



ARM Group LLC

Engineers and Scientists

February 26, 2021

Ms. Susan Bull
Oil Control Program
Maryland Department of the Environment
1800 Washington Boulevard, Suite 620
Baltimore, MD 21230

Re: **First Quarter 2021 Status Report &
Request for Case Closure**

MDE Case No. 2013-0321-AA
SMO Fort Meade Shell, SMO-550
2631 Annapolis Road, Hanover, MD
ARM Project No. 190292M

Dear Ms. Bull,

This document has been prepared to provide your Department with an update to the groundwater quality monitoring and remediation efforts at the above site, and to reiterate our request for case closure. This document includes new data and information collected into first quarter 2021. The monitoring wells were most recently sampled in November 2020 and February 2021. Hydrographs and concentration vs. time graphs are presented herein along with copies of the gauging and sampling database and laboratory report of analysis for the February 2021 sampling event.

A discontinuous, perched-water bearing zone exists at the site with groundwater averaging about 26½' below grade and represented in MW1, MW4, MW7, MW11, MW12 and MW16. Regional groundwater is about 9' deeper than the shallower perched zone (averaging about 33½' below grade) and is represented in MW2, MW8, MW9, MW10 and MW15. Review of hydrographs included herein shows that groundwater levels declined about 1¼' from October 2018 to December 2019, increased in elevation through November 2020 (by an average of about 3' with ½' to over 9' changes), and have since dropped an average of 1' by the February 2021 sampling event. Water levels in MW9 and MW15 did not show the recent drop in groundwater elevations observed in the other monitoring wells. Water levels in MW8 and MW10 were historically consistent with the deeper/regional groundwater elevations; however, the levels have been increasing since about early-2019 and appear to be caused by drainage from perched zones that are screened by the wells. Although screened into the regional groundwater zone, water levels in MW14 appear to be similarly influence by perched groundwater drainage. As such, the water levels in MW8, MW10 and MW14 appear to be influenced by both perched water drainage and regional groundwater. More often than not, when groundwater levels are lower, MW2 does not contain groundwater because the well was constructed above regional groundwater and does not appear to be affected by perched groundwater.

As discussed above and per the attached contoured groundwater elevation map, there are two water-bearing zones beneath the site. The shallow zone is currently about 26' depth, flows to the northwest, and is represented by water levels in MW1, MW4, MW7, MW12, MW14 and MW16. The deeper zone is currently about 28.5' to 35.5' below grade (average about 32½' depth), flows

to the south-southeast, and is represented by water levels in MW2, MW8, MW9, MW10 and MW15. Although they are screened into the deeper regional groundwater zone, water levels in MW8 and MW10 appear to be strongly affected by perched water drainage.

Immediately south of the site is a temporal drainage ditch that flows westerly and is a tributary to the southern-flowing Midway Branch that parallels Rockenbach Road located further southwest of the site, and ultimately passes through Fort George G. Meade. The elevation of this drainage ditch is consistent with the elevation of the perched groundwater zone, and several feet higher than the deep groundwater zone. Flow of groundwater within the perched groundwater system beneath the site is to the west, consistent with the flow of the temporal stream.

For nearly seven years, MW1, MW4 and MW12 have contained very low to no detectable VOC concentrations. MW1 is located in the upgradient portion of the site in the shallow water-bearing zone, MW4 is located hydraulically downgradient from the tankfield within the shallow water-bearing zone; and MW12 is located in the downgradient area of the shallow water-bearing zone. The August 2020 sample testing data for MW12 showed the presence of detectable VOCs, contrary to a long history of low to no VOC concentrations. It is believed that the August 2020 results for MW12 are erroneous and a result of sampling error of incomplete decontamination of sampling equipment between wells. The November 2020 and February 2021 sample-testing data for MW12 are consistent with historical results showing concentrations are otherwise non-detect.

The other two wells constructed within the shallow water-bearing zone are MW7 and MW16, and to a lesser extent MW14. MW16 is located proximate to the location of where a Stage-II vapor return line was damaged on the east side of the dispenser islands by a road construction contractor during the widening of Annapolis Road. MW16 has not contained detectable Benzene concentrations since late-2015 (e.g., over 5 years). During the past two years, the Total VOC concentration in MW16 has averaged about 7 µg/l, and over the past year the average was about 10 µg/l, all of which is Methyl Ethyl Ketone (MEK).

Through early-2014, groundwater levels in MW7 were consistent with the deeper water-bearing zone. From that time, groundwater elevations quickly increased and more consistent with the shallow water-bearing zone, and have since remained steady with shallow water-bearing zone elevations. When MW7 groundwater levels were lower, it contained light non-aqueous phase liquid (e.g., LNAPL or floating petroleum) with accumulations up to 3'-thick and averaged over 1.5'-thick from late-2013 into early-2014. As groundwater levels became shallower in MW7, LNAPL disappeared. Part of the disappearance was a response of free-product abatement (FPA) by hand bailing and vacuum truck extraction removing over 315 gallons of LNAPL. A groundwater sample collected from MW7 in later-2013 contained about 33 mg/l VOC including 1 mg/l Benzene. During the past year, MW7 groundwater samples contained an average Benzene concentration less than 5 µg/l, and did not contain detectable Benzene and only 2 to 3.3 µg/l contained about 5.4 µg/l Benzene and about 50 µg/l Total VOC (99.5% reduction VOC concentrations). Most of the VOC concentration in MW7 is composed of 1,2,4-Trimethylbenzene and 1,3,5-Trimethylbenzene (124-TMB and 135-TMB, respectively). Various state "acceptable" standards for TMBs range from 30 to 100 µg/l. The average TMBs in MW7 per previous testing are 55.8 µg/l 124-TMB and 6.5 µg/l 135-TMB. During the past two sampling events, MW7 has only contained Ethylbenzene at 2 to 3.3 µg/l (all other VOCs were below respective detection limits).



MW14 was originally constructed to about 30' depth. From December 2013 through February 2014, the well contained water at about 25½' depth (consistent with the shallow water-bearing zone) and LNAPL accumulations up to 3'-thick and averaging 1¾'-thick. Under the effects of vacuum truck enhanced fluid recovery (EFR) and hand bailing, LNAPL accumulations diminished quickly to non-measurable thicknesses by April 2014. Per the direction of the MDE, MW14 was replaced with a 44'-deep well in June 2014. After the well was reconstructed, water levels were consistent with the deeper water-bearing zone (e.g., water levels about 33¾' depth, compared to 25½' when the well was shallower). Beginning in Summer 2016, water levels in MW14 began to rise, and by March 2018 the water levels were consistent with the shallow water-bearing zone, and have remained so since. No LNAPL has been detected in MW14 since February 2015.

A groundwater sample collected from MW14 in September 2014 contained about 58.5 mg/l VOC. The highest Benzene concentration in MW14 samples was 320 µg/l in November 2015. Since that time, VOC concentrations have significantly decreased. For the past year, the average Benzene, Naphthalene and VOC concentrations were about 3.4 µg/l, 75 µg/l and 910 µg/l, respectively (e.g., over 98.5% reduction in concentrations). About half of the VOC concentrations in MW14 are TMBs with 630 µg/l 124-TMB and 150 µg/l 135-TMB per previous testing events. During the past two sampling events, MW14 has contained about 2.8 µg/l Benzene, 75 µg/l Naphthalene and 530 µg/l VOC (not including TMBs).

Per the above and presented herein, the perched groundwater zone continues to contain relatively low to no VOCs as displayed by concentrations in MW1, MW4, MW7, MW11, MW12, MW14 and MW16. LNAPL has not been measured or observed in these wells since April 2014 (MW7) and February 2015 (MW14), over six to seven years ago. The VOC concentrations in MW7 and MW14 groundwater samples are not indicative of any sustained LNAPL source (e.g., no "entrapped" LNAPL).

The deeper groundwater zone is represented by groundwater levels in MW2, MW8, MW9, MW10 and MW15. More often than not, MW2 (located near MW9 near the southeast edge of the property along Annapolis Road) does not contain enough groundwater for sampling and testing. MW2 was constructed before December 2012 and before the current monitoring activities began. Groundwater samples were collected from MW2 in June and September 2014 when groundwater elevations were higher (shallower), and showed that Benzene averaged about 210 µg/l, BTEX averaged 3450 µg/l and VOC averaged about 4400 µg/l. A groundwater sample was obtained from MW2 in September 2015 and showed the presence of 240 µg/l Benzene, about 720 µg/l BTEX and 1150 µg/l VOC. The most recent samples obtained from MW2 were in March and June 2019, and contained about 250 µg/l Benzene, 1000 µg/l BTEX and 1222 µg/l Total VOC. As such, concentrations in MW2's "cap water" have remained relatively unchanged between 2015 and 2019.

Like MW14, MW8 was replaced with a deeper well in June 2014 per direction of MDE (from about 34'-deep to 43½'-deep). Before the well was re-drilled (e.g., when it was shallower), it contained only a few inches of groundwater with samples containing about 1400 µg/l Benzene and 13500 µg/l Total VOC. After the well replaced with a deeper constructed screen section, groundwater samples contained about 15 µg/l Benzene and 570 µg/l Total VOC. For the past year, the groundwater in MW8 contained on average about 3.6 µg/l Benzene and 555 µg/l Total VOC



(not including TMBs). VOC concentrations have remained relatively stable in MW8 since late-2017. Slightly less than half of the VOC concentrations in MW8 are TMBs with an average of 660 µg/l 124-TMB and 56 µg/l 135-TMB per previous 2020 sampling events. Benzene concentrations in MW8 appear to be directly influenced by groundwater level fluctuations with higher concentrations occurring when groundwater is shallower, and lower concentrations occurring when groundwater is deeper.

Water levels in MW9 are consistent with the deeper groundwater zone, but have shown about 4' rise from April 2018 to March 2019, followed by dropping water levels (by nearly 3') to March 2020, and have since been rising into February 2021 by slightly more than 10.5" (e.g., 0.88'). Note that the more recent increase in water levels observed in other deep-zone wells (MW8, MW10 and MW15 with 6.75, 9.5' and 2' rises) were much higher than the 10.5"-rise observed in MW9. Consequently, the water levels in some of the "deeper" wells may be partly a function of perched groundwater draining downward within the screened interval of the wells, and affecting measured depths to groundwater.

Current groundwater levels are slightly higher (about ½') than previous times when MW9 contained LNAPL. LNAPL was observed in MW9 from the time it was constructed in April 2013 and through 2013 with accumulations up to about 1½"-thick. As groundwater elevations increased, LNAPL disappeared and was not detected through mid-2016. LNAPL reappeared when groundwater levels were lower from July 2016 through March 2017 with accumulations up to about 1½"-thick. Starting in March 2017, groundwater levels started to increase (get shallower) and LNAPL was no longer detected. Groundwater levels in MW9 approached historical lows by early-2018, which was followed by rising groundwater through mid-2019, a subsequent decline into March 2018, and have since been rising slowly - all without the reappearance of LNAPL.

In August 2013, a water sample from MW9 contained about 99.5 mg/l Total VOC including 6.5 mg/l Benzene. Concentrations decreased about two orders of magnitude by about early-2018, and have remained relatively stable with some fluctuations since that time. For the past year, the average concentrations are about 70 µg/l Benzene and 525 µg/l Total VOC. In early-2020, the VOC concentration contained an average of about 70 µg/l 124-TMB and 14 µg/l 135-TMB. During the past two sampling events, MW9 water samples have contained about 10 µg/l Acetone, 8 µg/l MEK, 6 µg/l Tert-Amylmethyl Ether (TAME) and 90 µg/l Tert-Butyl Alcohol (TBA).

The water level in MW10 significantly increased (i.e., about 7½') from fourth quarter 2018 into June 2019, and dropped 8½' into December 2019, and rebounded about 9½' into November 2020 with a slight drop into February 2021. MW10 had contained as much as 8.2 mg/l Total VOC and 710 µg/l Benzene. During the past year, the average concentrations have been about 560 µg/l Total VOC and 45 µg/l Benzene. Per early-2020 sampling events, about half of the VOC concentration are TMBs with an average of 95 µg/l 124-TMB and 48 µg/l 135-TMB. Concentrations have shown a steady decline since October 2018. The February 2021 sampling results showed the presence of about 14 µg/l Acetone, 10 µg/l MEK, 3 µg/l Tert-Amylmethyl Ether (TAME) and 21 µg/l Tert-Butyl Alcohol (TBA).



The groundwater level in MW15, also a deep water-bearing zone well, steadily increased (i.e., over 5½') from early-2017 to early-2018, then dropped about 3' through March 2020, and has since rebounded by 3' into February 2021. Concentrations have not changed appreciably since mid-2017, other than a more recent decline in concentrations that began in December 2019. The February 2021 sample contained about 208 µg/l Benzene, 20 µg/l Naphthalene and 715 µg/l VOC. The VOC concentration in February 2021 included about 32 µg/l Acetone, 9 µg/l MEK, 3.6 µg/l TAME and 32.5 µg/l TBA.

In summary, for the past year, Benzene concentrations in the shallow groundwater zone average less than 2 µg/l with the highest concentration in MW7 and MW14 at 22.3 and 5.9 µg/l in mid-2020, respectively. Naphthalene concentrations ranged from non-detect (less than 2 µg/l) to 107 µg/l in MW14 in August 2020 (currently 60.2 µg/l). Total VOC concentrations in the shallow groundwater zone wells ranged from non-detect to 1615 µg/l in MW14 in August 2020 (820 µg/l not including TMBs, currently 345 µg/l not including TMBs).

For the past year, Benzene concentrations in the deeper groundwater zone ranged from less than 1 µg/l to 673 µg/l (MW15) and averaged about 142 µg/l; Naphthalene ranged from below detection (<2 µg/l) to 273 µg/l (MW15) and averaged about 92 µg/l; and Total VOC (not including TMBs) ranged from 130 µg/l to 6850 µg/l (MW15) and averaged about 1320 µg/l. About 10% to over 50% (averaging about 30%) of the Total VOC concentrations in the deeper groundwater monitoring wells are TMBs with about 25 to 795 µg/l 124-TMB (averaging about 390 µg/l) and 2 to 150 µg/l 135-TMB (averaging 60 µg/l). As noted previously, various state standards for TMBs range from 30 to 100 µg/l.

Noted above are the detections of Acetone and MEK in groundwater samples, along with TAME and TBA. The presence of both Acetone and MEK can be caused by laboratory artifact. However, review of the laboratory QA/QC shows these compounds were not identified out of standards in control samples. Studies have shown that Acetone and MEK can be produced biologically during the chemical breakdown of 2-butanone (*Acetone and 2-Butanone Creation Associated with Biological and Chemical Remediation of Environmental Contamination; Fowler, Thompson and Muller; Remediation; Wiley Periodicals; Winter 2011, p, 9-28*).

Vacuum truck EFR events were performed fifteen times between October 2013 and December 2014. Three additional EFR events were performed in June-August 2016, two more in February and July 2017 in response to LNAPL and/or elevated concentrations in MW9 and MW15, and three more events in October/November 2017 and January 2018. Approximately 13770-gallons of impacted groundwater and LNAPL were removed to date. The average extraction rate during the 2017-18 events was about 625-gallons of total fluids per event including the February 2017 event that netted only 100-gallons (because of relatively deeper groundwater elevations and inability to use vacuum-extraction beyond about 30'-depth). An estimated 269-gallons of LNAPL have been removed by EFR with an additional 47-gallons removed by hand bailing for a total of about 316-gallons of LNAPL removed through January 2018. Note that this value does not include the volume of petroleum removed by vacuum-induced bioremediation, which has not been quantified. The last recovery event was January 2018, and no measurable "active" recovery has occurred since then.



MDE issued a “Request for Continued Monitoring” correspondence dated August 28, 2019. In the letter, MDE directed the following. Response to specific directives are noted accordingly below.

1. Continue quarterly monitoring of the monitoring well network. All samples are to be analyzed for VOCs plus oxygenates, ethanol and naphthalene per EPA 8260, and GRO per EPA 8015.

During the past seven sampling events (since third quarter 2019), water samples from the monitoring well network were collected and tested per the above, as well as DRO by EPA 8015. A sample could not be obtained from MW2 because of insufficient water in the well. The following oxygenates were included in the tested analytes: tert-Amyl methyl ether (TAME), tert-Butyl Alcohol (TBA), Diethyl ethyl (Ethyl Ether), Ethyl-tert-butyl ether (ETBE), Methyl-tert-butyl ether (MTBE), and Ethanol. A summary of oxygenate testing results for the sampling events is presented below. Note that any detection of an oxygenate is reported herein as part of the Total VOC concentration.

As presented below, TAME and TBA are present in deeper groundwater zone wells MW9, MW10 and MW15 per the February 2021 sampling event. EE and ETBE were below reporting limits in all wells. DIPE has been detected in deeper wells MW9, MW10 and MW15, and at lower concentrations in MW7, MW8 and MW14. MTBE has routinely been included in historical sample testings, and had been detected up to 630 µg/l in the past (in MW9). Previous to the February 2021 sampling event, the last time MTBE was detected above 20 µg/l was in February 2017 with 27 µg/l (MW15). The February 2021 sampling event showed MW9 with 30.1 µg/l MTBE. MTBE in shallow zone wells is usually only observed in MW7 with up to 2.7 µg/l during the past year. During the past year and within the deeper zone wells, MTBE has averaged about 6 µg/l. Per the September 2019 sampling event, Ethanol was detected in one sample (MW15) at a concentration below the reporting limit but above the method detection limit. 124-TMB and 135-TMB had not been included sample testing protocols previous to the March 2020 sampling event, but was included in the March, May and August 2020 sampling events.



Well	Date	TAME	TBA	EE	ETBE	DIPE	MTBE	135-TMB	124-TMB	Ethanol	Well	Date	TAME	TBA	EE	ETBE	DIPE	MTBE	135-TMB	124-TMB	Ethanol	
		All Concentrations Expressed in Micrograms per Liter (µg/l) Units											All Concentrations Expressed in Micrograms per Liter (µg/l) Units									
MW1	09/12/19	<1	<5	<1	<1	<1	<1			<200	MW10	09/12/19	2.4	5.4	<1	<1	7.6	1.6			<200	
	12/10/19	<1	<5	<1	<1	<1	<1			na		12/10/19	2.4	7.4	<1	<1	<1	1.6			na	
	03/18/20	<1	<5	<1	<1	<1	<1	<1	<1	<200		03/18/20	2.3	13.8	<1	<1	13.3	1.9	22.5	114.0	<200	
	05/27/20	<1	<5	<1	<1	<1	<1	<1	<1	1.1		<200	05/27/20	2.9	5.3	<1	<1	17.4	2.3	39.1	297.0	<200
	08/27/20	<1	<5	<1	<1	na	<1	<1	<1	1.1		na	08/27/20	3.6	10.1	<1	<1	na	3.5	82.0	513.0	na
	11/24/20	<1	<5	<1	<1	na	<1	na	na	na		na	11/24/20	<1	<5	<1	<1	na	3.5	na	na	na
	02/10/21	<1	<5	<1	<1	na	<1	na	na	na		na	02/10/21	3.1	21.1	<1	<1	na	4.0	na	na	na
MW4	09/12/19	<1	<5	<1	<1	<1	<1			<200	MW12	09/12/19	<1	<5	<1	<1	<1	<1			<200	
	12/10/19	<1	<5	<1	<1	<1	<1			na		12/10/19	<1	<5	<1	<1	<1	<1			na	
	03/18/20	<1	<5	<1	<1	<1	<1	<1	<1	<200		03/18/20	<1	<5	<1	<1	<1	<1	<1	<1	<200	
	05/27/20	<1	<5	<1	<1	<1	<1	<1	<1	<200		05/27/20	<1	<5	<1	<1	<1	<1	<1	<1	<1	<200
	08/27/20	<1	<5	<1	<1	na	<1	<1	1.1	na		08/27/20	<1	<5	<1	<1	na	<1	6.6	47.0	na	
	11/24/20	<1	<5	<1	<1	na	<1	na	na	na		na	11/24/20	<1	<5	<1	<1	na	<1	na	na	na
	02/10/21	<1	<5	<1	<1	na	<1	na	na	na		na	02/10/21	<1	<5	<1	<1	na	<1	na	na	na
MW7	09/12/19	<1	<5	<1	<1	1.5	0.66*			<200	MW14	09/12/19	<1	<5	<1	<1	<1	<1			<200	
	12/10/19	<1	<5	<1	<1	<1	0.29*			na		12/10/19	<1	6.3	<1	<1	<1	<1			na	
	03/18/20	<1	<5	<1	<1	0.34*	<1	9.9	67.4	<200		03/18/20	<1	7.7	<1	<1	0.98*	0.46*	30.4	124.0	<200	
	05/27/20	<1	<5	<1	<1	0.47*	<1	8.5	80.7	<200		05/27/20	0.35*	<5	<1	<1	2.0	0.47*	164.0	630.0	<200	
	08/27/20	2.2	13.8	<1	<1	na	2.7	1.0	19.2	na		08/27/20	<1	<5	<1	<1	na	<1	135.0	632.0	na	
	11/24/20	<1	<5	<1	<1	na	<1	na	na	na		11/24/20	<1	<5	<1	<1	na	<1	na	na	na	
	02/10/21	<1	<5	<1	<1	na	<1	na	na	na		na	02/10/21	<1	<5	<1	<1	na	<1	na	na	na
MW8	09/12/19	<1	<5	<1	<1	1.0	<1			<200	MW15	09/12/19	9.0	43.2	<1	0.40*	10.0	7.7			92.8*	
	12/10/19	<1	<5	<1	<1	<1	<1			na		12/10/19	11.5	42.5	<1	<1	<1	8.6			na	
	03/18/20	<1	<5	<1	<1	0.78*	<1	44.3	210.0	<200		03/18/20	8.5	31.8	<1	<1	17.3	6.8	151.0	795.0	<200	
	05/27/20	<1	<5	<1	<1	1.1	<1	56.8	662.0	<200		05/27/20	9.1	30.0	<1	0.43*	26.4	8.2	69.3	679.0	<200	
	08/27/20	<1	<5	<1	<1	na	0.43*	56.6	664.0	na		08/27/20	7.6	34.0	<1	<1	na	5.5	77.9	518.0	na	
	11/24/20	<1	<5	<1	<1	na	0.35*	na	na	na		11/24/20	4.4	25.3	<1	<1	na	3.5	na	na	na	
	02/10/21	0.43*	<5	<1	<1	na	0.31*	na	na	na		na	02/10/21	3.6	32.5	<1	<1	na	3.0	na	na	na
MW9	09/12/19	0.75*	60.5	<1	<1	2.4	4.1			<200	MW16	09/12/19	<1	<5	<1	<1	<1	<1			<200	
	12/10/19	4.9	82.9	<1	<1	<1	13.1			na		12/10/19	<1	<5	<1	<1	<1	<1			na	
	03/18/20	0.60*	195.0	<1	<1	2.2	8.3	2.0	25.8	<200		03/18/20	<1	<5	<1	<1	<1	<1	<1	<1	<200	
	05/27/20	2.7	106.0	<1	<1	14.9	10.6	26.3	53.0	<200		05/27/20	<1	<5	<1	<1	<1	<1	<1	0.66*	<200	
	08/27/20	7.4	66.4	<1	<1	na	16.0	86.5	131.0	na		08/27/20	<1	<5	<1	<1	na	<1	<1	<1	na	
	11/24/20	3.9	51.0	<1	<1	na	9.7	na	na	na		11/24/20	<1	<5	<1	<1	na	<1	<1	<1	na	
	02/10/21	8.4	125.0	<1	<1	na	30.1	na	na	na		na	02/10/21	<1	<5	<1	<1	na	<1	<1	<1	na

* - concentration below reporting limit, and is estimated above the method detection limit

- concentration suspected to be erroneous because of sampling error

2. Sample the station water supply well and car wash well for VOCs plus oxygenates, Ethanol and Naphthalene.

Contrary to older reports, there is only one water supply well at the station property; the station manager advised that the car wash is connected to municipal water service, and not the water supply well. Field verification in September 2019 revealed only one water supply well on the property. The single water supply well is marked with well tag AA930877, reported to be 402'-deep and constructed August 1995 with screen set at 387' to 402' depth and filter pack from 160' to 402' depth. However, the MDE well records database shows that this well was replaced in December 2000 with a 440'-deep well (well #AA945960) with screen set at 440' to 460' depth and filter pack from 340' to 465' depth. Why the existing supply well is incorrectly marked with an older well tag is not known; however, the 1995-well was reported to have been constructed about 15' from Annapolis Road, and the 2000-well is reported to be 30' from Annapolis Road (consistent with current conditions). Two older wells, which were successively replaced by the 1995-well and later by the 2000-well, were constructed September 1984 and December 1989 (well #AA813619 and #AA883691, respectively) as 347' and 394'-deep wells with screen sections at 340'-347' and 380'-387', respectively. The filter packs in these former wells extended from well completion depth to about 24' depth. The existing water supply is not used for potable water because of the very high sulfur smell (hard water), but is used for sanitary purposes (toilet and hand washing).

Testing of a sample collected from the station water well supply in September 2019 showed that it did not contain detectable VOCs. Re-testing of the well water supply in December 2019 from two locations (one from the bathroom sink and a second from an outside garden hose spigot) showed that the samples contained detectable Toluene concentrations (8.7 µg/l in the spigot sample and 10.7 µg/l in the bathroom sink sample), as well as Acetone (1.9 to 2.8 µg/l) and Methylene Chloride (0.85 to 1.1 µg/l). Methylene chloride (at 1.3 µg/l) was also detected in the pre-prepared QA/QC trip blank sample that accompanied the December 2019 samples during the sampling event, and the detection/reporting limits for Acetone in the trip blank was 5 times higher than the supply well samples. Re-testing of the two sampling locations in March 2020 showed the bathroom sample with 0.87 µg/l Acetone, and the spigot sample was non-detect for all VOCs. The laboratory control sample within the March 2020 testing showed elevated Acetone recovery, indicating that the Acetone measured in the bathroom sample was a probable laboratory artifact. The May 2020 sampling event showed that the Bathroom source water contained an estimated 1.3 µg/l Acetone, below the 2 µg/l reporting limit. The August 2020 sampling event showed that all VOCs were below detection limits. The November 2020 sampling of the station water well supply showed presence of Acetone (3 µg/l) and Methylene Chloride (0.98 µg/l). The trip blank contained 4.1 µg/l Acetone and 1.1 µg/l Methylene Chloride. Consequently, the November 2020 detections are presumed to be laboratory artifacts. The February 2021 sample from the bathroom sink did not contain any detectable VOC concentrations.

3. Collect (and analyze) samples from the water wells at KinderCare (8050 Rockenbach Road) and Ridgeview 1 and 2 (2633 Annapolis Road).

The KinderCare well has well tag AA814908 and was constructed in July 1985 to 362'-depth with a screen interval at 356' to 362'-depth and filter pack is reported to be set from 23' to 362'-depth. This is a relatively large filter pack interval, and may extend into the upper reaches of the water table aquifer. The current groundwater elevations of the shallow and deeper zone water at the subject site are about 219' and 211', respectively, above mean sea level. Based on topographic elevation of the KinderCare facility's well and the reported depth to water in the Maryland well database, the groundwater elevation in the KinderCare well is about 65' above mean sea level (at least 150' deeper than the subject site groundwater). A water treatment system is operated on the well water supply within the KinderCare facility including carbon filter, ion exchange and chlorinator. Per maintenance records at the facility, the water treatment system is professionally maintained several times per month. A sample of the water well supply (before treatment) was collected from the KinderCare well on September 25, 2019, and testing showed that it did not contain detectable VOC concentrations.

The two Ridgeview Plaza Shopping Center wells are tagged AA814854 (8"-diameter) and AA818514 (6"-diameter), and were constructed in July 1985 and September 1987, respectively. The 8"-well is 485'-deep with screen set at 444' to 485' and filter pack at 400' to 530'-depth. The 6"-well is 466'-deep with screen at 436' to and 466'-depth and filter pack at 420' to 466'-depth. Response to repeated requests to sample the two wells at the Ridgeview Plaza Shopping Center have not been received as of this writing. No additional attempts to contact Ridgeview Plaza ownership will be made unless superseded by MDE.

4. Reports (are) to include scaled maps with dissolved phase concentration maps including BTEX and MTBE concentrations. To enhance OCP's review of the data, present (provide) calculated Mann-Kendall analysis for each well.

Historical status reports for this project have included a contoured groundwater elevation map and dissolved phase concentration map indicating the concentrations of Benzene, total BTEX and Total VOC measured at each well location.

Other than the February 2021 sampling event, the last time that MTBE was detected at 20 µg/l or more was in February 2017 (MW15 with 27 µg/l). The only well yielding MTBE above 10 µg/l during the past two years is MW9. The average MTBE concentration during the two-year period leading to February 2021 is 11.6.3 µg/l. Consequently, mapping of an MTBE plume at this site is otherwise not practical. Mapping presented herein includes individual enumeration of the BTEX concentrations, MTBE and Total VOC.

Historical reports for this project have included hydrographs and concentration vs. time graphs for selected wells, typically for wells that regularly contained detectable dissolved petroleum concentrations. Review of the concentration vs. time graphs provides a good method for assessing concentration trends and simultaneous review of dependency on groundwater elevation fluctuations. Per direction of the MDE, Mann-Kendall analyses was performed for each well normally containing more than non-detect concentrations. A copy of the Mann-Kendall analyses is attached, and a summary is presented below.



Per the above, and the attached Mann-Kendall database and graphs, Total VOC concentrations show a decreasing trend in MW4, MW7, MW9, MW10 and MW14. MW2, which has been sampled infrequently when groundwater is shallow, is listed as having a stable trend for Total VOC. MW8 and MW16 are listed as having no trend for Total VOC. Since monitoring began, VOC concentrations in MW15 show no trend, but since December 2019 has shown a decreasing trend. All wells, except for MW2, MW15 and MW16, are listed as having decreasing trends for Benzene. MW8 is listed as having “no trend” for Total VOC, but has a decreasing trend for Benzene. Benzene (and Total VOC) in MW2 has not changed appreciably since mid-2015. MW16’s “no trend” for Benzene is due to groundwater samples typically not containing detectable Benzene concentrations, and the highest Benzene to date has been 3 µg/l (November 2015). The increasing Benzene trend for MW15, as determined by Mann-Kendall statistical analysis, is based on the full history of sampling. Review of the hydrograph and concentration vs. time (presented herein) shows that concentrations have remained relatively stable since mid-2017, and are decreasing since December 2019.

Well	VOC Concentrations				Benzene Concentrations			
	Coefficient of Variation	Mann-Kendall Statistic	Confidence Factor	Concentration Trend	Coefficient of Variation	Mann-Kendall Statistic	Confidence Factor	Concentration Trend
MW2	0.72	-2	59.2%	STABLE	0.16	3	67.5%	NO TREND
MW4	4.88	-252	>99.9%	DECREASING	5.24	-203	99.8%	DECREASING
MW7	3.96	-319	>99.9%	DECREASING	2.67	-181	99.9%	DECREASING
MW8	2.34	-35	69.2%	NO TREND	3.19	-128	97.0%	DECREASING
MW9	2.74	-232	>99.9%	DECREASING	3.05	-163	99.5%	DECREASING
MW10	1.16	-193	>99.9%	DECREASING	1.17	-199	>99.9%	DECREASING
MW14	2.23	-293	>99.9%	DECREASING	1.33	-251	>99.9%	DECREASING
MW15 (06/2014 to Present)	0.89	61	85.6%	NO TREND	0.90	103	96.6%	INCREASING
MW15 (12/2019 to Present)	0.84	-13	99.2%	DECREASING	0.62	-13	99.2%	DECREASING
MW16	3.20	-30	70.5%	NO TREND	1.23	-53	83.4%	NO TREND

5. Include a well survey identifying all drinking water supply wells within a half-mile radius of the subject property, and plot on a US Geological Survey map or scaled street map. Annotate the map with 500’, 1000’ and ½-mile radii. Provide a summary table including property address, property owner name and address, and well construction details.

Included in the Third and Fourth Quarter 2019 Status Reports were scaled aerial photograph maps that depict 500’, 1000’ and ½-mile radii from the subject site. Plotted on the maps are water supply wells as determined by in-depth review of the Maryland Well Database. Many of the plotted supply wells are no longer in existence, as the respective properties have been connected to municipal water supply. A summary table of the well information was presented in the Third and Fourth Quarter 2019 Status Reports.

Other than the station water supply well, there are three other wells within a 500’ radius of the site (Exxon and two at Ridgeview Plaza), and a fourth well about 750’ from the site (KinderCare). The Exxon well is not equipped with a well ID tag, and based on review of historical aerial photographic maps, was replaced after the above 1984-well. The former 1984-



well at the Exxon property was constructed with a filter pack that extended to 20' below grade (e.g., relatively shallow) although the well was screened from 137' to 145' depth. Review of the Maryland Well Database shows that several monitoring wells were constructed at the Exxon property in the past, indicative of a groundwater assessment (e.g., in response to petroleum release). Consequently, any petroleum that may be present in the Exxon water well supply is probably (and inherently) a result of Exxon-site activities.

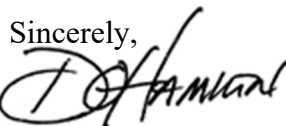
The two Ridgeview Plaza wells are constructed to 466' and 485' depth with filter pack sections to no shallower than about 400' depth. The elevation of the groundwater in the two wells is estimated to be about 40' above mean sea level, compared to the 215' elevation of the groundwater in the subject site monitoring wells. Consequently, the Ridgeview Plaza wells are screened within a much deeper aquifer than the shallow water table aquifer, and are unlikely to be influenced by conditions at the site's water table aquifer. The KinderCare well is about 750' from the site to the southwest, and constructed with a screen section at 356' to 362' depth with a filter pack that extends to 23' depth. The bulk of dissolved petroleum at the subject site is found in the deeper groundwater zone wells with groundwater at about 34'-depth and flows to the southeast. The groundwater elevation in the KinderCare well is about 65' above mean sea level (compared to the 215' elevation of the monitoring wells at the subject site). As such, the groundwater used from the KinderCare well is obtained from a different aquifer than the deeper water table zone beneath the subject site.

6. MDE stated that based on pending on a removal and upgrade schedule at the facility, they do not anticipate closing this case until a full UST closure assessment has been completed. Per email from The Wills Group (c/o Steve Stookey) to MDE on August 1, 2019, SMO anticipates UST upgrades possibly in 2021.

Because the exact timing for a future UST replacement at this site is unknown, and thereby precluding the possible closure of this case in light of continual and consistent data showing negligible risk for impact, at the minimum, we request MDE's approval to:

1. Decrease the monitoring well sampling frequency to twice per year (March and October), and
2. Some monitoring wells have consistently yielded very low to no VOCs for many years including MW1 (shallow zone), MW4 (shallow zone), MW12 (shallow zone), and MW16 (shallow zone). We request MDE's approval to cease groundwater sampling from these four monitoring wells. They will continue to be gauged during scheduled groundwater sampling events for presence of LNAPL and to monitor groundwater elevation.

If you have any questions concerning this submittal, please contact us below.

Sincerely,


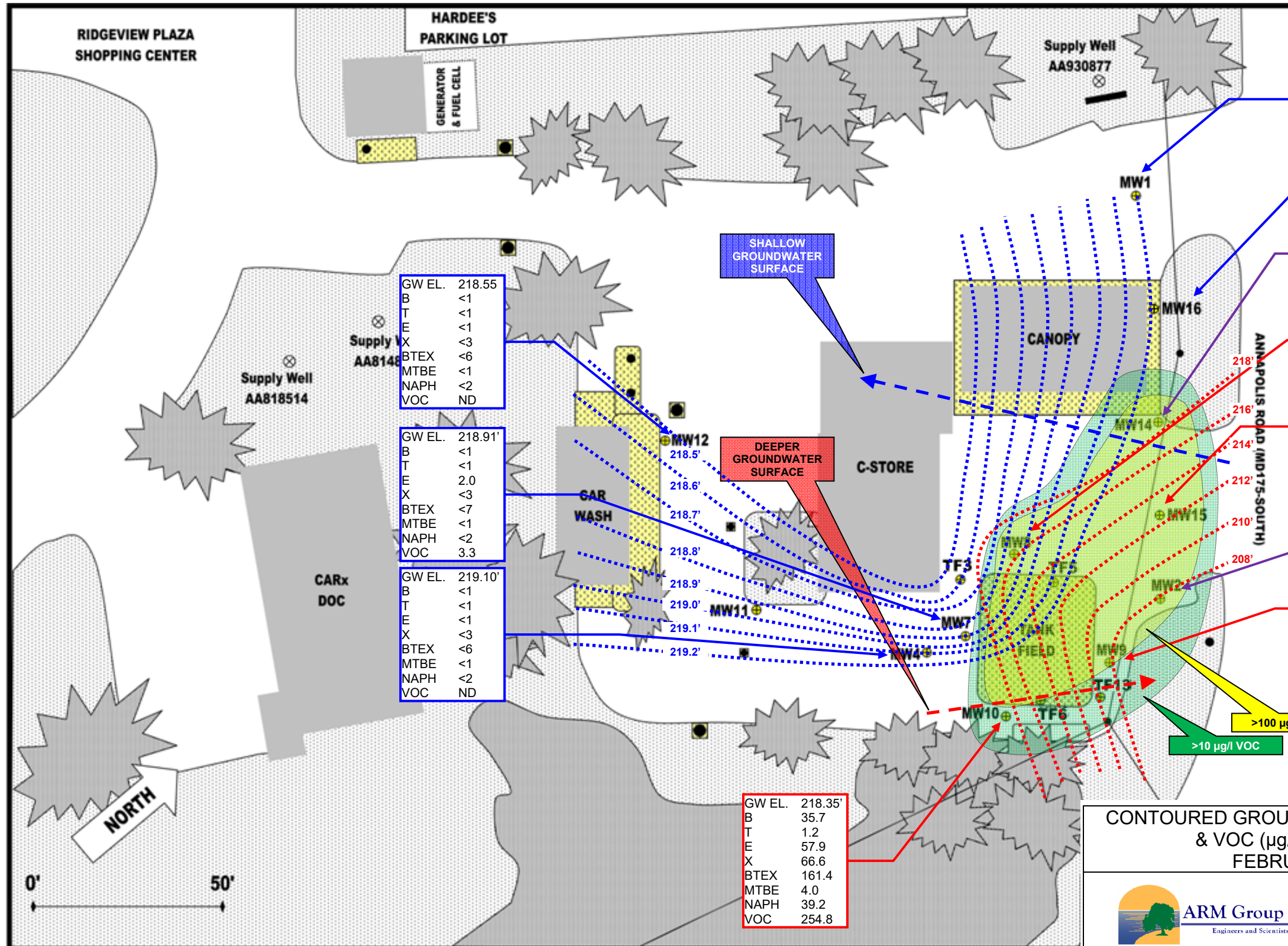
Douglas O. Hamilton
Senior Geologist/Project Manager
ARM Group LLC
9175 Guilford Road, Suite 310, Columbia, MD 21046
Office (410)290-7775, x2021; Cell (443)255-1633
Email DHamilton@armgroup.net

cc. Steve Stookey, Southern Maryland Oil c/o The Wills Group, 102 Centennial Street, LaPlata, MD 20646



CONTOURED GROUNDWATER ELEVATIONS & VOC, BTEX & BENZENE PLUME MAPS





GW EL.	219.21'
B	<1
T	<1
E	<1
X	<3
BTEX	<6
MTBE	<1
NAPH	<2
VOC	ND

GW EL.	219.20'
B	<1
T	<1
E	<1
X	<3
BTEX	<6
MTBE	<1
NAPH	<2
VOC	15.3

GW EL.	218.65'
B	1.9
T	0.9
E	152
X	121.9
BTEX	276.7
MTBE	<1
NAPH	60.2
VOC	345.3

GW EL.	216.48'
B	2.1
T	0.7
E	194
X	299.2
BTEX	496
MTBE	0.31
NAPH	129
VOC	656.1

GW EL.	212.78'
B	208
T	70.9
E	76.9
X	255
BTEX	610.8
MTBE	3.0
NAPH	19.8
VOC	714.4

GW EL.	208.91'
Most Recent Data	
B	218
T	10.5
E	626
X	190
BTEX	1045
MTBE	3.9
NAPH	203
VOC	1273

GW EL.	208.19'
B	118
T	17
E	85.7
X	270.4
BTEX	491.1
MTBE	30.1
NAPH	24.5
VOC	717.3

GW EL.	218.55'
B	<1
T	<1
E	<1
X	<3
BTEX	<6
MTBE	<1
NAPH	<2
VOC	ND

GW EL.	218.91'
B	<1
T	<1
E	2.0
X	<3
BTEX	<7
MTBE	<1
NAPH	<2
VOC	3.3

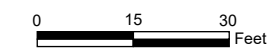
GW EL.	219.10'
B	<1
T	<1
E	<1
X	<3
BTEX	<6
MTBE	<1
NAPH	<2
VOC	ND

GW EL.	218.35'
B	35.7
T	1.2
E	57.9
X	66.6
BTEX	161.4
MTBE	4.0
NAPH	39.2
VOC	254.8

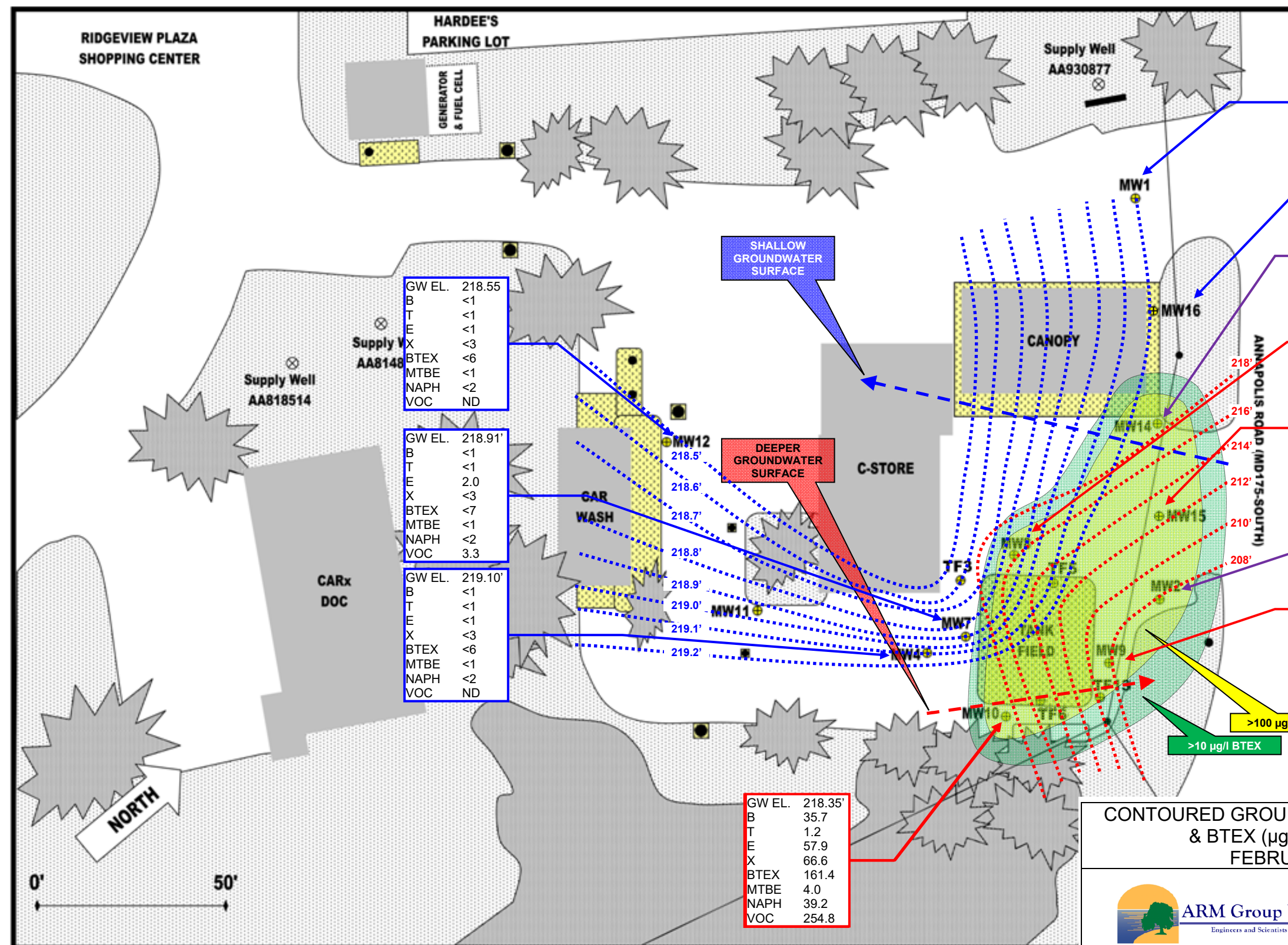


CONTOURED GROUNDWATER ELEVATIONS & VOC (µg/l) PLUME MAP
FEBRUARY 2020

FIGURE
F-21V



SMO FORT MEADE SHELL
SS-550
2631 ANNAPOLIS ROAD
HANOVER, MD
ARM NO. 190292M



GW EL.	219.21'
B	<1
T	<1
E	<1
X	<3
BTEX	<6
MTBE	<1
NAPH	<2
VOC	ND

GW EL.	219.20'
B	<1
T	<1
E	<1
X	<3
BTEX	<6
MTBE	<1
NAPH	<2
VOC	15.3

GW EL.	218.65'
B	1.9
T	0.9
E	152
X	121.9
BTEX	276.7
MTBE	<1
NAPH	60.2
VOC	345.3

GW EL.	216.48'
B	2.1
T	0.7
E	194
X	299.2
BTEX	496
MTBE	0.31
NAPH	129
VOC	656.1

GW EL.	212.78'
B	208
T	70.9
E	76.9
X	255
BTEX	610.8
MTBE	3.0
NAPH	19.8
VOC	714.4

GW EL.	208.91'
Most Recent Data	
B	218
T	10.5
E	626
X	190
BTEX	1045
MTBE	3.9
NAPH	203
VOC	1273

GW EL.	208.19'
B	118
T	17
E	85.7
X	270.4
BTEX	491.1
MTBE	30.1
NAPH	24.5
VOC	717.3

GW EL.	218.55
B	<1
T	<1
E	<1
X	<3
BTEX	<6
MTBE	<1
NAPH	<2
VOC	ND

GW EL.	218.91'
B	<1
T	<1
E	2.0
X	<3
BTEX	<7
MTBE	<1
NAPH	<2
VOC	3.3

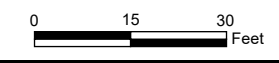
GW EL.	219.10'
B	<1
T	<1
E	<1
X	<3
BTEX	<6
MTBE	<1
NAPH	<2
VOC	ND

GW EL.	218.35'
B	35.7
T	1.2
E	57.9
X	66.6
BTEX	161.4
MTBE	4.0
NAPH	39.2
VOC	254.8

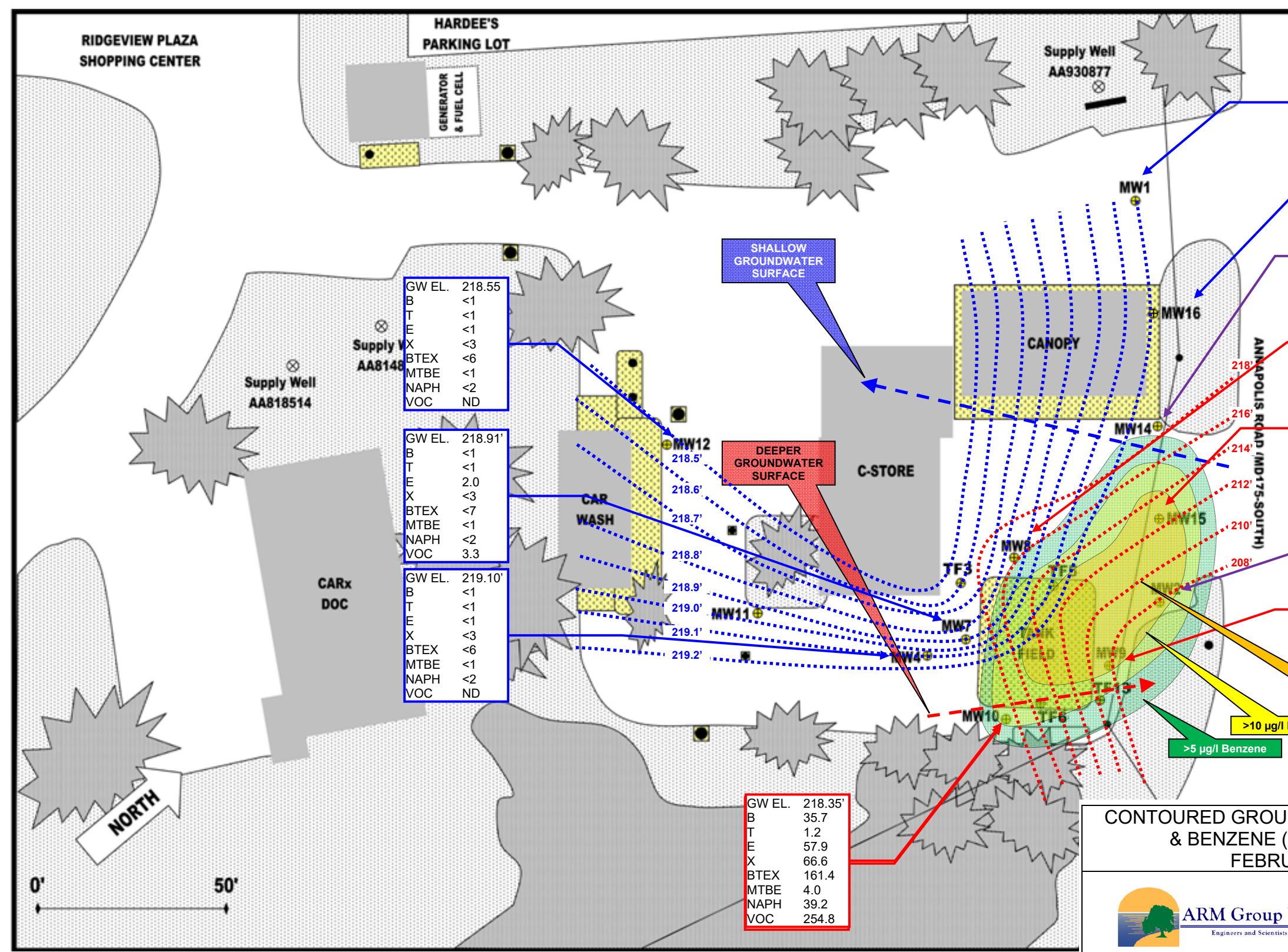
>100 µg/l BTEX
>10 µg/l BTEX

CONTOURED GROUNDWATER ELEVATIONS & BTEX (µg/l) PLUME MAP
FEBRUARY 2020

FIGURE
F-21BTEX



SMO FORT MEADE SHELL
SS-550
2631 ANNAPOLIS ROAD
HANOVER, MD
ARM NO. 190292M



GW EL.	219.21'
B	<1
T	<1
E	<1
X	<3
BTEX	<6
MTBE	<1
NAPH	<2
VOC	ND

GW EL.	219.20'
B	<1
T	<1
E	<1
X	<3
BTEX	<6
MTBE	<1
NAPH	<2
VOC	15.3

GW EL.	218.65'
B	1.9
T	0.9
E	152
X	121.9
BTEX	276.7
MTBE	<1
NAPH	60.2
VOC	345.3

GW EL.	216.48'
B	2.1
T	0.7
E	194
X	299.2
BTEX	496
MTBE	0.31
NAPH	129
VOC	656.1

GW EL.	212.78'
B	208
T	70.9
E	76.9
X	255
BTEX	610.8
MTBE	3.0
NAPH	19.8
VOC	714.4

GW EL.	208.91'
Most Recent Data	
B	218
T	10.5
E	626
X	190
BTEX	1045
MTBE	3.9
NAPH	203
VOC	1273

GW EL.	208.19'
B	118
T	17
E	85.7
X	270.4
BTEX	491.1
MTBE	30.1
NAPH	24.5
VOC	717.3

GW EL.	218.55
B	<1
T	<1
E	<1
X	<3
BTEX	<6
MTBE	<1
NAPH	<2
VOC	ND

GW EL.	218.91'
B	<1
T	<1
E	2.0
X	<3
BTEX	<7
MTBE	<1
NAPH	<2
VOC	3.3

GW EL.	219.10'
B	<1
T	<1
E	<1
X	<3
BTEX	<6
MTBE	<1
NAPH	<2
VOC	ND

GW EL.	218.35'
B	35.7
T	1.2
E	57.9
X	66.6
BTEX	161.4
MTBE	4.0
NAPH	39.2
VOC	254.8

CONTOURED GROUNDWATER ELEVATIONS & BENZENE (µg/l) PLUME MAP
FEBRUARY 2020

FIGURE
F-21B

ARM Group LLC
Engineers and Scientists

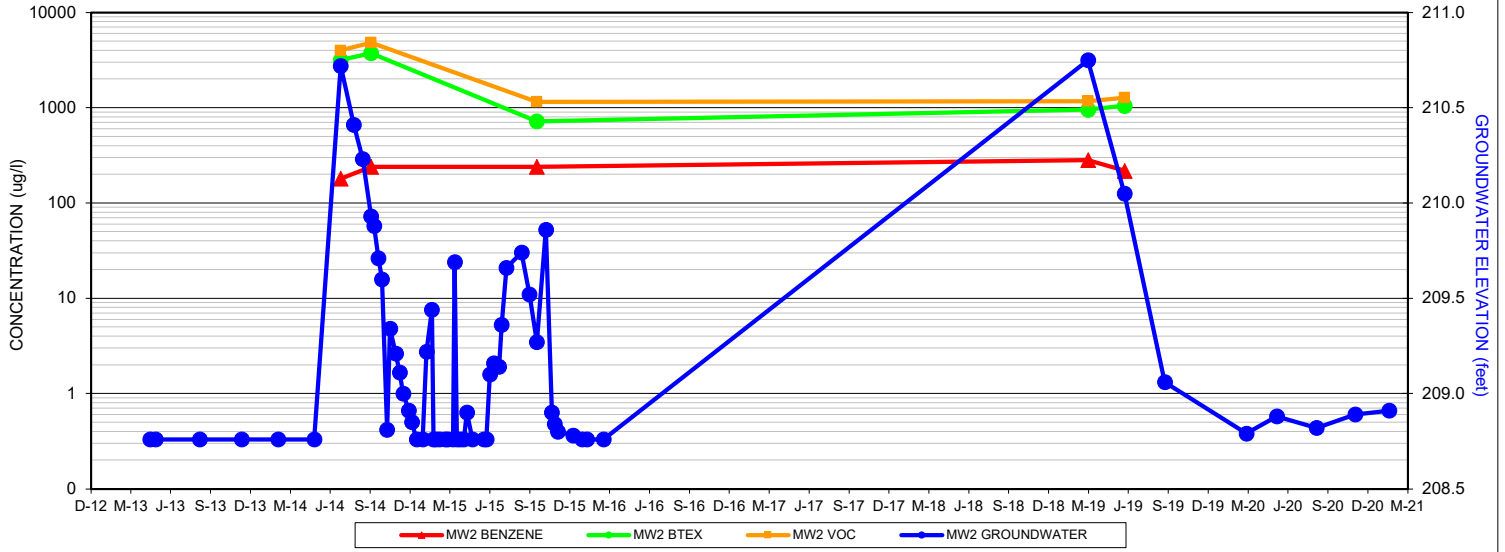
0 15 30 Feet

SMO FORT MEADE SHELL
SS-550
2631 ANNAPOLIS ROAD
HANOVER, MD
ARM NO. 190292M

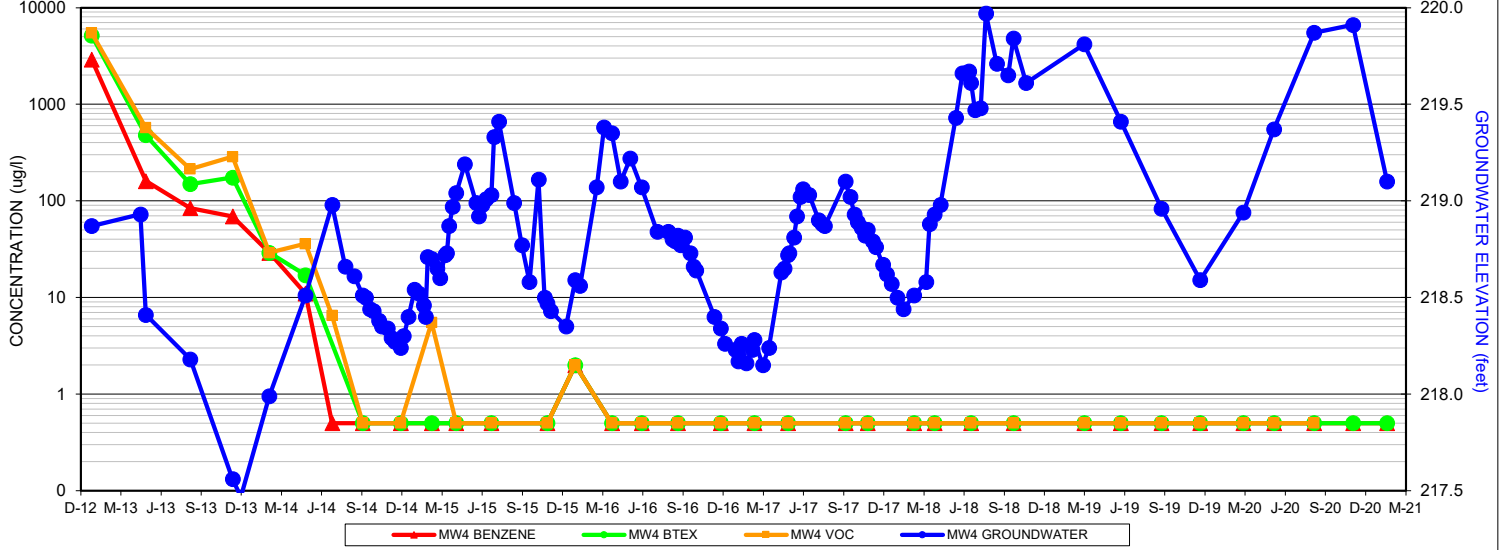
HYDROGRAPHS & GAUGING/SAMPLING DATABASE

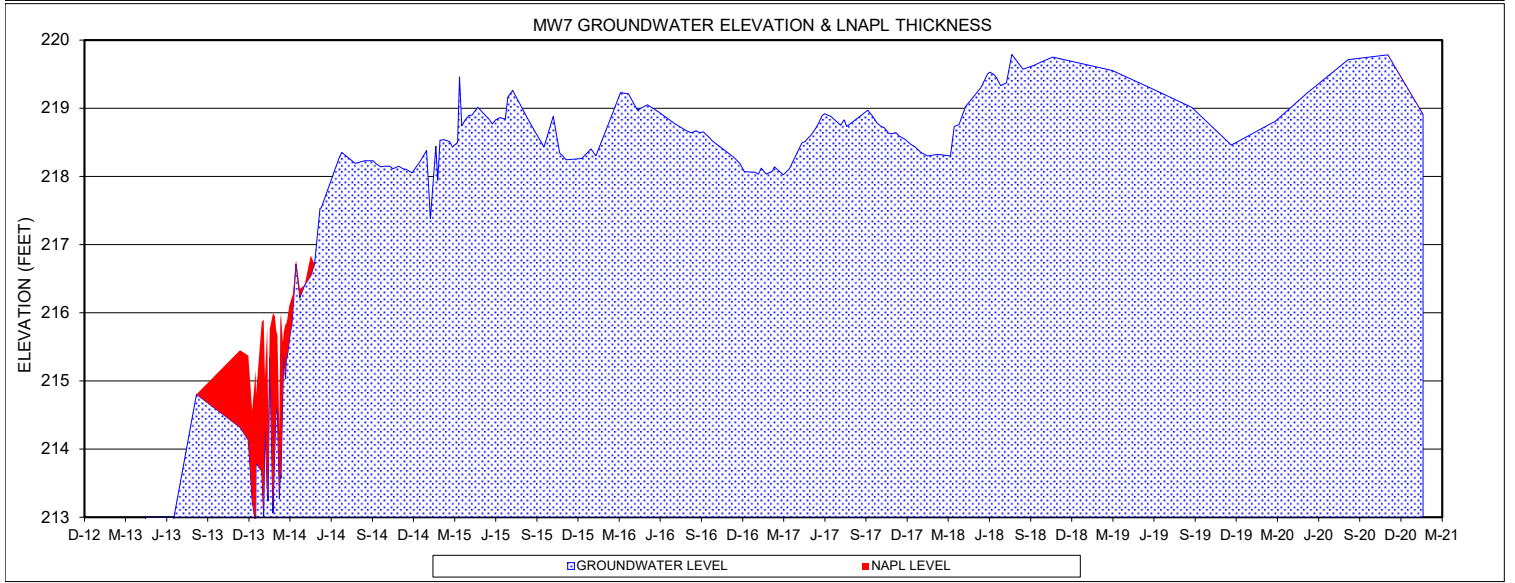
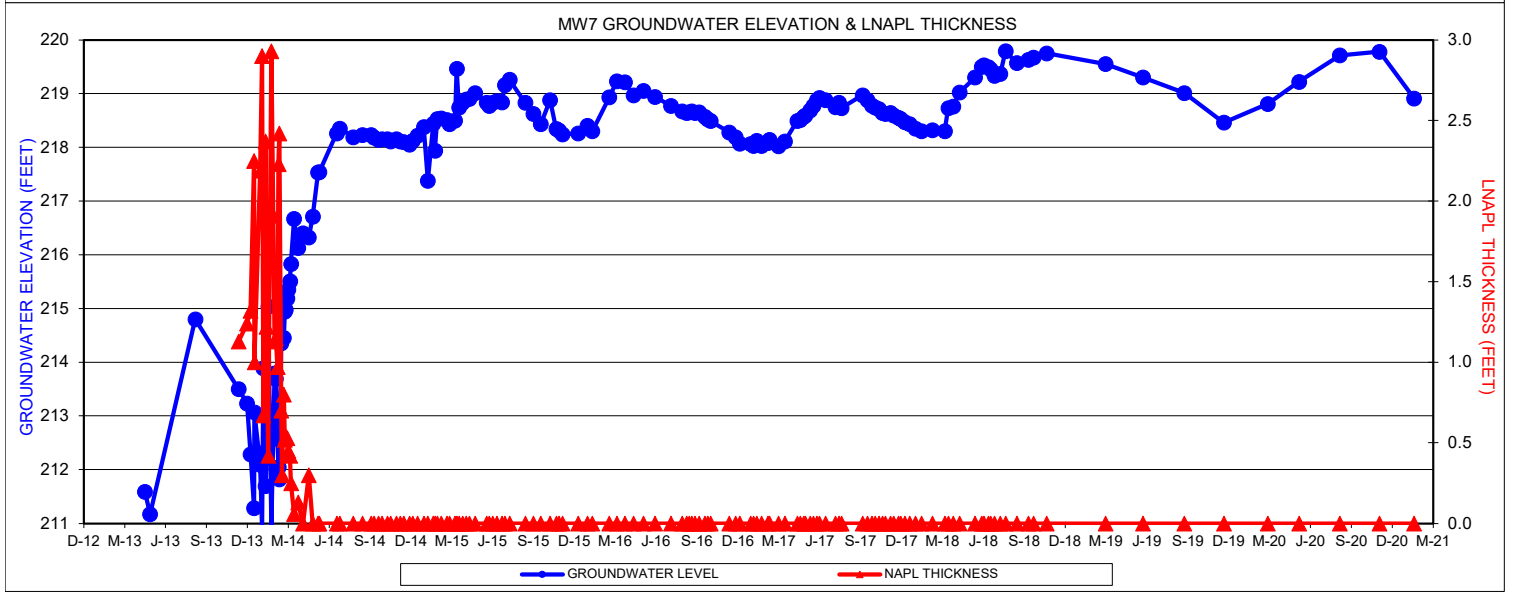
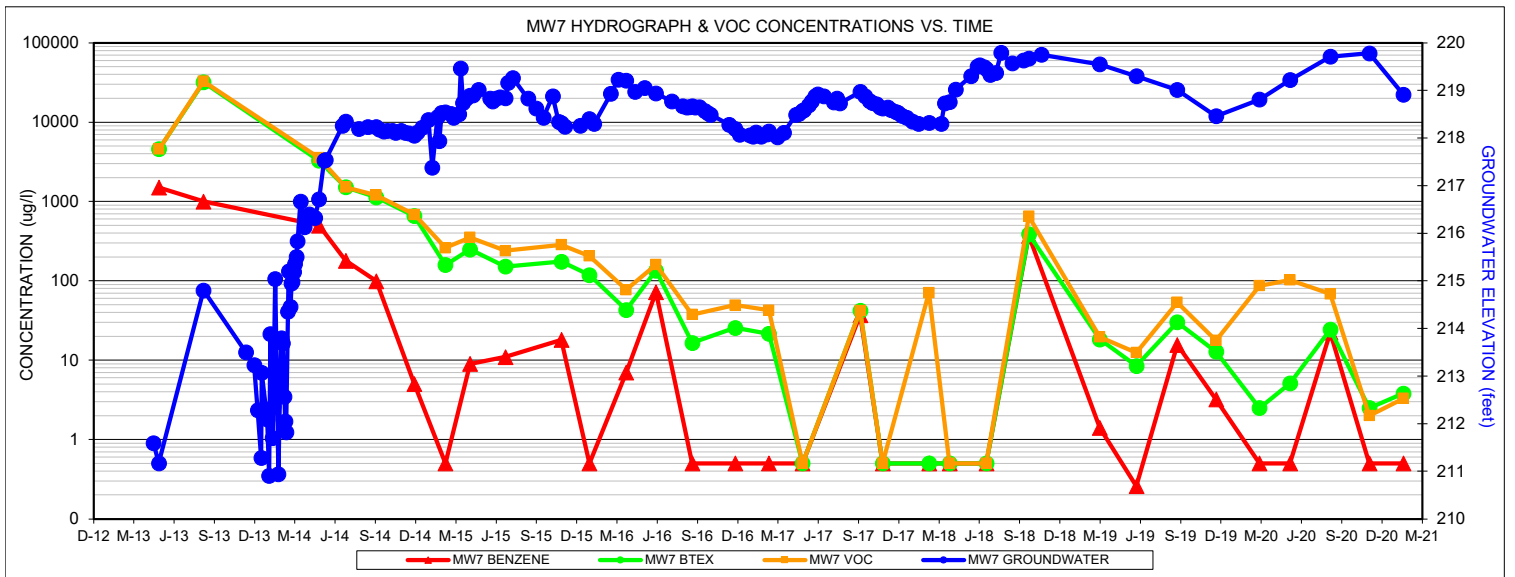


MW2 HYDROGRAPH & VOC CONCENTRATIONS VS. TIME

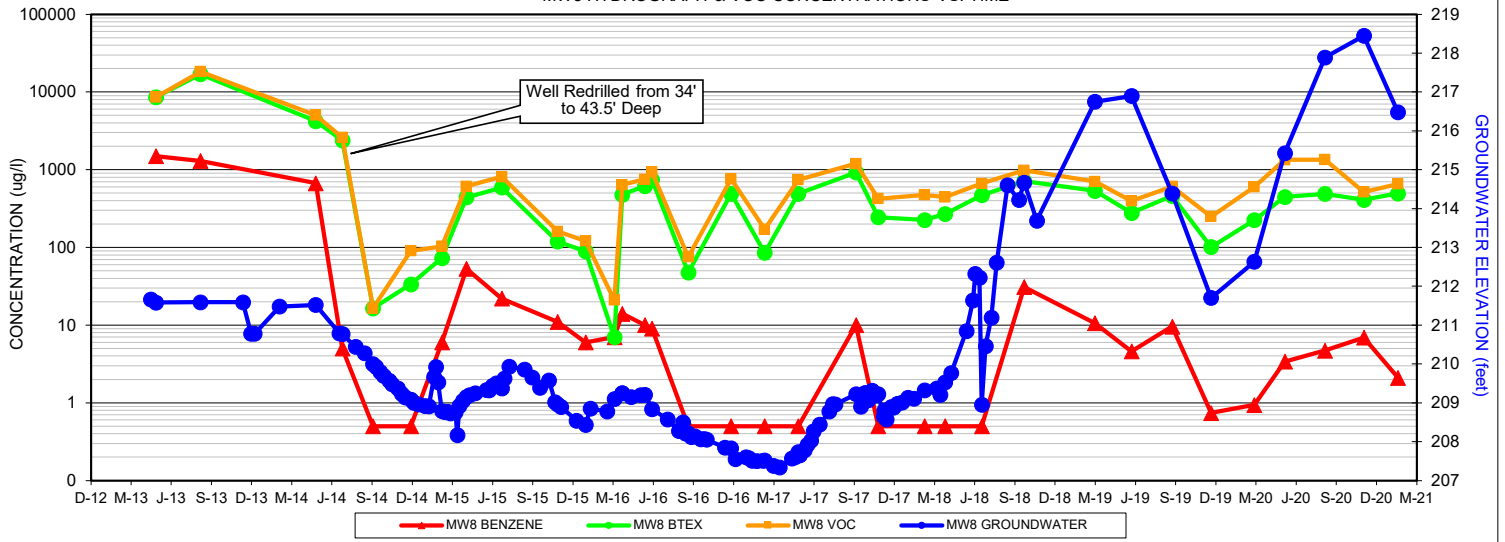


MW4 HYDROGRAPH & VOC CONCENTRATIONS VS. TIME

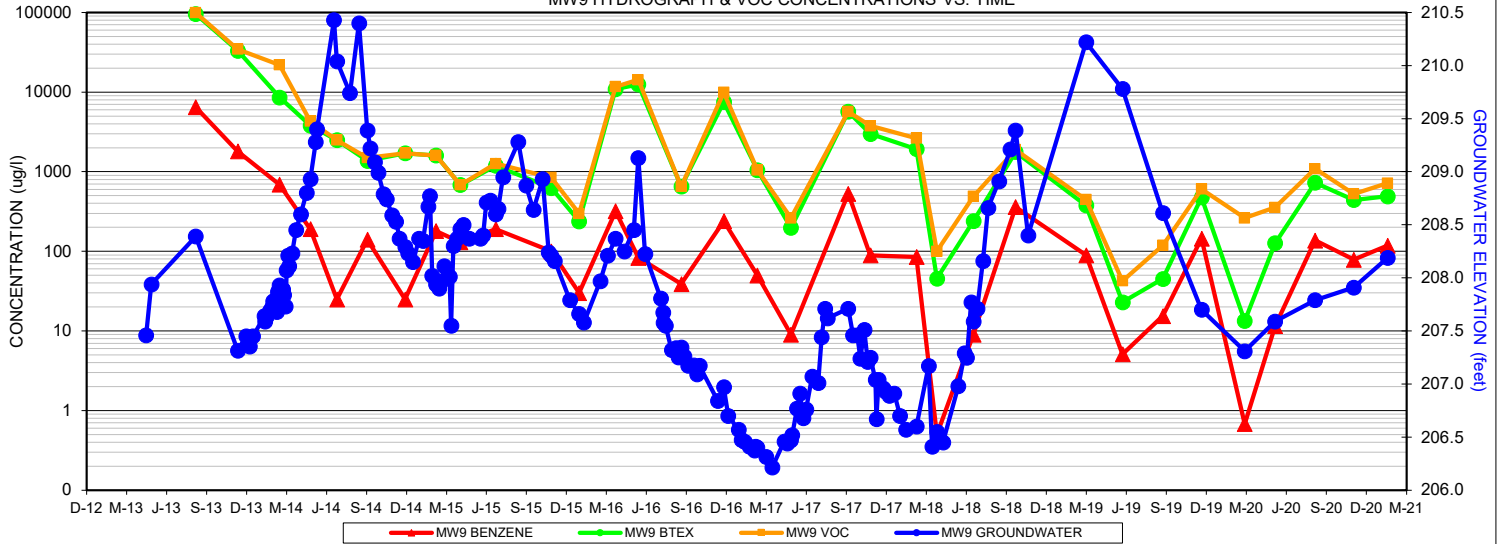




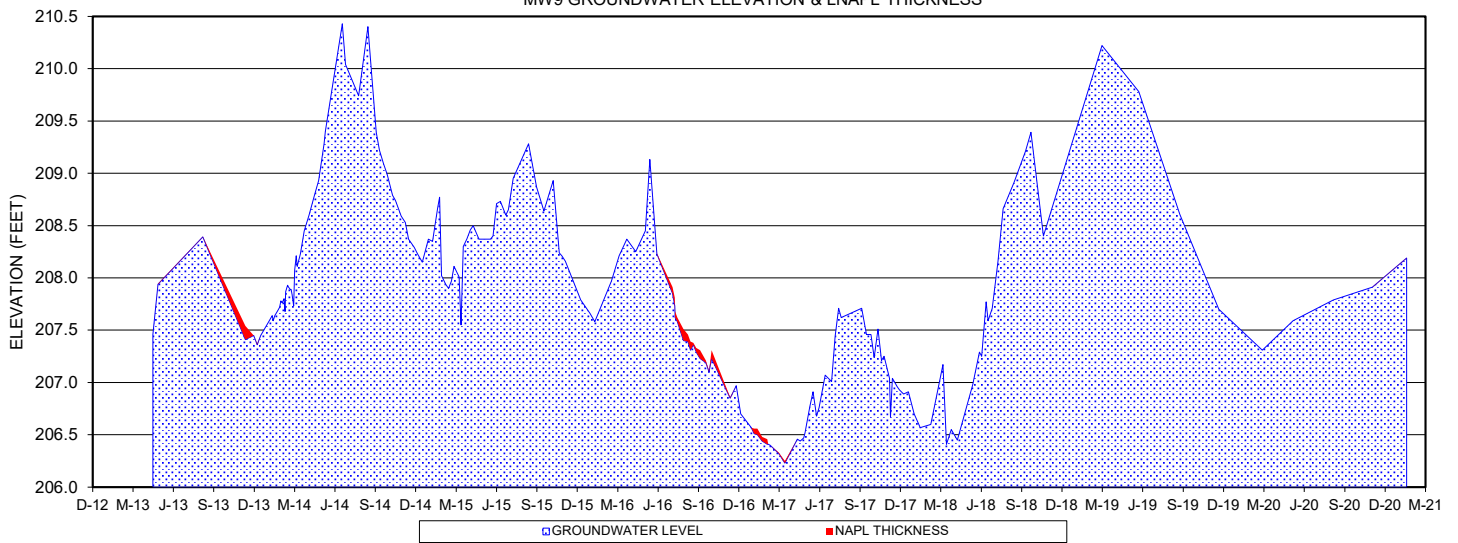
MW8 HYDROGRAPH & VOC CONCENTRATIONS VS. TIME



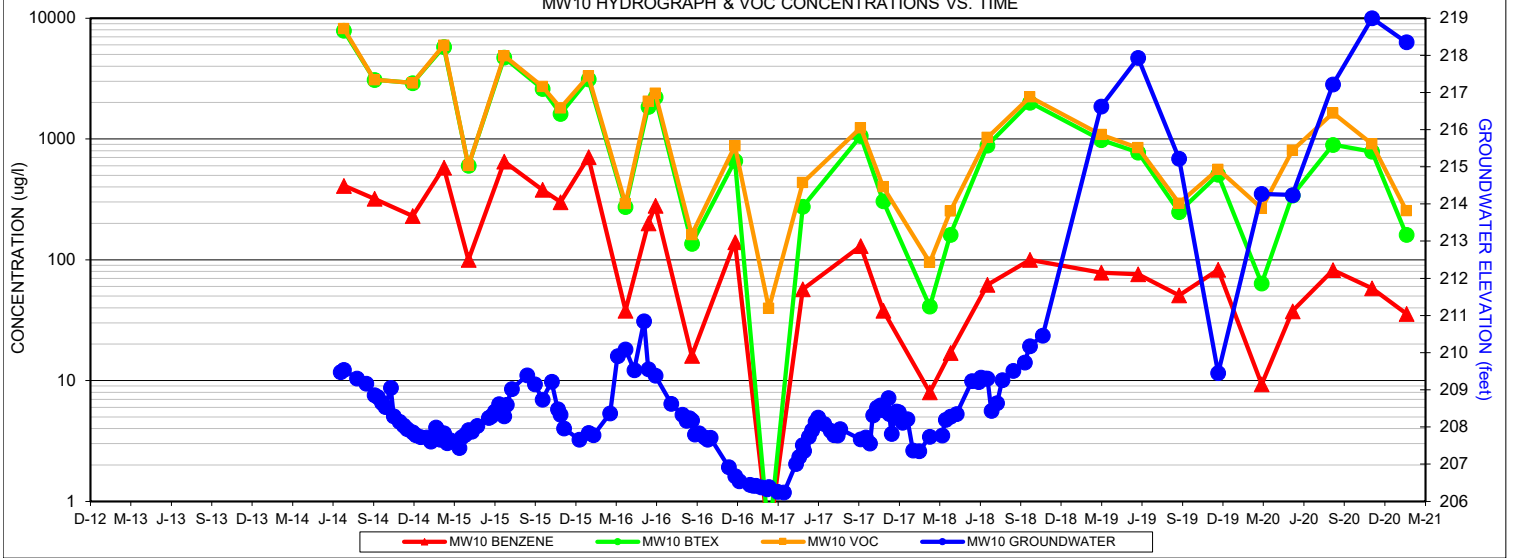
MW9 HYDROGRAPH & VOC CONCENTRATIONS VS. TIME

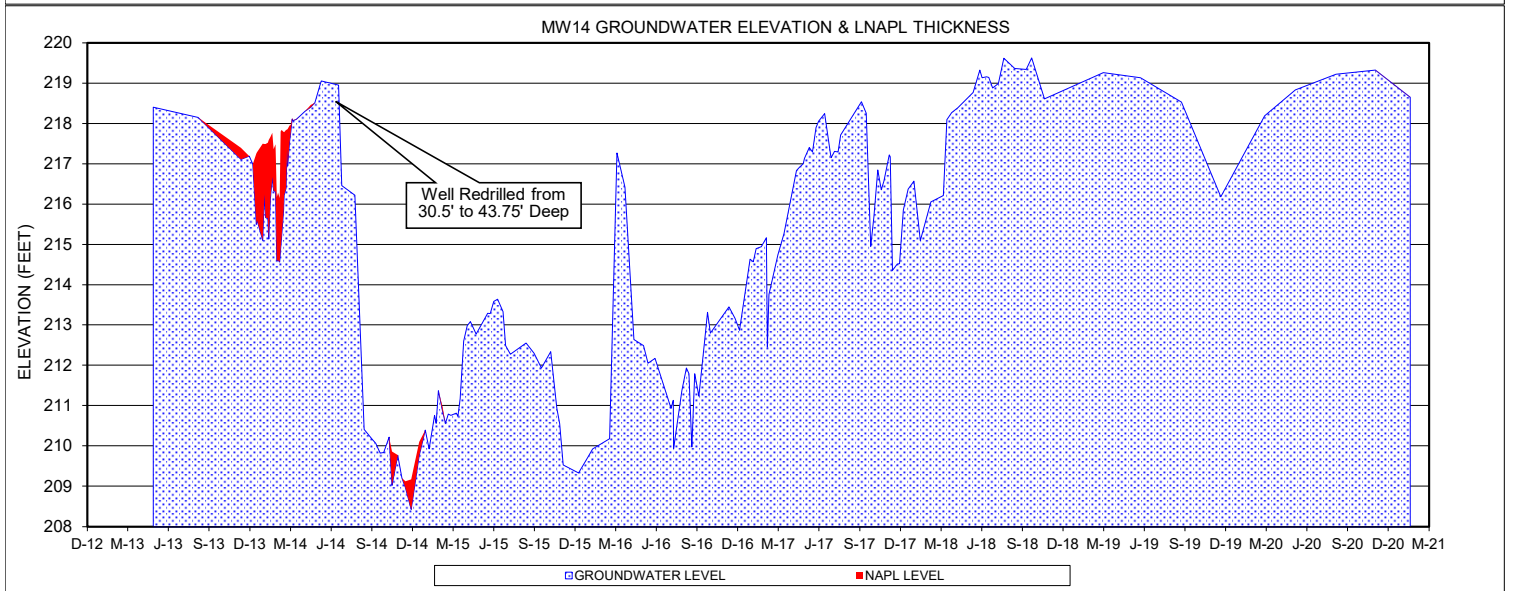
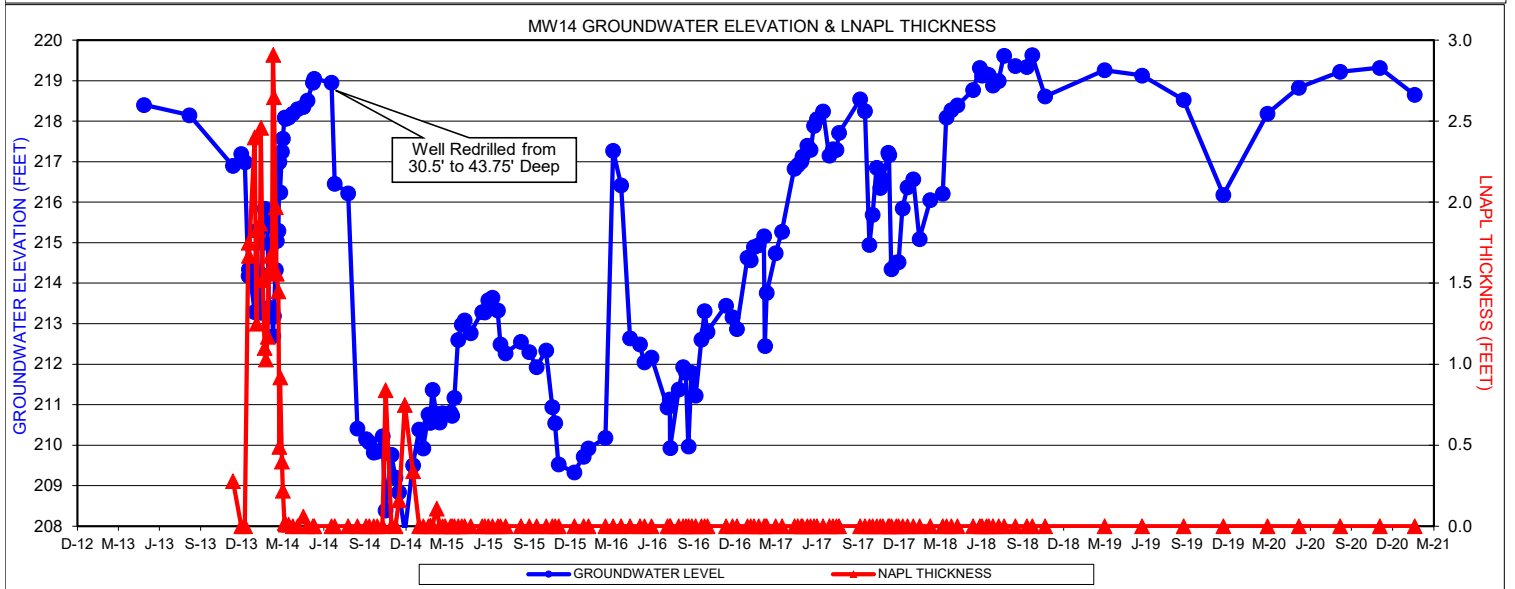
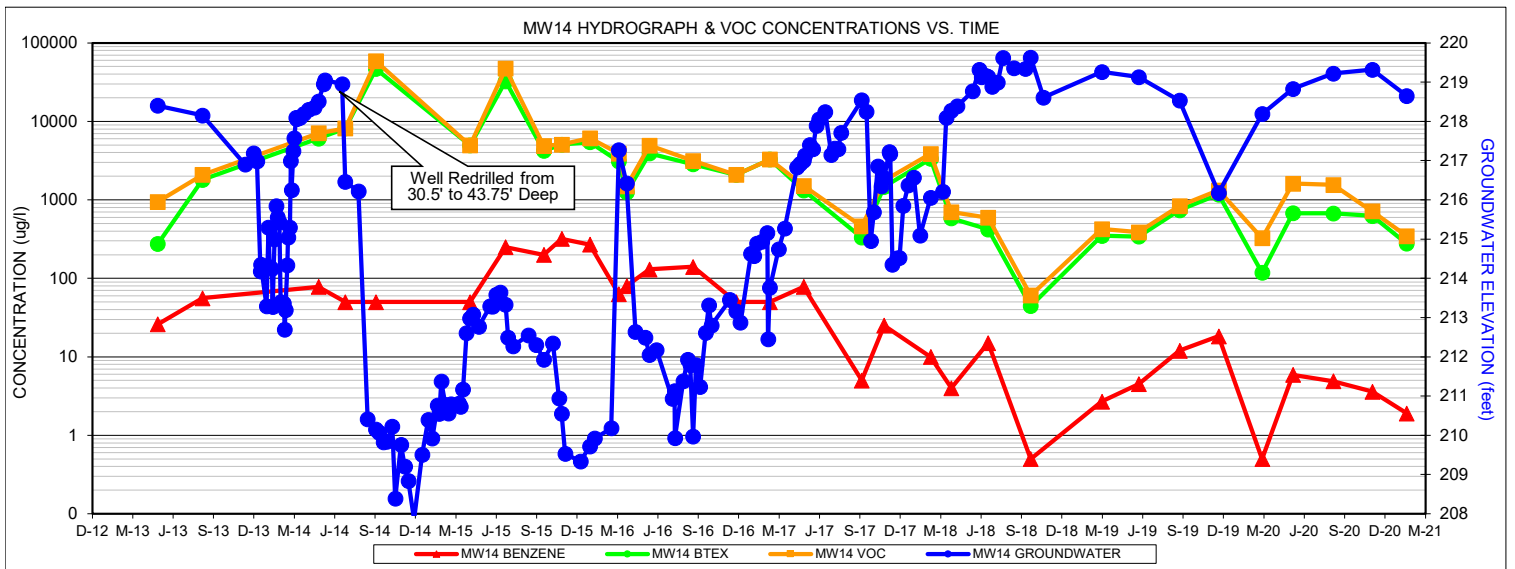


MW9 GROUNDWATER ELEVATION & LNAPL THICKNESS



MW10 HYDROGRAPH & VOC CONCENTRATIONS VS. TIME





Well	Date	Well Elev.	Well Depth	Depth to LNAPL	Depth to Water	LNAPL	Gallons Removed	Cumulative Removed	Corrected Water Elevation	Benzene	Toluene	Ethyl-benzene	m+p-Xylenes	o-Xylenes	MTBE	Cyclohexane	Methylcyclohexane	Cumene	Naphthalene	VOC	GRO	DRO		
																							Feet (ft)	
MW1	11/20/17	245.00	34.75	Clear	26.23				218.77															
	11/27/17			Clear	26.32					218.68														
	12/08/17			Clear	26.30					218.70														
	12/13/17			Clear	26.32					218.68														
	12/22/17			Clear	26.43					218.57														
	01/02/18			Clear	26.46					218.54														
	01/15/18			Clear	26.35					218.65														
	01/29/18			Clear	26.63					218.37														
	02/22/18			Clear	26.62					218.38		<1	<1	<1	<5	<5	<5	<5	<5	<5	<10	0.0	<0.22	<0.2
	03/22/18			Clear	26.40					218.60														
	03/30/18			Clear	26.24					218.76														
	04/10/18			Clear	26.18					218.82		<1	<1	<1	<5	<5	<5	<5	<5	<5	<10	0.0	<0.2	<0.2
	04/24/18			Clear	26.11					218.89														
	05/29/18			Clear	25.76					219.24														
	06/13/18			Clear	25.40					219.60														
	06/18/18			Clear	25.36					219.64														
	06/28/18			Clear	25.28					219.72														
	07/03/18			Clear	25.40					219.60		<1	<1	<1	<5	<5	<5	<5	<5	<5	<10	0.0	<0.2	0.21
	07/12/18			Clear	25.45					219.55														
	07/25/18			Clear	25.46					219.54														
	08/06/18			Clear	24.89					220.11														
	08/31/18			Clear	25.14					219.86														
	09/26/18			Clear	25.18					219.82														
	10/08/18			Clear	25.12					219.88		<1	<1	<1	<5	<5	<5	<5	<5	<5	<10	0.0	<0.2	0.24
	11/06/18			Clear	25.78					219.22														
	03/19/19			Clear	25.20					219.80		<1	0.5	<1	1.4	0.5	<1				<2	2.4	<0.2	<0.098
	06/11/19			Clear	25.54					219.46		<1	<1	<1	<2	<1	<1				<2	0.5	<0.2	0.08
	09/12/19			Clear	26.01					218.99		<1	<1	<1	<2	<1	<1				<2	0.5	<0.2	0.06
	12/10/19			Clear	26.51					218.49		<1	<1	<1	<2	<1	<1				<2	0.5	<0.2	0.09
	03/18/20			Clear	26.17					218.83		<1	<1	<1	<2	<1	<1				<2	0.5	<0.2	0.09
05/27/20	Clear	25.69					219.31		<1	<1	<1	<2	<1	<1				<2	1.1	<0.2	0.10			
08/27/20	Clear	25.33					219.67		<1	<1	<1	<2	<1	<1				<2	1.1	<0.2	0.08			
11/24/20	Clear	25.20					219.80		<1	<1	<1	<2	<1	<1				<2	0.0	<0.2	0.10			
02/10/21	Clear	25.79					219.21		<1	<1	<1	<2	<1	<1				<2	0.0	<0.2	0.11			

Well	Date	Well Elev.	Well Depth	Depth to LNAPL	Depth to Water	LNAPL	Gallons Removed	Cumulative Removed	Corrected Water Elevation	Benzene	Toluene	Ethyl-benzene	m+p-Xylenes	o-Xylenes	MTBE	Cyclohexane	Methyl-cyclohexane	Cumene	Naphthalene	VOC	GRO	DRO		
																							Feet (ft)	
MW2	04/17/13	243.51	34.75	Dry	34.75				208.76															
	04/29/13			Dry	34.75					208.76														
	08/09/13			Dry	34.75						208.76													
	11/14/13			Dry	34.75						208.76													
	02/06/14			Dry	34.75						208.76													
	04/30/14			Dry	34.75						208.76													
	06/30/14			Clear	32.79						210.72	180.0	57.0	1000.0	1800.0	120.0	<50	<50	<50	72.0	760.0	3989.0	12.00	7.80
	07/30/14			Clear	33.10						210.41													
	08/20/14			Clear	33.28						210.23													
	09/08/14			Clear	33.58						209.93	240.0	<10	1600.0	1900.0	<50	<50	73.0	120.0	150.0	740.0	4823.0	34.00	20.00
	09/15/14			Clear	33.63						209.88													
	09/25/14			Clear	33.80						209.71													
	10/03/14			Clear	33.91						209.60													
	10/15/14			Clear	34.70						208.81													
	10/22/14			Clear	34.17						209.34													
	11/04/14			Clear	34.30						209.21													
	11/13/14			Clear	34.40						209.11													
	11/21/14			Clear	34.51						209.00													
	12/04/14			Clear	34.60						208.91													
	12/11/14			Clear	34.66						208.85													
	12/22/14			Dry	34.75						208.76													
	01/05/15			Dry	34.75						208.76													
	01/14/15			Clear	34.29						209.22													
	01/26/15			Clear	34.07						209.44													
	01/30/15			Dry	34.75						208.76													
	02/04/15			Dry	34.75						208.76													
	02/13/15			Dry	34.75						208.76													
	02/26/15			Dry	34.75						208.76													
	03/04/15			Dry	34.75						208.76													
	03/16/15			Dry	34.75						208.76													
	03/20/15			Clear	33.82						209.69													
	03/25/15			Dry	34.75						208.76													
	04/02/15			Dry	34.75						208.76													
	04/10/15			Dry	34.75						208.76													
	04/17/15			Clear	34.61						208.90													
	04/30/15			Dry	34.75						208.76													
	05/26/15			Dry	34.75						208.76													
	06/01/15			Dry	34.75						208.76													
	06/09/15			Clear	34.41						209.10													
	06/18/15			Clear	34.35						209.16													
	06/30/15			Clear	34.37						209.14													
	07/06/15			Clear	34.15						209.36													
07/17/15	Clear	33.85						209.66																
08/21/15	Clear	33.77						209.74																
09/08/15	Clear	33.99						209.52																
09/25/15	Clear	34.24						209.27	240.0	18.0	300.0	160.0	<25	<25	49.0	65.0	49.0	270.0	1151.0	14.00	15.00			
10/16/15	Clear	33.65						209.86																
10/30/15	Clear	34.61						208.90																
11/05/15	Clear	34.67						208.84																
11/13/15	Clear	34.71						208.80																
12/18/15	Clear	34.73						208.78																
01/08/16	Dry	34.75						208.76																
01/19/16	Dry	34.75						208.76																
02/26/16	Dry	34.75						208.76																
03/19/19	Clear	32.76						210.75	282.0	12.7	535.0	116.0	9.4	9.8				156.0	1171.3	3.97	6.60			
06/11/19	Clear	33.46						210.05	218.0	10.5	626.0	184.0	6.1	3.9				203.0	1272.9	3.51	4.20			
09/12/19	Clear	34.45						209.06																
03/18/20	Dry	34.72						208.79																
05/27/20	Clear	34.63						208.88																
08/27/20	Clear	34.69						208.82																
11/24/20	Clear	34.62						208.89																
02/10/21	Clear	34.60						208.91																
TF3	04/17/13	244.62	12.96	na	Dry				na															
	02/26/15			na	Dry						na													

Well	Date	Well Elev.	Well Depth	Depth to LNAPL	Depth to Water	LNAPL	Gallons Removed	Cumulative Removed	Corrected Water Elevation	Benzene	Toluene	Ethyl-benzene	m+p-Xylenes	o-Xylenes	MTBE	Cyclohexane	Methyl-cyclohexane	Cumene	Naphthalene	VOC	GRO	DRO		
																							Feet (ft)	
MW4	01/15/18	245.21	34.10	Clear	26.71				218.50															
	01/29/18			Clear	26.77					218.44														
	02/22/18			Clear	26.70					218.51	0.5	<1	<1	<5	<5	<5	<5	<5	<5	<5	<10	0.5	<0.21	0.26
	03/22/18			Clear	26.63					218.58														
	03/30/18			Clear	26.33					218.88														
	04/10/18			Clear	26.28					218.93	0.5	<1	<1	<5	<5	<5	<5	<5	<5	<5	<10	0.5	<0.2	0.46
	04/24/18			Clear	26.23					218.98														
	05/29/18			Clear	25.78					219.43														
	06/13/18			Clear	25.55					219.66														
	06/18/18			Clear	25.55					219.66														
	06/28/18			Clear	25.54					219.67														
	07/03/18			Clear	25.60					219.61	0.5	<1	<1	<5	<5	<5	<5	<5	<5	<5	<10	0.5	<0.2	0.41
	07/12/18			Clear	25.74					219.47														
	07/25/18			Clear	25.73					219.48														
	08/06/18			Clear	25.24					219.97														
	08/31/18			Clear	25.50					219.71														
	09/26/18			Clear	25.56					219.65														
	10/08/18			Clear	25.37					219.84	0.5	<1	<1	<5	<5	<5	<5	<5	<5	<5	<10	0.5	<0.2	0.44
	11/06/18			Clear	25.60					219.61														
	03/19/19			Clear	25.40					219.81	0.5	<1	<1	<2	<1	<1					<2	0.5	<0.2	0.42
06/11/19	Clear	25.80					219.41	0.5	<1	<1	<2	<1	<1					<2	0.5	<0.2	0.46			
09/12/19	Clear	26.25					218.96	0.5	<1	<1	<2	<1	<1					<2	0.5	<0.2	0.26			
12/10/19	Clear	26.62					218.59	0.5	<1	<1	<2	<1	<1					<2	0.5	<0.2	0.17			
03/18/20	Clear	26.27					218.94	0.5	<1	<1	<2	<1	<1					<2	0.5	<0.2	0.28			
05/27/20	Clear	25.84					219.37	0.5	<1	<1	<2	<1	<1					<2	0.5	<0.2	0.24			
08/27/20	Clear	25.34					219.87	0.5	<1	<1	<2	<1	<1					<2	0.5	<0.2	0.23			
11/24/20	Clear	25.30					219.91	0.5	<1	<1	<2	<1	<1					<2	0.0	<0.2	0.31			
02/10/21	Clear	26.11					219.10	0.5	<1	<1	<2	<1	<1					<2	0.0	<0.2	0.24			
TF5	04/17/13	244.21	11.70	na	Dry				na															
	02/26/15			na	Dry						na													
TF6	04/17/13	244.17	9.70	na	Dry				na															
	02/26/15			na	Dry						na													

Well	Date	Well Elev.	Well Depth	Depth to LNAPL	Depth to Water	LNAPL	Gallons Removed	Cumulative Removed	Corrected Water Elevation	Benzene	Toluene	Ethylbenzene	m+p-Xylenes	o-Xylenes	MTBE	Cyclohexane	Methylcyclohexane	Cumene	Naphthalene	VOC	GRO	DRO		
																							Feet (ft)	
MWB8	04/17/13	244.88	34.11	Clear	33.22				211.66															
	04/29/13			Clear	33.30					211.58	1500.0	900.0	1600.0	4100.0	490.0	<100	<500	<500	<100	<1000	8590.0	18.00	4.20	
	08/09/13			Clear	33.29					211.59	1300.0	2300.0	2800.0	8300.0	2300.0	<50	<250	<250	170.0	1200.0	18370.0	46.00	12.00	
	11/14/13			Clear	33.29					211.59														
	12/03/13			DRY	34.10					210.78														
	12/11/13			DRY	34.10					210.78														
	02/06/14			Clear	33.40					211.48														
	04/30/14			Clear	33.36					211.52	670.0	150.0	770.0	2300.0	340.0	<10	<50	55.0	71.0	670.0	5026.0	17.00	190.00	
	06/23/14			Clear	34.00					210.79														
	06/30/14			Clear	34.02					210.77	5.0	<10	510.0	1600.0	260.0	<50	<50	<50	<50	220.0	2595.0	10.00	5.10	
	07/30/14	Clear	34.35					210.44																
	08/20/14	Clear	34.51					210.28																
	09/08/14	Clear	34.79					210.00	0.5	<1	6.0	10.0	<5	<5	<5	<5	<5	<5	<10	16.5	0.38	0.80		
	09/15/14	Clear	34.87					209.92																
	09/25/14	Clear	35.00					209.79																
	10/03/14	Clear	35.10					209.69																
	10/15/14	Clear	35.22					209.57																
	10/22/14	Clear	35.31					209.48																
	11/04/14	Clear	35.42					209.37																
	11/13/14	Clear	35.56					209.23																
	11/21/14	Clear	35.65					209.14																
	12/04/14	Clear	35.71					209.08	0.5	<1	19.0	14.0	<5	<5	<5	<5	<5	<5	57.0	90.5	<0.2	0.73		
	12/11/14	Clear	35.79					209.00																
	12/22/14	Clear	35.83					208.96																
	01/05/15	Clear	35.87					208.92																
	01/14/15	Clear	35.88					208.91																
	01/26/15	Clear	35.12					209.67																
	01/30/15	Clear	34.87					209.92																
	02/04/15	Clear	35.26					209.53																
	02/13/15	Clear	36.00					208.79	6.0	<1	26.0	20.0	21.0	<5	5.0	<5	<5	<5	25.0	103.0	1.30	1.70		
	02/20/15	Clear	36.03					208.76																
	02/26/15	Clear	36.02					208.77																
	03/04/15	Clear	36.06					208.73																
	03/16/15	Clear	36.04					208.75																
	03/20/15	Clear	36.62					208.17																
	03/25/15	Clear	35.87					208.92																
	04/02/15	Clear	35.74					209.05																
	04/10/15	Clear	35.64					209.15	53.0	<1	310.0	62.0	16.0	<5	<5	13.0	17.0	140.0	611.0	2.30	1.50			
	04/17/15	Clear	35.59					209.20																
	04/30/15	Clear	35.54					209.25																
	05/26/15	Clear	35.46					209.33																
	06/01/15	Clear	35.47					209.32																
	06/09/15	Clear	35.35					209.44																
	06/18/15	Clear	35.29					209.50																
	06/30/15	Clear	35.42					209.37	22.0	<1	380.0	170.0	18.0	<5	21.0	18.0	24.0	160.0	813.0	3.60	1.70			
	07/06/15	Clear	35.16					209.63																
	07/17/15	Clear	34.86					209.93																
	08/21/15	Clear	34.93					209.86																
	09/08/15	Clear	35.14					209.65																
	09/25/15	Clear	35.40					209.39																
10/16/15	Clear	35.21					209.58																	
10/30/15	Clear	35.77					209.02																	
11/05/15	Clear	35.83					208.96	11.0	<1	61.0	38.0	9.0	<5	11.0	8.0	<5	22.0	160.0	1.60	0.81				
11/13/15	Clear	35.90					208.89																	
12/18/15	Clear	36.25					208.54																	
01/08/16	Clear	36.36					208.43	6.0	<1	47.0	36.0	<5	<5	<5	<5	<5	<5	32.0	121.0	0.87	3.10			
01/19/16	Clear	35.94					208.85																	
02/26/16	Clear	36.01					208.78																	
03/14/16	Clear	35.69					209.10	7.0	<1	<1	<5	<5	<5	8.0	6.0	<5	<10	21.0						
04/01/16	Clear	35.54					209.25	14.0	3.0	130.0	300.0	31.0	<5	8.0	8.0	7.0	140.0	641.0	3.30	1.40				
04/01/16	Clear	35.54					209.25																	
04/21/16	Clear	35.64					209.15																	
05/13/16	Clear	35.59					209.20																	
05/23/16	Clear	35.58					209.21	10.0	3.0	270.0	310.0	24.0	<5	<5	6.0	19.0	110.0	752.0	3.50	1.70				
06/08/16	Clear	35.95					208.84	9.0	<2	400.0	310.0	22.0	<10	11.0	<10	28.0	150.0	930.0	1.90	1.40				
07/14/16	Clear	36.22					208.57																	
08/08/16	Clear	36.51					208.28																	
08/18/16	Clear	36.29					208.50																	
08/24/16	Clear	36.58					208.21																	
08/30/16	Clear	36.58					208.21	0.5	<1	10.0	37.0	<5	<5	<5	<5	<5	<5	28.0	75.5	0.27	0.45			
09/06/16	Clear	36.67					208.12																	
09/15/16	Clear	36.65					208.14																	
09/28/16	Clear	36.73					208.06																	
10/05/16	Clear	36.72					208.07																	
10/11/16	Clear	36.74					208.05																	
11/22/16	Clear	36.94					207.85																	
12/06/16	Clear	36.96					207.83	0.5	<1	170.0	320.0	<5	<5	<5	<5	11.0	260.0	761.5	1.70	1.				

Well	Date	Well Elev.	Well Depth	Depth to LNAPL	Depth to Water	LNAPL	Gallons Removed	Cumulative Removed	Corrected Water Elevation	Benzene	Toluene	Ethyl-benzene	m+p-Xylenes	o-Xylenes	MTBE	Cyclohexane	Methyl-cyclohexane	Cumene	Naphthalene	VOC	GRO	DRO	
										Micrograms Per Liter (µg/l)										Milligrams per Liter (mg/l)			
						Feet (ft)																	
MW8	11/20/17	244.79	43.60	Clear	36.14				208.65														
	11/22/17			Clear	35.99				208.80														
	11/27/17			Clear	36.22				208.57														
	12/08/17			Clear	35.90				208.89														
	12/13/17			Clear	35.91				208.88														
	12/22/17			Clear	35.81				208.98														
	01/02/18			Clear	35.78				209.01														
	01/15/18			Clear	35.66				209.13														
	01/29/18			Clear	35.68				209.11														
	02/22/18			Clear	35.47				209.32	0.5	<1	15.0	210.0	<5	<5	12.0	17.0	<5	220.0	474.0	1.80	1.10	
	03/22/18			Clear	35.42				209.37														
	03/30/18			Clear	35.58				209.21														
	04/10/18			Clear	35.26				209.53	0.5	<1	38.0	230.0	<5	<5	7.0	9.0	<5	160.0	444.0	1.20	2.30	
	04/24/18			Clear	35.02				209.77														
	05/29/18			Clear	33.94				210.85														
	06/13/18			Clear	33.15				211.64														
	06/18/18			Clear	32.47				212.32														
	06/28/18			Clear	32.57				212.22														
	07/03/18			Clear	35.84				208.95	0.5	<1	180.0	290.0	<5	<5	15.0	14.0	17.0	150.0	666.0	5.00	1.60	
	07/12/18			Clear	34.33				210.46														
	07/25/18			Clear	33.60				211.19														
	08/06/18			Clear	32.18				212.61														
	08/31/18			Clear	30.19				214.60														
	09/26/18			Clear	30.57				214.22														
	10/08/18			Clear	30.12				214.67	31.0	3.0	300.0	380.0	<5	<5	29.0	37.0	31.0	170.0	981.0	3.90	3.40	
	11/06/18			Clear	31.10				213.69														
	03/19/19			Clear	28.04				216.75	10.6	2.5	246.0	272.0	2.7	0.4				157.0	702.4	3.34	2.60	
	06/11/19			Clear	27.89				216.90	4.6	0.8	135.0	137.0	<1	<1				120.0	397.4	1.61	2.60	
	09/12/19			Clear	30.40				214.39	9.6	0.7	295.0	154.0	0.8	<1				138.0	607.5	2.29	2.20	
	12/10/19			Clear	33.09				211.70	0.7	1.4	34.1	63.7	1.3	<1				147.0	248.9	0.88	1.30	
	03/18/20			Clear	32.16				212.63	0.9	1.2	62.3	159.0	1.1	<1			7.8	88.4	600.5	1.02	1.30	
	05/27/20			Clear	29.36				215.43	3.4	0.9	227.0	215.0	1.0	<1			27.7	145.0	1339.9	1.43	1.20	
	08/27/20			Clear	26.90				217.89	4.7	0.6	205.0	276.0	1.1	0.4				137.0	1345.5	2.02	1.20	
	11/24/20			Clear	26.34				218.45	6.9	1.1	163.0	236.0	3.2	0.4				106.0	517.2	1.20	1.20	
	02/10/21			Clear	28.31				216.48	2.1	0.7	194.0	297.0	2.2	0.3				129.0	656.1	1.70	1.10	

Well	Date	Well Elev.	Well Depth	Depth to LNAPL	Depth to Water	LNAPL	Gallons Removed	Cumulative Removed	Corrected Water Elevation	Benzene	Toluene	Ethyl-benzene	m+p-Xylenes	o-Xylenes	MTBE	Cyclohexane	Methylcyclohexane	Cumene	Naphthalene	VOC	GRO	DRO		
																							Micrograms Per Liter (µg/l)	
Feet (ft)																								
MW9	01/09/17	243.49	40.50	36.92	36.92	0.00	0.00	1.05	206.57															
	01/16/17			36.93	36.98	0.05	0.07	1.11	206.47															
	01/23/17			36.93	36.99	0.06	0.08	1.19	206.46															
	02/03/17			37.01	37.05	0.04	0.05	1.24	206.41															
	02/15/17			37.03	37.08	0.05	0.07	1.31	206.37															
	02/17/17			37.08	37.08	0.00	0.00	1.31	206.41															
	02/21/17			37.09	37.09	0.00	0.00	1.31	206.40			50.0	230.0	<100	770.0	<500	<500	<500	<500	<500	<1000	1050.0	8.60	260.00
	03/13/17			37.16	37.17	0.01	0.01	1.32	206.31															
	03/27/17			37.24	37.26	0.02	0.03	1.35	206.22															
	04/24/17			37.03	37.03	0.00	0.00	1.35	206.46															
	05/01/17			37.05	37.05	0.00	0.00	1.35	206.44															
	05/09/17			37.02	37.02	0.00	0.00	1.35	206.47			9.0	25.0	14.0	97.0	52.0	8.0	9.0	12.0	5.0	31.0	262.0	2.30	30.00
	05/12/17			36.97	36.97	0.00	0.00	1.35	206.52															
	05/23/17			36.72	36.72	0.00	0.00	1.35	206.77															
	05/30/17			36.58	36.58	0.00	0.00	1.35	206.91															
	06/07/17			36.81	36.81	0.00	0.00	1.35	206.68															
	06/13/17			36.73	36.73	0.00	0.00	1.35	206.76															
	06/27/17			36.42	36.42	0.00	0.00	1.35	207.07															
	07/11/17			36.48	36.48	0.00	0.00	1.35	207.01															
	07/19/17			36.05	36.05	0.00	0.00	1.35	207.44															
	07/27/17			35.78	35.78	0.00	0.00	1.35	207.71															
	08/02/17			35.87	35.87	0.00	0.00	1.35	207.62															
	09/18/17			35.78	35.78	0.00	0.00	1.35	207.71			530.0	1400.0	470.0	2300.0	970.0	<500	<500	<500	<500	<1000	5670.0	46.00	510.00
	09/29/17			36.03	36.03	0.00	0.00	1.35	207.46															
	10/09/17			36.03	36.03	0.00	0.00	1.35	207.46															
	10/16/17			36.25	36.25	0.00	0.00	1.35	207.24															
	10/25/17			35.98	35.98	0.00	0.00	1.35	207.51															
	11/02/17			36.28	36.28	0.00	0.00	1.35	207.21															
	11/08/17			36.24	36.24	0.00	0.00	1.35	207.25			89.0	420.0	110.0	1400.0	970.0	<100	<100	160.0	<100	620.0	3769.0	21.00	300.00
	11/20/17			36.45	36.45	0.00	0.00	1.35	207.04															
	11/22/17			36.82	36.82	0.00	0.00	1.35	206.67															
	11/27/17			36.45	36.45	0.00	0.00	1.35	207.04															
	12/08/17			36.53	36.53	0.00	0.00	1.35	206.96															
	12/13/17			36.56	36.56	0.00	0.00	1.35	206.93															
	12/22/17			36.60	36.60	0.00	0.00	1.35	206.89															
	01/02/18			36.58	36.58	0.00	0.00	1.35	206.91															
	01/15/18			36.79	36.79	0.00	0.00	1.35	206.70															
	01/29/18			36.92	36.92	0.00	0.00	1.35	206.57															
	02/22/18			36.89	36.89	0.00	0.00	1.35	206.60			85.0	340.0	88.0	960.0	450.0	<100	<100	290.0	<100	420.0	2633.0	730.00	120.00
	03/22/18			36.32	36.32	0.00	0.00	1.35	207.17															
	03/30/18			37.08	37.08	0.00	0.00	1.35	206.41															
	04/10/18			36.94	36.94	0.00	0.00	1.35	206.55			0.5	<1	<1	17.0	28.0	11.0	<5	14.0	<5	30.0	100.0	24.00	30.00
	04/24/18			37.04	37.04	0.00	0.00	1.35	206.45															
	05/29/18			36.51	36.51	0.00	0.00	1.35	206.98															
	06/13/18			36.20	36.20	0.00	0.00	1.35	207.29															
	06/18/18			36.24	36.24	0.00	0.00	1.35	207.25															
	06/28/18			35.72	35.72	0.00	0.00	1.35	207.77															
	07/03/18			35.90	35.90	0.00	0.00	1.35	207.59			9.0	25.0	79.0	90.0	37.0	14.0	14.0	14.0	<10	38.0	490.0	7.70	8.00
	07/12/18			35.78	35.78	0.00	0.00	1.35	207.71															
	07/25/18			35.33	35.33	0.00	0.00	1.35	208.16															
08/06/18	34.83	34.83	0.00	0.00	1.35	208.66																		
08/31/18	34.58	34.58	0.00	0.00	1.35	208.91																		
09/26/18	34.28	34.28	0.00	0.00	1.35	209.21																		
10/08/18	34.10	34.10	0.00	0.00	1.35	209.39			360.0	240.0	150.0	690.0	330.0	<50	<50	<50	<50	120.0	1890.0	2.80	7.00			
11/06/18	35.09	35.09	0.00	0.00	1.35	208.40																		
03/19/19	33.27	33.27	0.00	0.00	1.35	210.22			89.5	27.5	57.6	146.0	57.2	10.7					30.7	445.3	2.25	3.90		
06/11/19	33.71	33.71	0.00	0.00	1.35	209.78			5.1	1.6	6.5	9.8	<1	1.6					2.7	42.7	0.93	0.86		
09/12/19	34.88	34.88	0.00	0.00	1.35	208.61			15.4	3.0	9.0	12.9	4.8	4.1					4.7	118.8	0.90	0.83		
12/10/19	35.79	35.79	0.00	0.00	1.35	207.70			145.0	20.0	73.9	195.0	41.6	13.1					4.8	605.4	14.60	17.30		
03/18/20	36.18	36.18	0.00	0.00	1.35	207.31			0.7	<1	9.0	2.9	0.8	8.3				1.5	<2	261.5	<2	7.20		
05/27/20	35.90	35.90	0.00	0.00	1.35	207.59			11.5	6.8	15.2	64.4	29.0	10.6				2.2	4.6	355.7	0.65	5.80		
08/27/20	35.70	35.70	0.00	0.00	1.35	207.79			137.0	76.5	100.0	307.0	108.0	16.0					31.8	1088.6	3.86	16.80		
11/24/20	35.58	35.58	0.00	0.00	1.35	207.91			78.5	24.8	43.7	204.0	90.9	9.7					14.4	527.3	1.32	3.30		
02/10/21	35.30	35.30	0.00	0.00	1.35	208.19			118.0	17.0	85.7	195.0	75.4	30.1					24.5	717.3	2.01	4.30		

Well	Date	Well Elev.	Well Depth	Depth to LNAPL	Depth to Water	LNAPL	Gallons Removed	Cumulative Removed	Corrected Water Elevation	Benzene	Toluene	Ethylbenzene	m+p-Xylenes	o-Xylenes	MTBE	Cyclohexane	Methylcyclohexane	Cumene	Naphthalene	VOC	GRO	DRO		
																							Feet (ft)	
MW10	04/17/13	244.23	34.20	Clear	33.24				210.99															
	04/29/13			Clear	34.09					210.14	INSUFFICIENT WATER IN WELL TO SAMPLE													
	08/09/13			Clear	33.79					210.44	INSUFFICIENT WATER IN WELL TO SAMPLE													
	11/14/13			DRY	34.15					210.08	INSUFFICIENT WATER IN WELL TO SAMPLE													
	12/11/13			DRY	34.15					210.08	INSUFFICIENT WATER IN WELL TO SAMPLE													
	12/19/13			DRY	34.15					210.08														
	01/02/14			DRY	34.12					210.11														
	01/06/14			DRY	34.20					210.03														
	01/09/14			Clear	34.13					210.10														
	01/14/14			Clear	34.10					210.13														
	01/16/14			Clear	34.13					210.10														
	01/20/14			Clear	34.09					210.14														
	01/27/14			Clear	34.05					210.18														
	01/31/14			Clear	34.07					210.16														
	02/03/14			Clear	34.09					210.14														
	02/06/14			Clear	34.07					210.16														
	02/10/14			Clear	34.08					210.15														
	02/12/14			Clear	34.11					210.12														
	02/14/14			Clear	34.10					210.13														
	02/18/14			Clear	34.09					210.14														
	02/20/14			Clear	34.09					210.14														
	02/24/14			Clear	34.07					210.16														
	02/26/14			Clear	34.07					210.16														
	02/28/14			Clear	34.10					210.13														
	03/04/14			Clear	34.08					210.15														
	03/06/14			Clear	33.98					210.25														
	03/10/14			Clear	33.95					210.28														
	03/12/14			Clear	34.02					210.21														
	03/19/14			Clear	33.91					210.32														
	03/28/14			Clear	34.32					209.91														
	04/08/14			Clear	33.95					210.28														
	04/21/14			Clear	34.09					210.14														
	04/30/14			Clear	34.05					210.18														
	05/12/14			Clear	34.10					210.13														
	05/15/14			Clear	34.15					210.08														
	06/23/14			Clear	34.68					209.48														
	06/30/14			Clear	34.62					209.54	410.0	2700.0	770.0	2900.0	1100.0	<100	<100	<100	<100	<100	310.0	8190.0	21.00	9.00
	07/30/14			Clear	34.85					209.31														
	08/20/14			Clear	34.99					209.17														
	09/09/14			Clear	35.30					208.86	320.0	1100.0	360.0	1000.0	310.0	<100	<100	<100	<100	<100	<200	3090.0	8.70	2.60
	09/15/14			Clear	35.35					208.81														
	09/25/14			Clear	35.51					208.65														
	10/03/14			Clear	35.62					208.54														
	10/15/14			Clear	35.10					209.06														
	10/22/14			Clear	35.87					208.29														
	11/04/14			Clear	36.02					208.14														
	11/13/14			Clear	36.12					208.04														
	11/21/14			Clear	36.21					207.95														
	12/04/14			Clear	36.30					207.86	230.0	1000.0	150.0	1100.0	420.0	<100	<100	<100	<100	<100	<200	2900.0	11.00	2.50
	12/11/14			Clear	36.38					207.78														
12/22/14	Clear	36.43					207.73																	
01/05/15	Clear	36.44					207.72																	
01/14/15	Clear	36.55					207.61																	
01/26/15	Clear	36.17					207.99																	
01/30/15	Clear	36.25					207.91																	
02/04/15	Clear	36.50					207.66																	
02/13/15	Clear	36.33					207.83	580.0	2200.0	280.0	2000.0	720.0	<50	<50	<50	<50	<50	180.0	5960.0	15.00	3.60			
02/20/15	Clear	36.59					207.57																	
02/26/15	Clear	36.51					207.65																	
03/20/15	Clear	36.72					207.44																	
03/25/15	Clear	36.44					207.72																	
04/02/15	Clear	36.37					207.79																	
04/10/15	Clear	36.24					207.92	100.0	140.0	<10	220.0	140.0	<50	<50	<50	<50	<50	<100	600.0	2.90	2.40			
04/17/15	Clear	36.28					207.88																	
04/30/15	Clear	36.13					208.03																	
05/26/15	Clear	35.91					208.25																	
06/01/15	Clear	35.87					208.29																	
06/09/15	Clear	35.74					208.42																	
06/18/15	Clear	35.54					208.62																	
06/30/15	Clear	35.87					208.29	650.0	1200.0	510.0	1900.0	460.0	<50	<50	<50	<50	<50	150.0	4870.0	4.40	3.70			
07/06/15	Clear	35.56					208.60																	
07/17/15	Clear	35.14					209.02																	
08/21/15	Clear	34.77					209.39																	
09/08/15	Clear	35.01					209.15																	
09/25/15	Clear	35.42					208.74	380.0	820.0	82.0	1100.0	220.0	<50	<50	<50	<50	<50	110.0	2712.0	6.80	1.40			
10/16/15	Clear	34.94					209.22																	
10/30/15	Clear	35.68					208.48																	
11/05/15	Clear	35.83					208.33	300.0	130.0	140.0	980.0	68.0	6.0	48.0	28.0	10.0	97.0	1807.0	6.50	1.90				
11/13/15	Clear	36.20					207.96																	
12/18/15	Clear	36.50					207.66																	
01/08/16	Clear	36.32					207.84	710.0	98.0	550.0	1700.0	52.0	<50	<50	<50	<50	<50	200.0	3310.0	7.90	2.10			
01/19/16	Clear	36																						

Well	Date	Well Elev.	Well Depth	Depth to LNAPL	Depth to Water	LNAPL	Gallons Removed	Cumulative Removed	Corrected Water Elevation	Benzene	Toluene	Ethyl-benzene	m+p-Xylenes	o-Xylenes	MTBE	Cyclohexane	Methyl-cyclohexane	Cumene	Naphthalene	VOC	GRO	DRO				
																							Feet (ft)			
MW10	02/03/17	244.16	43.60	Clear	37.78				206.38																	
	02/17/17			Clear	37.83					206.33																
	02/21/17			Clear	37.77					206.39	0.5	<1	<1	<5	<5	<5	<5	<5	<5	<10	39.5	0.33	1.00			
	03/13/17			Clear	37.90					206.26																
	03/27/17			Clear	37.92					206.24																
	04/24/17			Clear	37.15					207.01																
	05/01/17			Clear	36.96					207.20																
	05/09/17			Clear	36.64					207.52	57.0	2.0	13.0	190.0	13.0	<5	23.0	11.0	<5	69.0	434.0	2.10	2.10			
	05/12/17			Clear	36.80					207.36																
	05/23/17			Clear	36.42					207.74																
	05/30/17			Clear	36.25					207.91																
	06/07/17			Clear	36.02					208.14																
	06/13/17			Clear	35.90					208.26																
	06/27/17			Clear	36.08					208.08																
	07/11/17			Clear	36.26					207.90																
	07/19/17			Clear	36.38					207.78																
	07/27/17			Clear	36.39					207.77																
	08/02/17			Clear	36.21					207.95																
	09/18/17			Clear	36.49					207.67	130.0	37.0	390.0	430.0	70.0	<10	30.0	22.0	28.0	99.0	1236.0	6.50	2.80			
	09/29/17			Clear	36.44					207.72																
	10/09/17			Clear	36.60					207.56																
	10/16/17			Clear	35.84					208.32																
	10/25/17			Clear	35.64					208.52																
	11/02/17			Clear	35.58					208.58																
	11/08/17			Clear	35.71					208.45	38.0	<2	110.0	140.0	18.0	<10	15.0	11.0	<10	69.0	401.0	2.90	1.30			
	11/20/17			Clear	35.38					208.78																
	11/22/17			Clear	35.81					208.35																
	11/27/17			Clear	36.34					207.82																
	12/08/17			Clear	35.74					208.42																
	12/13/17			Clear	35.76					208.40																
	12/22/17			Clear	36.04					208.12																
	01/02/18			Clear	35.95					208.21																
	01/15/18			Clear	36.79					207.37																
	01/29/18			Clear	36.81					207.35																
	02/22/18			Clear	36.42					207.74	8.0	<1	6.0	27.0	<5	<5	20.0	14.0	<5	20.0	95.0	3.20	1.20			
	03/22/18			Clear	36.39					207.77																
	03/30/18			Clear	35.96					208.20																
	04/10/18			Clear	35.88					208.28	17.0	<1	52.0	92.0	<5	<5	14.0	12.0	<5	65.0	252.0	2.40	1.50			
	04/24/18			Clear	35.81					208.35																
	05/29/18			Clear	34.92					209.24																
	06/13/18			Clear	34.95					209.21																
	06/18/18			Clear	34.83					209.33																
	06/28/18			Clear	34.85					209.31																
	07/03/18			Clear	34.85					209.31	62.0	81.0	240.0	370.0	130.0	<10	15.0	14.0	14.0	100.0	1026.0	5.60	1.80			
	07/12/18			Clear	35.72					208.44																
	07/25/18			Clear	35.52					208.64																
	08/06/18			Clear	34.90					209.26																
	08/31/18			Clear	34.65					209.51																
	09/26/18			Clear	34.42					209.74																
	10/08/18			Clear	33.98					210.18	100.0	280.0	510.0	930.0	180.0	5.0	13.0	15.0	35.0	160.0	2228.0	4.40	2.00			
11/06/18	Clear	33.70					210.46																			
03/19/19	Clear	27.54					216.62	78.2	33.0	309.0	500.0	59.6	2.5					88.8	1083.7	3.54	2.60					
06/11/19	Clear	26.23					217.93	76.0	2.8	243.0	423.0	28.3	2.3					61.2	844.3	2.50	2.20					
09/12/19	Clear	28.94					215.22	50.7	0.6	135.0	60.6	1.6	1.6					22.6	293.1	2.36	1.10					
12/10/19	Clear	34.71					209.45	82.6	1.8	383.0	36.8	1.8	1.6					39.4	560.2	2.45	0.99					
03/18/20	Clear	29.89					214.27	9.3	<1	21.0	32.2	1.0	1.9				3.7	26.7	266.0	0.39	1.80					
05/27/20	Clear	29.92					214.24	37.5	0.7	90.3	203.0	9.7	2.3				9.1	74.9	803.8	1.55	2.20					
08/27/20	Clear	26.94					217.22	82.1	2.2	349.0	444.0	17.0	3.5					122.0	1635.6	2.76	2.40					
11/24/20	Clear	25.16					219.00	58.1	1.6	313.0	405.0	6.4	3.5					122.0	909.6	1.81	2.60					
02/10/21	Clear	25.81					218.35	35.7	1.2	57.9	64.7	1.9	4.0					39.2	254.8	0.89	1.30					

Well	Date	Well Elev.	Well Depth	Depth to LNAPL	Depth to Water	LNAPL	Gallons Removed	Cumulative Removed	Corrected Water Elevation	Benzene	Toluene	Ethyl-benzene	m+p-Xylenes	o-Xylenes	MTBE	Cyclohexane	Methyl-cyclohexane	Cumene	Naphthalene	VOC	GRO	DRO			
																							Feet (ft)		
MW11	04/29/13	246.01	31.70	Clear	27.58				218.43	59.0	4.0	<1	18.0	<1	<1	72.0	54.0	<1	<10	207.0	2.60	0.42			
	08/09/13			Clear	27.84				218.17	17.0	1.0	<1	3.0	<1	<1	25.0	26.0	<1	<10	72.0	1.20	<0.2			
	11/14/13			Clear	28.44				217.57	7.0	<1	<1	<2	<1	<1	7.0	5.0	<1	<10	19.0	0.54	na			
	12/03/13			Clear	27.63				218.38																
	02/06/14			Clear	31.70				214.31																
	02/18/14			Clear	28.04				217.97	3.0	<1	<1	2.0	<1	<1	6.0	<5	<1	<10	11.0	0.74	1.80			
	04/30/14			Clear	27.30				218.71	INSUFFICIENT WATER IN WELL TO SAMPLE															
	06/30/14			Clear	26.98				219.03	<1	<1	<1	10.0	<5	<5	<5	<5	<5	<5	<10	10.0	0.29	0.50		
	07/30/14			Clear	27.31				218.70																
	08/20/14			Clear	27.36				218.65																
	09/08/14			Clear	27.48				218.53	<1	<1	13.0	39.0	10.0	<5	<5	7.0	<5	12.0	81.0	<0.2	<0.22			
	09/15/14			Clear	27.50				218.51																
	09/25/14			Clear	27.57				218.44																
	10/03/14			Clear	27.58				218.43																
	10/15/14			Clear	27.60				218.41																
	10/22/14			Clear	27.66				218.35																
	11/04/14			Clear	27.69				218.32																
	11/13/14			Clear	27.70				218.31																
	11/21/14			Clear	27.74				218.27																
	12/04/14			Clear	27.78				218.23	<1	<1	<1	<5	<5	<5	<5	<5	<5	<5	<10	0.0	<0.2	0.24		
	12/22/14			Clear	27.65				218.36																
	01/05/15			Clear	27.47				218.54																
	01/14/15			Clear	27.52				218.49																
	01/26/15			Clear	27.92				218.09																
	01/30/15			Clear	27.81				218.20																
	02/04/15			Clear	28.03				217.98																
	02/13/15			Clear	27.30				218.71	<1	<1	<1	<5	<5	<5	<5	<5	<5	<5	<5	15.0	15.0	0.37	0.65	
	02/26/15			Clear	27.34				218.67																
	03/04/15			Clear	27.42				218.59																
	03/20/15			Clear	26.83				219.18																
	06/01/15			Clear	25.91				220.10																
	06/09/15			Clear	27.04				218.97																
	06/18/15			Clear	27.01				219.00																
	06/30/15			Clear	27.89				218.12	<1	<1	<1	<5	<5	<5	<5	<5	<5	<5	<10	0.0	<0.2	0.38		
	07/06/15			Clear	26.70				219.31																
	07/17/15			Clear	26.58				219.43																
	08/21/15			Clear	27.02				218.99																
	09/08/15			Clear	27.24				218.77																
	09/25/15			Clear	27.42				218.59																
	10/16/15			Clear	27.04				218.97																
10/30/15	Clear	27.53				218.48																			
11/05/15	Clear	27.52				218.49																			
11/13/15	Clear	27.58				218.43																			
12/18/15	Clear	27.65				218.36																			
02/26/16	Clear	26.85				219.16																			
06/16/16	Clear	26.85				219.16	<1	<1	<1	<5	<5	<5	<5	<5	<5	<5	<5	<10	0.0	<0.2	<0.2				
07/14/16	Clear	26.85				219.16																			

Well	Date	Well Elev.	Well Depth	Depth to LNAPL	Depth to Water	LNAPL	Gallons Removed	Cumulative Removed	Corrected Water Elevation	Benzene	Toluene	Ethyl-benzene	m+p-Xylenes	o-Xylenes	MTBE	Cyclohexane	Methyl-cyclohexane	Cumene	Naphthalene	VOC	GRO	DRO				
																							Feet (ft)			
MW12	02/22/18	245.23	34.70	Clear	27.13				218.10	<1	<1	<1	<5	<5	<5	<5	<5	<5	<10	0.0	0.40	<0.2				
	03/22/18			Clear	27.16				218.07																	
	03/30/18			Clear	26.73				218.50																	
	04/10/18			Clear	26.62				218.61	<1	<1	<1	<5	<5	<5	<5	<5	<5	<5	<10	0.0	<0.2	<0.2			
	04/24/18			Clear	26.65				218.58																	
	05/29/18			Clear	26.32				218.91																	
	06/13/18			Clear	26.00				219.23																	
	06/18/18			Clear	25.98				219.25																	
	06/28/18			Clear	25.96				219.27																	
	07/03/18			Clear	25.98				219.25	<1	<1	<1	<5	<5	<5	<5	<5	<5	<5	<5	<10	0.0	<0.2	<0.2		
	07/12/18			Clear	26.24				218.99																	
	07/25/18			Clear	26.20				219.03																	
	08/06/18			Clear	25.76				219.47																	
	08/31/18			Clear	25.93				219.30																	
	09/26/18			Clear	25.65				219.58																	
	10/08/18			Clear	25.90				219.33	<1	<1	3.0	<5	<5	<5	<5	<5	<5	<5	<5	<10	3.0	<0.2	<0.2		
	11/06/18			Clear	25.60				219.63																	
	03/19/19			Clear	26.02				219.21	<1	<1	0.5	<2	<1	<1						<2	0.5	<0.2	<0.099		
	06/11/19			Clear	26.24				218.99	<1	<1	<1	<2	<1	<1						<2	0.0	<0.2	0.06		
	09/12/19			Clear	26.68				218.55	<1	<1	<1	<2	<1	<1						<2	0.0	<0.2	0.10		
	12/10/19			Clear	26.94				218.29	<1	<1	<1	<2	<1	<1						<2	0.0	<0.2	<0.1		
	03/18/20			Clear	26.75				218.48	<1	<1	<1	<2	<1	<1						<2	0.0	<0.2	0.17		
	05/27/20			Clear	26.28				218.95	<1	<1	<1	<2	<1	<1						<2	0.0	<0.2	0.09		
08/27/20	Clear	25.65				219.58	<1	<1	23.0	35.7	34.1	<1						9.5	155.9	0.17	0.12					
11/24/20	Clear	25.69				219.54	<1	<1	<1	<2	<1	<1						<2	0.0	<0.2	0.07					
02/10/21	Clear	26.68				218.55	<1	<1	<1	<2	<1	<1						<2	0.0	<0.2	0.08					
04/29/13	Clear	10.76				232.87	100.0	1300.0	210.0	880.0	490.0	<10	<50	<50	46.0	160.0	3186.0	13.00	na							
07/30/14	Clear	11.02				232.61			na																	
02/26/15	na				Dry				na																	

Well	Date	Well Elev.	Well Depth	Depth to LNAPL	Depth to Water	LNAPL	Gallons Removed	Cumulative Removed	Corrected Water Elevation	Benzene	Toluene	Ethylbenzene	m+p-Xylenes	o-Xylenes	MTBE	Cyclohexane	Methylcyclohexane	Cumene	Naphthalene	VOC	GRO	DRO		
																							Feet (ft)	
MW14	12/06/16	243.47	43.64	30.31	30.31	0.00	0.00	6.34	213.16	50.0	<100	440.0	1600.0	<500	<500	<500	<500	<500	<1000	2090.0	10.00	48.00		
	12/16/16			30.60	30.60	0.00	0.00	6.34	212.87															
	01/09/17			28.84	28.84	0.00	0.00	6.34	214.63															
	01/16/17			28.90	28.90	0.00	0.00	6.34	214.57															
	01/23/17			28.58	28.58	0.00	0.00	6.34	214.89															
	02/03/17			28.53	28.53	0.00	0.00	6.34	214.94															
	02/15/17			28.31	28.31	0.00	0.00	6.34	215.16															
	02/17/17			31.02	31.02	0.00	0.00	6.34	212.45															
	02/21/17			29.71	29.71	0.00	0.00	6.34	213.76			50.0	<100	630.0	2600.0	<500	<500	<500	<500	<500	<1000	3280.0	11.00	24.00
	03/13/17			28.73	28.73	0.00	0.00	6.34	214.74															
	03/27/17			28.20	28.20	0.00	0.00	6.34	215.27															
	04/24/17			26.64	26.64	0.00	0.00	6.34	216.83															
	05/01/17			26.56	26.56	0.00	0.00	6.34	216.92															
	05/09/17			26.47	26.47	0.00	0.00	6.34	217.00			78.0	<10	340.0	810.0	94.0	<50	<50	51.0	<50	140.0	1513.0	7.50	6.60
	05/12/17			26.34	26.34	0.00	0.00	6.34	217.13															
	05/23/17			26.07	26.07	0.00	0.00	6.34	217.40															
	05/30/17			26.18	26.18	0.00	0.00	6.34	217.29															
	06/07/17			25.58	25.58	0.00	0.00	6.34	217.89															
	06/13/17			25.42	25.42	0.00	0.00	6.34	218.05															
	06/27/17			25.23	25.23	0.00	0.00	6.34	218.24															
	07/11/17			26.32	26.32	0.00	0.00	6.34	217.15															
	07/19/17			26.16	26.16	0.00	0.00	6.34	217.31															
	07/27/17			26.18	26.18	0.00	0.00	6.34	217.29															
	08/02/17			25.76	25.76	0.00	0.00	6.34	217.71															
	09/18/17			24.93	24.93	0.00	0.00	6.34	218.54			5.0	<1	100.0	190.0	37.0	<5	17.0	13.0	14.0	45.0	461.0	3.40	1.70
	09/29/17			25.22	25.22	0.00	0.00	6.34	218.25															
	10/09/17			28.52	28.52	0.00	0.00	6.34	214.95															
	10/16/17			27.78	27.78	0.00	0.00	6.34	215.69															
	10/25/17			26.62	26.62	0.00	0.00	6.34	216.85															
	11/02/17			27.12	27.12	0.00	0.00	6.34	216.35															
	11/08/17			26.91	26.91	0.00	0.00	6.34	216.56			25.0	<1	380.0	950.0	110.0	<25	54.0	48.0	39.0	150.0	1756.0	11.00	28.00
	11/20/17			26.25	26.25	0.00	0.00	6.34	217.22															
	11/22/17			26.30	26.30	0.00	0.00	6.34	217.17															
	11/27/17			29.12	29.12	0.00	0.00	6.34	214.35															
	12/08/17			28.96	28.96	0.00	0.00	6.34	214.51															
	12/13/17			28.95	28.95	0.00	0.00	6.34	214.52															
	12/22/17			27.62	27.62	0.00	0.00	6.34	215.85															
	01/02/18			27.10	27.10	0.00	0.00	6.34	216.37															
	01/15/18			26.90	26.90	0.00	0.00	6.34	216.57															
	01/29/18			28.38	28.38	0.00	0.00	6.34	215.09															
	02/22/18			27.42	27.42	0.00	0.00	6.34	216.05			10.0	<20	800.0	2400.0	120.0	<100	<100	140.0	<100	400.0	3860.0	170.00	52.00
03/22/18	27.26	27.26	0.00	0.00	6.34	216.21																		
03/30/18	25.38	25.38	0.00	0.00	6.34	218.09																		
04/10/18	25.20	25.20	0.00	0.00	6.34	218.27			4.0	<1	180.0	350.0	48.0	<5	9.0	16.0	20.0	72.0	699.0	4.50	2.90			
04/24/18	25.08	25.08	0.00	0.00	6.34	218.39																		
05/29/18	24.70	24.70	0.00	0.00	6.34	218.77																		
06/13/18	24.15	24.15	0.00	0.00	6.34	219.32																		
06/18/18	24.34	24.34	0.00	0.00	6.34	219.13																		
06/28/18	24.31	24.31	0.00	0.00	6.34	219.16																		
07/03/18	24.33	24.33	0.00	0.00	6.34	219.14			15.0	<2	190.0	200.0	16.0	<10	18.0	38.0	22.0	94.0	593.0	7.00	3.40			
07/12/18	24.59	24.59	0.00	0.00	6.34	218.88																		
07/25/18	24.48	24.48	0.00	0.00	6.34	218.99																		
08/06/18	23.85	23.85	0.00	0.00	6.34	219.62																		
08/31/18	24.11	24.11	0.00	0.00	6.34	219.36																		
09/26/18	24.13	24.13	0.00	0.00	6.34	219.34																		
10/08/18	23.84	23.84	0.00	0.00	6.34	219.63			0.5	<1	25.0	19.0	<5	<5	<5	<5	<5	16.0	60.5	0.59	0.65			
11/06/18	24.86	24.86	0.00	0.00	6.34	218.61																		
03/19/19	24.21	24.21	0.00	0.00	6.34	219.26			2.7	2.8	167.0	171.0	5.0	<1					67.6	424.2	3.82	4.30		
06/11/19	24.34	24.34	0.00	0.00	6.34	219.13			4.5	3.6	153.0	176.0	4.2	<1					45.5	386.8	1.96	1.90		
09/12/19	24.94	24.94	0.00	0.00	6.34	218.53			12.0	10.0	295.0	413.0	9.2	<1					80.7	835.0	4.02	1.80		
12/10/19	27.29	27.29	0.00	0.00	6.34	216.18			18.3	28.7	414.0	686.0	25.7	<1					146.0	1325.7	4.38	2.80		
03/18/20	25.28	25.28	0.00	0.00	6.34	218.19			0.5	0.5	39.3	73.0	4.4	0.5					6.2	19.6	325.0	0.90	1.30	
05/27/20	24.64	24.64	0.00	0.00	6.34	218.83			5.9	2.2	287.0	368.0	13.5	0.5					32.9	95.9	1615.2	1.93	1.50	
08/27/20	24.25	24.25	0.00	0.00	6.34	219.22			4.9	2.0	284.0	371.0	12.3	0.5					107.0	1554.6	2.26	1.40		
11/24/20	24.15	24.15	0.00	0.00	6.34	219.32			3.6	1.6	257.0	351.0	10.5	0.5					89.8	714.0	2.06	2.00		
02/10/21	24.82	24.82	0.00	0.00	6.34	218.65			1.9	0.9	152.0	118.0	3.9	0.5					60.2	345.3	1.26	1.30		

Well	Date	Well Elev.	Well Depth	Depth to LNAPL	Depth to Water	LNAPL	Gallons Removed	Cumulative Removed	Corrected Water Elevation	Benzene	Toluene	Ethylbenzene	m+p-Xylenes	o-Xylenes	MTBE	Cyclohexane	Methylcyclohexane	Cumene	Naphthalene	VOC	GRO	DRO			
																							Feet (ft)		
MW15	06/23/14	243.47	43.65	Clear	32.84				210.63																
	06/30/14			Clear	32.63					210.84	97.0	500.0	550.0	1600.0	480.0	<50	<50	<50	<50	220.0	3447.0	9.20	2.30		
	07/30/14			Clear	32.96					210.51															
	08/20/14			Clear	33.14					210.33															
	09/08/14			Clear	33.54					209.93	220.0	370.0	1200.0	1400.0	540.0	<50	53.0	<50		80.0	420.0	4283.0	13.00	4.60	
	09/15/14			Clear	33.51					209.96															
	09/25/14			Clear	33.63					209.84															
	10/03/14			Clear	33.78					209.69															
	10/15/14			Clear	33.94					209.53															
	10/22/14			Clear	34.03					209.44															
	11/04/14			Clear	34.20					209.27															
	11/13/14			Clear	34.32					209.15															
	11/21/14			Clear	34.41					209.06															
	12/04/14			Clear	34.50					208.97	110.0	78.0	440.0	490.0	<50	<50	<50	<50	<50	<50	200.0	1318.0	11.00	2.00	
	12/22/14			Clear	34.62					208.85															
	01/05/15			Clear	34.72					208.75															
	01/14/15			Clear	34.62					208.85															
	01/26/15			Clear	34.31					209.16															
	01/30/15			Clear	34.53					208.94															
	02/04/15			Clear	34.81					208.66															
	02/13/15			Clear	34.90					208.57	100.0	<5	520.0	110.0	<25	<25	<25	<25	<25	<25	34.0	200.0	964.0	4.90	1.20
	02/26/15			Clear	34.77					208.70															
	03/04/15			Clear	34.95					208.52															
	03/16/15			Clear	34.82					208.65															
	03/20/15			Clear	35.07					208.40															
	03/25/15			Clear	34.78					208.69															
	04/02/15			Clear	34.66					208.81															
	04/10/15			Clear	34.54					208.93	160.0	68.0	860.0	390.0	66.0	<25	62.0	51.0	74.0	74.0	300.0	2031.0	9.10	3.50	
	04/30/15			Clear	34.45					209.02															
	05/26/15			Clear	34.35					209.12															
	06/01/15			Clear	34.32					209.15															
	06/09/15			Clear	34.30					209.17															
	06/18/15			Clear	34.25					209.22															
	06/30/15			Clear	34.51					208.96	310.0	250.0	810.0	540.0	120.0	<25	60.0	97.0	79.0	79.0	320.0	2586.0	5.60	3.00	
	07/06/15			Clear	34.02					209.45															
	07/17/15			Clear	33.67					209.80															
	08/21/15			Clear	33.63					209.84															
	09/08/15			Clear	33.84					209.63															
	09/25/15			Clear	34.12					209.35															
	10/16/15			Clear	33.89					209.58															
	10/30/15			Clear	34.55					208.92															
	11/05/15			Clear	34.60					208.87	330.0	350.0	680.0	330.0	67.0	<5	71.0	48.0	52.0	52.0	230.0	2158.0	11.00	2.40	
	11/13/15			Clear	34.69					208.78															
	12/18/15			Clear	35.04					208.43															
	01/08/16			Clear	35.22					208.25	160.0	29.0	430.0	230.0	8.0	<5	36.0	29.0	42.0	42.0	180.0	1144.0	4.50	1.40	
	01/19/16			Clear	35.24					208.23															
	02/26/16			Clear	34.91					208.56															
03/14/16	Clear	34.37					209.10																		
04/01/16	Clear	34.12					209.35	250.0	1100.0	370.0	2400.0	1200.0	<50	<50	<50	73.0	73.0	660.0	6053.0	22.00	32.00				
04/21/16	Clear	34.18					209.29																		
05/13/16	Clear	32.03					211.44																		
05/23/16	Clear	32.57					210.90	1700.0	4400.0	920.0	1100.0	450.0	<50	62.0	<50	<50	<50	160.0	8792.0	9.70	9.20				
06/08/16	Clear	33.19					210.28	1800.0	6800.0	1200.0	2900.0	1000.0	<50	53.0	<50	<50	<50	270.0	14023.0	18.00	5.70				
07/14/16	Clear	33.82					209.65																		
07/19/16	Clear	34.11					209.36																		
07/20/16	Clear	34.94					208.53																		
08/08/16	Clear	34.79					208.68																		
08/18/16	Clear	34.71					208.76																		
08/24/16	Clear	34.76					208.71																		
08/30/16	Clear	35.21					208.26	9.0	3.0	<1	<5	<5	5.0	<5	<5	<5	<5	<5	<10	17.0	0.22	0.48			
09/06/16	Clear	35.09					208.38																		
09/15/16	Clear	35.12					208.35																		
09/28/16	Clear	35.02					208.45																		
10/05/16	Clear	34.95					208.52																		
10/11/16	Clear	34.93					208.54																		
11/22/16	Clear	35.54					207.93																		
12/06/16	Clear	34.98					208.49	0.5	<1	<1	<5	<5	25.0	9.0	<5	<5	<5	<10	387.5	0.35	1.60				
12/16/16	Clear	35.79					207.68																		
01/09/17	Clear	36.16					207.31																		
01/16/17	Clear	29.97					213.50																		
01/23/17	Clear	30.12					213.35																		
02/03/17	Clear	36.18					207.29																		
02/17/17	Clear	35.94					207.53																		
02/21/17	Clear	36.10					207.37	0.5	<1	<1	6.0	<5	27.0	<5	<5	<5	<5	<10	438.5	0.35	2.00				
03/13/17	Clear	36.25					207.22																		
03/27/17	Clear	36.10																							

Well	Date	Well Elev.	Well Depth	Depth to LNAPL	Depth to Water	LNAPL	Gallons Removed	Cumulative Removed	Corrected Water Elevation	Benzene	Toluene	Ethyl-benzene	m+p-Xylenes	o-Xylenes	MTBE	Cyclohexane	Methyl-cyclohexane	Cumene	Naphthalene	VOC	GRO	DRO			
																							Feet (ft)		
MW15	03/22/18	243.47	43.65	Clear	34.58				208.89																
	03/30/18			Clear	33.21					210.26															
	04/10/18			Clear	33.08					210.39	590.0	67.0	380.0	870.0	<50	<50	<50	<50	<50	300.0	2207.0	4.70	6.60		
	04/24/18			Clear	33.38					210.09															
	05/29/18			Clear	32.72					210.75															
	06/13/18			Clear	32.20					211.27															
	06/18/18			Clear	32.13					211.34															
	06/28/18			Clear	31.96					211.51															
	07/03/18			Clear	32.10					211.37	580.0	71.0	610.0	470.0	<25	<25	38.0	<25	<25	220.0	2429.0	10.00	4.80		
	07/12/18			Clear	32.35					211.12															
	07/25/18			Clear	32.67					210.80															
	08/06/18			Clear	30.72					212.75															
	08/31/18			Clear	32.45					211.02															
	09/26/18			Clear	32.38					211.09															
	10/08/18			Clear	31.96					211.51	510.0	290.0	690.0	430.0	79.0	<10	31.0	20.0	24.0	240.0	2574.0	5.40	3.80		
	11/06/18			Clear	30.90					212.57															
	03/19/19			Clear	30.61					212.86	572.0	1060.0	676.0	860.0	324.0	5.3					189.0	3760.3	10.70	6.20	
	06/11/19			Clear	31.13					212.34	865.0	505.0	1230.0	961.0	203.0	8.4					193.0	4015.8	10.70	4.20	
	09/12/19			Clear	31.56					211.91	581.0	78.5	1060.0	127.0	33.0	7.7					43.2	3230.5	6.20	8.50	
	12/10/19			Clear	33.70					209.77	1140.0	3900.0	1910.0	4080.0	1450.0	8.6					378.0	12987.1	29.60	6.30	
	03/18/20			Clear	33.63					209.84	673.0	2110.0	1100.0	1830.0	724.0	6.8					46.1	273.0	7795.4	16.60	6.30
	05/27/20			Clear	31.92					211.55	622.0	1080.0	554.0	962.0	615.0	8.2				18.7	184.0	4906.6	6.60	5.20	
	08/27/20			Clear	31.82					211.65	564.0	1210.0	723.0	943.0	512.0	5.5					129.0	4762.0	8.35	5.90	
11/24/20	Clear	31.64					211.83	184.0	417.0	273.0	796.0	395.0	3.5					92.4	2285.6	4.96	3.10				
02/10/21	Clear	30.69					212.78	208.0	70.9	76.9	145.0	110.0	3.0					19.8	714.4	1.68	3.90				

Well	Date	Well Elev.	Well Depth	Depth to LNAPL	Depth to Water	LNAPL	Gallons Removed	Cumulative Removed	Corrected Water Elevation	Benzene	Toluene	Ethyl-benzene	m+p-Xylenes	o-Xylenes	MTBE	Cyclo-hexane	Methyl-cyclo-hexane	Cumene	Naphthalene	VOC	GRO	DRO										
Feet (ft)										Micrograms Per Liter (µg/l)										Milligrams per Liter (mg/l)												
MW16	05/29/18	244.38	34.10	Clear	25.09				219.29																							
	06/13/18			Clear	24.75					219.63																						
	06/18/18			Clear	24.75					219.63																						
	06/28/18			Clear	24.68					219.70																						
	07/03/18			Clear	24.75					219.63	<1	<1	<1	<5	<5	<5	<5	<5	<5	<5	<10	0.0	1.30	0.37								
	07/12/18			Clear	24.82					219.56																						
	07/25/18			Clear	24.90					219.48																						
	08/06/18			Clear	24.30					220.08																						
	08/31/18			Clear	24.53					219.85																						
	09/26/18			Clear	24.68					219.70																						
	10/08/18			Clear	24.50					219.88	<1	<1	3.0	<5	<5	<5	<5	<5	<5	<5	<10	3.0	<0.2	<0.2								
	11/06/18			Clear	24.59					219.79																						
	03/19/19			Clear	24.60					219.78	<1	0.3	<1	1.3	<1	<1					1.6	3.2	1.41	0.39								
	06/11/19			Clear	24.93					219.45	<1	<1	<1	<2	<1	<1						<2	0.0	1.46	0.63							
	09/12/19			Clear	25.40					218.98	<1	<1	<1	<2	<1	<1						<2	6.4	0.94	1.30							
	12/10/19			Clear	25.88					218.50	<1	0.4	<1	<2	<1	<1						<2	2.6	1.40	0.43							
	03/18/20			Clear	25.49					218.89	<1	<1	<1	<2	<1	<1						<2	18.6	0.40	0.44							
	05/27/20			Clear	25.05					219.33	<1	<1	<1	<2	<1	<1						<2	0.7	0.68	0.41							
	08/27/20			Clear	24.65					219.73	<1	<1	<1	<2	<1	<1						<2	14.9	0.67	0.34							
	11/24/20			Clear	24.60					219.78	<1	<1	<1	<2	<1	<1						<2	0.0	0.55	0.41							
02/10/21	Clear	25.18					219.20	<1	<1	<1	<2	<1	<1						<2	15.3	0.92	0.22										
Station Supply Well	12/06/12	245.00	460.00		205.00				40.00	<0.5	<0.5	<0.5	<1	<0.5	<0.5	na	na	<0.5	<0.5	ND	na	na	na									
	04/29/13									<0.5	<0.5	<0.5	<1	<0.5	<0.5	na	na	<0.5	<0.5	ND	na	na	na	na	na	na	na	na	na	na		
	11/14/13									<0.5	<0.5	<0.5	<1	<0.5	<0.5	na	na	<0.5	<0.5	ND	na	na	na	na	na	na	na	na	na	na	na	
	02/06/14									<0.5	<0.5	<0.5	<1	<0.5	<0.5	na	na	<0.5	<0.5	ND	na	na	na	na	na	na	na	na	na	na	na	na
	04/30/14									<0.5	<0.5	<0.5	<1	<0.5	<0.5	na	na	<0.5	<0.5	ND	na	na	na	na	na	na	na	na	na	na	na	na
	09/08/14									<0.5	<0.5	<0.5	<1	<0.5	<0.5	na	na	<0.5	<0.5	ND	na	na	na	na	na	na	na	na	na	na	na	na
	09/12/19									<0.5	<0.5	<0.5	<1	<0.5	<0.5	na	na	<0.5	<0.5	ND	na	na	na	na	na	na	na	na	na	na	na	na
	12/10/19									<0.5	10.7	<0.5	<1	<0.5	<0.5	na	na	<0.5	<0.5	12.6	na	na	na	na	na	na	na	na	na	na	na	na
	03/27/20									<0.5	<0.5	<0.5	<1	<0.5	<0.5	na	na	<0.5	<0.5	ND	na	na	na	na	na	na	na	na	na	na	na	na
	05/27/20									<0.5	<0.5	<0.5	<1	<0.5	<0.5	na	na	<0.5	<0.5	1.3	na	na	na	na	na	na	na	na	na	na	na	na
	08/27/20									<0.5	<0.5	<0.5	<1	<0.5	<0.5	na	na	<0.5	<0.5	ND	na	na	na	na	na	na	na	na	na	na	na	na
	11/24/20									<0.5	<0.5	<0.5	<1	<0.5	<0.5	na	na	<0.5	<0.5	4.0	na	na	na	na	na	na	na	na	na	na	na	na
02/10/21	<0.5	<0.5	<0.5	<1	<0.5	<0.5	na	na	<0.5	<0.5	ND	na	na	na	na	na	na	na	na	na	na	na	na									
Station Spigot	12/10/19									<0.5	8.7	<0.5	<0.5	<0.5	na	na	na	na	<0.5	11.5	na	na	na									
	03/27/20									<0.5	<0.5	<0.5	<0.5	<0.5	na	na	na	na	<0.5	ND	na	na	na									
Station Car Wash	12/20/13	MUNICIPAL SUPPLY								<0.5	<0.5	<0.5	<1	<0.5	<0.5	na	na	<0.5	<0.5	ND	na	na	na									
	04/30/14	MUNICIPAL SUPPLY								<0.5	<0.5	<0.5	<1	<0.5	<0.5	na	na	<0.5	<0.5	ND	na	na	na									
	09/08/14	MUNICIPAL SUPPLY								<0.5	<0.5	<0.5	<1	<0.5	<0.5	na	na	<0.5	<0.5	ND	na	na	na									
KinderCare	06/05/13	255.00	362.00		190.00				65.00	<0.5	<0.5	<0.5	<1	<0.5	<0.5	na	na	<0.5	<0.5	ND	na	na	na									
	09/25/19									<0.5	<0.5	<0.5	<1	<0.5	<0.5	na	na	<0.5	<0.5	ND	na	na	na									
Ridgeview 1	01/14/14	241.00	485.00		200.00				41.00	<0.5	<0.5	<0.5	<1	<0.5	<0.5	na	na	<0.5	<0.5	ND	na	na	na									
Ridgeview 2	01/14/14	241.00	466.00		200.00				41.00	<0.5	<0.5	<0.5	<1	<0.5	<0.5	na	na	<0.5	<0.5	ND	na	na	na									

MANN-KENDALL ANALYSES & GRAPHS



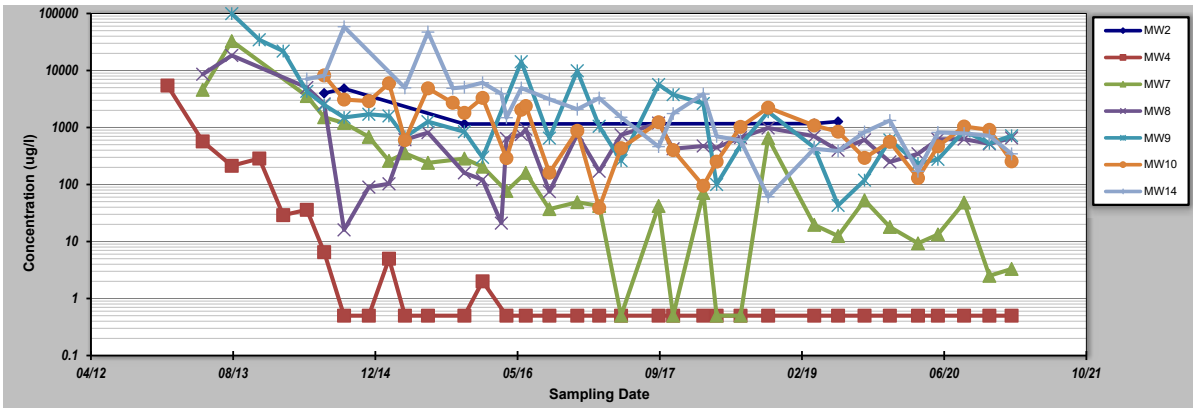
GSI MANN-KENDALL TOOLKIT for Constituent Trend Analysis

Evaluation Date:	Job ID: 190292M
Facility Name: SMO Hanover	Constituent: VOC
Conducted By: Doug Hamilton/ARM Group	Concentration Units: ug/l

Sampling Point ID:	MW2	MW4	MW7	MW8	MW9	MW10	MW14
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Sampling Event	Sampling Date	VOC CONCENTRATION (ug/l)						
		MW2	MW4	MW7	MW8	MW9	MW10	MW14
1	26-Dec-12		5447					
2	29-Apr-13		570		4580		8590	
3	9-Aug-13		213		32860		18370	99480
4	14-Nov-13		286					34598
5	6-Feb-14		29					21894
6	30-Apr-14		36		3564		5026	4297
7	30-Jun-14	3989	6.5	1512	2595	2495	8190	8150
8	8-Sep-14	4823	0.5	1202	16	1500	3090	58500
9	4-Dec-14		0.5	684	90	1705	2900	
10	13-Feb-15		5	260	103	1596	5960	
11	10-Apr-15		0.5	353	611	681	600	4960
12	30-Jun-15		0.5	240	813	1265	4870	47190
13	25-Sep-15						2712	4872
14	5-Nov-15	1151	0.5	285	160	843	1807	5080
15	8-Jan-16		2	205	121	298	3310	6110
16	14-Mar-16				21			3902
17	1-Apr-16		0.5	77	641		290	1486
18	23-May-16				752	14283	2050	4930
19	8-Jun-16		0.5	160	930		2380	
20	30-Aug-16		0.5	37	75	652	161	3136
21	6-Dec-16		0.5	49	761	9900	875	2090
22	21-Feb-17		0.5	42	171	1050	39	3280
23	9-May-17		0.5	0.5	742	262	434	1513
24	18-Sep-17		0.5	42	1198	5670	1236	461
25	8-Nov-17		0.5	0.5	424	3769	401	1756
26	22-Feb-18		0.5	71	474	2633	95	3860
27	10-Apr-18		0.5	0.5	444	100	252	699
28	3-Jul-18		0.5	0.5	666	490	1026	593
29	8-Oct-18		0.5	651	981	1890	2228	61
30	19-Mar-19	1171	0.5	19.6	702	445	1084	424
31	11-Jun-19	1273	0.5	12.5	397	43	844	387
32	12-Sep-19		0.5	53	608	119	293	835
33	10-Dec-19		0.5	18	249	605	560	1326
34	18-Mar-20		0.5	9.3	346	234	130	171
35	27-May-20		0.5	13.3	621	276	468	821
36	27-Aug-20		0.5	48.2	625	871	1040	788
37	24-Nov-20		0.5	2.5	517	527	910	714
38	10-Feb-21		0.5	3.3	656	717	255	345
39								
40								

Coefficient of Variation:	0.72	4.88	3.96	2.34	2.74	1.16	2.23
Mann-Kendall Statistic (S):	-2	-252	-319	-35	-232	-193	-293
Confidence Factor:	59.2%	>99.9%	>99.9%	69.2%	>99.9%	>99.9%	>99.9%
Concentration Trend:	Stable	Decreasing	Decreasing	No Trend	Decreasing	Decreasing	Decreasing



- Notes:**
- At least four independent sampling events per well are required for calculating the trend. *Methodology is valid for 4 to 40 samples.*
 - Confidence in Trend = Confidence (in percent) that constituent concentration is increasing (S>0) or decreasing (S<0): >95% = Increasing or Decreasing; ≥ 90% = Probably Increasing or Probably Decreasing; < 90% and S>0 = No Trend; < 90%, S≤0, and COV ≥ 1 = No Trend; < 90% and COV < 1 = Stable.
 - Methodology based on "MAROS: A Decision Support System for Optimizing Monitoring Plans", J.J. Aziz, M. Ling, H.S. Rifai, C.J. Newell, and J.R. Gonzales, *Ground Water*, 41(3):355-367, 2003.

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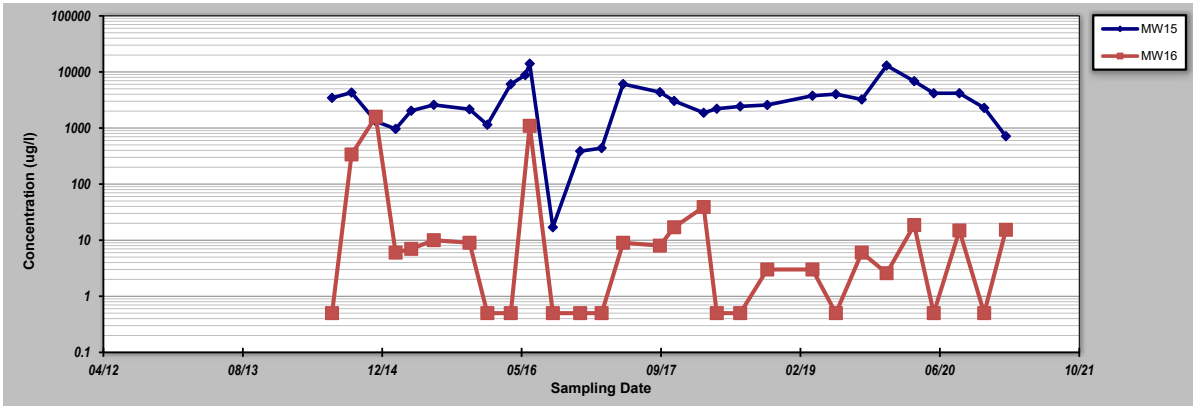
GSI MANN-KENDALL TOOLKIT for Constituent Trend Analysis

Evaluation Date:	Job ID: 190292M
Facility Name: SMO Hanover	Constituent: VOC
Conducted By: Doug Hamilton/ARM Group	Concentration Units: ug/l

Sampling Point ID:	MW15	MW16	
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Sampling Event	Sampling Date	VOC CONCENTRATION (ug/l)	
1	26-Dec-12		
2	29-Apr-13		
3	9-Aug-13		
4	14-Nov-13		
5	6-Feb-14		
6	30-Apr-14		
7	30-Jun-14	3447	0.5
8	8-Sep-14	4283	338
9	4-Dec-14	1318	1590
10	13-Feb-15	964	6
11	10-Apr-15	2031	7
12	30-Jun-15	2586	10
13	25-Sep-15		
14	5-Nov-15	2158	9
15	8-Jan-16	1144	0.5
16	14-Mar-16		
17	1-Apr-16	6053	0.5
18	23-May-16	8792	
19	8-Jun-16	14023	1096
20	30-Aug-16	17	0.5
21	6-Dec-16	387	0.5
22	21-Feb-17	438	0.5
23	9-May-17	6079	9
24	18-Sep-17	4350	8
25	8-Nov-17	3039	17
26	22-Feb-18	1871	39
27	10-Apr-18	2207	0.5
28	3-Jul-18	2429	0.5
29	8-Oct-18	2574	3
30	19-Mar-19	3760	3
31	11-Jun-19	4015	0.5
32	12-Sep-19	3230	6
33	10-Dec-19	12987	2.58
34	18-Mar-20	6849	18.6
35	27-May-20	4158	0.5
36	27-Aug-20	4166	14.9
37	24-Nov-20	2286	0.5
38	10-Feb-21	714	15.3
39			
40			

Coefficient of Variation:	0.89	3.20	
Mann-Kendall Statistic (S):	61	-30	
Confidence Factor:	85.6%	70.5%	
Concentration Trend:	No Trend	No Trend	



- Notes:**
- At least four independent sampling events per well are required for calculating the trend. *Methodology is valid for 4 to 40 samples.*
 - Confidence in Trend = Confidence (in percent) that constituent concentration is increasing (S>0) or decreasing (S<0): >95% = Increasing or Decreasing; ≥ 90% = Probably Increasing or Probably Decreasing; < 90% and S>0 = No Trend; < 90%, S≤0, and COV ≥ 1 = No Trend; < 90% and COV < 1 = Stable.
 - Methodology based on "MAROS: A Decision Support System for Optimizing Monitoring Plans", J.J. Aziz, M. Ling, H.S. Rifai, C.J. Newell, and J.R. Gonzales, *Ground Water*, 41(3):355-367, 2003.

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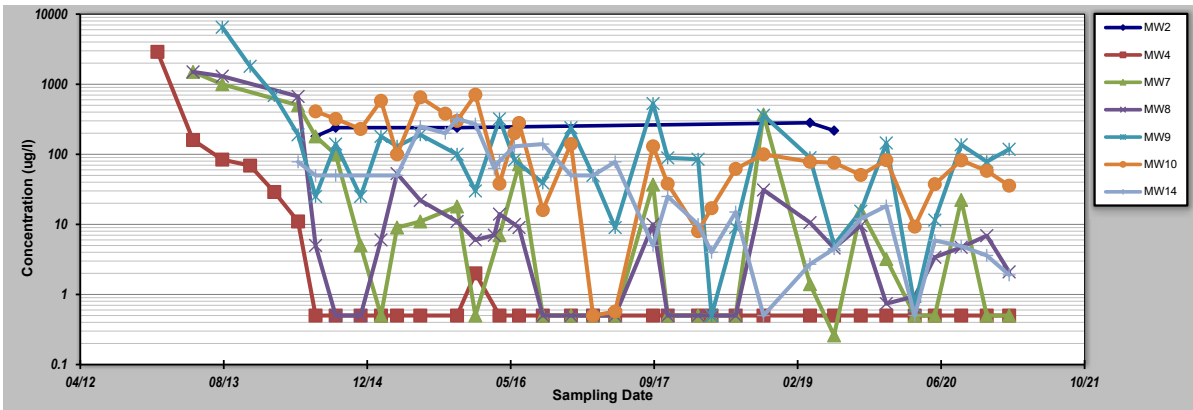
GSI MANN-KENDALL TOOLKIT for Constituent Trend Analysis

Evaluation Date: 27-May	Job ID: 190292M
Facility Name: SMO Hanover	Constituent: BENZENE
Conducted By: Doug Hamilton/ARM Group	Concentration Units: ug/l

Sampling Point ID:	MW2	MW4	MW7	MW8	MW9	MW10	MW14
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Sampling Event	Sampling Date	BENZENE CONCENTRATION (ug/l)						
		MW2	MW4	MW7	MW8	MW9	MW10	MW14
1	26-Dec-12		2900					
2	29-Apr-13		160	1500	1500			
3	9-Aug-13		84	1000	1300	6500		
4	14-Nov-13		69			1800		
5	6-Feb-14		29			690		
6	30-Apr-14		11	500	670	190		78
7	30-Jun-14	180	0.5	180	5	25	410	50
8	8-Sep-14	240	0.5	99	0.5	140	320	50
9	4-Dec-14		0.5	5	0.5	25	230	
10	13-Feb-15		0.5	0.5	6	180	580	
11	10-Apr-15		0.5	9	53	130	100	50
12	30-Jun-15		0.5	11	22	190	650	250
13	25-Sep-15						380	200
14	5-Nov-15	240	0.5	18	11	100	300	320
15	8-Jan-16		2	0.5	6	30	710	270
16	14-Mar-16				7			63
17	1-Apr-16		0.5	7	14	320	38	80
18	23-May-16				10	83	200	130
19	8-Jun-16		0.5	72	9		280	
20	30-Aug-16		0.5	0.5	0.5	39	16	140
21	6-Dec-16		0.5	0.5	0.5	240	140	50
22	21-Feb-17		0.5	0.5	0.5	50	0.5	50
23	9-May-17		0.5	0.5	0.5	9	0.57	78
24	18-Sep-17		0.5	37	10	530	130	5
25	8-Nov-17		0.5	0.5	0.5	89	38	25
26	22-Feb-18		0.5	0.5	0.5	85	8	10
27	10-Apr-18		0.5	0.5	0.5	0.5	17	4
28	3-Jul-18		0.5	0.5	0.5	9	62	15
29	8-Oct-18		0.5	370	31	360	100	0.5
30	19-Mar-19	282	0.5	1.4	10.6	89.5	78.2	2.7
31	11-Jun-19	218	0.5	0.26	4.6	5.1	76	4.5
32	12-Sep-19		0.5	15.6	9.6	15.4	50.7	12
33	10-Dec-19		0.5	3.2	0.74	145	82.6	18.3
34	18-Mar-20		0.5	0.5	18	0.94	0.68	9.3
35	27-May-20		0.5	0.5	3.4	11.5	37.5	5.9
36	27-Aug-20		0.5	22.3	4.7	137	82.1	4.9
37	24-Nov-20		0.5	0.5	6.9	78.5	58.1	3.6
38	10-Feb-21		0.5	0.5	2.1	118	35.7	1.9
39								
40								

Coefficient of Variation:	0.16	5.24	2.67	3.19	3.05	1.17	1.33
Mann-Kendall Statistic (S):	3	-203	-181	-128	-163	-199	-251
Confidence Factor:	67.5%	99.8%	99.9%	97.0%	99.5%	>99.9%	>99.9%
Concentration Trend:	No Trend	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing



Notes:

- At least four independent sampling events per well are required for calculating the trend. *Methodology is valid for 4 to 40 samples.*
- Confidence in Trend = Confidence (in percent) that constituent concentration is increasing (S>0) or decreasing (S<0): >95% = Increasing or Decreasing; ≥ 90% = Probably Increasing or Probably Decreasing; < 90% and S>0 = No Trend; < 90%, S≤0, and COV ≥ 1 = No Trend; < 90% and COV < 1 = Stable.
- Methodology based on "MAROS: A Decision Support System for Optimizing Monitoring Plans", J.J. Aziz, M. Ling, H.S. Rifai, C.J. Newell, and J.R. Gonzales, *Ground Water*, 41(3):355-367, 2003.

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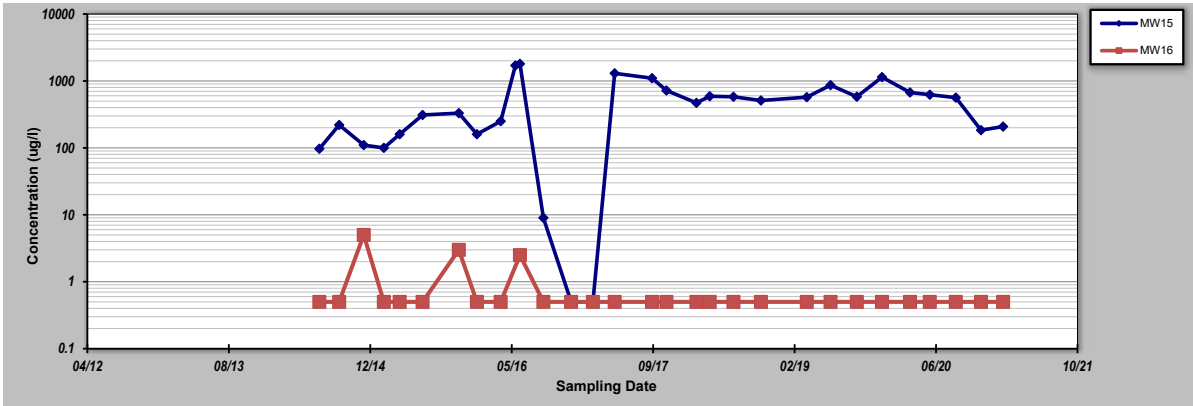
for Constituent Trend Analysis

Evaluation Date:	Job ID: 190292M
Facility Name: SMO Hanover	Constituent: BENZENE
Conducted By: Doug Hamilton/ARM Group	Concentration Units: ug/l

Sampling Point ID:	MW15	MW16	
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Sampling Event	Sampling Date	BENZENE CONCENTRATION (ug/l)	
		MW15	MW16
1	26-Dec-12		
2	29-Apr-13		
3	9-Aug-13		
4	14-Nov-13		
5	6-Feb-14		
6	30-Apr-14		
7	30-Jun-14	97	0.5
8	8-Sep-14	220	0.5
9	4-Dec-14	110	5
10	13-Feb-15	100	0.5
11	10-Apr-15	160	0.5
12	30-Jun-15	310	0.5
13	25-Sep-15		
14	5-Nov-15	330	3
15	8-Jan-16	160	0.5
16	14-Mar-16		
17	1-Apr-16	250	0.5
18	23-May-16	1700	
19	8-Jun-16	1800	2.5
20	30-Aug-16	9	0.5
21	6-Dec-16	0.5	0.5
22	21-Feb-17	0.5	0.5
23	9-May-17	1300	0.5
24	18-Sep-17	1100	0.5
25	8-Nov-17	720	0.5
26	22-Feb-18	470	0.5
27	10-Apr-18	590	0.5
28	3-Jul-18	580	0.5
29	8-Oct-18	510	0.5
30	19-Mar-19	572	0.5
31	11-Jun-19	865	0.5
32	12-Sep-19	581	0.5
33	10-Dec-19	1140	0.5
34	18-Mar-20	673	0.5
35	27-May-20	622	0.5
36	27-Aug-20	564	0.5
37	24-Nov-20	184	0.5
38	10-Feb-21	208	0.5
39			
40			

Coefficient of Variation:	0.90	1.23
Mann-Kendall Statistic (S):	103	-53
Confidence Factor:	96.6%	83.4%
Concentration Trend:	Increasing	No Trend



- Notes:**
- At least four independent sampling events per well are required for calculating the trend. *Methodology is valid for 4 to 40 samples.*
 - Confidence in Trend = Confidence (in percent) that constituent concentration is increasing (S>0) or decreasing (S<0): >95% = Increasing or Decreasing; ≥ 90% = Probably Increasing or Probably Decreasing; < 90% and S>0 = No Trend; < 90%, S≤0, and COV ≥ 1 = No Trend; < 90% and COV < 1 = Stable.
 - Methodology based on "MAROS: A Decision Support System for Optimizing Monitoring Plans", J.J. Aziz, M. Ling, H.S. Rifai, C.J. Newell, and J.R. Gonzales, *Ground Water*, 41(3):355-367, 2003.

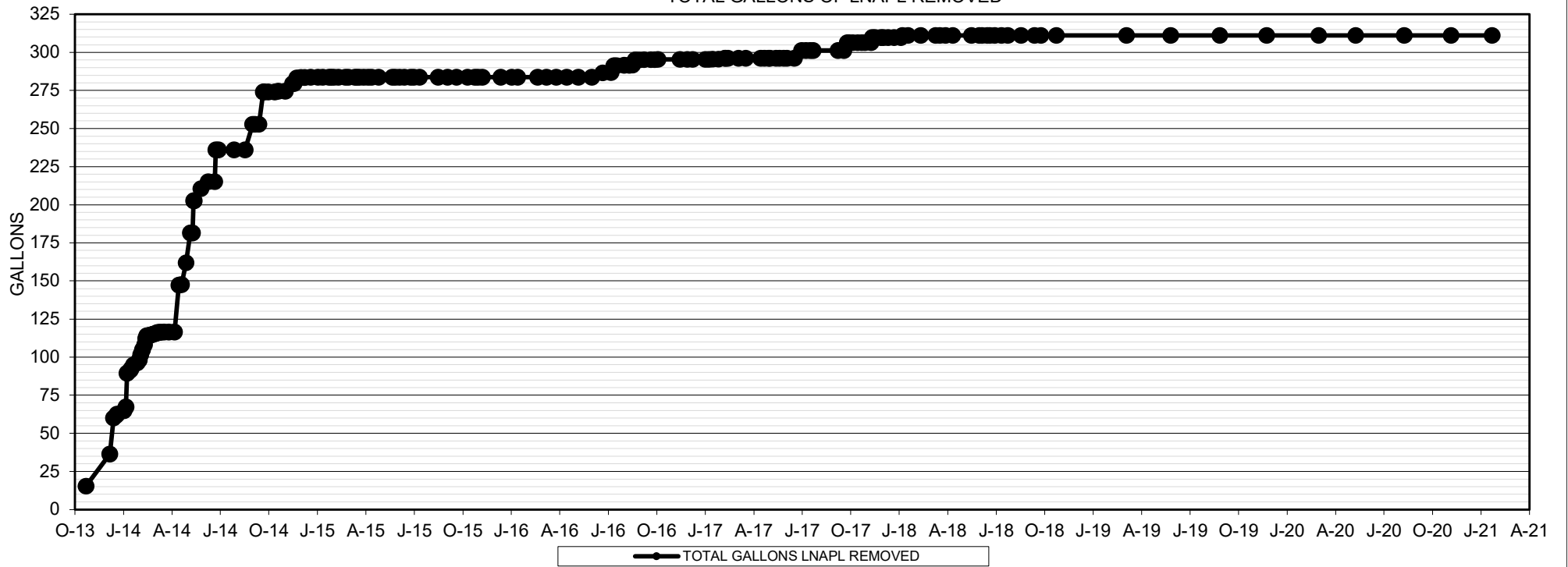
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PETROLEUM RECOVERY GRAPH & DATABASE



TOTAL GALLONS OF LNAPL REMOVED



**MONITORING WELL
LABORATORY REPORT OF ANALYSIS
FEBRUARY 2021**





Pace Analytical Services, LLC
 1638 Roseytown Road - Suites 2,3,4
 Greensburg, PA 15601
 (724)850-5600

February 25, 2021

Mr. Doug Hamilton
 ARM Group Inc.
 9175 Guilford Road
 Suite 310
 Columbia, MD 21046

RE: Project: SMO-HANOVER
 Pace Project No.: 30405856

Dear Mr. Hamilton:

Enclosed are the analytical results for sample(s) received by the laboratory between February 11, 2021 and February 16, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Long Island
- Pace Analytical Services - Greensburg

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Samantha Bayura
 samantha.bayura@pacelabs.com
 (724)850-5622
 Project Manager

Enclosures



REPORT OF LABORATORY ANALYSIS

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 Greensburg, PA 15601
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CERTIFICATIONS

Project: SMO-HANOVER
 Pace Project No.: 30405856

Pace Analytical Services Pennsylvania

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
 ANAB DOD-ELAP Rad Accreditation #: L2417
 Alabama Certification #: 41590
 Arizona Certification #: AZ0734
 Arkansas Certification
 California Certification #: 04222CA
 Colorado Certification #: PA01547
 Connecticut Certification #: PH-0694
 Delaware Certification
 EPA Region 4 DW Rad
 Florida/TNI Certification #: E87683
 Georgia Certification #: C040
 Florida: Cert E871149 SEKS WET
 Guam Certification
 Hawaii Certification
 Idaho Certification
 Illinois Certification
 Indiana Certification
 Iowa Certification #: 391
 Kansas/TNI Certification #: E-10358
 Kentucky Certification #: KY90133
 KY WW Permit #: KY0098221
 KY WW Permit #: KY0000221
 Louisiana DHH/TNI Certification #: LA180012
 Louisiana DEQ/TNI Certification #: 4086
 Maine Certification #: 2017020
 Maryland Certification #: 308
 Massachusetts Certification #: M-PA1457
 Michigan/PADEP Certification #: 9991

Missouri Certification #: 235
 Montana Certification #: Cert0082
 Nebraska Certification #: NE-OS-29-14
 Nevada Certification #: PA014572018-1
 New Hampshire/TNI Certification #: 297617
 New Jersey/TNI Certification #: PA051
 New Mexico Certification #: PA01457
 New York/TNI Certification #: 10888
 North Carolina Certification #: 42706
 North Dakota Certification #: R-190
 Ohio EPA Rad Approval: #41249
 Oregon/TNI Certification #: PA200002-010
 Pennsylvania/TNI Certification #: 65-00282
 Puerto Rico Certification #: PA01457
 Rhode Island Certification #: 65-00282
 South Dakota Certification
 Tennessee Certification #: 02867
 Texas/TNI Certification #: T104704188-17-3
 Utah/TNI Certification #: PA014572017-9
 USDA Soil Permit #: P330-17-00091
 Vermont Dept. of Health: ID# VT-0282
 Virgin Island/PADEP Certification
 Virginia/VELAP Certification #: 9526
 Washington Certification #: C868
 West Virginia DEP Certification #: 143
 West Virginia DHHR Certification #: 9964C
 Wisconsin Approve List for Rad
 Wyoming Certification #: 8TMS-L

Pace Analytical Services Long Island

Delaware Certification # NY10478
 Virginia Certification # 460302
 Delaware Certification # NY10478
 575 Broad Hollow Rd, Melville, NY 11747
 New York Certification #: 10478 Primary Accrediting Body
 New Jersey Certification #: NY158

Pennsylvania Certification #: 68-00350
 Connecticut Certification #: PH-0435
 Maryland Certification #: 208
 Rhode Island Certification #: LAO00340
 Massachusetts Certification #: M-NY026
 New Hampshire Certification #: 2987

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SAMPLE SUMMARY

Project: SMO-HANOVER
Pace Project No.: 30405856

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30405856001	MW-1	Water	02/10/21 09:00	02/11/21 22:30
30405856002	MW-4	Water	02/10/21 10:10	02/11/21 22:30
30405856003	MW-7	Water	02/10/21 10:45	02/11/21 22:30
30405856004	MW-8	Water	02/10/21 14:45	02/11/21 22:30
30405856005	MW-9	Water	02/10/21 11:33	02/11/21 22:30
30405856006	MW-10	Water	02/10/21 14:10	02/11/21 22:30
30405856007	MW-12	Water	02/10/21 14:20	02/11/21 22:30
30405856008	MW-14	Water	02/10/21 13:00	02/11/21 22:30
30405856009	MW-15	Water	02/10/21 14:58	02/11/21 22:30
30405856010	MW-16	Water	02/10/21 09:45	02/11/21 22:30
30405856011	Station-Spigot	Drinking Water	02/10/21 14:00	02/11/21 22:30
30405856012	TRIP BLANK	Water	02/10/21 00:01	02/16/21 22:00

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SAMPLE ANALYTE COUNT

Project: SMO-HANOVER
Pace Project No.: 30405856

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30405856001	MW-1	EPA 8015D	SEL	2	PASI-PA
		EPA 5030/8015B	ARG	2	PASI-PA
30405856002	MW-4	EPA 8260B	JAS	53	PASI-PA
		EPA 8015D	SEL	2	PASI-PA
30405856003	MW-7	EPA 5030/8015B	ARG	2	PASI-PA
		EPA 8260B	JAS	53	PASI-PA
30405856004	MW-8	EPA 8015D	SEL	2	PASI-PA
		EPA 5030/8015B	ARG	2	PASI-PA
30405856005	MW-9	EPA 8260B	JAS	53	PASI-PA
		EPA 8015D	SEL	2	PASI-PA
30405856006	MW-10	EPA 5030/8015B	ARG	2	PASI-PA
		EPA 8260B	JAS	53	PASI-PA
30405856007	MW-12	EPA 8015D	SEL	2	PASI-PA
		EPA 5030/8015B	ARG	2	PASI-PA
30405856008	MW-14	EPA 8260B	JAS	53	PASI-PA
		EPA 8015D	SEL	2	PASI-PA
30405856009	MW-15	EPA 5030/8015B	ARG	2	PASI-PA
		EPA 8260B	JAS	53	PASI-PA
30405856010	MW-16	EPA 8015D	SEL	2	PASI-PA
		EPA 5030/8015B	ARG	2	PASI-PA
30405856011	Station-Spigot	EPA 524.2	KGG	46	PASI-MV
30405856012	TRIP BLANK	EPA 8260C	JAS	52	PASI-PA

PASI-MV = Pace Analytical Services - Long Island
PASI-PA = Pace Analytical Services - Greensburg

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PROJECT NARRATIVE

Project: SMO-HANOVER
 Pace Project No.: 30405856

Method: EPA 8015D
Description: 8015D TPH Reduced Volume
Client: ARM Group Inc.
Date: February 25, 2021

General Information:
 10 samples were analyzed for EPA 8015D by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
 The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
 The samples were prepared in accordance with EPA 3510C with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
 All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
 All criteria were within method requirements with any exceptions noted below.

- QC Batch: 435194
- CL: The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased low.
- BLANK (Lab ID: 2101050)
 - o-Terphenyl (S)
 - LCS (Lab ID: 2101051)
 - o-Terphenyl (S)
 - MW-1 (Lab ID: 30405856001)
 - o-Terphenyl (S)
 - MW-10 (Lab ID: 30405856006)
 - o-Terphenyl (S)
 - MW-12 (Lab ID: 30405856007)
 - o-Terphenyl (S)
 - MW-14 (Lab ID: 30405856008)
 - o-Terphenyl (S)
 - MW-15 (Lab ID: 30405856009)
 - o-Terphenyl (S)
 - MW-4 (Lab ID: 30405856002)
 - o-Terphenyl (S)
 - MW-7 (Lab ID: 30405856003)
 - o-Terphenyl (S)
 - MW-8 (Lab ID: 30405856004)
 - o-Terphenyl (S)

Surrogates:
 All surrogates were within QC limits with any exceptions noted below.

Method Blank:
 All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

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PROJECT NARRATIVE

Project: SMO-HANOVER
 Pace Project No.: 30405856

Method: EPA 8015D
Description: 8015D TPH Reduced Volume
Client: ARM Group Inc.
Date: February 25, 2021

Laboratory Control Spike:
 All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
 All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.
 QC Batch: 435194
 A matrix spike/matrix spike duplicate was not performed due to insufficient sample volume.

- Additional Comments:**
 Analyte Comments:
 QC Batch: 435194
- 1c: A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.
- MW-1 (Lab ID: 30405856001)
 - TPH (C10-C28)
 - MW-10 (Lab ID: 30405856006)
 - TPH (C10-C28)
 - MW-12 (Lab ID: 30405856007)
 - TPH (C10-C28)
 - MW-14 (Lab ID: 30405856008)
 - TPH (C10-C28)
 - MW-15 (Lab ID: 30405856009)
 - TPH (C10-C28)
 - MW-16 (Lab ID: 30405856010)
 - TPH (C10-C28)
 - MW-4 (Lab ID: 30405856002)
 - TPH (C10-C28)
 - MW-7 (Lab ID: 30405856003)
 - TPH (C10-C28)
 - MW-8 (Lab ID: 30405856004)
 - TPH (C10-C28)
 - MW-9 (Lab ID: 30405856005)
 - TPH (C10-C28)

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PROJECT NARRATIVE

Project: SMO-HANOVER
 Pace Project No.: 30405856

Method: EPA 5030/8015B
Description: Gasoline Range Organics
Client: ARM Group Inc.
Date: February 25, 2021

General Information:
 10 samples were analyzed for EPA 5030/8015B by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
 The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
 All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
 All criteria were within method requirements with any exceptions noted below.

Surrogates:
 All surrogates were within QC limits with any exceptions noted below.

Method Blank:
 All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
 All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
 All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: SMO-HANOVER
 Pace Project No.: 30405856

Method: EPA 524.2
Description: 524.2 MSV
Client: ARM Group Inc.
Date: February 25, 2021

General Information:
 1 sample was analyzed for EPA 524.2 by Pace Analytical Services Long Island. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
 The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
 All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
 All criteria were within method requirements with any exceptions noted below.

Internal Standards:
 All internal standards were within QC limits with any exceptions noted below.

Surrogates:
 All surrogates were within QC limits with any exceptions noted below.

Method Blank:
 All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
 All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
 All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
 All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: SMO-HANOVER
Pace Project No.: 30405856

Method: EPA 8260B
Description: 8260B MSV
Client: ARM Group Inc.
Date: February 25, 2021

General Information:

10 samples were analyzed for EPA 8260B by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Internal Standards:

All internal standards were within QC limits with any exceptions noted below.

Surrogates:

All surrogates were within QC limits with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 435531

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30405856002

MH: Matrix spike recovery and/or matrix spike duplicate recovery was above laboratory control limits. Result may be biased high.

- MSD (Lab ID: 2102858)
- 1,1-Dichloroethene

Additional Comments:

Analyte Comments:

QC Batch: 435531

2c: The read back of the low concentration calibration standard for this compound is not within 30% of the true value. The results may be biased high and should be considered estimated.

- BLANK (Lab ID: 2102512)
- Bromomethane
- Bromoform

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PROJECT NARRATIVE

Project: SMO-HANOVER
Pace Project No.: 30405856

Method: EPA 8260B
Description: 8260B MSV
Client: ARM Group Inc.
Date: February 25, 2021

Analyte Comments:

QC Batch: 435531

2c: The read back of the low concentration calibration standard for this compound is not within 30% of the true value. The results may be biased high and should be considered estimated.

- BLANK (Lab ID: 2102512)
- Dibromochloromethane
- tert-Butyl Alcohol
- LCS (Lab ID: 2102513)
- Bromomethane
- Bromoform
- Dibromochloromethane
- tert-Butyl Alcohol
- MS (Lab ID: 2102857)
- Bromomethane
- Bromoform
- Dibromochloromethane
- tert-Butyl Alcohol
- MSD (Lab ID: 2102858)
- Bromomethane
- Bromoform
- Dibromochloromethane
- tert-Butyl Alcohol
- MW-1 (Lab ID: 30405856001)
- Bromomethane
- Bromoform
- Dibromochloromethane
- tert-Butyl Alcohol
- MW-10 (Lab ID: 30405856006)
- Bromomethane
- Bromoform
- Dibromochloromethane
- tert-Butyl Alcohol
- MW-12 (Lab ID: 30405856007)
- Bromomethane
- Bromoform
- Dibromochloromethane
- tert-Butyl Alcohol
- MW-14 (Lab ID: 30405856008)
- Bromomethane
- Bromoform
- Dibromochloromethane
- tert-Butyl Alcohol
- MW-15 (Lab ID: 30405856009)
- Bromomethane
- Bromoform
- Dibromochloromethane

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PROJECT NARRATIVE

Project: SMO-HANOVER
Pace Project No.: 30405856

Method: EPA 8260B
Description: 8260B MSV
Client: ARM Group Inc.
Date: February 25, 2021

Analyte Comments:

QC Batch: 435531

2c: The read back of the low concentration calibration standard for this compound is not within 30% of the true value. The results may be biased high and should be considered estimated.

- MW-15 (Lab ID: 30405856009)
 - tert-Butyl Alcohol
- MW-16 (Lab ID: 30405856010)
 - Bromomethane
 - Bromoform
 - Dibromochloromethane
 - tert-Butyl Alcohol
- MW-4 (Lab ID: 30405856002)
 - Bromomethane
 - Bromoform
 - Dibromochloromethane
 - tert-Butyl Alcohol
- MW-7 (Lab ID: 30405856003)
 - Bromomethane
 - Bromoform
 - Dibromochloromethane
 - tert-Butyl Alcohol
- MW-8 (Lab ID: 30405856004)
 - Bromomethane
 - Bromoform
 - Dibromochloromethane
 - tert-Butyl Alcohol
- MW-9 (Lab ID: 30405856005)
 - Bromomethane
 - Bromoform
 - Dibromochloromethane
 - tert-Butyl Alcohol

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PROJECT NARRATIVE

Project: SMO-HANOVER
Pace Project No.: 30405856

Method: EPA 8260C
Description: 8260C MSV
Client: ARM Group Inc.
Date: February 25, 2021

General Information:

1 sample was analyzed for EPA 8260C by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Internal Standards:

All internal standards were within QC limits with any exceptions noted below.

Surrogates:

All surrogates were within QC limits with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 436167

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30405806010

R1: RPD value was outside control limits.

- MSD (Lab ID: 2105560)
 - Chloroethane

Additional Comments:

Analyte Comments:

QC Batch: 436167

2c: The read back of the low concentration calibration standard for this compound is not within 30% of the true value. The results may be biased high and should be considered estimated.

- BLANK (Lab ID: 2105127)
 - Bromodichloromethane
 - Bromomethane

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PROJECT NARRATIVE

Project: SMO-HANOVER
Pace Project No.: 30405856

Method: EPA 8260C
Description: 8260C MSV
Client: ARM Group Inc.
Date: February 25, 2021

Analyte Comments:

QC Batch: 436167

2c: The read back of the low concentration calibration standard for this compound is not within 30% of the true value. The results may be biased high and should be considered estimated.

- BLANK (Lab ID: 2105127)
 - Chloromethane
 - Dibromochloromethane
- LCS (Lab ID: 2105128)
 - Bromodichloromethane
 - Bromomethane
 - Chloromethane
 - Dibromochloromethane
- MS (Lab ID: 2105559)
 - Bromodichloromethane
 - Bromomethane
 - Chloromethane
 - Dibromochloromethane
- MSD (Lab ID: 2105560)
 - Bromodichloromethane
 - Bromomethane
 - Chloromethane
 - Dibromochloromethane
- TRIP BLANK (Lab ID: 30405856012)
 - Bromodichloromethane
 - Bromomethane
 - Chloromethane
 - Dibromochloromethane

This data package has been reviewed for quality and completeness and is approved for release.

REPORT OF LABORATORY ANALYSIS

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(724)850-5600

ANALYTICAL RESULTS

Project: SMO-HANOVER
Pace Project No.: 30405856

Sample: MW-1 Lab ID: 30405856001 Collected: 02/10/21 09:00 Received: 02/11/21 22:30 Matrix: Water

Parameters	Results	Units	Report		MDL	DF	Prepared	Analyzed	CAS No.	Qual
			Limit	DF						
Analytical Method: EPA 8015D Preparation Method: EPA 3510C Pace Analytical Services - Greensburg										
8015D TPH Reduced Volume										
TPH (C10-C28)	0.11	mg/L	0.11	0.074	1	02/17/21 09:09	02/19/21 04:42			1c
Surrogates										
o-Terphenyl (S)	44	%	25-105		1	02/17/21 09:09	02/19/21 04:42	84-15-1		CL
Analytical Method: EPA 5030/8015B Pace Analytical Services - Greensburg										
Gasoline Range Organics										
TPH (C06-C10)	200 U	ug/L	200	98.0	1		02/16/21 17:20			
Surrogates										
4-Bromofluorobenzene (S)	95	%	70-130		1		02/16/21 17:20	460-00-4		
Analytical Method: EPA 8260B Pace Analytical Services - Greensburg										
8260B MSV										
Acetone	10.0 U	ug/L	10.0	5.6	1		02/18/21 18:01	67-64-1		
tert-Amylmethyl ether	1.0 U	ug/L	1.0	0.27	1		02/18/21 18:01	994-05-8		
Benzene	1.0 U	ug/L	1.0	0.34	1		02/18/21 18:01	71-43-2		
Bromochloromethane	1.0 U	ug/L	1.0	0.48	1		02/18/21 18:01	74-97-5		
Bromodichloromethane	1.0 U	ug/L	1.0	0.35	1		02/18/21 18:01	75-27-4		
Bromofrom	1.0 U	ug/L	1.0	0.56	1		02/18/21 18:01	75-25-2		2c
Bromomethane	1.0 U	ug/L	1.0	0.73	1		02/18/21 18:01	74-83-9		2c
TOTAL BTEX	6.0 U	ug/L	6.0	2.4	1		02/18/21 18:01			
2-Butanone (MEK)	10.0 U	ug/L	10.0	1.5	1		02/18/21 18:01	78-93-3		
tert-Butyl Alcohol	5.0 U	ug/L	5.0	4.3	1		02/18/21 18:01	75-65-0		2c
Carbon disulfide	1.0 U	ug/L	1.0	0.32	1		02/18/21 18:01	75-15-0		
Carbon tetrachloride	1.0 U	ug/L	1.0	0.44	1		02/18/21 18:01	56-23-5		
Chlorobenzene	1.0 U	ug/L	1.0	0.26	1		02/18/21 18:01	108-90-7		
Chloroethane	1.0 U	ug/L	1.0	0.64	1		02/18/21 18:01	75-00-3		
Chloroform	1.0 U	ug/L	1.0	0.39	1		02/18/21 18:01	67-66-3		
Chloromethane	1.0 U	ug/L	1.0	0.40	1		02/18/21 18:01	74-87-3		
Dibromochloromethane	1.0 U	ug/L	1.0	0.43	1		02/18/21 18:01	124-48-1		2c
1,2-Dichlorobenzene	1.0 U	ug/L	1.0	0.38	1		02/18/21 18:01	95-50-1		
1,3-Dichlorobenzene	1.0 U	ug/L	1.0	0.45	1		02/18/21 18:01	541-73-1		
1,4-Dichlorobenzene	1.0 U	ug/L	1.0	0.48	1		02/18/21 18:01	106-46-7		
1,1-Dichloroethane	1.0 U	ug/L	1.0	0.24	1		02/18/21 18:01	75-34-3		
1,2-Dichloroethane	1.0 U	ug/L	1.0	0.33	1		02/18/21 18:01	107-06-2		
1,2-Dichloroethane (Total)	2.0 U	ug/L	2.0	0.66	1		02/18/21 18:01	540-59-0		
1,1-Dichloroethene	1.0 U	ug/L	1.0	0.24	1		02/18/21 18:01	75-35-4		
cis-1,2-Dichloroethene	1.0 U	ug/L	1.0	0.38	1		02/18/21 18:01	156-59-2		
trans-1,2-Dichloroethene	1.0 U	ug/L	1.0	0.28	1		02/18/21 18:01	156-60-5		
1,2-Dichloropropane	1.0 U	ug/L	1.0	0.28	1		02/18/21 18:01	78-87-5		
cis-1,3-Dichloropropene	1.0 U	ug/L	1.0	0.29	1		02/18/21 18:01	10061-01-5		
trans-1,3-Dichloropropene	1.0 U	ug/L	1.0	0.32	1		02/18/21 18:01	10061-02-6		
Diethyl ether (Ethyl ether)	1.0 U	ug/L	1.0	0.35	1		02/18/21 18:01	60-29-7		
Ethylbenzene	1.0 U	ug/L	1.0	0.40	1		02/18/21 18:01	100-41-4		
Ethyl-tert-butyl ether	1.0 U	ug/L	1.0	0.29	1		02/18/21 18:01	637-92-3		
2-Hexanone	10.0 U	ug/L	10.0	0.58	1		02/18/21 18:01	591-78-6		

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Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: SMO-HANOVER
Pace Project No.: 30405856

Sample: MW-1 Lab ID: 30405856001 Collected: 02/10/21 09:00 Received: 02/11/21 22:30 Matrix: Water

Parameters	Results	Units	Report		MDL	DF	Prepared	Analyzed	CAS No.	Qual
			Limit	DF						
Analytical Method: EPA 8260B Pace Analytical Services - Greensburg										
8260B MSV										
Methylene Chloride	1.0 U	ug/L	1.0	0.64	1		02/18/21 18:01	75-09-2		
4-Methyl-2-pentanone (MIBK)	10.0 U	ug/L	10.0	0.42	1		02/18/21 18:01	108-10-1		
Methyl-tert-butyl ether	1.0 U	ug/L	1.0	0.25	1		02/18/21 18:01	1634-04-4		
Naphthalene	2.0 U	ug/L	2.0	0.82	1		02/18/21 18:01	91-20-3		
Styrene	1.0 U	ug/L	1.0	0.33	1		02/18/21 18:01	100-42-5		
1,1,2,2-Tetrachloroethane	1.0 U	ug/L	1.0	0.47	1		02/18/21 18:01	79-34-5		
Tetrachloroethene	1.0 U	ug/L	1.0	0.39	1		02/18/21 18:01	127-18-4		
Toluene	1.0 U	ug/L	1.0	0.32	1		02/18/21 18:01	108-88-3		
1,2,4-Trichlorobenzene	1.0 U	ug/L	1.0	0.73	1		02/18/21 18:01	120-82-1		
1,1,1-Trichloroethane	1.0 U	ug/L	1.0	0.38	1		02/18/21 18:01	71-55-6		
1,1,2-Trichloroethane	1.0 U	ug/L	1.0	0.33	1		02/18/21 18:01	79-00-5		
Trichloroethene	1.0 U	ug/L	1.0	0.29	1		02/18/21 18:01	79-01-6		
Vinyl chloride	1.0 U	ug/L	1.0	0.29	1		02/18/21 18:01	75-01-4		
Xylene (Total)	3.0 U	ug/L	3.0	1.4	1		02/18/21 18:01	1330-20-7		
m&p-Xylene	2.0 U	ug/L	2.0	0.94	1		02/18/21 18:01	179601-23-1		
o-Xylene	1.0 U	ug/L	1.0	0.41	1		02/18/21 18:01	95-47-6		
Surrogates										
4-Bromofluorobenzene (S)	98	%	70-130		1		02/18/21 18:01	460-00-4		
1,2-Dichloroethane-d4 (S)	113	%	70-130		1		02/18/21 18:01	17060-07-0		
Toluene-d8 (S)	105	%	70-130		1		02/18/21 18:01	2037-26-5		
Dibromofluoromethane (S)	98	%	70-130		1		02/18/21 18:01	1868-53-7		

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ANALYTICAL RESULTS

Project: SMO-HANOVER
Pace Project No.: 30405856

Sample:	Lab ID:	Collected:	Received:	Matrix:					
MW-4	30405856002	02/10/21 10:10	02/11/21 22:30	Water					
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8015D TPH Reduced Volume Analytical Method: EPA 8015D Preparation Method: EPA 3510C Pace Analytical Services - Greensburg									
TPH (C10-C28)	0.24	mg/L	0.11	0.074	1	02/17/21 09:09	02/19/21 05:05		1c
Surrogates									
o-Terphenyl (S)	47	%	25-105		1	02/17/21 09:09	02/19/21 05:05	84-15-1	CL
Gasoline Range Organics Analytical Method: EPA 5030/8015B Pace Analytical Services - Greensburg									
TPH (C06-C10)	200 U	ug/L	200	98.0	1		02/16/21 18:13		
Surrogates									
4-Bromofluorobenzene (S)	96	%	70-130		1		02/16/21 18:13	460-00-4	
8260B MSV Analytical Method: EPA 8260B Pace Analytical Services - Greensburg									
Acetone	10.0 U	ug/L	10.0	5.6	1		02/18/21 18:28	67-64-1	
tert-Amylmethyl ether	1.0 U	ug/L	1.0	0.27	1		02/18/21 18:28	994-05-8	
Benzene	1.0 U	ug/L	1.0	0.34	1		02/18/21 18:28	71-43-2	
Bromochloromethane	1.0 U	ug/L	1.0	0.48	1		02/18/21 18:28	74-97-5	
Bromodichloromethane	1.0 U	ug/L	1.0	0.35	1		02/18/21 18:28	75-27-4	
Bromoform	1.0 U	ug/L	1.0	0.56	1		02/18/21 18:28	75-25-2	2c
Bromomethane	1.0 U	ug/L	1.0	0.73	1		02/18/21 18:28	74-83-9	2c
TOTAL BTEX	6.0 U	ug/L	6.0	2.4	1		02/18/21 18:28		
2-Butanone (MEK)	10.0 U	ug/L	10.0	1.5	1		02/18/21 18:28	78-93-3	
tert-Butyl Alcohol	5.0 U	ug/L	5.0	4.3	1		02/18/21 18:28	75-65-0	2c
Carbon disulfide	1.0 U	ug/L	1.0	0.32	1		02/18/21 18:28	75-15-0	
Carbon tetrachloride	1.0 U	ug/L	1.0	0.44	1		02/18/21 18:28	56-23-5	
Chlorobenzene	1.0 U	ug/L	1.0	0.26	1		02/18/21 18:28	108-90-7	
Chloroethane	1.0 U	ug/L	1.0	0.64	1		02/18/21 18:28	75-00-3	
Chloroform	1.0 U	ug/L	1.0	0.39	1		02/18/21 18:28	67-66-3	
Chloromethane	1.0 U	ug/L	1.0	0.40	1		02/18/21 18:28	74-87-3	
Dibromochloromethane	1.0 U	ug/L	1.0	0.43	1		02/18/21 18:28	124-48-1	2c
1,2-Dichlorobenzene	1.0 U	ug/L	1.0	0.38	1		02/18/21 18:28	95-50-1	
1,3-Dichlorobenzene	1.0 U	ug/L	1.0	0.45	1		02/18/21 18:28	541-73-1	
1,4-Dichlorobenzene	1.0 U	ug/L	1.0	0.48	1		02/18/21 18:28	106-46-7	
1,1-Dichloroethane	1.0 U	ug/L	1.0	0.24	1		02/18/21 18:28	75-34-3	
1,2-Dichloroethane	1.0 U	ug/L	1.0	0.33	1		02/18/21 18:28	107-06-2	
1,2-Dichloroethane (Total)	2.0 U	ug/L	2.0	0.66	1		02/18/21 18:28	540-59-0	
1,1-Dichloroethene	1.0 U	ug/L	1.0	0.24	1		02/18/21 18:28	75-35-4	MH
cis-1,2-Dichloroethene	1.0 U	ug/L	1.0	0.38	1		02/18/21 18:28	156-59-2	
trans-1,2-Dichloroethene	1.0 U	ug/L	1.0	0.28	1		02/18/21 18:28	156-60-5	
1,2-Dichloropropane	1.0 U	ug/L	1.0	0.28	1		02/18/21 18:28	78-87-5	
cis-1,3-Dichloropropene	1.0 U	ug/L	1.0	0.29	1		02/18/21 18:28	10061-01-5	
trans-1,3-Dichloropropene	1.0 U	ug/L	1.0	0.32	1		02/18/21 18:28	10061-02-6	
Diethyl ether (Ethyl ether)	1.0 U	ug/L	1.0	0.35	1		02/18/21 18:28	60-29-7	
Ethylbenzene	1.0 U	ug/L	1.0	0.40	1		02/18/21 18:28	100-41-4	
Ethyl-tert-butyl ether	1.0 U	ug/L	1.0	0.29	1		02/18/21 18:28	637-92-3	
2-Hexanone	10.0 U	ug/L	10.0	0.58	1		02/18/21 18:28	591-78-6	

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ANALYTICAL RESULTS

Project: SMO-HANOVER
Pace Project No.: 30405856

Sample:	Lab ID:	Collected:	Received:	Matrix:					
MW-4	30405856002	02/10/21 10:10	02/11/21 22:30	Water					
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV Analytical Method: EPA 8260B Pace Analytical Services - Greensburg									
Methylene Chloride	1.0 U	ug/L	1.0	0.64	1		02/18/21 18:28	75-09-2	
4-Methyl-2-pentanone (MIBK)	10.0 U	ug/L	10.0	0.42	1		02/18/21 18:28	108-10-1	
Methyl-tert-butyl ether	1.0 U	ug/L	1.0	0.25	1		02/18/21 18:28	1634-04-4	
Naphthalene	2.0 U	ug/L	2.0	0.82	1		02/18/21 18:28	91-20-3	
Styrene	1.0 U	ug/L	1.0	0.33	1		02/18/21 18:28	100-42-5	
1,1,2,2-Tetrachloroethane	1.0 U	ug/L	1.0	0.47	1		02/18/21 18:28	79-34-5	
Tetrachloroethene	1.0 U	ug/L	1.0	0.39	1		02/18/21 18:28	127-18-4	
Toluene	1.0 U	ug/L	1.0	0.32	1		02/18/21 18:28	108-88-3	
1,2,4-Trichlorobenzene	1.0 U	ug/L	1.0	0.73	1		02/18/21 18:28	120-82-1	
1,1,1-Trichloroethane	1.0 U	ug/L	1.0	0.38	1		02/18/21 18:28	71-55-6	
1,1,2-Trichloroethane	1.0 U	ug/L	1.0	0.33	1		02/18/21 18:28	79-00-5	
Trichloroethene	1.0 U	ug/L	1.0	0.29	1		02/18/21 18:28	79-01-6	
Vinyl chloride	1.0 U	ug/L	1.0	0.29	1		02/18/21 18:28	75-01-4	
Xylene (Total)	3.0 U	ug/L	3.0	1.4	1		02/18/21 18:28	1330-20-7	
m&p-Xylene	2.0 U	ug/L	2.0	0.94	1		02/18/21 18:28	179601-23-1	
o-Xylene	1.0 U	ug/L	1.0	0.41	1		02/18/21 18:28	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	99	%	70-130		1		02/18/21 18:28	460-00-4	
1,2-Dichloroethane-d4 (S)	112	%	70-130		1		02/18/21 18:28	17060-07-0	
Toluene-d8 (S)	102	%	70-130		1		02/18/21 18:28	2037-26-5	
Dibromofluoromethane (S)	101	%	70-130		1		02/18/21 18:28	1868-53-7	

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ANALYTICAL RESULTS

Project: SMO-HANOVER
Pace Project No.: 30405856

Sample: MW-7 Lab ID: 30405856003 Collected: 02/10/21 10:45 Received: 02/11/21 22:30 Matrix: Water

Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
8015D TPH Reduced Volume									
Analytical Method: EPA 8015D Preparation Method: EPA 3510C									
Pace Analytical Services - Greensburg									
TPH (C10-C28)	1.9	mg/L	0.10	0.072	1	02/17/21 09:09	02/19/21 05:29		1c
Surrogates									
o-Terphenyl (S)	63	%	25-105		1	02/17/21 09:09	02/19/21 05:29	84-15-1	CL
Gasoline Range Organics									
Analytical Method: EPA 5030/8015B									
Pace Analytical Services - Greensburg									
TPH (C06-C10)	1000	ug/L	200	98.0	1		02/16/21 18:31		
Surrogates									
4-Bromofluorobenzene (S)	85	%	70-130		1		02/16/21 18:31	460-00-4	
8260B MSV									
Analytical Method: EPA 8260B									
Pace Analytical Services - Greensburg									
Acetone	10.0 U	ug/L	10.0	5.6	1		02/18/21 18:56	67-64-1	
tert-Amylmethyl ether	1.0 U	ug/L	1.0	0.27	1		02/18/21 18:56	994-05-8	
Benzene	1.0 U	ug/L	1.0	0.34	1		02/18/21 18:56	71-43-2	
Bromochloromethane	1.0 U	ug/L	1.0	0.48	1		02/18/21 18:56	74-97-5	
Bromodichloromethane	1.0 U	ug/L	1.0	0.35	1		02/18/21 18:56	75-27-4	
Bromoform	1.0 U	ug/L	1.0	0.56	1		02/18/21 18:56	75-25-2	2c
Bromomethane	1.0 U	ug/L	1.0	0.73	1		02/18/21 18:56	74-83-9	2c
TOTAL BTEX	3.3J	ug/L	6.0	2.4	1		02/18/21 18:56		
2-Butanone (MEK)	15.7	ug/L	10.0	1.5	1		02/18/21 18:56	78-93-3	
tert-Butyl Alcohol	5.0 U	ug/L	5.0	4.3	1		02/18/21 18:56	75-65-0	2c
Carbon disulfide	1.0 U	ug/L	1.0	0.32	1		02/18/21 18:56	75-15-0	
Carbon tetrachloride	1.0 U	ug/L	1.0	0.44	1		02/18/21 18:56	56-23-5	
Chlorobenzene	1.0 U	ug/L	1.0	0.26	1		02/18/21 18:56	108-90-7	
Chloroethane	1.0 U	ug/L	1.0	0.64	1		02/18/21 18:56	75-00-3	
Chloroform	1.0 U	ug/L	1.0	0.39	1		02/18/21 18:56	67-66-3	
Chloromethane	1.0 U	ug/L	1.0	0.40	1		02/18/21 18:56	74-87-3	
Dibromochloromethane	1.0 U	ug/L	1.0	0.43	1		02/18/21 18:56	124-48-1	2c
1,2-Dichlorobenzene	1.0 U	ug/L	1.0	0.38	1		02/18/21 18:56	95-50-1	
1,3-Dichlorobenzene	1.0 U	ug/L	1.0	0.45	1		02/18/21 18:56	541-73-1	
1,4-Dichlorobenzene	1.0 U	ug/L	1.0	0.48	1		02/18/21 18:56	106-46-7	
1,1-Dichloroethane	1.0 U	ug/L	1.0	0.24	1		02/18/21 18:56	75-34-3	
1,2-Dichloroethane	1.0 U	ug/L	1.0	0.33	1		02/18/21 18:56	107-06-2	
1,2-Dichloroethane (Total)	2.0 U	ug/L	2.0	0.66	1		02/18/21 18:56	540-59-0	
1,1-Dichloroethene	1.0 U	ug/L	1.0	0.24	1		02/18/21 18:56	75-35-4	
cis-1,2-Dichloroethene	1.0 U	ug/L	1.0	0.38	1		02/18/21 18:56	156-59-2	
trans-1,2-Dichloroethene	1.0 U	ug/L	1.0	0.28	1		02/18/21 18:56	156-60-5	
1,2-Dichloropropane	1.0 U	ug/L	1.0	0.28	1		02/18/21 18:56	78-87-5	
cis-1,3-Dichloropropene	1.0 U	ug/L	1.0	0.29	1		02/18/21 18:56	10061-01-5	
trans-1,3-Dichloropropene	1.0 U	ug/L	1.0	0.32	1		02/18/21 18:56	10061-02-6	
Diethyl ether (Ethyl ether)	1.0 U	ug/L	1.0	0.35	1		02/18/21 18:56	60-29-7	
Ethylbenzene	3.3	ug/L	1.0	0.40	1		02/18/21 18:56	100-41-4	
Ethyl-tert-butyl ether	1.0 U	ug/L	1.0	0.29	1		02/18/21 18:56	637-92-3	
2-Hexanone	10.0 U	ug/L	10.0	0.58	1		02/18/21 18:56	591-78-6	

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ANALYTICAL RESULTS

Project: SMO-HANOVER
Pace Project No.: 30405856

Sample: MW-7 Lab ID: 30405856003 Collected: 02/10/21 10:45 Received: 02/11/21 22:30 Matrix: Water

Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
8260B MSV									
Analytical Method: EPA 8260B									
Pace Analytical Services - Greensburg									
Methylene Chloride	1.0 U	ug/L	1.0	0.64	1		02/18/21 18:56	75-09-2	
4-Methyl-2-pentanone (MIBK)	10.0 U	ug/L	10.0	0.42	1		02/18/21 18:56	108-10-1	
Methyl-tert-butyl ether	1.0 U	ug/L	1.0	0.25	1		02/18/21 18:56	1634-04-4	
Naphthalene	3.7	ug/L	2.0	0.82	1		02/18/21 18:56	91-20-3	
Styrene	1.0 U	ug/L	1.0	0.33	1		02/18/21 18:56	100-42-5	
1,1,2,2-Tetrachloroethane	1.0 U	ug/L	1.0	0.47	1		02/18/21 18:56	79-34-5	
Tetrachloroethene	1.0 U	ug/L	1.0	0.39	1		02/18/21 18:56	127-18-4	
Toluene	1.0 U	ug/L	1.0	0.32	1		02/18/21 18:56	108-88-3	
1,2,4-Trichlorobenzene	1.0 U	ug/L	1.0	0.73	1		02/18/21 18:56	120-82-1	
1,1,1-Trichloroethane	1.0 U	ug/L	1.0	0.38	1		02/18/21 18:56	71-55-6	
1,1,2-Trichloroethane	1.0 U	ug/L	1.0	0.33	1		02/18/21 18:56	79-00-5	
Trichloroethene	1.0 U	ug/L	1.0	0.29	1		02/18/21 18:56	79-01-6	
Vinyl chloride	1.0 U	ug/L	1.0	0.29	1		02/18/21 18:56	75-01-4	
Xylene (Total)	3.0 U	ug/L	3.0	1.4	1		02/18/21 18:56	1330-20-7	
m&p-Xylene	2.0 U	ug/L	2.0	0.94	1		02/18/21 18:56	179601-23-1	
o-Xylene	1.0 U	ug/L	1.0	0.41	1		02/18/21 18:56	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	95	%	70-130		1		02/18/21 18:56	460-00-4	
1,2-Dichloroethane-d4 (S)	104	%	70-130		1		02/18/21 18:56	17060-07-0	
Toluene-d8 (S)	105	%	70-130		1		02/18/21 18:56	2037-26-5	
Dibromofluoromethane (S)	93	%	70-130		1		02/18/21 18:56	1868-53-7	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: SMO-HANOVER
Pace Project No.: 30405856

Sample: MW-8 Lab ID: 30405856004 Collected: 02/10/21 14:45 Received: 02/11/21 22:30 Matrix: Water

Parameters	Results	Units	Report		MDL	DF	Prepared	Analyzed	CAS No.	Qual
			Limit	DF						
Analytical Method: EPA 8015D Preparation Method: EPA 3510C Pace Analytical Services - Greensburg										
8015D TPH Reduced Volume										
TPH (C10-C28)	1.1	mg/L	0.099	0.068	1	02/17/21 09:09	02/19/21 05:52			1c
Surrogates										
o-Terphenyl (S)	32	%	25-105		1	02/17/21 09:09	02/19/21 05:52	84-15-1		CL
Analytical Method: EPA 5030/8015B Pace Analytical Services - Greensburg										
Gasoline Range Organics										
TPH (C06-C10)	1700	ug/L	200	98.0	1		02/16/21 18:49			
Surrogates										
4-Bromofluorobenzene (S)	98	%	70-130		1		02/16/21 18:49	460-00-4		
Analytical Method: EPA 8260B Pace Analytical Services - Greensburg										
8260B MSV										
Acetone	16.3	ug/L	10.0	5.6	1		02/18/21 20:17	67-64-1		
tert-Amylmethyl ether	0.43J	ug/L	1.0	0.27	1		02/18/21 20:17	994-05-8		
Benzene	2.1	ug/L	1.0	0.34	1		02/18/21 20:17	71-43-2		
Bromochloromethane	1.0 U	ug/L	1.0	0.48	1		02/18/21 20:17	74-97-5		
Bromodichloromethane	1.0 U	ug/L	1.0	0.35	1		02/18/21 20:17	75-27-4		
Bromofrom	1.0 U	ug/L	1.0	0.56	1		02/18/21 20:17	75-25-2		2c
Bromomethane	1.0 U	ug/L	1.0	0.73	1		02/18/21 20:17	74-83-9		2c
TOTAL BTEX	496	ug/L	6.0	2.4	1		02/18/21 20:17			
2-Butanone (MEK)	14.1	ug/L	10.0	1.5	1		02/18/21 20:17	78-93-3		
tert-Butyl Alcohol	5.0 U	ug/L	5.0	4.3	1		02/18/21 20:17	75-65-0		2c
Carbon disulfide	1.0 U	ug/L	1.0	0.32	1		02/18/21 20:17	75-15-0		
Carbon tetrachloride	1.0 U	ug/L	1.0	0.44	1		02/18/21 20:17	56-23-5		
Chlorobenzene	1.0 U	ug/L	1.0	0.26	1		02/18/21 20:17	108-90-7		
Chloroethane	1.0 U	ug/L	1.0	0.64	1		02/18/21 20:17	75-00-3		
Chloroform	1.0 U	ug/L	1.0	0.39	1		02/18/21 20:17	67-66-3		
Chloromethane	1.0 U	ug/L	1.0	0.40	1		02/18/21 20:17	74-87-3		
Dibromochloromethane	1.0 U	ug/L	1.0	0.43	1		02/18/21 20:17	124-48-1		2c
1,2-Dichlorobenzene	1.0 U	ug/L	1.0	0.38	1		02/18/21 20:17	95-50-1		
1,3-Dichlorobenzene	1.0 U	ug/L	1.0	0.45	1		02/18/21 20:17	541-73-1		
1,4-Dichlorobenzene	1.0 U	ug/L	1.0	0.48	1		02/18/21 20:17	106-46-7		
1,1-Dichloroethane	1.0 U	ug/L	1.0	0.24	1		02/18/21 20:17	75-34-3		
1,2-Dichloroethane	1.0 U	ug/L	1.0	0.33	1		02/18/21 20:17	107-06-2		
1,2-Dichloroethane (Total)	2.0 U	ug/L	2.0	0.66	1		02/18/21 20:17	540-59-0		
1,1-Dichloroethene	1.0 U	ug/L	1.0	0.24	1		02/18/21 20:17	75-35-4		
cis-1,2-Dichloroethene	1.0 U	ug/L	1.0	0.38	1		02/18/21 20:17	156-59-2		
trans-1,2-Dichloroethene	1.0 U	ug/L	1.0	0.28	1		02/18/21 20:17	156-60-5		
1,2-Dichloropropane	1.0 U	ug/L	1.0	0.28	1		02/18/21 20:17	78-87-5		
cis-1,3-Dichloropropene	1.0 U	ug/L	1.0	0.29	1		02/18/21 20:17	10061-01-5		
trans-1,3-Dichloropropene	1.0 U	ug/L	1.0	0.32	1		02/18/21 20:17	10061-02-6		
Diethyl ether (Ethyl ether)	1.0 U	ug/L	1.0	0.35	1		02/18/21 20:17	60-29-7		
Ethylbenzene	194	ug/L	1.0	0.40	1		02/18/21 20:17	100-41-4		
Ethyl-tert-butyl ether	1.0 U	ug/L	1.0	0.29	1		02/18/21 20:17	637-92-3		
2-Hexanone	10.0 U	ug/L	10.0	0.58	1		02/18/21 20:17	591-78-6		

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ANALYTICAL RESULTS

Project: SMO-HANOVER
Pace Project No.: 30405856

Sample: MW-8 Lab ID: 30405856004 Collected: 02/10/21 14:45 Received: 02/11/21 22:30 Matrix: Water

Parameters	Results	Units	Report		MDL	DF	Prepared	Analyzed	CAS No.	Qual
			Limit	DF						
Analytical Method: EPA 8260B Pace Analytical Services - Greensburg										
8260B MSV										
Methylene Chloride	1.0 U	ug/L	1.0	0.64	1		02/18/21 20:17	75-09-2		
4-Methyl-2-pentanone (MIBK)	10.0 U	ug/L	10.0	0.42	1		02/18/21 20:17	108-10-1		
Methyl-tert-butyl ether	0.31J	ug/L	1.0	0.25	1		02/18/21 20:17	1634-04-4		
Naphthalene	129	ug/L	2.0	0.82	1		02/18/21 20:17	91-20-3		
Styrene	1.0 U	ug/L	1.0	0.33	1		02/18/21 20:17	100-42-5		
1,1,2,2-Tetrachloroethane	1.0 U	ug/L	1.0	0.47	1		02/18/21 20:17	79-34-5		
Tetrachloroethene	1.0 U	ug/L	1.0	0.39	1		02/18/21 20:17	127-18-4		
Toluene	0.69J	ug/L	1.0	0.32	1		02/18/21 20:17	108-88-3		
1,2,4-Trichlorobenzene	1.0 U	ug/L	1.0	0.73	1		02/18/21 20:17	120-82-1		
1,1,1-Trichloroethane	1.0 U	ug/L	1.0	0.38	1		02/18/21 20:17	71-55-6		
1,1,2-Trichloroethane	1.0 U	ug/L	1.0	0.33	1		02/18/21 20:17	79-00-5		
Trichloroethene	1.0 U	ug/L	1.0	0.29	1		02/18/21 20:17	79-01-6		
Vinyl chloride	1.0 U	ug/L	1.0	0.29	1		02/18/21 20:17	75-01-4		
Xylene (Total)	299	ug/L	3.0	1.4	1		02/18/21 20:17	1330-20-7		
m&p-Xylene	297	ug/L	2.0	0.94	1		02/18/21 20:17	179601-23-1		
o-Xylene	2.2	ug/L	1.0	0.41	1		02/18/21 20:17	95-47-6		
Surrogates										
4-Bromofluorobenzene (S)	99	%	70-130		1		02/18/21 20:17	460-00-4		
1,2-Dichloroethane-d4 (S)	102	%	70-130		1		02/18/21 20:17	17060-07-0		
Toluene-d8 (S)	104	%	70-130		1		02/18/21 20:17	2037-26-5		
Dibromofluoromethane (S)	96	%	70-130		1		02/18/21 20:17	1868-53-7		

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ANALYTICAL RESULTS

Project: SMO-HANOVER
Pace Project No.: 30405856

Sample: MW-9 Lab ID: 30405856005 Collected: 02/10/21 11:33 Received: 02/11/21 22:30 Matrix: Water

Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
8015D TPH Reduced Volume									
Analytical Method: EPA 8015D Preparation Method: EPA 3510C									
Pace Analytical Services - Greensburg									
TPH (C10-C28)	4.3	mg/L	1.1	0.72	10	02/17/21 09:09	02/23/21 23:53		1c
Surrogates									
o-Terphenyl (S)	47	%	25-105		10	02/17/21 09:09	02/23/21 23:53	84-15-1	
Gasoline Range Organics									
Analytical Method: EPA 5030/8015B									
Pace Analytical Services - Greensburg									
TPH (C06-C10)	2010	ug/L	200	98.0	1		02/16/21 19:07		
Surrogates									
4-Bromofluorobenzene (S)	92	%	70-130		1		02/16/21 19:07	460-00-4	
8260B MSV									
Analytical Method: EPA 8260B									
Pace Analytical Services - Greensburg									
Acetone	14.1	ug/L	10.0	5.6	1		02/18/21 20:44	67-64-1	
tert-Amylmethyl ether	8.4	ug/L	1.0	0.27	1		02/18/21 20:44	994-05-8	
Benzene	118	ug/L	1.0	0.34	1		02/18/21 20:44	71-43-2	
Bromochloromethane	1.0 U	ug/L	1.0	0.48	1		02/18/21 20:44	74-97-5	
Bromodichloromethane	1.0 U	ug/L	1.0	0.35	1		02/18/21 20:44	75-27-4	
Bromofrom	1.0 U	ug/L	1.0	0.56	1		02/18/21 20:44	75-25-2	2c
Bromomethane	1.0 U	ug/L	1.0	0.73	1		02/18/21 20:44	74-83-9	2c
TOTAL BTEX	492	ug/L	6.0	2.4	1		02/18/21 20:44		
2-Butanone (MEK)	10.1	ug/L	10.0	1.5	1		02/18/21 20:44	78-93-3	
tert-Butyl Alcohol	125	ug/L	5.0	4.3	1		02/18/21 20:44	75-65-0	2c
Carbon disulfide	1.0 U	ug/L	1.0	0.32	1		02/18/21 20:44	75-15-0	
Carbon tetrachloride	1.0 U	ug/L	1.0	0.44	1		02/18/21 20:44	56-23-5	
Chlorobenzene	1.0 U	ug/L	1.0	0.26	1		02/18/21 20:44	108-90-7	
Chloroethane	1.0 U	ug/L	1.0	0.64	1		02/18/21 20:44	75-00-3	
Chloroform	1.0 U	ug/L	1.0	0.39	1		02/18/21 20:44	67-66-3	
Chloromethane	1.0 U	ug/L	1.0	0.40	1		02/18/21 20:44	74-87-3	
Dibromochloromethane	1.0 U	ug/L	1.0	0.43	1		02/18/21 20:44	124-48-1	2c
1,2-Dichlorobenzene	1.0 U	ug/L	1.0	0.38	1		02/18/21 20:44	95-50-1	
1,3-Dichlorobenzene	1.0 U	ug/L	1.0	0.45	1		02/18/21 20:44	541-73-1	
1,4-Dichlorobenzene	1.0 U	ug/L	1.0	0.48	1		02/18/21 20:44	106-46-7	
1,1-Dichloroethane	1.0 U	ug/L	1.0	0.24	1		02/18/21 20:44	75-34-3	
1,2-Dichloroethane	1.0 U	ug/L	1.0	0.33	1		02/18/21 20:44	107-06-2	
1,2-Dichloroethane (Total)	2.0 U	ug/L	2.0	0.66	1		02/18/21 20:44	540-59-0	
1,1-Dichloroethene	1.0 U	ug/L	1.0	0.24	1		02/18/21 20:44	75-35-4	
cis-1,2-Dichloroethene	1.0 U	ug/L	1.0	0.38	1		02/18/21 20:44	156-59-2	
trans-1,2-Dichloroethene	1.0 U	ug/L	1.0	0.28	1		02/18/21 20:44	156-60-5	
1,2-Dichloropropane	1.0 U	ug/L	1.0	0.28	1		02/18/21 20:44	78-87-5	
cis-1,3-Dichloropropene	1.0 U	ug/L	1.0	0.29	1		02/18/21 20:44	10061-01-5	
trans-1,3-Dichloropropene	1.0 U	ug/L	1.0	0.32	1		02/18/21 20:44	10061-02-6	
Diethyl ether (Ethyl ether)	1.0 U	ug/L	1.0	0.35	1		02/18/21 20:44	60-29-7	
Ethylbenzene	85.7	ug/L	1.0	0.40	1		02/18/21 20:44	100-41-4	
Ethyl-tert-butyl ether	1.0 U	ug/L	1.0	0.29	1		02/18/21 20:44	637-92-3	
2-Hexanone	10.0 U	ug/L	10.0	0.58	1		02/18/21 20:44	591-78-6	

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ANALYTICAL RESULTS

Project: SMO-HANOVER
Pace Project No.: 30405856

Sample: MW-9 Lab ID: 30405856005 Collected: 02/10/21 11:33 Received: 02/11/21 22:30 Matrix: Water

Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
8260B MSV									
Analytical Method: EPA 8260B									
Pace Analytical Services - Greensburg									
Methylene Chloride	1.0 U	ug/L	1.0	0.64	1		02/18/21 20:44	75-09-2	
4-Methyl-2-pentanone (MIBK)	24.1	ug/L	10.0	0.42	1		02/18/21 20:44	108-10-1	
Methyl-tert-butyl ether	30.1	ug/L	1.0	0.25	1		02/18/21 20:44	1634-04-4	
Naphthalene	24.5	ug/L	2.0	0.82	1		02/18/21 20:44	91-20-3	
Styrene	1.0 U	ug/L	1.0	0.33	1		02/18/21 20:44	100-42-5	
1,1,2,2-Tetrachloroethane	1.0 U	ug/L	1.0	0.47	1		02/18/21 20:44	79-34-5	
Tetrachloroethene	1.0 U	ug/L	1.0	0.39	1		02/18/21 20:44	127-18-4	
Toluene	17.0	ug/L	1.0	0.32	1		02/18/21 20:44	108-88-3	
1,2,4-Trichlorobenzene	1.0 U	ug/L	1.0	0.73	1		02/18/21 20:44	120-82-1	
1,1,1-Trichloroethane	1.0 U	ug/L	1.0	0.38	1		02/18/21 20:44	71-55-6	
1,1,2-Trichloroethane	1.0 U	ug/L	1.0	0.33	1		02/18/21 20:44	79-00-5	
Trichloroethene	1.0 U	ug/L	1.0	0.29	1		02/18/21 20:44	79-01-6	
Vinyl chloride	1.0 U	ug/L	1.0	0.29	1		02/18/21 20:44	75-01-4	
Xylene (Total)	271	ug/L	3.0	1.4	1		02/18/21 20:44	1330-20-7	
m&p-Xylene	195	ug/L	2.0	0.94	1		02/18/21 20:44	179601-23-1	
o-Xylene	75.4	ug/L	1.0	0.41	1		02/18/21 20:44	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	100	%	70-130		1		02/18/21 20:44	460-00-4	
1,2-Dichloroethane-d4 (S)	114	%	70-130		1		02/18/21 20:44	17060-07-0	
Toluene-d8 (S)	100	%	70-130		1		02/18/21 20:44	2037-26-5	
Dibromofluoromethane (S)	98	%	70-130		1		02/18/21 20:44	1868-53-7	

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ANALYTICAL RESULTS

Project: SMO-HANOVER
Pace Project No.: 30405856

Sample:	Lab ID:	Collected:	Received:	Matrix:					
MW-10	30405856006	02/10/21 14:10	02/11/21 22:30	Water					
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8015D TPH Reduced Volume Analytical Method: EPA 8015D Preparation Method: EPA 3510C Pace Analytical Services - Greensburg									
TPH (C10-C28)	1.3	mg/L	0.10	0.070	1	02/17/21 09:09	02/19/21 07:03		1c
Surrogates									
o-Terphenyl (S)	42	%	25-105		1	02/17/21 09:09	02/19/21 07:03	84-15-1	CL
Gasoline Range Organics Analytical Method: EPA 5030/8015B Pace Analytical Services - Greensburg									
TPH (C06-C10)	890	ug/L	200	98.0	1		02/16/21 19:25		
Surrogates									
4-Bromofluorobenzene (S)	100	%	70-130		1		02/16/21 19:25	460-00-4	
8260B MSV Analytical Method: EPA 8260B Pace Analytical Services - Greensburg									
Acetone	14.1	ug/L	10.0	5.6	1		02/18/21 21:11	67-64-1	
tert-Amylmethyl ether	3.1	ug/L	1.0	0.27	1		02/18/21 21:11	994-05-8	
Benzene	35.7	ug/L	1.0	0.34	1		02/18/21 21:11	71-43-2	
Bromochloromethane	1.0 U	ug/L	1.0	0.48	1		02/18/21 21:11	74-97-5	
Bromodichloromethane	1.0 U	ug/L	1.0	0.35	1		02/18/21 21:11	75-27-4	
Bromoform	1.0 U	ug/L	1.0	0.56	1		02/18/21 21:11	75-25-2	2c
Bromomethane	1.0 U	ug/L	1.0	0.73	1		02/18/21 21:11	74-83-9	2c
TOTAL BTEX	161	ug/L	6.0	2.4	1		02/18/21 21:11		
2-Butanone (MEK)	10.2	ug/L	10.0	1.5	1		02/18/21 21:11	78-93-3	
tert-Butyl Alcohol	21.1	ug/L	5.0	4.3	1		02/18/21 21:11	75-65-0	2c
Carbon disulfide	0.54J	ug/L	1.0	0.32	1		02/18/21 21:11	75-15-0	
Carbon tetrachloride	1.0 U	ug/L	1.0	0.44	1		02/18/21 21:11	56-23-5	
Chlorobenzene	1.0 U	ug/L	1.0	0.26	1		02/18/21 21:11	108-90-7	
Chloroethane	1.0 U	ug/L	1.0	0.64	1		02/18/21 21:11	75-00-3	
Chloroform	1.0 U	ug/L	1.0	0.39	1		02/18/21 21:11	67-66-3	
Chloromethane	1.0 U	ug/L	1.0	0.40	1		02/18/21 21:11	74-87-3	
Dibromochloromethane	1.0 U	ug/L	1.0	0.43	1		02/18/21 21:11	124-48-1	2c
1,2-Dichlorobenzene	1.0 U	ug/L	1.0	0.38	1		02/18/21 21:11	95-50-1	
1,3-Dichlorobenzene	1.0 U	ug/L	1.0	0.45	1		02/18/21 21:11	541-73-1	
1,4-Dichlorobenzene	1.0 U	ug/L	1.0	0.48	1		02/18/21 21:11	106-46-7	
1,1-Dichloroethane	1.0 U	ug/L	1.0	0.24	1		02/18/21 21:11	75-34-3	
1,2-Dichloroethane	1.0 U	ug/L	1.0	0.33	1		02/18/21 21:11	107-06-2	
1,2-Dichloroethane (Total)	2.0 U	ug/L	2.0	0.66	1		02/18/21 21:11	540-59-0	
1,1-Dichloroethene	1.0 U	ug/L	1.0	0.24	1		02/18/21 21:11	75-35-4	
cis-1,2-Dichloroethene	1.0 U	ug/L	1.0	0.38	1		02/18/21 21:11	156-59-2	
trans-1,2-Dichloroethene	1.0 U	ug/L	1.0	0.28	1		02/18/21 21:11	156-60-5	
1,2-Dichloropropane	1.0 U	ug/L	1.0	0.28	1		02/18/21 21:11	78-87-5	
cis-1,3-Dichloropropene	1.0 U	ug/L	1.0	0.29	1		02/18/21 21:11	10061-01-5	
trans-1,3-Dichloropropene	1.0 U	ug/L	1.0	0.32	1		02/18/21 21:11	10061-02-6	
Diethyl ether (Ethyl ether)	1.0 U	ug/L	1.0	0.35	1		02/18/21 21:11	60-29-7	
Ethylbenzene	57.9	ug/L	1.0	0.40	1		02/18/21 21:11	100-41-4	
Ethyl-tert-butyl ether	1.0 U	ug/L	1.0	0.29	1		02/18/21 21:11	637-92-3	
2-Hexanone	10.0 U	ug/L	10.0	0.58	1		02/18/21 21:11	591-78-6	

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(724)850-5600

ANALYTICAL RESULTS

Project: SMO-HANOVER
Pace Project No.: 30405856

Sample:	Lab ID:	Collected:	Received:	Matrix:					
MW-10	30405856006	02/10/21 14:10	02/11/21 22:30	Water					
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV Analytical Method: EPA 8260B Pace Analytical Services - Greensburg									
Methylene Chloride	1.0 U	ug/L	1.0	0.64	1		02/18/21 21:11	75-09-2	
4-Methyl-2-pentanone (MIBK)	1.7J	ug/L	10.0	0.42	1		02/18/21 21:11	108-10-1	
Methyl-tert-butyl ether	4.0	ug/L	1.0	0.25	1		02/18/21 21:11	1634-04-4	
Naphthalene	39.2	ug/L	2.0	0.82	1		02/18/21 21:11	91-20-3	
Styrene	1.0 U	ug/L	1.0	0.33	1		02/18/21 21:11	100-42-5	
1,1,2,2-Tetrachloroethane	1.0 U	ug/L	1.0	0.47	1		02/18/21 21:11	79-34-5	
Tetrachloroethene	1.0 U	ug/L	1.0	0.39	1		02/18/21 21:11	127-18-4	
Toluene	1.2	ug/L	1.0	0.32	1		02/18/21 21:11	108-88-3	
1,2,4-Trichlorobenzene	1.0 U	ug/L	1.0	0.73	1		02/18/21 21:11	120-82-1	
1,1,1-Trichloroethane	1.0 U	ug/L	1.0	0.38	1		02/18/21 21:11	71-55-6	
1,1,2-Trichloroethane	1.0 U	ug/L	1.0	0.33	1		02/18/21 21:11	79-00-5	
Trichloroethene	1.0 U	ug/L	1.0	0.29	1		02/18/21 21:11	79-01-6	
Vinyl chloride	1.0 U	ug/L	1.0	0.29	1		02/18/21 21:11	75-01-4	
Xylene (Total)	66.5	ug/L	3.0	1.4	1		02/18/21 21:11	1330-20-7	
m&p-Xylene	64.7	ug/L	2.0	0.94	1		02/18/21 21:11	179601-23-1	
o-Xylene	1.9	ug/L	1.0	0.41	1		02/18/21 21:11	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	96	%	70-130		1		02/18/21 21:11	460-00-4	
1,2-Dichloroethane-d4 (S)	117	%	70-130		1		02/18/21 21:11	17060-07-0	
Toluene-d8 (S)	101	%	70-130		1		02/18/21 21:11	2037-26-5	
Dibromofluoromethane (S)	97	%	70-130		1		02/18/21 21:11	1868-53-7	

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ANALYTICAL RESULTS

Project: SMO-HANOVER
Pace Project No.: 30405856

Sample: MW-12 Lab ID: 30405856007 Collected: 02/10/21 14:20 Received: 02/11/21 22:30 Matrix: Water

Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
8015D TPH Reduced Volume									
Analytical Method: EPA 8015D Preparation Method: EPA 3510C Pace Analytical Services - Greensburg									
TPH (C10-C28)	0.081J	mg/L	0.11	0.073	1	02/17/21 09:09	02/19/21 07:26		1c
Surrogates									
o-Terphenyl (S)	35	%	25-105		1	02/17/21 09:09	02/19/21 07:26	84-15-1	CL
Gasoline Range Organics									
Analytical Method: EPA 5030/8015B Pace Analytical Services - Greensburg									
TPH (C06-C10)	200 U	ug/L	200	98.0	1		02/16/21 20:00		
Surrogates									
4-Bromofluorobenzene (S)	96	%	70-130		1		02/16/21 20:00	460-00-4	
8260B MSV									
Analytical Method: EPA 8260B Pace Analytical Services - Greensburg									
Acetone	10.0 U	ug/L	10.0	5.6	1		02/18/21 19:23	67-64-1	
tert-Amylmethyl ether	1.0 U	ug/L	1.0	0.27	1		02/18/21 19:23	994-05-8	
Benzene	1.0 U	ug/L	1.0	0.34	1		02/18/21 19:23	71-43-2	
Bromochloromethane	1.0 U	ug/L	1.0	0.48	1		02/18/21 19:23	74-97-5	
Bromodichloromethane	1.0 U	ug/L	1.0	0.35	1		02/18/21 19:23	75-27-4	
Bromoform	1.0 U	ug/L	1.0	0.56	1		02/18/21 19:23	75-25-2	2c
Bromomethane	1.0 U	ug/L	1.0	0.73	1		02/18/21 19:23	74-83-9	2c
TOTAL BTEX	6.0 U	ug/L	6.0	2.4	1		02/18/21 19:23		
2-Butanone (MEK)	10.0 U	ug/L	10.0	1.5	1		02/18/21 19:23	78-93-3	
tert-Butyl Alcohol	5.0 U	ug/L	5.0	4.3	1		02/18/21 19:23	75-65-0	2c
Carbon disulfide	1.0 U	ug/L	1.0	0.32	1		02/18/21 19:23	75-15-0	
Carbon tetrachloride	1.0 U	ug/L	1.0	0.44	1		02/18/21 19:23	56-23-5	
Chlorobenzene	1.0 U	ug/L	1.0	0.26	1		02/18/21 19:23	108-90-7	
Chloroethane	1.0 U	ug/L	1.0	0.64	1		02/18/21 19:23	75-00-3	
Chloroform	1.0 U	ug/L	1.0	0.39	1		02/18/21 19:23	67-66-3	
Chloromethane	1.0 U	ug/L	1.0	0.40	1		02/18/21 19:23	74-87-3	
Dibromochloromethane	1.0 U	ug/L	1.0	0.43	1		02/18/21 19:23	124-48-1	2c
1,2-Dichlorobenzene	1.0 U	ug/L	1.0	0.38	1		02/18/21 19:23	95-50-1	
1,3-Dichlorobenzene	1.0 U	ug/L	1.0	0.45	1		02/18/21 19:23	541-73-1	
1,4-Dichlorobenzene	1.0 U	ug/L	1.0	0.48	1		02/18/21 19:23	106-46-7	
1,1-Dichloroethane	1.0 U	ug/L	1.0	0.24	1		02/18/21 19:23	75-34-3	
1,2-Dichloroethane	1.0 U	ug/L	1.0	0.33	1		02/18/21 19:23	107-06-2	
1,2-Dichloroethane (Total)	2.0 U	ug/L	2.0	0.66	1		02/18/21 19:23	540-59-0	
1,1-Dichloroethene	1.0 U	ug/L	1.0	0.24	1		02/18/21 19:23	75-35-4	
cis-1,2-Dichloroethene	1.0 U	ug/L	1.0	0.38	1		02/18/21 19:23	156-59-2	
trans-1,2-Dichloroethene	1.0 U	ug/L	1.0	0.28	1		02/18/21 19:23	156-60-5	
1,2-Dichloropropane	1.0 U	ug/L	1.0	0.28	1		02/18/21 19:23	78-87-5	
cis-1,3-Dichloropropene	1.0 U	ug/L	1.0	0.29	1		02/18/21 19:23	10061-01-5	
trans-1,3-Dichloropropene	1.0 U	ug/L	1.0	0.32	1		02/18/21 19:23	10061-02-6	
Diethyl ether (Ethyl ether)	1.0 U	ug/L	1.0	0.35	1		02/18/21 19:23	60-29-7	
Ethylbenzene	1.0 U	ug/L	1.0	0.40	1		02/18/21 19:23	100-41-4	
Ethyl-tert-butyl ether	1.0 U	ug/L	1.0	0.29	1		02/18/21 19:23	637-92-3	
2-Hexanone	10.0 U	ug/L	10.0	0.58	1		02/18/21 19:23	591-78-6	

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ANALYTICAL RESULTS

Project: SMO-HANOVER
Pace Project No.: 30405856

Sample: MW-12 Lab ID: 30405856007 Collected: 02/10/21 14:20 Received: 02/11/21 22:30 Matrix: Water

Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
8260B MSV									
Analytical Method: EPA 8260B Pace Analytical Services - Greensburg									
Methylene Chloride	1.0 U	ug/L	1.0	0.64	1		02/18/21 19:23	75-09-2	
4-Methyl-2-pentanone (MIBK)	10.0 U	ug/L	10.0	0.42	1		02/18/21 19:23	108-10-1	
Methyl-tert-butyl ether	1.0 U	ug/L	1.0	0.25	1		02/18/21 19:23	1634-04-4	
Naphthalene	2.0 U	ug/L	2.0	0.82	1		02/18/21 19:23	91-20-3	
Styrene	1.0 U	ug/L	1.0	0.33	1		02/18/21 19:23	100-42-5	
1,1,2,2-Tetrachloroethane	1.0 U	ug/L	1.0	0.47	1		02/18/21 19:23	79-34-5	
Tetrachloroethene	1.0 U	ug/L	1.0	0.39	1		02/18/21 19:23	127-18-4	
Toluene	1.0 U	ug/L	1.0	0.32	1		02/18/21 19:23	108-88-3	
1,2,4-Trichlorobenzene	1.0 U	ug/L	1.0	0.73	1		02/18/21 19:23	120-82-1	
1,1,1-Trichloroethane	1.0 U	ug/L	1.0	0.38	1		02/18/21 19:23	71-55-6	
1,1,2-Trichloroethane	1.0 U	ug/L	1.0	0.33	1		02/18/21 19:23	79-00-5	
Trichloroethene	1.0 U	ug/L	1.0	0.29	1		02/18/21 19:23	79-01-6	
Vinyl chloride	1.0 U	ug/L	1.0	0.29	1		02/18/21 19:23	75-01-4	
Xylene (Total)	3.0 U	ug/L	3.0	1.4	1		02/18/21 19:23	1330-20-7	
m&p-Xylene	2.0 U	ug/L	2.0	0.94	1		02/18/21 19:23	179601-23-1	
o-Xylene	1.0 U	ug/L	1.0	0.41	1		02/18/21 19:23	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	98	%	70-130		1		02/18/21 19:23	460-00-4	
1,2-Dichloroethane-d4 (S)	112	%	70-130		1		02/18/21 19:23	17060-07-0	
Toluene-d8 (S)	101	%	70-130		1		02/18/21 19:23	2037-26-5	
Dibromofluoromethane (S)	98	%	70-130		1		02/18/21 19:23	1868-53-7	

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ANALYTICAL RESULTS

Project: SMO-HANOVER
Pace Project No.: 30405856

Sample:	Lab ID:	Collected:	Received:	Matrix:					
MW-14	30405856008	02/10/21 13:00	02/11/21 22:30	Water					
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8015D TPH Reduced Volume Analytical Method: EPA 8015D Preparation Method: EPA 3510C Pace Analytical Services - Greensburg									
TPH (C10-C28)	1.3	mg/L	0.10	0.069	1	02/17/21 09:09	02/19/21 07:49		1c
Surrogates									
o-Terphenyl (S)	59	%	25-105		1	02/17/21 09:09	02/19/21 07:49	84-15-1	CL
Gasoline Range Organics Analytical Method: EPA 5030/8015B Pace Analytical Services - Greensburg									
TPH (C06-C10)	1260	ug/L	200	98.0	1		02/16/21 20:18		
Surrogates									
4-Bromofluorobenzene (S)	95	%	70-130		1		02/16/21 20:18	460-00-4	
8260B MSV Analytical Method: EPA 8260B Pace Analytical Services - Greensburg									
Acetone	10.0 U	ug/L	10.0	5.6	1		02/18/21 21:39	67-64-1	
tert-Amylmethyl ether	1.0 U	ug/L	1.0	0.27	1		02/18/21 21:39	994-05-8	
Benzene	1.9	ug/L	1.0	0.34	1		02/18/21 21:39	71-43-2	
Bromochloromethane	1.0 U	ug/L	1.0	0.48	1		02/18/21 21:39	74-97-5	
Bromodichloromethane	1.0 U	ug/L	1.0	0.35	1		02/18/21 21:39	75-27-4	
Bromofom	1.0 U	ug/L	1.0	0.56	1		02/18/21 21:39	75-25-2	2c
Bromomethane	1.0 U	ug/L	1.0	0.73	1		02/18/21 21:39	74-83-9	2c
TOTAL BTEX	277	ug/L	6.0	2.4	1		02/18/21 21:39		
2-Butanone (MEK)	7.9J	ug/L	10.0	1.5	1		02/18/21 21:39	78-93-3	
tert-Butyl Alcohol	5.0 U	ug/L	5.0	4.3	1		02/18/21 21:39	75-65-0	2c
Carbon disulfide	1.0 U	ug/L	1.0	0.32	1		02/18/21 21:39	75-15-0	
Carbon tetrachloride	1.0 U	ug/L	1.0	0.44	1		02/18/21 21:39	56-23-5	
Chlorobenzene	1.0 U	ug/L	1.0	0.26	1		02/18/21 21:39	108-90-7	
Chloroethane	1.0 U	ug/L	1.0	0.64	1		02/18/21 21:39	75-00-3	
Chloroform	1.0 U	ug/L	1.0	0.39	1		02/18/21 21:39	67-66-3	
Chloromethane	1.0 U	ug/L	1.0	0.40	1		02/18/21 21:39	74-87-3	
Dibromochloromethane	1.0 U	ug/L	1.0	0.43	1		02/18/21 21:39	124-48-1	2c
1,2-Dichlorobenzene	1.0 U	ug/L	1.0	0.38	1		02/18/21 21:39	95-50-1	
1,3-Dichlorobenzene	1.0 U	ug/L	1.0	0.45	1		02/18/21 21:39	541-73-1	
1,4-Dichlorobenzene	1.0 U	ug/L	1.0	0.48	1		02/18/21 21:39	106-46-7	
1,1-Dichloroethane	1.0 U	ug/L	1.0	0.24	1		02/18/21 21:39	75-34-3	
1,2-Dichloroethane	1.0 U	ug/L	1.0	0.33	1		02/18/21 21:39	107-06-2	
1,2-Dichloroethane (Total)	2.0 U	ug/L	2.0	0.66	1		02/18/21 21:39	540-59-0	
1,1-Dichloroethene	1.0 U	ug/L	1.0	0.24	1		02/18/21 21:39	75-35-4	
cis-1,2-Dichloroethene	1.0 U	ug/L	1.0	0.38	1		02/18/21 21:39	156-59-2	
trans-1,2-Dichloroethene	1.0 U	ug/L	1.0	0.28	1		02/18/21 21:39	156-60-5	
1,2-Dichloropropane	1.0 U	ug/L	1.0	0.28	1		02/18/21 21:39	78-87-5	
cis-1,3-Dichloropropene	1.0 U	ug/L	1.0	0.29	1		02/18/21 21:39	10061-01-5	
trans-1,3-Dichloropropene	1.0 U	ug/L	1.0	0.32	1		02/18/21 21:39	10061-02-6	
Diethyl ether (Ethyl ether)	1.0 U	ug/L	1.0	0.35	1		02/18/21 21:39	60-29-7	
Ethylbenzene	152	ug/L	1.0	0.40	1		02/18/21 21:39	100-41-4	
Ethyl-tert-butyl ether	1.0 U	ug/L	1.0	0.29	1		02/18/21 21:39	637-92-3	
2-Hexanone	10.0 U	ug/L	10.0	0.58	1		02/18/21 21:39	591-78-6	

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ANALYTICAL RESULTS

Project: SMO-HANOVER
Pace Project No.: 30405856

Sample:	Lab ID:	Collected:	Received:	Matrix:					
MW-14	30405856008	02/10/21 13:00	02/11/21 22:30	Water					
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV Analytical Method: EPA 8260B Pace Analytical Services - Greensburg									
Methylene Chloride	1.0 U	ug/L	1.0	0.64	1		02/18/21 21:39	75-09-2	
4-Methyl-2-pentanone (MIBK)	10.0 U	ug/L	10.0	0.42	1		02/18/21 21:39	108-10-1	
Methyl-tert-butyl ether	1.0 U	ug/L	1.0	0.25	1		02/18/21 21:39	1634-04-4	
Naphthalene	60.2	ug/L	2.0	0.82	1		02/18/21 21:39	91-20-3	
Styrene	1.0 U	ug/L	1.0	0.33	1		02/18/21 21:39	100-42-5	
1,1,2,2-Tetrachloroethane	1.0 U	ug/L	1.0	0.47	1		02/18/21 21:39	79-34-5	
Tetrachloroethene	1.0 U	ug/L	1.0	0.39	1		02/18/21 21:39	127-18-4	
Toluene	0.91J	ug/L	1.0	0.32	1		02/18/21 21:39	108-88-3	
1,2,4-Trichlorobenzene	1.0 U	ug/L	1.0	0.73	1		02/18/21 21:39	120-82-1	
1,1,1-Trichloroethane	1.0 U	ug/L	1.0	0.38	1		02/18/21 21:39	71-55-6	
1,1,2-Trichloroethane	1.0 U	ug/L	1.0	0.33	1		02/18/21 21:39	79-00-5	
Trichloroethene	1.0 U	ug/L	1.0	0.29	1		02/18/21 21:39	79-01-6	
Vinyl chloride	1.0 U	ug/L	1.0	0.29	1		02/18/21 21:39	75-01-4	
Xylene (Total)	122	ug/L	3.0	1.4	1		02/18/21 21:39	1330-20-7	
m&p-Xylene	118	ug/L	2.0	0.94	1		02/18/21 21:39	179601-23-1	
o-Xylene	3.9	ug/L	1.0	0.41	1		02/18/21 21:39	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	97	%	70-130		1		02/18/21 21:39	460-00-4	
1,2-Dichloroethane-d4 (S)	114	%	70-130		1		02/18/21 21:39	17060-07-0	
Toluene-d8 (S)	101	%	70-130		1		02/18/21 21:39	2037-26-5	
Dibromofluoromethane (S)	97	%	70-130		1		02/18/21 21:39	1868-53-7	

REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: SMO-HANOVER
Pace Project No.: 30405856

Sample:	Lab ID:	Collected:	Received:	Matrix:					
MW-15	30405856009	02/10/21 14:58	02/11/21 22:30	Water					
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8015D TPH Reduced Volume Analytical Method: EPA 8015D Preparation Method: EPA 3510C Pace Analytical Services - Greensburg									
TPH (C10-C28)	3.9	mg/L	1.1	0.75	10	02/17/21 09:09	02/19/21 08:36		1c
Surrogates									
o-Terphenyl (S)	52	%	25-105		10	02/17/21 09:09	02/19/21 08:36	84-15-1	CL
Gasoline Range Organics Analytical Method: EPA 5030/8015B Pace Analytical Services - Greensburg									
TPH (C06-C10)	1680	ug/L	200	98.0	1		02/16/21 20:36		
Surrogates									
4-Bromofluorobenzene (S)	100	%	70-130		1		02/16/21 20:36	460-00-4	
8260B MSV Analytical Method: EPA 8260B Pace Analytical Services - Greensburg									
Acetone	32.5	ug/L	10.0	5.6	1		02/18/21 22:06	67-64-1	
tert-Amylmethyl ether	3.6	ug/L	1.0	0.27	1		02/18/21 22:06	994-05-8	
Benzene	208	ug/L	1.0	0.34	1		02/18/21 22:06	71-43-2	
Bromochloromethane	1.0 U	ug/L	1.0	0.48	1		02/18/21 22:06	74-97-5	
Bromodichloromethane	1.0 U	ug/L	1.0	0.35	1		02/18/21 22:06	75-27-4	
Bromoform	1.0 U	ug/L	1.0	0.56	1		02/18/21 22:06	75-25-2	2c
Bromomethane	1.0 U	ug/L	1.0	0.73	1		02/18/21 22:06	74-83-9	2c
TOTAL BTEX	612	ug/L	6.0	2.4	1		02/18/21 22:06		
2-Butanone (MEK)	9.2J	ug/L	10.0	1.5	1		02/18/21 22:06	78-93-3	
tert-Butyl Alcohol	32.5	ug/L	5.0	4.3	1		02/18/21 22:06	75-65-0	2c
Carbon disulfide	0.44J	ug/L	1.0	0.32	1		02/18/21 22:06	75-15-0	
Carbon tetrachloride	1.0 U	ug/L	1.0	0.44	1		02/18/21 22:06	56-23-5	
Chlorobenzene	1.0 U	ug/L	1.0	0.26	1		02/18/21 22:06	108-90-7	
Chloroethane	1.0 U	ug/L	1.0	0.64	1		02/18/21 22:06	75-00-3	
Chloroform	1.0 U	ug/L	1.0	0.39	1		02/18/21 22:06	67-66-3	
Chloromethane	1.0 U	ug/L	1.0	0.40	1		02/18/21 22:06	74-87-3	
Dibromochloromethane	1.0 U	ug/L	1.0	0.43	1		02/18/21 22:06	124-48-1	2c
1,2-Dichlorobenzene	1.0 U	ug/L	1.0	0.38	1		02/18/21 22:06	95-50-1	
1,3-Dichlorobenzene	1.0 U	ug/L	1.0	0.45	1		02/18/21 22:06	541-73-1	
1,4-Dichlorobenzene	1.0 U	ug/L	1.0	0.48	1		02/18/21 22:06	106-46-7	
1,1-Dichloroethane	1.0 U	ug/L	1.0	0.24	1		02/18/21 22:06	75-34-3	
1,2-Dichloroethane	1.0 U	ug/L	1.0	0.33	1		02/18/21 22:06	107-06-2	
1,2-Dichloroethane (Total)	2.0 U	ug/L	2.0	0.66	1		02/18/21 22:06	540-59-0	
1,1-Dichloroethene	1.0 U	ug/L	1.0	0.24	1		02/18/21 22:06	75-35-4	
cis-1,2-Dichloroethene	1.0 U	ug/L	1.0	0.38	1		02/18/21 22:06	156-59-2	
trans-1,2-Dichloroethene	1.0 U	ug/L	1.0	0.28	1		02/18/21 22:06	156-60-5	
1,2-Dichloropropane	1.0 U	ug/L	1.0	0.28	1		02/18/21 22:06	78-87-5	
cis-1,3-Dichloropropene	1.0 U	ug/L	1.0	0.29	1		02/18/21 22:06	10061-01-5	
trans-1,3-Dichloropropene	1.0 U	ug/L	1.0	0.32	1		02/18/21 22:06	10061-02-6	
Diethyl ether (Ethyl ether)	1.0 U	ug/L	1.0	0.35	1		02/18/21 22:06	60-29-7	
Ethylbenzene	76.9	ug/L	1.0	0.40	1		02/18/21 22:06	100-41-4	
Ethyl-tert-butyl ether	1.0 U	ug/L	1.0	0.29	1		02/18/21 22:06	637-92-3	
2-Hexanone	10.0 U	ug/L	10.0	0.58	1		02/18/21 22:06	591-78-6	

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Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: SMO-HANOVER
Pace Project No.: 30405856

Sample:	Lab ID:	Collected:	Received:	Matrix:					
MW-15	30405856009	02/10/21 14:58	02/11/21 22:30	Water					
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV Analytical Method: EPA 8260B Pace Analytical Services - Greensburg									
Methylene Chloride	1.0 U	ug/L	1.0	0.64	1		02/18/21 22:06	75-09-2	
4-Methyl-2-pentanone (MIBK)	2.6J	ug/L	10.0	0.42	1		02/18/21 22:06	108-10-1	
Methyl-tert-butyl ether	3.0	ug/L	1.0	0.25	1		02/18/21 22:06	1634-04-4	
Naphthalene	19.8	ug/L	2.0	0.82	1		02/18/21 22:06	91-20-3	
Styrene	1.0 U	ug/L	1.0	0.33	1		02/18/21 22:06	100-42-5	
1,1,2,2-Tetrachloroethane	1.0 U	ug/L	1.0	0.47	1		02/18/21 22:06	79-34-5	
Tetrachloroethene	1.0 U	ug/L	1.0	0.39	1		02/18/21 22:06	127-18-4	
Toluene	70.9	ug/L	1.0	0.32	1		02/18/21 22:06	108-88-3	
1,2,4-Trichlorobenzene	1.0 U	ug/L	1.0	0.73	1		02/18/21 22:06	120-82-1	
1,1,1-Trichloroethane	1.0 U	ug/L	1.0	0.38	1		02/18/21 22:06	71-55-6	
1,1,2-Trichloroethane	1.0 U	ug/L	1.0	0.33	1		02/18/21 22:06	79-00-5	
Trichloroethene	1.0 U	ug/L	1.0	0.29	1		02/18/21 22:06	79-01-6	
Vinyl chloride	1.0 U	ug/L	1.0	0.29	1		02/18/21 22:06	75-01-4	
Xylene (Total)	256	ug/L	3.0	1.4	1		02/18/21 22:06	1330-20-7	
m&p-Xylene	145	ug/L	2.0	0.94	1		02/18/21 22:06	179601-23-1	
o-Xylene	110	ug/L	1.0	0.41	1		02/18/21 22:06	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	99	%	70-130		1		02/18/21 22:06	460-00-4	
1,2-Dichloroethane-d4 (S)	114	%	70-130		1		02/18/21 22:06	17060-07-0	
Toluene-d8 (S)	104	%	70-130		1		02/18/21 22:06	2037-26-5	
Dibromofluoromethane (S)	99	%	70-130		1		02/18/21 22:06	1868-53-7	

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1638 Rosetown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: SMO-HANOVER
Pace Project No.: 30405856

Sample:	Lab ID:	Collected:	Received:	Matrix:					
MW-16	30405856010	02/10/21 09:45	02/11/21 22:30	Water					
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8015D TPH Reduced Volume Analytical Method: EPA 8015D Preparation Method: EPA 3510C Pace Analytical Services - Greensburg									
TPH (C10-C28)	0.22	mg/L	0.099	0.068	1	02/17/21 09:09	02/24/21 00:17		1c
Surrogates									
o-Terphenyl (S)	49	%	25-105		1	02/17/21 09:09	02/24/21 00:17	84-15-1	
Gasoline Range Organics Analytical Method: EPA 5030/8015B Pace Analytical Services - Greensburg									
TPH (C06-C10)	922	ug/L	200	98.0	1		02/16/21 20:54		
Surrogates									
4-Bromofluorobenzene (S)	119	%	70-130		1		02/16/21 20:54	460-00-4	
8260B MSV Analytical Method: EPA 8260B Pace Analytical Services - Greensburg									
Acetone	10.0 U	ug/L	10.0	5.6	1		02/18/21 19:50	67-64-1	
tert-Amylmethyl ether	1.0 U	ug/L	1.0	0.27	1		02/18/21 19:50	994-05-8	
Benzene	1.0 U	ug/L	1.0	0.34	1		02/18/21 19:50	71-43-2	
Bromochloromethane	1.0 U	ug/L	1.0	0.48	1		02/18/21 19:50	74-97-5	
Bromodichloromethane	1.0 U	ug/L	1.0	0.35	1		02/18/21 19:50	75-27-4	
Bromofrom	1.0 U	ug/L	1.0	0.56	1		02/18/21 19:50	75-25-2	2c
Bromomethane	1.0 U	ug/L	1.0	0.73	1		02/18/21 19:50	74-83-9	2c
TOTAL BTEX	6.0 U	ug/L	6.0	2.4	1		02/18/21 19:50		
2-Butanone (MEK)	15.3	ug/L	10.0	1.5	1		02/18/21 19:50	78-93-3	
tert-Butyl Alcohol	5.0 U	ug/L	5.0	4.3	1		02/18/21 19:50	75-65-0	2c
Carbon disulfide	1.0 U	ug/L	1.0	0.32	1		02/18/21 19:50	75-15-0	
Carbon tetrachloride	1.0 U	ug/L	1.0	0.44	1		02/18/21 19:50	56-23-5	
Chlorobenzene	1.0 U	ug/L	1.0	0.26	1		02/18/21 19:50	108-90-7	
Chloroethane	1.0 U	ug/L	1.0	0.64	1		02/18/21 19:50	75-00-3	
Chloroform	1.0 U	ug/L	1.0	0.39	1		02/18/21 19:50	67-66-3	
Chloromethane	1.0 U	ug/L	1.0	0.40	1		02/18/21 19:50	74-87-3	
Dibromochloromethane	1.0 U	ug/L	1.0	0.43	1		02/18/21 19:50	124-48-1	2c
1,2-Dichlorobenzene	1.0 U	ug/L	1.0	0.38	1		02/18/21 19:50	95-50-1	
1,3-Dichlorobenzene	1.0 U	ug/L	1.0	0.45	1		02/18/21 19:50	541-73-1	
1,4-Dichlorobenzene	1.0 U	ug/L	1.0	0.48	1		02/18/21 19:50	106-46-7	
1,1-Dichloroethane	1.0 U	ug/L	1.0	0.24	1		02/18/21 19:50	75-34-3	
1,2-Dichloroethane	1.0 U	ug/L	1.0	0.33	1		02/18/21 19:50	107-06-2	
1,2-Dichloroethane (Total)	2.0 U	ug/L	2.0	0.66	1		02/18/21 19:50	540-59-0	
1,1-Dichloroethene	1.0 U	ug/L	1.0	0.24	1		02/18/21 19:50	75-35-4	
cis-1,2-Dichloroethene	1.0 U	ug/L	1.0	0.38	1		02/18/21 19:50	156-59-2	
trans-1,2-Dichloroethene	1.0 U	ug/L	1.0	0.28	1		02/18/21 19:50	156-60-5	
1,2-Dichloropropane	1.0 U	ug/L	1.0	0.28	1		02/18/21 19:50	78-87-5	
cis-1,3-Dichloropropene	1.0 U	ug/L	1.0	0.29	1		02/18/21 19:50	10061-01-5	
trans-1,3-Dichloropropene	1.0 U	ug/L	1.0	0.32	1		02/18/21 19:50	10061-02-6	
Diethyl ether (Ethyl ether)	1.0 U	ug/L	1.0	0.35	1		02/18/21 19:50	60-29-7	
Ethylbenzene	1.0 U	ug/L	1.0	0.40	1		02/18/21 19:50	100-41-4	
Ethyl-tert-butyl ether	1.0 U	ug/L	1.0	0.29	1		02/18/21 19:50	637-92-3	
2-Hexanone	10.0 U	ug/L	10.0	0.58	1		02/18/21 19:50	591-78-6	

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1638 Rosetown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: SMO-HANOVER
Pace Project No.: 30405856

Sample:	Lab ID:	Collected:	Received:	Matrix:					
MW-16	30405856010	02/10/21 09:45	02/11/21 22:30	Water					
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV Analytical Method: EPA 8260B Pace Analytical Services - Greensburg									
Methylene Chloride	1.0 U	ug/L	1.0	0.64	1		02/18/21 19:50	75-09-2	
4-Methyl-2-pentanone (MIBK)	10.0 U	ug/L	10.0	0.42	1		02/18/21 19:50	108-10-1	
Methyl-tert-butyl ether	1.0 U	ug/L	1.0	0.25	1		02/18/21 19:50	1634-04-4	
Naphthalene	2.0 U	ug/L	2.0	0.82	1		02/18/21 19:50	91-20-3	
Styrene	1.0 U	ug/L	1.0	0.33	1		02/18/21 19:50	100-42-5	
1,1,2,2-Tetrachloroethane	1.0 U	ug/L	1.0	0.47	1		02/18/21 19:50	79-34-5	
Tetrachloroethene	1.0 U	ug/L	1.0	0.39	1		02/18/21 19:50	127-18-4	
Toluene	1.0 U	ug/L	1.0	0.32	1		02/18/21 19:50	108-88-3	
1,2,4-Trichlorobenzene	1.0 U	ug/L	1.0	0.73	1		02/18/21 19:50	120-82-1	
1,1,1-Trichloroethane	1.0 U	ug/L	1.0	0.38	1		02/18/21 19:50	71-55-6	
1,1,2-Trichloroethane	1.0 U	ug/L	1.0	0.33	1		02/18/21 19:50	79-00-5	
Trichloroethene	1.0 U	ug/L	1.0	0.29	1		02/18/21 19:50	79-01-6	
Vinyl chloride	1.0 U	ug/L	1.0	0.29	1		02/18/21 19:50	75-01-4	
Xylene (Total)	3.0 U	ug/L	3.0	1.4	1		02/18/21 19:50	1330-20-7	
m&p-Xylene	2.0 U	ug/L	2.0	0.94	1		02/18/21 19:50	179601-23-1	
o-Xylene	1.0 U	ug/L	1.0	0.41	1		02/18/21 19:50	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	101	%	70-130		1		02/18/21 19:50	460-00-4	
1,2-Dichloroethane-d4 (S)	111	%	70-130		1		02/18/21 19:50	17060-07-0	
Toluene-d8 (S)	106	%	70-130		1		02/18/21 19:50	2037-26-5	
Dibromofluoromethane (S)	96	%	70-130		1		02/18/21 19:50	1868-53-7	

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ANALYTICAL RESULTS

Project: SMO-HANOVER
Pace Project No.: 30405856

Sample:	Lab ID:	Collected:	Received:	Matrix:					
TRIP BLANK	30405856012	02/10/21 00:01	02/16/21 22:00	Water					
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Analytical Method: EPA 8260C Pace Analytical Services - Greensburg									
Acetone	10.0 U	ug/L	10.0	5.6	1		02/24/21 12:46	67-64-1	
Benzene	1.0 U	ug/L	1.0	0.34	1		02/24/21 12:46	71-43-2	
Bromochloromethane	1.0 U	ug/L	1.0	0.48	1		02/24/21 12:46	74-97-5	
Bromodichloromethane	1.0 U	ug/L	1.0	0.35	1		02/24/21 12:46	75-27-4	2c
Bromoform	1.0 U	ug/L	1.0	0.56	1		02/24/21 12:46	75-25-2	
Bromomethane	1.0 U	ug/L	1.0	0.73	1		02/24/21 12:46	74-83-9	2c
TOTAL BTEX	6.0 U	ug/L	6.0	2.4	1		02/24/21 12:46		
2-Butanone (MEK)	10.0 U	ug/L	10.0	1.5	1		02/24/21 12:46	78-93-3	
Carbon disulfide	1.0 U	ug/L	1.0	0.32	1		02/24/21 12:46	75-15-0	
Carbon tetrachloride	1.0 U	ug/L	1.0	0.44	1		02/24/21 12:46	56-23-5	
Chlorobenzene	1.0 U	ug/L	1.0	0.26	1		02/24/21 12:46	108-90-7	
Chloroethane	1.0 U	ug/L	1.0	0.64	1		02/24/21 12:46	75-00-3	
Chloroform	1.0 U	ug/L	1.0	0.39	1		02/24/21 12:46	67-66-3	
Chloromethane	1.0 U	ug/L	1.0	0.40	1		02/24/21 12:46	74-87-3	2c
Dibromochloromethane	1.0 U	ug/L	1.0	0.43	1		02/24/21 12:46	124-48-1	2c
1,2-Dichlorobenzene	1.0 U	ug/L	1.0	0.38	1		02/24/21 12:46	95-50-1	
1,3-Dichlorobenzene	1.0 U	ug/L	1.0	0.45	1		02/24/21 12:46	541-73-1	
1,4-Dichlorobenzene	1.0 U	ug/L	1.0	0.48	1		02/24/21 12:46	106-46-7	
1,1-Dichloroethane	1.0 U	ug/L	1.0	0.24	1		02/24/21 12:46	75-34-3	
1,2-Dichloroethane	1.0 U	ug/L	1.0	0.33	1		02/24/21 12:46	107-06-2	
1,2-Dichloroethane (Total)	2.0 U	ug/L	2.0	0.66	1		02/24/21 12:46	540-59-0	
1,1-Dichloroethene	1.0 U	ug/L	1.0	0.24	1		02/24/21 12:46	75-35-4	
cis-1,2-Dichloroethene	1.0 U	ug/L	1.0	0.38	1		02/24/21 12:46	156-59-2	
trans-1,2-Dichloroethene	1.0 U	ug/L	1.0	0.28	1		02/24/21 12:46	156-60-5	
1,2-Dichloropropane	1.0 U	ug/L	1.0	0.28	1		02/24/21 12:46	78-87-5	
cis-1,3-Dichloropropene	1.0 U	ug/L	1.0	0.29	1		02/24/21 12:46	10061-01-5	
trans-1,3-Dichloropropene	1.0 U	ug/L	1.0	0.32	1		02/24/21 12:46	10061-02-6	
Ethylbenzene	1.0 U	ug/L	1.0	0.40	1		02/24/21 12:46	100-41-4	
2-Hexanone	10.0 U	ug/L	10.0	0.58	1		02/24/21 12:46	591-78-6	
Isopropylbenzene (Cumene)	1.0 U	ug/L	1.0	0.47	1		02/24/21 12:46	98-82-8	
Methylene Chloride	1.0 U	ug/L	1.0	0.64	1		02/24/21 12:46	75-09-2	
4-Methyl-2-pentanone (MIBK)	10.0 U	ug/L	10.0	0.42	1		02/24/21 12:46	108-10-1	
Methyl-tert-butyl ether	1.0 U	ug/L	1.0	0.25	1		02/24/21 12:46	1634-04-4	
Naphthalene	2.0 U	ug/L	2.0	0.82	1		02/24/21 12:46	91-20-3	
Styrene	1.0 U	ug/L	1.0	0.33	1		02/24/21 12:46	100-42-5	
1,1,2,2-Tetrachloroethane	1.0 U	ug/L	1.0	0.47	1		02/24/21 12:46	79-34-5	
Tetrachloroethene	1.0 U	ug/L	1.0	0.39	1		02/24/21 12:46	127-18-4	
Toluene	1.0 U	ug/L	1.0	0.32	1		02/24/21 12:46	108-88-3	
1,2,4-Trichlorobenzene	1.0 U	ug/L	1.0	0.73	1		02/24/21 12:46	120-82-1	
1,1,1-Trichloroethane	1.0 U	ug/L	1.0	0.38	1		02/24/21 12:46	71-55-6	
1,1,2-Trichloroethane	1.0 U	ug/L	1.0	0.33	1		02/24/21 12:46	79-00-5	
Trichloroethene	1.0 U	ug/L	1.0	0.29	1		02/24/21 12:46	79-01-6	
1,2,4-Trimethylbenzene	1.0 U	ug/L	1.0	0.63	1		02/24/21 12:46	95-63-6	
1,3,5-Trimethylbenzene	1.0 U	ug/L	1.0	0.45	1		02/24/21 12:46	108-67-8	
Vinyl chloride	1.0 U	ug/L	1.0	0.29	1		02/24/21 12:46	75-01-4	

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(724)850-5600

ANALYTICAL RESULTS

Project: SMO-HANOVER
Pace Project No.: 30405856

Sample:	Lab ID:	Collected:	Received:	Matrix:					
TRIP BLANK	30405856012	02/10/21 00:01	02/16/21 22:00	Water					
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Analytical Method: EPA 8260C Pace Analytical Services - Greensburg									
Xylene (Total)	3.0 U	ug/L	3.0	1.4	1		02/24/21 12:46	1330-20-7	
m&p-Xylene	2.0 U	ug/L	2.0	0.94	1		02/24/21 12:46	179601-23-1	
o-Xylene	1.0 U	ug/L	1.0	0.41	1		02/24/21 12:46	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	101	%	70-130		1		02/24/21 12:46	460-00-4	
1,2-Dichloroethane-d4 (S)	104	%	70-130		1		02/24/21 12:46	17060-07-0	
Toluene-d8 (S)	97	%	70-130		1		02/24/21 12:46	2037-26-5	
Dibromofluoromethane (S)	105	%	70-130		1		02/24/21 12:46	1868-53-7	

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QUALITY CONTROL DATA

Project: SMO-HANOVER
Pace Project No.: 30405856

QC Batch: 435148 Analysis Method: EPA 5030/8015B
QC Batch Method: EPA 5030/8015B Analysis Description: Gasoline Range Organics
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30405856001, 30405856002, 30405856003, 30405856004, 30405856005, 30405856006, 30405856007, 30405856008, 30405856009, 30405856010

METHOD BLANK: 2100893 Matrix: Water
Associated Lab Samples: 30405856001, 30405856002, 30405856003, 30405856004, 30405856005, 30405856006, 30405856007, 30405856008, 30405856009, 30405856010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
TPH (C06-C10)	ug/L	200 U	200	98.0	02/16/21 16:44	
4-Bromofluorobenzene (S)	%	95	70-130		02/16/21 16:44	

LABORATORY CONTROL SAMPLE: 2100894

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
TPH (C06-C10)	ug/L	1000	832	83	55-125	
4-Bromofluorobenzene (S)	%			89	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2100895 2100896

Parameter	Units	30405856001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
TPH (C06-C10)	ug/L	200 U	1000	1000	823	811	82	81	42-123	1	25	
4-Bromofluorobenzene (S)	%						90	91	70-130			

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QUALITY CONTROL DATA

Project: SMO-HANOVER
Pace Project No.: 30405856

QC Batch: 197514 Analysis Method: EPA 524.2
QC Batch Method: EPA 524.2 Analysis Description: 524.2 MSV
Laboratory: Pace Analytical Services - Long Island
Associated Lab Samples: 30405856011

METHOD BLANK: 969879 Matrix: Water
Associated Lab Samples: 30405856011

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	0.50 U	0.50	0.14	02/22/21 15:56	
1,1,2,2-Tetrachloroethane	ug/L	0.50 U	0.50	0.24	02/22/21 15:56	
1,1,2-Trichloroethane	ug/L	0.50 U	0.50	0.21	02/22/21 15:56	
1,1-Dichloroethane	ug/L	0.50 U	0.50	0.19	02/22/21 15:56	
1,1-Dichloroethene	ug/L	0.50 U	0.50	0.16	02/22/21 15:56	
1,2,4-Trichlorobenzene	ug/L	0.50 U	0.50	0.14	02/22/21 15:56	
1,2-Dichlorobenzene	ug/L	0.50 U	0.50	0.20	02/22/21 15:56	
1,2-Dichloroethane	ug/L	0.50 U	0.50	0.19	02/22/21 15:56	
1,3-Dichlorobenzene	ug/L	0.50 U	0.50	0.24	02/22/21 15:56	
1,4-Dichlorobenzene	ug/L	0.50 U	0.50	0.14	02/22/21 15:56	
2-Butanone (MEK)	ug/L	2.0 U	2.0	0.81	02/22/21 15:56	N3
2-Hexanone	ug/L	2.0 U	2.0	1.2	02/22/21 15:56	N3
4-Methyl-2-pentanone (MIBK)	ug/L	2.0 U	2.0	0.83	02/22/21 15:56	N3
Acetone	ug/L	2.0 U	2.0	1.3	02/22/21 15:56	N3
Benzene	ug/L	0.50 U	0.50	0.15	02/22/21 15:56	
Bromochloromethane	ug/L	0.50 U	0.50	0.24	02/22/21 15:56	
Bromodichloromethane	ug/L	0.50 U	0.50	0.25	02/22/21 15:56	
Bromoform	ug/L	0.50 U	0.50	0.30	02/22/21 15:56	
Bromomethane	ug/L	0.50 U	0.50	0.43	02/22/21 15:56	
Carbon tetrachloride	ug/L	0.50 U	0.50	0.26	02/22/21 15:56	
Chlorobenzene	ug/L	0.50 U	0.50	0.17	02/22/21 15:56	
Chloroethane	ug/L	0.50 U	0.50	0.34	02/22/21 15:56	
Chloroform	ug/L	0.50 U	0.50	0.21	02/22/21 15:56	
Chloromethane	ug/L	0.50 U	0.50	0.38	02/22/21 15:56	
cis-1,2-Dichloroethene	ug/L	0.50 U	0.50	0.27	02/22/21 15:56	
cis-1,3-Dichloropropene	ug/L	0.50 U	0.50	0.21	02/22/21 15:56	
Dibromochloromethane	ug/L	0.50 U	0.50	0.23	02/22/21 15:56	
Dichlorodifluoromethane	ug/L	0.50 U	0.50	0.21	02/22/21 15:56	
Ethylbenzene	ug/L	0.50 U	0.50	0.22	02/22/21 15:56	
Isopropylbenzene (Cumene)	ug/L	0.50 U	0.50	0.14	02/22/21 15:56	
m&p-Xylene	ug/L	0.50 U	0.50	0.20	02/22/21 15:56	
Methyl-tert-butyl ether	ug/L	0.50 U	0.50	0.20	02/22/21 15:56	
Methylene Chloride	ug/L	0.50 U	0.50	0.31	02/22/21 15:56	
Naphthalene	ug/L	0.50 U	0.50	0.32	02/22/21 15:56	
o-Xylene	ug/L	0.50 U	0.50	0.21	02/22/21 15:56	
Styrene	ug/L	0.50 U	0.50	0.14	02/22/21 15:56	
tert-Butyl Alcohol	ug/L	10.0 U	10.0	4.8	02/22/21 15:56	
Tetrachloroethene	ug/L	0.50 U	0.50	0.15	02/22/21 15:56	
Toluene	ug/L	0.50 U	0.50	0.17	02/22/21 15:56	
trans-1,2-Dichloroethene	ug/L	0.50 U	0.50	0.28	02/22/21 15:56	

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QUALITY CONTROL DATA

Project: SMO-HANOVER
Pace Project No.: 30405856

METHOD BLANK: 969879 Matrix: Water
Associated Lab Samples: 30405856011

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
trans-1,3-Dichloropropene	ug/L	0.50 U	0.50	0.13	02/22/21 15:56	
Trichloroethene	ug/L	0.50 U	0.50	0.36	02/22/21 15:56	
Vinyl chloride	ug/L	0.50 U	0.50	0.16	02/22/21 15:56	
Xylene (Total)	ug/L	0.50 U	0.50	0.071	02/22/21 15:56	
1,2-Dichlorobenzene-d4 (S)	%	96	70-130		02/22/21 15:56	
4-Bromofluorobenzene (S)	%	99	70-130		02/22/21 15:56	

LABORATORY CONTROL SAMPLE: 969880

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	10	9.4	94	70-130	
1,1,2,2-Tetrachloroethane	ug/L	10	10.4	104	70-130	
1,1,2-Trichloroethane	ug/L	10	10.2	102	70-130	
1,1-Dichloroethane	ug/L	10	9.7	97	70-130	
1,1-Dichloroethene	ug/L	10	9.3	93	70-130	
1,2,4-Trichlorobenzene	ug/L	10	9.1	91	70-130	
1,2-Dichlorobenzene	ug/L	10	9.3	93	70-130	
1,2-Dichloroethane	ug/L	10	10.2	102	70-130	
1,3-Dichlorobenzene	ug/L	10	9.2	92	70-130	
1,4-Dichlorobenzene	ug/L	10	9.2	92	70-130	
2-Butanone (MEK)	ug/L	10	10.2	102	70-130 N3	
2-Hexanone	ug/L	10	11.0	110	70-130 N3	
4-Methyl-2-pentanone (MIBK)	ug/L	10	10.8	108	70-130 N3	
Acetone	ug/L	10	10.0	100	70-130 N3	
Benzene	ug/L	10	10.0	100	70-130	
Bromochloromethane	ug/L	10	9.1	91	70-130	
Bromodichloromethane	ug/L	10	9.4	94	70-130	
Bromoform	ug/L	10	8.2	82	70-130	
Bromomethane	ug/L	10	8.6	86	70-130	
Carbon tetrachloride	ug/L	10	8.5	85	70-130	
Chlorobenzene	ug/L	10	9.4	94	70-130	
Chloroethane	ug/L	10	10.7	107	70-130	
Chloroform	ug/L	10	10.2	102	70-130	
Chloromethane	ug/L	10	8.1	81	70-130	
cis-1,2-Dichloroethene	ug/L	10	9.6	96	70-130	
cis-1,3-Dichloropropene	ug/L	10	10.1	101	70-130	
Dibromochloromethane	ug/L	10	8.6	86	70-130	
Dichlorodifluoromethane	ug/L	10	8.5	85	70-130	
Ethylbenzene	ug/L	10	9.5	95	70-130	
Isopropylbenzene (Cumene)	ug/L	10	9.5	95	70-130	
m&p-Xylene	ug/L	20	19.3	96	70-130	
Methyl-tert-butyl ether	ug/L	10	12.8	128	70-130	
Methylene Chloride	ug/L	10	9.1	91	70-130	
Naphthalene	ug/L	10	9.4	94	70-130	

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(724)850-5600

QUALITY CONTROL DATA

Project: SMO-HANOVER
Pace Project No.: 30405856

LABORATORY CONTROL SAMPLE: 969880

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
o-Xylene	ug/L	10	9.5	95	70-130	
Styrene	ug/L	10	10.1	101	70-130	
tert-Butyl Alcohol	ug/L	50	54.2	108	70-130	
Tetrachloroethene	ug/L	10	8.8	88	70-130	
Toluene	ug/L	10	9.4	94	70-130	
trans-1,2-Dichloroethene	ug/L	10	9.5	95	70-130	
trans-1,3-Dichloropropene	ug/L	10	10.1	101	70-130	
Trichloroethene	ug/L	10	9.2	92	70-130	
Vinyl chloride	ug/L	10	9.2	92	70-130	
Xylene (Total)	ug/L	30	28.8	96	70-130	
1,2-Dichlorobenzene-d4 (S)	%				96	70-130
4-Bromofluorobenzene (S)	%				100	70-130

SAMPLE DUPLICATE: 970325

Parameter	Units	70162028006 Result	Dup Result	RPD	Max RPD	Qualifiers
1,1,1-Trichloroethane	ug/L	<0.50	0.50 U			20
1,1,2,2-Tetrachloroethane	ug/L	<0.50	0.50 U			20
1,1,2-Trichloroethane	ug/L	<0.50	0.50 U			20
1,1-Dichloroethane	ug/L	<0.50	0.50 U			20
1,1-Dichloroethene	ug/L	<0.50	0.50 U			20
1,2,4-Trichlorobenzene	ug/L	<0.50	0.50 U			20
1,2-Dichlorobenzene	ug/L	<0.50	0.50 U			20
1,2-Dichloroethane	ug/L	<0.50	0.50 U			20
1,3-Dichlorobenzene	ug/L	<0.50	0.50 U			20
1,4-Dichlorobenzene	ug/L	<0.50	0.50 U			20
2-Butanone (MEK)	ug/L		2.0 U			N3
2-Hexanone	ug/L		2.0 U			N3
4-Methyl-2-pentanone (MIBK)	ug/L		2.0 U			N3
Acetone	ug/L		8.7			N3
Benzene	ug/L	<0.50	0.50 U			20
Bromochloromethane	ug/L	<0.50	0.50 U			20
Bromodichloromethane	ug/L	<0.50	0.50 U			20
Bromoform	ug/L	<0.50	0.50 U			20
Bromomethane	ug/L	<0.50	0.50 U			20
Carbon tetrachloride	ug/L	<0.50	0.50 U			20
Chlorobenzene	ug/L	<0.50	0.50 U			20
Chloroethane	ug/L	<0.50	0.50 U			20
Chloroform	ug/L	0.62	0.61		1	20
Chloromethane	ug/L	<0.50	0.50 U			20
cis-1,2-Dichloroethene	ug/L	<0.50	0.50 U			20
cis-1,3-Dichloropropene	ug/L	<0.50	0.50 U			20
Dibromochloromethane	ug/L	<0.50	0.50 U			20
Dichlorodifluoromethane	ug/L	<0.50	0.50 U			20
Ethylbenzene	ug/L	<0.50	0.50 U			20

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QUALITY CONTROL DATA

Project: SMO-HANOVER
Pace Project No.: 30405856

SAMPLE DUPLICATE: 970325

Parameter	Units	70162028006 Result	Dup Result	RPD	Max RPD	Qualifiers
Isopropylbenzene (Cumene)	ug/L	<0.50	0.50 U		20	
m&p-Xylene	ug/L	<0.50	0.50 U		20	
Methyl-tert-butyl ether	ug/L	<0.50	0.50 U		20	
Methylene Chloride	ug/L	<0.50	0.50 U		20	
Naphthalene	ug/L	<0.50	0.50 U		20	
o-Xylene	ug/L	<0.50	0.50 U		20	
Styrene	ug/L	<0.50	0.50 U		20	
tert-Butyl Alcohol	ug/L		10.0 U			
Tetrachloroethene	ug/L	<0.50	0.50 U		20	
Toluene	ug/L	<0.50	0.50 U		20	
trans-1,2-Dichloroethene	ug/L	<0.50	0.50 U		20	
trans-1,3-Dichloropropene	ug/L	<0.50	0.50 U		20	
Trichloroethene	ug/L	<0.50	0.50 U		20	
Vinyl chloride	ug/L	<0.50	0.50 U		20	
Xylene (Total)	ug/L		0.50 U			
1,2-Dichlorobenzene-d4 (S)	%	88	90		20	
4-Bromofluorobenzene (S)	%	100	104		20	

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QUALITY CONTROL DATA

Project: SMO-HANOVER
Pace Project No.: 30405856

QC Batch: 435531 Analysis Method: EPA 8260B
QC Batch Method: EPA 8260B Analysis Description: 8260B MSV
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30405856001, 30405856002, 30405856003, 30405856004, 30405856005, 30405856006, 30405856007, 30405856008, 30405856009, 30405856010

METHOD BLANK: 2102512 Matrix: Water
Associated Lab Samples: 30405856001, 30405856002, 30405856003, 30405856004, 30405856005, 30405856006, 30405856007, 30405856008, 30405856009, 30405856010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	1.0 U	1.0	0.38	02/18/21 13:29	
1,1,2,2-Tetrachloroethane	ug/L	1.0 U	1.0	0.47	02/18/21 13:29	
1,1,2-Trichloroethane	ug/L	1.0 U	1.0	0.33	02/18/21 13:29	
1,1-Dichloroethane	ug/L	1.0 U	1.0	0.24	02/18/21 13:29	
1,1-Dichloroethene	ug/L	1.0 U	1.0	0.24	02/18/21 13:29	
1,2,4-Trichlorobenzene	ug/L	1.0 U	1.0	0.73	02/18/21 13:29	
1,2-Dichlorobenzene	ug/L	1.0 U	1.0	0.38	02/18/21 13:29	
1,2-Dichloroethane	ug/L	1.0 U	1.0	0.33	02/18/21 13:29	
1,2-Dichloroethene (Total)	ug/L	2.0 U	2.0	0.66	02/18/21 13:29	
1,2-Dichloropropane	ug/L	1.0 U	1.0	0.28	02/18/21 13:29	
1,3-Dichlorobenzene	ug/L	1.0 U	1.0	0.45	02/18/21 13:29	
1,4-Dichlorobenzene	ug/L	1.0 U	1.0	0.48	02/18/21 13:29	
2-Butanone (MEK)	ug/L	10.0 U	10.0	1.5	02/18/21 13:29	
2-Hexanone	ug/L	10.0 U	10.0	0.58	02/18/21 13:29	
4-Methyl-2-pentanone (MIBK)	ug/L	10.0 U	10.0	0.42	02/18/21 13:29	
Acetone	ug/L	10.0 U	10.0	5.6	02/18/21 13:29	
Benzene	ug/L	1.0 U	1.0	0.34	02/18/21 13:29	
Bromochloromethane	ug/L	1.0 U	1.0	0.48	02/18/21 13:29	
Bromodichloromethane	ug/L	1.0 U	1.0	0.35	02/18/21 13:29	
Bromoform	ug/L	1.0 U	1.0	0.56	02/18/21 13:29	2c
Bromomethane	ug/L	1.0 U	1.0	0.73	02/18/21 13:29	2c
Carbon disulfide	ug/L	1.0 U	1.0	0.32	02/18/21 13:29	
Carbon tetrachloride	ug/L	1.0 U	1.0	0.44	02/18/21 13:29	
Chlorobenzene	ug/L	1.0 U	1.0	0.26	02/18/21 13:29	
Chloroethane	ug/L	1.0 U	1.0	0.64	02/18/21 13:29	
Chloroform	ug/L	1.0 U	1.0	0.39	02/18/21 13:29	
Chloromethane	ug/L	1.0 U	1.0	0.40	02/18/21 13:29	
cis-1,2-Dichloroethene	ug/L	1.0 U	1.0	0.38	02/18/21 13:29	
cis-1,3-Dichloropropene	ug/L	1.0 U	1.0	0.29	02/18/21 13:29	
Dibromochloromethane	ug/L	1.0 U	1.0	0.43	02/18/21 13:29	2c
Diethyl ether (Ethyl ether)	ug/L	1.0 U	1.0	0.35	02/18/21 13:29	
Ethyl-tert-butyl ether	ug/L	1.0 U	1.0	0.29	02/18/21 13:29	
Ethylbenzene	ug/L	1.0 U	1.0	0.40	02/18/21 13:29	
m&p-Xylene	ug/L	2.0 U	2.0	0.94	02/18/21 13:29	
Methyl-tert-butyl ether	ug/L	1.0 U	1.0	0.25	02/18/21 13:29	
Methylene Chloride	ug/L	1.0 U	1.0	0.64	02/18/21 13:29	
Naphthalene	ug/L	2.0 U	2.0	0.82	02/18/21 13:29	
o-Xylene	ug/L	1.0 U	1.0	0.41	02/18/21 13:29	
Styrene	ug/L	1.0 U	1.0	0.33	02/18/21 13:29	

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Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: SMO-HANOVER
Pace Project No.: 30405856

METHOD BLANK: 2102512 Matrix: Water
Associated Lab Samples: 30405856001, 30405856002, 30405856003, 30405856004, 30405856005, 30405856006, 30405856007, 30405856008, 30405856009, 30405856010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
tert-Amylmethyl ether	ug/L	1.0 U	1.0	0.27	02/18/21 13:29	
tert-Butyl Alcohol	ug/L	5.0 U	5.0	4.3	02/18/21 13:29	2c
Tetrachloroethene	ug/L	1.0 U	1.0	0.39	02/18/21 13:29	
Toluene	ug/L	1.0 U	1.0	0.32	02/18/21 13:29	
TOTAL BTEX	ug/L	6.0 U	6.0	2.4	02/18/21 13:29	
trans-1,2-Dichloroethene	ug/L	1.0 U	1.0	0.28	02/18/21 13:29	
trans-1,3-Dichloropropene	ug/L	1.0 U	1.0	0.32	02/18/21 13:29	
Trichloroethene	ug/L	1.0 U	1.0	0.29	02/18/21 13:29	
Vinyl chloride	ug/L	1.0 U	1.0	0.29	02/18/21 13:29	
Xylene (Total)	ug/L	3.0 U	3.0	1.4	02/18/21 13:29	
1,2-Dichloroethane-d4 (S)	%	106	70-130		02/18/21 13:29	
4-Bromofluorobenzene (S)	%	98	70-130		02/18/21 13:29	
Dibromofluoromethane (S)	%	101	70-130		02/18/21 13:29	
Toluene-d8 (S)	%	104	70-130		02/18/21 13:29	

LABORATORY CONTROL SAMPLE: 2102513

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	22.4	112	70-130	
1,1,2,2-Tetrachloroethane	ug/L	20	23.9	120	70-130	
1,1,2-Trichloroethane	ug/L	20	22.3	111	70-130	
1,1-Dichloroethane	ug/L	20	23.1	116	70-130	
1,1-Dichloroethene	ug/L	20	21.6	108	70-130	
1,2,4-Trichlorobenzene	ug/L	20	19.5	98	70-130	
1,2-Dichlorobenzene	ug/L	20	20.5	103	70-130	
1,2-Dichloroethane	ug/L	20	20.7	103	70-130	
1,2-Dichloroethene (Total)	ug/L	40	45.4	113	70-130	
1,2-Dichloropropane	ug/L	20	23.7	119	70-130	
1,3-Dichlorobenzene	ug/L	20	20.7	104	70-130	
1,4-Dichlorobenzene	ug/L	20	19.5	98	70-130	
2-Butanone (MEK)	ug/L	20	20.1	100	70-130	
2-Hexanone	ug/L	20	24.3	122	70-130	
4-Methyl-2-pentanone (MIBK)	ug/L	20	22.6	113	70-130	
Acetone	ug/L	20	21.7	109	67-173	
Benzene	ug/L	20	22.7	114	70-130	
Bromochloromethane	ug/L	20	18.9	94	70-130	
Bromodichloromethane	ug/L	20	22.6	113	70-130	
Bromoform	ug/L	20	21.7	109	63-119 2c	
Bromomethane	ug/L	20	14.5	73	24-159 2c	
Carbon disulfide	ug/L	20	18.2	91	57-132	
Carbon tetrachloride	ug/L	20	21.6	108	70-130	
Chlorobenzene	ug/L	20	21.6	108	70-130	
Chloroethane	ug/L	20	20.2	101	62-145	

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(724)850-5600

QUALITY CONTROL DATA

Project: SMO-HANOVER
Pace Project No.: 30405856

LABORATORY CONTROL SAMPLE: 2102513

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloroform	ug/L	20	20.4	102	70-130	
Chloromethane	ug/L	20	20.8	104	66-140	
cis-1,2-Dichloroethene	ug/L	20	22.2	111	70-130	
cis-1,3-Dichloropropene	ug/L	20	21.2	106	70-130	
Dibromochloromethane	ug/L	20	20.9	104	70-130 2c	
Diethyl ether (Ethyl ether)	ug/L	20	18.6	93	53-147	
Ethyl-tert-butyl ether	ug/L	20	20.4	102	69-123	
Ethylbenzene	ug/L	20	22.0	110	70-130	
m&p-Xylene	ug/L	40	44.0	110	70-130	
Methyl-tert-butyl ether	ug/L	20	19.8	99	70-130	
Methylene Chloride	ug/L	20	23.8	119	70-130	
Naphthalene	ug/L	20	21.1	106	55-160	
o-Xylene	ug/L	20	21.6	108	70-130	
Styrene	ug/L	20	22.5	112	70-130	
tert-Amylmethyl ether	ug/L	20	19.5	98	70-130	
tert-Butyl Alcohol	ug/L	100	101	101	44-175 2c	
Tetrachloroethene	ug/L	20	18.5	92	70-130	
Toluene	ug/L	20	21.6	108	70-130	
TOTAL BTEX	ug/L	120	132	110	70-130	
trans-1,2-Dichloroethene	ug/L	20	23.2	116	70-130	
trans-1,3-Dichloropropene	ug/L	20	22.3	111	70-130	
Trichloroethene	ug/L	20	19.6	98	70-130	
Vinyl chloride	ug/L	20	21.7	108	70-130	
Xylene (Total)	ug/L	60	65.5	109	70-130	
1,2-Dichloroethane-d4 (S)	%				99	70-130
4-Bromofluorobenzene (S)	%				98	70-130
Dibromofluoromethane (S)	%				97	70-130
Toluene-d8 (S)	%				108	70-130

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2102857 2102858

Parameter	Units	30405856002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Qual
1,1,1-Trichloroethane	ug/L	1.0 U	20	20	23.7	25.0	118	125	55-146	6	30
1,1,2,2-Tetrachloroethane	ug/L	1.0 U	20	20	22.5	22.6	112	113	55-118	1	30
1,1,2-Trichloroethane	ug/L	1.0 U	20	20	20.6	20.2	103	101	61-122	2	30
1,1-Dichloroethane	ug/L	1.0 U	20	20	22.8	22.4	114	112	59-130	2	30
1,1-Dichloroethene	ug/L	1.0 U	20	20	23.9	24.3	119	122	52-119	2	30 MH
1,2,4-Trichlorobenzene	ug/L	1.0 U	20	20	17.3	18.5	86	92	38-146	7	30
1,2-Dichlorobenzene	ug/L	1.0 U	20	20	19.2	19.4	96	97	58-126	1	30
1,2-Dichloroethane	ug/L	1.0 U	20	20	22.1	21.5	111	107	49-135	3	30
1,2-Dichloroethene (Total)	ug/L	2.0 U	40	40	44.0	43.1	110	108	61-119	2	30
1,2-Dichloropropane	ug/L	1.0 U	20	20	22.1	21.7	110	108	67-121	2	30
1,3-Dichlorobenzene	ug/L	1.0 U	20	20	19.8	20.7	99	104	56-130	5	30
1,4-Dichlorobenzene	ug/L	1.0 U	20	20	18.8	19.7	94	98	60-121	5	30

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QUALITY CONTROL DATA

Project: SMO-HANOVER
Pace Project No.: 30405856

MATRIX SPIKE & MATRIX SPIKE DUPLICATE:		2102857		2102858								
Parameter	Units	30405856002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	RPD	Qual
2-Butanone (MEK)	ug/L	10.0 U	20	20	20.7	19.5	103	97	59-138	6	30	
2-Hexanone	ug/L	10.0 U	20	20	22.6	21.0	113	105	66-123	8	30	
4-Methyl-2-pentanone (MIBK)	ug/L	10.0 U	20	20	23.0	22.0	115	110	70-130	4	30	
Acetone	ug/L	10.0 U	20	20	21.1	20.1	106	100	57-140	5	30	
Benzene	ug/L	1.0 U	20	20	22.0	21.8	110	109	50-149	1	30	
Bromochloromethane	ug/L	1.0 U	20	20	18.7	18.2	94	91	63-120	3	30	
Bromodichloromethane	ug/L	1.0 U	20	20	21.4	21.3	107	107	46-131	1	30	
Bromoform	ug/L	1.0 U	20	20	17.6	18.4	88	92	30-119	5	30	2c
Bromomethane	ug/L	1.0 U	20	20	13.4	15.8	67	79	10-163	16	30	2c
Carbon disulfide	ug/L	1.0 U	20	20	21.1	20.8	105	103	41-116	1	30	
Carbon tetrachloride	ug/L	1.0 U	20	20	22.0	23.6	110	118	55-119	7	30	
Chlorobenzene	ug/L	1.0 U	20	20	20.7	20.2	104	101	66-124	2	30	
Chloroethane	ug/L	1.0 U	20	20	26.4	31.0	132	155	45-162	16	30	
Chloroform	ug/L	1.0 U	20	20	21.4	20.9	107	105	56-123	2	30	
Chloromethane	ug/L	1.0 U	20	20	23.3	23.4	117	117	49-150	0	30	
cis-1,2-Dichloroethene	ug/L	1.0 U	20	20	20.7	21.0	103	105	63-116	2	30	
cis-1,3-Dichloropropene	ug/L	1.0 U	20	20	20.5	20.4	103	102	46-119	0	30	
Dibromochloromethane	ug/L	1.0 U	20	20	17.3	18.5	86	92	42-120	7	30	2c
Diethyl ether (Ethyl ether)	ug/L	1.0 U	20	20	21.7	20.7	109	103	52-125	5	30	
Ethyl-tert-butyl ether	ug/L	1.0 U	20	20	20.5	19.3	102	96	64-108	6	30	
Ethylbenzene	ug/L	1.0 U	20	20	21.7	21.2	108	106	63-135	2	30	
m&p-Xylene	ug/L	2.0 U	40	40	43.4	42.4	108	106	63-135	2	30	
Methyl-tert-butyl ether	ug/L	1.0 U	20	20	20.2	19.5	101	97	53-123	4	30	
Methylene Chloride	ug/L	1.0 U	20	20	22.2	21.8	111	109	57-132	2	30	
Naphthalene	ug/L	2.0 U	20	20	17.4	18.8	87	94	30-157	8	30	
o-Xylene	ug/L	1.0 U	20	20	20.7	19.8	103	99	57-133	5	30	
Styrene	ug/L	1.0 U	20	20	21.6	21.1	108	105	58-130	2	30	
tert-Amyl methyl ether	ug/L	1.0 U	20	20	19.1	18.0	95	90	62-112	6	30	
tert-Butyl Alcohol	ug/L	5.0 U	100	100	104	88.2	104	88	37-162	16	30	2c
Tetrachloroethene	ug/L	1.0 U	20	20	18.9	20.1	94	101	61-132	6	30	
Toluene	ug/L	1.0 U	20	20	20.7	20.9	104	105	59-139	1	30	
TOTAL BTEX	ug/L	6.0 U	120	120	128	126	107	105	50-149	2	30	
trans-1,2-Dichloroethene	ug/L	1.0 U	20	20	23.4	22.1	117	110	60-124	6	30	
trans-1,3-Dichloropropene	ug/L	1.0 U	20	20	21.0	21.1	105	105	48-121	1	30	
Trichloroethene	ug/L	1.0 U	20	20	19.6	20.3	98	102	63-128	4	30	
Vinyl chloride	ug/L	1.0 U	20	20	26.6	27.0	133	135	67-141	1	30	
Xylene (Total)	ug/L	3.0 U	60	60	64.1	62.2	107	104	63-135	3	30	
1,2-Dichloroethane-d4 (S)	%						116	114	70-130			
4-Bromofluorobenzene (S)	%						97	102	70-130			
Dibromofluoromethane (S)	%						105	103	70-130			
Toluene-d8 (S)	%						101	103	70-130			

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QUALITY CONTROL DATA

Project: SMO-HANOVER
Pace Project No.: 30405856

QC Batch: 436167 Analysis Method: EPA 8260C
QC Batch Method: EPA 8260C Analysis Description: 8260C MSV
Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples: 30405856012

METHOD BLANK: 2105127

Matrix: Water

Associated Lab Samples: 30405856012

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	1.0 U	1.0	0.38	02/24/21 12:18	
1,1,2,2-Tetrachloroethane	ug/L	1.0 U	1.0	0.47	02/24/21 12:18	
1,1,2-Trichloroethane	ug/L	1.0 U	1.0	0.33	02/24/21 12:18	
1,1-Dichloroethane	ug/L	1.0 U	1.0	0.24	02/24/21 12:18	
1,1-Dichloroethene	ug/L	1.0 U	1.0	0.24	02/24/21 12:18	
1,2,4-Trichlorobenzene	ug/L	1.0 U	1.0	0.73	02/24/21 12:18	
1,2,4-Trimethylbenzene	ug/L	1.0 U	1.0	0.63	02/24/21 12:18	
1,2-Dichlorobenzene	ug/L	1.0 U	1.0	0.38	02/24/21 12:18	
1,2-Dichloroethane	ug/L	1.0 U	1.0	0.33	02/24/21 12:18	
1,2-Dichloroethene (Total)	ug/L	2.0 U	2.0	0.66	02/24/21 12:18	
1,2-Dichloropropane	ug/L	1.0 U	1.0	0.28	02/24/21 12:18	
1,3,5-Trimethylbenzene	ug/L	1.0 U	1.0	0.45	02/24/21 12:18	
1,3-Dichlorobenzene	ug/L	1.0 U	1.0	0.45	02/24/21 12:18	
1,4-Dichlorobenzene	ug/L	1.0 U	1.0	0.48	02/24/21 12:18	
2-Butanone (MEK)	ug/L	10.0 U	10.0	1.5	02/24/21 12:18	
2-Hexanone	ug/L	10.0 U	10.0	0.58	02/24/21 12:18	
4-Methyl-2-pentanone (MIBK)	ug/L	10.0 U	10.0	0.42	02/24/21 12:18	
Acetone	ug/L	10.0 U	10.0	5.6	02/24/21 12:18	
Benzene	ug/L	1.0 U	1.0	0.34	02/24/21 12:18	
Bromochloromethane	ug/L	1.0 U	1.0	0.48	02/24/21 12:18	
Bromodichloromethane	ug/L	1.0 U	1.0	0.35	02/24/21 12:18	2c
Bromoform	ug/L	1.0 U	1.0	0.56	02/24/21 12:18	
Bromomethane	ug/L	1.0 U	1.0	0.73	02/24/21 12:18	2c
Carbon disulfide	ug/L	1.0 U	1.0	0.32	02/24/21 12:18	
Carbon tetrachloride	ug/L	1.0 U	1.0	0.44	02/24/21 12:18	
Chlorobenzene	ug/L	1.0 U	1.0	0.26	02/24/21 12:18	
Chloroethane	ug/L	1.0 U	1.0	0.64	02/24/21 12:18	
Chloroform	ug/L	1.0 U	1.0	0.39	02/24/21 12:18	
Chloromethane	ug/L	1.0 U	1.0	0.40	02/24/21 12:18	2c
cis-1,2-Dichloroethene	ug/L	1.0 U	1.0	0.38	02/24/21 12:18	
cis-1,3-Dichloropropene	ug/L	1.0 U	1.0	0.29	02/24/21 12:18	
Dibromochloromethane	ug/L	1.0 U	1.0	0.43	02/24/21 12:18	2c
Ethylbenzene	ug/L	1.0 U	1.0	0.40	02/24/21 12:18	
Isopropylbenzene (Cumene)	ug/L	1.0 U	1.0	0.47	02/24/21 12:18	
m&p-Xylene	ug/L	2.0 U	2.0	0.94	02/24/21 12:18	
Methyl-tert-butyl ether	ug/L	1.0 U	1.0	0.25	02/24/21 12:18	
Methylene Chloride	ug/L	1.0 U	1.0	0.64	02/24/21 12:18	
Naphthalene	ug/L	2.0 U	2.0	0.82	02/24/21 12:18	
o-Xylene	ug/L	1.0 U	1.0	0.41	02/24/21 12:18	
Styrene	ug/L	1.0 U	1.0	0.33	02/24/21 12:18	

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QUALITY CONTROL DATA

Project: SMO-HANOVER
Pace Project No.: 30405856

METHOD BLANK: 2105127 Matrix: Water
Associated Lab Samples: 30405856012

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Tetrachloroethene	ug/L	1.0 U	1.0	0.39	02/24/21 12:18	
Toluene	ug/L	1.0 U	1.0	0.32	02/24/21 12:18	
TOTAL BTEX	ug/L	6.0 U	6.0	2.4	02/24/21 12:18	
trans-1,2-Dichloroethene	ug/L	1.0 U	1.0	0.28	02/24/21 12:18	
trans-1,3-Dichloropropene	ug/L	1.0 U	1.0	0.32	02/24/21 12:18	
Trichloroethene	ug/L	1.0 U	1.0	0.29	02/24/21 12:18	
Vinyl chloride	ug/L	1.0 U	1.0	0.29	02/24/21 12:18	
Xylene (Total)	ug/L	3.0 U	3.0	1.4	02/24/21 12:18	
1,2-Dichloroethane-d4 (S)	%	108	70-130		02/24/21 12:18	
4-Bromofluorobenzene (S)	%	98	70-130		02/24/21 12:18	
Dibromofluoromethane (S)	%	109	70-130		02/24/21 12:18	
Toluene-d8 (S)	%	94	70-130		02/24/21 12:18	

LABORATORY CONTROL SAMPLE: 2105128

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	23.8	119	70-130	
1,1,2,2-Tetrachloroethane	ug/L	20	19.2	96	70-130	
1,1,2-Trichloroethane	ug/L	20	19.6	98	70-130	
1,1-Dichloroethane	ug/L	20	22.2	111	70-130	
1,1-Dichloroethene	ug/L	20	21.1	106	70-130	
1,2,4-Trichlorobenzene	ug/L	20	22.8	114	70-130	
1,2,4-Trimethylbenzene	ug/L	20	21.3	107	70-130	
1,2-Dichlorobenzene	ug/L	20	20.7	103	70-130	
1,2-Dichloroethane	ug/L	20	20.5	102	70-130	
1,2-Dichloroethene (Total)	ug/L	40	41.1	103	70-130	
1,2-Dichloropropane	ug/L	20	21.4	107	70-130	
1,3,5-Trimethylbenzene	ug/L	20	21.4	107	70-130	
1,3-Dichlorobenzene	ug/L	20	20.5	102	70-130	
1,4-Dichlorobenzene	ug/L	20	19.4	97	70-130	
2-Butanone (MEK)	ug/L	20	15.9	79	70-130	
2-Hexanone	ug/L	20	19.5	98	70-130	
4-Methyl-2-pentanone (MIBK)	ug/L	20	21.2	106	70-130	
Acetone	ug/L	20	19.3	96	67-173	
Benzene	ug/L	20	20.5	102	70-130	
Bromochloromethane	ug/L	20	18.8	94	70-130	
Bromodichloromethane	ug/L	20	22.4	112	70-130 2c	
Bromoform	ug/L	20	18.8	94	63-119	
Bromomethane	ug/L	20	24.3	121	24-159 2c	
Carbon disulfide	ug/L	20	19.7	98	57-132	
Carbon tetrachloride	ug/L	20	22.1	111	70-130	
Chlorobenzene	ug/L	20	20.6	103	70-130	
Chloroethane	ug/L	20	24.8	124	62-145	
Chloroform	ug/L	20	21.0	105	70-130	

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REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: SMO-HANOVER
Pace Project No.: 30405856

LABORATORY CONTROL SAMPLE: 2105128

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloromethane	ug/L	20	23.0	115	66-140 2c	
cis-1,2-Dichloroethene	ug/L	20	20.7	103	70-130	
cis-1,3-Dichloropropene	ug/L	20	22.5	113	70-130	
Dibromochloromethane	ug/L	20	18.8	94	70-130 2c	
Ethylbenzene	ug/L	20	21.3	107	70-130	
Isopropylbenzene (Cumene)	ug/L	20	23.0	115	70-130	
m&p-Xylene	ug/L	40	41.7	104	70-130	
Methyl-tert-butyl ether	ug/L	20	20.0	100	70-130	
Methylene Chloride	ug/L	20	21.0	105	70-130	
Naphthalene	ug/L	20	20.7	104	55-160	
o-Xylene	ug/L	20	20.1	101	70-130	
Styrene	ug/L	20	21.2	106	70-130	
Tetrachloroethene	ug/L	20	20.0	100	70-130	
Toluene	ug/L	20	20.5	103	70-130	
TOTAL BTEX	ug/L	120	124	103	70-130	
trans-1,2-Dichloroethene	ug/L	20	20.4	102	70-130	
trans-1,3-Dichloropropene	ug/L	20	21.0	105	70-130	
Trichloroethene	ug/L	20	21.0	105	70-130	
Vinyl chloride	ug/L	20	24.3	122	70-130	
Xylene (Total)	ug/L	60	61.8	103	70-130	
1,2-Dichloroethane-d4 (S)	%			101	70-130	
4-Bromofluorobenzene (S)	%			104	70-130	
Dibromofluoromethane (S)	%			105	70-130	
Toluene-d8 (S)	%			97	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2105559 2105560

Parameter	Units	2105559		2105560		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Result	MSD Conc.	MS Result	MSD Conc.						
1,1,1-Trichloroethane	ug/L	ND	20	20	20.6	22.0	103	110	55-146	6	30
1,1,2,2-Tetrachloroethane	ug/L	ND	20	20	18.5	19.5	92	98	55-118	5	30
1,1,2-Trichloroethane	ug/L	ND	20	20	20.1	20.3	100	102	61-122	1	30
1,1-Dichloroethane	ug/L	ND	20	20	18.6	19.3	93	97	59-130	4	30
1,1-Dichloroethene	ug/L	ND	20	20	18.4	19.6	92	98	52-119	7	30
1,2,4-Trichlorobenzene	ug/L	ND	20	20	17.1	22.1	86	110	38-146	25	30
1,2,4-Trimethylbenzene	ug/L	ND	20	20	21.1	21.5	105	108	52-151	2	30
1,2-Dichlorobenzene	ug/L	ND	20	20	19.3	20.0	97	100	58-126	4	30
1,2-Dichloroethane	ug/L	ND	20	20	19.3	19.8	96	99	49-135	3	30
1,2-Dichloroethene (Total)	ug/L	ND	40	40	36.7	37.7	92	94	61-119	3	30
1,2-Dichloropropane	ug/L	ND	20	20	17.8	19.5	89	98	67-121	9	30
1,3,5-Trimethylbenzene	ug/L	ND	20	20	19.2	20.9	96	105	53-142	8	30
1,3-Dichlorobenzene	ug/L	ND	20	20	18.9	18.9	95	95	56-130	0	30
1,4-Dichlorobenzene	ug/L	ND	20	20	17.2	20.0	86	100	60-121	15	30
2-Butanone (MEK)	ug/L	ND	20	20	16.3	19.7	81	99	59-138	19	30
2-Hexanone	ug/L	ND	20	20	20.2	21.8	101	109	66-123	7	30

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REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: SMO-HANOVER
Pace Project No.: 30405856

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2105559 2105560												
Parameter	Units	30405806010		MS	MSD	MS	MSD	MS	MSD	% Rec	Max	Qual
		Result	Conc.	Spike	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	20	20	18.5	21.6	93	108	70-130	15	30	
Acetone	ug/L	ND	20	20	19.1	21.1	95	105	57-140	10	30	
Benzene	ug/L	ND	20	20	19.4	23.0	97	115	50-149	17	30	
Bromochloromethane	ug/L	ND	20	20	17.3	17.6	86	88	63-120	2	30	
Bromodichloromethane	ug/L	ND	20	20	19.3	20.4	97	102	46-131	6	30 2c	
Bromoform	ug/L	ND	20	20	16.6	18.0	83	90	30-119	8	30	
Bromomethane	ug/L	ND	20	20	10.4	12.0	52	60	10-163	14	30 2c	
Carbon disulfide	ug/L	ND	20	20	15.3	17.5	77	88	41-116	14	30	
Carbon tetrachloride	ug/L	ND	20	20	18.3	20.3	92	102	55-119	10	30	
Chlorobenzene	ug/L	ND	20	20	19.6	20.0	98	100	66-124	2	30	
Chloroethane	ug/L	ND	20	20	18.8	31.6	94	158	45-162	51	30 R1	
Chloroform	ug/L	ND	20	20	17.2	19.1	86	95	56-123	10	30	
Chloromethane	ug/L	ND	20	20	23.9	22.6	120	113	49-150	6	30 2c	
cis-1,2-Dichloroethene	ug/L	ND	20	20	18.6	18.7	93	93	63-116	0	30	
cis-1,3-Dichloropropene	ug/L	ND	20	20	18.3	19.7	91	98	46-119	8	30	
Dibromochloromethane	ug/L	ND	20	20	18.1	19.0	91	95	42-120	5	30 2c	
Ethylbenzene	ug/L	ND	20	20	20.7	23.3	104	116	63-135	11	30	
Isopropylbenzene (Cumene)	ug/L	ND	20	20	20.4	22.3	102	111	50-167	9	30	
m&p-Xylene	ug/L	ND	40	40	41.0	41.8	102	104	63-135	2	30	
Methyl-tert-butyl ether	ug/L	ND	20	20	17.3	18.4	86	92	53-123	6	30	
Methylene Chloride	ug/L	ND	20	20	18.8	19.4	94	97	57-132	4	30	
Naphthalene	ug/L	ND	20	20	24.1	23.7	121	118	30-157	2	30	
o-Xylene	ug/L	ND	20	20	19.8	21.7	99	109	57-133	9	30	
Styrene	ug/L	ND	20	20	19.5	20.7	97	104	58-130	6	30	
Tetrachloroethene	ug/L	ND	20	20	18.3	20.6	92	103	61-132	12	30	
Toluene	ug/L	ND	20	20	19.7	21.9	99	110	59-139	11	30	
TOTAL BTEX	ug/L	ND	120	120	121	132	101	110	50-149	9	30	
trans-1,2-Dichloroethene	ug/L	ND	20	20	18.1	19.0	90	95	60-124	5	30	
trans-1,3-Dichloropropene	ug/L	ND	20	20	19.6	20.2	98	101	48-121	3	30	
Trichloroethene	ug/L	ND	20	20	17.4	20.5	87	103	63-128	17	30	
Vinyl chloride	ug/L	ND	20	20	22.4	24.1	112	121	67-141	7	30	
Xylene (Total)	ug/L	ND	60	60	60.8	63.5	101	106	63-135	4	30	
1,2-Dichloroethane-d4 (S)	%							101	110	70-130		
4-Bromofluorobenzene (S)	%							100	96	70-130		
Dibromofluoromethane (S)	%							96	92	70-130		
Toluene-d8 (S)	%							108	105	70-130		

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REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: SMO-HANOVER
Pace Project No.: 30405856

QC Batch:	435194	Analysis Method:	EPA 8015D
QC Batch Method:	EPA 3510C	Analysis Description:	EPA 8015D TPH RV
		Laboratory:	Pace Analytical Services - Greensburg
Associated Lab Samples: 30405856001, 30405856002, 30405856003, 30405856004, 30405856005, 30405856006, 30405856007, 30405856008, 30405856009, 30405856010			

METHOD BLANK:	2101050	Matrix:	Water
Associated Lab Samples: 30405856001, 30405856002, 30405856003, 30405856004, 30405856005, 30405856006, 30405856007, 30405856008, 30405856009, 30405856010			

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
TPH (C10-C28)	mg/L	0.10 U	0.10	0.069	02/19/21 03:31	
o-Terphenyl (S)	%	42	25-105		02/19/21 03:31	CL

LABORATORY CONTROL SAMPLE: 2101051						
Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
TPH (C10-C28)	mg/L	1	0.80	80	46-110	
o-Terphenyl (S)	%			57	25-105	CL

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Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALIFIERS

Project: SMO-HANOVER
Pace Project No.: 30405856

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.
 ND - Not Detected at or above adjusted reporting limit.
 TNTC - Too Numerous To Count
 J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.
 MDL - Adjusted Method Detection Limit.
 PQL - Practical Quantitation Limit.
 RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.
 S - Surrogate
 1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.
 Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.
 LCS(D) - Laboratory Control Sample (Duplicate)
 MS(D) - Matrix Spike (Duplicate)
 DUP - Sample Duplicate
 RPD - Relative Percent Difference
 NC - Not Calculable.
 SG - Silica Gel - Clean-Up
 U - Indicates the compound was analyzed for, but not detected.
 N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.
 Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.
 TNI - The NELAC Institute.

BATCH QUALIFIERS

Batch: 435194
 [M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

ANALYTE QUALIFIERS

1c A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.
 2c The read back of the low concentration calibration standard for this compound is not within 30% of the true value. The results may be biased high and should be considered estimated.
 CL The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased low.
 MH Matrix spike recovery and/or matrix spike duplicate recovery was above laboratory control limits. Result may be biased high.
 N3 Accreditation is not offered by the relevant laboratory accrediting body for this parameter.
 R1 RPD value was outside control limits.

REPORT OF LABORATORY ANALYSIS

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Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: SMO-HANOVER
Pace Project No.: 30405856

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30405856001	MW-1	EPA 3510C	435194	EPA 8015D	435416
30405856002	MW-4	EPA 3510C	435194	EPA 8015D	435416
30405856003	MW-7	EPA 3510C	435194	EPA 8015D	435416
30405856004	MW-8	EPA 3510C	435194	EPA 8015D	435416
30405856005	MW-9	EPA 3510C	435194	EPA 8015D	435416
30405856006	MW-10	EPA 3510C	435194	EPA 8015D	435416
30405856007	MW-12	EPA 3510C	435194	EPA 8015D	435416
30405856008	MW-14	EPA 3510C	435194	EPA 8015D	435416
30405856009	MW-15	EPA 3510C	435194	EPA 8015D	435416
30405856010	MW-16	EPA 3510C	435194	EPA 8015D	435416
30405856001	MW-1	EPA 5030/8015B	435148		
30405856002	MW-4	EPA 5030/8015B	435148		
30405856003	MW-7	EPA 5030/8015B	435148		
30405856004	MW-8	EPA 5030/8015B	435148		
30405856005	MW-9	EPA 5030/8015B	435148		
30405856006	MW-10	EPA 5030/8015B	435148		
30405856007	MW-12	EPA 5030/8015B	435148		
30405856008	MW-14	EPA 5030/8015B	435148		
30405856009	MW-15	EPA 5030/8015B	435148		
30405856010	MW-16	EPA 5030/8015B	435148		
30405856011	Station-Spigot	EPA 524.2	197514		
30405856001	MW-1	EPA 8260B	435531		
30405856002	MW-4	EPA 8260B	435531		
30405856003	MW-7	EPA 8260B	435531		
30405856004	MW-8	EPA 8260B	435531		
30405856005	MW-9	EPA 8260B	435531		
30405856006	MW-10	EPA 8260B	435531		
30405856007	MW-12	EPA 8260B	435531		
30405856008	MW-14	EPA 8260B	435531		
30405856009	MW-15	EPA 8260B	435531		
30405856010	MW-16	EPA 8260B	435531		
30405856012	TRIP BLANK	EPA 8260C	436167		

REPORT OF LABORATORY ANALYSIS

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CHAIN-OF-CUSTODY Analytical Request Document
 Pace Analytical
 Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevant fields

Company: **ARM Group** Billing Information:
 Address: **9175 Guilford Rd**
 Report To: **Doug Hamilton** Email To:
 Copy To: Site Collection Info/Address:
 Customer Project Name/Number: **SMO - HANOVER** State: **MD** County/City: **HANOVER** Time Zone Collected: **[] PT [] MT [] CT [X] ET**

Phone: Site/Facility ID #: **HANOVER SKILL** Compliance Monitoring? **[] Yes [] No**
 Email: **TON PALANK** Purchase Order #: **190292-001** DW PWS ID #: DW Location Code:
 Collected By (print): **TON PALANK** Turnaround Date Required: **STANDARD** Immediately Packed on Ice: **[] Yes [] No**
 Collected By (signature): **[Signature]** Rush: **[] Same Day [] Next Day** Field Filtered (if applicable): **[] Yes [] No**
 Sample Disposal: **[] Dispose as appropriate [] Return** **[] 2 Day [] 3 Day [] 4 Day [] 5 Day** (Expedite Charges Apply) Analysis:
[] Archive: **[] Hold:**

* Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Wastewater (WW), Product (P), Soil/Solid (SL), Oil (OL), Wipe (WP), Air (AR), Tissue (TS), Bioassay (B), Vapor (V), Other (OT)

Customer Sample ID	Matrix *	Comp / Grab	Collected (or Composite Start)		Composite End		Res Cl	# of Ctns
			Date	Time	Date	Time		
MW-1	GW	Grab	7/11/21	0900			8	
MW-2				1010				
MW-3				1045				
MW-4				1145				
MW-5				1133				
MW-6				1410				
MW-7				1420				
MW-8				1300				
MW-9				1458				
MW-10				0945				

Customer Remarks / Special Conditions / Possible Hazards: Type of Ice Used: **Wet** Blue Dry None SHORT HOLDS PRESENT (<72 hours): Y N **N/A**
 Packing Material Used: **Bubble wrap** Lab Tracking #: **2623264 N/A**
 Radchem sample(s) screened (<500 cpm): Y N **(NA)** Samples received via: FEDEX UPS Client Courier **Pace Courier**

Relinquished by/Company: (Signature) **ARM** Date/Time: **2/10/21 1620** Received by/Company: (Signature) **[Signature]** Date/Time: **2/11/21 1530**
 Relinquished by/Company: (Signature) **[Signature]** Date/Time: **2/11/21 1530** Received by/Company: (Signature) **[Signature]** Date/Time: **2/11/21 1530**
 Relinquished by/Company: (Signature) **[Signature]** Date/Time: **2/11/21 1840** Received by/Company: (Signature) **[Signature]** Date/Time: **2/11/21 1855**
 Relinquished by/Company: (Signature) **[Signature]** Date/Time: **2-11-21 2230** Received by/Company: (Signature) **[Signature]** Date/Time: **2-11-2021 2230**

LAB USE ONLY - Affix Wo#
WO# : 30405856
ALL SHAI
 Container Preservative T **313 V**
 30405856

** Preservative Types: (1) nitric acid, (2) sulfuric acid, (3) hydrochloric acid, (4) sodium hydroxide, (5) zinc acetate, (6) methanol, (7) sodium bisulfate, (8) sodium thiosulfate, (9) hexane, (A) ascorbic acid, (B) ammonium sulfate, (C) ammonium hydroxide, (D) TSP, (U) Unpreserved, (O) Other

Analyses

Lab Profile/Line:
 Lab Sample Receipt Checklist:
 Custody Seals Present/Intact Y N
 Custody Signatures Present Y N
 Collector Signature Present Y N
 Bottles Intact Y N
 Correct Bottles Y N
 Sufficient Volume Y N
 Samples Received on Ice Y N
 VOA - Headspace Acceptable Y N
 USDA Regulated Soils Y N
 Samples in Holding Time Y N
 Residual Chlorine Present Y N
 Cl Strips: Y N
 Sample pH Acceptable Y N
 pH Strips: **10001** Y N
 Sulfide Present Y N
 Lead Acetate Strips: Y N
 LAB USE ONLY:
 Lab Sample # / Comments:

Lab Sample Temperature Info:
 Temp Blank Received: Y N
 Therm ID#: **916**
 Cooler 1 Temp Upon Receipt: **31.2**
 Cooler 1 Therm Corr. Factor: **0**
 Cooler 1 Corrected Temp: **31.2**
 Comments: **MLC 2-12-2021**

Table #: **MTJL LAB USE ONLY**
 Acctnum:
 Template:
 Prelogin:
 PM:
 PB:

Non Conformance(s): Page: **2**
 YES / NO of: **2**

CHAIN-OF-CUSTODY Analytical Request Document
 Pace Analytical
 Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevant fields

Company: **ARM Group** Billing Information:
 Address: **9175 Guilford Rd**
 Report To: **Doug Hamilton** Email To:
 Copy To: Site Collection Info/Address:
 Customer Project Name/Number: **SMO - HANOVER** State: **MD** County/City: **HANOVER** Time Zone Collected: **[] PT [] MT [] CT [X] ET**

Phone: Site/Facility ID #: **HANOVER SKILL** Compliance Monitoring? **[] Yes [] No**
 Email: **TON PALANK** Purchase Order #: **190292-001** DW PWS ID #: DW Location Code:
 Collected By (print): **TON PALANK** Turnaround Date Required: **STANDARD** Immediately Packed on Ice: **[] Yes [] No**
 Collected By (signature): **[Signature]** Rush: **[] Same Day [] Next Day** Field Filtered (if applicable): **[] Yes [] No**
 Sample Disposal: **[] Dispose as appropriate [] Return** **[] 2 Day [] 3 Day [] 4 Day [] 5 Day** (Expedite Charges Apply) Analysis:
[] Archive: **[] Hold:**

* Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Wastewater (WW), Product (P), Soil/Solid (SL), Oil (OL), Wipe (WP), Air (AR), Tissue (TS), Bioassay (B), Vapor (V), Other (OT)

Customer Sample ID	Matrix *	Comp / Grab	Collected (or Composite Start)		Composite End		Res Cl	# of Ctns
			Date	Time	Date	Time		
STATION-Sp/lot	DW	Grab	2/10/21	1100			6	

Customer Remarks / Special Conditions / Possible Hazards: Type of Ice Used: **Wet** Blue Dry None SHORT HOLDS PRESENT (<72 hours): Y N **N/A**
 Packing Material Used: **Bubble wrap** Lab Tracking #: **2623263 N/A**
 Radchem sample(s) screened (<500 cpm): Y N **(NA)** Samples received via: FEDEX UPS Client Courier **Pace Courier**

Relinquished by/Company: (Signature) **ARM** Date/Time: **2/10/21 1620** Received by/Company: (Signature) **[Signature]** Date/Time: **2/11/21 1530**
 Relinquished by/Company: (Signature) **[Signature]** Date/Time: **2/11/21 1530** Received by/Company: (Signature) **[Signature]** Date/Time: **2/11/21 1530**
 Relinquished by/Company: (Signature) **[Signature]** Date/Time: **2/11/21 1840** Received by/Company: (Signature) **[Signature]** Date/Time: **2/11/21 1855**
 Relinquished by/Company: (Signature) **[Signature]** Date/Time: **2-11-21 2230** Received by/Company: (Signature) **[Signature]** Date/Time: **2-11-2021 2230**

LAB USE ONLY - Affix Workorder/Login Label Here or List Pace Workorder Number or MTJL Log-in Number Here
30405856
ALL SHADED AREAS are for LAB USE ONLY
 Container Preservative Type **
 Lab Project Manager:
 ** Preservative Types: (1) nitric acid, (2) sulfuric acid, (3) hydrochloric acid, (4) sodium hydroxide, (5) zinc acetate, (6) methanol, (7) sodium bisulfate, (8) sodium thiosulfate, (9) hexane, (A) ascorbic acid, (B) ammonium sulfate, (C) ammonium hydroxide, (D) TSP, (U) Unpreserved, (O) Other

Analyses

Lab Profile/Line:
 Lab Sample Receipt Checklist:
 Custody Seals Present/Intact Y N
 Custody Signatures Present Y N
 Collector Signature Present Y N
 Bottles Intact Y N
 Correct Bottles Y N
 Sufficient Volume Y N
 Samples Received on Ice Y N
 VOA - Headspace Acceptable Y N
 USDA Regulated Soils Y N
 Samples in Holding Time Y N
 Residual Chlorine Present Y N
 Cl Strips: Y N
 Sample pH Acceptable Y N
 pH Strips: Y N
 Sulfide Present Y N
 Lead Acetate Strips: Y N
 LAB USE ONLY:
 Lab Sample # / Comments:

Lab Sample Temperature Info:
 Temp Blank Received: Y N
 Therm ID#: **916**
 Cooler 1 Temp Upon Receipt: **31.2**
 Cooler 1 Therm Corr. Factor: **0**
 Cooler 1 Corrected Temp: **31.2**
 Comments: **MLC 7-12-2021**

Table #: **MTJL LAB USE ONLY**
 Acctnum:
 Template:
 Prelogin:
 PM:
 PB:

Non Conformance(s): Page: **2**
 YES / NO of: **2**

Client _____

Profile Number _____

Site _____

Notes _____

Sample Line Item	Matrix	AG1H	AG1S	AG1T	AG2U	AG3S	AG3U	AG5U	AG5T	BG1U	BG2U	BP1N	BP1U	BP2S	BP2U	BP3C	BP3N	BP3S	BP3U	DG9S	GCUB	VG9H	VG9T	VG9U	VOAK	WG9U	WG9U	ZPLC
1	UT																											
2																												
3																												
4																												
5																												
6																												
7																												
8																												
9																												
10																												
11																												
12																												

Container Codes

Glass

GJN	1 Gallon Jug with HNO3	DG9S	40mL amber VOA vial H2SO4
AG5U	100mL amber glass unpreserved	VG9U	40mL clear VOA vial
AG5T	100mL amber glass Na Thiosulfate	VG9T	40mL clear VOA vial Na Thiosulfate
GJN	1 Gallon Jug	VG9H	40mL clear VOA vial HCl
AG1S	1L amber glass H2SO4	JGFU	4oz amber wide jar
AG1H	1L amber glass HCl	WG9U	4oz wide jar unpreserved
AG1T	1L amber glass Na Thiosulfate	BG2U	500mL clear glass unpreserved
BG1U	1L clear glass unpreserved	AG2U	500mL amber glass unpreserved
AG3S	250mL amber glass H2SO4	WG9U	8oz wide jar unpreserved
AG3U	250mL amber glass unpreserved		

Plastic / Misc.

GCUB	1 Gallon Cubitainer	EZI	5g Encore
12GN	1/2 Gallon Cubitainer	VOAK	Kit for Volatile Solid
SP5T	120mL Coliform Na Thiosulfate	I	Wipe/Swab
BP1N	1L plastic HNO3	ZPLC	Ziploc Bag
BP1U	1L plastic unpreserved		
BP3S	250mL plastic H2SO4	WT	Water
BP3N	250mL plastic HNO3	SL	Solid
BP3U	250mL plastic unpreserved	OL	Non-aqueous liquid
BP3C	250mL plastic NAOH	WP	Wipe
BP2S	500mL plastic H2SO4		
BP2U	500mL plastic unpreserved		

Pace Analytical Services-Pittsburgh
Cooler Issue Tracking Form

Issue Number 021721-01
 Date/Time Received 7-11-2021
 Received Via Carrier
 Tracking Number (if known) _____
 Client (if known) AKM Group
 Holdtime issues (if known) _____
 Temperature (if applicable) 2.3/2.6
 Number of Coolers 1
 Location of Coolers coldroom

- Issue preventing login 1 profile or line not set up (A-not set up B-set up, could not find)
- Initials of person writing up issue: MCC 2 limited volume
- 3 temperature issue
- 4 cannot determine client or contact (A-not in LIMS B-could not find)
- 5 broken bottles
- 6 incorrect bottles
- 7 waiting for IRWO (list lab ID)
- 8 missing COC
- 9 other - comment

Folder given to initials/date: SMB 7-12-2021
 status check initials/date _____
 status check initials/date _____
 status check initials/date _____
 Folder returned to receiving on date: _____

Workorder # added to Logbook: **Y or N**

Pace Analytical* CHAIN-OF-CUSTODY Analytical Request Document

Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevant fields

Company: **ARM Group** Address: **9175 Guilford** Report To: **Doug Hamilton** Copy To:

Customer Project Name/Number: **SMO - HANOVER** State: **MD** County/City: **HANOVER** Time Zone Collected: **[] PT [] MT [] CT [X] ET**

Phone: **410-221-1111** Site/Facility ID #: **HANOVER SH11** Compliance Monitoring? **[] Yes [] No**

Collected By (print): **Tom Palank** Purchase Order #: **190292-001** DW PWS ID #: **MD** DW Location Code: **MD**

Collected By (signature): **[Signature]** Turnaround Date Required: **STANDARD** Immediately Packed on Ice: **[X] Yes [] No**

Sample Disposal: **[] Dispose as appropriate [] Return [] Archive: [] Hold:** Rush: **[] Same Day [] Next Day [] 2 Day [] 3 Day [] 4 Day [] 5 Day** Field Filtered (if applicable): **[] Yes [] No** Analysis: **Analysis: _____**

* Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Wastewater (WW), Product (P), Soil/Solid (SL), Oil (OL), Wipe (WP), Air (AR), Tissue (TS), Bioassay (B), Vapor (V), Other (OT)

Customer Sample ID	Matrix *	Comp / Grab	Collected (or Composite Start)		Composite End		Res CI	# of Ctns
			Date	Time	Date	Time		
Station-Split	DW	Grd	2/19/21	1700			6	1 VOL 524.2

Customer Remarks / Special Conditions / Possible Hazards: **Type of Ice Used: Wet Blue Dry None** SHORT-HOLDS PRESENT (<72 hours): **Y N NA**

Packing Material Used: **Pump Wap** Lab Tracking #: **2623263** Lab Sample Temperature Info: **Temp Blank Received: Y N NA**

Relinquished by/Company: (Signature) **[Signature]** Date/Time: **2/19/21 1620** Received by/Company: (Signature) **[Signature]** Date/Time: **2/11/21 1530**

Relinquished by/Company: (Signature) **[Signature]** Date/Time: **2/11/21 1530** Received by/Company: (Signature) **[Signature]** Date/Time: **2/11/21 1530**

Relinquished by/Company: (Signature) **[Signature]** Date/Time: **2-11-21 2230** Received by/Company: (Signature) **[Signature]** Date/Time: **2-11-2021 2230**

Lab Sample Receipt Checklist:

Custody Seals Present/Intact	Y	N	NA
Custody Signatures Present	Y	N	NA
Collector Signature Present	Y	N	NA
Bottles Intact	Y	N	NA
Correct Bot/Les	Y	N	NA
Sufficient Volume	Y	N	NA
Samples Received on Ice	Y	N	NA
VOA - Headspace Acceptable	Y	N	NA
USDA Regulated Soils	Y	N	NA
Samples in Holding Time	Y	N	NA
Residual Chlorine Present	Y	N	NA
CL Strips:			
Sample pH Acceptable	Y	N	NA
pH Strips:			
Sulfide Present	Y	N	NA
Lead Acetate Strips:			

LAB USE ONLY: Lab Sample # / Comments: **See pg 1**

Pace Greensburg Lab -Sample Container Count 30405856

Client _____ Profile Number _____

Site _____ Notes _____

Sample Line Item	Matrix	AG1H	AG1S	AG1T	AG2U	AG3S	AG3U	AG5U	AG5T	BG1U	BG2U	BP1N	BP1U	BP2S	BP2U	BP3C	BP3N	BP3S	BP3U	DG9S	GCUB	VG9H	VG9T	VG9U	VOAK	WG9U	WG9U	ZPLC
1	WT																					6						
2																						6						
3																						6						
4																						6						
5																						6						
6																						6						
7																						6						
8																						6						
9																						6						
10																						6						
11																						6						
12																						6						

Container Codes

Glass			
AG1H	1L amber glass HCl	WG9U	4oz wide jar unreserved
AG1S	1L amber glass H2SO4	WG9U	4oz wide jar unreserved
AG1T	1L amber glass Na Thiosulfate	WG9U	4oz wide jar unreserved
AG2U	1L clear glass unreserved	WG9U	4oz wide jar unreserved
AG3S	250mL amber glass H2SO4	WG9U	4oz wide jar unreserved
AG3U	250mL amber glass unreserved	WG9U	4oz wide jar unreserved
DG9S	40mL amber VOA vial H2SO4	WG9U	4oz wide jar unreserved
VG9U	40mL clear VOA vial	WG9U	4oz wide jar unreserved
VG9T	40mL clear VOA vial Na Thiosulfate	WG9U	4oz wide jar unreserved
VG9H	40mL clear VOA vial HCl	WG9U	4oz wide jar unreserved
WG9U	4oz amber wide jar	WG9U	4oz wide jar unreserved
WG9U	4oz wide jar unreserved	WG9U	4oz wide jar unreserved
BG2U	500mL clear glass unreserved	WG9U	4oz wide jar unreserved
AG2U	500mL amber glass unreserved	WG9U	4oz wide jar unreserved
WG9U	8oz wide jar unreserved	WG9U	4oz wide jar unreserved

Plastic / Misc.	
GCUB	1 Gallon Cubitainer
12GN	1/2 Gallon Cubitainer
SP6T	120mL Coliform Na Thiosulfate
BP1N	1L plastic HNO3
BP1U	1L plastic unreserved
BP3S	250mL plastic H2SO4
BP3N	250mL plastic HNO3
BP3U	250mL plastic unreserved
BP3C	250mL plastic NAOH
BP2S	500mL plastic H2SO4
BP2U	500mL plastic unreserved
EZ1	5g Encore
VOAK	Kit for Volatile Solid
I	Wipe/Swab
ZPLC	Ziploc Bag
WT	Water
SL	Solid
OL	Non-aqueous liquid
WIP	Wipe



Sample Condition Upon Receipt

WO#: 70163234
PM: NML Due Date: 03/01/21
CLIENT: PACE-PA

Client Name: _____

Project: _____

Courier: Fed Ex UPS USPS Client Commercial Pace Other

Tracking #: 9242 2960 0106

Custody Seal on Cooler/Box Present: Yes No Seals intact: Yes No

Packing Material: Bubble Wrap Bubble Bags Ziploc None Other

Thermometer Used: TH091 Correction Factor: -0.2

Cooler Temperature(°C): 6.0 Cooler Temperature Corrected(°C): 5.8

Temp should be above freezing to 6.0°C

USDA Regulated Soil (N/A, water sample)

Date and Initials of person examining contents: CH 2/20/21

Did samples originate in a quarantine zone within the United States: AL, AR, CA, FL, GA, ID, LA, MS, NC, NM, NY, OK, OR, SC, TN, TX, or VA (check map)? Yes No

Did samples originate from a foreign source including Hawaii and Puerto Rico)? Yes No

If Yes to either question, fill out a Regulated Soil Checklist (F-LI-C-010) and include with SCUR/COC paperwork.

				COMMENTS:
Chain of Custody Present:	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		1.
Chain of Custody Filled Out:	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		2.
Chain of Custody Relinquished:	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		3.
Sampler Name & Signature on COC:	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	4.
Samples Arrived within Hold Time:	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		5.
Short Hold Time Analysis (<72hr):	<input type="checkbox"/> Yes	<input type="checkbox"/> No		6.
Rush Turn Around Time Requested:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No		7.
Sufficient Volume: (Triple volume provided for)	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		8.
Correct Containers Used:	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		9.
-Pace Containers Used:	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		10.
Containers Intact:	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		11.
Filtered volume received for Dissolved tests	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A	Note if sediment is visible in the dissolved container.
Sample Labels match COC:	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		12.
-Includes date/time/ID, Matrix: <u>SL WT OIL</u>				
All containers needing preservation have been checked?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A	13. <input type="checkbox"/> HNO ₃ <input type="checkbox"/> H ₂ SO ₄ <input type="checkbox"/> NaOH <input type="checkbox"/> HCl
pH paper Lot #				Sample #
All containers needing preservation are found to be in compliance with method recommendation? (HNO ₃ , H ₂ SO ₄ , HCl, NaOH>9 Sulfide, NAOH>12 Cyanide)	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A	
Exceptions: VOA, Coliform, TOC/DOC, Oil and Grease, DR0/8015 (water).				
Per Method, VOA pH is checked after analysis				
Samples checked for dechlorination: KI starch test strips Lot #	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A	14. Positive for Res. Chlorine? Y N
Residual chlorine strips Lot #				
SM 4500 CN samples checked for sulfide?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A	15.
Lead Acetate Strips Lot #				
Headspace in VOA Vials (>6mm):	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> N/A	16.
Trip Blank Present:	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A	17.
Trip Blank Custody Seals Present	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A	
Pace Trip Blank Lot # (if applicable):				

Field Data Required? Y / N
Date/Time: _____

Client Notification/ Resolution: _____

Person Contacted: _____

Comments/ Resolution: _____

* PM [Project Manager] review is documented electronically in LIMS.

**WATER SUPPLY WELL
LABORATORY REPORTS OF ANALYSIS
FEBRUARY 2021**





Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: SMO-HANOVER
Pace Project No.: 30405856

Sample: Station-Spigot Lab ID: 30405856011 Collected: 02/10/21 14:00 Received: 02/11/21 22:30 Matrix: Drinking Water

Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
524.2 MSV Analytical Method: EPA 524.2 Pace Analytical Services - Long Island									
1,1,1-Trichloroethane	0.50 U	ug/L	0.50	0.14	1		02/22/21 17:41	71-55-6	
1,1,2,2-Tetrachloroethane	0.50 U	ug/L	0.50	0.24	1		02/22/21 17:41	79-34-5	
1,1,2-Trichloroethane	0.50 U	ug/L	0.50	0.21	1		02/22/21 17:41	79-00-5	
1,1-Dichloroethane	0.50 U	ug/L	0.50	0.19	1		02/22/21 17:41	75-34-3	
1,1-Dichloroethene	0.50 U	ug/L	0.50	0.16	1		02/22/21 17:41	75-35-4	
1,2,4-Trichlorobenzene	0.50 U	ug/L	0.50	0.14	1		02/22/21 17:41	120-82-1	
1,2-Dichlorobenzene	0.50 U	ug/L	0.50	0.20	1		02/22/21 17:41	95-50-1	
1,2-Dichloroethane	0.50 U	ug/L	0.50	0.19	1		02/22/21 17:41	107-06-2	
1,3-Dichlorobenzene	0.50 U	ug/L	0.50	0.24	1		02/22/21 17:41	541-73-1	
1,4-Dichlorobenzene	0.50 U	ug/L	0.50	0.14	1		02/22/21 17:41	106-46-7	
2-Butanone (MEK)	2.0 U	ug/L	2.0	0.81	1		02/22/21 17:41	78-93-3	N3
2-Hexanone	2.0 U	ug/L	2.0	1.2	1		02/22/21 17:41	591-78-6	N3
4-Methyl-2-pentanone (MIBK)	2.0 U	ug/L	2.0	0.83	1		02/22/21 17:41	108-10-1	N3
Acetone	2.0 U	ug/L	2.0	1.3	1		02/22/21 17:41	67-64-1	N3
Benzene	0.50 U	ug/L	0.50	0.15	1		02/22/21 17:41	71-43-2	
Bromochloromethane	0.50 U	ug/L	0.50	0.24	1		02/22/21 17:41	74-97-5	
Bromodichloromethane	0.50 U	ug/L	0.50	0.25	1		02/22/21 17:41	75-27-4	
Bromoform	0.50 U	ug/L	0.50	0.30	1		02/22/21 17:41	75-25-2	
Bromomethane	0.50 U	ug/L	0.50	0.43	1		02/22/21 17:41	74-83-9	
Carbon tetrachloride	0.50 U	ug/L	0.50	0.26	1		02/22/21 17:41	56-23-5	
Chlorobenzene	0.50 U	ug/L	0.50	0.17	1		02/22/21 17:41	108-90-7	
Chloroethane	0.50 U	ug/L	0.50	0.34	1		02/22/21 17:41	75-00-3	
Chloroform	0.50 U	ug/L	0.50	0.21	1		02/22/21 17:41	67-66-3	
Chloromethane	0.50 U	ug/L	0.50	0.38	1		02/22/21 17:41	74-87-3	
Dibromochloromethane	0.50 U	ug/L	0.50	0.23	1		02/22/21 17:41	124-48-1	
Dichlorodifluoromethane	0.50 U	ug/L	0.50	0.21	1		02/22/21 17:41	75-71-8	
Ethylbenzene	0.50 U	ug/L	0.50	0.22	1		02/22/21 17:41	100-41-4	
Isopropylbenzene (Cumene)	0.50 U	ug/L	0.50	0.14	1		02/22/21 17:41	98-82-8	
Methyl-tert-butyl ether	0.50 U	ug/L	0.50	0.20	1		02/22/21 17:41	1634-04-4	
Methylene Chloride	0.50 U	ug/L	0.50	0.31	1		02/22/21 17:41	75-09-2	
Naphthalene	0.50 U	ug/L	0.50	0.32	1		02/22/21 17:41	91-20-3	
Styrene	0.50 U	ug/L	0.50	0.14	1		02/22/21 17:41	100-42-5	
Tetrachloroethene	0.50 U	ug/L	0.50	0.15	1		02/22/21 17:41	127-18-4	
Toluene	0.50 U	ug/L	0.50	0.17	1		02/22/21 17:41	108-88-3	
Trichloroethene	0.50 U	ug/L	0.50	0.36	1		02/22/21 17:41	79-01-6	
Vinyl chloride	0.50 U	ug/L	0.50	0.16	1		02/22/21 17:41	75-01-4	
Xylene (Total)	0.50 U	ug/L	0.50	0.071	1		02/22/21 17:41	1330-20-7	
cis-1,2-Dichloroethene	0.50 U	ug/L	0.50	0.27	1		02/22/21 17:41	156-59-2	
cis-1,3-Dichloropropene	0.50 U	ug/L	0.50	0.21	1		02/22/21 17:41	10061-01-5	
m&p-Xylene	0.50 U	ug/L	0.50	0.20	1		02/22/21 17:41	179601-23-1	
o-Xylene	0.50 U	ug/L	0.50	0.21	1		02/22/21 17:41	95-47-6	
tert-Butyl Alcohol	10.0 U	ug/L	10.0	4.8	1		02/22/21 17:41	75-65-0	
trans-1,2-Dichloroethene	0.50 U	ug/L	0.50	0.28	1		02/22/21 17:41	156-60-5	
trans-1,3-Dichloropropene	0.50 U	ug/L	0.50	0.13	1		02/22/21 17:41	10061-02-6	

REPORT OF LABORATORY ANALYSIS

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Date: 02/25/2021 02:57 PM

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Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: SMO-HANOVER
Pace Project No.: 30405856

Sample: Station-Spigot Lab ID: 30405856011 Collected: 02/10/21 14:00 Received: 02/11/21 22:30 Matrix: Drinking Water

Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
524.2 MSV Analytical Method: EPA 524.2 Pace Analytical Services - Long Island									
Surrogates									
1,2-Dichlorobenzene-d4 (S)	93	%	70-130		1		02/22/21 17:41	2199-69-1	
4-Bromofluorobenzene (S)	100	%	70-130		1		02/22/21 17:41	460-00-4	

REPORT OF LABORATORY ANALYSIS

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Date: 02/25/2021 02:57 PM

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