



# ARM Group LLC

Engineers and Scientists

July 28, 2021

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

**Re: Third 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 requests for case closure. This document includes new data and information collected into third quarter 2021. The monitoring wells were most recently sampled in July, April 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 July 2021 sampling event. The trip blank prepared during the July 2021 sampling event contained an estimated 1.6 µg/l 2-Butanone (MEK) and 1.1 µg/l Chloroethane (see QA/QC data in attached laboratory report of analysis).

A discontinuous, perched-water bearing zone exists beneath the site with groundwater currently about 27' below grade in MW1, MW4, MW7, MW12, MW14 and MW16. Regional groundwater is currently about 34' depth and is represented in MW2, MW8, MW9, MW10 and MW15. Water levels in MW8 and MW10 were historically consistent with the deeper/regional groundwater elevations. However, the levels have been increasing since early-2019 that may be caused by drainage from perched zones that are screened by the wells. Although screened through the perched groundwater zone and into the regional groundwater zone, water levels in MW14 appear to be similarly influenced 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. Since early to mid-2020, water levels in MW15 began to increase independently from the deeper groundwater zone and approach levels consistent in the other perched zone wells, while water levels in MW9 have remained deeper. A significant drop in groundwater elevations occurred in MW10 and MW15 between the April and July 2021 gauging/sampling events. 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.

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 south 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 seven years, MW1, MW4 and MW12 have contained very low to no detectable VOC concentrations. MW1 is located in the upgradient, northeast portion of the site in the shallow water-bearing zone, MW4 is located hydraulically downgradient and west of the tankfield within the shallow water-bearing zone; and MW12 is located in the downgradient (northwest) area of the shallow water-bearing zone. The August 2020 and July 2021 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 and July 2021 results for MW12 are erroneous and a result of sampling error of incomplete decontamination of sampling equipment between wells. The November 2020, February and April 2021 sample-testing data for MW12 are consistent with historical results showing concentrations are otherwise non-detect or below reporting limits.

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., nearly 6 years). During the past two years, the Total VOC concentration in MW16 has averaged about 7 µg/l, all of which is either Methyl Ethyl Ketone (MEK) and/or 1,1,2-Trichloroethane (112-TCA).

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 two years, MW7 groundwater samples contained an average Benzene concentration less than 5 µg/l and about 40 µg/l Total VOC (over 99.5% reduction in Benzene and 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. Other than TMBs, during the past three sampling events, MW7 has contained only Ethylbenzene at 1 to 3.3 µg/l and Naphthalene at about 1.7 µg/l (all other VOCs were below respective reporting 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 33½' 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 more consistent with the shallow water-bearing zone, and have remained so since. No LNAPL has been detected in MW14 since February 2015, over 6½ years ago.

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 5 µg/l, 85 µg/l and 837 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 February and April 2021 sampling events, MW14 contained about 1.8 µg/l Benzene, 55.7 µg/l Naphthalene and 365 µg/l VOC (not including TMBs); coincident with a significant drop in groundwater elevation, the July 2021 sampling event showed MW14 groundwater contained about 13 µg/l, 119 µg/l and 1188 µg/l, respectively, of Benzene, Naphthalene and VOC.

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), and only MW14 contains Benzene and Naphthalene concentrations above drinking water standards.

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 3.4 µg/l Benzene and 437 µg/l Total VOC (not including TMBs). VOC concentrations have remained relatively stable in MW8 since late-2017 with decreasing concentrations over the last five to six sampling events. 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 sampling events in 2020. 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, a 3' decline to March 2020, a steady incline into April 2021, and subsequent ½' drop by July 2021. Note that the more recent water level fluctuations observed in other deep-zone wells (MW8, MW10 and MW15) were much higher than what was 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, as well as contributing to the resulting VOC concentrations of samples collected from the “mixed” groundwaters.

Current groundwater levels in MW9 are approximately the same as when the well last contained LNAPL in mid-2016. 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 until 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 (become shallower) and LNAPL was no longer detected. Groundwater levels in MW9 approached historical lows by early-2018 without the reappearance of LNAPL, which was followed by relatively significant rising groundwater levels through mid-2019, a subsequent decline of about 3' into March 2020, a steady rise in elevations into April 2021, followed by ½' drop by July 2021.

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. In early-2020, the VOC concentration contained an average of about 70 µg/l 124-TMB and 14 µg/l 135-TMB. For the past year, the average concentrations are about 61.5 µg/l Benzene and 500 µg/l Total VOC. During the past two sampling events, the average concentrations are about 12 µg/l Benzene, 0.7 µg/l Tert-Amylmethyl Ether (TAME), 92.5 µg/l Tert-Butyl Alcohol (TBA), 7.4 µg/l MTBE and 154 µg/l VOC.

The water level in MW10 significantly increased (i.e., about 7½') from fourth quarter 2018 into June 2019, and dropped 8½' into December 2019, rebounded about 9½' into November 2020 with a near 9' drop since November 2020. 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 612 µg/l Total VOC and 68 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 (but slower) decline since October 2018.

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, rebounded by 4' into April 2021, and followed with a 4½' drop by July 2021. Concentrations have not changed appreciably since mid-2017, other than slightly higher concentrations when groundwater



elevations are lower (deeper) and vice versa (lower concentrations when groundwater elevations are higher or shallower). For the past year, samples from MW15 have contained about 430 µg/l Benzene, 108 µg/l Naphthalene and 3183 µg/l VOC.

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 13 µg/l, respectively. Naphthalene concentrations ranged from non-detect (less than 2 µg/l) to 119 µg/l in MW14 in July 2021. Total VOC concentrations in the shallow groundwater zone wells ranged from non-detect to 1188 µg/l (July 2021 MW14) to 1554 µg/l (August 2020 MW14 including 767 µg/l TMBs).

For the past year, Benzene concentrations in the deeper groundwater zone ranged from less than 1 µg/l to 708 µg/l (MW15) and averaged about 145 µg/l; Naphthalene ranged from below detection (<2 µg/l) to 225 µg/l (MW15) and averaged about 78 µg/l; and Total VOC (not including TMBs) ranged from 79 µg/l to 5960 µg/l (MW15) and averaged about 1186 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-butanol (*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.

In August 2019, MDE issued a “Request for Continued Monitoring” correspondence with the following directives.



**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 eight 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 in Table 1, TAME and TBA are present in deeper groundwater zone wells MW9, MW10 and MW15. EE and ETBE were below reporting limits in all wells, but is above method detection limits occasionally in MW15. DIPE has been detected in deeper wells MW9, MW10 and MW15, and at lower concentrations in shallow wells 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; April 2021 testing showed 7.5 µg/l and July 2021 had 7.4 µg/l MTBE. MTBE in shallow zone wells is usually only observed in MW7 with up to 2.7 µg/l in August 2020, but below reporting and detection limits since August 2020. During the past year and within the deeper zone wells, MTBE has averaged about 6.6 µg/l. Per the September 2019 and July 2021 sampling events, Ethanol was detected in one sample (MW15) at concentrations 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.

**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 a 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, April and July 2021 samples 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 466'-depth and filter pack at 420' to 466'-depth. No response to repeated requests to sample the two wells at the Ridgeview Plaza Shopping Center were received. 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 (MW9 with 30.1 µg/l MTBE), the last time that MTBE was detected at 20 µg/l or more was in February 2017 (MW15 with 27 µg/l) and February 2021 (MW9 with 30.1 µg/l). Retesting of MW9 in April and July 2021 showed the sample contained 7.5 and 7.4 µg/l, respectively. 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 July 2021 is 13.6 µg/l. Consequently, mapping of an MTBE plume at this site is otherwise not practical. Mapping presented herein includes individual enumeration of the BTEX, MTBE and Total VOC concentrations.

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 are 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 and Benzene concentrations in MW15 show Probably Increasing to Increasing trends, respectively, but since December 2019 VOC and Benzene show Probably Decreasing to Stable trends, respectively. 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). Table 2 summarizes the MK statistics.

Table 2: Mann-Kendall Statistics

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	5.02	-270	>99.9%	DECREASING	5.39	-217	99.8%	DECREASING
MW7	4.08	-345	>99.9%	DECREASING	2.76	-228	>99.9%	DECREASING
MW8	2.39	-80	85.8%	NO TREND	3.29	-151	98.0%	DECREASING
MW9	2.83	-285	>99.9%	DECREASING	3.14	-208	99.9%	DECREASING
MW10	1.19	-214	>99.9%	DECREASING	1.16	-188	99.8%	DECREASING
MW14	2.27	-322	>99.9%	DECREASING	1.38	-282	>99.9%	DECREASING
MW15 (06/2014 to Present)	0.86	84	91.0%	PROBABLY INCREASING	0.87	120	97.3%	INCREASING
MW15 (12/2019 to Present)	0.74	-12	91.1%	PROBABLY DECREASING	0.53	-10	86.2%	STABLE
MW16	3.31	-36	72.3%	NO TREND	1.22	-59	83.6%	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 for 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 later 2021.***

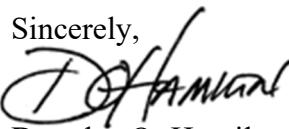
Because the exact timing for a future UST replacement at this site is unknown, and thereby precluding the possible closure of this case in light of continual and consistent data showing negligible risk for impact, at the minimum, we request MDE's approval to:



Third Quarter 2021 Status Report & Request for Closure  
SMO SS-550 – Hanover/Fort Meade Shell  
MDE Case No. 2013-0321-AA

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,  


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Email [DHamilton@armgroup.net](mailto:DHamilton@armgroup.net)

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

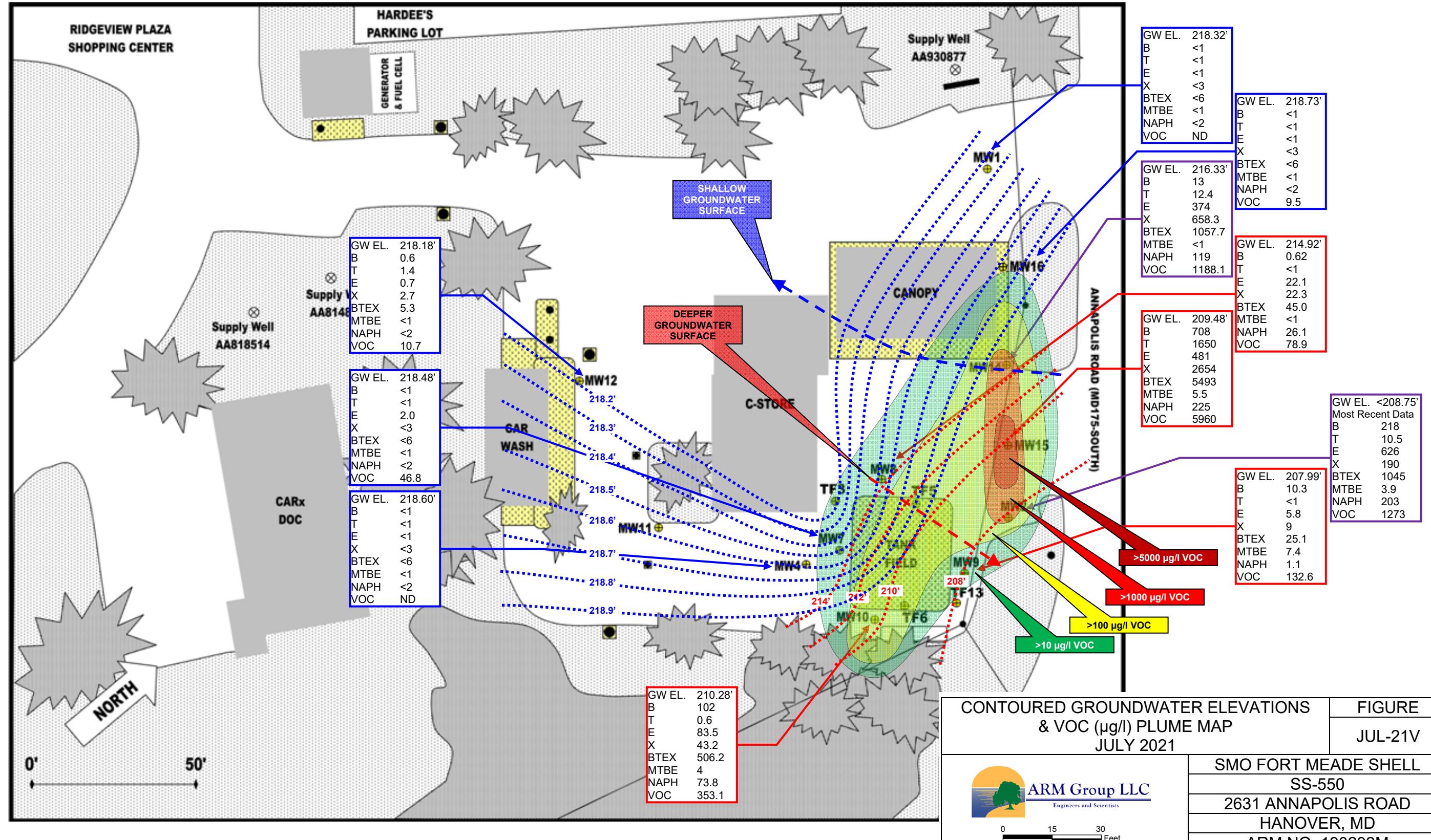


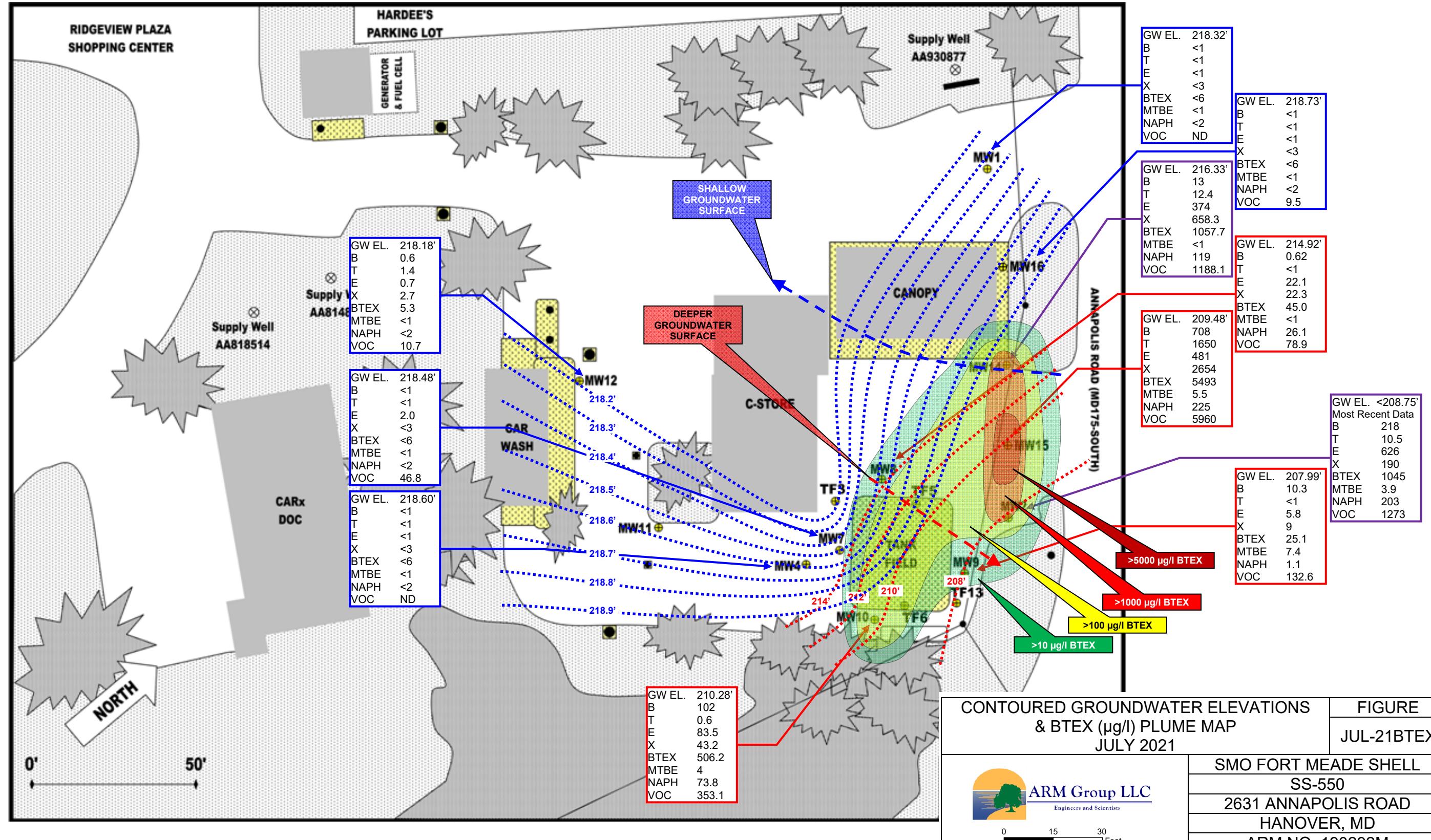
## **CONTOURED GROUNDWATER ELEVATIONS & VOC, BTEX & BENZENE PLUME MAPS**

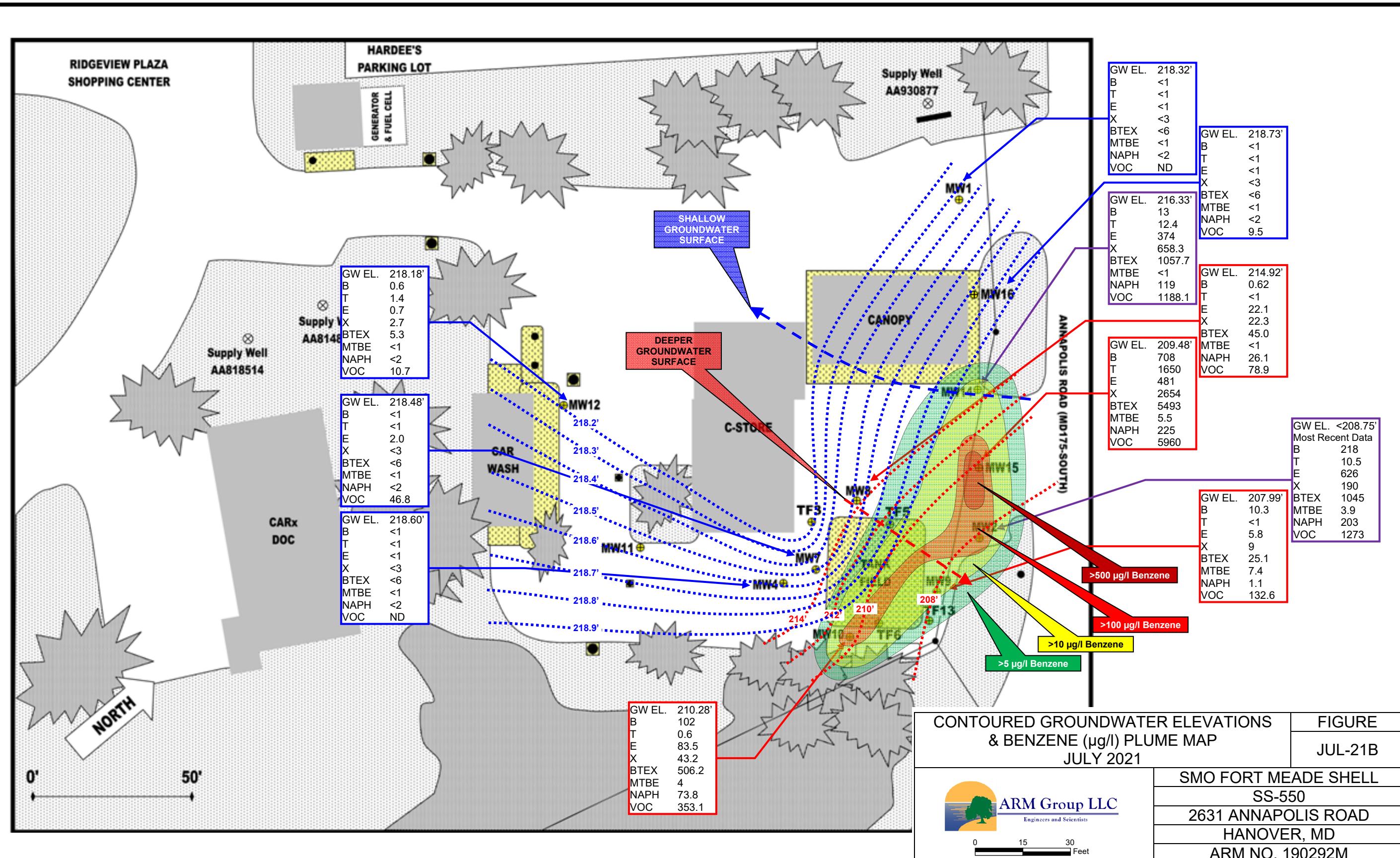
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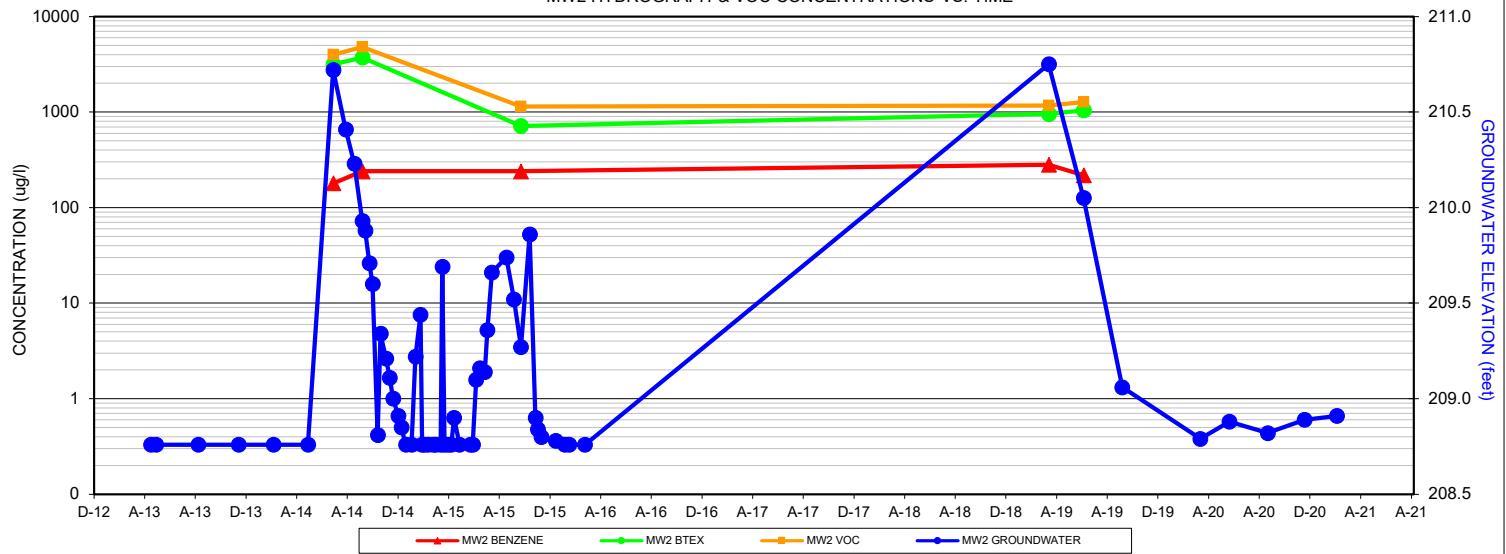
## **HYDROGRAPHS & GAUGING/SAMPLING DATABASE**

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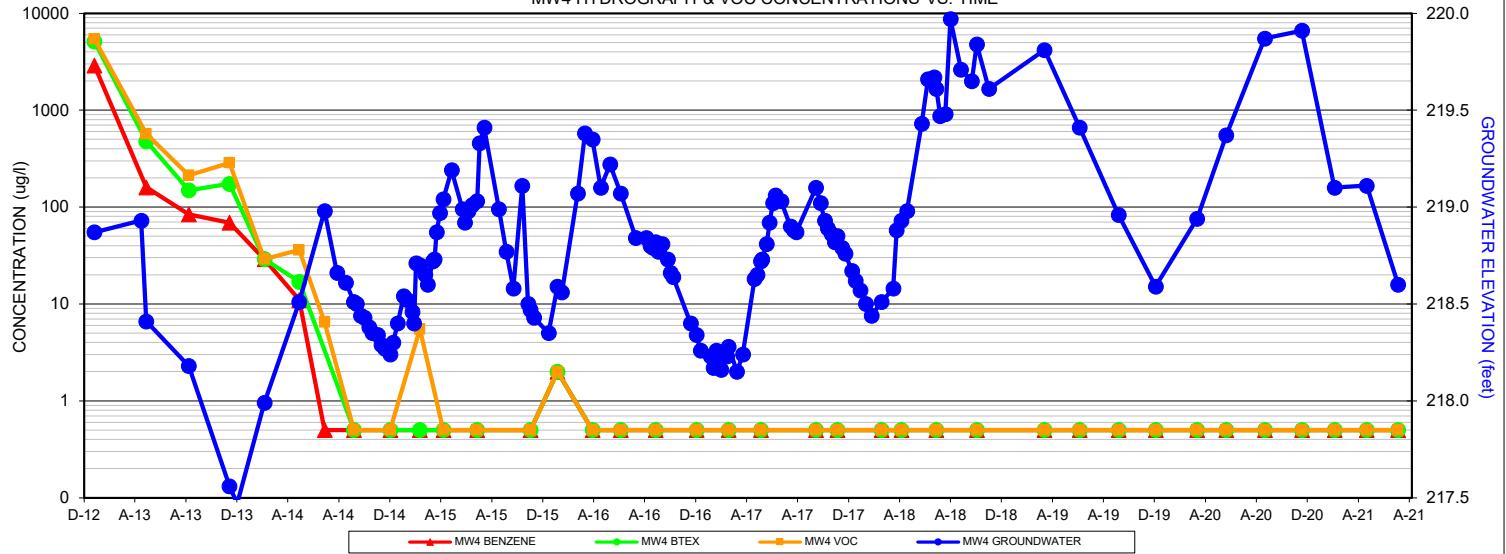
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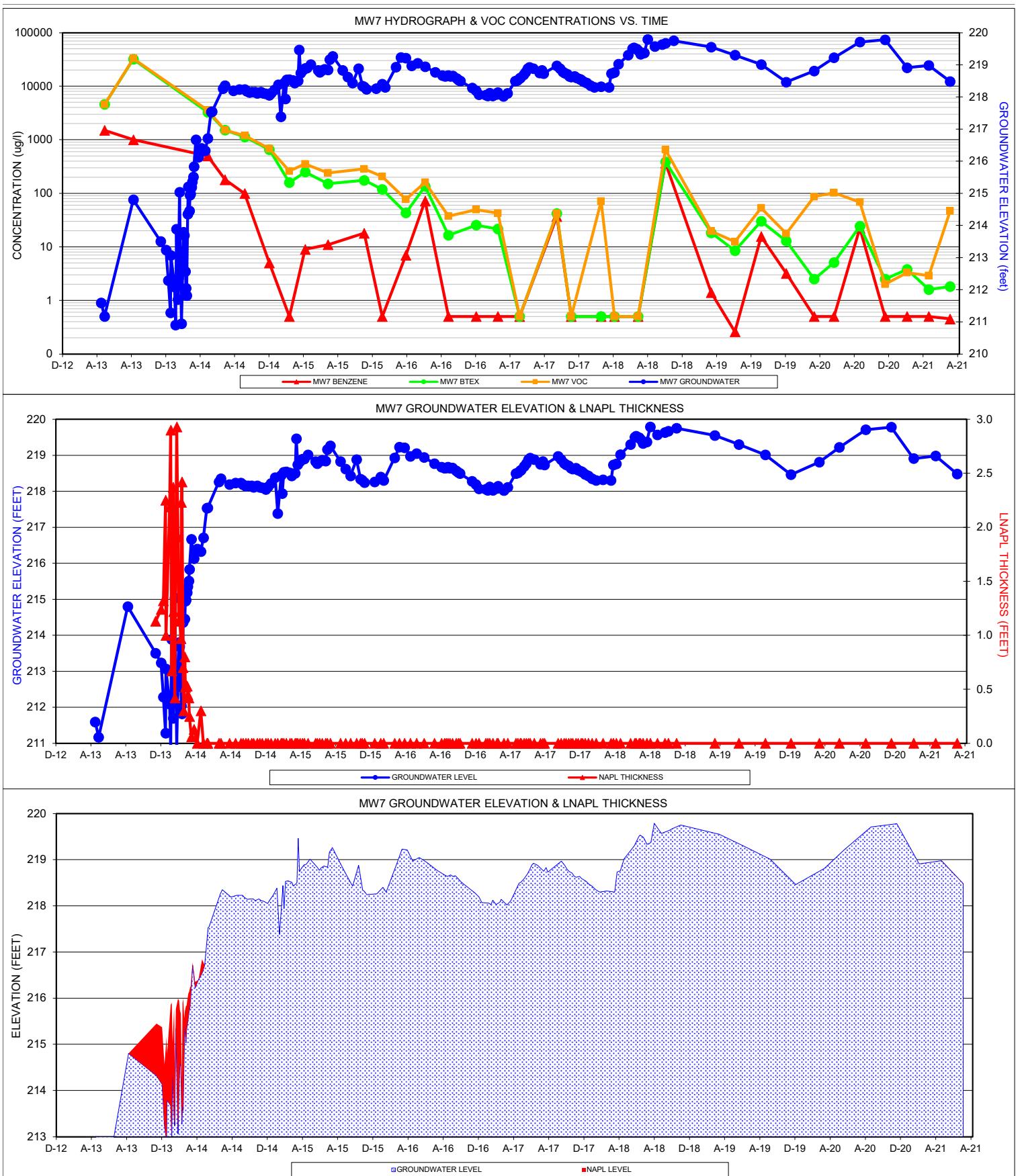


### MW2 HYDROGRAPH & VOC CONCENTRATIONS VS. TIME

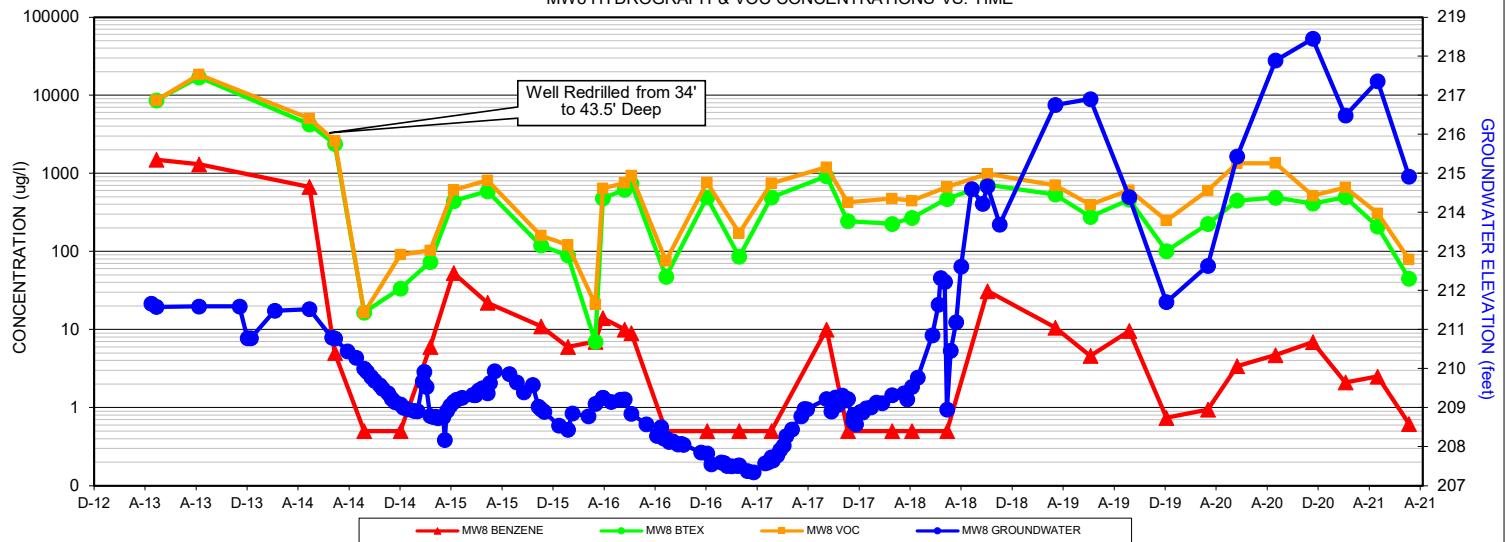


### MW4 HYDROGRAPH & VOC CONCENTRATIONS VS. TIME

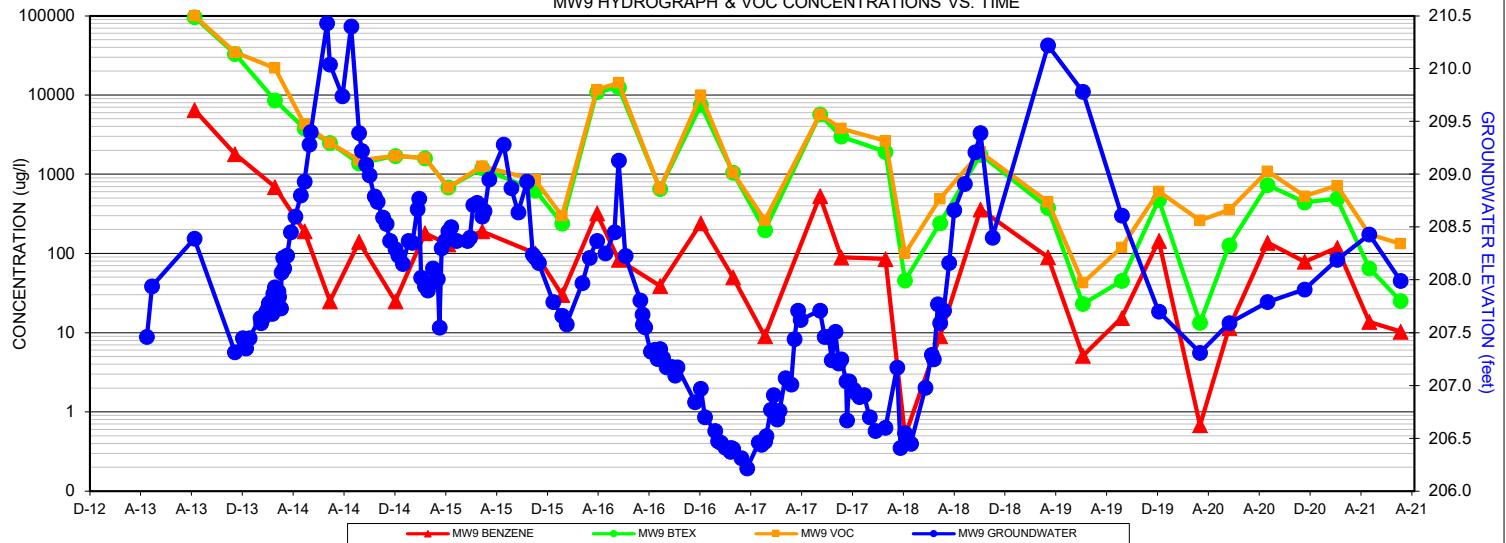




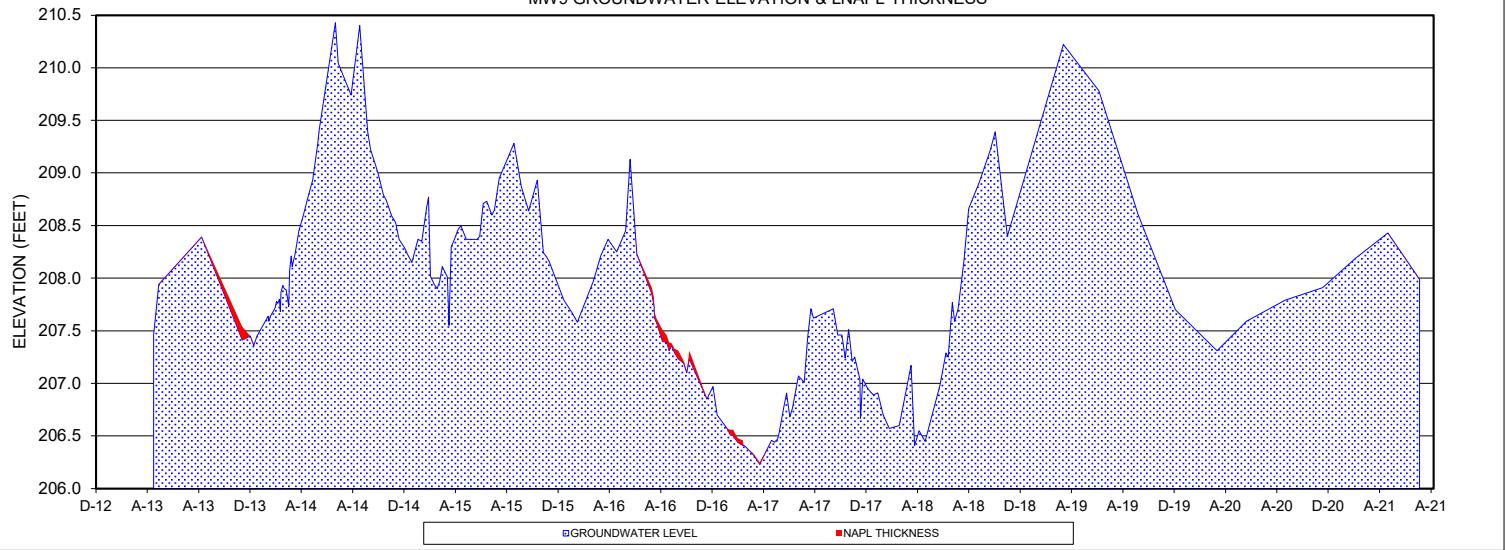
### MW8 HYDROGRAPH & VOC CONCENTRATIONS VS. TIME

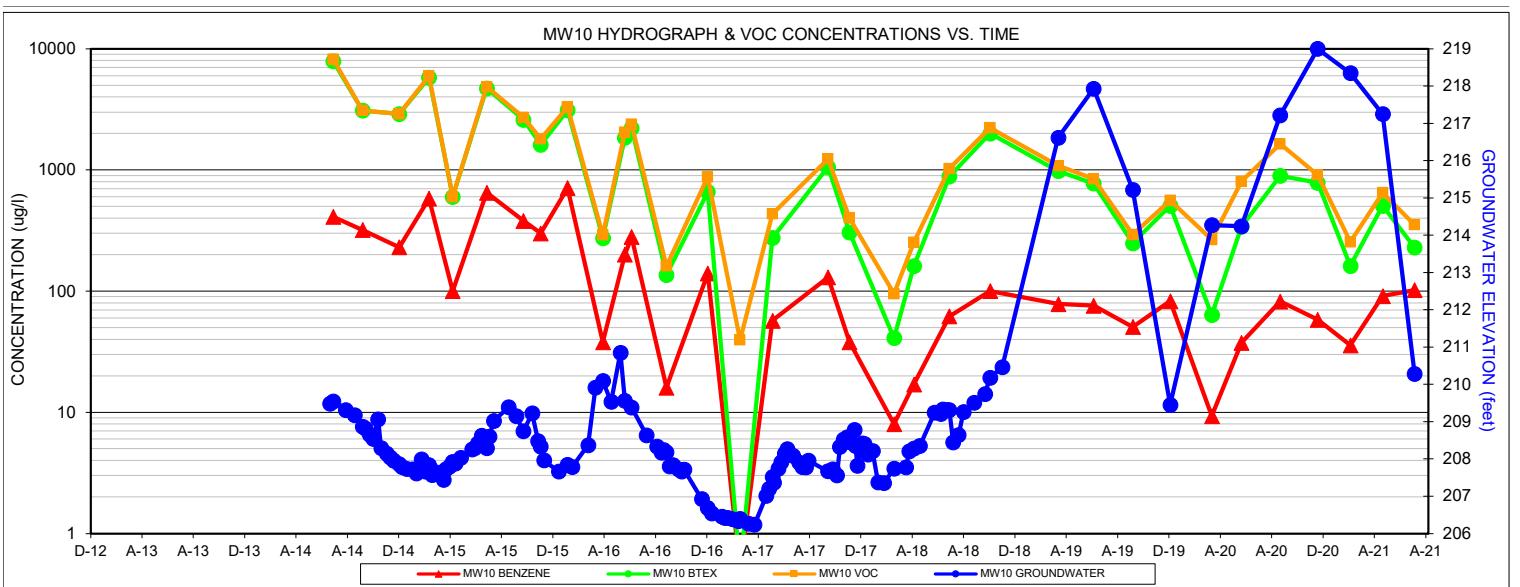


### MW9 HYDROGRAPH & VOC CONCENTRATIONS VS. TIME

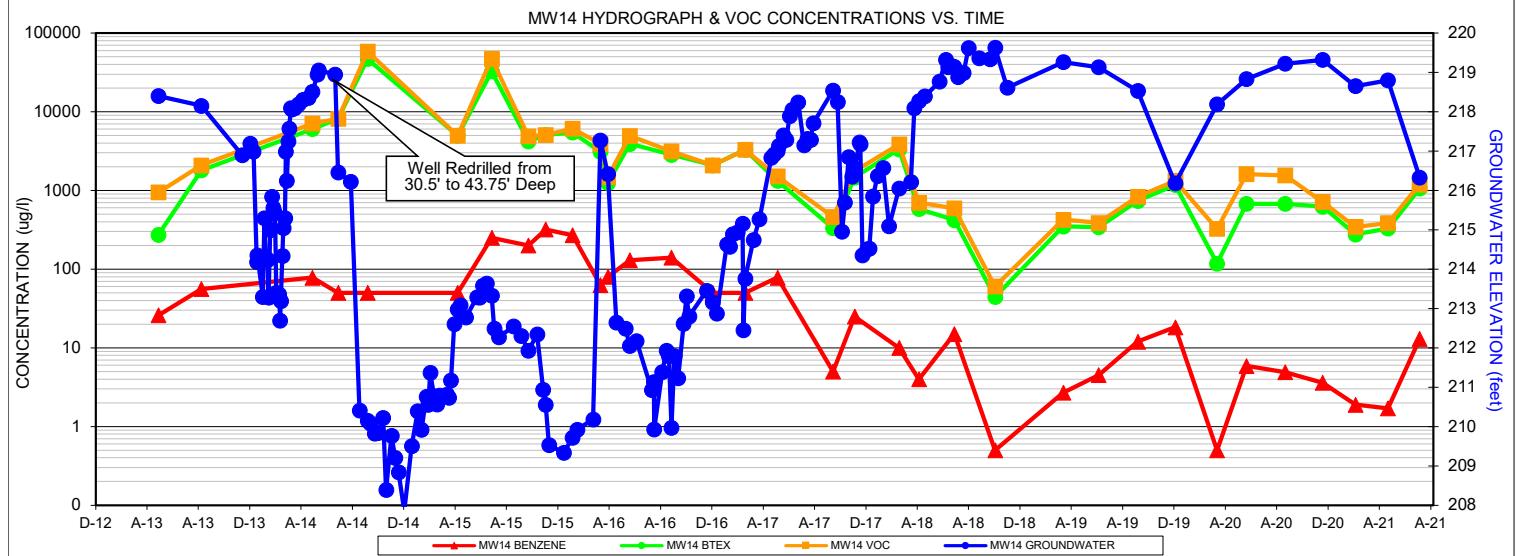


### MW9 GROUNDWATER ELEVATION & LNAPL THICKNESS

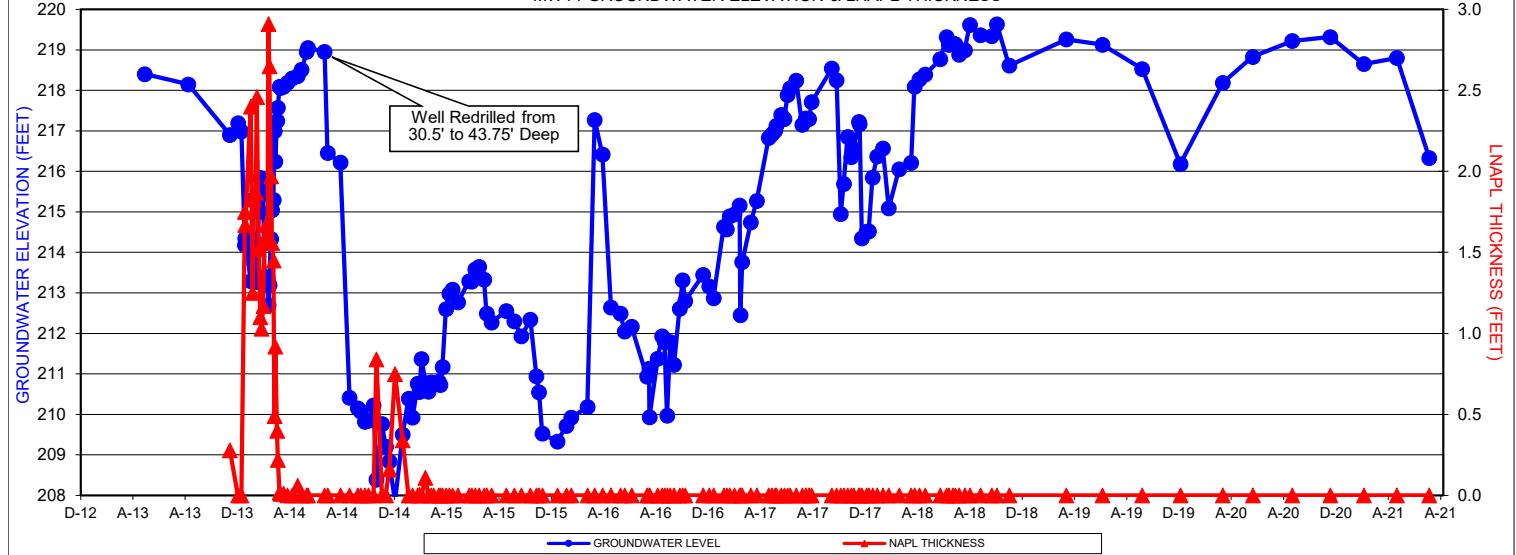




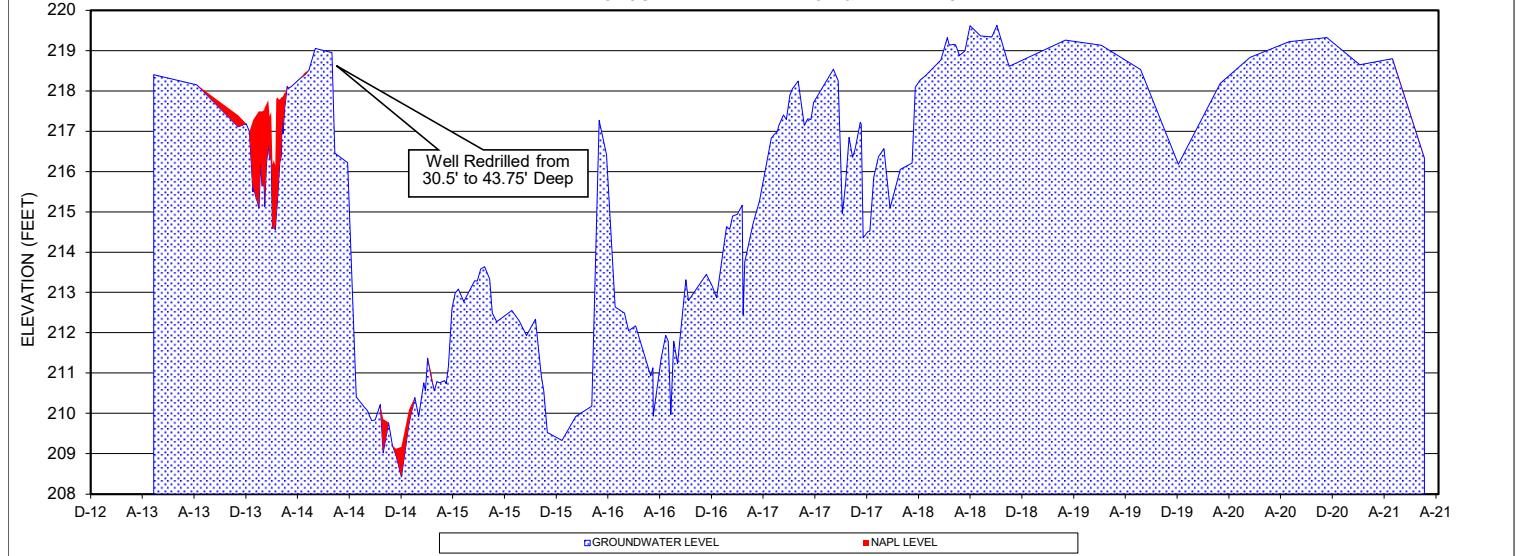
### MW14 HYDROGRAPH & VOC CONCENTRATIONS VS. TIME



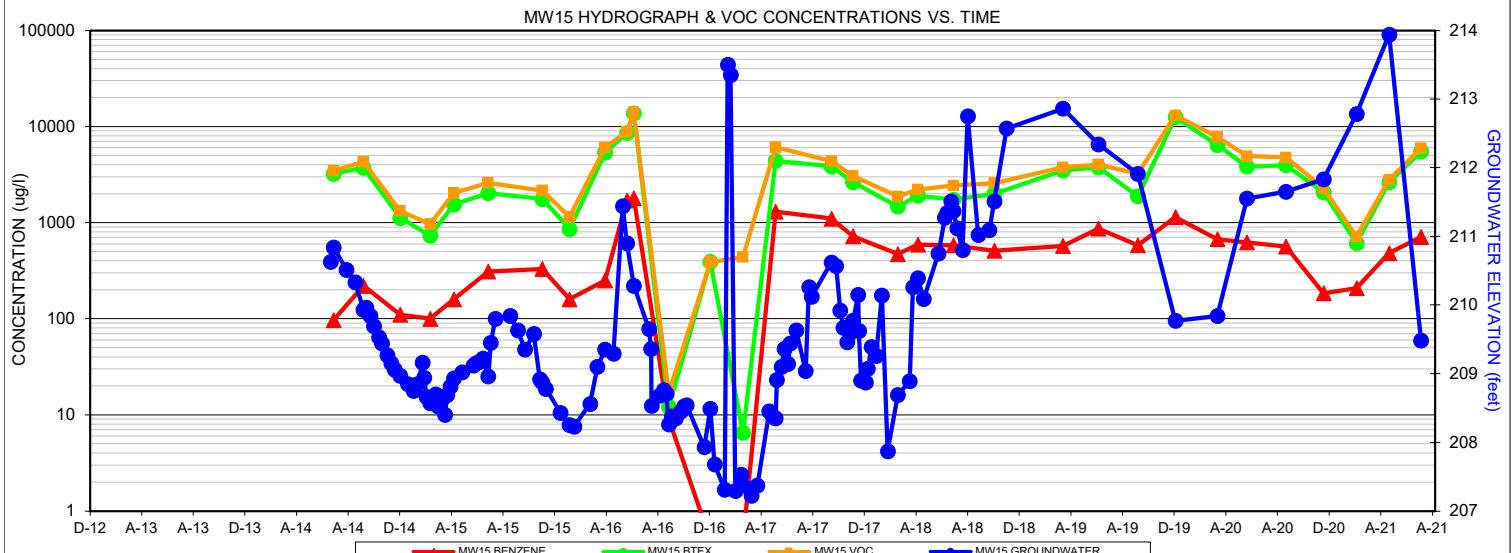
### MW14 GROUNDWATER ELEVATION & LNAPL THICKNESS



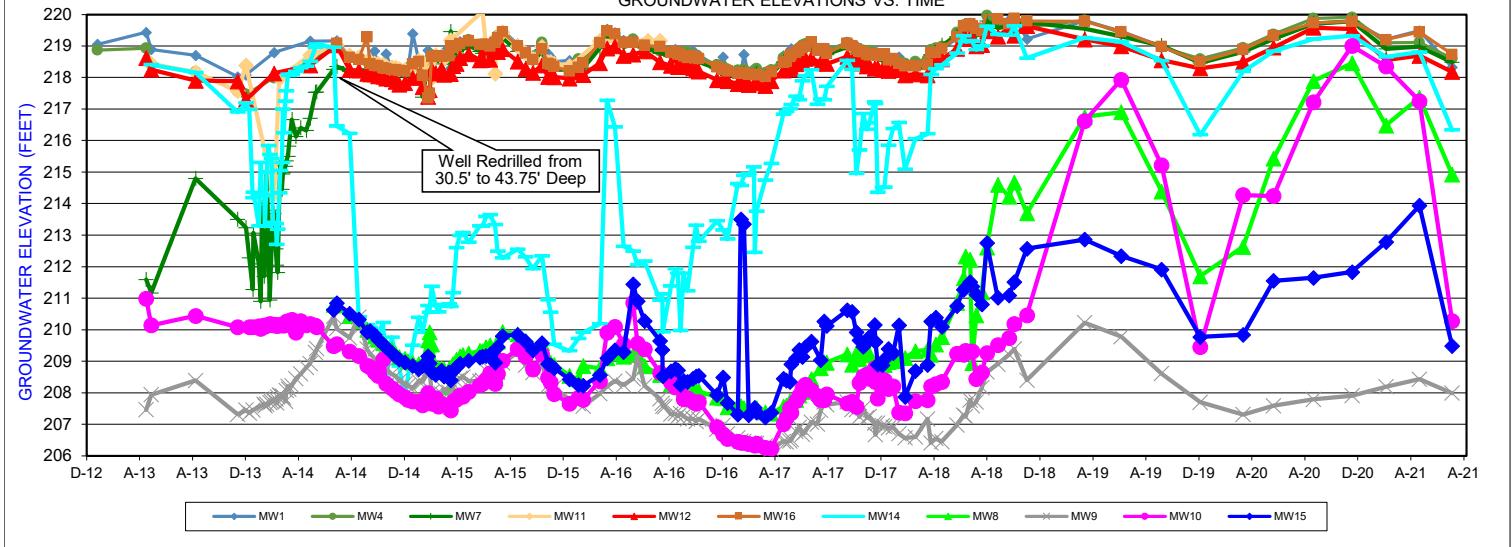
### MW14 GROUNDWATER ELEVATION & LNAPL THICKNESS



### MW15 HYDROGRAPH & VOC CONCENTRATIONS VS. TIME



### GROUNDWATER ELEVATIONS VS. TIME



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)										Micrograms Per Liter ( $\mu\text{g/l}$ )										Milligrams per Liter (mg/l)
	12/26/12			Clear	25.95				219.05	<1	<1	<1	<2	<1	<1	<5	<5	<1	<10	0.0	<0.2	0.35
	04/17/13			Clear	25.57				219.43													
	04/29/13			Clear	26.11				218.89	<1	<1	<1	<2	<1	<1	<5	<5	<1	<10	0.0	<0.2	<0.22
	08/09/13			Clear	26.30				218.70	<1	<1	<1	<2	<1	<1	<5	<5	<1	<10	0.0	<0.2	<0.19
	11/14/13			Clear	26.98				218.02	<1	<1	<1	<2	<1	<1	<5	<5	<1	<10	0.0	<0.2	<0.21
	12/03/13			Clear	26.92				218.08													
	02/06/14			Clear	26.21				218.79	<1	<1	<1	<2	<1	<1	<5	<5	<1	<10	0.0	<0.2	<0.22
	04/30/14			Clear	25.85				219.15	<1	<1	<1	<2	<1	<1	<5	<5	<1	<10	0.0	2.30	<0.22
	06/30/14			Clear	25.84				219.16	<1	<1	<1	<2	<1	<1	<5	<5	<1	<10	0.0	<0.2	<0.22
	07/30/14			Clear	26.34				218.66													
	08/20/14			Clear	26.43				218.57													
	09/08/14			Clear	26.48				218.52	<1	<1	<1	<2	<1	<1	<5	<5	<1	<10	0.0	<0.2	<0.21
	09/15/14			Clear	26.57				218.43													
	09/25/14			Clear	26.16				218.84													
	10/03/14			Clear	26.62				218.38													
	10/15/14			Clear	26.58				218.42													
	10/22/14			Clear	26.25				218.75													
	11/04/14			Clear	26.75				218.25													
	11/13/14			Clear	26.78				218.22													
	11/21/14			Clear	26.79				218.21													
	12/04/14			Clear	26.77				218.23	<1	<1	<1	<5	<5	<5	<5	<5	<5	<10	0.0	<0.2	<0.22
	12/11/14			Clear	26.75				218.25													
	12/22/14			Clear	25.61				219.39													
	01/05/15			Clear	26.47				218.53													
	01/14/15			Clear	26.91				218.09													
	01/26/15			Clear	26.14				218.86													
	01/30/15			Clear	26.38				218.62													
	02/04/15			Clear	26.34				218.66													
	02/13/15			Clear	26.28				218.72	<1	<1	<1	14.0	5.0	<5	<5	<5	<5	17.0	36.0	0.73	0.38
	02/26/15			Clear	26.28				218.72													
	03/04/15			Clear	26.19				218.81													
	03/16/15			Clear	26.14				218.86													
	03/20/15			Clear	26.71				218.29													
	03/25/15			Clear	26.55				218.45													
	04/02/15			Clear	25.94				219.06													
	04/10/15			Clear	25.87				219.13	<1	<1	<1	<5	<5	<5	<5	<5	<5	<10	0.0	0.27	0.36
	04/30/15			Clear	25.81				219.19													
	05/26/15			Clear	25.96				219.04													
	06/01/15			Clear	25.95				219.05													
	06/09/15			Clear	25.94				219.06													
	06/18/15			Clear	25.94				219.06													
	06/30/15			Clear	25.84				219.16	<1	<1	<1	13.0	<5	<5	<5	<5	<5	10.0	31.0	0.26	0.81
	07/06/15			Clear	25.71				219.29													
	07/17/15			Clear	25.51				219.49													
	08/21/15			Clear	25.94				219.06													
	09/08/15			Clear	26.20				218.80													
	09/25/15			Clear	26.30				218.70													
	10/16/15			Clear	25.92				219.08													
	10/30/15			Clear	26.25				218.75													
MW1	11/05/15	245.00	34.75	Clear	26.35				218.65	<1	<1	<1	<5	<5	<5	<5	<5	<5	<10	0.0	<0.2	<0.22
	11/13/15			Clear	26.50				218.50													
	12/18/15			Clear	26.46				218.54													
	01/08/16			Clear	26.69				218.31	<1	<1	<1	<5	<5	<5	<5	<5	<5	<10	0.0	<0.2	<0.23
	01/19/16			Clear	26.71				218.29													
	02/26/16			Clear	25.80				219.20													
	03/14/16			Clear	25.47				219.53													
	04/01/16			Clear	25.58				219.42	<1	<1	<1	<5	<5	<5	<5	<5	<5	<10	0.0	<0.2	<0.2
	04/21/16			Clear	25.83				219.17													
	05/13/16			Clear	25.78				219.22													
	06/08/16			Clear	25.97				219.03	<1	<1	37.0	130.0	30.0	<5	<5	6.0	15.0	80.0	298.0	6.00	4.00
	07/14/16			Clear	26.05				218.95													
	08/08/16			Clear	26.27				218.73													
	08/18/16			Clear	26.11				218.89													
	08/24/16			Clear	26.23				218.77													
	08/30/16			Clear	26.28				218.72	<1	<1	<1	<5	<5	<5	<5	<5	<5	<10	0.0	<0.2	<0.22
	09/06/16			Clear	26.35				218.65	<1	<1	<1	<5	<5	<5	<5	<5	<5	<10	0.0	<0.2	<0.21
	09/15/16			Clear	26.32				218.68													
	09/28/16			Clear	26.15				218.85													
	10/05/16			Clear	26.30				218.70													
	10/11/16			Clear	26.29				218.71													
	11/22/16			Clear	26.66				218.34													
	12/06/16			Clear	26.35				218.65	<1	<1	<1	<5	<5	<5	<5	<5	<5	<10	0.0	<0.2	<0.21
	12/16/16			Clear	26.80				218.20													
	01/09/17			Clear	26.88				218.12													
	01/16/17			Clear	26.88				218.12													
	01/23/17			Clear	26.27				218.73													
	02/03/17			Clear	26.95				218.05													
	02/17/17			Clear	26.97				218.03	<1	<1	2.0	13.0	<5	<5	<5	&lt					

Well	Date	Well	Depth	Depth to	LNAPL	Gallons	Cumu-	Corrected	Benzene	Toluene	Ethyl-	m+p-	o-	MTBE	Cyclo-	Methyl-	Cumene	Naph-	VOC	GRO	DRO	
		Elev.	Depth	LNAPL	Removed		lative	Removed	Water	Elevation	benzene	Xylenes	Xylenes		hexane	cyclo-	hexane	thalene				
		Feet (ft)								Micrograms Per Liter ( $\mu\text{g/l}$ )												
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	<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	<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	<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	<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	
	04/28/21			Clear	25.52			219.48	<1	<1	<1	<2	<1	<1				<2	0.7	<0.2	<0.11	
	07/12/21			Clear	26.68			218.32	<1	<1	<1	<2	<1	<1				<2	0.5	<0.2	0.09	

Well	Date	Well	Well	Depth	Depth to	LNAPL	Gallons	Cumula-	Corrected	Benzene	Toluene	Ethyl-	m+p-	o-	Cyclo-	Methyl-	Cumene	Naph-	VOC	GRO	DRO		
		Elev.	Depth	LNAPL	Water		Removed	Removal	Water	Elevation		Xylenes	Xylenes	MTBE	hexane	cyclo-	xylene	Thalene					
		Feet (ft)								Micrograms Per Liter ( $\mu\text{g/l}$ )										Milligrams per Liter (mg/l)			
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	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								
	06/11/19			Clear	33.46				210.05	218.0	10.5	626.0	184.0	6.1	3.9								
	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	Micrograms Per Liter ( $\mu\text{g/l}$ )													Milligrams per Liter (mg/l)		
										Benzene	Toluene	Ethylbenzene	m+p-Xylenes	o-Xylenes	MTBE	Cyclohexane	Methylcyclohexane	Cumene	Naphthalene	VOC	GRO	DRO			
										Feet (ft)															
	12/26/12			Clear	26.34				218.87	2900.0	300.0	690.0	1200.0	41.0	61.0	220.0	<100	35.0	<200	5447.0	9.90	0.28			
	04/17/13			Clear	26.28				218.93																
	04/29/13			Clear	26.80				218.41	160.0	110.0	62.0	120.0	26.0	<10	92.0	<50	<10	<100	570.0	3.10	0.37			
	08/09/13			Clear	27.03				218.18	84.0	9.0	25.0	31.0	<5	<5	35.0	29.0	<5	<50	213.0	1.90	<0.2			
	11/14/13			Clear	27.65				217.56	69.0	10.0	19.0	61.0	15.0	<1	52.0	33.0	5.0	22.0	286.0	2.80	0.55			
	12/03/13			Clear	27.74				217.47																
	02/06/14			Clear	27.22				217.99	29.0	<10	<10	<20	<10	<10	<50	<50	<10	<100	29.0	1.40	<0.22			
	04/30/14			Clear	26.70				218.51	11.0	<1	1.0	5.0	<1	<1	9.0	10.0	<1	<10	36.0	1.40	0.40			
	06/30/14			Clear	26.23				218.98	0.5	<1	<1	6.0	<1	<5	<5	<5	<5	<10	6.5	0.33	0.25			
	07/30/14			Clear	26.55				218.66																
	08/20/14			Clear	26.60				218.61																
	09/08/14			Clear	26.70				218.51	0.5	<1	<1	<5	<5	<5	<5	<5	<5	<10	0.5	0.28	0.23			
	09/15/14			Clear	26.71				218.50																
	09/25/14			Clear	26.77				218.44																
	10/03/14			Clear	26.78				218.43																
	10/15/14			Clear	26.83				218.38																
	10/22/14			Clear	26.86				218.35																
	11/04/14			Clear	26.87				218.34																
	11/13/14			Clear	26.92				218.29																
	11/21/14			Clear	26.94				218.27																
	12/04/14			Clear	26.97				218.24	0.5	<1	<1	<5	<5	<5	<5	<5	<5	<10	0.5	0.24	0.25			
	12/11/14			Clear	26.91				218.30																
	12/22/14			Clear	26.81				218.40																
	01/05/15			Clear	26.67				218.54																
	01/14/15			Clear	26.69				218.52																
	01/26/15			Clear	26.75				218.46																
	01/30/15			Clear	26.81				218.40																
	02/04/15			Clear	26.50				218.71																
	02/13/15			Clear	26.51				218.70	0.5	<1	<1	<5	<5	5.0	<5	<5	<5	<10	5.5	0.38	0.24			
	02/26/15			Clear	26.56				218.65																
	03/04/15			Clear	26.61				218.60																
	03/16/15			Clear	26.49				218.72																
	03/20/15			Clear	26.48				218.73																
	03/25/15			Clear	26.34				218.87																
	04/02/15			Clear	26.24				218.97																
	04/10/15			Clear	26.17				219.04	0.5	<1	<1	<5	<5	<5	<5	<5	<5	<10	0.5	<0.2	<0.22			
	04/30/15			Clear	26.02				219.19																
	05/26/15			Clear	26.22				218.99																
	06/01/15			Clear	26.29				218.92																
	06/09/15			Clear	26.23				218.98																
	06/18/15			Clear	26.20				219.01																
	06/30/15			Clear	26.18				219.03	0.5	<1	<1	<5	<5	<5	<5	<5	<5	<10	0.5	<0.2	<0.23			
	07/06/15			Clear	25.88				219.33																
	07/17/15			Clear	25.80				219.41																
	08/21/15			Clear	26.22				218.99																
	09/08/15			Clear	26.44				218.77																
	09/25/15			Clear	26.63				218.58																
	10/16/15			Clear	26.10				219.11																
	10/30/15			Clear	26.71				218.50																
	11/05/15			Clear	26.74				218.47	0.5	<1	<1	<5	<5	<5	<5	<5	<5	<10	0.5	<0.2	<0.23			
	11/13/15			Clear	26.78				218.43																
	12/18/15			Clear	26.86				218.35																
	01/08/16	245.21	34.10	Clear	26.62				218.59	2.0	<1	<1	<5	<5	<5	<5	<5	<5	<10	2.0	<0.2	0.30			
	01/19/16			Clear	26.65				218.56																
	02/26/16			Clear	26.14				219.07																
	03/14/16			Clear	25.83				219.38																
	04/01/16			Clear	25.86				219.35	0.5	<1	<1	<5	<5	<5	<5	<5	<5	<10	0.5	0.42	0.51			
	04/21/16			Clear	26.11				219.10																
	05/13/16			Clear	25.99				219.22																
	06/08/16			Clear	26.14				219.07	0.5	<1	<1	<5	<5	<5	<5	<5	<5	<10	0.5	0.22	0.37			
	07/14/16			Clear	26.37				218.84																
	08/08/16			Clear	26.37				218.84																
	08/24/16			Clear	26.41				218.80																
	08/24/16			Clear	26.42				218.79																
	08/30/16			Clear	26.39				218.82	0.5	<1	<1	<5	<5	<5	<5	<5	<5	<10	0.5	<0.2	<0.22			
	09/06/16			Clear	26.44				218.77																
	09/15/16			Clear	26.40				218.81																
	09/28/16			Clear	26.48				218.73																
	10/05/16			Clear	26.55				218.66																
	10/11/16			Clear	26.57				218.64																
	11/22/16			Clear	26.81				218.40																
	12/06/16			Clear	2																				

Well	Date	Well	Well	Depth	Depth to	LNAPL	Gallons	Cumu-	Corrected	Benzene	Toluene	Ethyl-	m+p-	o-	Cyclo-	Methyl-	Cumene	Naph-	VOC	GRO	DRO
		Elev.	Depth	LNAPL	Removed	lative	Water	Elevation	benzene	Xylenes	Xylenes	MTBE	hexane	cyclo-	hexane		thalene				
MW4	01/15/18	245.21	34.10	Clear	26.71			218.50												Milligrams per Liter (mg/l)	
	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	<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	<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	<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	<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	<1	<2	<2	0.5	<0.2	0.42	
	06/11/19			Clear	25.80			219.41	0.5	<1	<1	<2	<1	<1	<1	<2	<2	0.5	<0.2	0.46	
	09/12/19			Clear	26.25			218.96	0.5	<1	<1	<2	<1	<1	<1	<2	<2	0.5	<0.2	0.26	
	12/10/19			Clear	26.62			218.59	0.5	<1	<1	<2	<1	<1	<1	<2	<2	0.5	<0.2	0.17	
	03/18/20			Clear	26.27			218.94	0.5	<1	<1	<2	<1	<1	<1	<2	<2	0.5	<0.2	0.28	
	05/27/20			Clear	25.84			219.37	0.5	<1	<1	<2	<1	<1	<1	<2	<2	0.5	<0.2	0.24	
	08/27/20			Clear	25.34			219.87	0.5	<1	<1	<2	<1	<1	<1	<2	<2	0.5	<0.2	0.23	
	11/24/20			Clear	25.30			219.91	0.5	<1	<1	<2	<1	<1	<1	<2	<2	0.5	<0.2	0.31	
	02/10/21			Clear	26.11			219.10	0.5	<1	<1	<2	<1	<1	<1	<2	<2	0.5	<0.2	0.24	
	04/28/21			Clear	26.10			219.11	0.5	<1	<1	<2	<1	<1	<1	<2	<2	0.5	<0.2	<0.1	
	07/12/21			Clear	26.61			218.60	0.5	<1	<1	<2	<1	<1	<1	<2	<2	0.5	<0.2	0.08	
TF5	04/17/13	244.21	11.70	na	Dry			na													
TF6	04/17/13	244.17	9.70	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)	Micrograms Per Liter ( $\mu\text{g/l}$ )	Milligrams per Liter (mg/l)												
MW7	04/17/13	244.35 34.10		Clear	32.76				211.59															
	04/29/13			Clear	33.18				211.17	1500.0	800.0	620.0	1500.0	160.0	<100	<500	<500	<100	<1000	4580.0	20.00	3.40		
	08/09/13			Clear	29.55				214.80	1000.0	19000.0	2400.0	7000.0	2600.0	<50	<250	<250	210.0	650.0	32860.0	44.00	24.00		
	11/14/13			28.90	30.03	1.13	1.75	1.75	213.50															
	12/03/13			28.98	30.22	1.24	1.75	3.50	213.23															
	12/11/13			29.79	31.11	1.32	2.25	5.75	212.29															
	12/19/13			29.19	31.44	2.25	1.50	7.25	211.28															
	12/20/13			29.56	30.56	1.00	0.50	7.75	213.07															
	01/02/14			28.49	30.68	2.19	2.25	10.00	212.09															
	01/06/14			28.45	31.35	2.90	2.25	12.25	210.90															
	01/09/14			29.31	29.98	0.67	0.25	12.50	213.89															
	01/14/14			28.57	30.94	2.37	1.50	14.00	211.70															
	01/16/14			29.89	31.11	1.22	1.00	15.00	212.36															
	01/20/14			28.59	29.01	0.42	2.00	17.00	215.04															
	01/27/14			28.36	31.29	2.93	1.00	18.00	210.94															
	01/31/14			28.40	30.31	1.91	1.50	19.50	212.66															
	02/03/14			28.61	29.74	1.13	3.25	22.75	213.79															
	02/06/14			28.68	29.83	1.15	3.00	25.75	213.69															
	02/10/14			30.11	31.08	0.97	3.00	28.75	212.57															
	02/12/14			28.46	30.69	2.23	3.75	32.50	212.05															
	02/14/14			28.36	30.78	2.42	1.50	34.00	211.82															
	02/18/14			28.79	29.49	0.70	0.10	34.10	214.35															
	02/20/14			28.63	28.93	0.30	0.10	34.20	215.20															
	02/24/14			28.52	29.32	0.80	0.20	34.40	214.45															
	02/26/14			28.51	29.03	0.52	0.30	34.70	214.94															
	02/28/14			28.44	28.98	0.54	0.20	34.90	214.98															
	03/04/14			28.25	28.78	0.53	0.35	35.25	215.19															
	03/06/14			28.22	28.67	0.45	0.50	35.75	215.35															
	03/10/14			28.12	28.54	0.42	0.05	35.80	215.51															
	03/12/14			28.09	28.34	0.25	0.05	35.85	215.83															
	03/19/14			27.58	27.64	0.06	0.10	35.95	216.67															
	03/28/14			28.00	28.13	0.13	0.05	36.00	216.13															
	04/08/14			27.95	27.95	0.00	0.00	36.00	216.40															
	04/21/14			27.51	27.81	0.30	0.35	36.35	216.32															
	04/30/14			27.64	27.64	0.00	0.00	36.35	216.71	500.0	1100.0	440.0	1000.0	230.0	<10	51.0	58.0	46.0	110.0	3564.0	8.70	3.40		
	05/12/14			26.82	26.82	0.00	0.00	36.35	217.53															
	05/15/14			26.81	26.81	0.00	0.00	36.35	217.54															
	06/23/14			26.09	26.09	0.00	0.00	36.35	218.26															
	06/30/14			26.00	26.00	0.00	0.00	36.35	218.35	180.0	450.0	250.0	540.0	92.0	<50	<50	<50	<50	<100	1512.0	7.10	7.60		
	07/30/14			26.16	26.16	0.00	0.00	36.35	218.19															
	08/20/14			26.12	26.12	0.00	0.00	36.35	218.23															
	09/08/14			26.12	26.12	0.00	0.00	36.35	218.23	99.0	320.0	230.0	430.0	53.0	<50	<50	70.0	<50	<100	1202.0	9.40	2.40		
	09/15/14			26.17	26.17	0.00	0.00	36.35	218.18															
	09/25/14			26.21	26.21	0.00	0.00	36.35	218.14															
	10/03/14			26.20	26.20	0.00	0.00	36.35	218.15															
	10/15/14			26.20	26.20	0.00	0.00	36.35	218.15															
	10/22/14			26.24	26.24	0.00	0.00	36.35	218.11															
	11/04/14			26.20	26.20	0.00	0.00	36.35	218.15															
	11/13/14			26.24	26.24	0.00	0.00	36.35	218.11															
	11/21/14			26.25	26.25	0.00	0.00	36.35	218.10															
	12/04/14			26.30	26.30	0.00	0.00	36.35	218.05	5.0	<10	250.0	400.0	<50	<50	<50	<50	<50	<100	684.0	5.70	1.40		
	12/11/14			26.23	26.23	0.00	0.00	36.35	218.12															
	12/22/14			26.13	26.13	0.00	0.00	36.35	218.22															
	01/05/15			25.97	25.97	0.00	0.00	36.35	218.38															
	01/14/15			26.97	26.97	0.00	0.00	36.35	217.38															
	01/26/15			25.91	25.91	0.00	0.00	36.35	218.44															
	01/30/15			26.41	26.41	0.00	0.00	36.35	217.94															
	02/04/15			25.82	25.82	0.00	0.00	36.35	218.53	0.5	<1	63.0	89.0	6.0	<5	24.0	37.0	14.0	27.0	260.5	3.40	3.90		
	02/26/15			25.84	25.84	0.00	0.00	36.35	218.51															
	03/04/15			25.92	25.92	0.00	0.00	36.35	218.43															
	03/16/15			25.85	25.85	0.00	0.00	36.35	218.50															
	03/20/15			24.89	24.89	0.00	0.00	36.35	219.46	9.0	<1	110.0	130.0	<5	<5	25.0	31.0	17.0	31.0	353.0	3.60	1.70		
	03/25/15			25.61	25.61	0.00	0.00	36.35	218.74															
	04/02/15			25.52	25.52	0.00	0.00	36.35	218.83															
	04/10/15			25.46	25.46	0.00	0.00	36.35	218.89	7.														

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)						Micrograms Per Liter ( $\mu\text{g/l}$ )													Milligrams per Liter (mg/l)		
MW7	01/16/17	244.35	34.10	26.32	26.32	0.00	0.00	36.35	218.03														
	01/23/17			26.23	26.23	0.00	0.00	36.35	218.12														
	02/03/17			26.32	26.32	0.00	0.00	36.35	218.03														
	02/17/17			26.27	26.27	0.00	0.00	36.35	218.08														
	02/21/17			26.21	26.21	0.00	0.00	36.35	218.14	0.5	<1	11.0	10.0	<5	<5	6.0	15.0	<5	<10	42.5	1.50	1.50	
	03/13/17			26.33	26.33	0.00	0.00	36.35	218.02														
	03/27/17			26.24	26.24	0.00	0.00	36.35	218.11														
	04/24/17			25.86	25.86	0.00	0.00	36.35	218.49														
	05/01/17			25.84	25.84	0.00	0.00	36.35	218.51														
	05/09/17			25.78	25.78	0.00	0.00	36.35	218.57	0.5	<1	<1	<5	<5	<5	<5	<5	<5	<10	0.5	0.81	3.70	
	05/12/17			25.76	25.76	0.00	0.00	36.35	218.59														
	05/23/17			25.66	25.66	0.00	0.00	36.35	218.69														
	05/30/17			25.58	25.58	0.00	0.00	36.35	218.77														
	06/07/17			25.47	25.47	0.00	0.00	36.35	218.88														
	06/13/17			25.43	25.43	0.00	0.00	36.35	218.92														
	06/27/17			25.47	25.47	0.00	0.00	36.35	218.88														
	07/19/17			25.60	25.60	0.00	0.00	36.35	218.75														
	07/27/17			25.52	25.52	0.00	0.00	36.35	218.83														
	08/02/17			25.62	25.62	0.00	0.00	36.35	218.73														
	09/18/17			25.38	25.38	0.00	0.00	36.35	218.97	37.0	<1	5.0	<5	<5	<5	<5	<5	<5	<10	42.0	0.27	0.87	
	09/29/17			25.47	25.47	0.00	0.00	36.35	218.88														
	10/09/17			25.57	25.57	0.00	0.00	36.35	218.78														
	10/16/17			25.61	25.61	0.00	0.00	36.35	218.74														
	10/25/17			25.64	25.64	0.00	0.00	36.35	218.71														
	11/02/17			25.71	25.71	0.00	0.00	36.35	218.64														
	11/08/17			25.73	25.73	0.00	0.00	36.35	218.62	0.5	<1	<1	<5	<5	<5	<5	<5	<5	<10	0.5	0.28	1.20	
	11/20/17			25.71	25.71	0.00	0.00	36.35	218.64														
	11/27/17			25.76	25.76	0.00	0.00	36.35	218.59														
	12/08/17			25.80	25.80	0.00	0.00	36.35	218.55														
	12/13/17			25.82	25.82	0.00	0.00	36.35	218.53														
	12/22/17			25.88	25.88	0.00	0.00	36.35	218.47														
	01/02/18			25.92	25.92	0.00	0.00	36.35	218.43														
	01/15/18			26.00	26.00	0.00	0.00	36.35	218.35														
	01/29/18			26.05	26.05	0.00	0.00	36.35	218.30														
	02/22/18			26.03	26.03	0.00	0.00	36.35	218.32	0.5	<1	<1	<5	<5	<5	<5	6.0	<5	<10	71.0	1.10	0.92	
	03/22/18			26.05	26.05	0.00	0.00	36.35	218.30														
	03/30/18			25.62	25.62	0.00	0.00	36.35	218.73														
	04/10/18			25.59	25.59	0.00	0.00	36.35	218.76	0.5	<1	<1	<5	<5	<5	<5	<5	<5	<10	0.5	0.29	0.56	
	04/24/18			25.33	25.33	0.00	0.00	36.35	219.02														
	05/29/18			25.05	25.05	0.00	0.00	36.35	219.30														
	06/13/18			24.85	24.85	0.00	0.00	36.35	219.50														
	06/18/18			24.82	24.82	0.00	0.00	36.35	219.53														
	06/28/18			24.86	24.86	0.00	0.00	36.35	219.49														
	07/03/18			24.90	24.90	0.00	0.00	36.35	219.45	0.5	<1	<1	<5	<5	<5	<5	<5	<5	<10	0.5	0.57	1.10	
	07/12/18			25.02	25.02	0.00	0.00	36.35	219.33														
	07/25/18			24.98	24.98	0.00	0.00	36.35	219.37														
	08/06/18			24.56	24.56	0.00	0.00	36.35	219.79														
	08/31/18			24.78	24.78	0.00	0.00	36.35	219.57														
	09/26/18			24.72	24.72	0.00	0.00	36.35	219.63														
	10/08/18			24.68	24.68	0.00	0.00	36.35	219.67	370.0	7.0	10.0	<5	<5	12.0	21.0	20.0	<5	13.0	651.0	0.99	0.96	
	11/06/18			24.60	24.60	0.00	0.00	36.35	219.75														
	03/19/19			24.80	24.80	0.00	0.00	36.35	219.55	1.4	6.8	1.6	5.9	2.6	0.4					0.9	19.6	<0.2	1.60
	06/11/19			25.05	25.05	0.00	0.00	36.35	219.30	0.3	<1	5.0	3.2	<1	<1					4.0	12.5	1.27	1.90
	09/12/19			25.34	25.34	0.00	0.00	36.35	219.01	15.6	0.6	8.6	4.6	0.7	0.7					5.0	53.4	1.64	2.20
	12/10/19			25.89	25.89	0.00	0.00	36.35	218.46	3.2	0.5	5.6	3.5	<1	0.3					4.6	17.7	1.25	0.89
	03/18/20			25.54	25.54	0.00	0.00	36.35	218.81	0.5	<1	2.0	<2	<1	<1					4.5	2.5	86.6	<2
	05/27/20			25.13	25.13	0.00	0.00	36.35	219.22	0.5	<1	3.2	1.4	<1	<1					4.8	2.9	102.5	1.37
	08/27/20			24.64	24.64	0.00	0.00	36.35	219.71	22.3	<1	2.0	<2	<1	2.7					2.8	68.4	0.31	1.30
	11/24/20			24.57	24.57	0.00	0.00	36.35	219.78	0.5	<1	2.0	<2	<1	0.5					<2	2.0	<0.2	0.85
	02/10/21			25.44	25.44	0.00	0.00	36.35	218.91	0.5	<1	3.3	<2	<1	0.5					<2	3.3	1.00	1.90
	04/28/21			25.37	25.37	0.00	0.00	36.35	218.98	0.5	<1	1.1	<2	<1	0.5					1.8	2.9	0.59	0.76
	07/12/21			25.87	25.87</																		



Well	Date	Well	Well	Depth	Depth to	LNAPL	Gallons	Cumula-	Corrected	Benzene	Toluene	Ethyl-	m+p-	o-	MTBE	Cyclo-	Methyl-	Cumene	Naph-	VOC	GRO	DRO			
		Elev.	Depth	LNAPL	Removed			tive	Water	Elevation		Xylenes	Xylenes	Xylenes	hexane	cyclo-	xylene	thalene							
		Feet (ft)								Micrograms Per Liter ( $\mu\text{g/l}$ )												Milligrams per Liter (mg/l)			
MW8	11/20/17	244.79	43.60	Clear	36.14				208.68																
	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	0.68	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	
	04/28/21			Clear	27.43				217.36	2.5	0.5	93.1	111.0	0.7	<1						90.5	307.9	0.86	1.10	
	07/12/21			Clear	29.87				214.92	0.6	<1	22.1	21.6	0.7	<1						26.1	78.9	0.97	1.20	

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	
								Micrograms Per Liter ( $\mu\text{g/l}$ )												Milligrams per Liter (mg/l)			
		Feet (ft)																					
MW9	04/17/13	243.49	40.50	Clear	36.03				207.46														
	04/29/13			Clear	35.55	35.55	0.00	0.00	207.94	PURGE WATER CONTAINED DARK BROWN FREE-PHASE GASOLINE PRODUCT													
	08/09/13			Clear	35.10	35.10	0.01	0.00	208.39	6500.0	52000.0	6800.0	21000.0	9500.0	240.0	300.0	810.0	630.0	1700.0	99480.0	170.00	160.00	
	11/14/13			Clear	35.95	36.08	0.13	0.05	207.32	1800.0	15000.0	3200.0	9200.0	3900.0	160.0	130.0	110.0	220.0	610.0	34598.0	50.00	45.00	
	12/03/13			Clear	36.04	36.04	0.00	0.00	207.45														
	12/11/13			Clear	36.12	36.13	0.01	0.00	207.35														
	12/19/13			Clear	36.04	36.04	0.00	0.00	207.45														
	01/14/14			Clear	35.85				207.64														
	01/16/14			Clear	35.90				207.59														
	01/20/14			Clear	35.85				207.64														
	01/27/14			Clear	35.80				207.69														
	01/31/14			Clear	35.77				207.72														
	02/03/14			Clear	35.71				207.78														
	02/06/14			Clear	35.73				207.76														
	02/10/14			Clear	35.69				207.80														
	02/12/14			Clear	35.81				207.68														
	02/14/14			Clear	35.62				207.87														
	02/18/14			Clear	35.56				207.93	690.0	2200.0	800.0	3400.0	1500.0	630.0	91.0	93.0	83.0	330.0	21894.0	27.00	6.40	
	02/20/14			Clear	35.58				207.91														
	02/24/14			Clear	35.60				207.89														
	02/26/14			Clear	35.60				207.89														
	02/28/14			Clear	35.65				207.84														
	03/04/14			Clear	35.76				207.73														
	03/06/14			Clear	35.42				208.07														
	03/10/14			Clear	35.28				208.21														
	03/12/14			Clear	35.38				208.11														
	03/19/14			Clear	35.26				208.23														
	03/28/14			Clear	35.04				208.45														
	04/08/14			Clear	34.89				208.60														
	04/21/14			Clear	34.69				208.80														
	04/30/14			Clear	34.56				208.93	190.0	750.0	330.0	1600.0	920.0	93.0	<50	100.0	74.0	240.0	4297.0	12.00	10.00	
	05/12/14			Clear	34.21				209.28														
	05/15/14			Clear	34.09				209.40														
	06/23/14			Clear	33.06				210.43														
	06/30/14			Clear	33.45				210.04	25.0	1200.0	<50	820.0	450.0	<250	<250	<250	<250	<500	2495.0	51.00	39.00	
	07/30/14			Clear	33.75				209.74														
	08/20/14			Clear	33.09				210.40														
	09/08/14			Clear	34.10				209.39	140.0	600.0	90.0	360.0	180.0	<50	<50	<50	<50	130.0	1500.0	5.70	5.80	
	09/15/14			Clear	34.27				209.22														
	09/25/14			Clear	34.40				209.09														
	10/03/14			Clear	34.50				208.99														
	10/15/14			Clear	34.70				208.79														
	10/22/14			Clear	34.75				208.74														
	11/04/14			Clear	34.90				208.59														
	11/13/14			Clear	34.96				208.53														
	11/21/14			Clear	35.12				208.37														
	12/04/14			Clear	35.20				208.29	25.0	690.0	<50	630.0	360.0	<250	<250	<250	<250	<500	1705.0	110.00	18.00	
	12/11/14			Clear	35.26				208.23														
	12/22/14			Clear	35.34				208.15														
	01/05/15			Clear	35.12				208.37														
	01/14/15			Clear	35.14				208.35														
	01/26/15			Clear	34.82				208.67														
	01/30/15			Clear	34.72				208.77														
	02/04/15			Clear	35.47				208.02														
	02/13/15			Clear	35.55				207.94	180.0	690.0	66.0	390.0	270.0	<50	<50	<50	<50	<100	1596.0	60.00	13.00	
	02/20/15			Clear	35.59				207.90														
	02/26/15			Clear	35.52				207.97														
	03/04/15			Clear	35.38				208.11														
	03/16/15			Clear	35.48				208.01														
	03/20/15			Clear	35.94				207.55														
	03/25/15			Clear	35.19				208.30														
	04/02/15			Clear	35.12				208.37														
	04/10/15			Clear	35.03				208.46	130.0	220.0	56.0	180.0	95.0	<50	<50	<50	<50	<100	681.0	4.90	3.80	
	04/17/15			Clear	34.99				208.50														
	04/30/15			Clear	35.12				208.37														
	05/26/15			Clear	35.12				208.37														
	06/01/15			Clear	35.09				208.40														
	06/09/15			Clear	34.78				208.71														
	06/18/15			Clear	34.76				208.73														
	06/30/15			Clear	34.89				208.60	19													

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)						Micrograms Per Liter ( $\mu\text{g/l}$ )													Milligrams per Liter (mg/l)		
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	<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	<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	210.22	89.5	27.5	57.6	146.0	57.2	10.7					30.7	445.3	2.25	3.90
	03/19/19			33.27	33.27	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	0.96
	06/11/19			33.71	33.71	0.00	0.00	1.35	207.31	0.7	<1	9.0	2.9	0.8	8.3					4.7	118.8	0.90	0.83
	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					4.8	605.4	14.60	17.30
	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					1.5	<2	261.5	<2
	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					2.2	4.6	355.7	0.65
	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					31.8	1088.6	3.86	16.80
	08/27/20			35.70	35.70	0.00																	



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)						Micrograms Per Liter ( $\mu\text{g/l}$ )													Milligrams per Liter (mg/l)		
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			0.5	<1	<1	<5	<5	<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			8.0	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	
	04/28/21			Clear	26.91				217.25	91.1	0.9	303.0	110.0	1.2	4.4				104.0	647.7	1.72	2.50	
	07/12/21			Clear	33.88				210.28	102.0	0.6	83.5	42.4	0.8	4.0				73.8	353.1	1.64	1.20	

Well	Date	Well	Depth	Depth to	LNAPL	Gallons	Cumu-	Corrected	Benzene	Toluene	Ethyl-	m+p-	o-	MTBE	Cyclo-	Methyl-	Cumene	Naph-	VOC	GRO	DRO	
		Elev.	Depth	LNAPL	Removed		lative	Removed	Water	Elevation	benzene	Xylenes	Xylenes		hexane	cyclo-	hexane	thalene				
											Feet (ft)										Milligrams per Liter (mg/l)	
MW11	04/29/13	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	<1	<1	<1	6.0	<5	<1	<10	11.0	0.74	1.80		
	04/30/14		Clear	27.30			218.71															
	06/30/14		Clear	26.98			219.03	<1	<1	<1	10.0	<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	<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	246.01	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	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	<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		<1	<1	<1	<5	<5	<5	<5	<5	<10	0.0	<0.2	<0.2		
	06/16/16		Clear	26.85			219.16															
	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	Ethylbenzene	m+p-Xylenes	o-Xylenes	MTBE	Cyclohexane	Methylcyclohexane	Cumene	Naphthalene	VOC	GRO	DRO	
								Micrograms Per Liter ( $\mu\text{g/l}$ )												Milligrams per Liter (mg/l)			
		Feet (ft)																					
	04/17/13			Clear	26.61				218.62														
	04/29/13			Clear	26.98				218.25	<1	<1	<1	<2	<1	<1	<5	<5	<1	<10	0.0	<0.2	0.31	
	08/09/13			Clear	27.33				217.90	<1	<1	<1	<2	<1	<1	<5	<5	<1	<10	0.0	<0.2	0.33	
	11/14/13			Clear	27.35				217.88	<1	<1	<1	<2	<1	<1	<5	<5	<1	<10	0.0	<0.2	<0.22	
	12/03/13			Clear	27.93				217.30														
	02/06/14			Clear	27.10				218.13	<1	<1	<1	<2	<1	<1	<5	<5	<1	<10	0.0	<0.2	<0.25	
	04/30/14			Clear	26.85				218.38	<1	<1	<1	2.0	<1	<1	<5	<5	<1	<10	2.0	0.25	0.42	
	06/30/14			Clear	26.21				219.02	<1	<1	<1	<5	<5	<5	<5	<5	<5	<10	0.0	<0.2	<0.23	
	07/30/14			Clear	26.99				218.24														
	08/20/14			Clear	27.01				218.22														
	09/08/14			Clear	27.11				218.12	<1	<1	8.0	23.0	6.0	<5	<5	<5	<5	<10	37.0	<0.2	<0.22	
	09/15/14			Clear	27.13				218.10														
	09/25/14			Clear	27.13				218.10														
	10/03/14			Clear	27.19				218.04														
	10/15/14			Clear	27.20				218.03														
	10/22/14			Clear	27.26				217.97														
	11/04/14			Clear	27.28				217.95														
	11/13/14			Clear	27.36				217.87														
	11/21/14			Clear	27.46				217.77														
	12/04/14			Clear	27.40				217.83	<1	<1	<1	<5	<5	<5	<5	<5	<5	<10	0.0	0.29	0.30	
	12/22/14			Clear	27.24				217.99														
	01/05/15			Clear	27.20				218.03														
	01/14/15			Clear	27.54				217.69														
	01/26/15			Clear	27.84				217.39														
	01/30/15			Clear	27.63				217.60														
	02/04/15			Clear	27.00				218.23														
	02/13/15			Clear	27.10				218.13	<1	<1	<1	<5	<5	<5	<5	<5	<5	<10	0.0	0.20	0.28	
	02/26/15			Clear	26.98				218.25														
	03/04/15			Clear	27.14				218.09														
	03/20/15			Clear	27.12				218.11														
	03/25/15			Clear	26.87				218.36														
	04/02/15			Clear	26.80				218.43														
	04/10/15			Clear	26.61				218.62	<1	<1	<1	<5	<5	<5	<5	<5	<5	<10	0.0	<0.2	0.25	
	04/30/15			Clear	26.49				218.74														
	05/26/15			Clear	26.68				218.55														
	06/01/15			Clear	26.67				218.56														
	06/09/15			Clear	26.25				218.98														
	06/30/15			Clear	26.66				218.57														
	07/06/15			Clear	26.18				219.05	<1	<1	<1	<5	<5	<5	<5	<5	<5	<10	0.0	<0.2	0.27	
	07/17/15			Clear	26.42				218.81														
	08/21/15			Clear	26.33				218.90														
	09/08/15			Clear	26.72				218.51														
	09/25/15			Clear	27.08				218.15														
	10/16/15			Clear	26.85				218.38														
	10/30/15			Clear	27.21				218.02														
	11/05/15			Clear	27.17				218.06	3.0	<1	<1	7.0	<5	<5	<5	<5	<5	<10	10.0	<0.2	<0.23	
	11/13/15			Clear	27.22				218.01														
	12/18/15			Clear	27.26				217.97														
	01/08/16			Clear	27.07				218.16	<1	<1	<1	<5	<5	<5	<5	<5	<5	<10	0.0	<0.2	<0.22	
	01/19/16			Clear	27.15				218.08														
	02/26/16			Clear	26.78				218.45														
	03/14/16			Clear	26.31				218.92														
	04/01/16			Clear	26.24				218.99	<1	3.0	<1	8.0	<5	<5	<5	<5	<5	<10	11.0	0.35	0.47	
	04/21/16			Clear	26.54				218.69														
	05/13/16			Clear	26.50				218.73														
	06/08/16			Clear	26.40				218.83	<1	<1	7.0	25.0	7.0	<5	<5	<5	<5	<5	21.0	60.0	0.95	0.57
	07/14/16			Clear	26.75				218.48														
	08/08/16			Clear	26.86				218.37														
	08/18/16			Clear	26.52				218.71														
	08/24/16			Clear	26.90				218.33														
	08/30/16			Clear	26.85				218.38	<1	<1	<1	<5	<5	<5	<5	<5	<5	<10	0.0	<0.2	<0.21	
	09/06/16			Clear	26.88				218.35														
	09/15/16			Clear	26.67				218.36														
	09/28/16			Clear	26.94				218.29														
	10/05/16			Clear	27.00				218.23														
	10/11/16			Clear	27.04				218.19														
	11/22/16			Clear	27.31				217.92														
	12/06/16			Clear	27.30				217.93	<1	<1	<1	<5	<5	<5	<5	<5	<5	<10	0.0	<0.2	<0.2	
	12/16/16			Clear	27.34				217.89														
	01/09/17			Clear	27.44				217.79														
	01/16/17			Clear	27.42				217.81														
	01/23/17			Clear	27.26				217.97														
	02/03/17			Clear	27.47				217.76														
	02/17/17			Clear	27.41				217.82														
	02/21/17			Clear	27.36				217.87	<1	<1	<1	<5	<5	<5	<5	<5	<5	<10	0.0	<0.2	<0.2	
	03/13/17			Clear	27.50				217.73														
	03/27/17			Clear	27.34				217.89	</													

Well	Date	Well	Depth	Depth to	LNAPL	Gallons	Cumu-	Corrected	Benzene	Toluene	Ethyl-	m+p-	o-	Cyclo-	Methyl-	Cumene	Naph-	VOC	GRO	DRO				
		Elev.	Depth	Water	Removed		lative	Water			Xylenes	Xylenes	MTBE	hexane	cyclo-	hexane	thalene							
Feet (ft)																		Micrograms Per Liter ( $\mu\text{g/l}$ )						
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	<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	<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	<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	<1	<1	<2	0.5	<0.2	<0.099				
	06/11/19			Clear	26.24			218.99	<1	<1	<1	<2	<1	<1	<1	<1	<2	0.0	<0.2	0.06				
	09/12/19			Clear	26.68			218.55	<1	<1	<1	<2	<1	<1	<1	<1	<2	0.0	<0.2	0.10				
	12/10/19			Clear	26.94			218.29	<1	<1	<1	<2	<1	<1	<1	<1	<2	0.0	<0.2	<0.1				
	03/18/20			Clear	26.75			218.48	<1	<1	<1	<2	<1	<1	<1	<1	<2	0.0	<0.2	0.17				
	05/27/20			Clear	26.28			218.95	<1	<1	<1	<2	<1	<1	<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	<1	<1	9.5	155.9	0.17	0.12				
	11/24/20			Clear	25.69			219.54	<1	<1	<1	<2	<1	<1	<1	<1	<2	0.0	<0.2	0.07				
	02/10/21			Clear	26.68			218.55	<1	<1	<1	<2	<1	<1	<1	<1	<2	0.0	<0.2	0.08				
	04/28/21			Clear	26.54			218.69	<1	<1	<1	<2	<1	<1	<1	<1	<2	0.0	<0.2	<0.11				
	07/12/21			Clear	27.05			218.18	0.6	1.4	0.7	1.9	0.8	<1	<1	<1	<2	10.7	<0.2	0.15				
TF13	04/29/13	243.63	11.10	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																
	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	Cyclo-hexane	Methyl-cyclo-hexane	Cumene	Naphthalene	VOC	GRO	DRO		
		Feet (ft)																					Milligrams per Liter (mg/l)	
MW14	12/06/16			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	325.5	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	<1					107.0	1554.1	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	<1					89.8	713.5	2.06	2.00	
	02/10/21			24.82	24.82	0.00	0.00	6.34	21															

Well	Date	Well Elev.	Well Depth	Depth to LNAPL	Depth to Water	LNAPL	Gallons Removed	Cumulative Removed	Corrected Water Elevation	Micrograms Per Liter ( $\mu\text{g/l}$ )												Milligrams per Liter (mg/l)	
										Benzene	Toluene	Ethyl-benzene	m+p-Xylenes	o-Xylenes	MTBE	Cyclo-hexane	Methyl-cyclo-hexane	Cumene	Naphthalene	VOC	GRO	DRO	
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			209.13															
	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	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	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	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	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	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	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	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	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	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	<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	<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															

Well	Date	Well	Well	Depth	Depth to	LNAPL	Gallons	Cumu-	Corrected	Benzene	Toluene	Ethyl-	m+p-	o-	MTBE	Cyclo-	Methyl-	Cumene	Naph-	VOC	GRO	DRO		
		Elev.	Depth	LNAPL	Removed	lative	Removed	Water	Elevation				Xylenes	Xylenes		hexane	cyclo-	xylene		thalene				
		Feet (ft)										Micrograms Per Liter ( $\mu\text{g/l}$ )										Milligrams per Liter (mg/l)		
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	<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	
	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	
	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	
	04/28/21			Clear	29.53				213.94	481.0	519.0	798.0	553.0	281.0	3.1					73.5	2788.3	5.39	4.00	
	07/12/21			Clear	33.99				209.48	708.0	1650.0	481.0	1810.0	844.0	5.5					225.0	5959.5	11.70	7.60	



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)	Micrograms Per Liter ( $\mu\text{g/l}$ )	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	<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	<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	0.5	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	0.5	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	
	04/28/21			Clear	24.94				219.44	<1	<1	<1	<2	<1	<1				<2	0.0	0.51	0.45	
	07/12/21			Clear	25.65				218.73	<1	<1	<1	<2	<1	<1				<2	9.5	1.00	0.39	
Station Supply Well	12/06/12	245.00	460.00							<0.5	<0.5	<0.5	<1	<0.5	<0.5	na	na	<0.5	<0.5	ND	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	
	11/14/13									<0.5	<0.5	<0.5	<1	<0.5	<0.5	na	na	<0.5	<0.5	ND	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	
	04/30/14									<0.5	<0.5	<0.5	<1	<0.5	<0.5	na	na	<0.5	<0.5	ND	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	
	09/12/19									<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	na	na	<0.5	<0.5	ND	na	na	
	12/10/19									<0.5	10.7	<0.5	<0.5	<0.5	<0.5	na	na	<0.5	12.6	na	na	na	
	12/10/20									<0.5	8.7	<0.5	<0.5	<0.5	<0.5	na	na	<0.5	11.5	na	na	na	
	03/27/20									<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	na	na	<0.5	ND	na	na	na	
	03/27/20									<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	na	na	<0.5	ND	na	na	na	
	05/27/20									<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	na	na	<0.5	1.3	na	na	na	
	08/27/20									<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	na	na	<0.5	ND	na	na	na	
	11/24/20									<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	na	na	<0.5	4.0	na	na	na	
	02/10/21									<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	na	na	<0.5	ND	na	na	na	
	04/28/21									<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	na	na	<0.5	0.8	na	na	na	
	07/12/21									<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	na	na	<0.5	0.8	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	
	04/30/14									<0.5	<0.5	<0.5	<1	<0.5	<0.5	na	na	<0.5	<0.5	ND	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	
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	
	09/25/19									<0.5	<0.5	<0.5	<1	<0.5	<0.5	na	na	<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
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

## MANN-KENDALL ANALYSES & GRAPHS

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# GSI MANN-KENDALL TOOLKIT

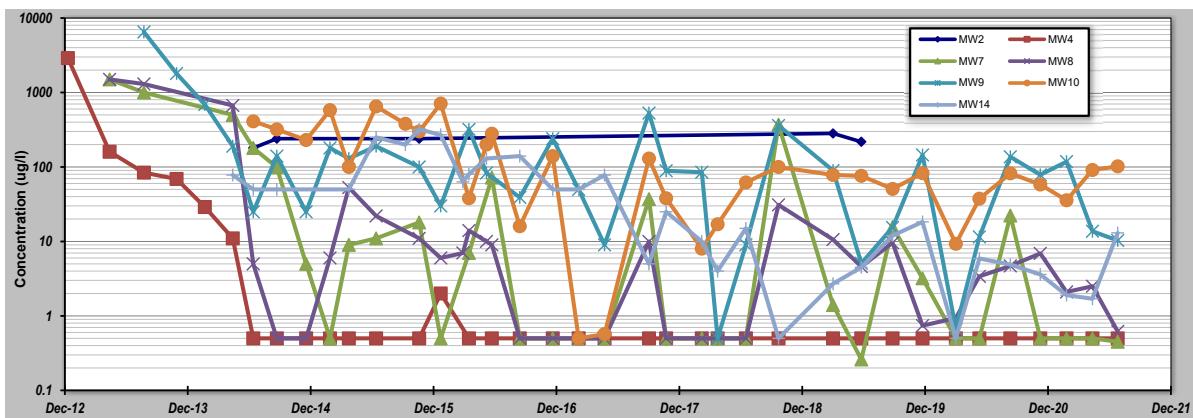
## for Constituent Trend Analysis

Evaluation Date: **27-May**  
 Facility Name: **SMO Hanover**  
 Conducted By: **Doug Hamilton/ARM Group**

Job ID: **190292M**  
 Constituent: **BENZENE**  
 Concentration Units: **ug/l**

Sampling Point ID: **MW2 MW4 MW7 MW8 MW9 MW10 MW14**

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	0.94	0.68	9.3	0.5
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	28-Apr-21		0.5	0.5	2.5	13.7	91.1	1.7
40	12-Jul-21		0.5	0.45	0.62	10.3	102	13
Coefficient of Variation:		0.16	5.39	2.76	3.29	3.14	1.16	1.38
Mann-Kendall Statistic (S):		3	-217	-228	-151	-208	-188	-282
Confidence Factor:		67.5%	99.8%	>99.9%	98.0%	99.9%	99.8%	>99.9%
Concentration Trend:	No Trend	Decreasing	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;  $\geq 90\%$  = Probably Increasing or Probably Decreasing; < 90% and  $S>0$  = No Trend; < 90%,  $S<0$ , and  $COV \geq 1$  = 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:

Facility Name:

Conducted By:

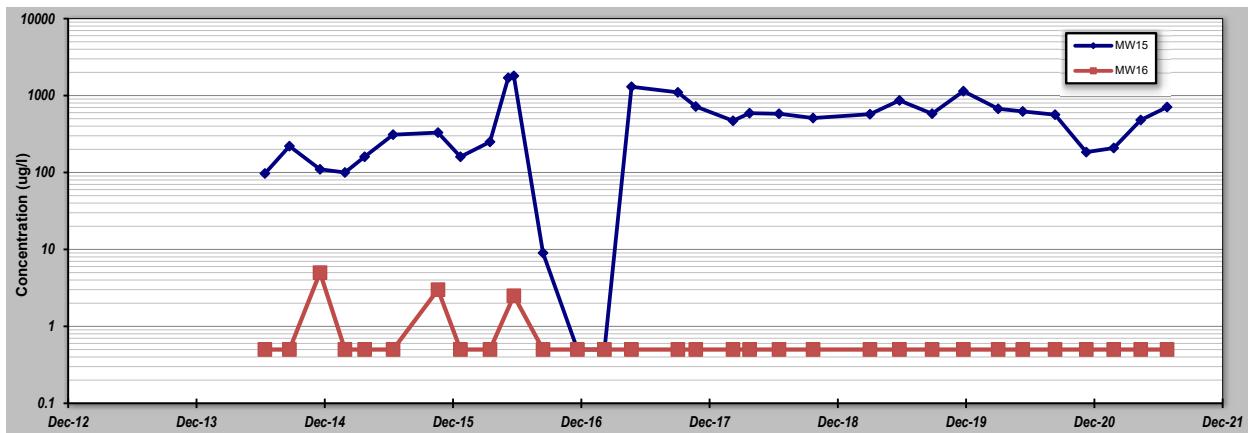
Job ID:

Constituent:

Concentration Units:

Sampling Point ID:

Sampling Event	Sampling Date	BENZENE CONCENTRATION (ug/l)							
1	30-Jun-14	97	0.5						
2	8-Sep-14	220	0.5						
3	4-Dec-14	110	5						
4	13-Feb-15	100	0.5						
5	10-Apr-15	160	0.5						
6	30-Jun-15	310	0.5						
7	5-Nov-15	330	3						
8	8-Jan-16	160	0.5						
9	1-Apr-16	250	0.5						
10	23-May-16	1700							
11	8-Jun-16	1800	2.5						
12	30-Aug-16	9	0.5						
13	6-Dec-16	0.5	0.5						
14	21-Feb-17	0.5	0.5						
15	9-May-17	1300	0.5						
16	18-Sep-17	1100	0.5						
17	8-Nov-17	720	0.5						
18	22-Feb-18	470	0.5						
19	10-Apr-18	590	0.5						
20	3-Jul-18	580	0.5						
21	8-Oct-18	510	0.5						
22	19-Mar-19	572	0.5						
23	11-Jun-19	865	0.5						
24	12-Sep-19	581	0.5						
25	10-Dec-19	1140	0.5						
26	18-Mar-20	673	0.5						
27	27-May-20	622	0.5						
28	27-Aug-20	564	0.5						
29	24-Nov-20	184	0.5						
30	10-Feb-21	208	0.5						
31	28-Apr-21	481	0.5						
32	12-Jul-21	708	0.5						
33									
34									
35									
Coefficient of Variation:	0.87	1.22							
Mann-Kendall Statistic (S):	120	-59							
Confidence Factor:	97.3%	83.6%							
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;  $\geq 90\%$  = Probably Increasing or Probably Decreasing;  $< 90\%$  and  $S>0$  = No Trend;  $< 90\%$ ,  $S\leq 0$ , and  $COV \geq 1$  = 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:

Facility Name: **SMO Hanover**

Conducted By: **Doug Hamilton/ARM Group**

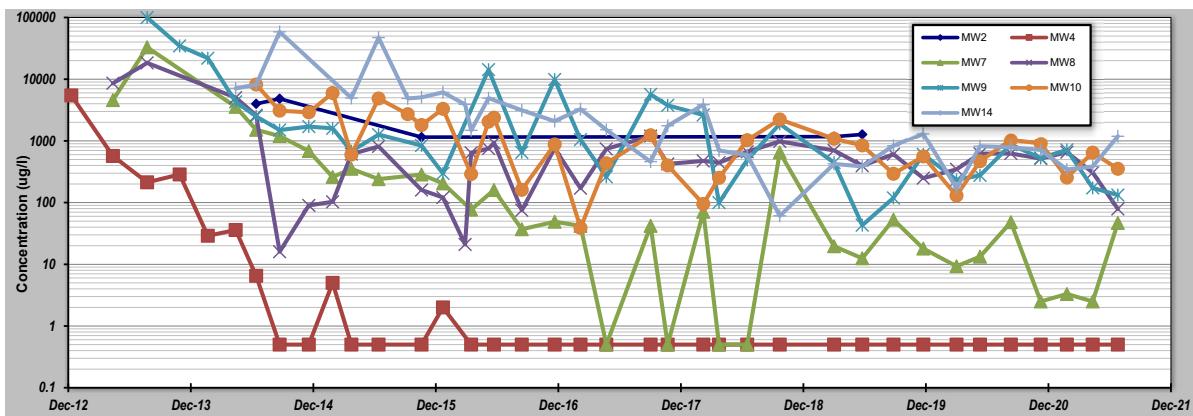
Job ID: **190292M**

Constituent: **VOC**

Concentration Units: **ug/l**

Sampling Point ID: **MW2 MW4 MW7 MW8 MW9 MW10 MW14**

Sampling Event	Sampling Date	VOC CONCENTRATION (ug/l)						
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		7088
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	28-Apr-21		0.5	2.5	307	173	647	385
40	12-Jul-21		0.5	46.8	78.9	132.6	353.1	1188.1
Coefficient of Variation:		0.72	5.02	4.08	2.39	2.83	1.19	2.29
Mann-Kendall Statistic (S):		-2	-270	-345	-80	-285	-214	-322
Confidence Factor:		59.2%	>99.9%	>99.9%	85.8%	>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;  $\geq 90\%$  = Probably Increasing or Probably Decreasing; < 90% and  $S=0$  = No Trend; < 90%,  $S\leq 0$ , and  $COV \geq 1$  = 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:

Facility Name: **SMO Hanover**

Conducted By: **Doug Hamilton/ARM Group**

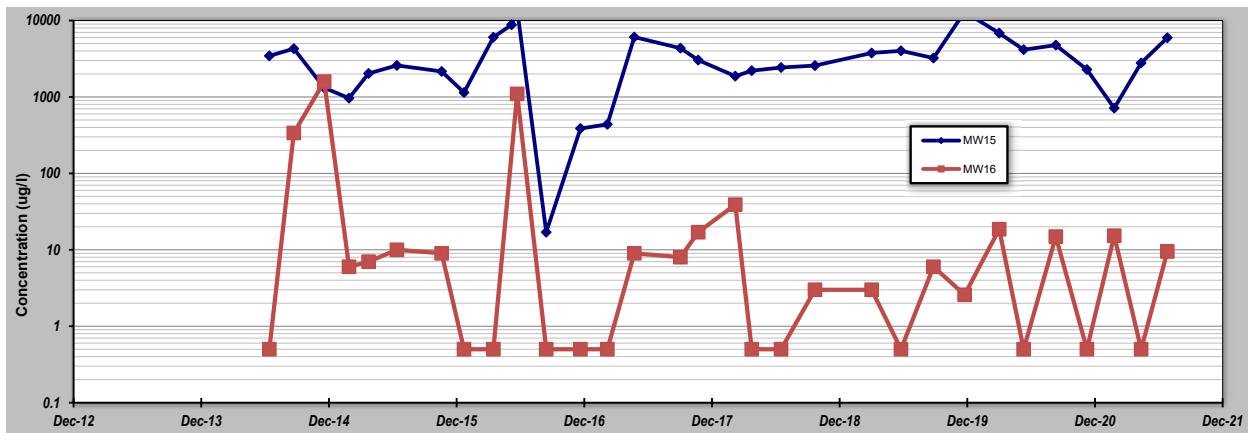
Job ID: **190292M**

Constituent: **VOC**

Concentration Units: **ug/l**

Sampling Point ID: **MW15**    **MW16**

Sampling Event	Sampling Date	VOC CONCENTRATION (ug/l)							
1	30-Jun-14	3447	0.5						
2	8-Sep-14	4283	338						
3	4-Dec-14	1318	1590						
4	13-Feb-15	964	6						
5	10-Apr-15	2031	7						
6	30-Jun-15	2586	10						
7	5-Nov-15	2158	9						
8	8-Jan-16	1144	0.5						
9	1-Apr-16	6053	0.5						
10	23-May-16	8792							
11	8-Jun-16	14023	1096						
12	30-Aug-16	17	0.5						
13	6-Dec-16	387	0.5						
14	21-Feb-17	438	0.5						
15	9-May-17	6079	9						
16	18-Sep-17	4350	8						
17	8-Nov-17	3039	17						
18	22-Feb-18	1871	39						
19	10-Apr-18	2207	0.5						
20	3-Jul-18	2429	0.5						
21	8-Oct-18	2574	3						
22	19-Mar-19	3760	3						
23	11-Jun-19	4015	0.5						
24	12-Sep-19	3230	6						
25	10-Dec-19	12987	2.58						
26	18-Mar-20	6849	18.6						
27	27-May-20	4158	0.5						
28	27-Aug-20	4762	14.9						
29	24-Nov-20	2285	0.5						
30	10-Feb-21	714	15.3						
31	28-Apr-21	2788	0.5						
32	12-Jul-21	5960	9.5						
33									
34									
35									
Coefficient of Variation:	0.86	3.31							
Mann-Kendall Statistic (S):	84	-36							
Confidence Factor:	91.0%	72.3%							
Concentration Trend:	Prob. Increasing	No Trend							



**Notes:**

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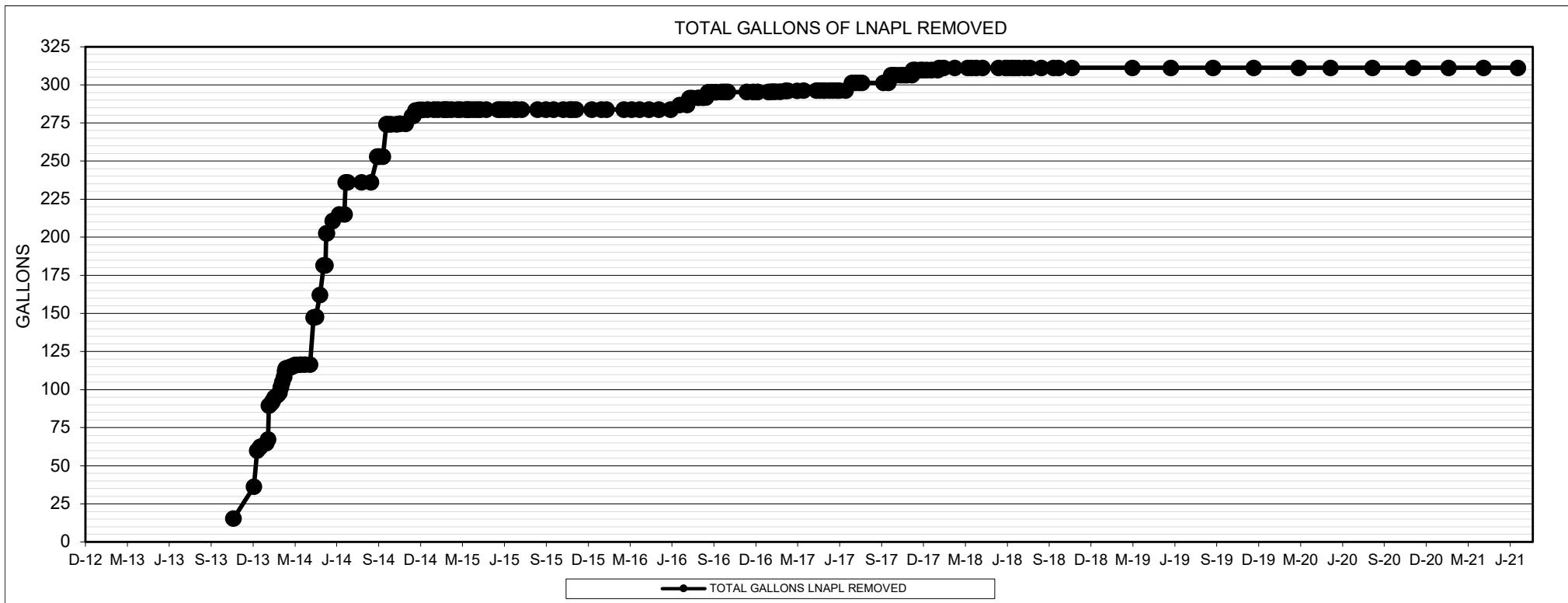
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## **PETROLEUM RECOVERY GRAPH & DATABASE**

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MW7 EFR LNAPL & Water Testing Results																					
Compound	Concentration	Units	Compound	Concentration	Units	Compound	Concentration	Units	Compound	Concentration	Units	Compound	Concentration	Units	Compound	Concentration	Units				
Ammonia	7.87	mg/l	Naphthalene	110	µg/l	MTBE	160.0	µg/l	Aluminum	150.0	µg/l										
BOD	163	mg/l	4-Chloro-3-methylphenol	23	µg/l	Benzene	2100.0	µg/l	Antimony	70.0	µg/l										
COD	318	mg/l	2-Methylnaphthalene	45	µg/l	Toluene	4800.0	µg/l	Barium	120.0	µg/l										
O&G	6.00	mg/l	Bis(2-ethylhexyl)phthalate	530	µg/l	Ethylbenzene	990.0	µg/l	Cadmium	9.6	µg/l										
pH	7.32		Total SVOCs	708	µg/l	m&p-Xylenes	3000.0	µg/l	Chromium	7.4	µg/l										
TOC	27	mg/l				c-Xylenes	1100.0	µg/l	Copper	910.0	µg/l										
TSS	1517	mg/l				Cumene	66.0	µg/l	Iron	25000.0	µg/l										
						DIPE	130.0	µg/l	Lead	470.0	µg/l										
						Naphthalene	110.0	µg/l	Magnesium	12000.0	µg/l										
						Total VOCs	12456.0	µg/l	Nickel	14.0	µg/l										
									Zinc	310.0	µg/l										
MW7 & MW9 (4" Diameter Well) Bailing & EFR Record																					
Date	Original LNAPL Thickness	LNAPL Thickness in Bailer (Inches)																			
		1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th	11th	12th	13th	14th	15th	Total				
10/22/13																	0.0	0.0	307.00	15.35	
12/06/13																	0.0	0.0	349.00	36.30	
12/13/13																	0.0	0.0	429.00	60.00	
12/19/13	2.25	1.50	2.50	13.25	7.00	5.50	7.00	0.50	5.0	1.3	1.3	1.0					45.8	3.8	1.68	61.68	
12/20/13	1.00	0.75	12.00	0.50	0.25													13.5	1.1	0.50	62.17
01/02/14	2.19	26.25	2.00	2.75	7.25	7.75	7.50	3.75	0.5									57.8	4.8	2.12	64.29
01/06/14	2.90	23.00	5.00	13.00	9.50	7.00	2.00											59.5	5.0	2.18	66.47
01/08/14																	0.0	0.0	440.00	88.47	
01/09/14	0.67	1.00	1.50	6.00	0.50													9.0	0.8	0.33	88.80
01/14/14	2.37	6.00	12.50	2.00	6.50	7.00	2.00	1.00										37.0	3.1	1.36	90.16
01/16/14	1.22	3.50	8.00	7.00	4.00	4.00	1.00	0.50										28.0	2.3	1.03	91.19
01/20/14	0.42	6.50	9.00	6.50	10.00	3.00	6.50	6.50	4.5	1.5	1.5	0.3						55.8	4.6	2.04	93.23
01/27/14	2.93	4.00	6.00	5.50	3.00	2.50	2.00	4.00	1.5	0.5							29.0	2.4	1.06	94.29	
01/31/14	1.91	5.00	9.00	6.00	3.00	4.00	5.50	4.00	1.5	2.0	0.5						40.5	3.4	1.49	95.78	
02/03/14	1.13	18.00	6.00	9.00	12.00	11.50	5.00	7.00	4.5	3.0	6.0	5.0	3.0	1.5	0.5	0.5	92.5	7.7	3.39	99.17	
02/06/14	1.15	15.00	9.00	6.00	8.00	3.00	10.50	7.00	7.5	4.0	6.0	2.5	2.0	1.0	0.5	0.5	82.8	6.9	3.03	102.20	
02/10/14	0.97	12.00	8.00	7.00	11.00	7.00	7.50	9.00	10.5	3.5	2.0	2.5	2.5	1.0	0.5	1.5	86.8	7.2	3.18	105.38	
02/12/14	2.23	22.00	8.00	10.00	17.00	8.00	6.00	11.00	3.5	4.0	6.5	2.3	2.0	1.0	0.5	0.3	102.0	8.5	3.74	109.12	
02/14/14	2.42	1.50	2.25	5.50	1.50	8.00	5.00	8.50	2.5	6.8	1.0						42.5	3.5	1.56	110.68	
02/18/14	0.70	0.50	1.00	0.50	0.50	0.25												2.8	0.2	0.10	110.78
02/20/14	0.30	0.50	0.50	0.25														1.8	0.1	0.06	110.85
02/24/14	0.80	1.00	2.50	1.00	0.50	0.50	0.25											5.8	0.5	0.21	111.06
02/26/14	0.52	2.00	2.00	0.50	1.50	0.50	1.00	0.50	0.3									8.3	0.7	0.30	111.36
02/28/14	0.54	2.00	1.50	1.00	0.50	0.50	0.25											5.8	0.5	0.21	111.57
03/04/14	0.53	3.00	2.00	1.50	1.00	1.00	0.50	0.50	0.3									9.8	0.8	0.36	111.93
03/06/14	0.45	3.50	2.25	1.50	1.50	1.00	1.50	0.50	0.5	0.5	0.3	0.3						13.3	1.1	0.49	112.42
03/10/14	0.42	1.00	0.50	0.50	0.50	0.25												2.3	0.2	0.08	112.50
03/12/14	0.25	0.25	0.25	0.13														0.6	0.1	0.02	112.52
03/19/14	0.06	1.00	0.50	0.50	0.50	0.25	0.25											3.0	0.3	0.11	112.63
03/28/14	0.13	0.50	0.25	0.25														1.0	0.1	0.04	112.67
04/08/14	0.00																	0.0	0.0	0.00	112.67
04/16/14																	0.0	0.0	616.00	143.47	
04/21/14	0.30	2.00	3.00	1.50	0.50	1.00	0.50	0.50	0.3									9.3	0.8	0.34	143.81
04/30/14																	0.0	0.0	287.00	158.16	
05/08/14																	0.0	0.0	392.00	177.76	
05/12/14	0.00																	0.0	0.0	177.76	
05/14/14	0.00																	0.0	0.0	420.00	198.76
05/15/14	0.00																	0.0	0.0	0.00	198.76
05/28/14																	0.0	0.0	267.00	206.77	
06/11/14																	0.0	0.0	150.00	211.27	
06/23/14	0.00																	0.0	0.0	0.00	211.27
06/25/14																	0.0	0.0	700.00	232.27	
06/30/14	0.00																	0.0	0.0	0.00	232.27
07/30/14	0.00																	0.0	0.0	0.00	232.27
08/20/14	0.00																	0.0	0.0	0.00	232.27
09/03/14																	0.0	0.0	560.00	249.07	
09/08/14	0.00																	0.0	0.0	0.00	249.07
09/15/14	0.00																	0.0	0.0	0.00	249.07
09/23/14																	0.0	0.0	2125.00	270.32	
09/25/14	0.00																	0.0	0.0	0.00	270.32
10/03/14	0.00																	0.0	0.0	0.00	270.32
10/15/14	0.00																	0.0	0.0	0.00	270.32
10/22/14	0.00																	0.0	0.0	0.00	270.32
10/04/14	0.00																	0.0	0.0	0.00	270.32
11/18/14																	0.0	0.0	1001.00	275.32	
11/21/14	0.00																	0.0	0.0	0.00	275.32
11/26/14																	0.0	0.0	731.00	278.98	
12/04/14	0.00																	0.0	0.0	0.00	278.98
12/11/14	0.00																	0.0	0.0	0.00	278.98
12/22/14	0.00																	0.0	0.0	0.00	278.98
01/05/15	0.00																	0.0	0.0	0.00	278.98
01/14/15	0.00																	0.0	0.0	0.00	278.98
01/26/15	0.00																	0.0	0.0	0.00	278.98
01/30/15	0.00																	0.0	0.0	0.00	278.98
02/0																					

06/28/16	Vacuum Truck EFR - Assumes ≈1/2% Total Volume Removed is LNAPL	0.0	0.0	579.00	281.88
07/14/16	0.06			0.1	0.1
07/19/16	0.08	Vacuum Truck EFR - Assumes ≈1/2% Total Volume Removed is LNAPL		0.1	0.1
07/20/16	0.06			0.1	0.1
07/25/16	0.04			0.0	0.0
08/08/16	0.11			0.1	0.1
08/18/16	0.07			0.1	0.1
08/24/16	0.08			0.1	0.1
08/29/16	Vacuum Truck EFR - Assumes ≈1/2% Total Volume Removed is LNAPL	0.0	0.0	679.00	290.27
08/30/16	0.02			0.0	0.0
09/06/16	0.04			0.0	0.0
09/15/16	0.08			0.1	0.1
09/28/16	0.02			0.0	0.0
10/05/16	0.01			0.0	0.0
10/11/16	0.08			0.1	0.1
11/22/16	0.01			0.0	0.0
12/06/16	0.00			0.0	0.0
12/16/16	0.00			0.0	0.0
01/09/17	0.00			0.0	0.0
01/16/17	0.05			0.0	0.0
01/23/17	0.06			0.1	0.1
02/03/17	0.04			0.0	0.0
02/15/17	Vacuum Truck EFR - Assumes ≈1/2% Total Volume Removed is LNAPL	0.0	0.0	100.00	291.31
02/17/17	0.00			0.0	0.0
02/21/17	0.00			0.0	0.0
03/13/17	0.01			0.0	0.0
03/27/17	0.02			0.0	0.0
04/24/17	0.00			0.0	0.0
05/01/17	0.00			0.0	0.0
05/09/17	0.00			0.0	0.0
05/12/17	0.00			0.0	0.0
05/23/17	0.00			0.0	0.0
05/30/17	0.00			0.0	0.0
06/07/17	0.00			0.0	0.0
06/13/17	0.00			0.0	0.0
06/27/17	0.00			0.0	0.0
07/11/17	Vacuum Truck EFR - Assumes ≈1/2% Total Volume Removed is LNAPL	0.0	0.0	1020.00	296.45
07/19/17	0.00			0.0	0.0
07/27/17	0.00			0.0	0.0
08/02/17	0.00			0.0	0.0
09/18/17	0.00			0.0	0.0
09/29/17	0.00			0.0	0.0
10/05/17	Vacuum Truck EFR - Assumes ≈1/2% Total Volume Removed is LNAPL	0.0	0.0	1020.00	301.55
10/09/17	0.00			0.0	0.0
10/16/17	0.00			0.0	0.0
10/25/17	0.00			0.0	0.0
11/02/17	0.00			0.0	0.0
11/08/17	0.00			0.0	0.0
11/20/17	0.00			0.0	0.0
11/22/17	Vacuum Truck EFR - Assumes ≈1/2% Total Volume Removed is LNAPL	0.0	0.0	680.00	304.95
11/27/17	0.00			0.0	0.0
12/08/17	0.00			0.0	0.0
12/13/17	0.00			0.0	0.0
12/22/17	0.00			0.0	0.0
01/02/18	0.00			0.0	0.0
01/15/18	0.00			0.0	0.0
01/18/18	Vacuum Truck EFR - Assumes ≈1/2% Total Volume Removed is LNAPL	0.0	0.0	294.00	306.42
01/29/18	0.00			0.0	0.0
02/22/18	0.00			0.0	0.0
03/22/18	0.00			0.0	0.0
03/30/18	0.00			0.0	0.0
04/10/18	0.00			0.0	0.0
04/24/18	0.00			0.0	0.0
05/29/18	0.00			0.0	0.0
06/13/18	0.00			0.0	0.0
06/18/18	0.00			0.0	0.0
06/28/18	0.00			0.0	0.0
07/03/18	0.00			0.0	0.0
07/12/18	0.00			0.0	0.0
07/25/18	0.00			0.0	0.0
08/06/18	0.00			0.0	0.0
08/31/18	0.00			0.0	0.0
09/26/18	0.00			0.0	0.0
10/08/18	0.00			0.0	0.0
11/06/18	0.00			0.0	0.0
03/19/19	0.00			0.0	0.0
06/11/19	0.00			0.0	0.0
09/12/19	0.00			0.0	0.0
12/10/19	0.00			0.0	0.0
03/18/20	0.00			0.0	0.0
05/27/20	0.00			0.0	0.0
08/27/20	0.00			0.0	0.0
11/24/20	0.00			0.0	0.0
02/10/21	0.00			0.0	0.0
04/28/21	0.00			0.0	0.0
07/12/21	0.00			0.0	0.0
TOTAL GALLONS OF IMPACTED GROUNDWATER REMOVED					
13767.47					
TOTAL GALLONS OF LNAPL REMOVED					
315.95					
TOTAL GALLONS OF LNAPL REMOVED BY EFR					
268.53					
TOTAL GALLONS OF LNAPL REMOVED BY BAILING					
47.42					



04/24/17	0.00									0.0	0.0	0.00	4.77
05/01/17	0.00									0.0	0.0	0.00	4.77
05/09/17	0.00									0.0	0.0	0.00	4.77
05/12/17	0.00									0.0	0.0	0.00	4.77
05/23/17	0.00									0.0	0.0	0.00	4.77
05/30/17	0.00									0.0	0.0	0.00	4.77
06/07/17	0.00									0.0	0.0	0.00	4.77
06/13/17	0.00									0.0	0.0	0.00	4.77
06/27/17	0.00									0.0	0.0	0.00	4.77
07/11/17	0.00									0.0	0.0	0.00	4.77
07/19/17	0.00									0.0	0.0	0.00	4.77
07/27/17	0.00									0.0	0.0	0.00	4.77
08/02/17	0.00									0.0	0.0	0.00	4.77
09/18/17	0.00									0.0	0.0	0.00	4.77
09/29/17	0.00									0.0	0.0	0.00	4.77
10/09/17	0.00									0.0	0.0	0.00	4.77
10/16/17	0.00									0.0	0.0	0.00	4.77
10/25/17	0.00									0.0	0.0	0.00	4.77
11/02/17	0.00									0.0	0.0	0.00	4.77
11/08/17	0.00									0.0	0.0	0.00	4.77
11/20/17	0.00									0.0	0.0	0.00	4.77
11/22/17	0.00									0.0	0.0	0.00	4.77
11/27/17	0.00									0.0	0.0	0.00	4.77
12/08/17	0.00									0.0	0.0	0.00	4.77
12/13/17	0.00									0.0	0.0	0.00	4.77
12/22/17	0.00									0.0	0.0	0.00	4.77
01/02/18	0.00									0.0	0.0	0.00	4.77
01/15/18	0.00									0.0	0.0	0.00	4.77
01/29/18	0.00									0.0	0.0	0.00	4.77
02/22/18	0.00									0.0	0.0	0.00	4.77
03/22/18	0.00									0.0	0.0	0.00	4.77
03/30/18	0.00									0.0	0.0	0.00	4.77
04/10/18	0.00									0.0	0.0	0.00	4.77
04/24/18	0.00									0.0	0.0	0.00	4.77
05/29/18	0.00									0.0	0.0	0.00	4.77
06/13/18	0.00									0.0	0.0	0.00	4.77
06/18/18	0.00									0.0	0.0	0.00	4.77
06/28/18	0.00									0.0	0.0	0.00	4.77
07/03/18	0.00									0.0	0.0	0.00	4.77
07/12/18	0.00									0.0	0.0	0.00	4.77
07/25/18	0.00									0.0	0.0	0.00	4.77
08/06/18	0.00									0.0	0.0	0.00	4.77
08/31/18	0.00									0.0	0.0	0.00	4.77
09/26/18	0.00									0.0	0.0	0.00	4.77
10/08/18	0.00									0.0	0.0	0.00	4.77
11/06/18	0.00									0.0	0.0	0.00	4.77
03/19/19	0.00									0.0	0.0	0.00	4.77
06/11/19	0.00									0.0	0.0	0.00	4.77
09/12/19	0.00									0.0	0.0	0.00	4.77
12/10/19	0.00									0.0	0.0	0.00	4.77
03/18/20	0.00									0.0	0.0	0.00	4.77
05/27/20	0.00									0.0	0.0	0.00	4.77
06/27/20	0.00									0.0	0.0	0.00	4.77
11/24/20	0.00									0.0	0.0	0.00	4.77
02/10/21	0.00									0.0	0.0	0.00	4.77
04/28/21	0.00									0.0	0.0	0.00	4.77
07/12/21	0.00									0.0	0.0	0.00	4.77

TOTAL GALLONS OF LNAPL REMOVED BY BAILING 4.77

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

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

July 21, 2021

Mr. Eric S. Magdar  
ARM Group Inc.  
9175 Guilford Road  
Suite 310  
Columbia, MD 21046

RE: Project: SMO-HANOVER/190292M  
Pace Project No.: 30430547

Dear Mr. Magdar:

Enclosed are the analytical results for sample(s) received by the laboratory on July 13, 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

cc: Mr. Stewart Kabis, ARM Group Inc.



#### 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

#### CERTIFICATIONS

Project: SMO-HANOVER/190292M  
Pace Project No.: 30430547

##### 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 WV Permit #: KY009821  
KY WV Permit #: KY000221  
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

575 Broad Hollow Rd, Melville, NY 11747  
Connecticut Certification #: PH-0435  
Delaware Certification # NY 10478  
Maryland Certification #: 208  
Massachusetts Certification #: M-NY026  
New Hampshire Certification #: 2987

New Jersey Certification #: NY158  
New York Certification #: 10478 Primary Accrediting Body  
Pennsylvania Certification #: 68-00350  
Rhode Island Certification #: LA000340  
Virginia Certification # 460302

#### REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, LLC  
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Greensburg, PA 15601  
(724)850-5600

#### SAMPLE SUMMARY

Project: SMO-HANOVER/190292M  
Pace Project No.: 30430547

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30430547001	MW-1	Water	07/12/21 09:15	07/13/21 21:45
30430547002	MW-4	Water	07/12/21 10:50	07/13/21 21:45
30430547003	MW-7	Water	07/12/21 10:25	07/13/21 21:45
30430547004	MW-8	Water	07/12/21 12:15	07/13/21 21:45
30430547005	MW-9	Water	07/12/21 11:05	07/13/21 21:45
30430547006	MW-10	Water	07/12/21 14:30	07/13/21 21:45
30430547007	MW-12	Water	07/12/21 13:45	07/13/21 21:45
30430547008	MW-14	Water	07/12/21 14:10	07/13/21 21:45
30430547009	MW-15	Water	07/12/21 14:45	07/13/21 21:45
30430547010	MW-16	Water	07/12/21 09:50	07/13/21 21:45
30430547011	Trip Blank	Water	07/12/21 00:01	07/13/21 21:45
30430546001	Station Spigot	Drinking Water	07/12/21 13:15	07/13/21 21:45
30430546002	Trip Blank	Water	07/12/21 00:01	07/13/21 21:45

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#### SAMPLE ANALYTE COUNT

Project: SMO-HANOVER/190292M  
Pace Project No.: 30430547

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30430547001	MW-1	EPA 8015D	SEL	2	PASI-PA
		EPA 5030/8015B	LEL	2	PASI-PA
		EPA 8260B	AJC	54	PASI-PA
30430547002	MW-4	EPA 8015D	SEL	2	PASI-PA
		EPA 5030/8015B	LEL	2	PASI-PA
		EPA 8260B	AJC	54	PASI-PA
30430547003	MW-7	EPA 8015D	SEL	2	PASI-PA
		EPA 5030/8015B	LEL	2	PASI-PA
		EPA 8260B	AJC	54	PASI-PA
30430547004	MW-8	EPA 8015D	SEL	2	PASI-PA
		EPA 5030/8015B	LEL	2	PASI-PA
		EPA 8260B	AJC	54	PASI-PA
30430547005	MW-9	EPA 8015D	SEL	2	PASI-PA
		EPA 5030/8015B	LEL	2	PASI-PA
		EPA 8260B	AJC	54	PASI-PA
30430547006	MW-10	EPA 8015D	SEL	2	PASI-PA
		EPA 5030/8015B	LEL	2	PASI-PA
		EPA 8260B	AJC	54	PASI-PA
30430547007	MW-12	EPA 8015D	SEL	2	PASI-PA
		EPA 5030/8015B	LEL	2	PASI-PA
		EPA 8260B	AJC	54	PASI-PA
30430547008	MW-14	EPA 8015D	SEL	2	PASI-PA
		EPA 5030/8015B	LEL	2	PASI-PA
		EPA 8260B	AJC	54	PASI-PA
30430547009	MW-15	EPA 8015D	SEL	2	PASI-PA
		EPA 5030/8015B	LEL	2	PASI-PA
		EPA 8260B	AJC	54	PASI-PA
30430547010	MW-16	EPA 8015D	SEL	2	PASI-PA
		EPA 5030/8015B	LEL	2	PASI-PA
		EPA 8260B	AJC	54	PASI-PA
30430547011	Trip Blank	EPA 8260B	AJC	54	PASI-PA
30430546001	Station Spigot	EPA 524.2	KGG	62	PASI-MV
30430546002	Trip Blank	EPA 524.2	KGG	62	PASI-MV

PASI-MV = Pace Analytical Services - Long Island

PASI-PA = Pace Analytical Services - Greensburg

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## PROJECT NARRATIVE

Project: SMO-HANOVER/190292M  
Pace Project No.: 30430547

Method: EPA 8015D  
Description: 8015D TPH Reduced Volume  
Client: ARM Group Inc.-Columbia  
Date: July 21, 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.

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

QC Batch: 456369  
ST: Surrogate recovery was above laboratory control limits. Results may be biased high.  
• MW-4 (Lab ID: 30430547002)  
• o-Terphenyl (S)  
• MW-7 (Lab ID: 30430547003)  
• o-Terphenyl (S)

**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: 456369  
A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30430547007  
R1: RPD value was outside control limits.  
• MSD (Lab ID: 2203778)  
• TPH (C10-C28)

**Additional Comments:**

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## PROJECT NARRATIVE

Project: SMO-HANOVER/190292M  
Pace Project No.: 30430547

Method: EPA 5030/8015B  
Description: Gasoline Range Organics  
Client: ARM Group Inc.-Columbia  
Date: July 21, 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.

QC Batch: 456266  
A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30430547007

MH: Matrix spike recovery and/or matrix spike duplicate recovery was above laboratory control limits. Result may be biased high.  
• MSD (Lab ID: 2203162)  
• TPH (C06-C10)

**Additional Comments:**

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## PROJECT NARRATIVE

Project: SMO-HANOVER/190292M  
Pace Project No.: 30430547

Method: EPA 524.2  
Description: 524.2 MSV  
Client: ARM Group Inc.-Columbia  
Date: July 21, 2021

**General Information:**  
2 samples were 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.

QC Batch: 218173  
IH: This analyte exceeded secondary source verification criteria high for the initial calibration. The reported results should be considered an estimated value.  
• LCS (Lab ID: 1100111)  
• Methyl-tert-butyl ether

**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.

QC Batch: 218173  
L1: Analyte recovery in the laboratory control sample (LCS) was above QC limits. Results for this analyte in associated samples may be biased high.  
• LCS (Lab ID: 1100111)  
• Methyl-tert-butyl ether

**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.

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## PROJECT NARRATIVE

Project: SMO-HANOVER/190292M  
Pace Project No.: 30430547

Method: EPA 524.2  
Description: 524.2 MSV  
Client: ARM Group Inc.-Columbia  
Date: July 21, 2021

QC Batch: 218173  
D6: The precision between the sample and sample duplicate exceeded laboratory control limits.  
• DUP (Lab ID: 1100859)  
• 1,1-Dichloroethene  
• Chloroform

### Additional Comments:

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## PROJECT NARRATIVE

Project: SMO-HANOVER/190292M  
Pace Project No.: 30430547

Method: EPA 8260B  
Description: 8260B MSV  
Client: ARM Group Inc.-Columbia  
Date: July 21, 2021

**General Information:**  
11 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.

QC Batch: 456788

IL: This analyte exceeded secondary source verification criteria low for the initial calibration. The reported results should be considered an estimated value.  
• BLANK (Lab ID: 2205671)  
• Ethanol  
• LCS (Lab ID: 2205672)  
• Ethanol  
• MS (Lab ID: 2205673)  
• Ethanol  
• MSD (Lab ID: 2205674)  
• Ethanol  
• MW-1 (Lab ID: 30430547001)  
• Ethanol  
• MW-10 (Lab ID: 30430547006)  
• Ethanol  
• MW-12 (Lab ID: 30430547007)  
• Ethanol  
• MW-14 (Lab ID: 30430547008)  
• Ethanol  
• MW-15 (Lab ID: 30430547009)  
• Ethanol  
• MW-16 (Lab ID: 30430547010)  
• Ethanol  
• MW-4 (Lab ID: 30430547002)  
• Ethanol  
• MW-7 (Lab ID: 30430547003)  
• Ethanol  
• MW-8 (Lab ID: 30430547004)  
• Ethanol  
• MW-9 (Lab ID: 30430547005)  
• Ethanol  
• Trip Blank (Lab ID: 30430547011)  
• Ethanol

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## PROJECT NARRATIVE

Project: SMO-HANOVER/190292M  
Pace Project No.: 30430547

Method: EPA 8260B  
Description: 8260B MSV  
Client: ARM Group Inc.-Columbia  
Date: July 21, 2021

**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: 456788

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30430547007

MH: Matrix spike recovery and/or matrix spike duplicate recovery was above laboratory control limits. Result may be biased high.  
• MS (Lab ID: 2205673)  
• 1,2-Dichloropropane  
• Carbon tetrachloride  
• Ethyl-tert-butyl ether  
• Trichloroethene  
• cis-1,2-Dichloroethene  
• tert-Butylmethyl ether

ML: Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.

• MSD (Lab ID: 2205674)  
• Ethylbenzene  
• Tetrachloroethene  
• Vinyl chloride  
• m,p-Xylene

R1: RPD value was outside control limits.  
• MSD (Lab ID: 2205674)  
• 1,1,1-Trichloroethane  
• 1,1-Dichloroethene  
• 1,2,4-Trichlorobenzene  
• 1,2-Dichlorobenzene  
• 1,3-Dichlorobenzene  
• 1,4-Dichlorobenzene  
• Benzene  
• Carbon disulfide

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## PROJECT NARRATIVE

Project: SMO-HANOVER/190292M  
Pace Project No.: 30430547

Method: EPA 8260B  
Description: 8260B MSV  
Client: ARM Group Inc.-Columbia  
Date: July 21, 2021

QC Batch: 456788

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30430547007

R1: RPD value was outside control limits.

- Carbon tetrachloride
- Chlorobenzene
- Chlороethane
- Chloromethane
- Ethylbenzene
- Styrene
- Tetrachloroethene
- Toluene
- Trichloroethene
- Vinyl chloride
- cis-1,2-Dichloroethene
- cis-1,3-Dichloropropene
- m&p-Xylene
- o-Xylene
- trans-1,2-Dichloroethene
- trans-1,3-Dichloropropene

Additional Comments:

Analyte Comments:

QC Batch: 456788

1c: The analyte did not meet the method recommended minimum RF.

- BLANK (Lab ID: 2205671)
  - Ethanol
- LCS (Lab ID: 2205672)
  - Ethanol
- MS (Lab ID: 2205673)
  - Ethanol
- MSD (Lab ID: 2205674)
  - Ethanol
- MW-1 (Lab ID: 30430547001)
  - Ethanol
- MW-10 (Lab ID: 30430547006)
  - Ethanol
- MW-12 (Lab ID: 30430547007)
  - Ethanol
- MW-14 (Lab ID: 30430547008)
  - Ethanol
- MW-15 (Lab ID: 30430547009)
  - Ethanol
- MW-16 (Lab ID: 30430547010)
  - Ethanol

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## PROJECT NARRATIVE

Project: SMO-HANOVER/190292M  
Pace Project No.: 30430547

Method: EPA 8260B  
Description: 8260B MSV  
Client: ARM Group Inc.-Columbia  
Date: July 21, 2021

Analyte Comments:

QC Batch: 456788

1c: The analyte did not meet the method recommended minimum RF.

- MW-4 (Lab ID: 30430547002)
  - Ethanol
- MW-7 (Lab ID: 30430547003)
  - Ethanol
- MW-8 (Lab ID: 30430547004)
  - Ethanol
- MW-9 (Lab ID: 30430547005)
  - Ethanol
- Trip Blank (Lab ID: 30430547011)
  - Ethanol

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

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## ANALYTICAL RESULTS

Project: SMO-HANOVER/190292M  
Pace Project No.: 30430547

Sample: MW-1	Lab ID: 30430547001	Collected: 07/12/21 09:15	Received: 07/13/21 21:45	Matrix: Water					
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8015D TPH Reduced Volume</b>									
Analytical Method: EPA 8015D Preparation Method: EPA 3510C Pace Analytical Services - Greensburg									
TPH (C10-C28) <i>Surrogates</i>	<b>0.092J</b>	mg/L	0.098	0.067	1	07/15/21 08:20	07/20/21 03:20		
o-Terphenyl (S)	68	%.	25-105		1	07/15/21 08:20	07/20/21 03:20	84-15-1	
<b>Gasoline Range Organics</b>									
Analytical Method: EPA 5030/8015B Pace Analytical Services - Greensburg									
TPH (C06-C10) <i>Surrogates</i>	<b>200 U</b>	ug/L	200	98.0	1		07/14/21 20:27		
4-Bromofluorobenzene (S)	96	%.	70-130		1		07/14/21 20:27	460-00-4	
<b>8260B MSV</b>									
Analytical Method: EPA 8260B Pace Analytical Services - Greensburg									
Acetone	<b>10.0 U</b>	ug/L	10.0	5.6	1	07/20/21 16:57	67-64-1		
tert-Amylmethyl ether	<b>1.0 U</b>	ug/L	1.0	0.27	1	07/20/21 16:57	994-00-8		
Benzene	<b>1.0 U</b>	ug/L	1.0	0.34	1	07/20/21 16:57	71-43-2		
Bromochloromethane	<b>1.0 U</b>	ug/L	1.0	0.48	1	07/20/21 16:57	74-97-5		
Bromodichloromethane	<b>1.0 U</b>	ug/L	1.0	0.35	1	07/20/21 16:57	75-27-4		
Bromoform	<b>1.0 U</b>	ug/L	1.0	0.56	1	07/20/21 16:57	75-25-2		
Bromomethane	<b>1.0 U</b>	ug/L	1.0	0.73	1	07/20/21 16:57	74-83-9		
TOTAL BTEx	<b>6.0 U</b>	ug/L	6.0	2.4	1	07/20/21 16:57			
2-Butanone (MEK)	<b>10.0 U</b>	ug/L	10.0	1.5	1	07/20/21 16:57	78-93-3		
tert-Butyl Alcohol	<b>5.0 U</b>	ug/L	5.0	4.3	1	07/20/21 16:57	75-65-0		
Carbon disulfide	<b>1.0 U</b>	ug/L	1.0	0.32	1	07/20/21 16:57	75-15-0		
Carbon tetrachloride	<b>1.0 U</b>	ug/L	1.0	0.44	1	07/20/21 16:57	56-23-5		
Chlorobenzene	<b>1.0 U</b>	ug/L	1.0	0.26	1	07/20/21 16:57	108-90-7		
Chloroethane	<b>1.0 U</b>	ug/L	1.0	0.64	1	07/20/21 16:57	75-00-3		
Chloroform	<b>1.0 U</b>	ug/L	1.0	0.39	1	07/20/21 16:57	67-66-3		
Chloromethane	<b>1.0 U</b>	ug/L	1.0	0.40	1	07/20/21 16:57	74-87-3		
Dibromochloromethane	<b>1.0 U</b>	ug/L	1.0	0.43	1	07/20/21 16:57	124-48-1		
1,2-Dichlorobenzene	<b>1.0 U</b>	ug/L	1.0	0.38	1	07/20/21 16:57	95-50-1		
1,3-Dichlorobenzene	<b>1.0 U</b>	ug/L	1.0	0.45	1	07/20/21 16:57	541-73-1		
1,4-Dichlorobenzene	<b>1.0 U</b>	ug/L	1.0	0.48	1	07/20/21 16:57	106-46-7		
1,1-Dichloroethane	<b>1.0 U</b>	ug/L	1.0	0.24	1	07/20/21 16:57	75-34-3		
1,2-Dichloroethane	<b>1.0 U</b>	ug/L	1.0	0.33	1	07/20/21 16:57	107-06-2		
1,2-Dichloroethene (Total)	<b>2.0 U</b>	ug/L	2.0	0.66	1	07/20/21 16:57	540-59-0		
1,1-Dichloroethene	<b>1.0 U</b>	ug/L	1.0	0.24	1	07/20/21 16:57	75-35-4		
cis-1,2-Dichloroethene	<b>1.0 U</b>	ug/L	1.0	0.38	1	07/20/21 16:57	156-59-2		
trans-1,2-Dichloroethene	<b>1.0 U</b>	ug/L	1.0	0.28	1	07/20/21 16:57	156-60-5		
1,2-Dichloropropane	<b>1.0 U</b>	ug/L	1.0	0.28	1	07/20/21 16:57	78-87-5		
cis-1,3-Dichloropropene	<b>1.0 U</b>	ug/L	1.0	0.29	1	07/20/21 16:57	10061-01-5		
trans-1,3-Dichloropropene	<b>1.0 U</b>	ug/L	1.0	0.32	1	07/20/21 16:57	10061-02-6		
Diethyl ether (Ethyl ether)	<b>1.0 U</b>	ug/L	1.0	0.35	1	07/20/21 16:57	60-29-7		
Ethanol	<b>200 U</b>	ug/L	200	73.5	1	07/20/21 16:57	64-17-5	1c,IL	
Ethylbenzene	<b>1.0 U</b>	ug/L	1.0	0.40	1	07/20/21 16:57	100-41-4		
Ethyl-tert-butyl ether	<b>1.0 U</b>	ug/L	1.0	0.29	1	07/20/21 16:57	637-92-3		

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## ANALYTICAL RESULTS

Project: SMO-HANOVER/190292M  
Pace Project No.: 30430547

Sample: MW-1	Lab ID: 30430547001	Collected: 07/12/21 09:15	Received: 07/13/21 21:45	Matrix: Water					
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260B MSV</b>									
Analytical Method: EPA 8260B Pace Analytical Services - Greensburg									
2-Hexanone	<b>10.0 U</b>	ug/L	10.0	0.58	1		07/20/21 16:57	591-78-6	
Methylene Chloride	<b>1.0 U</b>	ug/L	1.0	0.64	1		07/20/21 16:57	75-09-2	
4-Methyl-2-pentanone (MIBK)	<b>10.0 U</b>	ug/L	10.0	0.42	1		07/20/21 16:57	108-10-1	
Methyl-tert-butyl ether	<b>1.0 U</b>	ug/L	1.0	0.25	1		07/20/21 16:57	1634-04-4	
Naphthalene	<b>2.0 U</b>	ug/L	2.0	0.82	1		07/20/21 16:57	91-20-3	
Styrene	<b>1.0 U</b>	ug/L	1.0	0.33	1		07/20/21 16:57	100-42-5	
1,1,2,2-Tetrachloroethane	<b>1.0 U</b>	ug/L	1.0	0.47	1		07/20/21 16:57	79-34-5	
Tetrachloroethene	<b>1.0 U</b>	ug/L	1.0	0.39	1		07/20/21 16:57	127-18-4	
Toluene	<b>1.0 U</b>	ug/L	1.0	0.32	1		07/20/21 16:57	108-88-3	
1,2,4-Trichlorobenzene	<b>1.0 U</b>	ug/L	1.0	0.73	1		07/20/21 16:57	120-82-1	
1,1,1-Trichloroethane	<b>1.0 U</b>	ug/L	1.0	0.38	1		07/20/21 16:57	71-55-6	
1,1,2-Trichloroethane	<b>1.0 U</b>	ug/L	1.0	0.33	1		07/20/21 16:57	79-00-5	
Trichloroethene	<b>1.0 U</b>	ug/L	1.0	0.29	1		07/20/21 16:57	79-01-6	
Vinyl chloride	<b>1.0 U</b>	ug/L	1.0	0.29	1		07/20/21 16:57	75-01-4	
Xylene (Total)	<b>3.0 U</b>	ug/L	3.0	1.4	1		07/20/21 16:57	1330-20-7	
m,p-Xylene	<b>2.0 U</b>	ug/L	2.0	0.94	1		07/20/21 16:57	179601-23-1	
o-Xylene	<b>1.0 U</b>	ug/L	1.0	0.41	1		07/20/21 16:57	95-47-6	
<i>Surrogates</i>									
4-Bromofluorobenzene (S)	100	%.	70-130		1		07/20/21 16:57	460-00-4	
1,2-Dichloroethane-d4 (S)	100	%.	70-130		1		07/20/21 16:57	17060-07-0	
Toluene-d8 (S)	93	%.	70-130		1		07/20/21 16:57	2037-26-5	
Dibromofluoromethane (S)	101	%.	70-130		1		07/20/21 16:57	1868-53-7	

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## ANALYTICAL RESULTS

Project: SMO-HANOVER/190292M  
Pace Project No.: 30430547

Sample: MW-4	Lab ID: 30430547002	Collected: 07/12/21 10:50	Received: 07/13/21 21:45	Matrix: Water					
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8015D TPH Reduced Volume</b>									
Analytical Method: EPA 8015D Preparation Method: EPA 3510C Pace Analytical Services - Greensburg									
TPH (C10-C28) <i>Surrogates</i>	0.082J	mg/L	0.098	0.067	1	07/15/21 08:20	07/20/21 03:43		
o-Terphenyl (S)	110	%.	25-105		1	07/15/21 08:20	07/20/21 03:43	84-15-1	ST
<b>Gasoline Range Organics</b>									
Analytical Method: EPA 5030/8015B Pace Analytical Services - Greensburg									
TPH (C06-C10) <i>Surrogates</i>	200 U	ug/L	200	98.0	1		07/14/21 20:45		
4-Bromofluorobenzene (S)	97	%.	70-130		1		07/14/21 20:45	460-00-4	
<b>8260B MSV</b>									
Analytical Method: EPA 8260B Pace Analytical Services - Greensburg									
Acetone	10.0 U	ug/L	10.0	5.6	1		07/20/21 17:23	67-64-1	
tert-Amylmethyl ether	1.0 U	ug/L	1.0	0.27	1		07/20/21 17:23	994-00-8	
Benzene	1.0 U	ug/L	1.0	0.34	1		07/20/21 17:23	71-43-2	
Bromochloromethane	1.0 U	ug/L	1.0	0.48	1		07/20/21 17:23	74-97-5	
Bromodichloromethane	1.0 U	ug/L	1.0	0.35	1		07/20/21 17:23	75-27-4	
Bromoform	1.0 U	ug/L	1.0	0.56	1		07/20/21 17:23	75-25-2	
Bromomethane	1.0 U	ug/L	1.0	0.73	1		07/20/21 17:23	74-83-9	
TOTAL BTEx	6.0 U	ug/L	6.0	2.4	1		07/20/21 17:23		
2-Butanone (MEK)	10.0 U	ug/L	10.0	1.5	1		07/20/21 17:23	78-93-3	
tert-Butyl Alcohol	5.0 U	ug/L	5.0	4.3	1		07/20/21 17:23	75-65-0	
Carbon disulfide	1.0 U	ug/L	1.0	0.32	1		07/20/21 17:23	75-15-0	
Carbon tetrachloride	1.0 U	ug/L	1.0	0.44	1		07/20/21 17:23	56-23-5	
Chlorobenzene	1.0 U	ug/L	1.0	0.26	1		07/20/21 17:23	108-90-7	
Chloroethane	1.0 U	ug/L	1.0	0.64	1		07/20/21 17:23	75-00-3	
Chloroform	1.0 U	ug/L	1.0	0.39	1		07/20/21 17:23	67-66-3	
Chloromethane	1.0 U	ug/L	1.0	0.40	1		07/20/21 17:23	74-87-3	
Dibromochloromethane	1.0 U	ug/L	1.0	0.43	1		07/20/21 17:23	124-48-1	
1,2-Dichlorobenzene	1.0 U	ug/L	1.0	0.38	1		07/20/21 17:23	95-50-1	
1,3-Dichlorobenzene	1.0 U	ug/L	1.0	0.45	1		07/20/21 17:23	541-73-1	
1,4-Dichlorobenzene	1.0 U	ug/L	1.0	0.48	1		07/20/21 17:23	106-46-7	
1,1-Dichloroethane	1.0 U	ug/L	1.0	0.24	1		07/20/21 17:23	75-34-3	
1,2-Dichloroethane	1.0 U	ug/L	1.0	0.33	1		07/20/21 17:23	107-06-2	
1,2-Dichloroethene (Total)	2.0 U	ug/L	2.0	0.66	1		07/20/21 17:23	540-59-0	
1,1-Dichloroethene	1.0 U	ug/L	1.0	0.24	1		07/20/21 17:23	75-35-4	
cis-1,2-Dichloroethene	1.0 U	ug/L	1.0	0.38	1		07/20/21 17:23	156-59-2	
trans-1,2-Dichloroethene	1.0 U	ug/L	1.0	0.28	1		07/20/21 17:23	156-60-5	
1,2-Dichloropropane	1.0 U	ug/L	1.0	0.28	1		07/20/21 17:23	78-87-5	
cis-1,3-Dichloropropene	1.0 U	ug/L	1.0	0.29	1		07/20/21 17:23	10061-01-5	
trans-1,3-Dichloropropene	1.0 U	ug/L	1.0	0.32	1		07/20/21 17:23	10061-02-6	
Diethyl ether (Ethyl ether)	1.0 U	ug/L	1.0	0.35	1		07/20/21 17:23	60-29-7	
Ethanol	200 U	ug/L	200	73.5	1		07/20/21 17:23	64-17-5	1c,IL
Ethylbenzene	1.0 U	ug/L	1.0	0.40	1		07/20/21 17:23	100-41-4	
Ethyl-tert-butyl ether	1.0 U	ug/L	1.0	0.29	1		07/20/21 17:23	637-92-3	

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## ANALYTICAL RESULTS

Project: SMO-HANOVER/190292M  
Pace Project No.: 30430547

Sample: MW-4	Lab ID: 30430547002	Collected: 07/12/21 10:50	Received: 07/13/21 21:45	Matrix: Water					
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260B MSV</b>									
Analytical Method: EPA 8260B Pace Analytical Services - Greensburg									
2-Hexanone	10.0 U	ug/L	10.0	0.58	1		07/20/21 17:23	591-78-6	
Methylene Chloride	1.0 U	ug/L	1.0	0.64	1		07/20/21 17:23	75-09-2	
4-Methyl-2-pentanone (MIBK)	10.0 U	ug/L	10.0	0.42	1		07/20/21 17:23	108-10-1	
Methyl-tert-butyl ether	1.0 U	ug/L	1.0	0.25	1		07/20/21 17:23	1634-04-4	
Naphthalene	2.0 U	ug/L	2.0	0.82	1		07/20/21 17:23	91-20-3	
Styrene	1.0 U	ug/L	1.0	0.33	1		07/20/21 17:23	100-42-5	
1,1,2,2-Tetrachloroethane	1.0 U	ug/L	1.0	0.47	1		07/20/21 17:23	79-34-5	
Tetrachloroethene	1.0 U	ug/L	1.0	0.39	1		07/20/21 17:23	127-18-4	
Toluene	1.0 U	ug/L	1.0	0.32	1		07/20/21 17:23	108-88-3	
1,2,4-Trichlorobenzene	1.0 U	ug/L	1.0	0.73	1		07/20/21 17:23	120-82-1	
1,1,1-Trichloroethane	1.0 U	ug/L	1.0	0.38	1		07/20/21 17:23	71-55-6	
1,1,2-Trichloroethane	1.0 U	ug/L	1.0	0.33	1		07/20/21 17:23	79-00-5	
Trichloroethene	1.0 U	ug/L	1.0	0.29	1		07/20/21 17:23	79-01-6	
Vinyl chloride	1.0 U	ug/L	1.0	0.29	1		07/20/21 17:23	75-01-4	
Xylene (Total)	3.0 U	ug/L	3.0	1.4	1		07/20/21 17:23	1330-20-7	
m,p-Xylene	2.0 U	ug/L	2.0	0.94	1		07/20/21 17:23	179601-23-1	
o-Xylene	1.0 U	ug/L	1.0	0.41	1		07/20/21 17:23	95-47-6	
<i>Surrogates</i>									
4-Bromofluorobenzene (S)	102	%.	70-130		1		07/20/21 17:23	460-00-4	
1,2-Dichloroethane-d4 (S)	99	%.	70-130		1		07/20/21 17:23	17060-07-0	
Toluene-d8 (S)	94	%.	70-130		1		07/20/21 17:23	2037-26-5	
Dibromofluoromethane (S)	100	%.	70-130		1		07/20/21 17:23	1868-53-7	

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## ANALYTICAL RESULTS

Project: SMO-HANOVER/190292M  
Pace Project No.: 30430547

Sample: MW-7	Lab ID: 30430547003	Collected: 07/12/21 10:25	Received: 07/13/21 21:45	Matrix: Water					
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8015D TPH Reduced Volume</b>									
Analytical Method: EPA 8015D Preparation Method: EPA 3510C Pace Analytical Services - Greensburg									
TPH (C10-C28)	1.7	mg/L	0.098	0.067	1	07/15/21 08:20	07/20/21 04:31		
<i>Surrogates</i>									
o-Terphenyl (S)	113	%.	25-105		1	07/15/21 08:20	07/20/21 04:31	84-15-1	ST
<b>Gasoline Range Organics</b>									
Analytical Method: EPA 5030/8015B Pace Analytical Services - Greensburg									
TPH (C06-C10)	584	ug/L	200	98.0	1		07/14/21 21:02		
<i>Surrogates</i>									
4-Bromofluorobenzene (S)	95	%.	70-130		1	07/14/21 21:02	460-00-4		
<b>8260B MSV</b>									
Analytical Method: EPA 8260B Pace Analytical Services - Greensburg									
Acetone	38.1	ug/L	10.0	5.6	1	07/20/21 17:49	67-64-1		
tert-Amylmethyl ether	1.0 U	ug/L	1.0	0.27	1	07/20/21 17:49	994-00-8		
Benzene	0.45J	ug/L	1.0	0.34	1	07/20/21 17:49	71-43-2		
Bromochloromethane	1.0 U	ug/L	1.0	0.48	1	07/20/21 17:49	74-97-5		
Bromodichloromethane	1.0 U	ug/L	1.0	0.35	1	07/20/21 17:49	75-27-4		
Bromoform	1.0 U	ug/L	1.0	0.56	1	07/20/21 17:49	75-25-2		
Bromomethane	1.0 U	ug/L	1.0	0.73	1	07/20/21 17:49	74-83-9		
TOTAL BTEx	6.0 U	ug/L	6.0	2.4	1	07/20/21 17:49			
2-Butanone (MEK)	10.0 U	ug/L	10.0	1.5	1	07/20/21 17:49	78-93-3		
tert-Butyl Alcohol	5.0 U	ug/L	5.0	4.3	1	07/20/21 17:49	75-65-0		
Carbon disulfide	1.0 U	ug/L	1.0	0.32	1	07/20/21 17:49	75-15-0		
Carbon tetrachloride	1.0 U	ug/L	1.0	0.44	1	07/20/21 17:49	56-23-5		
Chlorobenzene	1.0 U	ug/L	1.0	0.26	1	07/20/21 17:49	108-90-7		
Chloroethane	0.81J	ug/L	1.0	0.64	1	07/20/21 17:49	75-00-3		
Chloroform	1.0 U	ug/L	1.0	0.39	1	07/20/21 17:49	67-66-3		
Chloromethane	1.0 U	ug/L	1.0	0.40	1	07/20/21 17:49	74-87-3		
Dibromochloromethane	1.0 U	ug/L	1.0	0.43	1	07/20/21 17:49	124-48-1		
1,2-Dichlorobenzene	1.0 U	ug/L	1.0	0.38	1	07/20/21 17:49	95-50-1		
1,3-Dichlorobenzene	1.0 U	ug/L	1.0	0.45	1	07/20/21 17:49	541-73-1		
1,4-Dichlorobenzene	1.0 U	ug/L	1.0	0.48	1	07/20/21 17:49	106-46-7		
1,1-Dichloroethane	1.0 U	ug/L	1.0	0.24	1	07/20/21 17:49	75-34-3		
1,2-Dichloroethane	1.0 U	ug/L	1.0	0.33	1	07/20/21 17:49	107-06-2		
1,2-Dichloroethene (Total)	2.0 U	ug/L	2.0	0.66	1	07/20/21 17:49	540-59-0		
1,1-Dichloroethene	1.0 U	ug/L	1.0	0.24	1	07/20/21 17:49	75-35-4		
cis-1,2-Dichloroethene	1.0 U	ug/L	1.0	0.38	1	07/20/21 17:49	156-59-2		
trans-1,2-Dichloroethene	1.0 U	ug/L	1.0	0.28	1	07/20/21 17:49	156-60-5		
1,2-Dichloropropane	1.0 U	ug/L	1.0	0.28	1	07/20/21 17:49	78-87-5		
cis-1,3-Dichloropropene	1.0 U	ug/L	1.0	0.29	1	07/20/21 17:49	10061-01-5		
trans-1,3-Dichloropropene	1.0 U	ug/L	1.0	0.32	1	07/20/21 17:49	10061-02-6		
Diethyl ether (Ethyl ether)	1.0 U	ug/L	1.0	0.35	1	07/20/21 17:49	60-29-7		
Ethanol	200 U	ug/L	200	73.5	1	07/20/21 17:49	64-17-5	1c,IL	
Ethylbenzene	0.96J	ug/L	1.0	0.40	1	07/20/21 17:49	100-41-4		
Ethyl-tert-butyl ether	1.0 U	ug/L	1.0	0.29	1	07/20/21 17:49	637-92-3		

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## ANALYTICAL RESULTS

Project: SMO-HANOVER/190292M  
Pace Project No.: 30430547

Sample: MW-7	Lab ID: 30430547003	Collected: 07/12/21 10:25	Received: 07/13/21 21:45	Matrix: Water					
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260B MSV</b>									
Analytical Method: EPA 8260B Pace Analytical Services - Greensburg									
2-Hexanone	10.0 U	ug/L	10.0	0.58	1		07/20/21 17:49	591-78-6	
Methylene Chloride	1.0 U	ug/L	1.0	0.64	1		07/20/21 17:49	75-09-2	
4-Methyl-2-pentanone (MIBK)	0.65J	ug/L	10.0	0.42	1		07/20/21 17:49	108-10-1	
Methyl-tert-butyl ether	1.0 U	ug/L	1.0	0.25	1		07/20/21 17:49	1634-04-4	
Naphthalene	1.6J	ug/L	2.0	0.82	1		07/20/21 17:49	91-20-3	
Styrene	1.0 U	ug/L	1.0	0.33	1		07/20/21 17:49	100-42-5	
1,1,2,2-Tetrachloroethane	1.0 U	ug/L	1.0	0.47	1		07/20/21 17:49	79-34-5	
Tetrachloroethene	1.0 U	ug/L	1.0	0.39	1		07/20/21 17:49	127-18-4	
Toluene	0.40J	ug/L	1.0	0.32	1		07/20/21 17:49	108-88-3	
1,2,4-Trichlorobenzene	1.0 U	ug/L	1.0	0.73	1		07/20/21 17:49	120-82-1	
1,1,1-Trichloroethane	1.0 U	ug/L	1.0	0.38	1		07/20/21 17:49	71-55-6	
1,1,2-Trichloroethane	3.8	ug/L	1.0	0.33	1		07/20/21 17:49	79-00-5	
Trichloroethene	1.0 U	ug/L	1.0	0.29	1		07/20/21 17:49	79-01-6	
Vinyl chloride	1.0 U	ug/L	1.0	0.29	1		07/20/21 17:49	75-01-4	
Xylene (Total)	3.0 U	ug/L	3.0	1.4	1		07/20/21 17:49	1330-20-7	
m,p-Xylene	2.0 U	ug/L	2.0	0.94	1		07/20/21 17:49	179601-23-1	
o-Xylene	1.0 U	ug/L	1.0	0.41	1		07/20/21 17:49	95-47-6	
<i>Surrogates</i>									
4-Bromofluorobenzene (S)	101	%.	70-130		1		07/20/21 17:49	460-00-4	
1,2-Dichloroethane-d4 (S)	95	%.	70-130		1		07/20/21 17:49	17060-07-0	
Toluene-d8 (S)	95	%.	70-130		1		07/20/21 17:49	2037-26-5	
Dibromofluoromethane (S)	95	%.	70-130		1		07/20/21 17:49	1868-53-7	

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## ANALYTICAL RESULTS

Project: SMO-HANOVER/190292M  
Pace Project No.: 30430547

Sample: MW-8	Lab ID: 30430547004	Collected: 07/12/21 12:15	Received: 07/13/21 21:45	Matrix: Water					
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8015D TPH Reduced Volume</b>									
Analytical Method: EPA 8015D Preparation Method: EPA 3510C Pace Analytical Services - Greensburg									
TPH (C10-C28)	1.2	mg/L	0.098	0.067	1	07/15/21 08:20	07/20/21 04:54		
<i>Surrogates</i>									
o-Terphenyl (S)	61	%.	25-105		1	07/15/21 08:20	07/20/21 04:54	84-15-1	
<b>Gasoline Range Organics</b>									
Analytical Method: EPA 5030/8015B Pace Analytical Services - Greensburg									
TPH (C06-C10)	971	ug/L	200	98.0	1		07/14/21 21:20		
<i>Surrogates</i>									
4-Bromofluorobenzene (S)	94	%.	70-130		1	07/14/21 21:20	460-00-4		
<b>8260B MSV</b>									
Analytical Method: EPA 8260B Pace Analytical Services - Greensburg									
Acetone	10.0 U	ug/L	10.0	5.6	1	07/20/21 21:39	67-64-1		
tert-Amylmethyl ether	1.0 U	ug/L	1.0	0.27	1	07/20/21 21:39	994-05-8		
Benzene	0.62J	ug/L	1.0	0.34	1	07/20/21 21:39	71-43-2		
Bromochloromethane	1.0 U	ug/L	1.0	0.48	1	07/20/21 21:39	74-97-5		
Bromodichloromethane	1.0 U	ug/L	1.0	0.35	1	07/20/21 21:39	75-27-4		
Bromoform	1.0 U	ug/L	1.0	0.56	1	07/20/21 21:39	75-25-2		
Bromomethane	1.0 U	ug/L	1.0	0.73	1	07/20/21 21:39	74-83-9		
TOTAL BTEx	45.0	ug/L	6.0	2.4	1	07/20/21 21:39			
2-Butanone (MEK)	2.1J	ug/L	10.0	1.5	1	07/20/21 21:39	78-93-3		
tert-Butyl Alcohol	5.0 U	ug/L	5.0	4.3	1	07/20/21 21:39	75-65-0		
Carbon disulfide	1.0 U	ug/L	1.0	0.32	1	07/20/21 21:39	75-15-0		
Carbon tetrachloride	1.0 U	ug/L	1.0	0.44	1	07/20/21 21:39	56-23-5		
Chlorobenzene	1.0 U	ug/L	1.0	0.26	1	07/20/21 21:39	108-90-7		
Chloroethane	1.0 U	ug/L	1.0	0.64	1	07/20/21 21:39	75-00-3		
Chloroform	1.0 U	ug/L	1.0	0.39	1	07/20/21 21:39	67-66-3		
Chloromethane	1.0 U	ug/L	1.0	0.40	1	07/20/21 21:39	74-87-3		
Dibromochloromethane	1.0 U	ug/L	1.0	0.43	1	07/20/21 21:39	124-48-1		
1,2-Dichlorobenzene	1.0 U	ug/L	1.0	0.38	1	07/20/21 21:39	95-50-1		
1,3-Dichlorobenzene	1.0 U	ug/L	1.0	0.45	1	07/20/21 21:39	541-73-1		
1,4-Dichlorobenzene	1.0 U	ug/L	1.0	0.48	1	07/20/21 21:39	106-46-7		
1,1-Dichloroethane	1.0 U	ug/L	1.0	0.24	1	07/20/21 21:39	75-34-3		
1,2-Dichloroethane	1.0 U	ug/L	1.0	0.33	1	07/20/21 21:39	107-06-2		
1,2-Dichloroethene (Total)	2.0 U	ug/L	2.0	0.66	1	07/20/21 21:39	540-59-0		
1,1-Dichloroethene	1.0 U	ug/L	1.0	0.24	1	07/20/21 21:39	75-35-4		
cis-1,2-Dichloroethene	1.0 U	ug/L	1.0	0.38	1	07/20/21 21:39	156-59-2		
trans-1,2-Dichloroethene	1.0 U	ug/L	1.0	0.28	1	07/20/21 21:39	156-60-5		
1,2-Dichloropropane	1.0 U	ug/L	1.0	0.28	1	07/20/21 21:39	78-87-5		
cis-1,3-Dichloropropene	1.0 U	ug/L	1.0	0.29	1	07/20/21 21:39	10061-01-5		
trans-1,3-Dichloropropene	1.0 U	ug/L	1.0	0.32	1	07/20/21 21:39	10061-02-6		
Diethyl ether (Ethyl ether)	1.0 U	ug/L	1.0	0.35	1	07/20/21 21:39	60-29-7		
Ethanol	200 U	ug/L	200	73.5	1	07/20/21 21:39	64-17-5	1c,IL	
Ethylbenzene	22.1	ug/L	1.0	0.40	1	07/20/21 21:39	100-41-4		
Ethyl-tert-butyl ether	1.0 U	ug/L	1.0	0.29	1	07/20/21 21:39	637-92-3		

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## ANALYTICAL RESULTS

Project: SMO-HANOVER/190292M  
Pace Project No.: 30430547

Sample: MW-8	Lab ID: 30430547004	Collected: 07/12/21 12:15	Received: 07/13/21 21:45	Matrix: Water					
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260B MSV</b>									
Analytical Method: EPA 8260B Pace Analytical Services - Greensburg									
2-Hexanone	0.76J	ug/L	10.0	0.58	1		07/20/21 21:39	591-78-6	
Methylene Chloride	1.0 U	ug/L	1.0	0.64	1		07/20/21 21:39	75-09-2	
4-Methyl-2-pentanone (MIBK)	2.0J	ug/L	10.0	0.42	1		07/20/21 21:39	108-10-1	
Methyl-tert-butyl ether	1.0 U	ug/L	1.0	0.25	1		07/20/21 21:39	1634-04-4	
Naphthalene	26.1	ug/L	2.0	0.82	1		07/20/21 21:39	91-20-3	
Styrene	1.0 U	ug/L	1.0	0.33	1		07/20/21 21:39	100-42-5	
1,1,2,2-Tetrachloroethane	1.0 U	ug/L	1.0	0.47	1		07/20/21 21:39	79-34-5	
Tetrachloroethene	1.0 U	ug/L	1.0	0.39	1		07/20/21 21:39	127-18-4	
Toluene	1.0 U	ug/L	1.0	0.32	1		07/20/21 21:39	108-88-3	
1,2,4-Trichlorobenzene	1.0 U	ug/L	1.0	0.73	1		07/20/21 21:39	120-82-1	
1,1,1-Trichloroethane	1.0 U	ug/L	1.0	0.38	1		07/20/21 21:39	71-55-6	
1,1,2-Trichloroethane	3.0	ug/L	1.0	0.33	1		07/20/21 21:39	79-00-5	
Trichloroethene	1.0 U	ug/L	1.0	0.29	1		07/20/21 21:39	79-01-6	
Vinyl chloride	1.0 U	ug/L	1.0	0.29	1		07/20/21 21:39	75-01-4	
Xylene (Total)	22.3	ug/L	3.0	1.4	1		07/20/21 21:39	1330-20-7	
m,p-Xylene	21.6	ug/L	2.0	0.94	1		07/20/21 21:39	179601-23-1	
o-Xylene	0.66J	ug/L	1.0	0.41	1		07/20/21 21:39	95-47-6	
<i>Surrogates</i>									
4-Bromofluorobenzene (S)	100	%.	70-130		1		07/20/21 21:39	460-00-4	
1,2-Dichloroethane-d4 (S)	96	%.	70-130		1		07/20/21 21:39	17060-07-0	
Toluene-d8 (S)	95	%.	70-130		1		07/20/21 21:39	2037-26-5	
Dibromofluoromethane (S)	96	%.	70-130		1		07/20/21 21:39	1868-53-7	

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## ANALYTICAL RESULTS

Project: SMO-HANOVER/190292M  
Pace Project No.: 30430547

Sample: MW-9	Lab ID: 30430547005	Collected: 07/12/21 11:05	Received: 07/13/21 21:45	Matrix: Water					
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8015D TPH Reduced Volume</b>									
Analytical Method: EPA 8015D Preparation Method: EPA 3510C Pace Analytical Services - Greensburg									
TPH (C10-C28) <i>Surrogates</i>	1.4	mg/L	0.099	0.068	1	07/15/21 08:20	07/20/21 09:37		
o-Terphenyl (S)	97	%.	25-105		1	07/15/21 08:20	07/20/21 09:37	84-15-1	
<b>Gasoline Range Organics</b>									
Analytical Method: EPA 5030/8015B Pace Analytical Services - Greensburg									
TPH (C06-C10) <i>Surrogates</i>	619	ug/L	200	98.0	1		07/14/21 21:38		
4-Bromofluorobenzene (S)	98	%.	70-130		1		07/14/21 21:38	460-00-4	
<b>8260B MSV</b>									
Analytical Method: EPA 8260B Pace Analytical Services - Greensburg									
Acetone	10.0 U	ug/L	10.0	5.6	1		07/20/21 19:06	67-64-1	
tert-Amylmethyl ether	1.0 U	ug/L	1.0	0.27	1		07/20/21 19:06	994-00-8	
Benzene	10.3	ug/L	1.0	0.34	1		07/20/21 19:06	71-43-2	
Bromochloromethane	1.0 U	ug/L	1.0	0.48	1		07/20/21 19:06	74-97-5	
Bromodichloromethane	1.0 U	ug/L	1.0	0.35	1		07/20/21 19:06	75-27-4	
Bromoform	1.0 U	ug/L	1.0	0.56	1		07/20/21 19:06	75-25-2	
Bromomethane	1.0 U	ug/L	1.0	0.73	1		07/20/21 19:06	74-83-9	
TOTAL BTEx	25.0	ug/L	6.0	2.4	1		07/20/21 19:06		
2-Butanone (MEK)	10.0 U	ug/L	10.0	1.5	1		07/20/21 19:06	78-93-3	
tert-Butyl Alcohol	94.1	ug/L	5.0	4.3	1		07/20/21 19:06	75-65-0	
Carbon disulfide	1.0 U	ug/L	1.0	0.32	1		07/20/21 19:06	75-15-0	
Carbon tetrachloride	1.0 U	ug/L	1.0	0.44	1		07/20/21 19:06	56-23-5	
Chlorobenzene	1.0 U	ug/L	1.0	0.26	1		07/20/21 19:06	108-90-7	
Chloroethane	1.0 U	ug/L	1.0	0.64	1		07/20/21 19:06	75-00-3	
Chloroform	1.0 U	ug/L	1.0	0.39	1		07/20/21 19:06	67-66-3	
Chloromethane	1.0 U	ug/L	1.0	0.40	1		07/20/21 19:06	74-87-3	
Dibromochloromethane	1.0 U	ug/L	1.0	0.43	1		07/20/21 19:06	124-48-1	
1,2-Dichlorobenzene	1.0 U	ug/L	1.0	0.38	1		07/20/21 19:06	95-50-1	
1,3-Dichlorobenzene	1.0 U	ug/L	1.0	0.45	1		07/20/21 19:06	541-73-1	
1,4-Dichlorobenzene	1.0 U	ug/L	1.0	0.48	1		07/20/21 19:06	106-46-7	
1,1-Dichloroethane	1.0 U	ug/L	1.0	0.24	1		07/20/21 19:06	75-34-3	
1,2-Dichloroethane	1.0 U	ug/L	1.0	0.33	1		07/20/21 19:06	107-06-2	
1,2-Dichloroethene (Total)	2.0 U	ug/L	2.0	0.66	1		07/20/21 19:06	540-59-0	
1,1-Dichloroethene	1.0 U	ug/L	1.0	0.24	1		07/20/21 19:06	75-35-4	
cis-1,2-Dichloroethene	1.0 U	ug/L	1.0	0.38	1		07/20/21 19:06	156-59-2	
trans-1,2-Dichloroethene	1.0 U	ug/L	1.0	0.28	1		07/20/21 19:06	156-60-5	
1,2-Dichloropropane	1.0 U	ug/L	1.0	0.28	1		07/20/21 19:06	78-87-5	
cis-1,3-Dichloropropene	1.0 U	ug/L	1.0	0.29	1		07/20/21 19:06	10061-01-5	
trans-1,3-Dichloropropene	1.0 U	ug/L	1.0	0.32	1		07/20/21 19:06	10061-02-6	
Diethyl ether (Ethyl ether)	1.0 U	ug/L	1.0	0.35	1		07/20/21 19:06	60-29-7	
Ethanol	200 U	ug/L	200	73.5	1		07/20/21 19:06	64-17-5	1c,IL
Ethylbenzene	5.8	ug/L	1.0	0.40	1		07/20/21 19:06	100-41-4	
Ethyl-tert-butyl ether	1.0 U	ug/L	1.0	0.29	1		07/20/21 19:06	637-92-3	

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## ANALYTICAL RESULTS

Project: SMO-HANOVER/190292M  
Pace Project No.: 30430547

Sample: MW-9	Lab ID: 30430547005	Collected: 07/12/21 11:05	Received: 07/13/21 21:45	Matrix: Water					
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260B MSV</b>									
Analytical Method: EPA 8260B Pace Analytical Services - Greensburg									
2-Hexanone	10.0 U	ug/L	10.0	0.58	1		07/20/21 19:06	591-78-6	
Methylene Chloride	1.0 U	ug/L	1.0	0.64	1		07/20/21 19:06	75-09-2	
4-Methyl-2-pentanone (MIBK)	3.0J	ug/L	10.0	0.42	1		07/20/21 19:06	108-10-1	
Methyl-tert-butyl ether	7.4	ug/L	1.0	0.25	1		07/20/21 19:06	1634-04-4	
Naphthalene	1.1J	ug/L	2.0	0.82	1		07/20/21 19:06	91-20-3	
Styrene	1.0 U	ug/L	1.0	0.33	1		07/20/21 19:06	100-42-5	
1,1,2,2-Tetrachloroethane	1.0 U	ug/L	1.0	0.47	1		07/20/21 19:06	79-34-5	
Tetrachloroethene	1.0 U	ug/L	1.0	0.39	1		07/20/21 19:06	127-18-4	
Toluene	1.0 U	ug/L	1.0	0.32	1		07/20/21 19:06	108-88-3	
1,2,4-Trichlorobenzene	1.0 U	ug/L	1.0	0.73	1		07/20/21 19:06	120-82-1	
1,1,1-Trichloroethane	1.0 U	ug/L	1.0	0.38	1		07/20/21 19:06	71-55-6	
1,1,2-Trichloroethane	1.9	ug/L	1.0	0.33	1		07/20/21 19:06	79-00-5	
Trichloroethene	1.0 U	ug/L	1.0	0.29	1		07/20/21 19:06	79-01-6	
Vinyl chloride	1.0 U	ug/L	1.0	0.29	1		07/20/21 19:06	75-01-4	
Xylene (Total)	9.0	ug/L	3.0	1.4	1		07/20/21 19:06	1330-20-7	
m,p-Xylene	6.5	ug/L	2.0	0.94	1		07/20/21 19:06	179601-23-1	
o-Xylene	2.5	ug/L	1.0	0.41	1		07/20/21 19:06	95-47-6	
<i>Surrogates</i>									
4-Bromofluorobenzene (S)	100	%.	70-130		1		07/20/21 19:06	460-00-4	
1,2-Dichloroethane-d4 (S)	98	%.	70-130		1		07/20/21 19:06	17060-07-0	
Toluene-d8 (S)	95	%.	70-130		1		07/20/21 19:06	2037-26-5	
Dibromofluoromethane (S)	98	%.	70-130		1		07/20/21 19:06	1868-53-7	

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## ANALYTICAL RESULTS

Project: SMO-HANOVER/190292M  
Pace Project No.: 30430547

Sample: MW-10	Lab ID: 30430547006	Collected: 07/12/21 14:30	Received: 07/13/21 21:45	Matrix: Water					
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8015D TPH Reduced Volume</b>									
Analytical Method: EPA 8015D Preparation Method: EPA 3510C Pace Analytical Services - Greensburg									
TPH (C10-C28)	1.2	mg/L	0.099	0.068	1	07/15/21 08:20	07/20/21 10:01		
<i>Surrogates</i>									
o-Terphenyl (S)	27	%.	25-105		1	07/15/21 08:20	07/20/21 10:01	84-15-1	
<b>Gasoline Range Organics</b>									
Analytical Method: EPA 5030/8015B Pace Analytical Services - Greensburg									
TPH (C06-C10)	1640	ug/L	200	98.0	1		07/14/21 21:56		
<i>Surrogates</i>									
4-Bromofluorobenzene (S)	96	%.	70-130		1	07/14/21 21:56	460-00-4		
<b>8260B MSV</b>									
Analytical Method: EPA 8260B Pace Analytical Services - Greensburg									
Acetone	30.7	ug/L	10.0	5.6	1	07/20/21 21:14	67-64-1		
tert-Amylmethyl ether	5.1	ug/L	1.0	0.27	1	07/20/21 21:14	994-05-8		
Benzene	102	ug/L	1.0	0.34	1	07/20/21 21:14	71-43-2		
Bromochloromethane	1.0 U	ug/L	1.0	0.48	1	07/20/21 21:14	74-97-5		
Bromodichloromethane	1.0 U	ug/L	1.0	0.35	1	07/20/21 21:14	75-27-4		
Bromoform	1.0 U	ug/L	1.0	0.56	1	07/20/21 21:14	75-25-2		
Bromomethane	1.0 U	ug/L	1.0	0.73	1	07/20/21 21:14	74-83-9		
TOTAL BTEx	230	ug/L	6.0	2.4	1	07/20/21 21:14			
2-Butanone (MEK)	4.3J	ug/L	10.0	1.5	1	07/20/21 21:14	78-93-3		
tert-Butyl Alcohol	5.0 U	ug/L	5.0	4.3	1	07/20/21 21:14	75-65-0		
Carbon disulfide	1.0 U	ug/L	1.0	0.32	1	07/20/21 21:14	75-15-0		
Carbon tetrachloride	1.0 U	ug/L	1.0	0.44	1	07/20/21 21:14	56-23-5		
Chlorobenzene	1.0 U	ug/L	1.0	0.26	1	07/20/21 21:14	108-90-7		
Chloroethane	0.82J	ug/L	1.0	0.64	1	07/20/21 21:14	75-00-3		
Chloroform	1.0 U	ug/L	1.0	0.39	1	07/20/21 21:14	67-66-3		
Chloromethane	1.0 U	ug/L	1.0	0.40	1	07/20/21 21:14	74-87-3		
Dibromochloromethane	1.0 U	ug/L	1.0	0.43	1	07/20/21 21:14	124-48-1		
1,2-Dichlorobenzene	1.0 U	ug/L	1.0	0.38	1	07/20/21 21:14	95-50-1		
1,3-Dichlorobenzene	1.0 U	ug/L	1.0	0.45	1	07/20/21 21:14	541-73-1		
1,4-Dichlorobenzene	1.0 U	ug/L	1.0	0.48	1	07/20/21 21:14	106-46-7		
1,1-Dichloroethane	1.0 U	ug/L	1.0	0.24	1	07/20/21 21:14	75-34-3		
1,2-Dichloroethane	1.0 U	ug/L	1.0	0.33	1	07/20/21 21:14	107-06-2		
1,2-Dichloroethene (Total)	2.0 U	ug/L	2.0	0.66	1	07/20/21 21:14	540-59-0		
1,1-Dichloroethene	1.0 U	ug/L	1.0	0.24	1	07/20/21 21:14	75-35-4		
cis-1,2-Dichloroethene	1.0 U	ug/L	1.0	0.38	1	07/20/21 21:14	156-59-2		
trans-1,2-Dichloroethene	1.0 U	ug/L	1.0	0.28	1	07/20/21 21:14	156-60-5		
1,2-Dichloropropane	1.0 U	ug/L	1.0	0.28	1	07/20/21 21:14	78-87-5		
cis-1,3-Dichloropropene	1.0 U	ug/L	1.0	0.29	1	07/20/21 21:14	10061-01-5		
trans-1,3-Dichloropropene	1.0 U	ug/L	1.0	0.32	1	07/20/21 21:14	10061-02-6		
Diethyl ether (Ethyl ether)	1.0 U	ug/L	1.0	0.35	1	07/20/21 21:14	60-29-7		
Ethanol	200 U	ug/L	200	73.5	1	07/20/21 21:14	64-17-5	1c,IL	
Ethylbenzene	83.5	ug/L	1.0	0.40	1	07/20/21 21:14	100-41-4		
Ethyl-tert-butyl ether	1.0 U	ug/L	1.0	0.29	1	07/20/21 21:14	637-92-3		

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## ANALYTICAL RESULTS

Project: SMO-HANOVER/190292M  
Pace Project No.: 30430547

Sample: MW-10	Lab ID: 30430547006	Collected: 07/12/21 14:30	Received: 07/13/21 21:45	Matrix: Water					
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260B MSV</b>									
Analytical Method: EPA 8260B Pace Analytical Services - Greensburg									
2-Hexanone	10.0 U	ug/L	10.0	0.58	1		07/20/21 21:14	591-78-6	
Methylene Chloride	1.0 U	ug/L	1.0	0.64	1		07/20/21 21:14	75-09-2	
4-Methyl-2-pentanone (MIBK)	2.3J	ug/L	10.0	0.42	1		07/20/21 21:14	108-10-1	
Methyl-tert-butyl ether	4.0	ug/L	1.0	0.25	1		07/20/21 21:14	1634-04-4	
Naphthalene	73.8	ug/L	2.0	0.82	1		07/20/21 21:14	91-20-3	
Styrene	1.0 U	ug/L	1.0	0.33	1		07/20/21 21:14	100-42-5	
1,1,2,2-Tetrachloroethane	1.0 U	ug/L	1.0	0.47	1		07/20/21 21:14	79-34-5	
Tetrachloroethene	1.0 U	ug/L	1.0	0.39	1		07/20/21 21:14	127-18-4	
Toluene	0.61J	ug/L	1.0	0.32	1		07/20/21 21:14	108-88-3	
1,2,4-Trichlorobenzene	1.0 U	ug/L	1.0	0.73	1		07/20/21 21:14	120-82-1	
1,1,1-Trichloroethane	1.0 U	ug/L	1.0	0.38	1		07/20/21 21:14	71-55-6	
1,1,2-Trichloroethane	2.8	ug/L	1.0	0.33	1		07/20/21 21:14	79-00-5	
Trichloroethene	1.0 U	ug/L	1.0	0.29	1		07/20/21 21:14	79-01-6	
Vinyl chloride	1.0 U	ug/L	1.0	0.29	1		07/20/21 21:14	75-01-4	
Xylene (Total)	43.2	ug/L	3.0	1.4	1		07/20/21 21:14	1330-20-7	
m,p-Xylene	42.4	ug/L	2.0	0.94	1		07/20/21 21:14	179601-23-1	
o-Xylene	0.77J	ug/L	1.0	0.41	1		07/20/21 21:14	95-47-6	
<i>Surrogates</i>									
4-Bromofluorobenzene (S)	100	%.	70-130		1		07/20/21 21:14	460-00-4	
1,2-Dichloroethane-d4 (S)	94	%.	70-130		1		07/20/21 21:14	17060-07-0	
Toluene-d8 (S)	94	%.	70-130		1		07/20/21 21:14	2037-26-5	
Dibromofluoromethane (S)	95	%.	70-130		1		07/20/21 21:14	1868-53-7	

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Greensburg, PA 15601  
(724)850-5600

## ANALYTICAL RESULTS

Project: SMO-HANOVER/190292M  
Pace Project No.: 30430547

Sample: MW-12	Lab ID: 30430547007	Collected: 07/12/21 13:45	Received: 07/13/21 21:45	Matrix: Water					
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8015D TPH Reduced Volume</b>									
Analytical Method: EPA 8015D Preparation Method: EPA 3510C Pace Analytical Services - Greensburg									
TPH (C10-C28) <i>Surrogates</i>	0.15	mg/L	0.10	0.069	1	07/15/21 08:20	07/20/21 10:48		R1
o-Terphenyl (S)	56	%.	25-105		1	07/15/21 08:20	07/20/21 10:48	84-15-1	
<b>Gasoline Range Organics</b>									
Analytical Method: EPA 5030/8015B Pace Analytical Services - Greensburg									
TPH (C06-C10) <i>Surrogates</i>	200 U	ug/L	200	98.0	1		07/14/21 22:14		MH
4-Bromofluorobenzene (S)	97	%.	70-130		1		07/14/21 22:14	460-00-4	
<b>8260B MSV</b>									
Analytical Method: EPA 8260B Pace Analytical Services - Greensburg									
Acetone	10.0 U	ug/L	10.0	5.6	1		07/20/21 15:14	67-64-1	
tert-Amylmethyl ether	1.0 U	ug/L	1.0	0.27	1		07/20/21 15:14	994-05-8	MH
Benzene	0.55J	ug/L	1.0	0.34	1		07/20/21 15:14	71-43-2	R1
Bromochloromethane	1.0 U	ug/L	1.0	0.48	1		07/20/21 15:14	74-97-5	
Bromodichloromethane	1.0 U	ug/L	1.0	0.35	1		07/20/21 15:14	75-27-4	
Bromoform	1.0 U	ug/L	1.0	0.56	1		07/20/21 15:14	75-25-2	
Bromomethane	0.95J	ug/L	1.0	0.73	1		07/20/21 15:14	74-83-9	
TOTAL BTEx	5.3J	ug/L	6.0	2.4	1		07/20/21 15:14		RS
2-Butanone (MEK)	2.1J	ug/L	10.0	1.5	1		07/20/21 15:14	78-93-3	
tert-Butyl Alcohol	5.0 U	ug/L	5.0	4.3	1		07/20/21 15:14	75-65-0	
Carbon disulfide	1.0 U	ug/L	1.0	0.32	1		07/20/21 15:14	75-15-0	R1
Carbon tetrachloride	1.0 U	ug/L	1.0	0.44	1		07/20/21 15:14	56-23-5	MH,R1
Chlorobenzene	1.0 U	ug/L	1.0	0.26	1		07/20/21 15:14	108-90-7	R1
Chloroethane	2.3	ug/L	1.0	0.64	1		07/20/21 15:14	75-00-3	R1
Chloroform	1.0 U	ug/L	1.0	0.39	1		07/20/21 15:14	67-66-3	
Chloromethane	1.0 U	ug/L	1.0	0.40	1		07/20/21 15:14	74-87-3	R1
Dibromochloromethane	1.0 U	ug/L	1.0	0.43	1		07/20/21 15:14	124-48-1	
1,2-Dichlorobenzene	1.0 U	ug/L	1.0	0.38	1		07/20/21 15:14	95-50-1	R1
1,3-Dichlorobenzene	1.0 U	ug/L	1.0	0.45	1		07/20/21 15:14	541-73-1	R1
1,4-Dichlorobenzene	1.0 U	ug/L	1.0	0.48	1		07/20/21 15:14	106-46-7	R1
1,1-Dichloroethane	1.0 U	ug/L	1.0	0.24	1		07/20/21 15:14	75-34-3	
1,2-Dichloroethane	1.0 U	ug/L	1.0	0.33	1		07/20/21 15:14	107-06-2	
1,2-Dichloroethene (Total)	2.0 U	ug/L	2.0	0.66	1		07/20/21 15:14	540-59-0	
1,1-Dichloroethene	1.0 U	ug/L	1.0	0.24	1		07/20/21 15:14	75-35-4	R1
cis-1,2-Dichloroethene	1.0 U	ug/L	1.0	0.38	1		07/20/21 15:14	156-59-2	MH,R1
trans-1,2-Dichloroethene	1.0 U	ug/L	1.0	0.28	1		07/20/21 15:14	156-60-5	R1
1,2-Dichloropropane	1.0 U	ug/L	1.0	0.28	1		07/20/21 15:14	78-87-5	MH
cis-1,3-Dichloropropene	1.0 U	ug/L	1.0	0.29	1		07/20/21 15:14	10061-01-5	R1
trans-1,3-Dichloropropene	1.0 U	ug/L	1.0	0.32	1		07/20/21 15:14	10061-02-6	R1
Diethyl ether (Ethyl ether)	1.0 U	ug/L	1.0	0.35	1		07/20/21 15:14	60-29-7	
Ethanol	200 U	ug/L	200	73.5	1		07/20/21 15:14	64-17-5	1c,IL
Ethylbenzene	0.69J	ug/L	1.0	0.40	1		07/20/21 15:14	100-41-4	ML,R1
Ethyl-tert-butyl ether	1.0 U	ug/L	1.0	0.29	1		07/20/21 15:14	637-92-3	MH

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## ANALYTICAL RESULTS

Project: SMO-HANOVER/190292M  
Pace Project No.: 30430547

Sample: MW-12	Lab ID: 30430547007	Collected: 07/12/21 13:45	Received: 07/13/21 21:45	Matrix: Water					
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260B MSV</b>									
Analytical Method: EPA 8260B Pace Analytical Services - Greensburg									
2-Hexanone	10.0 U	ug/L	10.0	0.58	1		07/20/21 15:14	591-78-6	
Methylene Chloride	1.0 U	ug/L	1.0	0.64	1		07/20/21 15:14	75-09-2	
4-Methyl-2-pentanone (MIBK)	10.0 U	ug/L	10.0	0.42	1		07/20/21 15:14	108-10-1	
Methyl-tert-butyl ether	1.0 U	ug/L	1.0	0.25	1		07/20/21 15:14	1634-04-4	
Naphthalene	2.0 U	ug/L	2.0	0.82	1		07/20/21 15:14	91-20-3	
Styrene	1.0 U	ug/L	1.0	0.33	1		07/20/21 15:14	100-42-5	R1
1,1,2,2-Tetrachloroethane	1.0 U	ug/L	1.0	0.47	1		07/20/21 15:14	79-34-5	
Tetrachloroethene	1.0 U	ug/L	1.0	0.39	1		07/20/21 15:14	127-18-4	ML,R1
Toluene	1.4	ug/L	1.0	0.32	1		07/20/21 15:14	108-88-3	R1
1,2,4-Trichlorobenzene	1.0 U	ug/L	1.0	0.73	1		07/20/21 15:14	120-82-1	R1
1,1,1-Trichloroethane	1.0 U	ug/L	1.0	0.38	1		07/20/21 15:14	71-55-6	
1,1,2-Trichloroethane	1.0 U	ug/L	1.0	0.33	1		07/20/21 15:14	79-00-5	
Trichloroethene	1.0 U	ug/L	1.0	0.29	1		07/20/21 15:14	79-01-6	MR,R1
Vinyl chloride	1.0 U	ug/L	1.0	0.29	1		07/20/21 15:14	75-01-4	ML,R1
Xylene (Total)	2.6J	ug/L	3.0	1.4	1		07/20/21 15:14	1330-20-7	RS
m,p-Xylene	1.9J	ug/L	2.0	0.94	1		07/20/21 15:14	179601-23-1	ML,R1
o-Xylene	0.76J	ug/L	1.0	0.41	1		07/20/21 15:14	95-47-6	R1
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	102	%.	70-130		1		07/20/21 15:14	460-00-4	
1,2-Dichloroethane-d4 (S)	99	%.	70-130		1		07/20/21 15:14	17060-07-0	
Toluene-d8 (S)	91	%.	70-130		1		07/20/21 15:14	2037-26-5	
Dibromofluoromethane (S)	101	%.	70-130		1		07/20/21 15:14	1868-53-7	

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## ANALYTICAL RESULTS

Project: SMO-HANOVER/190292M  
Pace Project No.: 30430547

Sample: MW-14	Lab ID: 30430547008	Collected: 07/12/21 14:10	Received: 07/13/21 21:45	Matrix: Water					
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8015D TPH Reduced Volume</b>									
Analytical Method: EPA 8015D Preparation Method: EPA 3510C Pace Analytical Services - Greensburg									
TPH (C10-C28)	1.7	mg/L	0.099	0.068	1	07/15/21 08:20	07/20/21 12:22		
<i>Surrogates</i>									
o-Terphenyl (S)	34	%.	25-105		1	07/15/21 08:20	07/20/21 12:22	84-15-1	
<b>Gasoline Range Organics</b>									
Analytical Method: EPA 5030/8015B Pace Analytical Services - Greensburg									
TPH (C06-C10)	3750	ug/L	200	98.0	1		07/15/21 17:31		
<i>Surrogates</i>									
4-Bromofluorobenzene (S)	99	%.	70-130		1	07/15/21 17:31	460-00-4		
<b>8260B MSV</b>									
Analytical Method: EPA 8260B Pace Analytical Services - Greensburg									
Acetone	10.0 U	ug/L	10.0	5.6	1	07/20/21 20:23	67-64-1		
tert-Amylmethyl ether	1.0 U	ug/L	1.0	0.27	1	07/20/21 20:23	994-05-8		
Benzene	13.0	ug/L	1.0	0.34	1	07/20/21 20:23	71-43-2		
Bromochloromethane	1.0 U	ug/L	1.0	0.48	1	07/20/21 20:23	74-97-5		
Bromodichloromethane	1.0 U	ug/L	1.0	0.35	1	07/20/21 20:23	75-27-4		
Bromoform	1.0 U	ug/L	1.0	0.56	1	07/20/21 20:23	75-25-2		
Bromomethane	1.0 U	ug/L	1.0	0.73	1	07/20/21 20:23	74-83-9		
TOTAL BTEx	1060	ug/L	6.0	2.4	1	07/20/21 20:23			
2-Butanone (MEK)	1.9 J	ug/L	10.0	1.5	1	07/20/21 20:23	78-93-3		
tert-Butyl Alcohol	5.4	ug/L	5.0	4.3	1	07/20/21 20:23	75-65-0		
Carbon disulfide	1.0 U	ug/L	1.0	0.32	1	07/20/21 20:23	75-15-0		
Carbon tetrachloride	1.0 U	ug/L	1.0	0.44	1	07/20/21 20:23	56-23-5		
Chlorobenzene	1.0 U	ug/L	1.0	0.26	1	07/20/21 20:23	108-90-7		
Chloroethane	1.0	ug/L	1.0	0.64	1	07/20/21 20:23	75-00-3		
Chloroform	1.0 U	ug/L	1.0	0.39	1	07/20/21 20:23	67-66-3		
Chloromethane	1.0 U	ug/L	1.0	0.40	1	07/20/21 20:23	74-87-3		
Dibromochloromethane	1.0 U	ug/L	1.0	0.43	1	07/20/21 20:23	124-48-1		
1,2-Dichlorobenzene	1.0 U	ug/L	1.0	0.38	1	07/20/21 20:23	95-50-1		
1,3-Dichlorobenzene	1.0 U	ug/L	1.0	0.45	1	07/20/21 20:23	541-73-1		
1,4-Dichlorobenzene	1.0 U	ug/L	1.0	0.48	1	07/20/21 20:23	106-46-7		
1,1-Dichloroethane	1.0 U	ug/L	1.0	0.24	1	07/20/21 20:23	75-34-3		
1,2-Dichloroethane	1.0 U	ug/L	1.0	0.33	1	07/20/21 20:23	107-06-2		
1,2-Dichloroethene (Total)	2.0 U	ug/L	2.0	0.66	1	07/20/21 20:23	540-59-0		
1,1-Dichloroethene	1.0 U	ug/L	1.0	0.24	1	07/20/21 20:23	75-35-4		
cis-1,2-Dichloroethene	1.0 U	ug/L	1.0	0.38	1	07/20/21 20:23	156-59-2		
trans-1,2-Dichloroethene	1.0 U	ug/L	1.0	0.28	1	07/20/21 20:23	156-60-5		
1,2-Dichloropropane	1.0 U	ug/L	1.0	0.28	1	07/20/21 20:23	78-87-5		
cis-1,3-Dichloropropene	1.0 U	ug/L	1.0	0.29	1	07/20/21 20:23	10061-01-5		
trans-1,3-Dichloropropene	1.0 U	ug/L	1.0	0.32	1	07/20/21 20:23	10061-02-6		
Diethyl ether (Ethyl ether)	1.0 U	ug/L	1.0	0.35	1	07/20/21 20:23	60-29-7		
Ethanol	200 U	ug/L	200	73.5	1	07/20/21 20:23	64-17-5	1c,IL	
Ethylbenzene	374	ug/L	1.0	0.40	1	07/20/21 20:23	100-41-4		
Ethyl-tert-butyl ether	1.0 U	ug/L	1.0	0.29	1	07/20/21 20:23	637-92-3		

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## ANALYTICAL RESULTS

Project: SMO-HANOVER/190292M  
Pace Project No.: 30430547

Sample: MW-14	Lab ID: 30430547008	Collected: 07/12/21 14:10	Received: 07/13/21 21:45	Matrix: Water					
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260B MSV</b>									
Analytical Method: EPA 8260B Pace Analytical Services - Greensburg									
2-Hexanone	1.0J	ug/L	10.0	0.58	1		07/20/21 20:23	591-78-6	
Methylene Chloride	1.0 U	ug/L	1.0	0.64	1		07/20/21 20:23	75-09-2	
4-Methyl-2-pentanone (MIBK)	2.1J	ug/L	10.0	0.42	1		07/20/21 20:23	108-10-1	
Methyl-tert-butyl ether	1.0 U	ug/L	1.0	0.25	1		07/20/21 20:23	1634-04-4	
Naphthalene	119	ug/L	2.0	0.82	1		07/20/21 20:23	91-20-3	
Styrene	1.0 U	ug/L	1.0	0.33	1		07/20/21 20:23	100-42-5	
1,1,2,2-Tetrachloroethane	1.0 U	ug/L	1.0	0.47	1		07/20/21 20:23	79-34-5	
Tetrachloroethene	1.0 U	ug/L	1.0	0.39	1		07/20/21 20:23	127-18-4	
Toluene	12.4	ug/L	1.0	0.32	1		07/20/21 20:23	108-88-3	
1,2,4-Trichlorobenzene	1.0 U	ug/L	1.0	0.73	1		07/20/21 20:23	120-82-1	
1,1,1-Trichloroethane	1.0 U	ug/L	1.0	0.38	1		07/20/21 20:23	71-55-6	
1,1,2-Trichloroethane	1.0 U	ug/L	1.0	0.33	1		07/20/21 20:23	79-00-5	
Trichloroethene	1.0 U	ug/L	1.0	0.29	1		07/20/21 20:23	79-01-6	
Vinyl chloride	1.0 U	ug/L	1.0	0.29	1		07/20/21 20:23	75-01-4	
Xylene (Total)	658	ug/L	3.0	1.4	1		07/20/21 20:23	1330-20-7	
m,p-Xylene	650	ug/L	2.0	0.94	1		07/20/21 20:23	179601-23-1	
o-Xylene	8.3	ug/L	1.0	0.41	1		07/20/21 20:23	95-47-6	
<i>Surrogates</i>									
4-Bromofluorobenzene (S)	96	%.	70-130		1		07/20/21 20:23	460-00-4	
1,2-Dichloroethane-d4 (S)	96	%.	70-130		1		07/20/21 20:23	17060-07-0	
Toluene-d8 (S)	92	%.	70-130		1		07/20/21 20:23	2037-26-5	
Dibromofluoromethane (S)	97	%.	70-130		1		07/20/21 20:23	1868-53-7	

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## ANALYTICAL RESULTS

Project: SMO-HANOVER/190292M  
Pace Project No.: 30430547

Sample: MW-15	Lab ID: 30430547009	Collected: 07/12/21 14:45	Received: 07/13/21 21:45	Matrix: Water					
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8015D TPH Reduced Volume</b>									
Analytical Method: EPA 8015D Preparation Method: EPA 3510C Pace Analytical Services - Greensburg									
TPH (C10-C28)	7.6	mg/L	2.0	1.4	20	07/15/21 08:20	07/20/21 17:58		
<i>Surrogates</i>									
o-Terphenyl (S)	60	%.	25-105		20	07/15/21 08:20	07/20/21 17:58	84-15-1	
<b>Gasoline Range Organics</b>									
Analytical Method: EPA 5030/8015B Pace Analytical Services - Greensburg									
TPH (C06-C10)	11700	ug/L	2000	980	10		07/15/21 17:49		
<i>Surrogates</i>									
4-Bromofluorobenzene (S)	98	%.	70-130		10	07/15/21 17:49	460-00-4		
<b>8260B MSV</b>									
Analytical Method: EPA 8260B Pace Analytical Services - Greensburg									
Acetone	10.0 U	ug/L	10.0	5.6	1	07/20/21 22:05	67-64-1		
tert-Amylmethyl ether	9.9	ug/L	1.0	0.27	1	07/20/21 22:05	994-05-8		
Benzene	708	ug/L	10.0	3.4	10	07/20/21 22:30	71-43-2		
Bromochloromethane	1.0 U	ug/L	1.0	0.48	1	07/20/21 22:05	74-97-5		
Bromodichloromethane	1.0 U	ug/L	1.0	0.35	1	07/20/21 22:05	75-27-4		
Bromoform	1.0 U	ug/L	1.0	0.56	1	07/20/21 22:05	75-25-2		
Bromomethane	1.0 U	ug/L	1.0	0.73	1	07/20/21 22:05	74-83-9		
TOTAL BTEx	5490	ug/L	60.0	24.0	10	07/20/21 22:30			
2-Butanone (MEK)	3.9J	ug/L	10.0	1.5	1	07/20/21 22:05	78-93-3		
tert-Butyl Alcohol	24.5	ug/L	5.0	4.3	1	07/20/21 22:05	75-65-0		
Carbon disulfide	0.66J	ug/L	1.0	0.32	1	07/20/21 22:05	75-15-0		
Carbon tetrachloride	1.0 U	ug/L	1.0	0.44	1	07/20/21 22:05	56-23-5		
Chlorobenzene	1.0 U	ug/L	1.0	0.26	1	07/20/21 22:05	108-90-7		
Chloroethane	3.6	ug/L	1.0	0.64	1	07/20/21 22:05	75-00-3		
Chloroform	1.0 U	ug/L	1.0	0.39	1	07/20/21 22:05	67-66-3		
Chloromethane	1.0 U	ug/L	1.0	0.40	1	07/20/21 22:05	74-87-3		
Dibromochloromethane	1.0 U	ug/L	1.0	0.43	1	07/20/21 22:05	124-48-1		
1,2-Dichlorobenzene	1.0 U	ug/L	1.0	0.38	1	07/20/21 22:05	95-50-1		
1,3-Dichlorobenzene	1.0 U	ug/L	1.0	0.45	1	07/20/21 22:05	541-73-1		
1,4-Dichlorobenzene	1.0 U	ug/L	1.0	0.48	1	07/20/21 22:05	106-46-7		
1,1-Dichloroethane	1.0 U	ug/L	1.0	0.24	1	07/20/21 22:05	75-34-3		
1,2-Dichloroethane	1.0 U	ug/L	1.0	0.33	1	07/20/21 22:05	107-06-2		
1,2-Dichloroethene (Total)	2.0 U	ug/L	2.0	0.66	1	07/20/21 22:05	540-59-0		
1,1-Dichloroethene	1.0 U	ug/L	1.0	0.24	1	07/20/21 22:05	75-35-4		
cis-1,2-Dichloroethene	1.0 U	ug/L	1.0	0.38	1	07/20/21 22:05	156-59-2		
trans-1,2-Dichloroethene	1.0 U	ug/L	1.0	0.28	1	07/20/21 22:05	156-60-5		
1,2-Dichloropropane	1.0 U	ug/L	1.0	0.28	1	07/20/21 22:05	78-87-5		
cis-1,3-Dichloropropene	1.0 U	ug/L	1.0	0.29	1	07/20/21 22:05	10061-01-5		
trans-1,3-Dichloropropene	1.0 U	ug/L	1.0	0.32	1	07/20/21 22:05	10061-02-6		
Diethyl ether (Ethyl ether)	1.0 U	ug/L	1.0	0.35	1	07/20/21 22:05	60-29-7		
Ethanol	191J	ug/L	200	73.5	1	07/20/21 22:05	64-17-5	1c,IL	
Ethylbenzene	481	ug/L	10.0	4.0	10	07/20/21 22:30	100-41-4		
Ethyl-tert-butyl ether	0.33J	ug/L	1.0	0.29	1	07/20/21 22:05	637-92-3		

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## ANALYTICAL RESULTS

Project: SMO-HANOVER/190292M  
Pace Project No.: 30430547

Sample: MW-15	Lab ID: 30430547009	Collected: 07/12/21 14:45	Received: 07/13/21 21:45	Matrix: Water					
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260B MSV</b>									
Analytical Method: EPA 8260B Pace Analytical Services - Greensburg									
2-Hexanone	2.1J	ug/L	10.0	0.58	1				07/20/21 22:05 591-78-6
Methylene Chloride	1.0 U	ug/L	1.0	0.64	1				07/20/21 22:05 75-09-2
4-Methyl-2-pentanone (MIBK)	10.0 U	ug/L	10.0	0.42	1				07/20/21 22:05 108-10-1
Methyl-tert-butyl ether	5.5	ug/L	1.0	0.25	1				07/20/21 22:05 1634-04-4
Naphthalene	225	ug/L	2.0	0.82	1				07/20/21 22:05 91-20-3
Styrene	1.0 U	ug/L	1.0	0.33	1				07/20/21 22:05 100-42-5
1,1,2,2-Tetrachloroethane	1.0 U	ug/L	1.0	0.47	1				07/20/21 22:05 79-34-5
Tetrachloroethene	1.0 U	ug/L	1.0	0.39	1				07/20/21 22:05 127-18-4
Toluene	1650	ug/L	10.0	3.2	10				07/20/21 22:30 108-88-3
1,2,4-Trichlorobenzene	1.0 U	ug/L	1.0	0.73	1				07/20/21 22:05 120-82-1
1,1,1-Trichloroethane	1.0 U	ug/L	1.0	0.38	1				07/20/21 22:05 71-55-6
1,1,2-Trichloroethane	1.0 U	ug/L	1.0	0.33	1				07/20/21 22:05 79-00-5
Trichloroethene	1.0 U	ug/L	1.0	0.29	1				07/20/21 22:05 79-01-6
Vinyl chloride	1.0 U	ug/L	1.0	0.29	1				07/20/21 22:05 75-01-4
Xylene (Total)	2660	ug/L	30.0	13.5	10				07/20/21 22:30 1330-20-7
m,p-Xylene	1810	ug/L	20.0	9.4	10				07/20/21 22:30 179601-23-1
o-Xylene	844	ug/L	10.0	4.1	10				07/20/21 22:30 95-47-6
<i>Surrogates</i>									
4-Bromofluorobenzene (S)	101	%.	70-130		1				07/20/21 22:05 460-00-4
1,2-Dichloroethane-d4 (S)	88	%.	70-130		1				07/20/21 22:05 17060-07-0
Toluene-d8 (S)	93	%.	70-130		1				07/20/21 22:05 2037-26-5
Dibromofluoromethane (S)	91	%.	70-130		1				07/20/21 22:05 1868-53-7

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## ANALYTICAL RESULTS

Project: SMO-HANOVER/190292M  
Pace Project No.: 30430547

Sample: MW-16	Lab ID:	30430547010	Collected:	07/12/21 09:50	Received:	07/13/21 21:45	Matrix:	Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8015D TPH Reduced Volume</b>									
Analytical Method: EPA 8015D Preparation Method: EPA 3510C Pace Analytical Services - Greensburg									
TPH (C10-C28)	0.39	mg/L	0.10	0.069	1	07/15/21 08:20	07/20/21 13:33		
<b>Surrogates</b>									
o-Terphenyl (S)	88	%.	25-105		1	07/15/21 08:20	07/20/21 13:33	84-15-1	
<b>Gasoline Range Organics</b>									
Analytical Method: EPA 5030/8015B Pace Analytical Services - Greensburg									
TPH (C06-C10)	1000	ug/L	200	98.0	1		07/15/21 18:07		
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	97	%.	70-130		1	07/15/21 18:07	460-00-4		
<b>8260B MSV</b>									
Analytical Method: EPA 8260B Pace Analytical Services - Greensburg									
Acetone	10.0 U	ug/L	10.0	5.6	1	07/20/21 18:14	67-64-1		
tert-Amylmethyl ether	1.0 U	ug/L	1.0	0.27	1	07/20/21 18:14	994-05-8		
Benzene	1.0 U	ug/L	1.0	0.34	1	07/20/21 18:14	71-43-2		
Bromochloromethane	1.0 U	ug/L	1.0	0.48	1	07/20/21 18:14	74-97-5		
Bromodichloromethane	1.0 U	ug/L	1.0	0.35	1	07/20/21 18:14	75-27-4		
Bromoform	1.0 U	ug/L	1.0	0.56	1	07/20/21 18:14	75-25-2		
Bromomethane	1.0 U	ug/L	1.0	0.73	1	07/20/21 18:14	74-83-9		
TOTAL BTEX	6.0 U	ug/L	6.0	2.4	1	07/20/21 18:14			
2-Butanone (MEK)	10.0 U	ug/L	10.0	1.5	1	07/20/21 18:14	78-93-3		
tert-Butyl Alcohol	5.0 U	ug/L	5.0	4.3	1	07/20/21 18:14	75-65-0		
Carbon disulfide	1.0 U	ug/L	1.0	0.32	1	07/20/21 18:14	75-15-0		
Carbon tetrachloride	1.0 U	ug/L	1.0	0.44	1	07/20/21 18:14	56-23-5		
Chlorobenzene	1.0 U	ug/L	1.0	0.26	1	07/20/21 18:14	108-90-7		
Chloroethane	1.1	ug/L	1.0	0.64	1	07/20/21 18:14	75-00-3		
Chloroform	1.0 U	ug/L	1.0	0.39	1	07/20/21 18:14	67-66-3		
Chloromethane	1.0 U	ug/L	1.0	0.40	1	07/20/21 18:14	74-87-3		
Dibromochloromethane	1.0 U	ug/L	1.0	0.43	1	07/20/21 18:14	124-48-1		
1,2-Dichlorobenzene	1.0 U	ug/L	1.0	0.38	1	07/20/21 18:14	95-50-1		
1,3-Dichlorobenzene	1.0 U	ug/L	1.0	0.45	1	07/20/21 18:14	541-73-1		
1,4-Dichlorobenzene	1.0 U	ug/L	1.0	0.48	1	07/20/21 18:14	106-46-7		
1,1-Dichloroethane	1.0 U	ug/L	1.0	0.24	1	07/20/21 18:14	75-34-3		
1,2-Dichloroethane	1.0 U	ug/L	1.0	0.33	1	07/20/21 18:14	107-06-2		
1,2-Dichloroethene (Total)	2.0 U	ug/L	2.0	0.66	1	07/20/21 18:14	540-59-0		
1,1-Dichloroethene	1.0 U	ug/L	1.0	0.24	1	07/20/21 18:14	75-35-4		
cis-1,2-Dichloroethene	1.0 U	ug/L	1.0	0.38	1	07/20/21 18:14	156-59-2		
trans-1,2-Dichloroethene	1.0 U	ug/L	1.0	0.28	1	07/20/21 18:14	156-60-5		
1,2-Dichloropropane	1.0 U	ug/L	1.0	0.28	1	07/20/21 18:14	78-87-5		
cis-1,3-Dichloropropene	1.0 U	ug/L	1.0	0.29	1	07/20/21 18:14	10061-01-5		
trans-1,3-Dichloropropene	1.0 U	ug/L	1.0	0.32	1	07/20/21 18:14	10061-02-6		
Diethyl ether (Ethyl ether)	1.0 U	ug/L	1.0	0.35	1	07/20/21 18:14	60-29-7		
Ethanol	200 U	ug/L	200	73.5	1	07/20/21 18:14	64-17-5	1c,IL	
Ethylbenzene	1.0 U	ug/L	1.0	0.40	1	07/20/21 18:14	100-41-4		
Ethyl-tert-butyl ether	1.0 U	ug/L	1.0	0.29	1	07/20/21 18:14	637-92-3		

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## ANALYTICAL RESULTS

Project: SMO-HANOVER/190292M  
Pace Project No.: 30430547

Sample: MW-16	Lab ID:	30430547010	Collected:	07/12/21 09:50	Received:	07/13/21 21:45	Matrix:	Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260B MSV</b>									
Analytical Method: EPA 8260B Pace Analytical Services - Greensburg									
2-Hexanone	10.0 U	ug/L	10.0	0.58	1		07/20/21 18:14	591-78-6	
Methylene Chloride	1.0 U	ug/L	1.0	0.64	1		07/20/21 18:14	75-09-2	
4-Methyl-2-pentanone (MIBK)	10.0 U	ug/L	10.0	0.42	1		07/20/21 18:14	108-10-1	
Methyl-tert-butyl ether	1.0 U	ug/L	1.0	0.25	1		07/20/21 18:14	1634-04-4	
Naphthalene	2.0 U	ug/L	2.0	0.82	1		07/20/21 18:14	91-20-3	
Styrene	1.0 U	ug/L	1.0	0.33	1		07/20/21 18:14	100-42-5	
1,1,2,2-Tetrachloroethane	1.0 U	ug/L	1.0	0.47	1		07/20/21 18:14	79-34-5	
Tetrachloroethene	1.0 U	ug/L	1.0	0.39	1		07/20/21 18:14	127-18-4	
Toluene	1.0 U	ug/L	1.0	0.32	1		07/20/21 18:14	108-88-3	
1,2,4-Trichlorobenzene	1.0 U	ug/L	1.0	0.73	1		07/20/21 18:14	120-82-1	
1,1,1-Trichloroethane	1.0 U	ug/L	1.0	0.38	1		07/20/21 18:14	71-55-6	
1,1,2-Trichloroethane	8.4	ug/L	1.0	0.33	1		07/20/21 18:14	79-00-5	
Trichloroethene	1.0 U	ug/L	1.0	0.29	1		07/20/21 18:14	79-01-6	
Vinyl chloride	1.0 U	ug/L	1.0	0.29	1		07/20/21 18:14	75-01-4	
Xylene (Total)	3.0 U	ug/L	3.0	1.4	1		07/20/21 18:14	1330-20-7	
m,p-Xylene	2.0 U	ug/L	2.0	0.94	1		07/20/21 18:14	179601-23-1	
o-Xylene	1.0 U	ug/L	1.0	0.41	1		07/20/21 18:14	95-47-6	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	99	%.	70-130		1		07/20/21 18:14	460-00-4	
1,2-Dichloroethane-d4 (S)	100	%.	70-130		1		07/20/21 18:14	17060-07-0	
Toluene-d8 (S)	96	%.	70-130		1		07/20/21 18:14	2037-26-5	
Dibromofluoromethane (S)	99	%.	70-130		1		07/20/21 18:14	1868-53-7	

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## ANALYTICAL RESULTS

Project: SMO-HANOVER/190292M  
Pace Project No.: 30430547

Sample: Trip Blank	Lab ID: 30430547011	Collected: 07/12/21 00:01	Received: 07/13/21 21:45	Matrix: Water					
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260B MSV</b>									
Analytical Method: EPA 8260B Pace Analytical Services - Greensburg									
Acetone	10.0 U	ug/L	10.0	5.6	1	07/20/21 15:40	67-64-1		
tert-Amylmethyl ether	1.0 U	ug/L	1.0	0.27	1	07/20/21 15:40	994-05-8		
Benzene	1.0 U	ug/L	1.0	0.34	1	07/20/21 15:40	71-43-2		
Bromochloromethane	1.0 U	ug/L	1.0	0.48	1	07/20/21 15:40	74-97-5		
Bromodichloromethane	1.0 U	ug/L	1.0	0.35	1	07/20/21 15:40	75-27-4		
Bromoform	1.0 U	ug/L	1.0	0.56	1	07/20/21 15:40	75-25-2		
Bromomethane	1.0 U	ug/L	1.0	0.73	1	07/20/21 15:40	74-83-9		
TOTAL BTEX	6.0 U	ug/L	6.0	2.4	1	07/20/21 15:40			
2-Butanone (MEK)	1.6J	ug/L	10.0	1.5	1	07/20/21 15:40	78-93-3		
tert-Butyl Alcohol	5.0 U	ug/L	5.0	4.3	1	07/20/21 15:40	75-65-0		
Carbon disulfide	0.38J	ug/L	1.0	0.32	1	07/20/21 15:40	75-15-0		
Carbon tetrachloride	1.0 U	ug/L	1.0	0.44	1	07/20/21 15:40	56-23-5		
Chlorobenzene	1.0 U	ug/L	1.0	0.26	1	07/20/21 15:40	108-90-7		
Chloroethane	1.1	ug/L	1.0	0.64	1	07/20/21 15:40	75-00-3		
Chloroform	1.0 U	ug/L	1.0	0.39	1	07/20/21 15:40	67-66-3		
Chloromethane	1.0 U	ug/L	1.0	0.40	1	07/20/21 15:40	74-87-3		
Dibromochloromethane	1.0 U	ug/L	1.0	0.43	1	07/20/21 15:40	124-48-1		
1,2-Dichlorobenzene	1.0 U	ug/L	1.0	0.38	1	07/20/21 15:40	95-50-1		
1,3-Dichlorobenzene	1.0 U	ug/L	1.0	0.45	1	07/20/21 15:40	541-73-1		
1,4-Dichlorobenzene	1.0 U	ug/L	1.0	0.48	1	07/20/21 15:40	106-46-7		
1,1-Dichloroethane	1.0 U	ug/L	1.0	0.24	1	07/20/21 15:40	75-34-3		
1,2-Dichloroethane	1.0 U	ug/L	1.0	0.33	1	07/20/21 15:40	107-06-2		
1,2-Dichloroethene (Total)	2.0 U	ug/L	2.0	0.66	1	07/20/21 15:40	540-59-0		
1,1-Dichloroethene	1.0 U	ug/L	1.0	0.24	1	07/20/21 15:40	75-35-4		
cis-1,2-Dichloroethene	1.0 U	ug/L	1.0	0.38	1	07/20/21 15:40	156-59-2		
trans-1,2-Dichloroethene	1.0 U	ug/L	1.0	0.28	1	07/20/21 15:40	156-60-5		
1,2-Dichloropropane	1.0 U	ug/L	1.0	0.28	1	07/20/21 15:40	78-87-5		
cis-1,3-Dichloropropene	1.0 U	ug/L	1.0	0.29	1	07/20/21 15:40	10061-01-5		
trans-1,3-Dichloropropene	1.0 U	ug/L	1.0	0.32	1	07/20/21 15:40	10061-02-6		
Diethyl ether (Ethyl ether)	1.0 U	ug/L	1.0	0.35	1	07/20/21 15:40	60-29-7		
Ethanol	200 U	ug/L	200	73.5	1	07/20/21 15:40	64-17-5	1c,IL	
Ethylbenzene	1.0 U	ug/L	1.0	0.40	1	07/20/21 15:40	100-41-4		
Ethyl-tert-butyl ether	1.0 U	ug/L	1.0	0.29	1	07/20/21 15:40	637-92-3		
2-Hexanone	10.0 U	ug/L	10.0	0.58	1	07/20/21 15:40	591-78-6		
Methylene Chloride	1.0 U	ug/L	1.0	0.64	1	07/20/21 15:40	75-09-2		
4-Methyl-2-pentanone (MIBK)	10.0 U	ug/L	10.0	0.42	1	07/20/21 15:40	108-10-1		
Methyl-tert-butyl ether	1.0 U	ug/L	1.0	0.25	1	07/20/21 15:40	1634-04-4		
Naphthalene	2.0 U	ug/L	2.0	0.82	1	07/20/21 15:40	91-20-3		
Styrene	1.0 U	ug/L	1.0	0.33	1	07/20/21 15:40	100-42-5		
1,1,2,2-Tetrachloroethane	1.0 U	ug/L	1.0	0.47	1	07/20/21 15:40	79-34-5		
Tetrachloroethene	1.0 U	ug/L	1.0	0.39	1	07/20/21 15:40	127-18-4		
Toluene	1.0 U	ug/L	1.0	0.32	1	07/20/21 15:40	108-88-3		
1,2,4-Trichlorobenzene	1.0 U	ug/L	1.0	0.73	1	07/20/21 15:40	120-82-1		
1,1,1-Trichloroethane	1.0 U	ug/L	1.0	0.38	1	07/20/21 15:40	71-55-6		
1,1,2-Trichloroethane	1.0 U	ug/L	1.0	0.33	1	07/20/21 15:40	79-00-5		

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## ANALYTICAL RESULTS

Project: SMO-HANOVER/190292M  
Pace Project No.: 30430547

Sample: Trip Blank	Lab ID: 30430547011	Collected: 07/12/21 00:01	Received: 07/13/21 21:45	Matrix: Water					
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260B MSV</b>									
Analytical Method: EPA 8260B Pace Analytical Services - Greensburg									
Trichloroethene	1.0 U	ug/L	1.0	0.29	1	07/20/21 15:40	79-01-6		
Vinyl chloride	1.0 U	ug/L	1.0	0.29	1	07/20/21 15:40	75-01-4		
Xylene (Total)	3.0 U	ug/L	3.0	1.4	1	07/20/21 15:40	1330-20-7		
m&p-Xylene	2.0 U	ug/L	2.0	0.94	1	07/20/21 15:40	179601-23-1		
o-Xylene	1.0 U	ug/L	1.0	0.41	1	07/20/21 15:40	95-47-6		
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	103	%	70-130		1	07/20/21 15:40	460-00-4		
1,2-Dichloroethane-d4 (S)	100	%	70-130		1	07/20/21 15:40	17060-07-0		
Toluene-d8 (S)	92	%	70-130		1	07/20/21 15:40	2037-26-5		
Dibromofluoromethane (S)	101	%	70-130		1	07/20/21 15:40	1868-53-7		

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

#### QUALITY CONTROL DATA

Project: SMO-HANOVER/190292M  
Pace Project No.: 30430547

QC Batch: 456266 Analysis Method: EPA 5030/8015B  
QC Batch Method: EPA 5030/8015B Analysis Description: Gasoline Range Organics  
Laboratory: Pace Analytical Services - Greensburg  
Associated Lab Samples: 30430547001, 30430547002, 30430547003, 30430547004, 30430547005, 30430547006, 30430547007

METHOD BLANK: 2203159 Matrix: Water  
Associated Lab Samples: 30430547001, 30430547002, 30430547003, 30430547004, 30430547005, 30430547006, 30430547007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
TPH (C06-C10)	ug/L	200 U	200	98.0	07/14/21 18:22	
4-Bromofluorobenzene (S)	%.	95	70-130		07/14/21 18:22	

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
TPH (C06-C10)	ug/L	1000	924	92	55-125	
4-Bromofluorobenzene (S)	%.			88	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2203161			2203162									
Parameter	Units	30430547007 Result	MS Spike Conc.	MS Spike Conc.	MS Result	MS Result	MS % Rec	MS % Rec	% Rec Limits	Max RPD	Max RPD	Qual
TPH (C06-C10)	ug/L	200 U	1000	1000	1170	1370	115	135	42-123	16	25	MH
4-Bromofluorobenzene (S)	%.						87	84	70-130			

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#### QUALITY CONTROL DATA

Project: SMO-HANOVER/190292M  
Pace Project No.: 30430547

QC Batch: 456433 Analysis Method: EPA 5030/8015B  
QC Batch Method: EPA 5030/8015B Analysis Description: Gasoline Range Organics  
Laboratory: Pace Analytical Services - Greensburg  
Associated Lab Samples: 30430547008, 30430547009, 30430547010

METHOD BLANK: 2204091 Matrix: Water  
Associated Lab Samples: 30430547008, 30430547009, 30430547010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
TPH (C06-C10)	ug/L	200 U	200	98.0	07/15/21 16:55	
4-Bromofluorobenzene (S)	%.	97	70-130		07/15/21 16:55	

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
TPH (C06-C10)	ug/L	1000	962	96	55-125	
4-Bromofluorobenzene (S)	%.			89	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2204093			2204094									
Parameter	Units	30430771001 Result	MS Spike Conc.	MS Spike Conc.	MS Result	MS Result	MS % Rec	MS % Rec	% Rec Limits	Max RPD	Max RPD	Qual
TPH (C06-C10)	ug/L	ND	1000	1000	913	1090	90	108	42-123	18	25	
4-Bromofluorobenzene (S)	%.						88	89	70-130			

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(724)850-5600

#### QUALITY CONTROL DATA

Project: SMO-HANOVER/190292M  
Pace Project No.: 30430547

QC Batch:	218173	Analysis Method:	EPA 524.2			
QC Batch Method:	EPA 524.2	Analysis Description:	524.2 MSV			
Associated Lab Samples:	30430546001, 30430546002	Laboratory:	Pace Analytical Services - Long Island			
METHOD BLANK: 1100110 Matrix: Water						
Associated Lab Samples: 30430546001, 30430546002						
Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	0.50 U	0.50	0.35	07/19/21 07:37	
1,1,1-Trichloroethane	ug/L	0.50 U	0.50	0.19	07/19/21 07:37	
1,1,2,2-Tetrachloroethane	ug/L	0.50 U	0.50	0.18	07/19/21 07:37	
1,1,2-Trichloroethane	ug/L	0.50 U	0.50	0.17	07/19/21 07:37	
1,1-Dichloroethane	ug/L	0.50 U	0.50	0.23	07/19/21 07:37	
1,1-Dichloroethene	ug/L	0.50 U	0.50	0.20	07/19/21 07:37	
1,1-Dichloropropene	ug/L	0.50 U	0.50	0.21	07/19/21 07:37	
1,2,3-Trichlorobenzene	ug/L	0.50 U	0.50	0.41	07/19/21 07:37	
1,2,3-Trichloropropane	ug/L	0.50 U	0.50	0.40	07/19/21 07:37	
1,2,4-Trichlorobenzene	ug/L	0.50 U	0.50	0.47	07/19/21 07:37	
1,2,4-Trimethylbenzene	ug/L	0.50 U	0.50	0.18	07/19/21 07:37	
1,2-Dichlorobenzene	ug/L	0.50 U	0.50	0.20	07/19/21 07:37	
1,2-Dichloroethane	ug/L	0.50 U	0.50	0.22	07/19/21 07:37	
1,2-Dichloropropane	ug/L	0.50 U	0.50	0.20	07/19/21 07:37	
1,3,5-Trimethylbenzene	ug/L	0.50 U	0.50	0.19	07/19/21 07:37	
1,3-Dichlorobenzene	ug/L	0.50 U	0.50	0.20	07/19/21 07:37	
1,3-Dichloropropane	ug/L	0.50 U	0.50	0.18	07/19/21 07:37	
1,4-Dichlorobenzene	ug/L	0.50 U	0.50	0.22	07/19/21 07:37	
2,2-Dichloropropane	ug/L	0.50 U	0.50	0.23	07/19/21 07:37	
2-Chlorotoluene	ug/L	0.50 U	0.50	0.21	07/19/21 07:37	
4-Chlorotoluene	ug/L	0.50 U	0.50	0.25	07/19/21 07:37	
Benzene	ug/L	0.50 U	0.50	0.22	07/19/21 07:37	
Bromobenzene	ug/L	0.50 U	0.50	0.18	07/19/21 07:37	
Bromoform	ug/L	0.50 U	0.50	0.21	07/19/21 07:37	
Bromomethane	ug/L	0.50 U	0.50	0.18	07/19/21 07:37	
Carbon tetrachloride	ug/L	0.50 U	0.50	0.17	07/19/21 07:37	
Chlorobenzene	ug/L	0.50 U	0.50	0.19	07/19/21 07:37	
Chloroethane	ug/L	0.50 U	0.50	0.25	07/19/21 07:37	
Chloroform	ug/L	0.50 U	0.50	0.23	07/19/21 07:37	
Chloromethane	ug/L	0.50 U	0.50	0.49	07/19/21 07:37	
cis-1,2-Dichloroethene	ug/L	0.50 U	0.50	0.18	07/19/21 07:37	
cis-1,3-Dichloropropene	ug/L	0.50 U	0.50	0.17	07/19/21 07:37	
Dibromochloromethane	ug/L	0.50 U	0.50	0.15	07/19/21 07:37	
Dibromomethane	ug/L	0.50 U	0.50	0.42	07/19/21 07:37	
Dichlorodifluoromethane	ug/L	0.50 U	0.50	0.22	07/19/21 07:37	
Ethylbenzene	ug/L	0.50 U	0.50	0.22	07/19/21 07:37	
Hexachloro-1,3-butadiene	ug/L	0.50 U	0.50	0.16	07/19/21 07:37	
Isopropylbenzene (Cumene)	ug/L	0.50 U	0.50	0.19	07/19/21 07:37	

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#### QUALITY CONTROL DATA

Project: SMO-HANOVER/190292M  
Pace Project No.: 30430547

METHOD BLANK:	1100110	Matrix: Water						
Associated Lab Samples:	30430546001, 30430546002	Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
m&p-Xylene	ug/L	0.50 U	0.50	0.24	07/19/21 07:37			
Methyl-tert-butyl ether	ug/L	0.50 U	0.50	0.38	07/19/21 07:37			
Methylene Chloride	ug/L	0.50 U	0.50	0.21	07/19/21 07:37			
n-Butylbenzene	ug/L	0.50 U	0.50	0.17	07/19/21 07:37			
n-Propylbenzene	ug/L	0.50 U	0.50	0.18	07/19/21 07:37			
o-Xylene	ug/L	0.50 U	0.50	0.20	07/19/21 07:37			
p-Isopropyltoluene	ug/L	0.50 U	0.50	0.20	07/19/21 07:37			
sec-Butylbenzene	ug/L	0.50 U	0.50	0.18	07/19/21 07:37			
Styrene	ug/L	0.50 U	0.50	0.19	07/19/21 07:37			
tert-Butylbenzene	ug/L	0.50 U	0.50	0.19	07/19/21 07:37			
Tetrachloroethene	ug/L	0.50 U	0.50	0.19	07/19/21 07:37			
Toluene	ug/L	0.50 U	0.50	0.22	07/19/21 07:37			
Total Trihalomethanes (Calc.)	ug/L	0.50 U	0.50	0.50	07/19/21 07:37			
trans-1,2-Dichloroethene	ug/L	0.50 U	0.50	0.24	07/19/21 07:37			
trans-1,3-Dichloropropene	ug/L	0.50 U	0.50	0.21	07/19/21 07:37			
Trichloroethene	ug/L	0.50 U	0.50	0.21	07/19/21 07:37			
Trichlorofluoromethane	ug/L	0.50 U	0.50	0.15	07/19/21 07:37			
Vinyl chloride	ug/L	0.50 U	0.50	0.23	07/19/21 07:37			
Xylene (Total)	ug/L	0.50 U	0.50	0.14	07/19/21 07:37			
1,2-Dichlorobenzene-d4 (S)	%	83	70-130		07/19/21 07:37			
4-Bromofluorobenzene (S)	%	88	70-130		07/19/21 07:37			

#### LABORATORY CONTROL SAMPLE: 1100111

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	10	9.3	93	70-130	
1,1,1-Trichloroethane	ug/L	10	9.6	96	70-130	
1,1,2,2-Tetrachloroethane	ug/L	10	10.2	102	70-130	
1,1,2-Trichloroethane	ug/L	10	10.4	104	70-130	
1,1-Dichloroethane	ug/L	10	10.5	105	70-130	
1,1-Dichloroethene	ug/L	10	10.4	104	70-130	
1,1-Dichloropropene	ug/L	10	10.8	108	70-130	
1,2,3-Trichlorobenzene	ug/L	10	8.4	84	70-130	
1,2,3-Trichloropropane	ug/L	10	10.6	106	70-130	
1,2,4-Trichlorobenzene	ug/L	10	8.8	88	70-130	
1,2,4,Trichlorobenzene	ug/L	10	10.5	105	70-130	
1,2-Dichlorobenzene	ug/L	10	10.2	102	70-130	
1,2-Dichloroethane	ug/L	10	11.7	117	70-130	
1,2-Dichloropropane	ug/L	10	10.1	101	70-130	
1,3,5-Trimethylbenzene	ug/L	10	9.7	97	70-130	
1,3-Dichlorobenzene	ug/L	10	10.2	102	70-130	
1,3-Dichloropropane	ug/L	10	11.1	111	70-130	
1,4-Dichlorobenzene	ug/L	10	10.2	102	70-130	
2,2-Dichloropropane	ug/L	10	10.5	105	70-130	

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(724)850-5600

### QUALITY CONTROL DATA

Project: SMO-HANOVER/190292M  
Pace Project No.: 30430547

LABORATORY CONTROL SAMPLE: 1100111

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
2-Chlorotoluene	ug/L	10	9.7	97	70-130	
4-Chlorotoluene	ug/L	10	10.6	106	70-130	
Benzene	ug/L	10	10.4	104	70-130	
Bromobenzene	ug/L	10	9.7	97	70-130	
Bromochloromethane	ug/L	10	9.4	94	70-130	
Bromodichloromethane	ug/L	10	9.5	95	70-130	
Bromoform	ug/L	10	8.7	87	70-130	
Bromomethane	ug/L	10	11.5	115	70-130	
Carbon tetrachloride	ug/L	10	8.4	84	70-130	
Chlorobenzene	ug/L	10	9.9	99	70-130	
Chloroethane	ug/L	10	12.9	129	70-130	
Chloroform	ug/L	10	9.8	98	70-130	
Chloromethane	ug/L	10	9.6	96	70-130	
cis-1,2-Dichloroethene	ug/L	10	9.6	96	70-130	
cis-1,3-Dichloropropene	ug/L	10	10.0	100	70-130	
Dibromochloromethane	ug/L	10	8.6	86	70-130	
Dibromomethane	ug/L	10	10.6	106	70-130	
Dichlorodifluoromethane	ug/L	10	9.0	90	70-130	
Ethylbenzene	ug/L	10	10.5	105	70-130	
Hexachloro-1,3-butadiene	ug/L	10	9.8	98	70-130	
Isopropylbenzene (Cumene)	ug/L	10	9.9	99	70-130	
m&p-Xylene	ug/L	20	19.9	100	70-130	
Methyl-tert-butyl ether	ug/L	10	17.2	172	70-130 IH,L1	
Methylene Chloride	ug/L	10	10.7	107	70-130	
n-Butylbenzene	ug/L	10	10.6	106	70-130	
n-Propylbenzene	ug/L	10	10.7	107	70-130	
o-Xylene	ug/L	10	10	100	70-130	
p-Isopropyltoluene	ug/L	10	10.1	101	70-130	
sec-Butylbenzene	ug/L	10	9.9	99	70-130	
Styrene	ug/L	10	10.9	109	70-130	
tert-Butylbenzene	ug/L	10	9.5	95	70-130	
Tetrachloroethene	ug/L	10	8.6	86	70-130	
Toluene	ug/L	10	10.1	101	70-130	
Total Trihalomethanes (Calc.)	ug/L		36.4			
trans-1,2-Dichloroethene	ug/L	10	9.8	98	70-130	
trans-1,3-Dichloropropene	ug/L	10	10.0	100	70-130	
Trichloroethene	ug/L	10	9.7	97	70-130	
Trichlorofluoromethane	ug/L	10	10.7	107	70-130	
Vinyl chloride	ug/L	10	11.6	116	70-130	
Xylene (Total)	ug/L	30	29.9	100	70-130	
1,2-Dichlorobenzene-d4 (S)	%			96	70-130	
4-Bromofluorobenzene (S)	%			109	70-130	

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### QUALITY CONTROL DATA

Project: SMO-HANOVER/190292M  
Pace Project No.: 30430547

SAMPLE DUPLICATE: 1100859

Parameter	Units	70180082001 Result	Dup Result	RPD	Max RPD	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	<0.50	0.50 U		20	
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	2.3	2.4	5	20	
1,1-Dichloroethene	ug/L	1.1	1.5	32	20 D6	
1,1-Dichloropropene	ug/L	<0.50	0.50 U		20	
1,2,3-Trichlorobenzene	ug/L	<0.50	0.50 U		20	
1,2,3-Trichloropropane	ug/L	<0.50	0.50 U		20	
1,2,4-Trichlorobenzene	ug/L	<0.50	0.50 U		20	
1,2,4-Trimethylbenzene	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	
1,2-Dichloropropane	ug/L	<0.50	0.50 U		20	
1,3,5-Trimethylbenzene	ug/L	<0.50	0.50 U		20	
1,3-Dichlorobenzene	ug/L	<0.50	0.50 U		20	
1,3-Dichloropropane	ug/L	<0.50	0.50 U		20	
1,4-Dichlorobenzene	ug/L	<0.50	0.50 U		20	
2,2-Dichloropropane	ug/L	<0.50	0.50 U		20	
2-Chlorotoluene	ug/L	<0.50	0.50 U		20	
4-Chlorotoluene	ug/L	<0.50	0.50 U		20	
Benzene	ug/L	<0.50	0.50 U		20	
Bromobenzene	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	0.56	0.70	23	20 D6	
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	
Dibromomethane	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	
Hexachloro-1,3-butadiene	ug/L	<0.50	0.50 U		20	
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	
n-Butylbenzene	ug/L	<0.50	0.50 U		20	
n-Propylbenzene	ug/L	<0.50	0.50 U		20	
o-Xylene	ug/L	<0.50	0.50 U		20	
p-Isopropyltoluene	ug/L	<0.50	0.50 U		20	

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### QUALITY CONTROL DATA

Project: SMO-HANOVER/190292M  
Pace Project No.: 30430547

SAMPLE DUPLICATE: 1100859						
Parameter	Units	70180082001 Result	Dup Result	RPD	Max RPD	Qualifiers
sec-Butylbenzene	ug/L	<0.50	0.50 U		20	
Styrene	ug/L	<0.50	0.50 U		20	
tert-Butyl Alcohol	ug/L	<10.0	10.0 U		20	
tert-Butylbenzene	ug/L	<0.50	0.50 U		20	
Tetrachloroethene	ug/L	12.7	12.5	1	20	
Toluene	ug/L	<0.50	0.50 U		20	
Total Trihalomethanes (Calc.)	ug/L	0.56	0.70	23	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	5.3	5.2	1	20	
Trichlorofluoromethane	ug/L	0.69	0.78	12	20	
Vinyl chloride	ug/L	<0.50	0.50 U		20	
Xylene (Total)	ug/L	<0.50	0.50 U		20	
1,2-Dichlorobenzene-d4 (S)	%	84	82		20	
4-Bromofluorobenzene (S)	%	83	88		20	

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### QUALITY CONTROL DATA

Project: SMO-HANOVER/190292M  
Pace Project No.: 30430547

QC Batch:	456788	Analysis Method:	EPA 8260B			
QC Batch Method:	EPA 8260B	Analysis Description:	8260B MSV			
Laboratory:	Pace Analytical Services - Greensburg					
Associated Lab Samples:	30430547001, 30430547002, 30430547003, 30430547004, 30430547005, 30430547006, 30430547007, 30430547008, 30430547009, 30430547010, 30430547011					
METHOD BLANK: 2205671						
Matrix: Water						
Associated Lab Samples:	30430547001, 30430547002, 30430547003, 30430547004, 30430547005, 30430547006, 30430547007, 30430547008, 30430547009, 30430547010, 30430547011					
Parameter	Units	Blank Result	Reporting Limit			
1,1,1-Trichloroethane	ug/L	1.0 U	1.0			
1,1,2,2-Tetrachloroethane	ug/L	1.0 U	1.0			
1,1,2-Trichloroethane	ug/L	1.0 U	1.0			
1,1-Dichloroethane	ug/L	1.0 U	1.0			
1,1-Dichloroethene	ug/L	1.0 U	1.0			
1,2,4-Trichlorobenzene	ug/L	1.0 U	1.0			
1,2-Dichlorobenzene	ug/L	1.0 U	1.0			
1,2-Dichloroethane	ug/L	1.0 U	1.0			
1,2-Dichloroethene (Total)	ug/L	2.0 U	2.0			
1,2-Dichloropropane	ug/L	1.0 U	1.0			
1,3-Dichlorobenzene	ug/L	1.0 U	1.0			
1,4-Dichlorobenzene	ug/L	1.0 U	1.0			
2-Butanone (MEK)	ug/L	10.0 U	10.0			
2-Hexanone	ug/L	10.0 U	10.0			
4-Methyl-2-pentanone (MIBK)	ug/L	10.0 U	10.0			
Acetone	ug/L	10.0 U	10.0			
Benzene	ug/L	1.0 U	1.0			
Bromochloromethane	ug/L	1.0 U	1.0			
Bromodichloromethane	ug/L	1.0 U	1.0			
Bromoform	ug/L	1.0 U	1.0			
Bromomethane	ug/L	0.88J	1.0			
Carbon disulfide	ug/L	1.0 U	1.0			
Carbon tetrachloride	ug/L	1.0 U	1.0			
Chlorobenzene	ug/L	1.0 U	1.0			
Chloroethane	ug/L	1.0 U	1.0			
Chloroform	ug/L	1.0 U	1.0			
Chloromethane	ug/L	1.0 U	1.0			
cis-1,2-Dichloroethene	ug/L	1.0 U	1.0			
cis-1,3-Dichloropropene	ug/L	1.0 U	1.0			
Dibromochloromethane	ug/L	1.0 U	1.0			
Diethyl ether (Ethyl ether)	ug/L	1.0 U	1.0			
Ethanol	ug/L	200 U	200			
Ethyl-tert-butyl ether	ug/L	1.0 U	1.0			
Ethylbenzene	ug/L	1.0 U	1.0			
m&p-Xylene	ug/L	2.0 U	2.0			
Methyl-tert-butyl ether	ug/L	1.0 U	1.0			
Methylene Chloride	ug/L	1.0 U	1.0			
Naphthalene	ug/L	2.0 U	2.0			
o-Xylene	ug/L	1.0 U	1.0			

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Greensburg, PA 15601  
(724)850-5600

### QUALITY CONTROL DATA

Project: SMO-HANOVER/190292M  
Pace Project No.: 30430547

METHOD BLANK: 2205671 Matrix: Water  
Associated Lab Samples: 30430547001, 30430547002, 30430547003, 30430547004, 30430547005, 30430547006, 30430547007,  
30430547008, 30430547009, 30430547010, 30430547011

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Styrene	ug/L	1.0 U	1.0	0.33	07/20/21 14:49	
tert-Amylmethyl ether	ug/L	1.0 U	1.0	0.27	07/20/21 14:49	
tert-Butyl Alcohol	ug/L	5.0 U	5.0	4.3	07/20/21 14:49	
Tetrachloroethene	ug/L	1.0 U	1.0	0.39	07/20/21 14:49	
Toluene	ug/L	1.0 U	1.0	0.32	07/20/21 14:49	
TOTAL BTEX	ug/L	6.0 U	6.0	2.4	07/20/21 14:49	
trans-1,2-Dichloroethene	ug/L	1.0 U	1.0	0.28	07/20/21 14:49	
trans-1,3-Dichloropropene	ug/L	1.0 U	1.0	0.32	07/20/21 14:49	
Trichloroethene	ug/L	1.0 U	1.0	0.29	07/20/21 14:49	
Vinyl chloride	ug/L	1.0 U	1.0	0.29	07/20/21 14:49	
Xylene (Total)	ug/L	3.0 U	3.0	1.4	07/20/21 14:49	
1,2-Dichloroethane-d4 (S)	%.	100	70-130		07/20/21 14:49	
4-Bromofluorobenzene (S)	%.	101	70-130		07/20/21 14:49	
Dibromofluoromethane (S)	%.	101	70-130		07/20/21 14:49	
Toluene-d8 (S)	%.	93	70-130		07/20/21 14:49	

LABORATORY CONTROL SAMPLE: 2205672

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	26.0	130	70-130	
1,1,2,2-Tetrachloroethane	ug/L	20	21.9	109	70-130	
1,1,2-Trichloroethane	ug/L	20	20.7	103	70-130	
1,1-Dichloroethane	ug/L	20	22.9	115	70-130	
1,1-Dichloroethene	ug/L	20	22.1	110	70-130	
1,2,4-Trichlorobenzene	ug/L	20	19.1	96	70-130	
1,2-Dichlorobenzene	ug/L	20	22.1	110	70-130	
1,2-Dichloroethane	ug/L	20	21.8	109	70-130	
1,2-Dichloroethene (Total)	ug/L	40	43.7	109	70-130	
1,2-Dichloropropane	ug/L	20	22.8	114	70-130	
1,3-Dichlorobenzene	ug/L	20	22.0	110	70-130	
1,4-Dichlorobenzene	ug/L	20	21.5	107	70-130	
2-Butanone (MEK)	ug/L	20	20.4	102	70-130	
2-Hexanone	ug/L	20	17.3	86	70-130	
4-Methyl-2-pentanone (MIBK)	ug/L	20	19.4	97	70-130	
Acetone	ug/L	20	19.8	99	67-173	
Benzene	ug/L	20	24.2	121	70-130	
Bromochloromethane	ug/L	20	21.9	110	70-130	
Bromodichloromethane	ug/L	20	23.3	116	70-130	
Bromoform	ug/L	20	18.2	91	63-119	
Bromomethane	ug/L	20	12.8	64	24-159	
Carbon disulfide	ug/L	20	19.5	98	57-132	
Carbon tetrachloride	ug/L	20	23.8	119	70-130	
Chlorobenzene	ug/L	20	21.8	109	70-130	

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(724)850-5600

### QUALITY CONTROL DATA

Project: SMO-HANOVER/190292M  
Pace Project No.: 30430547

LABORATORY CONTROL SAMPLE: 2205672

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloroethane	ug/L	20	20.3	102	62-145	
Chloroform	ug/L	20	22.1	111	70-130	
Chloromethane	ug/L	20	21.0	105	66-140	
cis-1,2-Dichloroethene	ug/L	20	21.4	107	70-130	
cis-1,3-Dichloropropene	ug/L	20	22.1	111	70-130	
Dibromochloromethane	ug/L	20	20.1	100	70-130	
Diethyl ether (Ethyl ether)	ug/L	20	20.9	104	53-147	
Ethanol	ug/L	200	183J	91	10-175 1c,IL	
Ethyl-tert-butyl ether	ug/L	20	20.5	102	69-123	
Ethylbenzene	ug/L	20	22.5	113	70-130	
m&p-Xylene	ug/L	40	45.4	114	70-130	
Methyl-tert-butyl ether	ug/L	20	20.6	103	70-130	
Methylene Chloride	ug/L	20	22.4	112	70-130	
Naphthalene	ug/L	20	19.6	98	55-160	
o-Xylene	ug/L	20	21.8	109	70-130	
Styrene	ug/L	20	23.1	116	70-130	
tert-Amylmethyl ether	ug/L	20	20.8	104	70-130	
tert-Butyl Alcohol	ug/L	100	96.1	96	44-175	
Tetrachloroethene	ug/L	20	21.8	109	70-130	
Toluene	ug/L	20	21.7	108	70-130	
TOTAL BTEX	ug/L	120	136	113	70-130	
trans-1,2-Dichloroethene	ug/L	20	22.3	111	70-130	
trans-1,3-Dichloropropene	ug/L	20	19.2	96	70-130	
Trichloroethene	ug/L	20	24.1	121	70-130	
Vinyl chloride	ug/L	20	20.6	103	70-130	
Xylene (Total)	ug/L	60	67.2	112	70-130	
1,2-Dichloroethane-d4 (S)	%.				101	70-130
4-Bromofluorobenzene (S)	%.				102	70-130
Dibromofluoromethane (S)	%.				101	70-130
Toluene-d8 (S)	%.				94	70-130

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2205673 2205674

Parameter	Units	MS Spike Conc.		MS Spike Conc.		MS Result		MS % Rec		MS % Rec		Max RPD	RPD Qual
		30430547007	Result	30430547007	Result	MS % Rec	MS % Rec	MS % Rec	MS % Rec	MS % Rec	MS % Rec		
1,1,1-Trichloroethane	ug/L	1.0 U	20	20	28.9	16.7	145	84	55-146	53	30	R1	
1,1,2,2-Tetrachloroethane	ug/L	1.0 U	20	20	20.5	18.4	103	92	55-118	11	30		
1,1,2-Trichloroethane	ug/L	1.0 U	20	20	21.3	18.7	107	93	61-122	13	30		
1,1-Dichloroethane	ug/L	1.0 U	20	20	24.6	18.2	123	91	59-130	30	30	R1	
1,1-Dichloroethene	ug/L	1.0 U	20	20	23.5	12.1	117	61	52-119	64	30	R1	
1,2,4-Trichlorobenzene	ug/L	1.0 U	20	20	17.1	11.4	84	56	38-146	40	30	R1	
1,2-Dichlorobenzene	ug/L	1.0 U	20	20	20.9	14.0	105	70	58-126	40	30	R1	
1,2-Dichloroethane	ug/L	1.0 U	20	20	24.2	21.1	120	105	49-135	14	30		
1,2-Dichloroethene (Total)	ug/L	2.0 U	40	40	47.0	31.0	118	77	61-119	41	30		
1,2-Dichloropropene	ug/L	1.0 U	20	20	25.1	18.8	126	94	67-121	29	30	MH	

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## QUALITY CONTROL DATA

Project: SMO-HANOVER/190292M  
Pace Project No.: 30430547

Parameter	Units	30430547007			2205673			2205674			Max RPD	Max RPD	Qual	
		MS Result	MS Spike Conc.	MS Spike Conc.	MS Result	MS Spike Conc.	MS Result	% Rec	% Rec	Limits	RPD			
1,3-Dichlorobenzene	ug/L	1.0 U	20	20	20.3	12.2	101	61	56-130	50	30	R1		
1,4-Dichlorobenzene	ug/L	1.0 U	20	20	19.9	12.0	100	60	60-121	50	30	R1		
2-Butanone (MEK)	ug/L	2.1J	20	20	20.4	21.0	92	95	59-138	3	30			
2-Hexanone	ug/L	10.0 U	20	20	17.6	17.7	86	87	66-123	1	30			
4-Methyl-2-pentanone (MIBK)	ug/L	10.0 U	20	20	20.7	20.0	104	100	70-130	4	30			
Acetone	ug/L	10.0 U	20	20	22.3	25.1	96	110	57-140	12	30			
Benzene	ug/L	0.55J	20	20	26.8	18.3	131	89	50-149	38	30	R1		
Bromochloromethane	ug/L	1.0 U	20	20	23.6	20.0	118	99	63-120	17	30			
Bromodichloromethane	ug/L	1.0 U	20	20	23.7	18.7	118	94	46-131	23	30			
Bromoform	ug/L	1.0 U	20	20	14.3	12.4	71	62	30-119	14	30			
Bromomethane	ug/L	0.95J	20	20	11.5	10.8	53	49	10-163	6	30			
Carbon disulfide	ug/L	1.0 U	20	20	20.3	10.1	100	49	41-116	67	30	R1		
Carbon tetrachloride	ug/L	1.0 U	20	20	25.3	12.0	126	60	55-119	71	30	MH,R1		
Chlorobenzene	ug/L	1.0 U	20	20	22.7	14.1	114	70	66-124	47	30	R1		
Chloroethane	ug/L	2.3	20	20	32.2	23.6	150	107	45-162	31	30	R1		
Chloroform	ug/L	1.0 U	20	20	23.3	17.6	116	87	56-123	28	30			
Chloromethane	ug/L	1.0 U	20	20	21.0	15.0	105	75	49-150	34	30	R1		
cis-1,2-Dichloroethene	ug/L	1.0 U	20	20	23.3	16.7	117	83	63-116	33	30	MH,R1		
cis-1,3-Dichloropropene	ug/L	1.0 U	20	20	20.6	14.4	103	72	46-119	36	30	R1		
Dibromo-chloromethane	ug/L	1.0 U	20	20	18.8	15.4	94	77	42-120	19	30			
Diethyl ether (Ethyl ether)	ug/L	1.0 U	20	20	22.9	21.3	115	107	52-125	7	30			
Ethanol	ug/L	200 U	200	155J	147J	77	73	10-175	30	1c,IL				
Ethyl-tert-butyl ether	ug/L	1.0 U	20	20	23.5	21.0	117	105	64-108	11	30	MH		
Ethybenzene	ug/L	0.69J	20	20	23.6	12.8	115	60	63-135	60	30	ML,R1		
m&p-Xylene	ug/L	1.9J	40	40	46.8	25.3	112	59	63-135	60	30	ML,R1		
Methyl-tert-butyl ether	ug/L	1.0 U	20	20	23.1	20.7	115	103	53-123	11	30			
Methylene Chloride	ug/L	1.0 U	20	20	26.1	22.0	130	110	57-132	17	30			
Naphthalene	ug/L	2.0 U	20	20	21.1	16.8	104	82	30-157	23	30			
o-Xylene	ug/L	0.76J	20	20	23.0	14.0	111	66	57-133	49	30	R1		
Styrene	ug/L	1.0 U	20	20	23.0	14.2	115	71	58-130	47	30	R1		
tert-Amylmethyl ether	ug/L	1.0 U	20	20	23.3	20.8	117	104	62-112	11	30	MH		
tert-Butyl Alcohol	ug/L	5.0 U	100	100	80.1	93.5	80	94	37-162	16	30			
Tetrachloroethene	ug/L	1.0 U	20	20	22.7	10.8	114	54	61-132	72	30	ML,R1		
Toluene	ug/L	1.4	20	20	23.7	14.5	112	65	59-139	48	30	R1		
TOTAL BTEX	ug/L	5.3J	120	120	144	84.9	116	66	50-149	52	30	RS		
trans-1,2-Dichloroethene	ug/L	1.0 U	20	20	23.7	14.3	119	71	60-124	50	30	R1		
trans-1,3-Dichloropropene	ug/L	1.0 U	20	20	17.3	12.5	86	62	48-121	32	30	R1		
Trichloroethene	ug/L	1.0 U	20	20	26.0	14.9	130	75	63-128	54	30	MH,R1		
Vinyl chloride	ug/L	1.0 U	20	20	23.0	12.6	115	63	67-141	59	30	ML,R1		
Xylene (Total)	ug/L	2.6J	60	60	69.9	39.4	112	61	63-135	56	30	RS		
1,2-Dichloroethane-d4 (S)	%				98	95	70-130							
4-Bromofluorobenzene (S)	%				100	103	70-130							
Dibromofluoromethane (S)	%				102	102	70-130							
Toluene-d8 (S)	%				94	95	70-130							

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## QUALITY CONTROL DATA

Project: SMO-HANOVER/190292M  
Pace Project No.: 30430547

Parameter	Units	30430547007			2203775			Associated Lab Samples:			Analysis Method:	Analysis Description:	Laboratory:	Qualifiers	
		MS Result	MS Spike Conc.	MS Spike Conc.	MS Result	MS Spike Conc.	MS Result	Blank Result	Reporting Limit	MDL					
METHOD BLANK:	2203775										Matrix: Water				
Associated Lab Samples:		30430547001, 30430547002, 30430547003, 30430547004, 30430547005, 30430547006, 30430547007, 30430547008, 30430547009, 30430547010													
TPH (C10-C28)	mg/L	0.096J			0.10		0.096		0.10		07/20/21 02:09				
o-Terphenyl (S)	%	90			25-105						07/20/21 02:09				
LABORATORY CONTROL SAMPLE:	2203776														
Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	Qualifiers	Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	Qualifiers				
TPH (C10-C28)	mg/L	1	1.1	108	46-110	o-Terphenyl (S)	%					103	25-105		
MATRIX SPIKE & MATRIX SPIKE DUPLICATE:	2203777					MATRIX SPIKE & MATRIX SPIKE DUPLICATE:	2203777								
Parameter	Units	30430547007	MS Result	MS Spike Conc.	MS Spike Conc.	Parameter	Units	30430547007	MS Result	MS % Rec	MS % Rec	Limits	RPD	Max RPD	
TPH (C10-C28)	mg/L	0.15	0.99	0.98	0.87	TPH (C10-C28)	mg/L	0.15	0.99	0.98	0.58	73	44	21-118	
o-Terphenyl (S)	%					o-Terphenyl (S)	%					92	60	25-105	

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## QUALIFIERS

Project: SMO-HANOVER/190292M  
Pace Project No.: 30430547

### 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.

### ANALYTE QUALIFIERS

Ic The analyte did not meet the method recommended minimum RF.  
D6 The precision between the sample and sample duplicate exceeded laboratory control limits.  
IH This analyte exceeded secondary source verification criteria high for the initial calibration. The reported results should be considered an estimated value.  
IL This analyte exceeded secondary source verification criteria low for the initial calibration. The reported results should be considered an estimated value.  
L1 Analyte recovery in the laboratory control sample (LCS) was above QC limits. Results for this analyte in associated samples may be biased high.  
MH Matrix spike recovery and/or matrix spike duplicate recovery was above laboratory control limits. Result may be biased high.  
ML Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.  
R1 RPD value was outside control limits.  
RS The RPD value in one of the constituent analytes was outside the control limits.  
ST Surrogate recovery was above laboratory control limits. Results may be biased high.

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## QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: SMO-HANOVER/190292M  
Pace Project No.: 30430547

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30430547001	MW-1	EPA 3510C	456369	EPA 8015D	456443
30430547002	MW-4	EPA 3510C	456369	EPA 8015D	456443
30430547003	MW-7	EPA 3510C	456369	EPA 8015D	456443
30430547004	MW-8	EPA 3510C	456369	EPA 8015D	456443
30430547005	MW-9	EPA 3510C	456369	EPA 8015D	456443
30430547006	MW-10	EPA 3510C	456369	EPA 8015D	456443
30430547007	MW-12	EPA 3510C	456369	EPA 8015D	456443
30430547008	MW-14	EPA 3510C	456369	EPA 8015D	456443
30430547009	MW-15	EPA 3510C	456369	EPA 8015D	456443
30430547010	MW-16	EPA 3510C	456369	EPA 8015D	456443
30430547001	MW-1	EPA 5030/8015B	456266		
30430547002	MW-4	EPA 5030/8015B	456266		
30430547003	MW-7	EPA 5030/8015B	456266		
30430547004	MW-8	EPA 5030/8015B	456266		
30430547005	MW-9	EPA 5030/8015B	456266		
30430547006	MW-10	EPA 5030/8015B	456266		
30430547007	MW-12	EPA 5030/8015B	456266		
30430547008	MW-14	EPA 5030/8015B	456433		
30430547009	MW-15	EPA 5030/8015B	456433		
30430547010	MW-16	EPA 5030/8015B	456433		
30430546001	Station Spigot	EPA 524.2	218173		
30430546002	Trip Blank	EPA 524.2	218173		
30430547001	MW-1	EPA 8260B	456788		
30430547002	MW-4	EPA 8260B	456788		
30430547003	MW-7	EPA 8260B	456788		
30430547004	MW-8	EPA 8260B	456788		
30430547005	MW-9	EPA 8260B	456788		
30430547006	MW-10	EPA 8260B	456788		
30430547007	MW-12	EPA 8260B	456788		
30430547008	MW-14	EPA 8260B	456788		
30430547009	MW-15	EPA 8260B	456788		
30430547010	MW-16	EPA 8260B	456788		
30430547011	Trip Blank	EPA 8260B	456788		

## REPORT OF LABORATORY ANALYSIS

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Date: 07/21/2021 04:26 PM

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## CHAIN-OF-CUSTODY Analytical Request Document

WO# : 30430547

Number or

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

Company: <b>ARM Group</b>	Billing Information:	LAB USE ONLY
Address: <b>9175 Guilford Rd</b>		<b>Container Preservative</b>
Report To: <b>Hamilton CARM Group</b>	Email To:	<b>30430547</b>
Copy To: <b>EMACPAR@ARMgroup.net</b>	Site Collection Info/Address:	
Customer Project Name/Number: <b>SMO-Hanover/190292M</b>	State: <b>/</b> County/City: <b></b> Time Zone Collected: <b>[ ] PT [ ] MT [ ] CT [X] ET</b>	Analyses

Phone: **443 995 5125** Site/Facility ID #: **8760** Compliance Monitoring? **[ ] Yes [ ] No**

Collected By (print): **TOM PALANK** Purchase Order #: **8760** DW PWS ID #: **8015**  
Quote #: **8015** DW Location Code: **8015**

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

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

\* 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	Analyses		Lab Profile/Line:	
			Date	Time				Cl Strips:	Sample pH Acceptable	pH Strips: <b>10D3801</b>	Lab Sample Receipt Checklist:
MW-1	GW	Grab	7/12/21	0915			8	X X X			Custody Seals Present/Intact <b>[ ] N/A</b>
MW-4				1050			8	1 1 1			Custody Signatures Present <b>[ ] N/A</b>
MW-7				1025			8				Collector Signature Present <b>[ ] N/A</b>
MW-8				1215			8				Bottles Intact <b>[ ] N/A</b>
MW-9				1105			8				Correct Bottles <b>[ ] N/A</b>
MW-10				1430			8				Sufficient Volume <b>[ ] N/A</b>
MW-12				1345			8				Samples Received on Ice <b>[ ] N/A</b>
MW-14				1410			8				VOA - Headspace Acceptable <b>[ ] N/A</b>
MW-15				1445			8				USDA Regulated Soils <b>[ ] N/A</b>
MW-16				0950			8				Samples in Holding Time <b>[ ] N/A</b>
											Residual Chlorine Present <b>[ ] N/A</b>
											Cl Strips:
											Sample pH Acceptable <b>[ ] N/A</b>
											pH Strips: <b>10D3801</b>
											Sulfide Present <b>[ ] N/A</b>
											Lead Acetate Strips: <b>0</b>

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 #: **2639605 N/A**

Radchem sample(s) screened (<500 cpm): **Y N N/A** Samples received via:

FEDEX UPS Client Courier Pace Courier

MTJL LAB USE ONLY

Table #:

Acctnum:

Template:

Prelogin:

PM:

PB:

Comments:

**MLC 7-14-2021**

Trip Blank Received: **[ ] Y N NA**

HCL MeOH TSP Other

Non Conformance(s): **YES / NO** Page: **1 of 2**

Relinquished by/Company: (Signature) **ARM Group** Date/Time: **7/13/21 1500** Received by/Company: (Signature) **J. Pace** Date/Time: **7-13-21 1500**

Relinquished by/Company: (Signature) **ARM Group** Date/Time: **7/13/21 1827** Received by/Company: (Signature) **RDS PACE** Date/Time: **7-13-21 1845**

Relinquished by/Company: (Signature) **ARM Group** Date/Time: **7/13/21 2145** Received by/Company: (Signature) **Manuvi Umar** Date/Time: **7-13-2021 2145**



## CHAIN-OF-CUSTODY Analytical Request Document

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

Company: **ARM Group**Address: **9175 Guilford Rd**Report To: **Hamilton C Arm Group**Copy To: **EMACPAR@AER.bing.net**Customer Project Name/Number: **SNO-Hanover/190292M**Phone: **443 975 5125**  
Email: Collected By (print): **TOM PALANK**Collected By (signature): Sample Disposal: **Rush:**[ ] Dispose as appropriate [ ] Return  
[ ] Archive: \_\_\_\_\_  
[ ] Hold: \_\_\_\_\_[ ] Same Day [ ] Next Day  
[ ] 2 Day [ ] 3 Day [ ] 4 Day [ ] 5 Day  
(Expedite Charges Apply)Turnaround Date Required: **STANDARD**Field Filtered (If applicable):  
[ ] Yes [ ] No

Analysis: \_\_\_\_\_

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

Customer Sample ID: **MW-1**Matrix \*: **GW**Comp / Grab: **Grab**Collected (or Composite Start): **7/12/21 0915**Date: **7/12/21**Time: **0915**Composite End: Date: Time: Res CI: **8**# of Ctns: **X X X**VOL: **8768**GRD: **8015**DPO: **8015**Comments: **Y/N/M/C**

Billing Information:

Email To: \_\_\_\_\_

Site Collection Info/Address: \_\_\_\_\_

LAB USE ONLY

Container:

**S13U****WO# : 30430547****WO# : 70180593**

PM: NML Due Date: 07/21/21

CLIENT: PACE-PA

Analyses

Lab Profile/Line:

Lab Sample Receipt Checklist:

Custody Seals Present/Intact **Y** **N** **NA**Custody Signatures Present **G** **N** **NA**Collector Signature Present **G** **N** **NA**Bottles Intact **G** **N** **NA**Correct Bottles **G** **N** **NA**Sufficient Volume **G** **N** **NA**Samples Received on Ice **G** **N** **NA**VOA - Headspace Acceptable **G** **N** **NA**USDA Regulated Soils **Y** **N** **NA**Samples in Holding Time **G** **N** **NA**Residual Chlorine Present **Y** **N** **NA**

Cl Strips: \_\_\_\_\_

Sample pH Acceptable **Y** **N** **NA**pH Strips: **1003801** **G** **N** **NA**Sulfide Present **Y** **N** **NA**

Lead Acetate Strips: \_\_\_\_\_

LAB USE ONLY:

Lab Sample # / Comments:

**Y/L/U/M/C**

001

002

003

004

005

006

007

008

009

010

Customer Remarks / Special Conditions / Possible Hazards:

Type of Ice Used: **Wet** **Blue** **Dry** **None**Packing Material Used: **Bubble wrap**Radchem sample(s) screened (<500 cpm): **Y** **N** **NA**Received by/Company: (Signature) **ARM Group**Date/Time: **7/13/21 1500**Received by/Company: (Signature) **J. R. Pace**Date/Time: **7-13-21 1500**Received by/Company: (Signature) **RDS PACE**Date/Time: **7/13/21 1827**Received by/Company: (Signature) **Mario J. Diaz**Date/Time: **7-13-21 2145**Received by/Company: (Signature) **RDS PACE**

Lab Sample Temperature Info:

Temp Blank Received: **Y** **G** **NA**Therm ID#: **13** **G** **NA**Cooler 1 Temp Upon Receipt: **32** **OC**Cooler 1 Therm Corr. Factor: **0** **OC**Cooler 1 Corrected Temp: **32** **OC**Comments: **MIC 7-14-2021**Trip Blank Received: **Y** **N** **NA**

HCL MeOH TSP Other

PM: \_\_\_\_\_

PB: \_\_\_\_\_

Non Conformance(s): **YES** **/ NO**Page: **1** of: **2**



## Sample Condition Upon Receipt

WO# : 70180593

Due Date: 07/21/21

Client Name:

Pace -PA

Projec

PM: NML  
CLIENT: PACE-PACourier:  FedEx  UPS  USPS  Client  Commercial  Pace  Other

Tracking #:

Custody Seal on Cooler/Box Present:  Yes  No Seals intact:  Yes  NoPacking Material:  Bubble Wrap  Bubble Bags  Ziploc  None  Other

Thermometer Used: TH091 Correction Factor: +0.0

Cooler Temperature(°C): 4.0 Cooler Temperature Corrected(°C): 4.0

Temp should be above freezing to 6.0°C

USDA Regulated Soil (  N/A, water sample)Temperature Blank Present:  Yes  No

Type of Ice: Wet Blue None

 Samples on ice, cooling process has begun

Date/Time 5035A kits placed in freezer \_\_\_\_\_

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

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 checked="" 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: -Pace Containers Used:	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	9.
Containers Intact:	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	10.
Filtered volume received for Dissolved tests	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A 11. Note if sediment is visible in the dissolved container.
Sample Labels match COC: -Includes date/time/ID, Matrix:	<input type="checkbox"/> Yes	<input type="checkbox"/> No	12.
All containers needing preservation have been checked?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A 13. <input type="checkbox"/> HNO <sub>3</sub> <input type="checkbox"/> H <sub>2</sub> SO <sub>4</sub> <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 <sub>3</sub> , H <sub>2</sub> SO <sub>4</sub> , HCl, NaOH>9 Sulfide, NAOH>12 Cyanide)	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Exceptions: VOA, Coliform, TOC/DOC, Oil and Grease, DRO/8015 (water).			Initial when completed: _____ Lot # of added preservative: _____ Date/Time preservative added: _____
Per Method, VOA pH is checked after analysis			
Samples checked for dechlorination:	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A 14.
KI starch test strips Lot #			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 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 checked="" type="checkbox"/> No	<input type="checkbox"/> N/A 17.
Trip Blank Custody Seals Present	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Pace Trip Blank Lot # (if applicable): _____			

Client Notification/ Resolution:

Field Data Required?

Y / N

Person Contacted:

Date/Time:

Comments/ Resolution:

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

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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/190292M  
Pace Project No.: 30430547

Sample: Station Spigot	Lab ID: 30430546001	Collected: 07/12/21 13:15	Received: 07/13/21 21:45	Matrix: Drinking Water					
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>524.2 MSV</b>									
Analytical Method: EPA 524.2 Pace Analytical Services - Long Island									
Benzene	0.50 U	ug/L	0.50	0.22	1	07/19/21 14:33	71-43-2		
Bromobenzene	0.50 U	ug/L	0.50	0.18	1	07/19/21 14:33	108-86-1		
Bromo(chloromethane	0.50 U	ug/L	0.50	0.21	1	07/19/21 14:33	74-97-5		
Bromo(dichloromethane	0.50 U	ug/L	0.50	0.18	1	07/19/21 14:33	75-27-4		
Bromoform	0.50 U	ug/L	0.50	0.35	1	07/19/21 14:33	75-25-2		
Bromomethane	0.50 U	ug/L	0.50	0.48	1	07/19/21 14:33	74-83-9		
tert-Butyl Alcohol	10.0 U	ug/L	10.0	6.5	1	07/19/21 14:33	75-65-0		
n-Butylbenzene	0.50 U	ug/L	0.50	0.17	1	07/19/21 14:33	104-51-8		
sec-Butylbenzene	0.50 U	ug/L	0.50	0.18	1	07/19/21 14:33	135-98-8		
tert-Butylbenzene	0.50 U	ug/L	0.50	0.19	1	07/19/21 14:33	98-06-6		
Carbon tetrachloride	0.50 U	ug/L	0.50	0.17	1	07/19/21 14:33	56-23-5		
Chlorobenzene	0.50 U	ug/L	0.50	0.19	1	07/19/21 14:33	108-90-7		
Chloroethane	0.50 U	ug/L	0.50	0.25	1	07/19/21 14:33	75-00-3		
Chloroform	0.50 U	ug/L	0.50	0.23	1	07/19/21 14:33	67-66-3		
Chloromethane	0.50 U	ug/L	0.50	0.49	1	07/19/21 14:33	74-87-3		
2-Chlorotoluene	0.50 U	ug/L	0.50	0.21	1	07/19/21 14:33	49-48-8		
4-Chlorotoluene	0.50 U	ug/L	0.50	0.25	1	07/19/21 14:33	106-43-4		
Dibromo(chloromethane	0.50 U	ug/L	0.50	0.15	1	07/19/21 14:33	124-48-1		
Dibromomethane	0.50 U	ug/L	0.50	0.42	1	07/19/21 14:33	74-95-3		
1,2-Dichlorobenzene	0.50 U	ug/L	0.50	0.20	1	07/19/21 14:33	95-50-1		
1,3-Dichlorobenzene	0.50 U	ug/L	0.50	0.20	1	07/19/21 14:33	541-73-1		
1,4-Dichlorobenzene	0.50 U	ug/L	0.50	0.22	1	07/19/21 14:33	106-46-7		
Dichlorodifluoromethane	0.50 U	ug/L	0.50	0.22	1	07/19/21 14:33	75-71-8		
1,1-Dichloroethane	0.50 U	ug/L	0.50	0.23	1	07/19/21 14:33	75-34-3		
1,2-Dichloroethane	0.50 U	ug/L	0.50	0.22	1	07/19/21 14:33	107-06-2		
1,1-Dichloroethene	0.50 U	ug/L	0.50	0.20	1	07/19/21 14:33	75-35-4		
cis-1,2-Dichloroethene	0.50 U	ug/L	0.50	0.18	1	07/19/21 14:33	156-59-2		
trans-1,2-Dichloroethene	0.50 U	ug/L	0.50	0.24	1	07/19/21 14:33	156-60-5		
1,2-Dichloropropane	0.50 U	ug/L	0.50	0.20	1	07/19/21 14:33	78-87-5		
1,3-Dichloropropane	0.50 U	ug/L	0.50	0.18	1	07/19/21 14:33	142-28-9		
2,2-Dichloropropane	0.50 U	ug/L	0.50	0.23	1	07/19/21 14:33	594-20-7		
1,1-Dichloropropene	0.50 U	ug/L	0.50	0.21	1	07/19/21 14:33	563-58-6		
cis-1,3-Dichloropropene	0.50 U	ug/L	0.50	0.17	1	07/19/21 14:33	10061-01-5		
trans-1,3-Dichloropropene	0.50 U	ug/L	0.50	0.21	1	07/19/21 14:33	10061-02-6		
Ethylbenzene	0.50 U	ug/L	0.50	0.22	1	07/19/21 14:33	100-41-4		
Hexachloro-1,3-butadiene	0.50 U	ug/L	0.50	0.16	1	07/19/21 14:33	87-68-3		
Isopropylbenzene (Cumene)	0.50 U	ug/L	0.50	0.19	1	07/19/21 14:33	98-82-8		
p-Isopropyltoluene	0.50 U	ug/L	0.50	0.20	1	07/19/21 14:33	99-87-6		
Methylene Chloride	0.65	ug/L	0.50	0.21	1	07/19/21 14:33	75-09-2		
Methyl-tert-butyl ether	0.50 U	ug/L	0.50	0.38	1	07/19/21 14:33	1634-04-4	L1	
n-Propylbenzene	0.50 U	ug/L	0.50	0.18	1	07/19/21 14:33	103-65-1		
Styrene	0.50 U	ug/L	0.50	0.19	1	07/19/21 14:33	100-42-5		
1,1,1,2-Tetrachloroethane	0.50 U	ug/L	0.50	0.35	1	07/19/21 14:33	630-20-6		
1,1,2,2-Tetrachloroethane	0.50 U	ug/L	0.50	0.18	1	07/19/21 14:33	79-34-5		
Tetrachloroethene	0.50 U	ug/L	0.50	0.19	1	07/19/21 14:33	127-18-4		

### REPORT OF LABORATORY ANALYSIS

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

### ANALYTICAL RESULTS

Project: SMO-HANOVER/190292M  
Pace Project No.: 30430547

Sample: Station Spigot	Lab ID: 30430546001	Collected: 07/12/21 13:15	Received: 07/13/21 21:45	Matrix: Drinking Water					
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>524.2 MSV</b>									
Analytical Method: EPA 524.2 Pace Analytical Services - Long Island									
Toluene	0.50 U	ug/L	0.50	0.22	1	07/19/21 14:33	108-88-3		
Total Trihalomethanes (Calc.)	0.50 U	ug/L	0.50	0.50	1	07/19/21 14:33			
1,2,3-Trichlorobenzene	0.50 U	ug/L	0.50	0.41	1	07/19/21 14:33	87-61-6		
1,2,4-Trichlorobenzene	0.50 U	ug/L	0.50	0.47	1	07/19/21 14:33	120-82-1		
1,1,1-Trichloroethane	0.50 U	ug/L	0.50	0.19	1	07/19/21 14:33	71-55-6		
1,1,2-Trichloroethane	0.50 U	ug/L	0.50	0.17	1	07/19/21 14:33	79-00-5		
Trichloroethene	0.50 U	ug/L	0.50	0.21	1	07/19/21 14:33	79-01-6		
Trichlorofluoromethane	0.50 U	ug/L	0.50	0.15	1	07/19/21 14:33	75-69-4		
1,2,3-Trichloropropane	0.50 U	ug/L	0.50	0.40	1	07/19/21 14:33	96-18-4		
1,2,4-Trimethylbenzene	0.50 U	ug/L	0.50	0.18	1	07/19/21 14:33	95-63-6		
1,3,5-Trimethylbenzene	0.50 U	ug/L	0.50	0.19	1	07/19/21 14:33	108-67-8		
Vinyl chloride	0.50 U	ug/L	0.50	0.23	1	07/19/21 14:33	75-01-4		
Xylene (Total)	0.50 U	ug/L	0.50	0.14	1	07/19/21 14:33	1330-20-7		
m&p-Xylene	0.50 U	ug/L	0.50	0.24	1	07/19/21 14:33	179601-23-1		
o-Xylene	0.50 U	ug/L	0.50	0.20	1	07/19/21 14:33	95-47-6		
<b>Surrogates</b>									
1,2-Dichlorobenzene-d4 (S)	77	%	70-130		1	07/19/21 14:33	2199-69-1		
4-Bromofluorobenzene (S)	91	%	70-130		1	07/19/21 14:33	460-00-4		

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

## ANALYTICAL RESULTS

Project: SMO-HANOVER/190292M  
Pace Project No.: 30430547

Sample: Trip Blank	Lab ID: 30430546002	Collected: 07/12/21 00:01	Received: 07/13/21 21:45	Matrix: Water					
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>524.2 MSV</b>									
Analytical Method: EPA 524.2 Pace Analytical Services - Long Island									
Benzene	0.50 U	ug/L	0.50	0.22	1	07/19/21 15:00	71-43-2		
Bromobenzene	0.50 U	ug/L	0.50	0.18	1	07/19/21 15:00	108-86-1		
Bromo(chloromethane	0.50 U	ug/L	0.50	0.21	1	07/19/21 15:00	74-97-5		
Bromo(dichloromethane	0.50 U	ug/L	0.50	0.18	1	07/19/21 15:00	75-27-4		
Bromoform	0.50 U	ug/L	0.50	0.35	1	07/19/21 15:00	75-25-2		
Bromomethane	0.50 U	ug/L	0.50	0.48	1	07/19/21 15:00	74-83-9		
tert-Butyl Alcohol	10.0 U	ug/L	10.0	6.5	1	07/19/21 15:00	75-65-0		
n-Butylbenzene	0.50 U	ug/L	0.50	0.17	1	07/19/21 15:00	104-51-8		
sec-Butylbenzene	0.50 U	ug/L	0.50	0.18	1	07/19/21 15:00	135-98-8		
tert-Butylbenzene	0.50 U	ug/L	0.50	0.19	1	07/19/21 15:00	98-06-6		
Carbon tetrachloride	0.50 U	ug/L	0.50	0.17	1	07/19/21 15:00	56-23-5		
Chlorobenzene	0.50 U	ug/L	0.50	0.19	1	07/19/21 15:00	108-90-7		
Chloroethane	0.50 U	ug/L	0.50	0.25	1	07/19/21 15:00	75-00-3		
Chloroform	0.50 U	ug/L	0.50	0.23	1	07/19/21 15:00	67-66-3		
Chloromethane	0.50 U	ug/L	0.50	0.49	1	07/19/21 15:00	74-87-3		
2-Chlorotoluene	0.50 U	ug/L	0.50	0.21	1	07/19/21 15:00	45-98-8		
4-Chlorotoluene	0.50 U	ug/L	0.50	0.25	1	07/19/21 15:00	106-43-4		
Dibromo(chloromethane	0.50 U	ug/L	0.50	0.15	1	07/19/21 15:00	124-48-1		
Dibromomethane	0.50 U	ug/L	0.50	0.42	1	07/19/21 15:00	74-95-3		
1,2-Dichlorobenzene	0.50 U	ug/L	0.50	0.20	1	07/19/21 15:00	95-50-1		
1,3-Dichlorobenzene	0.50 U	ug/L	0.50	0.20	1	07/19/21 15:00	541-73-1		
1,4-Dichlorobenzene	0.50 U	ug/L	0.50	0.22	1	07/19/21 15:00	106-46-7		
Dichlorodifluoromethane	0.50 U	ug/L	0.50	0.22	1	07/19/21 15:00	75-71-8		
1,1-Dichloroethane	0.50 U	ug/L	0.50	0.23	1	07/19/21 15:00	75-34-3		
1,2-Dichloroethane	0.50 U	ug/L	0.50	0.22	1	07/19/21 15:00	107-06-2		
1,1-Dichloroethene	0.50 U	ug/L	0.50	0.20	1	07/19/21 15:00	75-35-4		
cis-1,2-Dichloroethene	0.50 U	ug/L	0.50	0.18	1	07/19/21 15:00	156-59-2		
trans-1,2-Dichloroethene	0.50 U	ug/L	0.50	0.24	1	07/19/21 15:00	156-60-5		
1,2-Dichloropropane	0.50 U	ug/L	0.50	0.20	1	07/19/21 15:00	78-87-5		
1,3-Dichloropropane	0.50 U	ug/L	0.50	0.18	1	07/19/21 15:00	142-28-9		
2,2-Dichloropropane	0.50 U	ug/L	0.50	0.23	1	07/19/21 15:00	594-20-7		
1,1-Dichloropropene	0.50 U	ug/L	0.50	0.21	1	07/19/21 15:00	563-58-6		
cis-1,3-Dichloropropene	0.50 U	ug/L	0.50	0.17	1	07/19/21 15:00	10061-01-5		
trans-1,3-Dichloropropene	0.50 U	ug/L	0.50	0.21	1	07/19/21 15:00	10061-02-6		
Ethylbenzene	0.50 U	ug/L	0.50	0.22	1	07/19/21 15:00	100-41-4		
Hexachloro-1,3-butadiene	0.50 U	ug/L	0.50	0.16	1	07/19/21 15:00	87-68-3		
Isopropylbenzene (Cumene)	0.50 U	ug/L	0.50	0.19	1	07/19/21 15:00	98-82-8		
p-Isopropyltoluene	0.50 U	ug/L	0.50	0.20	1	07/19/21 15:00	99-87-6		
Methylene Chloride	0.93	ug/L	0.50	0.21	1	07/19/21 15:00	75-09-2		
Methyl-tert-butyl ether	0.50 U	ug/L	0.50	0.38	1	07/19/21 15:00	1634-04-4	L1	
n-Propylbenzene	0.50 U	ug/L	0.50	0.18	1	07/19/21 15:00	103-65-1		
Styrene	0.50 U	ug/L	0.50	0.19	1	07/19/21 15:00	100-42-5		
1,1,1,2-Tetrachloroethane	0.50 U	ug/L	0.50	0.35	1	07/19/21 15:00	630-20-6		
1,1,2,2-Tetrachloroethane	0.50 U	ug/L	0.50	0.18	1	07/19/21 15:00	79-34-5		
Tetrachloroethene	0.50 U	ug/L	0.50	0.19	1	07/19/21 15:00	127-18-4		

## 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/190292M  
Pace Project No.: 30430547

Sample: Trip Blank	Lab ID: 30430546002	Collected: 07/12/21 00:01	Received: 07/13/21 21:45	Matrix: Water					
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>524.2 MSV</b>									
Analytical Method: EPA 524.2 Pace Analytical Services - Long Island									
Toluene	0.50 U	ug/L	0.50	0.22	1	07/19/21 15:00	108-88-3		
Total Trihalomethanes (Calc.)	0.50 U	ug/L	0.50	0.50	1	07/19/21 15:00			
1,2,3-Trichlorobenzene	0.50 U	ug/L	0.50	0.41	1	07/19/21 15:00	87-61-6		
1,2,4-Trichlorobenzene	0.50 U	ug/L	0.50	0.47	1	07/19/21 15:00	120-82-1		
1,1,1-Trichloroethane	0.50 U	ug/L	0.50	0.19	1	07/19/21 15:00	71-55-6		
1,1,2-Trichloroethane	0.50 U	ug/L	0.50	0.17	1	07/19/21 15:00	79-00-5		
Trichloroethene	0.50 U	ug/L	0.50	0.21	1	07/19/21 15:00	79-01-6		
Trichlorofluoromethane	0.50 U	ug/L	0.50	0.15	1	07/19/21 15:00	75-69-4		
1,2,3-Trichloropropane	0.50 U	ug/L	0.50	0.40	1	07/19/21 15:00	96-18-4		
1,2,4-Trimethylbenzene	0.50 U	ug/L	0.50	0.18	1	07/19/21 15:00	95-63-6		
1,3,5-Trimethylbenzene	0.50 U	ug/L	0.50	0.19	1	07/19/21 15:00	108-67-8		
Vinyl chloride	0.50 U	ug/L	0.50	0.23	1	07/19/21 15:00	75-01-4		
Xylene (Total)	0.50 U	ug/L	0.50	0.14	1	07/19/21 15:00	1330-20-7		
m&p-Xylene	0.50 U	ug/L	0.50	0.24	1	07/19/21 15:00	179601-23-1		
o-Xylene	0.50 U	ug/L	0.50	0.20	1	07/19/21 15:00	95-47-6		
<b>Surrogates</b>									
1,2-Dichlorobenzene-d4 (S)	88	%	70-130		1	07/19/21 15:00	2199-69-1		
4-Bromofluorobenzene (S)	96	%	70-130		1	07/19/21 15:00	460-00-4		

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# Internal Transfer Chain of Custody



Samples Pre-Logged into eCOC.

State Of Origin: MD

Cert. Needed:  Yes

No

Owner Received Date: 7/13/2021

Results Requested By: 7/21/2021



Workorder: 30430547

Workorder Name: SMO-HANOVER/190292M

Report To		Subcontract To			Requested Analysis																
Samantha Bayura Pace Analytical Pittsburgh 1638 Roseytown Road Suites 2,3,4 Greensburg, PA 15601 Phone (724)850-5622		Pace Analytical Melville 575 Broad Hollow Road Melville, NY 11747 Phone (631)694-3040																			
Item	Sample ID	Sample Type	Collect Date/Time		Lab ID	Matrix	Preserved Containers		VOC by 524.2	LAB USE ONLY											
			HCL																		
			1	Station Spigot			PS	7/12/2021 13:15		30430546001	Drinking	1									
			2	Trip Blank			PS	7/12/2021 00:01		30430546002	Water	1									
			3																		
			4																		
5																					
Comments																					
Transfers	Released By		Date/Time	Received By			Date/Time														
1	<i>John D. Pen</i> 7/14/21 1700			<i>Marta Pace C.I.</i>			7/15/21 1040														
2																					
3																					
Cooler Temperature on Receipt <u>40</u> °C				Custody Seal Y or N			Received on Ice Y or N			Samples Intact Y or N											

WO# : 70180593



70180593

\*\*\*In order to maintain client confidentiality, location/name of the sampling site, sampler's name and signature may not be provided on this COC document.

This chain of custody is considered complete as is since this information is available in the owner laboratory.