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October 2, 2013 Project #13701

Mr. Thomas A. Wentland
Waste Management Engineer
Wisconsin Department of Natural Resources
1155 Pilgrim Road, P.O. Box 408
Plymouth, WI 53073-0408

RE: Groundwater Sampling and Remedial Optimization Evaluation
Former Moss-American Site
8716 North Grandville Road, Milwaukee, Wisconsin

Dear Mr. Wentland:

The Sigma Group, Inc. (Sigma) greatly appreciates the opportunity to perform environmental related services at the former Moss-American facility located at 8716 North Grandville Road, Milwaukee, Wisconsin (the Site). This report presents the data collected during the April 2013 groundwater monitoring activities, provides a thorough evaluation of the existing subsurface conditions, and proposes a strategy to optimize the site remediation in conformance with the Record of Decision (ROD) issued by the United States Environmental Protection Agency (USEPA) for the site.

The following sections provide a brief background of the project site and remediation completed to date, a discussion of the subsurface sampling and site evaluation activities, and a discussion of a potential remedial action to effectively enhance the remediation of the remaining petroleum-related contaminants present at the site.

SITE HISTORY AND REMEDIATION ACTIVITIES

The former Moss-American facility is located in the northwestern section of the City of Milwaukee at the southeast corner of the intersection of West Brown Deer and Granville Roads, at 8716 Granville Road. The 88-acre site includes the former location of the Moss-American creosoting facility, several miles of the Little Menomonee River - a portion of which flows through the eastern half of the site - and adjacent flood plain soils (**Figure 1**). After creosote operations ceased, approximately 23-acres of the site were purchased by the Union Pacific Railroad for loading and storage. The remaining area of approximately 65-acres of land is undeveloped Milwaukee County parkland.

The Little Menomonee River flows approximately 6.5 miles downstream of the former creosoting facility to its confluence with the Menomonee River. Land along the floodplain corridor is owned primarily by the City of Milwaukee, County of Milwaukee and, to a much lesser extent, private owners.

Site creosote operations were conducted from approximately 1921 to 1976. Based on the USEPA document, land usage patterns in the area changed considerably over time. Photos from the 1930s to the 1950s indicate that the creosote plant operated in a relatively

sparsely populated setting with several farms surrounded the manufacturing operation. From the 1960s to the present time, residential and commercial use of nearby property increased considerably, and agricultural and farming operations have almost completely phased out. Industrial parks and multi-lane highways traverse the site setting. From 1921 to 1971, the facility discharged wastes to settling ponds that ultimately discharged to the Little Menomonee River. These discharges ceased when the plant diverted its process water discharge to the Milwaukee sanitary sewerage system. Production at the facility ceased in 1976.

In 1983, the facility was proposed for inclusion on the National Priorities List (NPL) pursuant to Section 105 of CERCLA (Comprehensive Environmental Response, Compensation, and Liability Act). Subsequent remedial investigation conducted by the USEPA in late 1980s identified the presence of free product liquids associated with site groundwater. The most of the site soil contamination was associated with former creosote processing areas. Relatively high concentrations of petroleum-related constituents including Poly Aromatic Hydrocarbons (PAH) as well as benzene, toluene, ethylbenzene and xylenes (BTEX) were detected in the upper 10 feet of site soil. Shallow groundwater was also identified with relatively high petroleum related impacts. However, little to no groundwater impacts were identified deeper than 20 feet below ground surface.

Pursuant to the USEPA Record of Decision for the Moss-American Site (dated 1990) and subsequent ROD Amendment (dated 1998), remedial action was implemented at the site. The USEPA led actions included: a) excavation of highly contaminated soils and on-site treatment; b) on-site placement of the treated and lower contaminated soils under an appropriate cover; c) re-vegetation of the excavated areas; d) removal and off-site disposal of highly contaminated sediments from sections of the Little Menomonee River; e) construction of a new channel and redirection of river flow into the new channel; and, f) a groundwater remedy consisting of a funnel-and-gate system with in-situ aerobic treatment of the contaminated groundwater prior to its flow to the river.

The installed groundwater remedial system consisted of sheetpile cutoff walls to prevent flow of contaminated groundwater to the river and several funnel and gate systems for in situ aerobic treatment of groundwater (bio-sparging) prior to flow to the river. The remediation system has been effective in treating the majority of the identified groundwater plume area with the exception of the north-central portion of the plume. Over several years of operation of the funnel and gate system a zone of stagnation appears to have developed within the containment wall. Persistently high concentrations of select PAH compounds have been observed at two locations which include: a) monitoring well MW-34S along the cut-off wall; and b) monitoring well TG1-1 located at Gate 1 of the funnel and gate system. A system performance assessment completed by the US Army Corp of Engineers (USACE) on behalf of the USEPA indicates additional remedial efforts are necessary to address these two areas.

ADDITIONAL DATA COLLECTION AND GROUNDWATER MONITORING

In accordance with the Scope of Work provided by the WDNR, Sigma performed the following activities:

Soil Boring / Monitoring Well Installation – Two Wisconsin Administrative Code (WAC) Chapter NR141 compliant groundwater monitoring wells were installed immediately outside the sheetpile cutoff wall (**Figure 2**) – one located northeast of MW-34S indentified as MW-34S-N and one northwest of MW-7S identified as MW-7S-W. Standard hollow-stem augur drilling methods was used to install these wells. During boring advancement continuous soil sampling was performed for field and laboratory analysis. Soil samples were collected and described on the basis of color, grain size, plasticity, and other characteristics. A description of the observed soil characteristics are summarized on the soil boring logs, included as **Appendix A**.

Following the completion of the soil boring each borehole was completed as a monitoring well. Each well was constructed of 2-in diameter, 10-ft long PVC screen set at a depth of 13 feet below ground and completed with a 2-inch diameter PVC riser and stick-up with protective casing. All drill cuttings generated during the drilling activities were contained in drums and stored at a secure location on-site pending waste characterization and coordination for off-site disposal. **Figure 2** depicts the approximate location of each monitoring well.

Elevation and Location Survey – Following completion of well installation activities, an engineering survey was performed to establish the location and elevation of the newly installed wells with respect to the nearby monitoring wells. In accordance with the RFP two existing wells (MW-38S and MW-39S) were also included in the survey. The survey data was used to generate water level elevations (**Table 1**), update the site map (**Figure 2**) and prepare a groundwater elevation contour map (**Figure 3**).

Well Development – Following the requirements of the WAC Ch. NR141.21, the two newly installed monitoring wells and three existing piezometers (PZ-02, PZ-03, and PZ-10) were developed prior to groundwater sampling to ensure good hydraulic connection with the saturated subsurface materials. Piezometers PZ-07 and PZ-09 were proposed to be developed but obstructions in the well prevented development from occurring. The groundwater generated during the well development process was contained in 55-gallon drums and disposed off-site at the Port Washington Water Treatment facility

Groundwater Monitoring – In accordance with the RFP, Sigma completed one round of groundwater monitoring of the wells listed in **Table 1.** Please note six wells were unable to be sampled due to the presence of obstructions within the well casing or wells could not be located. All the wells were purged and sampled using disposable bailers except five wells. A peristaltic pump and dedicated sampling tubes were used to sample the three peizometers PZ-02, PZ-03 and PZ-10 (due to small well diameter) and two monitoring wells MW-34S and TG1-1 (due to the presence of free phase petroleum product at the bottom of these wells). Special care was taken during sampling of MW-34S and TG1-1 to avoid introducing any free product in the groundwater sample by gently lowering the sampling tubes in the well casing and positioning the tube intake several feet above the bottom of the well and the free product interface.

Groundwater monitoring activities included the collection of water samples and the measurement of field parameters including water levels, dissolved oxygen (DO), oxidation-

reduction potential (REDOX), pH, temperature, turbidity, specific conductance, and ferrous iron from all the wells. A total of 35 groundwater samples were collected and submitted to Synergy Environmental Lab, INC. of Appleton, Wisconsin for laboratory analysis of BETX and PAH (EPA Method 8260 and 8270D, respectively). Selected groundwater samples (identified in the RFP) were also submitted to CT Laboratories of Baraboo, Wisconsin and Terra System, Inc. of Claymont, Delaware for bioremediation parameter analyses (microbial enumeration, nitrate-nitrogen, nitrite nitrogen, total kjeldahl nitrogen, ammonia-nitrogen, total phosphate-phosphorous, orthophosphate, biochemical oxygen demand, chemical oxygen demand, and total organic carbon) to help evaluate the biodegradation potential of the residual subsurface impacts. Laboratory analytical reports are included in **Appendix B** and the data are summarized in **Tables 2** through **5**.

SUMMARY OF SITE CONDITIONS

Site Hydrogeology

Based on the two soil borings completed by Sigma shallow subsurface materials consist predominantly of fine-grained silt and clay mixed with occasional sand and gravel. This is consistent with the surficial unit described in the reports provided by the WDNR:

> "The site overlies a surficial water-bearing unit and confining bed. The water-bearing unit consists of a thin mantle of fill, alluvium, and weathered till. This thin layer of material would not yield sufficient water to wells to be classified as a true aquifer. The confining bed is the unweathered till of the Oak Creek Formation.
>
> The surficial unit comprises everything above the confining bed. It includes extensive fill deposits, alluvial deposits along the river, and the weathered few feet of the Oak Creek Formation. The fill is highly variable and has been added to the site at different times for different reasons. Alluvial deposits are associated with the Little Menomonee River. They consist of sand and gravel channel deposits and silt and clay flood deposits. The till is part of the Oak Creek Formation, which consists of glacial till, lacustrine clay, silt and sand, and some glaciofluvial sand and gravel. The till is fine grained, commonly containing 80 to 90 percent silt and clay. The till was generally weathered to a depth of 2 to 10 feet.
>
> The unweathered part of the Oak Creek Formation consists of a confining bed between the surficial water-bearing unit and underlying regional aquifers. The formation is a dense, silty clay till with interbedded lacustrine units. Below the site, the glacial deposits are approximately 150 feet thick and underlain by the dolomite aquifer. The minimum thickness of the confining bed below the site is at least 40 feet."

Review of the groundwater elevation data (**Table 1**) and groundwater elevation contour map (**Figure 3**) indicates the shallow groundwater flow at the Moss-American site is predominantly to the northeast towards the Little Menomonee River. A relatively flat hydraulic gradient (0.005 ft/ft to 0.0067 ft/ft)) is observed inside the sheet-pile area. The hydraulic gradient becomes steeper (0.02 ft/ft to 0.033 ft/ft)) near the upgradient and downgradient locations of the sheet-pile area. A comparison of the April 2013 groundwater flow map with the flow map generated for the September 2010 monitoring

event (Groundwater Monitoring Report, Q3 2010 prepared by Weston Solutions, Inc.) indicates a similar groundwater flow pattern.

Soil Conditions

During drilling of monitoring well MW-7S-W, petroleum product sheen was encountered within the soil samples collected at the depth intervals of 4' to 6' and 6' to 8'. Saturated conditions were encountered at a depth of 5' bgs. No product sheen or oil residue was observed in soil samples collected at deeper depths (8' to 14'). Based on discussions with the WDNR Project Manager a field decision was made to containerize the soil sample from 4' to 6' interval for BTEX and PAH analysis. It is noteworthy that no PID readings or oily sheen was observed at the soil boring completed during the installation of the monitoring well MW-34S-N. Additional soil boring investigation is needed to define the extent of the soil impacts identified at MW-7S-W.

Review of the analytical data from soil boring MW-7S-W indicates the presence of several PAH compounds in excess of the WDNR Residual Contaminant Levels (RCLs) for groundwater pathway and direct contact. The constituents detected exceeding the groundwater RCL standards include Benzo(a)pyrene, Benzo(b)fluoranthene, Chrysene, Fluorene, and Naphthalene (estimated). The constituents detected above the direct contact RCLs include Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)fluoranthene, Benzo(k)fluoranthene and Phenanthrene. A summary the complete soil analytical results are presented in **Table 2**.

Groundwater Conditions

Groundwater samples collected from 35 monitoring wells and piezometers in April 2013 from on- and off-site locations were analyzed for BTEX and PAHs. The laboratory analytical results are summarized and presented in **Table 3**. The table also includes groundwater quality data obtained during September 2010 groundwater sampling performed by Weston Solutions, Inc.

Free-phase Product – The presence of free-phase product was observed at two well locations: MW-34S and TG1-1. The free-phase product observed at these wells appears to be highly viscous and present at the bottom of the well identifying it as a heavier than water non-aqueous phase liquid (NAPL). No free-phase NAPL product was identified in the other monitoring well MW-7S where product sheen was observed in the past or other monitoring and remediation wells on-site. Nonetheless, the extent of the free phase product does not appear to be well defined and further evaluation is needed.

Newly Installed Monitoring Wells – Groundwater quality data collected from the two newly installed monitoring wells (MW-7S-W and MW-34S-N) located immediately outside the remediation sheet pile do not indicate the presence of any PAH or BTEX compounds in excess of the WAC Ch. NR140 Enforcement Standards (ES). However, two PAH constituents (Fluorene and Naphthalene) were identified above their respective WAC Ch. NR140 Preventive Action Limits (PAL) within the groundwater sample collected from monitoring well MW-7S-W. It is noteworthy that an oily sheen was discovered during monitoring well installation activities at MW-7S-W. The

groundwater impact detected within groundwater sample collected from MW-7S-W may be associated the shallow soil impacts observed at this location.

Distribution of PAH Compounds – Of the 35 wells sampled only eight were detected with PAH compounds in excess of the WAC NR140 Groundwater Standards. At four monitoring well locations (MW-7S-W, MW-E, MW-F and MW-H) four PAH compounds were detected above their respective PALs (Fluorene and Naphthalene at MW-7S-W; Benzo(b)fluoranthene at MW-E, MW-F and MW-H; and Chrysene at MW-F and MW-H).

At four other locations (MW-34S, TG1-1, PZ-03 and MW-I) both PALs and ESs for several PAH compounds were exceeded. Free phase product was encountered in two of these locations (MW-34S, TG1-1), therefore, groundwater samples from these wells are expected to have relatively high concentrations of dissolved PAH compounds. The groundwater sample from monitoring well PZ-03 located in the north central portion of the sheet-pile area contains Benzo(a)flouranthene at 1.45 microgram per liter (μg/L) and Chrysene at 1.47 μg/L, both exceeding the respective groundwater ESs.

Two PAH compounds, Benzo(b)fluoranthane and Chrysene, were detected in the groundwater sample from monitoring well MW-I at concentrations exceeding the groundwater ES and PAL, respectively. It is important to note that no PAH compounds were detected at this location during the September 2010 sampling event. Similar low level PAH compounds detected at MW-E, MW-F and MW-H with concentrations at or above the PALs where no PAH were detected in September 2010. Considering the location of these wells (approximately 2 miles downstream along the Little Menomonee River from the source site, see **Figure 1-2**, **Figure 1-3** and **Figure 1-4** by Weston Solutions, Inc. included as **Appendix C**) it is likely that the presence of sediments in the sample may have caused this anomaly. A low flow sampling method could be used in the future to eliminate such anomaly. Also a review of historical groundwater quality data from these locations could provide further clarifications.

***In Situ* Measurements** – *In situ* measurements were collected from all 35 sampling points and the data are summarized and presented in **Table 4.** A review of the data indicates groundwater pH ranges between 6.9 and 7.7 standard units (S. U.). The observed pH range represents a neutral groundwater condition and is conducive to microbial activities. The observed dissolved oxygen (DO) concentrations in groundwater range between 0.49 mg/L and 3.1 mg/L, with lower DO readings observed in wells with PAH impacts and higher DO levels observed in wells further away from the dissolved groundwater plume. Depleted DO levels are indicative of on-going biodegradation of the petroleum constituents dissolved in groundwater. Oxidation-reduction potential (REDOX) measurements observed during the April 2013 monitoring range between -160 mV and +173 mV, with negative values observed at wells with groundwater impacts. Large negative values are indicative of on-going biodegradation. Observed ferrous iron readings range between 0 and 8 mg/L, with higher readings observed in wells with PAH impacts. Ferrous iron is a byproduct of the biodegradation process and as such higher than background readings indicates high level of bioactivity.

Biodegradation Parameters – Nine wells were sampled for biodegradation parameters to evaluate the bioremediation potential of the dissolved plume. These parameters include: microbial enumeration, nitrate-nitrogen, nitrite nitrogen, total kjeldahl nitrogen, ammonia-nitrogen, total phosphate-phosphorous, orthophosphate, biochemical oxygen demand, chemical oxygen demand, and total organic carbon. Biodegradation parameters are summarized and presented in **Table 5**.

The total heterotrophic plate counts reported by CT Laboratories range between 11,000 colony forming units per liter (cfu/L) and 620,000 cfu/L representing low to moderate bacterial populations in the subsurface. A comparison with the September 2010 data indicates a reduction in bacterial populations in six of the nine sample locations. The petroleum degraders plate counts reported by Terra System Inc. range between 120,000 cfu/L and 36,000,000 cfu/L. (Note: petroleum degraders are a subset of the total heterotrophic bacteria and therefore, petroleum degraders plate count is typically lower than the total heterotrophic plate counts. Due to extended incubation time used by Terra System lab, [3 weeks instead of 1 week by CT Lab] during analysis, the significantly higher petroleum degrader population count was reported compared to the total heterotrophic plate count reported by CT Lab). Nonetheless, the presence of moderate bacterial populations indicates on-going bioactivity.

Review of the other biodegradation data presented in **Table 5** also suggests low to moderate bioactivity (low nitrate-nitrogen and relatively low BOD/COD readings).

SUMMARY

Results of the groundwater monitoring completed in April 2013 indicate groundwater conditions have improved at the site. **Figure 4** presents the distribution of the total PAHs detected in groundwater in September 2010 and April 2013. The distribution map was developed using only those PAH compounds with WDNR groundwater standards. A review of the plot indicates:

- Total PAH concentrations have decreased at all on-site sample locations since September 2010;
- Free-phase product is still present at MW-34S and TG1-1, however, no indication of free-phase product was present at MW-7S where an oily-sheen was observed in September 2010.
- Low level groundwater impacts were detected at wells located further downstream along the Little Menomonee River where no PAH impacts were identified in 2010. The presence of sediment in samples may have contributed to this anomaly. Future monitoring should include low flow sampling to evaluate if sediment in the samples is biasing the results.
- The sheet-pile containment and in-situ treatment systems have effectively contained and remediated the majority of the groundwater impacts.
- Based on one round of data from the newly installed wells located immediately outside the sheet-pile area no indication of groundwater plume migration outside the containment area is evident.

- Groundwater quality data from monitoring well MW-33S and piezometers PZ-02 located near the northwest portion of the sheet-pile area show decreasing concentrations of total PAHs; the data also indicate no plume migration around the containment area.

CONCLUSIONS

The following conclusions can be made based on an evaluation of the groundwater quality data obtained from the Moss-America site:

- Free-phase dense NAPL product is still present at depth at two monitoring wells (MW-34S and TG1-1). The lateral extent of the product area appears to be limited, however, further delineation is needed to confirm the product zone is stable.

- A product sheen was identified in a soil sample collected from the water table interface at soil boring location MW-7S-W; relatively low level of groundwater impacts and no soil impacts observed at depth suggests this may be an isolated area of soil impact. Further delineation is needed to confirm the limited extent of soil impact.

- The integrity of the steel sheet-pile containment structure appears to be sound; no leakage through the steel sheeting or plume migration around the containment structure is evident based on one round of data from the two newly installed wells (MW-7S-W and MW-34S-N) and an existing peizometer (PZ-02).

- Reduction in the dissolved PAH concentrations in groundwater appear to be on-going and natural attenuation of the dissolved phase constituents in groundwater away for the free-product area is likely occurring.

- Natural attenuation in groundwater is also evident at downgradient off-site wells located further south along the Little Menomonee River.

- The enhanced bioremediation system operated at the site appears to have mitigated the majority of the groundwater impacts with the exception of the free-phase NAPL at two isolated locations and dissolved PAH impacts at north-central portion (PZ-03) within the sheet-pile containment structure.

REMEDIAL OPTIMIZATION EVALUATION

Based on the above conclusions Sigma recommends the following activities to move the site to case closure:

- Implement the Geoprobe® soil boring program as recommended by the Army Corps of Engineers (USACE Final Report, dated March 2011) to better delineate the lateral and vertical extend of the two free-phase product areas.

- Depending upon the results of the soil boring programs implement additional remedial action to address the free-product areas.

- Implement additional soil boring/hand boring investigation activities to further define the product sheen discovered at MW-7S-W located outside the sheet-pile area.

Depending upon the results of the soil boring investigations a combination of remedial technologies could be implemented to address the two free product areas and groundwater plume and move the site to case closure. Attached **Table 6** presents an array of appropriate and effective remedial technologies to address the identified site conditions. Option 3 is recommended as an appropriate interim action to meet the goal of restoring groundwater quality in the reasonable period of time consistent with NR 140.24(2) Wisconsin Admin. Code requirements. This option includes the following elements:

1) Excavate shallow product sheen area identified at MW-7S (located outside north of the sheet-pile area) and treat excavated materials on-site;
2) Install slurry walls to create secondary containment measures around the two free-phase product areas (MW-34S and TG1-1) by injecting bentonite-cement slurry and creating a low-permeability barrier inside the sheet-pile structure;
3) Install four bio-enhancement wells equipped with iSOC units in the vicinity of PZ-03 to provide an oxygen rich environment and promote enhanced biodegradation of the dissolved PAH plume.
4) Add bio-amendments (PETREX by CL Solutions) for two events to enhance hydrocarbon degrader bacterial population.
5) Implement groundwater monitoring to evaluate on-going RNA of PAH compounds and assess the stability of the free-phase product areas; the following wells and piezometers are to be included in the monitoring program:

PZ-02, PZ-03, PZ-09 & PZ-10;
MW-A, MW-7S, MW-7S-W, MW-9S, MW-27S, MW-32S,
MW-33S, MW-34S, MW-34S-N, MW-37S, MW-38S,
MW-39S, MW-E, MW-F, MW-I, TG1-1, TG1-3, TG2-3,
TG3-3, TG4-3, TG5-3, TG6-3.

6) The groundwater monitoring program will include low flow PAH sampling and measurement of field parameters.

We trust the information provided is satisfactory to WDNR. Please feel free to call Sigma at 414-643-4125 if you have any questions or comments.

Sincerely,

THE SIGMA GROUP, INC.

Mafizul Islam, P.E.
Senior Project Manager

Randy E. Boness, P.G.
Geoscience Group Leader

List of Attachments

FIGURES

Figure 1
Figure 2
Figure 3
Figure 4

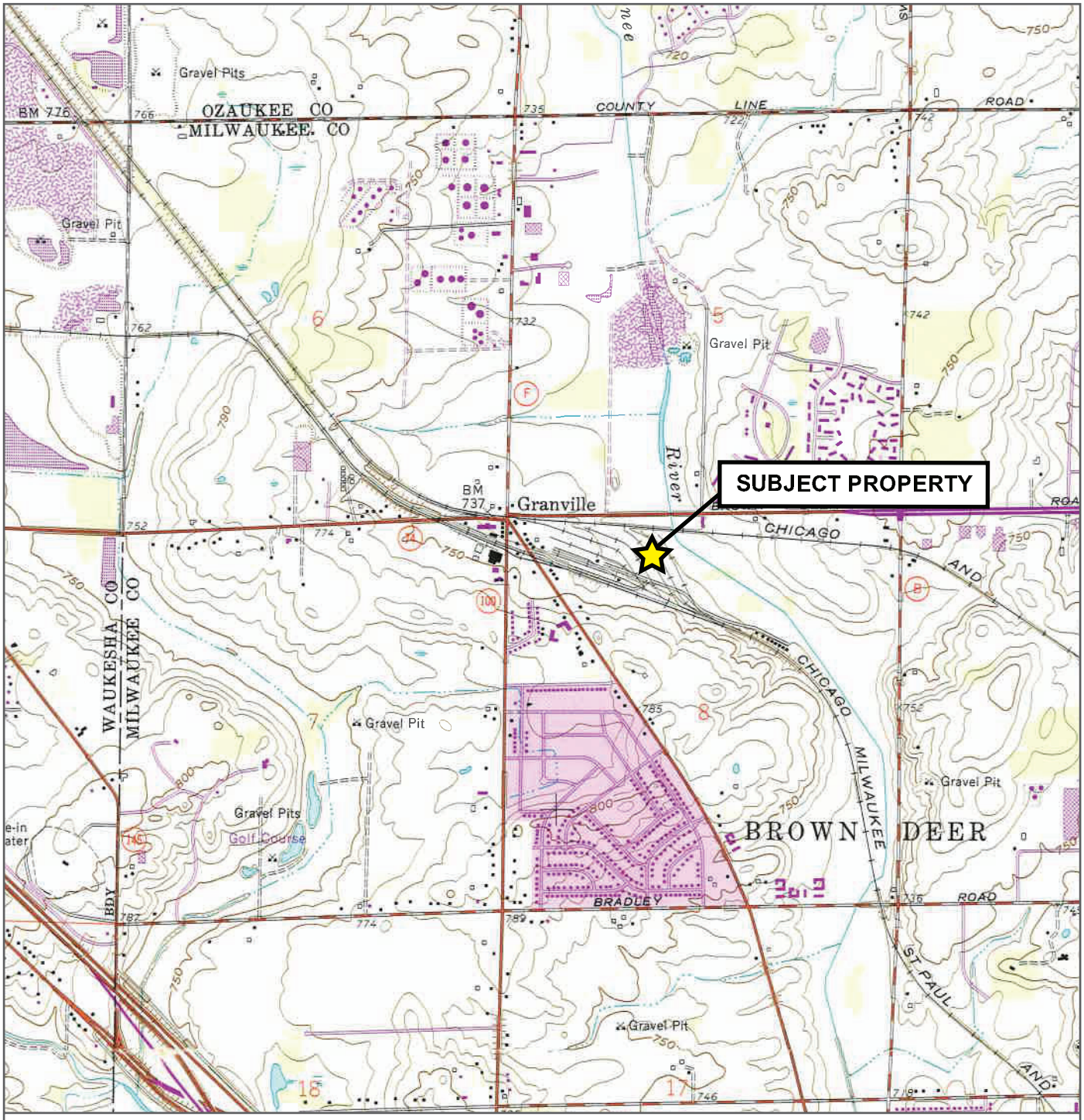
TABLES

Table 1
Table 2
Table 3
Table 4
Table 5

APPENDICES

Appendix A - Soil Boring Logs
Appendix B - Laboratory Analytical Reports
Appendix C - Figures 1-2, 1-3 & 1-4

FIGURES



N

Scale 1 : 24,000
1 inch = 2,000 feet

Located in the Northwest 1/4 of Section 8, T8N, R21E
USGS Menomonee Falls Quadrangle (1958, photorevised 1971 and 1976)
7.5 minute, 1 : 24,000 Topographic Map Collection

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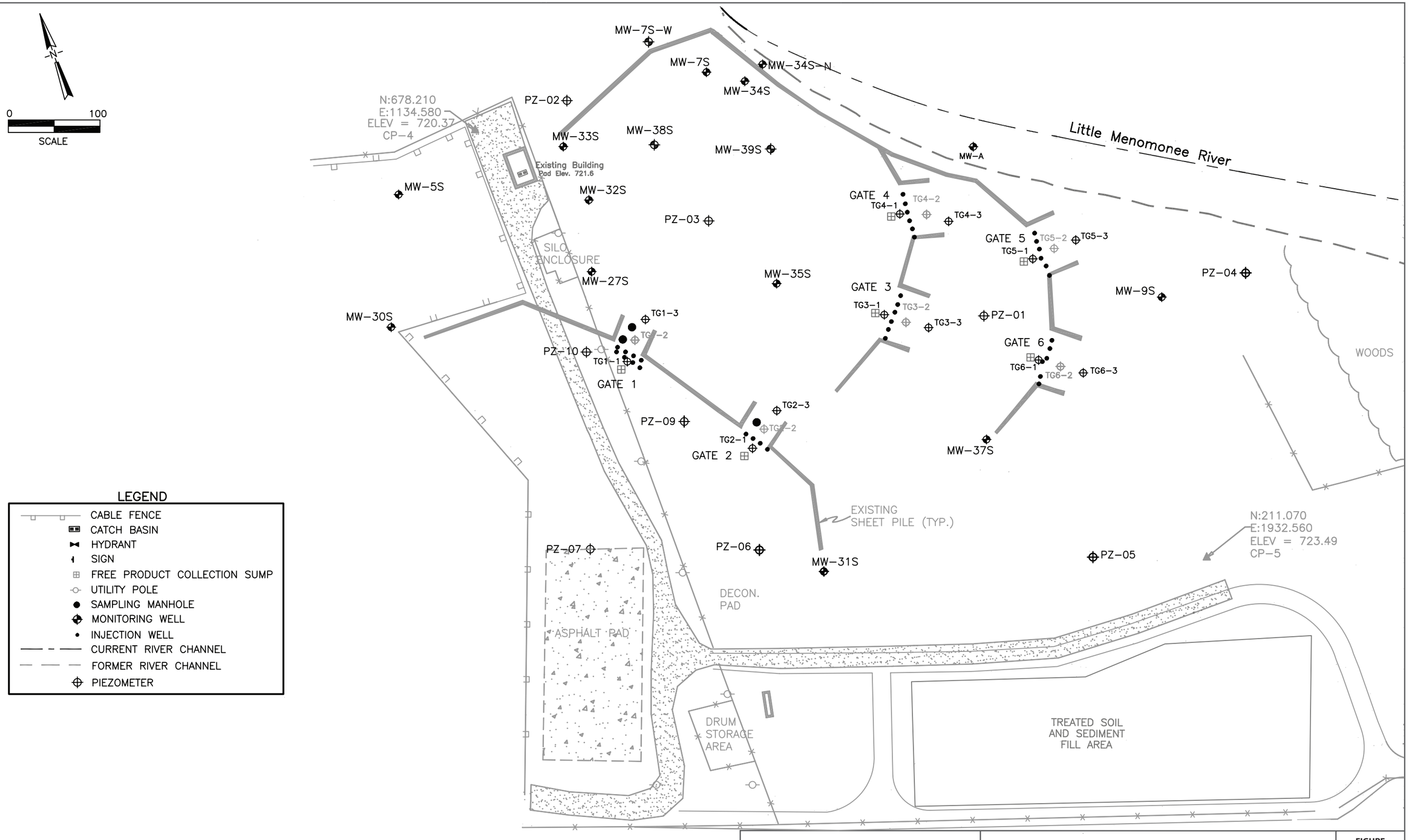
SITE LOCATION MAP

MOSS-AMERICAN SITE
8716 N. GRANDVILLE ROAD
MILWAUKEE, WISCONSIN

FIGURE
1

Project: 13701 | Directory: Figures | Filename: 13701_Fig 1_SLM | Created By: SLO | Date: 03/26/2013



LEGEND

- CABLE FENCE
- CATCH BASIN
- HYDRANT
- SIGN
- FREE PRODUCT COLLECTION SUMP
- UTILITY POLE
- SAMPLING MANHOLE
- MONITORING WELL
- INJECTION WELL
- CURRENT RIVER CHANNEL
- FORMER RIVER CHANNEL
- PIEZOMETER

Project: 13701 | Directory: WDNR | Filename: Moss Amercian Site Plan revised.pdf | Created By: JVW | Date: 04/09/2013

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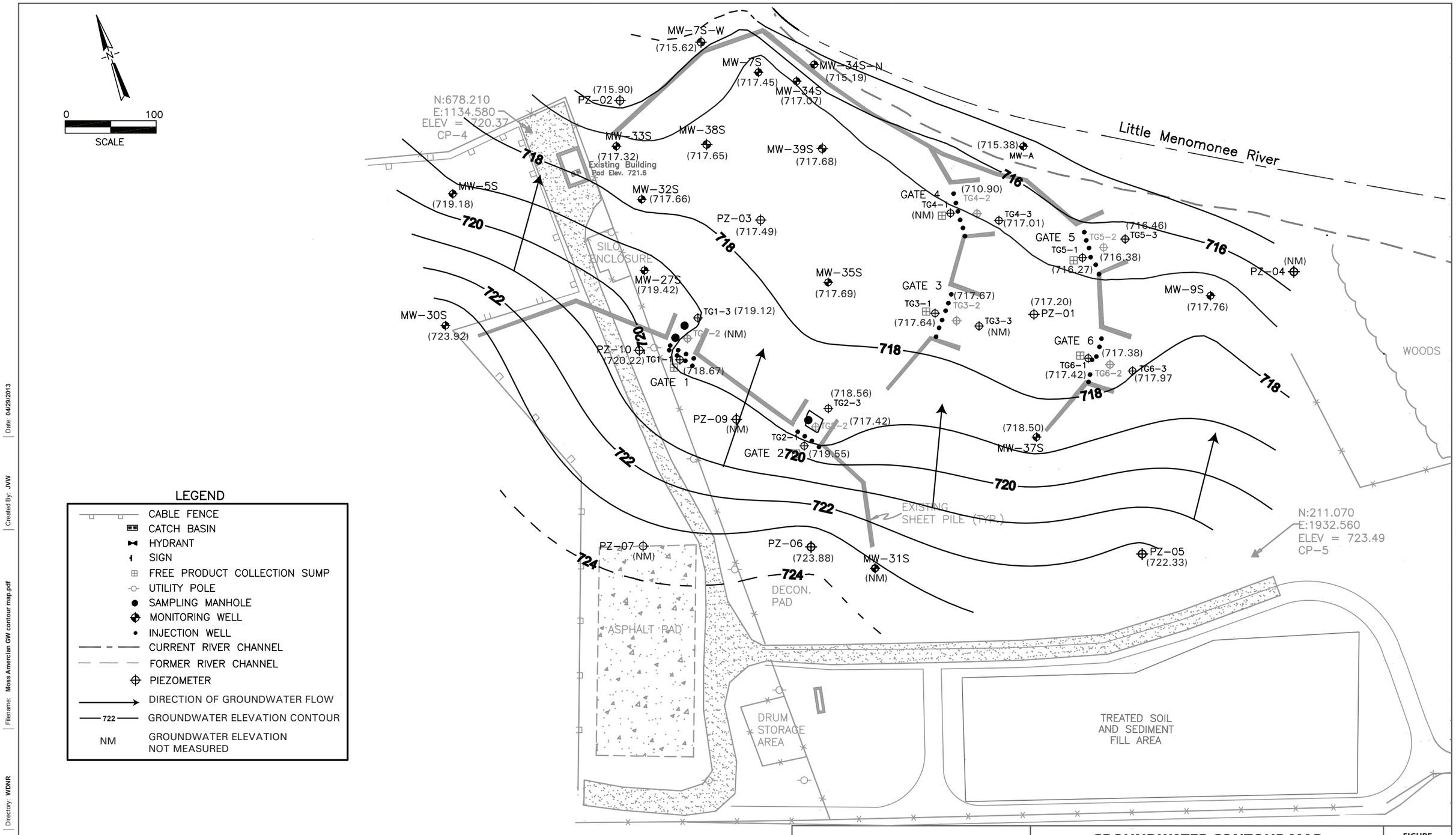
SITE LAYOUT MAP

Moss-American Superfund Site
8716 North Grandville Road, Milwaukee, Wisconsin

FIGURE
2



LEGEND

- CABLE FENCE
- CATCH BASIN
- HYDRANT
- SIGN
- FREE PRODUCT COLLECTION SUMP
- UTILITY POLE
- SAMPLING MANHOLE
- MONITORING WELL
- INJECTION WELL
- CURRENT RIVER CHANNEL
- FORMER RIVER CHANNEL
- PIEZOMETER
- DIRECTION OF GROUNDWATER FLOW
- 722 GROUNDWATER ELEVATION CONTOUR
- NM GROUNDWATER ELEVATION NOT MEASURED

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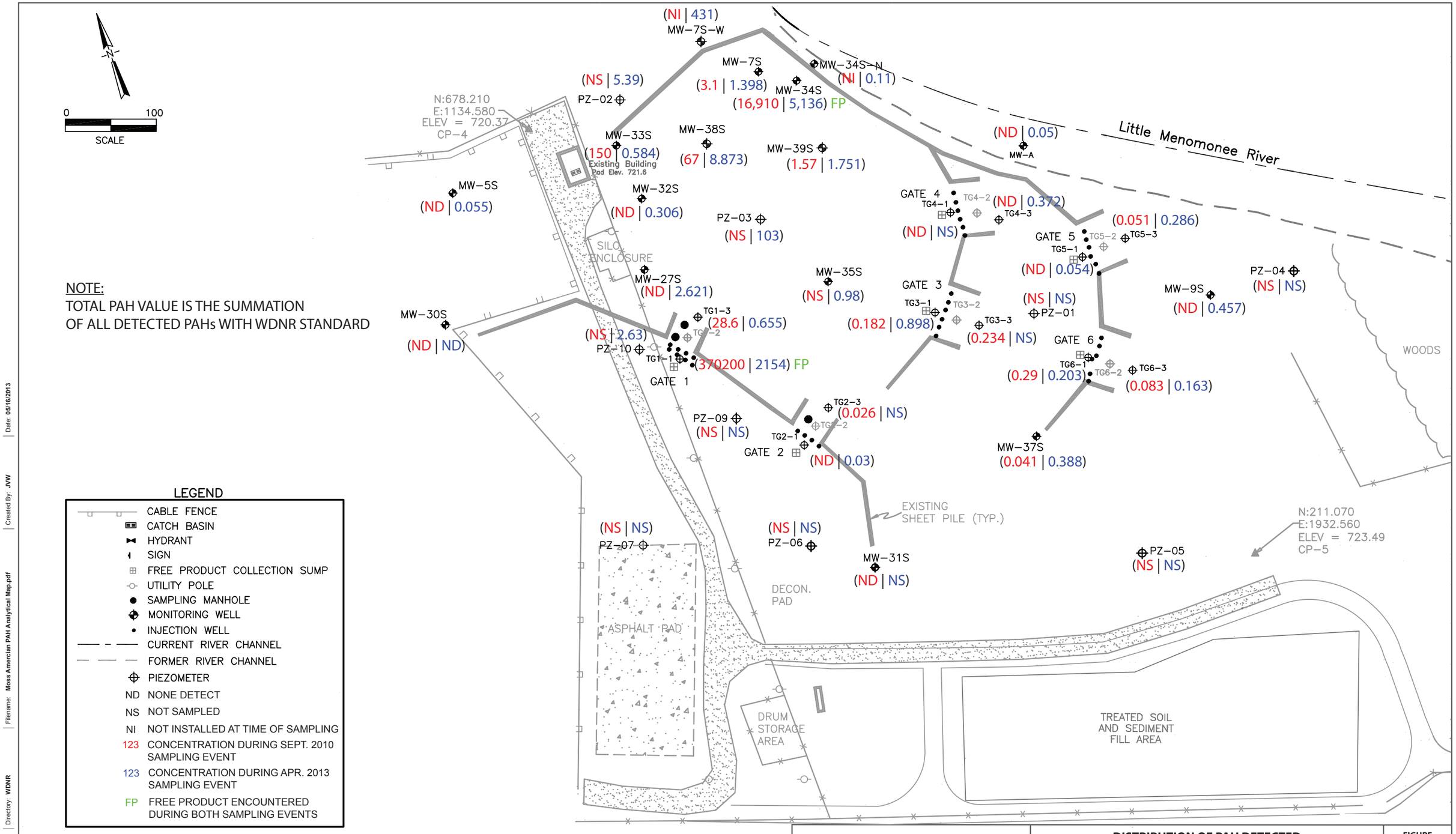
GROUNDWATER CONTOUR MAP
APRIL 2013

Moss-American Superfund Site
8716 North Grandville Road, Milwaukee, Wisconsin

FIGURE
3

Project: 13701 | Directory: WDNR | Filename: Moss Amercian GW contour map.pdf | Created By: JVW | Date: 04/29/2013



Project: 13701 | Directory: WDNR | Filename: Moss Amercian PAH Analytical Map.pdf | Created By: JVW | Date: 05/16/2013

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DISTRIBUTION OF PAH DETECTED IN GROUNDWATER SEPT 2012 | APR 2013

Moss-American Superfund Site
8716 North Grandville Road, Milwaukee, Wisconsin

FIGURE
4

TABLES

Table 1
Soil Analytical Data
Moss-American, 8716 N. Grandville Road, Milwaukee, WI
Sigma Project No. 13701

Soil Sample Location:		MW-7S-W	Groundwater Pathway RCL [4]	Non-Industrial Direct Contact RCL [5]	Industrial Direct Contact RCL [6]
Sample Depth (feet bgs):		4-6			
Sample Collection Date:		3/28/13			
Depth to Groundwater (feet bgs):		5			
Unsaturated/Smear Zone (U) or Saturated (S):					
Organic Vapor Monitor	ppm		NS	NS	NS
PVOCs & Detected VOCs					
Benzene	µg/kg	<25	5.1	1,490	7,410
Ethylbenzene	µg/kg	<25	1,570	7,470	37,000
Toluene	µg/kg	<25	1,107.2	818,000	818,000
Xylenes (total)	µg/kg	<75	3,940	258,000	258,000
PAHs					
Acenaphthene	µg/kg	47,000	NS	3,440,000	33,000,000
Acenaphthylene	µg/kg	520 J	NS	487,000	487,000
Anthracene	µg/kg	30,700	196,744.2	17,200,000	100,000,000
Benzo(a)anthracene	µg/kg	*11,100*	NS	148	2,110
Benzo(a)pyrene	µg/kg	***2,720***	470	15	211
Benzo(b)fluoranthene	µg/kg	***5,400***	480	148	2,110
Benzo(ghi)perylene	µg/kg	740 J	NS	NS	NS
Benzo(k)fluoranthene	µg/kg	*2,260*	NS	1,480	21,100
Chrysene	µg/kg	**9,300**	145.1	14,800	211,000
Dibenzo(a,h)anthracene	µg/kg	<446	NS	15	211
Fluoranthene	µg/kg	69,000	88,817.9	2,290,000	22,000,000
Fluorene	µg/kg	**47,000**	14,814.8	2,290,000	22,000,000
Indeno(1,2,3-cd)pyrene	µg/kg	**710 J**	NS	148	2,110
1-Methylnaphthalene	µg/kg	13,200	NS	15,600	53,100
2-Methylnaphthalene	µg/kg	<412	NS	229,000	368,000
Naphthalene	µg/kg	**1050 J**	658.7	2,150	26,000
Phenanthrene	µg/kg	*142,000*	NS	115,000	115,000
Pyrene	µg/kg	46,000	54,472.5	1,720,000	16,500,000

Notes:
1. Unsaturated/smear zone versus satured soil conditions based on:
(1) measured water levels in adjacent/nearby monitoring wells,
(2) soil moisture conditions recorded on soil boring logs, and/or
(3) soil moisture contents reported on laboratory analytical reports.
2. Analytical units: µg/kg = micrograms per kilogram (equivalent to parts per billion, ppb)
mg/kg = milligrams per kilogram (equivalent to parts per million, ppm)
7. NS = no standard established
8. Laboratory flags: "J" = Analyte detected between Limit of Detection and Limit of Quantitation
9. Exceedances:

BOLD = Concentration exceeds Groundwater Pathway RCL
ITALICS = Concentration exceeds Non-Industrial OR Industrial Direct Contact RCL
(unsaturated soil samples only)

TABLE 2
Water Level Elevation and Product Thickness
MOSS – AMERICAN SUPERFUND SITE
PROJECT NO. 13701

Well ID	Depth of Well (ft.)	Depth of Water (ft.)	Ground Elevation (ft. MSL)	TOC Elevation (ft. MSL)	Groundwater Elevation (ft. MSL)	Depth to Product (ft.)	Product Thickness (ft.)	Diameter (in.)	Well Material	Comment
MW-5S	19.75	5.45	723.41	724.63	719.18	NP	NP	2	Steel	
MW-7S	15.40	4.14	719.47	721.59	717.45	NP	NP	2	Steel	
MW-7S-W	16.85	4.22	716.41	719.84	715.62	NP	NP	2	PVC	free product on probe
MW-9S	15.30	3.90	719.15	721.66	717.76	NP	NP	2	Steel	
MW-27S	17.39	3.68	720.57	723.10	719.42	NP	NP	2	PVC	
MW-30S	14.72	3.42	725.35	727.34	723.92	NP	NP	2	Steel	
MW-31S										can't locate, possibly buried (Tom W.)
MW-32S	14.95	5.13	719.68	722.79	717.66	NP	NP	2	Steel	
MW-33S	14.95	4.49	719.25	721.81	717.32	NP	NP	2	Steel	
MW-34S	14.97	4.45	718.97	721.52	717.07	13.5	1.47	2	Steel	product on well, product at 13.5'
MW-34S-N	18.15	3.52	715.41	718.71	715.19	NP	NP	2	PVC	
MW-35S	14.63	4.06	718.14	721.75	717.69	NP	NP	2	Steel	
MW-37S	15.00	4.80	721.33	723.30	718.50	NP	NP	2	Steel	
MW-38S	18.20	4.09	718.36	721.74	717.65	NP	NP	2	Steel	
MW-39S	17.93	3.42	717.80	721.10	717.68	NP	NP	2	Steel	
TG1-1	15.10	4.65	719.77	723.32	718.67	14	1.10	2	Steel	product at 14.00'
TG1-2			720.06	722.81		NP	NP	2	Steel	
TG1-3	14.62	3.41	719.56	722.53	719.12	NP	NP	2	Steel	
TG2-1	15.00	4.25	720.67	723.80	719.55	NP	NP	2	Steel	
TG2-2	14.80	5.63	720.62	723.05	717.42	NP	NP	2	Steel	
TG2-3	OB	4.05	720.06	722.61	718.56	NP	NP	2	Steel	obstructed at 4.22'
TG3-1	14.60	3.41	719.14	721.05	717.64	NP	NP	2	Steel	
TG3-2	14.25	3.25	718.87	720.92	717.67	NP	NP	2	Steel	
TG3-3	OB	OB	718.35	720.60		NP	NP	2	Steel	obstructed at 3.06'
TG4-1	OB	OB	718.06	721.14		NP	NP	2	Steel	obstructed at 4.23'
TG4-2	14.93	3.85	718.26	720.75	716.90	NP	NP	2	Steel	

TABLE 2
Water Level Elevation and Product Thickness
MOSS – AMERICAN SUPERFUND SITE
PROJECT NO. 13701

Well ID	Depth of Well (ft.)	Depth of Water (ft.)	Ground Elevation (ft. MSL)	TOC Elevation (ft. MSL)	Groundwater Elevation (ft. MSL)	Depth to Product (ft.)	Product Thickness (ft.)	Diameter (in.)	Well Material	Comment
TG4-3	14.28	3.03	718.01	720.04	717.01	NP	NP	2	Steel	
TG5-1	14.65	4.85	717.60	721.12	716.27	NP	NP	2	Steel	
TG5-2	14.80	4.25	718.18	720.63	716.38	NP	NP	2	Steel	
TG5-3	15.02	3.53	718.17	719.99	716.46	NP	NP	2	Steel	
TG6-1	15.02	4.54	719.47	721.96	717.42	NP	NP	2	Steel	
TG6-2	14.23	4.67	719.70	722.05	717.38	NP	NP	2	Steel	
TG6-3	14.65	4.50	719.58	722.47	717.97	NP	NP	2	Steel	
PZ-01	14.90	3.85	718.04	721.05	717.20	NP	NP	1.5	PVC	
PZ-02	14.85	5.94	718.89	721.84	715.90	NP	NP	1.5	PVC	
PZ-03	14.85	4.60	719.00	722.09	717.49	NP	NP	1.5	PVC	
PZ-04	OB	OB	717.30	720.22		NP	NP	1.5	PVC	obstruction at 3.81'
PZ-05	14.82	5.10	724.34	727.43	722.33	NP	NP	1.5	PVC	
PZ-06	13.40	3.91	724.62	727.79	723.88	NP	NP	1.5	PVC	
PZ-07	OB	OB	725.78	728.72		NP	NP	1.5	PVC	obstruction at 4.44'
PZ-09	OB	OB	721.12	724.08		NP	NP	1.5	PVC	obstruction at 3.2'
PZ-10	14.95	4.83	722.04	725.05	720.22	NP	NP	1.5	PVC	
MW-A	11.80	0.77	716.73	716.15	715.38	NP	NP	2	PVC	
MW-B	11.63	0.70	714.92	714.49	713.79	NP	NP	2	PVC	
MW-C	12.50	0.00	714.18	713.82	713.82	NP	NP	2	PVC	well submerged inside flush mount
MW-D	12.00	0.20	716.21	715.85	715.65	NP	NP	2	PVC	
MW-E	18.85	1.17	713.26	712.83	711.66	NP	NP	2	PVC	
MW-F	19.55	1.95	713.52	713.10	711.15	NP	NP	2	PVC	
MW-G	13.83	1.55	713.21	712.75	711.20	NP	NP	2	PVC	
MW-H	18.10	0.00	710.40	710.07	710.07	NP	NP	2	PVC	
MW-I	9.00	1.50	710.27	709.92	708.42	NP	NP	2	PVC	
MW-J	14.75	0.00	710.08	709.85	709.85	NP	NP	2	PVC	well submerged inside flush mount
MW-K	NS	NS	707.13	706.70	NS	NS	NS	2	PVC	well completely submerged under

Notes:
1. NP = no product
2. OB = obstruction
3. NS = not sampled, MW-K not sampled due to being completely submerged under water

Table 3
Groundwater Analytical Data
Moss American - 8716 North Granville Road, Milwaukee, WI
Sigma Project No. 13701

Well Location:		NR 140	NR 140	MW-5S		MW-7S		MW-7S-W	MW-9S		MW-27S		MW-30S		MW-31S	MW-32S		MW-33S		MW-34S	
Date:		ES	PAL	9/27/10	4/4/13	9/28/10	4/4/13	4/5/13	9/30/10	4/4/13	9/27/10	4/4/13	9/28/10	4/4/13	9/29/10	9/27/10	4/4/13	9/28/10	4/4/13	9/28/10	4/4/13
PVOCs & Detected VOCs																					
Benzene	µg/L	5	0.5	<0.2	<0.27	*0.9 J*	0.36 J	<0.27	<0.2	<0.27	<0.2	<0.27	<0.2	<0.27	<0.2	<0.2	<0.27	<0.2	<0.27	***6.2***	***7***
Ethylbenzene	µg/L	700	140	<0.2	<0.82	0.3 J	<0.82	<0.82	<0.2	<0.82	<0.2	<0.82	<0.2	<0.82	<0.2	<0.2	<0.82	0.5 J	<0.82	26	28.4
Toluene	µg/L	1,000	200	<0.2	<0.8	<0.2	<0.8	<0.8	<0.2	<0.8	<0.2	<0.8	<0.2	<0.8	<0.2	<0.2	<0.8	0.3 J	<0.8	1.1	1.39 J
Xylenes, Total	µg/L	10,000	1,000	<0.6	<2.41	1.8 J	1.7 J	1.56 J	<0.6	<2.41	<0.6	<2.41	<0.6	<2.41	<0.6	<0.6	<2.41	3.1	<2.41	49	49.2
PAHs																					
Acenaphthene	µg/L	NS	NS	<0.51	<0.021	8.3	5	291	<0.52	0.028 J	<0.52	0.113	<0.53	<0.021	<0.52	<054	<0.021	100	0.66	2100	410
Acenaphthylene	µg/L	NS	NS	<1	<0.02	<8.2	0.17	2.45 J	<1	<0.02	<1	0.022 J	<1.1	<0.02	<1	<1.1	<0.02	<1	<0.02	<200	<20
Anthracene	µg/L	3,000	600	<0.02	0.030 J	<0.022	0.138	183	<0.021	0.048 J	<0.021	0.14	<0.021	0.113	<0.021	<0.022	0.057 J	0.62	0.132	450	88
Benzo(a)anthracene	µg/L	NS	NS	<0.01	<0.025	<0.011	<0.025	<2.5	<0.01	0.025	<0.01	<0.025	<0.011	<0.025	<0.01	<0.011	<0.025	<0.01	<0.025	310	54 J
Benzo(a)pyrene	µg/L	0.2	0.02	<0.01	<0.018	<0.011	<0.018	<1.8	<0.01	<0.018	<0.01	<0.018	<0.011	<0.018	<0.01	<0.011	<0.018	<0.01	<0.018	***120***	<18
Benzo(b)fluoranthene	µg/L	0.2	0.02	<0.0081	<0.02	<0.0086	<0.02	<2	<0.0084	<0.02	<0.0084	<0.02	<0.0084	<0.02	<0.0084	<0.0086	<0.02	<0.0081	<0.02	***100***	***26.1 J***
Benzo(ghi)perylene	µg/L	NS	NS	<0.061	<0.023	<0.065	<0.023	<2.3	<0.063	<0.023	<0.063	<0.023	<0.063	<0.023	<0.063	<0.065	<0.023	<0.061	<0.023	<61	<23
Benzo(k)fluoranthene	µg/L	NS	NS	<0.0081	<0.027	<0.0083	<0.027	<2.7	<0.0084	<0.027	<0.0084	<0.027	<0.0084	<0.027	<0.0084	<0.0086	<0.027	<0.0081	<0.027	59	<27
Chrysene	µg/L	0.2	0.02	<0.061	<0.018	<0.065	<0.018	<1.8	<0.063	<0.018	<0.063	<0.018	<0.063	<0.018	<0.063	<0.065	<0.018	<0.061	<0.018	***340***	***50 J***
Dibenzo(a,h)anthracene	µg/L	NS	NS	<0.02	<0.023	<0.022	<0.023	<2.3	<0.021	<0.023	<0.021	<0.023	<0.021	<0.023	<0.021	<0.022	<0.023	<0.02	<0.023	<23	<23
Fluoranthene	µg/L	400	80	<0.02	<0.026	<0.022	<0.026	14.4	<0.021	<0.026	<0.021	0.037 J	<0.021	<0.026	<0.021	<0.022	<0.026	0.028 J	<0.026	***1800***	*320*
Fluorene	µg/L	400	80	<0.1	<0.02	1.5	0.83	*162*	<0.1	0.029 J	<0.1	0.075	<0.11	<0.02	<0.1	<0.11	<0.02	49	0.251	***1700***	*330*
Indeno(1,2,3-cd)pyrene	µg/L	NS	NS	<0.04	<0.027	<0.043	<0.027	<2.7	<0.042	<0.027	<0.042	<0.027	<0.042	<0.027	<0.042	<0.043	<0.027	<0.04	<0.027	<49	<27
1-Methylnaphthalene	µg/L	NS	NS	NA	<0.019	NA	9.7	136	NA	0.027 J	NA	0.115	NA	<0.019	NA	NA	0.019 J	NA	0.057 J	NA	315
2-Methylnaphthalene	µg/L	NS	NS	NA	<0.016	NA	8.9	15.2	NA	0.041 J	NA	0.222	NA	<0.016	NA	NA	0.025 J	NA	0.025 J	NA	470
Naphthalene	µg/L	100	10	<1	0.025 J	1.6 J	0.43	*64*	<1	0.38	<1	2.34	<1.1	0.024 J	<1	<1.1	0.249	***100***	0.201	***11000***	***4100***
Phenanthrene	µg/L	NS	NS	<0.04	<0.018	<0.043	0.034 J	177	<0.042	0.044 J	0.073 J	0.106	0.046 J	0.029 J	<0.042	<0.043	0.022 J	15	0.08	4600	800
Pyrene	µg/L	250	50	<0.1	<0.025	<0.11	<0.025	7.5 J	<0.1	<0.025	<0.1	0.029 J	<0.11	<0.025	<0.1	<0.11	<0.025	<0.1	<0.025	***1400***	*222*

Notes:
1. NR 140 ES = Wisconsin Administrative Code, Chapter NR 140 Enforcement Standard
2. NR 140 PAL = Wisconsin Administrative Code, Chapter NR 140 Preventive Action Limit
3. NS = no standard
4. NA = not analyzed
5. µg/L = micrograms per liter (equivalent to parts per billion, ppb)
6. Laboratory flags: "J" = Analyte detected between Limit of Detection and Limit of Quantitation.
7. Exceedances: **BOLD** = Concentration exceeds NR 140 ES
   ITALICS = Concentration exceeds NR 140 PAL

Table 3
Groundwater Analytical Data
Moss American - 8716 North Granville Road, Milwaukee, WI
Sigma Project No. 13701

Well Location:		NR 140	NR 140	MW-34S-N	MW-35S	MW-37S		MW-38S		MW-39S		TG1-1		TG1-3		TG2-1		TG2-3	TG3-1		TG3-3
Date:		ES	PAL	4/5/13	9/28/10	9/29/10	4/4/13	9/28/10	4/4/13	9/28/10	4/4/13	9/29/10	4/3/13	9/29/10	4/3/13	9/29/10	4/3/13	9/29/10	9/29/10	4/3/13	9/29/10
PVOCs & Detected VOCs																					
Benzene	µg/L	5	0.5	<0.27	<0.2	<0.2	<0.27	*1.9*	*0.96*	<0.2	<0.27	0.3 J	<0.27	<0.2	<0.27	<0.2	<0.27	<0.2	<0.2	<0.27	<0.2
Ethylbenzene	µg/L	700	140	<0.82	<0.2	<0.2	<0.82	0.9 J	1.4 J	<0.2	<0.82	30	18.4	<0.2	<0.82	<0.2	<0.82	<0.2	<0.2	<0.82	<0.2
Toluene	µg/L	1,000	200	<0.8	<0.2	<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	<0.2	<0.8	<0.2
Xylenes, Total	µg/L	10,000	1,000	<2.41	<0.6	<0.6	<2.41	0.9 J	1.41 J	<0.6	<2.41	55	31.3	<0.6	<2.41	<0.6	<2.41	<0.6	<0.6	<2.41	<0.6
PAHs																					
Acenaphthene	µg/L	NS	NS	0.059 J	0.6 J	<0.52	0.025 J	4	4.2	3.3	5.8	90000	262	2.9	1.77	<0.58	<0.021	<0.55	<0.54	0.099	<0.52
Acenaphthylene	µg/L	NS	NS	<0.02	<1.1	<1	<0.02	<3.2	0.153	<13	0.127	4000 J	<10	<1	<0.02	<1.2	<0.02	<1.1	<1.1	0.056 J	<1
Anthracene	µg/L	3,000	600	0.023 J	<0.022	<0.021	<0.02	<0.022	0.263	0.13	0.136	***20000***	23.6 J	0.12	0.113	<0.023	0.035 J	<0.022	<0.022	0.189	0.023 J
Benzo(a)anthracene	µg/L	NS	NS	<0.025	0.017 J	<0.01	<0.025	<0.011	0.039 J	<0.011	0.069 J	14000	<12.5	<0.01	0.025 J	<0.012	<0.025	<0.011	<0.011	0.076 J	<0.01
Benzo(a)pyrene	µg/L	0.2	0.02	<0.018	<0.011	0.027 J	<0.018	<0.011	*0.032 J*	<0.044	*0.027 J*	***7300***	<9	<0.01	<0.018	<0.012	<0.018	<0.011	<0.011	*0.04 J*	<0.01
Benzo(b)fluoranthene	µg/L	0.2	0.02	<0.02	<0.0089	0.014 J	<0.02	<0.0089	*0.079*	<0.0085	*0.057 J*	***4900***	<10	<0.0083	<0.02	<0.0093	<0.02	<0.0088	<0.0087	*0.073*	<0.0083
Benzo(ghi)perylene	µg/L	NS	NS	<0.023	<0.067	0.08 J	<0.023	<0.067	0.077	<0.063	<0.023	3000	<11.5	<0.062	<0.023	<0.069	<0.023	<0.066	<0.065	0.065 J	<0.062
Benzo(k)fluoranthene	µg/L	NS	NS	<0.027	<0.0089	0.01 J	<0.027	<0.0089	<0.027	<0.0085	<0.027	2900	<13.5	<0.0083	<0.027	<0.0093	<0.027	<0.0088	<0.0087	0.029 J	<0.0083
Chrysene	µg/L	0.2	0.02	<0.018	<0.067	<0.062	<0.018	<0.067	*0.052 J*	<0.063	*0.054 J*	***14000***	<9	<0.062	<0.018	<0.069	<0.018	<0.066	<0.065	*0.061*	<0.062
Dibenzo(a,h)anthracene	µg/L	NS	NS	<0.023	<0.022	<0.021	<0.023	<0.022	<0.023	<0.021	<0.023	1200	<11.5	<0.021	<0.023	<0.023	<0.023	<0.022	<0.022	<0.023	<0.021
Fluoranthene	µg/L	400	80	<0.026	0.5	<0.021	<0.026	<0.22	0.103	0.19	0.32	***82000***	28.1 J	27	0.155	<0.023	<0.026	0.026 J	0.062 J	0.244	0.061 J
Fluorene	µg/L	400	80	0.034 J	0.12 J	<0.1	0.028 J	<0.11	0.152	1.1	0.73	***75000***	*135*	1.4	0.259	<0.12	<0.02	<0.11	0.12 J	0.068	0.15 J
Indeno(1,2,3-cd)pyrene	µg/L	NS	NS	<0.027	<0.045	<0.041	<0.027	<0.044	0.04 J	<0.042	<0.027	2600	<13.5	<0.041	<0.027	<0.046	<0.027	<0.044	<0.044	0.044 J	<0.042
1-Methylnaphthalene	µg/L	NS	NS	0.055 J	NA	NA	0.025 J	NA	1.99	NA	0.169	NA	169	NA	<0.019	NA	<0.019	NA	NA	<0.019	NA
2-Methylnaphthalene	µg/L	NS	NS	0.039 J	NA	NA	0.044 J	NA	7.9	NA	0.117	NA	164	NA	0.017 J	NA	<0.016	NA	NA	0.017 J	NA
Naphthalene	µg/L	100	10	0.053 J	<1.1	<1	0.36	***67***	8.1	<1.1	0.211	***110000***	***1950***	<1	0.024 J	<1.2	<0.023	<1.1	<1.1	0.024 J	<1
Phenanthrene	µg/L	NS	NS	0.057 J	0.053 J	<0.041	0.037 J	<0.044	0.15	0.056 J	0.252	200000	113	0.59	0.035 J	<0.046	<0.018	<0.044	<0.044	0.069	0.1 J
Pyrene	µg/L	250	50	<0.025	0.36 J	<0.1	<0.025	<0.11	0.092	0.15 J	0.216	***57000***	17.7 J	0.16 J	0.104	<0.12	<0.025	<0.11	<0.11	0.199	<0.1

Table 3
Groundwater Analytical Data
Moss American - 8716 North Granville Road, Milwaukee, WI
Sigma Project No. 13701

Well Location:		NR 140	NR 140	TG4-1	TG4-3		TG5-1		TG5-3		TG6-1		TG6-3		PZ-02	PZ-03	PZ-10	MW-A		MW-B	
Date:		ES	PAL	9/29/10	9/29/10	4/3/13	9/29/10	4/3/13	9/29/10	4/3/13	9/29/10	4/3/13	9/29/10	4/3/13	4/4/13	4/4/13	4/4/13	9/30/10	4/4/13	9/27/10	4/5/13
PVOCs & Detected VOCs																					
Benzene	µg/L	5	0.5	<0.2	<0.2	<0.27	<0.2	<0.27	<0.2	<0.27	<0.2	<0.27	<0.2	<0.27	<0.27	0.44 J	<0.27	<0.2	<0.27	<0.2	<0.27
Ethylbenzene	µg/L	700	140	<0.2	<0.2	<0.82	<0.2	<0.82	<0.2	<0.82	<0.2	<0.82	<0.2	<0.82	<0.82	2.68	<0.82	<0.2	<0.82	<0.2	<0.82
Toluene	µg/L	1,000	200	<0.2	<0.2	<0.8	<0.2	<0.8	<0.2	<0.8	<0.2	<0.8	<0.2	<0.8	<0.8	<0.8	<0.8	<0.2	<0.8	<0.2	<0.8
Xylenes, Total	µg/L	10,000	1,000	<0.6	<0.6	<2.41	<0.6	<2.41	<0.6	<2.41	<0.6	<2.41	<0.6	<2.41	<2.41	1.92 J	<2.41	<0.6	<2.41	<0.6	<2.41
PAHs																					
Acenaphthene	µg/L	NS	NS	<0.54	<0.52	<0.021	<0.52	<0.021	<0.52	<0.021	0.63 J	0.232	<0.52	<0.021	79	116	5.2	<0.51	<0.021	<0.53	<0.021
Acenaphthylene	µg/L	NS	NS	<1.1	<1	0.021 J	<1	<0.02	<1	<0.02	<1.1	<0.02	<1	<0.02	1.01 J	0.99 J	0.095	<1	<0.02	<1.1	<0.02
Anthracene	µg/L	3,000	600	<0.022	<0.021	0.127	<0.021	0.054 J	<0.021	0.087	0.023 J	0.031 J	<0.021	0.042 J	<0.4	2.37	0.31	<0.021	0.025 J	<0.021	<0.02
Benzo(a)anthracene	µg/L	NS	NS	<0.011	<0.01	0.033 J	<0.01	<0.025	<0.01	<0.025	<0.011	<0.025	<0.01	<0.025	<0.5	2.03	0.128	<0.01	<0.025	<0.011	<0.025
Benzo(a)pyrene	µg/L	0.2	0.02	<0.011	<0.01	*0.024 J*	<0.01	<0.018	<0.01	<0.018	<0.011	<0.018	<0.01	<0.018	<0.36	***0.71 J***	*0.07*	<0.01	<0.018	<0.011	<0.018
Benzo(b)fluoranthene	µg/L	0.2	0.02	<0.0086	<0.0084	*0.044 J*	<0.0084	<0.02	<0.0083	<0.02	<0.0091	<0.02	<0.0084	<0.02	<0.4	***1.45***	*0.169*	<0.0082	<0.02	<0.0086	<0.02
Benzo(ghi)perylene	µg/L	NS	NS	<0.065	<0.063	0.042 J	<0.063	<0.023	<0.062	<0.023	<0.068	<0.023	<0.063	<0.023	<0.46	<0.46	0.108	<0.062	<0.023	<0.064	<0.023
Benzo(k)fluoranthene	µg/L	NS	NS	<0.0086	<0.0084	<0.027	<0.0084	<0.027	<0.0083	<0.027	<0.0091	<0.07	<0.0084	<0.027	<0.54	<0.54	0.064 J	<0.0082	<0.027	<0.0086	<0.027
Chrysene	µg/L	0.2	0.02	<0.065	<0.063	*0.023 J*	<0.063	<0.018	<0.062	<0.018	<0.068	<0.018	<0.063	<0.018	<0.36	***1.47***	*0.132*	<0.062	<0.018	<0.064	<0.018
Dibenzo(a,h)anthracene	µg/L	NS	NS	<0.022	<0.021	<0.023	<0.021	<0.023	<0.021	<0.023	<0.023	<0.023	<0.021	<0.023	<0.46	<0.46	<0.023	<0.021	<0.023	<0.021	<0.023
Fluoranthene	µg/L	400	80	<0.022	<0.021	0.083 J	<0.021	<0.026	0.051 J	0.096	0.047 J	0.069 J	0.083 J	0.069 J	<0.52	10.7	0.41	<0.021	<0.026	<0.021	<0.026
Fluorene	µg/L	400	80	<0.11	<0.1	<0.02	<0.1	<0.02	<0.1	<0.02	0.22 J	0.048 J	<0.1	<0.02	3.6	33	0.92	<0.1	<0.02	<0.11	<0.02
Indeno(1,2,3-cd)pyrene	µg/L	NS	NS	<0.043	<0.042	<0.027	<0.042	<0.027	<0.041	<0.027	<0.045	<0.027	<0.042	<0.027	<0.54	<0.54	0.071 J	<0.041	<0.027	<0.043	<0.027
1-Methylnaphthalene	µg/L	NS	NS	NA	NA	<0.019	NA	<0.019	NA	<0.019	NA	<0.019	NA	<0.019	0.8 J	47	3.4	NA	<0.019	NA	<0.019
2-Methylnaphthalene	µg/L	NS	NS	NA	NA	<0.016	NA	<0.016	NA	0.020 J	NA	0.019 J	NA	<0.016	<0.32	<0.32	2.82	NA	<0.016	NA	<0.016
Naphthalene	µg/L	100	10	<1.1	<1	<0.023	<1	<0.023	<1	<0.023	<1.1	<0.023	<1	<0.023	1.79	*47*	0.32	<1	<0.023	<1.1	0.034 J
Phenanthrene	µg/L	NS	NS	<0.043	<0.042	0.037 J	<0.042	0.027 J	<0.041	0.027 J	<0.045	0.025 J	<0.042	0.021 J	<0.36	1.87	1.36	<0.041	0.026 J	<0.043	0.037 J
Pyrene	µg/L	250	50	<0.11	<0.1	0.071 J	<0.1	<0.025	<0.1	0.103	<0.11	0.055 J	<0.1	0.052 J	<0.5	7.1	0.299	<0.1	0.025	<0.11	0.025

Table 3
Groundwater Analytical Data
Moss American - 8716 North Granville Road, Milwaukee, WI
Sigma Project No. 13701

Well Location:		NR 140	NR 140	MW-C		MW-D		MW-E		MW-F		MW-G		MW-H		MW-I		MW-J		MW-K
Date:		ES	PAL	9/27/10	4/5/13	9/27/10	4/5/13	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
PVOCs & Detected VOCs																				
Benzene	µg/L	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	<0.27	<0.2	<0.27	<0.2
Ethylbenzene	µg/L	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	<0.82	<0.2	<0.82	<0.2
Toluene	µg/L	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	<0.8	<0.2	<0.8	<0.2
Xylenes, Total	µg/L	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	<2.41	<0.6	<2.41	<0.6
PAHs																				
Acenaphthene	µg/L	NS	NS	<0.54	<0.021	<0.55	<0.021	<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	<1.1	<0.02	<1.1	<0.02	<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	3,000	600	<0.022	<0.02	<0.022	<0.02	<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	<0.011	<0.025	<0.011	<0.025	<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	0.2	0.02	<0.0111	<0.018	<0.011	<0.018	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	0.2	0.02	<0.0087	0.039 J	<0.0088	<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	<0.065	0.026 J	<0.066	0.038 J	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	<0.0087	<0.027	<0.0088	<0.027	<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	0.2	0.02	<0.065	0.028 J	<0.066	*0.02 J*	<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	<0.022	<0.023	<0.022	<0.023	<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	400	80	<0.022	0.052 J	<0.022	<0.026	<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	400	80	<0.11	<0.02	<0.11	<0.02	<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	<0.043	<0.027	<0.044	<0.027	<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
1-Methylnaphthalene	µg/L	NS	NS	NA	0.11	NA	<0.019	NA	0.02 J	NA	<0.019	NA	<0.019	NA	<0.019	NA	<0.019	NA	0.025 J	NA
2-Methylnaphthalene	µg/L	NS	NS	NA	<0.016	NA	<0.016	NA	<0.016	NA	<0.016	NA	<0.016	NA	<0.016	NA	<0.016	NA	<0.016	NA
Naphthalene	µg/L	100	10	<1.1	<0.023	<1.1	<0.023	<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	<0.043	0.044 J	<0.044	<0.018	<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	250	50	<0.11	0.046 J	<0.11	<0.025	<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

Table 4
Groundwater *In Situ* Measurements
Moss American - 8716 North Grandville Road, Milwaukee, WI
Sigma Project No. 13701

Well Identification	Date	In Situ Measurements				
		pH	Temperature (° C)	Ferrous Iron (mg/l)	Dissolved Oxygen (mg/l)	Redox Potential (mV)
MW-5S	9/27/10	6.57	12.15	NA	11.20	36.1
	4/4/13	7.2	9.0	3.0	2.00	35
MW-7S	9/28/10	6.89	13.12	NA	0.8	-70
	4/4/13	7.1	5.9	3.6	1.40	-15
MW-7S-W	4/5/13	7.2	6.1	0.0	1.9	-182
MW-9S	9/30/10	6.69	13.75	NA	1.7	-21.3
	4/4/13	7.3	5.6	8.0	1.50	-36
MW-27S	9/27/10	6.47	14.51	NA	0.8	-70.1
	4/4/13	7.3	7.5	3.0	1.40	-58
MW-30S	9/28/10	6.72	13.87	NA	0.8	45.5
	4/4/13	7.3	7.6	0.8	1.90	40
MW-31S	9/29/10	6.90	13.37	NA	0.8	-16.1
MW-32S	9/27/10	6.40	16.49	NA	2.4	-57.6
	4/4/13	7.4	6.4	6.8	1.40	-159
MW-33S	9/28/10	6.34	14.60	NA	3.7	-18.2
	4/4/13	6.9	6.5	3.6	1.10	-15
MW-34S	9/28/10	NS	NS	NS	NS	NS
	4/4/13	7.2	6.2	7.0	0.49	-160
MW-34S-N	4/5/13	7.1	6.0	0.0	2.4	131
MW-35S	9/28/10	6.46	16.26	NA	0.8	-38.9
MW-37S	9/29/10	6.71	15.58	NA	3.0	-18.6
	4/4/13	7.7	7.4	0.0	1.30	122
MW-38S	9/28/10	6.87	14.32	NA	1.0	-43.3
	4/4/13	7.0	7.9	2.0	1.10	-33
MW-39S	9/28/10	6.75	16.04	NA	0.4	-48.3
	4/4/13	7.6	6.5	4.2	0.97	-104
TG1-1	9/29/10	NA	NA	NA	NA	NA
	4/3/13	7.2	5.8	4.0	0.85	-120
TG1-3	9/29/10	6.97	16.08	NA	1.68	-124.0
	4/3/13	7.1	5.1	3.6	0.55	-88
TG2-1	9/29/10	6.77	14.23	NA	0.76	-2.5
	4/3/13	7.2	5.2	0.0	0.60	12
TG2-3	9/29/10	6.88	16.63	NA	1.12	-113.6
	4/3/13	NA	NA	NA	NA	NA
TG3-1	9/29/10	6.81	16.75	NA	3.04	-67.1
	4/3/13	7.2	5.6	2.4	1.30	-96
TG3-3	9/29/10	6.79	16.79	NA	1.19	-81.5
	4/3/13	NS	NS	NS	NS	NS
TG4-1	9/29/10	6.97	15.83	NA	5.16	70.4
	4/3/13	NS	NS	NS	NS	NS
TG4-3	9/29/10	7.16	15.96	NA	5.63	-6.3
	4/3/13	7.1	6.2	4.2	0.90	-129
TG5-1	9/29/10	6.89	15.68	NA	5.37	81.0
	4/3/13	7.0	6.1	4.0	1.00	-8
TG5-3	9/29/10	7.08	15.31	NA	1.04	-36.5
	4/3/13	7.1	6.4	1.4	1.00	-14
TG6-1	9/29/10	6.86	16.71	NA	0.72	-110.7
	4/3/13	7.3	5.8	0.0	1.20	-107

Table 4
Groundwater *In Situ* Measurements
Moss American - 8716 North Grandville Road, Milwaukee, WI
Sigma Project No. 13701

Well Identification	Date	In Situ Measurements				
		pH	Temperature (° C)	Ferrous Iron (mg/l)	Dissolved Oxygen (mg/l)	Redox Potential (mV)
TG6-3	9/29/10	6.58	15.76	NA	1.33	-46.4
	4/3/13	7.3	3.8	4.2	1.40	-14
PZ-02	4/4/13	7.0	6.0	4.0	1.00	-12
PZ-03	4/4/13	7.2	6.8	4.0	0.95	-20
PZ-10	4/4/13	7.2	5.8	7.0	1.40	-103
MW-A	9/30/10	6.76	14.09	NA	0.43	-48
	4/5/13	7.3	5.8	4.0	1.70	173
MW-B	9/27/10	6.87	13.58	NA	0.98	19.6
	4/5/13	7.3	4.7	1.0	1.40	27
MW-C	9/27/10	7.01	12.83	NA	1.28	-53.5
	4/5/13	7.3	6.9	2.0	1.20	-31
MW-D	9/27/10	6.71	13.82	NA	1.64	-87.6
	4/5/13	7.4	5.7	4.0	1.80	75
MW-E	9/30/10	7.16	12.57	NA	NA	NA
	4/5/13	7.5	7.5	0.0	1.10	-10
MW-F	9/30/10	7.04	13.59	NA	2.57	85.4
	4/5/13	7.4	8.2	3.6	1.24	-60
MW-G	9/30/10	6.85	14.32	NA	2.25	83.9
	4/5/13	7.2	7.3	0.0	3.00	-10
MW-H	9/28/10	7.05	13.13	NA	1.47	8.4
	4/5/13	7.3	7.3	4.0	1.60	-30
MW-I	9/28/10	7.08	15.07	NA	1.50	-52.4
	4/5/13	7.7	4.8	0.0	3.10	-40
MW-J	9/28/10	7.14	11.69	NA	2.16	1.1
	4/5/13	7.3	7.3	0.0	2.90	46
MW-K	9/28/10	7.03	16.82	NA	2.03	108.4

Notes:
1. ° C = degrees Celcius
2. mg/l = milligrams per liter (equivalent to parts per million, ppm)
3. mV = millivolts
4. NA = not analyzed
5. NS = not sampled (obstructions occurred in TG2-3 and TG4-1 preventing sampling on 4/3/13)

Table 5
Groundwater Bioremediation Data
Moss American - 8716 North Grandville Road, Milwaukee, WI
Sigma Project No. 13701

Well Identification	Date	Nitrate-Nitrogen	Nitrite-Nitrogen	Total Kjeldahl Nitrogen	Ammonia-Nitrogen	Total Phosphate-Phosphorous	Orthophosphate	Biochemical Oxygen Demand	Chemical Oxygen Demand	Total Organic Carbon	Heterotrophic Plate Count[a]	Sub-Petroleum Degraders[b]
		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	cfu/L	cfu/L
TG1-1	9/29/10	<0.04	<0.015	<1.3	0.79	<0.25	<0.03	29.2	415.0	11.4	3,690,000	1,850,000
	4/3/13	<0.08	<0.04	1.6	0.4	<0.13	<0.18	7.0	51.0	14.0	300,000	160,000
TG1-3	9/29/10	<0.04	<0.015	1.9	1.9	<0.25	<0.03	<3.6	28.5	10.8	6,300,000	100,000
	4/3/13	0.17	<0.04	1.8	0.93	0.31	<0.18	7.2	66.0	14.0	250,000	130,000
TG2-1	9/29/10	<0.04	<0.015	<0.5	0.37 *	<0.25	<0.03	<1.4	7.1 *	2.3	610,000	240,000
	4/3/13	<0.08	<0.04	<0.4	<0.04	0.16	<0.18	<2.0	<13	5.6	550,000	8,000,000
TG2-3	9/29/10	<0.04	<0.015	0.84 *	<0.2	<0.25	<0.03	<2	19.0	6.6	160,000	360,000
	4/3/13	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
TG3-1	9/29/10	<0.04	<0.015	1.2	<0.2	0.28 *	<0.03	<2.1	28.1	11.1	40,000	80,000
	4/3/13	0.21	<0.04	0.85	0.32	1.6	<0.18	3.5	42.0	24.0	500,000	22,000,000
TG3-3	9/29/10	<0.04	<0.015	2.1	1.7	<0.25	<0.03	8.3	25.3	8.5	300,000	20,000
	4/3/13	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
TG4-1	9/29/10	<0.04	<0.015	0.51 *	0.25 *	<0.25	0.072 *	<1.5	22.1	8.8	180,000	30,000
	4/3/13	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
TG4-3	9/29/10	<0.04	<0.015	1.0	0.68	<0.25	<0.03	<1.6	23.3	9.1	810,000	430,000
	4/3/13	0.19	<0.04	0.78	0.44	0.29	<0.18	<2.0	20.0	13	66,000	2,000,000
TG5-1	9/29/10	<0.04	<0.015	0.71 *	<0.2	<0.25	0.1	<1.6	11.9	4.6	540,000	<10,000
	4/3/13	<0.08	<0.04	<0.4	<0.04	0.17	<0.18	<2.0	16	7.5	120,000	3,800,000
TG5-3	9/29/10	<0.04	<0.015	1.2	0.9	<0.25	<0.03	<1.3	14.2	5.0	1,680,000	<10,000
	4/3/13	0.18	<0.04	1.1	0.3	0.17	<0.18	2.0	15.0	13.0	11,000	1,000,000
TG6-1	9/29/10	<0.04	<0.015	3	2.2	0.34	<0.03	<2.6	28.9	12	220,000	60,000
	4/3/13	0.18	<0.04	1.3	0.64	0.14	<0.18	4.7	19	4.2	620,000	36,000,000
TG6-3	9/29/10	<0.04	<0.015	0.9 *	0.53 *	<0.25	<0.03	<1.3	14.2	6.8	<10,000	<10,000
	4/3/13	0.19	<0.04	0.66	0.38	0.18	<0.18	<2.0	38	20	150,000	120,000

Notes:
1. cfu/L = colony forming units per liter
2. mg/L = milligrams per liter (equivalent to parts per million, ppm)
3. Laboratory flags:
   * = Analyte detected between Limit of Detection and Limit of Quantitation.
4. NS = not sampled due to obstruction in well
5. [a] = analysis was completed by CT Laboratories using an incubation period of one week
6. [b] = analysis was completed by Terra System, Inc. using an incubation period of three weeks

APPENDIX A

SOIL BORING AND WELL CONSTRUCTION LOGS

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
8716 N. Grandville Road	-	MW-7S-W

Boring Drilled By: Name of crew chief (first, last) and Firm	Date Drilling Started	Date Drilling Completed	Drilling Method
Brian GESTRA	3/28/2013	3/28/2013	hollow stem auger

WI Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
VN621		MW-7S-W	Feet MSL	Feet MSL	8.3 inches

Local Grid Origin ☐ (estimated: ☐) or Boring Location ☐
State Plane N, E S/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 13	9 1 1 3	1	TOPSOIL and grass, dk brown, moist, partially frozen	ML			0						
				SILT, med and dk brown, very dense, moist										
2 SS	24 7	2 2 2 5	2 3		ML			0						
3 SS	24 10	22 20 26 12	4 5	COARSE SAND and GRAVEL, med brown/grey, loose, wet, product Water at approx. 5'	SW			0						Lab sample (4-6')
4 SS	24 15	2 7 9 4	6 7	SILT, lt brown/tan, med dense, wet, slight product	ML			0						
			8	med grey/brown										
5 SS	24 15	3 6 10 15	9	SILT with trace small gravel, med grey/brown, med dense, med plasticity, wet				0						
6 SS	24 20	4 6 7 10	10 11	lt brown/tan, very dense	ML			0						
7 SS	24 19	b 8 15 13	12 13					0						
			14	End of boring at 14'. Monitoring well MW-7S-W installed with bottom of casing at 13'.										

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

Signature: S Oszuscik

Firm: Sigma Environmental Services, Inc.
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
8716 N. Grandville Road	-	MW-34S-N

Boring Drilled By: Name of crew chief (first, last) and Firm	Date Drilling Started	Date Drilling Completed	Drilling Method
Brian GESTRA	3/28/2013	3/28/2013	hollow stem auger

WI Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
VN622		MW-34S-N	Feet MSL	Feet MSL	8.3 inches

Local Grid Origin ☐ (estimated: ☐) or Boring Location ☐
State Plane N, E S/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	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 11	3 2 1 1	1	TOPSOIL and grass, dk brown, very dense, moist, partially frozen	ML									
				SILT, lt and dk brown, soft, moist to wet	ML			0						
2 SS	24 0	1 WOH	2											
			3											
3 SS	24 4	1 WOH	4											
			5	SILT with slight CLAY, med grey/brown, very soft, wet	CL-MI			0						
4 SS	24 7	4 3 4 5	6	Water at approx. 5-7'				0						
			7	SILT with trace small gravel, med grey, slightly dense, wet										
5 SS	24 20	3 4 WOH	8	lt brown/grey				0						
			9		ML									
6 SS	24 16	3 4 4 8	10	lt grey				0						
			11	no gravel										
7 SS	24 19	3 3 6 10	12					0						
			13	COARSE SAND, loose, wet	SP									
				SILT with trace small gravel, med grey/brown/red, med dense, wet	ML									
			14	End of boring at 14'. Monitoring well MW-34S-N installed with bottom of casing at 13'.										

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
S Oszuscik	Sigma Environmental Services, Inc. 1300 W. Canal St Milwaukee, WI 53233	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

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

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

Facility/Project Name: 8716 N. Grandville Road	Local Grid Location of Well: ____ ft. ☐ N. ☐ S. ____ ft. ☐ E. ☐ W.	Well Name: MW-7S-W
Facility License, Permit or Monitoring No.: -	Local Grid Origin ☐ (estimated: ☐) or Well Location ☐ Lat. ° ' " Long. ° ' " or	Wis. Unique Well No.: VN621 / DNR Well Number:
Facility ID	St. Plane ____ ft. N, ____ ft. E. S/C/N	Date Well Installed: 03/28/2013
Type of Well: Well Code 11/mw	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): Brian GESTRA
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 ____ ft. MSL
B. Well casing, top elevation ____ ft. MSL
C. Land surface elevation ____ ft. MSL
D. Surface seal, bottom ____ ft. MSL or 1.0 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

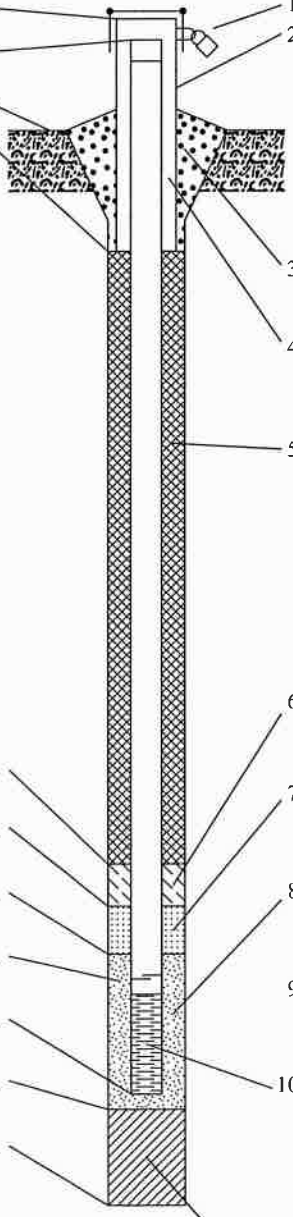
14. Drilling method used: Rotary ☐ 50 / Hollow Stem Auger ☒ 41 / ____ Other ☐ __

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):
____

E. Bentonite seal, top ____ ft. MSL or 0.0 ft.
F. Fine sand, top ____ ft. MSL or 1.0 ft.
G. Filter pack, top ____ ft. MSL or 2.0 ft.
H. Screen joint, top ____ ft. MSL or 3.0 ft.
I. Well bottom ____ ft. MSL or 13.0 ft.
J. Filter pack, bottom ____ ft. MSL or 13.0 ft.
K. Borehole, bottom ____ ft. MSL or 14.0 ft.
L. Borehole, diameter 8.3 in.
M. O.D. well casing 2.25 in.
N. I.D. well casing 2.00 in.



1. Cap and lock? ☒ Yes ☐ No
2. Protective cover pipe:
a. Inside diameter: 4.0 in.
b. Length: 4.0 ft.
c. Material: Steel ☒ 04 / ____ 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. #4000 __
b. Volume added ____ ft^3
8. Filter pack material: Manufacturer, product name & mesh size
a. #5 __
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: S Orzuski | Firm: Sigma Environmental Services, Inc., 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: 8716 N. Grandville Road	Local Grid Location of Well: ☐ N. ☐ S. ____ ft. ☐ E. ☐ W. ____ ft.	Well Name: MW-34S-N
Facility License, Permit or Monitoring No.: -	Local Grid Origin ☐ (estimated: ☐) or Well Location ☐ Lat. ° ' " Long. ° ' " or	Wis. Unique Well No.: VN622 / DNR Well Number:
Facility ID	St. Plane ____ ft. N, ____ ft. E. S/C/N	Date Well Installed: 03/28/2013
Type of Well: Well Code 11/mw	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): Brian GESTRA
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 ____ ft. MSL

B. Well casing, top elevation ____ ft. MSL

C. Land surface elevation ____ ft. MSL

D. Surface seal, bottom ____ ft. MSL or 1.0 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 ☐ 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):

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

F. Fine sand, top ____ ft. MSL or 1.0 ft.

G. Filter pack, top ____ ft. MSL or 2.0 ft.

H. Screen joint, top ____ ft. MSL or 3.0 ft.

I. Well bottom ____ ft. MSL or 13.0 ft.

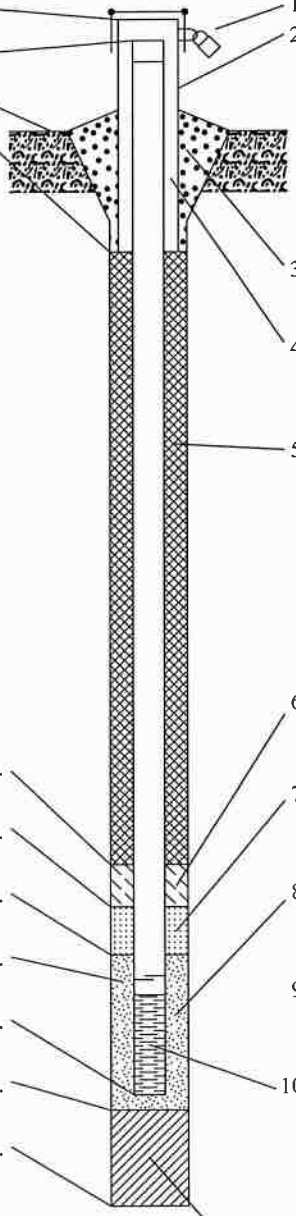
J. Filter pack, bottom ____ ft. MSL or 13.0 ft.

K. Borehole, bottom ____ ft. MSL or 14.0 ft.

L. Borehole, diameter 8.3 in.

M. O.D. well casing 2.25 in.

N. I.D. well casing 2.00 in.



1. Cap and lock? ☒ Yes ☐ No
2. Protective cover pipe:
a. Inside diameter: 4.0 in.
b. Length: 4.0 ft.
c. Material: 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. #4000 __
b. Volume added ____ ft^3
8. Filter pack material: Manufacturer, product name & mesh size
a. #5 __
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	
S Oswald	Sigma Environmental Services, Inc. 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.

APPENDIX B

LABORATORY ANALYTICAL REPORTS

Synergy Environmental Lab, INC.

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

STACY OSZUSCIK/MAFISUL ISLAM
SIGMA ENVIRONMMENTAL
1300 W. CANAL STREET
MILWAUKEE, WI 53233

Report Date *16-Apr-13*

Project Name MOSS-AMERICA **Invoice #** E24979
Project # 13701

Lab Code 5024979A
Sample ID COMPOSITE 1
Sample Matrix Soil
Sample Date 3/28/2013

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Inorganic										
Metals										
TCLP Arsenic	< 0.05	mg/l	0.05		1	6010B		4/9/2013	ESC	1
TCLP Barium	0.87	mg/l	0.15		1	6010B		4/9/2013	ESC	1
TCLP Cadmium	< 0.05	mg/l	0.05		1	6010B		4/9/2013	ESC	1
TCLP Chromium	< 0.05	mg/l	0.05		1	6010B		4/9/2013	ESC	1
TCLP Copper	< 0.05	mg/l	0.05		1	6010B		4/9/2013	ESC	1
TCLP Lead	< 0.05	mg/l	0.05		1	6010B		4/9/2013	ESC	1
TCLP Mercury	< 0.001	mg/l	0.001		1	7470A		4/8/2013	ESC	1
TCLP Nickel	< 0.05	mg/l	0.05		1	6010B		4/9/2013	ESC	1
TCLP Selenium	< 0.05	mg/l	0.05		1	6010B		4/9/2013	ESC	1
TCLP Silver	< 0.05	mg/l	0.05		1	6010B		4/9/2013	ESC	1
TCLP Zinc	0.13	mg/l	0.05		1	6010B		4/9/2013	ESC	1
Organic										
PCB'S										
PCB-1016	< 0.0065	mg/kg	0.0065	0.017	1	EPA 8082A		4/9/2013	ESC	1
PCB-1221	< 0.0054	mg/kg	0.0054	0.017	1	EPA 8082A		4/9/2013	ESC	1
PCB-1232	< 0.0042	mg/kg	0.0042	0.017	1	EPA 8082A		4/9/2013	ESC	1
PCB-1242	< 0.0032	mg/kg	0.0032	0.017	1	EPA 8082A		4/9/2013	ESC	1
PCB-1248	< 0.0032	mg/kg	0.0032	0.017	1	EPA 8082A		4/9/2013	ESC	1
PCB-1254	< 0.0047	mg/kg	0.0047	0.017	1	EPA 8082A		4/9/2013	ESC	1
PCB-1260	< 0.0049	mg/kg	0.0049	0.017	1	EPA 8082A		4/9/2013	ESC	1
TCLP SVOC's										
TCLP o-Cresol	< 0.1	mg/l	0.1		1	8270C		4/10/2013	ESC	1
TCLP m & p-Cresol	< 0.1	mg/l	0.1		1	8270C		4/10/2013	ESC	1
TCLP 1,4-Dichlorobenzene	< 0.1	mg/l	0.1		1	8270C		4/10/2013	ESC	1
TCLP 2,4-Dinitrotoluene	< 0.1	mg/l	0.1		1	8270C		4/10/2013	ESC	1
TCLP Hexachlorobenzene	< 0.1	mg/l	0.1		1	8270C		4/10/2013	ESC	1
TCLP Hexachlorobutadiene	< 0.1	mg/l	0.1		1	8270C		4/10/2013	ESC	1
TCLP Hexachloroethane	< 0.1	mg/l	0.1		1	8270C		4/10/2013	ESC	1
TCLP Nitrobenzene	< 0.1	mg/l	0.1		1	8270C		4/10/2013	ESC	1
TCLP Pentachlorophenol	< 0.1	mg/l	0.1		1	8270C		4/10/2013	ESC	1
TCLP Phenol	< 0.1	mg/l	0.1		1	8270C		4/10/2013	ESC	1

Project Name MOSS-AMERICA **Invoice #** E24979
Project # 13701

Lab Code 5024979A
Sample ID COMPOSITE 1
Sample Matrix Soil
Sample Date 3/28/2013

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
TCLP Pyridine	< 0.1	mg/l	0.1		1	8270C		4/10/2013	ESC	1
TCLP 2,4,6-Trichlorophenol	< 0.1	mg/l	0.1		1	8270C		4/10/2013	ESC	1
TCLP 2,4,5-Trichlorophenol	< 0.1	mg/l	0.1		1	8270C		4/10/2013	ESC	1
TCLP VOC's										
TCLP Benzene	< 0.05	mg/l	0.05		1	8260B		4/6/2013	ESC	1
TCLP Carbon Tetrachloride	< 0.05	mg/l	0.05		1	8260B		4/6/2013	ESC	1
TCLP Chlorobenzene	< 0.05	mg/l	0.05		1	8260B		4/6/2013	ESC	1
TCLP Chloroform	< 0.25	mg/l	0.25		1	8260B		4/6/2013	ESC	1
TCLP 1,2-Dichloroethane	< 0.05	mg/l	0.05		1	8260B		4/6/2013	ESC	1
TCLP 1,1-Dichloroethene	< 0.05	mg/l	0.05		1	8260B		4/6/2013	ESC	1
TCLP Methyl Ethyl Ketone	< 0.5	mg/l	0.5		1	8260B		4/6/2013	ESC	1
TCLP Tetrachloroethene	< 0.05	mg/l	0.05		1	8260B		4/6/2013	ESC	1
TCLP Trichloroethene	< 0.05	mg/l	0.05		1	8260B		4/6/2013	ESC	1
TCLP Vinyl Chloride	< 0.05	mg/l	0.05		1	8260B		4/6/2013	ESC	1
Wet Chemistry										
General										
Free Liquid	None				1	9095A		4/11/2013	ESC	1
Reactive Cyanide	< 0.125	mg/kg	0.125	0.125	1	9012B		4/8/2013	ESC	1
Reactive Sulfide	49	mg/kg	25	25	1	EPA 9034		4/5/2013	ESC	1
Specific Gravity	2.1	g/cm3			1	2710F		4/4/2013	ESC	1
Solids, Total %	85.4	%			1	2540G		4/6/2013	ESC	1
pH	8.4	su			1	EPA 9045D		4/9/2013	ESC	1
Chlorides	60	mg/kg	0.8	10	1	9056		4/5/2013	ESC	1
Flash Point	> 170	Deg. F			1	D93		4/9/2013	ESC	1

Lab Code 5024979B
Sample ID MW-7S-W (4-6')
Sample Matrix Soil
Sample Date 3/28/2013

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
General										
General										
Solids Percent	92.4	%			1	5021		4/4/2013	MDK	1
Organic										
BTEX										
Benzene	< 25	ug/kg	7.9	25	1	GRO95/8021		4/5/2013	CJR	1
Ethylbenzene	< 25	ug/kg	7.7	25	1	GRO95/8021		4/5/2013	CJR	1
Toluene	< 25	ug/kg	8.4	27	1	GRO95/8021		4/5/2013	CJR	1
m&p-Xylene	< 50	ug/kg	16	50	1	GRO95/8021		4/5/2013	CJR	1
o-Xylene	< 25	ug/kg	10	32	1	GRO95/8021		4/5/2013	CJR	1
PAH SIM										
Acenaphthene	47000	ug/kg	436	1386	20	M8270D	4/4/2013	4/5/2013	MDK	1
Acenaphthylene	520 "J"	ug/kg	384	1218	20	M8270D	4/4/2013	4/5/2013	MDK	1
Anthracene	30700	ug/kg	390	1242	20	M8270D	4/4/2013	4/5/2013	MDK	1
Benzo(a)anthracene	11100	ug/kg	458	1458	20	M8270D	4/4/2013	4/5/2013	MDK	1
Benzo(a)pyrene	2720	ug/kg	348	1106	20	M8270D	4/4/2013	4/5/2013	MDK	1
Benzo(b)fluoranthene	5400	ug/kg	392	1246	20	M8270D	4/4/2013	4/5/2013	MDK	1
Benzo(g,h,i)perylene	740 "J"	ug/kg	454	1444	20	M8270D	4/4/2013	4/5/2013	MDK	1
Benzo(k)fluoranthene	2260	ug/kg	432	1376	20	M8270D	4/4/2013	4/5/2013	MDK	1
Chrysene	9300	ug/kg	362	1154	20	M8270D	4/4/2013	4/5/2013	MDK	1
Dibenzo(a,h)anthracene	< 446	ug/kg	446	1420	20	M8270D	4/4/2013	4/5/2013	MDK	1
Fluoranthene	69000	ug/kg	422	1344	20	M8270D	4/4/2013	4/5/2013	MDK	1
Fluorene	47000	ug/kg	444	1412	20	M8270D	4/4/2013	4/5/2013	MDK	1
Indeno(1,2,3-cd)pyrene	710 "J"	ug/kg	478	1522	20	M8270D	4/4/2013	4/5/2013	MDK	1
1-Methyl naphthalene	13200	ug/kg	414	1316	20	M8270D	4/4/2013	4/5/2013	MDK	1
2-Methyl naphthalene	< 412	ug/kg	412	1308	20	M8270D	4/4/2013	4/5/2013	MDK	1

Project Name MOSS-AMERICA **Invoice #** E24979
Project # 13701

Lab Code 5024979B
Sample ID MW-7S-W (4-6')
Sample Matrix Soil
Sample Date 3/28/2013

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Naphthalene	1050 "J"	ug/kg	442	1404	20	M8270D	4/4/2013	4/5/2013	MDK	1
Phenanthrene	142000	ug/kg	448	1422	20	M8270D	4/4/2013	4/5/2013	MDK	1
Pyrene	46000	ug/kg	462	1472	20	M8270D	4/4/2013	4/5/2013	MDK	1

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

Code	*Comment*
1	Laboratory QC within limits.

ESC denotes sub contract lab - Certification #998093910

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

CHAIN OF CUSTODY RECORD

Synergy Environmental Lab, Inc.

1990 Prospect Ct. • Appleton, WI 54914
920-830-2455 • FAX 920-733-0631

Chain # No 0457

Page 1 of 1

Sample Handling Request
___ Rush Analysis Date Required ____
(Rushes accepted only with prior authorization)
X Normal Turn Around

Lab I.D. #

Account No. : **Quote No.:**

Project #: 13701

Sampler: (signature) B Oszusik

Project (Name / Location): Moss-America / 8716 N. Grandville Rd, MKE, WI

Reports To: Stacy Oszusik + Mafizul Islam	Invoice To: Mafizul Islam
Company The Sigma Group	Company SAME
Address 1300 W. Canal St.	Address
City State Zip MKE, WI 53233	City State Zip
Phone 414-643-4200	Phone
FAX 414-643-4210	FAX

Analysis Requested | **Other Analysis**

Lab I.D.	Sample I.D.	Collection Date	Collection Time	Comp	Grab	Filtered Y/N	No. of Containers	Sample Type (Matrix)*	Preservation	DRO (Mod DRO Sep 95)	GRO (Mod GRO Sep 95)	IRON	LEAD	NITRATE / NITRITE	PAH (EPA 8270)	PVOC (EPA 8021)	PVOC + NAPHTHALENE	SULFATE	VOC DW (EPA 524.2)	VOC (EPA 8260)	8-RCRA METALS	Protocol B	BTEX	PID/ FID
502499 A	Composite 1	3-28	3pm	X		N	6	Soil	—													X		0
B	MW-7S-W (4-6')	3-29	9am		X	N	2	Soil	—						X								X	0

Comments/Special Instructions (*Specify groundwater "GW", Drinking Water "DW", Waste Water "WW", Soil "S", Air "A", Oil, Sludge etc.)

Note: product was seen and smelt in sample MW-7S-W (4-6')

Sample Integrity - To be completed by receiving lab.
Method of Shipment : Driven
Temp. of Temp. Blank. ___ °C On Ice X
Cooler seal intact upon receipt: X Yes ___ No

Relinquished By: (sign)	Time	Date	Received By: (sign)	Time	Date
B Oszusik	9:20 am	3-29-13	X held for weekend - Easter		
B Oszusik	7:30 am	4-1-13			

Received in Laboratory By: Mark Kruse Time: 8:30 Date: 4-2-13

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ANALYTICAL REPORT

SIGMA
MAFIZUL ISLAM
1300 W CANAL STREET
MILWAUKEE, WI 53233

Project Name: MOSS AMERICAN
Project Phase:
Contract #: 2582
Project #: 13701
Folder #: 96399
Purchase Order #: 13701

Arrival Temperature: See COC
Report Date: 4/29/2013
Date Received: 4/4/2013
Reprint Date: 4/29/2013

CT LAB Sample#: 280995 Sample Description: TG1-3 Sampled: 4/3/2013 1012

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Inorganic Results										
BOD 5-Day	**7.2**	mg/L	2.0	N/A	1		4/4/2013 17:00	4/9/2013 14:09	LJS	SM 5210B
Total COD	**66**	mg/L	13	42	1		4/15/2013 12:00	4/15/2013 17:35	LJS	EPA 410.4
Total Kjeldahl Nitrogen	**1.8**	mg/L	0.40	1.4	1		4/9/2013 15:00	4/11/2013 12:46	LJS	ASTM D3590
Total Phosphorus	**0.31**	mg/L	0.13 *	0.43	1			4/10/2013 16:35	EJC	EPA 365.1
Heterotrophic Plate Count	**250000**	cfu/L	20.0		1			4/4/2013 12:00	CES	SM 9215D
Ammonia Nitrogen Total	**0.93**	mg/L	0.040	0.14	1	M		4/12/2013 12:10	MML	SM 4500-NH3H
Total Organic Carbon	**14**	mg/L	0.40	1.2	1			4/8/2013 19:48	BMS	EPA 9060A
Nitrate Nitrogen Total	**0.17**	mg/L	0.080 *	0.28	1			4/4/2013 12:03	MML	EPA 300.0
Nitrite Nitrogen Total	<0.040	mg/L	0.040	0.12	1			4/4/2013 12:03	MML	EPA 300.0
Orthophosphate Total	<0.18	mg/L	0.18	0.59	1			4/4/2013 12:03	MML	EPA 300.0
Sub Lab Results										
Petroleum Deg. Count	**ATTACHED**		N/A	N/A	1			4/29/2013 00:00	PML	

Solid sample results reported on a Dry Weight Basis

CT LAB Sample#: 280997 Sample Description: TG2-1 Sampled: 4/3/2013 1025

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Inorganic Results										
BOD 5-Day	<2.0	mg/L	2.0	N/A	1		4/4/2013 17:00	4/9/2013 14:09	LJS	SM 5210B
Total COD	<13	mg/L	13	42	1		4/15/2013 12:00	4/15/2013 17:35	LJS	EPA 410.4
Total Kjeldahl Nitrogen	<0.40	mg/L	0.40	1.4	1		4/9/2013 15:00	4/11/2013 12:50	LJS	ASTM D3590
Total Phosphorus	**0.16**	mg/L	0.13 *	0.43	1			4/10/2013 16:42	EJC	EPA 365.1
Heterotrophic Plate Count	**550000**	cfu/L	20.0		1			4/4/2013 12:00	CES	SM 9215D
Ammonia Nitrogen Total	<0.040	mg/L	0.040	0.14	1			4/12/2013 12:13	MML	SM 4500-NH3H
Total Organic Carbon	**5.6**	mg/L	0.40	1.2	1			4/8/2013 20:01	BMS	EPA 9060A
Nitrate Nitrogen Total	<0.080	mg/L	0.080	0.28	1			4/4/2013 12:22	MML	EPA 300.0
Nitrite Nitrogen Total	<0.040	mg/L	0.040	0.12	1			4/4/2013 12:22	MML	EPA 300.0
Orthophosphate Total	<0.18	mg/L	0.18	0.59	1			4/4/2013 12:22	MML	EPA 300.0
Sub Lab Results										
Petroleum Deg. Count	**ATTACHED**		N/A	N/A	1			4/29/2013 00:00	PML	

CT LAB Sample#: 280998 Sample Description: TG3-1 Sampled: 4/3/2013 1100

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Inorganic Results										
BOD 5-Day	**3.5**	mg/L	2.0	N/A	1		4/4/2013 17:00	4/9/2013 14:09	LJS	SM 5210B
Total COD	**42**	mg/L	13	42	1		4/15/2013 12:00	4/15/2013 17:35	LJS	EPA 410.4
Total Kjeldahl Nitrogen	**0.85**	mg/L	0.40 *	1.4	1		4/9/2013 15:00	4/11/2013 12:51	LJS	ASTM D3590
Total Phosphorus	**1.6**	mg/L	0.13	0.43	1			4/10/2013 16:44	EJC	EPA 365.1
Heterotrophic Plate Count	**500000**	cfu/L	20.0		1			4/4/2013 12:00	CES	SM 9215D
Ammonia Nitrogen Total	**0.32**	mg/L	0.040	0.14	1			4/12/2013 12:14	MML	SM 4500-NH3H

Solid sample results reported on a Dry Weight Basis

CT LAB Sample#: 280998 Sample Description: TG3-1 Sampled: 4/3/2013 1100

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Total Organic Carbon	**24**	mg/L	0.40	1.2	1			4/8/2013 20:14	BMS	EPA 9060A
Nitrate Nitrogen Total	**0.21**	mg/L	0.080 *	0.28	1			4/4/2013 12:40	MML	EPA 300.0
Nitrite Nitrogen Total	<0.040	mg/L	0.040	0.12	1			4/4/2013 12:40	MML	EPA 300.0
Orthophosphate Total	<0.18	mg/L	0.18	0.59	1			4/4/2013 12:40	MML	EPA 300.0
Sub Lab Results										
Petroleum Deg. Count	**ATTACHED**		N/A	N/A	1			4/29/2013 00:00	PML	

CT LAB Sample#: 280999 Sample Description: TG4-3 Sampled: 4/3/2013 1305

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Inorganic Results										
BOD 5-Day	<2.0	mg/L	2.0	N/A	1	Q	4/4/2013 17:00	4/9/2013 14:09	LJS	SM 5210B
Total COD	**20**	mg/L	13 *	42	1		4/15/2013 12:00	4/15/2013 17:35	LJS	EPA 410.4
Total Kjeldahl Nitrogen	**0.78**	mg/L	0.40 *	1.4	1		4/9/2013 15:00	4/11/2013 12:52	LJS	ASTM D3590
Total Phosphorus	**0.29**	mg/L	0.13 *	0.43	1			4/10/2013 16:46	EJC	EPA 365.1
Heterotrophic Plate Count	**66000**	cfu/L	20.0		1			4/4/2013 12:00	CES	SM 9215D
Ammonia Nitrogen Total	**0.44**	mg/L	0.040	0.14	1			4/12/2013 12:16	MML	SM 4500-NH3H
Total Organic Carbon	**13**	mg/L	0.40	1.2	1			4/8/2013 20:53	BMS	EPA 9060A
Nitrate Nitrogen Total	**0.19**	mg/L	0.080 *	0.28	1			4/4/2013 12:59	MML	EPA 300.0
Nitrite Nitrogen Total	<0.040	mg/L	0.040	0.12	1			4/4/2013 12:59	MML	EPA 300.0
Orthophosphate Total	<0.18	mg/L	0.18	0.59	1			4/4/2013 12:59	MML	EPA 300.0
Sub Lab Results										
Petroleum Deg. Count	**ATTACHED**		N/A	N/A	1			4/29/2013 00:00	PML	

Solid sample results reported on a Dry Weight Basis

CT LAB Sample#: 281000 Sample Description: TG5-1 Sampled: 4/3/2013 1258

Analyte	Result	Units	LOD		LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Inorganic Results											
BOD 5-Day	<2.0	mg/L	2.0		N/A	1	Q	4/4/2013 17:00	4/9/2013 14:09	LJS	SM 5210B
Total COD	**16**	mg/L	13	*	42	1		4/15/2013 12:00	4/15/2013 17:35	LJS	EPA 410.4
Total Kjeldahl Nitrogen	<0.40	mg/L	0.40		1.4	1		4/9/2013 15:00	4/11/2013 12:56	LJS	ASTM D3590
Total Phosphorus	**0.17**	mg/L	0.13	*	0.43	1			4/10/2013 16:48	EJC	EPA 365.1
Heterotrophic Plate Count	**120000**	cfu/L	20.0			1			4/4/2013 12:00	CES	SM 9215D
Ammonia Nitrogen Total	<0.040	mg/L	0.040		0.14	1			4/12/2013 12:17	MML	SM 4500-NH3H
Total Organic Carbon	**7.5**	mg/L	0.40		1.2	1			4/8/2013 21:48	BMS	EPA 9060A
Nitrate Nitrogen Total	<0.080	mg/L	0.080		0.28	1			4/4/2013 13:17	MML	EPA 300.0
Nitrite Nitrogen Total	<0.040	mg/L	0.040		0.12	1			4/4/2013 13:17	MML	EPA 300.0
Orthophosphate Total	<0.18	mg/L	0.18		0.59	1			4/4/2013 13:17	MML	EPA 300.0
Sub Lab Results											
Petroleum Deg. Count	**ATTACHED**		N/A		N/A	1			4/29/2013 00:00	PML	

CT LAB Sample#: 281001 Sample Description: TG5-3 Sampled: 4/3/2013 1250

Analyte	Result	Units	LOD		LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Inorganic Results											
BOD 5-Day	**2.0**	mg/L	2.0		N/A	1	Q	4/4/2013 17:00	4/9/2013 14:09	LJS	SM 5210B
Total COD	**15**	mg/L	13	*	42	1		4/15/2013 12:00	4/15/2013 17:35	LJS	EPA 410.4
Total Kjeldahl Nitrogen	**1.1**	mg/L	0.40	*	1.4	1		4/9/2013 15:00	4/11/2013 12:57	LJS	ASTM D3590
Total Phosphorus	**0.17**	mg/L	0.13	*	0.43	1			4/10/2013 16:50	EJC	EPA 365.1
Heterotrophic Plate Count	**11000**	cfu/L	20.0			1			4/4/2013 12:00	CES	SM 9215D
Ammonia Nitrogen Total	**0.30**	mg/L	0.040		0.14	1			4/12/2013 12:22	MML	SM 4500-NH3H

Solid sample results reported on a Dry Weight Basis

CT LAB Sample#: 281001 Sample Description: TG5-3 Sampled: 4/3/2013 1250

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Total Organic Carbon	**13**	mg/L	0.40	1.2	1			4/8/2013 22:00	BMS	EPA 9060A
Nitrate Nitrogen Total	**0.18**	mg/L	0.080 *	0.28	1			4/4/2013 13:36	MML	EPA 300.0
Nitrite Nitrogen Total	<0.040	mg/L	0.040	0.12	1			4/4/2013 13:36	MML	EPA 300.0
Orthophosphate Total	<0.18	mg/L	0.18	0.59	1			4/4/2013 13:36	MML	EPA 300.0
Sub Lab Results										
Petroleum Deg. Count	**ATTACHED**		N/A	N/A	1			4/29/2013 00:00	PML	

CT LAB Sample#: 281002 Sample Description: TG6-1 Sampled: 4/3/2013 1230

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Inorganic Results										
BOD 5-Day	**4.7**	mg/L	2.0	N/A	1	Q	4/4/2013 17:00	4/9/2013 14:09	LJS	SM 5210B
Total COD	**19**	mg/L	13 *	42	1		4/15/2013 12:00	4/15/2013 17:35	LJS	EPA 410.4
Total Kjeldahl Nitrogen	**1.3**	mg/L	0.40 *	1.4	1		4/9/2013 15:00	4/11/2013 12:58	LJS	ASTM D3590
Total Phosphorus	**0.14**	mg/L	0.13 *	0.43	1			4/10/2013 16:56	EJC	EPA 365.1
Heterotrophic Plate Count	**620000**	cfu/L	20.0		1			4/4/2013 12:00	CES	SM 9215D
Ammonia Nitrogen Total	**0.64**	mg/L	0.040	0.14	1			4/12/2013 12:23	MML	SM 4500-NH3H
Total Organic Carbon	**4.2**	mg/L	0.40	1.2	1			4/8/2013 22:13	BMS	EPA 9060A
Nitrate Nitrogen Total	**0.18**	mg/L	0.080 *	0.28	1			4/4/2013 13:54	MML	EPA 300.0
Nitrite Nitrogen Total	<0.040	mg/L	0.040	0.12	1			4/4/2013 13:54	MML	EPA 300.0
Orthophosphate Total	<0.18	mg/L	0.18	0.59	1			4/4/2013 13:54	MML	EPA 300.0
Sub Lab Results										
Petroleum Deg. Count	**ATTACHED**		N/A	N/A	1			4/29/2013 00:00	PML	

Solid sample results reported on a Dry Weight Basis

CT LAB Sample#: 281003 Sample Description: TG6-3 Sampled: 4/3/2013 1240

Analyte	Result	Units	LOD		LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Inorganic Results											
BOD 5-Day	<2.0	mg/L	2.0		N/A	1	Q	4/4/2013 17:00	4/9/2013 14:09	LJS	SM 5210B
Total COD	**38**	mg/L	13	*	42	1		4/15/2013 12:00	4/15/2013 17:35	LJS	EPA 410.4
Total Kjeldahl Nitrogen	**0.66**	mg/L	0.40	*	1.4	1		4/9/2013 15:00	4/11/2013 12:59	LJS	ASTM D3590
Total Phosphorus	**0.18**	mg/L	0.13	*	0.43	1			4/10/2013 16:59	EJC	EPA 365.1
Heterotrophic Plate Count	**150000**	cfu/L	20.0			1			4/4/2013 12:00	CES	SM 9215D
Ammonia Nitrogen Total	**0.38**	mg/L	0.040		0.14	1			4/12/2013 12:24	MML	SM 4500-NH3H
Total Organic Carbon	**20**	mg/L	0.40		1.2	1			4/8/2013 22:24	BMS	EPA 9060A
Nitrate Nitrogen Total	**0.19**	mg/L	0.080	*	0.28	1			4/4/2013 14:13	MML	EPA 300.0
Nitrite Nitrogen Total	<0.040	mg/L	0.040		0.12	1			4/4/2013 14:13	MML	EPA 300.0
Orthophosphate Total	<0.18	mg/L	0.18		0.59	1			4/4/2013 14:13	MML	EPA 300.0
Sub Lab Results											
Petroleum Deg. Count	**ATTACHED**		N/A		N/A	1			4/29/2013 00:00	PML	

CT LAB Sample#: 281004 Sample Description: TG1-1 Sampled: 4/3/2013 1407

Analyte	Result	Units	LOD		LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Inorganic Results											
BOD 5-Day	**7.0**	mg/L	2.0		N/A	1	Q	4/4/2013 17:00	4/9/2013 14:09	LJS	SM 5210B
Total COD	**51**	mg/L	13		42	1		4/15/2013 12:00	4/15/2013 17:35	LJS	EPA 410.4
Total Kjeldahl Nitrogen	**1.6**	mg/L	0.40		1.4	1		4/9/2013 15:00	4/11/2013 13:01	LJS	ASTM D3590
Total Phosphorus	<0.13	mg/L	0.13		0.43	1			4/10/2013 17:01	EJC	EPA 365.1
Heterotrophic Plate Count	**300000**	cfu/L	20.0			1			4/4/2013 12:00	CES	SM 9215D
Ammonia Nitrogen Total	**0.40**	mg/L	0.040		0.14	1			4/12/2013 12:25	MML	SM 4500-NH3H

Solid sample results reported on a Dry Weight Basis

CT LAB Sample#: 281004 Sample Description: TG1-1 Sampled: 4/3/2013 1407

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Total Organic Carbon	**14**	mg/L	0.40	1.2	1			4/8/2013 22:37	BMS	EPA 9060A
Nitrate Nitrogen Total	<0.080	mg/L	0.080	0.28	1			4/4/2013 14:31	MML	EPA 300.0
Nitrite Nitrogen Total	<0.040	mg/L	0.040	0.12	1			4/4/2013 14:31	MML	EPA 300.0
Orthophosphate Total	<0.18	mg/L	0.18	0.59	1			4/4/2013 14:31	MML	EPA 300.0
Sub Lab Results										
Petroleum Deg. Count	**ATTACHED**		N/A	N/A	1			4/29/2013 00:00	PML	

Solid sample results reported on a Dry Weight Basis

Notes: * Indicates Value in between the LOD (limit of detection) and the LOQ (limit of quantitation).

All samples were received intact and properly preserved unless otherwise noted. The results reported relate only to the samples tested. This report shall not be reproduced, except in full, without written approval of this laboratory. The Chain of Custody is attached.

Submitted by: Pat M. Letterer
Project Manager
608-356-2760

QC Qualifiers

Code	Description
B	Analyte detected in the associated Method Blank.
C	Toxicity present in BOD sample.
D	Diluted Out.
E	Safe, No Total Coliform detected.
F	Unsafe, Total Coliform detected, no E. Coli detected.
G	Unsafe, Total Coliform detected and E. Coli detected.
H	Holding time exceeded.
J	Estimated value.
L	Significant peaks were detected outside the chromatographic window.
M	Matrix spike and/or Matrix Spike Duplicate recovery outside acceptance limits.
N	Insufficient BOD oxygen depletion.
O	Complete BOD oxygen depletion.
P	Concentration of analyte differs more than 40% between primary and confirmation analysis.
Q	Laboratory Control Sample outside acceptance limits.
R	See Narrative at end of report.
S	Surrogate standard recovery outside acceptance limits due to apparent matrix effects.
T	Sample received with improper preservation or temperature.
U	Analyte concentration was below detection limit.
V	Raised Quantitation or Reporting Limit due to limited sample amount or dilution for matrix background interference.
W	Sample amount received was below program minimum.
X	Analyte exceeded calibration range.
Y	Replicate/Duplicate precision outside acceptance limits.
Z	Specified calibration criteria was not met.

Current CT Laboratories Certifications

Illinois NELAP ID# 002413
Kansas NELAP ID# E-10368
Kentucky ID# 0023
Pennsylvania NELAP ID# 68-04201
New Jersey NELAP ID# WI001
North Carolina ID# 674
Wisconsin (WDNR) Chemistry ID# 157066030
Wisconsin (DATCP) Bacteriology ID# 105-289
DoD-ELAP A2LA Cert # 3317.013
Alaska ID # UST-099
Louisiana ID # 115843
Virginia ID# 460203
ISO/IEC 17025-2005 A2LA Cert # 3317.01
GA EPD Stipulation ID 115843, Exp 6-30-13

Terra Systems
INCORPORATED

April 26, 2013

Dennis Linley
CT Laboratories
1230 Lange Ct.
Baraboo, WI 53913

RE: Hydrocarbon-Utilizer Count Report for Moss-American Samples Collected from 1300 W. Canal Street, Milwaukee, WI on April 3, 2013

Dear Dennis

Attached is the analytical report for hydrocarbon-utilizing microbial counts for the Moss-American Samples collected from 1300 W. Canal Street, Milwaukee, WI site on April 3, 2013. The samples were received at Terra Systems, Inc. on April 4, 2013. The counts of diesel-utilizing bacteria ranged from low to moderate, 1.2×10^2 in TG6-3 to 3.6×10^4 colony-forming units (CFU/mL) in TG6-1. The groundwater contains low to moderate numbers of microorganisms capable of degrading hydrocarbon contaminants under aerobic conditions.

Please let us know if you have any questions about these microbial counts or if I can be of further assistance on this project.

Sincerely,
TERRA SYSTEMS, INC.

Michael D Lee, PhD.

Michael D. Lee, Ph.D.
Vice-President Research and Development

130 Hickman Road ● Suite 1 ● Claymont Delaware 19703 ● 302-798-9553 ● Fax 302-798-9554
● www.terrasystems.net

Dennis Linley
CT Laboratories
1230 Lange Ct.
Baraboo, WI 53913

Sample Collected: April 3, 2013
Sample Received: April 4, 2013
Sample Location: Sigma Environmental Moss-American

HYDROCARBON-UTILIZERS
MINERAL AGAR

DESCRIPTION	MATRIX	RESULT
TG1-1	Groundwater	1.6×10^2 CFU/mL
TG1-3	Groundwater	1.3×10^2 CFU/mL
TG2-1	Groundwater	8.0×10^3 CFU/mL
TG3-1	Groundwater	2.2×10^4 CFU/mL
TG4-3	Groundwater	2.0×10^3 CFU/mL
TG5-1	Groundwater	3.8×10^3 CFU/mL
TG5-3	Groundwater	1.0×10^3 CFU/mL
TG6-1	Groundwater	3.6×10^4 CFU/mL
TG6-3	Groundwater	1.2×10^2 CFU/mL

Diesel vapors supported the growth of hydrocarbon-utilizing bacteria that were plated on Noble Agar, a washed agar with very low organic content, which was amended with inorganic nutrients.

Respectfully submitted,

Michael D Lee, PhD.

Michael D. Lee, Ph.D.
Laboratory Manager
Terra Systems, Inc.

No. __1 of 1

TERRA SYSTEMS, INC.

130 Hickman Road, Suite 1, Claymont, DE 19703 phone 302-798-9553 fax 302-798-9554

Chain of Custody

Client: SIGMA ENVIRONMENTAL Project Name: MOSS-AMERICAN

Project Description: MOSS-AMERICAN Project Manager/Contact: MAFIZUL ISLAM

Location: 1300 W. CANAL ST. MILWAUKEE, WI 53233 Phone: 414-643-4125

Sampler: TOM McCOY

Lot:

Date	Time	Sample Identification	Sample Technique	Matrix	Preservative	Container Type	Number of Containers	Parameters for Analysis: Sub Petroleum Degraders	Remarks
4/3/13	10:12	TG1-3		GW	None	100 ml sterile	1	X	
4/3/13	10:25	TG2-1		GW	None	"	1	X	
4/3/13	11:00	TG3-1		GW	None	"	1	X	
4/3/13	13:05	TG4-3		GW	None	"	1	X	
4/3/13	12:58	TG5-1		GW	None	"	1	X	
4/3/13	12:50	TG5-3		GW	None	"	1	X	
4/3/13	12:30	TG6-1		GW	None	"	1	X	
4/3/13	12:40	TG6-3		GW	None	"	1	X	
4/3/13	14:05	TG1-1		GW	None	"	1	X	

Relinquished by (signature)	Date/time	Received by (signature)	Date/time
[signature]	4/3/13 16:30	[signature]	9/4/13 10:19

Shipped to:

Date/time:

Carrier/Airbill number:

Cooler Temperature: °C pH: Comments:

Rev. 2/2013

CHAIN OF CUSTODY

Page 1 of 1

Company: Sigma Environmental
Project Contact: Mafizul Islam
Telephone: 414-643-4125
Project Name: Moss-America
Project #: 13701
Location: Milwaukee, WI
Sampled By: Tom McCoy

CT LABORATORIES
1230 Lange Court, Baraboo, WI 53913
608-356-2760 Fax 608-356-2766
www.ctlaboratories.com

Folder #: 96399
Company: SIGMA
Project: MOSS AMERICAN
Logged By: JLS PM: PM

Program:
QSM RCRA SDWA NPDES
Solid Waste Other _____

PO # 13701

Report To:
EMAIL: mislam@thesigmagroup.com
Company: Sigma Environmental
Address: 1300 W. Canal Street
Milwaukee, WI 53233
Invoice To:*
EMAIL:
Company: same
Address:

*Party listed is responsible for payment of invoice as per CT Laboratories' terms and conditions

Client Special Instructions

Matrix:
GW – groundwater SW - surface water WW - wastewater DW - drinking water
S - soil/sediment SL - sludge A - air M - misc/waste

Collection Date	Collection Time	Matrix	Grab/ Comp	Sample # (1,2,3, etc)	Sample ID Description	Filtered? Y/N	BOD	Heterotrophic	COD	TOC	NH3	TKN	T Phos	Anions IC Tot 300.0	Total # Containers	Designated MS/MSD	CT Lab ID # (Lab use only)
							ANALYSES REQUESTED (Fill in Spaces with Bottles per Test)										
4/3/13	10:12	GW		1	TG1-3	N	X	X	X	X	X	X	X	X	5		280995
4/3/13	10:25	GW		2	TG2-1	N	X	X	X	X	X	X	X	X	5		280997
4/3/13	11:00	GW		3	TG3-1	N	X	X	X	X	X	X	X	X	5		280998
4/3/13	13:05	GW		8	TG4-3	N	X	X	X	X	X	X	X	X	5		280999
4/3/13	12:58	GW		7	TG5-1	N	X	X	X	X	X	X	X	X	5		281000
4/13/13	12:50	GW		6	TG5-3	N	X	X	X	X	X	X	X	X	5		281001
4/13/13	12:30	GW		4	TG6-1	N	X	X	X	X	X	X	X	X	5		281002
4/3/13	12:40	GW		5	TG6-3	N	X	X	X	X	X	X	X	X	5		281003
4/3/13	14:07	GW		9	TG1-1	N	X	X	X	X	X	X	X	X	5		281004

Turnaround Time
Normal RUSH*
Date Needed: _____
Rush analysis requires prior CT Laboratories' approval
Surcharges:
24 hr 200%
2-3 days 100%
4-9 days 50%

Relinquished By:	Date/Time	Received By:	Date/Time
	4/3/13 16:30		
Received by:	**Date/Time**	**Received for Laboratory by:**	**Date/Time**
			4/4/13 1008

Lab Use Only
Ice Present (Yes) No
Temperature 1.6, 2.1
Cooler # 5124, 5204

4/4/13 0955

CT Laboratories Terms and Conditions

Where a purchaser (Client) places an order for laboratory, consulting or sampling services from CT Laboratories (CTL), CTL shall provide the ordered services pursuant to these Terms and Conditions, and the related Quotation, or as agreed in a negotiated contract. In the absence of a written agreement to the contrary, the Order constitutes an acceptance by the Client of CTL's offer to do business under these Terms and Conditions, and an agreement to be bound by these Terms and Conditions. No contrary or additional terms and conditions expressed in a Client's document shall be deemed to become a part of the contract created upon acceptance of these Terms and Conditions, unless accepted by CTL in advance of the start of the project and in writing.

1. ORDERS AND RECEIPT OF SAMPLES (Sample Acceptance Policy)

1.1 The Client may place the Order (i.e., specify a Scope of Work) either by submitting a purchase order to CTL in writing, by telephone (confirmed in writing) or by negotiated contract. Whichever option the Client selects for placing the Order, the Order shall not be valid unless it contains sufficient specification to enable CTL to carry out the Client's requirements. It is the policy of CT Laboratories that samples not meeting the acceptance criteria, outlined in the NELAC standards and Section 5.8.3.2 of the DOD QSM, will not be accepted by the laboratory or will be qualified on the final report. All samples submitted to the laboratory must: (1) be accompanied by proper, full and complete documentation, including sample identification, location, date and time of collection, the collector's name, type of preservation (if any), type of sample, any special comments concerning the sample and any additional pertinent fields on the chain-of-custody. In the absence of any of the required information, the laboratory will attempt to contact the client to obtain the information; if unable to obtain the necessary information, the final report will be qualified. (2) be labeled appropriately with a unique sample identification written with indelible ink on water resistant labels. If the laboratory cannot determine the identity of a sample, it will be rejected and the client will be contacted for further instructions or resampling. (3) be in an appropriate sample container. If the container is inappropriate, the client will be contacted for further instructions or resampling. If analysis is possible, the final report will be qualified. CT Laboratories can provide a sampling guide containing approved containers and preservations for analytical methods requested. (4) adhere to specified holding times. If samples are received with less than ½ the holding time remaining for the requested test, CT Laboratories will make its best effort to analyze the samples and notify the client. If holding times are exceeded, the final report will be qualified. (5) contain adequate sample volume to perform the necessary testing. If sufficient volume is not present, the sample will be rejected and the client will be contacted for further instructions or resampling. If samples show signs of damage, contamination or inadequate preservation, the client will be notified. If analysis can be performed, the final report will be qualified. If not, the samples will be rejected and the client notified for further instructions or resampling.

1.2 CT Laboratories must be supplied with complete written disclosure of the known or suspected presence of any hazardous substances, as defined by applicable federal or state law. Where any samples which were not accompanied by the required disclosure, cause interruptions in the lab's ability to process work due to contamination of instruments or work areas, the Client will be responsible for the costs of clean up and recovery.

1.3 Prior to Sample Acceptance, the entire risk of loss or damage to samples remains with the Client. In no event will CTL have any responsibility or liability for the action or inaction of any carrier shipping or delivering any sample to or from CTL's premises. Client is responsible to assure that any sample containing any hazardous substance which is to be delivered to CTL's premises will be packaged, labeled, transported and delivered properly and in accordance with applicable laws.

2. PAYMENT TERMS

2.1 Services performed by CTL will be in accordance with prices quoted and later confirmed in writing or as stated in the Price Schedule. Invoices may be submitted to Client upon completion of any sample delivery group. Payment in advance is required for all Clients except those whose credit has been established with CTL. For Clients with approved credit, payment terms are not 30 days from the date of invoice by CTL. All overdue payments are subject to an additional interest and service charge of one and one-half percent (1.5%) (or the maximum rate permissible by law, whichever is lesser) per month or portion thereof from the due date until the date of payment. All fees are charged or billed directly to the Client. The billing of a third party will not be accepted without a statement, signed by the third party that acknowledges and accepts payment responsibility. CTL may suspend work and withhold delivery of data under this order at any time in the event Client fails to make timely payment of its invoices. Client shall be responsible for all costs and expenses of collection including reasonable attorney's fees. CTL reserves the right to refuse to proceed with work at any time based upon an unfavorable Client credit report.

3. CHANGE ORDERS, TERMINATION

3.1 Changes to the Scope of Work, price, or result delivery date may be initiated by CTL after Sample Acceptance due to any condition which conflicts with analytical, QA or other protocols warranted in these Terms and Conditions. CTL will not proceed with such changes until an agreement with the Client is reached on the amount of any cost, schedule change or technical change to the Scope of Work, and such agreement is documented in writing.

3.2 Changes to the Scope of Work, including but not limited to increasing or decreasing the work, changing test and analysis specification or acceleration in the performance of the work may be initiated by the Client after sample acceptance. Such a change will be documented in writing and may result in a change in cost and turnaround time commitment. CTL's acceptance of such changes is contingent upon technical feasibility and operational capacity.

3.3 Suspension or termination of all or any part of the work may be initiated by the Client. CTL will be compensated consistent with Section 2 of these Terms and Conditions. CTL will complete all work in progress and be paid in full for all work completed.

4. WARRANTIES AND LIABILITY

4.1 Where applicable, CTL will use analytical methodologies which are in substantial conformity with published test methods. CTL has implemented these methods in its Laboratory Quality Manuals and referenced Standard Operating Procedures and where the nature or composition of the sample requires it, CTL reserves the right to deviate from these methodologies as necessary or appropriate, based on the reasonable judgment of CTL, which deviations, if any, will be made on a basis consistent with recognized standards of the industry and/or CTL's Laboratory Quality Manuals. Client may request that CTL perform according to a mutually agreed Quality Assurance Project Plan (QAPP). In the event that samples arrive prior to agreement on a QAPP, CTL will proceed with analyses under its standard Quality Manuals then in effect, and CTL will not be responsible for any resampling or other charges if work must be repeated to comply with a subsequently finalized QAPP.

4.2 CTL shall start preparation and/or analysis within holding times provided that Sample Acceptance occurs within 48 hours of sampling or 1/2 of the holding time for the test, whichever is less. Where resolution of inconsistencies leading to Sample Acceptance does not occur within this period, CTL will use its best efforts to meet holding times and will proceed with the work provided that, in CTL's judgment, the chain-of-custody or definition of the Scope of Work provide sufficient guidance. Reanalysis of samples to comply with CTL's Quality Manuals will be deemed to have met holding times provided the initial analysis was performed within the applicable holding time. Where reanalysis demonstrates that sample matrix interference is the cause of failure to meet any Quality Manual requirements, the warranty will be deemed to have been met.

4.3 CTL warrants that it possesses and maintains all licenses and certifications which are required to perform services under these Terms and Conditions provided that such requirements are specified in writing to CTL prior to Sample Acceptance. CTL will notify the Client in writing of any decertification or revocation of any license, or notice of either, which affects work in progress.

4.4 The warranty obligations set forth in Sections 4.1, 4.2 and 4.3 are the sole and exclusive warranties given by CTL in connection with any services performed by CTL or any Results generated from such services, and CTL gives and makes NO OTHER REPRESENTATION OR WARRANTY OF ANY KIND, EXPRESS OR IMPLIED. No representative of CTL is authorized to give or make any other representation or warranty or modify this warranty in any way.

4.5 Client's sole and exclusive remedy for the breach of warranty in connection with any services performed by CTL, will be limited to repeating any services performed, contingent on the Client's providing, at the request of CTL and at the Client's expense, additional sample(s) if necessary. Any reanalysis requested by the Client generating Results consistent with the original Results will be at the Client's expense. If resampling is necessary, CTL's liability for resampling costs will be limited to actual cost or one hundred or one hundred fifty dollars ($150) per sample, whichever is less.

4.6 CTL's liability for any and all causes of action arising hereunder, whether based in contract, tort, warranty, negligence or otherwise, shall be limited to the lesser amount of compensation for the services performed or $100,000. All claims, including those for negligence, shall be deemed waived unless suit thereon is filed within one year after CTL's completion of the services. Under no circumstances, whether arising in contract, tort (including negligence), or otherwise, shall CTL be responsible for loss of use, loss of profits, or for any special, indirect, incidental or consequential damages occasioned by the services performed or by application or use of the reports prepared.

4.7 In no event shall CTL have any responsibility or liability to the Client for any failure or delay in performance by CTL which results, directly or indirectly, in whole or in part, from any cause or circumstance beyond the reasonable control of CTL. Such causes and circumstances shall include, but not be limited to, acts of God, acts of Client, acts or orders of any governmental authority, strikes or other labor disputes, natural disasters, accidents, wars, civil disturbances, equipment breakdown, matrix interference or unknown highly contaminated samples that impact instrument operation, unavailability of supplies from usual suppliers, difficulties or delays in transportation, mail or delivery services, or any other cause beyond CTL's reasonable control.

5. RESULTS, WORK PRODUCT

5.1 Data or information provided to CTL or generated by services performed under this agreement shall only become the property of the Client upon receipt in full by CTL of payment for the whole Order. Ownership of any analytical method, QA/QC protocols, software programs or equipment developed by CTL for performance of work will be retained by CTL, and Client shall not disclose such information to any third party.

5.2 Data and sample materials provided by Client or at Client's request, and the result obtained by CTL shall be held in confidence (unless such information is generally available to the public or is in the public domain or Client has failed to pay CTL for all services rendered or is otherwise in breach of these Terms and Conditions), subject to any disclosure required by law or legal process.

5.3 Should the Results delivered by CTL be used by the Client or Client's client, even though subsequently determined not to meet the warranties described in these Terms and Conditions, then the compensation will be adjusted based upon mutual agreement. In no case shall the Client unreasonably withhold CTL's right to independently defend its data.

5.4 CTL reserves the right to subcontract services ordered by the Client to another laboratory or laboratories, if, in CTL's sole judgment, it is reasonably necessary, appropriate or advisable to do so, and with the Client's permission. CTL will in no way be liable for any subcontracted services and all applicable warranties, guarantees and insurance are those of the subcontracted laboratory.

5.5 CTL shall dispose of the Client's samples 30 days after the analytical report is issued, unless instructed to store them for an alternate period of time or to return such samples to the Client, in a manner consistent with U.S. Environmental Protection Agency regulations or other applicable Federal, state or local requirements. Any samples for projects that are canceled or not accepted, or for which return was requested, will be returned to the Client at their own expense. CTL reserves the right to return to the Client any sample or unused portion of a sample that is not within CTL's permitted capability or the capabilities of CTL's designated waste disposal vendor(s).

5.6 Unless a different time period is agreed to in any order under these Terms and Conditions, CTL agrees to retain all records for five (5) years.

5.7 In the event that CTL is required to respond to legal process related to services for Client, Client agrees to reimburse CTL for hourly charges for personnel involved in the response and attorney fees reasonably incurred in obtaining advice concerning the response, preparation to testify, and appearances related to the legal process, travel and all reasonable expenses associated with the litigation.

6. INSURANCE

6.1 CTL shall maintain in force during the performance of services under these Terms and Conditions, Workers' Compensation and Employer's Liability Insurance in accordance with the laws of the states having jurisdiction over CTL's employees who are engaged in the performance of the work. CTL shall also maintain during such period, Comprehensive General and Contractual Liability (limit of $2,000,000 per occurrence/ aggregate), Comprehensive Automobile Liability, owned and hired, ($1,000,000 combined single limit), and Professional/Pollution Liability Insurance (limit of $5,000,000 per occurrence/aggregate). Any Client required changes to these limits or conditions may result in a change in cost to the Client.

7. AUDIT

7.1 Upon prior notice to CTL, the Client may audit and inspect CTL's records and accounts covering reimbursable costs related to work done for the Client, for a period of one (1) year after completion of the work. The purpose of any such audit shall be only for verification of such costs, and CTL shall not be required to provide access to cost records where prices are expressed as fixed fees or published unit prices

Synergy Environmental Lab, INC.

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

MAFIZUL ISLAM
SIGMA ENVIRONMMENTAL
1300 W. CANAL STREET
MILWAUKEE, WI 53233

Report Date *12-Apr-13*

Project Name MOSS-AMERICAN **Invoice #** E25001
Project # 13701

Lab Code 5025001A
Sample ID TG1-3
Sample Matrix Water
Sample Date 4/3/2013

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
BTEX										
Benzene	< 0.27	ug/l	0.27	0.85	1	GRO95/8021		4/8/2013	CJR	1
Ethylbenzene	< 0.82	ug/l	0.82	2.6	1	GRO95/8021		4/8/2013	CJR	1
Toluene	< 0.8	ug/l	0.8	2.6	1	GRO95/8021		4/8/2013	CJR	1
m&p-Xylene	< 1.6	ug/l	1.6	5.2	1	GRO95/8021		4/8/2013	CJR	1
o-Xylene	< 0.81	ug/l	0.81	2.6	1	GRO95/8021		4/8/2013	CJR	1
PAH SIM										
Acenaphthene	1.77	ug/l	0.021	0.068	1	M8270D	4/9/2013	4/11/2013	MDK	1
Acenaphthylene	< 0.02	ug/l	0.02	0.063	1	M8270D	4/9/2013	4/11/2013	MDK	1
Anthracene	0.113	ug/l	0.02	0.064	1	M8270D	4/9/2013	4/11/2013	MDK	1
Benzo(a)anthracene	0.025 "J"	ug/l	0.025	0.078	1	M8270D	4/9/2013	4/11/2013	MDK	1
Benzo(a)pyrene	< 0.018	ug/l	0.018	0.058	1	M8270D	4/9/2013	4/11/2013	MDK	1
Benzo(b)fluoranthene	< 0.02	ug/l	0.02	0.063	1	M8270D	4/9/2013	4/11/2013	MDK	1
Benzo(g,h,i)perylene	< 0.023	ug/l	0.023	0.075	1	M8270D	4/9/2013	4/11/2013	MDK	1
Benzo(k)fluoranthene	< 0.027	ug/l	0.027	0.087	1	M8270D	4/9/2013	4/11/2013	MDK	1
Chrysene	< 0.018	ug/l	0.018	0.058	1	M8270D	4/9/2013	4/11/2013	MDK	1
Dibenzo(a,h)anthracene	< 0.023	ug/l	0.023	0.072	1	M8270D	4/9/2013	4/11/2013	MDK	1
Fluoranthene	0.155	ug/l	0.026	0.084	1	M8270D	4/9/2013	4/11/2013	MDK	1
Fluorene	0.259	ug/l	0.02	0.063	1	M8270D	4/9/2013	4/11/2013	MDK	1
Indeno(1,2,3-cd)pyrene	< 0.027	ug/l	0.027	0.085	1	M8270D	4/9/2013	4/11/2013	MDK	1
1-Methyl naphthalene	< 0.019	ug/l	0.019	0.061	1	M8270D	4/9/2013	4/11/2013	MDK	1
2-Methyl naphthalene	0.017 "J"	ug/l	0.016	0.052	1	M8270D	4/9/2013	4/11/2013	MDK	1
Naphthalene	0.024 "J"	ug/l	0.023	0.075	1	M8270D	4/9/2013	4/11/2013	MDK	1
Phenanthrene	0.035 "J"	ug/l	0.018	0.059	1	M8270D	4/9/2013	4/11/2013	MDK	1
Pyrene	0.104	ug/l	0.025	0.08	1	M8270D	4/9/2013	4/11/2013	MDK	1

Project Name MOSS-AMERICAN **Invoice #** E25001
Project # 13701

Lab Code 5025001B
Sample ID TG2-1
Sample Matrix Water
Sample Date 4/3/2013

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
BTEX										
Benzene	< 0.27	ug/l	0.27	0.85	1	GRO95/8021		4/8/2013	CJR	1
Ethylbenzene	< 0.82	ug/l	0.82	2.6	1	GRO95/8021		4/8/2013	CJR	1
Toluene	< 0.8	ug/l	0.8	2.6	1	GRO95/8021		4/8/2013	CJR	1
m&p-Xylene	< 1.6	ug/l	1.6	5.2	1	GRO95/8021		4/8/2013	CJR	1
o-Xylene	< 0.81	ug/l	0.81	2.6	1	GRO95/8021		4/8/2013	CJR	1
PAH SIM										
Acenaphthene	< 0.021	ug/l	0.021	0.068	1	M8270D	4/9/2013	4/11/2013	MDK	1
Acenaphthylene	< 0.02	ug/l	0.02	0.063	1	M8270D	4/9/2013	4/11/2013	MDK	1
Anthracene	0.035 "J"	ug/l	0.02	0.064	1	M8270D	4/9/2013	4/11/2013	MDK	1
Benzo(a)anthracene	< 0.025	ug/l	0.025	0.078	1	M8270D	4/9/2013	4/11/2013	MDK	1
Benzo(a)pyrene	< 0.018	ug/l	0.018	0.058	1	M8270D	4/9/2013	4/11/2013	MDK	1
Benzo(b)fluoranthene	< 0.02	ug/l	0.02	0.063	1	M8270D	4/9/2013	4/11/2013	MDK	1
Benzo(g,h,i)perylene	< 0.023	ug/l	0.023	0.075	1	M8270D	4/9/2013	4/11/2013	MDK	1
Benzo(k)fluoranthene	< 0.027	ug/l	0.027	0.087	1	M8270D	4/9/2013	4/11/2013	MDK	1
Chrysene	< 0.018	ug/l	0.018	0.058	1	M8270D	4/9/2013	4/11/2013	MDK	1
Dibenzo(a,h)anthracene	< 0.023	ug/l	0.023	0.072	1	M8270D	4/9/2013	4/11/2013	MDK	1
Fluoranthene	< 0.026	ug/l	0.026	0.084	1	M8270D	4/9/2013	4/11/2013	MDK	1
Fluorene	< 0.02	ug/l	0.02	0.063	1	M8270D	4/9/2013	4/11/2013	MDK	1
Indeno(1,2,3-cd)pyrene	< 0.027	ug/l	0.027	0.085	1	M8270D	4/9/2013	4/11/2013	MDK	1
1-Methyl naphthalene	< 0.019	ug/l	0.019	0.061	1	M8270D	4/9/2013	4/11/2013	MDK	1
2-Methyl naphthalene	< 0.016	ug/l	0.016	0.052	1	M8270D	4/9/2013	4/11/2013	MDK	1
Naphthalene	< 0.023	ug/l	0.023	0.075	1	M8270D	4/9/2013	4/11/2013	MDK	1
Phenanthrene	< 0.018	ug/l	0.018	0.059	1	M8270D	4/9/2013	4/11/2013	MDK	1
Pyrene	< 0.025	ug/l	0.025	0.08	1	M8270D	4/9/2013	4/11/2013	MDK	1

Lab Code 5025001C
Sample ID TG3-1
Sample Matrix Water
Sample Date 4/3/2013

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
BTEX										
Benzene	< 0.27	ug/l	0.27	0.85	1	GRO95/8021		4/9/2013	CJR	1
Ethylbenzene	< 0.82	ug/l	0.82	2.6	1	GRO95/8021		4/9/2013	CJR	1
Toluene	< 0.8	ug/l	0.8	2.6	1	GRO95/8021		4/9/2013	CJR	1
m&p-Xylene	< 1.6	ug/l	1.6	5.2	1	GRO95/8021		4/9/2013	CJR	1
o-Xylene	< 0.81	ug/l	0.81	2.6	1	GRO95/8021		4/9/2013	CJR	1
PAH SIM										
Acenaphthene	0.099	ug/l	0.021	0.068	1	M8270D	4/9/2013	4/11/2013	MDK	1
Acenaphthylene	0.056 "J"	ug/l	0.02	0.063	1	M8270D	4/9/2013	4/11/2013	MDK	1
Anthracene	0.189	ug/l	0.02	0.064	1	M8270D	4/9/2013	4/11/2013	MDK	1
Benzo(a)anthracene	0.076 "J"	ug/l	0.025	0.078	1	M8270D	4/9/2013	4/11/2013	MDK	1
Benzo(a)pyrene	0.04 "J"	ug/l	0.018	0.058	1	M8270D	4/9/2013	4/11/2013	MDK	1
Benzo(b)fluoranthene	0.073	ug/l	0.02	0.063	1	M8270D	4/9/2013	4/11/2013	MDK	1
Benzo(g,h,i)perylene	0.065 "J"	ug/l	0.023	0.075	1	M8270D	4/9/2013	4/11/2013	MDK	1
Benzo(k)fluoranthene	0.029 "J"	ug/l	0.027	0.087	1	M8270D	4/9/2013	4/11/2013	MDK	1
Chrysene	0.061	ug/l	0.018	0.058	1	M8270D	4/9/2013	4/11/2013	MDK	1
Dibenzo(a,h)anthracene	< 0.023	ug/l	0.023	0.072	1	M8270D	4/9/2013	4/11/2013	MDK	1
Fluoranthene	0.244	ug/l	0.026	0.084	1	M8270D	4/9/2013	4/11/2013	MDK	1
Fluorene	0.068	ug/l	0.02	0.063	1	M8270D	4/9/2013	4/11/2013	MDK	1
Indeno(1,2,3-cd)pyrene	0.044 "J"	ug/l	0.027	0.085	1	M8270D	4/9/2013	4/11/2013	MDK	1
1-Methyl naphthalene	< 0.019	ug/l	0.019	0.061	1	M8270D	4/9/2013	4/11/2013	MDK	1
2-Methyl naphthalene	0.017 "J"	ug/l	0.016	0.052	1	M8270D	4/9/2013	4/11/2013	MDK	1
Naphthalene	0.024 "J"	ug/l	0.023	0.075	1	M8270D	4/9/2013	4/11/2013	MDK	1

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Project # 13701

Lab Code 5025001C
Sample ID TG3-1
Sample Matrix Water
Sample Date 4/3/2013

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Phenanthrene	0.069	ug/l	0.018	0.059	1	M8270D	4/9/2013	4/11/2013	MDK	1
Pyrene	0.199	ug/l	0.025	0.08	1	M8270D	4/9/2013	4/11/2013	MDK	1

Lab Code 5025001D
Sample ID TG4-3
Sample Matrix Water
Sample Date 4/3/2013

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
BTEX										
Benzene	< 0.27	ug/l	0.27	0.85	1	GRO95/8021		4/9/2013	CJR	1
Ethylbenzene	< 0.82	ug/l	0.82	2.6	1	GRO95/8021		4/9/2013	CJR	1
Toluene	< 0.8	ug/l	0.8	2.6	1	GRO95/8021		4/9/2013	CJR	1
m&p-Xylene	< 1.6	ug/l	1.6	5.2	1	GRO95/8021		4/9/2013	CJR	1
o-Xylene	< 0.81	ug/l	0.81	2.6	1	GRO95/8021		4/9/2013	CJR	1
PAH SIM										
Acenaphthene	< 0.021	ug/l	0.021	0.068	1	M8270D	4/9/2013	4/11/2013	MDK	1
Acenaphthylene	0.021 "J"	ug/l	0.02	0.063	1	M8270D	4/9/2013	4/11/2013	MDK	1
Anthracene	0.127	ug/l	0.02	0.064	1	M8270D	4/9/2013	4/11/2013	MDK	1
Benzo(a)anthracene	0.033 "J"	ug/l	0.025	0.078	1	M8270D	4/9/2013	4/11/2013	MDK	1
Benzo(a)pyrene	0.024 "J"	ug/l	0.018	0.058	1	M8270D	4/9/2013	4/11/2013	MDK	1
Benzo(b)fluoranthene	0.044 "J"	ug/l	0.02	0.063	1	M8270D	4/9/2013	4/11/2013	MDK	1
Benzo(g,h,i)perylene	0.042 "J"	ug/l	0.023	0.075	1	M8270D	4/9/2013	4/11/2013	MDK	1
Benzo(k)fluoranthene	< 0.027	ug/l	0.027	0.087	1	M8270D	4/9/2013	4/11/2013	MDK	1
Chrysene	0.023 "J"	ug/l	0.018	0.058	1	M8270D	4/9/2013	4/11/2013	MDK	1
Dibenzo(a,h)anthracene	< 0.023	ug/l	0.023	0.072	1	M8270D	4/9/2013	4/11/2013	MDK	1
Fluoranthene	0.083 "J"	ug/l	0.026	0.084	1	M8270D	4/9/2013	4/11/2013	MDK	1
Fluorene	< 0.02	ug/l	0.02	0.063	1	M8270D	4/9/2013	4/11/2013	MDK	1
Indeno(1,2,3-cd)pyrene	< 0.027	ug/l	0.027	0.085	1	M8270D	4/9/2013	4/11/2013	MDK	1
1-Methyl naphthalene	< 0.019	ug/l	0.019	0.061	1	M8270D	4/9/2013	4/11/2013	MDK	1
2-Methyl naphthalene	< 0.016	ug/l	0.016	0.052	1	M8270D	4/9/2013	4/11/2013	MDK	1
Naphthalene	< 0.023	ug/l	0.023	0.075	1	M8270D	4/9/2013	4/11/2013	MDK	1
Phenanthrene	0.037 "J"	ug/l	0.018	0.059	1	M8270D	4/9/2013	4/11/2013	MDK	1
Pyrene	0.071 "J"	ug/l	0.025	0.08	1	M8270D	4/9/2013	4/11/2013	MDK	1

Lab Code 5025001E
Sample ID TG5-1
Sample Matrix Water
Sample Date 4/3/2013

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
BTEX										
Benzene	< 0.27	ug/l	0.27	0.85	1	GRO95/8021		4/9/2013	CJR	1
Ethylbenzene	< 0.82	ug/l	0.82	2.6	1	GRO95/8021		4/9/2013	CJR	1
Toluene	< 0.8	ug/l	0.8	2.6	1	GRO95/8021		4/9/2013	CJR	1
m&p-Xylene	< 1.6	ug/l	1.6	5.2	1	GRO95/8021		4/9/2013	CJR	1
o-Xylene	< 0.81	ug/l	0.81	2.6	1	GRO95/8021		4/9/2013	CJR	1
PAH SIM										
Acenaphthene	< 0.021	ug/l	0.021	0.068	1	M8270D	4/9/2013	4/11/2013	MDK	1
Acenaphthylene	< 0.02	ug/l	0.02	0.063	1	M8270D	4/9/2013	4/11/2013	MDK	1
Anthracene	0.054 "J"	ug/l	0.02	0.064	1	M8270D	4/9/2013	4/11/2013	MDK	1
Benzo(a)anthracene	< 0.025	ug/l	0.025	0.078	1	M8270D	4/9/2013	4/11/2013	MDK	1
Benzo(a)pyrene	< 0.018	ug/l	0.018	0.058	1	M8270D	4/9/2013	4/11/2013	MDK	1
Benzo(b)fluoranthene	< 0.02	ug/l	0.02	0.063	1	M8270D	4/9/2013	4/11/2013	MDK	1
Benzo(g,h,i)perylene	< 0.023	ug/l	0.023	0.075	1	M8270D	4/9/2013	4/11/2013	MDK	1

Project Name MOSS-AMERICAN **Invoice #** E25001
Project # 13701

Lab Code 5025001E
Sample ID TG5-1
Sample Matrix Water
Sample Date 4/3/2013

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Benzo(k)fluoranthene	< 0.027	ug/l	0.027	0.087	1	M8270D	4/9/2013	4/11/2013	MDK	1
Chrysene	< 0.018	ug/l	0.018	0.058	1	M8270D	4/9/2013	4/11/2013	MDK	1
Dibenzo(a,h)anthracene	< 0.023	ug/l	0.023	0.072	1	M8270D	4/9/2013	4/11/2013	MDK	1
Fluoranthene	< 0.026	ug/l	0.026	0.084	1	M8270D	4/9/2013	4/11/2013	MDK	1
Fluorene	< 0.02	ug/l	0.02	0.063	1	M8270D	4/9/2013	4/11/2013	MDK	1
Indeno(1,2,3-cd)pyrene	< 0.027	ug/l	0.027	0.085	1	M8270D	4/9/2013	4/11/2013	MDK	1
1-Methyl naphthalene	< 0.019	ug/l	0.019	0.061	1	M8270D	4/9/2013	4/11/2013	MDK	1
2-Methyl naphthalene	< 0.016	ug/l	0.016	0.052	1	M8270D	4/9/2013	4/11/2013	MDK	1
Naphthalene	< 0.023	ug/l	0.023	0.075	1	M8270D	4/9/2013	4/11/2013	MDK	1
Phenanthrene	0.027 "J"	ug/l	0.018	0.059	1	M8270D	4/9/2013	4/11/2013	MDK	1
Pyrene	< 0.025	ug/l	0.025	0.08	1	M8270D	4/9/2013	4/11/2013	MDK	1

Lab Code 5025001F
Sample ID TG5-3
Sample Matrix Water
Sample Date 4/3/2013

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
BTEX										
Benzene	< 0.27	ug/l	0.27	0.85	1	GRO95/8021		4/9/2013	CJR	1
Ethylbenzene	< 0.82	ug/l	0.82	2.6	1	GRO95/8021		4/9/2013	CJR	1
Toluene	< 0.8	ug/l	0.8	2.6	1	GRO95/8021		4/9/2013	CJR	1
m&p-Xylene	< 1.6	ug/l	1.6	5.2	1	GRO95/8021		4/9/2013	CJR	1
o-Xylene	< 0.81	ug/l	0.81	2.6	1	GRO95/8021		4/9/2013	CJR	1
PAH SIM										
Acenaphthene	< 0.021	ug/l	0.021	0.068	1	M8270D	4/9/2013	4/11/2013	MDK	1
Acenaphthylene	< 0.02	ug/l	0.02	0.063	1	M8270D	4/9/2013	4/11/2013	MDK	1
Anthracene	0.087	ug/l	0.02	0.064	1	M8270D	4/9/2013	4/11/2013	MDK	1
Benzo(a)anthracene	< 0.025	ug/l	0.025	0.078	1	M8270D	4/9/2013	4/11/2013	MDK	1
Benzo(a)pyrene	< 0.018	ug/l	0.018	0.058	1	M8270D	4/9/2013	4/11/2013	MDK	1
Benzo(b)fluoranthene	< 0.02	ug/l	0.02	0.063	1	M8270D	4/9/2013	4/11/2013	MDK	1
Benzo(g,h,i)perylene	< 0.023	ug/l	0.023	0.075	1	M8270D	4/9/2013	4/11/2013	MDK	1
Benzo(k)fluoranthene	< 0.027	ug/l	0.027	0.087	1	M8270D	4/9/2013	4/11/2013	MDK	1
Chrysene	< 0.018	ug/l	0.018	0.058	1	M8270D	4/9/2013	4/11/2013	MDK	1
Dibenzo(a,h)anthracene	< 0.023	ug/l	0.023	0.072	1	M8270D	4/9/2013	4/11/2013	MDK	1
Fluoranthene	0.096	ug/l	0.026	0.084	1	M8270D	4/9/2013	4/11/2013	MDK	1
Fluorene	< 0.02	ug/l	0.02	0.063	1	M8270D	4/9/2013	4/11/2013	MDK	1
Indeno(1,2,3-cd)pyrene	< 0.027	ug/l	0.027	0.085	1	M8270D	4/9/2013	4/11/2013	MDK	1
1-Methyl naphthalene	< 0.019	ug/l	0.019	0.061	1	M8270D	4/9/2013	4/11/2013	MDK	1
2-Methyl naphthalene	0.020 "J"	ug/l	0.016	0.052	1	M8270D	4/9/2013	4/11/2013	MDK	1
Naphthalene	< 0.023	ug/l	0.023	0.075	1	M8270D	4/9/2013	4/11/2013	MDK	1
Phenanthrene	0.027 "J"	ug/l	0.018	0.059	1	M8270D	4/9/2013	4/11/2013	MDK	1
Pyrene	0.103	ug/l	0.025	0.08	1	M8270D	4/9/2013	4/11/2013	MDK	1

Lab Code 5025001G
Sample ID TG6-1
Sample Matrix Water
Sample Date 4/3/2013

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
BTEX										
Benzene	< 0.27	ug/l	0.27	0.85	1	GRO95/8021		4/9/2013	CJR	1
Ethylbenzene	< 0.82	ug/l	0.82	2.6	1	GRO95/8021		4/9/2013	CJR	1
Toluene	< 0.8	ug/l	0.8	2.6	1	GRO95/8021		4/9/2013	CJR	1
m&p-Xylene	< 1.6	ug/l	1.6	5.2	1	GRO95/8021		4/9/2013	CJR	1
o-Xylene	< 0.81	ug/l	0.81	2.6	1	GRO95/8021		4/9/2013	CJR	1

Project Name MOSS-AMERICAN **Invoice #** E25001
Project # 13701

Lab Code 5025001G
Sample ID TG6-1
Sample Matrix Water
Sample Date 4/3/2013

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
PAH SIM										
Acenaphthene	0.232	ug/l	0.021	0.068	1	M8270D	4/9/2013	4/11/2013	MDK	1
Acenaphthylene	< 0.02	ug/l	0.02	0.063	1	M8270D	4/9/2013	4/11/2013	MDK	1
Anthracene	0.031 "J"	ug/l	0.02	0.064	1	M8270D	4/9/2013	4/11/2013	MDK	1
Benzo(a)anthracene	< 0.025	ug/l	0.025	0.078	1	M8270D	4/9/2013	4/11/2013	MDK	1
Benzo(a)pyrene	< 0.018	ug/l	0.018	0.058	1	M8270D	4/9/2013	4/11/2013	MDK	1
Benzo(b)fluoranthene	< 0.02	ug/l	0.02	0.063	1	M8270D	4/9/2013	4/11/2013	MDK	1
Benzo(g,h,i)perylene	< 0.023	ug/l	0.023	0.075	1	M8270D	4/9/2013	4/11/2013	MDK	1
Benzo(k)fluoranthene	< 0.027	ug/l	0.027	0.087	1	M8270D	4/9/2013	4/11/2013	MDK	1
Chrysene	< 0.018	ug/l	0.018	0.058	1	M8270D	4/9/2013	4/11/2013	MDK	1
Dibenzo(a,h)anthracene	< 0.023	ug/l	0.023	0.072	1	M8270D	4/9/2013	4/11/2013	MDK	1
Fluoranthene	0.069 "J"	ug/l	0.026	0.084	1	M8270D	4/9/2013	4/11/2013	MDK	1
Fluorene	0.048 "J"	ug/l	0.02	0.063	1	M8270D	4/9/2013	4/11/2013	MDK	1
Indeno(1,2,3-cd)pyrene	< 0.027	ug/l	0.027	0.085	1	M8270D	4/9/2013	4/11/2013	MDK	1
1-Methyl naphthalene	< 0.019	ug/l	0.019	0.061	1	M8270D	4/9/2013	4/11/2013	MDK	1
2-Methyl naphthalene	0.019 "J"	ug/l	0.016	0.052	1	M8270D	4/9/2013	4/11/2013	MDK	1
Naphthalene	< 0.023	ug/l	0.023	0.075	1	M8270D	4/9/2013	4/11/2013	MDK	1
Phenanthrene	0.025 "J"	ug/l	0.018	0.059	1	M8270D	4/9/2013	4/11/2013	MDK	1
Pyrene	0.055 "J"	ug/l	0.025	0.08	1	M8270D	4/9/2013	4/11/2013	MDK	1

Lab Code 5025001H
Sample ID TG6-3
Sample Matrix Water
Sample Date 4/3/2013

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
BTEX										
Benzene	< 0.27	ug/l	0.27	0.85	1	GRO95/8021		4/9/2013	CJR	1
Ethylbenzene	< 0.82	ug/l	0.82	2.6	1	GRO95/8021		4/9/2013	CJR	1
Toluene	< 0.8	ug/l	0.8	2.6	1	GRO95/8021		4/9/2013	CJR	1
m&p-Xylene	< 1.6	ug/l	1.6	5.2	1	GRO95/8021		4/9/2013	CJR	1
o-Xylene	< 0.81	ug/l	0.81	2.6	1	GRO95/8021		4/9/2013	CJR	1
PAH SIM										
Acenaphthene	< 0.021	ug/l	0.021	0.068	1	M8270D	4/9/2013	4/11/2013	MDK	1
Acenaphthylene	< 0.02	ug/l	0.02	0.063	1	M8270D	4/9/2013	4/11/2013	MDK	1
Anthracene	0.042 "J"	ug/l	0.02	0.064	1	M8270D	4/9/2013	4/11/2013	MDK	1
Benzo(a)anthracene	< 0.025	ug/l	0.025	0.078	1	M8270D	4/9/2013	4/11/2013	MDK	1
Benzo(a)pyrene	< 0.018	ug/l	0.018	0.058	1	M8270D	4/9/2013	4/11/2013	MDK	1
Benzo(b)fluoranthene	< 0.02	ug/l	0.02	0.063	1	M8270D	4/9/2013	4/11/2013	MDK	1
Benzo(g,h,i)perylene	< 0.023	ug/l	0.023	0.075	1	M8270D	4/9/2013	4/11/2013	MDK	1
Benzo(k)fluoranthene	< 0.027	ug/l	0.027	0.087	1	M8270D	4/9/2013	4/11/2013	MDK	1
Chrysene	< 0.018	ug/l	0.018	0.058	1	M8270D	4/9/2013	4/11/2013	MDK	1
Dibenzo(a,h)anthracene	< 0.023	ug/l	0.023	0.072	1	M8270D	4/9/2013	4/11/2013	MDK	1
Fluoranthene	0.069 "J"	ug/l	0.026	0.084	1	M8270D	4/9/2013	4/11/2013	MDK	1
Fluorene	< 0.02	ug/l	0.02	0.063	1	M8270D	4/9/2013	4/11/2013	MDK	1
Indeno(1,2,3-cd)pyrene	< 0.027	ug/l	0.027	0.085	1	M8270D	4/9/2013	4/11/2013	MDK	1
1-Methyl naphthalene	< 0.019	ug/l	0.019	0.061	1	M8270D	4/9/2013	4/11/2013	MDK	1
2-Methyl naphthalene	< 0.016	ug/l	0.016	0.052	1	M8270D	4/9/2013	4/11/2013	MDK	1
Naphthalene	< 0.023	ug/l	0.023	0.075	1	M8270D	4/9/2013	4/11/2013	MDK	1
Phenanthrene	0.021 "J"	ug/l	0.018	0.059	1	M8270D	4/9/2013	4/11/2013	MDK	1
Pyrene	0.052 "J"	ug/l	0.025	0.08	1	M8270D	4/9/2013	4/11/2013	MDK	1

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Project # 13701

Lab Code 5025001I
Sample ID TG1-1
Sample Matrix Water
Sample Date 4/3/2013

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
BTEX										
Benzene	< 0.27	ug/l	0.27	0.85	1	GRO95/8021		4/9/2013	CJR	1
Ethylbenzene	18.4	ug/l	0.82	2.6	1	GRO95/8021		4/9/2013	CJR	1
Toluene	< 0.8	ug/l	0.8	2.6	1	GRO95/8021		4/9/2013	CJR	1
m&p-Xylene	19.9	ug/l	1.6	5.2	1	GRO95/8021		4/9/2013	CJR	1
o-Xylene	11.4	ug/l	0.81	2.6	1	GRO95/8021		4/9/2013	CJR	1
PAH SIM										
Acenaphthene	262	ug/l	10.5	34	500	M8270D	4/9/2013	4/12/2013	MDK	1
Acenaphthylene	< 10	ug/l	10	31.5	500	M8270D	4/9/2013	4/12/2013	MDK	1
Anthracene	23.6 "J"	ug/l	10	32	500	M8270D	4/9/2013	4/12/2013	MDK	1
Benzo(a)anthracene	< 12.5	ug/l	12.5	39	500	M8270D	4/9/2013	4/12/2013	MDK	1
Benzo(a)pyrene	< 9	ug/l	9	29	500	M8270D	4/9/2013	4/12/2013	MDK	1
Benzo(b)fluoranthene	< 10	ug/l	10	31.5	500	M8270D	4/9/2013	4/12/2013	MDK	1
Benzo(g,h,i)perylene	< 11.5	ug/l	11.5	37.5	500	M8270D	4/9/2013	4/12/2013	MDK	1
Benzo(k)fluoranthene	< 13.5	ug/l	13.5	43.5	500	M8270D	4/9/2013	4/12/2013	MDK	1
Chrysene	< 9	ug/l	9	29	500	M8270D	4/9/2013	4/12/2013	MDK	1
Dibenzo(a,h)anthracene	< 11.5	ug/l	11.5	36	500	M8270D	4/9/2013	4/12/2013	MDK	1
Fluoranthene	28.1 "J"	ug/l	13	42	500	M8270D	4/9/2013	4/12/2013	MDK	1
Fluorene	135	ug/l	10	31.5	500	M8270D	4/9/2013	4/12/2013	MDK	1
Indeno(1,2,3-cd)pyrene	< 13.5	ug/l	13.5	42.5	500	M8270D	4/9/2013	4/12/2013	MDK	1
1-Methyl naphthalene	169	ug/l	9.5	30.5	500	M8270D	4/9/2013	4/12/2013	MDK	1
2-Methyl naphthalene	164	ug/l	8	26	500	M8270D	4/9/2013	4/12/2013	MDK	1
Naphthalene	1950	ug/l	11.5	37.5	500	M8270D	4/9/2013	4/12/2013	MDK	1
Phenanthrene	113	ug/l	9	29.5	500	M8270D	4/9/2013	4/12/2013	MDK	1
Pyrene	17.7 "J"	ug/l	12.5	40	500	M8270D	4/9/2013	4/12/2013	MDK	1

Lab Code 5025001J
Sample ID PZ-02
Sample Matrix Water
Sample Date 4/4/2013

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
BTEX										
Benzene	< 0.27	ug/l	0.27	0.85	1	GRO95/8021		4/9/2013	CJR	1
Ethylbenzene	< 0.82	ug/l	0.82	2.6	1	GRO95/8021		4/9/2013	CJR	1
Toluene	< 0.8	ug/l	0.8	2.6	1	GRO95/8021		4/9/2013	CJR	1
m&p-Xylene	< 1.6	ug/l	1.6	5.2	1	GRO95/8021		4/9/2013	CJR	1
o-Xylene	< 0.81	ug/l	0.81	2.6	1	GRO95/8021		4/9/2013	CJR	1
PAH SIM										
Acenaphthene	79	ug/l	0.42	1.36	20	M8270D	4/9/2013	4/12/2013	MDK	1
Acenaphthylene	1.01 "J"	ug/l	0.4	1.26	20	M8270D	4/9/2013	4/12/2013	MDK	1
Anthracene	< 0.4	ug/l	0.4	1.28	20	M8270D	4/9/2013	4/12/2013	MDK	1
Benzo(a)anthracene	< 0.5	ug/l	0.5	1.56	20	M8270D	4/9/2013	4/12/2013	MDK	1
Benzo(a)pyrene	< 0.36	ug/l	0.36	1.16	20	M8270D	4/9/2013	4/12/2013	MDK	1
Benzo(b)fluoranthene	< 0.4	ug/l	0.4	1.26	20	M8270D	4/9/2013	4/12/2013	MDK	1
Benzo(g,h,i)perylene	< 0.46	ug/l	0.46	1.5	20	M8270D	4/9/2013	4/12/2013	MDK	1
Benzo(k)fluoranthene	< 0.54	ug/l	0.54	1.74	20	M8270D	4/9/2013	4/12/2013	MDK	1
Chrysene	< 0.36	ug/l	0.36	1.16	20	M8270D	4/9/2013	4/12/2013	MDK	1
Dibenzo(a,h)anthracene	< 0.46	ug/l	0.46	1.44	20	M8270D	4/9/2013	4/12/2013	MDK	1
Fluoranthene	< 0.52	ug/l	0.52	1.68	20	M8270D	4/9/2013	4/12/2013	MDK	1
Fluorene	3.6	ug/l	0.4	1.26	20	M8270D	4/9/2013	4/12/2013	MDK	1
Indeno(1,2,3-cd)pyrene	< 0.54	ug/l	0.54	1.7	20	M8270D	4/9/2013	4/12/2013	MDK	1
1-Methyl naphthalene	0.8 "J"	ug/l	0.38	1.22	20	M8270D	4/9/2013	4/12/2013	MDK	1
2-Methyl naphthalene	< 0.32	ug/l	0.32	1.04	20	M8270D	4/9/2013	4/12/2013	MDK	1
Naphthalene	1.79	ug/l	0.46	1.5	20	M8270D	4/9/2013	4/12/2013	MDK	1

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Lab Code 5025001J
Sample ID PZ-02
Sample Matrix Water
Sample Date 4/4/2013

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Phenanthrene	< 0.36	ug/l	0.36	1.18	20	M8270D	4/9/2013	4/12/2013	MDK	1
Pyrene	< 0.5	ug/l	0.5	1.6	20	M8270D	4/9/2013	4/12/2013	MDK	1

Lab Code 5025001K
Sample ID MW-33S
Sample Matrix Water
Sample Date 4/4/2013

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
BTEX										
Benzene	< 0.27	ug/l	0.27	0.85	1	GRO95/8021		4/9/2013	CJR	1
Ethylbenzene	< 0.82	ug/l	0.82	2.6	1	GRO95/8021		4/9/2013	CJR	1
Toluene	< 0.8	ug/l	0.8	2.6	1	GRO95/8021		4/9/2013	CJR	1
m&p-Xylene	< 1.6	ug/l	1.6	5.2	1	GRO95/8021		4/9/2013	CJR	1
o-Xylene	< 0.81	ug/l	0.81	2.6	1	GRO95/8021		4/9/2013	CJR	1
PAH SIM										
Acenaphthene	0.66	ug/l	0.021	0.068	1	M8270D	4/9/2013	4/11/2013	MDK	1
Acenaphthylene	< 0.02	ug/l	0.02	0.063	1	M8270D	4/9/2013	4/11/2013	MDK	1
Anthracene	0.132	ug/l	0.02	0.064	1	M8270D	4/9/2013	4/11/2013	MDK	1
Benzo(a)anthracene	< 0.025	ug/l	0.025	0.078	1	M8270D	4/9/2013	4/11/2013	MDK	1
Benzo(a)pyrene	< 0.018	ug/l	0.018	0.058	1	M8270D	4/9/2013	4/11/2013	MDK	1
Benzo(b)fluoranthene	< 0.02	ug/l	0.02	0.063	1	M8270D	4/9/2013	4/11/2013	MDK	1
Benzo(g,h,i)perylene	< 0.023	ug/l	0.023	0.075	1	M8270D	4/9/2013	4/11/2013	MDK	1
Benzo(k)fluoranthene	< 0.027	ug/l	0.027	0.087	1	M8270D	4/9/2013	4/11/2013	MDK	1
Chrysene	< 0.018	ug/l	0.018	0.058	1	M8270D	4/9/2013	4/11/2013	MDK	1
Dibenzo(a,h)anthracene	< 0.023	ug/l	0.023	0.072	1	M8270D	4/9/2013	4/11/2013	MDK	1
Fluoranthene	< 0.026	ug/l	0.026	0.084	1	M8270D	4/9/2013	4/11/2013	MDK	1
Fluorene	0.251	ug/l	0.02	0.063	1	M8270D	4/9/2013	4/11/2013	MDK	1
Indeno(1,2,3-cd)pyrene	< 0.027	ug/l	0.027	0.085	1	M8270D	4/9/2013	4/11/2013	MDK	1
1-Methyl naphthalene	0.057 "J"	ug/l	0.019	0.061	1	M8270D	4/9/2013	4/11/2013	MDK	1
2-Methyl naphthalene	0.025 "J"	ug/l	0.016	0.052	1	M8270D	4/9/2013	4/11/2013	MDK	1
Naphthalene	0.201	ug/l	0.023	0.075	1	M8270D	4/9/2013	4/11/2013	MDK	1
Phenanthrene	0.08	ug/l	0.018	0.059	1	M8270D	4/9/2013	4/11/2013	MDK	1
Pyrene	< 0.025	ug/l	0.025	0.08	1	M8270D	4/9/2013	4/11/2013	MDK	1

Lab Code 5025001L
Sample ID MW-32S
Sample Matrix Water
Sample Date 4/4/2013

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
BTEX										
Benzene	< 0.27	ug/l	0.27	0.85	1	GRO95/8021		4/9/2013	CJR	1
Ethylbenzene	< 0.82	ug/l	0.82	2.6	1	GRO95/8021		4/9/2013	CJR	1
Toluene	< 0.8	ug/l	0.8	2.6	1	GRO95/8021		4/9/2013	CJR	1
m&p-Xylene	< 1.6	ug/l	1.6	5.2	1	GRO95/8021		4/9/2013	CJR	1
o-Xylene	< 0.81	ug/l	0.81	2.6	1	GRO95/8021		4/9/2013	CJR	1
PAH SIM										
Acenaphthene	< 0.021	ug/l	0.021	0.068	1	M8270D	4/9/2013	4/11/2013	MDK	1
Acenaphthylene	< 0.02	ug/l	0.02	0.063	1	M8270D	4/9/2013	4/11/2013	MDK	1
Anthracene	0.057 "J"	ug/l	0.02	0.064	1	M8270D	4/9/2013	4/11/2013	MDK	1
Benzo(a)anthracene	< 0.025	ug/l	0.025	0.078	1	M8270D	4/9/2013	4/11/2013	MDK	1
Benzo(a)pyrene	< 0.018	ug/l	0.018	0.058	1	M8270D	4/9/2013	4/11/2013	MDK	1
Benzo(b)fluoranthene	< 0.02	ug/l	0.02	0.063	1	M8270D	4/9/2013	4/11/2013	MDK	1
Benzo(g,h,i)perylene	< 0.023	ug/l	0.023	0.075	1	M8270D	4/9/2013	4/11/2013	MDK	1

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Lab Code 5025001L
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	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Benzo(k)fluoranthene	< 0.027	ug/l	0.027	0.087	1	M8270D	4/9/2013	4/11/2013	MDK	1
Chrysene	< 0.018	ug/l	0.018	0.058	1	M8270D	4/9/2013	4/11/2013	MDK	1
Dibenzo(a,h)anthracene	< 0.023	ug/l	0.023	0.072	1	M8270D	4/9/2013	4/11/2013	MDK	1
Fluoranthene	< 0.026	ug/l	0.026	0.084	1	M8270D	4/9/2013	4/11/2013	MDK	1
Fluorene	< 0.02	ug/l	0.02	0.063	1	M8270D	4/9/2013	4/11/2013	MDK	1
Indeno(1,2,3-cd)pyrene	< 0.027	ug/l	0.027	0.085	1	M8270D	4/9/2013	4/11/2013	MDK	1
1-Methyl naphthalene	0.019 "J"	ug/l	0.019	0.061	1	M8270D	4/9/2013	4/11/2013	MDK	1
2-Methyl naphthalene	0.025 "J"	ug/l	0.016	0.052	1	M8270D	4/9/2013	4/11/2013	MDK	1
Naphthalene	0.249	ug/l	0.023	0.075	1	M8270D	4/9/2013	4/11/2013	MDK	1
Phenanthrene	0.022 "J"	ug/l	0.018	0.059	1	M8270D	4/9/2013	4/11/2013	MDK	1
Pyrene	< 0.025	ug/l	0.025	0.08	1	M8270D	4/9/2013	4/11/2013	MDK	1

Lab Code 5025001M
Sample ID MW-38S
Sample Matrix Water
Sample Date 4/4/2013

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
BTEX										
Benzene	0.96	ug/l	0.27	0.85	1	GRO95/8021		4/9/2013	CJR	1
Ethylbenzene	1.4 "J"	ug/l	0.82	2.6	1	GRO95/8021		4/9/2013	CJR	1
Toluene	< 0.8	ug/l	0.8	2.6	1	GRO95/8021		4/9/2013	CJR	1
m&p-Xylene	< 1.6	ug/l	1.6	5.2	1	GRO95/8021		4/9/2013	CJR	1
o-Xylene	1.41 "J"	ug/l	0.81	2.6	1	GRO95/8021		4/9/2013	CJR	1
PAH SIM										
Acenaphthene	4.2	ug/l	0.021	0.068	1	M8270D	4/9/2013	4/11/2013	MDK	1
Acenaphthylene	0.153	ug/l	0.02	0.063	1	M8270D	4/9/2013	4/11/2013	MDK	1
Anthracene	0.263	ug/l	0.02	0.064	1	M8270D	4/9/2013	4/11/2013	MDK	1
Benzo(a)anthracene	0.039 "J"	ug/l	0.025	0.078	1	M8270D	4/9/2013	4/11/2013	MDK	1
Benzo(a)pyrene	0.032 "J"	ug/l	0.018	0.058	1	M8270D	4/9/2013	4/11/2013	MDK	1
Benzo(b)fluoranthene	0.079	ug/l	0.02	0.063	1	M8270D	4/9/2013	4/11/2013	MDK	1
Benzo(g,h,i)perylene	0.077	ug/l	0.023	0.075	1	M8270D	4/9/2013	4/11/2013	MDK	1
Benzo(k)fluoranthene	< 0.027	ug/l	0.027	0.087	1	M8270D	4/9/2013	4/11/2013	MDK	1
Chrysene	0.052 "J"	ug/l	0.018	0.058	1	M8270D	4/9/2013	4/11/2013	MDK	1
Dibenzo(a,h)anthracene	< 0.023	ug/l	0.023	0.072	1	M8270D	4/9/2013	4/11/2013	MDK	1
Fluoranthene	0.103	ug/l	0.026	0.084	1	M8270D	4/9/2013	4/11/2013	MDK	1
Fluorene	0.152	ug/l	0.02	0.063	1	M8270D	4/9/2013	4/11/2013	MDK	1
Indeno(1,2,3-cd)pyrene	0.04 "J"	ug/l	0.027	0.085	1	M8270D	4/9/2013	4/11/2013	MDK	1
1-Methyl naphthalene	1.99	ug/l	0.019	0.061	1	M8270D	4/9/2013	4/11/2013	MDK	1
2-Methyl naphthalene	7.9	ug/l	0.016	0.052	1	M8270D	4/9/2013	4/11/2013	MDK	1
Naphthalene	8.1	ug/l	0.023	0.075	1	M8270D	4/9/2013	4/11/2013	MDK	1
Phenanthrene	0.15	ug/l	0.018	0.059	1	M8270D	4/9/2013	4/11/2013	MDK	1
Pyrene	0.092	ug/l	0.025	0.08	1	M8270D	4/9/2013	4/11/2013	MDK	1

Lab Code 5025001N
Sample ID MW-39S
Sample Matrix Water
Sample Date 4/4/2013

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
BTEX										
Benzene	< 0.27	ug/l	0.27	0.85	1	GRO95/8021		4/9/2013	CJR	1
Ethylbenzene	< 0.82	ug/l	0.82	2.6	1	GRO95/8021		4/9/2013	CJR	1
Toluene	< 0.8	ug/l	0.8	2.6	1	GRO95/8021		4/9/2013	CJR	1
m&p-Xylene	< 1.6	ug/l	1.6	5.2	1	GRO95/8021		4/9/2013	CJR	1
o-Xylene	< 0.81	ug/l	0.81	2.6	1	GRO95/8021		4/9/2013	CJR	1

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Project # 13701

Lab Code 5025001N
Sample ID MW-39S
Sample Matrix Water
Sample Date 4/4/2013

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
PAH SIM										
Acenaphthene	5.8	ug/l	0.021	0.068	1	M8270D	4/9/2013	4/11/2013	MDK	1
Acenaphthylene	0.127	ug/l	0.02	0.063	1	M8270D	4/9/2013	4/11/2013	MDK	1
Anthracene	0.136	ug/l	0.02	0.064	1	M8270D	4/9/2013	4/11/2013	MDK	1
Benzo(a)anthracene	0.069 "J"	ug/l	0.025	0.078	1	M8270D	4/9/2013	4/11/2013	MDK	1
Benzo(a)pyrene	0.027 "J"	ug/l	0.018	0.058	1	M8270D	4/9/2013	4/11/2013	MDK	1
Benzo(b)fluoranthene	0.057 "J"	ug/l	0.02	0.063	1	M8270D	4/9/2013	4/11/2013	MDK	1
Benzo(g,h,i)perylene	< 0.023	ug/l	0.023	0.075	1	M8270D	4/9/2013	4/11/2013	MDK	1
Benzo(k)fluoranthene	< 0.027	ug/l	0.027	0.087	1	M8270D	4/9/2013	4/11/2013	MDK	1
Chrysene	0.054 "J"	ug/l	0.018	0.058	1	M8270D	4/9/2013	4/11/2013	MDK	1
Dibenzo(a,h)anthracene	< 0.023	ug/l	0.023	0.072	1	M8270D	4/9/2013	4/11/2013	MDK	1
Fluoranthene	0.32	ug/l	0.026	0.084	1	M8270D	4/9/2013	4/11/2013	MDK	1
Fluorene	0.73	ug/l	0.02	0.063	1	M8270D	4/9/2013	4/11/2013	MDK	1
Indeno(1,2,3-cd)pyrene	< 0.027	ug/l	0.027	0.085	1	M8270D	4/9/2013	4/11/2013	MDK	1
1-Methyl naphthalene	0.169	ug/l	0.019	0.061	1	M8270D	4/9/2013	4/11/2013	MDK	1
2-Methyl naphthalene	0.117	ug/l	0.016	0.052	1	M8270D	4/9/2013	4/11/2013	MDK	1
Naphthalene	0.211	ug/l	0.023	0.075	1	M8270D	4/9/2013	4/11/2013	MDK	1
Phenanthrene	0.252	ug/l	0.018	0.059	1	M8270D	4/9/2013	4/11/2013	MDK	1
Pyrene	0.216	ug/l	0.025	0.08	1	M8270D	4/9/2013	4/11/2013	MDK	1

Lab Code 5025001O
Sample ID PZ-03
Sample Matrix Water
Sample Date 4/4/2013

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
BTEX										
Benzene	0.44 "J"	ug/l	0.27	0.85	1	GRO95/8021		4/9/2013	CJR	1
Ethylbenzene	2.68	ug/l	0.82	2.6	1	GRO95/8021		4/9/2013	CJR	1
Toluene	< 0.8	ug/l	0.8	2.6	1	GRO95/8021		4/9/2013	CJR	1
m&p-Xylene	< 1.6	ug/l	1.6	5.2	1	GRO95/8021		4/9/2013	CJR	1
o-Xylene	1.92 "J"	ug/l	0.81	2.6	1	GRO95/8021		4/9/2013	CJR	1
PAH SIM										
Acenaphthene	116	ug/l	0.42	1.36	20	M8270D	4/9/2013	4/12/2013	MDK	1
Acenaphthylene	0.99 "J"	ug/l	0.4	1.26	20	M8270D	4/9/2013	4/12/2013	MDK	1
Anthracene	2.37	ug/l	0.4	1.28	20	M8270D	4/9/2013	4/12/2013	MDK	1
Benzo(a)anthracene	2.03	ug/l	0.5	1.56	20	M8270D	4/9/2013	4/12/2013	MDK	1
Benzo(a)pyrene	0.71 "J"	ug/l	0.36	1.16	20	M8270D	4/9/2013	4/12/2013	MDK	1
Benzo(b)fluoranthene	1.45	ug/l	0.4	1.26	20	M8270D	4/9/2013	4/12/2013	MDK	1
Benzo(g,h,i)perylene	< 0.46	ug/l	0.46	1.5	20	M8270D	4/9/2013	4/12/2013	MDK	1
Benzo(k)fluoranthene	< 0.54	ug/l	0.54	1.74	20	M8270D	4/9/2013	4/12/2013	MDK	1
Chrysene	1.47	ug/l	0.36	1.16	20	M8270D	4/9/2013	4/12/2013	MDK	1
Dibenzo(a,h)anthracene	< 0.46	ug/l	0.46	1.44	20	M8270D	4/9/2013	4/12/2013	MDK	1
Fluoranthene	10.7	ug/l	0.52	1.68	20	M8270D	4/9/2013	4/12/2013	MDK	1
Fluorene	33	ug/l	0.4	1.26	20	M8270D	4/9/2013	4/12/2013	MDK	1
Indeno(1,2,3-cd)pyrene	< 0.54	ug/l	0.54	1.7	20	M8270D	4/9/2013	4/12/2013	MDK	1
1-Methyl naphthalene	47	ug/l	0.38	1.22	20	M8270D	4/9/2013	4/12/2013	MDK	1
2-Methyl naphthalene	< 0.32	ug/l	0.32	1.04	20	M8270D	4/9/2013	4/12/2013	MDK	1
Naphthalene	47	ug/l	0.46	1.5	20	M8270D	4/9/2013	4/12/2013	MDK	1
Phenanthrene	1.87	ug/l	0.36	1.18	20	M8270D	4/9/2013	4/12/2013	MDK	1
Pyrene	7.1	ug/l	0.5	1.6	20	M8270D	4/9/2013	4/12/2013	MDK	1

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Lab Code 5025001P
Sample ID MW-7S
Sample Matrix Water
Sample Date 4/4/2013

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
BTEX										
Benzene	0.36 "J"	ug/l	0.27	0.85	1	GRO95/8021		4/9/2013	CJR	1
Ethylbenzene	< 0.82	ug/l	0.82	2.6	1	GRO95/8021		4/9/2013	CJR	1
Toluene	< 0.8	ug/l	0.8	2.6	1	GRO95/8021		4/9/2013	CJR	1
m&p-Xylene	< 1.6	ug/l	1.6	5.2	1	GRO95/8021		4/9/2013	CJR	1
o-Xylene	1.7 "J"	ug/l	0.81	2.6	1	GRO95/8021		4/9/2013	CJR	1
PAH SIM										
Acenaphthene	5.0	ug/l	0.021	0.068	1	M8270D	4/9/2013	4/11/2013	MDK	1
Acenaphthylene	0.17	ug/l	0.02	0.063	1	M8270D	4/9/2013	4/11/2013	MDK	1
Anthracene	0.138	ug/l	0.02	0.064	1	M8270D	4/9/2013	4/11/2013	MDK	1
Benzo(a)anthracene	< 0.025	ug/l	0.025	0.078	1	M8270D	4/9/2013	4/11/2013	MDK	1
Benzo(a)pyrene	< 0.018	ug/l	0.018	0.058	1	M8270D	4/9/2013	4/11/2013	MDK	1
Benzo(b)fluoranthene	< 0.02	ug/l	0.02	0.063	1	M8270D	4/9/2013	4/11/2013	MDK	1
Benzo(g,h,i)perylene	< 0.023	ug/l	0.023	0.075	1	M8270D	4/9/2013	4/11/2013	MDK	1
Benzo(k)fluoranthene	< 0.027	ug/l	0.027	0.087	1	M8270D	4/9/2013	4/11/2013	MDK	1
Chrysene	< 0.018	ug/l	0.018	0.058	1	M8270D	4/9/2013	4/11/2013	MDK	1
Dibenzo(a,h)anthracene	< 0.023	ug/l	0.023	0.072	1	M8270D	4/9/2013	4/11/2013	MDK	1
Fluoranthene	< 0.026	ug/l	0.026	0.084	1	M8270D	4/9/2013	4/11/2013	MDK	1
Fluorene	0.83	ug/l	0.02	0.063	1	M8270D	4/9/2013	4/11/2013	MDK	1
Indeno(1,2,3-cd)pyrene	< 0.027	ug/l	0.027	0.085	1	M8270D	4/9/2013	4/11/2013	MDK	1
1-Methyl naphthalene	9.7	ug/l	0.019	0.061	1	M8270D	4/9/2013	4/11/2013	MDK	1
2-Methyl naphthalene	8.9	ug/l	0.016	0.052	1	M8270D	4/9/2013	4/11/2013	MDK	1
Naphthalene	0.43	ug/l	0.023	0.075	1	M8270D	4/9/2013	4/11/2013	MDK	1
Phenanthrene	0.034 "J"	ug/l	0.018	0.059	1	M8270D	4/9/2013	4/11/2013	MDK	1
Pyrene	< 0.025	ug/l	0.025	0.08	1	M8270D	4/9/2013	4/11/2013	MDK	1

Lab Code 5025001Q
Sample ID MW-34S
Sample Matrix Water
Sample Date 4/4/2013

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
BTEX										
Benzene	7.0	ug/l	0.27	0.85	1	GRO95/8021		4/9/2013	CJR	1
Ethylbenzene	28.4	ug/l	0.82	2.6	1	GRO95/8021		4/9/2013	CJR	1
Toluene	1.39 "J"	ug/l	0.8	2.6	1	GRO95/8021		4/9/2013	CJR	1
m&p-Xylene	34	ug/l	1.6	5.2	1	GRO95/8021		4/9/2013	CJR	1
o-Xylene	15.2	ug/l	0.81	2.6	1	GRO95/8021		4/9/2013	CJR	1
PAH SIM										
Acenaphthene	410	ug/l	21	68	1000	M8270D	4/9/2013	4/11/2013	MDK	1
Acenaphthylene	< 20	ug/l	20	63	1000	M8270D	4/9/2013	4/11/2013	MDK	1
Anthracene	88	ug/l	20	64	1000	M8270D	4/9/2013	4/11/2013	MDK	1
Benzo(a)anthracene	54 "J"	ug/l	25	78	1000	M8270D	4/9/2013	4/11/2013	MDK	1
Benzo(a)pyrene	< 18	ug/l	18	58	1000	M8270D	4/9/2013	4/11/2013	MDK	1
Benzo(b)fluoranthene	26.1 "J"	ug/l	20	63	1000	M8270D	4/9/2013	4/11/2013	MDK	1
Benzo(g,h,i)perylene	< 23	ug/l	23	75	1000	M8270D	4/9/2013	4/11/2013	MDK	1
Benzo(k)fluoranthene	< 27	ug/l	27	87	1000	M8270D	4/9/2013	4/11/2013	MDK	1
Chrysene	50 "J"	ug/l	18	58	1000	M8270D	4/9/2013	4/11/2013	MDK	1
Dibenzo(a,h)anthracene	< 23	ug/l	23	72	1000	M8270D	4/9/2013	4/11/2013	MDK	1
Fluoranthene	320	ug/l	26	84	1000	M8270D	4/9/2013	4/11/2013	MDK	1
Fluorene	330	ug/l	20	63	1000	M8270D	4/9/2013	4/11/2013	MDK	1
Indeno(1,2,3-cd)pyrene	< 27	ug/l	27	85	1000	M8270D	4/9/2013	4/11/2013	MDK	1
1-Methyl naphthalene	315	ug/l	19	61	1000	M8270D	4/9/2013	4/11/2013	MDK	1
2-Methyl naphthalene	470	ug/l	16	52	1000	M8270D	4/9/2013	4/11/2013	MDK	1
Naphthalene	4100	ug/l	23	75	1000	M8270D	4/9/2013	4/11/2013	MDK	1

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Lab Code 5025001Q
Sample ID MW-34S
Sample Matrix Water
Sample Date 4/4/2013

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Phenanthrene	800	ug/l	18	59	1000	M8270D	4/9/2013	4/11/2013	MDK	1
Pyrene	222	ug/l	25	80	1000	M8270D	4/9/2013	4/11/2013	MDK	1

Lab Code 5025001R
Sample ID MW-27S
Sample Matrix Water
Sample Date 4/4/2013

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
BTEX										
Benzene	< 0.27	ug/l	0.27	0.85	1	GRO95/8021		4/9/2013	CJR	1
Ethylbenzene	< 0.82	ug/l	0.82	2.6	1	GRO95/8021		4/9/2013	CJR	1
Toluene	< 0.8	ug/l	0.8	2.6	1	GRO95/8021		4/9/2013	CJR	1
m&p-Xylene	< 1.6	ug/l	1.6	5.2	1	GRO95/8021		4/9/2013	CJR	1
o-Xylene	< 0.81	ug/l	0.81	2.6	1	GRO95/8021		4/9/2013	CJR	1
PAH SIM										
Acenaphthene	0.113	ug/l	0.021	0.068	1	M8270D	4/9/2013	4/11/2013	MDK	1
Acenaphthylene	0.022 "J"	ug/l	0.02	0.063	1	M8270D	4/9/2013	4/11/2013	MDK	1
Anthracene	0.14	ug/l	0.02	0.064	1	M8270D	4/9/2013	4/11/2013	MDK	1
Benzo(a)anthracene	< 0.025	ug/l	0.025	0.078	1	M8270D	4/9/2013	4/11/2013	MDK	1
Benzo(a)pyrene	< 0.018	ug/l	0.018	0.058	1	M8270D	4/9/2013	4/11/2013	MDK	1
Benzo(b)fluoranthene	< 0.02	ug/l	0.02	0.063	1	M8270D	4/9/2013	4/11/2013	MDK	1
Benzo(g,h,i)perylene	< 0.023	ug/l	0.023	0.075	1	M8270D	4/9/2013	4/11/2013	MDK	1
Benzo(k)fluoranthene	< 0.027	ug/l	0.027	0.087	1	M8270D	4/9/2013	4/11/2013	MDK	1
Chrysene	< 0.018	ug/l	0.018	0.058	1	M8270D	4/9/2013	4/11/2013	MDK	1
Dibenzo(a,h)anthracene	< 0.023	ug/l	0.023	0.072	1	M8270D	4/9/2013	4/11/2013	MDK	1
Fluoranthene	0.037 "J"	ug/l	0.026	0.084	1	M8270D	4/9/2013	4/11/2013	MDK	1
Fluorene	0.075	ug/l	0.02	0.063	1	M8270D	4/9/2013	4/11/2013	MDK	1
Indeno(1,2,3-cd)pyrene	< 0.027	ug/l	0.027	0.085	1	M8270D	4/9/2013	4/11/2013	MDK	1
1-Methyl naphthalene	0.115	ug/l	0.019	0.061	1	M8270D	4/9/2013	4/11/2013	MDK	1
2-Methyl naphthalene	0.222	ug/l	0.016	0.052	1	M8270D	4/9/2013	4/11/2013	MDK	1
Naphthalene	2.34	ug/l	0.023	0.075	1	M8270D	4/9/2013	4/11/2013	MDK	1
Phenanthrene	0.106	ug/l	0.018	0.059	1	M8270D	4/9/2013	4/11/2013	MDK	1
Pyrene	0.029 "J"	ug/l	0.025	0.08	1	M8270D	4/9/2013	4/11/2013	MDK	1

Lab Code 5025001S
Sample ID MW-37S
Sample Matrix Water
Sample Date 4/4/2013

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
BTEX										
Benzene	< 0.27	ug/l	0.27	0.85	1	GRO95/8021		4/9/2013	CJR	1
Ethylbenzene	< 0.82	ug/l	0.82	2.6	1	GRO95/8021		4/9/2013	CJR	1
Toluene	< 0.8	ug/l	0.8	2.6	1	GRO95/8021		4/9/2013	CJR	1
m&p-Xylene	< 1.6	ug/l	1.6	5.2	1	GRO95/8021		4/9/2013	CJR	1
o-Xylene	< 0.81	ug/l	0.81	2.6	1	GRO95/8021		4/9/2013	CJR	1
PAH SIM										
Acenaphthene	0.025 "J"	ug/l	0.021	0.068	1	M8270D	4/9/2013	4/11/2013	MDK	1
Acenaphthylene	< 0.02	ug/l	0.02	0.063	1	M8270D	4/9/2013	4/11/2013	MDK	1
Anthracene	< 0.02	ug/l	0.02	0.064	1	M8270D	4/9/2013	4/11/2013	MDK	1
Benzo(a)anthracene	< 0.025	ug/l	0.025	0.078	1	M8270D	4/9/2013	4/11/2013	MDK	1
Benzo(a)pyrene	< 0.018	ug/l	0.018	0.058	1	M8270D	4/9/2013	4/11/2013	MDK	1
Benzo(b)fluoranthene	< 0.02	ug/l	0.02	0.063	1	M8270D	4/9/2013	4/11/2013	MDK	1
Benzo(g,h,i)perylene	< 0.023	ug/l	0.023	0.075	1	M8270D	4/9/2013	4/11/2013	MDK	1

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Lab Code 5025001S
Sample ID MW-37S
Sample Matrix Water
Sample Date 4/4/2013

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Benzo(k)fluoranthene	< 0.027	ug/l	0.027	0.087	1	M8270D	4/9/2013	4/11/2013	MDK	1
Chrysene	< 0.018	ug/l	0.018	0.058	1	M8270D	4/9/2013	4/11/2013	MDK	1
Dibenzo(a,h)anthracene	< 0.023	ug/l	0.023	0.072	1	M8270D	4/9/2013	4/11/2013	MDK	1
Fluoranthene	< 0.026	ug/l	0.026	0.084	1	M8270D	4/9/2013	4/11/2013	MDK	1
Fluorene	0.028 "J"	ug/l	0.02	0.063	1	M8270D	4/9/2013	4/11/2013	MDK	1
Indeno(1,2,3-cd)pyrene	< 0.027	ug/l	0.027	0.085	1	M8270D	4/9/2013	4/11/2013	MDK	1
1-Methyl naphthalene	0.025 "J"	ug/l	0.019	0.061	1	M8270D	4/9/2013	4/11/2013	MDK	1
2-Methyl naphthalene	0.044 "J"	ug/l	0.016	0.052	1	M8270D	4/9/2013	4/11/2013	MDK	1
Naphthalene	0.36	ug/l	0.023	0.075	1	M8270D	4/9/2013	4/11/2013	MDK	1
Phenanthrene	0.037 "J"	ug/l	0.018	0.059	1	M8270D	4/9/2013	4/11/2013	MDK	1
Pyrene	< 0.025	ug/l	0.025	0.08	1	M8270D	4/9/2013	4/11/2013	MDK	1

Lab Code 5025001T
Sample ID MW-9S
Sample Matrix Water
Sample Date 4/4/2013

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
BTEX										
Benzene	< 0.27	ug/l	0.27	0.85	1	GRO95/8021		4/9/2013	CJR	1
Ethylbenzene	< 0.82	ug/l	0.82	2.6	1	GRO95/8021		4/9/2013	CJR	1
Toluene	< 0.8	ug/l	0.8	2.6	1	GRO95/8021		4/9/2013	CJR	1
m&p-Xylene	< 1.6	ug/l	1.6	5.2	1	GRO95/8021		4/9/2013	CJR	1
o-Xylene	< 0.81	ug/l	0.81	2.6	1	GRO95/8021		4/9/2013	CJR	1
PAH SIM										
Acenaphthene	0.028 "J"	ug/l	0.021	0.068	1	M8270D	4/9/2013	4/11/2013	MDK	1
Acenaphthylene	< 0.02	ug/l	0.02	0.063	1	M8270D	4/9/2013	4/11/2013	MDK	1
Anthracene	0.048 "J"	ug/l	0.02	0.064	1	M8270D	4/9/2013	4/11/2013	MDK	1
Benzo(a)anthracene	< 0.025	ug/l	0.025	0.078	1	M8270D	4/9/2013	4/11/2013	MDK	1
Benzo(a)pyrene	< 0.018	ug/l	0.018	0.058	1	M8270D	4/9/2013	4/11/2013	MDK	1
Benzo(b)fluoranthene	< 0.02	ug/l	0.02	0.063	1	M8270D	4/9/2013	4/11/2013	MDK	1
Benzo(g,h,i)perylene	< 0.023	ug/l	0.023	0.075	1	M8270D	4/9/2013	4/11/2013	MDK	1
Benzo(k)fluoranthene	< 0.027	ug/l	0.027	0.087	1	M8270D	4/9/2013	4/11/2013	MDK	1
Chrysene	< 0.018	ug/l	0.018	0.058	1	M8270D	4/9/2013	4/11/2013	MDK	1
Dibenzo(a,h)anthracene	< 0.023	ug/l	0.023	0.072	1	M8270D	4/9/2013	4/11/2013	MDK	1
Fluoranthene	< 0.026	ug/l	0.026	0.084	1	M8270D	4/9/2013	4/11/2013	MDK	1
Fluorene	0.029 "J"	ug/l	0.02	0.063	1	M8270D	4/9/2013	4/11/2013	MDK	1
Indeno(1,2,3-cd)pyrene	< 0.027	ug/l	0.027	0.085	1	M8270D	4/9/2013	4/11/2013	MDK	1
1-Methyl naphthalene	0.027 "J"	ug/l	0.019	0.061	1	M8270D	4/9/2013	4/11/2013	MDK	1
2-Methyl naphthalene	0.041 "J"	ug/l	0.016	0.052	1	M8270D	4/9/2013	4/11/2013	MDK	1
Naphthalene	0.38	ug/l	0.023	0.075	1	M8270D	4/9/2013	4/11/2013	MDK	1
Phenanthrene	0.044 "J"	ug/l	0.018	0.059	1	M8270D	4/9/2013	4/11/2013	MDK	1
Pyrene	< 0.025	ug/l	0.025	0.08	1	M8270D	4/9/2013	4/11/2013	MDK	1

Lab Code 5025001U
Sample ID PZ-10
Sample Matrix Water
Sample Date 4/4/2013

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
BTEX										
Benzene	< 0.27	ug/l	0.27	0.85	1	GRO95/8021		4/9/2013	CJR	1
Ethylbenzene	< 0.82	ug/l	0.82	2.6	1	GRO95/8021		4/9/2013	CJR	1
Toluene	< 0.8	ug/l	0.8	2.6	1	GRO95/8021		4/9/2013	CJR	1
m&p-Xylene	< 1.6	ug/l	1.6	5.2	1	GRO95/8021		4/9/2013	CJR	1
o-Xylene	< 0.81	ug/l	0.81	2.6	1	GRO95/8021		4/9/2013	CJR	1

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Project # 13701

Lab Code 5025001U
Sample ID PZ-10
Sample Matrix Water
Sample Date 4/4/2013

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
PAH SIM										
Acenaphthene	5.2	ug/l	0.021	0.068	1	M8270D	4/10/2013	4/11/2013	MDK	1
Acenaphthylene	0.095	ug/l	0.02	0.063	1	M8270D	4/10/2013	4/11/2013	MDK	1
Anthracene	0.34	ug/l	0.02	0.064	1	M8270D	4/10/2013	4/11/2013	MDK	1
Benzo(a)anthracene	0.128	ug/l	0.025	0.078	1	M8270D	4/10/2013	4/11/2013	MDK	1
Benzo(a)pyrene	0.07	ug/l	0.018	0.058	1	M8270D	4/10/2013	4/11/2013	MDK	1
Benzo(b)fluoranthene	0.169	ug/l	0.02	0.063	1	M8270D	4/10/2013	4/11/2013	MDK	1
Benzo(g,h,i)perylene	0.108	ug/l	0.023	0.075	1	M8270D	4/10/2013	4/11/2013	MDK	1
Benzo(k)fluoranthene	0.064 "J"	ug/l	0.027	0.087	1	M8270D	4/10/2013	4/11/2013	MDK	1
Chrysene	0.132	ug/l	0.018	0.058	1	M8270D	4/10/2013	4/11/2013	MDK	1
Dibenzo(a,h)anthracene	< 0.023	ug/l	0.023	0.072	1	M8270D	4/10/2013	4/11/2013	MDK	1
Fluoranthene	0.41	ug/l	0.026	0.084	1	M8270D	4/10/2013	4/11/2013	MDK	1
Fluorene	0.92	ug/l	0.02	0.063	1	M8270D	4/10/2013	4/11/2013	MDK	1
Indeno(1,2,3-cd)pyrene	0.071 "J"	ug/l	0.027	0.085	1	M8270D	4/10/2013	4/11/2013	MDK	1
1-Methyl naphthalene	3.4	ug/l	0.019	0.061	1	M8270D	4/10/2013	4/11/2013	MDK	1
2-Methyl naphthalene	2.82	ug/l	0.016	0.052	1	M8270D	4/10/2013	4/11/2013	MDK	1
Naphthalene	0.32	ug/l	0.023	0.075	1	M8270D	4/10/2013	4/11/2013	MDK	1
Phenanthrene	1.36	ug/l	0.018	0.059	1	M8270D	4/10/2013	4/11/2013	MDK	1
Pyrene	0.299	ug/l	0.025	0.08	1	M8270D	4/10/2013	4/11/2013	MDK	1

Lab Code 5025001V
Sample ID MW-30S
Sample Matrix Water
Sample Date 4/4/2013

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
BTEX										
Benzene	< 0.27	ug/l	0.27	0.85	1	GRO95/8021		4/10/2013	CJR	1
Ethylbenzene	< 0.82	ug/l	0.82	2.6	1	GRO95/8021		4/10/2013	CJR	1
Toluene	< 0.8	ug/l	0.8	2.6	1	GRO95/8021		4/10/2013	CJR	1
m&p-Xylene	< 1.6	ug/l	1.6	5.2	1	GRO95/8021		4/10/2013	CJR	1
o-Xylene	< 0.81	ug/l	0.81	2.6	1	GRO95/8021		4/10/2013	CJR	1
PAH SIM										
Acenaphthene	< 0.021	ug/l	0.021	0.068	1	M8270D	4/10/2013	4/11/2013	MDK	1
Acenaphthylene	< 0.02	ug/l	0.02	0.063	1	M8270D	4/10/2013	4/11/2013	MDK	1
Anthracene	0.113	ug/l	0.02	0.064	1	M8270D	4/10/2013	4/11/2013	MDK	1
Benzo(a)anthracene	< 0.025	ug/l	0.025	0.078	1	M8270D	4/10/2013	4/11/2013	MDK	6
Benzo(a)pyrene	< 0.018	ug/l	0.018	0.058	1	M8270D	4/10/2013	4/11/2013	MDK	6
Benzo(b)fluoranthene	< 0.02	ug/l	0.02	0.063	1	M8270D	4/10/2013	4/11/2013	MDK	6
Benzo(g,h,i)perylene	< 0.023	ug/l	0.023	0.075	1	M8270D	4/10/2013	4/11/2013	MDK	6
Benzo(k)fluoranthene	< 0.027	ug/l	0.027	0.087	1	M8270D	4/10/2013	4/11/2013	MDK	6
Chrysene	< 0.018	ug/l	0.018	0.058	1	M8270D	4/10/2013	4/11/2013	MDK	6
Dibenzo(a,h)anthracene	< 0.023	ug/l	0.023	0.072	1	M8270D	4/10/2013	4/11/2013	MDK	6
Fluoranthene	< 0.026	ug/l	0.026	0.084	1	M8270D	4/10/2013	4/11/2013	MDK	1
Fluorene	< 0.02	ug/l	0.02	0.063	1	M8270D	4/10/2013	4/11/2013	MDK	1
Indeno(1,2,3-cd)pyrene	< 0.027	ug/l	0.027	0.085	1	M8270D	4/10/2013	4/11/2013	MDK	6
1-Methyl naphthalene	< 0.019	ug/l	0.019	0.061	1	M8270D	4/10/2013	4/11/2013	MDK	1
2-Methyl naphthalene	< 0.016	ug/l	0.016	0.052	1	M8270D	4/10/2013	4/11/2013	MDK	1
Naphthalene	0.024 "J"	ug/l	0.023	0.075	1	M8270D	4/10/2013	4/11/2013	MDK	1
Phenanthrene	0.029 "J"	ug/l	0.018	0.059	1	M8270D	4/10/2013	4/11/2013	MDK	1
Pyrene	< 0.025	ug/l	0.025	0.08	1	M8270D	4/10/2013	4/11/2013	MDK	1

Project Name MOSS-AMERICAN **Invoice #** E25001
Project # 13701

Lab Code 5025001W
Sample ID MW-5S
Sample Matrix Water
Sample Date 4/4/2013

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
BTEX										
Benzene	< 0.27	ug/l	0.27	0.85	1	GRO95/8021		4/10/2013	CJR	1
Ethylbenzene	< 0.82	ug/l	0.82	2.6	1	GRO95/8021		4/10/2013	CJR	1
Toluene	< 0.8	ug/l	0.8	2.6	1	GRO95/8021		4/10/2013	CJR	1
m&p-Xylene	< 1.6	ug/l	1.6	5.2	1	GRO95/8021		4/10/2013	CJR	1
o-Xylene	< 0.81	ug/l	0.81	2.6	1	GRO95/8021		4/10/2013	CJR	1
PAH SIM										
Acenaphthene	< 0.021	ug/l	0.021	0.068	1	M8270D	4/10/2013	4/11/2013	MDK	1
Acenaphthylene	< 0.02	ug/l	0.02	0.063	1	M8270D	4/10/2013	4/11/2013	MDK	1
Anthracene	0.030 "J"	ug/l	0.02	0.064	1	M8270D	4/10/2013	4/11/2013	MDK	1
Benzo(a)anthracene	< 0.025	ug/l	0.025	0.078	1	M8270D	4/10/2013	4/11/2013	MDK	1
Benzo(a)pyrene	< 0.018	ug/l	0.018	0.058	1	M8270D	4/10/2013	4/11/2013	MDK	1
Benzo(b)fluoranthene	< 0.02	ug/l	0.02	0.063	1	M8270D	4/10/2013	4/11/2013	MDK	1
Benzo(g,h,i)perylene	< 0.023	ug/l	0.023	0.075	1	M8270D	4/10/2013	4/11/2013	MDK	1
Benzo(k)fluoranthene	< 0.027	ug/l	0.027	0.087	1	M8270D	4/10/2013	4/11/2013	MDK	1
Chrysene	< 0.018	ug/l	0.018	0.058	1	M8270D	4/10/2013	4/11/2013	MDK	1
Dibenzo(a,h)anthracene	< 0.023	ug/l	0.023	0.072	1	M8270D	4/10/2013	4/11/2013	MDK	1
Fluoranthene	< 0.026	ug/l	0.026	0.084	1	M8270D	4/10/2013	4/11/2013	MDK	1
Fluorene	< 0.02	ug/l	0.02	0.063	1	M8270D	4/10/2013	4/11/2013	MDK	1
Indeno(1,2,3-cd)pyrene	< 0.027	ug/l	0.027	0.085	1	M8270D	4/10/2013	4/11/2013	MDK	1
1-Methyl naphthalene	< 0.019	ug/l	0.019	0.061	1	M8270D	4/10/2013	4/11/2013	MDK	1
2-Methyl naphthalene	< 0.016	ug/l	0.016	0.052	1	M8270D	4/10/2013	4/11/2013	MDK	1
Naphthalene	0.025 "J"	ug/l	0.023	0.075	1	M8270D	4/10/2013	4/11/2013	MDK	1
Phenanthrene	< 0.018	ug/l	0.018	0.059	1	M8270D	4/10/2013	4/11/2013	MDK	1
Pyrene	< 0.025	ug/l	0.025	0.08	1	M8270D	4/10/2013	4/11/2013	MDK	1

Lab Code 5025001X
Sample ID MW-A
Sample Matrix Water
Sample Date 4/4/2013

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
BTEX										
Benzene	< 0.27	ug/l	0.27	0.85	1	GRO95/8021		4/10/2013	CJR	1
Ethylbenzene	< 0.82	ug/l	0.82	2.6	1	GRO95/8021		4/10/2013	CJR	1
Toluene	< 0.8	ug/l	0.8	2.6	1	GRO95/8021		4/10/2013	CJR	1
m&p-Xylene	< 1.6	ug/l	1.6	5.2	1	GRO95/8021		4/10/2013	CJR	1
o-Xylene	< 0.81	ug/l	0.81	2.6	1	GRO95/8021		4/10/2013	CJR	1
PAH SIM										
Acenaphthene	< 0.021	ug/l	0.021	0.068	1	M8270D	4/10/2013	4/11/2013	MDK	1
Acenaphthylene	< 0.02	ug/l	0.02	0.063	1	M8270D	4/10/2013	4/11/2013	MDK	1
Anthracene	0.025 "J"	ug/l	0.02	0.064	1	M8270D	4/10/2013	4/11/2013	MDK	1
Benzo(a)anthracene	< 0.025	ug/l	0.025	0.078	1	M8270D	4/10/2013	4/11/2013	MDK	1
Benzo(a)pyrene	< 0.018	ug/l	0.018	0.058	1	M8270D	4/10/2013	4/11/2013	MDK	1
Benzo(b)fluoranthene	< 0.02	ug/l	0.02	0.063	1	M8270D	4/10/2013	4/11/2013	MDK	1
Benzo(g,h,i)perylene	< 0.023	ug/l	0.023	0.075	1	M8270D	4/10/2013	4/11/2013	MDK	1
Benzo(k)fluoranthene	< 0.027	ug/l	0.027	0.087	1	M8270D	4/10/2013	4/11/2013	MDK	1
Chrysene	< 0.018	ug/l	0.018	0.058	1	M8270D	4/10/2013	4/11/2013	MDK	1
Dibenzo(a,h)anthracene	< 0.023	ug/l	0.023	0.072	1	M8270D	4/10/2013	4/11/2013	MDK	1
Fluoranthene	< 0.026	ug/l	0.026	0.084	1	M8270D	4/10/2013	4/11/2013	MDK	1
Fluorene	< 0.02	ug/l	0.02	0.063	1	M8270D	4/10/2013	4/11/2013	MDK	1
Indeno(1,2,3-cd)pyrene	< 0.027	ug/l	0.027	0.085	1	M8270D	4/10/2013	4/11/2013	MDK	1
1-Methyl naphthalene	< 0.019	ug/l	0.019	0.061	1	M8270D	4/10/2013	4/11/2013	MDK	1
2-Methyl naphthalene	< 0.016	ug/l	0.016	0.052	1	M8270D	4/10/2013	4/11/2013	MDK	1
Naphthalene	< 0.023	ug/l	0.023	0.075	1	M8270D	4/10/2013	4/11/2013	MDK	1

Project Name MOSS-AMERICAN **Invoice #** E25001
Project # 13701

Lab Code 5025001X
Sample ID MW-A
Sample Matrix Water
Sample Date 4/4/2013

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Phenanthrene	0.026 "J"	ug/l	0.018	0.059	1	M8270D	4/10/2013	4/11/2013	MDK	1
Pyrene	< 0.025	ug/l	0.025	0.08	1	M8270D	4/10/2013	4/11/2013	MDK	1

Lab Code 5025001Y
Sample ID MW-B
Sample Matrix Water
Sample Date 4/5/2013

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
BTEX										
Benzene	< 0.27	ug/l	0.27	0.85	1	GRO95/8021		4/10/2013	CJR	1
Ethylbenzene	< 0.82	ug/l	0.82	2.6	1	GRO95/8021		4/10/2013	CJR	1
Toluene	< 0.8	ug/l	0.8	2.6	1	GRO95/8021		4/10/2013	CJR	1
m&p-Xylene	< 1.6	ug/l	1.6	5.2	1	GRO95/8021		4/10/2013	CJR	1
o-Xylene	< 0.81	ug/l	0.81	2.6	1	GRO95/8021		4/10/2013	CJR	1
PAH SIM										
Acenaphthene	< 0.021	ug/l	0.021	0.068	1	M8270D	4/10/2013	4/11/2013	MDK	1
Acenaphthylene	< 0.02	ug/l	0.02	0.063	1	M8270D	4/10/2013	4/11/2013	MDK	1
Anthracene	< 0.02	ug/l	0.02	0.064	1	M8270D	4/10/2013	4/11/2013	MDK	1
Benzo(a)anthracene	< 0.025	ug/l	0.025	0.078	1	M8270D	4/10/2013	4/11/2013	MDK	1
Benzo(a)pyrene	< 0.018	ug/l	0.018	0.058	1	M8270D	4/10/2013	4/11/2013	MDK	1
Benzo(b)fluoranthene	< 0.02	ug/l	0.02	0.063	1	M8270D	4/10/2013	4/11/2013	MDK	1
Benzo(g,h,i)perylene	< 0.023	ug/l	0.023	0.075	1	M8270D	4/10/2013	4/11/2013	MDK	1
Benzo(k)fluoranthene	< 0.027	ug/l	0.027	0.087	1	M8270D	4/10/2013	4/11/2013	MDK	1
Chrysene	< 0.018	ug/l	0.018	0.058	1	M8270D	4/10/2013	4/11/2013	MDK	1
Dibenzo(a,h)anthracene	< 0.023	ug/l	0.023	0.072	1	M8270D	4/10/2013	4/11/2013	MDK	1
Fluoranthene	< 0.026	ug/l	0.026	0.084	1	M8270D	4/10/2013	4/11/2013	MDK	1
Fluorene	< 0.02	ug/l	0.02	0.063	1	M8270D	4/10/2013	4/11/2013	MDK	1
Indeno(1,2,3-cd)pyrene	< 0.027	ug/l	0.027	0.085	1	M8270D	4/10/2013	4/11/2013	MDK	1
1-Methyl naphthalene	< 0.019	ug/l	0.019	0.061	1	M8270D	4/10/2013	4/11/2013	MDK	1
2-Methyl naphthalene	< 0.016	ug/l	0.016	0.052	1	M8270D	4/10/2013	4/11/2013	MDK	1
Naphthalene	0.034 "J"	ug/l	0.023	0.075	1	M8270D	4/10/2013	4/11/2013	MDK	1
Phenanthrene	0.037 "J"	ug/l	0.018	0.059	1	M8270D	4/10/2013	4/11/2013	MDK	1
Pyrene	< 0.025	ug/l	0.025	0.08	1	M8270D	4/10/2013	4/11/2013	MDK	1

Lab Code 5025001Z
Sample ID MW-C
Sample Matrix Water
Sample Date 4/5/2013

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
BTEX										
Benzene	< 0.27	ug/l	0.27	0.85	1	GRO95/8021		4/10/2013	CJR	1
Ethylbenzene	< 0.82	ug/l	0.82	2.6	1	GRO95/8021		4/10/2013	CJR	1
Toluene	< 0.8	ug/l	0.8	2.6	1	GRO95/8021		4/10/2013	CJR	1
m&p-Xylene	< 1.6	ug/l	1.6	5.2	1	GRO95/8021		4/10/2013	CJR	1
o-Xylene	< 0.81	ug/l	0.81	2.6	1	GRO95/8021		4/10/2013	CJR	1
PAH SIM										
Acenaphthene	< 0.021	ug/l	0.021	0.068	1	M8270D	4/10/2013	4/11/2013	MDK	1
Acenaphthylene	< 0.02	ug/l	0.02	0.063	1	M8270D	4/10/2013	4/11/2013	MDK	1
Anthracene	< 0.02	ug/l	0.02	0.064	1	M8270D	4/10/2013	4/11/2013	MDK	1
Benzo(a)anthracene	< 0.025	ug/l	0.025	0.078	1	M8270D	4/10/2013	4/11/2013	MDK	1
Benzo(a)pyrene	< 0.018	ug/l	0.018	0.058	1	M8270D	4/10/2013	4/11/2013	MDK	1
Benzo(b)fluoranthene	0.039 "J"	ug/l	0.02	0.063	1	M8270D	4/10/2013	4/11/2013	MDK	1
Benzo(g,h,i)perylene	0.026 "J"	ug/l	0.023	0.075	1	M8270D	4/10/2013	4/11/2013	MDK	1

Project Name MOSS-AMERICAN **Invoice #** E25001
Project # 13701

Lab Code 5025001Z
Sample ID MW-C
Sample Matrix Water
Sample Date 4/5/2013

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Benzo(k)fluoranthene	< 0.027	ug/l	0.027	0.087	1	M8270D	4/10/2013	4/11/2013	MDK	1
Chrysene	0.028 "J"	ug/l	0.018	0.058	1	M8270D	4/10/2013	4/11/2013	MDK	1
Dibenzo(a,h)anthracene	< 0.023	ug/l	0.023	0.072	1	M8270D	4/10/2013	4/11/2013	MDK	1
Fluoranthene	0.052 "J"	ug/l	0.026	0.084	1	M8270D	4/10/2013	4/11/2013	MDK	1
Fluorene	< 0.02	ug/l	0.02	0.063	1	M8270D	4/10/2013	4/11/2013	MDK	1
Indeno(1,2,3-cd)pyrene	< 0.027	ug/l	0.027	0.085	1	M8270D	4/10/2013	4/11/2013	MDK	1
1-Methyl naphthalene	0.11	ug/l	0.019	0.061	1	M8270D	4/10/2013	4/11/2013	MDK	1
2-Methyl naphthalene	< 0.016	ug/l	0.016	0.052	1	M8270D	4/10/2013	4/11/2013	MDK	1
Naphthalene	< 0.023	ug/l	0.023	0.075	1	M8270D	4/10/2013	4/11/2013	MDK	1
Phenanthrene	0.044 "J"	ug/l	0.018	0.059	1	M8270D	4/10/2013	4/11/2013	MDK	1
Pyrene	0.046 "J"	ug/l	0.025	0.08	1	M8270D	4/10/2013	4/11/2013	MDK	1

Lab Code 525001AA
Sample ID MW-D
Sample Matrix Water
Sample Date 4/5/2013

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
BTEX										
Benzene	< 0.27	ug/l	0.27	0.85	1	GRO95/8021		4/10/2013	CJR	1
Ethylbenzene	< 0.82	ug/l	0.82	2.6	1	GRO95/8021		4/10/2013	CJR	1
Toluene	< 0.8	ug/l	0.8	2.6	1	GRO95/8021		4/10/2013	CJR	1
m&p-Xylene	< 1.6	ug/l	1.6	5.2	1	GRO95/8021		4/10/2013	CJR	1
o-Xylene	< 0.81	ug/l	0.81	2.6	1	GRO95/8021		4/10/2013	CJR	1
PAH SIM										
Acenaphthene	< 0.021	ug/l	0.021	0.068	1	M8270D	4/10/2013	4/11/2013	MDK	1
Acenaphthylene	< 0.02	ug/l	0.02	0.063	1	M8270D	4/10/2013	4/11/2013	MDK	1
Anthracene	< 0.02	ug/l	0.02	0.064	1	M8270D	4/10/2013	4/11/2013	MDK	1
Benzo(a)anthracene	< 0.025	ug/l	0.025	0.078	1	M8270D	4/10/2013	4/11/2013	MDK	1
Benzo(a)pyrene	< 0.018	ug/l	0.018	0.058	1	M8270D	4/10/2013	4/11/2013	MDK	1
Benzo(b)fluoranthene	< 0.02	ug/l	0.02	0.063	1	M8270D	4/10/2013	4/11/2013	MDK	1
Benzo(g,h,i)perylene	0.038 "J"	ug/l	0.023	0.075	1	M8270D	4/10/2013	4/11/2013	MDK	1
Benzo(k)fluoranthene	< 0.027	ug/l	0.027	0.087	1	M8270D	4/10/2013	4/11/2013	MDK	1
Chrysene	0.02 "J"	ug/l	0.018	0.058	1	M8270D	4/10/2013	4/11/2013	MDK	1
Dibenzo(a,h)anthracene	< 0.023	ug/l	0.023	0.072	1	M8270D	4/10/2013	4/11/2013	MDK	1
Fluoranthene	< 0.026	ug/l	0.026	0.084	1	M8270D	4/10/2013	4/11/2013	MDK	1
Fluorene	< 0.02	ug/l	0.02	0.063	1	M8270D	4/10/2013	4/11/2013	MDK	1
Indeno(1,2,3-cd)pyrene	< 0.027	ug/l	0.027	0.085	1	M8270D	4/10/2013	4/11/2013	MDK	1
1-Methyl naphthalene	< 0.019	ug/l	0.019	0.061	1	M8270D	4/10/2013	4/11/2013	MDK	1
2-Methyl naphthalene	< 0.016	ug/l	0.016	0.052	1	M8270D	4/10/2013	4/11/2013	MDK	1
Naphthalene	< 0.023	ug/l	0.023	0.075	1	M8270D	4/10/2013	4/11/2013	MDK	1
Phenanthrene	< 0.018	ug/l	0.018	0.059	1	M8270D	4/10/2013	4/11/2013	MDK	1
Pyrene	< 0.025	ug/l	0.025	0.08	1	M8270D	4/10/2013	4/11/2013	MDK	1

Lab Code 525001BB
Sample ID MW-E
Sample Matrix Water
Sample Date 4/5/2013

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
BTEX										
Benzene	< 0.27	ug/l	0.27	0.85	1	GRO95/8021		4/10/2013	CJR	1
Ethylbenzene	< 0.82	ug/l	0.82	2.6	1	GRO95/8021		4/10/2013	CJR	1
Toluene	< 0.8	ug/l	0.8	2.6	1	GRO95/8021		4/10/2013	CJR	1
m&p-Xylene	< 1.6	ug/l	1.6	5.2	1	GRO95/8021		4/10/2013	CJR	1
o-Xylene	< 0.81	ug/l	0.81	2.6	1	GRO95/8021		4/10/2013	CJR	1

Project Name MOSS-AMERICAN **Invoice #** E25001
Project # 13701

Lab Code 525001BB
Sample ID MW-E
Sample Matrix Water
Sample Date 4/5/2013

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
PAH SIM										
Acenaphthene	< 0.021	ug/l	0.021	0.068	1	M8270D	4/10/2013	4/11/2013	MDK	1
Acenaphthylene	< 0.02	ug/l	0.02	0.063	1	M8270D	4/10/2013	4/11/2013	MDK	1
Anthracene	< 0.02	ug/l	0.02	0.064	1	M8270D	4/10/2013	4/11/2013	MDK	1
Benzo(a)anthracene	< 0.025	ug/l	0.025	0.078	1	M8270D	4/10/2013	4/11/2013	MDK	1
Benzo(a)pyrene	0.038 "J"	ug/l	0.018	0.058	1	M8270D	4/10/2013	4/11/2013	MDK	1
Benzo(b)fluoranthene	0.063	ug/l	0.02	0.063	1	M8270D	4/10/2013	4/11/2013	MDK	1
Benzo(g,h,i)perylene	0.44	ug/l	0.023	0.075	1	M8270D	4/10/2013	4/11/2013	MDK	1
Benzo(k)fluoranthene	< 0.027	ug/l	0.027	0.087	1	M8270D	4/10/2013	4/11/2013	MDK	1
Chrysene	< 0.018	ug/l	0.018	0.058	1	M8270D	4/10/2013	4/11/2013	MDK	1
Dibenzo(a,h)anthracene	< 0.023	ug/l	0.023	0.072	1	M8270D	4/10/2013	4/11/2013	MDK	1
Fluoranthene	< 0.026	ug/l	0.026	0.084	1	M8270D	4/10/2013	4/11/2013	MDK	1
Fluorene	< 0.02	ug/l	0.02	0.063	1	M8270D	4/10/2013	4/11/2013	MDK	1
Indeno(1,2,3-cd)pyrene	0.094	ug/l	0.027	0.085	1	M8270D	4/10/2013	4/11/2013	MDK	1
1-Methyl naphthalene	0.02 "J"	ug/l	0.019	0.061	1	M8270D	4/10/2013	4/11/2013	MDK	1
2-Methyl naphthalene	< 0.016	ug/l	0.016	0.052	1	M8270D	4/10/2013	4/11/2013	MDK	1
Naphthalene	< 0.023	ug/l	0.023	0.075	1	M8270D	4/10/2013	4/11/2013	MDK	1
Phenanthrene	0.018 "J"	ug/l	0.018	0.059	1	M8270D	4/10/2013	4/11/2013	MDK	1
Pyrene	0.034 "J"	ug/l	0.025	0.08	1	M8270D	4/10/2013	4/11/2013	MDK	1

Lab Code 525001CC
Sample ID MW-F
Sample Matrix Water
Sample Date 4/5/2013

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
BTEX										
Benzene	< 0.27	ug/l	0.27	0.85	1	GRO95/8021		4/10/2013	CJR	1
Ethylbenzene	< 0.82	ug/l	0.82	2.6	1	GRO95/8021		4/10/2013	CJR	1
Toluene	< 0.8	ug/l	0.8	2.6	1	GRO95/8021		4/10/2013	CJR	1
m&p-Xylene	< 1.6	ug/l	1.6	5.2	1	GRO95/8021		4/10/2013	CJR	1
o-Xylene	< 0.81	ug/l	0.81	2.6	1	GRO95/8021		4/10/2013	CJR	1
PAH SIM										
Acenaphthene	< 0.021	ug/l	0.021	0.068	1	M8270D	4/10/2013	4/11/2013	MDK	1
Acenaphthylene	< 0.02	ug/l	0.02	0.063	1	M8270D	4/10/2013	4/11/2013	MDK	1
Anthracene	< 0.02	ug/l	0.02	0.064	1	M8270D	4/10/2013	4/11/2013	MDK	1
Benzo(a)anthracene	0.03 "J"	ug/l	0.025	0.078	1	M8270D	4/10/2013	4/11/2013	MDK	1
Benzo(a)pyrene	0.039 "J"	ug/l	0.018	0.058	1	M8270D	4/10/2013	4/11/2013	MDK	1
Benzo(b)fluoranthene	0.065	ug/l	0.02	0.063	1	M8270D	4/10/2013	4/11/2013	MDK	1
Benzo(g,h,i)perylene	0.188	ug/l	0.023	0.075	1	M8270D	4/10/2013	4/11/2013	MDK	1
Benzo(k)fluoranthene	< 0.027	ug/l	0.027	0.087	1	M8270D	4/10/2013	4/11/2013	MDK	1
Chrysene	0.06	ug/l	0.018	0.058	1	M8270D	4/10/2013	4/11/2013	MDK	1
Dibenzo(a,h)anthracene	< 0.023	ug/l	0.023	0.072	1	M8270D	4/10/2013	4/11/2013	MDK	1
Fluoranthene	0.087	ug/l	0.026	0.084	1	M8270D	4/10/2013	4/11/2013	MDK	1
Fluorene	< 0.02	ug/l	0.02	0.063	1	M8270D	4/10/2013	4/11/2013	MDK	1
Indeno(1,2,3-cd)pyrene	0.04 "J"	ug/l	0.027	0.085	1	M8270D	4/10/2013	4/11/2013	MDK	1
1-Methyl naphthalene	< 0.019	ug/l	0.019	0.061	1	M8270D	4/10/2013	4/11/2013	MDK	1
2-Methyl naphthalene	< 0.016	ug/l	0.016	0.052	1	M8270D	4/10/2013	4/11/2013	MDK	1
Naphthalene	0.027 "J"	ug/l	0.023	0.075	1	M8270D	4/10/2013	4/11/2013	MDK	1
Phenanthrene	0.062	ug/l	0.018	0.059	1	M8270D	4/10/2013	4/11/2013	MDK	1
Pyrene	0.127	ug/l	0.025	0.08	1	M8270D	4/10/2013	4/11/2013	MDK	1

Project Name MOSS-AMERICAN **Invoice #** E25001
Project # 13701

Lab Code 525001DD
Sample ID MW-G
Sample Matrix Water
Sample Date 4/5/2013

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
BTEX										
Benzene	< 0.27	ug/l	0.27	0.85	1	GRO95/8021		4/10/2013	CJR	1
Ethylbenzene	< 0.82	ug/l	0.82	2.6	1	GRO95/8021		4/10/2013	CJR	1
Toluene	< 0.8	ug/l	0.8	2.6	1	GRO95/8021		4/10/2013	CJR	1
m&p-Xylene	< 1.6	ug/l	1.6	5.2	1	GRO95/8021		4/10/2013	CJR	1
o-Xylene	< 0.81	ug/l	0.81	2.6	1	GRO95/8021		4/10/2013	CJR	1
PAH SIM										
Acenaphthene	< 0.021	ug/l	0.021	0.068	1	M8270D	4/10/2013	4/11/2013	MDK	1
Acenaphthylene	< 0.02	ug/l	0.02	0.063	1	M8270D	4/10/2013	4/11/2013	MDK	1
Anthracene	< 0.02	ug/l	0.02	0.064	1	M8270D	4/10/2013	4/11/2013	MDK	1
Benzo(a)anthracene	< 0.025	ug/l	0.025	0.078	1	M8270D	4/10/2013	4/11/2013	MDK	1
Benzo(a)pyrene	< 0.018	ug/l	0.018	0.058	1	M8270D	4/10/2013	4/11/2013	MDK	1
Benzo(b)fluoranthene	< 0.02	ug/l	0.02	0.063	1	M8270D	4/10/2013	4/11/2013	MDK	1
Benzo(g,h,i)perylene	0.047 "J"	ug/l	0.023	0.075	1	M8270D	4/10/2013	4/11/2013	MDK	1
Benzo(k)fluoranthene	< 0.027	ug/l	0.027	0.087	1	M8270D	4/10/2013	4/11/2013	MDK	1
Chrysene	< 0.018	ug/l	0.018	0.058	1	M8270D	4/10/2013	4/11/2013	MDK	1
Dibenzo(a,h)anthracene	< 0.023	ug/l	0.023	0.072	1	M8270D	4/10/2013	4/11/2013	MDK	1
Fluoranthene	< 0.026	ug/l	0.026	0.084	1	M8270D	4/10/2013	4/11/2013	MDK	1
Fluorene	< 0.02	ug/l	0.02	0.063	1	M8270D	4/10/2013	4/11/2013	MDK	1
Indeno(1,2,3-cd)pyrene	< 0.027	ug/l	0.027	0.085	1	M8270D	4/10/2013	4/11/2013	MDK	1
1-Methyl naphthalene	< 0.019	ug/l	0.019	0.061	1	M8270D	4/10/2013	4/11/2013	MDK	1
2-Methyl naphthalene	< 0.016	ug/l	0.016	0.052	1	M8270D	4/10/2013	4/11/2013	MDK	1
Naphthalene	< 0.023	ug/l	0.023	0.075	1	M8270D	4/10/2013	4/11/2013	MDK	1
Phenanthrene	0.02 "J"	ug/l	0.018	0.059	1	M8270D	4/10/2013	4/11/2013	MDK	1
Pyrene	0.033 "J"	ug/l	0.025	0.08	1	M8270D	4/10/2013	4/11/2013	MDK	1

Lab Code 525001EE
Sample ID MW-H
Sample Matrix Water
Sample Date 4/5/2013

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
BTEX										
Benzene	< 0.27	ug/l	0.27	0.85	1	GRO95/8021		4/10/2013	CJR	1
Ethylbenzene	< 0.82	ug/l	0.82	2.6	1	GRO95/8021		4/10/2013	CJR	1
Toluene	< 0.8	ug/l	0.8	2.6	1	GRO95/8021		4/10/2013	CJR	1
m&p-Xylene	< 1.6	ug/l	1.6	5.2	1	GRO95/8021		4/10/2013	CJR	1
o-Xylene	< 0.81	ug/l	0.81	2.6	1	GRO95/8021		4/10/2013	CJR	1
PAH SIM										
Acenaphthene	< 0.021	ug/l	0.021	0.068	1	M8270D	4/10/2013	4/11/2013	MDK	1
Acenaphthylene	< 0.02	ug/l	0.02	0.063	1	M8270D	4/10/2013	4/11/2013	MDK	1
Anthracene	< 0.02	ug/l	0.02	0.064	1	M8270D	4/10/2013	4/11/2013	MDK	1
Benzo(a)anthracene	0.053 "J"	ug/l	0.025	0.078	1	M8270D	4/10/2013	4/11/2013	MDK	1
Benzo(a)pyrene	0.049 "J"	ug/l	0.018	0.058	1	M8270D	4/10/2013	4/11/2013	MDK	1
Benzo(b)fluoranthene	0.107	ug/l	0.02	0.063	1	M8270D	4/10/2013	4/11/2013	MDK	1
Benzo(g,h,i)perylene	0.107	ug/l	0.023	0.075	1	M8270D	4/10/2013	4/11/2013	MDK	1
Benzo(k)fluoranthene	< 0.027	ug/l	0.027	0.087	1	M8270D	4/10/2013	4/11/2013	MDK	1
Chrysene	0.082	ug/l	0.018	0.058	1	M8270D	4/10/2013	4/11/2013	MDK	1
Dibenzo(a,h)anthracene	< 0.023	ug/l	0.023	0.072	1	M8270D	4/10/2013	4/11/2013	MDK	1
Fluoranthene	0.153	ug/l	0.026	0.084	1	M8270D	4/10/2013	4/11/2013	MDK	1
Fluorene	< 0.02	ug/l	0.02	0.063	1	M8270D	4/10/2013	4/11/2013	MDK	1
Indeno(1,2,3-cd)pyrene	0.041 "J"	ug/l	0.027	0.085	1	M8270D	4/10/2013	4/11/2013	MDK	1
1-Methyl naphthalene	< 0.019	ug/l	0.019	0.061	1	M8270D	4/10/2013	4/11/2013	MDK	1
2-Methyl naphthalene	< 0.016	ug/l	0.016	0.052	1	M8270D	4/10/2013	4/11/2013	MDK	1
Naphthalene	< 0.023	ug/l	0.023	0.075	1	M8270D	4/10/2013	4/11/2013	MDK	1

Project Name MOSS-AMERICAN **Invoice #** E25001
Project # 13701

Lab Code 525001EE
Sample ID MW-H
Sample Matrix Water
Sample Date 4/5/2013

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Phenanthrene	0.044 "J"	ug/l	0.018	0.059	1	M8270D	4/10/2013	4/11/2013	MDK	1
Pyrene	0.15	ug/l	0.025	0.08	1	M8270D	4/10/2013	4/11/2013	MDK	1

Lab Code 525001FF
Sample ID MW-I
Sample Matrix Water
Sample Date 4/5/2013

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
BTEX										
Benzene	< 0.27	ug/l	0.27	0.85	1	GRO95/8021		4/10/2013	CJR	1
Ethylbenzene	< 0.82	ug/l	0.82	2.6	1	GRO95/8021		4/10/2013	CJR	1
Toluene	< 0.8	ug/l	0.8	2.6	1	GRO95/8021		4/10/2013	CJR	1
m&p-Xylene	< 1.6	ug/l	1.6	5.2	1	GRO95/8021		4/10/2013	CJR	1
o-Xylene	< 0.81	ug/l	0.81	2.6	1	GRO95/8021		4/10/2013	CJR	1
PAH SIM										
Acenaphthene	< 0.021	ug/l	0.021	0.068	1	M8270D	4/10/2013	4/11/2013	MDK	1
Acenaphthylene	< 0.02	ug/l	0.02	0.063	1	M8270D	4/10/2013	4/11/2013	MDK	1
Anthracene	< 0.02	ug/l	0.02	0.064	1	M8270D	4/10/2013	4/11/2013	MDK	1
Benzo(a)anthracene	0.055 "J"	ug/l	0.025	0.078	1	M8270D	4/10/2013	4/11/2013	MDK	1
Benzo(a)pyrene	0.093	ug/l	0.018	0.058	1	M8270D	4/10/2013	4/11/2013	MDK	1
Benzo(b)fluoranthene	0.222	ug/l	0.02	0.063	1	M8270D	4/10/2013	4/11/2013	MDK	1
Benzo(g,h,i)perylene	0.152	ug/l	0.023	0.075	1	M8270D	4/10/2013	4/11/2013	MDK	1
Benzo(k)fluoranthene	0.071 "J"	ug/l	0.027	0.087	1	M8270D	4/10/2013	4/11/2013	MDK	1
Chrysene	0.111	ug/l	0.018	0.058	1	M8270D	4/10/2013	4/11/2013	MDK	1
Dibenzo(a,h)anthracene	< 0.023	ug/l	0.023	0.072	1	M8270D	4/10/2013	4/11/2013	MDK	1
Fluoranthene	0.196	ug/l	0.026	0.084	1	M8270D	4/10/2013	4/11/2013	MDK	1
Fluorene	< 0.02	ug/l	0.02	0.063	1	M8270D	4/10/2013	4/11/2013	MDK	1
Indeno(1,2,3-cd)pyrene	0.093	ug/l	0.027	0.085	1	M8270D	4/10/2013	4/11/2013	MDK	1
1-Methyl naphthalene	< 0.019	ug/l	0.019	0.061	1	M8270D	4/10/2013	4/11/2013	MDK	1
2-Methyl naphthalene	< 0.016	ug/l	0.016	0.052	1	M8270D	4/10/2013	4/11/2013	MDK	1
Naphthalene	< 0.023	ug/l	0.023	0.075	1	M8270D	4/10/2013	4/11/2013	MDK	1
Phenanthrene	0.087	ug/l	0.018	0.059	1	M8270D	4/10/2013	4/11/2013	MDK	1
Pyrene	0.16	ug/l	0.025	0.08	1	M8270D	4/10/2013	4/11/2013	MDK	1

Lab Code 525001GG
Sample ID MW-J
Sample Matrix Water
Sample Date 4/5/2013

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
BTEX										
Benzene	< 0.27	ug/l	0.27	0.85	1	GRO95/8021		4/10/2013	CJR	1
Ethylbenzene	< 0.82	ug/l	0.82	2.6	1	GRO95/8021		4/10/2013	CJR	1
Toluene	< 0.8	ug/l	0.8	2.6	1	GRO95/8021		4/10/2013	CJR	1
m&p-Xylene	< 1.6	ug/l	1.6	5.2	1	GRO95/8021		4/10/2013	CJR	1
o-Xylene	< 0.81	ug/l	0.81	2.6	1	GRO95/8021		4/10/2013	CJR	1
PAH SIM										
Acenaphthene	< 0.021	ug/l	0.021	0.068	1	M8270D	4/10/2013	4/11/2013	MDK	1
Acenaphthylene	< 0.02	ug/l	0.02	0.063	1	M8270D	4/10/2013	4/11/2013	MDK	1
Anthracene	< 0.02	ug/l	0.02	0.064	1	M8270D	4/10/2013	4/11/2013	MDK	1
Benzo(a)anthracene	0.026 "J"	ug/l	0.025	0.078	1	M8270D	4/10/2013	4/11/2013	MDK	1
Benzo(a)pyrene	0.025 "J"	ug/l	0.018	0.058	1	M8270D	4/10/2013	4/11/2013	MDK	1
Benzo(b)fluoranthene	0.055 "J"	ug/l	0.02	0.063	1	M8270D	4/10/2013	4/11/2013	MDK	1
Benzo(g,h,i)perylene	0.054 "J"	ug/l	0.023	0.075	1	M8270D	4/10/2013	4/11/2013	MDK	1

Project Name MOSS-AMERICAN **Invoice #** E25001
Project # 13701

Lab Code 525001GG
Sample ID MW-J
Sample Matrix Water
Sample Date 4/5/2013

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Benzo(k)fluoranthene	< 0.027	ug/l	0.027	0.087	1	M8270D	4/10/2013	4/11/2013	MDK	1
Chrysene	0.038 "J"	ug/l	0.018	0.058	1	M8270D	4/10/2013	4/11/2013	MDK	1
Dibenzo(a,h)anthracene	< 0.023	ug/l	0.023	0.072	1	M8270D	4/10/2013	4/11/2013	MDK	1
Fluoranthene	0.061 "J"	ug/l	0.026	0.084	1	M8270D	4/10/2013	4/11/2013	MDK	1
Fluorene	< 0.02	ug/l	0.02	0.063	1	M8270D	4/10/2013	4/11/2013	MDK	1
Indeno(1,2,3-cd)pyrene	< 0.027	ug/l	0.027	0.085	1	M8270D	4/10/2013	4/11/2013	MDK	1
1-Methyl naphthalene	0.025 "J"	ug/l	0.019	0.061	1	M8270D	4/10/2013	4/11/2013	MDK	1
2-Methyl naphthalene	< 0.016	ug/l	0.016	0.052	1	M8270D	4/10/2013	4/11/2013	MDK	1
Naphthalene	0.032 "J"	ug/l	0.023	0.075	1	M8270D	4/10/2013	4/11/2013	MDK	1
Phenanthrene	0.047 "J"	ug/l	0.018	0.059	1	M8270D	4/10/2013	4/11/2013	MDK	1
Pyrene	0.058 "J"	ug/l	0.025	0.08	1	M8270D	4/10/2013	4/11/2013	MDK	1

Lab Code 525001HH
Sample ID DUPLICATE #1
Sample Matrix Water
Sample Date 4/5/2013

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
BTEX										
Benzene	< 0.27	ug/l	0.27	0.85	1	GRO95/8021		4/10/2013	CJR	1
Ethylbenzene	< 0.82	ug/l	0.82	2.6	1	GRO95/8021		4/10/2013	CJR	1
Toluene	< 0.8	ug/l	0.8	2.6	1	GRO95/8021		4/10/2013	CJR	1
m&p-Xylene	< 1.6	ug/l	1.6	5.2	1	GRO95/8021		4/10/2013	CJR	1
o-Xylene	< 0.81	ug/l	0.81	2.6	1	GRO95/8021		4/10/2013	CJR	1

Lab Code 525001II
Sample ID DUPLICATE #2
Sample Matrix Water
Sample Date 4/5/2013

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
BTEX										
Benzene	< 0.27	ug/l	0.27	0.85	1	GRO95/8021		4/10/2013	CJR	1
Ethylbenzene	< 0.82	ug/l	0.82	2.6	1	GRO95/8021		4/10/2013	CJR	1
Toluene	< 0.8	ug/l	0.8	2.6	1	GRO95/8021		4/10/2013	CJR	1
m&p-Xylene	< 1.6	ug/l	1.6	5.2	1	GRO95/8021		4/10/2013	CJR	1
o-Xylene	< 0.81	ug/l	0.81	2.6	1	GRO95/8021		4/10/2013	CJR	1

Lab Code 525001JJ
Sample ID DUPLICATE #3
Sample Matrix Water
Sample Date 4/5/2013

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
BTEX										
Benzene	< 0.27	ug/l	0.27	0.85	1	GRO95/8021		4/10/2013	CJR	1
Ethylbenzene	< 0.82	ug/l	0.82	2.6	1	GRO95/8021		4/10/2013	CJR	1
Toluene	< 0.8	ug/l	0.8	2.6	1	GRO95/8021		4/10/2013	CJR	1
m&p-Xylene	< 1.6	ug/l	1.6	5.2	1	GRO95/8021		4/10/2013	CJR	1
o-Xylene	< 0.81	ug/l	0.81	2.6	1	GRO95/8021		4/10/2013	CJR	1

Project Name MOSS-AMERICAN **Invoice #** E25001
Project # 13701

Lab Code 525001KK
Sample ID DUPLICATE #4
Sample Matrix Water
Sample Date 4/5/2013

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
BTEX										
Benzene	< 0.27	ug/l	0.27	0.85	1	GRO95/8021		4/10/2013	CJR	1
Ethylbenzene	< 0.82	ug/l	0.82	2.6	1	GRO95/8021		4/10/2013	CJR	1
Toluene	< 0.8	ug/l	0.8	2.6	1	GRO95/8021		4/10/2013	CJR	1
m&p-Xylene	< 1.6	ug/l	1.6	5.2	1	GRO95/8021		4/10/2013	CJR	1
o-Xylene	< 0.81	ug/l	0.81	2.6	1	GRO95/8021		4/10/2013	CJR	1

Lab Code 525001LL
Sample ID EQUIP BLANK
Sample Matrix Water
Sample Date 4/5/2013

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
BTEX										
Benzene	< 0.27	ug/l	0.27	0.85	1	GRO95/8021		4/10/2013	CJR	1
Ethylbenzene	< 0.82	ug/l	0.82	2.6	1	GRO95/8021		4/10/2013	CJR	1
Toluene	< 0.8	ug/l	0.8	2.6	1	GRO95/8021		4/10/2013	CJR	1
m&p-Xylene	< 1.6	ug/l	1.6	5.2	1	GRO95/8021		4/10/2013	CJR	1
o-Xylene	< 0.81	ug/l	0.81	2.6	1	GRO95/8021		4/10/2013	CJR	1

Lab Code 525001MM
Sample ID TB
Sample Matrix Water
Sample Date 4/5/2013

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
BTEX										
Benzene	< 0.27	ug/l	0.27	0.85	1	GRO95/8021		4/10/2013	CJR	1
Ethylbenzene	< 0.82	ug/l	0.82	2.6	1	GRO95/8021		4/10/2013	CJR	1
Toluene	< 0.8	ug/l	0.8	2.6	1	GRO95/8021		4/10/2013	CJR	1
m&p-Xylene	< 1.6	ug/l	1.6	5.2	1	GRO95/8021		4/10/2013	CJR	1
o-Xylene	< 0.81	ug/l	0.81	2.6	1	GRO95/8021		4/10/2013	CJR	1

Lab Code 525001NN
Sample ID MW-7S-W
Sample Matrix Water
Sample Date 4/5/2013

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
BTEX										
Benzene	< 0.27	ug/l	0.27	0.85	1	GRO95/8021		4/11/2013	CJR	1
Ethylbenzene	< 0.82	ug/l	0.82	2.6	1	GRO95/8021		4/11/2013	CJR	1
Toluene	< 0.8	ug/l	0.8	2.6	1	GRO95/8021		4/11/2013	CJR	1
m&p-Xylene	< 1.6	ug/l	1.6	5.2	1	GRO95/8021		4/11/2013	CJR	1
o-Xylene	1.56 "J"	ug/l	0.81	2.6	1	GRO95/8021		4/11/2013	CJR	1
PAH SIM										
Acenaphthene	291	ug/l	2.1	6.8	100	M8270D	4/10/2013	4/12/2013	MDK	1
Acenaphthylene	2.45 "J"	ug/l	2	6.3	100	M8270D	4/10/2013	4/12/2013	MDK	1
Anthracene	183	ug/l	2	6.4	100	M8270D	4/10/2013	4/12/2013	MDK	1
Benzo(a)anthracene	< 2.5	ug/l	2.5	7.8	100	M8270D	4/10/2013	4/12/2013	MDK	1
Benzo(a)pyrene	< 1.8	ug/l	1.8	5.8	100	M8270D	4/10/2013	4/12/2013	MDK	1
Benzo(b)fluoranthene	< 2	ug/l	2	6.3	100	M8270D	4/10/2013	4/12/2013	MDK	1

Project Name MOSS-AMERICAN **Invoice #** E25001
Project # 13701

Lab Code 525001NN
Sample ID MW-7S-W
Sample Matrix Water
Sample Date 4/5/2013

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Benzo(g,h,i)perylene	< 2.3	ug/l	2.3	7.5	100	M8270D	4/10/2013	4/12/2013	MDK	1
Benzo(k)fluoranthene	< 2.7	ug/l	2.7	8.7	100	M8270D	4/10/2013	4/12/2013	MDK	1
Chrysene	< 1.8	ug/l	1.8	5.8	100	M8270D	4/10/2013	4/12/2013	MDK	1
Dibenzo(a,h)anthracene	< 2.3	ug/l	2.3	7.2	100	M8270D	4/10/2013	4/12/2013	MDK	1
Fluoranthene	14.4	ug/l	2.6	8.4	100	M8270D	4/10/2013	4/12/2013	MDK	1
Fluorene	162	ug/l	2	6.3	100	M8270D	4/10/2013	4/12/2013	MDK	1
Indeno(1,2,3-cd)pyrene	< 2.7	ug/l	2.7	8.5	100	M8270D	4/10/2013	4/12/2013	MDK	1
1-Methyl naphthalene	136	ug/l	1.9	6.1	100	M8270D	4/10/2013	4/12/2013	MDK	1
2-Methyl naphthalene	15.2	ug/l	1.6	5.2	100	M8270D	4/10/2013	4/12/2013	MDK	1
Naphthalene	64	ug/l	2.3	7.5	100	M8270D	4/10/2013	4/12/2013	MDK	1
Phenanthrene	177	ug/l	1.8	5.9	100	M8270D	4/10/2013	4/12/2013	MDK	1
Pyrene	7.5 "J"	ug/l	2.5	8	100	M8270D	4/10/2013	4/12/2013	MDK	1

Lab Code 525001OO
Sample ID MW-34S-N
Sample Matrix Water
Sample Date 4/5/2013

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
BTEX										
Benzene	< 0.27	ug/l	0.27	0.85	1	GRO95/8021		4/11/2013	CJR	1
Ethylbenzene	< 0.82	ug/l	0.82	2.6	1	GRO95/8021		4/11/2013	CJR	1
Toluene	< 0.8	ug/l	0.8	2.6	1	GRO95/8021		4/11/2013	CJR	1
m&p-Xylene	< 1.6	ug/l	1.6	5.2	1	GRO95/8021		4/11/2013	CJR	1
o-Xylene	< 0.81	ug/l	0.81	2.6	1	GRO95/8021		4/11/2013	CJR	1
PAH SIM										
Acenaphthene	0.059 "J"	ug/l	0.021	0.068	1	M8270D	4/10/2013	4/11/2013	MDK	1
Acenaphthylene	< 0.02	ug/l	0.02	0.063	1	M8270D	4/10/2013	4/11/2013	MDK	1
Anthracene	0.023 "J"	ug/l	0.02	0.064	1	M8270D	4/10/2013	4/11/2013	MDK	1
Benzo(a)anthracene	< 0.025	ug/l	0.025	0.078	1	M8270D	4/10/2013	4/11/2013	MDK	1
Benzo(a)pyrene	< 0.018	ug/l	0.018	0.058	1	M8270D	4/10/2013	4/11/2013	MDK	1
Benzo(b)fluoranthene	< 0.02	ug/l	0.02	0.063	1	M8270D	4/10/2013	4/11/2013	MDK	1
Benzo(g,h,i)perylene	< 0.023	ug/l	0.023	0.075	1	M8270D	4/10/2013	4/11/2013	MDK	1
Benzo(k)fluoranthene	< 0.027	ug/l	0.027	0.087	1	M8270D	4/10/2013	4/11/2013	MDK	1
Chrysene	< 0.018	ug/l	0.018	0.058	1	M8270D	4/10/2013	4/11/2013	MDK	1
Dibenzo(a,h)anthracene	< 0.023	ug/l	0.023	0.072	1	M8270D	4/10/2013	4/11/2013	MDK	1
Fluoranthene	< 0.026	ug/l	0.026	0.084	1	M8270D	4/10/2013	4/11/2013	MDK	1
Fluorene	0.034 "J"	ug/l	0.02	0.063	1	M8270D	4/10/2013	4/11/2013	MDK	1
Indeno(1,2,3-cd)pyrene	< 0.027	ug/l	0.027	0.085	1	M8270D	4/10/2013	4/11/2013	MDK	1
1-Methyl naphthalene	0.055 "J"	ug/l	0.019	0.061	1	M8270D	4/10/2013	4/11/2013	MDK	1
2-Methyl naphthalene	0.039 "J"	ug/l	0.016	0.052	1	M8270D	4/10/2013	4/11/2013	MDK	1
Naphthalene	0.053 "J"	ug/l	0.023	0.075	1	M8270D	4/10/2013	4/11/2013	MDK	1
Phenanthrene	0.057 "J"	ug/l	0.018	0.059	1	M8270D	4/10/2013	4/11/2013	MDK	1
Pyrene	< 0.025	ug/l	0.025	0.08	1	M8270D	4/10/2013	4/11/2013	MDK	1

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

Code	*Comment*
1	Laboratory QC within limits.
6	The surrogate recovery 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

CHAIN OF CUSTODY RECORD

Synergy Environmental Lab, Inc.

1990 Prospect Ct. • Appleton, WI 54914
920-830-2455 • FAX 920-733-0631

Chain # № 773
Page 1 of 5

Sample Handling Request
___ Rush Analysis Date Required ___
(Rushes accepted only with prior authorization)
X Normal Turn Around

Lab I.D. #
Account No. : Quote No.:
Project #: 13701
Sampler: (signature)

Project (Name / Location): Moss-American Milwaukee, WI

Reports To: MaFizul Islam	Invoice To:
Company: Sigma Environmental	Company
Address: 1300 West Canal Street	Address
City State Zip: Milwaukee WI 53233	City State Zip
Phone: 414-643-4125	Phone
FAX: 414-643-4210	FAX

Lab I.D.	Sample I.D.	Collection Date	Collection Time	Comp	Grab	Filtered Y/N	No. of Containers	Sample Type (Matrix)*	Preservation
502500 A	TG1-3	4/3/13	10:12			N	4	GW	HCL
B	TG2-1	4/3/13	10:25			N	4	GW	HCL
C	TG3-1	4/3/13	11:00			N	4	GW	HCL
D	TG4-3	4/3/13	13:05			N	4	GW	HCL
E	TG5-1	4/3/13	12:58			N	4	GW	HCL
F	TG5-3	4/3/13	12:50			N	4	GW	HCL
G	TG6-1	4/3/13	12:30			N	4	GW	HCL
H	TG6-3	4/3/13	12:40			N	4	GW	HCL
I	TG1-1	4/3/13	14:07			N	4	GW	HCL
J	PZ-02	4/4/13	10:45			N	4	GW	HCL

Analysis Requested

DRO (Mod DRO Sep 95)	GRO (Mod GRO Sep 95)	IRON	LEAD	NITRATE / NITRITE	PAH (EPA 8270)	PVOC (EPA 8021)	PVOC + NAPHTHALENE	SULFATE	VOC DW (EPA 524.2)	VOC (EPA 8260)	8-RCRA METALS	BTEX
					X							X
					X							X
					X							X
					X							X
					X							X
					X							X
					X							X
					X							X
					X							X
					X							X

Other Analysis

PID/FID

Comments/Special Instructions (*Specify groundwater "GW", Drinking Water "DW", Waste Water "WW", Soil "S", Air "A", Oil, Sludge etc.)

Sample Integrity - To be completed by receiving lab.
Method of Shipment : Hand
Temp. of Temp. Blank. ____ °C On Ice: ✓
Cooler seal intact upon receipt: ____ Yes ____ No

Relinquished By: (sign)	Time	Date	Received By: (sign)	Time	Date
	1430	4/5/13			

Received in Laboratory By: Christa Rose Time: 10:00 Date: 4-6-13

CHAIN OF CUSTODY RECORD

Synergy Environmental Lab, Inc.

1990 Prospect Ct. • Appleton, WI 54914
920-830-2455 • FAX 920-733-0631

Chain # No 0774
Page 2 of 5

Sample Handling Request
___ Rush Analysis Date Required ____
(Rushes accepted only with prior authorization)
X Normal Turn Around

Lab I.D. #
Account No. : **Quote No.:**
Project #: 13701
Sampler: (signature) Chi McCoy
Project (Name / Location): Moss-American Milwaukee, WI

Reports To: Mafizul Islam	Invoice To:
Company Sigma Environmental	Company
Address 1300 West Canal Street	Address
City State Zip Milwaukee, WI 53233	City State Zip
Phone 414-643-4125	Phone
FAX 414-643-4210	FAX

Lab I.D.	Sample I.D.	Collection Date	Collection Time	Comp	Grab	Filtered Y/N	No. of Containers	Sample Type (Matrix)*	Preservation	DRO (Mod DRO Sep 95)	GRO (Mod GRO Sep 95)	IRON	LEAD	NITRATE / NITRITE	PAH (EPA 8270)	PVOC (EPA 8021)	PVOC + NAPHTHALENE	SULFATE	VOC DW (EPA 524.2)	VOC (EPA 8260)	8-RCRA METALS	BTEX	PID/ FID
502500 k	MW-33S	4/4/13	11:45			N	4	GW	HCL						X							X	
L	MW-32S	4/4/13	11:35			N	4	GW	HCL						X							X	
M	MW-38S	4/4/13	11:15			N	4	GW	HCL						X							X	
N	MW-39S	4/4/13	11:25			N	4	GW	HCL						X							X	
O	PZ-03	4/4/13	11:05			N	4	GW	HCL						X							X	
P	MW-7S	4/4/13	10:55			N	4	GW	HCL						X							X	
Q	MW-34S	4/4/13	11:20			N	4	GW	HCL						X							X	
R	MW-27S	4/4/13	12:11			N	4	GW	HCL						X							X	
S	MW-37S	4/4/13	12:53			N	4	GW	HCL						X							X	
		4/4/13				N	4	GW	HCL						X							X	

Comments/Special Instructions (*Specify groundwater "GW", Drinking Water "DW", Waste Water "WW", Soil "S", Air "A", Oil, Sludge etc.)

Sample Integrity - To be completed by receiving lab.
Method of Shipment : Driven
Temp. of Temp. Blank. ____ °C On Ice: ____
Cooler seal intact upon receipt: ____ Yes ____ No

Relinquished By: (sign)	Time	Date	Received By: (sign)	Time	Date
Chi McCoy	1413	4/5/13			

Received in Laboratory By: Christine Ross Time: 10:00 Date: 4-6-13

CHAIN OF CUSTODY RECORD

Synergy Environmental Lab, Inc.

1990 Prospect Ct. • Appleton, WI 54914
920-830-2455 • FAX 920-733-0631

Chain # Nº 3775

Page 3 of 5

Sample Handling Request
___ Rush Analysis Date Required ____
(Rushes accepted only with prior authorization)
X Normal Turn Around

Lab I.D. #

Account No. : **Quote No.:**

Project #: 13701

Sampler: (signature)

Project (Name / Location): Moss-American Milwaukee, WI

Reports To: Mafizul Islam	Invoice To:
Company Sigma Environmental	Company
Address 1300 West Canal Street	Address
City State Zip Milwaukee, WI 53233	City State Zip
Phone 414-643-4125	Phone
FAX 414-643-4210	FAX

Lab I.D.	Sample I.D.	Collection Date	Collection Time	Comp	Grab	Filtered Y/N	No. of Containers	Sample Type (Matrix)*	Preservation	DRO (Mod DRO Sep 95)	GRO (Mod GRO Sep 95)	IRON	LEAD	NITRATE / NITRITE	PAH (EPA 8270)	PVOC (EPA 8021)	PVOC + NAPHTHALENE	SULFATE	VOC DW (EPA 524.2)	VOC (EPA 8260)	8-RCRA METALS	BTEX	PID/ FID
502500 IT	MW-9S	4/4/13	13:10			N	4	GW	HCL						X							X	
U	PZ-10	4/4/13	13:30			N	4	GW	HCL						X							X	
V	MW-30S	4/4/13	14:00			N	4	GW	HCL						X							X	
W	MW-5S	4/4/13	14:05			N	4	GW	HCL						X							X	
X	MW-A	4/4/13	15:05			N	4	GW	HCL						X							X	
Y	MW-B	4/5/13	9:25			N	4	GW	HCL						X							X	
Z	MW-C	4/5/13	9:55			N	4	GW	HCL						X							X	
52501 AA	MW-D	4/5/13	10:40			N	4	GW	HCL						X							X	
BB	MW-E	4/5/13	11:06			N	4	GW	HCL						X							X	
CC	MW-F	4/5/13	11:32			N	4	GW	HCL						X							X	

Comments/Special Instructions (*Specify groundwater "GW", Drinking Water "DW", Waste Water "WW", Soil "S", Air "A", Oil, Sludge etc.)

Sample Integrity - To be completed by receiving lab.
Method of Shipment : Driven
Temp. of Temp. Blank. ____ °C On Ice: ✓
Cooler seal intact upon receipt: ✓ Yes ____ No

Relinquished By: (sign)	Time	Date	Received By: (sign)	Time	Date
	14:30	4/5/13			

Received in Laboratory By: Time: 10:00 Date: 4-6-13

CHAIN OF CUSTODY RECORD

Synergy Environmental Lab, Inc.

1990 Prospect Ct. • Appleton, WI 54914
920-830-2455 • FAX 920-733-0631

Chain # No 3776
Page 4 of 5

Sample Handling Request
___ Rush Analysis Date Required ____
(Rushes accepted only with prior authorization)
X Normal Turn Around

Lab I.D. #
Account No. : **Quote No.:**
Project #: 13701
Sampler: (signature)
Project (Name / Location): Moss-American Milwaukee, WI

Reports To: Mafizul Islam	Invoice To:
Company Sigma Environmental	Company
Address 1300 West Canal Street	Address
City State Zip Milwaukee, WI 53233	City State Zip
Phone 414-643-4125	Phone
FAX 414-643-4210	FAX

Analysis Requested | **Other Analysis**

Lab I.D.	Sample I.D.	Collection Date	Collection Time	Comp	Grab	Filtered Y/N	No. of Containers	Sample Type (Matrix)*	Preservation	DRO (Mod DRO Sep 95)	GRO (Mod GRO Sep 95)	IRON	LEAD	NITRATE / NITRITE	PAH (EPA 8270)	PVOC (EPA 8021)	PVOC + NAPHTHALENE	SULFATE	VOC DW (EPA 524.2)	VOC (EPA 8260)	8-RCRA METALS	BTEX	PID/ FID
502500 DD	MW-G	4/5/13	11:58			N	4	GW	HCL						X							X	
EE	MW-H	4/5/13	12:20			N	4	GW	HCL						X							X	
FF	MW-I	4/5/13	12:46			N	4	GW	HCL						X							X	
GG	MW-J	4/5/13	13:10			N	4	GW	HCL						X							X	
HH	DUPLICATE #1	4/4/13	—			N	3	GW	HCL													X	
II	DUPLICATE #2	4/4/13	—			N	3	GW	HCL													X	
JJ	DUPLICATE #3	4/5/13	—			N	3	GW	HCL													X	
KK	DUPLICATE #4	4/5/13	—			N	3	GW	HCL													X	
LL	EQUIP. BLANK	4/5/13	—			N	2	—	HCL													X	
MM	TRIP BLANK	—	—			N	2	—	HCL													X	

Comments/Special Instructions (*Specify groundwater "GW", Drinking Water "DW", Waste Water "WW", Soil "S", Air "A", Oil, Sludge etc.)

Sample Integrity - To be completed by receiving lab.
Method of Shipment : Dunham
Temp. of Temp. Blank. ____ °C On Ice: ✓
Cooler seal intact upon receipt: ✓ Yes ____ No

Relinquished By: (sign)	Time	Date	Received By: (sign)	Time	Date
	14:30	4/5/13			

Received in Laboratory By: Time: 10:00 Date: 4-6-13

CHAIN OF CUSTODY RECORD

Synergy Environmental Lab, Inc.

1990 Prospect Ct. • Appleton, WI 54914
920-830-2455 • FAX 920-733-0631

Chain # No 15653

Page 5 of 5

Sample Handling Request
___ Rush Analysis Date Required ____
(Rushes accepted only with prior authorization)
X Normal Turn Around

Lab I.D. #

Account No. : **Quote No.:**

Project #: 13701

Sampler: (signature)

Project (Name / Location): Moss-American Milwaukee, WI

Reports To: Mafizul Islam	Invoice To:
Company Sigma Environmental	Company
Address 1300 West Canal St.	Address
City State Zip Milwaukee, WI	City State Zip
Phone 414-643-4125	Phone
FAX 414-643-4210	FAX

Lab I.D.	Sample I.D.	Collection Date	Collection Time	Comp	Grab	Filtered Y/N	No. of Containers	Sample Type (Matrix)*	Preservation	DRO (Mod DRO Sep 95)	GRO (Mod GRO Sep 95)	IRON	LEAD	NITRATE / NITRITE	PAH (EPA 8270)	PVOC (EPA 8021)	PVOC + NAPHTHALENE	SULFATE	VOC DW (EPA 524.2)	VOC (EPA 8260)	8-RCRA METALS	BTEX	PID/ FID
S2500 MW	MW-7S-W	4/5/13	8:10			N	4	GW	HCl						X							X	
00	MW-34S-N	4/5/13	8:15			N	4	GW	HCl						X							X	

Analysis Requested | Other Analysis

Comments/Special Instructions (*Specify groundwater "GW", Drinking Water "DW", Waste Water "WW", Soil "S", Air "A", Oil, Sludge etc.)

Sample Integrity - To be completed by receiving lab.
Method of Shipment : Delivery
Temp. of Temp. Blank. ____ °C On Ice: ✓
Cooler seal intact upon receipt: ✓ Yes ____ No

Relinquished By: (sign)	Time	Date	Received By: (sign)	Time	Date
	14:30	4/5/13			

Received in Laboratory By: Time: 10:02 Date: 4-6-13

APPENDIX C

FIGURES 1-2, 1-3 & 1-4

N

0 400'

SCALE

LEGEND

CURRENT (NEW) CHANNEL

OLD CHANNEL

MONITORING WELLS

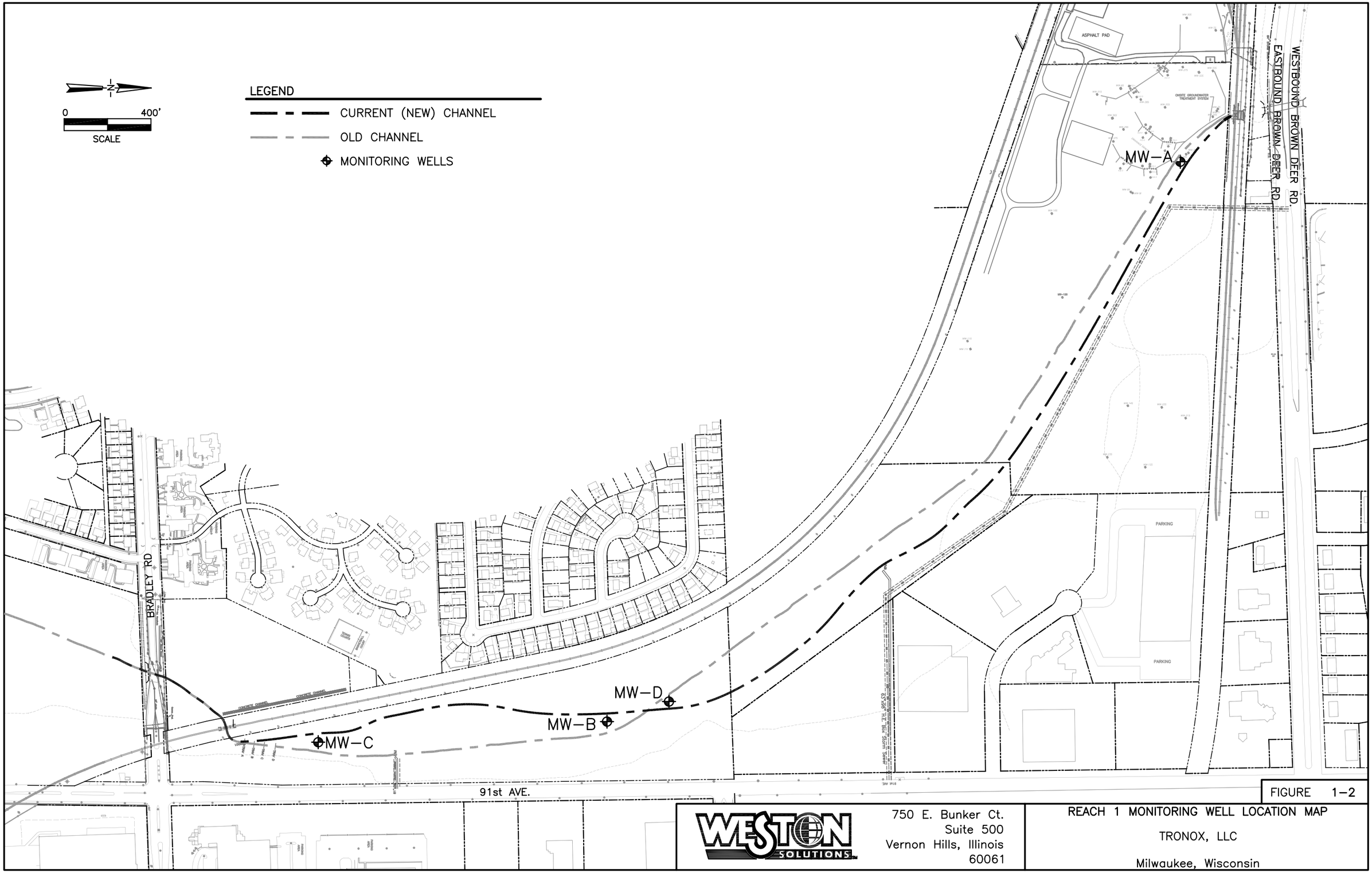

FIGURE 1-2

WESTON SOLUTIONS

750 E. Bunker Ct.
Suite 500
Vernon Hills, Illinois
60061

REACH 1 MONITORING WELL LOCATION MAP

TRONOX, LLC

Milwaukee, Wisconsin

J:\moss-1\REACH-1\200-SCALE-WELLMAP.dwg, 12/7/2007 9:29:37 AM

N

0 400'

SCALE

W. EVERTS STREET

GOOD HOPE ROAD

N. GRANVILLE ROAD

CALUMET ROAD

BRADLEY ROAD

91st. ST.

91st. ST.

MW-E

MW-F

MW-G

LEGEND

CURRENT (NEW) CHANNEL

OLD CHANNEL

MONITORING WELLS

FIGURE 1-3

WESTON SOLUTIONS

750 E. Bunker Ct.
Suite 500
Vernon Hills, Illinois
60061

REACH 2 MONITORING WELL LOCATION MAP

TRONOX, LLC

Milwaukee, Wisconsin

J:\moss-1m\REACH-2-3\100-SCALE-WELLS.dwg, 12/7/2007 9:31:28 AM

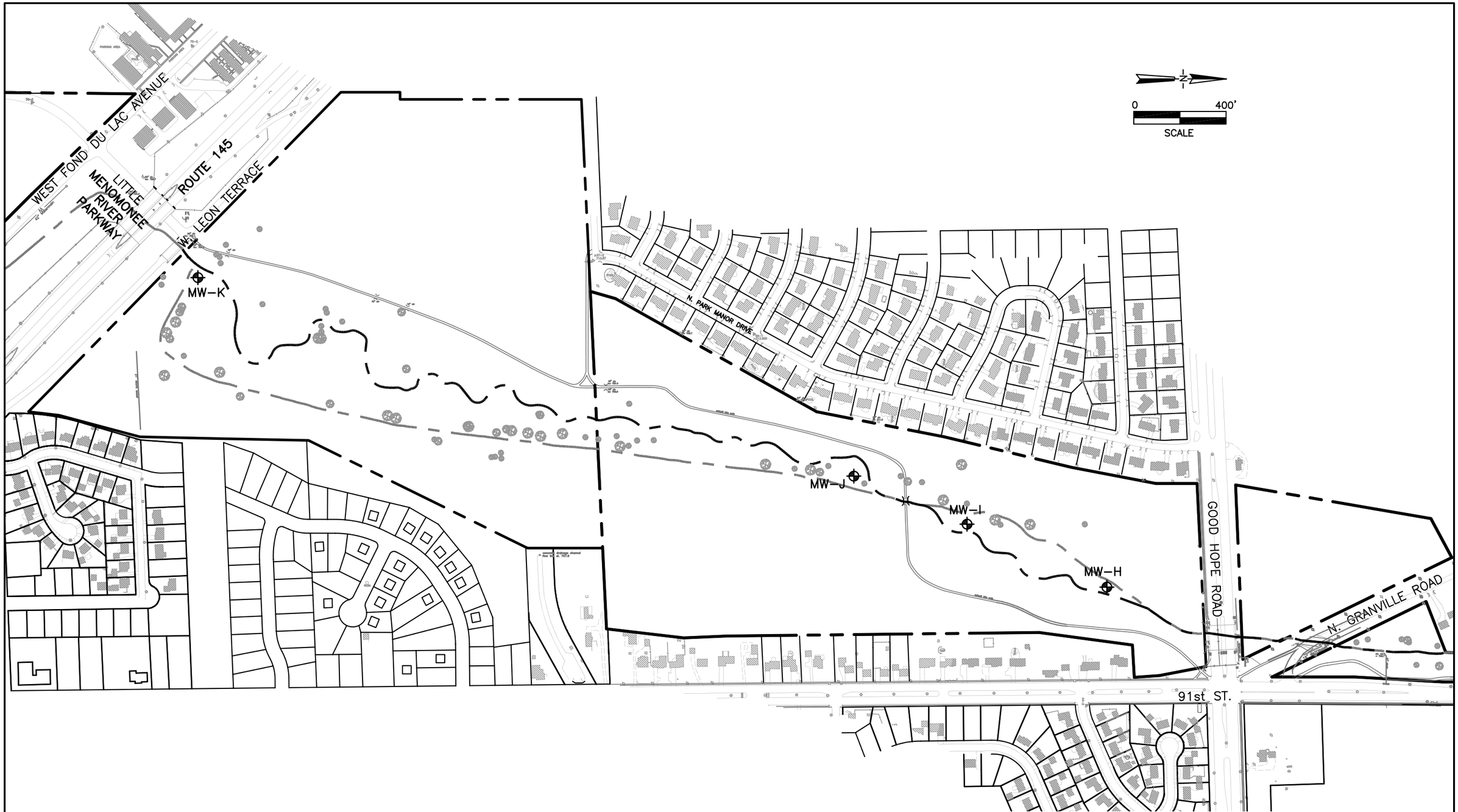

FIGURE 1-4

WESTON SOLUTIONS

750 E. Bunker Ct.
Suite 500
Vernon Hills, Illinois
60061

REACH 3 MONITORING WELL LOCATION MAP

TRONOX, LLC

Milwaukee, Wisconsin

J:\mass-1m\REACH-2-3\100-SCALE-MWELLS.dwg, 12/7/2007 9:31:56 AM