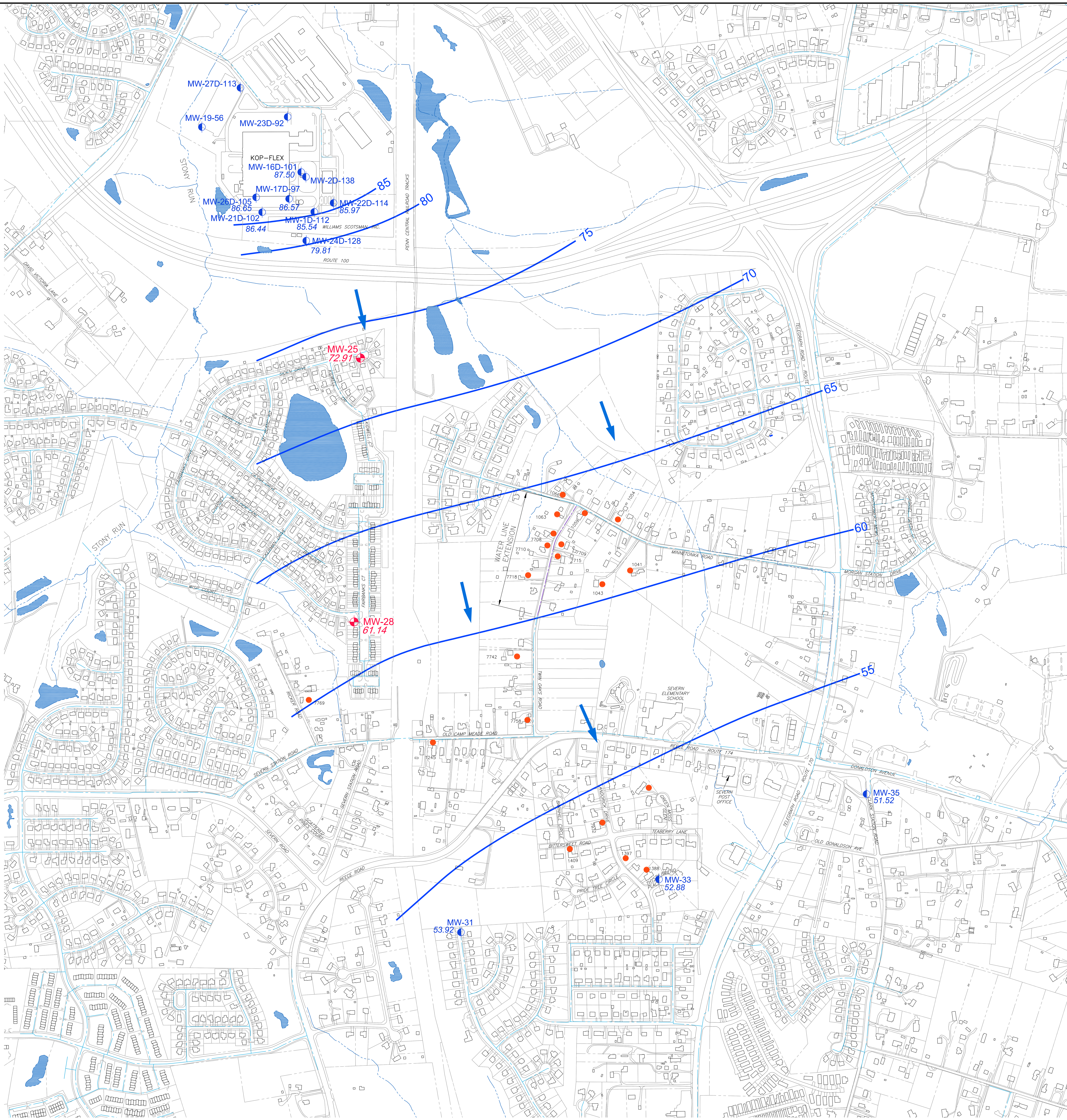

LEGEND

- PROPERTY LINE
- WATER MAIN
- WATER MAIN EXTENSION
- STREAM
- WATER BODY
- SHALLOW AND DEEP MONITORING WELLS
- DEEP MONITORING WELL
- PRIVATE WELL (APPROXIMATE LOCATION)
- POTENTIOMETRIC SURFACE CONTOUR (FEET MSL)
- INFERRED GROUNDWATER FLOW DIRECTION

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0 400 800 1200
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REVISIONS

REV	DESCRIPTION

DRAWN BY EGC
CHECKED
APPROVED

POTENTIOMETRIC SURFACE CONTOURS FOR THE CONFINED PORTION OF THE LOWER PATAPSCO AQUIFER (JUNE 2015)

KOP-FLEX VCP SITE
HANOVER, MARYLAND

PREPARED FOR
EMERSON
ST. LOUIS, MISSOURI

WSP USA Corp.
11190 Sunrise Valley Drive, Suite 300
Reston, Virginia 20191
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FIGURE 2

Drawing Number
00039196-041

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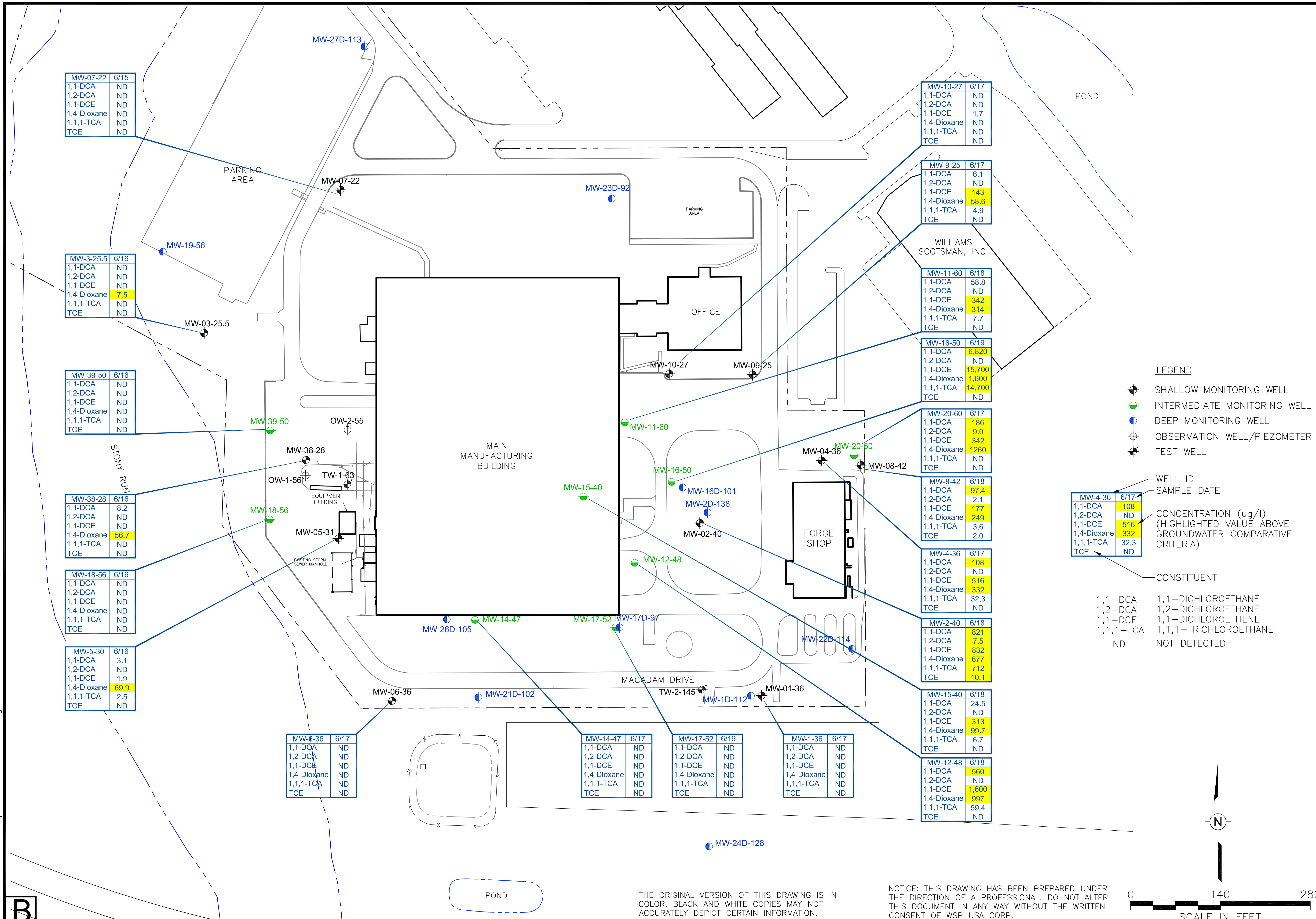

MW-07-22	6/15
1,1-DCA	ND
1,2-DCA	ND
1,1-DCE	ND
1,4-Dioxane	ND
1,1,1-TCA	ND
TCE	ND

MW-3-25.5	6/16
1,1-DCA	ND
1,2-DCA	ND
1,1-DCE	ND
1,4-Dioxane	7.5
1,1,1-TCA	ND
TCE	ND

MW-39-50	6/16
1,1-DCA	ND
1,2-DCA	ND
1,1-DCE	ND
1,4-Dioxane	ND
1,1,1-TCA	ND
TCE	ND

MW-38-28	6/16
1,1-DCA	8.2
1,2-DCA	ND
1,1-DCE	ND
1,4-Dioxane	56.7
1,1,1-TCA	ND
TCE	ND

MW-18-56	6/16
1,1-DCA	ND
1,2-DCA	ND
1,1-DCE	ND
1,4-Dioxane	ND
1,1,1-TCA	ND
TCE	ND

MW-5-30	6/16
1,1-DCA	3.1
1,2-DCA	ND
1,1-DCE	1.9
1,4-Dioxane	69.9
1,1,1-TCA	2.5
TCE	ND

MW-6-36	6/17
1,1-DCA	ND
1,2-DCA	ND
1,1-DCE	ND
1,4-Dioxane	ND
1,1,1-TCA	ND
TCE	ND

MW-14-47	6/17
1,1-DCA	ND
1,2-DCA	ND
1,1-DCE	ND
1,4-Dioxane	ND
1,1,1-TCA	ND
TCE	ND

MW-17-52	6/19
1,1-DCA	ND
1,2-DCA	ND
1,1-DCE	ND
1,4-Dioxane	ND
1,1,1-TCA	ND
TCE	ND

MW-1-36	6/17
1,1-DCA	ND
1,2-DCA	ND
1,1-DCE	ND
1,4-Dioxane	ND
1,1,1-TCA	ND
TCE	ND

MW-10-27	6/17
1,1-DCA	ND
1,2-DCA	ND
1,1-DCE	1.7
1,4-Dioxane	ND
1,1,1-TCA	ND
TCE	ND

MW-9-25	6/17
1,1-DCA	6.1
1,2-DCA	ND
1,1-DCE	143
1,4-Dioxane	58.6
1,1,1-TCA	4.9
TCE	ND

MW-11-60	6/18
1,1-DCA	58.8
1,2-DCA	ND
1,1-DCE	342
1,4-Dioxane	314
1,1,1-TCA	7.7
TCE	ND

MW-16-50	6/19
1,1-DCA	6,820
1,2-DCA	ND
1,1-DCE	15,700
1,4-Dioxane	1,600
1,1,1-TCA	14,700
TCE	ND

MW-20-60	6/17
1,1-DCA	186
1,2-DCA	9.0
1,1-DCE	342
1,4-Dioxane	1260
1,1,1-TCA	ND
TCE	ND

MW-8-42	6/18
1,1-DCA	97.4
1,2-DCA	2.1
1,1-DCE	177
1,4-Dioxane	249
1,1,1-TCA	3.6
TCE	2.0

MW-4-36	6/17
1,1-DCA	108
1,2-DCA	ND
1,1-DCE	516
1,4-Dioxane	332
1,1,1-TCA	32.3
TCE	ND

MW-2-40	6/18
1,1-DCA	821
1,2-DCA	7.5
1,1-DCE	832
1,4-Dioxane	677
1,1,1-TCA	712
TCE	10.1

MW-15-40	6/18
1,1-DCA	24.5
1,2-DCA	ND
1,1-DCE	313
1,4-Dioxane	99.7
1,1,1-TCA	6.7
TCE	ND

MW-12-48	6/18
1,1-DCA	560
1,2-DCA	ND
1,1-DCE	1,600
1,4-Dioxane	997
1,1,1-TCA	59.4
TCE	ND

LEGEND

- SHALLOW MONITORING WELL
- INTERMEDIATE MONITORING WELL
- DEEP MONITORING WELL
- OBSERVATION WELL/PIEZOMETER
- TEST WELL

MW-4-36	6/17
1,1-DCA	108
1,2-DCA	ND
1,1-DCE	516
1,4-Dioxane	332
1,1,1-TCA	32.3
TCE	ND

WELL ID
SAMPLE DATE
CONCENTRATION (ug/l) (HIGHLIGHTED VALUE ABOVE GROUNDWATER COMPARATIVE CRITERIA)
CONSTITUENT

1,1-DCA	1,1-DICHLOROETHANE
1,2-DCA	1,2-DICHLOROETHANE
1,1-DCE	1,1-DICHLOROETHENE
1,1,1-TCA	1,1,1-TRICHLOROETHANE
ND	NOT DETECTED

N

0 140 280
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Checked: RJW 7/20/2015
Approved: RW
DWG Name: 00003705-252

KOP-FLEX
HANOVER, MARYLAND
PREPARED FOR
EMERSON
ST. LOUIS, MISSOURI

Figure 3

SURFICIAL WATER-BEARING ZONE MONITORING WELLS GROUNDWATER SAMPLING DATA
JUNE 2015

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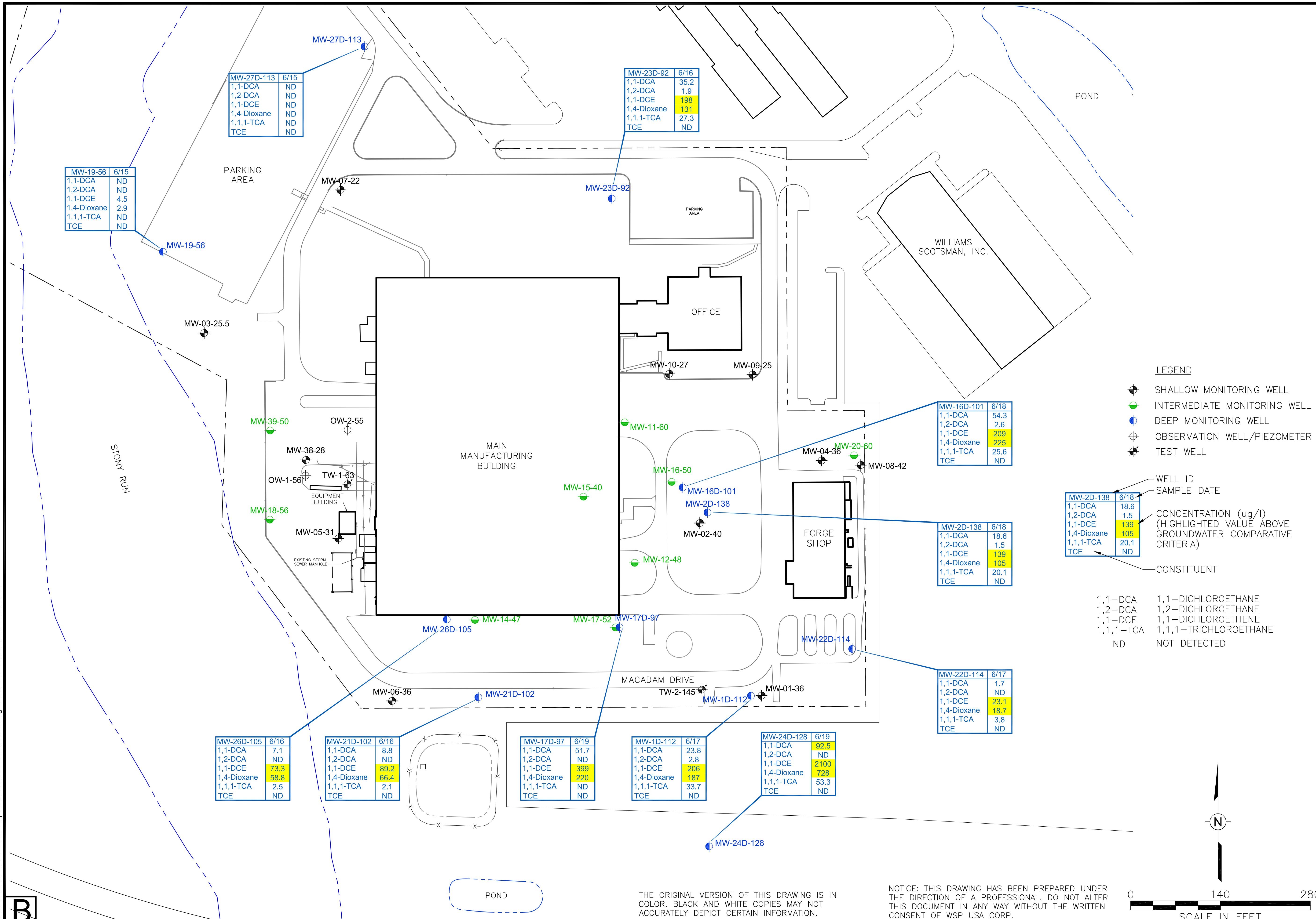

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Approved:
DWG Name: 00003705-252

KOP-FLEX
HANOVER, MARYLAND
PREPARED FOR
EMERSON
ST. LOUIS, MISSOURI

Figure 4

CONFINED LOWER PATAPSCO AQUIFER MONITORING WELLS GROUNDWATER SAMPLING DATA
JUNE 2015

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R:\ACAD\CADD\00003705-Kopflex\CAD\00003705-252.dwg 8/12/2015 11:34 AM USEC01012

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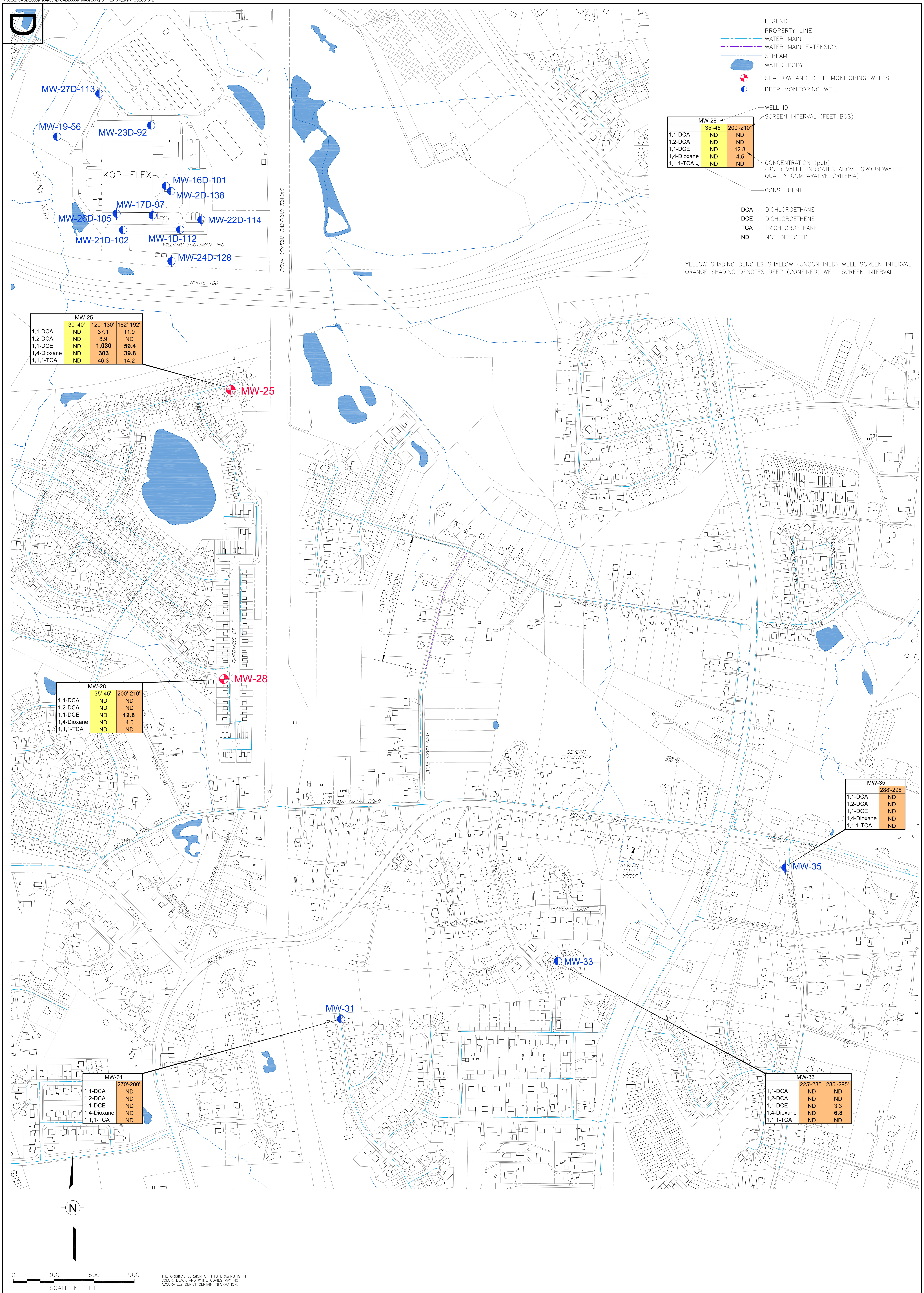

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MW-28 (legend)	35'-45'	200'-210'
1,1-DCA	ND	ND
1,2-DCA	ND	ND
1,1-DCE	ND	12.8
1,4-Dioxane	ND	4.5
1,1,1-TCA	ND	ND

MW-25	30'-40'	120'-130'	182'-192'
1,1-DCA	ND	37.1	11.9
1,2-DCA	ND	8.9	ND
1,1-DCE	ND	**1,030**	**59.4**
1,4-Dioxane	ND	**303**	**39.8**
1,1,1-TCA	ND	46.3	14.2

MW-28	35'-45'	200'-210'
1,1-DCA	ND	ND
1,2-DCA	ND	ND
1,1-DCE	ND	**12.8**
1,4-Dioxane	ND	4.5
1,1,1-TCA	ND	ND

MW-35	288'-298'
1,1-DCA	ND
1,2-DCA	ND
1,1-DCE	ND
1,4-Dioxane	ND
1,1,1-TCA	ND

MW-31	270'-280'
1,1-DCA	ND
1,2-DCA	ND
1,1-DCE	ND
1,4-Dioxane	ND
1,1,1-TCA	ND

MW-33	225'-235'	285'-295'
1,1-DCA	ND	ND
1,2-DCA	ND	ND
1,1-DCE	ND	3.3
1,4-Dioxane	ND	**6.8**
1,1,1-TCA	ND	ND

00039196-043
Drawing Number
FIGURE 5

WSP
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OFFSITE MONITORING WELL VOC CONCENTRATIONS JUNE 2015

KOP-FLEX VCP SITE
HANOVER, MARYLAND
PREPARED FOR
EMERSON
ST. LOUIS, MISSOURI

DRAWN BY: EGC
CHECKED: RJW 7/20/2015
APPROVED: 8/2/2015

SEAL

DATE

REVISIONS

REV	DESCRIPTION		
1	Revised:	Chkd:	Appr.:
2	Revised:	Chkd:	Appr.:
3	Revised:	Chkd:	Appr.:

Tables

Table 1

Summary of Onsite Monitoring Well Results
June 2015 Sampling Event
Kop-Flex VCP Site
Hanover, Maryland

Analyte (b)	MDE Groundwater Quality Criteria (ug/L)	MW-01-36 6/17/2015	MW-01D-112 6/17/2015	MW-02-40 6/18/2015	MW-02D-138 6/18/2015	MW-03-25.5 6/16/2015	MW-04-36 6/17/2015	MW-05-31 6/16/2015
1,1,1-Trichloroethane	200	1 U	33.7	**712**	20.1	1 U	32.3	2.5
1,1-Dichloroethane	90	1 U	23.8	**821**	18.6	1 U	**108**	1.9
1,1-Dichloroethene	7	1 U	**206**	**832**	**139**	1 U	**516**	3.1
1,2-Dichloroethane	5	1 U	2.8	**7.5**	1.5	1 U	5 U	1 U
Trichloroethene	5	1 U	2.5 U	**10.1**	1 U	1 U	5 U	1 U
1,4-Dioxane	6.7 (e)	2 U	**187**	**677**	**105**	**7.5**	**332**	**69.9**
Tetrachloroethene	5	1 U	2.5 U	5 U	1 U	1 U	5 U	1 U

a/ U = not detected at a concentration above the method detection limit.
Bolded number indicates concentration above the groundwater quality criteria.
b/ All concentrations in micrograms per liter (µg/l)
c/ Sample and Duplicate
The duplicate of MW-23D-92 is identified as MW-100.
The duplicate of MW-11-60 is identified as MW-101.
d/ MDE Groundwater Quality Criteria sources:
http://www.mde.maryland.gov/assets/document/Final%20Update%20No%202.1%20dated%205-20-08(1).pdf

e/ Value represents MDE risk-based cleanup level

Table 1

Summary of Onsite Monitoring Well Results
June 2015 Sampling Event
Kop-Flex VCP Site
Hanover, Maryland

Analyte (b)	MDE Groundwater Quality Criteria (ug/L)	MW-06-36 6/17/2015	MW-07-22 6/15/2015	MW-08-42 6/18/2015	MW-09-25 6/17/2015	MW-10-27 6/17/2015	MW-11-60 6/18/2015	MW-101 6/18/2015	MW-12-48 6/18/2015	MW-14-47 6/17/2015
1,1,1-Trichloroethane	200	1 U	1 U	3.6	4.9	1 U	7.7	11.3	59.4	1 U
1,1-Dichloroethane	90	1 U	1 U	**97.4**	6.1	1 U	58.8	79.8	**560**	1 U
1,1-Dichloroethene	7	1 U	1 U	**177**	**143**	1.7	**342**	**429**	**1,600**	1 U
1,2-Dichloroethane	5	1 U	1 U	2.1	1 U	1 U	4 U	5 U	**25** U	1 U
Trichloroethene	5	1 U	1 U	2	1 U	1 U	4 U	5 U	**25** U	1 U
1,4-Dioxane	6.7 (e)	2 U	2 U	**249**	**58.6**	2 U	**314**	**340**	**997**	2 U
Tetrachloroethene	5	1 U	1 U	1 U	1 U	1 U	4 U	5 U	25 U	1 U

a/ U = not detected at a concentration above the method detection limit.
Bolded number indicates concentration above the groundwater quality criteria.
b/ All concentrations in micrograms per liter (μg/l)
c/ Sample and Duplicate
The duplicate of MW-23D-92 is identified as MW-100.
The duplicate of MW-11-60 is identified as MW-101.
d/ MDE Groundwater Quality Criteria sources:
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Final%20Update%20No%202.1%20dated%205-20-08(1).pdf

e/ Value represents MDE risk-based cleanup level

Table 1

Summary of Onsite Monitoring Well Results
June 2015 Sampling Event
Kop-Flex VCP Site
Hanover, Maryland

Analyte (b)	MDE Groundwater Quality Criteria (ug/L)	MW-15-40 6/18/2015	MW-16-50 6/19/2015	MW-16D-101 6/18/2015	MW-17-52 6/19/2015	MW-17D-97 6/19/2015	MW-18-56 6/16/2015	MW-19-56 6/15/2015	MW-20-60 6/17/2015
1,1,1-Trichloroethane	200	6.7	**14,700**	25.6	1 U	5 U	1 U	1 U	4 U
1,1-Dichloroethane	90	24.5	**6,820**	54.3	1 U	51.7	1 U	1 U	**186**
1,1-Dichloroethene	7	**313**	**15,700**	**209**	1 U	**399**	1 U	4.5	**342**
1,2-Dichloroethane	5	4 U	**400** U	2.6	1 U	5 U	1 U	1 U	**9**
Trichloroethene	5	4 U	**400** U	2.5 U	1 U	5 U	1 U	1 U	4 U
1,4-Dioxane	6.7 (e)	**99.7**	**1,600**	**225**	2 U	**220**	2 U	2.9	**1,260**
Tetrachloroethene	5	4 U	400 U	2.5 U	1 U	5 U	1 U	1 U	4 U

a/ U = not detected at a concentration above the method detection limit.
Bolded number indicates concentration above the groundwater quality criteria.
b/ All concentrations in micrograms per liter (µg/l)
c/ Sample and Duplicate
The duplicate of MW-23D-92 is identified as MW-100.
The duplicate of MW-11-60 is identified as MW-101.
d/ MDE Groundwater Quality Criteria sources:
http://www.mde.maryland.gov/assets/document/
Final%20Update%20No%202.1%20dated%205-20-08(1).pd

e/ Value represents MDE risk-based cleanup level

Table 1

Summary of Onsite Monitoring Well Results
June 2015 Sampling Event
Kop-Flex VCP Site
Hanover, Maryland

Analyte (b)	MDE Groundwater Quality Criteria (ug/L)	MW-21D-102 6/16/2015	MW-22D-114 6/17/2015	MW-23D-92 6/16/2015	MW-100 (c) 6/16/2015	MW-26D-105 6/16/2015	MW-27D-113 6/15/2015	MW-38-28 6/16/2015	MW-39-50 6/16/2015
1,1,1-Trichloroethane	200	2.1	3.8	27.3	30.1	2.5	1 U	1 U	1 U
1,1-Dichloroethane	90	8.8	1.7	35.2	2.1	7.1	1 U	8.2	1 U
1,1-Dichloroethene	7	**89.2**	**23.1**	**198**	**191**	**73.3**	1 U	1 U	1 U
1,2-Dichloroethane	5	1 U	1 U	1.9	1 U	1 U	1 U	1 U	1 U
Trichloroethene	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-Dioxane	6.7 (e)	**66.4**	**18.7**	**131**	**147**	**58.8**	2 U	**56.7**	2 U
Tetrachloroethene	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U

a/ U = not detected at a concentration above the method detection limit.
Bolded number indicates concentration above the groundwater quality criteria.
b/ All concentrations in micrograms per liter (µg/l)
c/ Sample and Duplicate
The duplicate of MW-23D-92 is identified as MW-100.
The duplicate of MW-11-60 is identified as MW-101.
d/ MDE Groundwater Quality Criteria sources:
http://www.mde.maryland.gov/assets/document/
Final%20Update%20No%202.1%20dated%205-20-08(1).pd

e/ Value represents MDE risk-based cleanup level

Table 2

Summary of COCs Detected in Groundwater Samples (2009 - 2015)
Onsite Monitoring Wells
Kop-Flex VCP Site
Hanover, Maryland (a)

Monitoring Well	Acetone	Benzene	Bromoform	2-Butanone (MEK)	Chloroethane	Chloroform	Chloromethane	1,2-Dichlorobenzene	1,3-Dichlorobenzene	1,4-Dichlorobenzene	1,1-Dichloroethane	1,2-Dichloroethane	1,1-Dichloroethene	1,2-Dichloroethene	cis-1,2-Dichloroethene	1,4- Dioxane	Ethylbenzene	Isopropylbenzene	p-Isopropyltoluene	Methylene Chloride	Methyl-tert-butyl Ether	Naphthalene	Tetrachloroethene	Toluene	1,1,1-Trichloroethane	1,1,2-Trichloroethane	Trichloroethene	Vinyl Chloride	Xylene (total)	Total VOCs
MW-1																														
May-09	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NR	NA	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	---
Oct-09	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NR	NA	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	---
May-10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NR	NA	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	---
Oct-10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NR	NA	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	---
Jun-11	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NR	NA	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	---
Dec-11	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NR	ND	NA	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	---
Jun-12	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NR	ND	NA	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	---
Dec-12	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NR	ND	NA	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	---
Jul-13	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NR	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	---
Dec-13	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NR	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	---
Jun-14	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NR	ND	11.6	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	12
Dec-14	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NR	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	---
Jun-15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NR	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	---
MW-1D																														
Jun-12	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	63	ND	310	NR	ND	430	ND	ND	NA	ND	ND	ND	ND	ND	96	ND	ND	ND	ND	899
Dec-12	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	77	6.4	380	NR	ND	422	ND	ND	NA	ND	ND	ND	ND	ND	120	1.6	1.7	ND	ND	1,009
Jul-13	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	70.9	6.2	389	NR	ND	439.0	ND	NA	ND	ND	ND	ND	ND	ND	98.8	1.5	1.8	ND	ND	1,007
Dec-13 (g)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	45.2	4.40	288	NR	ND	290.0 (l)	ND	NA	ND	ND	ND	ND	ND	ND	62.4	ND	ND	ND	ND	690
Jun-14 (g)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	45.7	4.70	320	NR	ND	326.0 (c)	ND	NA	ND	ND	ND	ND	ND	ND	62.4	ND	ND	ND	ND	759
Dec-14 (n)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	34.0	4.00	209	NR	ND	279.0 (c)	ND	NA	ND	ND	ND	ND	ND	ND	35.8	ND	ND	ND	ND	562
Jun-15 (n)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	23.8	2.80	206	NR	ND	187.0 (h)	ND	NA	ND	ND	ND	ND	ND	ND	33.7	ND	ND	ND	ND	453
MW-2																														
May-09	ND	ND	ND	ND	120	ND	ND	ND	ND	ND	1,200	9	600	7	NR	NA	ND	ND	NA	3	ND	ND	3	ND	150	ND	8	2	ND	2,102
Oct-09	ND	ND	ND	17	240	ND	ND	ND	ND	ND	2,900	12	1,200	12	NR	NA	ND	ND	NA	5	ND	ND	7	ND	380	ND	17	4	3	4,797
May-10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3,200	16	1,800	15	NR	NA	ND	ND	NA	ND	ND	ND	11	ND	520	ND	22	5	ND	5,589
Oct-10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3,400	15	2,000	13	NR	NA	ND	ND	NA	ND	ND	ND	11	ND	2,700	ND	23	4	ND	8,166
Jun-11	ND	ND	ND	ND	280	ND	ND	ND	ND	ND	3,300	ND	2,200	ND	NR	NA	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5,780
Nov-11	ND	ND	ND	22	130	1	ND	ND	ND	ND	1,600	15	1,800	NR	9	1140	ND	ND	NA	4.4	ND	ND	8	ND	2,800	1	22	6	3.3	7,561
Jun-12 (d)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1,900	ND	1,900	NR	ND	983	ND	ND	NA	ND	ND	ND	ND	ND	6,100	ND	ND	ND	ND	10,883
Dec-12	ND	ND	ND	ND	62	ND	ND	ND	ND	ND	880	10	820	NR	5.8	747	ND	ND	NA	ND	ND	ND	3.6	ND	350	ND	11	ND	ND	2,889
Jul-13	ND	ND	ND	7	47.6	ND	ND	ND	ND	ND	755	10.3	890	NR	5.6	933.0	ND	NA	ND	ND	ND	ND	4	ND	541	ND	11.7	2.8	ND	3,208
Dec-13 (h)	ND	ND	ND	ND	29	ND	ND	ND	ND	ND	486.0	5.60	457	NR	ND	671.0 (i)	ND	NA	ND	ND	ND	ND	ND	ND	228.0	ND	5.7	ND	ND	1,882
Jun-14 (h)	ND	ND	ND	ND	28.7	ND	ND	ND	ND	ND	643.0	8.50	678	NR	ND	629.0 (c)	ND	NA	ND	16.3	ND	ND	ND	ND	599.0	ND	11.2	ND	ND	2,614
Dec-14 (h)	ND	ND	ND	ND	29.3	ND	ND	ND	ND	ND	567	7	528	NR	ND	301 (c)	ND	NA	ND	ND	ND	ND	ND	ND	21	ND	6	ND	ND	1,459
Jun-15 (h)	ND	ND	ND	ND	43.1	ND	ND	ND	ND	ND	821.0	7.50	832	NR	ND	677.0 (c)	ND	NA	ND	ND	ND	ND	ND	ND	712.0	ND	10.1	ND	ND	3,103
MW-2D																														
Jul-11	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	16	2	120	ND	NR	NA	ND	ND	NA	ND	ND	ND	ND	ND	28	ND	ND	ND	ND	166
Nov-11	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	17	2	130	NR	ND	116	ND	ND	NA	ND	ND	ND	ND	ND	27	ND	ND	ND	ND	292
Jun-12	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	16	ND	130	NR	ND	118	ND	ND	NA	ND	ND	ND	ND	ND	28	ND	ND	ND	ND	292
Dec-12	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	17	2.0	130	NR	ND	101	ND	ND	NA	ND	ND	ND	ND	ND	23	ND	ND	ND	ND	273
Jul-13	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	18.5	2.1	170	NR	ND	130.0	ND	NA	ND	ND	ND	ND	ND	ND	23	ND	ND	ND	ND	344
Dec-13	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	13.0	1.50	118	NR	ND	109.0 (h)	ND	NA	ND	ND	ND	ND	ND	ND	15.9	ND	ND	ND	ND	257
Jun-14	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	19.7	1.80	166	NR	ND	121.0 (n)	ND	NA	ND	ND	ND	ND	ND	ND	26.9	ND	ND	ND	ND	335
Dec-14	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	19.7	1.80	147	NR	ND	103.0 (n)	ND	NA	ND	ND	ND	ND	ND	ND	20.2	ND	ND	ND	ND	292
Jun-15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	18.6	1.50	139	NR	ND	105.0 (n)	ND	NA	ND	ND	ND	ND	ND	ND	20.1	ND	ND	ND	ND	284
MW-3																														
May-09	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NR	NA	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	---
Oct-09	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NR	NA	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	---
May-10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NR	NA	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	---
Oct-10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NR	NA	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	---
Jun-11	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NR	NA	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	---
Nov-11	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NR	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	---
Jun-12	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NR	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	---
Dec-12	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NR	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	---
Jul-13	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NR	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	---
Dec-13	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NR	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	---
Jun-14	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NR	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	---
Dec-14	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NR	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	---
Jun-15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NR	ND	7.5	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	8
MW-4																														
May-09	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	130	ND	350	ND	NR	NA	ND	ND	NA	ND	ND	ND	1	ND	100	ND	3	ND	ND	584
Oct-09	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	150	ND	410	3	NR	NA	ND	ND	NA	ND	ND	ND	1	ND	100	ND	3	ND	ND	667
May-10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	290	8	1,100	ND	NR	NA	ND	ND	NA	ND	ND	ND	5	ND	180	ND	8	ND	ND	1,591
Oct-10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	130	3	360	ND	NR	NA	ND	ND	NA	ND	ND	ND	2	ND	75	ND	3	ND	ND	573
Jun-11	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	81	2	200	ND	NR	NA	ND	ND	NA	ND	ND	ND	ND	ND	32	ND	2	ND	ND	317
Dec-11	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	87	2	250	NR	ND	212	ND	ND	NA	ND	ND	ND	ND	ND	47	ND	2	ND	ND	600
Jun-12	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	68	ND	180	NR	ND	158	ND	ND	NA	ND	ND	ND	ND	ND	25	ND	ND	ND	ND	431
Dec-12	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	100	2	210	NR	ND	188	ND	ND	NA	ND	ND	ND	ND	ND	26	ND	2	ND	ND	528
Jul-13	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	108	2.3	233	NR	ND	232.0	ND	ND	ND	ND	ND	ND	ND	ND	27.9	ND	2.3	ND	ND	606
Dec-13	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	67.0	1.40	188	NR	ND	178.0 (h)	ND	NA	ND	ND	ND	ND	ND	ND	21.3	ND	1.7	ND	ND	457
Jun-14	ND	ND	ND	ND	ND	1.3	ND	ND	ND	ND	198.0 (c)	7.20	908 (c)	NR	ND	456.0 (h)	ND	NA	ND	ND	ND	ND	3.2	ND	104.0	ND	8.0	ND	ND	1,686
Dec-14 (g)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	38.2	ND	128	NR	ND	23.7	ND	NA	ND	ND	ND	ND	ND	ND	11.8	ND	ND	ND	ND	202
Jun-15 (h)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	108.0	ND	516	NR	ND	332.0 (c)	ND	NA	ND	ND	ND	ND	ND	ND	32.3	ND	ND	ND	ND	988
MW-5																														
May-09	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	9	ND	4	ND	NR	NA	ND	ND	NA	ND	ND	ND	ND	ND	6	ND	ND	ND	ND	19
Oct-09	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	11	ND	5	ND	NR	NA	ND	ND	NA	ND	ND	ND	ND	ND	6	ND	ND	ND	ND	22
May-10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	12	ND	7	ND	NR	NA	ND	ND	NA	ND	ND	ND	ND	ND	6	ND	ND	ND	ND	25
Oct-10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	8	ND	4	ND	NR	NA	ND	ND	NA	ND	ND	ND	ND	ND	5	ND	ND	ND	ND	17
Jun-11	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7	ND	3	ND	NR	NA	ND	ND	NA	ND	ND	ND	ND	ND	5	ND	ND	ND	ND	15
Dec-11	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.1	ND	ND	NR	ND	246	ND	ND	NA	ND	ND	ND	ND	ND	4	ND	ND	ND	ND	255

Table 2

Summary of COCs Detected in Groundwater Samples (2009 - 2015)
Onsite Monitoring Wells
Kop-Flex VCP Site
Hanover, Maryland (a)

Monitoring Well	Acetone	Benzene	Bromoform	2-Butanone (MEK)	Chloroethane	Chloroform	Chloromethane	1,2-Dichlorobenzene	1,3-Dichlorobenzene	1,4-Dichlorobenzene	1,1-Dichloroethane	1,2-Dichloroethane	1,1-Dichloroethene	1,2-Dichloroethene	cis-1,2-Dichloroethene	1,4- Dioxane	Ethylbenzene	Isopropylbenzene	p-Isopropyltoluene	Methylene Chloride	Methyl-tert-butyl Ether	Naphthalene	Tetrachloroethene	Toluene	1,1,1-Trichloroethane	1,1,2-Trichloroethane	Trichloroethene	Vinyl Chloride	Xylene (total)	Total VOCs
Jun-12	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7	ND	ND	NR	ND	211	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	218
Dec-12	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.4	ND	ND	NR	ND	245	ND	ND	NA	ND	ND	ND	ND	ND	2.2	ND	ND	ND	ND	251
Jul-13	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.3	ND	2.2	NR	ND	205.0	ND	NA	ND	ND	ND	ND	ND	ND	2.4	ND	ND	ND	ND	213
Dec-13	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.9	ND	1.5	NR	ND	137.0 (h)	ND	NA	ND	ND	ND	ND	ND	ND	1.8	ND	ND	ND	ND	143
Jun-14	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.0	ND	1.9	NR	ND	92.3	ND	NA	ND	ND	ND	ND	ND	ND	2.5	ND	ND	ND	ND	100
Dec-14	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.8	ND	1.7	NR	ND	91.2	ND	NA	ND	ND	ND	ND	ND	ND	2.0	ND	ND	ND	ND	98
Jun-15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.1	ND	1.9	NR	ND	69.9	ND	NA	ND	ND	ND	ND	ND	ND	2.5	ND	ND	ND	ND	77
MW-6																														
May-09	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NR	NA	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	---
Oct-09	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NR	NA	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	---
May-10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NR	NA	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	---
Oct-10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NR	NA	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	---
Jun-11	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NR	NA	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	---
Dec-11	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NR	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	---
Jun-12	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NR	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	---
Dec-12	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NR	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	---
Jul-13	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NR	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	---
Dec-13	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NR	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	---
Jun-14	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NR	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	---
Dec-14	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NR	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	---
Jun-15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NR	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	---
MW-7																														
May-09	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NR	NA	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	---
Oct-09	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NR	NA	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	---
May-10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NR	NA	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	---
Oct-10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NR	NA	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	---
Jun-11	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NR	NA	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	---
Dec-11	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NR	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	---
Jun-12	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NR	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	---
Dec-12	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NR	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	---
Jul-13	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NR	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	---
Dec-13	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NR	ND	2.4	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2
Jun-14	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NR	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	---
Dec-14	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NR	ND	2.2	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2
Jun-15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NR	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	---
MW-8																														
May-09	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	210	5	250	1	NR	NA	ND	ND	NA	ND	ND	ND	1	ND	100	ND	4	ND	ND	571
Oct-09	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	260	5	310	1	NR	NA	ND	ND	NA	ND	ND	ND	1	ND	70	ND	4	ND	ND	651
May-10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	249	5	240	1	NR	NA	ND	ND	NA	ND	ND	ND	2	ND	65	ND	4	ND	ND	566
Oct-10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	170	3	200	ND	NR	NA	ND	ND	NA	ND	ND	ND	ND	ND	25	ND	3	ND	ND	401
Jun-11	ND	ND	ND	ND	ND	3	ND	ND	ND	ND	300	6	350	1	NR	NA	ND	ND	NA	ND	ND	ND	1	ND	23	ND	4	ND	ND	688
Dec-11	ND	ND	ND	ND	ND	2	ND	ND	ND	ND	140	3	190	NR	ND	361	ND	ND	NA	ND	ND	ND	ND	ND	13	ND	2	ND	ND	711
Jun-12 (g)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	140	ND	150	NR	ND	445	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	735
Dec-12	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	180	4.1	210	NR	ND	418	ND	ND	NA	ND	ND	ND	ND	ND	9.0	ND	3.1	ND	ND	824
Jul-13	ND	ND	ND	ND	ND	1.1	ND	ND	ND	ND	164	4.4	208	NR	1.2	456.0	ND	ND	ND	ND	ND	ND	1.1	ND	6.4	ND	3.6	ND	ND	846
Dec-13	ND	ND	ND	ND	ND	1.2	ND	ND	ND	ND	78.2	2.00	129	NR	ND	254.0 (h)	ND	NA	ND	ND	ND	ND	ND	ND	4.7	ND	1.8	ND	ND	471
Jun-14	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	89.9	1.90	142	NR	ND	219.0 (h)	ND	NA	ND	ND	ND	ND	ND	ND	3.3	ND	1.6	ND	ND	458
Dec-14	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	59.4	1.60	111	NR	ND	190.0	ND	NA	ND	ND	ND	ND	ND	ND	2.0	ND	1.3	ND	ND	365
Jun-15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	97.4	2.10	177	NR	ND	249.0 (n)	ND	NA	ND	ND	ND	ND	ND	ND	3.6	ND	2.0	ND	ND	531
MW-9																														
May-09	ND	ND	ND	ND	ND	1	ND	ND	ND	ND	17	2	250	ND	NR	NA	ND	ND	NA	ND	ND	ND	ND	ND	16	ND	ND	ND	ND	286
Oct-09	ND	ND	ND	ND	ND	1	ND	ND	ND	ND	18	ND	300	ND	NR	NA	ND	ND	NA	ND	ND	ND	ND	ND	13	ND	ND	ND	ND	332
May-10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	16	2	240	ND	NR	NA	ND	ND	NA	ND	ND	ND	ND	ND	10	ND	ND	ND	ND	268
Jun-11	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	16	2	290	ND	NR	NA	ND	ND	NA	ND	ND	ND	ND	ND	10	ND	ND	ND	ND	318
Nov-11	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	14	1	220	NR	ND	86	ND	ND	NA	ND	ND	ND	ND	ND	8	ND	ND	ND	ND	330
Jun-12	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	8	ND	160	NR	ND	71.3	ND	ND	NA	ND	ND	ND	ND	ND	6	ND	ND	ND	ND	245
Dec-12	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	12	1.2	150	NR	ND	69.2	ND	ND	NA	ND	ND	ND	ND	ND	5.5	ND	ND	ND	ND	238
Jul-13	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	10.9	1.2	170	NR	ND	69.5	ND	NA	ND	ND	ND	ND	ND	ND	6.4	ND	ND	ND	ND	258
Dec-13	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	10.5	1.30	181	NR	ND	97.7 (h)	ND	NA	ND	ND	ND	ND	ND	ND	4.6	ND	ND	ND	ND	295
Jun-14	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	8.5	1.20	193	NR	ND	53.9 (h)	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	257
Dec-14	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	11.1	1.40	179	NR	ND	96.1	ND	NA	ND	ND	ND	ND	ND	ND	9.4	ND	ND	ND	ND	297
Jun-15 (g)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.1	ND	143	NR	ND	58.6 (n)	ND	NA	ND	ND	ND	ND	ND	ND	4.9	ND	ND	ND	ND	213
MW-10																														
May-09	ND	ND	ND	ND	ND	6	ND	ND	ND	ND	ND	ND	4	ND	NR	NA	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	10
Oct-09	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3	ND	NR	NA	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3
May-10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4	ND	NR	NA	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4
Oct-10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3	ND	NR	NA	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3
Jun-11	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4	ND	NR	NA	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4
Nov-11	ND	ND	ND	ND	ND	4	ND	ND	ND	ND	ND	ND	4	NR	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	8
Jun-12	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NR	ND	3.3	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3
Dec-12	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.4	NR	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2
Jul-13	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.9	NR	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3
Dec-13	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.9	NR	ND	3.4	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5
Jun-14	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.3	NR	ND	13.1	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	15
Dec-14	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.1	NR	ND	2.4	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5
Jun-15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.7	NR	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2
MW-11																														
May-09	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	67	9	740	2	NR	NA	ND	ND	NA	ND	ND	ND	ND	ND	47	ND	4	ND	ND	869
Oct-09	ND	ND	ND	ND	38	2	ND	ND	ND	ND	620	16	2,100	8	NR	NA	ND	ND	NA	4	ND	ND	3	ND	230	2	13	1	ND	3,037
May-10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	130	10	750	3	NR	NA	ND	ND	NA	ND	ND	ND	ND	ND	67	ND	5	ND	ND	965
Oct-10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	110	9	540	2	NR	NA	ND	ND	NA	ND	ND	ND	ND	ND	52	ND	5	ND	ND	718

Table 2

Summary of COCs Detected in Groundwater Samples (2009 - 2015)
Onsite Monitoring Wells
Kop-Flex VCP Site
Hanover, Maryland (a)

Monitoring Well	Acetone	Benzene	Bromoform	2-Butanone (MEK)	Chloroethane	Chloroform	Chloromethane	1,2-Dichlorobenzene	1,3-Dichlorobenzene	1,4-Dichlorobenzene	1,1-Dichloroethane	1,2-Dichloroethane	1,1-Dichloroethene	1,2-Dichloroethene	cis-1,2-Dichloroethene	1,4- Dioxane	Ethylbenzene	Isopropylbenzene	p-Isopropyltoluene	Methylene Chloride	Methyl-tert-butyl Ether	Naphthalene	Tetrachloroethene	Toluene	1,1,1-Trichloroethane	1,1,2-Trichloroethane	Trichloroethene	Vinyl Chloride	Xylene (total)	Total VOCs
Jun-11	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	94	8	720	2	NR	NA	ND	ND	NA	ND	ND	ND	ND	ND	29	ND	3	ND	ND	856
Dec-11	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	60	7	430	NR	ND	575	ND	ND	NA	ND	ND	ND	ND	ND	16	ND	ND	ND	ND	1,088
Jun-12 (h)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	130	ND	730	NR	ND	487	ND	ND	NA	ND	ND	ND	ND	ND	35	ND	ND	ND	ND	1,382
Dec-12	ND	ND	ND	ND	40	1.9	ND	ND	ND	ND	1,000	20	1,800	NR	12	1,160	ND	ND	NA	6.7	ND	ND	4	ND	300	2.9	13	ND	ND	4,360
Jul-13	ND	ND	ND	ND	11.6	1.4	ND	ND	ND	ND	403	13	1,360	NR	7.2	787.0	ND	NA	ND	ND	ND	ND	1.6	ND	103	1	8.8	1.6	ND	2,699
Dec-13 (c)	ND	ND	ND	ND	38.1	ND	ND	ND	ND	ND	742.0	12.80	1,520	NR	10.5	1,000.0	ND	NA	ND	ND	ND	ND	ND	ND	343.0	ND	10.3	ND	ND	3,677
Jun-14 (m)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	75.2	4.90	442	NR	ND	372.0 (c)	ND	NA	ND	9	ND	ND	ND	ND	21.7	ND	ND	ND	ND	925
Dec-14 (c)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	190.0	ND	695	NR	ND	397.0 (c)	ND	NA	ND	ND	ND	ND	ND	ND	28.8	ND	ND	ND	ND	1,311
Jun-15 (m)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	58.8	ND	342	NR	ND	314.0 (c)	ND	NA	ND	ND	ND	ND	ND	ND	7.7	ND	ND	ND	ND	723
MW-12																														
May-09	ND	ND	ND	ND	7	2	ND	ND	ND	ND	840	29	2,200	22	NR	NA	ND	ND	NA	3	ND	ND	4	ND	120	3	16	2	ND	3,248
Oct-09	ND	ND	ND	ND	5	1	ND	ND	ND	ND	680	21	1,900	16	NR	NA	ND	ND	NA	2	ND	ND	3	ND	87	2	13	2	ND	2,732
May-10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1,100	20	2,300	25	NR	NA	ND	ND	NA	ND	ND	ND	4	ND	160	ND	9	3	ND	3,621
Oct-10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	610	26	2,200	19	NR	NA	ND	ND	NA		ND	ND	3	ND	110	2	13	2	ND	2,985
Jun-11	ND	ND	ND	ND	11	2	ND	ND	ND	ND	750	34	2,800	24	NR	NA	ND	ND	NA	3	ND	ND	3	ND	110	3	16	2	ND	3,758
Nov-11	ND	ND	ND	ND	6	3	ND	ND	ND	ND	440	39	2,400	NR	22	1,550	ND	ND	NA	2	ND	ND	3	ND	85	4	17	2	ND	4,573
Jun-12 (c)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	430	ND	1,700	NR	ND	1,130	ND	ND	NA	ND	ND	ND	ND	ND	63	ND	ND	ND	ND	3,323
Dec-12	ND	ND	ND	ND	30	2.0	ND	ND	ND	ND	460	31	1,600	NR	19	1,240	ND	ND	NA	ND	ND	ND	2.0	ND	48	3.3	13	ND	ND	3,448
Jul-13	ND	ND	ND	ND	152	2.1	ND	ND	ND	ND	869	39.2	2,840	NR	35.2	1,530.0	ND	NA	ND	6.6	ND	ND	4	ND	77.2	3.2	16.7	2.6	ND	5,578
Dec-13 (l)	ND	ND	ND	ND	52	ND	ND	ND	ND	ND	439.0	26.20	1,530	NR	ND	1,720.0 (i)	ND	NA	ND	ND	ND	ND	ND	ND	41.8	ND	ND	ND	ND	3,809
Jun-14 (c)	ND	ND	ND	ND	83.6	ND	ND	ND	ND	ND	1,210.0	43.50	3,510	NR	33.2	182.0 (n)	ND	NA	ND	ND	ND	ND	ND	ND	125.0	ND	17.8	ND	ND	5,205
Dec-14 (i)	ND	ND	ND	ND	145.0	ND	ND	ND	ND	ND	1,370.0	37.50	3,350	NR	34.8	1,270.0 (n)	ND	NA	ND	ND	ND	ND	ND	ND	78.8	ND	ND	ND	ND	6,286
Jun-15 (i)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	560.0	ND	1,600	NR	ND	997.0	ND	NA	ND	ND	ND	ND	ND	ND	59.4	ND	ND	ND	ND	3,216
MW-14																														
May-09	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NR	NA	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	---
Oct-09	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3	ND	NR	NA	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3
May-10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5	ND	NR	NA	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5
Oct-10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3	ND	NR	NA	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3
Jun-11	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5	ND	NR	NA	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5
Nov-11	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.8	NR	ND	6.9	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	13
Jun-12	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5	NR	ND	7.4	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	12
Dec-12	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NR	ND	3.6	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4
Jul-13	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.6	NR	ND	3.0	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6
Dec-13	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NR	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	---
Jun-14	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.2	NR	ND	3.3	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6
Dec-14	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NR	ND	2.2	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2
Jun-15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NR	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	---
MW-15																														
Sep-10	ND	ND	ND	ND	4	1	ND	ND	ND	ND	370	16	1,300	9	NR	NA	ND	ND	NA	ND	ND	ND	4	ND	27	2	15	1	ND	1,749
Oct-10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	180	9	670	5	NR	NA	ND	ND	NA	ND	ND	ND	2	ND	22	2	7	ND	ND	897
Jun-11	ND	ND	ND	ND	8	ND	ND	ND	ND	ND	210	3	300	2	NR	NA	ND	ND	NA	ND	ND	ND	ND	ND	51	ND	2	ND	ND	576
Dec-11	ND	ND	ND	ND	4	ND	ND	ND	ND	ND	190	7	530	NR	3	345	ND	ND	NA	ND	ND	ND	1	ND	48	ND	4.7	ND	ND	1,133
Jun-12 (h)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	200	ND	500	NR	ND	575	ND	ND	NA	ND	ND	ND	ND	ND	47	ND	ND	ND	ND	1,322
Dec-12	ND	ND	ND	ND	11	ND	ND	ND	ND	ND	320	5.2	540	NR	4.2	272	ND	ND	NA	ND	ND	ND	1.2	ND	150	ND	5.2	ND	ND	1,309
Jul-13	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	153	ND	465	NR	5.5	2,530.0	ND	NA	ND	ND	ND	ND	ND	ND	43.2	ND	ND	ND	ND	3,197
Dec-13 (g)	ND	ND	ND	ND	3	ND	ND	ND	ND	ND	181.0	3.00	289	NR	2.8	228.0 (h)	ND	NA	ND	ND	ND	ND	ND	ND	107.0	ND	2.4	ND	ND	817
Jun-14 (n)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	57.0	4.40	433 (c)	NR	5.8	92.8 (g)	ND	NA	ND	10.2	ND	ND	ND	ND	13.7	ND	ND	ND	ND	617
Dec-14 (m)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	71.0	ND	318	NR	ND	208.0 (n)	ND	NA	ND	ND	ND	ND	ND	ND	20.7	ND	ND	ND	ND	618
Jun-15 (m)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	24.5	ND	313	NR	ND	99.7 (n)	ND	NA	ND	ND	ND	ND	ND	ND	6.7	ND	ND	ND	ND	444
MW-16																														
Sep-10	ND	ND	ND	23	480	13	6	3	ND	ND	8,300	57	16,000	67	NR	NA	22	10	NA	28	ND	17	250	7	160,000	4	370	ND	101	185,758
Oct-10	ND	ND	ND				ND	ND	ND	ND	4,900	42	12,000	52	NR	NA	ND	ND	NA	ND	ND	ND	140	ND	71,000	3	190	6	ND	88,333
Jun-11	ND	ND	ND	ND	660	ND	ND	ND	ND	ND	3,400	ND	19,000	ND	NR	NA	ND	ND	NA	ND	ND	ND	ND	ND	21,000	ND	130	ND	ND	44,190
Dec-11	ND	ND	ND	23	560	7	ND	1.7	ND	ND	8,200	53	18,000	NR	59	1,930	12	4.6	NA	30	ND	7.1	110	4.2	100,000	3	220	14	57	129,295
Jun-12 (f)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4,300	ND	11,000	NR	ND	2,050	ND	ND	NA	ND	ND	ND	ND	ND	41,000	ND	ND	ND	ND	58,350
Dec-12	ND	ND	ND	18	460	5.8	ND	1.3	1.1	ND	14,000	52	14,000	NR	56	1,740	7.6	3.3	NA	30	ND	4.5	69	3.4	30,000	3.5	160	9.2	36	60,661
Jul-13	46.5	ND	1.8	ND	1,290	7.2	2.7	1.4	ND	ND	3,600	61.3	17,900	NR	59.1	2,260.0	9.9	NA	ND	29.5	ND	6	83.8	4.4	29,400	4.3	ND	17.7	46.2	54,832
Dec-13 (k)	ND	ND	ND	ND	266	ND	ND	ND	ND	ND	2,050.0	ND	19,400	NR	ND	2,840.0 (d)	ND	NA	ND	ND	ND	ND	ND	ND	12,000.0	ND	ND	ND	ND	36,556
Jun-14 (k)	ND	ND	ND	ND	278	ND	ND	ND	ND	ND	3,850.0	ND	16,400	NR	ND	1,570.0 (i)	ND	NA	ND	ND	ND	ND	ND	ND	30,500.0	ND	213.0	ND	ND	52,811
Dec-14	ND	ND	ND	17	ND	2.2	ND	ND	ND	ND	5,910.0 (p)	18.90	4,670 (p)	NR	32.6	451.0 (h)	4	NA	2	7	ND	3	30.7	1.6	15,000.0 (p)	ND	63.8	5.1	17	26,236
Jun-15 (p)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6,820.0	ND	15,700	NR	ND	1,600.0 (d)	ND	NA	ND	ND	ND	ND	ND	ND	14,700.0	ND	ND	ND	ND	38,820
MW-16D																														
Jan-11	ND	ND	ND	ND	3	4	ND	ND	ND	ND	110	4	330	ND	NR	NA	ND	ND	NA	8	ND	2	ND	ND	82	ND	2	ND	3	548
Jun-11	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	100	4	400	ND	NR	NA	ND	ND	NA	ND	ND	ND	ND	ND	75	ND	2	ND	ND	581
Dec-11	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	72	4	240	NR	ND	267	ND	ND	NA	ND	ND	ND	ND	ND	64	ND	1	ND	ND	650
Jun-12	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	49	ND	150	NR	ND	215	ND	ND	NA	ND	ND	ND	ND	ND	33	ND	ND	ND	ND	447
Dec-12	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	55	3	130	NR	ND	189	ND	ND	NA	ND	ND	ND	ND	ND	29	ND	ND	ND	ND	407
Jul-13	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	54.3	3	193	NR	ND	246.0	ND	NA	ND	ND	ND	ND	ND	ND	23.8	ND	ND	ND	ND	520
Dec-13	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	43.2	2.20	155	NR	ND	218.0 (h)	ND	NA	ND	ND	ND	ND	ND	ND	21.3	ND	ND	ND	ND	440
Jun-14	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	57.6	3.50	191	NR	ND	232.0 (h)	ND	NA	ND	ND	ND	ND	ND	ND	28.9	ND	ND	ND	ND	513
Dec-14	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	90.0	4.10 (n)	288	NR	ND	251.0 (h)	ND	NA	ND	ND	ND	ND	ND	ND	44.3	ND	1.8	ND	ND	679
Jun-15 (n)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	54.3	2.60	209	NR	ND	225.0 (c)	ND	NA	ND	ND	ND	ND	ND	ND	25.6	ND	ND	ND	ND	517
MW-17																														
Sep-10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	10	ND	7	ND	NR	NA	ND	ND	NA	ND	ND	ND	ND	ND	7	ND	ND	ND	ND	24
Oct-10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3	ND	5	ND	NR	NA	ND	ND	NA	ND	ND	ND	ND	ND	2	ND	ND	ND	ND	10
Jun-11	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2	ND	2	ND	NR	NA	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4
Nov-11	ND	ND	ND	ND	1	ND	ND	ND	ND	ND	46	ND	41	NR	ND	22	ND	ND	NA	ND	ND	ND	ND	ND	22	ND	ND	ND	ND	132
Jun-12 (c)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NR	ND	10.2	ND	ND	NA	ND	ND	ND	ND	ND	23	ND	ND	ND	ND	33
Dec-12	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NR	ND	4.4	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4
Jul-13	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.6	NR	ND	4.3	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6
Dec-13	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NR	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	---

Table 2

Summary of COCs Detected in Groundwater Samples (2009 - 2015)
Onsite Monitoring Wells
Kop-Flex VCP Site
Hanover, Maryland (a)

Monitoring Well	Acetone	Benzene	Bromoform	2-Butanone (MEK)	Chloroethane	Chloroform	Chloromethane	1,2-Dichlorobenzene	1,3-Dichlorobenzene	1,4-Dichlorobenzene	1,1-Dichloroethane	1,2-Dichloroethane	1,1-Dichloroethene	1,2-Dichloroethene	cis-1,2-Dichloroethene	1,4- Dioxane	Ethylbenzene	Isopropylbenzene	p-Isopropyltoluene	Methylene Chloride	Methyl-tert-butyl Ether	Naphthalene	Tetrachloroethene	Toluene	1,1,1-Trichloroethane	1,1,2-Trichloroethane	Trichloroethene	Vinyl Chloride	Xylene (total)	Total VOCs
Jun-14	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.4	NR	ND	34.3	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	37
Dec-14	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NR	ND	2.5	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3
Jun-15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NR	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	---
MW-17D																														
Sep-10	ND	ND	ND	ND	4	1	ND	ND	ND	ND	150	12	940	7	NR	NA	ND	ND	NA	5	ND	ND	1	ND	26	ND	9	1	ND	1,156
Oct-10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	190	13	1,300	9	NR	NA	ND	ND	NA	ND	ND	ND	2	ND	42	ND	10	ND	ND	1,566
Jun-11	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	290	ND	2,100	ND	NR	NA	ND	ND	NA	ND	ND	ND	ND	ND	29	ND	ND	ND	ND	2,419
Nov-11	ND	ND	ND	ND	15	1	ND	ND	ND	ND	270	14	1,900	NR	14	575	ND	ND	NA	3	ND	ND	3	ND	38	2	12	ND	ND	2,847
Jun-12 (c)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	290	ND	1,000	NR	ND	618	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1,908
Dec-12	ND	ND	ND	ND	41	1.3	ND	ND	ND	ND	470	17	1,800	NR	19	669	ND	ND	NA	4.7	ND	ND	1.5	ND	36.0	ND	11	ND	ND	3,071
Jul-13	ND	ND	ND	ND	68.4	1.3	ND	ND	ND	ND	496	17	2,310	NR	22.3	612.0	ND	NA	ND	6.6	ND	ND	2	ND	36.2	ND	10.9	1.5	ND	3,584
Dec-13 (m)	ND	ND	ND	ND	37	ND	ND	ND	ND	ND	326.0	13.60	2,100	NR	16.8	592.0 (l)	ND	NA	ND	ND	ND	ND	ND	ND	22.6	ND	7.9	ND	ND	3,116
Jun-14 (c)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	143.0	10.20	1,260	NR	ND	435.0	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1,848
Dec-14	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	66.2	4.60	484	NR	3.8	23.3	ND	NA	ND	ND	ND	ND	ND	ND	4.3	ND	2.9	ND	ND	591
Jun-15 (h)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	51.7	ND	399	NR	ND	220.0	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	671
MW-18																														
Dec-11	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NR	ND	13.6	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	14
Jun-12	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NR	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	---
Dec-12	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NR	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	---
Jul-13	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NR	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	---
Dec-13	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NR	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	---
Jun-14	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NR	ND	4.6	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5
Dec-14	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NR	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	---
Jun-15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NR	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	---
MW-19																														
Dec-11	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	8	NR	ND	5.9	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	14
Jun-12	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NR	ND	4.0	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4
Dec-12	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NR	ND	3.6	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4
Jul-13	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6	NR	ND	5.5	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	12
Dec-13	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.5	NR	ND	4.1	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	8
Jun-14	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.7	NR	ND	6.3	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	10
Dec-14	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.0	NR	ND	4.2	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	8
Jun-15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.5	NR	ND	2.9	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7
MW-20																														
Dec-11	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NR	ND	11.9	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	12
Jun-12	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	8.5	ND	51	NR	ND	272	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	332
Dec-12	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	30	3.1	120	NR	ND	506	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	659
Jul-13	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	83.8	6.2	255	NR	1.5	845.0	ND	NA	ND	ND	ND	ND	ND	ND	ND	2	ND	ND	ND	1,194
Dec-13 (g)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	121.0	7.00	333	NR	ND	1,230.0 (i)	ND	NA	ND	ND	ND	ND	ND	ND	ND	2.5	ND	ND	ND	1,694
Jun-14 (g)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	173.0	8.80	359	NR	2.1	1,010.0 (i)	ND	NA	ND	5.6	ND	ND	ND	ND	ND	3.3	2.1	ND	ND	1,564
Dec-14 (m)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	166.0	9.30	302	NR	ND	660.0 (i)	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1,137
Jun-15 (m)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	186.0	9.00	342	NR	ND	1,260.0 (i)	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1,797
MW-21D																														
Jun-12	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	12	ND	90	NR	ND	84.2	ND	ND	NA	ND	ND	ND	ND	ND	8	ND	ND	ND	ND	194
Dec-12	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	14	ND	90	NR	ND	81.8	ND	ND	NA	ND	ND	ND	ND	ND	5.7	ND	ND	ND	ND	192
Jul-13	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	11.9	ND	102	NR	ND	80.1	ND	NA	ND	ND	ND	ND	ND	ND	5	ND	ND	ND	ND	199
Dec-13	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	10.1	ND	82.4	NR	ND	70.0	ND	NA	ND	ND	ND	ND	ND	ND	4.1	ND	ND	ND	ND	167
Jun-14	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	8.3	ND	76.5	NR	ND	77.0 (g)	ND	NA	ND	ND	ND	ND	ND	ND	2.8	ND	ND	ND	ND	165
Dec-14	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	10.4	ND	105.0	NR	ND	138.0	ND	NA	ND	ND	ND	ND	ND	ND	3.2	ND	ND	ND	ND	257
Jun-15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	8.8	ND	89.2	NR	ND	66.4 (n)	ND	NA	ND	ND	ND	ND	ND	ND	2.1	ND	ND	ND	ND	167
MW-22D																														
Jun-12	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	27	NR	ND	29	ND	ND	NA	ND	ND	ND	ND	ND	8	ND	ND	ND	ND	64
Dec-12	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.5	ND	38	NR	ND	41	ND	ND	NA	ND	ND	ND	ND	ND	10	ND	ND	ND	ND	94
Jul-13	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.7	ND	34.2	NR	ND	31.8	ND	NA	ND	ND	ND	ND	ND	ND	6.5	ND	ND	ND	ND	75
Dec-13	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.7	ND	43.5	NR	ND	35.3 (g)	ND	NA	ND	ND	ND	ND	ND	ND	8.4	ND	ND	ND	ND	91
Jun-14	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.5	ND	44.2	NR	ND	39.3	ND	NA	ND	ND	ND	ND	ND	ND	9.0	ND	ND	ND	ND	96
Dec-14	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.0	ND	27.0	NR	ND	22.8	ND	NA	ND	ND	ND	ND	ND	ND	4.2	ND	ND	ND	ND	56
Jun-15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.7	ND	23.1	NR	ND	18.7	ND	NA	ND	ND	ND	ND	ND	ND	3.8	ND	ND	ND	ND	47
MW-23D																														
Jun-12	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	29	ND	120	NR	ND	149	ND	ND	NA	ND	ND	ND	ND	ND	36	ND	ND	ND	ND	334
Aug-12	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	39	2.2	130	NR	ND	NA	ND	ND	NA	ND	ND	ND	ND	ND	35	ND	ND	ND	ND	206
Dec-12	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	32	2.0	110	NR	ND	130	ND	ND	NA	ND	ND	ND	ND	ND	31	ND	ND	ND	ND	305
Jul-13	ND	ND	ND	ND	ND	ND	1.5	ND	ND	ND	32.7	2.3	131	NR	ND	186.0	ND	NA	ND	ND	ND	ND	ND	ND	28.6	ND	ND	ND	ND	382
Dec-13	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	25.6	1.7	101	NR	ND	165.0 (h)	ND	NA	ND	ND	ND	ND	ND	ND	21.3	ND	ND	ND	ND	315
Jun-14	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	29.1	2.3	101	NR	ND	132.0 (g)	ND	NA	ND	ND	ND	ND	ND	ND	24.7	ND	ND	ND	ND	290
Dec-14	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	28.3	1.90	157.0	NR	ND	151.0	ND	NA	ND	ND	ND	ND	ND	ND	26.5	ND	ND	ND	ND	365
Jun-15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	35.2	1.90	198	NR	ND	131.0 (n)	ND	NA	ND	ND	ND	ND	ND	ND	27.3	ND	ND	ND	ND	393
MW-24D																														
Jun-12 (c)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1,300	NR	ND	342	ND	ND	NA	ND	ND	ND	ND	ND	53	ND	ND	ND	ND	1,695
Aug-12	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	72	13	1,600	NR	6	NA	ND	ND	NA	ND	ND	ND	1.7	ND	60	1.5	13	ND	ND	1,767
Dec-12	ND	ND	ND	ND	ND	1.3	ND	ND	ND	ND	61	12	1,500	NR	6.7	393	ND	ND	NA	ND	ND	ND	1.8	ND	62	1.5	16	ND	ND	2,055
Jul-13	ND	ND	ND	ND	ND	1.2	ND	ND	ND	ND	57.7	10.8	1,520	NR	6.2	470.0	ND	NA	ND	ND	ND	ND	1.4	ND	48.7	1.3	12.4	ND	ND	2,130
Dec-13 (c)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	47.4	ND	1,190	NR	ND	433.0	ND	NA	ND	ND	ND	ND	ND	ND	34.1	ND	10.1	ND	ND	1,715
Jun-14 (c)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	57.3	11.3	1,510	NR	ND	488.0	ND	NA	ND	ND	ND	ND	ND	ND	43.4	ND	14.2	ND	ND	2,124
Dec-14 (l)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	106.0	ND	2,640	NR	ND	657.0 (c)	ND	NA	ND	ND	ND	ND	ND	ND	60.9	ND	ND	ND	ND	3,464
Jun-15 (l)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	92.5	ND	2,100	NR	ND	728.0 (c)	ND	NA	ND	ND	ND	ND	ND	ND	53.3	ND	ND	ND	ND	2,974
MW-27D																														
Sep-13	ND	ND	ND	ND	ND	2.1	ND	ND	ND	ND	ND	0.17 J	ND	NR	ND	0.9 J	ND	NA	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	4
Dec-13	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NR	ND	ND	ND	NA	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	1
Jun-14	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NR	ND	ND	ND	NA	ND	ND	1.6	ND	ND	ND	ND	ND	ND	ND	ND	2
Dec-14	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NR	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	---

Table 2

Summary of COCs Detected in Groundwater Samples (2009 - 2015)
Onsite Monitoring Wells
Kop-Flex VCP Site
Hanover, Maryland (a)

Monitoring Well	Acetone	Benzene	Bromoform	2-Butanone (MEK)	Chloroethane	Chloroform	Chloromethane	1,2-Dichlorobenzene	1,3-Dichlorobenzene	1,4-Dichlorobenzene	1,1-Dichloroethane	1,2-Dichloroethane	1,1-Dichloroethene	1,2-Dichloroethene	cis-1,2-Dichloroethene	1,4- Dioxane	Ethylbenzene	Isopropylbenzene	p-Isopropyltoluene	Methylene Chloride	Methyl-tert-butyl Ether	Naphthalene	Tetrachloroethene	Toluene	1,1,1-Trichloroethane	1,1,2-Trichloroethane	Trichloroethene	Vinyl Chloride	Xylene (total)	Total VOCs
Jun-15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NR	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	---
MW-26D																														
Mar-13	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	12.4	ND	98.2	NR	ND	118.0	ND	NA	ND	ND	ND	ND	ND	5.6	6.3	ND	ND	ND	ND	241
Jul-13	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	13.5	ND	120	NR	ND	99.2	ND	NA	ND	ND	ND	ND	ND	ND	6.6	ND	ND	ND	ND	239
Dec-13	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.9	ND	51.5	NR	ND	60.7	ND	NA	ND	ND	ND	ND	ND	ND	2.7	ND	ND	ND	ND	122
Jun-14	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.2	ND	42.4	NR	ND	39.8	ND	NA	ND	ND	ND	ND	ND	ND	1.8	ND	ND	ND	ND	89
Dec-14	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.5	ND	78.1	NR	ND	73.0	ND	NA	ND	ND	ND	ND	ND	ND	2.8	ND	ND	ND	ND	161
Jun-15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.1	ND	73.3	NR	ND	58.8	ND	NA	ND	ND	ND	ND	ND	ND	2.5	ND	ND	ND	ND	142
MW-38																														
Jun-14	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	9.5	ND	ND	NR	ND	51.8	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	61
Dec-14	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	8.7	ND	ND	NR	ND	68.7	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	77
Jun-15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	8.2	ND	ND	NR	ND	56.7	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	65
MW-39																														
Jun-14	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.2	NR	ND	6.3	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	10
Dec-14	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NR	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	---
Jun-15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NR	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	---

a/ all samples measured in ppb (ug/L);
all samples collected using low-flow purging techniques
e = as estimated below the detection limit;
E = result exceeds calibration range
ND = not detected; NA = Not analyzed
NA = not analyzed
NR = constituent not reported
b/suspected laboratory contaminant
c/ sample run at a 10x dilution
d/ sample run at 50x dilution
f/sample run at a 250x dilution
g/sample run at a 2x dilution
h/sample run at a 5x dilution
i/sample run at a 25x dilution
k/sample run at 200x dilution
l/sample run at 20x dilution
m/sample run at 4x dilution
n/sample run at 2.5x dilution
p/sample run at 400x dilution

Table 3

Summary of Off-Property Monitoring Well Sample Results
June 2015 Sampling Event
Kop-Flex VCP Site
Hanover, Maryland

Analyte (b)	Groundwater Quality Criteria (ug/L)	MW-24D-128 6/19/2015	MW-25-40 6/24/2015	MW-25-130 6/24/2015	MW-25-190 6/25/2015	MW-28-45 6/23/2015	MW-28-210 6/23/2015	MW-31-280 6/24/2015	MW-33-235 6/23/2015	MW-33-295 6/23/2015	MW-35-298 6/22/2015
1,1,1-Trichloroethane	200	53.3	1 U	46.3	14.2	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethane	90	**92.5**	1 U	37.1	11.9	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethene	7	**2,100**	1 U	**1,030**	**59.4**	1 U	**12.8**	1 U	1 U	3.3	1 U
1,2-Dichloroethane	5	**20** U	1 U	**8.9**	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Trichloroethene	5	**20** U	1 U	**6.8**	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-Dioxane	6.7 (d)	**728**	2 U	**303**	**39.8**	2 U	4.5	2 U	2 U	**6.8**	2 U
Tetrachloroethene	5	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U

a/ U = not detected at a concentration above the method detection limit
Bolded number indicates concentration above the groundwater quality criteria
b/ All concentrations in micrograms per liter (µg/l)
c/ Groundwater Quality Criteria sources:
RSLs: http://www.mde.maryland.gov/assets/document/Final%20Update%20No%202.1%20dated%205-20-08(1).pdf
d/ Value represents MDE risk-based cleanup level.

Table 4

Summary of COCs Detected in Groundwater Samples
Offsite Monitoring Wells
Kop-Flex VCP Site
Hanover, Maryland (a)

Monitoring Well	Chloroform	1,1-Dichloroethane	1,2-Dichloroethane	1,1-Dichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	1,4- Dioxane	Methylene Chloride	Methyl-tert-butyl Ether	Tetrachloroethene	1,1,1-Trichloroethane	1,1,2-Trichloroethane	Trichloroethene	Total VOCs
MW-24D														
Jun-12 (c)	ND	ND	ND	1,300	ND	ND	342	ND	ND	ND	53	ND	ND	1,695
Aug-12	ND	72	13	1,600	6	ND	NA	ND	ND	1.7	60	1.5	13	1,767
Dec-12	1.3	61	12	1,500	6.7	ND	393	ND	ND	1.8	62	1.5	16	2,055
Jul-13	1.2	57.7	10.8	1,520	6.2	1.1	470.0	ND	ND	1.4	48.7	1.3	12.4	2,131
Dec-13 (c)	ND	47.4	ND	1,190	ND	ND	433.0	ND	ND	ND	34.1	ND	10.1	1,715
Jun-14 (c)	ND	57.3	11.3	1,510	ND	ND	488.0	ND	ND	ND	43.4	ND	14.2	2,124
Dec-14 (b)	ND	106.0	ND	2,640	ND	ND	657.0 (c)	ND	ND	ND	60.9	ND	ND	3,464
Jun-15 (b)	ND	92.5	ND	2,100	ND	ND	728.0 (c)	ND	ND	ND	53.3	ND	ND	2,974
MW-25-40														
Sep-14	ND	ND	ND	ND	ND	ND	ND	ND	1.5	ND	ND	ND	ND	2
Dec-14	ND	ND	ND	ND	ND	ND	ND	ND	1.5	ND	ND	ND	ND	2
Mar-15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	---
Jun-15	ND	ND	ND	ND	ND	ND	ND	ND	1.2	ND	ND	ND	ND	1
MW-25-130														
Sep-14	1.5	47.0	12.3	1,140.0	6.1	ND	492.0	ND	ND	1.1	64.2	2.0	11.2	1,777
Dec-14 (c)	ND	31.4	ND	799.0	ND	ND	349.0	25.5	ND	ND	33.4	ND	ND	1,238
Mar-15 (c)	ND	38.6	10.8	854.0	ND	ND	446.0	66.8	ND	ND	43.5	ND	ND	1,460
Jun-15 (d)	1.1	37.1	8.9	1,030.0	4.6	ND	303.0	66.8	ND	ND	46.3	1.2	6.8	1,506
MW-25-190														
Sep-14	ND	10.8	ND	52.2	ND	ND	65.1	ND	ND	ND	14.0	ND	ND	142
Dec-14	ND	13.3	ND	58.2	ND	ND	45.9	ND	ND	ND	15.6	ND	ND	133
Mar-15	ND	11.7	ND	53.0	ND	ND	49.4	ND	ND	ND	13.7	ND	ND	128
Jun-15	ND	11.9	ND	59.4	ND	ND	39.8	ND	ND	ND	14.2	ND	ND	125
MW-28-45														
Sep-14	ND	ND	ND	ND	ND	ND	6.5	ND	ND	ND	ND	ND	ND	7
Dec-14	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	---
Mar-15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	---
Jun-15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	---
MW-28-210														
Sep-14	ND	ND	ND	6.8	ND	ND	5.1	ND	ND	ND	ND	ND	ND	12
Dec-14	ND	ND	ND	9.4	ND	ND	4.1	ND	ND	ND	ND	ND	ND	14
Mar-15	ND	ND	ND	10.8	ND	ND	6.0	ND	ND	ND	ND	ND	ND	17
Jun-15	ND	ND	ND	12.8	ND	ND	4.5	ND	ND	ND	ND	ND	ND	17
MW-31-280														
Sep-14	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	---
Dec-14	ND	ND	ND	ND	ND	ND	2.4	ND	ND	ND	ND	ND	ND	2
Mar-15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	---
Jun-15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	---
MW-33-235														

Table 4

Summary of COCs Detected in Groundwater Samples
Offsite Monitoring Wells
Kop-Flex VCP Site
Hanover, Maryland (a)

Monitoring Well	Chloroform	1,1-Dichloroethane	1,2-Dichloroethane	1,1-Dichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	1,4- Dioxane	Methylene Chloride	Methyl-tert-butyl Ether	Tetrachloroethene	1,1,1-Trichloroethane	1,1,2-Trichloroethane	Trichloroethene	Total VOCs
Sep-14	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	---
Dec-14	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	---
Mar-15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	---
Jun-15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	---
MW-33-295														
Sep-14	ND	ND	ND	3.3	ND	ND	7.2	ND	ND	ND	ND	ND	ND	11
Dec-14	ND	ND	ND	3.5	ND	ND	7.1	ND	ND	ND	ND	ND	ND	11
Mar-15	ND	ND	ND	4.8	ND	ND	8.0	ND	ND	ND	ND	ND	ND	13
Jun-15	ND	ND	ND	3.3	ND	ND	6.8	ND	ND	ND	ND	ND	ND	10
MW-35-298														
Sep-14	ND	ND	ND	ND	ND	ND	36.7	ND	ND	ND	ND	ND	ND	37
Dec-14	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	---
Mar-15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	---
Jun-15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	---

a/ all samples collected using low-flow purging techniques and measured in ppb (ug/L);
ND = not detected; NA = not analyzed; e = estimated as below reporting limit
--- = no VOCs detected above the detection limit
b/sample run at 20x dilution
c/ sample run at a 10x dilution
d/sample run at 12.5x dilution

Enclosure A – Laboratory Report for June 2015 Onsite and Offsite Monitoring Well Samples

Enclosure B – Laboratory Report for Residential Well Sample from 763 Donaldson Avenue (June 2015)