November 13, 2019

Project Reference #18687

Mr. Thomas Wentland and Mr. Lee Delcore
Wisconsin Department of Natural Resources
1155 Pilgrim Rd, PO Box 408
Plymouth, WI 53073-0408

RE: **Quarterly Report of Groundwater Sampling**
Former Moss-American Facility, 8716 N. Granville Rd., Milwaukee, WI
FID # 241378280

Dear Mr. Wentland and Mr. Delcore:

The Sigma Group, Inc. (Sigma) is pleased to present this Quarterly Report of Groundwater Sampling for the above-mentioned property (hereinafter "the site"). This report is the first Quarterly Report submitted in fulfillment of the Scope of Work prepared by the Wisconsin Department of Natural Resources (WDNR) in August 2019 and the Work Plan prepared by Sigma in September 2019.

In accordance with the Scope of Work and Work Plan, this Quarterly Report includes the following:

- description of the installation of six new groundwater monitoring wells;
- soil boring, well construction, and well development logs of the six new groundwater monitoring wells;
- groundwater monitoring well condition report of all wells;
- summary and tabulation of groundwater analytical results;
- laboratory reports of groundwater analytical results; and,
- recommendations for modification of future groundwater sampling, if any.

GROUNDWATER MONITORING WELL INSTALLATION

Six groundwater monitoring wells were installed on September 24 and 25, 2019 to replace groundwater monitoring wells previously abandoned due to damage or location within the limits of remedial activities. The groundwater monitoring wells installed are MW-7S-WR, MW-31SR, MW-32-SR, MW-34SR, TG1-1R, and PZ-09R, and were intended to replace groundwater monitoring wells of the same name without the appended "R".

Soil Boring/Groundwater Monitoring Well Installation

Six groundwater monitoring wells were installed in accordance with ch. NR 141, Wisconsin Administrative Code, in locations shown on **Figure 1**. These replacement groundwater monitoring wells were installed as close as possible to the previously abandoned groundwater monitoring wells. Standard hollow stem auger drilling methods were used

to advance the soil borings. Soil samples were obtained with a split-spoon sampler every two-and-a-half feet, and were described in general conformance with the Unified Soil Classification System, on the basis of soil type, grain size, plasticity, color, moisture, and any other relevant characteristics. The description of the observed soil characteristics is summarized on the soil boring logs, included in **Attachment 1**.

Following completion of each soil boring, each borehole was completed as a ch. NR 141-compliant monitoring well. Each well was constructed of a 2-inch diameter, 10-foot long PVC screen set at a depth of 15 feet below ground surface (bgs), and completed with a 2-inch diameter PVC riser and stick-up with protective casing. Groundwater monitoring well construction logs are included in **Attachment 2**. All drill cuttings generated during the drilling activities were contained in drums and stored on site. Veolia Environmental Services (Veolia) is scheduled to pick up the drums in November 2019, and treat and dispose the soil as hazardous waste. Waste disposal manifests will be included in the next Quarterly Report.

Elevation and Location Survey

Following completion of well installation activities, the newly installed wells were surveyed to establish the location and elevation. Further, the existing groundwater monitoring well locations were resurveyed to verify location and elevation. Updated survey data has been used to include the locations of the newly installed groundwater monitoring wells on **Figure 1** and to verify the locations of the existing groundwater monitoring wells.

Well Development

In accordance with ch. NR 141, the six newly installed groundwater monitoring wells were developed prior to groundwater sampling to ensure good hydraulic connection with the saturated subsurface materials. At each well location, development activities continued till the groundwater turned clean of sediments, the groundwater monitoring well went dry, or the volume removed met the calculated pore volume. Groundwater monitoring well development logs are included in **Attachment 3**. The groundwater generated during the well development process was contained in 55-gallon drums and is scheduled to be picked up by Veolia in November 2019, and treated and disposed of as hazardous waste. Waste disposal manifests will be included in the next Quarterly Report.

GROUNDWATER MONITORING WELL CONDITION REPORT

A total of fifty-three (53) groundwater monitoring wells are currently present at this site. The groundwater monitoring wells have been described by their original purpose in previous site documents, though beginning in 2013, all site groundwater monitoring wells have been used to monitor shallow groundwater quality and general effectiveness of the multiple rounds of remedial activities conducted on site. The original purpose of the groundwater monitoring wells is as follows (and shown on **Table 1** for each well):

- shallow groundwater monitoring wells were used to monitor shallow groundwater quality;
- containment performance monitoring wells were used to monitor performance of the containment aspect of the funnel and gate remedial system;

- treatment performance monitoring wells were used to monitor the performance of the treatment aspect of the funnel and gate remedial system;
- piezometers were used to monitor groundwater elevations; and,
- river reach monitoring wells were used to monitor groundwater conditions between the old and new river channels following the rerouting of the river.

All groundwater monitoring wells were inspected in September and October 2019 and the condition of each is presented in **Table 1.** To summarize:

- Of the 15 shallow groundwater monitoring and containment performance monitoring wells, 14 monitoring wells were in good condition and able to be sampled;
- Of the 18 treatment performance monitoring wells, all 18 monitoring wells were in good condition and able to be sampled;
- Of the 9 piezometers, 8 piezometers were in good condition and able to be sampled; and,
- Of the 11 river reach monitoring wells, one was in good condition and able to be sampled.

As noted on **Table 1**, a total of 7 monitoring wells were repaired during the installation of the replacement monitoring wells while the appropriate equipment was on site.

Two monitoring wells (MW-7S and MW-38S) contain a bent well casing; however, both monitoring wells can be sampled using a peristaltic pump or a 1-inch diameter bailer. One shallow groundwater monitoring well (MW-27S) and one piezometer (PZ-07) remain obstructed and cannot be repaired. Due to the obstruction, these two monitoring wells were not sampled and require replacement. Ten of the eleven river reach wells were not sampled due to recent flooding of the adjacent river creating unsuitable sampling conditions and/or poor well condition (including one location with a broken well head).

GROUNDWATER SAMPLING ACTIVITIES

All accessible groundwater monitoring wells in good condition were sampled between October 2 and October 9, 2019. Samples were obtained from 41 groundwater monitoring wells.

Groundwater monitoring wells were measured for the field parameters of water level, dissolved oxygen, oxidation-reduction potential, pH, temperature, turbidity, specific conductance, and ferrous iron using a Solinst Water Level Meter, a YSI Professional Plus Multiparameter meter and a Hach 2100Q portable turbidimeter. The groundwater monitoring wells were then purged and sampled using disposable bailers. Each groundwater monitoring well was sampled for benzene, toluene, ethylbenzene, xylenes (BTEX) (EPA Method 8260), and the polycyclic aromatic hydrocarbons (PAHs) (EPA Method 8270D). Quality control and quality assurance samples included 4 duplicate samples, 2 trip blanks, and 2 equipment blanks. Groundwater generated from purging activities was contained in 55-gallon drums and is scheduled to be picked up by Veolia in November 2019

for disposal as hazardous waste. Waste manifests will be included in the next Quarterly Report.

SUMMARY OF GROUNDWATER ANALYTICAL RESULTS

Groundwater Elevation Measurements

Groundwater elevation measurements are consistent with historic results, generally within one foot of previous measurements. As recorded in previous site documents, groundwater flow is toward the Little Menomonee River, or to the northeast, as depicted on **Figure 2**. Groundwater elevation measurements are summarized in **Table 2**.

Groundwater *In Situ* Measurements

Groundwater *in situ* measurements are reported in **Table 3.** In general, results are consistent with historical *in situ* measurements with some exceptions. Turbidity is higher than previously reported (Annual Groundwater Treatment Performance Monitoring Report Q3 2010 (Weston Solutions, Inc., November 2010)), most likely due to differences in meters or sampling procedures. Turbidity differences reported within this sampling round varied due to purging and sampling methods used during sampling. Relatively high turbidity values were observed when turbidity samples were collected the same day as purging. However, if turbidity samples were collected approximately 24 hours after purging, turbidity values were significantly lower. Purging with a bailer appears to be drawing fine sediments from the formation resulting in turbid water. Oxidation-reduction potential is also higher than previously reported, most likely due to the addition of oxidant material during the 2017-2018 remedial activities. The higher oxidation-reduction potential is an indication that the residual oxidant material is continuing to remediate the soil and groundwater contamination.

Groundwater Analytical Results

Groundwater samples from 41 groundwater monitoring wells were submitted to the laboratory for analysis of BTEX and PAHs. Laboratory reports are presented in **Attachment 4**, and results are summarized on **Table 4**. Results are compared to the Preventive Action Limits (PALs) and Enforcement Standards (ESs) published in the USEPA's Record of Decision (1990) for BTEX (hereinafter "EPA ROD PAL" and "EPA ROD ES"), and current ch. NR 140 PALs and ESs for PAHs. Current ch. NR 140 PALs and ESs for BTEX are also shown on **Table 4** for comparison purposes.

Summary of BTEX Results

Of the 41 groundwater monitoring wells sampled in this sampling round, 39 groundwater monitoring wells reported results less than the limit of detection for BTEX. The piezometer PZ-02 reported a concentration of total xylenes between the limit of quantitation and limit of detection, and less than both PALs and ESs; and reported concentrations of benzene, ethylbenzene, and toluene less than the limit of detection. Only one sampling location, the piezometer PZ-03, reported detectable concentrations of benzene, toluene, ethylbenzene, and total xylenes. Reported concentrations of ethylbenzene, toluene, and total xylenes for piezometer PZ-03 were less than both PALs and ESs. The reported concentration of

benzene (2.02 µg/L) for piezometer PZ-03 is greater than both PALs and the EPA ROD ES, but less than the ch. NR 140 ES.

Summary of PAH Results

Of the 41 groundwater monitoring wells sampled in this sampling round, 23 groundwater monitoring wells reported results less than ch. NR 140 PALs for PAHs. At the remaining 18 groundwater monitoring wells sampled, four analytes were reported at concentrations exceeding ch. NR 140 PALs and/or ESs. The analytes are benzo(a)pyrene, benzo(b)fluoranthene, chrysene, and naphthalene. Results of each of these four analytes are described below.

Benzo(a)pyrene

Seven groundwater monitoring wells reported concentrations of benzo(a)pyrene greater than the ch. NR 140 PAL and/or ES, generally in an area centrally located within the source property.

- Groundwater monitoring wells MW-35S, TG3-2, and TG3-3 reported concentrations of benzo(a)pyrene greater than the ch. NR 140 PAL, but between the limit of quantitation and the limit of detection.
- Groundwater monitoring wells TG2-2, TG5-2, and PZ-10 reported concentrations of benzo(a)pyrene greater than the ch. NR 140 PAL but less than the ch. NR 140 ES.
- Groundwater monitoring well PZ-09R reported concentrations of benzo(a)pyrene greater than ch. NR 140 ESs.

Benzo(b)fluoranthene

Fifteen groundwater monitoring wells reported concentrations of benzo(b)fluoranthene greater than the ch. NR 140 PAL and/or ES, generally in an area centrally located within the source property, with one sample point (MW-34S-N) at the north end of the source property, and one sample point (PZ-05) at the south end of the source property.

- Groundwater monitoring wells MW-34S-N, MW-35S, TG1-1R, TG1-2, TG2-3, TG3-1, TG6-2, and PZ-05 reported concentrations of benzo(b)fluoranthene greater than the ch. NR 140 PAL, but between the limit of quantitation and the limit of detection.
- Groundwater monitoring wells TG3-2, TG3-3, TG5-1, and PZ-10 reported concentrations of benzo(b)fluoranthene greater than the ch. NR 140 PAL but less than the ch. NR 140 ES.
- Groundwater monitoring wells TG2-2, TG5-2, and PZ-09R reported concentrations of benzo(b)fluoranthene greater than the ch. NR 140 ES.

Chrysene

Thirteen groundwater monitoring wells reported concentrations of chrysene greater than the ch. NR 140 PAL and/or ES, generally in an area centrally located within the source property, with one sample point (MW-34SR) at the north end of the source property, and one sample point (PZ-05) at the south end of the property.

- Groundwater monitoring wells MW-34SR, TG1-2, TG3-1, TG3-2, TG6-2, and PZ-05 reported concentrations of chrysene greater than the ch. NR 140 PAL, but between the limit of quantitation and the limit of detection.
- Groundwater monitoring wells MW-35S, TG2-2, TG3-3, TG5-1, TG5-2, and PZ-10 reported concentrations of chrysene greater than the ch. NR 140 PAL but less than the ch. NR 140 ES.
- Groundwater monitoring well PZ-09R reported concentrations of chrysene greater than the ch. NR 140 ES.

Naphthalene

Two groundwater monitoring wells reported concentrations of naphthalene greater than the ch. NR 140 PAL and/or ES.

- Groundwater monitoring well PZ-02 reported a concentration of naphthalene greater than its ch. NR 140 PAL but less than its ch. NR 140 ES.
- Groundwater monitoring well PZ-03 reported a concentration of naphthalene greater than its ch. NR 140 ES and at a relatively high concentration. Review of the historical data indicate that PZ-03 was only sampled once previously in 2013, and that naphthalene was detected during that sampling round. However, the detected concentration of naphthalene in 2013 was significantly lower.

DISCUSSION AND RECOMMENDATIONS

The former Moss-American Facility has historically contained contamination at high levels throughout the source property. A full review and comparison of historical results to current results is beyond the scope of this Quarterly Report, however a few brief examples are illustrative of the overall health of the property. For example, naphthalene has been reported at concentrations up to and exceeding 23,000 µg/L, and has been reported at concentrations in the 1,000s µg/L at multiple sampling points. Chrysene has been reported at concentrations in the range of 1,000s µg/L (source: Third Five Year Review Report, USEPA, April 2010). Contaminant concentrations have decreased significantly from historical levels; for example, ch. NR 140 ES exceedances are limited to four sampling locations at concentrations several orders of magnitude lower than historical levels. A total of nine analytes were reported at concentrations greater than ch. NR 140 PALs and/or ESs in the Annual Groundwater Treatment Performance Monitoring Report Q3 2010 (Weston Solutions, Inc., November 2010). In the current sampling round, only five analytes were detected at concentrations greater than ch. NR 140 PALs and/or ESs.

Sigma recommends that the next round of quarterly groundwater monitoring is conducted using either low-flow sampling procedures or traditional bailer purging and sampling after 24 hours to minimize the possibility of drawing fine sediments from the formation into the samples.

Sigma anticipates performing the next round of quarterly groundwater monitoring approximately 3 months following the completion of this round of quarterly groundwater monitoring, or about January 1, 2020. Please feel free to contact the undersigned should you have any questions.

Sincerely,

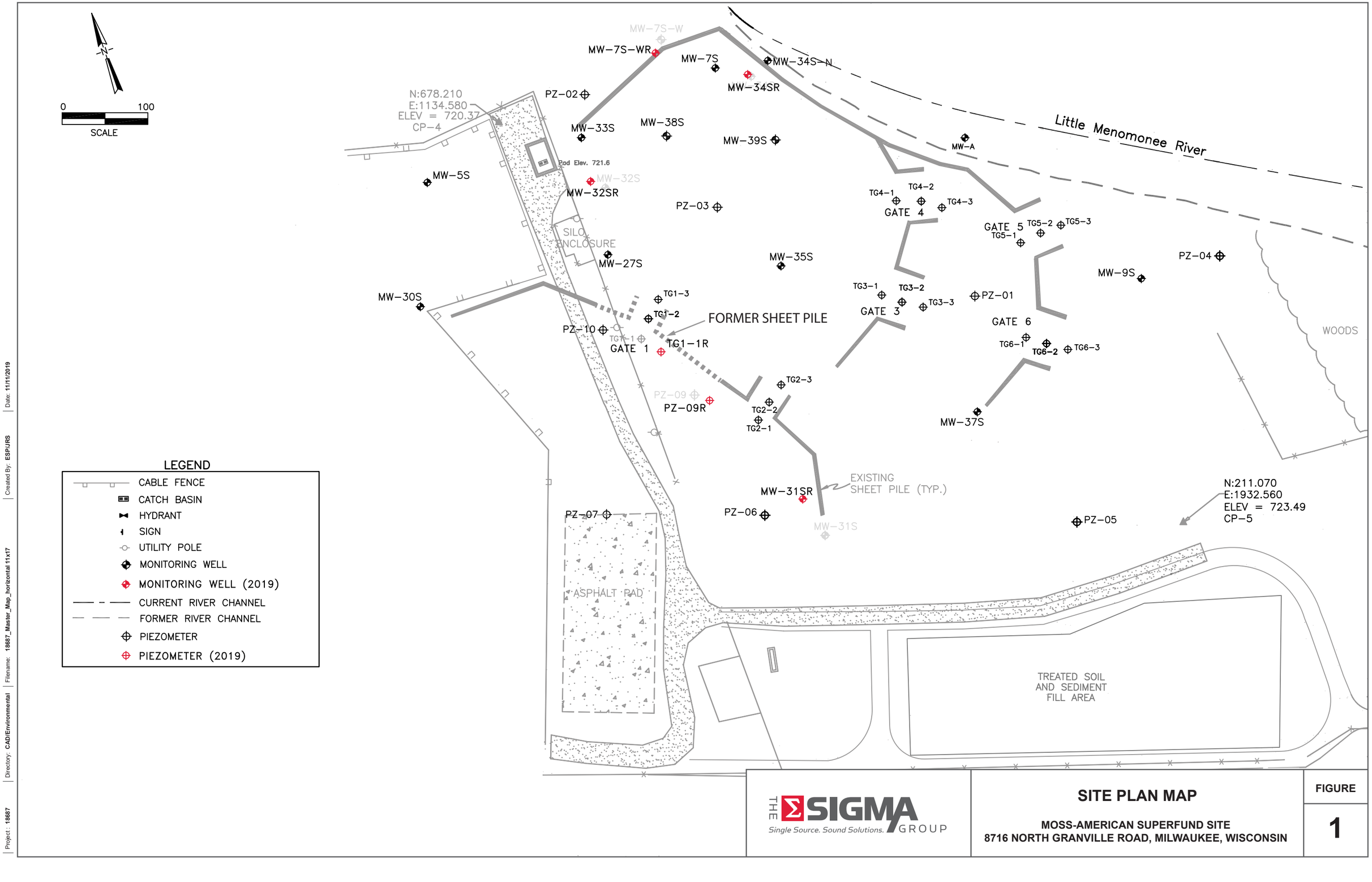
THE SIGMA GROUP

Andrea Lorenz
Project Engineer

Mafizul Islam, P.E.
Senior Project Manager

Attachments:

Figure 1	Site Plan Map
Figure 2	Groundwater Contour Map
Table 1	Groundwater Monitoring Wells Condition Report
Table 2	Groundwater Elevation Results
Table 3	Groundwater *In Situ* Results
Table 4	Groundwater Analytical Results
Attachment 1	Soil Boring Logs for Groundwater Monitoring Well Installation
Attachment 2	Well Construction Logs
Attachment 3	Well Development Logs
Attachment 4	Laboratory Reports



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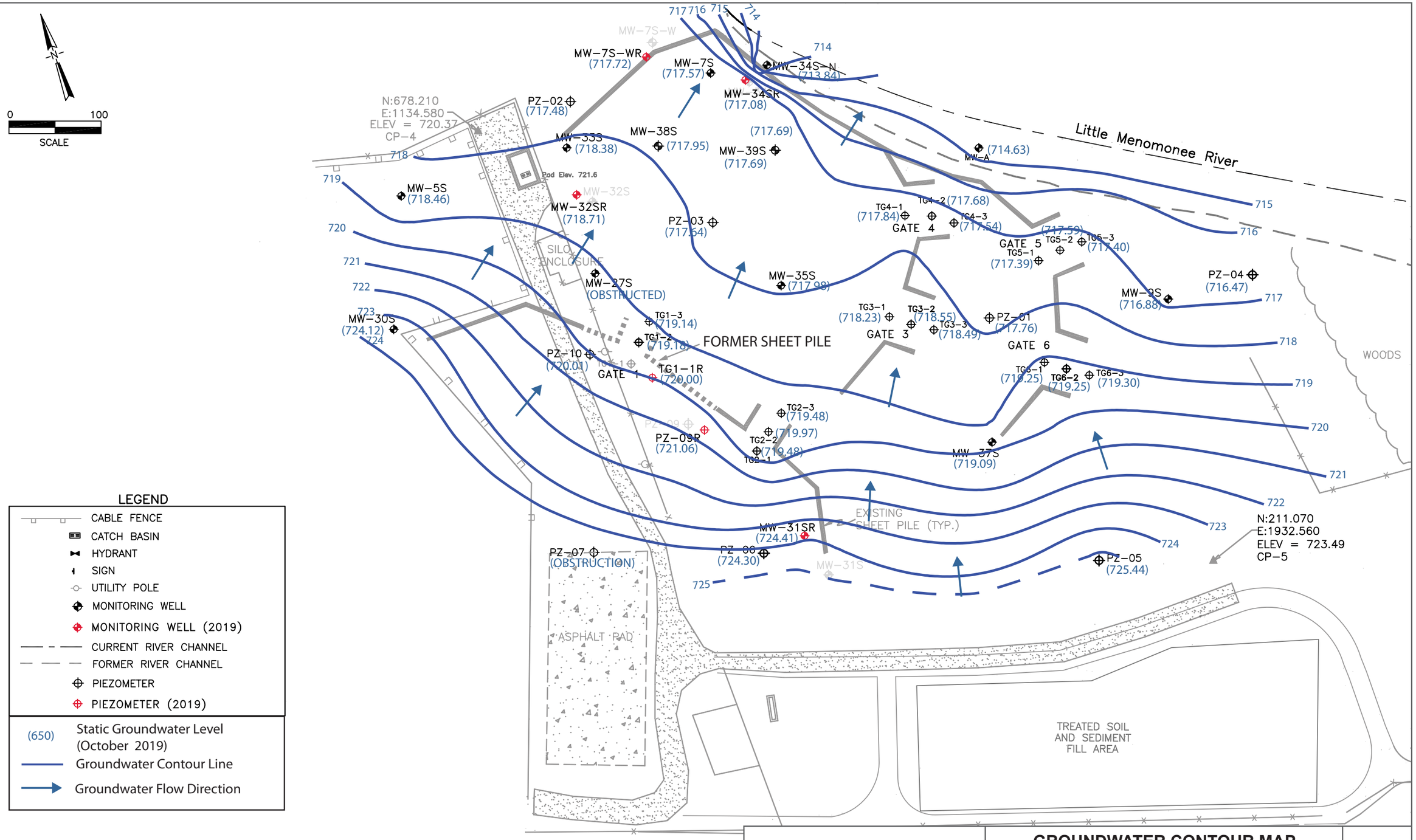
SITE PLAN MAP

MOSS-AMERICAN SUPERFUND SITE
8716 NORTH GRANVILLE ROAD, MILWAUKEE, WISCONSIN

FIGURE
1

Project: 18687 | Directory: CAD/Environmental | Filename: 18687_Master_Map_horizontal 11x17 | Created By: ESP/JRS | Date: 11/11/2019



LEGEND

- CABLE FENCE
- CATCH BASIN
- HYDRANT
- SIGN
- UTILITY POLE
- MONITORING WELL
- MONITORING WELL (2019)
- CURRENT RIVER CHANNEL
- FORMER RIVER CHANNEL
- PIEZOMETER
- PIEZOMETER (2019)

(650) Static Groundwater Level (October 2019)

Groundwater Contour Line

Groundwater Flow Direction

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GROUNDWATER CONTOUR MAP (OCTOBER 2019)

MOSS-AMERICAN SUPERFUND SITE
8716 NORTH GRANVILLE ROAD, MILWAUKEE, WISCONSIN

FIGURE
2

Project: 18687 | Directory: CAD/Environmental | Filename: 18687_Master_Map_horizontal 11x17 | Created By: ESP/JRS | Date: 11/11/2019

Table 1

Groundwater Monitoring Wells Condition Report- Fall 2019

Former Moss-American Facility- 8716 N Granville Rd, Milwaukee, WI

Sigma Project # 18687

Type of Monitoring Well	Well ID	Sampled in Fall 2019?	Well Casing Diameter (inches)	Well Casing Material	Comment
shallow groundwater	MW-5S	Y	2	Steel	Good condition; able to sample
	MW-7S	Y	2	Steel	Well casing is bent. Well can be sampled using a 1" bailer or peristaltic pump.
	MW-7S-WR	Y	2	PVC	New well installed 9/2019
	MW-9S	Y	2	Steel	Good condition; able to sample
	MW-27S	**N**	2	PVC	Well was inclined initially. Gestra straightened the well prior to sampling. Well is obstructed at 4.05 ft below top of casing. No water present.
containment performance	MW-30S	Y	2	Steel	Good condition; able to sample
	MW-31SR	Y	2	PVC	New well installed 9/2019
	MW-32SR	Y	2	PVC	New well installed 9/2019
	MW-33S	Y	2	Steel	Good condition; able to sample
	MW-34SR	Y	2	PVC	New well installed 9/2019
	MW-34S-N	Y	2	PVC	Protective casing loose initially. Sigma repaired by adding sand to fix the protective casing to the ground and cut down the well casing. Well is currently in good condition.
	MW-35S	Y	2	Steel	Well was inclined and heaved initially. Gestra straightened the well prior to sampling. Well is currently in good condition.
	MW-37S	Y	2	Steel	Well was inclined initially. Gestra straightened the well prior to sampling. Well is currently in good condition.
	MW-38S	Y	2	Steel	Well casing is bent. Well can be sampled using a 1" bailer or peristaltic pump.
	MW-39S	Y	2	Steel	Well was inclined initially. Gestra straightened the well prior to sampling. Well is currently in good condition.
treatment performance	TG1-1R	Y	2	PVC	New well installed 9/2019
	TG1-2	Y	2	Steel	Good condition; able to sample
	TG1-3	Y	2	Steel	Good condition; able to sample
	TG2-1	Y	2	Steel	Good condition; able to sample
	TG2-2	Y	2	Steel	Good condition; able to sample
	TG2-3	Y	2	Steel	Good condition; able to sample
	TG3-1	Y	2	Steel	Well is slightly inclined but otherwise in good conditon; able to sample
	TG3-2	Y	2	Steel	Good condition; able to sample
	TG3-3	Y	2	Steel	Good condition; able to sample
	TG4-1	Y	2	Steel	Good condition; able to sample
	TG4-2	Y	2	Steel	Good condition; able to sample
	TG4-3	Y	2	Steel	Good condition; able to sample
	TG5-1	Y	2	Steel	Good condition; able to sample
	TG5-2	Y	2	Steel	Good condition; able to sample
	TG5-3	Y	2	Steel	Good condition; able to sample
	TG6-1	Y	2	Steel	Good condition; able to sample
	TG6-2	Y	2	Steel	Good condition; able to sample
	TG6-3	Y	2	Steel	Good condition; able to sample
piezometer	PZ-01	Y	1.5	PVC	Well was inclined initially. Gestra straightened the well prior to sampling. Well is currently in good condition.
	PZ-02	Y	1.5	PVC	Well was inclined initially. Gestra straightened the well prior to sampling. Well is currently in good condition.
	PZ-03	Y	1.5	PVC	Good condition; able to sample
	PZ-04	Y	1.5	PVC	Good condition; able to sample
	PZ-05	Y	1.5	PVC	Good condition; able to sample
	PZ-06	Y	1.5	PVC	Good condition; able to sample
	PZ-07	**N**	1.5	PVC	Obstructed at 4.1 ft below top of casing
	PZ-09R	Y	2	PVC	New well installed 9/2019
	PZ-10	Y	1.5	PVC	Good condition; able to sample
river reach	MW-A	Y	2	PVC	Good condition; able to sample
	MW-B	**N**	2	PVC	Well not sampled due to flooding of the adjacent river
	MW-C	**N**	2	PVC	Well not sampled due to flooding of the adjacent river
	MW-D	**N**	2	PVC	Well not accessible
	MW-E	**N**	2	PVC	Well submerged; well not sampled due to flooding of the river
	MW-F	**N**	2	PVC	Concrete with vault ripped out. Casing open and exposed to surface water
	MW-G	**N**	2	PVC	Well submerged; well not sampled due to flooding of the river
	MW-H	**N**	2	PVC	Well not sampled due to flooding of the adjacent river
	MW-I	**N**	2	PVC	Well could not be located; well location appears to be submerged
	MW-J	**N**	2	PVC	Well not sampled due to flooding of the adjacent river
	MW-K	**N**	2	PVC	Well submerged; well not sampled due to flooding of the river

NOTE: Monitoring Wells MW-27S and PZ-07 need to be abandoned and replaced to continue sampling.

Table 2
Groundwater Elevation Results
Moss American - 8716 North Granville Road, Milwaukee, WI
Sigma Project No. 18687

Well ID	Date	Ground Elevation	Top of Casing	Depth to Groundwater	Well Depth	Water Column	Water Column Difference	Groundwater Elevation	Depth to Groundwater	Physical Observations
		(feet MSL)	(feet MSL)	(feet TOC)	(feet TOC)	(feet)	(feet)	(feet MSL)	(feet bgs)	
MW-5S	4/4/13	723.41	724.63	5.45	19.75	14.30		719.18	4.23	
	10/8/19	722.723	724.44	5.98	19.52	13.54	-0.76	718.46	4.26	good recovery
MW-7S	4/4/13	719.47	721.59	4.14	15.40	11.26		717.45	2.02	
	10/7/19	718.872	721.769	4.20	15.05	10.85	-0.41	717.57	1.30	good recovery, Dup #4
MW-7S-W	4/5/13	716.41	719.84	4.22	16.85	12.63		715.62	0.79	
MW-7S-WR	10/3/19	717.664	720.047	2.33	17.37	15.04		717.72	-0.05	going dry
MW-9S	4/4/13	719.15	721.66	3.90	15.30	11.40		717.76	1.39	
	9/27/19	718.717	721.466	4.59	15.05	10.46	-0.94	716.88	1.84	good recovery
MW-27S	4/4/13	720.57	723.10	3.68	17.39	13.71		719.42	1.15	
	10/3/19	720.135	723.722	OB	OB	OB		OB	OB	obstruction
MW-30S	4/4/13	725.35	727.34	3.42	14.72	11.30		723.92	1.43	
	10/8/19	725.595	727.33	3.21	14.50	11.29	-0.01	724.12	1.48	good recovery
MW-31S	4/3/13			NS	NS	NS		NS	NS	not located
MW-31SR	10/8/19	723.127	725.944	1.53	17.35	15.82		724.41	-1.29	moderate recovery
MW-32S	4/4/13	719.68	722.79	5.13	14.95	9.82		717.66	2.02	
MW-32SR	10/3/19	719.164	721.945	3.24	17.62	14.38		718.71	0.46	good recovery
MW-33S	4/4/13	719.25	721.81	4.49	14.95	10.46		717.32	1.93	
	10/3/19	719.043	722.306	3.93	14.70	10.77	0.31	718.38	0.67	good recovery
MW-34S	4/4/13	718.97	721.52	4.45	14.97	10.52		717.07	1.90	
MW-34SR	10/7/19	718.181	720.815	3.74	17.78	14.04		717.08	1.11	dry, Dup #3
MW-34S-N	4/5/13	715.41	718.71	3.52	18.15	14.63		715.19	0.22	
	10/8/19	715.298	717.218	3.38	17.41	14.03	-0.60	713.84	1.46	dry
MW-35S	4/4/13	718.14	721.75	4.06	14.63	10.57		717.69	0.45	
	10/7/19	718.545	722.478	4.50	14.41	9.91	-0.66	717.98	0.57	very good recovery
MW-37S	4/4/13	721.33	723.30	4.80	15.00	10.20		718.50	2.83	
	10/7/19	722.651	723.661	4.57	14.47	9.90	-0.30	719.09	3.56	
MW-38S	4/4/13	718.36	721.74	4.09	18.20	14.11		717.65	0.71	
	10/7/19	718.88	722.37	4.42	17.95	13.53	-0.58	717.95	0.94	
MW-39S	4/4/13	717.80	721.10	3.42	17.93	14.51		717.68	0.12	
	10/8/19	718.109	721.355	3.67	17.99	14.32	-0.19	717.69	0.42	good recovery
TG1-1	4/3/13	719.77	723.32	4.65	15.10	10.45		718.67	1.10	
TG1-1R	10/3/19	720.924	723.45	3.45	17.45	14.00		720.00	0.92	dry
TG1-2	4/3/13	720.06	722.81			0.00		722.81	-2.75	
	10/3/19	719.783	723.798	4.62	14.30	9.68		719.18	0.61	good recovery
TG1-3	4/3/13	719.56	722.53	3.41	14.62	11.21		719.12	0.44	
	10/3/19	719.6	723.156	4.02	14.39	10.37	-0.84	719.14	0.46	good recovery
TG2-1	4/3/13	720.67	723.80	4.25	15.00	10.75		719.55	1.12	
	10/8/19	720.194	723.8	4.32	14.80	10.48	-0.27	719.48	0.71	slow recovery
TG2-2	4/3/13	720.62	723.05	5.63	14.80	9.17		717.42	3.20	
	10/8/19	720.596	723.352	3.38	14.55	11.17	2.00	719.97	0.62	moderate recovery

Table 2
Groundwater Elevation Results
Moss American - 8716 North Granville Road, Milwaukee, WI
Sigma Project No. 18687

Well ID	Date	Ground Elevation	Top of Casing	Depth to Groundwater	Well Depth	Water Column	Water Column Difference	Groundwater Elevation	Depth to Groundwater	Physical Observations
		(feet MSL)	(feet MSL)	(feet TOC)	(feet TOC)	(feet)	(feet)	(feet MSL)	(feet bgs)	
TG2-3	4/3/13	720.06	722.61	4.05	OB	OB		718.56	1.50	
	10/8/19	719.83	723.928	4.45	14.75	10.30		719.48	0.35	slow recovery
TG3-1	4/3/13	719.14	721.05	3.41	14.60	11.19		717.64	1.50	
	10/8/19	718.933	721.875	3.65	14.60	10.95	-0.24	718.23	0.71	good recovery
TG3-2	4/3/13	718.87	720.92	3.25	14.25	11.00		717.67	1.20	
	10/8/19	718.67	721.679	3.13	14.00	10.87	-0.13	718.55	0.12	good recovery
TG3-3	4/3/13	718.35	720.60	OB	OB	OB		OB	OB	
	10/8/19	718.009	721.518	3.03	14.75	11.72		718.49	-0.48	good recovery
TG4-1	4/3/13	718.06	721.14	OB	OB	OB		OB	OB	
	10/7/19	717.961	722.265	4.43	14.45	10.02		717.84	0.13	good recovery
TG4-2	4/3/13	718.26	720.75	3.85	14.93	11.08		716.90	1.36	
	10/7/19	717.934	721.708	4.03	14.75	10.72	-0.36	717.68	0.26	good recovery
TG4-3	4/3/13	718.01	720.04	3.03	14.28	11.25		717.01	1.00	
	10/7/19	717.617	720.726	3.19	14.10	10.91	-0.34	717.54	0.08	good recovery
TG5-1	4/3/13	717.60	721.12	4.85	14.65	9.80		716.27	1.33	
	9/27/19	717.791	722.152	4.76	14.40	9.64	-0.16	717.39	0.40	good recovery
TG5-2	4/3/13	718.18	720.63	4.25	14.80	10.55		716.38	1.80	
	10/7/19	717.616	721.914	4.32	14.55	10.23	-0.32	717.59	0.02	good recovery
TG5-3	4/3/13	718.17	719.99	3.53	15.02	11.49		716.46	1.71	
	9/27/19	716.919	720.87	3.47	14.75	11.28	-0.21	717.40	-0.48	slow recovery
TG6-1	4/3/13	719.47	721.96	4.54	15.02	10.48		717.42	2.05	
	9/27/19	719.163	722.409	3.16	14.80	11.64	1.16	719.25	-0.09	
TG6-2	4/3/13	719.70	722.05	4.67	14.23	9.56		717.38	2.32	
	9/27/19	719.49	722.74	3.49	14.10	10.61	1.05	719.25	0.24	moderate recovery
TG6-3	4/3/13	719.58	722.47	4.50	14.65	10.15		717.97	1.61	
	9/27/19	719.472	722.917	3.62	14.45	10.83	0.68	719.30	0.17	moderate recovery
PZ-01	4/4/13	718.04	721.05	3.85	14.90	11.05		717.20	0.84	
	10/8/19	717.808	721.473	3.71	14.55	10.84	-0.21	717.76	0.05	slow recovery
PZ-02	4/4/13	718.89	721.84	5.94	14.85	8.91		715.90	2.99	
	10/3/19	718.362	721.725	4.25	14.75	10.50	1.59	717.48	0.89	good recovery
PZ-03	4/4/13	719.00	722.09	4.60	14.85	10.25		717.49	1.51	
	10/8/19	718.705	722.294	4.65	14.61	9.96	-0.29	717.64	1.06	good recovery
PZ-04	4/4/13	717.30	720.22	OB	OB	OB	OB	OB	OB	
	9/27/19	716.588	720.726	4.26	15.75	11.49		716.47	0.12	slow recovery
PZ-05	4/4/13	724.34	727.43	5.10	14.82	9.72		722.33	2.01	
	10/7/19	726.261	727.51	2.07	14.56	12.49	2.77	725.44	0.82	good recovery
PZ-06	4/4/13	724.62	727.79	3.91	13.40	9.49		723.88	0.74	
	10/8/19	724.50	728.07	3.77	13.55	9.78	0.29	724.30	0.21	slow recovery
PZ-07	4/4/13	725.78	728.72	OB	OB	OB	OB	OB	OB	
	10/8/19			OB	OB	OB	OB	OB	OB	obstruction
PZ-09	4/4/13	721.12	724.08	OB	OB	OB	OB	OB	OB	
PZ-09R	10/3/19	720.631	723.623	2.56	17.62	15.06		721.06	-0.43	good recovery

Table 2
Groundwater Elevation Results
Moss American - 8716 North Granville Road, Milwaukee, WI
Sigma Project No. 18687

Well ID	Date	Ground Elevation	Top of Casing	Depth to Groundwater	Well Depth	Water Column	Water Column Difference	Groundwater Elevation	Depth to Groundwater	Physical Observations
		(feet MSL)	(feet MSL)	(feet TOC)	(feet TOC)	(feet)	(feet)	(feet MSL)	(feet bgs)	
PZ-10	4/4/13	722.04	725.05	4.83	14.95	10.12		720.22	1.82	
	10/8/19	721.74	725.841	5.83	14.73	8.90	-1.22	720.01	1.73	slow recovery
MW-A	4/5/13	716.73	716.15	0.77	11.80	11.03		715.38	1.35	
	10/8/19	715.695	715.416	0.79	11.57	10.78	-0.25	714.63	1.07	going dry
MW-B	4/5/13	714.92	714.49	0.70	11.63	10.93		713.79	1.13	
	10/8/19	NS	NS	NS	NS	NS		NS	NS	
MW-C	4/5/13	714.18	713.82	0.00	12.50	12.50		713.82	0.36	
	10/8/19	NS	NS	NS	NS	NS		NS	NS	
MW-D	4/5/13	716.21	715.85	0.20	12.00	11.80		715.65	0.56	
	10/8/19	NS	NS	NS	NS	NS		NS	NS	
MW-E	4/5/13	713.26	712.83	1.17	18.85	17.68		711.66	1.60	
	10/8/19	NS	NS	NS	NS	NS		NS	NS	
MW-F	4/5/13	713.52	713.10	1.95	19.55	17.60		711.15	2.37	
	10/8/19	NS	NS	NS	NS	NS		NS	NS	
MW-G	4/5/13	713.21	712.75	1.55	13.83	12.28		711.20	2.01	
	10/8/19	NS	NS	NS	NS	NS		NS	NS	
MW-H	4/5/13	710.40	710.07	0.00	18.10	18.10		710.07	0.33	
	10/8/19	NS	NS	NS	NS	NS		NS	NS	
MW-I	4/5/13	710.27	709.92	1.50	9.00	7.50		708.42	1.85	
	10/8/19	NS	NS	NS	NS	NS		NS	NS	
MW-J	4/5/13	710.08	709.85	0.00	14.75	14.75		709.85	0.23	
	10/8/19	NS	NS	NS	NS	NS		NS	NS	
MW-K	4/5/13	707.13	706.70	NS	NS	NS		NS	NS	submerged
	10/8/19	NS	NS	NS	NS	NS		NS	NS	

Notes:
1. feet MSL = feet above Mean Sea Level
2. feet bgs = feet below ground surface
3. feet TOC = feet below top of casing
4. OB = obstruction
5. NS = not sampled

Table 3
Groundwater *In Situ* Results
Moss American - 8716 North Granville Road, Milwaukee, WI
Sigma Project No. 18687

Well ID	Date	In Situ Measurements						
		pH	Temperature (° C)	Ferrous Iron (mg/l)	Specific Conductance (mmhos/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/l)	Redox Potential (mV)
MW-5S	9/27/10	6.57	12.15	NA	1.695	0.72	11.20	36.1
	4/4/13	7.20	9.00	3.0			2.00	35.0
	10/8/19	7.37	10.5	2.2	1.938	187	0.61	348.6
MW-7S	9/28/10	6.89	13.12	NA	1.244	4.16	0.80	-70.0
	4/4/13	7.10	5.90	3.6			1.40	-15.0
	10/7/19	7.21	14.6	2.8	1.867	132	1.58	301.5
MW-7S-W	9/29/10	NI	NI	NI			NI	NI
	4/5/13	7.20	6.10	0.0			1.90	-182.0
MW-7S-WR	10/3/19	7.19	14.3	0.0	1.531	7.21	1.41	274.3
MW-9S	9/30/10	6.69	13.75	NA	0.980	2.06	1.70	-21.3
	4/4/13	7.30	5.60	8.0			1.50	-36.0
	9/27/19	6.89	12.8	2.0	1.536	52.1	1.5	237.2
MW-27S	9/27/10	6.47	14.51	NA	1.471	1.44	0.80	-70.1
	4/4/13	7.30	7.50	3.0			1.40	-58.0
	10/3/19	OB	OB	OB	OB	OB	OB	OB
MW-30S	9/28/10	6.72	13.87	NA	1.370	0.46	0.80	45.5
	4/4/13	7.30	7.60	0.8			1.90	40.0
	10/8/19	7.09	11.6	1.6	1.988	187	1.9	346.9
MW-31S	9/29/10	6.90	13.37	NA	1.116	4.51	0.80	-16.1
	4/3/13	NS	NS	NS			NS	NS
MW-31SR	10/8/19	7.34	11.9	0.0	1.431	13.5	5.1	255.2
MW-32S	9/27/10	6.40	16.49	NA	1.136	2.08	2.40	-57.6
	4/4/13	7.40	6.40	6.8			1.40	-159.0
MW-32SR	10/3/19	6.74	12.7	3.8	1.873	34.6	2.2	347.0
MW-33S	9/28/10	6.34	14.60	NA	1.236	1.55	3.70	-18.2
	4/4/13	6.90	6.50	3.6			1.10	-15.0
	10/3/19	6.68	12.7	4.4	1.810	17.7	1.44	265.3
MW-34S	9/28/10	NS	NS	NS	NS	NS	NS	NS
	4/4/13	7.20	6.20	7.0			0.49	-160.0
MW-34SR	10/7/19	6.74	14.2	0.0	3.472	10.5	1.29	282.1
MW-34S-N	9/28/10	NI	NI	NI			NI	NI
	4/5/13	7.10	6.00	0.0			2.40	131.0
	10/8/19	7.63	14.6	0.0	0.898	253	3.88	267.8
MW-35S	9/28/10	6.46	16.26	NA	1.527	0.91	0.80	-38.9
	4/4/13	NS	NS	NS			NS	NS
	10/17/19	7.12	16.1	4.4	1.298	201	2.92	307.8
MW-37S	9/29/10	6.71	15.58	NA	1.115	0.43	3.00	-18.6
	4/4/13	7.70	7.40	0.0			1.30	122.0
	10/7/19	7.56	12.5	4.4	1.223	64	0.8	218.9

Table 3
Groundwater *In Situ* Results
Moss American - 8716 North Granville Road, Milwaukee, WI
Sigma Project No. 18687

Well ID	Date	In Situ Measurements						
		pH	Temperature (° C)	Ferrous Iron (mg/l)	Specific Conductance (mmhos/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/l)	Redox Potential (mV)
MW-38S	9/28/10	6.87	14.32	NA	1.221	4.75	1.00	-43.3
	4/4/13	7.00	7.90	2.0			1.10	-33.0
	10/7/19	7.02	15.3	1.6	1.337	103	2.95	267.4
MW-39S	9/28/10	6.75	16.04	NA	1.255	4.84	0.40	-48.3
	4/4/13	7.60	6.50	4.2			0.97	-104.0
	10/8/19	6.93	15.9	2.8	1.607	121	2.36	292.6
TG1-1	9/29/10	NA	NA	NA	NA	NA	NA	NA
	4/3/13	7.20	5.80	4.0			0.85	-120.0
TG1-1R	10/3/19	7.27	12.4	0.0	3.931	14.1	0.95	353.8
TG1-2	10/3/19	7.14	14.6	5.0	2.165	44.2	1.92	322.0
TG1-3	9/29/10	6.97	16.08	NA	1.196	3.81	1.68	-124.0
	4/3/13	7.10	5.10	3.6			0.55	-88.0
	10/3/19	7.00	16.0	4.5	1.927	42.6	1.91	160.0
TG2-1	9/29/10	6.77	14.23	NA	1.089	3.53	0.76	-2.5
	4/3/13	7.20	5.20	0.0			0.60	12.0
	10/8/19	7.20	13.5	0.0	1.502	33.4	2.2	266.7
TG2-2	10/8/19	7.24	14.1	2.4	1.431	127	1.0	267.3
TG2-3	9/29/10	6.88	16.63	NA	0.996	3.62	1.12	-113.6
	4/3/13	NS	NS	NS			NS	NS
	10/8/19	6.99	14.3	0.0	1.819	99.1	1.0	267.2
TG3-1	9/29/10	6.81	16.75	NA	1.196	3.69	3.04	-67.1
	4/3/13	7.20	5.60	2.4			1.30	-96.0
	10/8/19	6.91	14.5	2.0	1.797	104	2.20	251.5
TG3-2	10/8/19	7.12	15.2	2.6	1.503	105	2.0	263.4
TG3-3	9/29/10	6.79	16.79	NA	1.106	4.00	1.19	-81.5
	4/3/13	NS	NS	NS			NS	NS
	10/8/19	6.96	14.2	2.4	1.643	32.9	2.8	279.4
TG4-1	9/29/10	6.97	15.83	NA	1.12	1.60	5.16	70.4
	4/3/13	NS	NS	NS			NS	NS
	10/7/19	7.10	15.2	4.2	1.673	79.1	2.7	271.5
TG4-2	10/7/19	7.22	15.4	4.0	1.538	116	2.1	284.2
TG4-3	9/29/10	7.16	15.96	NA	1.118	0.85	5.63	-6.3
	4/3/13	7.10	6.20	4.2			0.90	-129.0
	10/7/19	7.28	13.6	4.4	1.640	261	1.7	299.7
TG5-1	9/29/10	6.89	15.68	NA	1.249	1.00	5.37	81.0
	4/3/13	7.00	6.10	4.0			1.00	-8.0
	9/27/19	7.13	13.4	2.4	3.181	47.8	2.4	333.2
TG5-2	10/7/19	7.02	14.8	5.2	1.678	139	2.7	289.0

Table 3
Groundwater *In Situ* Results
Moss American - 8716 North Granville Road, Milwaukee, WI
Sigma Project No. 18687

Well ID	Date	In Situ Measurements						
		pH	Temperature (° C)	Ferrous Iron (mg/l)	Specific Conductance (mmhos/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/l)	Redox Potential (mV)
TG5-3	9/29/10	7.08	15.31	NA	1.051	4.50	1.04	-36.5
	4/3/13	7.10	6.40	1.4			1.00	-14.0
	9/27/19	7.13	12.2	1.2	1.633	19.9	1.5	315.2
TG6-1	9/29/10	6.86	16.71	NA	1.359	2.06	0.72	-110.7
	4/3/13	7.30	5.80	0.0			1.20	-107.0
	9/27/19	6.90	13.5	0.0	1.456	16.7	2.9	289.3
TG6-2	9/27/19	6.86	13.9	1.4	1.596	21.2	3.3	294.2
TG6-3	9/29/10	6.58	15.76	NA	1.330	1.15	1.33	-46.4
	4/3/13	7.30	3.80	4.2			1.40	-14.0
	9/27/19	7.34	14.4	0.0	0.628	80.8	0.9	283.9
PZ-01	10/8/19	6.98	13.4	0.0	1.578	389	3.2	263.1
PZ-02	9/29/10	NS	NS	NS			NS	NS
	4/4/13	7.00	6.00	4.0			1.00	-12.0
	10/3/19	6.80	13.5	3.0	1.616	33	3.45	278.4
PZ-03	9/29/10	NS	NS	NS			NS	NS
	4/4/13	7.20	6.80	4.0			0.95	-20.0
	10/8/19	6.93	16.5	3.4	2.028	172	2.84	342.6
PZ-04	9/27/19	7.01	12.6	1.2	1.567	853	1.6	247.2
PZ-05	10/7/19	7.60	14.9	1.2	1.260	122	2.2	292.3
PZ-06	10/8/19	7.08	12.3	0.0	1.658	55.1	2.1	253.2
PZ-07	10/8/19	OB	OB	OB	OB	OB	OB	OB
PZ-09R	10/3/19	6.98	13.5	5.0	1.393	352	2.8	325.0
PZ-10	9/29/10	NS	NS	NS			NS	NS
	4/4/13	7.20	5.80	7.0			1.40	-103.0
	10/8/19	7.11	16.1	4.8	1.137	550	2.31	325.1
MW-A	9/30/10	6.76	14.09	NA			0.43	-48.0
	4/5/13	7.30	5.80	4.0			1.70	173.0
	10/8/19	7.02	12.1	2.4	1.631	152	1.81	298.3
MW-B	9/27/10	6.87	13.58	NA			0.98	19.6
	4/5/13	7.30	4.70	1.0			1.40	27.0
	10/8/19	NS	NS	NS	NS	NS	NS	NS
MW-C	9/27/10	7.01	12.83	NA			1.28	-53.5
	4/5/13	7.30	6.90	2.0			1.20	-31.0
	10/8/19	NS	NS	NS	NS	NS	NS	NS
MW-D	9/27/10	6.71	13.82	NA			1.64	-87.6
	4/5/13	7.40	5.70	4.0			1.80	75.0
	10/8/19	NS	NS	NS	NS	NS	NS	NS

Table 3
Groundwater *In Situ* Results
Moss American - 8716 North Granville Road, Milwaukee, WI
Sigma Project No. 18687

Well ID	Date	In Situ Measurements						
		pH	Temperature (° C)	Ferrous Iron (mg/l)	Specific Conductance (mmhos/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/l)	Redox Potential (mV)
MW-E	9/30/10	7.16	12.57	NA			NA	NA
	4/5/13	7.50	7.50	0.0			1.10	-10.0
	10/8/19	NS	NS	NS	NS	NS	NS	NS
MW-F	9/30/10	7.04	13.59	NA			2.57	85.4
	4/5/13	7.40	8.20	3.6			1.24	-60.0
	10/8/19	NS	NS	NS	NS	NS	NS	NS
MW-G	9/30/10	6.85	14.32	NA			2.25	83.9
	4/5/13	7.20	7.30	0.0			3.00	-10.0
	10/8/19	NS	NS	NS	NS	NS	NS	NS
MW-H	9/28/10	7.05	13.13	NA			1.47	8.4
	4/5/13	7.30	7.30	4.0			1.60	-30.0
	10/8/19	NS	NS	NS	NS	NS	NS	NS
MW-I	9/28/10	7.08	15.07	NA			1.50	-52.4
	4/5/13	7.70	4.80	0.0			3.10	-40.0
	10/8/19	NS	NS	NS	NS	NS	NS	NS
MW-J	9/28/10	7.14	11.69	NA			2.16	1.1
	4/5/13	7.30	7.30	0.0			2.90	46.0
	10/8/19	NS	NS	NS	NS	NS	NS	NS
MW-K	9/28/10	7.03	16.82	NA			2.03	108.4
	4/5/13	NS	NS	NS			NS	NS
	10/8/19	NS	NS	NS	NS	NS	NS	NS

Notes:
1. C = degrees Celsius
2. mg/l = milligrams per liter (equivalent to parts per million, ppm)
3. mmhos/cm = millimhos/centimeter
4. NTU = Nephelometric Turbidity Unit
5. mV = millivolts
6. NA = Sample was not analyzed
6. NS = Well was not sampled (either due to obstruction, or not included in the program or could not be located.)
7. OB = Well was obstructed
8. NI = Well was not installed

Table 4
Groundwater Analytical Results
Former Moss American Facility
Sigma Project No. 18687

Well Location:		EPA ROD ES	EPA ROD PAL	NR 140 ES	NR 140 PAL	MW-5S			MW-7S			MW-7S DUP	MW-7S-W	MW-7S-WR	MW-9S			MW-27S			MW-30S		
Date:						9/27/10	4/4/13	10/9/19	9/28/10	4/4/13	10/9/19	10/9/19	4/5/13	10/4/19	9/30/10	4/4/13	10/2/19	9/27/10	4/4/13	10/7/19	9/28/10	4/4/13	10/9/19
BTEX																							
Benzene	µg/L	0.67	0.067	5	0.5	<0.2	<0.27	< 0.22	**0.9 J**	0.36 J	< 0.22	< 0.22	<0.27	< 0.22	<0.2	<0.27	< 0.22	<0.2	<0.27	obstructed	<0.2	<0.27	< 0.22
Ethylbenzene	µg/L	1360.0	272.0	700	140	<0.2	<0.82	< 0.26	0.3 J	<0.82	< 0.26	< 0.26	<0.82	< 0.26	<0.2	<0.82	< 0.26	<0.2	<0.82		<0.2	<0.82	< 0.26
Xylenes, Total	µg/L	620.0	124.0	10,000	1,000	<0.6	<2.41	< 0.72	1.8 J	1.7 J	< 0.72	< 0.72	1.56 J	< 0.72	<0.6	<2.41	< 0.72	<0.6	<2.41		<0.6	<2.41	< 0.72
Toluene	µg/L	343.0	68.6	1,000	200	<0.2	<0.8	< 0.19	<0.2	<0.8	< 0.19	< 0.19	<0.8	< 0.19	<0.2	<0.8	< 0.19	<0.2	<0.8		<0.2	<0.8	< 0.19
PAHs																							
Acenaphthene	µg/L	NS	NS	NS	NS	<0.51	<0.021	< 0.0094	8.3	5	2.18	NT	291	3.30	<0.52	0.028 J	< 0.0094	<0.52	0.113		<0.53	<0.021	< 0.0094
Acenaphthylene	µg/L	NS	NS	NS	NS	<1	<0.02	< 0.0156	<8.2	0.17	0.067	NT	2.45 J	0.106	<1	<0.02	< 0.0156	<1	0.022 J		<1.1	<0.02	< 0.0156
Anthracene	µg/L	NS	NS	3,000	600	<0.02	0.030 J	0.0192 J	<0.022	0.138	0.136	NT	183	0.223	<0.021	0.048 J	0.0198 J	<0.021	0.14		<0.021	0.113	0.134
Benzo(a)anthracene	µg/L	NS	NS	NS	NS	<0.01	<0.025	< 0.0131	<0.011	<0.025	0.0256 J	NT	<2.5	0.0255 J	<0.01	0.025	< 0.0131	<0.01	<0.025		<0.011	<0.025	0.0174 J
Benzo(a)pyrene	µg/L	NS	NS	0.2	0.02	<0.01	<0.018	< 0.0167	<0.011	<0.018	< 0.0167	NT	<1.8	< 0.0167	<0.01	<0.018	< 0.0167	<0.01	<0.018		<0.011	<0.018	< 0.0167
Benzo(b)fluoranthene	µg/L	NS	NS	0.2	0.02	<0.0081	<0.02	< 0.016	<0.0086	<0.02	< 0.016	NT	<2	< 0.016	<0.0084	<0.02	< 0.016	<0.0084	<0.02		<0.0084	<0.02	< 0.016
Benzo(ghi)perylene	µg/L	NS	NS	NS	NS	<0.061	<0.023	< 0.0142	<0.065	<0.023	< 0.0142	NT	<2.3	< 0.0142	<0.063	<0.023	< 0.0142	<0.063	<0.023		<0.063	<0.023	< 0.0142
Benzo(k)fluoranthene	µg/L	NS	NS	NS	NS	<0.0081	<0.027	< 0.0146	<0.0083	<0.027	< 0.0146	NT	<2.7	< 0.0146	<0.0084	<0.027	< 0.0146	<0.0084	<0.027		<0.0084	<0.027	< 0.0146
Chrysene	µg/L	NS	NS	0.2	0.02	<0.061	<0.018	< 0.0157	<0.065	<0.018	< 0.0157	NT	<1.8	0.0163 J	<0.063	<0.018	< 0.0157	<0.063	<0.018		<0.063	<0.018	< 0.0157
Dibenzo(a,h)anthracene	µg/L	NS	NS	NS	NS	<0.02	<0.023	< 0.0173	<0.022	<0.023	< 0.0173	NT	<2.3	< 0.0173	<0.021	<0.023	< 0.0173	<0.021	<0.023		<0.021	<0.023	< 0.0173
Fluoranthene	µg/L	NS	NS	400	80	<0.02	<0.026	< 0.0088	<0.022	<0.026	0.029	NT	14.4	0.76	<0.021	<0.026	< 0.0088	<0.021	0.037 J		<0.021	<0.026	0.01 J
Fluorene	µg/L	NS	NS	400	80	<0.1	<0.02	< 0.0079	1.5	0.83	0.43	NT	*162*	0.014 J	<0.1	0.029 J	< 0.0079	<0.1	0.075		<0.11	<0.02	0.0144 J
Indeno(1,2,3-cd)pyrene	µg/L	NS	NS	NS	NS	<0.04	<0.027	< 0.0121	<0.043	<0.027	< 0.0121	NT	<2.7	< 0.0121	<0.042	<0.027	< 0.0121	<0.042	<0.027		<0.042	<0.027	< 0.0121
Naphthalene	µg/L	NS	NS	100	10	<1	0.025 J	0.086	1.6 J	0.43	0.112	NT	*64*	< 0.026	<1	0.38	< 0.026	<1	2.34		<1.1	0.024 J	0.047 J
Phenanthrene	µg/L	NS	NS	NS	NS	<0.04	<0.018	< 0.0143	<0.043	0.034 J	0.0278 J	NT	177	0.0307 J	<0.042	0.044 J	< 0.0143	0.073 J	0.106		0.046 J	0.029 J	< 0.0143
Pyrene	µg/L	NS	NS	250	50	<0.1	<0.025	< 0.0121	<0.11	<0.025	0.0236 J	NT	7.5 J	0.52	<0.1	<0.025	< 0.0121	<0.1	0.029 J		<0.11	<0.025	0.0158 J

Notes:

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4. NR 140 PAL = Wisconsin Administrative Code, Chapter NR 140 Preventive Action Limit
5. NS = no standard
6. µg/L = micrograms per liter (equivalent to parts per billion, ppb)
7. Laboratory flags: "J" = Analyte detected between Limit of Detection and Limit of Quantitation
8. NT = not tested
9. Exceedances:
   - **BOLD** = Concentration exceeds NR 140 ES
   - *ITALICS* = Concentration exceeds NR 140 PAL
   - **BOLD** = Concentration exceeds EPA ROD ES
   - *ITALICS* = Concentration exceeds EPA ROD PAL

QA/QC sample
DUPLICATE 4
submitted

Table 4
Groundwater Analytical Results
Former Moss American Facility
Sigma Project No. 18687

Well Location:		EPA ROD ES	EPA ROD PAL	NR 140 ES	NR 140 PAL	MW-31S	MW-31SR	MW-32S		MW-32SR	MW-33S			MW-34S		MW-34SR	MW-34SR DUP	MW-34S-N		MW-35S	
Date:						9/29/10	10/3/19	9/27/10	4/4/13	10/4/19	9/28/10	4/4/13	10/4/19	9/28/10	4/4/13	10/9/19	10/9/19	4/5/13	10/9/19	9/28/10	10/7/19
BTEX																					
Benzene	µg/L	0.67	0.067	5	0.5	<0.2	< 0.22	<0.2	<0.27	< 0.22	<0.2	<0.27	< 0.22	**6.2**	**7**	< 0.22	< 0.22	<0.27	< 0.22	<0.2	< 0.22
Ethylbenzene	µg/L	1360.0	272.0	700	140	<0.2	< 0.26	<0.2	<0.82	< 0.26	0.5 J	<0.82	< 0.26	26	28.4	< 0.26	< 0.26	<0.82	< 0.26	<0.2	< 0.26
Xylenes, Total	µg/L	620.0	124.0	10,000	1,000	<0.6	< 0.72	<0.6	<2.41	< 0.72	3.1	<2.41	< 0.72	49	49.2	< 0.72	< 0.72	<2.41	< 0.72	<0.6	< 0.72
Toluene	µg/L	343.0	68.6	1,000	200	<0.2	< 0.19	<0.2	<0.8	< 0.19	0.3 J	<0.8	< 0.19	1.1	1.39 J	< 0.19	< 0.19	<0.8	< 0.19	<0.2	< 0.19
PAHs																					
Acenaphthene	µg/L	NS	NS	NS	NS	<0.52	< 0.0094	<054	<0.021	0.67	100	0.66	0.12	2100	410	2.39	NT	0.059 J	0.0137 J	0.6 J	2.68
Acenaphthylene	µg/L	NS	NS	NS	NS	<1	< 0.0156	<1.1	<0.02	< 0.0468	<1	<0.02	< 0.0156	<200	<20	0.048 J	NT	<0.02	< 0.0156	<1.1	0.034 J
Anthracene	µg/L	NS	NS	3,000	600	<0.021	< 0.015	<0.022	0.057 J	0.136 J	0.62	0.132	0.158	450	88	0.271	NT	0.023 J	0.0163 J	<0.022	0.16
Benzo(a)anthracene	µg/L	NS	NS	NS	NS	<0.01	0.0199 J	<0.011	<0.025	< 0.0393	<0.01	<0.025	< 0.0131	310	54 J	0.033 J	NT	<0.025	0.0243 J	0.017 J	0.087
Benzo(a)pyrene	µg/L	NS	NS	0.2	0.02	<0.01	< 0.0167	<0.011	<0.018	< 0.0501	<0.01	<0.018	< 0.0167	**120**	<18	< 0.0167	NT	<0.018	< 0.0167	<0.011	*0.0241 J*
Benzo(b)fluoranthene	µg/L	NS	NS	0.2	0.02	<0.0084	< 0.016	<0.0086	<0.02	< 0.048	<0.0081	<0.02	< 0.016	**100**	**26.1 J**	< 0.016	NT	<0.02	*0.0231 J*	<0.0089	*0.048 J*
Benzo(ghi)perylene	µg/L	NS	NS	NS	NS	<0.063	< 0.0142	<0.065	<0.023	< 0.0426	<0.061	<0.023	< 0.0142	<61	<23	< 0.0142	NT	<0.023	< 0.0142	<0.067	0.0164 J
Benzo(k)fluoranthene	µg/L	NS	NS	NS	NS	<0.0084	< 0.0146	<0.0086	<0.027	< 0.0438	<0.0081	<0.027	< 0.0146	59	<27	< 0.0146	NT	<0.027	< 0.0146	<0.0089	0.0178 J
Chrysene	µg/L	NS	NS	0.2	0.02	<0.063	< 0.0157	<0.065	<0.018	< 0.0471	<0.061	<0.018	< 0.0157	**340**	**50 J**	*0.0244 J*	NT	<0.018	< 0.0157	<0.067	*0.055*
Dibenzo(a,h)anthracene	µg/L	NS	NS	NS	NS	<0.021	< 0.0173	<0.022	<0.023	< 0.0519	<0.02	<0.023	< 0.0173	<23	<23	< 0.0173	NT	<0.023	< 0.0173	<0.022	< 0.0173
Fluoranthene	µg/L	NS	NS	400	80	<0.021	< 0.0088	<0.022	<0.026	0.096	0.028 J	<0.026	< 0.0088	**1800**	*320*	0.44	NT	<0.026	0.028 J	0.5	0.62
Fluorene	µg/L	NS	NS	400	80	<0.1	< 0.0079	<0.11	<0.02	< 0.0237	49	0.251	0.045	**1700**	*330*	1.56	NT	0.034 J	< 0.0079	0.12 J	0.279
Indeno(1,2,3-cd)pyrene	µg/L	NS	NS	NS	NS	<0.042	< 0.0121	<0.043	<0.027	< 0.0363	<0.04	<0.027	< 0.0121	<49	<27	< 0.0121	NT	<0.027	< 0.0121	<0.045	< 0.0121
Naphthalene	µg/L	NS	NS	100	10	<1	< 0.026	<1.1	0.249	< 0.078	*100*	0.201	0.23	**11000**	**4100**	0.304	NT	0.053 J	0.0308 J	<1.1	0.219
Phenanthrene	µg/L	NS	NS	NS	NS	<0.042	0.0177 J	<0.043	0.022 J	0.046 J	15	0.08	0.0201 J	4600	800	0.55	NT	0.057 J	0.0171 J	0.053 J	0.0232 J
Pyrene	µg/L	NS	NS	250	50	<0.1	< 0.0121	<0.11	<0.025	0.054 J	<0.1	<0.025	< 0.0121	**1400**	*222*	0.267	NT	<0.025	0.0231 J	0.36 J	0.42

Notes:

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4. NR 140 PAL = Wisconsin Administrative Code, Chapter NR 140 Preventive Action Limit
5. NS = no standard
6. µg/L = micrograms per liter (equivalent to parts per billion, ppb)
7. Laboratory flags: "J" = Analyte detected between Limit of Detection and Limit of Quantitation
8. NT = not tested
9. Exceedances:
   - **BOLD** = Concentration exceeds NR 140 ES
   - *ITALICS* = Concentration exceeds NR 140 PAL
   - **BOLD** = Concentration exceeds EPA ROD ES
   - *ITALICS* = Concentration exceeds EPA ROD PAL

QA/QC sample
DUPLICATE 3
submitted

Table 4
Groundwater Analytical Results
Former Moss American Facility
Sigma Project No. 18687

Well Location:		EPA ROD ES	EPA ROD PAL	NR 140 ES	NR 140 PAL	MW-37S			MW-38S			MW-39S			TG1-1		TG1-1R	TG1-1R DUP	TG1-2	TG1-3		
Date:						9/29/10	4/4/13	10/7/19	9/28/10	4/4/13	10/9/19	9/28/10	4/4/13	10/9/19	9/29/10	4/3/13	10/4/19	10/4/19	10/4/19	9/29/10	4/3/13	10/4/19
BTEX																						
Benzene	µg/L	0.67	0.067	5	0.5	<0.2	<0.27	< 0.22	**1.9**	**0.96**	< 0.22	<0.2	<0.27	< 0.22	*0.3 J*	<0.27	< 0.22	< 0.22	< 0.22	<0.2	<0.27	< 0.22
Ethylbenzene	µg/L	1360.0	272.0	700	140	<0.2	<0.82	< 0.26	0.9 J	1.4 J	< 0.26	<0.2	<0.82	< 0.26	30	18.4	< 0.26	< 0.26	< 0.26	<0.2	<0.82	< 0.26
Xylenes, Total	µg/L	620.0	124.0	10,000	1,000	<0.6	<2.41	< 0.72	0.9 J	1.41 J	< 0.72	<0.6	<2.41	< 0.72	55	31.3	< 0.72	< 0.72	< 0.72	<0.6	<2.41	< 0.72
Toluene	µg/L	343.0	68.6	1,000	200	<0.2	<0.8	< 0.19	<0.2	<0.8	< 0.19	<0.2	<0.8	< 0.19	<0.2	<0.8	< 0.19	< 0.19	< 0.19	<0.2	<0.8	< 0.19
PAHs																						
Acenaphthene	µg/L	NS	NS	NS	NS	<0.52	0.025 J	0.0259 J	4	4.2	0.70	3.3	5.8	13.9	90000	262	0.167	NT	12.1	2.9	1.77	1.16
Acenaphthylene	µg/L	NS	NS	NS	NS	<1	<0.02	< 0.0156	<3.2	0.153	0.0242 J	<13	0.127	0.062 J	4000 J	<10	< 0.0156	NT	0.065 J	<1	<0.02	< 0.0156
Anthracene	µg/L	NS	NS	3,000	600	<0.021	<0.02	0.0249 J	<0.022	0.263	0.10	0.13	0.136	0.101	**20,000**	23.6 J	0.0312 J	NT	0.229	0.12	0.113	0.063
Benzo(a)anthracene	µg/L	NS	NS	NS	NS	<0.01	<0.025	0.0168 J	<0.011	0.039 J	0.0166 J	<0.011	0.069 J	0.036 J	14000	<12.5	0.0198 J	NT	0.077 J	<0.01	0.025 J	0.0154 J
Benzo(a)pyrene	µg/L	NS	NS	0.2	0.02	*0.027 J*	<0.018	< 0.0167	<0.011	*0.032 J*	< 0.0167	<0.044	*0.027 J*	< 0.0334	**7300**	<9	< 0.0167	NT	< 0.0334	<0.01	<0.018	< 0.0167
Benzo(b)fluoranthene	µg/L	NS	NS	0.2	0.02	0.014 J	<0.02	< 0.016	<0.0089	*0.079*	< 0.016	<0.0085	*0.057 J*	< 0.032	**4900**	<10	*0.0213 J*	NT	*0.035 J*	<0.0083	<0.02	< 0.016
Benzo(ghi)perylene	µg/L	NS	NS	NS	NS	0.08 J	<0.023	< 0.0142	<0.067	0.077	< 0.0142	<0.063	<0.023	< 0.0284	3000	<11.5	0.0201 J	NT	< 0.0284	<0.062	<0.023	< 0.0142
Benzo(k)fluoranthene	µg/L	NS	NS	NS	NS	0.01 J	<0.027	< 0.0146	<0.0089	<0.027	< 0.0146	<0.0085	<0.027	< 0.0292	2900	<13.5	0.0175 J	NT	< 0.0292	<0.0083	<0.027	< 0.0146
Chrysene	µg/L	NS	NS	0.2	0.02	<0.062	<0.018	< 0.0157	<0.067	*0.052 J*	< 0.0157	<0.063	*0.054 J*	< 0.0314	**14000**	<9	< 0.0157	NT	*0.052 J*	<0.062	<0.018	< 0.0157
Dibenzo(a,h)anthracene	µg/L	NS	NS	NS	NS	<0.021	<0.023	< 0.0173	<0.022	<0.023	< 0.0173	<0.021	<0.023	< 0.0346	1200	<11.5	< 0.0173	NT	< 0.0346	<0.021	<0.023	< 0.0173
Fluoranthene	µg/L	NS	NS	400	80	<0.021	<0.026	< 0.0088	<0.22	0.103	< 0.0088	0.19	0.32	0.064	**82000**	28.1 J	0.087	NT	0.87	27	0.155	0.097
Fluorene	µg/L	NS	NS	400	80	<0.1	0.028 J	0.0146 J	<0.11	0.152	0.017 J	1.1	0.73	0.70	**75000**	*135*	0.0214 J	NT	2.31	1.4	0.259	0.051
Indeno(1,2,3-cd)pyrene	µg/L	NS	NS	NS	NS	<0.041	<0.027	< 0.0121	<0.044	0.04 J	< 0.0121	<0.042	<0.027	< 0.0242	2600	<13.5	0.0197 J	NT	< 0.0242	<0.041	<0.027	< 0.0121
Naphthalene	µg/L	NS	NS	100	10	<1	0.36	0.286	*67*	8.1	0.04 J	<1.1	0.211	0.103 J	**110000**	**1950**	< 0.026	NT	< 0.052	<1	0.024 J	< 0.026
Phenanthrene	µg/L	NS	NS	NS	NS	<0.041	0.037 J	< 0.0143	<0.044	0.15	0.0169 J	0.056 J	0.252	< 0.0286	200000	113	< 0.0143	NT	0.097	0.59	0.035 J	< 0.0143
Pyrene	µg/L	NS	NS	250	50	<0.1	<0.025	< 0.0121	<0.11	0.092	< 0.0121	0.15 J	0.216	0.046 J	**57000**	17.7 J	0.102	NT	0.52	0.16 J	0.104	0.058

Notes:

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8. NT = not tested
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   - **BOLD** = Concentration exceeds NR 140 ES
   - *ITALICS* = Concentration exceeds NR 140 PAL
   - **BOLD** = Concentration exceeds EPA ROD ES
   - *ITALICS* = Concentration exceeds EPA ROD PAL

QA/QC
sample
DUPLICATE
1 submitted

Table 4
Groundwater Analytical Results
Former Moss American Facility
Sigma Project No. 18687

Well Location:		EPA ROD ES	EPA ROD PAL	NR 140 ES	NR 140 PAL	TG2-1			TG2-2	TG2-3		TG3-1			TG3-2	TG3-3		TG4-1		TG4-2	TG4-3		
Date:						9/29/10	4/3/13	10/3/19	10/3/19	9/29/10	10/3/19	9/29/10	4/3/13	10/3/19	10/3/19	9/29/10	10/3/19	9/29/10	10/8/19	10/8/19	9/29/10	4/3/13	10/8/19
BTEX																							
Benzene	µg/L	0.67	0.067	5	0.5	<0.2	<0.27	< 0.22	< 0.22	<0.2	< 0.22	<0.2	<0.27	< 0.22	< 0.22	<0.2	< 0.22	<0.2	< 0.22	< 0.22	<0.2	<0.27	< 0.22
Ethylbenzene	µg/L	1360.0	272.0	700	140	<0.2	<0.82	< 0.26	< 0.26	<0.2	< 0.26	<0.2	<0.82	< 0.26	< 0.26	<0.2	< 0.26	<0.2	< 0.26	< 0.26	<0.2	<0.82	< 0.26
Xylenes, Total	µg/L	620.0	124.0	10,000	1,000	<0.6	<2.41	< 0.72	< 0.72	<0.6	< 0.72	<0.6	<2.41	< 0.72	< 0.72	<0.6	< 0.72	<0.6	< 0.72	< 0.72	<0.6	<2.41	< 0.72
Toluene	µg/L	343.0	68.6	1,000	200	<0.2	<0.8	< 0.19	< 0.19	<0.2	< 0.19	<0.2	<0.8	< 0.19	< 0.19	<0.2	< 0.19	<0.2	< 0.19	< 0.19	<0.2	<0.8	< 0.19
PAHs																							
Acenaphthene	µg/L	NS	NS	NS	NS	<0.58	<0.021	< 0.0094	0.047	<0.55	< 0.0094	<0.54	0.099	0.189	0.087	<0.52	0.27	<0.54	< 0.0094	0.252	<0.52	<0.021	< 0.0094
Acenaphthylene	µg/L	NS	NS	NS	NS	<1.2	<0.02	< 0.0156	0.097	<1.1	< 0.0156	<1.1	0.056 J	< 0.0156	0.0252 J	<1	0.038 J	<1.1	< 0.0156	< 0.0156	<1	0.021 J	< 0.0156
Anthracene	µg/L	NS	NS	3,000	600	<0.023	0.035 J	0.022 J	0.285	<0.022	0.032 J	<0.022	0.189	0.106	0.116	0.023 J	0.196	<0.022	0.091	0.144	<0.021	0.127	0.12
Benzo(a)anthracene	µg/L	NS	NS	NS	NS	<0.012	<0.025	< 0.0131	0.115	<0.011	0.0205 J	<0.011	0.076 J	0.032 J	0.04 J	<0.01	0.062	<0.011	0.0139 J	0.0289 J	<0.01	0.033 J	0.0208 J
Benzo(a)pyrene	µg/L	NS	NS	0.2	0.02	<0.012	<0.018	< 0.0167	*0.114*	<0.011	< 0.0167	<0.011	*0.04 J*	< 0.0167	*0.0246 J*	<0.01	*0.039 J*	<0.011	< 0.0167	< 0.0167	<0.01	*0.024 J*	< 0.0167
Benzo(b)fluoranthene	µg/L	NS	NS	0.2	0.02	<0.0093	<0.02	< 0.016	**0.315**	<0.0088	*0.0273 J*	<0.0087	*0.073*	*0.0228 J*	*0.07*	<0.0083	*0.108*	<0.0086	< 0.016	0.0196 J	<0.0084	*0.044 J*	< 0.016
Benzo(ghi)perylene	µg/L	NS	NS	NS	NS	<0.069	<0.023	< 0.0142	0.225	<0.066	< 0.0142	<0.065	0.065 J	< 0.0142	0.049	<0.062	0.072	<0.065	< 0.0142	< 0.0142	<0.063	0.042 J	0.0152 J
Benzo(k)fluoranthene	µg/L	NS	NS	NS	NS	<0.0093	<0.027	< 0.0146	0.08	<0.0088	0.0207 J	<0.0087	0.029 J	0.0169 J	0.0261 J	<0.0083	0.036 J	<0.0086	< 0.0146	< 0.0146	<0.0084	<0.027	< 0.0146
Chrysene	µg/L	NS	NS	0.2	0.02	<0.069	<0.018	< 0.0157	*0.137*	<0.066	< 0.0157	<0.065	*0.061*	*0.0236 J*	*0.034 J*	<0.062	*0.066*	<0.065	< 0.0157	0.0159 J	<0.063	*0.023 J*	< 0.0157
Dibenzo(a,h)anthracene	µg/L	NS	NS	NS	NS	<0.023	<0.023	< 0.0173	0.039 J	<0.022	< 0.0173	<0.022	<0.023	< 0.0173	< 0.0173	<0.021	< 0.0173	<0.022	< 0.0173	< 0.0173	<0.021	<0.023	< 0.0173
Fluoranthene	µg/L	NS	NS	400	80	<0.023	<0.026	< 0.0088	0.279	0.026 J	0.0177 J	0.062 J	0.244	0.05	0.077	0.061 J	0.222	<0.022	< 0.0088	0.169	<0.021	0.083 J	0.025 J
Fluorene	µg/L	NS	NS	400	80	<0.12	<0.02	< 0.0079	0.0263	<0.11	< 0.0079	0.12 J	0.068	0.026	0.0139 J	0.15 J	0.05	<0.11	< 0.0079	< 0.0079	<0.1	<0.02	< 0.0079
Indeno(1,2,3-cd)pyrene	µg/L	NS	NS	NS	NS	<0.046	<0.027	< 0.0121	0.138	<0.044	< 0.0121	<0.044	0.044 J	< 0.0121	0.031 J	<0.042	0.042	<0.043	< 0.0121	< 0.0121	<0.042	<0.027	< 0.0121
Naphthalene	µg/L	NS	NS	100	10	<1.2	<0.023	< 0.026	< 0.026	<1.1	< 0.026	<1.1	0.024 J	< 0.026	< 0.026	<1	< 0.026	<1.1	0.032 J	0.036 J	<1	<0.023	0.048 J
Phenanthrene	µg/L	NS	NS	NS	NS	<0.046	<0.018	< 0.0143	0.069	<0.044	< 0.0143	<0.044	0.069	0.0298 J	0.0246 J	0.1 J	0.155	<0.043	< 0.0143	0.0166 J	<0.042	0.037 J	< 0.0143
Pyrene	µg/L	NS	NS	250	50	<0.12	<0.025	< 0.0121	0.262	<0.11	0.0156 J	<0.11	0.199	0.036 J	0.069	<0.1	0.178	<0.11	< 0.0121	0.123	<0.1	0.071 J	0.0245 J

Notes:
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4. NR 140 PAL = Wisconsin Administrative Code, Chapter NR 140 Preventive Action Limit
5. NS = no standard
6. µg/L = micrograms per liter (equivalent to parts per billion, ppb)
7. Laboratory flags: "J" = Analyte detected between Limit of Detection and Limit of Quantitation
8. NT = not tested
9. Exceedances:
   - **BOLD** = Concentration exceeds NR 140 ES
   - *ITALICS* = Concentration exceeds NR 140 PAL
   - **BOLD** = Concentration exceeds EPA ROD ES
   - *ITALICS* = Concentration exceeds EPA ROD PAL

Table 4
Groundwater Analytical Results
Former Moss American Facility
Sigma Project No. 18687

Well Location:		EPA ROD ES	EPA ROD PAL	NR 140 ES	NR 140 PAL	TG5-1			TG5-2	TG5-3			TG6-1			TG6-2	TG6-3			PZ-01	PZ-02	
Date:						9/29/10	4/3/13	10/2/19	10/7/19	9/29/10	4/3/13	10/2/19	9/29/10	4/3/13	10/3/19	10/3/19	9/29/10	4/3/13	10/3/19	10/3/19	4/4/13	10/4/19
BTEX																						
Benzene	µg/L	0.67	0.067	5	0.5	<0.2	<0.27	< 0.22	< 0.22	<0.2	<0.27	< 0.22	<0.2	<0.27	< 0.22	< 0.22	<0.2	<0.27	< 0.22	< 0.22	<0.27	< 0.22
Ethylbenzene	µg/L	1360.0	272.0	700	140	<0.2	<0.82	< 0.26	< 0.26	<0.2	<0.82	< 0.26	<0.2	<0.82	< 0.26	< 0.26	<0.2	<0.82	< 0.26	< 0.26	<0.82	< 0.26
Xylenes, Total	µg/L	620.0	124.0	10,000	1,000	<0.6	<2.41	< 0.72	< 0.72	<0.6	<2.41	< 0.72	<0.6	<2.41	< 0.72	< 0.72	<0.6	<2.41	< 0.72	< 0.72	<2.41	1.13 J
Toluene	µg/L	343.0	68.6	1,000	200	<0.2	<0.8	< 0.19	< 0.19	<0.2	<0.8	< 0.19	<0.2	<0.8	< 0.19	< 0.19	<0.2	<0.8	< 0.19	< 0.19	<0.8	< 0.19
PAHs																						
Acenaphthene	µg/L	NS	NS	NS	NS	<0.52	<0.021	< 0.0094	0.036	<0.52	<0.021	< 0.0094	0.63 J	0.232	0.277	0.0108 J	<0.52	<0.021	< 0.0094	< 0.0094	79	108
Acenaphthylene	µg/L	NS	NS	NS	NS	<1	<0.02	< 0.0156	0.17	<1	<0.02	< 0.0156	<1.1	<0.02	< 0.0156	< 0.0156	<1	<0.02	< 0.0156	< 0.0156	1.01 J	1.00
Anthracene	µg/L	NS	NS	3,000	600	<0.021	0.054 J	0.038 J	0.32	<0.021	0.087	0.046 J	0.023 J	0.031 J	0.0204 J	0.041 J	<0.021	0.042 J	0.019 J	< 0.015	<0.4	< 0.3
Benzo(a)anthracene	µg/L	NS	NS	NS	NS	<0.01	<0.025	0.074	0.082	<0.01	<0.025	0.0239 J	<0.011	<0.025	0.0261 J	0.044	<0.01	<0.025	0.0145 J	0.0181 J	<0.5	< 0.262
Benzo(a)pyrene	µg/L	NS	NS	0.2	0.02	<0.01	<0.018	< 0.0167	*0.166*	<0.01	<0.018	< 0.0167	<0.011	<0.018	< 0.0167	< 0.0167	<0.01	<0.018	< 0.0167	< 0.0167	<0.36	< 0.334
Benzo(b)fluoranthene	µg/L	NS	NS	0.2	0.02	<0.0084	<0.02	*0.056*	**0.217**	<0.0083	<0.02	0.0187 J	<0.0091	<0.02	0.0192 J	*0.037 J*	<0.0084	<0.02	< 0.016	< 0.016	<0.4	< 0.32
Benzo(ghi)perylene	µg/L	NS	NS	NS	NS	<0.063	<0.023	0.034 J	0.288	<0.062	<0.023	< 0.0142	<0.068	<0.023	0.0195 J	< 0.0142	<0.063	<0.023	< 0.0142	< 0.0142	<0.46	< 0.284
Benzo(k)fluoranthene	µg/L	NS	NS	NS	NS	<0.0084	<0.027	0.051	0.06	<0.0083	<0.027	< 0.0146	<0.0091	<0.07	0.0157 J	< 0.0146	<0.0084	<0.027	< 0.0146	< 0.0146	<0.54	< 0.292
Chrysene	µg/L	NS	NS	0.2	0.02	<0.063	<0.018	*0.065*	*0.074*	<0.062	<0.018	< 0.0157	<0.068	<0.018	0.018 J	*0.0301 J*	<0.063	<0.018	< 0.0157	< 0.0157	<0.36	< 0.314
Dibenzo(a,h)anthracene	µg/L	NS	NS	NS	NS	<0.021	<0.023	0.0265 J	0.057	<0.021	<0.023	< 0.0173	<0.023	<0.023	< 0.0173	< 0.0173	<0.021	<0.023	< 0.0173	< 0.0173	<0.46	< 0.346
Fluoranthene	µg/L	NS	NS	400	80	<0.021	<0.026	0.051	0.218	0.051 J	0.096	0.0176 J	0.047 J	0.069 J	0.0286	0.18	0.083 J	0.069 J	0.036	0.0133 J	<0.52	< 0.176
Fluorene	µg/L	NS	NS	400	80	<0.1	<0.02	< 0.0079	< 0.0079	<0.1	<0.02	< 0.0079	0.22 J	0.048 J	0.0278	< 0.0079	<0.1	<0.02	< 0.0079	< 0.0079	3.6	29.8
Indeno(1,2,3-cd)pyrene	µg/L	NS	NS	NS	NS	<0.042	<0.027	0.0278 J	0.164	<0.041	<0.027	< 0.0121	<0.045	<0.027	0.0145 J	< 0.0121	<0.042	<0.027	< 0.0121	< 0.0121	<0.54	< 0.242
Naphthalene	µg/L	NS	NS	100	10	<1	<0.023	< 0.026	0.222	<1	<0.023	< 0.026	<1.1	<0.023	< 0.026	< 0.026	<1	<0.023	< 0.026	< 0.026	1.79	*19.4*
Phenanthrene	µg/L	NS	NS	NS	NS	<0.042	0.027 J	< 0.0143	0.0223 J	<0.041	0.027 J	< 0.0143	<0.045	0.025 J	< 0.0143	< 0.0143	<0.042	0.021 J	< 0.0143	< 0.0143	<0.36	< 0.286
Pyrene	µg/L	NS	NS	250	50	<0.1	<0.025	0.051	0.229	<0.1	0.103	0.0242 J	<0.11	0.055 J	0.0222 J	0.148	<0.1	0.052 J	0.026 J	0.0134 J	<0.5	< 0.242

Notes:

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6. µg/L = micrograms per liter (equivalent to parts per billion, ppb)
7. Laboratory flags: "J" = Analyte detected between Limit of Detection and Limit of Quantitation
8. NT = not tested
9. Exceedances:
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   - *ITALICS* = Concentration exceeds NR 140 PAL
   - **BOLD** = Concentration exceeds EPA ROD ES
   - *ITALICS* = Concentration exceeds EPA ROD PAL

Table 4
Groundwater Analytical Results
Former Moss American Facility
Sigma Project No. 18687

Well Location:		EPA ROD ES	EPA ROD PAL	NR 140 ES	NR 140 PAL	PZ-03		PZ-04	PZ-05	PZ-06	PZ-09R	PZ-09R DUP	PZ-10		MW-A			MW-B		MW-C		MW-D	
Date:						4/4/13	10/9/19	10/2/19	10/7/19	10/3/19	10/4/19	10/4/19	4/4/13	10/9/19	9/30/10	4/4/13	10/9/19	9/27/10	4/5/13	9/27/10	4/5/13	9/27/10	4/5/13
BTEX																							
Benzene	µg/L	0.67	0.067	5	0.5	*0.44 J*	**2.02**	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	<0.27	< 0.22	<0.2	<0.27	< 0.22	<0.2	<0.27	<0.2	<0.27	<0.2	<0.27
Ethylbenzene	µg/L	1360.0	272.0	700	140	2.68	10.7	< 0.26	< 0.26	< 0.26	< 0.26	< 0.26	<0.82	< 0.26	<0.2	<0.82	< 0.26	<0.2	<0.82	<0.2	<0.82	<0.2	<0.82
Xylenes, Total	µg/L	620.0	124.0	10,000	1,000	1.92 J	34.1	< 0.72	< 0.72	< 0.72	< 0.72	< 0.72	<2.41	< 0.72	<0.6	<2.41	< 0.72	<0.6	<2.41	<0.6	<2.41	<0.6	<2.41
Toluene	µg/L	343.0	68.6	1,000	200	<0.8	1.01	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	<0.8	< 0.19	<0.2	<0.8	< 0.19	<0.2	<0.8	<0.2	<0.8	<0.2	<0.8
PAHs																							
Acenaphthene	µg/L	NS	NS	NS	NS	116	154	< 0.0094	0.0115 J	< 0.0094	18.8	NT	5.2	2.95	<0.51	<0.021	0.037	<0.53	<0.021	<0.54	<0.021	<0.55	<0.021
Acenaphthylene	µg/L	NS	NS	NS	NS	0.99 J	< 4.68	< 0.0156	< 0.0156	< 0.0156	0.42	NT	0.095	0.071	<1	<0.02	< 0.0156	<1.1	<0.02	<1.1	<0.02	<1.1	<0.02
Anthracene	µg/L	NS	NS	3,000	600	2.37	< 4.5	0.0187 J	0.0155 J	0.0205 J	1.86	NT	0.31	0.236	<0.021	0.025 J	0.0231 J	<0.021	<0.02	<0.022	<0.02	<0.022	<0.02
Benzo(a)anthracene	µg/L	NS	NS	NS	NS	2.03	< 3.93	0.0166 J	0.037 J	0.0149 J	1.36	NT	0.128	0.075	<0.01	<0.025	0.0146 J	<0.011	<0.025	<0.011	<0.025	<0.011	<0.025
Benzo(a)pyrene	µg/L	NS	NS	0.2	0.02	**0.71 J**	< 5.01	< 0.0167	0.0177 J	< 0.0167	**0.36**	NT	*0.07*	*0.06*	<0.01	<0.018	< 0.0167	<0.011	<0.018	<0.0111	<0.018	<0.011	<0.018
Benzo(b)fluoranthene	µg/L	NS	NS	0.2	0.02	**1.45**	< 4.8	< 0.016	*0.035 J*	< 0.016	**0.85**	NT	*0.169*	*0.151*	<0.0082	<0.02	< 0.016	<0.0086	<0.02	<0.0087	*0.039 J*	<0.0088	<0.02
Benzo(ghi)perylene	µg/L	NS	NS	NS	NS	<0.46	< 4.26	< 0.0142	0.0176 J	< 0.0142	0.142 J	NT	0.108	0.14	<0.062	<0.023	< 0.0142	<0.064	<0.023	<0.065	0.026 J	<0.066	0.038 J
Benzo(k)fluoranthene	µg/L	NS	NS	NS	NS	<0.54	< 4.38	< 0.0146	< 0.0146	< 0.0146	0.306	NT	0.064 J	0.046 J	<0.0082	<0.027	< 0.0146	<0.0086	<0.027	<0.0087	<0.027	<0.0088	<0.027
Chrysene	µg/L	NS	NS	0.2	0.02	**1.47**	< 4.71	< 0.0157	*0.0262 J*	< 0.0157	**1.06**	NT	*0.132*	*0.083*	<0.062	<0.018	< 0.0157	<0.064	<0.018	<0.065	*0.028 J*	<0.066	*0.02 J*
Dibenzo(a,h)anthracene	µg/L	NS	NS	NS	NS	<0.46	< 5.19	< 0.0173	< 0.0173	< 0.0173	< 0.0865	NT	<0.023	< 0.0173	<0.021	<0.023	< 0.0173	<0.021	<0.023	<0.022	<0.023	<0.022	<0.023
Fluoranthene	µg/L	NS	NS	400	80	10.7	< 2.64	0.0138 J	0.031	< 0.0088	7.00	NT	0.41	0.179	<0.021	<0.026	< 0.0088	<0.021	<0.026	<0.022	0.052 J	<0.022	<0.026
Fluorene	µg/L	NS	NS	400	80	33	57.0	< 0.0079	< 0.0079	< 0.0079	11.1	NT	0.92	0.43	<0.1	<0.02	0.0125 J	<0.11	<0.02	<0.11	<0.02	<0.11	<0.02
Indeno(1,2,3-cd)pyrene	µg/L	NS	NS	NS	NS	<0.54	< 3.63	< 0.0121	< 0.0121	< 0.0121	0.099 J	NT	0.071 J	0.082	<0.041	<0.027	< 0.0121	<0.043	<0.027	<0.043	<0.027	<0.044	<0.027
Naphthalene	µg/L	NS	NS	100	10	*47*	**1620**	< 0.026	0.124	< 0.026	0.57	NT	0.32	2.71	<1	<0.023	0.74	<1.1	0.034 J	<1.1	<0.023	<1.1	<0.023
Phenanthrene	µg/L	NS	NS	NS	NS	1.87	11.0 J	0.026 J	0.018 J	< 0.0143	0.61	NT	1.36	0.072	<0.041	0.026 J	< 0.0143	<0.043	0.037 J	<0.043	0.044 J	<0.044	<0.018
Pyrene	µg/L	NS	NS	250	50	7.1	< 3.63	0.0189 J	0.029 J	< 0.0121	4.80	NT	0.299	0.154	<0.1	0.025	< 0.0121	<0.11	0.025	<0.11	0.046 J	<0.11	<0.025

Notes:

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6. µg/L = micrograms per liter (equivalent to parts per billion, ppb)
7. Laboratory flags: "J" = Analyte detected between Limit of Detection and Limit of Quantitation
8. NT = not tested
9. Exceedances:
   - **BOLD** = Concentration exceeds NR 140 ES
   - *ITALICS* = Concentration exceeds NR 140 PAL
   - **BOLD** = Concentration exceeds EPA ROD ES
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QA/QC sample
DUPLICATE 2
submitted

Table 4
Groundwater Analytical Results
Former Moss American Facility
Sigma Project No. 18687

Well Location:		EPA ROD ES	EPA ROD PAL	NR 140 ES	NR 140 PAL	MW-E		MW-F		MW-G		MW-H		MW-I		MW-J		MW-K
Date:						9/30/10	4/5/13	9/30/10	4/5/13	9/30/10	4/5/13	9/28/10	4/5/13	9/28/10	4/5/13	9/28/10	4/5/13	9/28/10
BTEX																		
Benzene	µg/L	0.67	0.067	5	0.5	<0.2	<0.27	<0.2	<0.27	<0.2	<0.27	<0.2	<0.27	<0.2	<0.27	<0.2	<0.27	<0.2
Ethylbenzene	µg/L	1360.0	272.0	700	140	<0.2	<0.82	<0.2	<0.82	<0.2	<0.82	<0.2	<0.82	<0.2	<0.82	<0.2	<0.82	<0.2
Xylenes, Total	µg/L	620.0	124.0	10,000	1,000	<0.6	<2.41	<0.6	<2.41	<0.6	<2.41	<0.6	<2.41	<0.6	<2.41	<0.6	<2.41	<0.6
Toluene	µg/L	343.0	68.6	1,000	200	<0.2	<0.8	<0.2	<0.8	<0.2	<0.8	<0.2	<0.8	<0.2	<0.8	<0.2	<0.8	<0.2
PAHs																		
Acenaphthene	µg/L	NS	NS	NS	NS	<0.56	<0.021	<0.51	<0.021	<0.51	<0.021	<0.52	<0.021	<0.52	<0.021	<0.54	<0.021	<0.53
Acenaphthylene	µg/L	NS	NS	NS	NS	<1.1	<0.02	<1	<0.02	<1	<0.02	<1	<0.02	<1	<0.02	<1.1	<0.02	<1.1
Anthracene	µg/L	NS	NS	3,000	600	<0.022	<0.02	<0.021	<0.02	<0.02	<0.02	<0.021	<0.02	<0.021	<0.02	<0.021	<0.02	0.022 J
Benzo(a)anthracene	µg/L	NS	NS	NS	NS	<0.011	<0.025	<0.01	0.03 J	<0.01	<0.025	<0.01	0.053 J	<0.01	0.055 J	<0.011	0.026 J	<0.011
Benzo(a)pyrene	µg/L	NS	NS	0.2	0.02	*0.02 J*	*0.038 J*	<0.01	*0.039 J*	<0.01	<0.018	<0.01	*0.049 J*	<0.01	*0.093*	<0.011	*0.025 J*	<0.011
Benzo(b)fluoranthene	µg/L	NS	NS	0.2	0.02	<0.009	*0.063*	<0.0082	*0.065*	<0.0082	<0.02	<0.0083	*0.107*	<0.0084	**0.222**	<0.0086	*0.055 J*	<0.0085
Benzo(ghi)perylene	µg/L	NS	NS	NS	NS	0.12 J	0.44	<0.062	0.188	<0.061	0.047 J	<0.062	0.107	<0.063	0.152	<0.064	0.054 J	<0.064
Benzo(k)fluoranthene	µg/L	NS	NS	NS	NS	<0.009	<0.027	<0.0082	<0.027	<0.0082	<0.027	<0.0083	<0.027	<0.0084	0.071 J	<0.0086	<0.027	<0.0085
Chrysene	µg/L	NS	NS	0.2	0.02	<0.067	<0.018	<0.062	*0.06*	<0.061	<0.018	<0.062	*0.082*	<0.063	*0.111*	<0.064	*0.038 J*	<0.064
Dibenzo(a,h)anthracene	µg/L	NS	NS	NS	NS	<0.022	<0.023	<0.021	<0.023	<0.02	<0.023	<0.021	<0.023	<0.021	<0.023	<0.021	<0.023	<0.021
Fluoranthene	µg/L	NS	NS	400	80	<0.022	<0.026	<0.021	0.087	<0.02	<0.026	<0.021	0.153	<0.021	0.196	<0.021	0.061 J	<0.021
Fluorene	µg/L	NS	NS	400	80	<0.11	<0.02	<0.1	<0.02	<0.1	<0.02	<0.1	<0.02	<0.1	<0.02	<0.11	<0.02	<0.11
Indeno(1,2,3-cd)pyrene	µg/L	NS	NS	NS	NS	<0.045	0.094	<0.041	0.04 J	<0.041	<0.027	<0.042	0.041 J	<0.042	0.093	<0.043	<0.027	<0.043
Naphthalene	µg/L	NS	NS	100	10	<1.1	<0.023	<1	0.027 J	<1	<0.023	<1	<0.023	<1	<0.023	<1.1	0.032 J	<1.1
Phenanthrene	µg/L	NS	NS	NS	NS	<0.045	0.018 J	<0.041	0.062	<0.041	0.02 J	<0.042	0.044 J	<0.042	0.087	<0.043	0.047 J	<0.043
Pyrene	µg/L	NS	NS	250	50	<0.11	0.034 J	<0.1	0.127	<0.1	0.033 J	<0.1	0.15	<0.1	0.16	<0.11	0.058 J	<0.11

Notes:

1. EPA ROD ES = Enforcement Standard within the EPA's 1990 Record of Decision for Moss America
2. EPA ROD PAL = Preventive Action Limit within the EPA's 1990 Record of Decision for Moss America
3. NR 140 ES = Wisconsin Administrative Code, Chapter NR 140 Enforcement Standard
4. NR 140 PAL = Wisconsin Administrative Code, Chapter NR 140 Preventive Action Limit
5. NS = no standard
6. µg/L = micrograms per liter (equivalent to parts per billion, ppb)
7. Laboratory flags: "J" = Analyte detected between Limit of Detection and Limit of Quantitation
8. NT = not tested
9. Exceedances:
   - **BOLD** = Concentration exceeds NR 140 ES
   - *ITALICS* = Concentration exceeds NR 140 PAL
   - **BOLD** = Concentration exceeds EPA ROD ES
   - *ITALICS* = Concentration exceeds EPA ROD PAL

ATTACHMENT 1

Soil Boring Logs for Groundwater Monitoring Well Installation

State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

Route To: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☒ Other ☐

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
Moss-American		MW-7S-WR

Boring Drilled By: Name of crew chief (first, last) and Firm	Date Drilling Started	Date Drilling Completed	Drilling Method
Steve Gestra Engineering	9/24/2019	9/24/2019	hollow stem auger

WI Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
	WB902	MW-7S-WR	713.1 Feet MSL	717.7 Feet MSL	6.3 inches

Local Grid Origin ☐ (estimated: ☐) or Boring Location ☐
State Plane 435,092 N, 2,492,277 E Ⓢ/C/N
NW 1/4 of NW 1/4 of Section 8, T 8 N, R 21 E
Lat ___ ° ___ ' ___ "
Long ___ ° ___ ' ___ "
Local Grid Location ☐ N ___ Feet ☐ S ☐ E ___ Feet ☐ W

Facility ID	County	County Code	Civil Town/City/ or Village
	Milwaukee	41	Milwaukee

Sample Number and Type	Sample Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
1 SS	24 8		1	Moist TOPSOIL, 2" Brown CLAYEY SAND, trace fine gravel, moist, little wood pieces, (FILL).										
2 SS	24 12		2 3		SC									
3 SS	24 14		4 5	6" gray fine sand to medium gravel, trace cobbles, moist to wet										
4 SS	24 9		6 7	Dark brown gravel-sand-silt mixtures, trace clay, wet to saturated. (FILL)										
5 SS	24 8		8 9	5" metalic shiny dark gray layer, intense petroleum-like odor.	GM									
6 SS	24 14		10 11	Siff gray SILT, non to low plasticity, moist to wet, intermix with coarse gravel (FILL)										
7 SS	24 23		12 13		ML									
8 SS	12 2		14 15											
				End of boring at 15'. Monitoring well MW-7S-WR installed										

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature	Firm		
	The Sigma Group 1300 W Canal St Milwaukee, WI 53233	Tel: 414-643-4200 Fax: 414-643-4210

This form is authorized by Chapters 281, 283, 289, 291, 292, 293, 295, and 299, Wis. Stats. Completion of this form is mandatory. Failure to file this form may result in forfeiture of between $10 and $25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be be used for any other purpose. NOTE: See instructions for more information, including where the completed form should be sent.

State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

Route To: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☒ Other ☐

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
Moss-American		MW-31SR

Boring Drilled By: Name of crew chief (first, last) and Firm	Date Drilling Started	Date Drilling Completed	Drilling Method
Steve Gestra Engineering	9/25/2019	9/25/2019	hollow stem auger

WI Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
	WB904	MW-31SR	721.6 Feet MSL	723.1 Feet MSL	6.3 inches

Local Grid Origin ☐ (estimated: ☐) or Boring Location ☐
State Plane 434,544 N, 2,492,270 E Ⓢ/C/N
NW 1/4 of NW 1/4 of Section 8, T 8 N, R 21 E
Lat ° ' "
Long ° ' "
Local Grid Location ☐ N ☐ E Feet ☐ S Feet ☐ W

Facility ID	County	County Code	Civil Town/City/ or Village
	Milwaukee	41	Milwaukee

Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
1 SS	24 10		0	Moist TOPSOIL, 10"										
2 SS	24 14		1–3	Stiff dark brown SILT, trace clay to fine sand, low plasticity, moist. 6" medium sand, some well grade fine to coarse gravel, wet (FILL)	ML									
3 SS	24 14		4–5	Light brown fine SAND, trace clay, wet. 2" saturated (FILL)	SP									
4 SS	24 12		6–7	Light brown well graded SAND, some clay, little medium gravel, saturated (FILL)	SW									
5 SS	24 13		8–9											
6 SS	24 15		10–11	Light brown CLAYEY SAND, trace silt/clay, saturated. 4" fine sand, little poorly graded gravel with cobbles (FILL)	SC									
7 SS	24 20		12–13	Loose gray fine sand to poor graded gravel, trace silt/clay, moist (FILL)	SP									
8 SS	12 12		14–15											
			15	End of boring at 15'. Monitoring well MW-31SR installed										

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature

Firm The Sigma Group
1300 W Canal St Milwaukee, WI 53233

Tel: 414-643-4200
Fax: 414-643-4210

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State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

Route To: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☒ Other ☐

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
Moss-American		MW-32SR

Boring Drilled By: Name of crew chief (first, last) and Firm	Date Drilling Started	Date Drilling Completed	Drilling Method
Steve Gestra Engineering	9/24/2019	9/24/2019	hollow stem auger

WI Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
	WB901	MW-32SR	714.2 Feet MSL	719.2 Feet MSL	6.3 inches

Local Grid Origin ☐ (estimated: ☐) or Boring Location ☐
State Plane 434,975 N, 2,492,156 E Ⓢ/C/N
NW 1/4 of NW 1/4 of Section 8, T 8 N, R 21 E
Lat ° ' "
Long ° ' "
Local Grid Location ☐ N Feet ☐ S ☐ E Feet ☐ W

Facility ID	County	County Code	Civil Town/City/ or Village
	Milwaukee	41	Milwaukee

Sample Number and Type	Sample Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
1 SS	24 4		1	Light brown well graded SAND, trace gravel to cobbles, moist, (FILL)	SW									
2 SS	24 3.5		2 3	Light brown coarse SAND, trace angular gravel to cobbles, wet to saturated, intermix with stiff gray clay/silt, little fine sand, wet to saturated	SP									
3 SS	24 10		4 5											
4 SS	24 20		6 7	Stiff brownish-gray CLAY, little well graded sand, trace silt, medium plasticity, wet to saturated.	CL									
5 SS	24 24		8 9											
6 SS	24 20		10 11	Trace coarse sand to gravel										
7 SS	24 20		12 13	Soft gray CLAY, trace silt to fine sand, high plasticity, saturated. 4" trace coarse sand, wet	CH									
8 SS	12 4		14 15	Soft gray CLAY, little to some well grade sand, low plasticity, wet to saturated	CL									
				End of boring at 15'. Monitoring well MW-32SR installed										

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature	Firm	Tel: 414-643-4200
	The Sigma Group 1300 W Canal St Milwaukee, WI 53233	Fax: 414-643-4210

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State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

Route To: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☒ Other ☐

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
Moss-American		MW-34SR

Boring Drilled By: Name of crew chief (first, last) and Firm	Date Drilling Started	Date Drilling Completed	Drilling Method
Steve Gestra Engineering	9/24/2019	9/24/2019	hollow stem auger

WI Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
	WB903	MW-34SR	714.4 Feet MSL	718.2 Feet MSL	6.3 inches

Local Grid Origin ☐ (estimated: ☐) or Boring Location ☐
State Plane 435,034 N, 2,492,370 E Ⓢ/C/N
NW 1/4 of NW 1/4 of Section 8, T 8 N, R 21 E
Lat ___ ° ___ ' ___ "
Long ___ ° ___ ' ___ "
Local Grid Location ☐ N ___ Feet ☐ S ☐ E ___ Feet ☐ W

Facility ID	County	County Code	Civil Town/City/ or Village
	Milwaukee	41	Milwaukee

Sample Number and Type	Sample Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
1 SS	24 16		1	Moist TOPSOIL, 3"										
			2	Soft to medium stiff brown SILT to fine sand, low plasticity, moist, intermix with coarse sand, little clay, trace medium gravel, moist (FILL)										
2 SS	24 19		3		ML									
3 SS	24 16		4											
			5											
4 SS	24 13		6	Dark brown well graded SAND, trace clay, trace medium gravel, some roots and wood pieces, wet to saturated (FILL), intermixed with peat, moist to wet										
			7											
5 SS	24 5		8		SW									
			9											
6 SS	24 15		10											
			11											
7 SS	24 19		12	Soft brownish-gray SILT, trace coarse sand to medium gravel, non to low plasticity, Wet to saturated (FILL)										
			13		ML									
8 SS	12 20		14											
			15											
				End of boring at 15.5'. Monitoring well MW-34SR installed										

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature

Firm The Sigma Group
1300 W Canal St Milwaukee, WI 53233

Tel: 414-643-4200
Fax: 414-643-4210

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State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

Route To: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☒ Other ☐

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
Moss-American		TG1-1R

Boring Drilled By: Name of crew chief (first, last) and Firm	Date Drilling Started	Date Drilling Completed	Drilling Method
Steve Gestra Engineering	9/24/2019	9/24/2019	hollow stem auger

WI Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
	WB900	TG1-1R	716.6 Feet MSL	720.9 Feet MSL	6.3 inches

Local Grid Origin ☐ (estimated: ☐) or Boring Location ☐
State Plane 434,760 N, 2,492,169 E Ⓢ/C/N
NW 1/4 of NW 1/4 of Section 8, T 8 N, R 21 E
Lat ° ' "
Long ° ' "
Local Grid Location ☐ N ☐ E Feet ☐ S Feet ☐ W

Facility ID	County	County Code	Civil Town/City/ or Village
	Milwaukee	41	Milwaukee

Sample Number and Type	Sample Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
1 SS	24 8		1	Moist TOPSOIL, 3" Medium stiff brown CLAY, trace coarse to fine sand, moist, medium plasticity (FILL), 5" Peat	CL									
2 SS	24 12		3											
3 SS	24 14		4											
4 SS	24 9		6	Loose dark brown clayey SAND, well graded, trace cobbles, wet (FILL). Last 1" decrease in clay and increase in coarse sand, loose	SC									
5 SS	24 8		8	Soft light to dark brown SANDY CLAY, low plasticity, wet (FILL).										
6 SS	24 14		10											
7 SS	24 23		11	Cobbles	CL									
8 SS	12 2		13											
			14	Cobbles and sand										
			15	End of boring at 15'. Monitoring well TG1-1R installed										

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature	Firm	Tel: 414-643-4200
	The Sigma Group 1300 W Canal St Milwaukee, WI 53233	Fax: 414-643-4210

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State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

Route To: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☒ Other ☐

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
Moss-American		PZ-09R

Boring Drilled By: Name of crew chief (first, last) and Firm	Date Drilling Started	Date Drilling Completed	Drilling Method
Steve Gestra Engineering	9/25/2019	9/25/2019	hollow stem auger

WI Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
	WB905	PZ-09	717.6 Feet MSL	720.6 Feet MSL	6.3 inches

Local Grid Origin ☐ (estimated: ☐) or Boring Location ☐
State Plane 434,688 N, 2,492,204 E Ⓢ/C/N
NW 1/4 of NW 1/4 of Section 8, T 8 N, R 21 E
Lat ° ' "
Long ° ' "
Local Grid Location ☐ N ☐ E Feet ☐ S Feet ☐ W

Facility ID	County	County Code	Civil Town/City/ or Village
	Milwaukee	41	Milwaukee

Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
1 SS	24 12		1	Moist TOPSOIL, 0.5' / Dark brown fine gravel and pieces of roots and wood, wet, intermix with fine sand, little silty clay, wet to saturated (FILL)	GM									
2 SS	24 16		2 3											
3 SS	24 7		4 5	Dark brown poorly graded GRAVEL and silt, some roots and wood, wet to saturated, intermixed with soft silt to fine sand (FILL). 4.5 ft 2"black sand layer petroleum-like odor /	GP									
4 SS	24 4		6 7	Light brownish-gray SILTY, some sand, trace poorly grade gravel and cobbles, saturated (FILL)										
5 SS	24 4		8 9											
6 SS	24 19		10 11		ML									
7 SS	24 9		12 13											
8 SS	12 3		14 15											
				End of boring at 15'. Monitoring pizoemeter PZ-09R installed										EOB at 15' bgs

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature

Firm The Sigma Group
1300 W Canal St Milwaukee, WI 53233

Tel: 414-643-4200
Fax: 414-643-4210

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ATTACHMENT 2

Well Construction Logs

State of Wisconsin
Department of Natural Resources

Route To: Watershed/Wastewater ☐ Waste Management ☐ Remediation/Redevelopment ☒ Other ☐

MONITORING WELL CONSTRUCTION

Form 4400-113A Rev. 7-98

Facility/Project Name: Moss-American	Local Grid Location of Well: ____ ft. ☐ N. ☐ S. ____ ft. ☐ E. ☐ W.	Well Name: TG1-1R
Facility License, Permit or Monitoring No.	Local Grid Origin ☐ (estimated: ☐) or Well Location ☐ Lat. ° ' " Long. ° ' " or	Wis. Unique Well No. / DNR Well Number: WB900
Facility ID	St. Plane 434,760 ft. N, 2,492,169 ft. E. Ⓢ/C/N	Date Well Installed: 09/24/2019
Type of Well: Well Code 99/ot	Section Location of Waste/Source: NW 1/4 of NW 1/4 of Sec. 8 T. 8 N, R. 21 ☒ E ☐ W	Well Installed By: (Person's Name and Firm): Steve / Gestra Engineering
Distance from Waste/Source ft. / Enf. Stds. Apply ☐	Location of Well Relative to Waste/Source: u ☐ Upgradient s ☐ Sidegradient d ☐ Downgradient n ☐ Not Known	Gov. Lot Number

A. Protective pipe, top elevation 723.80 ft. MSL

B. Well casing, top elevation 723.45 ft. MSL

C. Land surface elevation 720.9 ft. MSL

D. Surface seal, bottom 717.4 ft. MSL or 3.5 ft.

12. USCS classification of soil near screen:
GP ☐ GM ☐ GC ☐ GW ☐ SW ☐ SP ☐
SM ☐ SC ☐ ML ☐ MH ☐ CL ☒ CH ☐
Bedrock ☐

13. Sieve analysis attached? ☐ Yes ☒ No

14. Drilling method used: Rotary ☐ 50 / Hollow Stem Auger ☒ 41 / ____ Other ☐ __

15. Drilling fluid used: Water ☐ 02 Air ☐ 01 Drilling Mud ☐ 03 None ☒ 99

16. Drilling additives used? ☐ Yes ☒ No

Describe ____

17. Source of water (attach analysis, if required):
None

E. Bentonite seal, top 720.9 ft. MSL or 0.0 ft.

F. Fine sand, top 717.4 ft. MSL or 3.5 ft.

G. Filter pack, top 716.9 ft. MSL or 4.0 ft.

H. Screen joint, top 715.9 ft. MSL or 5.0 ft.

I. Well bottom 705.9 ft. MSL or 15.0 ft.

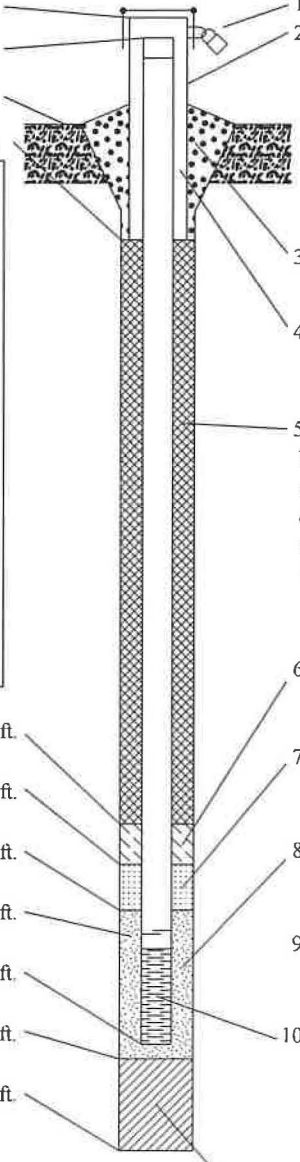
J. Filter pack, bottom 705.9 ft. MSL or 15.0 ft.

K. Borehole, bottom 705.9 ft. MSL or 15.0 ft.

L. Borehole, diameter 6.3 in.

M. O.D. well casing 2.38 in.

N. I.D. well casing 2.00 in.



1. Cap and lock? ☒ Yes ☐ No

2. Protective cover pipe:
a. Inside diameter: ____ in.
b. Length: ____ ft.
c. Material: Steel ☒ 04 / Steel Well Vault / Other ☐ __
d. Additional protection? ☐ Yes ☒ No
If yes, describe: ____

3. Surface seal: Bentonite ☒ 30 / Concrete ☐ 01 / ____ Other ☐ __

4. Material between well casing and protective pipe:
Bentonite ☒ 30 / ____ Other ☐ __

5. Annular space seal: a. Granular/Chipped Bentonite ☐ 33
b. ____Lbs/gal mud weight . . . Bentonite-sand slurry ☐ 35
c. ____Lbs/gal mud weight . . . Bentonite slurry ☐ 31
d. ____% Bentonite . . . Bentonite-cement grout ☐ 50
e. ____ Ft^3 volume added for any of the above
f. How installed: Tremie ☐ 01 / Tremie pumped ☐ 02 / Gravity ☒ 08

6. Bentonite seal: a. Bentonite granules ☐ 33
b. ☐ 1/4 in. ☒ 3/8 in. ☐ 1/2 in. Bentonite chips ☒ 32
c. ____ Other ☐ __

7. Fine sand material: Manufacturer, product name & mesh size
a. ____ __
b. Volume added ____ ft^3

8. Filter pack material: Manufacturer, product name & mesh size
a. ____ __
b. Volume added ____ ft^3

9. Well casing: Flush threaded PVC schedule 40 ☒ 23 / Flush threaded PVC schedule 80 ☐ 24 / ____ Other ☐ __

10. Screen material: PVC __
a. Screen Type: Factory cut ☒ 11 / Continuous slot ☐ 01 / ____ Other ☐ __
b. Manufacturer ____
c. Slot size: 0.010 in.
d. Slotted length: 10.0 ft.

11. Backfill material (below filter pack): None ☒ 14 / ____ Other ☐ __

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature ____ Firm: The Sigma Group, 1300 W Canal St Milwaukee, WI 53233 Tel: 414-643-4200 Fax: 414-643-4210

Please complete both Forms 4400-113A and 4400-113B and return them to the appropriate DNR office and bureau. Completion of these reports is required by chs. 160, 281, 283, 289, 291, 292, 293, 295, and 299, Wis. Stats., and ch. NR 141, Wis. Adm. Code. In accordance with chs. 281, 289, 291, 292, 293, 295, and 299, Wis. Stats., failure to file these forms may result in a forfeiture of between $10 and $25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on these forms is not intended to be used for any other purpose. NOTE: See the instructions for more information, including where the completed forms should be sent.

State of Wisconsin
Department of Natural Resources

Route To: Watershed/Wastewater ☐ Waste Management ☐ Remediation/Redevelopment ☒ Other ☐

MONITORING WELL CONSTRUCTION
Form 4400-113A Rev. 7-98

Facility/Project Name: Moss-American	Local Grid Location of Well: ____ ft. ☐ N. ☐ S. ____ ft. ☐ E. ☐ W.	Well Name: MW-34SR
Facility License, Permit or Monitoring No.	Local Grid Origin ☐ (estimated: ☐) or Well Location ☐ Lat. ° ' " Long. ° ' " or	Wis. Unique Well No. / DNR Well Number: WB903
Facility ID	St. Plane 435,034 ft. N, 2,492,370 ft. E. Ⓢ/C/N	Date Well Installed: 09/24/2019
Type of Well: Well Code 99/ot	Section Location of Waste/Source: NW 1/4 of NW 1/4 of Sec. 8, T. 8 N, R. 21 ☒ E ☐ W	Well Installed By: (Person's Name and Firm): Steve / Gestra Engineering
Distance from Waste/Source ft. / Enf. Stds. Apply ☐	Location of Well Relative to Waste/Source: u ☐ Upgradient s ☐ Sidegradient d ☐ Downgradient n ☐ Not Known	Gov. Lot Number

A. Protective pipe, top elevation 721.22 ft. MSL
B. Well casing, top elevation 720.80 ft. MSL
C. Land surface elevation 718.2 ft. MSL
D. Surface seal, bottom 714.2 ft. MSL or 4.0 ft.

12. USCS classification of soil near screen:
GP ☐ GM ☐ GC ☐ GW ☐ SW ☐ SP ☐
SM ☐ SC ☐ ML ☐ MH ☐ CL ☒ CH ☐
Bedrock ☐

13. Sieve analysis attached? ☐ Yes ☒ No

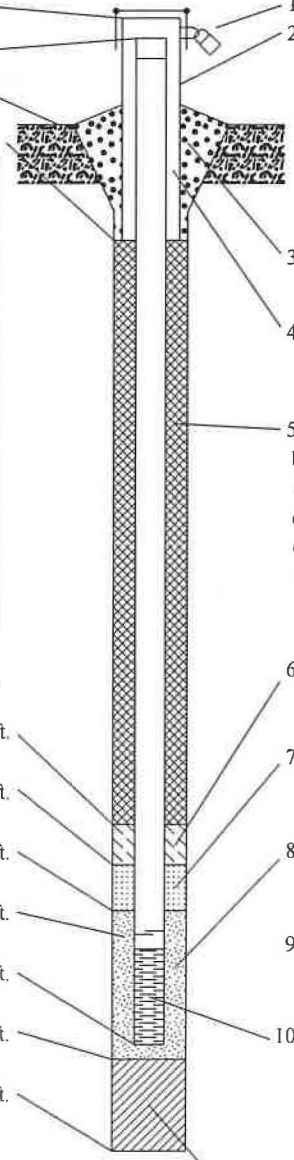
14. Drilling method used: Rotary ☐ 50; Hollow Stem Auger ☒ 41; ____ Other ☐ __

15. Drilling fluid used: Water ☐ 02 Air ☐ 01 Drilling Mud ☐ 03 None ☒ 99

16. Drilling additives used? ☐ Yes ☒ No
Describe ____

17. Source of water (attach analysis, if required):
None

E. Bentonite seal, top 718.2 ft. MSL or 0.0 ft.
F. Fine sand, top 714.2 ft. MSL or 4.0 ft.
G. Filter pack, top 713.7 ft. MSL or 4.5 ft.
H. Screen joint, top 712.7 ft. MSL or 5.5 ft.
I. Well bottom 703.2 ft. MSL or 15.0 ft.
J. Filter pack, bottom 702.7 ft. MSL or 15.5 ft.
K. Borehole, bottom 703.2 ft. MSL or 15.0 ft.
L. Borehole, diameter 6.3 in.
M. O.D. well casing 2.38 in.
N. I.D. well casing 2.00 in.



1. Cap and lock? ☒ Yes ☐ No
2. Protective cover pipe:
a. Inside diameter: ____ in.
b. Length: ____ ft.
c. Material: Steel ☒ 04; Steel Well Vault; Other ☐ __
d. Additional protection? ☐ Yes ☒ No
If yes, describe: ____
3. Surface seal: Bentonite ☒ 30; Concrete ☐ 01; ____ Other ☐ __
4. Material between well casing and protective pipe: Bentonite ☒ 30; ____ Other ☐ __
5. Annular space seal: a. Granular/Chipped Bentonite ☐ 33
b. ____Lbs/gal mud weight . . . Bentonite-sand slurry ☐ 35
c. ____Lbs/gal mud weight . . . Bentonite slurry ☐ 31
d. ____% Bentonite . . . Bentonite-cement grout ☐ 50
e. ____ Ft³ volume added for any of the above
f. How installed: Tremie ☐ 01; Tremie pumped ☐ 02; Gravity ☒ 08
6. Bentonite seal: a. Bentonite granules ☐ 33
b. ☐ 1/4 in. ☒ 3/8 in. ☐ 1/2 in. Bentonite chips ☒ 32
c. ____ Other ☐ __
7. Fine sand material: Manufacturer, product name & mesh size
a. ____ __
b. Volume added ____ ft³
8. Filter pack material: Manufacturer, product name & mesh size
a. ____ __
b. Volume added ____ ft³
9. Well casing: Flush threaded PVC schedule 40 ☒ 23; Flush threaded PVC schedule 80 ☐ 24; ____ Other ☐ __
10. Screen material: PVC __
a. Screen Type: Factory cut ☒ 11; Continuous slot ☐ 01; ____ Other ☐ __
b. Manufacturer ____
c. Slot size: 0.010 in.
d. Slotted length: 10.0 ft.
11. Backfill material (below filter pack): None ☒ 14; ____ Other ☐ __

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature: [signature] Firm: The Sigma Group, 1300 W Canal St Milwaukee, WI 53233 Tel: 414-643-4200 Fax: 414-643-4210

Please complete both Forms 4400-113A and 4400-113B and return them to the appropriate DNR office and bureau. Completion of these reports is required by chs. 160, 281, 283, 289, 291, 292, 293, 295, and 299, Wis. Stats., and ch. NR 141, Wis. Adm. Code. In accordance with chs. 281, 289, 291, 292, 293, 295, and 299, Wis. Stats., failure to file these forms may result in a forfeiture of between $10 and $25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on these forms is not intended to be used for any other purpose. NOTE: See the instructions for more information, including where the completed forms should be sent.

State of Wisconsin
Department of Natural Resources

Route To: Watershed/Wastewater ☐ Waste Management ☐ Remediation/Redevelopment ☒ Other ☐

MONITORING WELL CONSTRUCTION

Form 4400-113A Rev. 7-98

Facility/Project Name: Moss-American	Local Grid Location of Well: ____ ft. ☐N ☐S ____ ft. ☐E ☐W	Well Name: MW-32SR
Facility License, Permit or Monitoring No.	Local Grid Origin ☐ (estimated: ☐) or Well Location ☐ Lat. ° ' " Long. ° ' " or	Wis. Unique Well No. / DNR Well Number: WB901
Facility ID	St. Plane 434,975 ft. N, 2,492,156 ft. E. (S)/C/N	Date Well Installed: 09/24/2019
Type of Well: Well Code 99/ot	Section Location of Waste/Source: NW 1/4 of NW 1/4 of Sec. 8, T. 8 N, R. 21 ☒E ☐W	Well Installed By: (Person's Name and Firm): Steve / Gestra Engineering
Distance from Waste/Source ft. / Enf. Stds. Apply ☐	Location of Well Relative to Waste/Source: u ☐ Upgradient s ☐ Sidegradient d ☐ Downgradient n ☐ Not Known	Gov. Lot Number

A. Protective pipe, top elevation 722.20 ft. MSL

B. Well casing, top elevation 721.95 ft. MSL

C. Land surface elevation 719.2 ft. MSL

D. Surface seal, bottom 715.7 ft. MSL or 3.5 ft.

12. USCS classification of soil near screen:
GP ☐ GM ☐ GC ☐ GW ☐ SW ☐ SP ☐
SM ☐ SC ☐ ML ☐ MH ☐ CL ☒ CH ☐
Bedrock ☐

13. Sieve analysis attached? ☐ Yes ☒ No

14. Drilling method used: Rotary ☐ 50 / Hollow Stem Auger ☒ 41 / ____ Other ☐ __

15. Drilling fluid used: Water ☐ 02 Air ☐ 01 Drilling Mud ☐ 03 None ☒ 99

16. Drilling additives used? ☐ Yes ☒ No

Describe ____

17. Source of water (attach analysis, if required):
None

E. Bentonite seal, top 719.2 ft. MSL or 0.0 ft.

F. Fine sand, top 715.7 ft. MSL or 3.5 ft.

G. Filter pack, top 715.2 ft. MSL or 4.0 ft.

H. Screen joint, top 714.2 ft. MSL or 5.0 ft.

I. Well bottom 704.2 ft. MSL or 15.0 ft.

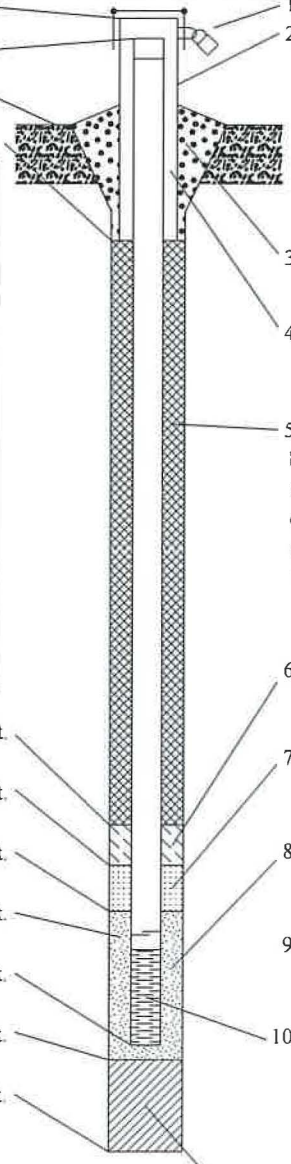
J. Filter pack, bottom 704.2 ft. MSL or 15.0 ft.

K. Borehole, bottom 704.2 ft. MSL or 15.0 ft.

L. Borehole, diameter 6.3 in.

M. O.D. well casing 2.38 in.

N. I.D. well casing 2.00 in.



1. Cap and lock? ☒ Yes ☐ No
2. Protective cover pipe:
a. Inside diameter: ____ in.
b. Length: ____ ft.
c. Material: Steel ☒ 04 / Stell Well / Other ☐ __
d. Additional protection? ☐ Yes ☒ No
If yes, describe: ____
3. Surface seal: Bentonite ☒ 30 / Concrete ☐ 01 / ____ Other ☐ __
4. Material between well casing and protective pipe: Bentonite ☒ 30 / ____ Other ☐ __
5. Annular space seal: a. Granular/Chipped Bentonite ☐ 33
b. ____ Lbs/gal mud weight . . . Bentonite-sand slurry ☐ 35
c. ____ Lbs/gal mud weight . . . Bentonite slurry ☐ 31
d. ____ % Bentonite . . . Bentonite-cement grout ☐ 50
e. ____ Ft^3 volume added for any of the above
f. How installed: Tremie ☐ 01 / Tremie pumped ☐ 02 / Gravity ☒ 08
6. Bentonite seal: a. Bentonite granules ☐ 33
b. ☐ 1/4 in. ☒ 3/8 in. ☐ 1/2 in. Bentonite chips ☒ 32
c. ____ Other ☐ __
7. Fine sand material: Manufacturer, product name & mesh size
a. ____ __
b. Volume added ____ ft^3
8. Filter pack material: Manufacturer, product name & mesh size
a. ____ __
b. Volume added ____ ft^3
9. Well casing: Flush threaded PVC schedule 40 ☒ 23 / Flush threaded PVC schedule 80 ☐ 24 / ____ Other ☐ __
10. Screen material: PVC __
a. Screen Type: Factory cut ☒ 11 / Continuous slot ☐ 01 / ____ Other ☐ __
b. Manufacturer ____
c. Slot size: 0.010 in.
d. Slotted length: 10.0 ft.
11. Backfill material (below filter pack): None ☒ 14 / ____ Other ☐ __

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature: [signature] Firm: The Sigma Group, 1300 W Canal St Milwaukee, WI 53233 Tel: 414-643-4200 Fax: 414-643-4210

Please complete both Forms 4400-113A and 4400-113B and return them to the appropriate DNR office and bureau. Completion of these reports is required by chs. 160, 281, 283, 289, 291, 292, 293, 295, and 299, Wis. Stats., and ch. NR 141, Wis. Adm. Code. In accordance with chs. 281, 289, 291, 292, 293, 295, and 299, Wis. Stats., failure to file these forms may result in a forfeiture of between $10 and $25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on these forms is not intended to be used for any other purpose. NOTE: See the instructions for more information, including where the completed forms should be sent.

State of Wisconsin
Department of Natural Resources

Route To: Watershed/Wastewater ☐ Waste Management ☐ Remediation/Redevelopment ☒ Other ☐

MONITORING WELL CONSTRUCTION
Form 4400-113A Rev. 7-98

Facility/Project Name: Moss-American	Local Grid Location of Well: ☐ N. ft. ☐ S. ☐ E. ft. ☐ W.	Well Name: MW-31SR
Facility License, Permit or Monitoring No.	Local Grid Origin ☐ (estimated: ☐) or Well Location ☐ Lat. ° ' " Long. ° ' " or	Wis. Unique Well No. / DNR Well Number: WB904
Facility ID	St. Plane 434,544 ft. N, 2,492,270 ft. E. Ⓢ/C/N	Date Well Installed: 09/25/2019
Type of Well: Well Code 99/ot	Section Location of Waste/Source: NW 1/4 of NW 1/4 of Sec. 8 T. 8 N, R. 21 ☒ E ☐ W	Well Installed By: (Person's Name and Firm): Steve / Gestra Engineering
Distance from Waste/Source ft. / Enf. Stds. Apply ☐	Location of Well Relative to Waste/Source: u ☐ Upgradient s ☐ Sidegradient d ☐ Downgradient n ☐ Not Known	Gov. Lot Number

A. Protective pipe, top elevation 726.30 ft. MSL
B. Well casing, top elevation 725.94 ft. MSL
C. Land surface elevation 723.1 ft. MSL
D. Surface seal, bottom 719.6 ft. MSL or 3.5 ft.

12. USCS classification of soil near screen:
GP ☐ GM ☐ GC ☐ GW ☐ SW ☐ SP ☐
SM ☐ SC ☐ ML ☐ MH ☐ CL ☒ CH ☐
Bedrock ☐

13. Sieve analysis attached? ☐ Yes ☒ No

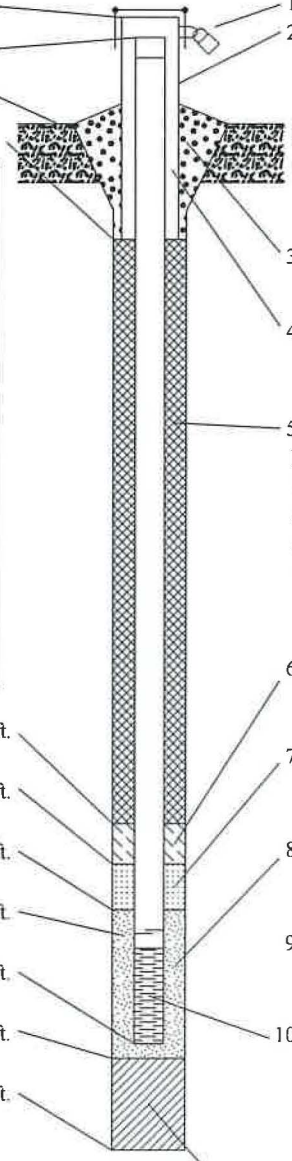
14. Drilling method used: Rotary ☐ 50; Hollow Stem Auger ☒ 41; Other ☐ __

15. Drilling fluid used: Water ☐ 02; Air ☐ 01; Drilling Mud ☐ 03; None ☒ 99

16. Drilling additives used? ☐ Yes ☒ No
Describe

17. Source of water (attach analysis, if required):
None

E. Bentonite seal, top 723.1 ft. MSL or 0.0 ft.
F. Fine sand, top 719.6 ft. MSL or 3.5 ft.
G. Filter pack, top 719.1 ft. MSL or 4.0 ft.
H. Screen joint, top 718.1 ft. MSL or 5.0 ft.
I. Well bottom 708.1 ft. MSL or 15.0 ft.
J. Filter pack, bottom 708.1 ft. MSL or 15.0 ft.
K. Borehole, bottom 708.1 ft. MSL or 15.0 ft.
L. Borehole, diameter 6.3 in.
M. O.D. well casing 2.38 in.
N. I.D. well casing 2.00 in.



1. Cap and lock? ☒ Yes ☐ No
2. Protective cover pipe:
a. Inside diameter: ____ in.
b. Length: ____ ft.
c. Material: Steel ☒ 04; Steel Well Vault; Other ☐ __
d. Additional protection? ☐ Yes ☒ No
If yes, describe:
3. Surface seal: Bentonite ☒ 30; Concrete ☐ 01; Other ☐ __
4. Material between well casing and protective pipe: Bentonite ☒ 30; Other ☐ __
5. Annular space seal: a. Granular/Chipped Bentonite ☐ 33; b. ____Lbs/gal mud weight . . . Bentonite-sand slurry ☐ 35; c. ____Lbs/gal mud weight . . . Bentonite slurry ☐ 31; d. ____% Bentonite . . . Bentonite-cement grout ☐ 50; e. ____ Ft^3 volume added for any of the above; f. How installed: Tremie ☐ 01; Tremie pumped ☐ 02; Gravity ☒ 08
6. Bentonite seal: a. Bentonite granules ☐ 33; b. ☐ 1/4 in. ☒ 3/8 in. ☐ 1/2 in. Bentonite chips ☒ 32; c. ____ Other ☐ __
7. Fine sand material: Manufacturer, product name & mesh size
a. ____ __
b. Volume added ____ ft^3
8. Filter pack material: Manufacturer, product name & mesh size
a. ____ __
b. Volume added ____ ft^3
9. Well casing: Flush threaded PVC schedule 40 ☒ 23; Flush threaded PVC schedule 80 ☐ 24; Other ☐ __
10. Screen material: PVC __
a. Screen Type: Factory cut ☒ 11; Continuous slot ☐ 01; Other ☐ __
b. Manufacturer
c. Slot size: 0.010 in.
d. Slotted length: 10.0 ft.
11. Backfill material (below filter pack): None ☒ 14; Other ☐ __

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature | Firm: The Sigma Group, 1300 W Canal St Milwaukee, WI 53233 | Tel: 414-643-4200 Fax: 414-643-4210

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State of Wisconsin
Department of Natural Resources

Route To: Watershed/Wastewater ☐ Waste Management ☐ Remediation/Redevelopment ☒ Other ☐

MONITORING WELL CONSTRUCTION
Form 4400-113A Rev. 7-98

Facility/Project Name: Moss-American	Local Grid Location of Well: ☐ N. ☐ S. ____ ft. ☐ E. ☐ W. ____ ft.	Well Name: MW-7S-WR
Facility License, Permit or Monitoring No.	Local Grid Origin ☐ (estimated: ☐) or Well Location ☐ Lat. ° ' " Long. ° ' " or St. Plane 435,092 ft. N, 2,492,277 ft. E. (S)/C/N	Wis. Unique Well No. / DNR Well Number: WB902
Facility ID		Date Well Installed: 09/24/2019
Type of Well: Well Code 99/ot	Section Location of Waste/Source: NW 1/4 of NW 1/4 of Sec. 8 T. 8 N, R. 21 ☒ E ☐ W	Well Installed By: (Person's Name and Firm): Steve / Gestra Engineering
Distance from Waste/Source ft. / Enf. Stds. Apply ☐	Location of Well Relative to Waste/Source: u ☐ Upgradient s ☐ Sidegradient d ☐ Downgradient n ☐ Not Known	Gov. Lot Number

A. Protective pipe, top elevation 720.40 ft. MSL
B. Well casing, top elevation 720.05 ft. MSL
C. Land surface elevation 717.7 ft. MSL
D. Surface seal, bottom 714.2 ft. MSL or 3.5 ft.

12. USCS classification of soil near screen:
GP ☐ GM ☐ GC ☐ GW ☐ SW ☐ SP ☐
SM ☐ SC ☐ ML ☐ MH ☐ CL ☒ CH ☐
Bedrock ☐

13. Sieve analysis attached? ☐ Yes ☒ No

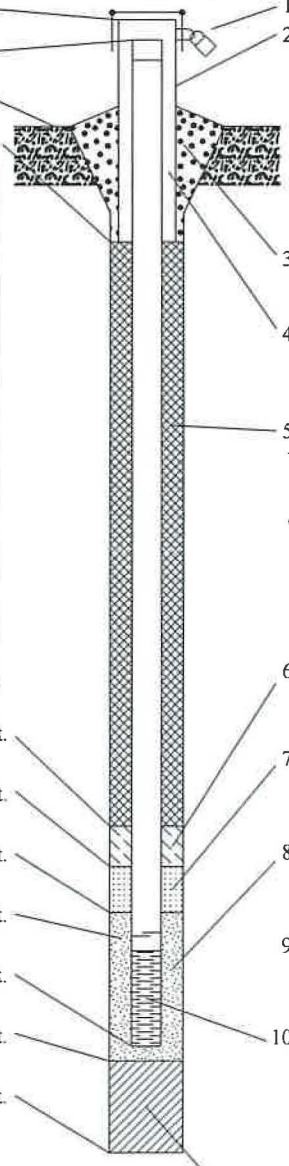
14. Drilling method used: Rotary ☐ 5 0 / Hollow Stem Auger ☒ 4 1 / ____ Other ☐ _ _

15. Drilling fluid used: Water ☐ 0 2 Air ☐ 0 1 Drilling Mud ☐ 0 3 None ☒ 9 9

16. Drilling additives used? ☐ Yes ☒ No
Describe ____

17. Source of water (attach analysis, if required):
None

E. Bentonite seal, top 717.7 ft. MSL or 0.0 ft.
F. Fine sand, top 714.2 ft. MSL or 3.5 ft.
G. Filter pack, top 713.7 ft. MSL or 4.0 ft.
H. Screen joint, top 712.7 ft. MSL or 5.0 ft.
I. Well bottom 702.7 ft. MSL or 15.0 ft.
J. Filter pack, bottom 702.7 ft. MSL or 15.0 ft.
K. Borehole, bottom 702.7 ft. MSL or 15.0 ft.
L. Borehole, diameter 6.3 in.
M. O.D. well casing 2.38 in.
N. I.D. well casing 2.00 in.



1. Cap and lock? ☒ Yes ☐ No
2. Protective cover pipe:
a. Inside diameter: ____ in.
b. Length: ____ ft.
c. Material: Steel ☒ 0 4 / Stell Well / Other ☐ _ _
d. Additional protection? ☐ Yes ☒ No
If yes, describe: ____
3. Surface seal: Bentonite ☒ 3 0 / Concrete ☐ 0 1 / ____ Other ☐ _ _
4. Material between well casing and protective pipe: Bentonite ☒ 3 0 / ____ Other ☐ _ _
5. Annular space seal: a. Granular/Chipped Bentonite ☐ 3 3
b. ____ Lbs/gal mud weight . . . Bentonite-sand slurry ☐ 3 5
c. ____ Lbs/gal mud weight . . . Bentonite slurry ☐ 3 1
d. ____ % Bentonite . . . Bentonite-cement grout ☐ 5 0
e. ____ Ft^3 volume added for any of the above
f. How installed: Tremie ☐ 0 1 / Tremie pumped ☐ 0 2 / Gravity ☒ 0 8
6. Bentonite seal: a. Bentonite granules ☐ 3 3
b. ☐ 1/4 in. ☒ 3/8 in. ☐ 1/2 in. Bentonite chips ☒ 3 2
c. ____ Other ☐ _ _
7. Fine sand material: Manufacturer, product name & mesh size
a. ____ _ _
b. Volume added ____ ft^3
8. Filter pack material: Manufacturer, product name & mesh size
a. ____ _ _
b. Volume added ____ ft^3
9. Well casing: Flush threaded PVC schedule 40 ☒ 2 3 / Flush threaded PVC schedule 80 ☐ 2 4 / ____ Other ☐ _ _
10. Screen material: PVC _ _
a. Screen Type: Factory cut ☒ 1 1 / Continuous slot ☐ 0 1 / ____ Other ☐ _ _
b. Manufacturer ____
c. Slot size: 0.010 in.
d. Slotted length: 10.0 ft.
11. Backfill material (below filter pack): None ☒ 1 4 / ____ Other ☐ _ _

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature: [signature] Firm: The Sigma Group, 1300 W Canal St Milwaukee, WI 53233 Tel: 414-643-4200 Fax: 414-643-4210

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State of Wisconsin
Department of Natural Resources

Route To: Watershed/Wastewater ☐ Waste Management ☐ Remediation/Redevelopment ☒ Other ☐

MONITORING WELL CONSTRUCTION
Form 4400-113A Rev. 7-98

Facility/Project Name: Moss-American	Local Grid Location of Well: ____ ft. ☐ N. ☐ S. ____ ft. ☐ E. ☐ W.	Well Name: PZ-09R
Facility License, Permit or Monitoring No.	Local Grid Origin ☐ (estimated: ☐) or Well Location ☐ Lat. ° ' " Long. ° ' " or	Wis. Unique Well No. / DNR Well Number: WB905
Facility ID	St. Plane 434,688 ft. N, 2,492,204 ft. E. Ⓢ/C/N	Date Well Installed: 09/25/2019
Type of Well: Well Code 99/ot	Section Location of Waste/Source: NW 1/4 of NW 1/4 of Sec. 8, T. 8 N, R. 21 ☒ E ☐ W	Well Installed By: (Person's Name and Firm): Steve / Gestra Engineering
Distance from Waste/Source ft. / Enf. Stds. Apply ☐	Location of Well Relative to Waste/Source: u ☐ Upgradient s ☐ Sidegradient d ☐ Downgradient n ☐ Not Known	Gov. Lot Number

A. Protective pipe, top elevation 723.90 ft. MSL
B. Well casing, top elevation 723.62 ft. MSL
C. Land surface elevation 720.6 ft. MSL
D. Surface seal, bottom 717.1 ft. MSL or 3.5 ft.

12. USCS classification of soil near screen:
GP ☐ GM ☐ GC ☐ GW ☐ SW ☐ SP ☐
SM ☐ SC ☐ ML ☐ MH ☐ CL ☒ CH ☐
Bedrock ☐

13. Sieve analysis attached? ☐ Yes ☒ No

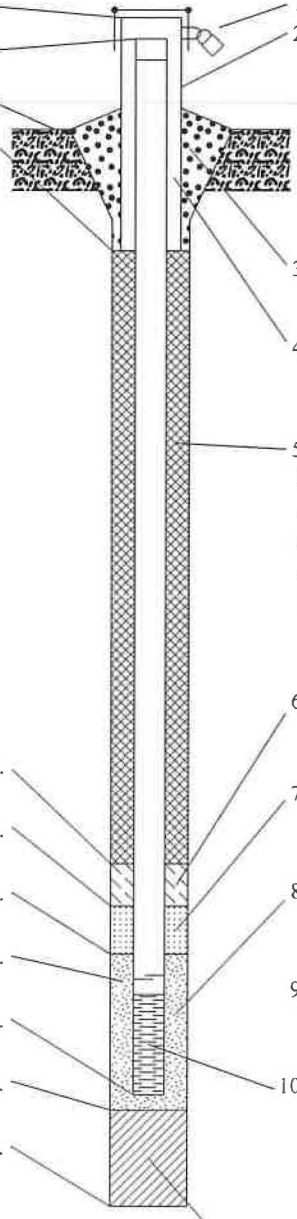
14. Drilling method used: Rotary ☐ 5 0 / Hollow Stem Auger ☒ 4 1 / Other ☐ _ _

15. Drilling fluid used: Water ☐ 0 2 / Air ☐ 0 1 / Drilling Mud ☐ 0 3 / None ☒ 9 9

16. Drilling additives used? ☐ Yes ☒ No
Describe _____

17. Source of water (attach analysis, if required):
None

E. Bentonite seal, top 720.6 ft. MSL or 0.0 ft.
F. Fine sand, top 717.1 ft. MSL or 3.5 ft.
G. Filter pack, top 716.6 ft. MSL or 4.0 ft.
H. Screen joint, top 715.6 ft. MSL or 5.0 ft.
I. Well bottom 705.6 ft. MSL or 15.0 ft.
J. Filter pack, bottom 705.6 ft. MSL or 15.0 ft.
K. Borehole, bottom 705.6 ft. MSL or 15.0 ft.
L. Borehole, diameter 6.3 in.
M. O.D. well casing 2.38 in.
N. I.D. well casing 2.00 in.



1. Cap and lock? ☒ Yes ☐ No
2. Protective cover pipe:
a. Inside diameter: ____ in.
b. Length: ____ ft.
c. Material: Steel Well Vault — Steel ☒ 0 4 / Other ☐ _ _
d. Additional protection? ☐ Yes ☒ No
If yes, describe: _____
3. Surface seal: Bentonite ☒ 3 0 / Concrete ☐ 0 1 / Other ☐ _ _
4. Material between well casing and protective pipe: Bentonite ☒ 3 0 / Other ☐ _ _
5. Annular space seal: a. Granular/Chipped Bentonite ☐ 3 3
b. ____ Lbs/gal mud weight . . . Bentonite-sand slurry ☐ 3 5
c. ____ Lbs/gal mud weight . . . Bentonite slurry ☐ 3 1
d. ____ % Bentonite . . . Bentonite-cement grout ☐ 5 0
e. ____ Ft^3 volume added for any of the above
f. How installed: Tremie ☐ 0 1 / Tremie pumped ☐ 0 2 / Gravity ☒ 0 8
6. Bentonite seal: a. Bentonite granules ☐ 3 3
b. ☐ 1/4 in. ☒ 3/8 in. ☐ 1/2 in. Bentonite chips ☒ 3 2
c. _____ Other ☐ _ _
7. Fine sand material: Manufacturer, product name & mesh size
a. _____ _ _
b. Volume added _____ ft^3
8. Filter pack material: Manufacturer, product name & mesh size
a. _____ _ _
b. Volume added _____ ft^3
9. Well casing: Flush threaded PVC schedule 40 ☒ 2 3 / Flush threaded PVC schedule 80 ☐ 2 4 / Other ☐ _ _
10. Screen material: PVC _ _
a. Screen Type: Factory cut ☒ 1 1 / Continuous slot ☐ 0 1 / Other ☐ _ _
b. Manufacturer _____
c. Slot size: 0.010 in.
d. Slotted length: 10.0 ft.
11. Backfill material (below filter pack): None ☒ 1 4 / Other ☐ _ _

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature: _____ Firm: The Sigma Group, 1300 W Canal St Milwaukee, WI 53233 Tel: 414-643-4200 Fax: 414-643-4210

Please complete both Forms 4400-113A and 4400-113B and return them to the appropriate DNR office and bureau. Completion of these reports is required by chs. 160, 281, 283, 289, 291, 292, 293, 295, and 299, Wis. Stats., and ch. NR 141, Wis. Adm. Code. In accordance with chs. 281, 289, 291, 292, 293, 295, and 299, Wis. Stats., failure to file these forms may result in a forfeiture of between $10 and $25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on these forms is not intended to be used for any other purpose. NOTE: See the instructions for more information, including where the completed forms should be sent.

ATTACHMENT 3

Well Development Logs

State of Wisconsin
Department of Natural Resources

MONITORING WELL DEVELOPMENT

Form 4400-113B Rev. 7-98

Route to: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☒ Other ☐ _____

Facility/Project Name	County Name	Well Name
Moss American	Milwaukee	MW-7S-WR
Facility License, Permit or Monitoring Number	**County Code**	**Wis. Unique Well Number**	**DNR Well ID Number**
	41	_____	WB909

1. Can this well be purged dry? ☐ Yes ☐ No

2. Well development method

surged with bailer and bailed	☐ 41
surged with bailer and pumped	☐ 61
surged with block and bailed	☐ 42
surged with block and pumped	☐ 62
surged with block, bailed and pumped	☐ 70
compressed air	☐ 20
bailed only	☒ 10
pumped only	☐ 51
pumped slowly	☐ 50
Other _____	☐

3. Time spent developing well 60 min.

4. Depth of well (from top of well casisng) 17.4 ft.

5. Inside diameter of well 2.0 in.

6. Volume of water in filter pack and well casing 18.9 gal.

7. Volume of water removed from well 34.0 gal.

8. Volume of water added (if any) 0. gal.

9. Source of water added _____

10. Analysis performed on water added? (If yes, attach results) ☐ Yes ☐ No

	Before Development	After Development
11. Depth to Water (from top of well casing)	a. 4.54 ft.	____.__ ft.
Date	b. 09/26/2019 (m m d d y y y y)	__/__/____ (m m d d y y y y)
Time	c. __:__ ☐ a.m. ☐ p.m.	__:__ ☐ a.m. ☐ p.m.
12. Sediment in well bottom	___.__ inches	___.__ inches
13. Water clarity	Clear ☐ 10 Turbid ☒ 15 (Describe)	Clear ☐ 20 Turbid ☐ 25 (Describe)

Fill in if drilling fluids were used and well is at solid waste facility:

14. Total suspended solids	_____.__ mg/l	_____.__ mg/l
15. COD	_____.__ mg/l	_____.__ mg/l

16. Well developed by: Name (first, last) and Firm
First Name: Paulo Last Name: Antunes
Firm: The Sigma Group

17. Additional comments on development:
~~good recovery~~ going dry

Name and Address of Facility Contact /Owner/Responsible Party
First Name: Thomas Last Name: Wentland
Facility/Firm: Wisconsin Department of Natural Resources
Street: 1155 Pilgrim Road
City/State/Zip: Plymouth WI 53073

I hereby certify that the above information is true and correct to the best of my knowledge.
Signature: _____
Print Name: Paulo Antunes
Firm: The Sigma Group

NOTE: See instructions for more information including a list of county codes and well type codes.

State of Wisconsin
Department of Natural Resources

MONITORING WELL DEVELOPMENT

Form 4400-113B Rev. 7-98

Route to: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☒ Other ☐ _____

Facility/Project Name	County Name	Well Name
Moss American	Milwaukee	MW-31SR

Facility License, Permit or Monitoring Number	County Code	Wis. Unique Well Number	DNR Well ID Number
	41	_____	WB 904

1. Can this well be purged dry? ☐ Yes ☐ No

2. Well development method

surged with bailer and bailed	☐ 41
surged with bailer and pumped	☐ 61
surged with block and bailed	☐ 42
surged with block and pumped	☐ 62
surged with block, bailed and pumped	☐ 70
compressed air	☐ 20
bailed only	☒ 10
pumped only	☐ 51
pumped slowly	☐ 50
Other _____	☐

3. Time spent developing well 30 min.

4. Depth of well (from top of well casisng) 17.4 ft.

5. Inside diameter of well 2.0 in.

6. Volume of water in filter pack and well casing 23.3 gal.

7. Volume of water removed from well 20.0 gal.

8. Volume of water added (if any) 0. gal.

9. Source of water added _____

10. Analysis performed on water added? (If yes, attach results) ☐ Yes ☐ No

	Before Development	After Development
11. Depth to Water (from top of well casing)	a. 1.53 ft.	_____ ft.
Date	b. 09/26/2019 (m m d d y y y y)	__/__/____ (m m d d y y y y)
Time	c. __:__ ☐ a.m. ☐ p.m.	__:__ ☐ a.m. ☐ p.m.
12. Sediment in well bottom	___.__ inches	___.__ inches
13. Water clarity	Clear ☐ 10 Turbid ☒ 15 (Describe)	Clear ☐ 20 Turbid ☐ 25 (Describe)
Fill in if drilling fluids were used and well is at solid waste facility:		
14. Total suspended solids	_____.__ mg/l	_____.__ mg/l
15. COD	_____.__ mg/l	_____.__ mg/l

16. Well developed by: Name (first, last) and Firm
First Name: Paulo Last Name: Antunes
Firm: The Sigma Group

17. Additional comments on development:
moderate recovery

Name and Address of Facility Contact/Owner/Responsible Party
First Name: Thomas Last Name: Wentland
Facility/Firm: Wisconsin Department of Natural Resources
Street: 1155 Pilgrim Road
City/State/Zip: Plymouth WI 53073

I hereby certify that the above information is true and correct to the best of my knowledge.
Signature: _____
Print Name: Paulo Antunes
Firm: The Sigma Group

NOTE: See instructions for more information including a list of county codes and well type codes.

State of Wisconsin
Department of Natural Resources

MONITORING WELL DEVELOPMENT

Form 4400-113B Rev. 7-98

Route to: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☒ Other ☐ _____

Facility/Project Name	County Name	Well Name
Moss American	Milwaukee	MW-325R
Facility License, Permit or Monitoring Number	**County Code**	**Wis. Unique Well Number** / **DNR Well ID Number**
	41	_____ / WB 901

1. Can this well be purged dry? ☐ Yes ☐ No

2. Well development method

surged with bailer and bailed	☐ 41
surged with bailer and pumped	☐ 61
surged with block and bailed	☐ 42
surged with block and pumped	☐ 62
surged with block, bailed and pumped	☐ 70
compressed air	☐ 20
bailed only	☒ 10
pumped only	☐ 51
pumped slowly	☐ 50
Other _____	☐

3. Time spent developing well 60 min.

4. Depth of well (from top of well casisng) 17.6 ft.

5. Inside diameter of well 2.0 in.

6. Volume of water in filter pack and well casing 18.6 gal.

7. Volume of water removed from well 26.0 gal.

8. Volume of water added (if any) 0. gal.

9. Source of water added _____

10. Analysis performed on water added? (If yes, attach results) ☐ Yes ☐ No

	Before Development	After Development
11. Depth to Water (from top of well casing)	a. 4.92 ft.	____.__ ft.
Date	b. 09/26/2019 (m m d d y y y y)	__/__/____ (m m d d y y y y)
Time	c. __:__ ☐ a.m. ☐ p.m.	__:__ ☐ a.m. ☐ p.m.
12. Sediment in well bottom	___.__ inches	___.__ inches
13. Water clarity	Clear ☐ 10 Turbid ☒ 15 (Describe)	Clear ☐ 20 Turbid ☐ 25 (Describe)

Fill in if drilling fluids were used and well is at solid waste facility:

14. Total suspended solids	_____.__ mg/l	_____.__ mg/l
15. COD	_____.__ mg/l	_____.__ mg/l

16. Well developed by: Name (first, last) and Firm
First Name: Paulo Last Name: Antunes
Firm: The Sigma Group

17. Additional comments on development:
good recovery

Name and Address of Facility Contact /Owner/Responsible Party
First Name: Thomas Last Name: Wentland
Facility/Firm: Wisconsin Department of Natural Resources
Street: 1155 Pilgrim Road
City/State/Zip: Plymouth WI 53073

I hereby certify that the above information is true and correct to the best of my knowledge.
Signature: _____
Print Name: Paulo Antunes
Firm: The Sigma Group

NOTE: See instructions for more information including a list of county codes and well type codes.

State of Wisconsin
Department of Natural Resources

MONITORING WELL DEVELOPMENT

Form 4400-113B Rev. 7-98

Route to: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☒ Other ☐ _____

Facility/Project Name	County Name	Well Name
Moss American	Milwaukee	MW-345R
Facility License, Permit or Monitoring Number	**County Code**	**Wis. Unique Well Number**	**DNR Well ID Number**
	41	_____	WB 903

1. Can this well be purged dry? ☐ Yes ☐ No

2. Well development method

surged with bailer and bailed	☐ 41
surged with bailer and pumped	☐ 61
surged with block and bailed	☐ 42
surged with block and pumped	☐ 62
surged with block, bailed and pumped	☐ 70
compressed air	☐ 20
bailed only	☒ 10
pumped only	☐ 51
pumped slowly	☐ 50
Other _____	☐

3. Time spent developing well 15 min.

4. Depth of well (from top of well casisng) 17.8 ft.

5. Inside diameter of well 2.0 in.

6. Volume of water in filter pack and well casing 20.6 gal.

7. Volume of water removed from well 40 gal.

8. Volume of water added (if any) 0 gal.

9. Source of water added _____

10. Analysis performed on water added? ☐ Yes ☐ No
(If yes, attach results)

	Before Development	After Development
11. Depth to Water (from top of well casing)	a. ___.__ ft.	___.__ ft.
Date	b. __/__/____ m m d d y y y y	__/__/____ m m d d y y y y
Time	c. __:__ ☐ a.m. ☐ p.m.	__:__ ☐ a.m. ☐ p.m.
12. Sediment in well bottom	___.__ inches	___.__ inches
13. Water clarity	Clear ☐ 10 Turbid ☒ 15 (Describe)	Clear ☐ 20 Turbid ☐ 25 (Describe)

Fill in if drilling fluids were used and well is at solid waste facility:

14. Total suspended solids	____.__ mg/l	____.__ mg/l
15. COD	____.__ mg/l	____.__ mg/l

16. Well developed by: Name (first, last) and Firm
First Name: Paulo Last Name: Antunes
Firm: The Sigma Group

17. Additional comments on development:
purged dry

Name and Address of Facility Contact /Owner/Responsible Party
First Name: Thomas Last Name: Wentland
Facility/Firm: Wisconsin Department of Natural Resources
Street: 1155 Pilgrim Road
City/State/Zip: Plymouth WI 53073

I hereby certify that the above information is true and correct to the best of my knowledge.
Signature: _____
Print Name: Paulo Antunes
Firm: The Sigma Group

NOTE: See instructions for more information including a list of county codes and well type codes.

State of Wisconsin
Department of Natural Resources

MONITORING WELL DEVELOPMENT

Form 4400-113B Rev. 7-98

Route to: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☒ Other ☐ _____

Facility/Project Name	County Name	Well Name
Moss American	Milwaukee	TG1-1R

Facility License, Permit or Monitoring Number	County Code	Wis. Unique Well Number	DNR Well ID Number
	41	_____	___

1. Can this well be purged dry? ☐ Yes ☐ No

2. Well development method

surged with bailer and bailed	☐ 41
surged with bailer and pumped	☐ 61
surged with block and bailed	☐ 42
surged with block and pumped	☐ 62
surged with block, bailed and pumped	☐ 70
compressed air	☐ 20
bailed only	☒ 10
pumped only	☐ 51
pumped slowly	☐ 50
Other _____	☐

3. Time spent developing well _____ min.

4. Depth of well (from top of well casisng) 17.5 ft.

5. Inside diameter of well 2.0 in.

6. Volume of water in filter pack and well casing 19.3 gal.

7. Volume of water removed from well 9.0 gal.

8. Volume of water added (if any) 0. gal.

9. Source of water added _____

10. Analysis performed on water added? (If yes, attach results) ☐ Yes ☐ No

	Before Development	After Development
11. Depth to Water (from top of well casing)	a. 4.35 ft.	_____ ft.
Date	b. 09/26/2019 (m m d d y y y y)	__/__/____ (m m d d y y y y)
Time	c. __:__ ☐ a.m. ☐ p.m.	__:__ ☐ a.m. ☐ p.m.
12. Sediment in well bottom	___.__ inches	___.__ inches

13. Water clarity

Before Development	After Development
Clear ☒ 10	Clear ☐ 20
Turbid ☒ 15	Turbid ☐ 25
(Describe)	(Describe)

Fill in if drilling fluids were used and well is at solid waste facility:

	Before Development	After Development
14. Total suspended solids	_____.__ mg/l	_____.__ mg/l
15. COD	_____.__ mg/l	_____.__ mg/l

16. Well developed by: Name (first, last) and Firm
First Name: Paulo Last Name: Antunes
Firm: The Sigma Group

17. Additional comments on development:
purged dry

Name and Address of Facility Contact /Owner/Responsible Party
First Name: Thomas Last Name: Wentland
Facility/Firm: Wisconsin Department of Natural Resources
Street: 1155 Pilgrim Road
City/State/Zip: Plymouth WI 53073

I hereby certify that the above information is true and correct to the best of my knowledge.
Signature: [signature]
Print Name: Paulo Antunes
Firm: The Sigma Group

NOTE: See instructions for more information including a list of county codes and well type codes.

State of Wisconsin
Department of Natural Resources

MONITORING WELL DEVELOPMENT

Form 4400-113B Rev. 7-98

Route to: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☒ Other ☐ _____

Facility/Project Name	County Name	Well Name
Moss American	Milwaukee	PZ-09R

Facility License, Permit or Monitoring Number	County Code	Wis. Unique Well Number	DNR Well ID Number
	41	_____	WB905

1. Can this well be purged dry? ☐ Yes ☐ No

2. Well development method

surged with bailer and bailed	☐ 41
surged with bailer and pumped	☐ 61
surged with block and bailed	☐ 42
surged with block and pumped	☐ 62
surged with block, bailed and pumped	☐ 70
compressed air	☐ 20
bailed only	☒ 10
pumped only	☐ 51
pumped slowly	☐ 50
Other _____	☐

3. Time spent developing well 60 min.

4. Depth of well (from top of well casisng) 17.7 ft.

5. Inside diameter of well 2.0 in.

6. Volume of water in filter pack and well casing 21.5 gal.

7. Volume of water removed from well 25.0 gal.

8. Volume of water added (if any) 0. gal.

9. Source of water added _____

10. Analysis performed on water added? ☐ Yes ☐ No
(If yes, attach results)

	Before Development	After Development
11. Depth to Water (from top of well casing)	a. 3.00 ft.	____.__ ft.
Date	b. 09/26/2019 (m m d d y y y y)	__/__/____ (m m d d y y y y)
Time	c. __:__ ☐ a.m. ☐ p.m.	__:__ ☐ a.m. ☐ p.m.
12. Sediment in well bottom	__.__ inches	__.__ inches
13. Water clarity	Clear ☐ 10 Turbid ☒ 15 (Describe)	Clear ☐ 20 Turbid ☐ 25 (Describe)

Fill in if drilling fluids were used and well is at solid waste facility:

14. Total suspended solids	____.__ mg/l	____.__ mg/l
15. COD	____.__ mg/l	____.__ mg/l

16. Well developed by: Name (first, last) and Firm
First Name: Paulo Last Name: Antunes
Firm: The Sigma Group

17. Additional comments on development:
good recovery

Name and Address of Facility Contact /Owner/Responsible Party
First Name: Thomas Last Name: Wentland
Facility/Firm: Wisconsin Department of Natural Resources
Street: 1155 Pilgrim Road
City/State/Zip: Plymouth WI 53073

I hereby certify that the above information is true and correct to the best of my knowledge.
Signature: _____
Print Name: Paulo Antunes
Firm: The Sigma Group

NOTE: See instructions for more information including a list of county codes and well type codes.

ATTACHMENT 4

Laboratory Reports

Synergy Environmental Lab, INC

1990 Prospect Ct., Appleton, WI 54914 *P 920-830-2455 * F 920-733-0631

MAFIZUL ISLAM
THE SIGMA GROUP, INC.
1300 W. CANAL STREET
MILWAUKEE. WI 53233

Report Date *15-Oct-19*

Project Name WDNR-MOSS AMERICA **Invoice #** E36912
Project # 18687

Lab Code 5036912A
Sample ID MW-9S
Sample Matrix Water
Sample Date 10/2/2019

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
BTEX										
Benzene	< 0.22	ug/l	0.22	0.71	1	8260B		10/9/2019	CJR	1
Ethylbenzene	< 0.26	ug/l	0.26	0.83	1	8260B		10/9/2019	CJR	1
Toluene	< 0.19	ug/l	0.19	0.6	1	8260B		10/9/2019	CJR	1
m&p-Xylene	< 0.43	ug/l	0.43	1.38	1	8260B		10/9/2019	CJR	1
o-Xylene	< 0.29	ug/l	0.29	0.93	1	8260B		10/9/2019	CJR	1
PAH SIM										
Acenaphthene	< 0.0094	ug/l	0.0094	0.03	1	M8270C	10/7/2019	10/8/2019	NJC	1
Acenaphthylene	< 0.0156	ug/l	0.0156	0.0495	1	M8270C	10/7/2019	10/8/2019	NJC	1
Anthracene	0.0198 "J"	ug/l	0.015	0.0478	1	M8270C	10/7/2019	10/8/2019	NJC	1
Benzo(a)anthracene	< 0.0131	ug/l	0.0131	0.0418	1	M8270C	10/7/2019	10/8/2019	NJC	1
Benzo(a)pyrene	< 0.0167	ug/l	0.0167	0.0531	1	M8270C	10/7/2019	10/8/2019	NJC	1
Benzo(b)fluoranthene	< 0.016	ug/l	0.016	0.0509	1	M8270C	10/7/2019	10/8/2019	NJC	1
Benzo(g,h,i)perylene	< 0.0142	ug/l	0.0142	0.0451	1	M8270C	10/7/2019	10/8/2019	NJC	1
Benzo(k)fluoranthene	< 0.0146	ug/l	0.0146	0.0463	1	M8270C	10/7/2019	10/8/2019	NJC	1
Chrysene	< 0.0157	ug/l	0.0157	0.0499	1	M8270C	10/7/2019	10/8/2019	NJC	1
Dibenzo(a,h)anthracene	< 0.0173	ug/l	0.0173	0.0549	1	M8270C	10/7/2019	10/8/2019	NJC	1
Fluoranthene	< 0.0088	ug/l	0.0088	0.0281	1	M8270C	10/7/2019	10/8/2019	NJC	1
Fluorene	< 0.0079	ug/l	0.0079	0.0251	1	M8270C	10/7/2019	10/8/2019	NJC	1
Indeno(1,2,3-cd)pyrene	< 0.0121	ug/l	0.0121	0.0385	1	M8270C	10/7/2019	10/8/2019	NJC	1
1-Methyl naphthalene	< 0.0191	ug/l	0.0191	0.0609	1	M8270C	10/7/2019	10/8/2019	NJC	1
2-Methyl naphthalene	< 0.0186	ug/l	0.0186	0.059	1	M8270C	10/7/2019	10/8/2019	NJC	1
Naphthalene	< 0.026	ug/l	0.026	0.083	1	M8270C	10/7/2019	10/8/2019	NJC	1
Phenanthrene	< 0.0143	ug/l	0.0143	0.0456	1	M8270C	10/7/2019	10/8/2019	NJC	1
Pyrene	< 0.0121	ug/l	0.0121	0.0386	1	M8270C	10/7/2019	10/8/2019	NJC	1

Project Name WDNR-MOSS AMERICA **Invoice #** E36912
Project # 18687

Lab Code 5036912B
Sample ID PZ-04
Sample Matrix Water
Sample Date 10/2/2019

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
BTEX										
Benzene	< 0.22	ug/l	0.22	0.71	1	8260B		10/9/2019	CJR	1
Ethylbenzene	< 0.26	ug/l	0.26	0.83	1	8260B		10/9/2019	CJR	1
Toluene	< 0.19	ug/l	0.19	0.6	1	8260B		10/9/2019	CJR	1
m&p-Xylene	< 0.43	ug/l	0.43	1.38	1	8260B		10/9/2019	CJR	1
o-Xylene	< 0.29	ug/l	0.29	0.93	1	8260B		10/9/2019	CJR	1
PAH SIM										
Acenaphthene	< 0.0094	ug/l	0.0094	0.03	1	M8270C	10/9/2019	10/9/2019	NJC	7
Acenaphthylene	< 0.0156	ug/l	0.0156	0.0495	1	M8270C	10/9/2019	10/9/2019	NJC	7
Anthracene	0.0187 "J"	ug/l	0.015	0.0478	1	M8270C	10/9/2019	10/9/2019	NJC	1
Benzo(a)anthracene	0.0166 "J"	ug/l	0.0131	0.0418	1	M8270C	10/9/2019	10/9/2019	NJC	1
Benzo(a)pyrene	< 0.0167	ug/l	0.0167	0.0531	1	M8270C	10/9/2019	10/9/2019	NJC	1
Benzo(b)fluoranthene	< 0.016	ug/l	0.016	0.0509	1	M8270C	10/9/2019	10/9/2019	NJC	1
Benzo(g,h,i)perylene	< 0.0142	ug/l	0.0142	0.0451	1	M8270C	10/9/2019	10/9/2019	NJC	1
Benzo(k)fluoranthene	< 0.0146	ug/l	0.0146	0.0463	1	M8270C	10/9/2019	10/9/2019	NJC	1
Chrysene	< 0.0157	ug/l	0.0157	0.0499	1	M8270C	10/9/2019	10/9/2019	NJC	1
Dibenzo(a,h)anthracene	< 0.0173	ug/l	0.0173	0.0549	1	M8270C	10/9/2019	10/9/2019	NJC	1
Fluoranthene	0.0138 "J"	ug/l	0.0088	0.0281	1	M8270C	10/9/2019	10/9/2019	NJC	1
Fluorene	< 0.0079	ug/l	0.0079	0.0251	1	M8270C	10/9/2019	10/9/2019	NJC	1
Indeno(1,2,3-cd)pyrene	< 0.0121	ug/l	0.0121	0.0385	1	M8270C	10/9/2019	10/9/2019	NJC	1
1-Methyl naphthalene	< 0.0191	ug/l	0.0191	0.0609	1	M8270C	10/9/2019	10/9/2019	NJC	7
2-Methyl naphthalene	< 0.0186	ug/l	0.0186	0.059	1	M8270C	10/9/2019	10/9/2019	NJC	7
Naphthalene	< 0.026	ug/l	0.026	0.083	1	M8270C	10/9/2019	10/9/2019	NJC	7
Phenanthrene	0.026 "J"	ug/l	0.0143	0.0456	1	M8270C	10/9/2019	10/9/2019	NJC	7
Pyrene	0.0189 "J"	ug/l	0.0121	0.0386	1	M8270C	10/9/2019	10/9/2019	NJC	1

Project Name WDNR-MOSS AMERICA **Invoice #** E36912
Project # 18687

Lab Code 5036912C
Sample ID TG5-3
Sample Matrix Water
Sample Date 10/2/2019

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
BTEX										
Benzene	< 0.22	ug/l	0.22	0.71	1	8260B		10/9/2019	CJR	1
Ethylbenzene	< 0.26	ug/l	0.26	0.83	1	8260B		10/9/2019	CJR	1
Toluene	< 0.19	ug/l	0.19	0.6	1	8260B		10/9/2019	CJR	1
m&p-Xylene	< 0.43	ug/l	0.43	1.38	1	8260B		10/9/2019	CJR	1
o-Xylene	< 0.29	ug/l	0.29	0.93	1	8260B		10/9/2019	CJR	1
PAH SIM										
Acenaphthene	< 0.0094	ug/l	0.0094	0.03	1	M8270C	10/9/2019	10/9/2019	NJC	7
Acenaphthylene	< 0.0156	ug/l	0.0156	0.0495	1	M8270C	10/9/2019	10/9/2019	NJC	7
Anthracene	0.046 "J"	ug/l	0.015	0.0478	1	M8270C	10/9/2019	10/9/2019	NJC	1
Benzo(a)anthracene	0.0239 "J"	ug/l	0.0131	0.0418	1	M8270C	10/9/2019	10/9/2019	NJC	1
Benzo(a)pyrene	< 0.0167	ug/l	0.0167	0.0531	1	M8270C	10/9/2019	10/9/2019	NJC	1
Benzo(b)fluoranthene	0.0187 "J"	ug/l	0.016	0.0509	1	M8270C	10/9/2019	10/9/2019	NJC	1
Benzo(g,h,i)perylene	< 0.0142	ug/l	0.0142	0.0451	1	M8270C	10/9/2019	10/9/2019	NJC	1
Benzo(k)fluoranthene	< 0.0146	ug/l	0.0146	0.0463	1	M8270C	10/9/2019	10/9/2019	NJC	1
Chrysene	< 0.0157	ug/l	0.0157	0.0499	1	M8270C	10/9/2019	10/9/2019	NJC	1
Dibenzo(a,h)anthracene	< 0.0173	ug/l	0.0173	0.0549	1	M8270C	10/9/2019	10/9/2019	NJC	1
Fluoranthene	0.0176 "J"	ug/l	0.0088	0.0281	1	M8270C	10/9/2019	10/9/2019	NJC	1
Fluorene	< 0.0079	ug/l	0.0079	0.0251	1	M8270C	10/9/2019	10/9/2019	NJC	1
Indeno(1,2,3-cd)pyrene	< 0.0121	ug/l	0.0121	0.0385	1	M8270C	10/9/2019	10/9/2019	NJC	1
1-Methyl naphthalene	< 0.0191	ug/l	0.0191	0.0609	1	M8270C	10/9/2019	10/9/2019	NJC	7
2-Methyl naphthalene	< 0.0186	ug/l	0.0186	0.059	1	M8270C	10/9/2019	10/9/2019	NJC	7
Naphthalene	< 0.026	ug/l	0.026	0.083	1	M8270C	10/9/2019	10/9/2019	NJC	7
Phenanthrene	< 0.0143	ug/l	0.0143	0.0456	1	M8270C	10/9/2019	10/9/2019	NJC	7
Pyrene	0.0242 "J"	ug/l	0.0121	0.0386	1	M8270C	10/9/2019	10/9/2019	NJC	1

Project Name WDNR-MOSS AMERICA **Invoice #** E36912
Project # 18687

Lab Code 5036912D
Sample ID TG5-1
Sample Matrix Water
Sample Date 10/2/2019

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
BTEX										
Benzene	< 0.22	ug/l	0.22	0.71	1	8260B		10/9/2019	CJR	1
Ethylbenzene	< 0.26	ug/l	0.26	0.83	1	8260B		10/9/2019	CJR	1
Toluene	< 0.19	ug/l	0.19	0.6	1	8260B		10/9/2019	CJR	1
m&p-Xylene	< 0.43	ug/l	0.43	1.38	1	8260B		10/9/2019	CJR	1
o-Xylene	< 0.29	ug/l	0.29	0.93	1	8260B		10/9/2019	CJR	1
PAH SIM										
Acenaphthene	< 0.0094	ug/l	0.0094	0.03	1	M8270C	10/9/2019	10/9/2019	NJC	7
Acenaphthylene	< 0.0156	ug/l	0.0156	0.0495	1	M8270C	10/9/2019	10/9/2019	NJC	7
Anthracene	0.038 "J"	ug/l	0.015	0.0478	1	M8270C	10/9/2019	10/9/2019	NJC	1
Benzo(a)anthracene	0.074	ug/l	0.0131	0.0418	1	M8270C	10/9/2019	10/9/2019	NJC	1
Benzo(a)pyrene	< 0.0167	ug/l	0.0167	0.0531	1	M8270C	10/9/2019	10/9/2019	NJC	1
Benzo(b)fluoranthene	0.056	ug/l	0.016	0.0509	1	M8270C	10/9/2019	10/9/2019	NJC	1
Benzo(g,h,i)perylene	0.034 "J"	ug/l	0.0142	0.0451	1	M8270C	10/9/2019	10/9/2019	NJC	1
Benzo(k)fluoranthene	0.051	ug/l	0.0146	0.0463	1	M8270C	10/9/2019	10/9/2019	NJC	1
Chrysene	0.065	ug/l	0.0157	0.0499	1	M8270C	10/9/2019	10/9/2019	NJC	1
Dibenzo(a,h)anthracene	0.0265 "J"	ug/l	0.0173	0.0549	1	M8270C	10/9/2019	10/9/2019	NJC	1
Fluoranthene	0.051	ug/l	0.0088	0.0281	1	M8270C	10/9/2019	10/9/2019	NJC	1
Fluorene	< 0.0079	ug/l	0.0079	0.0251	1	M8270C	10/9/2019	10/9/2019	NJC	1
Indeno(1,2,3-cd)pyrene	0.0278 "J"	ug/l	0.0121	0.0385	1	M8270C	10/9/2019	10/9/2019	NJC	1
1-Methyl naphthalene	< 0.0191	ug/l	0.0191	0.0609	1	M8270C	10/9/2019	10/9/2019	NJC	7
2-Methyl naphthalene	< 0.0186	ug/l	0.0186	0.059	1	M8270C	10/9/2019	10/9/2019	NJC	7
Naphthalene	< 0.026	ug/l	0.026	0.083	1	M8270C	10/9/2019	10/9/2019	NJC	7
Phenanthrene	< 0.0143	ug/l	0.0143	0.0456	1	M8270C	10/9/2019	10/9/2019	NJC	7
Pyrene	0.051	ug/l	0.0121	0.0386	1	M8270C	10/9/2019	10/9/2019	NJC	1

Project Name WDNR-MOSS AMERICA **Invoice #** E36912
Project # 18687

Lab Code 5036912E
Sample ID TG6-1
Sample Matrix Water
Sample Date 10/3/2019

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
BTEX										
Benzene	< 0.22	ug/l	0.22	0.71	1	8260B		10/9/2019	CJR	1
Ethylbenzene	< 0.26	ug/l	0.26	0.83	1	8260B		10/9/2019	CJR	1
Toluene	< 0.19	ug/l	0.19	0.6	1	8260B		10/9/2019	CJR	1
m&p-Xylene	< 0.43	ug/l	0.43	1.38	1	8260B		10/9/2019	CJR	1
o-Xylene	< 0.29	ug/l	0.29	0.93	1	8260B		10/9/2019	CJR	1
PAH SIM										
Acenaphthene	0.277	ug/l	0.0094	0.03	1	M8270C	10/9/2019	10/9/2019	NJC	7
Acenaphthylene	< 0.0156	ug/l	0.0156	0.0495	1	M8270C	10/9/2019	10/9/2019	NJC	7
Anthracene	0.0204 "J"	ug/l	0.015	0.0478	1	M8270C	10/9/2019	10/9/2019	NJC	1
Benzo(a)anthracene	0.0261 "J"	ug/l	0.0131	0.0418	1	M8270C	10/9/2019	10/9/2019	NJC	1
Benzo(a)pyrene	< 0.0167	ug/l	0.0167	0.0531	1	M8270C	10/9/2019	10/9/2019	NJC	1
Benzo(b)fluoranthene	0.0192 "J"	ug/l	0.016	0.0509	1	M8270C	10/9/2019	10/9/2019	NJC	1
Benzo(g,h,i)perylene	0.0195 "J"	ug/l	0.0142	0.0451	1	M8270C	10/9/2019	10/9/2019	NJC	1
Benzo(k)fluoranthene	0.0157 "J"	ug/l	0.0146	0.0463	1	M8270C	10/9/2019	10/9/2019	NJC	1
Chrysene	0.018 "J"	ug/l	0.0157	0.0499	1	M8270C	10/9/2019	10/9/2019	NJC	1
Dibenzo(a,h)anthracene	< 0.0173	ug/l	0.0173	0.0549	1	M8270C	10/9/2019	10/9/2019	NJC	1
Fluoranthene	0.0286	ug/l	0.0088	0.0281	1	M8270C	10/9/2019	10/9/2019	NJC	1
Fluorene	0.0278	ug/l	0.0079	0.0251	1	M8270C	10/9/2019	10/9/2019	NJC	1
Indeno(1,2,3-cd)pyrene	0.0145 "J"	ug/l	0.0121	0.0385	1	M8270C	10/9/2019	10/9/2019	NJC	1
1-Methyl naphthalene	< 0.0191	ug/l	0.0191	0.0609	1	M8270C	10/9/2019	10/9/2019	NJC	7
2-Methyl naphthalene	< 0.0186	ug/l	0.0186	0.059	1	M8270C	10/9/2019	10/9/2019	NJC	7
Naphthalene	< 0.026	ug/l	0.026	0.083	1	M8270C	10/9/2019	10/9/2019	NJC	7
Phenanthrene	< 0.0143	ug/l	0.0143	0.0456	1	M8270C	10/9/2019	10/9/2019	NJC	7
Pyrene	0.0222 "J"	ug/l	0.0121	0.0386	1	M8270C	10/9/2019	10/9/2019	NJC	1

Project Name WDNR-MOSS AMERICA **Invoice #** E36912
Project # 18687

Lab Code 5036912F
Sample ID TG6-2
Sample Matrix Water
Sample Date 10/3/2019

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
BTEX										
Benzene	< 0.22	ug/l	0.22	0.71	1	8260B		10/9/2019	CJR	1
Ethylbenzene	< 0.26	ug/l	0.26	0.83	1	8260B		10/9/2019	CJR	1
Toluene	< 0.19	ug/l	0.19	0.6	1	8260B		10/9/2019	CJR	1
m&p-Xylene	< 0.43	ug/l	0.43	1.38	1	8260B		10/9/2019	CJR	1
o-Xylene	< 0.29	ug/l	0.29	0.93	1	8260B		10/9/2019	CJR	1
PAH SIM										
Acenaphthene	0.0108 "J"	ug/l	0.0094	0.03	1	M8270C	10/9/2019	10/9/2019	NJC	7
Acenaphthylene	< 0.0156	ug/l	0.0156	0.0495	1	M8270C	10/9/2019	10/9/2019	NJC	7
Anthracene	0.041 "J"	ug/l	0.015	0.0478	1	M8270C	10/9/2019	10/9/2019	NJC	1
Benzo(a)anthracene	0.044	ug/l	0.0131	0.0418	1	M8270C	10/9/2019	10/9/2019	NJC	1
Benzo(a)pyrene	< 0.0167	ug/l	0.0167	0.0531	1	M8270C	10/9/2019	10/9/2019	NJC	1
Benzo(b)fluoranthene	0.037 "J"	ug/l	0.016	0.0509	1	M8270C	10/9/2019	10/9/2019	NJC	1
Benzo(g,h,i)perylene	< 0.0142	ug/l	0.0142	0.0451	1	M8270C	10/9/2019	10/9/2019	NJC	1
Benzo(k)fluoranthene	< 0.0146	ug/l	0.0146	0.0463	1	M8270C	10/9/2019	10/9/2019	NJC	1
Chrysene	0.0301 "J"	ug/l	0.0157	0.0499	1	M8270C	10/9/2019	10/9/2019	NJC	1
Dibenzo(a,h)anthracene	< 0.0173	ug/l	0.0173	0.0549	1	M8270C	10/9/2019	10/9/2019	NJC	1
Fluoranthene	0.18	ug/l	0.0088	0.0281	1	M8270C	10/9/2019	10/9/2019	NJC	1
Fluorene	< 0.0079	ug/l	0.0079	0.0251	1	M8270C	10/9/2019	10/9/2019	NJC	1
Indeno(1,2,3-cd)pyrene	< 0.0121	ug/l	0.0121	0.0385	1	M8270C	10/9/2019	10/9/2019	NJC	1
1-Methyl naphthalene	< 0.0191	ug/l	0.0191	0.0609	1	M8270C	10/9/2019	10/9/2019	NJC	7
2-Methyl naphthalene	< 0.0186	ug/l	0.0186	0.059	1	M8270C	10/9/2019	10/9/2019	NJC	7
Naphthalene	< 0.026	ug/l	0.026	0.083	1	M8270C	10/9/2019	10/9/2019	NJC	7
Phenanthrene	< 0.0143	ug/l	0.0143	0.0456	1	M8270C	10/9/2019	10/9/2019	NJC	7
Pyrene	0.148	ug/l	0.0121	0.0386	1	M8270C	10/9/2019	10/9/2019	NJC	1

Project Name WDNR-MOSS AMERICA **Invoice #** E36912
Project # 18687

Lab Code 5036912G
Sample ID TG6-3
Sample Matrix Water
Sample Date 10/3/2019

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
BTEX										
Benzene	< 0.22	ug/l	0.22	0.71	1	8260B		10/9/2019	CJR	1
Ethylbenzene	< 0.26	ug/l	0.26	0.83	1	8260B		10/9/2019	CJR	1
Toluene	< 0.19	ug/l	0.19	0.6	1	8260B		10/9/2019	CJR	1
m&p-Xylene	< 0.43	ug/l	0.43	1.38	1	8260B		10/9/2019	CJR	1
o-Xylene	< 0.29	ug/l	0.29	0.93	1	8260B		10/9/2019	CJR	1
PAH SIM										
Acenaphthene	< 0.0094	ug/l	0.0094	0.03	1	M8270C	10/9/2019	10/9/2019	NJC	7
Acenaphthylene	< 0.0156	ug/l	0.0156	0.0495	1	M8270C	10/9/2019	10/9/2019	NJC	7
Anthracene	0.019 "J"	ug/l	0.015	0.0478	1	M8270C	10/9/2019	10/9/2019	NJC	1
Benzo(a)anthracene	0.0145 "J"	ug/l	0.0131	0.0418	1	M8270C	10/9/2019	10/9/2019	NJC	1
Benzo(a)pyrene	< 0.0167	ug/l	0.0167	0.0531	1	M8270C	10/9/2019	10/9/2019	NJC	1
Benzo(b)fluoranthene	< 0.016	ug/l	0.016	0.0509	1	M8270C	10/9/2019	10/9/2019	NJC	1
Benzo(g,h,i)perylene	< 0.0142	ug/l	0.0142	0.0451	1	M8270C	10/9/2019	10/9/2019	NJC	1
Benzo(k)fluoranthene	< 0.0146	ug/l	0.0146	0.0463	1	M8270C	10/9/2019	10/9/2019	NJC	1
Chrysene	< 0.0157	ug/l	0.0157	0.0499	1	M8270C	10/9/2019	10/9/2019	NJC	1
Dibenzo(a,h)anthracene	< 0.0173	ug/l	0.0173	0.0549	1	M8270C	10/9/2019	10/9/2019	NJC	1
Fluoranthene	0.036	ug/l	0.0088	0.0281	1	M8270C	10/9/2019	10/9/2019	NJC	1
Fluorene	< 0.0079	ug/l	0.0079	0.0251	1	M8270C	10/9/2019	10/9/2019	NJC	1
Indeno(1,2,3-cd)pyrene	< 0.0121	ug/l	0.0121	0.0385	1	M8270C	10/9/2019	10/9/2019	NJC	1
1-Methyl naphthalene	< 0.0191	ug/l	0.0191	0.0609	1	M8270C	10/9/2019	10/9/2019	NJC	7
2-Methyl naphthalene	< 0.0186	ug/l	0.0186	0.059	1	M8270C	10/9/2019	10/9/2019	NJC	7
Naphthalene	< 0.026	ug/l	0.026	0.083	1	M8270C	10/9/2019	10/9/2019	NJC	7
Phenanthrene	< 0.0143	ug/l	0.0143	0.0456	1	M8270C	10/9/2019	10/9/2019	NJC	7
Pyrene	0.026 "J"	ug/l	0.0121	0.0386	1	M8270C	10/9/2019	10/9/2019	NJC	1

Project Name WDNR-MOSS AMERICA **Invoice #** E36912
Project # 18687

Lab Code 5036912H
Sample ID TG3-1
Sample Matrix Water
Sample Date 10/3/2019

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
BTEX										
Benzene	< 0.22	ug/l	0.22	0.71	1	8260B		10/9/2019	CJR	1
Ethylbenzene	< 0.26	ug/l	0.26	0.83	1	8260B		10/9/2019	CJR	1
Toluene	< 0.19	ug/l	0.19	0.6	1	8260B		10/9/2019	CJR	1
m&p-Xylene	< 0.43	ug/l	0.43	1.38	1	8260B		10/9/2019	CJR	1
o-Xylene	< 0.29	ug/l	0.29	0.93	1	8260B		10/9/2019	CJR	1
PAH SIM										
Acenaphthene	0.189	ug/l	0.0094	0.03	1	M8270C	10/9/2019	10/9/2019	NJC	7
Acenaphthylene	< 0.0156	ug/l	0.0156	0.0495	1	M8270C	10/9/2019	10/9/2019	NJC	7
Anthracene	0.106	ug/l	0.015	0.0478	1	M8270C	10/9/2019	10/9/2019	NJC	1
Benzo(a)anthracene	0.032 "J"	ug/l	0.0131	0.0418	1	M8270C	10/9/2019	10/9/2019	NJC	1
Benzo(a)pyrene	< 0.0167	ug/l	0.0167	0.0531	1	M8270C	10/9/2019	10/9/2019	NJC	1
Benzo(b)fluoranthene	0.0228 "J"	ug/l	0.016	0.0509	1	M8270C	10/9/2019	10/9/2019	NJC	1
Benzo(g,h,i)perylene	< 0.0142	ug/l	0.0142	0.0451	1	M8270C	10/9/2019	10/9/2019	NJC	1
Benzo(k)fluoranthene	0.0169 "J"	ug/l	0.0146	0.0463	1	M8270C	10/9/2019	10/9/2019	NJC	1
Chrysene	0.0236 "J"	ug/l	0.0157	0.0499	1	M8270C	10/9/2019	10/9/2019	NJC	1
Dibenzo(a,h)anthracene	< 0.0173	ug/l	0.0173	0.0549	1	M8270C	10/9/2019	10/9/2019	NJC	1
Fluoranthene	0.05	ug/l	0.0088	0.0281	1	M8270C	10/9/2019	10/9/2019	NJC	1
Fluorene	0.026	ug/l	0.0079	0.0251	1	M8270C	10/9/2019	10/9/2019	NJC	1
Indeno(1,2,3-cd)pyrene	< 0.0121	ug/l	0.0121	0.0385	1	M8270C	10/9/2019	10/9/2019	NJC	1
1-Methyl naphthalene	< 0.0191	ug/l	0.0191	0.0609	1	M8270C	10/9/2019	10/9/2019	NJC	7
2-Methyl naphthalene	< 0.0186	ug/l	0.0186	0.059	1	M8270C	10/9/2019	10/9/2019	NJC	7
Naphthalene	< 0.026	ug/l	0.026	0.083	1	M8270C	10/9/2019	10/9/2019	NJC	7
Phenanthrene	0.0298 "J"	ug/l	0.0143	0.0456	1	M8270C	10/9/2019	10/9/2019	NJC	7
Pyrene	0.036 "J"	ug/l	0.0121	0.0386	1	M8270C	10/9/2019	10/9/2019	NJC	1

Project Name WDNR-MOSS AMERICA **Invoice #** E36912
Project # 18687

Lab Code 5036912I
Sample ID TG3-2
Sample Matrix Water
Sample Date 10/3/2019

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
BTEX										
Benzene	< 0.22	ug/l	0.22	0.71	1	8260B		10/9/2019	CJR	1
Ethylbenzene	< 0.26	ug/l	0.26	0.83	1	8260B		10/9/2019	CJR	1
Toluene	< 0.19	ug/l	0.19	0.6	1	8260B		10/9/2019	CJR	1
m&p-Xylene	< 0.43	ug/l	0.43	1.38	1	8260B		10/9/2019	CJR	1
o-Xylene	< 0.29	ug/l	0.29	0.93	1	8260B		10/9/2019	CJR	1
PAH SIM										
Acenaphthene	0.087	ug/l	0.0094	0.03	1	M8270C	10/9/2019	10/9/2019	NJC	7
Acenaphthylene	0.0252 "J"	ug/l	0.0156	0.0495	1	M8270C	10/9/2019	10/9/2019	NJC	7
Anthracene	0.116	ug/l	0.015	0.0478	1	M8270C	10/9/2019	10/9/2019	NJC	1
Benzo(a)anthracene	0.04 "J"	ug/l	0.0131	0.0418	1	M8270C	10/9/2019	10/9/2019	NJC	1
Benzo(a)pyrene	0.0246 "J"	ug/l	0.0167	0.0531	1	M8270C	10/9/2019	10/9/2019	NJC	1
Benzo(b)fluoranthene	0.07	ug/l	0.016	0.0509	1	M8270C	10/9/2019	10/9/2019	NJC	1
Benzo(g,h,i)perylene	0.049	ug/l	0.0142	0.0451	1	M8270C	10/9/2019	10/9/2019	NJC	1
Benzo(k)fluoranthene	0.0261 "J"	ug/l	0.0146	0.0463	1	M8270C	10/9/2019	10/9/2019	NJC	1
Chrysene	0.034 "J"	ug/l	0.0157	0.0499	1	M8270C	10/9/2019	10/9/2019	NJC	1
Dibenzo(a,h)anthracene	< 0.0173	ug/l	0.0173	0.0549	1	M8270C	10/9/2019	10/9/2019	NJC	1
Fluoranthene	0.077	ug/l	0.0088	0.0281	1	M8270C	10/9/2019	10/9/2019	NJC	1
Fluorene	0.0139 "J"	ug/l	0.0079	0.0251	1	M8270C	10/9/2019	10/9/2019	NJC	1
Indeno(1,2,3-cd)pyrene	0.031 "J"	ug/l	0.0121	0.0385	1	M8270C	10/9/2019	10/9/2019	NJC	1
1-Methyl naphthalene	< 0.0191	ug/l	0.0191	0.0609	1	M8270C	10/9/2019	10/9/2019	NJC	7
2-Methyl naphthalene	< 0.0186	ug/l	0.0186	0.059	1	M8270C	10/9/2019	10/9/2019	NJC	7
Naphthalene	< 0.026	ug/l	0.026	0.083	1	M8270C	10/9/2019	10/9/2019	NJC	7
Phenanthrene	0.0246 "J"	ug/l	0.0143	0.0456	1	M8270C	10/9/2019	10/9/2019	NJC	7
Pyrene	0.069	ug/l	0.0121	0.0386	1	M8270C	10/9/2019	10/9/2019	NJC	1

Project Name WDNR-MOSS AMERICA **Invoice #** E36912
Project # 18687

Lab Code 5036912J
Sample ID TG3-3
Sample Matrix Water
Sample Date 10/3/2019

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
BTEX										
Benzene	< 0.22	ug/l	0.22	0.71	1	8260B		10/9/2019	CJR	1
Ethylbenzene	< 0.26	ug/l	0.26	0.83	1	8260B		10/9/2019	CJR	1
Toluene	< 0.19	ug/l	0.19	0.6	1	8260B		10/9/2019	CJR	1
m&p-Xylene	< 0.43	ug/l	0.43	1.38	1	8260B		10/9/2019	CJR	1
o-Xylene	< 0.29	ug/l	0.29	0.93	1	8260B		10/9/2019	CJR	1
PAH SIM										
Acenaphthene	0.27	ug/l	0.0094	0.03	1	M8270C	10/9/2019	10/9/2019	NJC	7
Acenaphthylene	0.038 "J"	ug/l	0.0156	0.0495	1	M8270C	10/9/2019	10/9/2019	NJC	7
Anthracene	0.196	ug/l	0.015	0.0478	1	M8270C	10/9/2019	10/9/2019	NJC	1
Benzo(a)anthracene	0.062	ug/l	0.0131	0.0418	1	M8270C	10/9/2019	10/9/2019	NJC	1
Benzo(a)pyrene	0.039 "J"	ug/l	0.0167	0.0531	1	M8270C	10/9/2019	10/9/2019	NJC	1
Benzo(b)fluoranthene	0.108	ug/l	0.016	0.0509	1	M8270C	10/9/2019	10/9/2019	NJC	1
Benzo(g,h,i)perylene	0.072	ug/l	0.0142	0.0451	1	M8270C	10/9/2019	10/9/2019	NJC	1
Benzo(k)fluoranthene	0.036 "J"	ug/l	0.0146	0.0463	1	M8270C	10/9/2019	10/9/2019	NJC	1
Chrysene	0.066	ug/l	0.0157	0.0499	1	M8270C	10/9/2019	10/9/2019	NJC	1
Dibenzo(a,h)anthracene	< 0.0173	ug/l	0.0173	0.0549	1	M8270C	10/9/2019	10/9/2019	NJC	1
Fluoranthene	0.222	ug/l	0.0088	0.0281	1	M8270C	10/9/2019	10/9/2019	NJC	1
Fluorene	0.05	ug/l	0.0079	0.0251	1	M8270C	10/9/2019	10/9/2019	NJC	1
Indeno(1,2,3-cd)pyrene	0.042	ug/l	0.0121	0.0385	1	M8270C	10/9/2019	10/9/2019	NJC	1
1-Methyl naphthalene	< 0.0191	ug/l	0.0191	0.0609	1	M8270C	10/9/2019	10/9/2019	NJC	7
2-Methyl naphthalene	< 0.0186	ug/l	0.0186	0.059	1	M8270C	10/9/2019	10/9/2019	NJC	7
Naphthalene	< 0.026	ug/l	0.026	0.083	1	M8270C	10/9/2019	10/9/2019	NJC	7
Phenanthrene	0.155	ug/l	0.0143	0.0456	1	M8270C	10/9/2019	10/9/2019	NJC	7
Pyrene	0.178	ug/l	0.0121	0.0386	1	M8270C	10/9/2019	10/9/2019	NJC	1

Project Name WDNR-MOSS AMERICA **Invoice #** E36912
Project # 18687

Lab Code 5036912K
Sample ID PZ-01
Sample Matrix Water
Sample Date 10/3/2019

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
BTEX										
Benzene	< 0.22	ug/l	0.22	0.71	1	8260B		10/9/2019	CJR	1
Ethylbenzene	< 0.26	ug/l	0.26	0.83	1	8260B		10/9/2019	CJR	1
Toluene	< 0.19	ug/l	0.19	0.6	1	8260B		10/9/2019	CJR	1
m&p-Xylene	< 0.43	ug/l	0.43	1.38	1	8260B		10/9/2019	CJR	1
o-Xylene	< 0.29	ug/l	0.29	0.93	1	8260B		10/9/2019	CJR	1
PAH SIM										
Acenaphthene	< 0.0094	ug/l	0.0094	0.03	1	M8270C	10/9/2019	10/9/2019	NJC	7
Acenaphthylene	< 0.0156	ug/l	0.0156	0.0495	1	M8270C	10/9/2019	10/9/2019	NJC	7
Anthracene	< 0.015	ug/l	0.015	0.0478	1	M8270C	10/9/2019	10/9/2019	NJC	1
Benzo(a)anthracene	0.0181 "J"	ug/l	0.0131	0.0418	1	M8270C	10/9/2019	10/9/2019	NJC	1
Benzo(a)pyrene	< 0.0167	ug/l	0.0167	0.0531	1	M8270C	10/9/2019	10/9/2019	NJC	1
Benzo(b)fluoranthene	< 0.016	ug/l	0.016	0.0509	1	M8270C	10/9/2019	10/9/2019	NJC	1
Benzo(g,h,i)perylene	< 0.0142	ug/l	0.0142	0.0451	1	M8270C	10/9/2019	10/9/2019	NJC	1
Benzo(k)fluoranthene	< 0.0146	ug/l	0.0146	0.0463	1	M8270C	10/9/2019	10/9/2019	NJC	1
Chrysene	< 0.0157	ug/l	0.0157	0.0499	1	M8270C	10/9/2019	10/9/2019	NJC	1
Dibenzo(a,h)anthracene	< 0.0173	ug/l	0.0173	0.0549	1	M8270C	10/9/2019	10/9/2019	NJC	1
Fluoranthene	0.0133 "J"	ug/l	0.0088	0.0281	1	M8270C	10/9/2019	10/9/2019	NJC	1
Fluorene	< 0.0079	ug/l	0.0079	0.0251	1	M8270C	10/9/2019	10/9/2019	NJC	1
Indeno(1,2,3-cd)pyrene	< 0.0121	ug/l	0.0121	0.0385	1	M8270C	10/9/2019	10/9/2019	NJC	1
1-Methyl naphthalene	< 0.0191	ug/l	0.0191	0.0609	1	M8270C	10/9/2019	10/9/2019	NJC	7
2-Methyl naphthalene	< 0.0186	ug/l	0.0186	0.059	1	M8270C	10/9/2019	10/9/2019	NJC	7
Naphthalene	< 0.026	ug/l	0.026	0.083	1	M8270C	10/9/2019	10/9/2019	NJC	7
Phenanthrene	< 0.0143	ug/l	0.0143	0.0456	1	M8270C	10/9/2019	10/9/2019	NJC	7
Pyrene	0.0134 "J"	ug/l	0.0121	0.0386	1	M8270C	10/9/2019	10/9/2019	NJC	1

Project Name WDNR-MOSS AMERICA **Invoice #** E36912
Project # 18687

Lab Code 5036912L
Sample ID MW-31SR
Sample Matrix Water
Sample Date 10/3/2019

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
BTEX										
Benzene	< 0.22	ug/l	0.22	0.71	1	8260B		10/10/2019	CJR	1
Ethylbenzene	< 0.26	ug/l	0.26	0.83	1	8260B		10/10/2019	CJR	1
Toluene	< 0.19	ug/l	0.19	0.6	1	8260B		10/10/2019	CJR	1
m&p-Xylene	< 0.43	ug/l	0.43	1.38	1	8260B		10/10/2019	CJR	1
o-Xylene	< 0.29	ug/l	0.29	0.93	1	8260B		10/10/2019	CJR	1
PAH SIM										
Acenaphthene	< 0.0094	ug/l	0.0094	0.03	1	M8270C	10/9/2019	10/9/2019	NJC	7
Acenaphthylene	< 0.0156	ug/l	0.0156	0.0495	1	M8270C	10/9/2019	10/9/2019	NJC	7
Anthracene	< 0.015	ug/l	0.015	0.0478	1	M8270C	10/9/2019	10/9/2019	NJC	1
Benzo(a)anthracene	0.0199 "J"	ug/l	0.0131	0.0418	1	M8270C	10/9/2019	10/9/2019	NJC	1
Benzo(a)pyrene	< 0.0167	ug/l	0.0167	0.0531	1	M8270C	10/9/2019	10/9/2019	NJC	1
Benzo(b)fluoranthene	< 0.016	ug/l	0.016	0.0509	1	M8270C	10/9/2019	10/9/2019	NJC	1
Benzo(g,h,i)perylene	< 0.0142	ug/l	0.0142	0.0451	1	M8270C	10/9/2019	10/9/2019	NJC	1
Benzo(k)fluoranthene	< 0.0146	ug/l	0.0146	0.0463	1	M8270C	10/9/2019	10/9/2019	NJC	1
Chrysene	< 0.0157	ug/l	0.0157	0.0499	1	M8270C	10/9/2019	10/9/2019	NJC	1
Dibenzo(a,h)anthracene	< 0.0173	ug/l	0.0173	0.0549	1	M8270C	10/9/2019	10/9/2019	NJC	1
Fluoranthene	< 0.0088	ug/l	0.0088	0.0281	1	M8270C	10/9/2019	10/9/2019	NJC	1
Fluorene	< 0.0079	ug/l	0.0079	0.0251	1	M8270C	10/9/2019	10/9/2019	NJC	1
Indeno(1,2,3-cd)pyrene	< 0.0121	ug/l	0.0121	0.0385	1	M8270C	10/9/2019	10/9/2019	NJC	1
1-Methyl naphthalene	< 0.0191	ug/l	0.0191	0.0609	1	M8270C	10/9/2019	10/9/2019	NJC	7
2-Methyl naphthalene	< 0.0186	ug/l	0.0186	0.059	1	M8270C	10/9/2019	10/9/2019	NJC	7
Naphthalene	< 0.026	ug/l	0.026	0.083	1	M8270C	10/9/2019	10/9/2019	NJC	7
Phenanthrene	0.0177 "J"	ug/l	0.0143	0.0456	1	M8270C	10/9/2019	10/9/2019	NJC	7
Pyrene	< 0.0121	ug/l	0.0121	0.0386	1	M8270C	10/9/2019	10/9/2019	NJC	1

Project Name WDNR-MOSS AMERICA **Invoice #** E36912
Project # 18687

Lab Code 5036912M
Sample ID PZ-06
Sample Matrix Water
Sample Date 10/3/2019

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
BTEX										
Benzene	< 0.22	ug/l	0.22	0.71	1	8260B		10/10/2019	CJR	1
Ethylbenzene	< 0.26	ug/l	0.26	0.83	1	8260B		10/10/2019	CJR	1
Toluene	< 0.19	ug/l	0.19	0.6	1	8260B		10/10/2019	CJR	1
m&p-Xylene	< 0.43	ug/l	0.43	1.38	1	8260B		10/10/2019	CJR	1
o-Xylene	< 0.29	ug/l	0.29	0.93	1	8260B		10/10/2019	CJR	1
PAH SIM										
Acenaphthene	< 0.0094	ug/l	0.0094	0.03	1	M8270C	10/9/2019	10/9/2019	NJC	7
Acenaphthylene	< 0.0156	ug/l	0.0156	0.0495	1	M8270C	10/9/2019	10/9/2019	NJC	7
Anthracene	0.0205 "J"	ug/l	0.015	0.0478	1	M8270C	10/9/2019	10/9/2019	NJC	1
Benzo(a)anthracene	0.0149 "J"	ug/l	0.0131	0.0418	1	M8270C	10/9/2019	10/9/2019	NJC	1
Benzo(a)pyrene	< 0.0167	ug/l	0.0167	0.0531	1	M8270C	10/9/2019	10/9/2019	NJC	1
Benzo(b)fluoranthene	< 0.016	ug/l	0.016	0.0509	1	M8270C	10/9/2019	10/9/2019	NJC	1
Benzo(g,h,i)perylene	< 0.0142	ug/l	0.0142	0.0451	1	M8270C	10/9/2019	10/9/2019	NJC	1
Benzo(k)fluoranthene	< 0.0146	ug/l	0.0146	0.0463	1	M8270C	10/9/2019	10/9/2019	NJC	1
Chrysene	< 0.0157	ug/l	0.0157	0.0499	1	M8270C	10/9/2019	10/9/2019	NJC	1
Dibenzo(a,h)anthracene	< 0.0173	ug/l	0.0173	0.0549	1	M8270C	10/9/2019	10/9/2019	NJC	1
Fluoranthene	< 0.0088	ug/l	0.0088	0.0281	1	M8270C	10/9/2019	10/9/2019	NJC	1
Fluorene	< 0.0079	ug/l	0.0079	0.0251	1	M8270C	10/9/2019	10/9/2019	NJC	1
Indeno(1,2,3-cd)pyrene	< 0.0121	ug/l	0.0121	0.0385	1	M8270C	10/9/2019	10/9/2019	NJC	1
1-Methyl naphthalene	< 0.0191	ug/l	0.0191	0.0609	1	M8270C	10/9/2019	10/9/2019	NJC	7
2-Methyl naphthalene	< 0.0186	ug/l	0.0186	0.059	1	M8270C	10/9/2019	10/9/2019	NJC	7
Naphthalene	< 0.026	ug/l	0.026	0.083	1	M8270C	10/9/2019	10/9/2019	NJC	7
Phenanthrene	< 0.0143	ug/l	0.0143	0.0456	1	M8270C	10/9/2019	10/9/2019	NJC	7
Pyrene	< 0.0121	ug/l	0.0121	0.0386	1	M8270C	10/9/2019	10/9/2019	NJC	1

Project Name WDNR-MOSS AMERICA **Invoice #** E36912
Project # 18687

Lab Code 5036912N
Sample ID TG2-1
Sample Matrix Water
Sample Date 10/3/2019

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
BTEX										
Benzene	< 0.22	ug/l	0.22	0.71	1	8260B		10/10/2019	CJR	1
Ethylbenzene	< 0.26	ug/l	0.26	0.83	1	8260B		10/10/2019	CJR	1
Toluene	< 0.19	ug/l	0.19	0.6	1	8260B		10/10/2019	CJR	1
m&p-Xylene	< 0.43	ug/l	0.43	1.38	1	8260B		10/10/2019	CJR	1
o-Xylene	< 0.29	ug/l	0.29	0.93	1	8260B		10/10/2019	CJR	1
PAH SIM										
Acenaphthene	< 0.0094	ug/l	0.0094	0.03	1	M8270C	10/9/2019	10/9/2019	NJC	7
Acenaphthylene	< 0.0156	ug/l	0.0156	0.0495	1	M8270C	10/9/2019	10/9/2019	NJC	7
Anthracene	0.022 "J"	ug/l	0.015	0.0478	1	M8270C	10/9/2019	10/9/2019	NJC	1
Benzo(a)anthracene	< 0.0131	ug/l	0.0131	0.0418	1	M8270C	10/9/2019	10/9/2019	NJC	1
Benzo(a)pyrene	< 0.0167	ug/l	0.0167	0.0531	1	M8270C	10/9/2019	10/9/2019	NJC	1
Benzo(b)fluoranthene	< 0.016	ug/l	0.016	0.0509	1	M8270C	10/9/2019	10/9/2019	NJC	1
Benzo(g,h,i)perylene	< 0.0142	ug/l	0.0142	0.0451	1	M8270C	10/9/2019	10/9/2019	NJC	1
Benzo(k)fluoranthene	< 0.0146	ug/l	0.0146	0.0463	1	M8270C	10/9/2019	10/9/2019	NJC	1
Chrysene	< 0.0157	ug/l	0.0157	0.0499	1	M8270C	10/9/2019	10/9/2019	NJC	1
Dibenzo(a,h)anthracene	< 0.0173	ug/l	0.0173	0.0549	1	M8270C	10/9/2019	10/9/2019	NJC	1
Fluoranthene	< 0.0088	ug/l	0.0088	0.0281	1	M8270C	10/9/2019	10/9/2019	NJC	1
Fluorene	< 0.0079	ug/l	0.0079	0.0251	1	M8270C	10/9/2019	10/9/2019	NJC	1
Indeno(1,2,3-cd)pyrene	< 0.0121	ug/l	0.0121	0.0385	1	M8270C	10/9/2019	10/9/2019	NJC	1
1-Methyl naphthalene	< 0.0191	ug/l	0.0191	0.0609	1	M8270C	10/9/2019	10/9/2019	NJC	7
2-Methyl naphthalene	< 0.0186	ug/l	0.0186	0.059	1	M8270C	10/9/2019	10/9/2019	NJC	7
Naphthalene	< 0.026	ug/l	0.026	0.083	1	M8270C	10/9/2019	10/9/2019	NJC	7
Phenanthrene	< 0.0143	ug/l	0.0143	0.0456	1	M8270C	10/9/2019	10/9/2019	NJC	7
Pyrene	< 0.0121	ug/l	0.0121	0.0386	1	M8270C	10/9/2019	10/9/2019	NJC	1

Project Name WDNR-MOSS AMERICA **Invoice #** E36912
Project # 18687

Lab Code 5036912O
Sample ID TG2-2
Sample Matrix Water
Sample Date 10/3/2019

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
BTEX										
Benzene	< 0.22	ug/l	0.22	0.71	1	8260B		10/10/2019	CJR	1
Ethylbenzene	< 0.26	ug/l	0.26	0.83	1	8260B		10/10/2019	CJR	1
Toluene	< 0.19	ug/l	0.19	0.6	1	8260B		10/10/2019	CJR	1
m&p-Xylene	< 0.43	ug/l	0.43	1.38	1	8260B		10/10/2019	CJR	1
o-Xylene	< 0.29	ug/l	0.29	0.93	1	8260B		10/10/2019	CJR	1
PAH SIM										
Acenaphthene	0.047	ug/l	0.0094	0.03	1	M8270C	10/9/2019	10/9/2019	NJC	7
Acenaphthylene	0.097	ug/l	0.0156	0.0495	1	M8270C	10/9/2019	10/9/2019	NJC	7
Anthracene	0.285	ug/l	0.015	0.0478	1	M8270C	10/9/2019	10/9/2019	NJC	1
Benzo(a)anthracene	0.115	ug/l	0.0131	0.0418	1	M8270C	10/9/2019	10/9/2019	NJC	1
Benzo(a)pyrene	0.114	ug/l	0.0167	0.0531	1	M8270C	10/9/2019	10/9/2019	NJC	1
Benzo(b)fluoranthene	0.315	ug/l	0.016	0.0509	1	M8270C	10/9/2019	10/9/2019	NJC	1
Benzo(g,h,i)perylene	0.225	ug/l	0.0142	0.0451	1	M8270C	10/9/2019	10/9/2019	NJC	1
Benzo(k)fluoranthene	0.08	ug/l	0.0146	0.0463	1	M8270C	10/9/2019	10/9/2019	NJC	1
Chrysene	0.137	ug/l	0.0157	0.0499	1	M8270C	10/9/2019	10/9/2019	NJC	1
Dibenzo(a,h)anthracene	0.039 "J"	ug/l	0.0173	0.0549	1	M8270C	10/9/2019	10/9/2019	NJC	1
Fluoranthene	0.279	ug/l	0.0088	0.0281	1	M8270C	10/9/2019	10/9/2019	NJC	1
Fluorene	0.0263	ug/l	0.0079	0.0251	1	M8270C	10/9/2019	10/9/2019	NJC	1
Indeno(1,2,3-cd)pyrene	0.138	ug/l	0.0121	0.0385	1	M8270C	10/9/2019	10/9/2019	NJC	1
1-Methyl naphthalene	< 0.0191	ug/l	0.0191	0.0609	1	M8270C	10/9/2019	10/9/2019	NJC	7
2-Methyl naphthalene	< 0.0186	ug/l	0.0186	0.059	1	M8270C	10/9/2019	10/9/2019	NJC	7
Naphthalene	< 0.026	ug/l	0.026	0.083	1	M8270C	10/9/2019	10/9/2019	NJC	7
Phenanthrene	0.069	ug/l	0.0143	0.0456	1	M8270C	10/9/2019	10/9/2019	NJC	7
Pyrene	0.262	ug/l	0.0121	0.0386	1	M8270C	10/9/2019	10/9/2019	NJC	1

Project Name WDNR-MOSS AMERICA **Invoice #** E36912
Project # 18687

Lab Code 5036912P
Sample ID TG2-3
Sample Matrix Water
Sample Date 10/3/2019

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
BTEX										
Benzene	< 0.22	ug/l	0.22	0.71	1	8260B		10/10/2019	CJR	1
Ethylbenzene	< 0.26	ug/l	0.26	0.83	1	8260B		10/10/2019	CJR	1
Toluene	< 0.19	ug/l	0.19	0.6	1	8260B		10/10/2019	CJR	1
m&p-Xylene	< 0.43	ug/l	0.43	1.38	1	8260B		10/10/2019	CJR	1
o-Xylene	< 0.29	ug/l	0.29	0.93	1	8260B		10/10/2019	CJR	1
PAH SIM										
Acenaphthene	< 0.0094	ug/l	0.0094	0.03	1	M8270C	10/9/2019	10/9/2019	NJC	7
Acenaphthylene	< 0.0156	ug/l	0.0156	0.0495	1	M8270C	10/9/2019	10/9/2019	NJC	7
Anthracene	0.032 "J"	ug/l	0.015	0.0478	1	M8270C	10/9/2019	10/9/2019	NJC	1
Benzo(a)anthracene	0.0205 "J"	ug/l	0.0131	0.0418	1	M8270C	10/9/2019	10/9/2019	NJC	1
Benzo(a)pyrene	< 0.0167	ug/l	0.0167	0.0531	1	M8270C	10/9/2019	10/9/2019	NJC	1
Benzo(b)fluoranthene	0.0273 "J"	ug/l	0.016	0.0509	1	M8270C	10/9/2019	10/9/2019	NJC	1
Benzo(g,h,i)perylene	< 0.0142	ug/l	0.0142	0.0451	1	M8270C	10/9/2019	10/9/2019	NJC	1
Benzo(k)fluoranthene	0.0207 "J"	ug/l	0.0146	0.0463	1	M8270C	10/9/2019	10/9/2019	NJC	1
Chrysene	< 0.0157	ug/l	0.0157	0.0499	1	M8270C	10/9/2019	10/9/2019	NJC	1
Dibenzo(a,h)anthracene	< 0.0173	ug/l	0.0173	0.0549	1	M8270C	10/9/2019	10/9/2019	NJC	1
Fluoranthene	0.0177 "J"	ug/l	0.0088	0.0281	1	M8270C	10/9/2019	10/9/2019	NJC	1
Fluorene	< 0.0079	ug/l	0.0079	0.0251	1	M8270C	10/9/2019	10/9/2019	NJC	1
Indeno(1,2,3-cd)pyrene	< 0.0121	ug/l	0.0121	0.0385	1	M8270C	10/9/2019	10/9/2019	NJC	1
1-Methyl naphthalene	< 0.0191	ug/l	0.0191	0.0609	1	M8270C	10/9/2019	10/9/2019	NJC	7
2-Methyl naphthalene	< 0.0186	ug/l	0.0186	0.059	1	M8270C	10/9/2019	10/9/2019	NJC	7
Naphthalene	< 0.026	ug/l	0.026	0.083	1	M8270C	10/9/2019	10/9/2019	NJC	7
Phenanthrene	< 0.0143	ug/l	0.0143	0.0456	1	M8270C	10/9/2019	10/9/2019	NJC	7
Pyrene	0.0156 "J"	ug/l	0.0121	0.0386	1	M8270C	10/9/2019	10/9/2019	NJC	1

Project Name WDNR-MOSS AMERICA **Invoice #** E36912
Project # 18687

Lab Code 5036912Q
Sample ID PZ-02
Sample Matrix Water
Sample Date 10/4/2019

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
BTEX										
Benzene	< 0.22	ug/l	0.22	0.71	1	8260B		10/10/2019	CJR	1
Ethylbenzene	< 0.26	ug/l	0.26	0.83	1	8260B		10/10/2019	CJR	1
Toluene	< 0.19	ug/l	0.19	0.6	1	8260B		10/10/2019	CJR	1
m&p-Xylene	0.84 "J"	ug/l	0.43	1.38	1	8260B		10/10/2019	CJR	1
o-Xylene	0.29 "J"	ug/l	0.29	0.93	1	8260B		10/10/2019	CJR	1
PAH SIM										
Acenaphthene	108	ug/l	0.188	0.6	20	M8270C	10/9/2019	10/11/2019	NJC	1
Acenaphthylene	1.00	ug/l	0.312	0.99	20	M8270C	10/9/2019	10/11/2019	NJC	1
Anthracene	< 0.3	ug/l	0.3	0.956	20	M8270C	10/9/2019	10/11/2019	NJC	1
Benzo(a)anthracene	< 0.262	ug/l	0.262	0.836	20	M8270C	10/9/2019	10/11/2019	NJC	1
Benzo(a)pyrene	< 0.334	ug/l	0.334	1.062	20	M8270C	10/9/2019	10/11/2019	NJC	1
Benzo(b)fluoranthene	< 0.32	ug/l	0.32	1.018	20	M8270C	10/9/2019	10/11/2019	NJC	1
Benzo(g,h,i)perylene	< 0.284	ug/l	0.284	0.902	20	M8270C	10/9/2019	10/11/2019	NJC	1
Benzo(k)fluoranthene	< 0.292	ug/l	0.292	0.926	20	M8270C	10/9/2019	10/11/2019	NJC	1
Chrysene	< 0.314	ug/l	0.314	0.998	20	M8270C	10/9/2019	10/11/2019	NJC	1
Dibenzo(a,h)anthracene	< 0.346	ug/l	0.346	1.098	20	M8270C	10/9/2019	10/11/2019	NJC	1
Fluoranthene	< 0.176	ug/l	0.176	0.562	20	M8270C	10/9/2019	10/11/2019	NJC	1
Fluorene	29.8	ug/l	0.158	0.502	20	M8270C	10/9/2019	10/11/2019	NJC	1
Indeno(1,2,3-cd)pyrene	< 0.242	ug/l	0.242	0.77	20	M8270C	10/9/2019	10/11/2019	NJC	1
1-Methyl naphthalene	0.85 "J"	ug/l	0.382	1.218	20	M8270C	10/9/2019	10/11/2019	NJC	1
2-Methyl naphthalene	< 0.372	ug/l	0.372	1.18	20	M8270C	10/9/2019	10/11/2019	NJC	1
Naphthalene	19.4	ug/l	0.52	1.66	20	M8270C	10/9/2019	10/11/2019	NJC	1
Phenanthrene	< 0.286	ug/l	0.286	0.912	20	M8270C	10/9/2019	10/11/2019	NJC	1
Pyrene	< 0.242	ug/l	0.242	0.772	20	M8270C	10/9/2019	10/11/2019	NJC	1

Project Name WDNR-MOSS AMERICA **Invoice #** E36912
Project # 18687

Lab Code 5036912R
Sample ID MW-7S-WR
Sample Matrix Water
Sample Date 10/4/2019

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
BTEX										
Benzene	< 0.22	ug/l	0.22	0.71	1	8260B		10/10/2019	CJR	1
Ethylbenzene	< 0.26	ug/l	0.26	0.83	1	8260B		10/10/2019	CJR	1
Toluene	< 0.19	ug/l	0.19	0.6	1	8260B		10/10/2019	CJR	1
m&p-Xylene	< 0.43	ug/l	0.43	1.38	1	8260B		10/10/2019	CJR	1
o-Xylene	< 0.29	ug/l	0.29	0.93	1	8260B		10/10/2019	CJR	1
PAH SIM										
Acenaphthene	3.30	ug/l	0.0094	0.03	1	M8270C	10/9/2019	10/11/2019	NJC	1
Acenaphthylene	0.106	ug/l	0.0156	0.0495	1	M8270C	10/9/2019	10/11/2019	NJC	1
Anthracene	0.223	ug/l	0.015	0.0478	1	M8270C	10/9/2019	10/11/2019	NJC	1
Benzo(a)anthracene	0.0255 "J"	ug/l	0.0131	0.0418	1	M8270C	10/9/2019	10/11/2019	NJC	1
Benzo(a)pyrene	< 0.0167	ug/l	0.0167	0.0531	1	M8270C	10/9/2019	10/11/2019	NJC	1
Benzo(b)fluoranthene	< 0.016	ug/l	0.016	0.0509	1	M8270C	10/9/2019	10/11/2019	NJC	1
Benzo(g,h,i)perylene	< 0.0142	ug/l	0.0142	0.0451	1	M8270C	10/9/2019	10/11/2019	NJC	1
Benzo(k)fluoranthene	< 0.0146	ug/l	0.0146	0.0463	1	M8270C	10/9/2019	10/11/2019	NJC	1
Chrysene	0.0163 "J"	ug/l	0.0157	0.0499	1	M8270C	10/9/2019	10/11/2019	NJC	1
Dibenzo(a,h)anthracene	< 0.0173	ug/l	0.0173	0.0549	1	M8270C	10/9/2019	10/11/2019	NJC	1
Fluoranthene	0.76	ug/l	0.0088	0.0281	1	M8270C	10/9/2019	10/11/2019	NJC	1
Fluorene	0.014 "J"	ug/l	0.0079	0.0251	1	M8270C	10/9/2019	10/11/2019	NJC	1
Indeno(1,2,3-cd)pyrene	< 0.0121	ug/l	0.0121	0.0385	1	M8270C	10/9/2019	10/11/2019	NJC	1
1-Methyl naphthalene	< 0.0191	ug/l	0.0191	0.0609	1	M8270C	10/9/2019	10/11/2019	NJC	1
2-Methyl naphthalene	< 0.0186	ug/l	0.0186	0.059	1	M8270C	10/9/2019	10/11/2019	NJC	1
Naphthalene	< 0.026	ug/l	0.026	0.083	1	M8270C	10/9/2019	10/11/2019	NJC	1
Phenanthrene	0.0307 "J"	ug/l	0.0143	0.0456	1	M8270C	10/9/2019	10/11/2019	NJC	1
Pyrene	0.52	ug/l	0.0121	0.0386	1	M8270C	10/9/2019	10/11/2019	NJC	1

Project Name WDNR-MOSS AMERICA **Invoice #** E36912
Project # 18687

Lab Code 5036912S
Sample ID PZ-09R
Sample Matrix Water
Sample Date 10/4/2019

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
BTEX										
Benzene	< 0.22	ug/l	0.22	0.71	1	8260B		10/10/2019	CJR	1
Ethylbenzene	< 0.26	ug/l	0.26	0.83	1	8260B		10/10/2019	CJR	1
Toluene	< 0.19	ug/l	0.19	0.6	1	8260B		10/10/2019	CJR	1
m&p-Xylene	< 0.43	ug/l	0.43	1.38	1	8260B		10/10/2019	CJR	1
o-Xylene	< 0.29	ug/l	0.29	0.93	1	8260B		10/10/2019	CJR	1
PAH SIM										
Acenaphthene	18.8	ug/l	0.047	0.15	5	M8270C	10/9/2019	10/11/2019	NJC	1
Acenaphthylene	0.42	ug/l	0.078	0.2475	5	M8270C	10/9/2019	10/11/2019	NJC	1
Anthracene	1.86	ug/l	0.075	0.239	5	M8270C	10/9/2019	10/11/2019	NJC	1
Benzo(a)anthracene	1.36	ug/l	0.0655	0.209	5	M8270C	10/9/2019	10/11/2019	NJC	1
Benzo(a)pyrene	0.36	ug/l	0.0835	0.2655	5	M8270C	10/9/2019	10/11/2019	NJC	1
Benzo(b)fluoranthene	0.85	ug/l	0.08	0.2545	5	M8270C	10/9/2019	10/11/2019	NJC	1
Benzo(g,h,i)perylene	0.142 "J"	ug/l	0.071	0.2255	5	M8270C	10/9/2019	10/11/2019	NJC	1
Benzo(k)fluoranthene	0.306	ug/l	0.073	0.2315	5	M8270C	10/9/2019	10/11/2019	NJC	1
Chrysene	1.06	ug/l	0.0785	0.2495	5	M8270C	10/9/2019	10/11/2019	NJC	1
Dibenzo(a,h)anthracene	< 0.0865	ug/l	0.0865	0.2745	5	M8270C	10/9/2019	10/11/2019	NJC	1
Fluoranthene	7.00	ug/l	0.044	0.1405	5	M8270C	10/9/2019	10/11/2019	NJC	1
Fluorene	11.1	ug/l	0.0395	0.1255	5	M8270C	10/9/2019	10/11/2019	NJC	1
Indeno(1,2,3-cd)pyrene	0.099 "J"	ug/l	0.0605	0.1925	5	M8270C	10/9/2019	10/11/2019	NJC	1
1-Methyl naphthalene	1.12	ug/l	0.0955	0.3045	5	M8270C	10/9/2019	10/11/2019	NJC	1
2-Methyl naphthalene	< 0.093	ug/l	0.093	0.295	5	M8270C	10/9/2019	10/11/2019	NJC	1
Naphthalene	0.57	ug/l	0.13	0.415	5	M8270C	10/9/2019	10/11/2019	NJC	1
Phenanthrene	0.61	ug/l	0.0715	0.228	5	M8270C	10/9/2019	10/11/2019	NJC	1
Pyrene	4.80	ug/l	0.0605	0.193	5	M8270C	10/9/2019	10/11/2019	NJC	1

Project Name WDNR-MOSS AMERICA **Invoice #** E36912
Project # 18687

Lab Code 5036912T
Sample ID TG1-1R
Sample Matrix Water
Sample Date 10/4/2019

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
BTEX										
Benzene	< 0.22	ug/l	0.22	0.71	1	8260B		10/10/2019	CJR	1
Ethylbenzene	< 0.26	ug/l	0.26	0.83	1	8260B		10/10/2019	CJR	1
Toluene	< 0.19	ug/l	0.19	0.6	1	8260B		10/10/2019	CJR	1
m&p-Xylene	< 0.43	ug/l	0.43	1.38	1	8260B		10/10/2019	CJR	1
o-Xylene	< 0.29	ug/l	0.29	0.93	1	8260B		10/10/2019	CJR	1
PAH SIM										
Acenaphthene	0.167	ug/l	0.0094	0.03	1	M8270C	10/9/2019	10/11/2019	NJC	1
Acenaphthylene	< 0.0156	ug/l	0.0156	0.0495	1	M8270C	10/9/2019	10/11/2019	NJC	1
Anthracene	0.0312 "J"	ug/l	0.015	0.0478	1	M8270C	10/9/2019	10/11/2019	NJC	1
Benzo(a)anthracene	0.0198 "J"	ug/l	0.0131	0.0418	1	M8270C	10/9/2019	10/11/2019	NJC	1
Benzo(a)pyrene	< 0.0167	ug/l	0.0167	0.0531	1	M8270C	10/9/2019	10/11/2019	NJC	1
Benzo(b)fluoranthene	0.0213 "J"	ug/l	0.016	0.0509	1	M8270C	10/9/2019	10/11/2019	NJC	1
Benzo(g,h,i)perylene	0.0201 "J"	ug/l	0.0142	0.0451	1	M8270C	10/9/2019	10/11/2019	NJC	1
Benzo(k)fluoranthene	0.0175 "J"	ug/l	0.0146	0.0463	1	M8270C	10/9/2019	10/11/2019	NJC	1
Chrysene	< 0.0157	ug/l	0.0157	0.0499	1	M8270C	10/9/2019	10/11/2019	NJC	1
Dibenzo(a,h)anthracene	< 0.0173	ug/l	0.0173	0.0549	1	M8270C	10/9/2019	10/11/2019	NJC	1
Fluoranthene	0.087	ug/l	0.0088	0.0281	1	M8270C	10/9/2019	10/11/2019	NJC	1
Fluorene	0.0214 "J"	ug/l	0.0079	0.0251	1	M8270C	10/9/2019	10/11/2019	NJC	1
Indeno(1,2,3-cd)pyrene	0.0197 "J"	ug/l	0.0121	0.0385	1	M8270C	10/9/2019	10/11/2019	NJC	1
1-Methyl naphthalene	< 0.0191	ug/l	0.0191	0.0609	1	M8270C	10/9/2019	10/11/2019	NJC	1
2-Methyl naphthalene	< 0.0186	ug/l	0.0186	0.059	1	M8270C	10/9/2019	10/11/2019	NJC	1
Naphthalene	< 0.026	ug/l	0.026	0.083	1	M8270C	10/9/2019	10/11/2019	NJC	1
Phenanthrene	< 0.0143	ug/l	0.0143	0.0456	1	M8270C	10/9/2019	10/11/2019	NJC	1
Pyrene	0.102	ug/l	0.0121	0.0386	1	M8270C	10/9/2019	10/11/2019	NJC	1

Project Name WDNR-MOSS AMERICA **Invoice #** E36912
Project # 18687

Lab Code 5036912U
Sample ID MW-32SR
Sample Matrix Water
Sample Date 10/4/2019

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
BTEX										
Benzene	< 0.22	ug/l	0.22	0.71	1	8260B		10/10/2019	CJR	1
Ethylbenzene	< 0.26	ug/l	0.26	0.83	1	8260B		10/10/2019	CJR	1
Toluene	< 0.19	ug/l	0.19	0.6	1	8260B		10/10/2019	CJR	1
m&p-Xylene	< 0.43	ug/l	0.43	1.38	1	8260B		10/10/2019	CJR	1
o-Xylene	< 0.29	ug/l	0.29	0.93	1	8260B		10/10/2019	CJR	1
PAH SIM										
Acenaphthene	0.67	ug/l	0.0282	0.09	3	M8270C	10/11/2019	10/11/2019	NJC	1
Acenaphthylene	< 0.0468	ug/l	0.0468	0.1485	3	M8270C	10/11/2019	10/11/2019	NJC	1
Anthracene	0.136 "J"	ug/l	0.045	0.1434	3	M8270C	10/11/2019	10/11/2019	NJC	1
Benzo(a)anthracene	< 0.0393	ug/l	0.0393	0.1254	3	M8270C	10/11/2019	10/11/2019	NJC	1
Benzo(a)pyrene	< 0.0501	ug/l	0.0501	0.1593	3	M8270C	10/11/2019	10/11/2019	NJC	1
Benzo(b)fluoranthene	< 0.048	ug/l	0.048	0.1527	3	M8270C	10/11/2019	10/11/2019	NJC	1
Benzo(g,h,i)perylene	< 0.0426	ug/l	0.0426	0.1353	3	M8270C	10/11/2019	10/11/2019	NJC	1
Benzo(k)fluoranthene	< 0.0438	ug/l	0.0438	0.1389	3	M8270C	10/11/2019	10/11/2019	NJC	1
Chrysene	< 0.0471	ug/l	0.0471	0.1497	3	M8270C	10/11/2019	10/11/2019	NJC	1
Dibenzo(a,h)anthracene	< 0.0519	ug/l	0.0519	0.1647	3	M8270C	10/11/2019	10/11/2019	NJC	1
Fluoranthene	0.096	ug/l	0.0264	0.0843	3	M8270C	10/11/2019	10/11/2019	NJC	1
Fluorene	< 0.0237	ug/l	0.0237	0.0753	3	M8270C	10/11/2019	10/11/2019	NJC	1
Indeno(1,2,3-cd)pyrene	< 0.0363	ug/l	0.0363	0.1155	3	M8270C	10/11/2019	10/11/2019	NJC	1
1-Methyl naphthalene	< 0.0573	ug/l	0.0573	0.1827	3	M8270C	10/11/2019	10/11/2019	NJC	1
2-Methyl naphthalene	< 0.0558	ug/l	0.0558	0.177	3	M8270C	10/11/2019	10/11/2019	NJC	1
Naphthalene	< 0.078	ug/l	0.078	0.249	3	M8270C	10/11/2019	10/11/2019	NJC	1
Phenanthrene	0.046 "J"	ug/l	0.0429	0.1368	3	M8270C	10/11/2019	10/11/2019	NJC	1
Pyrene	0.054 "J"	ug/l	0.0363	0.1158	3	M8270C	10/11/2019	10/11/2019	NJC	1

Project Name WDNR-MOSS AMERICA **Invoice #** E36912
Project # 18687

Lab Code 5036912V
Sample ID TG1-2
Sample Matrix Water
Sample Date 10/4/2019

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
BTEX										
Benzene	< 0.22	ug/l	0.22	0.71	1	8260B		10/10/2019	CJR	1
Ethylbenzene	< 0.26	ug/l	0.26	0.83	1	8260B		10/10/2019	CJR	1
Toluene	< 0.19	ug/l	0.19	0.6	1	8260B		10/10/2019	CJR	1
m&p-Xylene	< 0.43	ug/l	0.43	1.38	1	8260B		10/10/2019	CJR	1
o-Xylene	< 0.29	ug/l	0.29	0.93	1	8260B		10/10/2019	CJR	1
PAH SIM										
Acenaphthene	12.1	ug/l	0.0188	0.06	2	M8270C	10/11/2019	10/14/2019	NJC	1
Acenaphthylene	0.065 "J"	ug/l	0.0312	0.099	2	M8270C	10/11/2019	10/14/2019	NJC	1
Anthracene	0.229	ug/l	0.03	0.0956	2	M8270C	10/11/2019	10/14/2019	NJC	1
Benzo(a)anthracene	0.077 "J"	ug/l	0.0262	0.0836	2	M8270C	10/11/2019	10/14/2019	NJC	1
Benzo(a)pyrene	< 0.0334	ug/l	0.0334	0.1062	2	M8270C	10/11/2019	10/14/2019	NJC	1
Benzo(b)fluoranthene	0.035 "J"	ug/l	0.032	0.1018	2	M8270C	10/11/2019	10/14/2019	NJC	1
Benzo(g,h,i)perylene	< 0.0284	ug/l	0.0284	0.0902	2	M8270C	10/11/2019	10/14/2019	NJC	1
Benzo(k)fluoranthene	< 0.0292	ug/l	0.0292	0.0926	2	M8270C	10/11/2019	10/14/2019	NJC	1
Chrysene	0.052 "J"	ug/l	0.0314	0.0998	2	M8270C	10/11/2019	10/14/2019	NJC	1
Dibenzo(a,h)anthracene	< 0.0346	ug/l	0.0346	0.1098	2	M8270C	10/11/2019	10/14/2019	NJC	1
Fluoranthene	0.87	ug/l	0.0176	0.0562	2	M8270C	10/11/2019	10/14/2019	NJC	1
Fluorene	2.31	ug/l	0.0158	0.0502	2	M8270C	10/11/2019	10/14/2019	NJC	1
Indeno(1,2,3-cd)pyrene	< 0.0242	ug/l	0.0242	0.077	2	M8270C	10/11/2019	10/14/2019	NJC	1
1-Methyl naphthalene	0.179	ug/l	0.0382	0.1218	2	M8270C	10/11/2019	10/14/2019	NJC	1
2-Methyl naphthalene	< 0.0372	ug/l	0.0372	0.118	2	M8270C	10/11/2019	10/14/2019	NJC	1
Naphthalene	< 0.052	ug/l	0.052	0.166	2	M8270C	10/11/2019	10/14/2019	NJC	1
Phenanthrene	0.097	ug/l	0.0286	0.0912	2	M8270C	10/11/2019	10/14/2019	NJC	1
Pyrene	0.52	ug/l	0.0242	0.0772	2	M8270C	10/11/2019	10/14/2019	NJC	1

Project Name WDNR-MOSS AMERICA **Invoice #** E36912
Project # 18687

Lab Code 5036912W
Sample ID TG1-3
Sample Matrix Water
Sample Date 10/4/2019

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
BTEX										
Benzene	< 0.22	ug/l	0.22	0.71	1	8260B		10/10/2019	CJR	1
Ethylbenzene	< 0.26	ug/l	0.26	0.83	1	8260B		10/10/2019	CJR	1
Toluene	< 0.19	ug/l	0.19	0.6	1	8260B		10/10/2019	CJR	1
m&p-Xylene	< 0.43	ug/l	0.43	1.38	1	8260B		10/10/2019	CJR	1
o-Xylene	< 0.29	ug/l	0.29	0.93	1	8260B		10/10/2019	CJR	1
PAH SIM										
Acenaphthene	1.16	ug/l	0.0094	0.03	1	M8270C	10/9/2019	10/11/2019	NJC	2
Acenaphthylene	< 0.0156	ug/l	0.0156	0.0495	1	M8270C	10/9/2019	10/11/2019	NJC	1
Anthracene	0.063	ug/l	0.015	0.0478	1	M8270C	10/9/2019	10/11/2019	NJC	1
Benzo(a)anthracene	0.0154 "J"	ug/l	0.0131	0.0418	1	M8270C	10/9/2019	10/11/2019	NJC	1
Benzo(a)pyrene	< 0.0167	ug/l	0.0167	0.0531	1	M8270C	10/9/2019	10/11/2019	NJC	1
Benzo(b)fluoranthene	< 0.016	ug/l	0.016	0.0509	1	M8270C	10/9/2019	10/11/2019	NJC	1
Benzo(g,h,i)perylene	< 0.0142	ug/l	0.0142	0.0451	1	M8270C	10/9/2019	10/11/2019	NJC	1
Benzo(k)fluoranthene	< 0.0146	ug/l	0.0146	0.0463	1	M8270C	10/9/2019	10/11/2019	NJC	1
Chrysene	< 0.0157	ug/l	0.0157	0.0499	1	M8270C	10/9/2019	10/11/2019	NJC	1
Dibenzo(a,h)anthracene	< 0.0173	ug/l	0.0173	0.0549	1	M8270C	10/9/2019	10/11/2019	NJC	1
Fluoranthene	0.097	ug/l	0.0088	0.0281	1	M8270C	10/9/2019	10/11/2019	NJC	1
Fluorene	0.051	ug/l	0.0079	0.0251	1	M8270C	10/9/2019	10/11/2019	NJC	1
Indeno(1,2,3-cd)pyrene	< 0.0121	ug/l	0.0121	0.0385	1	M8270C	10/9/2019	10/11/2019	NJC	1
1-Methyl naphthalene	< 0.0191	ug/l	0.0191	0.0609	1	M8270C	10/9/2019	10/11/2019	NJC	1
2-Methyl naphthalene	< 0.0186	ug/l	0.0186	0.059	1	M8270C	10/9/2019	10/11/2019	NJC	1
Naphthalene	< 0.026	ug/l	0.026	0.083	1	M8270C	10/9/2019	10/11/2019	NJC	1
Phenanthrene	< 0.0143	ug/l	0.0143	0.0456	1	M8270C	10/9/2019	10/11/2019	NJC	1
Pyrene	0.058	ug/l	0.0121	0.0386	1	M8270C	10/9/2019	10/11/2019	NJC	1

Project Name WDNR-MOSS AMERICA **Invoice #** E36912
Project # 18687

Lab Code 5036912X
Sample ID MW-33S
Sample Matrix Water
Sample Date 10/4/2019

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
BTEX										
Benzene	< 0.22	ug/l	0.22	0.71	1	8260B		10/10/2019	CJR	1
Ethylbenzene	< 0.26	ug/l	0.26	0.83	1	8260B		10/10/2019	CJR	1
Toluene	< 0.19	ug/l	0.19	0.6	1	8260B		10/10/2019	CJR	1
m&p-Xylene	< 0.43	ug/l	0.43	1.38	1	8260B		10/10/2019	CJR	1
o-Xylene	< 0.29	ug/l	0.29	0.93	1	8260B		10/10/2019	CJR	1
PAH SIM										
Acenaphthene	0.12	ug/l	0.0094	0.03	1	M8270C	10/11/2019	10/11/2019	NJC	1
Acenaphthylene	< 0.0156	ug/l	0.0156	0.0495	1	M8270C	10/11/2019	10/11/2019	NJC	1
Anthracene	0.158	ug/l	0.015	0.0478	1	M8270C	10/11/2019	10/11/2019	NJC	1
Benzo(a)anthracene	< 0.0131	ug/l	0.0131	0.0418	1	M8270C	10/11/2019	10/11/2019	NJC	1
Benzo(a)pyrene	< 0.0167	ug/l	0.0167	0.0531	1	M8270C	10/11/2019	10/11/2019	NJC	1
Benzo(b)fluoranthene	< 0.016	ug/l	0.016	0.0509	1	M8270C	10/11/2019	10/11/2019	NJC	1
Benzo(g,h,i)perylene	< 0.0142	ug/l	0.0142	0.0451	1	M8270C	10/11/2019	10/11/2019	NJC	1
Benzo(k)fluoranthene	< 0.0146	ug/l	0.0146	0.0463	1	M8270C	10/11/2019	10/11/2019	NJC	1
Chrysene	< 0.0157	ug/l	0.0157	0.0499	1	M8270C	10/11/2019	10/11/2019	NJC	1
Dibenzo(a,h)anthracene	< 0.0173	ug/l	0.0173	0.0549	1	M8270C	10/11/2019	10/11/2019	NJC	1
Fluoranthene	< 0.0088	ug/l	0.0088	0.0281	1	M8270C	10/11/2019	10/11/2019	NJC	1
Fluorene	0.045	ug/l	0.0079	0.0251	1	M8270C	10/11/2019	10/11/2019	NJC	1
Indeno(1,2,3-cd)pyrene	< 0.0121	ug/l	0.0121	0.0385	1	M8270C	10/11/2019	10/11/2019	NJC	1
1-Methyl naphthalene	0.0254 "J"	ug/l	0.0191	0.0609	1	M8270C	10/11/2019	10/11/2019	NJC	1
2-Methyl naphthalene	< 0.0186	ug/l	0.0186	0.059	1	M8270C	10/11/2019	10/11/2019	NJC	1
Naphthalene	0.23	ug/l	0.026	0.083	1	M8270C	10/11/2019	10/11/2019	NJC	1
Phenanthrene	0.0201 "J"	ug/l	0.0143	0.0456	1	M8270C	10/11/2019	10/11/2019	NJC	1
Pyrene	< 0.0121	ug/l	0.0121	0.0386	1	M8270C	10/11/2019	10/11/2019	NJC	1

Lab Code 5036912Y
Sample ID DUP 01
Sample Matrix Water
Sample Date 10/4/2019

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
BTEX										
Benzene	< 0.22	ug/l	0.22	0.71	1	8260B		10/10/2019	CJR	1
Ethylbenzene	< 0.26	ug/l	0.26	0.83	1	8260B		10/10/2019	CJR	1
Toluene	< 0.19	ug/l	0.19	0.6	1	8260B		10/10/2019	CJR	1
m&p-Xylene	< 0.43	ug/l	0.43	1.38	1	8260B		10/10/2019	CJR	1
o-Xylene	< 0.29	ug/l	0.29	0.93	1	8260B		10/10/2019	CJR	1

Project Name WDNR-MOSS AMERICA **Invoice #** E36912
Project # 18687

Lab Code 5036912Z
Sample ID DUP 02
Sample Matrix Water
Sample Date 10/4/2019

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
BTEX										
Benzene	< 0.22	ug/l	0.22	0.71	1	8260B		10/10/2019	CJR	1
Ethylbenzene	< 0.26	ug/l	0.26	0.83	1	8260B		10/10/2019	CJR	1
Toluene	< 0.19	ug/l	0.19	0.6	1	8260B		10/10/2019	CJR	1
m&p-Xylene	< 0.43	ug/l	0.43	1.38	1	8260B		10/10/2019	CJR	1
o-Xylene	< 0.29	ug/l	0.29	0.93	1	8260B		10/10/2019	CJR	1

Lab Code 536912AA
Sample ID EQUIP BLK
Sample Matrix Water
Sample Date 10/4/2019

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
BTEX										
Benzene	< 0.22	ug/l	0.22	0.71	1	8260B		10/10/2019	CJR	1
Ethylbenzene	< 0.26	ug/l	0.26	0.83	1	8260B		10/10/2019	CJR	1
Toluene	< 0.19	ug/l	0.19	0.6	1	8260B		10/10/2019	CJR	1
m&p-Xylene	< 0.43	ug/l	0.43	1.38	1	8260B		10/10/2019	CJR	1
o-Xylene	< 0.29	ug/l	0.29	0.93	1	8260B		10/10/2019	CJR	1

Lab Code 536912BB
Sample ID TRIP BLK
Sample Matrix Water
Sample Date 10/4/2019

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
BTEX										
Benzene	< 0.22	ug/l	0.22	0.71	1	8260B		10/10/2019	CJR	1
Ethylbenzene	< 0.26	ug/l	0.26	0.83	1	8260B		10/10/2019	CJR	1
Toluene	< 0.19	ug/l	0.19	0.6	1	8260B		10/10/2019	CJR	1
m&p-Xylene	< 0.43	ug/l	0.43	1.38	1	8260B		10/10/2019	CJR	1
o-Xylene	< 0.29	ug/l	0.29	0.93	1	8260B		10/10/2019	CJR	1

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

Code	*Comment*
1	Laboratory QC within limits.
2	Relative percent difference failed for laboratory spiked samples.
7	The LCS not within established limits.

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

Authorized Signature

Synergy Environmental Lab, INC

1990 Prospect Ct., Appleton, WI 54914 *P 920-830-2455 * F 920-733-0631

MAFIZUL ISLAM
THE SIGMA GROUP, INC.
1300 W. CANAL STREET
MILWAUKEE. WI 53233

Report Date *22-Oct-19*

Project Name WDNR-MOSS AMERICA **Invoice #** E36952
Project # 18687

Lab Code 5036952A
Sample ID MW-35S
Sample Matrix Water
Sample Date 10/7/2019

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
BTEX										
Benzene	< 0.22	ug/l	0.22	0.71	1	8260B		10/17/2019	CJR	1
Ethylbenzene	< 0.26	ug/l	0.26	0.83	1	8260B		10/17/2019	CJR	1
Toluene	< 0.19	ug/l	0.19	0.6	1	8260B		10/17/2019	CJR	1
m&p-Xylene	< 0.43	ug/l	0.43	1.38	1	8260B		10/17/2019	CJR	1
o-Xylene	< 0.29	ug/l	0.29	0.93	1	8260B		10/17/2019	CJR	1
PAH SIM										
Acenaphthene	2.68	ug/l	0.0094	0.03	1	M8270C	10/15/2019	10/16/2019	NJC	1
Acenaphthylene	0.034 "J"	ug/l	0.0156	0.0495	1	M8270C	10/15/2019	10/16/2019	NJC	1
Anthracene	0.16	ug/l	0.015	0.0478	1	M8270C	10/15/2019	10/16/2019	NJC	1
Benzo(a)anthracene	0.087	ug/l	0.0131	0.0418	1	M8270C	10/15/2019	10/16/2019	NJC	5
Benzo(a)pyrene	0.0241 "J"	ug/l	0.0167	0.0531	1	M8270C	10/15/2019	10/16/2019	NJC	1
Benzo(b)fluoranthene	0.048 "J"	ug/l	0.016	0.0509	1	M8270C	10/15/2019	10/16/2019	NJC	1
Benzo(g,h,i)perylene	0.0164 "J"	ug/l	0.0142	0.0451	1	M8270C	10/15/2019	10/16/2019	NJC	1
Benzo(k)fluoranthene	0.0178 "J"	ug/l	0.0146	0.0463	1	M8270C	10/15/2019	10/16/2019	NJC	1
Chrysene	0.055	ug/l	0.0157	0.0499	1	M8270C	10/15/2019	10/16/2019	NJC	1
Dibenzo(a,h)anthracene	< 0.0173	ug/l	0.0173	0.0549	1	M8270C	10/15/2019	10/16/2019	NJC	1
Fluoranthene	0.62	ug/l	0.0088	0.0281	1	M8270C	10/15/2019	10/16/2019	NJC	1
Fluorene	0.279	ug/l	0.0079	0.0251	1	M8270C	10/15/2019	10/16/2019	NJC	1
Indeno(1,2,3-cd)pyrene	< 0.0121	ug/l	0.0121	0.0385	1	M8270C	10/15/2019	10/16/2019	NJC	1
1-Methyl naphthalene	0.0212 "J"	ug/l	0.0191	0.0609	1	M8270C	10/15/2019	10/16/2019	NJC	1
2-Methyl naphthalene	0.0222 "J"	ug/l	0.0186	0.059	1	M8270C	10/15/2019	10/16/2019	NJC	1
Naphthalene	0.219	ug/l	0.026	0.083	1	M8270C	10/15/2019	10/16/2019	NJC	5
Phenanthrene	0.0232 "J"	ug/l	0.0143	0.0456	1	M8270C	10/15/2019	10/16/2019	NJC	1
Pyrene	0.42	ug/l	0.0121	0.0386	1	M8270C	10/15/2019	10/16/2019	NJC	1

Project Name WDNR-MOSS AMERICA **Invoice #** E36952
Project # 18687

Lab Code 5036952B
Sample ID TG5-2
Sample Matrix Water
Sample Date 10/7/2019

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
BTEX										
Benzene	< 0.22	ug/l	0.22	0.71	1	8260B		10/17/2019	CJR	1
Ethylbenzene	< 0.26	ug/l	0.26	0.83	1	8260B		10/17/2019	CJR	1
Toluene	< 0.19	ug/l	0.19	0.6	1	8260B		10/17/2019	CJR	1
m&p-Xylene	< 0.43	ug/l	0.43	1.38	1	8260B		10/17/2019	CJR	1
o-Xylene	< 0.29	ug/l	0.29	0.93	1	8260B		10/17/2019	CJR	1
PAH SIM										
Acenaphthene	0.036	ug/l	0.0094	0.03	1	M8270C	10/15/2019	10/16/2019	NJC	1
Acenaphthylene	0.17	ug/l	0.0156	0.0495	1	M8270C	10/15/2019	10/16/2019	NJC	1
Anthracene	0.32	ug/l	0.015	0.0478	1	M8270C	10/15/2019	10/16/2019	NJC	1
Benzo(a)anthracene	0.082	ug/l	0.0131	0.0418	1	M8270C	10/15/2019	10/16/2019	NJC	5
Benzo(a)pyrene	0.166	ug/l	0.0167	0.0531	1	M8270C	10/15/2019	10/16/2019	NJC	1
Benzo(b)fluoranthene	0.217	ug/l	0.016	0.0509	1	M8270C	10/15/2019	10/16/2019	NJC	1
Benzo(g,h,i)perylene	0.288	ug/l	0.0142	0.0451	1	M8270C	10/15/2019	10/16/2019	NJC	1
Benzo(k)fluoranthene	0.06	ug/l	0.0146	0.0463	1	M8270C	10/15/2019	10/16/2019	NJC	1
Chrysene	0.074	ug/l	0.0157	0.0499	1	M8270C	10/15/2019	10/16/2019	NJC	1
Dibenzo(a,h)anthracene	0.057	ug/l	0.0173	0.0549	1	M8270C	10/15/2019	10/16/2019	NJC	1
Fluoranthene	0.218	ug/l	0.0088	0.0281	1	M8270C	10/15/2019	10/16/2019	NJC	1
Fluorene	< 0.0079	ug/l	0.0079	0.0251	1	M8270C	10/15/2019	10/16/2019	NJC	1
Indeno(1,2,3-cd)pyrene	0.164	ug/l	0.0121	0.0385	1	M8270C	10/15/2019	10/16/2019	NJC	1
1-Methyl naphthalene	0.0216 "J"	ug/l	0.0191	0.0609	1	M8270C	10/15/2019	10/16/2019	NJC	1
2-Methyl naphthalene	< 0.0186	ug/l	0.0186	0.059	1	M8270C	10/15/2019	10/16/2019	NJC	1
Naphthalene	0.222	ug/l	0.026	0.083	1	M8270C	10/15/2019	10/16/2019	NJC	5
Phenanthrene	0.0223 "J"	ug/l	0.0143	0.0456	1	M8270C	10/15/2019	10/16/2019	NJC	1
Pyrene	0.229	ug/l	0.0121	0.0386	1	M8270C	10/15/2019	10/16/2019	NJC	1

Project Name WDNR-MOSS AMERICA **Invoice #** E36952
Project # 18687

Lab Code 5036952C
Sample ID PZ-05
Sample Matrix Water
Sample Date 10/7/2019

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
BTEX										
Benzene	< 0.22	ug/l	0.22	0.71	1	8260B		10/17/2019	CJR	1
Ethylbenzene	< 0.26	ug/l	0.26	0.83	1	8260B		10/17/2019	CJR	1
Toluene	< 0.19	ug/l	0.19	0.6	1	8260B		10/17/2019	CJR	1
m&p-Xylene	< 0.43	ug/l	0.43	1.38	1	8260B		10/17/2019	CJR	1
o-Xylene	< 0.29	ug/l	0.29	0.93	1	8260B		10/17/2019	CJR	1
PAH SIM										
Acenaphthene	0.0115 "J"	ug/l	0.0094	0.03	1	M8270C	10/15/2019	10/16/2019	NJC	1
Acenaphthylene	< 0.0156	ug/l	0.0156	0.0495	1	M8270C	10/15/2019	10/16/2019	NJC	1
Anthracene	0.0155 "J"	ug/l	0.015	0.0478	1	M8270C	10/15/2019	10/16/2019	NJC	1
Benzo(a)anthracene	0.037 "J"	ug/l	0.0131	0.0418	1	M8270C	10/15/2019	10/16/2019	NJC	5
Benzo(a)pyrene	0.0177 "J"	ug/l	0.0167	0.0531	1	M8270C	10/15/2019	10/16/2019	NJC	1
Benzo(b)fluoranthene	0.035 "J"	ug/l	0.016	0.0509	1	M8270C	10/15/2019	10/16/2019	NJC	1
Benzo(g,h,i)perylene	0.0176 "J"	ug/l	0.0142	0.0451	1	M8270C	10/15/2019	10/16/2019	NJC	1
Benzo(k)fluoranthene	< 0.0146	ug/l	0.0146	0.0463	1	M8270C	10/15/2019	10/16/2019	NJC	1
Chrysene	0.0262 "J"	ug/l	0.0157	0.0499	1	M8270C	10/15/2019	10/16/2019	NJC	1
Dibenzo(a,h)anthracene	< 0.0173	ug/l	0.0173	0.0549	1	M8270C	10/15/2019	10/16/2019	NJC	1
Fluoranthene	0.031	ug/l	0.0088	0.0281	1	M8270C	10/15/2019	10/16/2019	NJC	1
Fluorene	< 0.0079	ug/l	0.0079	0.0251	1	M8270C	10/15/2019	10/16/2019	NJC	1
Indeno(1,2,3-cd)pyrene	< 0.0121	ug/l	0.0121	0.0385	1	M8270C	10/15/2019	10/16/2019	NJC	1
1-Methyl naphthalene	< 0.0191	ug/l	0.0191	0.0609	1	M8270C	10/15/2019	10/16/2019	NJC	1
2-Methyl naphthalene	< 0.0186	ug/l	0.0186	0.059	1	M8270C	10/15/2019	10/16/2019	NJC	1
Naphthalene	0.124	ug/l	0.026	0.083	1	M8270C	10/15/2019	10/16/2019	NJC	5
Phenanthrene	0.018 "J"	ug/l	0.0143	0.0456	1	M8270C	10/15/2019	10/16/2019	NJC	1
Pyrene	0.029 "J"	ug/l	0.0121	0.0386	1	M8270C	10/15/2019	10/16/2019	NJC	1

Project Name WDNR-MOSS AMERICA **Invoice #** E36952
Project # 18687

Lab Code 5036952D
Sample ID MW-37S
Sample Matrix Water
Sample Date 10/7/2019

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
BTEX										
Benzene	< 0.22	ug/l	0.22	0.71	1	8260B		10/17/2019	CJR	1
Ethylbenzene	< 0.26	ug/l	0.26	0.83	1	8260B		10/17/2019	CJR	1
Toluene	< 0.19	ug/l	0.19	0.6	1	8260B		10/17/2019	CJR	1
m&p-Xylene	< 0.43	ug/l	0.43	1.38	1	8260B		10/17/2019	CJR	1
o-Xylene	< 0.29	ug/l	0.29	0.93	1	8260B		10/17/2019	CJR	1
PAH SIM										
Acenaphthene	0.0259 "J"	ug/l	0.0094	0.03	1	M8270C	10/15/2019	10/16/2019	NJC	1
Acenaphthylene	< 0.0156	ug/l	0.0156	0.0495	1	M8270C	10/15/2019	10/16/2019	NJC	1
Anthracene	0.0249 "J"	ug/l	0.015	0.0478	1	M8270C	10/15/2019	10/16/2019	NJC	1
Benzo(a)anthracene	0.0168 "J"	ug/l	0.0131	0.0418	1	M8270C	10/15/2019	10/16/2019	NJC	5
Benzo(a)pyrene	< 0.0167	ug/l	0.0167	0.0531	1	M8270C	10/15/2019	10/16/2019	NJC	1
Benzo(b)fluoranthene	< 0.016	ug/l	0.016	0.0509	1	M8270C	10/15/2019	10/16/2019	NJC	1
Benzo(g,h,i)perylene	< 0.0142	ug/l	0.0142	0.0451	1	M8270C	10/15/2019	10/16/2019	NJC	1
Benzo(k)fluoranthene	< 0.0146	ug/l	0.0146	0.0463	1	M8270C	10/15/2019	10/16/2019	NJC	1
Chrysene	< 0.0157	ug/l	0.0157	0.0499	1	M8270C	10/15/2019	10/16/2019	NJC	1
Dibenzo(a,h)anthracene	< 0.0173	ug/l	0.0173	0.0549	1	M8270C	10/15/2019	10/16/2019	NJC	1
Fluoranthene	< 0.0088	ug/l	0.0088	0.0281	1	M8270C	10/15/2019	10/16/2019	NJC	1
Fluorene	0.0146 "J"	ug/l	0.0079	0.0251	1	M8270C	10/15/2019	10/16/2019	NJC	1
Indeno(1,2,3-cd)pyrene	< 0.0121	ug/l	0.0121	0.0385	1	M8270C	10/15/2019	10/16/2019	NJC	1
1-Methyl naphthalene	0.0247 "J"	ug/l	0.0191	0.0609	1	M8270C	10/15/2019	10/16/2019	NJC	1
2-Methyl naphthalene	< 0.0186	ug/l	0.0186	0.059	1	M8270C	10/15/2019	10/16/2019	NJC	1
Naphthalene	0.286	ug/l	0.026	0.083	1	M8270C	10/15/2019	10/16/2019	NJC	5
Phenanthrene	< 0.0143	ug/l	0.0143	0.0456	1	M8270C	10/15/2019	10/16/2019	NJC	1
Pyrene	< 0.0121	ug/l	0.0121	0.0386	1	M8270C	10/15/2019	10/16/2019	NJC	1

Project Name WDNR-MOSS AMERICA **Invoice #** E36952
Project # 18687

Lab Code 5036952E
Sample ID TG4-1
Sample Matrix Water
Sample Date 10/8/2019

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
BTEX										
Benzene	< 0.22	ug/l	0.22	0.71	1	8260B		10/17/2019	CJR	1
Ethylbenzene	< 0.26	ug/l	0.26	0.83	1	8260B		10/17/2019	CJR	1
Toluene	< 0.19	ug/l	0.19	0.6	1	8260B		10/17/2019	CJR	1
m&p-Xylene	< 0.43	ug/l	0.43	1.38	1	8260B		10/17/2019	CJR	1
o-Xylene	< 0.29	ug/l	0.29	0.93	1	8260B		10/17/2019	CJR	1
PAH SIM										
Acenaphthene	< 0.0094	ug/l	0.0094	0.03	1	M8270C	10/15/2019	10/16/2019	NJC	1
Acenaphthylene	< 0.0156	ug/l	0.0156	0.0495	1	M8270C	10/15/2019	10/16/2019	NJC	1
Anthracene	0.091	ug/l	0.015	0.0478	1	M8270C	10/15/2019	10/16/2019	NJC	1
Benzo(a)anthracene	0.0139 "J"	ug/l	0.0131	0.0418	1	M8270C	10/15/2019	10/16/2019	NJC	5
Benzo(a)pyrene	< 0.0167	ug/l	0.0167	0.0531	1	M8270C	10/15/2019	10/16/2019	NJC	1
Benzo(b)fluoranthene	< 0.016	ug/l	0.016	0.0509	1	M8270C	10/15/2019	10/16/2019	NJC	1
Benzo(g,h,i)perylene	< 0.0142	ug/l	0.0142	0.0451	1	M8270C	10/15/2019	10/16/2019	NJC	1
Benzo(k)fluoranthene	< 0.0146	ug/l	0.0146	0.0463	1	M8270C	10/15/2019	10/16/2019	NJC	1
Chrysene	< 0.0157	ug/l	0.0157	0.0499	1	M8270C	10/15/2019	10/16/2019	NJC	1
Dibenzo(a,h)anthracene	< 0.0173	ug/l	0.0173	0.0549	1	M8270C	10/15/2019	10/16/2019	NJC	1
Fluoranthene	< 0.0088	ug/l	0.0088	0.0281	1	M8270C	10/15/2019	10/16/2019	NJC	1
Fluorene	< 0.0079	ug/l	0.0079	0.0251	1	M8270C	10/15/2019	10/16/2019	NJC	1
Indeno(1,2,3-cd)pyrene	< 0.0121	ug/l	0.0121	0.0385	1	M8270C	10/15/2019	10/16/2019	NJC	1
1-Methyl naphthalene	< 0.0191	ug/l	0.0191	0.0609	1	M8270C	10/15/2019	10/16/2019	NJC	1
2-Methyl naphthalene	< 0.0186	ug/l	0.0186	0.059	1	M8270C	10/15/2019	10/16/2019	NJC	1
Naphthalene	0.032 "J"	ug/l	0.026	0.083	1	M8270C	10/15/2019	10/16/2019	NJC	5
Phenanthrene	< 0.0143	ug/l	0.0143	0.0456	1	M8270C	10/15/2019	10/16/2019	NJC	1
Pyrene	< 0.0121	ug/l	0.0121	0.0386	1	M8270C	10/15/2019	10/16/2019	NJC	1

Project Name WDNR-MOSS AMERICA **Invoice #** E36952
Project # 18687

Lab Code 5036952F
Sample ID TG4-2
Sample Matrix Water
Sample Date 10/8/2019

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
BTEX										
Benzene	< 0.22	ug/l	0.22	0.71	1	8260B		10/17/2019	CJR	1
Ethylbenzene	< 0.26	ug/l	0.26	0.83	1	8260B		10/17/2019	CJR	1
Toluene	< 0.19	ug/l	0.19	0.6	1	8260B		10/17/2019	CJR	1
m&p-Xylene	< 0.43	ug/l	0.43	1.38	1	8260B		10/17/2019	CJR	1
o-Xylene	< 0.29	ug/l	0.29	0.93	1	8260B		10/17/2019	CJR	1
PAH SIM										
Acenaphthene	0.252	ug/l	0.0094	0.03	1	M8270C	10/15/2019	10/16/2019	NJC	1
Acenaphthylene	< 0.0156	ug/l	0.0156	0.0495	1	M8270C	10/15/2019	10/16/2019	NJC	1
Anthracene	0.144	ug/l	0.015	0.0478	1	M8270C	10/15/2019	10/16/2019	NJC	1
Benzo(a)anthracene	0.0289 "J"	ug/l	0.0131	0.0418	1	M8270C	10/15/2019	10/16/2019	NJC	5
Benzo(a)pyrene	< 0.0167	ug/l	0.0167	0.0531	1	M8270C	10/15/2019	10/16/2019	NJC	1
Benzo(b)fluoranthene	0.0196 "J"	ug/l	0.016	0.0509	1	M8270C	10/15/2019	10/16/2019	NJC	1
Benzo(g,h,i)perylene	< 0.0142	ug/l	0.0142	0.0451	1	M8270C	10/15/2019	10/16/2019	NJC	1
Benzo(k)fluoranthene	< 0.0146	ug/l	0.0146	0.0463	1	M8270C	10/15/2019	10/16/2019	NJC	1
Chrysene	0.0159 "J"	ug/l	0.0157	0.0499	1	M8270C	10/15/2019	10/16/2019	NJC	1
Dibenzo(a,h)anthracene	< 0.0173	ug/l	0.0173	0.0549	1	M8270C	10/15/2019	10/16/2019	NJC	1
Fluoranthene	0.169	ug/l	0.0088	0.0281	1	M8270C	10/15/2019	10/16/2019	NJC	1
Fluorene	< 0.0079	ug/l	0.0079	0.0251	1	M8270C	10/15/2019	10/16/2019	NJC	1
Indeno(1,2,3-cd)pyrene	< 0.0121	ug/l	0.0121	0.0385	1	M8270C	10/15/2019	10/16/2019	NJC	1
1-Methyl naphthalene	< 0.0191	ug/l	0.0191	0.0609	1	M8270C	10/15/2019	10/16/2019	NJC	1
2-Methyl naphthalene	< 0.0186	ug/l	0.0186	0.059	1	M8270C	10/15/2019	10/16/2019	NJC	1
Naphthalene	0.036 "J"	ug/l	0.026	0.083	1	M8270C	10/15/2019	10/16/2019	NJC	5
Phenanthrene	0.0166 "J"	ug/l	0.0143	0.0456	1	M8270C	10/15/2019	10/16/2019	NJC	1
Pyrene	0.123	ug/l	0.0121	0.0386	1	M8270C	10/15/2019	10/16/2019	NJC	1

Project Name WDNR-MOSS AMERICA **Invoice #** E36952
Project # 18687

Lab Code 5036952G
Sample ID TG4-3
Sample Matrix Water
Sample Date 10/8/2019

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
BTEX										
Benzene	< 0.22	ug/l	0.22	0.71	1	8260B		10/17/2019	CJR	1
Ethylbenzene	< 0.26	ug/l	0.26	0.83	1	8260B		10/17/2019	CJR	1
Toluene	< 0.19	ug/l	0.19	0.6	1	8260B		10/17/2019	CJR	1
m&p-Xylene	< 0.43	ug/l	0.43	1.38	1	8260B		10/17/2019	CJR	1
o-Xylene	< 0.29	ug/l	0.29	0.93	1	8260B		10/17/2019	CJR	1
PAH SIM										
Acenaphthene	< 0.0094	ug/l	0.0094	0.03	1	M8270C	10/15/2019	10/16/2019	NJC	1
Acenaphthylene	< 0.0156	ug/l	0.0156	0.0495	1	M8270C	10/15/2019	10/16/2019	NJC	1
Anthracene	0.12	ug/l	0.015	0.0478	1	M8270C	10/15/2019	10/16/2019	NJC	1
Benzo(a)anthracene	0.0208 "J"	ug/l	0.0131	0.0418	1	M8270C	10/15/2019	10/16/2019	NJC	5
Benzo(a)pyrene	< 0.0167	ug/l	0.0167	0.0531	1	M8270C	10/15/2019	10/16/2019	NJC	1
Benzo(b)fluoranthene	< 0.016	ug/l	0.016	0.0509	1	M8270C	10/15/2019	10/16/2019	NJC	1
Benzo(g,h,i)perylene	0.0152 "J"	ug/l	0.0142	0.0451	1	M8270C	10/15/2019	10/16/2019	NJC	1
Benzo(k)fluoranthene	< 0.0146	ug/l	0.0146	0.0463	1	M8270C	10/15/2019	10/16/2019	NJC	1
Chrysene	< 0.0157	ug/l	0.0157	0.0499	1	M8270C	10/15/2019	10/16/2019	NJC	1
Dibenzo(a,h)anthracene	< 0.0173	ug/l	0.0173	0.0549	1	M8270C	10/15/2019	10/16/2019	NJC	1
Fluoranthene	0.025 "J"	ug/l	0.0088	0.0281	1	M8270C	10/15/2019	10/16/2019	NJC	1
Fluorene	< 0.0079	ug/l	0.0079	0.0251	1	M8270C	10/15/2019	10/16/2019	NJC	1
Indeno(1,2,3-cd)pyrene	< 0.0121	ug/l	0.0121	0.0385	1	M8270C	10/15/2019	10/16/2019	NJC	1
1-Methyl naphthalene	< 0.0191	ug/l	0.0191	0.0609	1	M8270C	10/15/2019	10/16/2019	NJC	1
2-Methyl naphthalene	< 0.0186	ug/l	0.0186	0.059	1	M8270C	10/15/2019	10/16/2019	NJC	1
Naphthalene	0.048 "J"	ug/l	0.026	0.083	1	M8270C	10/15/2019	10/16/2019	NJC	5
Phenanthrene	< 0.0143	ug/l	0.0143	0.0456	1	M8270C	10/15/2019	10/16/2019	NJC	1
Pyrene	0.0245 "J"	ug/l	0.0121	0.0386	1	M8270C	10/15/2019	10/16/2019	NJC	1

Project Name WDNR-MOSS AMERICA **Invoice #** E36952
Project # 18687

Lab Code 5036952H
Sample ID MW-07S
Sample Matrix Water
Sample Date 10/9/2019

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
BTEX										
Benzene	< 0.22	ug/l	0.22	0.71	1	8260B		10/17/2019	CJR	1
Ethylbenzene	< 0.26	ug/l	0.26	0.83	1	8260B		10/17/2019	CJR	1
Toluene	< 0.19	ug/l	0.19	0.6	1	8260B		10/17/2019	CJR	1
m&p-Xylene	< 0.43	ug/l	0.43	1.38	1	8260B		10/17/2019	CJR	1
o-Xylene	< 0.29	ug/l	0.29	0.93	1	8260B		10/17/2019	CJR	1
PAH SIM										
Acenaphthene	2.18	ug/l	0.0094	0.03	1	M8270C	10/15/2019	10/16/2019	NJC	1
Acenaphthylene	0.067	ug/l	0.0156	0.0495	1	M8270C	10/15/2019	10/16/2019	NJC	1
Anthracene	0.136	ug/l	0.015	0.0478	1	M8270C	10/15/2019	10/16/2019	NJC	1
Benzo(a)anthracene	0.0256 "J"	ug/l	0.0131	0.0418	1	M8270C	10/15/2019	10/16/2019	NJC	5
Benzo(a)pyrene	< 0.0167	ug/l	0.0167	0.0531	1	M8270C	10/15/2019	10/16/2019	NJC	1
Benzo(b)fluoranthene	< 0.016	ug/l	0.016	0.0509	1	M8270C	10/15/2019	10/16/2019	NJC	1
Benzo(g,h,i)perylene	< 0.0142	ug/l	0.0142	0.0451	1	M8270C	10/15/2019	10/16/2019	NJC	1
Benzo(k)fluoranthene	< 0.0146	ug/l	0.0146	0.0463	1	M8270C	10/15/2019	10/16/2019	NJC	1
Chrysene	< 0.0157	ug/l	0.0157	0.0499	1	M8270C	10/15/2019	10/16/2019	NJC	1
Dibenzo(a,h)anthracene	< 0.0173	ug/l	0.0173	0.0549	1	M8270C	10/15/2019	10/16/2019	NJC	1
Fluoranthene	0.029	ug/l	0.0088	0.0281	1	M8270C	10/15/2019	10/16/2019	NJC	1
Fluorene	0.43	ug/l	0.0079	0.0251	1	M8270C	10/15/2019	10/16/2019	NJC	1
Indeno(1,2,3-cd)pyrene	< 0.0121	ug/l	0.0121	0.0385	1	M8270C	10/15/2019	10/16/2019	NJC	1
1-Methyl naphthalene	4.90	ug/l	0.0191	0.0609	1	M8270C	10/15/2019	10/16/2019	NJC	1
2-Methyl naphthalene	0.037 "J"	ug/l	0.0186	0.059	1	M8270C	10/15/2019	10/16/2019	NJC	1
Naphthalene	0.112	ug/l	0.026	0.083	1	M8270C	10/15/2019	10/16/2019	NJC	5
Phenanthrene	0.0278 "J"	ug/l	0.0143	0.0456	1	M8270C	10/15/2019	10/16/2019	NJC	1
Pyrene	0.0236 "J"	ug/l	0.0121	0.0386	1	M8270C	10/15/2019	10/16/2019	NJC	1

Project Name WDNR-MOSS AMERICA **Invoice #** E36952
Project # 18687

Lab Code 5036952I
Sample ID MW-34SR
Sample Matrix Water
Sample Date 10/9/2019

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
BTEX										
Benzene	< 0.22	ug/l	0.22	0.71	1	8260B		10/17/2019	CJR	1
Ethylbenzene	< 0.26	ug/l	0.26	0.83	1	8260B		10/17/2019	CJR	1
Toluene	< 0.19	ug/l	0.19	0.6	1	8260B		10/17/2019	CJR	1
m&p-Xylene	< 0.43	ug/l	0.43	1.38	1	8260B		10/17/2019	CJR	1
o-Xylene	< 0.29	ug/l	0.29	0.93	1	8260B		10/17/2019	CJR	1
PAH SIM										
Acenaphthene	2.39	ug/l	0.0094	0.03	1	M8270C	10/15/2019	10/16/2019	NJC	1
Acenaphthylene	0.048 "J"	ug/l	0.0156	0.0495	1	M8270C	10/15/2019	10/16/2019	NJC	1
Anthracene	0.271	ug/l	0.015	0.0478	1	M8270C	10/15/2019	10/16/2019	NJC	1
Benzo(a)anthracene	0.033 "J"	ug/l	0.0131	0.0418	1	M8270C	10/15/2019	10/16/2019	NJC	5
Benzo(a)pyrene	< 0.0167	ug/l	0.0167	0.0531	1	M8270C	10/15/2019	10/16/2019	NJC	1
Benzo(b)fluoranthene	< 0.016	ug/l	0.016	0.0509	1	M8270C	10/15/2019	10/16/2019	NJC	1
Benzo(g,h,i)perylene	< 0.0142	ug/l	0.0142	0.0451	1	M8270C	10/15/2019	10/16/2019	NJC	1
Benzo(k)fluoranthene	< 0.0146	ug/l	0.0146	0.0463	1	M8270C	10/15/2019	10/16/2019	NJC	1
Chrysene	0.0244 "J"	ug/l	0.0157	0.0499	1	M8270C	10/15/2019	10/16/2019	NJC	1
Dibenzo(a,h)anthracene	< 0.0173	ug/l	0.0173	0.0549	1	M8270C	10/15/2019	10/16/2019	NJC	1
Fluoranthene	0.44	ug/l	0.0088	0.0281	1	M8270C	10/15/2019	10/16/2019	NJC	1
Fluorene	1.56	ug/l	0.0079	0.0251	1	M8270C	10/15/2019	10/16/2019	NJC	1
Indeno(1,2,3-cd)pyrene	< 0.0121	ug/l	0.0121	0.0385	1	M8270C	10/15/2019	10/16/2019	NJC	1
1-Methyl naphthalene	0.65	ug/l	0.0191	0.0609	1	M8270C	10/15/2019	10/16/2019	NJC	1
2-Methyl naphthalene	0.262	ug/l	0.0186	0.059	1	M8270C	10/15/2019	10/16/2019	NJC	1
Naphthalene	0.304	ug/l	0.026	0.083	1	M8270C	10/15/2019	10/16/2019	NJC	5
Phenanthrene	0.55	ug/l	0.0143	0.0456	1	M8270C	10/15/2019	10/16/2019	NJC	1
Pyrene	0.267	ug/l	0.0121	0.0386	1	M8270C	10/15/2019	10/16/2019	NJC	1

Project Name WDNR-MOSS AMERICA **Invoice #** E36952
Project # 18687

Lab Code 5036952J
Sample ID MW-38S
Sample Matrix Water
Sample Date 10/9/2019

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
BTEX										
Benzene	< 0.22	ug/l	0.22	0.71	1	8260B		10/17/2019	CJR	1
Ethylbenzene	< 0.26	ug/l	0.26	0.83	1	8260B		10/17/2019	CJR	1
Toluene	< 0.19	ug/l	0.19	0.6	1	8260B		10/17/2019	CJR	1
m&p-Xylene	< 0.43	ug/l	0.43	1.38	1	8260B		10/17/2019	CJR	1
o-Xylene	< 0.29	ug/l	0.29	0.93	1	8260B		10/17/2019	CJR	1
PAH SIM										
Acenaphthene	0.70	ug/l	0.0094	0.03	1	M8270C	10/15/2019	10/16/2019	NJC	1
Acenaphthylene	0.0242 "J"	ug/l	0.0156	0.0495	1	M8270C	10/15/2019	10/16/2019	NJC	1
Anthracene	0.10	ug/l	0.015	0.0478	1	M8270C	10/15/2019	10/16/2019	NJC	1
Benzo(a)anthracene	0.0166 "J"	ug/l	0.0131	0.0418	1	M8270C	10/15/2019	10/16/2019	NJC	5
Benzo(a)pyrene	< 0.0167	ug/l	0.0167	0.0531	1	M8270C	10/15/2019	10/16/2019	NJC	1
Benzo(b)fluoranthene	< 0.016	ug/l	0.016	0.0509	1	M8270C	10/15/2019	10/16/2019	NJC	1
Benzo(g,h,i)perylene	< 0.0142	ug/l	0.0142	0.0451	1	M8270C	10/15/2019	10/16/2019	NJC	1
Benzo(k)fluoranthene	< 0.0146	ug/l	0.0146	0.0463	1	M8270C	10/15/2019	10/16/2019	NJC	1
Chrysene	< 0.0157	ug/l	0.0157	0.0499	1	M8270C	10/15/2019	10/16/2019	NJC	1
Dibenzo(a,h)anthracene	< 0.0173	ug/l	0.0173	0.0549	1	M8270C	10/15/2019	10/16/2019	NJC	1
Fluoranthene	< 0.0088	ug/l	0.0088	0.0281	1	M8270C	10/15/2019	10/16/2019	NJC	1
Fluorene	0.017 "J"	ug/l	0.0079	0.0251	1	M8270C	10/15/2019	10/16/2019	NJC	1
Indeno(1,2,3-cd)pyrene	< 0.0121	ug/l	0.0121	0.0385	1	M8270C	10/15/2019	10/16/2019	NJC	1
1-Methyl naphthalene	0.44	ug/l	0.0191	0.0609	1	M8270C	10/15/2019	10/16/2019	NJC	1
2-Methyl naphthalene	< 0.0186	ug/l	0.0186	0.059	1	M8270C	10/15/2019	10/16/2019	NJC	1
Naphthalene	0.04 "J"	ug/l	0.026	0.083	1	M8270C	10/15/2019	10/16/2019	NJC	5
Phenanthrene	0.0169 "J"	ug/l	0.0143	0.0456	1	M8270C	10/15/2019	10/16/2019	NJC	1
Pyrene	< 0.0121	ug/l	0.0121	0.0386	1	M8270C	10/15/2019	10/16/2019	NJC	1

Project Name WDNR-MOSS AMERICA **Invoice #** E36952
Project # 18687

Lab Code 5036952K
Sample ID MW-39S
Sample Matrix Water
Sample Date 10/9/2019

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
BTEX										
Benzene	< 0.22	ug/l	0.22	0.71	1	8260B		10/17/2019	CJR	1
Ethylbenzene	< 0.26	ug/l	0.26	0.83	1	8260B		10/17/2019	CJR	1
Toluene	< 0.19	ug/l	0.19	0.6	1	8260B		10/17/2019	CJR	1
m&p-Xylene	< 0.43	ug/l	0.43	1.38	1	8260B		10/17/2019	CJR	1
o-Xylene	< 0.29	ug/l	0.29	0.93	1	8260B		10/17/2019	CJR	1
PAH SIM										
Acenaphthene	13.9	ug/l	0.0188	0.06	2	M8270C	10/15/2019	10/16/2019	NJC	1
Acenaphthylene	0.062 "J"	ug/l	0.0312	0.099	2	M8270C	10/15/2019	10/16/2019	NJC	1
Anthracene	0.101	ug/l	0.03	0.0956	2	M8270C	10/15/2019	10/16/2019	NJC	1
Benzo(a)anthracene	0.036 "J"	ug/l	0.0262	0.0836	2	M8270C	10/15/2019	10/16/2019	NJC	1
Benzo(a)pyrene	< 0.0334	ug/l	0.0334	0.1062	2	M8270C	10/15/2019	10/16/2019	NJC	1
Benzo(b)fluoranthene	< 0.032	ug/l	0.032	0.1018	2	M8270C	10/15/2019	10/16/2019	NJC	1
Benzo(g,h,i)perylene	< 0.0284	ug/l	0.0284	0.0902	2	M8270C	10/15/2019	10/16/2019	NJC	1
Benzo(k)fluoranthene	< 0.0292	ug/l	0.0292	0.0926	2	M8270C	10/15/2019	10/16/2019	NJC	1
Chrysene	< 0.0314	ug/l	0.0314	0.0998	2	M8270C	10/15/2019	10/16/2019	NJC	1
Dibenzo(a,h)anthracene	< 0.0346	ug/l	0.0346	0.1098	2	M8270C	10/15/2019	10/16/2019	NJC	1
Fluoranthene	0.064	ug/l	0.0176	0.0562	2	M8270C	10/15/2019	10/16/2019	NJC	1
Fluorene	0.70	ug/l	0.0158	0.0502	2	M8270C	10/15/2019	10/16/2019	NJC	1
Indeno(1,2,3-cd)pyrene	< 0.0242	ug/l	0.0242	0.077	2	M8270C	10/15/2019	10/16/2019	NJC	1
1-Methyl naphthalene	< 0.0382	ug/l	0.0382	0.1218	2	M8270C	10/15/2019	10/16/2019	NJC	1
2-Methyl naphthalene	< 0.0372	ug/l	0.0372	0.118	2	M8270C	10/15/2019	10/16/2019	NJC	1
Naphthalene	0.103 "J"	ug/l	0.052	0.166	2	M8270C	10/15/2019	10/16/2019	NJC	5
Phenanthrene	< 0.0286	ug/l	0.0286	0.0912	2	M8270C	10/15/2019	10/16/2019	NJC	1
Pyrene	0.046 "J"	ug/l	0.0242	0.0772	2	M8270C	10/15/2019	10/16/2019	NJC	1

Project Name WDNR-MOSS AMERICA **Invoice #** E36952
Project # 18687

Lab Code 5036952L
Sample ID MW-34SN
Sample Matrix Water
Sample Date 10/9/2019

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
BTEX										
Benzene	< 0.22	ug/l	0.22	0.71	1	8260B		10/18/2019	CJR	1
Ethylbenzene	< 0.26	ug/l	0.26	0.83	1	8260B		10/18/2019	CJR	1
Toluene	< 0.19	ug/l	0.19	0.6	1	8260B		10/18/2019	CJR	1
m&p-Xylene	< 0.43	ug/l	0.43	1.38	1	8260B		10/18/2019	CJR	1
o-Xylene	< 0.29	ug/l	0.29	0.93	1	8260B		10/18/2019	CJR	1
PAH SIM										
Acenaphthene	0.0137 "J"	ug/l	0.0094	0.03	1	M8270C	10/15/2019	10/16/2019	NJC	1
Acenaphthylene	< 0.0156	ug/l	0.0156	0.0495	1	M8270C	10/15/2019	10/16/2019	NJC	1
Anthracene	0.0163 "J"	ug/l	0.015	0.0478	1	M8270C	10/15/2019	10/16/2019	NJC	1
Benzo(a)anthracene	0.0243 "J"	ug/l	0.0131	0.0418	1	M8270C	10/15/2019	10/16/2019	NJC	5
Benzo(a)pyrene	< 0.0167	ug/l	0.0167	0.0531	1	M8270C	10/15/2019	10/16/2019	NJC	1
Benzo(b)fluoranthene	0.0231 "J"	ug/l	0.016	0.0509	1	M8270C	10/15/2019	10/16/2019	NJC	1
Benzo(g,h,i)perylene	< 0.0142	ug/l	0.0142	0.0451	1	M8270C	10/15/2019	10/16/2019	NJC	1
Benzo(k)fluoranthene	< 0.0146	ug/l	0.0146	0.0463	1	M8270C	10/15/2019	10/16/2019	NJC	1
Chrysene	< 0.0157	ug/l	0.0157	0.0499	1	M8270C	10/15/2019	10/16/2019	NJC	1
Dibenzo(a,h)anthracene	< 0.0173	ug/l	0.0173	0.0549	1	M8270C	10/15/2019	10/16/2019	NJC	1
Fluoranthene	0.028 "J"	ug/l	0.0088	0.0281	1	M8270C	10/15/2019	10/16/2019	NJC	1
Fluorene	< 0.0079	ug/l	0.0079	0.0251	1	M8270C	10/15/2019	10/16/2019	NJC	1
Indeno(1,2,3-cd)pyrene	< 0.0121	ug/l	0.0121	0.0385	1	M8270C	10/15/2019	10/16/2019	NJC	1
1-Methyl naphthalene	< 0.0191	ug/l	0.0191	0.0609	1	M8270C	10/15/2019	10/16/2019	NJC	1
2-Methyl naphthalene	< 0.0186	ug/l	0.0186	0.059	1	M8270C	10/15/2019	10/16/2019	NJC	1
Naphthalene	0.0308 "J"	ug/l	0.026	0.083	1	M8270C	10/15/2019	10/16/2019	NJC	5
Phenanthrene	0.0171 "J"	ug/l	0.0143	0.0456	1	M8270C	10/15/2019	10/16/2019	NJC	1
Pyrene	0.0231 "J"	ug/l	0.0121	0.0386	1	M8270C	10/15/2019	10/16/2019	NJC	1

Project Name WDNR-MOSS AMERICA **Invoice #** E36952
Project # 18687

Lab Code 5036952M
Sample ID MW-30S
Sample Matrix Water
Sample Date 10/9/2019

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
BTEX										
Benzene	< 0.22	ug/l	0.22	0.71	1	8260B		10/18/2019	CJR	1
Ethylbenzene	< 0.26	ug/l	0.26	0.83	1	8260B		10/18/2019	CJR	1
Toluene	< 0.19	ug/l	0.19	0.6	1	8260B		10/18/2019	CJR	1
m&p-Xylene	< 0.43	ug/l	0.43	1.38	1	8260B		10/18/2019	CJR	1
o-Xylene	< 0.29	ug/l	0.29	0.93	1	8260B		10/18/2019	CJR	1
PAH SIM										
Acenaphthene	< 0.0094	ug/l	0.0094	0.03	1	M8270C	10/15/2019	10/16/2019	NJC	1
Acenaphthylene	< 0.0156	ug/l	0.0156	0.0495	1	M8270C	10/15/2019	10/16/2019	NJC	1
Anthracene	0.134	ug/l	0.015	0.0478	1	M8270C	10/15/2019	10/16/2019	NJC	1
Benzo(a)anthracene	0.0174 "J"	ug/l	0.0131	0.0418	1	M8270C	10/15/2019	10/16/2019	NJC	5
Benzo(a)pyrene	< 0.0167	ug/l	0.0167	0.0531	1	M8270C	10/15/2019	10/16/2019	NJC	1
Benzo(b)fluoranthene	< 0.016	ug/l	0.016	0.0509	1	M8270C	10/15/2019	10/16/2019	NJC	1
Benzo(g,h,i)perylene	< 0.0142	ug/l	0.0142	0.0451	1	M8270C	10/15/2019	10/16/2019	NJC	1
Benzo(k)fluoranthene	< 0.0146	ug/l	0.0146	0.0463	1	M8270C	10/15/2019	10/16/2019	NJC	1
Chrysene	< 0.0157	ug/l	0.0157	0.0499	1	M8270C	10/15/2019	10/16/2019	NJC	1
Dibenzo(a,h)anthracene	< 0.0173	ug/l	0.0173	0.0549	1	M8270C	10/15/2019	10/16/2019	NJC	1
Fluoranthene	0.01 "J"	ug/l	0.0088	0.0281	1	M8270C	10/15/2019	10/16/2019	NJC	1
Fluorene	0.0144 "J"	ug/l	0.0079	0.0251	1	M8270C	10/15/2019	10/16/2019	NJC	1
Indeno(1,2,3-cd)pyrene	< 0.0121	ug/l	0.0121	0.0385	1	M8270C	10/15/2019	10/16/2019	NJC	1
1-Methyl naphthalene	< 0.0191	ug/l	0.0191	0.0609	1	M8270C	10/15/2019	10/16/2019	NJC	1
2-Methyl naphthalene	< 0.0186	ug/l	0.0186	0.059	1	M8270C	10/15/2019	10/16/2019	NJC	1
Naphthalene	0.047 "J"	ug/l	0.026	0.083	1	M8270C	10/15/2019	10/16/2019	NJC	5
Phenanthrene	< 0.0143	ug/l	0.0143	0.0456	1	M8270C	10/15/2019	10/16/2019	NJC	1
Pyrene	0.0158 "J"	ug/l	0.0121	0.0386	1	M8270C	10/15/2019	10/16/2019	NJC	1

Project Name WDNR-MOSS AMERICA **Invoice #** E36952
Project # 18687

Lab Code 5036952N
Sample ID MW-5S
Sample Matrix Water
Sample Date 10/9/2019

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
BTEX										
Benzene	< 0.22	ug/l	0.22	0.71	1	8260B		10/18/2019	CJR	1
Ethylbenzene	< 0.26	ug/l	0.26	0.83	1	8260B		10/18/2019	CJR	1
Toluene	< 0.19	ug/l	0.19	0.6	1	8260B		10/18/2019	CJR	1
m&p-Xylene	< 0.43	ug/l	0.43	1.38	1	8260B		10/18/2019	CJR	1
o-Xylene	< 0.29	ug/l	0.29	0.93	1	8260B		10/18/2019	CJR	1
PAH SIM										
Acenaphthene	< 0.0094	ug/l	0.0094	0.03	1	M8270C	10/15/2019	10/16/2019	NJC	1
Acenaphthylene	< 0.0156	ug/l	0.0156	0.0495	1	M8270C	10/15/2019	10/16/2019	NJC	1
Anthracene	0.0192 "J"	ug/l	0.015	0.0478	1	M8270C	10/15/2019	10/16/2019	NJC	1
Benzo(a)anthracene	< 0.0131	ug/l	0.0131	0.0418	1	M8270C	10/15/2019	10/16/2019	NJC	1
Benzo(a)pyrene	< 0.0167	ug/l	0.0167	0.0531	1	M8270C	10/15/2019	10/16/2019	NJC	1
Benzo(b)fluoranthene	< 0.016	ug/l	0.016	0.0509	1	M8270C	10/15/2019	10/16/2019	NJC	1
Benzo(g,h,i)perylene	< 0.0142	ug/l	0.0142	0.0451	1	M8270C	10/15/2019	10/16/2019	NJC	1
Benzo(k)fluoranthene	< 0.0146	ug/l	0.0146	0.0463	1	M8270C	10/15/2019	10/16/2019	NJC	1
Chrysene	< 0.0157	ug/l	0.0157	0.0499	1	M8270C	10/15/2019	10/16/2019	NJC	1
Dibenzo(a,h)anthracene	< 0.0173	ug/l	0.0173	0.0549	1	M8270C	10/15/2019	10/16/2019	NJC	1
Fluoranthene	< 0.0088	ug/l	0.0088	0.0281	1	M8270C	10/15/2019	10/16/2019	NJC	1
Fluorene	< 0.0079	ug/l	0.0079	0.0251	1	M8270C	10/15/2019	10/16/2019	NJC	1
Indeno(1,2,3-cd)pyrene	< 0.0121	ug/l	0.0121	0.0385	1	M8270C	10/15/2019	10/16/2019	NJC	1
1-Methyl naphthalene	< 0.0191	ug/l	0.0191	0.0609	1	M8270C	10/15/2019	10/16/2019	NJC	1
2-Methyl naphthalene	< 0.0186	ug/l	0.0186	0.059	1	M8270C	10/15/2019	10/16/2019	NJC	1
Naphthalene	0.086	ug/l	0.026	0.083	1	M8270C	10/15/2019	10/16/2019	NJC	5
Phenanthrene	< 0.0143	ug/l	0.0143	0.0456	1	M8270C	10/15/2019	10/16/2019	NJC	1
Pyrene	< 0.0121	ug/l	0.0121	0.0386	1	M8270C	10/15/2019	10/16/2019	NJC	1

Project Name WDNR-MOSS AMERICA **Invoice #** E36952
Project # 18687

Lab Code 5036952O
Sample ID PZ-03
Sample Matrix Water
Sample Date 10/9/2019

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
BTEX										
Benzene	2.02	ug/l	0.22	0.71	1	8260B		10/18/2019	CJR	1
Ethylbenzene	10.7	ug/l	0.26	0.83	1	8260B		10/18/2019	CJR	1
Toluene	1.01	ug/l	0.19	0.6	1	8260B		10/18/2019	CJR	1
m&p-Xylene	15.4	ug/l	0.43	1.38	1	8260B		10/18/2019	CJR	1
o-Xylene	18.7	ug/l	0.29	0.93	1	8260B		10/18/2019	CJR	1
PAH SIM										
Acenaphthene	154	ug/l	2.82	9	300	M8270C	10/15/2019	10/16/2019	NJC	1
Acenaphthylene	< 4.68	ug/l	4.68	14.85	300	M8270C	10/15/2019	10/16/2019	NJC	1
Anthracene	< 4.50	ug/l	4.5	14.34	300	M8270C	10/15/2019	10/16/2019	NJC	1
Benzo(a)anthracene	< 3.93	ug/l	3.93	12.54	300	M8270C	10/15/2019	10/16/2019	NJC	1
Benzo(a)pyrene	< 5.01	ug/l	5.01	15.93	300	M8270C	10/15/2019	10/16/2019	NJC	1
Benzo(b)fluoranthene	< 4.80	ug/l	4.8	15.27	300	M8270C	10/15/2019	10/16/2019	NJC	1
Benzo(g,h,i)perylene	< 4.26	ug/l	4.26	13.53	300	M8270C	10/15/2019	10/16/2019	NJC	1
Benzo(k)fluoranthene	< 4.38	ug/l	4.38	13.89	300	M8270C	10/15/2019	10/16/2019	NJC	1
Chrysene	< 4.71	ug/l	4.71	14.97	300	M8270C	10/15/2019	10/16/2019	NJC	1
Dibenzo(a,h)anthracene	< 5.19	ug/l	5.19	16.47	300	M8270C	10/15/2019	10/16/2019	NJC	1
Fluoranthene	< 2.64	ug/l	2.64	8.43	300	M8270C	10/15/2019	10/16/2019	NJC	1
Fluorene	57.0	ug/l	2.37	7.53	300	M8270C	10/15/2019	10/16/2019	NJC	1
Indeno(1,2,3-cd)pyrene	< 3.63	ug/l	3.63	11.55	300	M8270C	10/15/2019	10/16/2019	NJC	1
1-Methyl naphthalene	108	ug/l	5.73	18.27	300	M8270C	10/15/2019	10/16/2019	NJC	1
2-Methyl naphthalene	32.0	ug/l	5.58	17.7	300	M8270C	10/15/2019	10/16/2019	NJC	1
Naphthalene	1620	ug/l	7.8	24.9	300	M8270C	10/15/2019	10/16/2019	NJC	5
Phenanthrene	11.0 "J"	ug/l	4.29	13.68	300	M8270C	10/15/2019	10/16/2019	NJC	1
Pyrene	< 3.63	ug/l	3.63	11.58	300	M8270C	10/15/2019	10/16/2019	NJC	1

Project Name WDNR-MOSS AMERICA **Invoice #** E36952
Project # 18687

Lab Code 5036952P
Sample ID PZ-10
Sample Matrix Water
Sample Date 10/9/2019

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
BTEX										
Benzene	< 0.22	ug/l	0.22	0.71	1	8260B		10/18/2019	CJR	1
Ethylbenzene	< 0.26	ug/l	0.26	0.83	1	8260B		10/18/2019	CJR	1
Toluene	< 0.19	ug/l	0.19	0.6	1	8260B		10/18/2019	CJR	1
m&p-Xylene	< 0.43	ug/l	0.43	1.38	1	8260B		10/18/2019	CJR	1
o-Xylene	< 0.29	ug/l	0.29	0.93	1	8260B		10/18/2019	CJR	1
PAH SIM										
Acenaphthene	2.95	ug/l	0.0094	0.03	1	M8270C	10/15/2019	10/16/2019	NJC	1
Acenaphthylene	0.071	ug/l	0.0156	0.0495	1	M8270C	10/15/2019	10/16/2019	NJC	1
Anthracene	0.236	ug/l	0.015	0.0478	1	M8270C	10/15/2019	10/16/2019	NJC	1
Benzo(a)anthracene	0.075	ug/l	0.0131	0.0418	1	M8270C	10/15/2019	10/16/2019	NJC	5
Benzo(a)pyrene	0.06	ug/l	0.0167	0.0531	1	M8270C	10/15/2019	10/16/2019	NJC	1
Benzo(b)fluoranthene	0.151	ug/l	0.016	0.0509	1	M8270C	10/15/2019	10/16/2019	NJC	1
Benzo(g,h,i)perylene	0.14	ug/l	0.0142	0.0451	1	M8270C	10/15/2019	10/16/2019	NJC	1
Benzo(k)fluoranthene	0.046 "J"	ug/l	0.0146	0.0463	1	M8270C	10/15/2019	10/16/2019	NJC	1
Chrysene	0.083	ug/l	0.0157	0.0499	1	M8270C	10/15/2019	10/16/2019	NJC	1
Dibenzo(a,h)anthracene	< 0.0173	ug/l	0.0173	0.0549	1	M8270C	10/15/2019	10/16/2019	NJC	1
Fluoranthene	0.179	ug/l	0.0088	0.0281	1	M8270C	10/15/2019	10/16/2019	NJC	1
Fluorene	0.43	ug/l	0.0079	0.0251	1	M8270C	10/15/2019	10/16/2019	NJC	1
Indeno(1,2,3-cd)pyrene	0.082	ug/l	0.0121	0.0385	1	M8270C	10/15/2019	10/16/2019	NJC	1
1-Methyl naphthalene	0.256	ug/l	0.0191	0.0609	1	M8270C	10/15/2019	10/16/2019	NJC	1
2-Methyl naphthalene	0.075	ug/l	0.0186	0.059	1	M8270C	10/15/2019	10/16/2019	NJC	1
Naphthalene	2.71	ug/l	0.026	0.083	1	M8270C	10/15/2019	10/16/2019	NJC	5
Phenanthrene	0.072	ug/l	0.0143	0.0456	1	M8270C	10/15/2019	10/16/2019	NJC	1
Pyrene	0.154	ug/l	0.0121	0.0386	1	M8270C	10/15/2019	10/16/2019	NJC	1

Project Name WDNR-MOSS AMERICA **Invoice #** E36952
Project # 18687

Lab Code 5036952Q
Sample ID MW-A
Sample Matrix Water
Sample Date 10/9/2019

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
BTEX										
Benzene	< 0.22	ug/l	0.22	0.71	1	8260B		10/18/2019	CJR	1
Ethylbenzene	< 0.26	ug/l	0.26	0.83	1	8260B		10/18/2019	CJR	1
Toluene	< 0.19	ug/l	0.19	0.6	1	8260B		10/18/2019	CJR	1
m&p-Xylene	< 0.43	ug/l	0.43	1.38	1	8260B		10/18/2019	CJR	1
o-Xylene	< 0.29	ug/l	0.29	0.93	1	8260B		10/18/2019	CJR	1
PAH SIM										
Acenaphthene	0.037	ug/l	0.0094	0.03	1	M8270C	10/15/2019	10/16/2019	NJC	1
Acenaphthylene	< 0.0156	ug/l	0.0156	0.0495	1	M8270C	10/15/2019	10/16/2019	NJC	1
Anthracene	0.0231 "J"	ug/l	0.015	0.0478	1	M8270C	10/15/2019	10/16/2019	NJC	1
Benzo(a)anthracene	0.0146 "J"	ug/l	0.0131	0.0418	1	M8270C	10/15/2019	10/16/2019	NJC	5
Benzo(a)pyrene	< 0.0167	ug/l	0.0167	0.0531	1	M8270C	10/15/2019	10/16/2019	NJC	1
Benzo(b)fluoranthene	< 0.016	ug/l	0.016	0.0509	1	M8270C	10/15/2019	10/16/2019	NJC	1
Benzo(g,h,i)perylene	< 0.0142	ug/l	0.0142	0.0451	1	M8270C	10/15/2019	10/16/2019	NJC	1
Benzo(k)fluoranthene	< 0.0146	ug/l	0.0146	0.0463	1	M8270C	10/15/2019	10/16/2019	NJC	1
Chrysene	< 0.0157	ug/l	0.0157	0.0499	1	M8270C	10/15/2019	10/16/2019	NJC	1
Dibenzo(a,h)anthracene	< 0.0173	ug/l	0.0173	0.0549	1	M8270C	10/15/2019	10/16/2019	NJC	1
Fluoranthene	< 0.0088	ug/l	0.0088	0.0281	1	M8270C	10/15/2019	10/16/2019	NJC	1
Fluorene	0.0125 "J"	ug/l	0.0079	0.0251	1	M8270C	10/15/2019	10/16/2019	NJC	1
Indeno(1,2,3-cd)pyrene	< 0.0121	ug/l	0.0121	0.0385	1	M8270C	10/15/2019	10/16/2019	NJC	1
1-Methyl naphthalene	0.044 "J"	ug/l	0.0191	0.0609	1	M8270C	10/15/2019	10/16/2019	NJC	1
2-Methyl naphthalene	0.0239 "J"	ug/l	0.0186	0.059	1	M8270C	10/15/2019	10/16/2019	NJC	1
Naphthalene	0.74	ug/l	0.026	0.083	1	M8270C	10/15/2019	10/16/2019	NJC	5
Phenanthrene	< 0.0143	ug/l	0.0143	0.0456	1	M8270C	10/15/2019	10/16/2019	NJC	1
Pyrene	< 0.0121	ug/l	0.0121	0.0386	1	M8270C	10/15/2019	10/16/2019	NJC	1

Lab Code 5036952R
Sample ID DUPLICATE 03
Sample Matrix Water
Sample Date 10/9/2019

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
BTEX										
Benzene	< 0.22	ug/l	0.22	0.71	1	8260B		10/18/2019	CJR	1
Ethylbenzene	< 0.26	ug/l	0.26	0.83	1	8260B		10/18/2019	CJR	1
Toluene	< 0.19	ug/l	0.19	0.6	1	8260B		10/18/2019	CJR	1
m&p-Xylene	< 0.43	ug/l	0.43	1.38	1	8260B		10/18/2019	CJR	1
o-Xylene	< 0.29	ug/l	0.29	0.93	1	8260B		10/18/2019	CJR	1

Project Name WDNR-MOSS AMERICA **Invoice #** E36952
Project # 18687

Lab Code 5036952S
Sample ID DUPLICATE 04
Sample Matrix Water
Sample Date 10/9/2019

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
BTEX										
Benzene	< 0.22	ug/l	0.22	0.71	1	8260B		10/18/2019	CJR	1
Ethylbenzene	< 0.26	ug/l	0.26	0.83	1	8260B		10/18/2019	CJR	1
Toluene	< 0.19	ug/l	0.19	0.6	1	8260B		10/18/2019	CJR	1
m&p-Xylene	< 0.43	ug/l	0.43	1.38	1	8260B		10/18/2019	CJR	1
o-Xylene	< 0.29	ug/l	0.29	0.93	1	8260B		10/18/2019	CJR	1

Lab Code 5036952T
Sample ID EQUIP BLK
Sample Matrix Water
Sample Date 10/9/2019

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
BTEX										
Benzene	< 0.22	ug/l	0.22	0.71	1	8260B		10/17/2019	CJR	1
Ethylbenzene	< 0.26	ug/l	0.26	0.83	1	8260B		10/17/2019	CJR	1
Toluene	< 0.19	ug/l	0.19	0.6	1	8260B		10/17/2019	CJR	1
m&p-Xylene	< 0.43	ug/l	0.43	1.38	1	8260B		10/17/2019	CJR	1
o-Xylene	< 0.29	ug/l	0.29	0.93	1	8260B		10/17/2019	CJR	1

Lab Code 5036952U
Sample ID TRIP BLK
Sample Matrix Water
Sample Date 10/9/2019

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
BTEX										
Benzene	< 0.22	ug/l	0.22	0.71	1	8260B		10/18/2019	CJR	1
Ethylbenzene	< 0.26	ug/l	0.26	0.83	1	8260B		10/18/2019	CJR	1
Toluene	< 0.19	ug/l	0.19	0.6	1	8260B		10/18/2019	CJR	1
m&p-Xylene	< 0.43	ug/l	0.43	1.38	1	8260B		10/18/2019	CJR	1
o-Xylene	< 0.29	ug/l	0.29	0.93	1	8260B		10/18/2019	CJR	1

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

Code	*Comment*
1	Laboratory QC within limits.
5	The QC blank not within established limits.

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

Authorized Signature