June 30, 2017

Ms. Kathy Halbur
Federal On-Scene Coordinator
United States Environmental Protection Agency, Region 5
2984 Shawano Avenue
Green Bay, Wisconsin 54313

Re: Response to Jet Fuel Release
WDNR WI SPILL #11418 ID 20170501SE41-2 and #11422 ID 20170501SE41-3
NRC Incident Report #1177177
General Mitchell International Airport, Concourse E, Milwaukee, Wisconsin 53207

Dear Ms. Halbur:

MKE Fuel Company, LLC (MKE Fuel), the Lessee of the Jet A fuel system at General Mitchell International Airport (MKE), retained Burns & McDonnell Engineering Company, Inc. (Burns & McDonnell) to assist with investigation activities associated with the May 1, 2017 discovery of a petroleum hydrocarbon release originating from Concourse E at MKE located in Milwaukee, Wisconsin (Site) (see Figure 1). The incident was reported to the Wisconsin Department of Natural Resources (WDNR) by the Milwaukee Fire Department (MFD) and by Mr. Greg Failey of MKE. WDNR assigned WI SPILL #11418 ID 20170501SE41-2 for the MFD report and #11422 ID 20170501SE41-3 for the MKE report. WDNR reported the release to the United States Environmental Protection Agency (USEPA) National Response Center (NRC) which assigned incident Report #1177177. Burns & McDonnell prepared this letter summarizing investigation and remediation activities completed to date associated with the incident. Based on the activities completed, Burns & McDonnell submits that no further investigation or remediation is required or warranted at the Site. With the implementation of the additional mitigation activities and the continuing obligations described below, Burns & McDonnell requests closure of the incident.

Incident Description

On the evening of May 1, 2017, a jet fuel odor was reported in the vicinity of the car rental area as well as the employee parking lot at MKE. At approximately the same time a sheen was observed on surface water in a concrete channel on the northwest portion of MKE property near the location of the MKE storm sewer outfall, and in Wilson Park Creek northwest of the 6th Street bridge. MKE Aircraft Rescue and Fire Fighting (ARFF) and MFD personnel responded to the incident and placed boom in the concrete channel on MKE property and northwest of the intersection of Layton Avenue and 1st Street. Upon notification of fuel odors, Aircraft Service International Group (ASIG), operator of the MKE fuel hydrant system on behalf of MKE Fuel, immediately conducted investigation activities in an attempt to determine the source of the release. ASIG discovered a leaking hydrant valve at hydrant pit 60C adjacent to Concourse E at MKE (see Figure 2) by approximately 1630 on May 2, 2017. The segment of hydrant line around

Concourse E was isolated and the 60C hydrant valve was removed and the piping blind flanged to prevent any further release. Attachment A includes ASIG inspection records of the hydrant system.

Figure 3 presents the site layout of the area surrounding hydrant pit 60C. The hydrant pit is at the southern end of a hydrant lateral line that runs south-southwest from the main hydrant line. A 36-inch diameter storm sewer is present approximately 10 feet northeast of hydrant pit 60C and runs in a southeast to northwest direction. A 29-inch by 45-inch box sewer is present to the southwest of hydrant pit 60C and runs in a southeast to northwest direction. The 36-inch diameter storm sewer and 29-inch by 45-inch box sewer both flow into structure 525 that is located northwest of hydrant pit 60C as shown on Figure 3.

Based on discussions and information made available by ASIG, the cause of the release can be attributed to a malfunctioning hydrant valve in conjunction with an unsecured hydrant pit boot seal. It appears that subsidence of pavement in relation to the hydrant piping caused the seal to uncouple from the pit bottom, allowing the fuel contained within the pit to leak from the pit into the underlying soil and ultimately infiltrate the storm sewer system.

The actual quantity of fuel released from the pit is unknown. In order to estimate the amount of fuel released from the pit, despite the potential for such an estimate to be over-inclusive, the time frame between the initial incident report on May 1, 2017 and valve shut-off was approximately 23 hours. Based on this information, the maximum estimated release volume is 500 gallons.

Initial Field Response

As part of the MKE Fuel release response, ASIG contacted the spill prevention, control and countermeasure (SPCC) emergency response contractor SET Environmental, Inc. (SET) to begin immediate response activities. SET mobilized to the Site on May 1, 2017 to begin response activities, including deployment of oil-sorbent and containment boom in storm sewer structures, in the concrete channel and in Wilson Park Creek northwest of MKE, recovery and disposal of impacted water, isolation of the sewers where feasible, and internal piping power washing and video inspection of the sewers. Attachment B includes photographs documenting the incident and field responses.

SET placed boom at eleven locations within the storm sewer system between hydrant pit 60C and Wilson Park Creek where it passes under the 5th Street bridge. Figure 2 shows the boom locations between hydrant pit 60C and the intersection of 1st Street and Layton Avenue. SET monitored and replaced impacted boom as needed and placed the impacted boom into a roll-off box staged in an area off the airfield. SET collected a sample of the material in the roll-off box and submitted it to Environmental Monitoring and Technologies, Inc. (EMT) for waste characterization analysis. Attachment C includes the laboratory analytical report for the roll-off

box sample. SET disposed of the impacted materials in the roll-off box at the Kestrel Hawk Landfill located in Racine, WI. Attachment D includes a copy of the disposal manifest.

On May 5, 2017 ASIG personnel removed the fiberglass containment of hydrant pit 60C and SET collected a soil sample from the exposed soil. SET submitted the soil sample for waste characterization analysis in the event that soil excavation would be required as part of the remediation activities. Pace Analytical Services, LLC (Pace) in Green Bay, Wisconsin analyzed the sample for volatile organic compounds (VOCs) using method EPA 8260, polynuclear aromatic hydrocarbons (PAHs) using method EPA 8270SIM, Resource Conservation and Recovery Act (RCRA) 8 Metals using methods EPA 6010 and 7471, Diesel Range Organics (DRO) using method WI MOD DRO, Gasoline Range Organics (GRO) using method WI MOD GRO, Flashpoint using method EPA 1010, and Percent Moisture using method ASTM International (ASTM) D2974. Attachment E includes a copy of the soil sample waste characterization analytical results.

In an attempt to prevent impacted water from reaching the adjacent storm sewer system and subsequent outfall, on May 5, 2017 SET placed inflatable rubber plugs in the 24-inch diameter storm sewer line at structure 524 located southeast of hydrant pit 60C, and in the 36-inch diameter storm sewer line at structure 525 located northwest and downgradient of pit 60C (See Figure 3). SET also used a video camera to inspect the 36-inch diameter sewer pipe on May 8, 2017 and the 24-inch diameter line on May 23, 2017 in an effort to identify potential subsurface sources of water infiltration into the pipe. On May 17, 2017 SET removed the inflatable rubber plugs and power-washed the interiors of the 36-inch and 24-inch diameter storm sewers and the 29-inch by 45-inch box sewer to remove residual impacts on the inside of the sewer pipes. The wash water was recovered at structure 525.

SET removed approximately 39,800 gallons of impacted liquids from the storm sewer outfall, structure 525, and at various locations throughout the system using a vacuum truck during remediation activities. Of the total liquid volume recovered, SET determined through visual inspection using a Geiger tube and oil/water paste, that less than 1% of the total recovered liquids was fuel. The majority of the liquid was water collected during precipitation events. Approximately 2.5 inches of rain was recorded at MKE in the five-day period leading up to the release, which contributed to the volume of impacted liquid collected. SET collected a sample of the recovered liquid and submitted the sample to the Covanta Environmental Solutions Advanced Waste Services facility in Milwaukee, Wisconsin for waste profile testing, including flashpoint, metals, and non-polar oil and grease. Attachment F includes SET email correspondence regarding the liquid waste profile. All impacted liquids recovered during remediation were transported to the Advanced Waste Services facility for processing. Attachment G includes copies of the manifests for transportation of the liquids.

Additional Field Response

Burns & McDonnell mobilized to the Site on May 2, 2017 to assist with environmental response activities. Burns & McDonnell response activities included collecting a water sample from the concrete channel at 1st Street and Layton Avenue for forensic analysis, collecting a soil sample from the soil beneath the hydrant pit 60C structure, and advancing soil borings near hydrant pit 60C and the adjacent 36-inch diameter storm sewer line (MKE-SB01 to MKE-SB04).

Burns & McDonnell personnel collected a water sample from the concrete channel at 1st Street and Layton Avenue on May 2, 2017 and submitted it to GW/S Environmental Consulting LLC (GW/S) in Tulsa, Oklahoma for forensic analysis of petroleum source. The sample results indicated the petroleum impact in the sample was from relatively "fresh" Jet A fuel. The forensic laboratory analytical report is included as Attachment H.

On May 8, 2017 Burns & McDonnell collected a soil sample from the exposed soil beneath hydrant pit 60C and submitted the sample to Pace in Green Bay, Wisconsin for analysis of VOCs and PAHs. Burns & McDonnell compared the sample analytical results against the industrial direct contact, non-industrial direct contact, and soil to groundwater residual contaminant levels (RCLs) in accordance with NR 720, Wisconsin Administrative Code. Petroleum constituents consistent with Jet A fuel, including 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, xylenes and PAHs were detected in the soil sample with several PAHs detected at concentrations greater than the industrial and/or non-industrial direct contact RCLs. 1,2,4-trimethylbenzene, o-xylene and several PAHs were also detected at concentrations greater than the soil to groundwater RCLs. Table 1 presents the laboratory analytical results for the soil sample and comparison to the RCLs, and the laboratory analytical reports are included as Attachment I.

On May 12, 2017, Burns & McDonnell subcontracted Direct Push Analytical Corp. (Direct Push), of St. Charles, Illinois to advance soil borings around hydrant pit 60C for the purpose of evaluating the presence and extent of subsurface impacts. Direct Push cored through the surface concrete and advanced soil borings at four locations (MKE-SB01 through MKE-SB04) to depths of 16 feet below ground surface (bgs) using direct push sampling (DPS) equipment. A Burns & McDonnell geologist characterized recovered soil in accordance with the Unified Soil Classification System (USCS) and logged visual observations of soil type and condition on drilling forms. Field personnel field screened each sample interval for VOCs with a calibrated photoionization detector (PID). The locations of the soil borings are shown on Figure 3 and the drilling logs are included in Attachment J.

The geology of the site consisted of approximately 24 inches of concrete at the surface, underlain by 6-inches to 2-feet of fill that consisted of a coarse to fine sandy gravel sub-base. Beneath the fill material was a stiff to hard brown and gray clay with trace amounts of sand and gravel that was at least 13 feet thick, extending to the end of each boring at 16 feet bgs. Figures 4, 5 and 6

present cross-sections depicting the subsurface present in the area of hydrant pit 60C. Groundwater was not encountered during the drilling activities.

Field personnel collected one soil sample for laboratory analysis from each soil boring at an interval where visual and PID screenings indicated the highest concentration of impacted material, or from the approximate depth of the fuel hydrant pipe or the 36-inch diameter storm sewer pipe. Burns & McDonnell submitted the soil samples to Pace in Grand Rapids, Michigan for laboratory analysis of VOCs and PAHs.

Table 1 presents the laboratory analytical results from the soil samples collected during soil probing activities and Attachment I contains the laboratory analytical reports. Several VOCs and PAHs were detected in the soil samples, but detected concentrations were below the non-industrial and industrial direct contact RCLs. Only 1,2,4-trimethylbenzene was detected at a concentration greater than the soil to groundwater RCL.

Based on the laboratory analytical results, the investigation successfully delineated soil impacts around hydrant pit 60C and established that petroleum impacts in the soil surrounding hydrant pit 60C were limited in extent to areas adjacent to the hydrant pit. The approximate extent of residual soil impacts that will be left in place is shown on Figures 4, 5 and 6. Approximately 24 inches of concrete is present at the ground surface and functions as an engineered barrier, which prevents direct contact with potentially impacted soil and thus eliminates the direct contact exposure pathway. Additionally, groundwater was not encountered in the soil borings and the concrete significantly limits the amount of precipitation that infiltrates into the subsurface. Therefore, the absence of groundwater near the impacted soil and the presence of the concrete above the impacted soil provides an engineered barrier that eliminates the soil to groundwater exposure pathway.

In an effort to further explore the hydraulic connection between the hydrant pit area and downgradient structures, Burns & McDonnell and SET conducted dye tests. On May 25, 2017 approximately 200 gallons of dyed water was introduced into the open 60C hydrant pit (directly into the pipe bedding material of the fuel hydrant lateral) and flow monitoring was performed at the downgradient structures. Within approximately 15 minutes of introduction of the water into hydrant pit 60C, the dyed water was observed flowing into structure 525 from within and around the 36-inch diameter storm sewer. The dye test showed a hydraulic connection between the fuel hydrant pit and the storm sewer system, which is assumed to be migration from the pit into the bedding material surrounding the hydrant pipe, and then into the bedding material surrounding the sewer pipe. The dye test supports the assumption that the storm sewer system is not water-tight and allows flow into the pipe from the pipe bedding material, since the dyed water was observed flowing within the sewer pipe and entering structure 525 around the pipe connection.

Closure Activities

MKE Fuel re-pressurized the segment of the hydrant system around Concourse E on June 8, 2017. In addition, SET continued to monitor and replace the boom locations, and evaluate hydrant pit 60C and structure 525 through multiple precipitation events to monitor for the presence of sheen.

Based on discussions with USEPA and WDNR, Burns & McDonnell proposed to submit a request for response action closure after collecting forensic water samples that show the absence of Jet A fuel for two consecutive significant precipitation events. The closure samples would be collected at agreed upon sample locations from within structure 525, from the MKE storm sewer outfall, and from the boom location at the intersection of 1st Street and Layton Avenue.

Burns & McDonnell field personnel conducted the proposed closure field evaluations and water sampling events on June 17, June 18, and June 20, 2017. Each sampling event was conducted within twelve hours of a rain event that exceeded a total accumulation of 0.2 inches according to MKE precipitation records obtained from the National Weather Service Daily Summary through www.wunderground.com. In addition, each rain event occurred within a 5-hour period and is described below:

- The June 17, 2017 sampling event was performed between 1045 and 1122. MKE precipitation records show 0.43 inches of rainfall between 2400 and 0500 on June 17. The containers for this sampling event were damaged during shipment to the laboratory so a third sampling event was conducted on June 20, 2017.
- The June 18, 2017 sampling event was performed between 0822 and 0912. MKE precipitation records show 0.44 inches of rainfall between 1800 and 2000 on June 17 and a trace of rainfall between 0400 and 0600 on June 18.
- The June 20, 2017 sampling event was performed between 1650 and 1720. MKE precipitation records show 0.22 inches of rainfall between 1200 and 1500 on June 20.

Burns & McDonnell submitted the water samples to GW/S for forensic analysis of petroleum source. No fuel sheen or fuel odor was observed at the three sampling locations during any of the sampling events. USEPA was on-site during the June 18, 2017 sampling event.

The results for the six water samples collected on June 18 and June 20, 2017 indicate no detectable concentrations of petroleum products or petroleum components. The combination of the water sample results along with the absence of visible sheen on the surface water indicates that the residual impacts have been flushed from the sewer line and pipe bedding material.

Additional Mitigation Activities

MKE Fuel will complete additional mitigation activities in response to the leak that occurred at hydrant pit 60C that will include the following:

- Provide new secondary containment for the hydrant pit to replace the fiberglass bottom that was removed. The schedule is still being finalized, but construction is anticipated to be completed by September 30, 2017.
- Perform annual inspections of the hydrant system to evaluate the hydrant pits. The purpose of the inspections will be to visually evaluate the boot seals at the hydrant pipe penetration inlet for obvious failures.
- ASIG will review daily inspection documentation procedures in an effort to identify potential improvements.
- MKE will continue to monitor the MKE outfall, which is a Wisconsin Pollutant Discharge Elimination System outfall, in accordance with their permit requirements, including observation for the presence of sheen and water quality sampling.
- Upgrade the fuel hydrant system by installing double block and bleed valves. This will allow for proper isolation and segmentation of the fuel hydrant system to conduct leak detection testing in accordance with Wisconsin Department of Agriculture, Trade and Consumer Protection (ATCP) 93.517. Leak detection testing is performed by pressurizing the hydrant system and measuring fluctuations in volume with leak detection equipment. The testing will be performed on an annual frequency and can provide the ability to detect releases of less than 1.0 gallon per hour. This upgrade is currently scheduled to be completed in 2018.
- Revise the MKE SPCC as necessary based on the USEPA audit conducted on June 1, 2017. As of the date of this letter, USEPA has not provided documentation of the audit findings.

Continuing Obligations

Soil with residual impacts will remain in place at the Site as shown on Figures 4, 5, and 6, so the following continuing obligations will apply to the Site:

- The concrete surface must remain in place as an engineered barrier to prevent direct contact with the soil and inhibit water infiltration into the soil.
- If soil excavation is performed near the area with residual impacts, proper management of the soil will be required including laboratory testing and proper offsite disposal, if necessary.

- The current orientation of structures in the area of the residual impacts does not necessitate a vapor mitigation system. However, if any revisions are made to the airport layout and buildings are constructed near the area of residual impacts, then the need for a vapor mitigation system shall be evaluated.
- The property is currently used as a general aviation facility and the future use of the property is not anticipated to change. A change in property usage would require a re-evaluation of the Site.

Conclusions

ARFF, MFD and SET timely addressed Jet A impacts from the release by placing boom at several locations along the sewer system between hydrant pit 60C and to where Wilson Park Creek passes under the 5th Street bridge. SET also performed active removal of sheen from the water using vacuum trucks.

Burns & McDonnell collected soil samples from below hydrant pit 60C and from soil borings within 10 feet horizontally around hydrant pit 60C to a depth of 16 feet bgs. The soil boring observations delineated soil impacts adjacent to the hydrant pit and indicated that soil impacts were limited to areas adjacent to the pit. Soil sample analytical results for several constituents were greater than the industrial, non-industrial, and soil to groundwater RCLs in the soil sample collected from within 2 feet of ground surface below the hydrant pit. However, because 24 inches of concrete is present at the ground surface, there is no potential for human exposure to the minimally impacted soil, which eliminates the direct contact exposure pathway. For the soil to groundwater exposure pathway evaluation, soil samples from the immediate vicinity of the hydrant pit showed no evidence of impacted soil and the native soil consists of low permeability stiff to hard clay. In addition, groundwater was not encountered in the soil borings and the surface concrete acts as a barrier to infiltration of precipitation. Therefore, the potential for groundwater impact from this release is minimal.

The dye tests indicated a hydraulic connection between the bedding material of the hydrant pit and storm sewer, and confirmed that the storm sewer system is not water-tight which allowed the fuel to enter the storm sewer system. More specifically, it appears that fuel followed a preferential flow path from the hydrant pit bedding material into the 36-inch diameter storm sewer bedding material and into the storm sewer system.

SET continued to maintain and monitor the boom locations and Burns & McDonnell collected closure water samples for forensic analysis of petroleum products. The results of the closure water samples indicated no detectable concentrations of petroleum products or petroleum components. These results, combined with the absence of visible sheen on the surface water,

indicates that the residual impacts have been flushed from the sewer system. Therefore, no additional response activities are necessary.

MKE Fuel and MKE will initiate or otherwise continue with mitigation activities as described above to assist with reducing the chances of a future release from the fuel hydrant system.

Soil with residual impacts will remain in place, resulting in continuing institutional control obligations for the Site. Continuing obligations will include maintaining the concrete surface as an engineered barrier, managing any excavated soil with residual impacts, evaluating the need for a vapor mitigation system if future revisions are made to the airport layout, and maintaining future use of the property as an airport.

Burns & McDonnell trusts that this letter provides a summary of the activities completed at the Site. With the implementation of the additional mitigation activities and the continuing obligations described above, Burns & McDonnell requests closure of NRC incident Report #1177177, WI SPILL #11418 ID 20170501SE41-2, and WI SPILL #11422 ID 20170501SE41-3.

If you have any questions or require additional information, please call Corey Merriman at (312) 572-8143.

Sincerely,
BURNS & McDONNELL ENGINEERING COMPANY, INC.

Corey S. Merriman
Project Manager

Jeff Grubich, PE
Associate Engineer

Enclosures: Table 1: Soil Sample Analytical Results and Screening
Figure 1 – Site Location Map
Figure 2 – Storm Sewer Layout
Figure 3 – Soil Sample Location Map
Figure 4 – Cross-Section A-A’
Figure 5 – Cross-Section B-B’
Figure 6 – Cross-Section C-C’
Attachment A – ASIG Inspection Records
Attachment B – Photograph Log
Attachment C – SET Waste Characterization Laboratory Analytical Report
Attachment D – SET Rolloff Box Disposal Manifest

Attachment E – SET Soil Waste Characterization Sample Laboratory Analytical Report
Attachment F – SET Correspondence Regarding Water Waste Profile
Attachment G – Waste Liquid Disposal Manifests
Attachment H – Burns & McDonnell Forensic Sample Laboratory Reports
Attachment I – Burns & McDonnell Sample Laboratory Analytical Reports
Attachment J – Drilling Logs

cc: Trevor Nobile – WDNR
Tom Kelly – MKE Fuel
Dave Ziebell – ASIG
Greg Failey – MKE

TABLES

Table 1
Soil Sample Analytical Results and Screening
MKE Fuel Company, LLC - Release Support
General Mitchell International Airport, Milwaukee, WI

Contaminant	Non I/C Direct Contact RCL (mg/kg)	I/C Direct Contact RCL (mg/kg)	Soil to Groundwater RCL (mg/kg) DF=1	Sample Identification, Date and Depth (feet bgs)/Concentration				
				60C 5/8/2017 2.0'	MKE-SB01-001 5/12/2017 4.1'-5.1'	MKE-SB02-001 5/12/2017 5.5'-6.2'	MKE-SB03-001 5/12/2017 4.0'-5.0'	MKE-SB04-001 5/12/2017 4.0'-5.0'
Volatile Organic Compounds (VOCs) (mg/kg)								
Benzene	1.49	7.41	0.0026	0.500 U	0.019 U	0.018 U	0.018 U	0.018 U
Ethylbenzene	7.47	37	0.785	0.500 U	0.17	0.014 U	0.014 U	0.014 U
Toluene	818	818	0.5536	0.500 U	0.014 U	0.013 U	0.013 U	0.013 U
Xylene, m&p-	388*	388*	--	22.1	0.038	0.0062 U	0.0062 U	0.0063 U
Xylene, o-	434	434	1.98	**20.5**	0.014 U	0.013 U	0.013 U	0.013 U
Methyl tert-Butyl Ether (MTBE)	59.4	293	0.0135	0.500 U	0.0065 U	0.0060 U	0.0061 U	0.0062 U
Dichloroethane, 1,2-	0.608	3.03	0.0014	0.500 U	0.018 U	0.017 U	0.017 U	0.017 U
Dibromoethane, 1,2-	0.047	0.23	1.41E-05	0.500 U	0.014 U	0.013 U	0.013 U	0.013 U
Trichloroethylene	1.26	8.81	0.0018	0.500 U	0.0098 U	0.0091 U	0.0091 U	0.0092 U
Tetrachloroethylene	30.7	153	0.0023	0.500 U	0.0075 U	0.0069 U	0.0070 U	0.0070 U
Vinyl Chloride	0.067	2.03	6.90E-05	0.500 U	0.021 U	0.019 U	0.019 U	0.019 U
Dichloroethylene, 1,1-	342	1,190	0.0025	0.500 U	0.011 U	0.011 U	0.011 U	0.011 U
Dichloroethylene, 1,2-trans-	1,560	1,850	0.0313	0.500 U	0.015 U	0.014 U	0.014 U	0.014 U
Dichloroethylene, 1,2-cis-	156	2,040	0.0206	0.500 U	0.0088 U	0.0082 U	0.0082 U	0.0083 U
Trichloroethane, 1,1,1-	640	640	0.0701	0.500 U	0.016 U	0.014 U	0.015 U	0.015 U
Carbon Tetrachloride	0.854	4.25	0.0019	0.500 U	0.0097 U	0.0089 U	0.0090 U	0.0091 U
Trimethylbenzene, 1,2,4-	89.8	219	0.691	**54.4**	**1.3**	0.013 U	0.013 U	0.013 U
Trimethylbenzene, 1,3,5-	182	182	--	28.4	0.019	0.0048 U	0.0048 U	0.0049 U
Bromobenzene	354	679	--	0.500 U	0.0083 U	0.0077 U	0.0077 U	0.0078 U
Bromochloromethane	232	976	--	0.500 U	0.022 U	0.020 U	0.020 U	0.020 U
Bromodichloromethane	0.39	1.96	2.00E-04	0.500 U	0.015 U	0.014 U	0.014 U	0.014 U
Bromoform	23.6	115	0.0012	0.500 U	0.014 U	0.013 U	0.013 U	0.013 U
Bromomethane	10.3	46	0.0025	1.40 U	0.020 U	0.019 U	0.019 U	0.019 U
Butylbenzene, n-	108	108	--	0.500 U	0.037	0.0059 U	0.0060 U	0.0060 U
Butylbenzene, sec-	145	145	--	1.05 J	0.034 J	0.016 U	0.016 U	0.016 U
Butylbenzene, tert-	183	183	--	0.500 U	0.016 U	0.015 U	0.015 U	0.015 U
Chlorobenzene	392	761	--	0.500 U	0.0037 U	0.0034 U	0.0034 U	0.0035 U
Chloroform	0.423	2.13	0.0017	0.929 U	0.014 U	0.013 U	0.013 U	0.013 U
Chloromethane	171	720	0.0078	0.500 U	0.021 U	0.020 U	0.020 U	0.020 U
Chlorotoluene, o-	907	907	--	0.500 U	0.019 U	0.018 U	0.018 U	0.018 U
Chlorotoluene, p-	253	253	--	0.500 U	0.0038 U	0.0035 U	0.0036 U	0.0036 U
Cumene	268	268	--	0.500 U	0.047	0.0029 U	0.0029 U	0.0029 U
Dibromo-3-chloropropane, 1,2-	0.008	0.099	8.64E-05	1.82 U	0.026 U	0.024 U	0.024 U	0.024 U
Dibromochloromethane	7.6	34.1	0.016	0.500 U	0.014 U	0.013 U	0.013 U	0.013 U
Dibromomethane (Methylene Bromide)	36.6	154	--	0.500 U	0.0094 U	0.0087 U	0.0088 U	0.0088 U
Dichlorobenzene, 1,2-	376	376	0.584	0.500 U	0.019 U	0.017 U	0.017 U	0.018 U
Dichlorobenzene, 1,3-	297	297	0.5764	0.500 U	0.015 U	0.014 U	0.014 U	0.014 U
Dichlorobenzene, 1,4-	3.48	17.5	0.072	0.500 U	0.0073 U	0.0068 U	0.0069 U	0.0069 U
Dichlorodifluoromethane	135	571	1.5431	0.500 U	0.0078 U	0.0072 U	0.0072 U	0.0073 U
Dichloroethane, 1,1-	4.72	23.7	0.2417	0.500 U	0.014 U	0.013 U	0.013 U	0.013 U
Dichloropropane, 1,2-	1.33	6.62	0.0017	0.500 U	0.0076 U	0.0071 U	0.0071 U	0.0072 U
Dichloropropane, 1,3-	1,490	1,490	--	0.500 U	0.0091 U	0.0084 U	0.0085 U	0.0086 U
Dichloropropane, 2,2-	191	191	--	0.500 U	0.019 U	0.018 U	0.018 U	0.018 U
Dichloropropene, 1,1-	--	--	--	0.500 U	0.019 U	0.017 U	0.017 U	0.018 U
Dichloropropene, cis-1,3-	1,210	1,210	1.00E-04	0.500 U	0.015 U	0.014 U	0.014 U	0.014 U
Dichloropropene, trans-1,3-	1,510	1,510	1.00E-04	0.500 U	0.015 U	0.014 U	0.014 U	0.014 U
Diisopropyl Ether	2,260	2,260	--	0.500 U	0.043 U	0.040 U	0.040 U	0.040 U
Ethyl Chloride	2,120	2,120	0.1133	1.34 U	0.017 U	0.016 U	0.016 U	0.016 U

Notes:

1) I/C = Industrial/Commercial

2) RCL = Residual Contaminant Levels in accordance with NR720, Wisconsin Administrative Code

3) mg/kg = milligrams per kilogram.

4) DF = Dilution Factor

5) * = Lower RCL of individual RCLs for m-Xylene and p-Xylene was used as RCL for m,p-Xylene

6) U - Compound/analyte not detected. The associated numerical value is the reporting limit.

7) J - Estimated value

8) Bolded concentrations greater than the most soil to groundwater RCL

9) Shaded and bolded concentrations greater than the direct contact and soil to groundwater RCLs

10) -- - RCL not available.

Table 1 (Continued)
Soil Sample Analytical Results and Screening
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General Mitchell International Airport, Milwaukee, WI

Contaminant	Non I/C Direct Contact RCL (mg/kg)	I/C Direct Contact RCL (mg/kg)	Soil to Groundwater RCL (mg/kg) DF=1	Sample Identification, Date and Depth (feet bgs)/Concentration				
				60C 5/8/2017 2.0'	MKE-SB01-001 5/12/2017 4.1'-5.1'	MKE-SB02-001 5/12/2017 5.5'-6.2'	MKE-SB03-001 5/12/2017 4.0'-5.0'	MKE-SB04-001 5/12/2017 4.0'-5.0'
VOCs (Continued) (mg/kg)								
Hexachlorobutadiene	1.51	7.45	--	0.500 U	0.020 U	0.019 U	0.019 U	0.019 U
Isopropyltoluene, p-	162	162	--	3.86	0.058 J	0.017 U	0.017 U	0.017 U
Methylene Chloride	60.7	1,070	0.0013	0.500 U	0.020 U	0.019 U	0.019 U	0.019 U
Propyl benzene	264	264	--	0.500 U	0.082	0.016 U	0.016 U	0.016 U
Styrene	867	867	0.11	0.500 U	0.0034 U	0.0032 U	0.0032 U	0.0032 U
Tetrachloroethane, 1,1,1,2-	2.59	12.9	0.0267	0.500 U	0.0097 U	0.0089 U	0.0090 U	0.0091 U
Tetrachloroethane, 1,1,2,2-	0.753	3.69	7.82E-05	0.500 U	0.018 U	0.016 U	0.016 U	0.017 U
Trichlorobenzene, 1,2,3-	62.6	818	--	0.500 U	0.010 U	0.0093 U	0.0094 U	0.0095 U
Trichlorobenzene, 1,2,4-	22	98.7	0.204	0.951 U	0.010 U	0.0097 U	0.0098 U	0.0099 U
Trichloroethane, 1,1,2-	1.48	7.34	0.0016	0.500 U	0.010 U	0.0096 U	0.0096 U	0.0097 U
Trichlorofluoromethane	1,230	1,230	--	0.500 U	0.019 U	0.018 U	0.018 U	0.018 U
Trichloropropane, 1,2,3-	0.005	0.095	0.026	0.500 U	0.016 U	0.015 U	0.015 U	0.015 U
Polynuclear Aromatic Hydrocarbons (PAHs) (mg/kg)								
Acenaphthene	3,440	33,000	--	0.867	0.011	0.00020 U	0.00042 J	0.0013
Acenaphthylene	--	--	--	0.337 J	0.0018 J	0.00019 U	0.00042 J	0.00043 J
Anthracene	17,200	100,000	98.4746	1.06	0.0037 J	0.00028 U	0.00042 J	0.0022
Benz[a]anthracene	0.147	2.1	--	**3.50**	0.0073	0.00044 U	0.00044 U	0.0035
Benzo[a]pyrene	0.015	0.211	0.235	**3.70**	0.0055 J	0.00060 U	0.00061 U	0.0026
Benzo[b]fluoranthene	0.148	2.11	0.2397	**5.15**	0.0055 J	0.00044 U	0.00044 U	0.0030
Benzo[g,h,i]perylene	--	--	--	2.35	0.0037 J	0.00083 J	0.0017 J	0.0022 J
Benzo[k]fluoranthene	1.48	21.1	--	**1.96**	0.0037 J	0.00042 J	0.00042 J	0.0022
Chrysene	14.8	211	0.0723	**3.87**	0.0073	0.0017	0.0017	0.0039
Dibenz[a,h]anthracene	0.015	0.211	--	**0.643**	0.0041 U	0.00095 U	0.00095 U	0.00096 U
Fluoranthene	2,290	22,000	44.4389	7.10	0.015	0.00042	0.00083	0.0070
Fluorene	2,290	22,000	7.415	1.09	0.0055	0.00021 U	0.00042 J	0.0013
Indeno[1,2,3-cd]pyrene	0.148	2.11	--	**1.94**	0.0037 J	0.00079 U	0.00080 U	0.0017 J
Naphthalene	5.15	26	0.3291	**7.86**	0.068	0.00032 U	0.0083	0.00087 J
Phenanthrene	--	--	--	2.91	0.013	0.00042	0.0012	0.0070
Pyrene	1,720	16,500	27.2727	5.84	0.015	0.0012	0.0021	0.0074

Notes:

1) I/C = Industrial/Commercial

2) RCL = Residual Contaminant Levels in accordance with NR720, Wisconsin Administrative Code

3) mg/kg = milligrams per kilogram.

4) DF = Dilution Factor

5) * = Lower RCL of individual RCLs for m-Xylene and p-Xylene was used as RCL for m,p-Xylene

6) U - Compound/analyte not detected. The associated numerical value is the reporting limit.

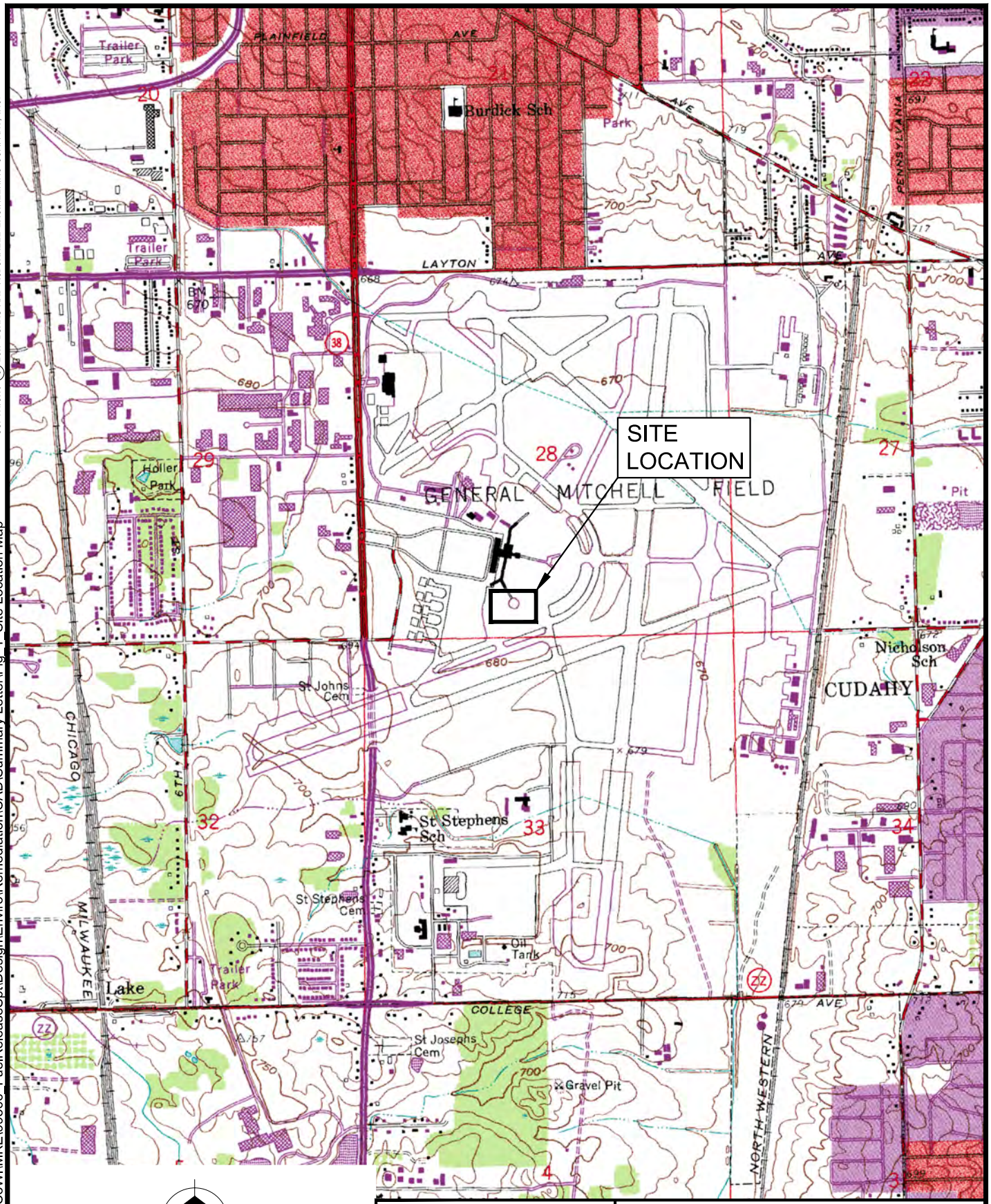
7) J - Estimated value

8) Bolded concentrations greater than the most soil to groundwater RCL

9) Shaded and bolded concentrations greater than the direct contact and soil to groundwater RCLs

10) -- - RCL not available.

FIGURES



N

0 2000' 4000'

SCALE IN FEET

BURNS McDONNELL

Figure 1
SITE LOCATION MAP
MKE RELEASE SUPPORT
MKE FUEL COMPANY, LLC
MILWAUKEE, WISCONSIN

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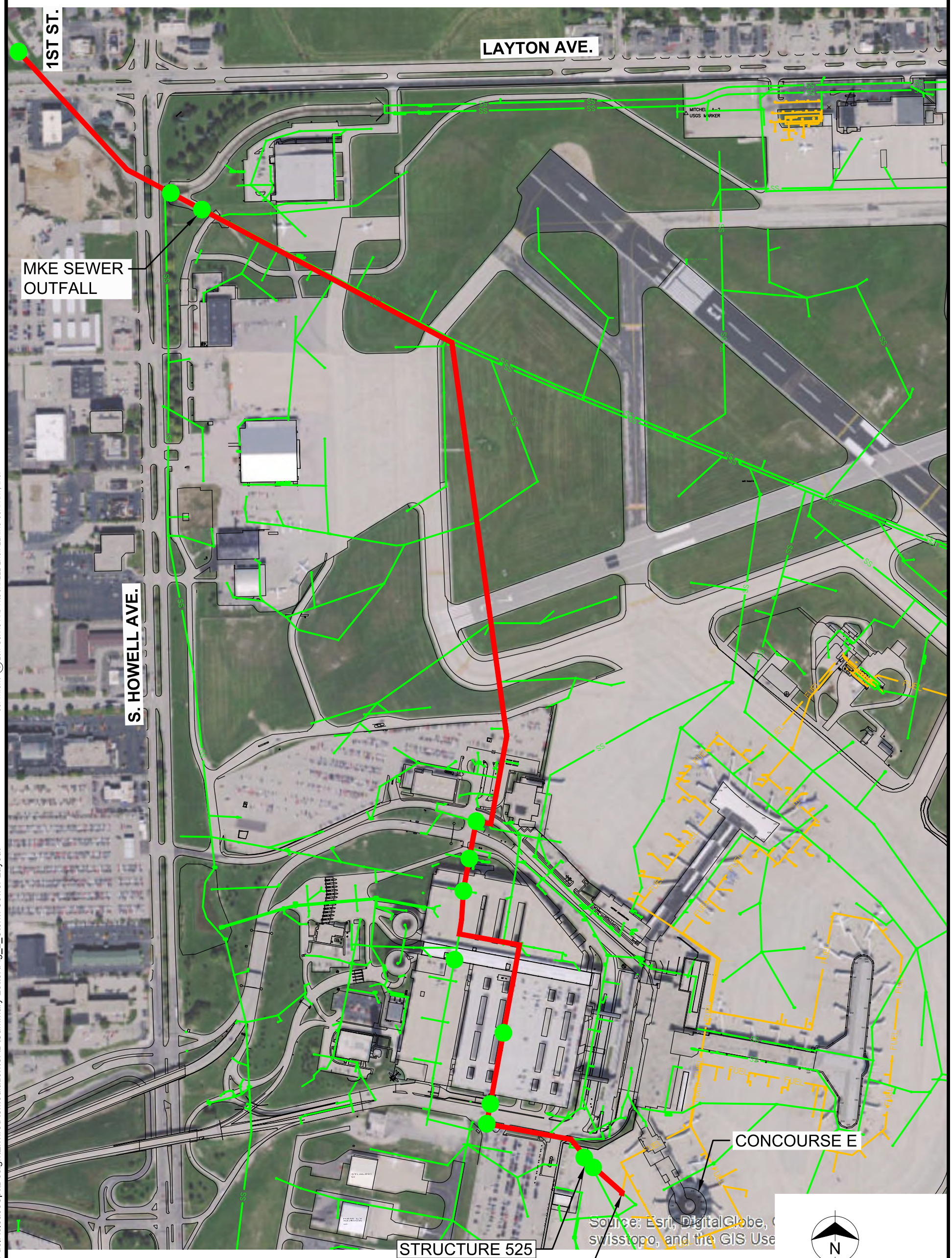
Z:\Clients\ANF\MilwaukeeCo\WIMKE\99566_FuelReleaseSpt\Design\Enviro\Remediation\CAD\Summary Letter\Fig_1_Site Location Map



LEGEND

- STORM SEWER FLOW PATH
- JET FUEL HYDRANT LINE
- STORM SEWER
- BOOM DEPLOYMENT LOCATION

BURNS McDONNELL

Figure 2
STORM SEWER LAYOUT
MKE RELEASE SUPPORT
MKE FUEL COMPANY, LLC
MILWAUKEE, WISCONSIN

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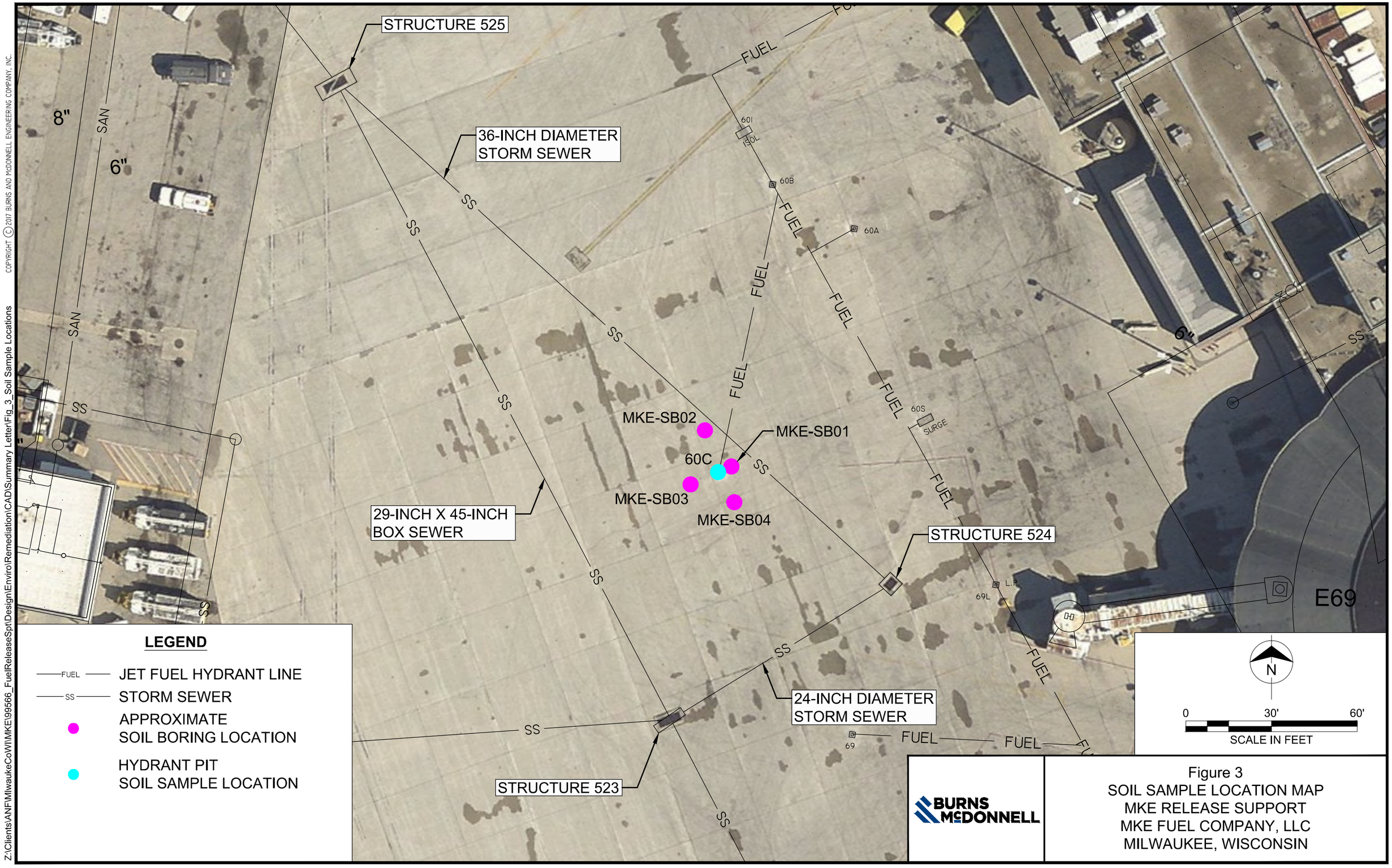

LEGEND

- FUEL — JET FUEL HYDRANT LINE
- SS — STORM SEWER
- APPROXIMATE SOIL BORING LOCATION
- HYDRANT PIT SOIL SAMPLE LOCATION

BURNS McDONNELL

Figure 3
SOIL SAMPLE LOCATION MAP
MKE RELEASE SUPPORT
MKE FUEL COMPANY, LLC
MILWAUKEE, WISCONSIN

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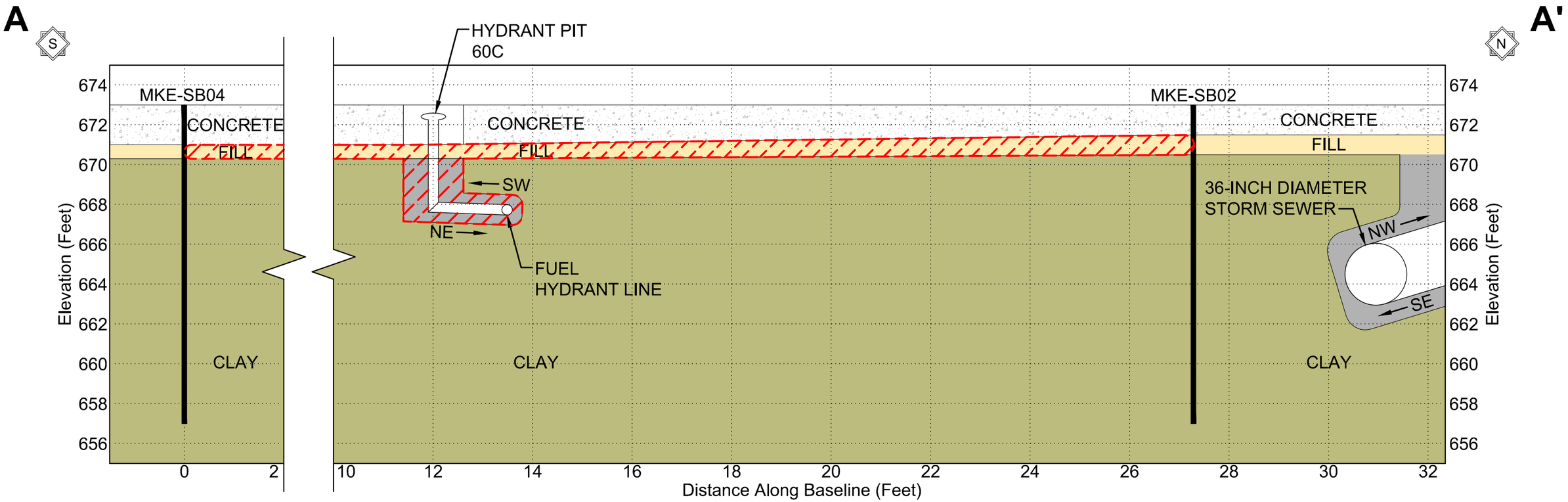

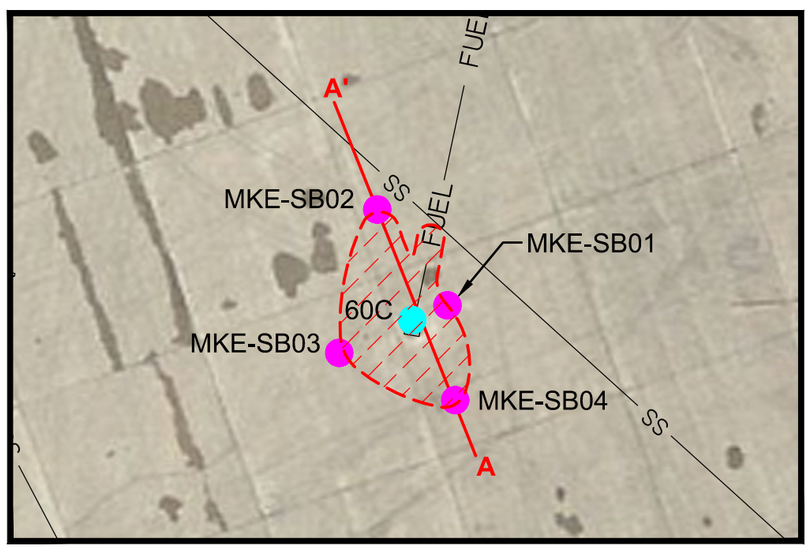

CROSS SECTION LOCATION MAP

0 10' 20' 40'
SCALE IN FEET

N

SECTION A -

0 2' 4'
HORIZONTAL SCALE

0 5' 10'
VERTICAL SCALE

LEGEND

- FUEL — JET FUEL HYDRANT LINE
- SS — STORM SEWER
- APPROXIMATE SOIL BORING LOCATION
- HYDRANT PIT SOIL SAMPLE LOCATION
- CONCRETE
- FILL
- BEDDING MATERIAL
- CLAY
- IMPACTED FILL MATERIAL

NOTES:

1. BEDDING MATERIAL THICKNESS AROUND PIPES IS APPROXIMATE
2. FUEL HYDRANT AND SEWER PIPES ARE NOT TO SCALE AND ARE FOR VISUAL REPRESENTATION ONLY

BURNS McDONNELL

Figure 4
CROSS SECTION A-A'
MKE RELEASE SUPPORT
MKE FUEL COMPANY, LLC
MILWAUKEE, WISCONSIN

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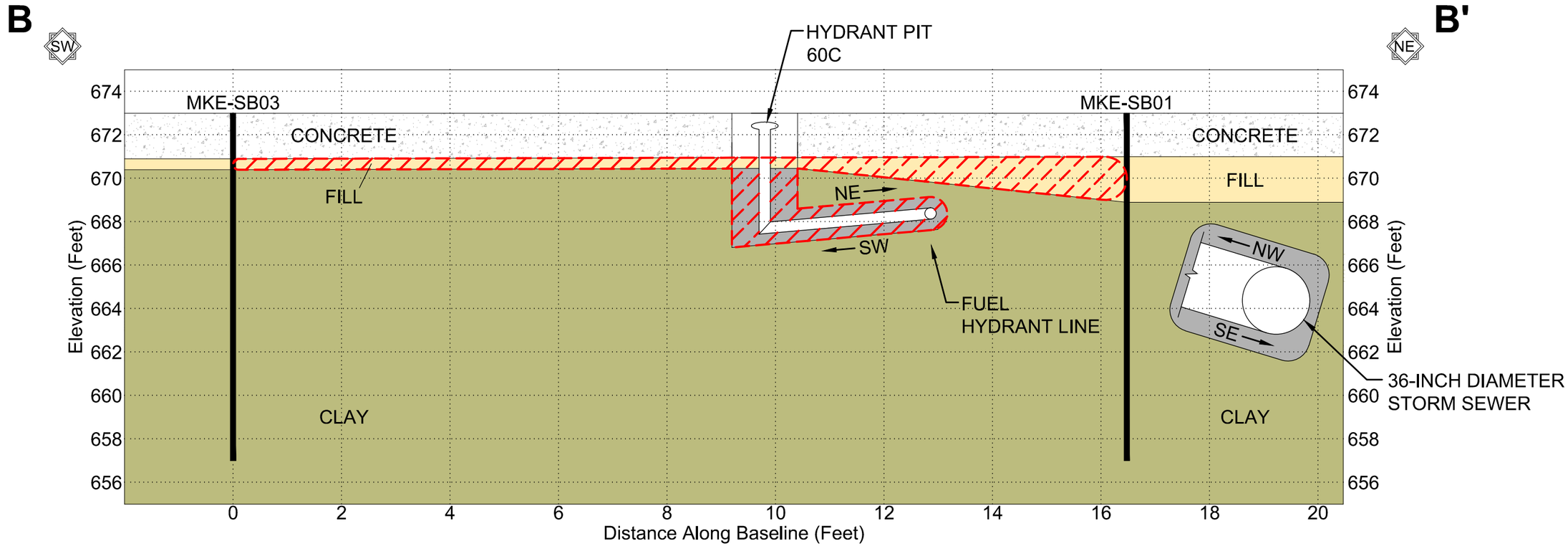

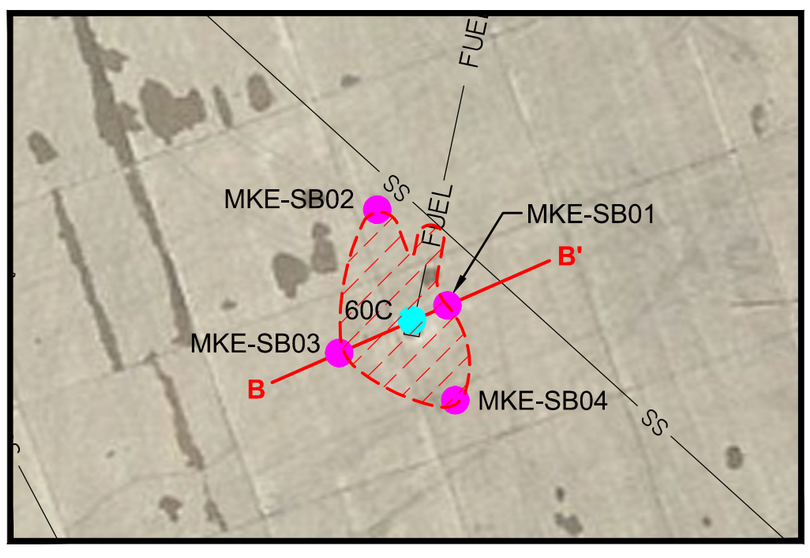

CROSS SECTION LOCATION MAP

0 10' 20' 40'
SCALE IN FEET

N

SECTION B / -

0 2' 4'
HORIZONTAL SCALE

0 5' 10'
VERTICAL SCALE

LEGEND

- FUEL — JET FUEL HYDRANT LINE
- SS — STORM SEWER
- APPROXIMATE SOIL BORING LOCATION
- HYDRANT PIT SOIL SAMPLE LOCATION
- CONCRETE
- FILL
- BEDDING MATERIAL
- CLAY
- IMPACTED FILL MATERIAL

NOTES:

1. BEDDING MATERIAL THICKNESS AROUND PIPES IS APPROXIMATE
2. FUEL HYDRANT AND SEWER PIPES ARE NOT TO SCALE AND ARE FOR VISUAL REPRESENTATION ONLY

BURNS McDONNELL

Figure 5
CROSS SECTION B-B'
MKE RELEASE SUPPORT
MKE FUEL COMPANY, LLC
MILWAUKEE, WISCONSIN

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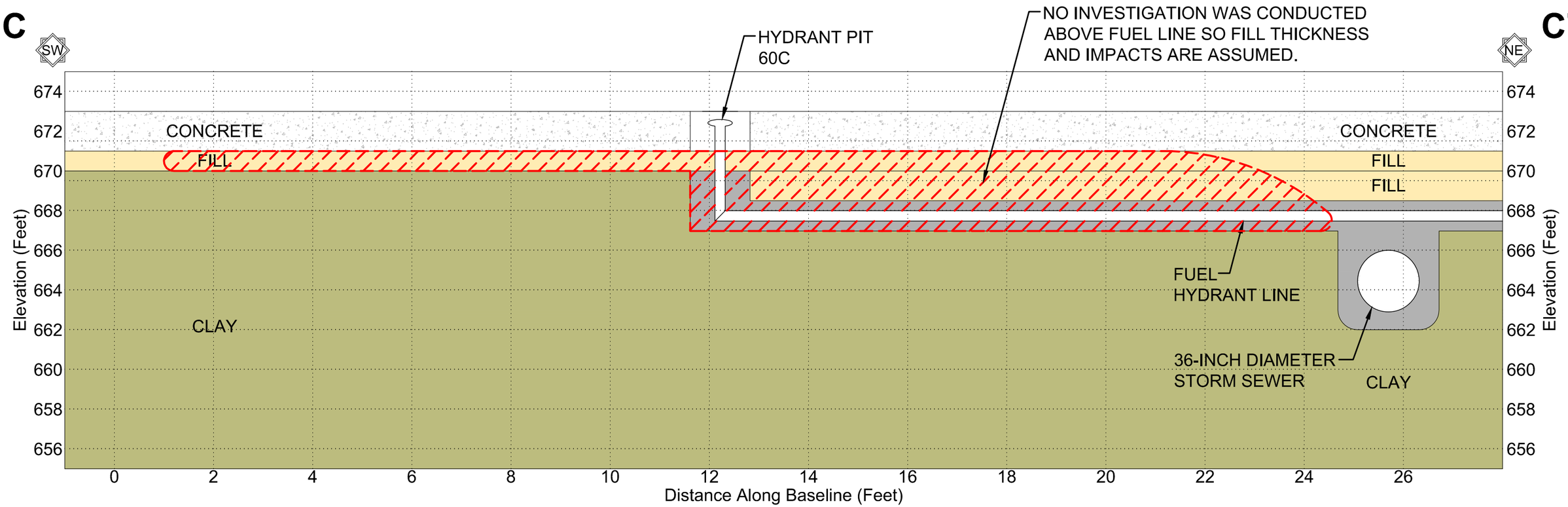
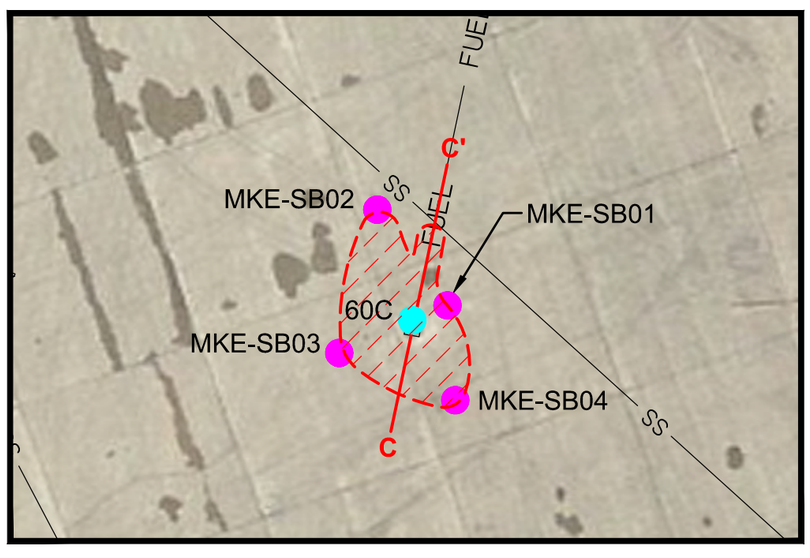


SECTION C -

0 2' 4'
HORIZONTAL SCALE

0 5' 10'
VERTICAL SCALE



CROSS SECTION LOCATION MAP

0 10' 20' 40'
SCALE IN FEET

N

LEGEND

- FUEL — JET FUEL HYDRANT LINE
- SS — STORM SEWER
- APPROXIMATE SOIL BORING LOCATION
- HYDRANT PIT SOIL SAMPLE LOCATION
- CONCRETE
- FILL
- BEDDING MATERIAL
- CLAY
- IMPACTED FILL MATERIAL

NOTES:

1. BEDDING MATERIAL THICKNESS AROUND PIPES IS APPROXIMATE
2. FUEL HYDRANT AND SEWER PIPES ARE NOT TO SCALE AND ARE FOR VISUAL REPRESENTATION ONLY

BURNS McDONNELL

Figure 6
CROSS SECTION C-C'
MKE RELEASE SUPPORT
MKE FUEL COMPANY, LLC
MILWAUKEE, WISCONSIN

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ATTACHMENT A
ASIG INSPECTION RECORDS

DAILY HYDRANT SYSTEM CHECKS

Location #: MKE | Facility: HYDRANT | Date: 5-1-17

PERFORM DAILY (USE APPLICABLE CONDITION CODES)

CO[illegible]ION CODES:
S = [illegible]ISFACTORY
C = COMMENT (COMMENTS REQUIRED IN REMARKS)
N/U = NOT IN USE
N/A = NOT APPLICABLE

PIT #	Pit Leaks & Cleanliness	Pit Valve & Lid Condition	EFS Stations
10A	S	S	XXX
10B	S	S	S
12A	S	S	S
12B	S	S	XXX
12C	S	S	XXX
12D	S	S	S
14A	S	S	S
14B	S	S	XXX
18,	S	S	S
19A	C	S	S
19B	S	S	XXX
19C	S	S	S
[illegible]0.20	S	S	S
[illegible]A	C	S	S
20B	C	S	S
21A	S	S	S
21B	S	S	XXX
21C	S	S	XXX
22A	C	S	S
23..	S	S	S

PIT #	Pit Leaks & Cleanliness	Pit Valve & Lid Condition	EFS Stations
23A	S	S	S
24..	S	S	S
24A	S	S	S
25..	S	S	S
27..	C	S	S
27C	S	S	XXX
15..	S	S	S
11..	S	S	S
9A	C	S	S
9B	S	S	XXX
34..	S	S	XXX
36..	C	S	S
38A	S	S	S
38B	C	S	XXX
38C	S	S	XXX
42..	C	S	S
44..	S	S	S
46..	S	S	XXX
47..	S	S	S
49..	S	S	S

PIT #	Pit Leaks & Cleanliness	Pit Valve & Lid Condition	EFS Stations
48..	S	S	S
45..	S	S	S
43..	S	S	S
41..	S	S	S
39..	S	S	S
51A	S	S	S
53A	S	S	S
53B	S	S	XXX
53C	S	S	XXX
52A	S	S	S
52B	S	S	XXX
52C	S	S	S
52D	S	S	S
29A	S	S	S
29B	S	S	XXX
29C	S	S	XXX
28A	S	S	XXX
28B	S	S	XXX
28C	S	S	XXX
28D	S	S	S

PIT #	Pit Leaks & Cleanliness	Pit Valve & Lid Condition	EFS Stations
28E	S	S	XXX
27A	S	S	XXX
27B	S	S	XXX
27C	S	S	S
27D	S	S	XXX
27E	S	S	XXX
61..	S	S	XXX
62A	S	S	S
63..	S	S	XXX
64..	S	S	XXX
65..	S	S	XXX
66..	S	S	S
67..	S	S	XXX
68A	S	S	S
68B	S	S	XXX
68C	S	S	XXX
69..	S	S	XXX
60A	S	S	S
60B	S	S	XXX
60C	S	S	XXX

	Rating	Comments
Pressure/Flow Chart	S	

SIGNATURE: [illegible]
SIGNATURE OF PERSON PERFORMING TASKS

REMARKS: F350 Down, 18 servo cap replaced. 27, 42, 36 Full of water, 38B, 9A, 22A, 20B, 20A, 19A Water Above boot level
Sumped all rain pits. Sumped 10A, 12A 20B 42, 48, 61 62, 53A multiple times

PIT # 10A THRU 49	TIME CHECKED 1000	INITIALS [illegible]
PIT # 48 THRU 60C	TIME CHECKED 1300-2000	INITIALS [illegible]
PIT # THRU	TIME CHECKED	INITIALS
PIT # THRU	TIME CHECKED	INITIALS
PIT # THRU	TIME CHECKED	INITIALS

WEATHER CONDITIONS AM SHIFT Rain
WEATHER CONDITIONS PM SHIFT RAIN ALL DAY

DAILY HYDRANT SYSTEM CHECKS

Location #: MKE | Facility: HYDRANT | Date: 5-2-17

PERFORM DAILY (USE APPLICABLE CONDITION CODES)

CO[illegible]TION CODES:
S = [illegible]ISFACTORY
C = COMMENT (COMMENTS REQUIRED IN REMARKS)
N/U = NOT IN USE
N/A = NOT APPLICABLE

PIT #	Pit Leaks & Cleanliness	Pit Valve & Lid Condition	EFS Stations
10A	S	S	XXX
10B	S	S	S
12A	S	S	S
12B	S	S	XXX
12C	S	S	XXX
12D	S	S	S
14A	S	S	S
14B	S	S	XXX
18,	S	S	S
19A	S	S	S
19B	S	S	XXX
19C	S	S	S
[illegible]0..20	S	S	S
[illegible]A	S	S	S
[illegible]B	S	S	S
21A	S	S	S
21B	S	S	XXX
21C	S	S	XXX
22A	C	S	S
23..	S	S	S

PIT #	Pit Leaks & Cleanliness	Pit Valve & Lid Condition	EFS Stations
23A	S	S	S
24..	S	S	S
24A	S	S	S
25..	C	C	S
27..	S	S	S
27C	S	S	XXX
15..	S	S	S
11..	C	S	S
9A	C	S	S
9B	S	S	XXX
34..	S	S	XXX
36..	S	S	S
38A	S	S	S
38B	C	S	XXX
38C	C	S	XXX
42..	S	S	S
44..	S	S	S
46..	S	S	XXX
47..	S	S	S
49..	S	S	S

PIT #	Pit Leaks & Cleanliness	Pit Valve & Lid Condition	EFS Stations
48..	S	S	S
45..	S	S	S
43..	S	S	S
41..	S	S	S
39..	S	S	S
51A	S	S	S
53A	S	S	S
53B	S	S	XXX
53C	S	S	XXX
52A	S	S	S
52B	S	S	XXX
52C	S	S	S
52D	S	S	S
29A	C	C	S
29B	S	S	XXX
29C	S	S	XXX
28A	S	S	XXX
28B	S	S	XXX
28C	S	S	XXX
28D	S	S	S

PIT #	Pit Leaks & Cleanliness	Pit Valve & Lid Condition	EFS Stations
28E	S	S	XXX
27A	S	S	XXX
27B	S	S	XXX
27C	S	S	S
27D	S	S	XXX
27E	S	S	XXX
61..	C	C	XXX
62A	C	C	S
63..	C	C	XXX
64..	C	C	XXX
65..	S	S	XXX
66..	C	C	S
67..	S	S	XXX
68A	S	S	S
68B	S	S	XXX
68C	S	S	XXX
69..	S	S	XXX
60A	S	S	S
60B	S	S	XXX
60C	S	S	XXX

	Rating	Comments
Pressure/Flow Chart	S	

SIGNATURE: [illegible] / [illegible]
SIGNATURE OF PERSON PERFORMING TASKS

REMARKS: 25 blocked, 38C, 38B, 9A, 11, 22A, At or Above boot level, Blocked 22A/10H/19L/11
Pits blocked: 29A/61/62A/63/64/66; Pit half full. Half fuel, Half water

PIT # 10A	THRU	49	TIME CHECKED	1330	INITIALS	[illegible]
PIT # 48	THRU	60C	TIME CHECKED	2300	INITIALS	[illegible]
PIT #	THRU		TIME CHECKED		INITIALS	
PIT #	THRU		TIME CHECKED		INITIALS	
PIT #	THRU		TIME CHECKED		INITIALS	

WEATHER CONDITIONS AM SHIFT
WEATHER CONDITIONS PM SHIFT

DAILY HYDRANT SYSTEM CHECKS

Location #: MKE | Facility: HYDRANT | Date: 5-3-17

PERFORM DAILY (USE APPLICABLE CONDITION CODES)

CO[illegible]TION CODES:
S = [illegible]ISFACTORY
C = COMMENT (COMMENTS REQUIRED IN REMARKS)
N/U = NOT IN USE
N/A = NOT APPLICABLE

PIT #	Pit Leaks & Cleanliness	Pit Valve & Lid Condition	EFS Stations
10A	S	S	XXX
10B	S	S	S
12A	S	S	S
12B	S	S	XXX
12C	S	S	XXX
12D	S	S	S
14A	S	S	S
14B	S	S	XXX
18,	S	S	S
19A	S	S	S
19B	S	S	XXX
19C	S	S	S
[illegible]0..20	S	S	S
[illegible]A	S	S	S
[illegible]B	S	S	S
21A	S	S	S
21B	S	S	XXX
21C	S	S	XXX
22A	S	S	S
23..	S	S	S

PIT #	Pit Leaks & Cleanliness	Pit Valve & Lid Condition	EFS Stations
23A	S	S	S
24..	S	S	S
24A	S	S	S
25..	S	S	S
27..	S	S	S
27C	S	S	XXX
15..	S	S	S
11..	S	S	S
9A	C	C	S
9B	C	C	XXX
34..	S	S	XXX
36..	S	S	S
38A	S	S	S
38B	S	S	XXX
38C	S	S	XXX
42..	S	S	S
44..	S	S	
46..	S	S	XXX
47..	S	S	S
49..	S	S	S

PIT #	Pit Leaks & Cleanliness	Pit Valve & Lid Condition	EFS Stations
48..	S	S	S
45..	S	S	S
43..	S	S	S
41..	S	S	S
39..	S	S	S
51A	S	S	S
53A	S	S	S
53B	S	S	XXX
53C	S	S	XXX
52A	S	S	S
52B	S	S	XXX
52C	S	S	S
52D	S	S	S
29A	C	C	S
29B	S	S	XXX
29C	S	S	XXX
28A	S	S	XXX
28B	S	S	XXX
28C	S	S	XXX
28D	S	S	S

PIT #	Pit Leaks & Cleanliness	Pit Valve & Lid Condition	EFS Stations
28E	S	S	XXX
27A	S	S	XXX
27B	S	S	XXX
27C	S	S	S
27D	S	S	XXX
27E	S	S	XXX
61..	S	S	XXX
62A	S	S	S
63..	S	S	XXX
64..	S	S	XXX
65..	S	S	XXX
66..	C	S	S
67..	S	S	XXX
68A	S	S	S
68B	S	S	XXX
68C	S	S	XXX
69..	S	S	XXX
60A	S	S	S
60B	S	S	XXX
60C	S	S	XXX

	Rating	Comments
Pressure/Flow Chart	S	

SIGNATURE: KC
SIGNATURE OF PERSON PERFORMING TASKS

REMARKS: 12D partially blocked by dot bridge could only open half way., 9A, 9B blocked. 66 Leak 29A IVS KC

PIT # 10A	THRU 49	TIME CHECKED	900 & 1730	INITIALS	PS
PIT # 48	THRU 60C	TIME CHECKED	1400	INITIALS	KC
PIT #	THRU	TIME CHECKED		INITIALS	
PIT #	THRU	TIME CHECKED		INITIALS	
PIT #	THRU	TIME CHECKED		INITIALS	

WEATHER CONDITIONS AM SHIFT
WEATHER CONDITIONS PM SHIFT

DAILY HYDRANT SYSTEM CHECKS

Location #: MKE | Facility: HYDRANT | Date: 5/3/17

PERFORM DAILY (USE APPLICABLE CONDITION CODES)

CONDITION CODES:
S = SATISFACTORY
C = COMMENT (COMMENTS REQUIRED IN REMARKS)
N/U = NOT IN USE
N/A = NOT APPLICABLE

PIT #	Pit Leaks & Cleanliness	Pit Valve & Lid Condition	EFS Stations
10A			XXX
10B			
12A			
12B			XXX
12C			XXX
12D			
14A			
14B			XXX
18,			
19A			
19B			XXX
19C			
20..			
20A			
20B			
21A			
21B			XXX
21C			XXX
22A			
23..			

PIT #	Pit Leaks & Cleanliness	Pit Valve & Lid Condition	EFS Stations
23A			
24..			
24A			
25..			
27..			
27C			XXX
15..			
11..			
9A			
9B			XXX
34..			XXX
36..			
38A			
38B			XXX
38C			XXX
42..			
44..			
46..			XXX
47..			
49..			

PIT #	Pit Leaks & Cleanliness	Pit Valve & Lid Condition	EFS Stations
48..			
45..			
43..			
41..			
39..			
51A			
53A			
53B			XXX
53C			XXX
52A			
52B			XXX
52C			
52D			
29A			
29B			XXX
29C			XXX
28A			XXX
28B			XXX
28C			XXX
28D			

PIT #	Pit Leaks & Cleanliness	Pit Valve & Lid Condition	EFS Stations
28E			XXX
27A			XXX
27B			XXX
27C			
27D			XXX
27E			XXX
61..	S	S	XXX
62A	S	S	S
63..	S	S	XXX
64..	S	S	XXX
65..	S	S	XXX
66..	C	S	S
67..	S	S	XXX
68A	S	S	S
68B	S	S	XXX
68C	S	S	XXX
69..	S	S	XXX
60A	S	S	S
60B	S	S	XXX
60C	S	S	XXX

	Rating	Comments
Pressure/Flow Chart		

SIGNATURE: KC
SIGNATURE OF PERSON PERFORMING TASKS

REMARKS: 66 Seeping

PIT # 61	THRU 60C	TIME CHECKED 1400		INITIALS KC
PIT #	THRU	TIME CHECKED		INITIALS
PIT #	THRU	TIME CHECKED		INITIALS
PIT #	THRU	TIME CHECKED		INITIALS
PIT #	THRU	TIME CHECKED		INITIALS

WEATHER CONDITIONS AM SHIFT
WEATHER CONDITIONS PM SHIFT

DAILY HYDRANT SYSTEM CHECKS

Location #: MKE | Facility: HYDRANT | Date: 5-4-17

'E' CONCOURSE 6 HR. CHECK

PERFORM DAILY (USE APPLICABLE CONDITION CODES)

CONDITION CODES:
S = SATISFACTORY
C = COMMENT (COMMENTS REQUIRED IN REMARKS)
N/U = NOT IN USE
N/A = NOT APPLICABLE

PIT #	Pit Leaks & Cleanliness	Pit Valve & Lid Condition	EFS Stations
10A			XXX
10B			
12A			
12B			XXX
12C			XXX
12D			
14A			
14B			XXX
18,			
19A			
19B			XXX
19C			
20..			
)A			
20B			
21A			
21B			XXX
21C			XXX
22A			
23..			

PIT #	Pit Leaks & Cleanliness	Pit Valve & Lid Condition	EFS Stations
23A			
24..			
24A			
25..			
27..			
27C			XXX
15..			
11..			
9A			
9B			XXX
34..			XXX
36..			
38A			
38B			XXX
38C			XXX
42..			
44..			
46..			XXX
47..			
49..			

PIT #	Pit Leaks & Cleanliness	Pit Valve & Lid Condition	EFS Stations
48..			
45..			
43..			
41..			
39..			
51A			
53A			
53B			XXX
53C			XXX
52A			
52B			XXX
52C			
52D			
29A			
29B			XXX
29C			XXX
28A			XXX
28B			XXX
28C			XXX
28D			

PIT #	Pit Leaks & Cleanliness	Pit Valve & Lid Condition	EFS Stations
28E			XXX
27A			XXX
27B			XXX
27C			
27D			XXX
27E			XXX
61..	S	S	XXX
62A	S	S	S
63..	S	S	XXX
64..	S	S	XXX
65..	S	S	XXX
66..	S	S	S
67..	S	S	XXX
68A	S	S	S
68B	S	S	XXX
68C	S	S	XXX
69..	S	S	XXX
60A	S	S	S
60B	S	S	XXX
60C	S	S	XXX

	Rating	Comments
Pressure/Flow Chart		

SIGNATURE: _____
SIGNATURE OF PERSON PERFORMING TASKS

REMARKS:

PIT # 61 THRU 60C TIME CHECKED 0620 INITIALS
PIT # THRU TIME CHECKED INITIALS
PIT # THRU TIME CHECKED INITIALS
PIT # THRU TIME CHECKED INITIALS
PIT # THRU TIME CHECKED INITIALS

WEATHER CONDITIONS AM SHIFT
WEATHER CONDITIONS PM SHIFT

DAILY HYDRANT SYSTEM CHECKS

Location #: MKE | Facility: HYDRANT | Date: 5-4-17

PERFORM DAILY (USE APPLICABLE CONDITION CODES)

CONDITION CODES:
S = SATISFACTORY
C = COMMENT (COMMENTS REQUIRED IN REMARKS)
N/U = NOT IN USE
N/A = NOT APPLICABLE

PIT #	Pit Leaks & Cleanliness	Pit Valve & Lid Condition	EFS Stations
10A	S	S	XXX
10B	S	S	S
12A	S	S	S
12B	S	S	XXX
12C	S	S	XXX
12D	S	S	S
14A	S	S	S
14B	S	S	XXX
18,	S	S	S
19A	S	S	S
19B	S	S	XXX
19C	S	S	S
20..	S	S	S
20A	S	S	S
20B	S	S	S
21A	S	S	S
21B	S	S	XXX
21C	S	S	XXX
22A	S	S	S
23..	S	S	S

PIT #	Pit Leaks & Cleanliness	Pit Valve & Lid Condition	EFS Stations
23A	S	S	S
24..	S	S	S
24A	S	S	S
25..	S	S	S
27..	S	S	S
27C	S	S	XXX
15..	S	S	S
11..	S	S	S
9A	S	S	S
9B	S	S	XXX
34..	S	S	XXX
36..	S	S	S
38A	S	S	S
38B	S	S	XXX
38C	S	S	XXX
42..	S	S	S
44..	S	S	S
46..	S	S	XXX
47..	S	S	S
49..	S	S	S

PIT #	Pit Leaks & Cleanliness	Pit Valve & Lid Condition	EFS Stations
48..	S	S	S
45..	S	S	S
43..	S	S	S
41..	S	S	S
39..	S	S	S
51A	S	S	S
53A	S	S	S
53B	C	S	XXX
53C	S	S	XXX
52A	S	S	S
52B	S	S	XXX
52C	S	S	S
52D	S	S	S
29A	S	S	S
29B	S	S	XXX
29C	S	S	XXX
28A	S	S	XXX
28B	S	S	XXX
28C	S	S	XXX
28D	S	S	S

PIT #	Pit Leaks & Cleanliness	Pit Valve & Lid Condition	EFS Stations
28E	S	S	XXX
27A	S	S	XXX
27B	S	S	XXX
27C	S	S	S
27D	S	S	XXX
27E	S	S	XXX
61..			XXX
62A			
63..			XXX
64..			XXX
65..			XXX
66..			
67..			XXX
68A			
68B			XXX
68C			XXX
69..			XXX
60A			
60B			XXX
60C			XXX

	Rating	Comments
Pressure/Flow Chart	S	

SIGNATURE: [signature]
SIGNATURE OF PERSON PERFORMING TASKS

REMARKS:

PIT # 10A THRU 49 TIME CHECKED 1000 INITIALS [initials]
PIT # THRU TIME CHECKED INITIALS
PIT # THRU TIME CHECKED INITIALS
PIT # THRU TIME CHECKED INITIALS
PIT # THRU TIME CHECKED INITIALS

WEATHER CONDITIONS AM SHIFT
WEATHER CONDITIONS PM SHIFT

DAILY HYDRANT SYSTEM CHECKS

Location #: MKE | Facility: HYDRANT | Date: 5-4-17

PERFORM DAILY (USE APPLICABLE CONDITION CODES) "E" CONCOURSE 6 HR. CHECK

CONDITION CODES:
S = SATISFACTORY
C = COMMENT (COMMENTS REQUIRED IN REMARKS)
N/U = NOT IN USE
N/A = NOT APPLICABLE

PIT #	Pit Leaks & Cleanliness	Pit Valve & Lid Condition	EFS Stations
10A			XXX
10B			
12A			
12B			XXX
12C			XXX
12D			
14A			
14B			XXX
18,			
19A			
19B			XXX
19C			
20..			
20A			
20B			
21A			
21B			XXX
21C			XXX
22A			
23..			

PIT #	Pit Leaks & Cleanliness	Pit Valve & Lid Condition	EFS Stations
23A			
24..			
24A			
25..			
27..			
27C			XXX
15..			
11..			
9A			
9B			XXX
34..			XXX
36..			
38A			
38B			XXX
38C			XXX
42..			
44..			
46..			XXX
47..			
49..			

PIT #	Pit Leaks & Cleanliness	Pit Valve & Lid Condition	EFS Stations
48..			
45..			
43..			
41..			
39..			
51A			
53A			
53B			XXX
53C			XXX
52A			
52B			XXX
52C			
52D			
29A			
29B			XXX
29C			XXX
28A			XXX
28B			XXX
28C			XXX
28D			

PIT #	Pit Leaks & Cleanliness	Pit Valve & Lid Condition	EFS Stations
28E			XXX
27A			XXX
27B			XXX
27C			
27D			XXX
27E			XXX
61..	S	S	XXX
62A	S	S	S
63..	S	S	XXX
64..	S	S	XXX
65..	S	S	XXX
66..	S	S	S
67..	S	S	XXX
68A	S	S	S
68B	S	S	XXX
68C	S	S	XXX
69..	S	S	XXX
60A	S	S	S
60B	S	S	XXX
60C	S	S	XXX

	Rating	Comments
Pressure/Flow Chart	N/A	

SIGNATURE: [signature]
SIGNATURE OF PERSON PERFORMING TASKS

REMARKS:

PIT # 61 THRU 60C TIME CHECKED 1300 INITIALS [signature]
PIT # THRU TIME CHECKED INITIALS
PIT # THRU TIME CHECKED INITIALS
PIT # THRU TIME CHECKED INITIALS
PIT # THRU TIME CHECKED INITIALS

WEATHER CONDITIONS AM SHIFT
WEATHER CONDITIONS PM SHIFT

DAILY HYDRANT SYSTEM CHECKS

Location #: MKE | Facility: HYDRANT | Date: 5-4-17

PERFORM DAILY (USE APPLICABLE CONDITION CODES)

"E" Concourse 6hr check

CONDITION CODES:
S = SATISFACTORY
C = COMMENT (COMMENTS REQUIRED IN REMARKS)
N/U = NOT IN USE
N/A = NOT APPLICABLE

PIT #	Pit Leaks & Cleanliness	Pit Valve & Lid Condition	EFS Stations
10A			XXX
10B			
12A			
12B			XXX
12C			XXX
12D			
14A			
14B			XXX
18,			
19A			
19B			XXX
19C			
20..			
0A			
20B			
21A			
21B			XXX
21C			XXX
22A			
23..			

PIT #	Pit Leaks & Cleanliness	Pit Valve & Lid Condition	EFS Stations
23A			
24..			
24A			
25..			
27..			
27C			XXX
15..			
11..			
9A			
9B			XXX
34..			XXX
36..			
38A			
38B			XXX
38C			XXX
42..			
44..			
46..			XXX
47..			
49..			

PIT #	Pit Leaks & Cleanliness	Pit Valve & Lid Condition	EFS Stations
48..			
45..			
43..			
41..			
39..			
51A			
53A			
53B			XXX
53C			XXX
52A			
52B			XXX
52C			
52D			
29A			
29B			XXX
29C			XXX
28A			XXX
28B			XXX
28C			XXX
28D			

PIT #	Pit Leaks & Cleanliness	Pit Valve & Lid Condition	EFS Stations
28E			XXX
27A			XXX
27B			XXX
27C			
27D			XXX
27E			XXX
61..	S	S	XXX
62A	S	S	S
63..	S	S	XXX
64..	S	S	XXX
65..	S	S	XXX
66..	S	S	S
67..	S	S	XXX
68A	S	S	S
68B	S	S	XXX
68C	S	S	XXX
69..	S	S	XXX
60A	S	S	S
60B	S	S	XXX
60C	S	S	XXX

	Rating	Comments
Pressure/Flow Chart		

SIGNATURE: KC
SIGNATURE OF PERSON PERFORMING TASKS

REMARKS:

PIT # 61 THRU 60C TIME CHECKED 2000 INITIALS
PIT # THRU TIME CHECKED INITIALS
PIT # THRU TIME CHECKED INITIALS
PIT # THRU TIME CHECKED INITIALS
PIT # THRU TIME CHECKED INITIALS

WEATHER CONDITIONS AM SHIFT
WEATHER CONDITIONS PM SHIFT

DAILY HYDRANT SYSTEM CHECKS

Location #: MKE | Facility: HYDRANT | Date: 5/4/17

PERFORM DAILY (USE APPLICABLE CONDITION CODES)

CONDITION CODES:

S = SATISFACTORY

C = COMMENT (COMMENTS REQUIRED IN REMARKS)

N/U = NOT IN USE

N/A = NOT APPLICABLE

PIT #	Pit Leaks & Cleanliness	Pit Valve & Lid Condition	EFS Stations
10A			XXX
10B			
12A			
12B			XXX
12C			XXX
12D			
14A			
14B			XXX
18,			
19A			
19B			XXX
19C			
20..			
20A			
20B			
21A			
21B			XXX
21C			XXX
22A			
23..			

PIT #	Pit Leaks & Cleanliness	Pit Valve & Lid Condition	EFS Stations
23A			
24..			
24A			
25..			
27..			
27C			XXX
15..			
11.,			
9A			
9B			XXX
34..			XXX
36..			
38A			
38B			XXX
38C			XXX
42..			
44..			
46..			XXX
47..			
49..			

PIT #	Pit Leaks & Cleanliness	Pit Valve & Lid Condition	EFS Stations
48..			
45..			
43..			
41..			
39..			
51A			
53A			
53B			XXX
53C			XXX
52A			
52B			XXX
52C			
52D			
29A			
29B			XXX
29C			XXX
28A			XXX
28B			XXX
28C			XXX
28D			

PIT #	Pit Leaks & Cleanliness	Pit Valve & Lid Condition	EFS Stations
28E			XXX
27A			XXX
27B			XXX
27C			
27D			XXX
27E			XXX
61..	S	S	XXX
62A	S	S	S
63..	S	S	XXX
64..	S	S	XXX
65..	S	S	XXX
66..	S	S	S
67..	S	S	XXX
68A	C	S	S
68B	S	S	XXX
68C	S	S	XXX
69..	S	S	XXX
60A	S	S	S
60B	S	S	XXX
60C	S	S	XXX

	Rating	Comments
Pressure/Flow Chart		

SIGNATURE: KC

SIGNATURE OF PERSON PERFORMING TASKS

REMARKS: 69A Possible seep near Boot cant tell

PIT # 61	THRU 60C	TIME CHECKED 2330	INITIALS KC
PIT #	THRU	TIME CHECKED	INITIALS
PIT #	THRU	TIME CHECKED	INITIALS
PIT #	THRU	TIME CHECKED	INITIALS
PIT #	THRU	TIME CHECKED	INITIALS

WEATHER CONDITIONS AM SHIFT

WEATHER CONDITIONS PM SHIFT

* 6 Hour Fr Concourse Pit Check *

DAILY HYDRANT SYSTEM CHECKS

Location #: MKE | Facility: HYDRANT | Date: Oca 5/5/17 1030AM

PERFORM DAILY (USE APPLICABLE CONDITION CODES)

CONDITION CODES:
S = SATISFACTORY
C = COMMENT (COMMENTS REQUIRED IN REMARKS)
N/U = NOT IN USE
N/A = NOT APPLICABLE

PIT #	Pit Leaks & Cleanliness	Pit Valve & Lid Condition	EFS Stations
10A			XXX
10B			
12A			
12B			XXX
12C			XXX
12D			
14A			
14B			XXX
18,			
19A			
19B			XXX
19C			
20..			
1A			
20B			
21A			
21B			XXX
21C			XXX
22A			
23..			

PIT #	Pit Leaks & Cleanliness	Pit Valve & Lid Condition	EFS Stations
23A			
24..			
24A			
25..			
27..			
27C			XXX
15..			
11..			
9A			
9B			XXX
34..			XXX
36..			
38A			
38B			XXX
38C			XXX
42..			
44..			
46..			XXX
47..			
49..			

PIT #	Pit Leaks & Cleanliness	Pit Valve & Lid Condition	EFS Stations
48..			
45..			
43..			
41..			
39..			
51A			
53A			
53B			XXX
53C			XXX
52A			
52B			XXX
52C			
52D			
29A			
29B			XXX
29C			XXX
28A			XXX
28B			XXX
28C			XXX
28D			

PIT #	Pit Leaks & Cleanliness	Pit Valve & Lid Condition	EFS Stations
28E			XXX
27A			XXX
27B			XXX
27C			
27D			XXX
27E			XXX
61..	S	S	XXX
62A	S	S	S
63..	S	S	XXX
64..	S	S	XXX
65..	S	S	XXX
66..	C	S	S
67..	S	S	XXX
68A	S	S	S
68B	S	S	XXX
68C	S	S	XXX
69..	S	S	XXX
60A	S	S	S
60B	S	S	XXX
60C	C	C	XXX

	Rating	Comments
Pressure/Flow Chart		

SIGNATURE: LR
SIGNATURE OF PERSON PERFORMING TASKS

REMARKS: 66 Fuel/Water Found & Sumped out
60C Pit capped/Vault off

PIT #61	THRU 60C	TIME CHECKED 1030	INITIALS LR
PIT #	THRU	TIME CHECKED	INITIALS
PIT #	THRU	TIME CHECKED	INITIALS
PIT #	THRU	TIME CHECKED	INITIALS
PIT #	THRU	TIME CHECKED	INITIALS

WEATHER CONDITIONS AM SHIFT
WEATHER CONDITIONS PM SHIFT

* 6 Hour E Concourse Pit Check *

DAILY HYDRANT SYSTEM CHECKS

Location #: MKE | Facility: HYDRANT | Date: 5/5/17 1030AM

PERFORM DAILY (USE APPLICABLE CONDITION CODES)

CONDITION CODES:
S = SATISFACTORY
C = COMMENT (COMMENTS REQUIRED IN REMARKS)
N/U = NOT IN USE
N/A = NOT APPLICABLE

PIT #	Pit Leaks & Cleanliness	Pit Valve & Lid Condition	EFS Stations	PIT #	Pit Leaks & Cleanliness	Pit Valve & Lid Condition	EFS Stations	PIT #	Pit Leaks & Cleanliness	Pit Valve & Lid Condition	EFS Stations	PIT #	Pit Leaks & Cleanliness	Pit Valve & Lid Condition	EFS Stations
27HL			XXX	39I			XXX								
10H			XXX	53S			XXX								
14S			XXX	52H			XXX								
17HLI			XXX	29F			XXX								
19L			XXX	37S			XXX								
24HLI			XXX	37I			XXX								
15S			XXX	28S			XXX								
11H			XXX	61L	S	S	XXX								
9L			XXX	61I	S	S	XXX								
9H			XXX	63L	S	S	XXX								
30L			XXX	62S	S	S	XXX								
30HL			XXX	65I	C	S	XXX								
30I			XXX	66I	C	S	XXX								
3S			XXX	66H	S	S	XXX								
38H			XXX	66L	S	S	XXX								
42I			XXX	69S	S	S	XXX								
42H			XXX	69L	S	S	XXX								
47S			XXX	60I	C	S	XXX								
41L			XXX	60H	S	S	XXX								

	Rating	Comments
Pressure/Flow Chart		

SIGNATURE: LR
SIGNATURE OF PERSON PERFORMING TASKS

REMARKS: 60I Leak in floor 66I Valve L/O 65I Leak in floor

PIT # 61L	THRU 60H	TIME CHECKED 1030	INITIALS LR
PIT #	THRU	TIME CHECKED	INITIALS
PIT #	THRU	TIME CHECKED	INITIALS
PIT #	THRU	TIME CHECKED	INITIALS
PIT #	THRU	TIME CHECKED	INITIALS

WEATHER CONDITIONS AM SHIFT
WEATHER CONDITIONS PM SHIFT

DAILY HYDRANT SYSTEM CHECKS

Location #: MKE | Facility: HYDRANT | Date: 5/5/17

PERFORM DAILY (USE APPLICABLE CONDITION CODES)

CONDITION CODES:
S = SATISFACTORY
C = COMMENT (COMMENTS REQUIRED IN REMARKS)
N/U = NOT IN USE
N/A = NOT APPLICABLE

PIT #	Pit Leaks & Cleanliness	Pit Valve & Lid Condition	EFS Stations
10A	S	S	XXX
10B	S	S	S
12A	S	S	S
12B	S	S	XXX
12C	S	S	XXX
12D	S	S	S
14A	S	S	S
14B	S	S	XXX
18,	S	S	S
19A	S	S	S
19B	S	S	XXX
19C	S	S	S
20..	S	S	S
21A	S	S	S
21B	S	S	S
21B	S	S	XXX
21C	S	S	XXX
22A	S	S	S
23..	S	S	S

PIT #	Pit Leaks & Cleanliness	Pit Valve & Lid Condition	EFS Stations
23A	S	S	S
24..	S	S	S
24A	S	S	S
25..	S	S	S
27..	S	S	S
27C	S	S	XXX
15..	S	S	S
11..	S	S	S
9A	S	S	S
9B	S	S	XXX
34..	S	S	XXX
36..	S	S	S
38A	S	S	S
38B	S	S	XXX
38C	S	S	XXX
42..	S	S	S
44..	S	S	S
46..	S	S	XXX
47..	S	S	S
49..	S	S	S

PIT #	Pit Leaks & Cleanliness	Pit Valve & Lid Condition	EFS Stations
48..	S	S	S
45..	S	S	S
43..	S	S	S
41..	S	S	S
39..	S	S	S
51A	S	S	S
53A	S	S	S
53B	S	S	XXX
53C	S	S	XXX
52A	S	S	S
52B	S	S	XXX
52C	S	S	S
52D	S	S	S
29A	S	S	S
29B	S	S	XXX
29C	S	S	XXX
28A	S	S	XXX
28B	S	S	XXX
28C	S	S	XXX
28D	S	S	S

PIT #	Pit Leaks & Cleanliness	Pit Valve & Lid Condition	EFS Stations
28E	S	S	XXX
27A	S	S	XXX
27B	S	S	XXX
27C	S	S	S
27D	S	S	XXX
27E	S	S	XXX
61..	S	S	XXX
62A	S	S	S
63..	S	S	XXX
64..	S	S	XXX
65..	S	S	XXX
66..	S	S	S
67..	S	S	XXX
68A	S	S	S
68B	S	S	XXX
68C	S	S	XXX
69..	S	S	XXX
60A	S	S	S
60B	S	S	XXX
60C	S	S	XXX

	Rating	Comments
Pressure/Flow Chart		

SIGNATURE: [signature]
SIGNATURE OF PERSON PERFORMING TASKS

REMARKS:

PIT # 10A	THRU 60C	TIME CHECKED 1600	INITIALS KC
PIT #	THRU	TIME CHECKED	INITIALS
PIT #	THRU	TIME CHECKED	INITIALS
PIT #	THRU	TIME CHECKED	INITIALS
PIT #	THRU	TIME CHECKED	INITIALS

WEATHER CONDITIONS AM SHIFT
WEATHER CONDITIONS PM SHIFT

DAILY HYDRANT SYSTEM CHECKS

Location #: MKE | Facility: HYDRANT | Date: 5/5/17

PERFORM DAILY (USE APPLICABLE CONDITION CODES)

CONDITION CODES:

S = SATISFACTORY

C = COMMENT (COMMENTS REQUIRED IN REMARKS)

N/U = NOT IN USE

N/A = NOT APPLICABLE

PIT #	Pit Leaks & Cleanliness	Pit Valve & Lid Condition	EFS Stations
10A			XXX
10B			
12A			
12B			XXX
12C			XXX
12D			
14A			
14B			XXX
18,			
19A			
19B			XXX
19C			
20..			
20A			
20B			
21A			
21B			XXX
21C			XXX
22A			
23..			

PIT #	Pit Leaks & Cleanliness	Pit Valve & Lid Condition	EFS Stations
23A			
24..			
24A			
25..			
27..			
27C			XXX
15..			
11..			
9A			
9B			XXX
34..			XXX
36..			
38A			
38B			XXX
38C			XXX
42..			
44..			
46..			XXX
47..			
49..			

PIT #	Pit Leaks & Cleanliness	Pit Valve & Lid Condition	EFS Stations
48..			
45..			
43..			
41..			
39..			
51A			
53A			
53B			XXX
53C			XXX
52A			
52B			XXX
52C			
52D			
29A			
29B			XXX
29C			XXX
28A			XXX
28B			XXX
28C			XXX
28D			

PIT #	Pit Leaks & Cleanliness	Pit Valve & Lid Condition	EFS Stations
28E			XXX
27A			XXX
27B			XXX
27C			
27D			XXX
27E			XXX
61..	S	S	XXX
62A	S	S	S
63..	S	S	XXX
64..	S	S	XXX
65..	S	S	XXX
66..	S	S	S
67..	S	S	XXX
68A	S	S	S
68B	S	S	XXX
68C	S	S	XXX
69..	S	S	XXX
60A	S	S	S
60B	S	S	XXX
60C	C	C	XXX

	Rating	Comments
Pressure/Flow Chart		

SIGNATURE: [signature]

SIGNATURE OF PERSON PERFORMING TASKS

REMARKS: 60C covered

PIT # 61	THRU 60C	TIME CHECKED 1630	INITIALS RC
PIT #	THRU	TIME CHECKED	INITIALS
PIT #	THRU	TIME CHECKED	INITIALS
PIT #	THRU	TIME CHECKED	INITIALS
PIT #	THRU	TIME CHECKED	INITIALS

WEATHER CONDITIONS AM SHIFT

WEATHER CONDITIONS PM SHIFT

DAILY HYDRANT SYSTEM CHECKS

Location #: MKE | Facility: HYDRANT | Date: 5/5/17

PERFORM DAILY (USE APPLICABLE CONDITION CODES)

CONDITION CODES:

S = SATISFACTORY

C = COMMENT (COMMENTS REQUIRED IN REMARKS)

N/U = NOT IN USE

N/A = NOT APPLICABLE

PIT #	Pit Leaks & Cleanliness	Pit Valve & Lid Condition	EFS Stations
10A			XXX
10B			
12A			
12B			XXX
12C			XXX
12D			
14A			
14B			XXX
18,			
19A			
19B			XXX
19C			
20..			
)A			
20B			
21A			
21B			XXX
21C			XXX
22A			
23..			

PIT #	Pit Leaks & Cleanliness	Pit Valve & Lid Condition	EFS Stations
23A			
24..			
24A			
25..			
27..			
27C			XXX
15..			
11..			
9A			
9B			XXX
34..			XXX
36..			
38A			
38B			XXX
38C			XXX
42..			
44..			
46..			XXX
47..			
49..			

PIT #	Pit Leaks & Cleanliness	Pit Valve & Lid Condition	EFS Stations
48..			
45..			
43..			
41..			
39..			
51A			
53A			
53B			XXX
53C			XXX
52A			
52B			XXX
52C			
52D			
29A			
29B			XXX
29C			XXX
28A			XXX
28B			XXX
28C			XXX
28D			

PIT #	Pit Leaks & Cleanliness	Pit Valve & Lid Condition	EFS Stations
28E			XXX
27A			XXX
27B			XXX
27C			
27D			XXX
27E			XXX
61..	S	S	XXX
62A	S	S	S
63..	S	S	XXX
64..	S	S	XXX
65..	S	S	XXX
66..	S	C	S
67..	S	S	XXX
68A	S	S	S
68B	S	S	XXX
68C	S	S	XXX
69..	S	S	XXX
60A	S	C	S
60B	S	S	XXX
60C	C	C	XXX

	Rating	Comments
Pressure/Flow Chart		

SIGNATURE: [signature]

SIGNATURE OF PERSON PERFORMING TASKS

REMARKS: 66 and 60A Pit heads off center 60C covered

PIT # 61	THRU 60B	TIME CHECKED 2000	INITIALS KC	
PIT #	THRU	TIME CHECKED	INITIALS	
PIT #	THRU	TIME CHECKED	INITIALS	
PIT #	THRU	TIME CHECKED	INITIALS	
PIT #	THRU	TIME CHECKED	INITIALS	

WEATHER CONDITIONS AM SHIFT

WEATHER CONDITIONS PM SHIFT

DAILY HYDRANT SYSTEM CHECKS

Location #: MKE | Facility: HYDRANT | Date: 5/5/17

PERFORM DAILY (USE APPLICABLE CONDITION CODES)

CONDITION CODES:

S = SATISFACTORY
C = COMMENT (COMMENTS REQUIRED IN REMARKS)
N/U = NOT IN USE
N/A = NOT APPLICABLE

PIT #	Pit Leaks & Cleanliness	Pit Valve & Lid Condition	EFS Stations
10A			XXX
10B			
12A			
12B			XXX
12C			XXX
12D			
14A			
14B			XXX
18,			
19A			
19B			XXX
19C			
20..			
1A			
20B			
21A			
21B			XXX
21C			XXX
22A			
23..			

PIT #	Pit Leaks & Cleanliness	Pit Valve & Lid Condition	EFS Stations
23A			
24..			
24A			
25..			
27..			
27C			XXX
15..			
11..			
9A			
9B			XXX
34..			XXX
36..			
38A			
38B			XXX
38C			XXX
42..			
44..			
46..			XXX
47..			
49..			

PIT #	Pit Leaks & Cleanliness	Pit Valve & Lid Condition	EFS Stations
48..			
45..			
43..			
41..			
39..			
51A			
53A			
53B			XXX
53C			XXX
52A			
52B			XXX
52C			
52D			
29A			
29B			XXX
29C			XXX
28A			XXX
28B			XXX
28C			XXX
28D			

PIT #	Pit Leaks & Cleanliness	Pit Valve & Lid Condition	EFS Stations
28E			XXX
27A			XXX
27B			XXX
27C			
27D			XXX
27E			XXX
61..	S	S	XXX
62A	S	S	S
63..	S	S	XXX
64..	S	S	XXX
65..	S	S	XXX
66..	S	C	S
67..	S	S	XXX
68A	S	S	
68B	S	S	XXX
68C	S	S	XXX
69..	S	S	XXX
60A	S	C	S
60B	S	S	XXX
60C	C	C	XXX

	Rating	Comments
Pressure/Flow Chart		

SIGNATURE: [signature]
SIGNATURE OF PERSON PERFORMING TASKS

REMARKS: 66 and 60A PIT hydrants off center 60C covered

PIT # 61	THRU 60B	TIME CHECKED 2328	INITIALS KC
PIT #	THRU	TIME CHECKED	INITIALS
PIT #	THRU	TIME CHECKED	INITIALS
PIT #	THRU	TIME CHECKED	INITIALS
PIT #	THRU	TIME CHECKED	INITIALS

WEATHER CONDITIONS AM SHIFT
WEATHER CONDITIONS PM SHIFT

DAILY HYDRANT SYSTEM CHECKS

Location #: MKE | Facility: HYDRANT | Date: 5-6-17

PERFORM DAILY (USE APPLICABLE CONDITION CODES)

C 'TION CODES:
S = ,SFACTORY
C = COMMENT (COMMENTS REQUIRED IN REMARKS)
N/U = NOT IN USE
N/A = NOT APPLICABLE

PIT #	Pit Leaks & Cleanliness	Pit Valve & Lid Condition	EFS Stations
10A	S	S	XXX
10B	S	S	S
12A	S	S	S
12B	S	S	XXX
12C	S	S	XXX
12D	S	S	S
14A	S	S	S
14B	S	S	XXX
18,	S	S	S
19A	S	S	S
19B	S	S	XXX
19C	S	S	S
20..	S	S	S
nA	S	S	S
B	S	S	S
21A	S	S	S
21B	S	S	XXX
21C	S	S	XXX
22A	S	S	S
23..	S	S	S

PIT #	Pit Leaks & Cleanliness	Pit Valve & Lid Condition	EFS Stations
23A	S	S	S
24..	S	S	S
24A	S	S	S
25..	S	S	S
27..	S	S	S
27C	S	S	XXX
15..	S	S	S
11..	S	S	S
9A	S	S	S
9B	S	S	XXX
34..	S	S	XXX
36..	S	S	S
38A	S	S	S
38B	S	S	XXX
38C	S	S	XXX
42..	S	S	S
44..	S	S	S
46..	S	S	XXX
47..	S	S	S
49..	S	S	S

PIT #	Pit Leaks & Cleanliness	Pit Valve & Lid Condition	EFS Stations
48..	S	S	S
45..	S	S	S
43..	S	S	S
41..	S	S	S
39.. X	S	S	S
51A	S	S	S
53A	S	S	S
53B	L/O	L/O	XXX
53C	S	S	XXX
52A	S	S	S
52B	S	S	XXX
52C X	S	S	S
52D	S	S	S
29A X	S	S	S
29B X	S	S	XXX
29C X	S	S	XXX
28A X	S	S	XXX
28B X	S	S	XXX
28C	S	S	XXX
28D X	S	S	S

PIT #	Pit Leaks & Cleanliness	Pit Valve & Lid Condition	EFS Stations
28E	S	S	XXX
27A	S	S	XXX
27B	S	S	XXX
27C	S	S	S
27D	S	S	XXX
27E	S	S	XXX
61.. X	S	S	XXX
62A	S	S	S
63..	S	S	XXX
64..	S	S	XXX
65..	S	S	XXX
66..	S	S	S
67..	S	S	XXX
68A	S	S	S
68B	S	S	XXX
68C	S	S	XXX
69..	S	S	XXX
60A	BARRICADED		
60B	S	S	XXX
60C	S	S	XXX

	Rating	Comments
Pressure/Flow Chart	S	

SIGNATURE: Jerry Wagner
SIGNATURE OF PERSON PERFORMING TASKS

REMARKS:

PIT # 60C THRU 48	TIME CHECKED 10:30 TO 11:30	INITIALS	
PIT # 10A THRU 49	TIME CHECKED 14:00 TO 15:15	INITIALS	JRN
PIT # THRU	TIME CHECKED	INITIALS	
PIT # THRU	TIME CHECKED	INITIALS	
PIT # THRU	TIME CHECKED	INITIALS	

WEATHER CONDITIONS AM SHIFT
WEATHER CONDITIONS PM SHIFT Clear/windy

DAILY HYDRANT SYSTEM CHECKS

Location #: MKE | Facility: HYDRANT | Date: 5/6/17

PERFORM DAILY (USE APPLICABLE CONDITION CODES)

CONDITION CODES:
S = SATISFACTORY
C = COMMENT (COMMENTS REQUIRED IN REMARKS)
N/U = NOT IN USE
N/A = NOT APPLICABLE

PIT #	Pit Leaks & Cleanliness	Pit Valve & Lid Condition	EFS Stations
10A			XXX
10B			
12A			
12B			XXX
12C			XXX
12D			
14A			
14B			XXX
18,			
19A			
19B			XXX
19C			
20..			
20A			
20B			
21A			
21B			XXX
21C			XXX
22A			
23..			

PIT #	Pit Leaks & Cleanliness	Pit Valve & Lid Condition	EFS Stations
23A			
24..			
24A			
25..			
27..			
27C			XXX
15..			
11..			
9A			
9B			XXX
34..			XXX
36..			
38A			
38B			XXX
38C			XXX
42..			
44..			
46..			XXX
47..			
49..			

PIT #	Pit Leaks & Cleanliness	Pit Valve & Lid Condition	EFS Stations
48..			
45..			
43..			
41..			
39..			
51A			
53A			
53B			XXX
53C			XXX
52A			
52B			XXX
52C			
52D			
29A			
29B			XXX
29C			XXX
28A			XXX
28B			XXX
28C			XXX
28D			

PIT #	Pit Leaks & Cleanliness	Pit Valve & Lid Condition	EFS Stations
28E			XXX
27A			XXX
27B			XXX
27C			
27D			XXX
27E			XXX
61..	S	S	XXX
62A	S	S	S
63..	S	S	XXX
64..	S	S	XXX
65..	S	S	XXX
66..	S	C	S
67..	S	S	XXX
68A	S	S	S
68B	S	S	XXX
68C	S	S	XXX
69..	S	S	XXX
60A	S	S	S
60B	S	S	XXX
60C	C	C	XXX

	Rating	Comments
Pressure/Flow Chart		

SIGNATURE: [signature]
SIGNATURE OF PERSON PERFORMING TASKS

REMARKS: 66 off center 60C covered

PIT # 61	THRU 60B	TIME CHECKED 1800	INITIALS KC
PIT #	THRU	TIME CHECKED	INITIALS
PIT #	THRU	TIME CHECKED	INITIALS
PIT #	THRU	TIME CHECKED	INITIALS
PIT #	THRU	TIME CHECKED	INITIALS

WEATHER CONDITIONS AM SHIFT
WEATHER CONDITIONS PM SHIFT

DAILY HYDRANT SYSTEM CHECKS

Location #: MKE | Facility: HYDRANT | Date: 5/6/17

PERFORM DAILY (USE APPLICABLE CONDITION CODES)

CONDITION CODES:
S = SATISFACTORY
C = COMMENT (COMMENTS REQUIRED IN REMARKS)
N/U = NOT IN USE
N/A = NOT APPLICABLE

PIT #	Pit Leaks & Cleanliness	Pit Valve & Lid Condition	EFS Stations
10A			XXX
10B			
12A			
12B			XXX
12C			XXX
12D			
14A			
14B			XXX
18,.			
19A			
19B			XXX
19C			
20..			
0A			
B			
21A			
21B			XXX
21C			XXX
22A			
23..			

PIT #	Pit Leaks & Cleanliness	Pit Valve & Lid Condition	EFS Stations
23A			
24..			
24A			
25..			
27..			
27C			XXX
15..			
11..			
9A			
9B			XXX
34..			XXX
36..			
38A			
38B			XXX
38C			XXX
42..			
44..			
46..			XXX
47..			
49..			

PIT #	Pit Leaks & Cleanliness	Pit Valve & Lid Condition	EFS Stations
48..			
45..			
43..			
41..			
39..			
51A			
53A			
53B			XXX
53C			XXX
52A			
52B			XXX
52C			
52D			
29A			
29B			XXX
29C			XXX
28A			XXX
28B			XXX
28C			XXX
28D			

PIT #	Pit Leaks & Cleanliness	Pit Valve & Lid Condition	EFS Stations
28E			XXX
27A			XXX
27B			XXX
27C			
27D			XXX
27E			XXX
61..	S	S	XXX
62A	S	S	S
63..	S	S	XXX
64..	S	S	XXX
65..	S	S	XXX
66..	S	S	S
67..	S	S	XXX
68A	S	S	S
68B	S	S	XXX
68C	S	S	XXX
69..	S	S	XXX
60A	S	S	S
60B	S	S	XXX
60C	C	C	XXX

	Rating	Comments
Pressure/Flow Chart		

SIGNATURE: [signature]
SIGNATURE OF PERSON PERFORMING TASKS

REMARKS: 60C covered

PIT # 61	THRU 60B	TIME CHECKED 2340	INITIALS KC
PIT #	THRU	TIME CHECKED	INITIALS
PIT #	THRU	TIME CHECKED	INITIALS
PIT #	THRU	TIME CHECKED	INITIALS
PIT #	THRU	TIME CHECKED	INITIALS

WEATHER CONDITIONS AM SHIFT
WEATHER CONDITIONS PM SHIFT

DAILY HYDRANT SYSTEM CHECKS

Location #: MKE | Facility: HYDRANT | Date: 5-7-17

PERFORM DAILY (USE APPLICABLE CONDITION CODES)

CONDITION CODES:

S = SATISFACTORY

C = COMMENT (COMMENTS REQUIRED IN REMARKS)

N/U = NOT IN USE

N/A = NOT APPLICABLE

PIT #	Pit Leaks & Cleanliness	Pit Valve & Lid Condition	EFS Stations
10A	S	S	///////
10B	S	S	S
12A	S	S	S
12B	S	S	///////
12C	S	S	///////
12D	S	S	S
14A	S	S	S
14B	S	S	///////
18,	S	S	S
19A	S	S	S
19B	S	S	///////
19C	S	S	S
20..	S	S	S
[illegible]	S	S	S
20B	S	S	S
21A	S	S	S
21B	S	S	///////
21C	S	S	///////
22A	S	S	S
23..	S	S	S

PIT #	Pit Leaks & Cleanliness	Pit Valve & Lid Condition	EFS Stations
23A	S	S	S
24..	S	S	S
24A	S	S	S
25..	S	S	S
27..	S	S	S
27C	S	S	///////
15..	S	S	S
11..	S	S	S
9A	S	S	S
9B	S	S	///////
34..	S	S	///////
36..	S	S	S
38A	S	S	S
38B	S	S	///////
38C	S	S	///////
42..	S	S	S
44..	S	S	S
46..	S	S	///////
47..	S	S	S
49..	S	S	S

PIT #	Pit Leaks & Cleanliness	Pit Valve & Lid Condition	EFS Stations
48..	S	S	S
45..	S	S	S
43..	S	S	S
41..	S	S	S
39..	S	S	S
51A	S	S	S
53A	S	S	S
53B	S	S	///////
53C	S	S	///////
52A	S	S	S
52B	S	S	///////
52C	S	S	S
52D	S	S	S
29A	S	S	S
29B	S	S	///////
29C	S	S	///////
28A	S	S	///////
28B	S	S	///////
28C	S	S	///////
28D	S	S	S

PIT #	Pit Leaks & Cleanliness	Pit Valve & Lid Condition	EFS Stations
28E	S	S	///////
27A	S	S	///////
27B	S	S	///////
27C	S	S	S
27D	S	S	///////
27E	S	S	///////
61..	S	S	///////
62A	S	S	S
63..	S	S	///////
64..	S	S	///////
65..	S	S	///////
66..	S	S	S
67..	S	S	///////
68A	S	S	S
68B	S	S	///////
68C	S	S	///////
69..	S	S	///////
60A	S	S	S
60B	S	S	///////
60C	S	S	///////

	Rating	Comments
Pressure/Flow Chart	S	

SIGNATURE: [signature]

SIGNATURE OF PERSON PERFORMING TASKS

REMARKS: Concourse E: 0700/1300/2100

PIT# 10A THUR 49 TIME CHECKED 1030 INITIALS RS

PIT# 48 THUR 60C TIME CHECKED 1100 INITIALS RS

PIT# THUR TIME CHECKED INITIALS

PIT# THUR TIME CHECKED INITIALS

WEATHER CONDITIONS AM SHIFT

WEATHER CONDITIONS PM SHIFT

DAILY HYDRANT SYSTEM CHECKS

Location #: MKE | Facility: HYDRANT | Date: 5-7-17

PERFORM DAILY (USE APPLICABLE CONDITION CODES)

CONDITION CODES:
S = SATISFACTORY
C = COMMENT (COMMENTS REQUIRED IN REMARKS)
N/U = NOT IN USE
N/A = NOT APPLICABLE

0700 | 1330

PIT #	Pit Leaks & Cleanliness	Pit Valve & Lid Condition	EFS Stations
61..	S	S	//////
62A	S	C	S
63..	S	S	//////
64..	S	S	//////
65..	S	S	//////
66..	S	S	S
67..	S	S	//////
68A	S	S	S
68B	S	S	//////
68C	S	S	//////
69..	S	S	//////
60A	S	S	S
60B	S	S	//////
60C	Covered		//////
[redacted]			XXX
[redacted]			XXX
[redacted]			XXX
[redacted]			XXX
[redacted]			XXX

PIT #	Pit Leaks & Cleanliness	Pit Valve & Lid Condition	EFS Stations
[redacted]			XXX
[redacted]			XXX
[redacted]			XXX
[redacted]			XXX
[redacted]			XXX
[redacted]			XXX
[redacted]			XXX
61L	S	S	XXX
61I	C	S	XXX
63L	S	S	XXX
62S	S	S	XXX
65I	C	S	XXX
66I	C	S	XXX
66H	S	S	XXX
66L	S	S	XXX
69S	S	S	XXX
69L	S	S	XXX
60I	C	S	XXX
60H	S	S	XXX

PIT #	Pit Leaks & Cleanliness	Pit Valve & Lid Condition	EFS Stations
61..	S	S	//////
62A	S	C	
63..	S	S	//////
64..	S	S	//////
65..	S	S	//////
66..	S	S	
67..	S	S	//////
68A	S	S	
68B	S	S	//////
68C	S	S	//////
69..	S	S	//////
60A	S	S	
60B	S	S	//////
60C	Covered		//////
[redacted]			XXX
[redacted]			XXX
[redacted]			XXX
[redacted]			XXX
[redacted]			XXX

PIT #	Pit Leaks & Cleanliness	Pit Valve & Lid Condition	EFS Stations
[redacted]			XXX
[redacted]			XXX
[redacted]			XXX
[redacted]			XXX
[redacted]			XXX
[redacted]			XXX
[redacted]			XXX
61L	S	S	XXX
61I	C	S	XXX
63L	S	S	XXX
62S	S	S	XXX
65I	C	S	XXX
66I	C	S	XXX
66H	S	S	XXX
66L	S	S	XXX
69S	S	S	XXX
69L	S	S	XXX
60I	C	S	XXX
60H	S	S	XXX

	Rating	Comments
Pressure/Flow Chart		

SIGNATURE: RS

SIGNATURE OF PERSON PERFORMING TASKS

REMARKS: 62A Lid pin spring missing 66, [redacted], 60A off center, 62S some water, 61I water, [redacted], 60I water, 65I 66I water

PIT # 61	THRU	60H	TIME CHECKED	700	INITIALS RS
PIT # 61	THRU	60H	TIME CHECKED	1330	INITIALS RS
PIT #	THRU		TIME CHECKED		INITIALS
PIT #	THRU		TIME CHECKED		INITIALS
PIT #	THRU		TIME CHECKED		INITIALS

WEATHER CONDITIONS AM SHIFT

WEATHER CONDITIONS PM SHIFT

ATTACHMENT B
PHOTOGRAPH LOG

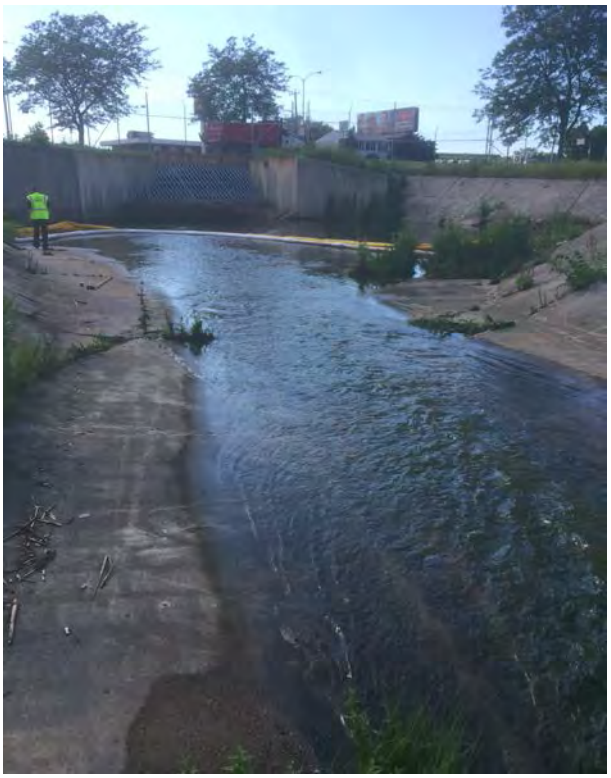
Subject	Setting up to core surface concrete at MKE-SB01 looking northwest. 60C hydrant pit is to left of coring machine.		**1**
Site	MKE Release Suppport		**Date**
Client	MKE Fuel Company, Inc.		5/12/2017

Subject	Typical soil encountered at the Site in descending depth from right to left (surface concrete at upper right of table)		**2**
Site	MKE Release Suppport		**Date**
Client	MKE Fuel Company, Inc.		5/12/2017

Subject	Surface concrete at soil borings restored and hydrant pit 60C re-covered looking southeast.		**3**
Site	MKE Release Suppport		**Date**
Client	MKE Fuel Company, Inc.		5/12/2017

Subject	Sheen on surface water at MKE sewer outfall after rain event		**4**
Site	MKE Release Suppport		**Date**
Client	MKE Fuel Company, Inc.		5/22/2017

Subject	Surface water conditions during final sampling event.		**5**
Site	MKE Release Suppport		**Date**
Client	MKE Fuel Company, Inc.		6/20/2017



Subject	Surface water conditions during final sampling event.		**6**
Site	MKE Release Suppport		**Date**
Client	MKE Fuel Company, Inc.		6/20/2017

ATTACHMENT C
SET WASTE CHARACTERIZATION LABORATORY ANALYTICAL REPORT

Environmental Monitoring and Technologies, Inc.

8100 N. Austin Avenue Morton Grove, IL 60053-3203 P 847.967.6666 800.246.0663 F 847.967.6735 www.emt.com

Analytical Report

Danielle Weiss
SET Environmental (WI)
9730 S. 20th Street
Oak Creek, WI 53154

June 01, 2017

Work Order: 17E0776

RE: SET WI Sample Analysis
GMIA ROB 20-23

Dear Danielle Weiss:

Enclosed are the analytical reports for the EMT Work Order listed. Also included with this analytical report is a copy of the chain of custody associated with these samples. If you have any questions, please contact me.

Sincerely,

Katherine Langfoss For Eric Jensen
Project Manager
847.967.6666
ejensen@emt.com
Approved for release: 6/1/2017 1:55:34PM

Approved by,

Matthew Gregory
Technical Manager

The contents of this report apply to the sample(s) analyzed. No duplication is allowed except in its entirety. Detection and Reporting limits are adjusted for sample size used, dilutions and moisture content, if applicable.

State of Wisconsin Dept of Natural Resources, Cert No. 999888890

Table of Contents

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Environmental Monitoring and Technologies, Inc.

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Sample Summary

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
S#1 RB-20-23	17E0776-01	Solid	05/16/17 14:05	05/23/17 14:30

Environmental Monitoring and Technologies, Inc.

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Case Narrative

Client: SET Environmental (WI)
Project: SET WI Sample Analysis
GMIA ROB 20-23
Work Order: 17E0776

Date: 06/01/2017

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

Sample results only relate to the sample(s) received at the laboratory and analytes of interest tested.

Work Order: 17E0776
The samples were received on 05/23/17 14:30. The temperature of the cooler at receipt was

Cooler	Temp C°
Default Cooler	3.0

Refer to Qualifiers and Definitions for quality and analytical clarifications or deviations.

GC Semivolatiles

Method: 8015B_DRO, B7E1126-BS1/BSD1: RPD for spike compound was outside of the limit.

Method: 8015B_DRO, S7E0555-CCV2: The recovery of the target analyte in the bracketing CCV was below the limit. Therefore, the associated quality control and sample were re-analyzed.

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Client Sample Results

Client: SET Environmental (WI)
Project: SET WI Sample Analysis GMIA ROB 20-23
Work Order: 17E0776

Client Sample ID: S#1 RB-20-23
Report Date: 06/01/2017
Collection Date: 05/16/2017 14:05
Matrix: Solid
Lab ID: 17E0776-01

Analyses	Result	EMT Reporting Limit	Qual	Units		Date/Time Analyzed	Batch	Analyst
Wet Chemistry								
Method: ASTM D92-90								
Ignitability (open cup)	>180	35.0		°F		05/25/17 11:50	B7E1036	SG
Method: SM2540G								
Total Solids	**89.5**	0.100	H	% (Percent)		05/24/17 15:08	B7E0997	sa1
Method: SW9045C								
pH	**7.02**		H	pH Units		05/24/17 15:22	B7E1004	PK1
Petroleum Hydrocarbons by GC FID								
Method: WI(95)-DRO: PUBL-SW-141								
Diesel Range Organics	**645**	392		mg/Kg	24.4	05/31/17 18:25	B7E1126	JN1
Petroleum Hydrocarbons by GC PID/FID								
Method: WI(95)-GRO: PUBL-SW-140								
Gasoline Range Organics	< 111	421		mg/Kg	111	05/25/17 10:41	B7E1021	MNN
Volatile Organic Compounds by GC/MS								
Method: SW8260B / SW5035								
Benzene	< 2810	2810	H	ug/Kg		05/26/17 12:06	B7E1089	XN
Surrogate: Dibromofluoromethane			*H*	*Recovery: 95%*	*Limits: 78-119*	*05/26/17 12:06*	*B7E1089*	*XN*
Surrogate: 1,2-Dichloroethane-d4			*H*	*Recovery: 99%*	*Limits: 71-136*	*05/26/17 12:06*	*B7E1089*	*XN*
Surrogate: Fluorobenzene			*H*	*Recovery: 100%*	*Limits: 91-106*	*05/26/17 12:06*	*B7E1089*	*XN*
Surrogate: Toluene-d8			*H*	*Recovery: 100%*	*Limits: 85-116*	*05/26/17 12:06*	*B7E1089*	*XN*
Surrogate: 4-Bromofluorobenzene			*H*	*Recovery: 112%*	*Limits: 85-119*	*05/26/17 12:06*	*B7E1089*	*XN*
Surrogate: 1,2-Dichlorobenzene-d4			*H*	*Recovery: 106%*	*Limits: 80-120*	*05/26/17 12:06*	*B7E1089*	*XN*

Environmental Monitoring and Technologies, Inc.

8100 N. Austin Avenue Morton Grove, IL 60053-3203 P 847.967.6666 800.246.0663 F 847.967.6735 www.emt.com

Dates Report

Client: SET Environmental (WI)
Project: SET WI Sample Analysis
GMIA ROB 20-23
Work Order: 17E0776

Report Date: 06/01/2017

Sample ID	Client Sample ID	Collection	Matrix	Test Name	Leached Prep Date	Prep Date	Analysis Date	Batch ID	Sequence
17E0776-01	S#1 RB-20-23	05/16/17	Solid	Total Solids / Percent Moisture		05/24/17 14:23	05/24/17 15:08	B7E0997	
				pH / Corrosivity 50% solution test		05/24/17 15:21	05/24/17 15:22	B7E1004	
				Gasoline Range Organics (WDNR) by GC/FID		05/25/17 06:20	05/25/17 10:41	B7E1021	S7E0476
				Flash Point, Open Cup		05/25/17 11:30	05/25/17 11:50	B7E1036	
				Volatile Organic Compounds by GC/MS		05/25/17 17:54	05/26/17 12:06	B7E1089	S7E0498
				Diesel Range Organics (WDNR) by GC/FID		05/27/17 08:06	05/31/17 18:25	B7E1126	S7F0006

Environmental Monitoring and Technologies, Inc.

8100 N. Austin Avenue Morton Grove, IL 60053-3203 P 847.967.6666 800.246.0663 F 847.967.6735 www.emt.com

Quality Control

Client: SET Environmental (WI)
Project: SET WI Sample Analysis GMIA ROB 20-23
Work Order: 17E0776

Report Date: 06/01/2017
Matrix: Solid

Wet Chemistry

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch: B7E0997										
Blank (B7E0997-BLK1)				*Prepared: 05/24/2017 14:23*			*Analyzed: 05/24/2017 15:30*			
Total Solids	< 0.100	0.100	%							
LCS (B7E0997-BS1)				*Prepared: 05/24/2017 14:23*			*Analyzed: 05/24/2017 15:32*			
Total Solids	0.188	0.100	%	0.2001		94.1	88.3-107			
Duplicate (B7E0997-DUP1)		**Source: 17E0733-29**		*Prepared: 05/24/2017 14:23*			*Analyzed: 05/24/2017 15:34*			
Total Solids	92.2	0.100	%		89.1			3.44	5	
Duplicate (B7E0997-DUP2)		**Source: 17E0788-08**		*Prepared: 05/24/2017 14:23*			*Analyzed: 05/24/2017 15:36*			
Total Solids	73.0	0.100	%		75.1			2.75	5	
Batch: B7E1004										
LCS (B7E1004-BS1)				*Prepared: 05/24/2017 15:21*			*Analyzed: 05/24/2017 15:22*			
pH	7.05		pH Units	7.000		101	90-110			
Duplicate (B7E1004-DUP1)		**Source: 17E0776-01**		*Prepared: 05/24/2017 15:21*			*Analyzed: 05/24/2017 15:22*			
pH	7.27		pH Units		7.02			3.50	10	H

Environmental Monitoring and Technologies, Inc.

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Quality Control

(Continued)

Client: SET Environmental (WI)
Project: SET WI Sample Analysis GMIA ROB 20-23
Work Order: 17E0776

Report Date: 06/01/2017
Matrix: Solid

Petroleum Hydrocarbons by GC FID

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch: B7E1126										
Blank (B7E1126-BLK1)				*Prepared: 05/27/2017 08:06*			*Analyzed: 05/30/2017 17:10*			
Diesel Range Organics	< 0.994	16.0	mg/Kg							
Blank (B7E1126-BLK2)				*Prepared: 05/27/2017 08:06*			*Analyzed: 05/31/2017 16:54*			
Diesel Range Organics	< 0.994	16.0	mg/Kg							
LCS (B7E1126-BS1)				*Prepared: 05/27/2017 08:06*			*Analyzed: 05/30/2017 17:55*			
Diesel Range Organics	29.7	15.9	mg/Kg	39.68		75	70-120			
LCS (B7E1126-BS2)				*Prepared: 05/27/2017 08:06*			*Analyzed: 05/31/2017 17:39*			
Diesel Range Organics	36.4	15.9	mg/Kg	39.68		92	70-120			
LCS Dup (B7E1126-BSD1)				*Prepared: 05/27/2017 08:06*			*Analyzed: 05/30/2017 19:26*			
Diesel Range Organics	36.7	15.7	mg/Kg	39.37		93	70-120	21	20	P
LCS Dup (B7E1126-BSD2)				*Prepared: 05/27/2017 08:06*			*Analyzed: 05/31/2017 19:10*			
Diesel Range Organics	37.8	15.7	mg/Kg	39.37		96	70-120	4	20	

Environmental Monitoring and Technologies, Inc.

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Quality Control

(Continued)

Client: SET Environmental (WI)
Project: SET WI Sample Analysis GMIA ROB 20-23
Work Order: 17E0776

Report Date: 06/01/2017
Matrix: Solid

Petroleum Hydrocarbons by GC PID/FID

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch: B7E1021										
Blank (B7E1021-BLK1)				*Prepared: 05/25/2017 06:20*			*Analyzed: 05/25/2017 08:10*			
Gasoline Range Organics	< 7.92	30.0	mg/Kg							
LCS (B7E1021-BS1)				*Prepared: 05/25/2017 06:20*			*Analyzed: 05/25/2017 08:54*			
Gasoline Range Organics	18.1	30.0	mg/Kg	20.00		91	80-120			J
LCS Dup (B7E1021-BSD1)				*Prepared: 05/25/2017 06:20*			*Analyzed: 05/25/2017 11:25*			
Gasoline Range Organics	16.8	30.0	mg/Kg	20.00		84	80-120	8	20	J

Environmental Monitoring and Technologies, Inc.

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Quality Control

(Continued)

Client: SET Environmental (WI)
Project: SET WI Sample Analysis GMIA ROB 20-23
Work Order: 17E0776

Report Date: 06/01/2017
Matrix: Solid

Volatile Organic Compounds by GC/MS

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch: B7E1089 - SW5035										
Blank (B7E1089-BLK1)				*Prepared: 05/25/2017 14:54*			*Analyzed: 05/26/2017 06:40*			
Benzene	< 220	220	ug/Kg							
Surrogate: Dibromofluoromethane	*18.6*		*ug/Kg*	*20.00*		*93*	*78-119*			
Surrogate: 1,2-Dichloroethane-d4	*19.2*		*ug/Kg*	*20.00*		*96*	*71-136*			
Surrogate: Fluorobenzene	*19.9*		*ug/Kg*	*20.00*		*100*	*91-106*			
Surrogate: Toluene-d8	*19.9*		*ug/Kg*	*20.00*		*99*	*85-116*			
Surrogate: 4-Bromofluorobenzene	*11.1*		*ug/Kg*	*10.00*		*111*	*85-119*			
Surrogate: 1,2-Dichlorobenzene-d4	*21.6*		*ug/Kg*	*20.00*		*108*	*80-120*			
LCS (B7E1089-BS1)				*Prepared: 05/25/2017 14:54*			*Analyzed: 05/26/2017 03:24*			
Benzene	3450	187	ug/Kg	3746		92	77-121			
Surrogate: Dibromofluoromethane	*19.4*		*ug/Kg*	*20.00*		*97*	*78-119*			
Surrogate: 1,2-Dichloroethane-d4	*19.0*		*ug/Kg*	*20.00*		*95*	*71-136*			
Surrogate: Fluorobenzene	*19.6*		*ug/Kg*	*20.00*		*98*	*91-106*			
Surrogate: Toluene-d8	*19.8*		*ug/Kg*	*20.00*		*99*	*85-116*			
Surrogate: 4-Bromofluorobenzene	*10.1*		*ug/Kg*	*10.00*		*101*	*85-119*			
Surrogate: 1,2-Dichlorobenzene-d4	*19.8*		*ug/Kg*	*20.00*		*99*	*80-120*			
LCS Dup (B7E1089-BSD1)				*Prepared: 05/25/2017 14:54*			*Analyzed: 05/26/2017 03:56*			
Benzene	2930	173	ug/Kg	3458		85	77-121	16	20	
Surrogate: Dibromofluoromethane	*18.8*		*ug/Kg*	*20.00*		*94*	*78-119*			
Surrogate: 1,2-Dichloroethane-d4	*18.6*		*ug/Kg*	*20.00*		*93*	*71-136*			
Surrogate: Fluorobenzene	*20.0*		*ug/Kg*	*20.00*		*100*	*91-106*			
Surrogate: Toluene-d8	*19.7*		*ug/Kg*	*20.00*		*98*	*85-116*			
Surrogate: 4-Bromofluorobenzene	*10.3*		*ug/Kg*	*10.00*		*103*	*85-119*			
Surrogate: 1,2-Dichlorobenzene-d4	*20.2*		*ug/Kg*	*20.00*		*101*	*80-120*			

Environmental Monitoring and Technologies, Inc.

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Certified Analyses included in this Report

Analyte	CAS #	Certifications
SM2540G in Solid		
Total Solids	Moist	WDNR
SW8260B in Solid		
Benzene	71-43-2	LELAP,WDNR,DoD,ILEPA
SW9045C in Solid		
pH		DoD,ILEPA,WDNR
WI(95)-DRO: PUBL-SW-141 in Solid		
Diesel Range Organics	68334-30-5	WDNR,DoD
WI(95)-GRO: PUBL-SW-140 in Solid		
Gasoline Range Organics	8006-61-9	WDNR,DoD

List of Certifications

Code	Description	Number	Expires
AKDEC	State of Alaska, Dept. Environmental Conservation	UST-105	07/16/2017
CPSC	US Consumer Product Safety Commission, Accredited by PJLA Lab No. 1050	L14-56	04/30/2018
DoD	Department of Defense, Accredited by PJLA	L14-55	04/30/2018
ILEPA	State of Illinois, NELAP Accredited Lab No. 100256	003674	07/27/2017
ISO	ISO/IEC 17025, Accredited by PJLA	L14-56	04/30/2018
LELAP	State of Louisiana, NELAP Accredited Lab No. 171344	05015	06/30/2017
NJDEP	State of New Jersey, NELAP Accredited Lab No. IL010	NLC160001	06/30/2017
WDNR	State of Wisconsin Dept of Natural Resources	999888890	08/31/2017

Environmental Monitoring and Technologies, Inc.

8100 N. Austin Avenue Morton Grove, IL 60053-3203 P 847.967.6666 800.246.0663 F 847.967.6735 www.emt.com

Qualifiers and Definitions

Item	Description
H	Sample prepared and/ or analyzed past recommended holdtime.
J	Estimated Value
P	The %RPD result is above the laboratory control limits.
%Rec	Percent Recovery
MDL	In the state of Wisconsin MDL is equivalent to LOD; in all other applications MDL is equivalent to MDL.

ENVIRONMENTAL MONITORING & TECHNOLOGIES,
8100 North Austin Avenue
Morton Grove, Illinois 60053-3203
FAX: 847-967-6735
www.emt.com

17E0776
PM: Eric Jensen
SET Environmental (WI)
SET WI Sample Analysis

RUSH S.D.

# of Custody Record

TURNARAOUND TIME:
☒ RUSH
____ day turnaround
☒ ROUTINE

Due Date: ____-____-____ COC #: 132455

Company: SET Env. 9730 S 20th Street
Address: Oak Creek, WI
Phone #: (847) 276-7913 Fax #: (____) ____-____
P.O. #: 147256 Proj.#: 1705-0165
Client Contact: Shaun Dekker
Project ID / Location: GMIA - ROB 20-23

Sample Type:
1. Waste Water 4. Sludge 7. Groundwater (filtered)
2. Drinking Water 5. Oil 8. Other
3. Soil 6. Groundwater Absorbents

Container Type:
P - Plastic V - VOC Vial O - Other
G - Glass B - Tedlar Bag

Preservative:
1. None 4. NaOH 7. Zn Ace
2. H_2SO_4 5. HCl 8. Other
3. HNO_3 6. MeOH

Analyses

Sample I.D.	Sample Type	Container Size	Container Type	Container No.	Sampling By	Sampling Date	Sampling Time	pH	Temp.	Preservation Field	Preservation Lab	Benzene	Flash	pH	GRO	DRO							EMT USE ONLY EMT WORKORDER # 17E0776
S#1 RB-20-23	8	Qt	G	2	S.D	5.16	1405	-	80°	Ice		X	X	X	X	X							01AB

Relinquished By:	Date: / Time:	Received By:	Date: / Time:	EMT USE ONLY
	~~5-16-17~~ 5-23-17 ~~15:30~~ 1245		5-23-17 1245	Client Code:
Relinquished By:	Date: 5-23-17 Time: 1430	Received By:	Date: - - Time: :	EMT Project I.D. Waste Characterization
Relinquished By:	Date: - - Time: :	Received For Lab By:	Date: 5-23-17 Time: 14:30	Jar Lot No.

☑ SAMPLE RECEIVED ON ICE
☐ TEMPERATURE (Must be recorded if sampling was greater than 6 hrs. prior to sample receipt)
3.0

EMT SAMPLE RETURN POLICY ON BACK

SPECIAL INSTRUCTIONS:

Table of Contents

ATTACHMENT D
SET ROLLOFF BOX DISPOSAL MANIFEST

REPUBLIC SERVICES, INC.

NON-HAZARDOUS SPECIAL WASTE & ASBESTOS MANIFEST

If waste is asbestos waste, complete Sections I, II, III and IV
If waste is NOT asbestos waste, complete Sections I, II and III

1011380

I. GENERATOR (Generator completes Ia-r)

a. Generator's US EPA ID Number	b. Manifest Document Number	c. Page 1 of
WICESQG	17050165-03	1

d. Generator's Name and Location:	e. Generator's Mailing Address:
MKE Fuel Company 4972 South Howell Ave. Milwaukee, WI 53207 f. Phone:414-999-4556	MKE Fuel Company 4972 South Howell Ave. Milwaukee, WI 53207 g. Phone:414-999-4556
If owner of the generating facility differs from the generator, provide: h. Owner's Name:	i. Owner's Phone No.:

j. Waste Profile #	k. Exp. Date	l. Waste Shipping Name and Description	m. Containers No.	m. Containers Type	n. Total Quantity	o. Unit Wt/Vol
3063176803	06/01/2020	Jet A Impacted Solids	1	CM	22	Y
					2.01	TN

GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.

p. Generator Authorized Agent Name (Print)	q. Signature	r. Date
David Ziebell	[signature]	6-15-17

II. TRANSPORTER (Generator completes IIa-b and Transporter completes IIc-e)

a. Transporter's Name and Address:
SET Environmental
450 Sumac Road
Wheeling, IL 60090

b. Phone: 847-537-9221

c. Driver Name (Print)	d. Signature	e. Date
ED Duffy	[signature]	6-15-17

III. DESTINATION (Generator complete IIIa-c and Destination Site completes IIId-g)

a. Disposal Facility and Site Address:	c. US EPA Number	d. Discrepancy Indication Space:
Kestrel Hawk Park Landfill 1989 Oakes Rd. Racine, WI 53406 b. Phone: 262.884.7080		

I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.

e. Name of Authorized Agent (Print)	f. Signature	g. Date
Marco Diaz	[signature]	6-15-17

IV. ASBESTOS (Generator completes IVa-f and Operator complete IVg-i)

a. Operator's Name and Address:	c. Responsible Agency Name and Address:
b. Phone:	d. Phone:

e. Special Handling Instructions and Additional Information:

f. ☐ Friable ☐ Non-Friable ☐ Both % Friable % Non-Friable

OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations.

g. Operator's Name and Title (Print)	h. Signature	i. Date

*Operator refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both

ATTACHMENT E
SET SOIL WASTE CHARACTERIZATION SAMPLE LABORATORY ANALYTICAL REPORT

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

May 16, 2017

Kurt McClung
Key Engineering Group, LTD.
735 North Water Street
Milwaukee, WI 53202

RE: Project: 1705-0165
Pace Project No.: 40149503

Dear Kurt McClung:
Enclosed are the analytical results for sample(s) received by the laboratory on May 06, 2017. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,

Dan Milewsky
dan.milewsky@pacelabs.com
(920)469-2436
Project Manager

Enclosures

cc: Valerie Collins, Key Engineering Group, LTD.
Cassie Haupt, KEY ENGINEERING GROUP, LTD.
Toni Schoen, KEY ENGINEERING GROUP, LTD.

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Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

CERTIFICATIONS

Project: 1705-0165
Pace Project No.: 40149503

Green Bay Certification IDs

1241 Bellevue Street, Green Bay, WI 54302
Florida/NELAP Certification #: E87948
Illinois Certification #: 200050
Kentucky UST Certification #: 82
Louisiana Certification #: 04168
Minnesota Certification #: 055-999-334
New York Certification #: 12064
North Dakota Certification #: R-150
Virginia VELAP ID: 460263
South Carolina Certification #: 83006001
Texas Certification #: T104704529-14-1
Wisconsin Certification #: 405132750
Wisconsin DATCP Certification #: 105-444
USDA Soil Permit #: P330-16-00157
Federal Fish & Wildlife Permit #: LE51774A-0

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Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

SAMPLE SUMMARY

Project: 1705-0165
Pace Project No.: 40149503

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40149503001	**60C PROFILE**	Solid	05/05/17 09:30	05/06/17 08:10

REPORT OF LABORATORY ANALYSIS

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1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

SAMPLE ANALYTE COUNT

Project: 1705-0165
Pace Project No.: 40149503

Lab ID	Sample ID	Method	Analysts	Analytes Reported
40149503001	**60C PROFILE**	WI MOD DRO	ABF	1
		WI MOD GRO	ALD	1
		EPA 6010	DLB	7
		EPA 7471	AJT	1
		EPA 8270 by SIM	ARO	20
		EPA 8260	SMT	64
		ASTM D2974-87	TEL	1
		EPA 1010	DEY	1

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SUMMARY OF DETECTION

Project: 1705-0165
Pace Project No.: 40149503

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
40149503001	**60C PROFILE**					
WI MOD DRO	Diesel Range Organics	597	mg/kg	70.4	05/10/17 13:48	D5,DC
WI MOD GRO	Gasoline Range Organics	28.5	mg/kg	5.4	05/08/17 20:24	1q,G+
EPA 6010	Arsenic	2.8J	mg/kg	5.0	05/09/17 18:47	
EPA 6010	Barium	89.7	mg/kg	0.50	05/09/17 18:47	
EPA 6010	Cadmium	0.55	mg/kg	0.50	05/09/17 18:47	
EPA 6010	Chromium	11.7	mg/kg	1.0	05/09/17 18:47	
EPA 6010	Lead	33.8	mg/kg	1.3	05/09/17 18:47	
EPA 7471	Mercury	0.029J	mg/kg	0.038	05/09/17 12:13	
EPA 8270 by SIM	Anthracene	2.9	mg/kg	1.6	05/15/17 10:45	
EPA 8270 by SIM	Benzo(a)anthracene	7.0	mg/kg	0.91	05/15/17 10:45	
EPA 8270 by SIM	Benzo(a)pyrene	7.3	mg/kg	0.72	05/15/17 10:45	
EPA 8270 by SIM	Benzo(b)fluoranthene	10	mg/kg	0.81	05/15/17 10:45	
EPA 8270 by SIM	Benzo(g,h,i)perylene	4.1	mg/kg	0.58	05/15/17 10:45	
EPA 8270 by SIM	Benzo(k)fluoranthene	4.1	mg/kg	0.72	05/15/17 10:45	
EPA 8270 by SIM	Chrysene	8.0	mg/kg	0.97	05/15/17 10:45	
EPA 8270 by SIM	Dibenz(a,h)anthracene	1.2	mg/kg	0.64	05/15/17 10:45	
EPA 8270 by SIM	Fluoranthene	13.4	mg/kg	1.5	05/15/17 10:45	
EPA 8270 by SIM	Fluorene	0.54J	mg/kg	1.2	05/15/17 10:45	
EPA 8270 by SIM	Indeno(1,2,3-cd)pyrene	3.9	mg/kg	0.63	05/15/17 10:45	
EPA 8270 by SIM	Phenanthrene	6.6	mg/kg	3.3	05/15/17 10:45	
EPA 8270 by SIM	Pyrene	10.3	mg/kg	1.3	05/15/17 10:45	
EPA 8260	1,3,5-Trimethylbenzene	0.031J	mg/kg	0.065	05/08/17 15:08	
ASTM D2974-87	Percent Moisture	7.3	%	0.10	05/08/17 11:29	
EPA 1010	Flashpoint	>210	deg F		05/08/17 10:36	

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ANALYTICAL RESULTS

Project: 1705-0165
Pace Project No.: 40149503

Sample: 60C PROFILE **Lab ID: 40149503001** Collected: 05/05/17 09:30 Received: 05/06/17 08:10 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIDRO GCS	Analytical Method: WI MOD DRO Preparation Method: WI MOD DRO								
Diesel Range Organics	**597**	mg/kg	70.4	21.0	15	05/09/17 09:43	05/10/17 13:48		D5,DC
WIGRO GCV	Analytical Method: WI MOD GRO Preparation Method: TPH GRO/PVOC WI ext.								
Gasoline Range Organics	**28.5**	mg/kg	5.4	2.7	1	05/08/17 07:00	05/08/17 20:24		1q,G+
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Arsenic	**2.8J**	mg/kg	5.0	1.1	1	05/08/17 15:16	05/09/17 18:47	7440-38-2	
Barium	**89.7**	mg/kg	0.50	0.15	1	05/08/17 15:16	05/09/17 18:47	7440-39-3	
Cadmium	**0.55**	mg/kg	0.50	0.13	1	05/08/17 15:16	05/09/17 18:47	7440-43-9	
Chromium	**11.7**	mg/kg	1.0	0.28	1	05/08/17 15:16	05/09/17 18:47	7440-47-3	
Lead	**33.8**	mg/kg	1.3	0.44	1	05/08/17 15:16	05/09/17 18:47	7439-92-1	
Selenium	**<1.1**	mg/kg	5.0	1.1	1	05/08/17 15:16	05/09/17 18:47	7782-49-2	
Silver	**<0.35**	mg/kg	1.0	0.35	1	05/08/17 15:16	05/09/17 18:47	7440-22-4	
7471 Mercury	Analytical Method: EPA 7471 Preparation Method: EPA 7471								
Mercury	**0.029J**	mg/kg	0.038	0.011	1	05/09/17 07:36	05/09/17 12:13	7439-97-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546								
Acenaphthene	**<0.33**	mg/kg	1.1	0.33	80	05/10/17 13:35	05/15/17 10:45	83-32-9	
Acenaphthylene	**<0.28**	mg/kg	0.95	0.28	80	05/10/17 13:35	05/15/17 10:45	208-96-8	
Anthracene	**2.9**	mg/kg	1.6	0.49	80	05/10/17 13:35	05/15/17 10:45	120-12-7	
Benzo(a)anthracene	**7.0**	mg/kg	0.91	0.27	80	05/10/17 13:35	05/15/17 10:45	56-55-3	
Benzo(a)pyrene	**7.3**	mg/kg	0.72	0.22	80	05/10/17 13:35	05/15/17 10:45	50-32-8	
Benzo(b)fluoranthene	**10**	mg/kg	0.81	0.24	80	05/10/17 13:35	05/15/17 10:45	205-99-2	
Benzo(g,h,i)perylene	**4.1**	mg/kg	0.58	0.18	80	05/10/17 13:35	05/15/17 10:45	191-24-2	
Benzo(k)fluoranthene	**4.1**	mg/kg	0.72	0.22	80	05/10/17 13:35	05/15/17 10:45	207-08-9	
Chrysene	**8.0**	mg/kg	0.97	0.29	80	05/10/17 13:35	05/15/17 10:45	218-01-9	
Dibenz(a,h)anthracene	**1.2**	mg/kg	0.64	0.19	80	05/10/17 13:35	05/15/17 10:45	53-70-3	
Fluoranthene	**13.4**	mg/kg	1.5	0.45	80	05/10/17 13:35	05/15/17 10:45	206-44-0	
Fluorene	**0.54J**	mg/kg	1.2	0.36	80	05/10/17 13:35	05/15/17 10:45	86-73-7	
Indeno(1,2,3-cd)pyrene	**3.9**	mg/kg	0.63	0.19	80	05/10/17 13:35	05/15/17 10:45	193-39-5	
1-Methylnaphthalene	**<0.35**	mg/kg	1.2	0.35	80	05/10/17 13:35	05/15/17 10:45	90-12-0	
2-Methylnaphthalene	**<0.43**	mg/kg	1.4	0.43	80	05/10/17 13:35	05/15/17 10:45	91-57-6	
Naphthalene	**<0.73**	mg/kg	2.4	0.73	80	05/10/17 13:35	05/15/17 10:45	91-20-3	
Phenanthrene	**6.6**	mg/kg	3.3	1.0	80	05/10/17 13:35	05/15/17 10:45	85-01-8	
Pyrene	**10.3**	mg/kg	1.3	0.39	80	05/10/17 13:35	05/15/17 10:45	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	0	%	25-81		80	05/10/17 13:35	05/15/17 10:45	321-60-8	S4
Terphenyl-d14 (S)	0	%	29-98		80	05/10/17 13:35	05/15/17 10:45	1718-51-0	S4
8260 MSV Med Level Normal List	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
Benzene	**<0.025**	mg/kg	0.060	0.025	1	05/08/17 08:00	05/08/17 15:08	71-43-2	W
Bromobenzene	**<0.025**	mg/kg	0.060	0.025	1	05/08/17 08:00	05/08/17 15:08	108-86-1	W
Bromochloromethane	**<0.025**	mg/kg	0.060	0.025	1	05/08/17 08:00	05/08/17 15:08	74-97-5	W

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ANALYTICAL RESULTS

Project: 1705-0165
Pace Project No.: 40149503

Sample: 60C PROFILE **Lab ID: 40149503001** Collected: 05/05/17 09:30 Received: 05/06/17 08:10 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level Normal List	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
Bromodichloromethane	**<0.025**	mg/kg	0.060	0.025	1	05/08/17 08:00	05/08/17 15:08	75-27-4	W
Bromoform	**<0.025**	mg/kg	0.060	0.025	1	05/08/17 08:00	05/08/17 15:08	75-25-2	W
Bromomethane	**<0.070**	mg/kg	0.25	0.070	1	05/08/17 08:00	05/08/17 15:08	74-83-9	W
n-Butylbenzene	**<0.025**	mg/kg	0.060	0.025	1	05/08/17 08:00	05/08/17 15:08	104-51-8	W
sec-Butylbenzene	**<0.025**	mg/kg	0.060	0.025	1	05/08/17 08:00	05/08/17 15:08	135-98-8	W
tert-Butylbenzene	**<0.025**	mg/kg	0.060	0.025	1	05/08/17 08:00	05/08/17 15:08	98-06-6	W
Carbon tetrachloride	**<0.025**	mg/kg	0.060	0.025	1	05/08/17 08:00	05/08/17 15:08	56-23-5	W
Chlorobenzene	**<0.025**	mg/kg	0.060	0.025	1	05/08/17 08:00	05/08/17 15:08	108-90-7	W
Chloroethane	**<0.067**	mg/kg	0.25	0.067	1	05/08/17 08:00	05/08/17 15:08	75-00-3	W
Chloroform	**<0.046**	mg/kg	0.25	0.046	1	05/08/17 08:00	05/08/17 15:08	67-66-3	W
Chloromethane	**<0.025**	mg/kg	0.060	0.025	1	05/08/17 08:00	05/08/17 15:08	74-87-3	W
2-Chlorotoluene	**<0.025**	mg/kg	0.060	0.025	1	05/08/17 08:00	05/08/17 15:08	95-49-8	W
4-Chlorotoluene	**<0.025**	mg/kg	0.060	0.025	1	05/08/17 08:00	05/08/17 15:08	106-43-4	W
1,2-Dibromo-3-chloropropane	**<0.091**	mg/kg	0.25	0.091	1	05/08/17 08:00	05/08/17 15:08	96-12-8	W
Dibromochloromethane	**<0.025**	mg/kg	0.060	0.025	1	05/08/17 08:00	05/08/17 15:08	124-48-1	W
1,2-Dibromoethane (EDB)	**<0.025**	mg/kg	0.060	0.025	1	05/08/17 08:00	05/08/17 15:08	106-93-4	W
Dibromomethane	**<0.025**	mg/kg	0.060	0.025	1	05/08/17 08:00	05/08/17 15:08	74-95-3	W
1,2-Dichlorobenzene	**<0.025**	mg/kg	0.060	0.025	1	05/08/17 08:00	05/08/17 15:08	95-50-1	W
1,3-Dichlorobenzene	**<0.025**	mg/kg	0.060	0.025	1	05/08/17 08:00	05/08/17 15:08	541-73-1	W
1,4-Dichlorobenzene	**<0.025**	mg/kg	0.060	0.025	1	05/08/17 08:00	05/08/17 15:08	106-46-7	W
Dichlorodifluoromethane	**<0.025**	mg/kg	0.060	0.025	1	05/08/17 08:00	05/08/17 15:08	75-71-8	W
1,1-Dichloroethane	**<0.025**	mg/kg	0.060	0.025	1	05/08/17 08:00	05/08/17 15:08	75-34-3	W
1,2-Dichloroethane	**<0.025**	mg/kg	0.060	0.025	1	05/08/17 08:00	05/08/17 15:08	107-06-2	W
1,1-Dichloroethene	**<0.025**	mg/kg	0.060	0.025	1	05/08/17 08:00	05/08/17 15:08	75-35-4	W
cis-1,2-Dichloroethene	**<0.025**	mg/kg	0.060	0.025	1	05/08/17 08:00	05/08/17 15:08	156-59-2	W
trans-1,2-Dichloroethene	**<0.025**	mg/kg	0.060	0.025	1	05/08/17 08:00	05/08/17 15:08	156-60-5	W
1,2-Dichloropropane	**<0.025**	mg/kg	0.060	0.025	1	05/08/17 08:00	05/08/17 15:08	78-87-5	W
1,3-Dichloropropane	**<0.025**	mg/kg	0.060	0.025	1	05/08/17 08:00	05/08/17 15:08	142-28-9	W
2,2-Dichloropropane	**<0.025**	mg/kg	0.060	0.025	1	05/08/17 08:00	05/08/17 15:08	594-20-7	W
1,1-Dichloropropene	**<0.025**	mg/kg	0.060	0.025	1	05/08/17 08:00	05/08/17 15:08	563-58-6	W
cis-1,3-Dichloropropene	**<0.025**	mg/kg	0.060	0.025	1	05/08/17 08:00	05/08/17 15:08	10061-01-5	W
trans-1,3-Dichloropropene	**<0.025**	mg/kg	0.060	0.025	1	05/08/17 08:00	05/08/17 15:08	10061-02-6	W
Diisopropyl ether	**<0.025**	mg/kg	0.060	0.025	1	05/08/17 08:00	05/08/17 15:08	108-20-3	W
Ethylbenzene	**<0.025**	mg/kg	0.060	0.025	1	05/08/17 08:00	05/08/17 15:08	100-41-4	W
Hexachloro-1,3-butadiene	**<0.025**	mg/kg	0.060	0.025	1	05/08/17 08:00	05/08/17 15:08	87-68-3	W
Isopropylbenzene (Cumene)	**<0.025**	mg/kg	0.060	0.025	1	05/08/17 08:00	05/08/17 15:08	98-82-8	W
p-Isopropyltoluene	**<0.025**	mg/kg	0.060	0.025	1	05/08/17 08:00	05/08/17 15:08	99-87-6	W
Methylene Chloride	**<0.025**	mg/kg	0.060	0.025	1	05/08/17 08:00	05/08/17 15:08	75-09-2	W
Methyl-tert-butyl ether	**<0.025**	mg/kg	0.060	0.025	1	05/08/17 08:00	05/08/17 15:08	1634-04-4	W
Naphthalene	**<0.040**	mg/kg	0.25	0.040	1	05/08/17 08:00	05/08/17 15:08	91-20-3	W
n-Propylbenzene	**<0.025**	mg/kg	0.060	0.025	1	05/08/17 08:00	05/08/17 15:08	103-65-1	W
Styrene	**<0.025**	mg/kg	0.060	0.025	1	05/08/17 08:00	05/08/17 15:08	100-42-5	W
1,1,1,2-Tetrachloroethane	**<0.025**	mg/kg	0.060	0.025	1	05/08/17 08:00	05/08/17 15:08	630-20-6	W
1,1,2,2-Tetrachloroethane	**<0.025**	mg/kg	0.060	0.025	1	05/08/17 08:00	05/08/17 15:08	79-34-5	W
Tetrachloroethene	**<0.025**	mg/kg	0.060	0.025	1	05/08/17 08:00	05/08/17 15:08	127-18-4	W

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ANALYTICAL RESULTS

Project: 1705-0165
Pace Project No.: 40149503

Sample: 60C PROFILE **Lab ID: 40149503001** Collected: 05/05/17 09:30 Received: 05/06/17 08:10 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level Normal List	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
Toluene	**<0.025**	mg/kg	0.060	0.025	1	05/08/17 08:00	05/08/17 15:08	108-88-3	W
1,2,3-Trichlorobenzene	**<0.025**	mg/kg	0.060	0.025	1	05/08/17 08:00	05/08/17 15:08	87-61-6	W
1,2,4-Trichlorobenzene	**<0.048**	mg/kg	0.25	0.048	1	05/08/17 08:00	05/08/17 15:08	120-82-1	W
1,1,1-Trichloroethane	**<0.025**	mg/kg	0.060	0.025	1	05/08/17 08:00	05/08/17 15:08	71-55-6	W
1,1,2-Trichloroethane	**<0.025**	mg/kg	0.060	0.025	1	05/08/17 08:00	05/08/17 15:08	79-00-5	W
Trichloroethene	**<0.025**	mg/kg	0.060	0.025	1	05/08/17 08:00	05/08/17 15:08	79-01-6	W
Trichlorofluoromethane	**<0.025**	mg/kg	0.060	0.025	1	05/08/17 08:00	05/08/17 15:08	75-69-4	W
1,2,3-Trichloropropane	**<0.025**	mg/kg	0.060	0.025	1	05/08/17 08:00	05/08/17 15:08	96-18-4	W
1,2,4-Trimethylbenzene	**<0.025**	mg/kg	0.060	0.025	1	05/08/17 08:00	05/08/17 15:08	95-63-6	W
1,3,5-Trimethylbenzene	**0.031J**	mg/kg	0.065	0.027	1	05/08/17 08:00	05/08/17 15:08	108-67-8	
Vinyl chloride	**<0.025**	mg/kg	0.060	0.025	1	05/08/17 08:00	05/08/17 15:08	75-01-4	W
m&p-Xylene	**<0.050**	mg/kg	0.12	0.050	1	05/08/17 08:00	05/08/17 15:08	179601-23-1	W
o-Xylene	**<0.025**	mg/kg	0.060	0.025	1	05/08/17 08:00	05/08/17 15:08	95-47-6	W
Surrogates									
Dibromofluoromethane (S)	96	%	53-165		1	05/08/17 08:00	05/08/17 15:08	1868-53-7	
Toluene-d8 (S)	93	%	54-163		1	05/08/17 08:00	05/08/17 15:08	2037-26-5	
4-Bromofluorobenzene (S)	81	%	48-138		1	05/08/17 08:00	05/08/17 15:08	460-00-4	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**7.3**	%	0.10	0.10	1		05/08/17 11:29		
1010 Flashpoint,Closed Cup	Analytical Method: EPA 1010								
Flashpoint	**>210**	deg F			1		05/08/17 10:36		

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QUALITY CONTROL DATA

Project: 1705-0165
Pace Project No.: 40149503

QC Batch: 254849 | Analysis Method: WI MOD GRO
QC Batch Method: TPH GRO/PVOC WI ext. | Analysis Description: WIGRO Solid GCV
Associated Lab Samples: 40149503001

METHOD BLANK: 1503186 | Matrix: Solid
Associated Lab Samples: 40149503001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Gasoline Range Organics	mg/kg	<1.6	5.0	05/08/17 12:42	
a,a,a-Trifluorotoluene (S)	%	102	80-120	05/08/17 12:42	

LABORATORY CONTROL SAMPLE & LCSD: 1503187 1503188

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Gasoline Range Organics	mg/kg	10	9.3	9.1	93	91	80-120	3	20	
a,a,a-Trifluorotoluene (S)	%				102	102	80-120			

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

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QUALITY CONTROL DATA

Project: 1705-0165
Pace Project No.: 40149503

QC Batch: 254926 | Analysis Method: EPA 7471
QC Batch Method: EPA 7471 | Analysis Description: 7471 Mercury
Associated Lab Samples: 40149503001

METHOD BLANK: 1503484 | Matrix: Solid
Associated Lab Samples: 40149503001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	mg/kg	<0.011	0.037	05/09/17 11:16	

LABORATORY CONTROL SAMPLE: 1503485

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/kg	.83	0.85	102	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1503486 1503487

Parameter	Units	40149519008 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/kg	0.12	.89	.88	0.97	0.99	96	98	85-115	2	20	

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QUALITY CONTROL DATA

Project: 1705-0165
Pace Project No.: 40149503

QC Batch: 254964 | Analysis Method: EPA 6010
QC Batch Method: EPA 3050 | Analysis Description: 6010 MET
Associated Lab Samples: 40149503001

METHOD BLANK: 1503561 | Matrix: Solid
Associated Lab Samples: 40149503001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Arsenic	mg/kg	<1.0	5.0	05/10/17 10:57	
Barium	mg/kg	<0.15	0.50	05/10/17 10:57	
Cadmium	mg/kg	<0.13	0.50	05/10/17 10:57	
Chromium	mg/kg	<0.28	1.0	05/10/17 10:57	
Lead	mg/kg	<0.43	1.3	05/10/17 10:57	
Selenium	mg/kg	<1.1	5.0	05/10/17 10:57	
Silver	mg/kg	<0.34	1.0	05/10/17 10:57	

LABORATORY CONTROL SAMPLE: 1503562

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/kg	50	51.5	103	80-120	
Barium	mg/kg	50	51.7	103	80-120	
Cadmium	mg/kg	50	51.5	103	80-120	
Chromium	mg/kg	50	49.8	100	80-120	
Lead	mg/kg	50	50.5	101	80-120	
Selenium	mg/kg	50	53.3	107	80-120	
Silver	mg/kg	25	25.6	102	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1503563 1503564

Parameter	Units	40149519008 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Arsenic	mg/kg	11.3J	53.4	53.2	57.9	62.6	87	97	75-125	8	20	
Barium	mg/kg	104	53.4	53.2	170	164	124	113	75-125	4	20	
Cadmium	mg/kg	<1.4	53.4	53.2	51.4	53.1	96	100	75-125	3	20	
Chromium	mg/kg	19.9	53.4	53.2	65.3	67.2	85	89	75-125	3	20	
Lead	mg/kg	367	53.4	53.2	1300	941	1750	1080	75-125	32	20	M0,R1
Selenium	mg/kg	<1.2	53.4	53.2	52.5	51.4	97	96	75-125	2	20	
Silver	mg/kg	0.53J	26.7	26.6	26.5	26.7	98	98	75-125	1	20	

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QUALITY CONTROL DATA

Project: 1705-0165
Pace Project No.: 40149503

QC Batch: 254918 | Analysis Method: EPA 8260
QC Batch Method: EPA 5035/5030B | Analysis Description: 8260 MSV Med Level Normal List
Associated Lab Samples: 40149503001

METHOD BLANK: 1503475 | Matrix: Solid
Associated Lab Samples: 40149503001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	mg/kg	<0.014	0.050	05/08/17 09:24	
1,1,1-Trichloroethane	mg/kg	<0.014	0.050	05/08/17 09:24	
1,1,2,2-Tetrachloroethane	mg/kg	<0.018	0.050	05/08/17 09:24	
1,1,2-Trichloroethane	mg/kg	<0.020	0.050	05/08/17 09:24	
1,1-Dichloroethane	mg/kg	<0.018	0.050	05/08/17 09:24	
1,1-Dichloroethene	mg/kg	<0.018	0.050	05/08/17 09:24	
1,1-Dichloropropene	mg/kg	<0.014	0.050	05/08/17 09:24	
1,2,3-Trichlorobenzene	mg/kg	<0.017	0.050	05/08/17 09:24	
1,2,3-Trichloropropane	mg/kg	<0.022	0.050	05/08/17 09:24	
1,2,4-Trichlorobenzene	mg/kg	<0.048	0.25	05/08/17 09:24	
1,2,4-Trimethylbenzene	mg/kg	<0.012	0.050	05/08/17 09:24	
1,2-Dibromo-3-chloropropane	mg/kg	<0.091	0.25	05/08/17 09:24	
1,2-Dibromoethane (EDB)	mg/kg	<0.015	0.050	05/08/17 09:24	
1,2-Dichlorobenzene	mg/kg	<0.016	0.050	05/08/17 09:24	
1,2-Dichloroethane	mg/kg	<0.015	0.050	05/08/17 09:24	
1,2-Dichloropropane	mg/kg	<0.017	0.050	05/08/17 09:24	
1,3,5-Trimethylbenzene	mg/kg	<0.014	0.050	05/08/17 09:24	
1,3-Dichlorobenzene	mg/kg	<0.013	0.050	05/08/17 09:24	
1,3-Dichloropropane	mg/kg	<0.012	0.050	05/08/17 09:24	
1,4-Dichlorobenzene	mg/kg	<0.016	0.050	05/08/17 09:24	
2,2-Dichloropropane	mg/kg	<0.013	0.050	05/08/17 09:24	
2-Chlorotoluene	mg/kg	<0.016	0.050	05/08/17 09:24	
4-Chlorotoluene	mg/kg	<0.013	0.050	05/08/17 09:24	
Benzene	mg/kg	<0.0092	0.020	05/08/17 09:24	
Bromobenzene	mg/kg	<0.021	0.050	05/08/17 09:24	
Bromochloromethane	mg/kg	<0.021	0.050	05/08/17 09:24	
Bromodichloromethane	mg/kg	<0.0098	0.050	05/08/17 09:24	
Bromoform	mg/kg	<0.020	0.050	05/08/17 09:24	
Bromomethane	mg/kg	<0.070	0.25	05/08/17 09:24	
Carbon tetrachloride	mg/kg	<0.012	0.050	05/08/17 09:24	
Chlorobenzene	mg/kg	<0.015	0.050	05/08/17 09:24	
Chloroethane	mg/kg	<0.067	0.25	05/08/17 09:24	
Chloroform	mg/kg	<0.046	0.25	05/08/17 09:24	
Chloromethane	mg/kg	<0.020	0.050	05/08/17 09:24	
cis-1,2-Dichloroethene	mg/kg	<0.017	0.050	05/08/17 09:24	
cis-1,3-Dichloropropene	mg/kg	<0.017	0.050	05/08/17 09:24	
Dibromochloromethane	mg/kg	<0.018	0.050	05/08/17 09:24	
Dibromomethane	mg/kg	<0.019	0.050	05/08/17 09:24	
Dichlorodifluoromethane	mg/kg	<0.012	0.050	05/08/17 09:24	
Diisopropyl ether	mg/kg	<0.018	0.050	05/08/17 09:24	
Ethylbenzene	mg/kg	<0.012	0.050	05/08/17 09:24	

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QUALITY CONTROL DATA

Project: 1705-0165
Pace Project No.: 40149503

METHOD BLANK: 1503475 Matrix: Solid
Associated Lab Samples: 40149503001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Hexachloro-1,3-butadiene	mg/kg	<0.024	0.050	05/08/17 09:24	
Isopropylbenzene (Cumene)	mg/kg	<0.013	0.050	05/08/17 09:24	
m&p-Xylene	mg/kg	<0.034	0.10	05/08/17 09:24	
Methyl-tert-butyl ether	mg/kg	<0.013	0.050	05/08/17 09:24	
Methylene Chloride	mg/kg	<0.016	0.050	05/08/17 09:24	
n-Butylbenzene	mg/kg	<0.011	0.050	05/08/17 09:24	
n-Propylbenzene	mg/kg	<0.012	0.050	05/08/17 09:24	
Naphthalene	mg/kg	<0.040	0.25	05/08/17 09:24	
o-Xylene	mg/kg	<0.014	0.050	05/08/17 09:24	
p-Isopropyltoluene	mg/kg	<0.012	0.050	05/08/17 09:24	
sec-Butylbenzene	mg/kg	<0.012	0.050	05/08/17 09:24	
Styrene	mg/kg	<0.0090	0.050	05/08/17 09:24	
tert-Butylbenzene	mg/kg	<0.0095	0.050	05/08/17 09:24	
Tetrachloroethene	mg/kg	<0.013	0.050	05/08/17 09:24	
Toluene	mg/kg	<0.011	0.050	05/08/17 09:24	
trans-1,2-Dichloroethene	mg/kg	<0.016	0.050	05/08/17 09:24	
trans-1,3-Dichloropropene	mg/kg	<0.014	0.050	05/08/17 09:24	
Trichloroethene	mg/kg	<0.024	0.050	05/08/17 09:24	
Trichlorofluoromethane	mg/kg	<0.025	0.050	05/08/17 09:24	
Vinyl chloride	mg/kg	<0.021	0.050	05/08/17 09:24	
4-Bromofluorobenzene (S)	%	85	48-138	05/08/17 09:24	
Dibromofluoromethane (S)	%	96	53-165	05/08/17 09:24	
Toluene-d8 (S)	%	100	54-163	05/08/17 09:24	

LABORATORY CONTROL SAMPLE: 1503476

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	mg/kg	2.5	2.3	94	70-130	
1,1,2,2-Tetrachloroethane	mg/kg	2.5	2.8	111	70-130	
1,1,2-Trichloroethane	mg/kg	2.5	2.5	99	70-130	
1,1-Dichloroethane	mg/kg	2.5	2.5	99	70-133	
1,1-Dichloroethene	mg/kg	2.5	2.4	98	70-130	
1,2,4-Trichlorobenzene	mg/kg	2.5	2.1	86	70-130	
1,2-Dibromo-3-chloropropane	mg/kg	2.5	2.4	95	50-150	
1,2-Dibromoethane (EDB)	mg/kg	2.5	2.2	87	70-130	
1,2-Dichlorobenzene	mg/kg	2.5	2.4	97	70-130	
1,2-Dichloroethane	mg/kg	2.5	2.4	96	70-138	
1,2-Dichloropropane	mg/kg	2.5	2.5	102	70-130	
1,3-Dichlorobenzene	mg/kg	2.5	2.4	96	70-130	
1,4-Dichlorobenzene	mg/kg	2.5	2.4	97	70-130	
Benzene	mg/kg	2.5	2.4	97	70-130	
Bromodichloromethane	mg/kg	2.5	2.5	99	70-130	
Bromoform	mg/kg	2.5	2.2	88	68-130	
Bromomethane	mg/kg	2.5	3.2	128	25-163	

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QUALITY CONTROL DATA

Project: 1705-0165
Pace Project No.: 40149503

LABORATORY CONTROL SAMPLE: 1503476

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Carbon tetrachloride	mg/kg	2.5	2.1	84	70-130	
Chlorobenzene	mg/kg	2.5	2.4	96	70-130	
Chloroethane	mg/kg	2.5	3.2	129	34-151	
Chloroform	mg/kg	2.5	2.3	92	70-130	
Chloromethane	mg/kg	2.5	2.1	84	52-130	
cis-1,2-Dichloroethene	mg/kg	2.5	2.2	88	70-130	
cis-1,3-Dichloropropene	mg/kg	2.5	2.4	95	70-130	
Dibromochloromethane	mg/kg	2.5	2.3	92	70-130	
Dichlorodifluoromethane	mg/kg	2.5	1.7	67	27-150	
Ethylbenzene	mg/kg	2.5	2.5	100	70-130	
Isopropylbenzene (Cumene)	mg/kg	2.5	2.5	101	70-130	
m&p-Xylene	mg/kg	5	4.9	99	70-130	
Methyl-tert-butyl ether	mg/kg	2.5	2.5	99	70-130	
Methylene Chloride	mg/kg	2.5	2.2	89	70-131	
o-Xylene	mg/kg	2.5	2.5	100	70-130	
Styrene	mg/kg	2.5	2.3	93	70-130	
Tetrachloroethene	mg/kg	2.5	2.3	90	70-130	
Toluene	mg/kg	2.5	2.4	95	70-130	
trans-1,2-Dichloroethene	mg/kg	2.5	2.3	93	70-130	
trans-1,3-Dichloropropene	mg/kg	2.5	2.2	89	70-130	
Trichloroethene	mg/kg	2.5	2.2	89	70-130	
Trichlorofluoromethane	mg/kg	2.5	2.6	103	50-150	
Vinyl chloride	mg/kg	2.5	2.2	90	57-130	
4-Bromofluorobenzene (S)	%			90	48-138	
Dibromofluoromethane (S)	%			88	53-165	
Toluene-d8 (S)	%			85	54-163	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1503477 1503478

Parameter	Units	40149496001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1-Trichloroethane	mg/kg	<25.0 ug/kg	1.5	1.5	1.5	1.5	93	93	70-130	0	20	
1,1,2,2-Tetrachloroethane	mg/kg	<25.0 ug/kg	1.5	1.5	1.8	2.0	117	125	70-130	7	20	
1,1,2-Trichloroethane	mg/kg	<25.0 ug/kg	1.5	1.5	1.7	1.7	106	109	70-130	3	20	
1,1-Dichloroethane	mg/kg	<25.0 ug/kg	1.5	1.5	1.5	1.6	99	102	64-133	3	20	
1,1-Dichloroethene	mg/kg	<25.0 ug/kg	1.5	1.5	1.5	1.5	97	98	56-130	1	24	
1,2,4-Trichlorobenzene	mg/kg	<47.6 ug/kg	1.5	1.5	1.5	1.6	99	100	70-130	1	20	
1,2-Dibromo-3-chloropropane	mg/kg	<91.2 ug/kg	1.5	1.5	1.7	1.8	109	114	50-150	4	20	
1,2-Dibromoethane (EDB)	mg/kg	<25.0 ug/kg	1.5	1.5	1.5	1.5	98	99	70-130	1	20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 1705-0165
Pace Project No.: 40149503

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1503477 1503478

Parameter	Units	40149496001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,2-Dichlorobenzene	mg/kg	<25.0 ug/kg	1.5	1.5	1.6	1.7	103	107	70-130	4	20	
1,2-Dichloroethane	mg/kg	<25.0 ug/kg	1.5	1.5	1.6	1.6	104	105	70-138	1	20	
1,2-Dichloropropane	mg/kg	<25.0 ug/kg	1.5	1.5	1.6	1.8	105	112	70-130	7	20	
1,3-Dichlorobenzene	mg/kg	<25.0 ug/kg	1.5	1.5	1.6	1.6	103	104	70-130	1	20	
1,4-Dichlorobenzene	mg/kg	<25.0 ug/kg	1.5	1.5	1.6	1.6	103	105	70-130	2	20	
Benzene	mg/kg	<25.0 ug/kg	1.5	1.5	1.6	1.6	102	102	70-130	0	20	
Bromodichloromethane	mg/kg	<25.0 ug/kg	1.5	1.5	1.7	1.7	107	108	70-130	1	20	
Bromoform	mg/kg	<25.0 ug/kg	1.5	1.5	1.6	1.6	101	102	65-130	1	20	
Bromomethane	mg/kg	<69.9 ug/kg	1.5	1.5	1.9	2.0	120	125	11-163	4	21	
Carbon tetrachloride	mg/kg	<25.0 ug/kg	1.5	1.5	1.4	1.3	86	86	70-130	0	20	
Chlorobenzene	mg/kg	<25.0 ug/kg	1.5	1.5	1.6	1.6	104	102	70-130	1	20	
Chloroethane	mg/kg	<67.0 ug/kg	1.5	1.5	2.2	2.0	138	129	17-151	6	20	
Chloroform	mg/kg	<46.4 ug/kg	1.5	1.5	1.5	1.5	98	98	70-130	0	20	
Chloromethane	mg/kg	<25.0 ug/kg	1.5	1.5	1.3	1.3	84	85	13-130	1	20	
cis-1,2-Dichloroethene	mg/kg	<25.0 ug/kg	1.5	1.5	1.5	1.6	98	99	70-130	2	20	
cis-1,3-Dichloropropene	mg/kg	<25.0 ug/kg	1.5	1.5	1.6	1.6	101	104	70-130	3	20	
Dibromochloromethane	mg/kg	<25.0 ug/kg	1.5	1.5	1.6	1.6	100	103	70-130	3	20	
Dichlorodifluoromethane	mg/kg	<25.0 ug/kg	1.5	1.5	1.0	1.0	65	65	10-150	0	21	
Ethylbenzene	mg/kg	<25.0 ug/kg	1.5	1.5	1.6	1.6	102	102	70-130	1	20	
Isopropylbenzene (Cumene)	mg/kg	<25.0 ug/kg	1.5	1.5	1.6	1.5	99	97	70-130	2	20	
m&p-Xylene	mg/kg	<50.0 ug/kg	3.1	3.1	3.2	3.1	102	100	70-130	2	20	
Methyl-tert-butyl ether	mg/kg	<25.0 ug/kg	1.5	1.5	1.8	1.7	113	109	70-130	3	20	
Methylene Chloride	mg/kg	<25.0 ug/kg	1.5	1.5	1.6	1.6	99	100	70-131	1	20	
o-Xylene	mg/kg	<25.0 ug/kg	1.5	1.5	1.6	1.6	102	104	70-130	2	20	
Styrene	mg/kg	<25.0 ug/kg	1.5	1.5	1.6	1.6	102	99	70-130	3	20	
Tetrachloroethene	mg/kg	<25.0 ug/kg	1.5	1.5	1.4	1.4	90	90	70-130	0	20	
Toluene	mg/kg	<25.0 ug/kg	1.5	1.5	1.6	1.6	105	103	70-130	1	20	

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QUALITY CONTROL DATA

Project: 1705-0165
Pace Project No.: 40149503

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1503477 1503478

Parameter	Units	40149496001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
trans-1,2-Dichloroethene	mg/kg	<25.0 ug/kg	1.5	1.5	1.5	1.5	94	94	70-130	0	20	
trans-1,3-Dichloropropene	mg/kg	<25.0 ug/kg	1.5	1.5	1.6	1.6	103	99	70-130	3	20	
Trichloroethene	mg/kg	<25.0 ug/kg	1.5	1.5	1.5	1.5	93	98	70-130	5	20	
Trichlorofluoromethane	mg/kg	<25.0 ug/kg	1.5	1.5	1.5	1.5	96	95	40-150	1	31	
Vinyl chloride	mg/kg	<25.0 ug/kg	1.5	1.5	1.4	1.4	90	89	26-130	1	20	
4-Bromofluorobenzene (S)	%						101	97	48-138			
Dibromofluoromethane (S)	%						98	99	53-165			
Toluene-d8 (S)	%						104	99	54-163			

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QUALITY CONTROL DATA

Project: 1705-0165
Pace Project No.: 40149503

QC Batch: 255216
QC Batch Method: EPA 3546
Associated Lab Samples: 40149503001

Analysis Method: EPA 8270 by SIM
Analysis Description: 8270/3546 MSSV PAH by SIM

METHOD BLANK: 1504712
Matrix: Solid
Associated Lab Samples: 40149503001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1-Methylnaphthalene	mg/kg	<0.0040	0.013	05/11/17 09:55	
2-Methylnaphthalene	mg/kg	<0.0050	0.017	05/11/17 09:55	
Acenaphthene	mg/kg	<0.0039	0.013	05/11/17 09:55	
Acenaphthylene	mg/kg	<0.0033	0.011	05/11/17 09:55	
Anthracene	mg/kg	<0.0057	0.019	05/11/17 09:55	
Benzo(a)anthracene	mg/kg	<0.0032	0.011	05/11/17 09:55	
Benzo(a)pyrene	mg/kg	<0.0025	0.0084	05/11/17 09:55	
Benzo(b)fluoranthene	mg/kg	<0.0028	0.0094	05/11/17 09:55	
Benzo(g,h,i)perylene	mg/kg	<0.0020	0.0068	05/11/17 09:55	
Benzo(k)fluoranthene	mg/kg	<0.0025	0.0084	05/11/17 09:55	
Chrysene	mg/kg	<0.0034	0.011	05/11/17 09:55	
Dibenz(a,h)anthracene	mg/kg	<0.0022	0.0074	05/11/17 09:55	
Fluoranthene	mg/kg	<0.0052	0.017	05/11/17 09:55	
Fluorene	mg/kg	<0.0041	0.014	05/11/17 09:55	
Indeno(1,2,3-cd)pyrene	mg/kg	<0.0022	0.0073	05/11/17 09:55	
Naphthalene	mg/kg	<0.0084	0.028	05/11/17 09:55	
Phenanthrene	mg/kg	<0.012	0.039	05/11/17 09:55	
Pyrene	mg/kg	<0.0045	0.015	05/11/17 09:55	
2-Fluorobiphenyl (S)	%	77	25-81	05/11/17 09:55	
Terphenyl-d14 (S)	%	83	29-98	05/11/17 09:55	

LABORATORY CONTROL SAMPLE: 1504713

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1-Methylnaphthalene	mg/kg	.33	0.27	80	49-102	
2-Methylnaphthalene	mg/kg	.33	0.27	82	47-91	
Acenaphthene	mg/kg	.33	0.31	92	52-97	
Acenaphthylene	mg/kg	.33	0.30	91	49-97	
Anthracene	mg/kg	.33	0.32	97	62-101	
Benzo(a)anthracene	mg/kg	.33	0.28	84	53-95	
Benzo(a)pyrene	mg/kg	.33	0.29	87	57-108	
Benzo(b)fluoranthene	mg/kg	.33	0.27	80	53-113	
Benzo(g,h,i)perylene	mg/kg	.33	0.33	100	43-114	
Benzo(k)fluoranthene	mg/kg	.33	0.29	87	66-116	
Chrysene	mg/kg	.33	0.31	93	64-109	
Dibenz(a,h)anthracene	mg/kg	.33	0.34	102	50-105	
Fluoranthene	mg/kg	.33	0.30	90	58-107	
Fluorene	mg/kg	.33	0.30	91	52-99	
Indeno(1,2,3-cd)pyrene	mg/kg	.33	0.34	103	51-113	
Naphthalene	mg/kg	.33	0.24	73	50-91	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

QUALITY CONTROL DATA

Project: 1705-0165
Pace Project No.: 40149503

LABORATORY CONTROL SAMPLE: 1504713

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Phenanthrene	mg/kg	.33	0.32	95	57-101	
Pyrene	mg/kg	.33	0.28	85	50-102	
2-Fluorobiphenyl (S)	%			78	25-81	
Terphenyl-d14 (S)	%			83	29-98	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1504714 1504715

Parameter	Units	40149438002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1-Methylnaphthalene	mg/kg	<5.2 ug/kg	.43	.43	0.39	0.41	91	95	37-102	4	29	
2-Methylnaphthalene	mg/kg	<6.4 ug/kg	.43	.43	0.40	0.40	93	94	44-91	1	36	M1
Acenaphthene	mg/kg	<5.0 ug/kg	.43	.43	0.43	0.42	100	98	46-97	2	26	M1
Acenaphthylene	mg/kg	<4.2 ug/kg	.43	.43	0.43	0.42	99	97	47-97	2	29	M1
Anthracene	mg/kg	<7.4 ug/kg	.43	.43	0.44	0.42	102	99	50-101	3	28	M1
Benzo(a)anthracene	mg/kg	<4.1 ug/kg	.43	.43	0.38	0.36	87	84	48-95	4	28	
Benzo(a)pyrene	mg/kg	<3.2 ug/kg	.43	.43	0.38	0.37	89	85	47-108	4	36	
Benzo(b)fluoranthene	mg/kg	<3.6 ug/kg	.43	.43	0.35	0.33	81	77	42-113	5	34	
Benzo(g,h,i)perylene	mg/kg	<2.6 ug/kg	.43	.43	0.45	0.43	104	100	18-114	4	30	
Benzo(k)fluoranthene	mg/kg	<3.2 ug/kg	.43	.43	0.40	0.39	94	91	50-116	3	27	
Chrysene	mg/kg	<4.3 ug/kg	.43	.43	0.42	0.40	98	94	55-109	4	28	
Dibenz(a,h)anthracene	mg/kg	<2.9 ug/kg	.43	.43	0.45	0.43	105	101	39-105	4	29	
Fluoranthene	mg/kg	<6.7 ug/kg	.43	.43	0.40	0.40	94	92	41-107	2	28	
Fluorene	mg/kg	<5.3 ug/kg	.43	.43	0.43	0.41	99	95	48-99	4	28	
Indeno(1,2,3-cd)pyrene	mg/kg	<2.8 ug/kg	.43	.43	0.46	0.44	106	102	27-113	5	30	
Naphthalene	mg/kg	<10.9 ug/kg	.43	.43	0.38	0.39	89	91	40-91	2	37	
Phenanthrene	mg/kg	<15.0 ug/kg	.43	.43	0.43	0.42	100	97	46-101	2	40	
Pyrene	mg/kg	<5.8 ug/kg	.43	.43	0.39	0.38	91	87	50-102	4	31	
2-Fluorobiphenyl (S)	%						80	79	25-81			
Terphenyl-d14 (S)	%						84	80	29-98			

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REPORT OF LABORATORY ANALYSIS

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1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

QUALITY CONTROL DATA

Project: 1705-0165
Pace Project No.: 40149503

QC Batch: 255039 | Analysis Method: WI MOD DRO
QC Batch Method: WI MOD DRO | Analysis Description: WIDRO GCS
Associated Lab Samples: 40149503001

METHOD BLANK: 1503743 | Matrix: Solid
Associated Lab Samples: 40149503001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Diesel Range Organics	mg/kg	<1.3	4.4	05/10/17 09:36	

LABORATORY CONTROL SAMPLE & LCSD: 1503744 1503745

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Diesel Range Organics	mg/kg	40	33.3	36.8	83	92	70-120	10	20	

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1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

QUALITY CONTROL DATA

Project: 1705-0165
Pace Project No.: 40149503

QC Batch: 254900
QC Batch Method: ASTM D2974-87
Associated Lab Samples: 40149503001

Analysis Method: ASTM D2974-87
Analysis Description: Dry Weight/Percent Moisture

SAMPLE DUPLICATE: 1503414

Parameter	Units	40149539038 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	41.2	40.7	1	10	

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Green Bay, WI 54302
(920)469-2436

QUALITY CONTROL DATA

Project: 1705-0165
Pace Project No.: 40149503

QC Batch: 254878
QC Batch Method: EPA 1010
Analysis Method: EPA 1010
Analysis Description: 1010 Flash Point, Closed Cup
Associated Lab Samples: 40149503001

LABORATORY CONTROL SAMPLE: 1503277

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Flashpoint	deg F		80.9			

SAMPLE DUPLICATE: 1503489

Parameter	Units	10387493001 Result	Dup Result	RPD	Max RPD	Qualifiers
Flashpoint	deg F	>210	>210			

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Green Bay, WI 54302
(920)469-2436

QUALIFIERS

Project: 1705-0165
Pace Project No.: 40149503

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above LOD.

J - Estimated concentration at or above the LOD and below the LOQ.

LOD - Limit of Detection adjusted for dilution factor and percent moisture.

LOQ - Limit of Quantitation adjusted for dilution factor and percent moisture.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected at or above the adjusted LOD.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

1q	Approximately 3.2 mg/Kg of the GRO value is due to the addition of 8260 surrogate standards.
D5	The sample was re-weighed into a new container because the sample weight in the original container exceeded the method specifications.
DC	Chromatographic pattern inconsistent with typical Diesel Fuel.
G+	Late peaks present outside the GRO window.
M0	Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
R1	RPD value was outside control limits.
S4	Surrogate recovery not evaluated against control limits due to sample dilution.
W	Non-detect results are reported on a wet weight basis.

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Green Bay, WI 54302
(920)469-2436

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 1705-0165
Pace Project No.: 40149503

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40149503001	**60C PROFILE**	WI MOD DRO	255039	WI MOD DRO	255096
40149503001	**60C PROFILE**	TPH GRO/PVOC WI ext.	254849	WI MOD GRO	254895
40149503001	**60C PROFILE**	EPA 3050	254964	EPA 6010	255098
40149503001	**60C PROFILE**	EPA 7471	254926	EPA 7471	255022
40149503001	**60C PROFILE**	EPA 3546	255216	EPA 8270 by SIM	255242
40149503001	**60C PROFILE**	EPA 5035/5030B	254918	EPA 8260	254930
40149503001	**60C PROFILE**	ASTM D2974-87	254900		
40149503001	**60C PROFILE**	EPA 1010	254878		

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40149503

Pace Analytical®
www.pacelabs.com

UPPER MIDWEST REGION
MN: 612-607-1700 WI: 920-469-2436

CHAIN OF CUSTODY

*Preservation Codes
A=None B=HCL C=H2SO4 D=HNO3 E=DI Water F=Methanol G=NaOH
H=Sodium Bisulfate Solution I=Sodium Thiosulfate J=Other

(Please Print Clearly)

Company Name:	KEY
Branch/Location:	MILWAUKEE, WI
Project Contact:	K. McCLUNG
Phone:	262 853 1196
Project Number:	1705-0165
Project Name:	
Project State:	WISCONSIN
Sampled By (Print):	KURT McCLUNG
Sampled By (Sign):	Kurt McClung
PO #:	Regulatory Program:

Quote #:	
Mail To Contact:	
Mail To Company:	
Mail To Address:	
Invoice To Contact:	
Invoice To Company:	
Invoice To Address:	
Invoice To Phone:	

Data Package Options (billable)
- ☐ EPA Level III
- ☐ EPA Level IV

MS/MSD
- ☐ On your sample (billable)
- ☐ NOT needed on your sample

Matrix Codes
A = Air, B = Biota, C = Charcoal, O = Oil, S = Soil, SI = Sludge, W = Water, DW = Drinking Water, GW = Ground Water, SW = Surface Water, WW = Waste Water, WP = Wipe

PACE LAB #	CLIENT FIELD ID	COLLECTION DATE	COLLECTION TIME	MATRIX	FILTERED? (YES/NO) Y/N	PRESERVATION (CODE)* Pick Letter	FLASH	DRO	PAHS	VOCS/GRO	METALS				CLIENT COMMENTS	LAB COMMENTS (Lab Use Only)	Profile #
					Analyses Requested		A	A	A	A	A						
001	60C PROFILE	5/5/17	930	SOIL			X	X	X	X	X				RUSH: FLASH GRO DRO BENZENE	2-4ozag^A, 1-4ozp^A, 1-4ozp^F	

Rush Turnaround Time Requested - Prelims
(Rush TAT subject to approval/surcharge)
Date Needed: 5/10/17

Transmit Prelim Rush Results by (complete what you want):

Email #1:	dweiss@setenv.com
Email #2:	
Telephone:	
Fax:	

Samples on HOLD are subject to special pricing and release of liability

Relinquished By:	Date/Time:	Received By:	Date/Time:
Kurt McClung	5/5/17 1000		
CS Logistics	5/6/17 0810	[illegible]	5/6/17 0810

PACE Project No. 40149503

Receipt Temp = 4.0 °C

Sample Receipt pH OK / Adjusted

Cooler Custody Seal Present / Not Present Intact / Not Intact

Version 6.0 06/14/06

C019a(27Jun2006)

ORIGINAL

Pace Analytical

Sample Condition Upon Receipt

Pace Analytical Services, Inc.
1241 Bellevue Street, Suite 9
Green Bay, WI 54302

Project #: **WO# : 40149503**

40149503

Client Name: Key

Courier: ☐ Fed Ex ☐ UPS ☐ Client ☐ Pace Other: CS Logistics

Tracking #:

Custody Seal on Cooler/Box Present: ☒ yes ☐ no Seals intact: ☒ yes ☐ no

Custody Seal on Samples Present: ☐ yes ☒ no Seals intact: ☐ yes ☐ no

Packing Material: ☒ Bubble Wrap ☒ Bubble Bags ☐ None ☐ Other

Thermometer Used N/A **Type of Ice:** Wet Blue Dry None ☒ Samples on ice, cooling process has begun

Cooler Temperature Uncorr: Not /Corr: **Biological Tissue is Frozen:** ☐ yes ☐ no

Temp Blank Present: ☐ yes ☒ no

Temp should be above freezing to 6°C for all sample except Biota.
Frozen Biota Samples should be received ≤ 0°C.

Person examining contents:
Date: 5/6/17
Initials: SM

		Comments:
Chain of Custody Present:	☒Yes ☐No ☐N/A	1.
Chain of Custody Filled Out:	☒Yes ☐No ☐N/A	2.
Chain of Custody Relinquished:	☒Yes ☐No ☐N/A	3.
Sampler Name & Signature on COC:	☒Yes ☐No ☐N/A	4.
Samples Arrived within Hold Time:	☒Yes ☐No ☐N/A	5.
- VOA Samples frozen upon receipt	☐Yes ☐No	Date/Time:
Short Hold Time Analysis (<72hr):	☐Yes ☒No ☐N/A	6.
Rush Turn Around Time Requested:	☒Yes ☐No ☐N/A	7.
Sufficient Volume:	☐Yes ☐No ☐N/A	8.
Correct Containers Used:	☐Yes ☒No ☐N/A	9. DRO not tared SM 5/6/17
-Pace Containers Used:	☒Yes ☐No ☐N/A	
-Pace IR Containers Used:	☐Yes ☐No ☒N/A	SM 5/6/17
Containers Intact:	☒Yes ☒No ☐N/A	10. ~~DRO not tared~~ SM 5/6/17
Filtered volume received for Dissolved tests	☐Yes ☐No ☒N/A	11.
Sample Labels match COC: KJ 5/6/17	☒Yes ☒No ☐N/A	12. 4oz p time is 093
-Includes date/time/ID/Analysis Matrix: S		KJ 5/6/17
All containers needing preservation have been checked. (Non-Compliance noted in 13.)	☐Yes ☐No ☒N/A	13. ☐ HNO3 ☐ H2SO4 ☐ NaOH ☐ NaOH +ZnAct
All containers needing preservation are found to be in compliance with EPA recommendation. (HNO3, H2SO4 ≤2; NaOH+ZnAct ≥9, NaOH ≥12)	☐Yes ☐No ☒N/A	
exceptions: VOA, coliform, TOC, TOX, TOH, O&G, WIDROW, Phenolics, OTHER:	☐Yes ☒No	Initial when completed / Lab Std #ID of preservative / Date/Time:
Headspace in VOA Vials (>6mm):	☐Yes ☐No ☒N/A	14.
Trip Blank Present:	☐Yes ☒No ☐N/A	15.
Trip Blank Custody Seals Present	☐Yes ☐No ☒N/A	
Pace Trip Blank Lot # (if purchased):		

Client Notification/ Resolution: If checked, see attached form for additional comments ☐

Person Contacted: Date/Time:

Comments/ Resolution:

Project Manager Review: Meet for DM **Date:** 5/16/17

F-GB-C-031-Rev.03 (9April2015) SCUR Form

ATTACHMENT F
SET CORRESPONDENCE REGARDING WATER WASTE PROFILE

From: Danielle Weiss
To: Shaun Dekker
Subject: RE: Liquid Waste Profile
Date: Thursday, May 04, 2017 1:31:12 PM

Here is what the lab at AWS can report

Flashpoint greater than 140 F
Silica gel treated hexane extractable material (non polar oil and grease) 84 mg/l
metals were tested by ICP and no metals that exceeded our permit limitations were detected.

Let me know if we need to send a sample out for full analysis or what they are looking for VOC's, TCLP, totals.
Thanks,

Danielle Weiss | SET Environmental
Cell (224) 374-7008| Office (414) 761-9316

-----Original Message-----
From: Shaun Dekker
Sent: Thursday, May 04, 2017 12:17 PM
To: Danielle Weiss
Subject: Re: Liquid Waste Profile

I don't know. I'll send what they have and go from there

Shaun Dekker
SET Environmental Inc.
Milwaukee, WI Field Services
847-276-7913

> On May 4, 2017, at 12:15 PM, Danielle Weiss <dweiss@setenv.com> wrote:
>
> I am sure they can get us something on it. But if she is looking for TCLP results we will have to send a sample to a certified lab for this, do you think she will want to do that in addition?
>
> Danielle Weiss | SET Environmental
> Cell (224) 374-7008| Office (414) 761-9316
>
>
> -----Original Message-----
> From: Shaun Dekker
> Sent: Thursday, May 04, 2017 12:14 PM
> To: Danielle Weiss
> Subject: Re: Liquid Waste Profile
>
> Do they have any record of the analysis they did in house
>
> Shaun Dekker
> SET Environmental Inc.
> Milwaukee, WI Field Services
> 847-276-7913
>
>> On May 4, 2017, at 12:12 PM, Danielle Weiss <dweiss@setenv.com> wrote:
>>

>> Ok, let me know
>> Thanks,
>>
>> Danielle Weiss | SET Environmental
>> Cell (224) 374-7008| Office (414) 761-9316
>>
>>
>> -----Original Message-----
>> From: Shaun Dekker
>> Sent: Thursday, May 04, 2017 12:09 PM
>> To: Danielle Weiss
>> Subject: Re: Liquid Waste Profile
>>
>> Yes. The USEPA. I'll talk to her and see how she feels about the analysis on hand
>>
>> Shaun Dekker
>> SET Environmental Inc.
>> Milwaukee, WI Field Services
>> 847-276-7913
>>
>>> On May 4, 2017, at 12:07 PM, Danielle Weiss <dweiss@setenv.com> wrote:
>>>
>>> Hi Shaun, here is the profile. The lab did not run any certified analytical they just tested the sample for metals, flash, and treatability - everything sowed non haz. Is someone requesting documentation of the sample results?
>>> Thanks,
>>>
>>> Danielle Weiss | SET Environmental
>>> Cell (224) 374-7008| Office (414) 761-9316
>>>
>>>
>>> -----Original Message-----
>>> From: Shaun Dekker
>>> Sent: Thursday, May 04, 2017 11:33 AM
>>> To: Danielle Weiss
>>> Subject: Liquid Waste Profile
>>>
>>> Danielle,
>>>
>>> Could you please pass along executed waste profile and analytical from Advanced waste?
>>>
>>> Shaun Dekker
>>> SET Environmental Inc.
>>> Milwaukee, WI Field Services
>>> 847-276-7913
>>> <20170504120156599.pdf>

ATTACHMENT G
WASTE LIQUID DISPOSAL MANIFESTS

COVANTA
Environmental Solutions

Corporate Office
1126 South 70th Street, Suite N408B - West Allis, WI 53214
Phone: 800-842-9792 Fax: 414-475-4496

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number:
2. Page 1 of 1
3. Emergency Response Phone: (800) 842-9792
4. Waste Tracking Number: CES 094241

GENERATOR

5. Generator's Name and Mailing Address
MKE Fuels LLC
4972 S Howell Avenue
Milwaukee, WI 53207
Generator's Phone: Dave Ziebell

Generator's Site Address (if different than mailing address)

6. Transporter 1 Company Name: Covanta Environmental Solutions Carriers II, LLC
U.S. EPA ID Number: WI0000815381

7. Transporter 2 Company Name
U.S. EPA ID Number

8. Designated Facility Name and Site Address
Advanced Waste Services, Inc.
3801L West McKinley Ave
Milwaukee, WI 53208
Facility's Phone: 414-342-1852
U.S. EPA ID Number: WIR000136522

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
1	Non RCRA regulated, Non DOT hazardous Liquid material	001	TT	5000 G	NONE	
2.						
3.						
4.						

13. Special Handling Instructions and Additional Information
Profile #1: 1000137829-0-8-1 / 2-AWS
1

Trailer # 513
Emergency Response Guide On-board
Site arrival time 600
Site departure time 700
www.covanta.com

14. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Generator's/Offeror's Printed/Typed Name: David Ziebell
Signature: x
Month 5 Day 4 Year 17

TRANSPORTER

INT'L

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter Signature (for exports only): Date leaving U.S.:

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Ken Fisher
Signature:
Month 5 Day 4 Year 17

Transporter 2 Printed/Typed Name
Signature
Month Day Year

DESIGNATED FACILITY

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

17b. Alternate Facility (or Generator)
U.S. EPA ID Number
Facility's Phone:

17c. Signature of Alternate Facility (or Generator)
Month Day Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name:
Signature:
Month 05 Day 01 Year 17

COVANTA
Environmental Solutions

Corporate Office
1126 South 70th Street, Suite N408B - West Allis, WI 53214
Phone: 800-842-9792 Fax: 414-475-4496

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number
2. Page 1 of 1
3. Emergency Response Phone (800) 842-9792
4. Waste Tracking Number CES 094242

5. Generator's Name and Mailing Address
MKE Fuels LLC
4972 S Howell Avenue
Milwaukee, WI 53207
Generator's Phone: Dave Ziebell

Generator's Site Address (if different than mailing address)

6. Transporter 1 Company Name: Covanta Environmental Solutions Carriers II, LLC
U.S. EPA ID Number: WI0000815381

7. Transporter 2 Company Name
U.S. EPA ID Number

8. Designated Facility Name and Site Address
'Advanced Waste Services, Inc.
3801L West McKinley Ave
Milwaukee, WI 53208
Facility's Phone: 414-342-1852
U.S. EPA ID Number: WIR000136572

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
	1Non RCRA regulated, Non DOT hazardous Liquid material	001	TT	5000 G	NONE	
	2.					
	3.					
	4.					

13. Special Handling Instructions and Additional Information
Profile #1: 1000137629-O-B-1 / 2-AWS

2

TRK 318
TRL 529

Trailer # _____
Emergency Response Guide On-board
Site arrival time _____
Site departure time _____
www.covanta.com

Pump FRAC TANK

14. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Generator's/Offeror's Printed/Typed Name: X Dave Ziebell
Signature: X [signature]
Month 5 Day 4 Year 17

INT'L

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER

16. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: Russ Daniels
Signature: [signature]
Month 5 Day 4 Year 17
Transporter 2 Printed/Typed Name
Signature
Month Day Year

DESIGNATED FACILITY

17. Discrepancy
17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number:
17b. Alternate Facility (or Generator)
U.S. EPA ID Number
Facility's Phone:
17c. Signature of Alternate Facility (or Generator)
Month Day Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a
Printed/Typed Name: Jacob Morrison
Signature: [signature]
Month 05 Day 04 Year 17

COVANTA
Environmental Solutions

Corporate Office
1126 South 70th Street, Suite N408B - West Allis, WI 53214
Phone: 800-842-9792 Fax: 414-475-4496

GENERATOR

NON-HAZARDOUS WASTE MANIFEST	1. Generator ID Number	2. Page 1 of 1	3. Emergency Response Phone (800) 842-9792	4. Waste Tracking Number CES 094243

5. Generator's Name and Mailing Address
MKE Fuels LLC
4972 S Howell Avenue
Milwaukee, WI 53207
Generator's Phone: Dave Ziebell

Generator's Site Address (if different than mailing address)

6. Transporter 1 Company Name: Covanta Environmental Solutions Carriers II, LLC — U.S. EPA ID Number: WI0000815381

7. Transporter 2 Company Name — U.S. EPA ID Number:

8. Designated Facility Name and Site Address
'Advanced Waste Services, Inc.
3801L West McKinley Ave
Milwaukee, WI 53208
Facility's Phone: 414-342-1852
U.S. EPA ID Number: WIR000136572

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
	1Non RCRA regulated, Non DOT hazardous Liquid material	001	TT	5100G	NONE	
	2.					
	3.					
	4.					

13. Special Handling Instructions and Additional Information
Profile #1: 1000137829-O-B-1 / 2-AWS

1

Trailer # 565
Emergency Response Guide On-board
Site arrival time 815AM
Site departure time 845AM
www.covanta.com

14. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Generator's/Offeror's Printed/Typed Name: Dave Ziebell — Signature: [signature] — Month 5 Day 4 Year 17

INT'L

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER

16. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: Allan Geyer — Signature: [signature] — Month 5 Day 4 Year 17
Transporter 2 Printed/Typed Name — Signature — Month Day Year

DESIGNATED FACILITY

17. Discrepancy
17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number:
17b. Alternate Facility (or Generator) — U.S. EPA ID Number
Facility's Phone:
17c. Signature of Alternate Facility (or Generator) — Month Day Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a
Printed/Typed Name: Jordan — Signature: [signature] — Month 05 Day 04 Year 17

COVANTA
Environmental Solutions

Corporate Office
1126 South 70th Street, Suite N406B - West Allis, WI 53214
Phone: 800-842-9792 Fax: 414-475-4496

GENERATOR

NON-HAZARDOUS WASTE MANIFEST	1. Generator ID Number	2. Page 1 of 1	3. Emergency Response Phone (800) 842-9792	4. Waste Tracking Number CES 094290

5. Generator's Name and Mailing Address
MKE Fuels LLC
4972 S Howell Avenue
Milwaukee, WI 53207
Generator's Phone: Dave Ziebell

Generator's Site Address (if different than mailing address)

6. Transporter 1 Company Name: Covanta Environmental Solutions Carriers II, LLC — U.S. EPA ID Number: WI0000815381

7. Transporter 2 Company Name — U.S. EPA ID Number:

8. Designated Facility Name and Site Address
Advanced Waste Services, Inc.
3801L West McKinley Ave
Milwaukee, WI 53208
Facility's Phone: 414-342-1852
U.S. EPA ID Number: WIR000136572

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
	1. Non RCRA regulated, Non DOT hazardous Liquid material	001	TT	5000	G	NONE
	2.					
	3.					
	4.					

13. Special Handling Instructions and Additional Information
Profile #1: 100013829-0-B-1 / 2-AWS

(1)

Trailer # 550
Emergency Response Guide On-board
Site arrival time
Site departure time
www.covanta.com

14. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Generator's/Offeror's Printed/Typed Name: Dave Ziebell — Signature: [signature] — Month 5 Day 9 Year 17

INT'L

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER

16. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: Altru Geyer — Signature: [signature] — Month 5 Day 9 Year 17
Transporter 2 Printed/Typed Name — Signature — Month Day Year

DESIGNATED FACILITY

17. Discrepancy
17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number:
17b. Alternate Facility (or Generator) — U.S. EPA ID Number
Facility's Phone:
17c. Signature of Alternate Facility (or Generator) — Month Day Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a
Printed/Typed Name: Jacob Morrison — Signature: [signature] — Month 05 Day 09 Year 17

COVANTA
Environmental Solutions

Corporate Office
1126 South 70th Street, Suite N408B - West Allis, WI 53214
Phone: 800-842-9792 Fax: 414-475-4496

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number
2. Page 1 of 1
3. Emergency Response Phone (800) 842-9792
4. Waste Tracking Number CES 094289

5. Generator's Name and Mailing Address
MKE Fuels LLC
4972 S Howell Avenue
Milwaukee, WI 53207
Generator's Phone: Dave Ziebell

Generator's Site Address (if different than mailing address)

6. Transporter 1 Company Name: Covanta Environmental Solutions Carriers II, LLC — U.S. EPA ID Number: WI0000815381

7. Transporter 2 Company Name — U.S. EPA ID Number

8. Designated Facility Name and Site Address
Advanced Waste Services, Inc.
3801L West McKinley Ave
Milwaukee, WI 53208
Facility's Phone: 414-342-1852
U.S. EPA ID Number: WIR000136572

9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
1. Non RCRA regulated, Non DOT hazardous Liquid material	001	TT	5000	G	NONE
2.					
3.					
4.					

13. Special Handling Instructions and Additional Information
Profile #1: 1000137829-0-B-1 / 2-AWS

(1)

Trailer # 545
Emergency Response Guide On-board
Site arrival time 7:25
Site departure time 7:50
www.covanta.com

14. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Generator's/Offeror's Printed/Typed Name: Gary RHoDEN — Signature — Month 05 Day 09 Year 17

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter Signature (for exports only): Date leaving U.S.:

16. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: Gerald Bell — Signature — Month 05 Day 09 Year 17
Transporter 2 Printed/Typed Name — Signature — Month Day Year

17. Discrepancy
17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number:

17b. Alternate Facility (or Generator) — U.S. EPA ID Number
Facility's Phone:

17c. Signature of Alternate Facility (or Generator) — Month Day Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a
Printed/Typed Name: MARK KIJOR — Signature — Month 05 Day 09 Year 17

GENERATOR — INT'L — TRANSPORTER — DESIGNATED FACILITY

COVANTA
Environmental Solutions

Corporate Office
1126 South 70th Street, Suite N408B - West Allis, WI 53214
Phone: 800-842-9792 Fax: 414-475-4496

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number
2. Page 1 of 1
3. Emergency Response Phone (800) 842-9792
4. Waste Tracking Number CES 094236

5. Generator's Name and Mailing Address: MKE Fuels LLC
4972 S. Howell Ave
Milwaukee, WI 53207
Generator's Phone: (847) 276-7913
Generator's Site Address (if different than mailing address)

6. Transporter 1 Company Name: Covanta Environmental Solutions Carriers II, LLC
U.S. EPA ID Number: WI0000815381

7. Transporter 2 Company Name
U.S. EPA ID Number

8. Designated Facility Name and Site Address
Advanced Waste Services
3801L West McKinley Ave
Milwaukee, WI 53208
Facility's Phone: 414-342-1852
U.S. EPA ID Number: WIR000136572

9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
1. Non-RCRA regulated, Non-DOT hazardous material	001	TT	5,000	G	None
2.					
3.					
4.					

13. Special Handling Instructions and Additional Information
Profile #1:
#
1000137829
(2)
Trailer # 509
Emergency Response Guide On-board
Site arrival time
Site departure time
www.covanta.com

14. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.
Generator's/Offeror's Printed/Typed Name: Dave Zielboll
Signature
Month 05 Day 11 Year 17

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter Signature (for exports only): Date leaving U.S.:

16. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: Jorge Alvarez
Signature
Month 05 Day 11 Year 17
Transporter 2 Printed/Typed Name
Signature
Month Day Year

17. Discrepancy
17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number:
17b. Alternate Facility (or Generator)
U.S. EPA ID Number
Facility's Phone:
17c. Signature of Alternate Facility (or Generator)
Month Day Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a
Printed/Typed Name: Jacob Morrison
Signature
Month 05 Day 11 Year 17

GENERATOR
INT'L
TRANSPORTER
DESIGNATED FACILITY

COVANTA
Environmental Solutions

Corporate Office
1126 South 70th Street, Suite N408B - West Allis, WI 53214
Phone: 800-842-9792 Fax: 414-475-4496

GENERATOR

NON-HAZARDOUS WASTE MANIFEST	1. Generator ID Number	2. Page 1 of 1	3. Emergency Response Phone (800) 842-9792	4. Waste Tracking Number CES 094239

5. Generator's Name and Mailing Address: MKE Fuels LLC
4972 S. Howell Ave
Milwaukee, WI. 53207 (847) 276-7913
Generator's Site Address (if different than mailing address)
Generator's Phone:

6. Transporter 1 Company Name: Covanta Environmental Solutions Carriers II, LLC — U.S. EPA ID Number: WI0000815381

7. Transporter 2 Company Name — U.S. EPA ID Number:

8. Designated Facility Name and Site Address: Advanced Waste Services, 3801L West McKinley Ave, Milwaukee, WI 53208 — U.S. EPA ID Number: WIR000136572
Facility's Phone: 414-342-1852

9. Waste Shipping Name and Description	10. Containers No.	Type	11. Total Quantity	12. Unit Wt./Vol.	
1. Non-RCRA regulated, Non-DOT hazardous material	001	TT	5,000	G	None
2.					
3.					
4.					

13. Special Handling Instructions and Additional Information
Profile #1:
#
1000137829
(2)
Trailer # 520
Emergency Response Guide On-board
Site arrival time 2:50 pm
Site departure time 3:30 pm
www.covanta.com

14. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.
Generator's/Offeror's Printed/Typed Name: Dave Ziebell — Signature: — Month 05 Day 11 Year 17

INT'L
15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER
16. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: Nick Cruz — Signature: — Month 05 Day 11 Year 17
Transporter 2 Printed/Typed Name — Signature — Month Day Year

DESIGNATED FACILITY
17. Discrepancy
17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number:
17b. Alternate Facility (or Generator) — U.S. EPA ID Number
Facility's Phone:
17c. Signature of Alternate Facility (or Generator) — Month Day Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a
Printed/Typed Name: Jacob Morrison — Signature: — Month 05 Day 11 Year 17

NON-HAZARDOUS WASTE MANIFEST	1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number
	WICESQG	1	877-437-7455	0002034

5. Generator's Name and Mailing Address
MKE Fuel Company
4972 South Howell Ave. MKE Fuel Company
Milwaukee, WI 53207
Generator's Phone: 817-905-2647

Generator's Site Address (if different than mailing address)
4972 South Howell Ave.
MKE Fuel Company
Milwaukee, WI 53207

6. Transporter 1 Company Name: SET Environmental, Inc.
U.S. EPA ID Number: ILD981957236

7. Transporter 2 Company Name:
U.S. EPA ID Number:

8. Designated Facility Name and Site Address
Advanced Waste Services
3801 West McKinley Avenue
Milwaukee, WI 53208
Facility's Phone: (800) 842-9792
U.S. EPA ID Number: WI0000815381

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
	1. Non-RCRA, Non-DOT Regulated	1	TT	2200	G	
	2.					
	3.					
	4.					

13. Special Handling Instructions and Additional Information
1=1000137829:Jet A impacted water
(2)
1705-0105

14. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

Generator's/Offeror's Printed/Typed Name: Dave Zebell
Signature:
Month 5 Day 17 Year 17

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter Signature (for exports only): Date leaving U.S.:

16. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: Dave Bendix
Signature:
Month 05 Day 17 Year 17

Transporter 2 Printed/Typed Name:
Signature:
Month Day Year

17. Discrepancy
17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number:

17b. Alternate Facility (or Generator)
U.S. EPA ID Number
Facility's Phone:

17c. Signature of Alternate Facility (or Generator)
Month Day Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a
Printed/Typed Name: Jdeab Morrison
Signature:
Month 05 Day 17 Year 17

GENERATOR — INT'L — TRANSPORTER — DESIGNATED FACILITY

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number: WICESQG
2. Page 1 of 1
3. Emergency Response Phone: 877-437-7455
4. Waste Tracking Number: 0002035

5. Generator's Name and Mailing Address
MKE Fuel Company
4972 South Howell Ave. MKE Fuel Company
Milwaukee, WI 53207
Generator's Phone: 817-905-2647

Generator's Site Address (if different than mailing address)
4972 South Howell Ave.
MKE Fuel Company
Milwaukee, WI 53207

6. Transporter 1 Company Name: SET Environmental, Inc.
U.S. EPA ID Number: ILD981957236

7. Transporter 2 Company Name:
U.S. EPA ID Number:

8. Designated Facility Name and Site Address
Advanced Waste Services
3801 West McKinley Avenue
Milwaukee, WI 53208
Facility's Phone: (800) 842-9792
U.S. EPA ID Number: WI0000815381

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
	1. Non-RCRA, Non-DOT Regulated	1	TT	2000	G	
	2.					
	3.					
	4.					

13. Special Handling Instructions and Additional Information
I=1000137829:Jet A impacted water
2
1705 0105

14. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

Generator's/Offeror's Printed/Typed Name: Rob Hansen on behalf of DV
Signature:
Month 05 Day 18 Year 17

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter Signature (for exports only): Date leaving U.S.:

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Dave Banda
Signature:
Month 05 Day 18 Year 17

Transporter 2 Printed/Typed Name:
Signature:
Month Day Year

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

17b. Alternate Facility (or Generator)
U.S. EPA ID Number
Facility's Phone:

17c. Signature of Alternate Facility (or Generator)
Month Day Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name: Jacob Morrison
Signature:
Month 05 Day 18 Year 17

GENERATOR | INT'L | TRANSPORTER | DESIGNATED FACILITY

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number: WICESQG
2. Page 1 of 1
3. Emergency Response Phone: 877-437-7455
4. Waste Tracking Number: 0002046

GENERATOR

5. Generator's Name and Mailing Address
MKE Fuel Company
4972 South Howell Ave. MKE Fuel Company
Milwaukee, WI 53207
Generator's Phone: 817-905-2647

Generator's Site Address (if different than mailing address)
4972 South Howell Ave.
MKE Fuel Company
Milwaukee, WI 53207

6. Transporter 1 Company Name: SET Environmental, Inc.
U.S. EPA ID Number: ILD981957236

7. Transporter 2 Company Name:
U.S. EPA ID Number:

8. Designated Facility Name and Site Address
Advanced Waste Services
3801 West McKinley Avenue
Milwaukee, WI 53208
Facility's Phone: (800) 842-9792
U.S. EPA ID Number: WI0000815381

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
1.	Non-RCRA, Non-DOT Regulated	1	TT	500	G	
2.						
3.						
4.						

13. Special Handling Instructions and Additional Information
1=1000137829:Jet A impacted water
2
1705-0465

14. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

Generator's/Offeror's Printed/Typed Name: Dave Zieboll
Signature:
Month 5 Day 25 Year 17

INT'L

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Jar Bal
Signature:
Month 5 Day 25 Year 17

Transporter 2 Printed/Typed Name:
Signature:
Month Day Year

DESIGNATED FACILITY

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

17b. Alternate Facility (or Generator)
U.S. EPA ID Number:
Facility's Phone:

17c. Signature of Alternate Facility (or Generator)
Month Day Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name: Jacob Morrison
Signature:
Month 05 Day 25 Year 17

ATTACHMENT H
BURNS & McDONNELL FORENSIC SAMPLE LABORATORY REPORTS

GW/S Environmental Consulting LLC
GENE W. SCHMIDT, CGWP & PHG
Specializing in Forensics of Petroleum Hydrocarbon Contamination of Groundwater and Soils
www.gwsconsulting.co

8 May 2017

Lloyd W. Landreth, Attorney
LANDRETH LAW FIRM PLC
801 E. B St.
Jenks, OK 74037 – 4307

ASIG MKE (PROJECT #97859)

Attached are the gas chromatograms (GC-FID) for the petroleum sample, GS-Creek-01, collected on 2 May 2017 and received by us on 4 May 2017 for our analytical examination and forensic evaluation. Next day turnaround was requested.

The, GS-Creek-01, sample is a 100% relatively "fresh" recently release Jet A fuel. No other petroleum products were present in the sample. The nC17/pristane ratio is 1.7 meaning the Jet A fuel was, most likely, released less than two years ago.

Also attached is an Isoprenoid Plot that can be used to "genetically" correlate the subject sample to other Jet A samples from the subject area.

Gene W. Schmidt

Gene W. Schmidt

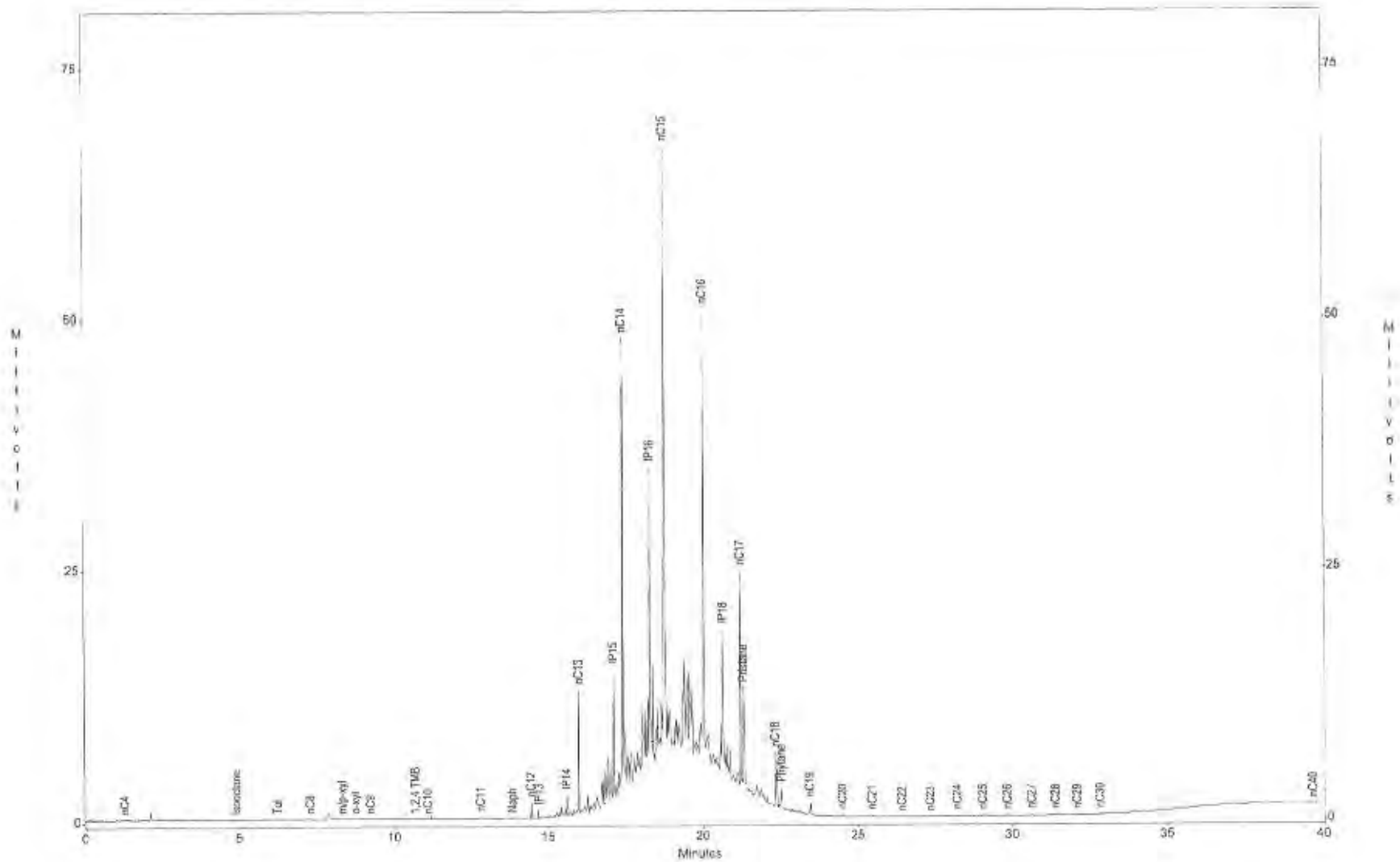
Attachments

11619 S. Hudson Place • Tulsa, Oklahoma 74137-8532
(O) 918-298-9849 ~ (C) 918-261-4650 ~ envirodog@aol.com

Torkelson Geochemistry, Inc.
GC/FID

Project: 97859
Sample ID : GS-Creek-01
Acquired : May 08, 2017 09:45:01

c:\ezchrom\chrom\17049\creek01 -- Channel A

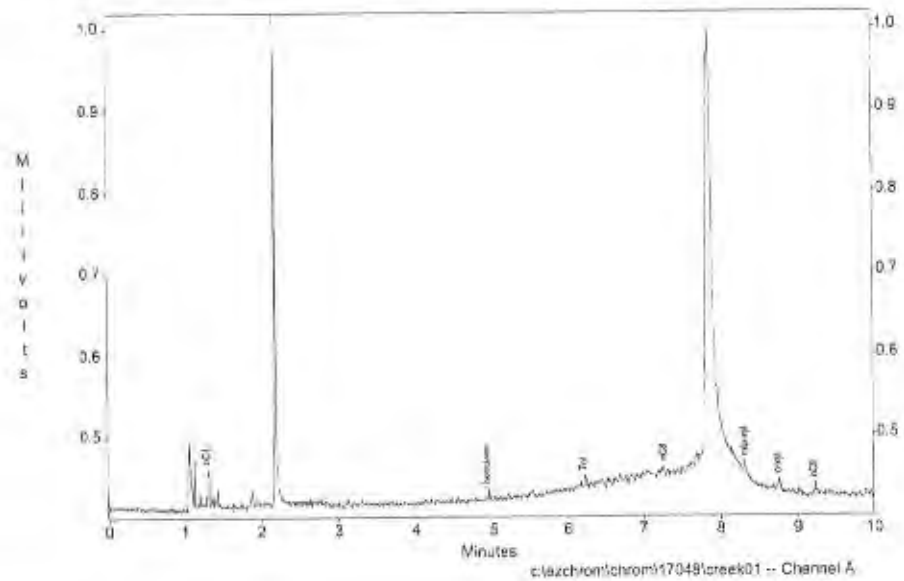


Torkelson Geochemistry, Inc.

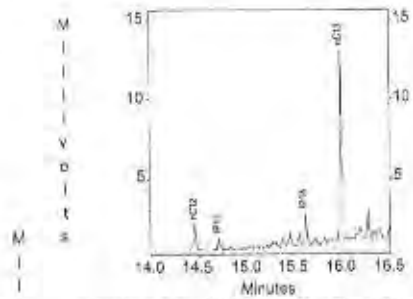
GC/FID

Project: 97859
Sample ID : GS-Creek-01
Acquired : May 08, 2017 09:45:01

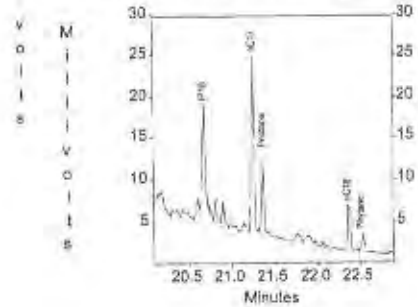
c:\ezchrom\chrom\17048\creek01 -- Channel A



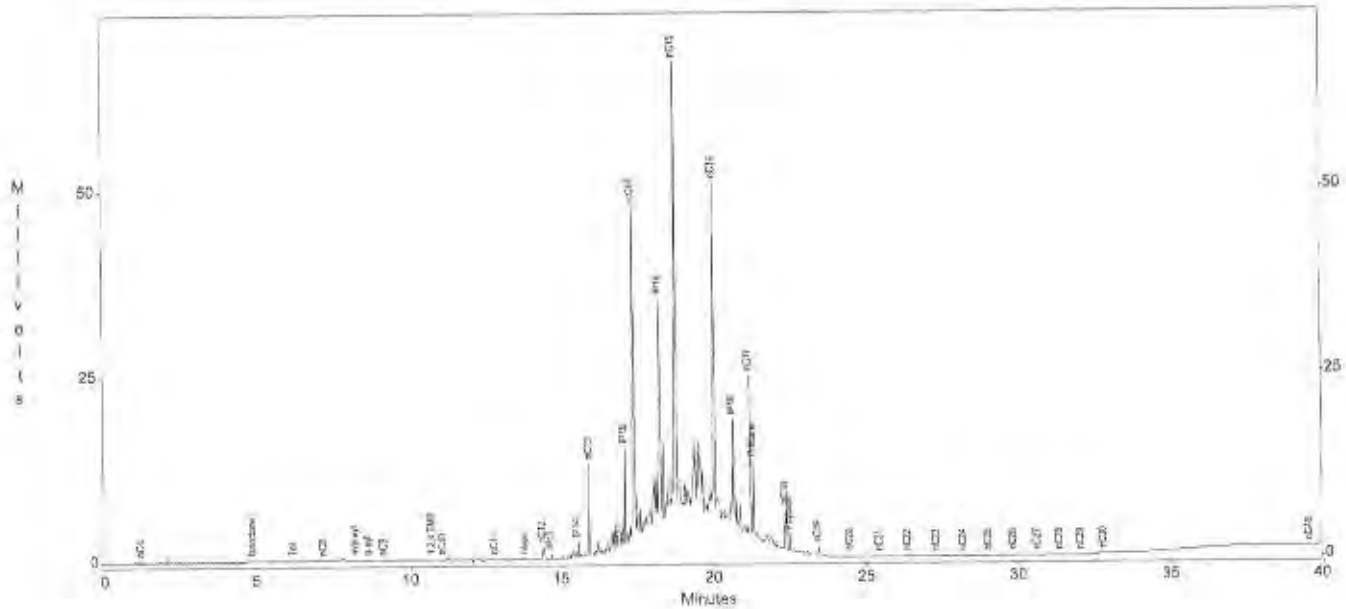
c:\ezchrom\chrom\17048\creek01 -- Channel A



c:\ezchrom\chrom\17048\creek01 -- Channel A



c:\ezchrom\chrom\17048\creek01 -- Channel A



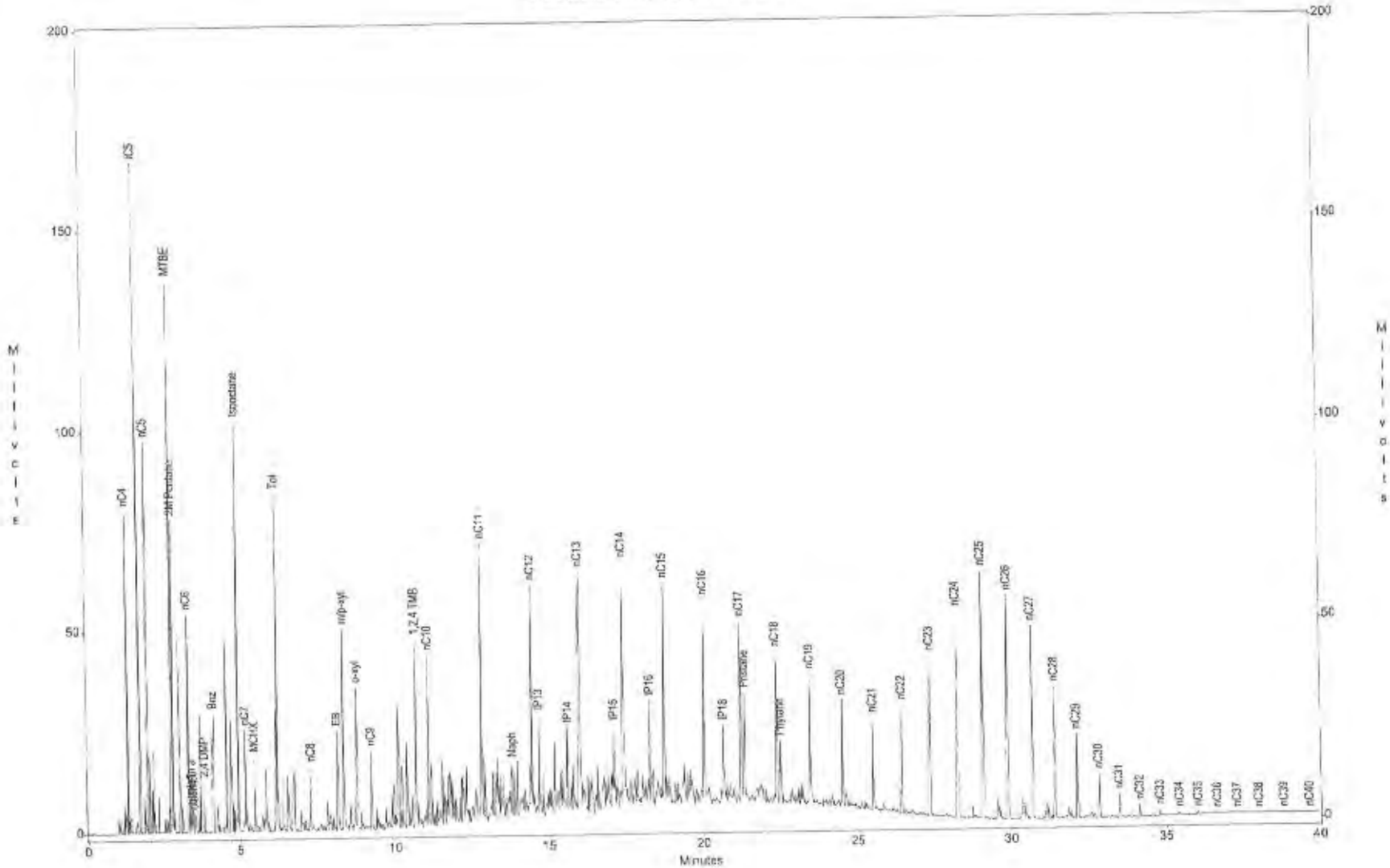
Channel A Results

Peak	Area	Height
nC4	36	15
nC5	0	1
nC6	0	1
MTBE	0	1
2M Pentane	0	1
nC6	1	1
p'efin a	0	0
p'efin b	0	0
p'efin c	0	0
2,4 DMP	0	0
Bnz	2	3
Isooctane	12	11
nC7	2	5
MCH	2	3
Tol	15	13
nC8	11	10
E8	0	0
m/p xyl	36	16
o xyl	36	16
nC9	33	15
1,3,5 TMB	87	31
nC10	582	81
nC11	271	137
Naph	111	67
nC12	2577	1364
IP13	1402	837
IP14	2853	2046
nC13	17830	12260
IP15	19222	12849
nC14	59257	44530
IP16	57404	39214
nC15	135496	59832
nC16	98127	45162
IP18	36099	24398
nC17	38375	21573
Pristane	12061	10272
nC18	9569	5524
Phytane	4388	2156
nC19	2461	1276
nC20	596	317
nC21	231	131
nC22	148	80
nC23	199	81
nC24	247	100
nC25	283	118
nC26	252	110
nC27	232	96
nC28	128	62
nC29	79	35
nC30	54	19
nC31	0	0
nC32	0	0
nC33	0	0
nC34	0	1
nC35	0	1
nC36	0	1
nC37	0	1
nC38	0	1
nC39	0	0
nC40	12	13

Torkelson Geochemistry, Inc.
GC/FID

Project: 97859
Sample ID : Gas/Dies/Wax std
Acquired : May 08, 2017 10:34:04

c:\ezchrom\chrom\17048\gadlwax2 -- Channel A

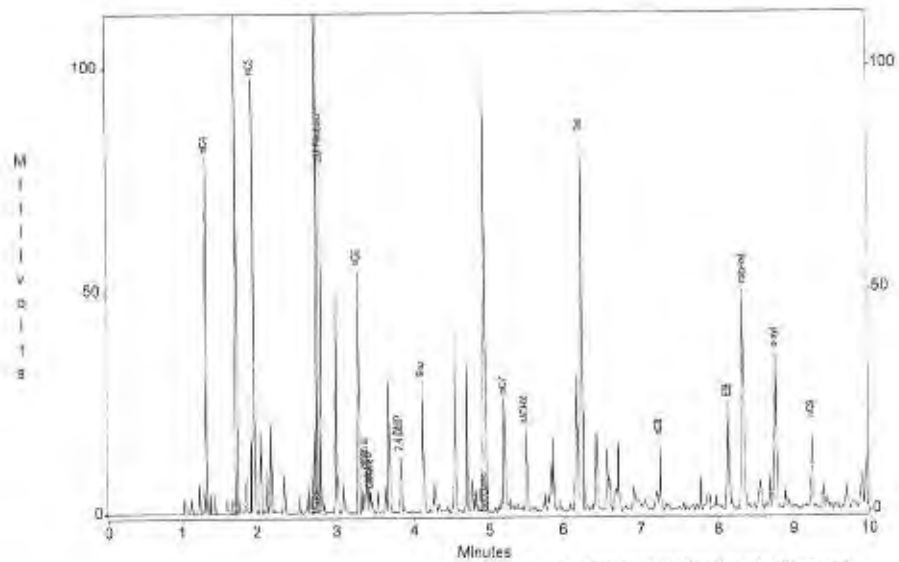


Torkelson Geochemistry, Inc.

GC/FID

Project: 97859
Sample ID : Gas/Dies/Wax std
Acquired : May 08, 2017 10:34:04

c:\ezchrom\chrom\17048\gadiwax2 -- Channel A



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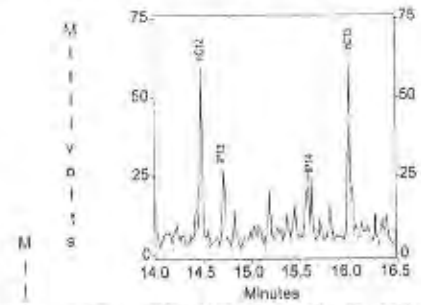

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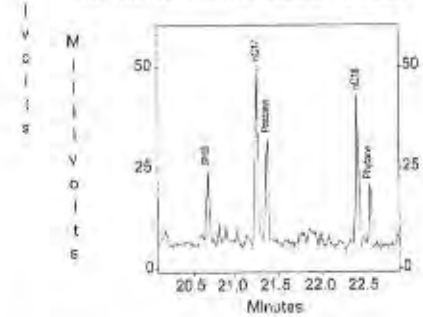

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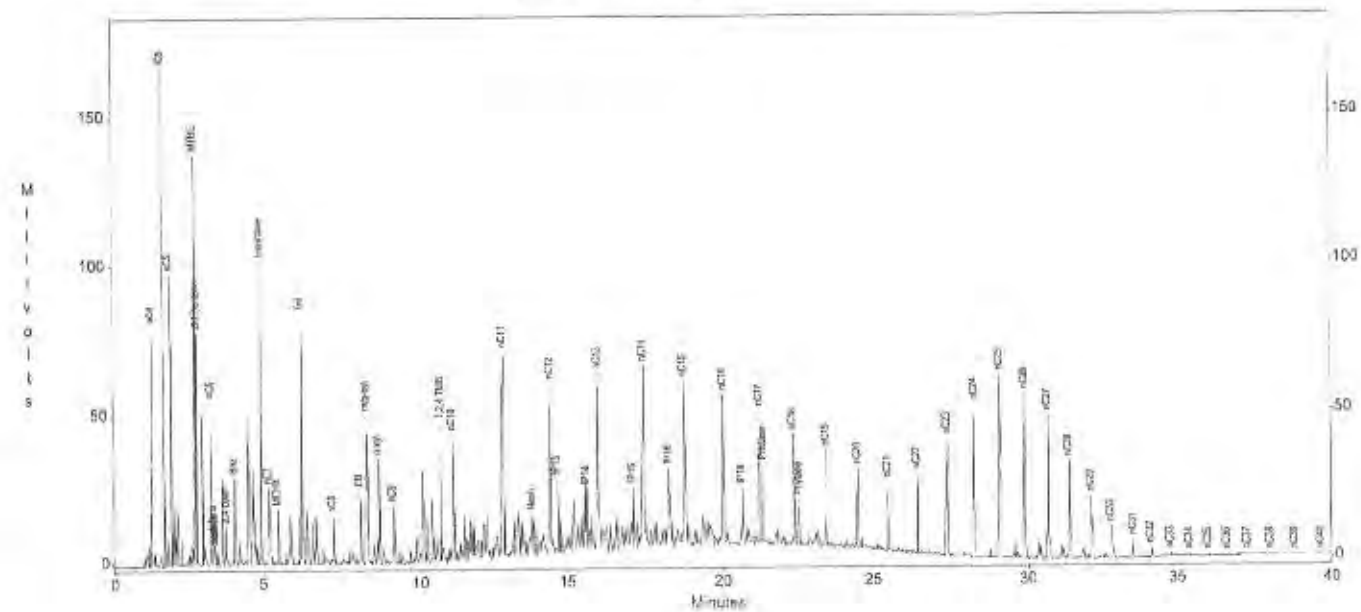


Channel A Results

Peak	Area	Height
nC4	42592	30230
nC5	112797	167076
nC6	66134	97586
MTBE	142353	137876
2M Pentane	69993	77898
nC6	54401	54329
Benzene a	9846	8991
Benzene b	5756	5007
Benzene c	5024	4557
2,4 DMP	12957	12586
Bnz	35841	25414
Isooctane	155424	102100
nC7	32523	25436
MCH	22562	18595
Tol	141048	84016
nC8	19543	15848
EB	35082	24513
m/p-xyl	123412	49303
o-xyl	55404	35324
nC9	29567	19103
1,2,4 TMB	63819	46737
nC10	69118	42593
nC11	123744	69212
Naph	29109	14234
nC12	125476	57986
IP13	54015	25472
IP14	32035	21762
nC13	122731	55587
IP15	42939	21082
nC14	161565	61636
IP16	62302	26097
nC15	109125	54125
nC16	118010	51042
IP18	49661	19934
nC17	95950	43158
Pristane	62496	27303
nC18	75973	37746
Phytane	31648	15637
nC19	81775	32633
nC20	63838	26912
nC21	41659	23191
nC22	53027	28884
nC23	86551	35712
nC24	133671	61486
nC25	158995	61470
nC26	162267	55461
nC27	122660	46269
nC28	75984	32713
nC29	40955	20813
nC30	21303	10698
nC31	9876	5735
nC32	5093	2925
nC33	2702	1491
nC34	1560	787
nC35	861	401
nC36	412	222
nC37	326	127
nC38	155	56
nC39	133	40
nC40	134	29

BURNS McDONNELL

Request for Chemical Analysis and Chain of Custody Record

Burns & McDonnell Engineering
1431 Opus Place
Downers Grove, Illinois 60515
Phone: (630) 724-3200 Fax: (630) 724-3201

Attention: Sindy Panagiotopoulos
SPanagiotopoulos@burnsmcd.com

Laboratory: GW/S Environmental Consulting
Address: 11619 S. Hudson Place
City/State/ZIP: Tulsa, OK 74137
Telephone: 918-298-9849

Document Control No.: 97859-2017-01
Lab. Reference No. or Episode No.:

Project Number: 97859

Site Name: ASIG MKE

Sample Number			Sample Event		Sample Depth (in feet)		Sample Collected		Sample Type: Matrix			Number of Containers	Parameter/Method Code: 6C/FID Fingerprint						Remarks
Group of SWMU Name	Sample Point	Sample Designator	Round	Year	From	To	Date	Time	Liquid	Solid	Gas								
GS-Creek	-01		—	—	—	—	5/2/17	1500	X			2	X						EPA 8015M

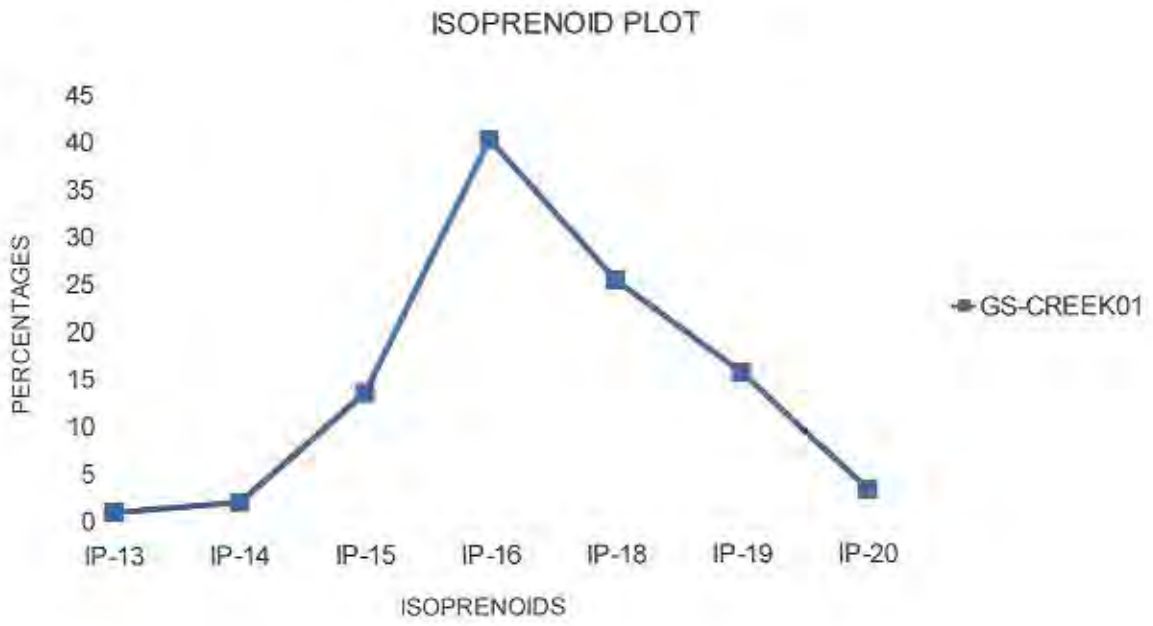
S. Panagiotopoulos 5/2/17

Sampler (signature):		Sampler (signature):	Custody Seal Number	Special Instructions:
Sindy Panagiotopoulos		Steve W. Schmidt 5-9-17		48-hr tat.
Relinquished By (signature): 1. Sindy Panagiotopoulos	Date/Time 5/2/17 1500	Received By (signature): Federal Express	Date/Time	Ice Present in Container: Yes ___ No ___
Relinquished By (signature): 2. Steve W. Schmidt	Date/Time 5-9-17	Received By (signature): Bruce Stockelson	Date/Time 5-5-17/1500	Temperature Upon Receipt:

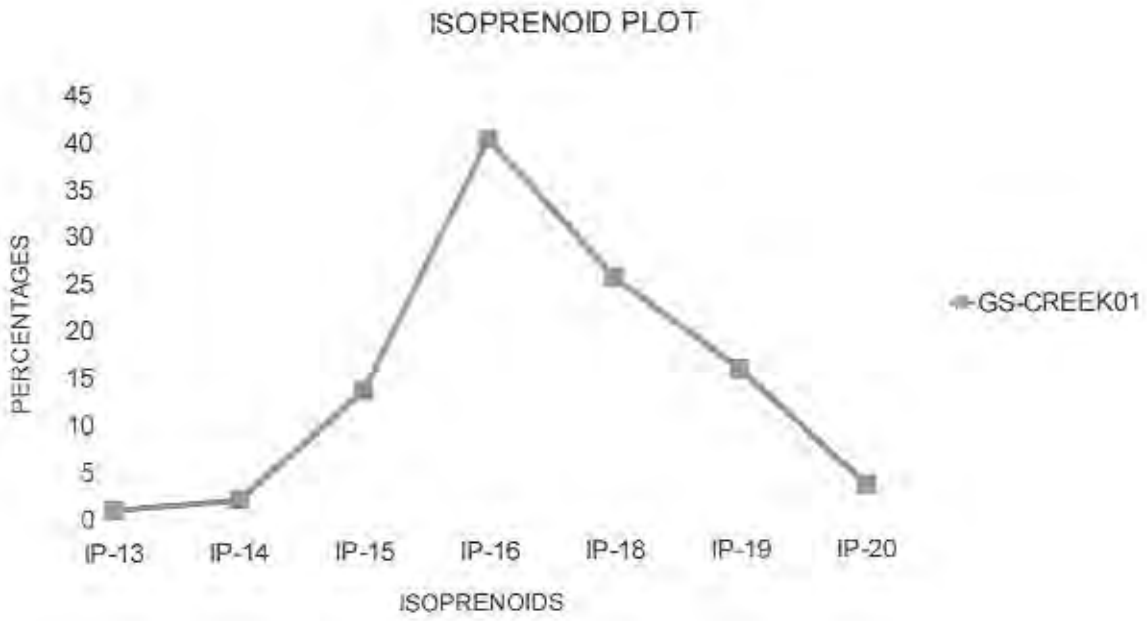
Laboratory Comments: LLYOD LANDRETH 918.296.0460

040915 Form WCD-KC1-CHI

	GS-CREEK01
IP-13	0.9
IP-14	1.9
IP-15	13.4
IP-16	40.1
IP-18	25.2
IP-19	15.4
IP-20	3.1



	GS-CREEK01
IP-13	0.9
IP-14	1.9
IP-15	13.4
IP-16	40.1
IP-18	25.2
IP-19	15.4
IP-20	3.1



GW/S Environmental Consulting LLC

GENE W. SCHMIDT, CGWP & PHG
Specializing in Forensics of Petroleum Hydrocarbon
Contamination of Groundwater and Soils
www.gwsconsulting.co

11619 S. Hudson Place
Tulsa, Oklahoma 74137-8532

(O) 918-298-9849
envirodog@aol.com

Facsimile Transmittal Sheet

To: LANCE SUMMERS

From: Gene W. Schmidt

Phone:

Pages: 13

Fax: 1.630.724.3201

Date: 21 JUNE 17

cc:

Phone:

Fax Phone:

Notes/Comments

GW/S Environmental Consulting LLC
GENE W. SCHMIDT, CGWP & PHG
Specializing in Forensics of Petroleum Hydrocarbon Contamination of Groundwater and Soils
www.gwsconsulting.co

21 June 2017

Lance Summers
BURNS & McDONNELL ENGINEERING
1431 Opus Place
Downers Grove, IL 60515

ASIG MKE

Attached are the gas chromatograms (GC) for the water samples, Storm Grate-02, Outfall 1-02 and Outfall 2-02, collected on 18 June 2017 and received by us on 20 June 2017 for our analytical examination and forensic evaluation. Next day turnaround was requested.

None of the three water samples contain any detectable concentrations of petroleum products or petroleum components to allow for any forensic evaluation of the presence of petroleum products other than the fact that no petroleum product were detected. Apparently, the water samples are not in near-by contact with any petroleum products or components components.

Gene W. Schmidt

Gene W. Schmidt

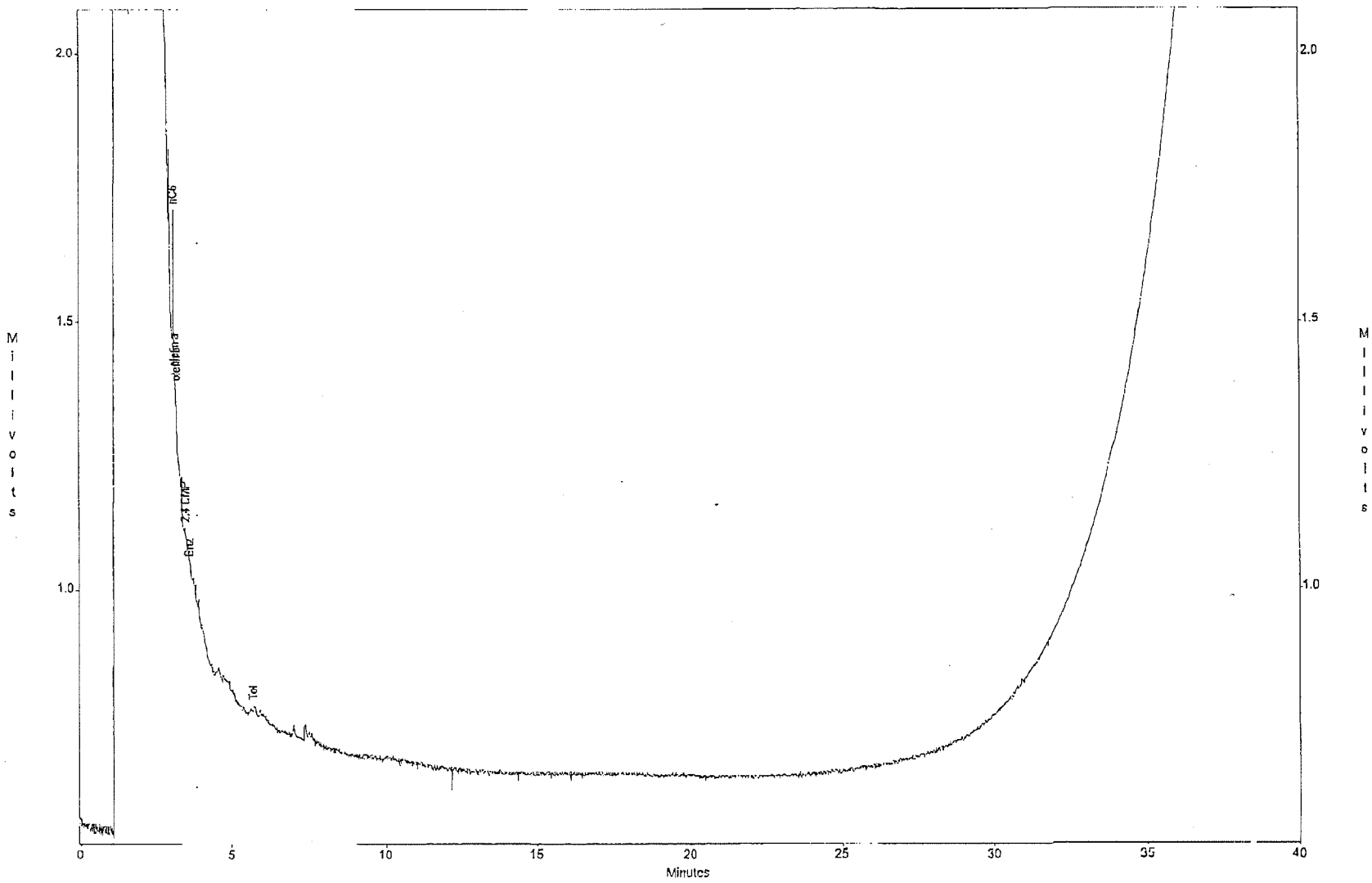
Attachments

11619 S. Hudson Place • Tulsa, Oklahoma 74137-8532
(O) 918-298-9849 ~ (C) 918-261-4650 ~ envirodog@aol.com

Torkelson Geochemistry, Inc.

ASIG MKE Site
Sample ID : Storm Grate-02
Acquired : Jun 21, 2017 09:12:33

c:\ezchrom\chrom\17073\stormgrt.sl -- Channel A

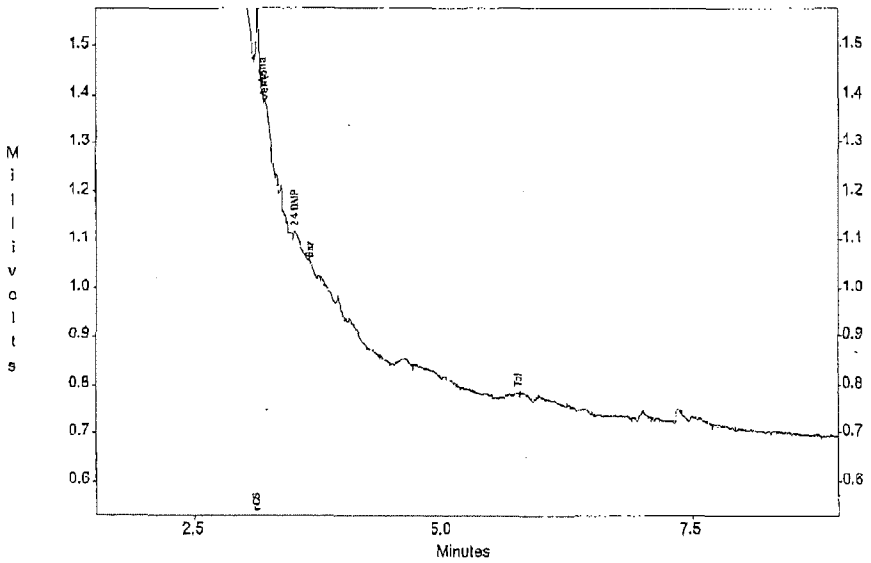


GW/S Environmental
9182989849
p.3

Torkelson Geochemistry, Inc.

ASIG MKE Site
Sample ID : Storm Grate-02
Acquired : Jun 21, 2017 09:12:33

c:\ezchrom\chrom\17073\stormgrt.sl -- Channel A



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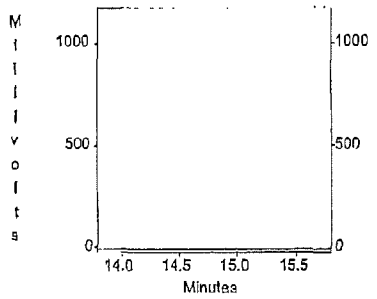

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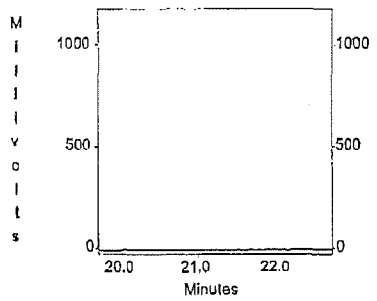

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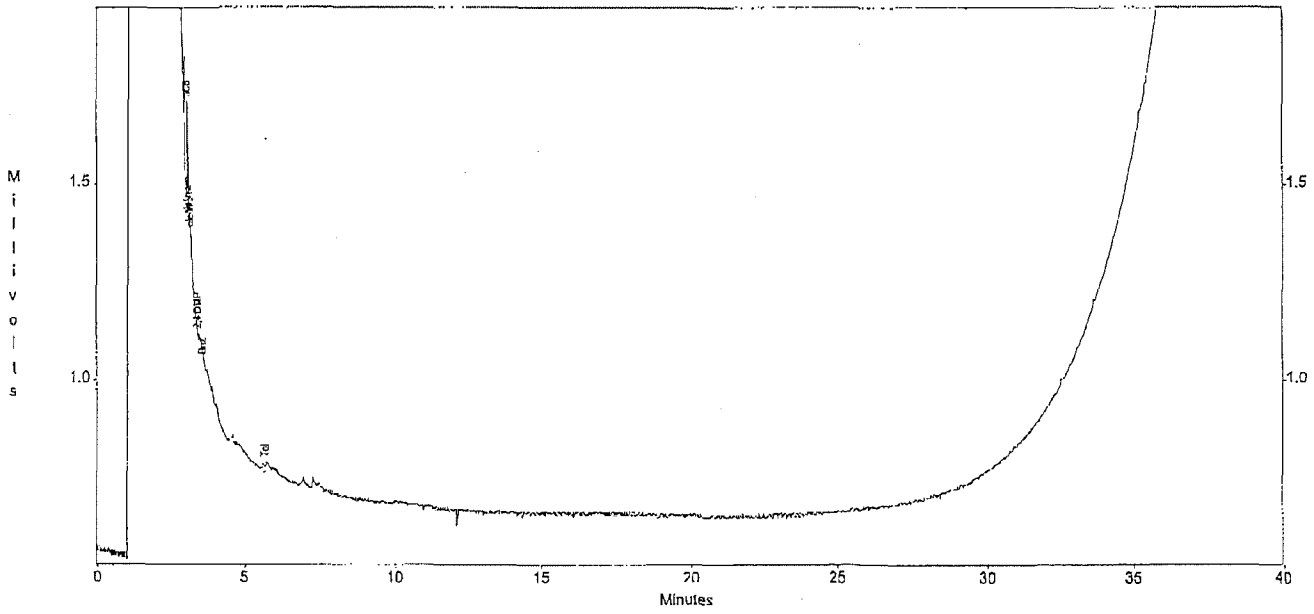


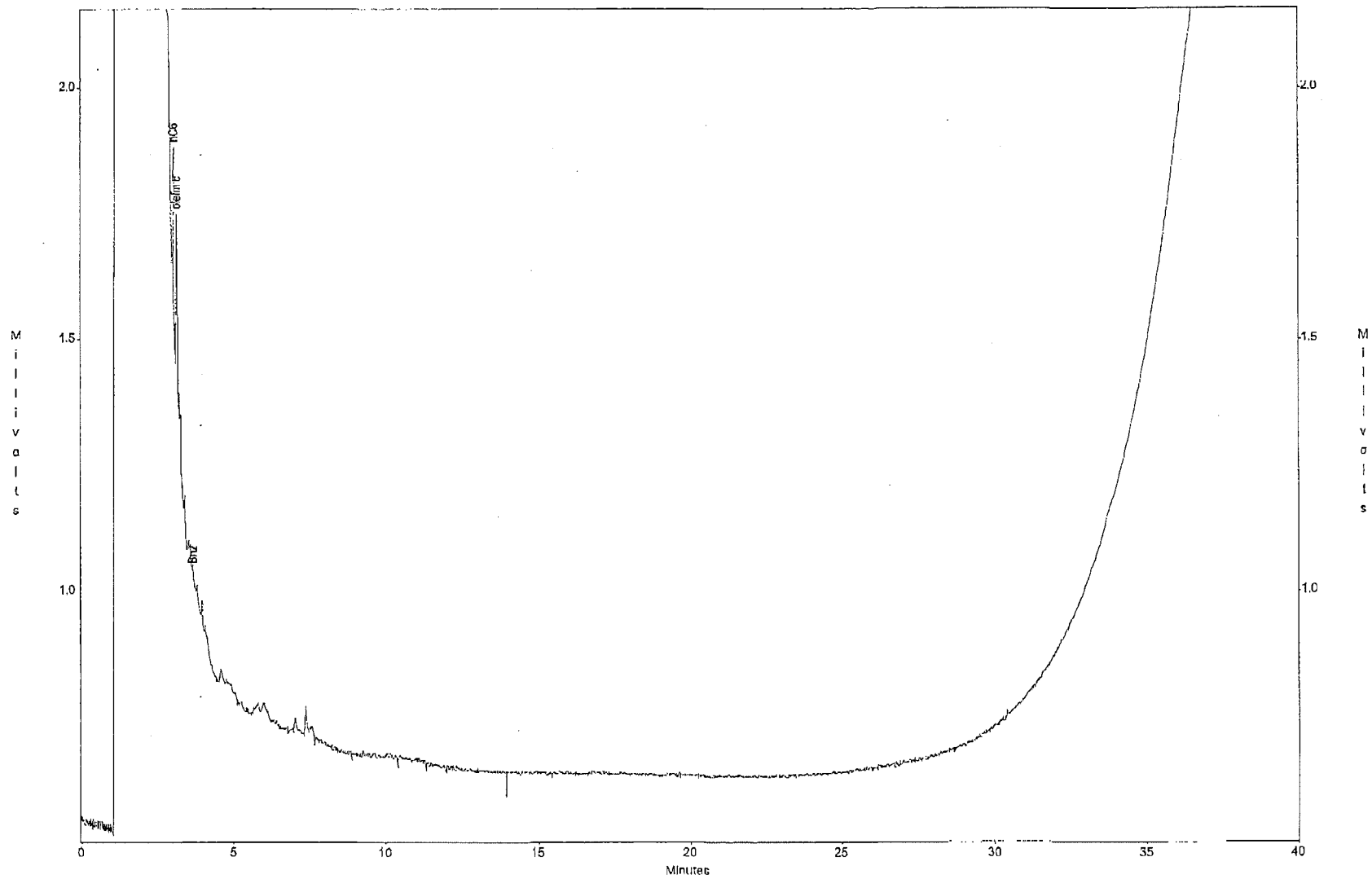
Channel A Results

Peak	Area	Height
nC6	451	289
olefin a	54	52
olefin c	0	0
olefin b	99	57
2,4 DMP	88	29
Bnz	32	14
Isooctane	0	0
nC7	0	0
MCHX	0	0
Tol	36	6
nC8	0	0
EB	0	0
m/p xyl	0	0
o-xyl	0	0
nC9	0	0
1,2,4 TMB	0	0
nC10	0	0
nC11	0	0
Naph	0	0
nC12	0	0
IP13	0	0
IP14	0	0
nC13	0	0
IP15	0	0
nC14	0	0
IP16	0	0
nC15	0	0
nC16	0	0
IP18	0	0
nC17	0	0
Pristane	0	0
nC18	0	0
Phytane	0	0
nC19	0	0
nC20	0	0
nC21	0	0
nC22	0	0
nC23	0	0
nC24	0	0
nC25	0	0
nC26	0	0
nC27	0	0
nC28	0	0
nC29	0	0
nC30	0	0
nC31	0	0
nC32	0	0
nC33	0	0
nC34	0	0
nC35	0	0
nC36	0	0
nC37	0	0
nC38	0	0
nC39	0	0
nC40	0	0

Torkelson Geochemistry, Inc.

ASIG MKE Site
Sample ID : Outfall 1-02
Acquired : Jun 21, 2017 10:01:02

c:\ezchrom\chrom\17073\outfall1.sl -- Channel A



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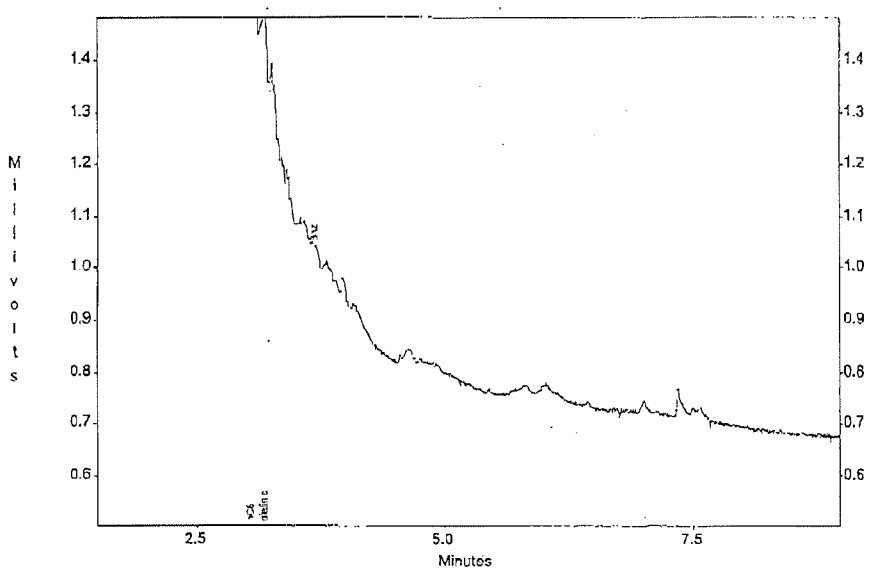
9182989849
p.5

Torkelson Geochemistry, Inc.

ASIG MKE Site
Sample ID : Outfall 1-02
Acquired : Jun 21, 2017 10:01:02

c:\ezchrom\chrom\17073\outfall1.sl -- Channel A



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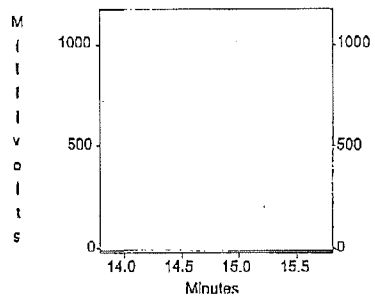

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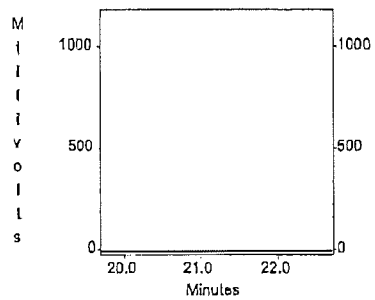

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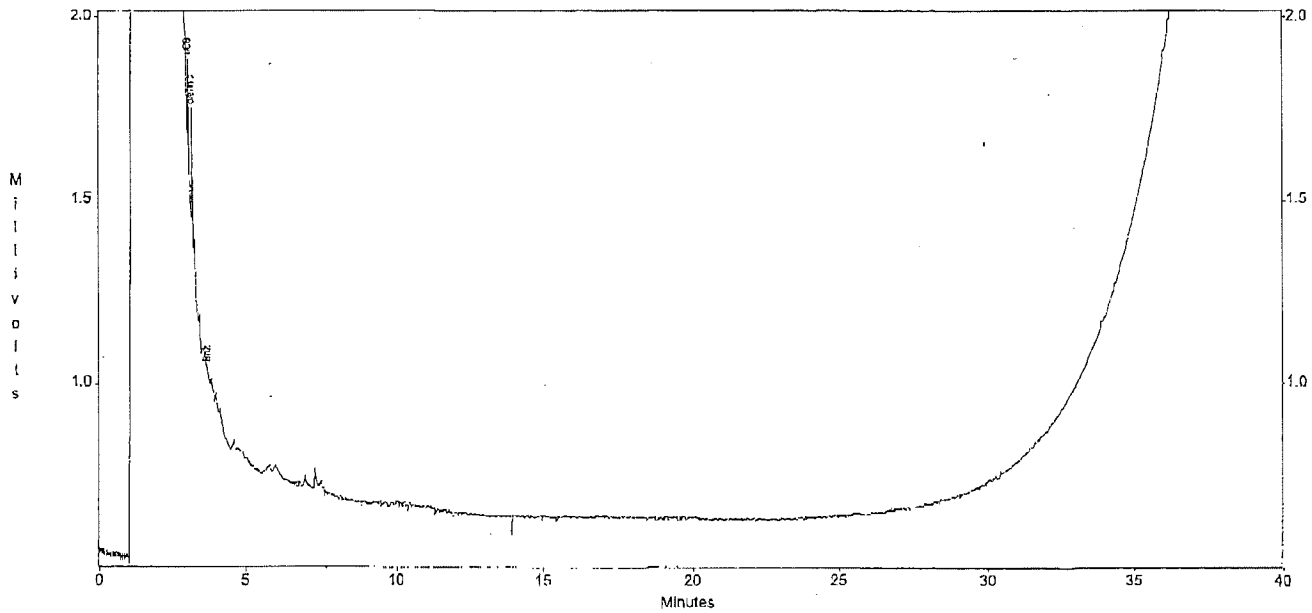


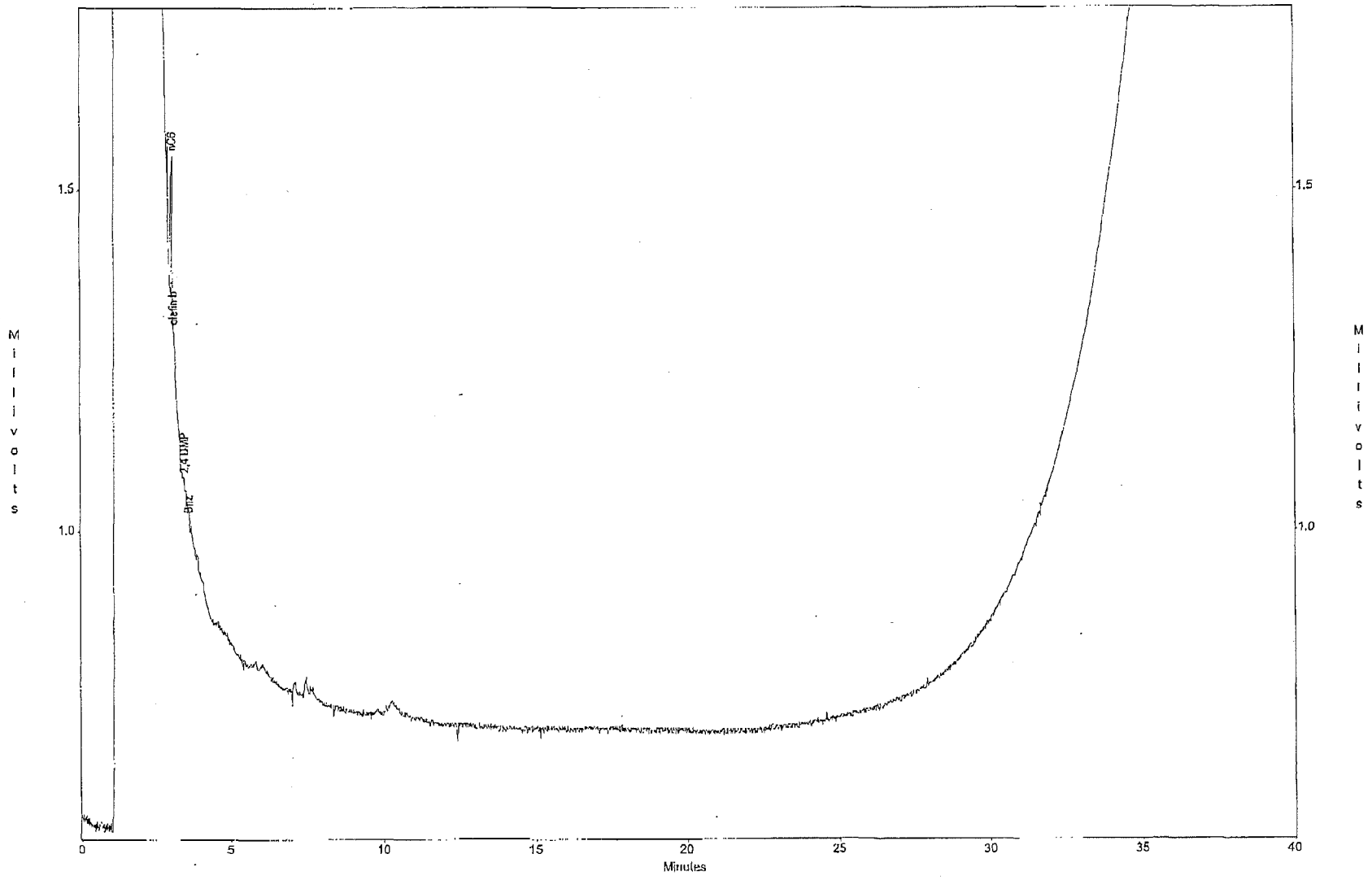
Channel A Results

Peak	Area	Height
nC6	525	275
olefin a	0	0
olefin b	0	0
olefin c	566	354
2,4 DNP	0	0
Bnz	52	21
Isooctane	0	0
nC7	0	0
MCHX	0	0
Tol	0	0
nC8	0	0
Eb	0	0
m/p xyl	0	0
o xyl	0	0
nC9	0	0
1,2,4 TMB	0	0
nC10	0	0
nC11	0	0
Naph	0	0
nC12	0	0
IP13	0	0
IP14	0	0
nC13	0	0
IP15	0	0
nC14	0	0
IP16	0	0
nC15	0	0
nC16	0	0
IP18	0	0
nC17	0	0
Pristane	0	0
nC18	0	0
Phytane	0	0
nC19	0	0
nC20	0	0
nC21	0	0
nC22	0	0
nC23	0	0
nC24	0	0
nC25	0	0
nC26	0	0
nC27	0	0
nC28	0	0
nC29	0	0
nC30	0	0
nC31	0	0
nC32	0	0
nC33	0	0
nC34	0	0
nC35	0	0
nC36	0	0
nC37	0	0
nC38	0	0
nC39	0	0
nC40	0	0

Torkelson Geochemistry, Inc.

ASIG MKE Site
Sample ID : Outfall 2-02
Acquired : Jun 21, 2017 08:23:05

c:\ezchrom\chrom\17073\outfall2.sl – Channel A

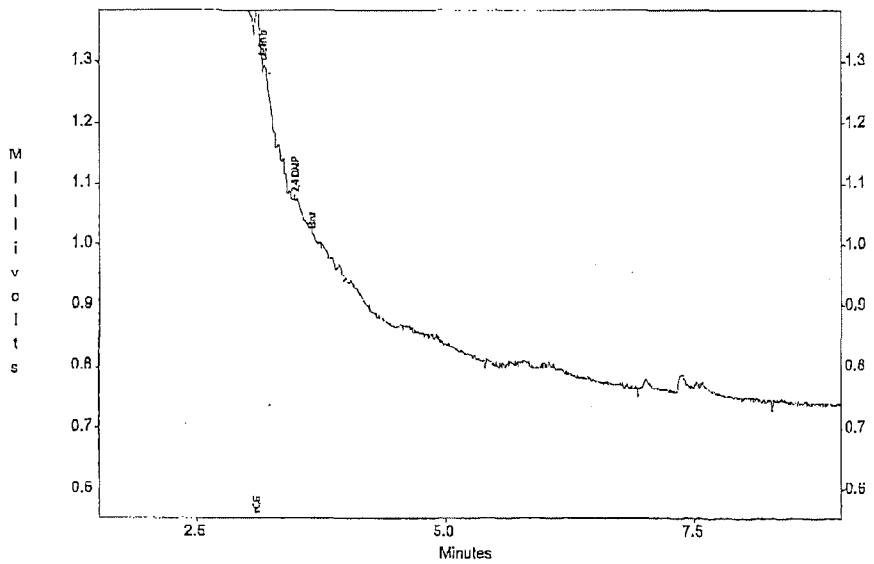


GW/S Environmental
9182989849
p.7

Torkelson Geochemistry, Inc.

ASIG MKE Site
Sample ID : Outfall 2-02
Acquired : Jun 21, 2017 08:23:05

c:\ezchrom\chrom\17073\outfall2.sl -- Channel A



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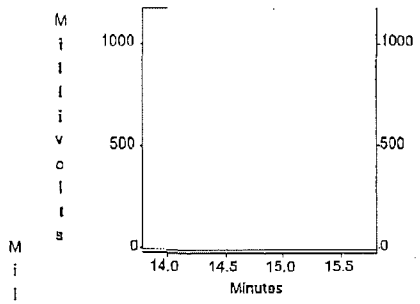

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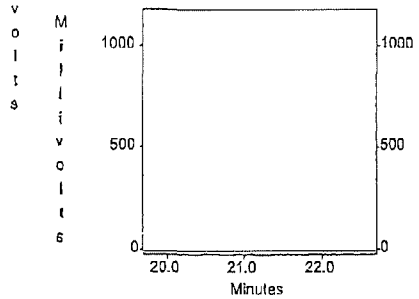

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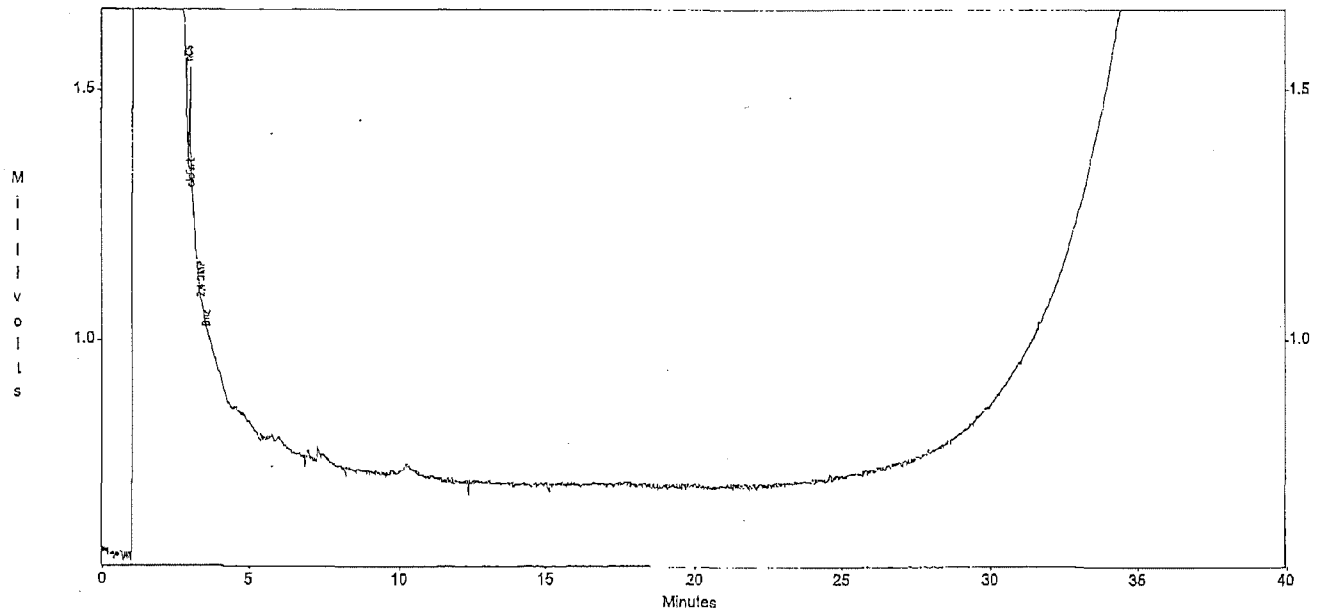


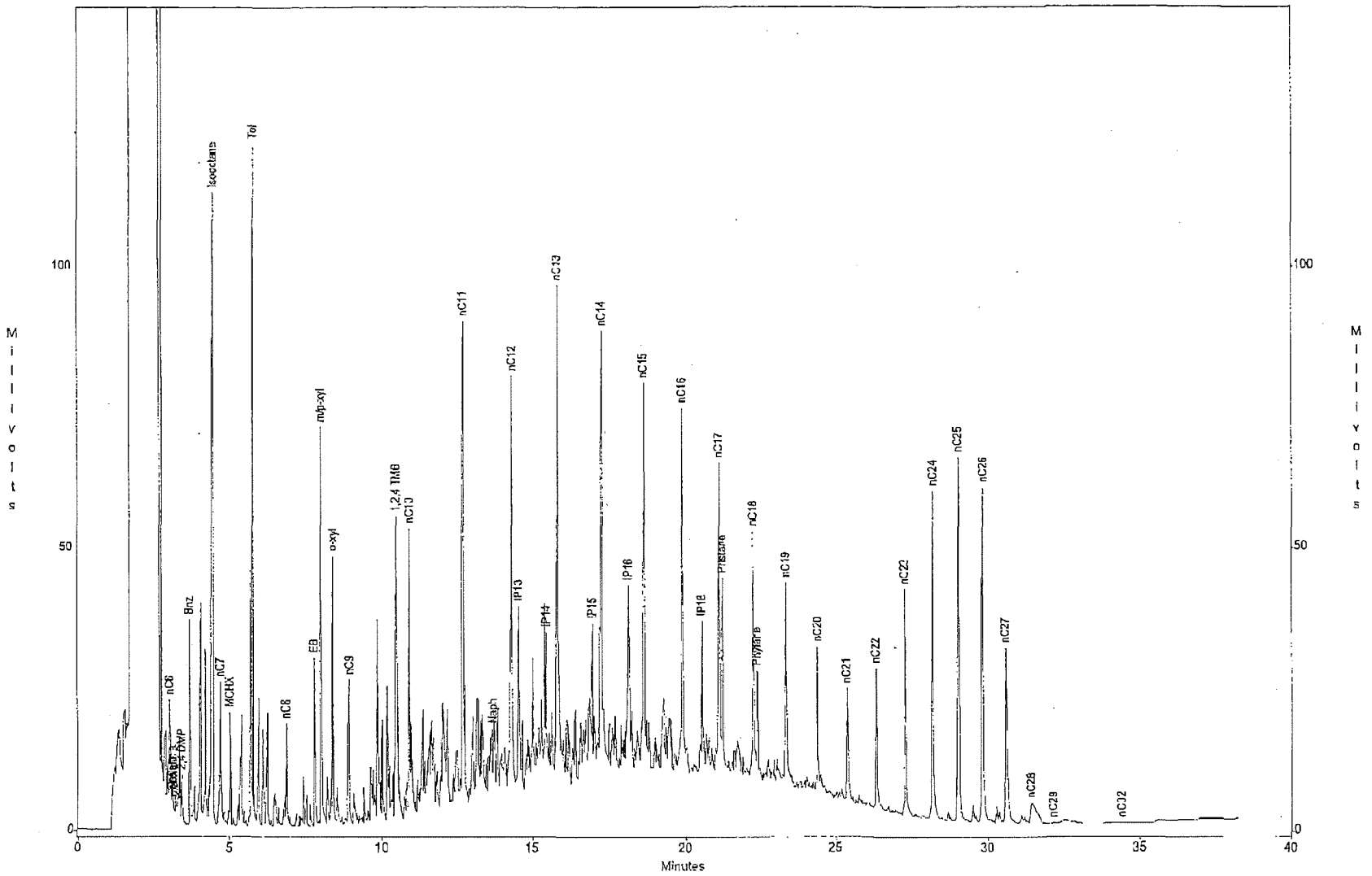
Channel A Results

Peak	Area	Height
nC6	437	230
olefin a	0	0
olefin b	176	52
olefin c	0	0
2,4 DMP	65	21
Bnz	14	7
Isooctane	0	0
nC7	0	0
MCHX	0	0
Tol	0	0
nC8	0	0
EB	0	0
m/p-xyl	0	0
o-xyl	0	0
nC9	0	0
1,2,4 TMB	0	0
nC10	0	0
nC11	0	0
Naph	0	0
nC12	0	0
IP13	0	0
IP14	0	0
nC13	0	0
IP15	0	0
nC14	0	0
IP16	0	0
nC15	0	0
nC16	0	0
IP18	0	0
nC17	0	0
Pristane	0	0
nC18	0	0
Phytane	0	0
nC19	0	0
nC20	0	0
nC21	0	0
nC22	0	0
nC23	0	0
nC24	0	0
nC25	0	0
nC26	0	0
nC27	0	0
nC28	0	0
nC29	0	0
nC30	0	0
nC31	0	0
nC32	0	0
nC33	0	0
nC34	0	0
nC35	0	0
nC36	0	0
nC37	0	0
nC38	0	0
nC39	0	0
nC40	0	0

Torkelson Geochemistry, Inc.

ASIG MKE Site
Sample ID : *Gas/Dies/Wax std*
Acquired : Jun 21, 2017 11:38:46

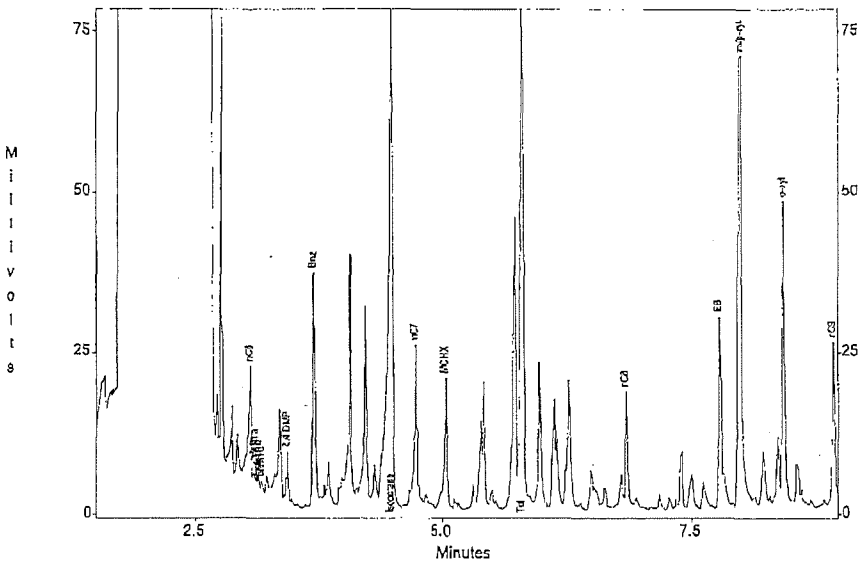
c:\ezchrom\chrom\17073\gadiwax.sl2 -- Channel A



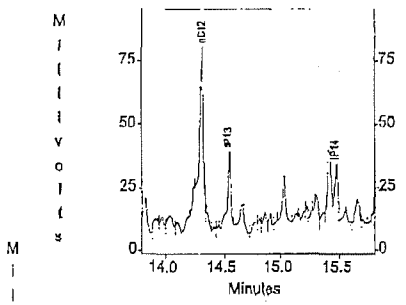
Torkelson Geochemistry, Inc.

ASIG MKE Site
Sample ID : Gas/Dies/Wax std
Acquired : Jun 21, 2017 11:38:46

c:\ezchrom\chrom\17073\gadiwax.sl2 – Channel A



c:\ezchrom\chrom\17073\gadiwax.sl2 – Channel A



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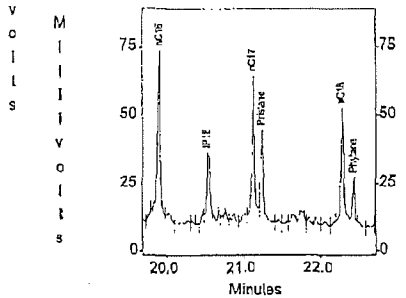
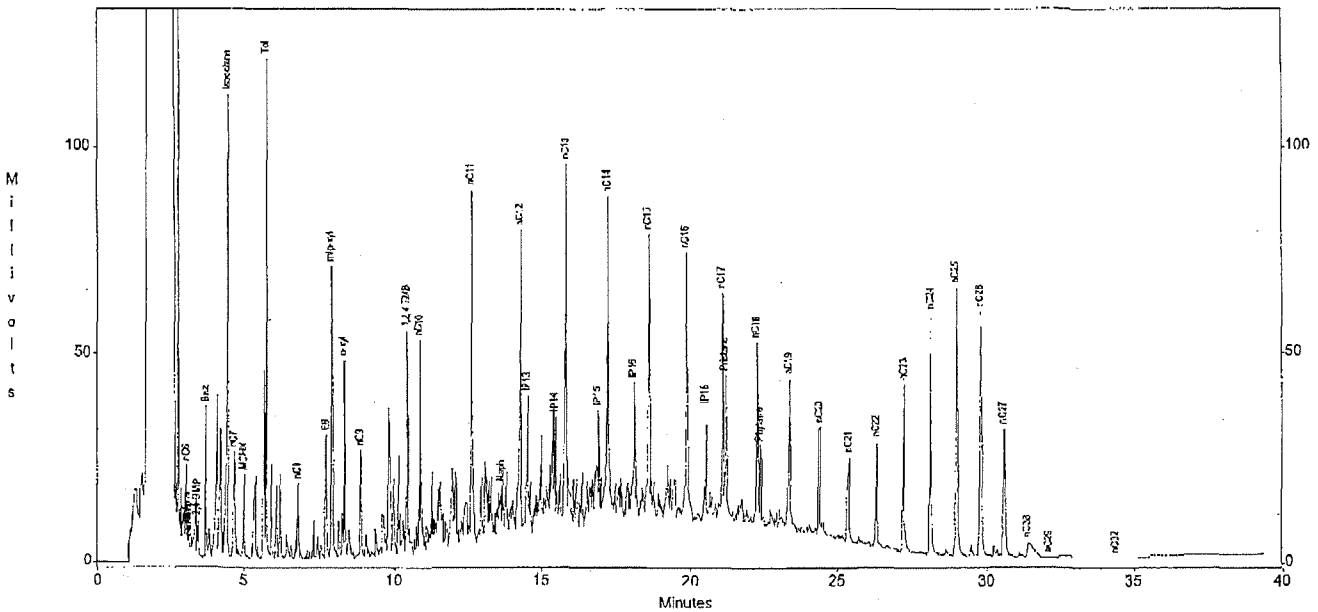


c:\ezchrom\chrom\17073\gadiwax.sl2 – Channel A



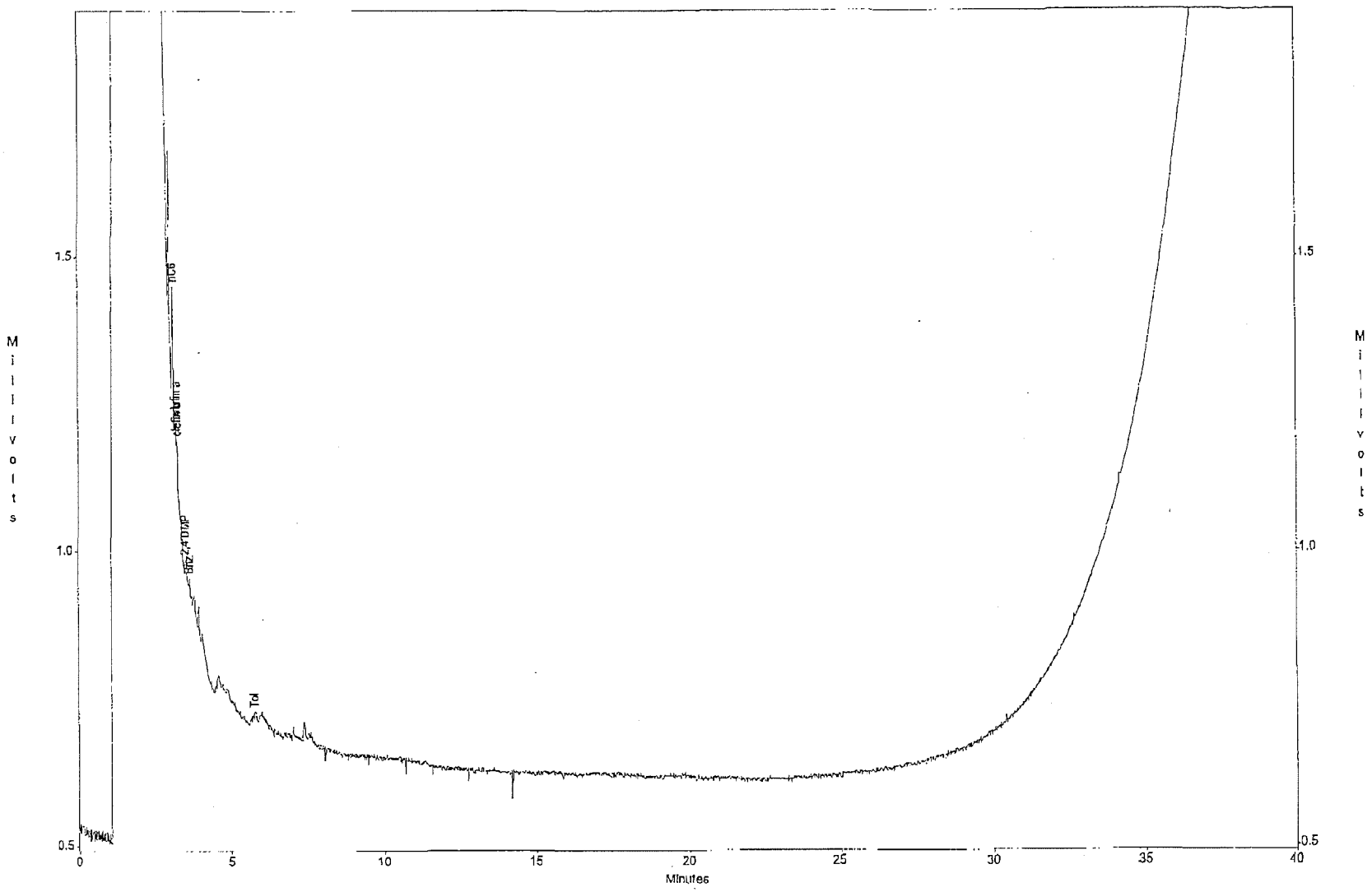
Channel A Results

Peak	Area	Height
nC6	27281	18252
olefin a	4187	4035
olefin b	2316	2541
olefin c	1654	1574
2,4 DMP	11279	7995
Bnz	50292	36325
Isooctane	215327	111882
nC7	45559	25381
MCHX	34263	20195
Tol	224887	120684
nC8	38157	18071
EB	50614	29753
m/p-xyl	189804	78156
o-xyl	69218	47634
nC9	49251	25595
1,2,4 TMB	134560	58442
nC10	111153	51003
nC11	189804	85091
Naph	24189	12049
nC12	182172	73568
IP13	86202	32858
IP14	37610	23339
nC13	207854	86279
IP15	39553	24903
nC14	193817	75107
IP16	87113	32223
nC15	177442	68272
nC16	182043	64320
IP18	57788	24629
nC17	148138	54199
Pristane	80556	34204
nC18	123889	43726
Phytane	45552	19048
nC19	96522	35274
nC20	67534	25674
nC21	49371	19867
nC22	63028	24863
nC23	108161	39853
nC24	163839	57937
nC25	187668	64288
nC26	177206	50903
nC27	116917	30751
nC28	10527	3599
nC29	712	153
nC30	0	0
nC31	0	0
nC32	27	11
nC33	0	0
nC34	0	0
nC35	0	0
nC36	0	0
nC37	0	0
nC38	0	0
nC39	0	0
nC40	0	0

Torkelson Geochemistry, Inc.

ASIG MKE Site
Sample ID : Solvent
Acquired : Jun 21, 2017 12:27:38

c:\ezchrom\chrom\17073\solvent.sl -- Channel A

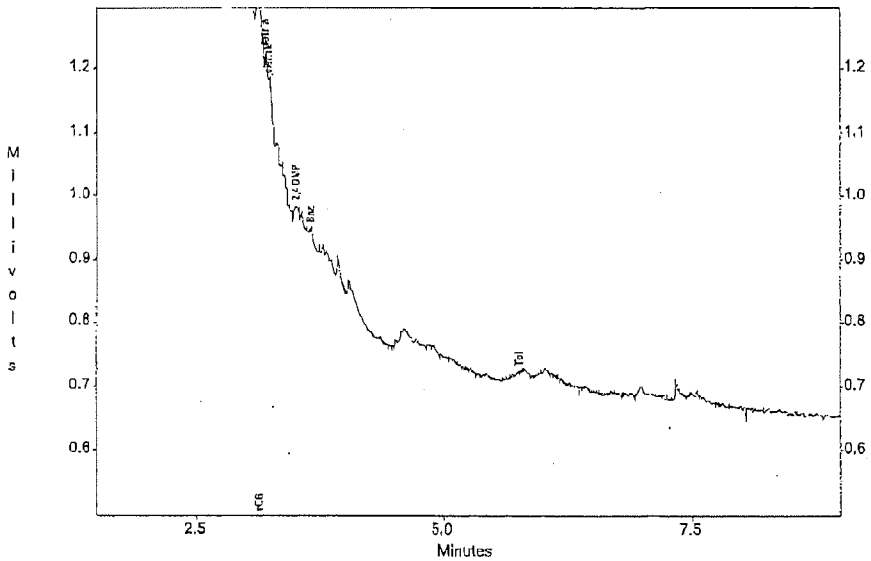


GW/S Environmental
9182989849
p.11

Torkelson Geochemistry, Inc.

ASIG MKE Site
Sample ID : Solvent
Acquired : Jun 21, 2017 12:27:38

c:\ezchrom\chrom\17073\solvent.sl -- Channel A



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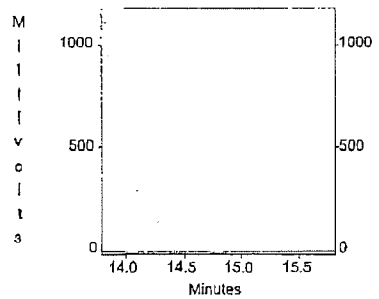
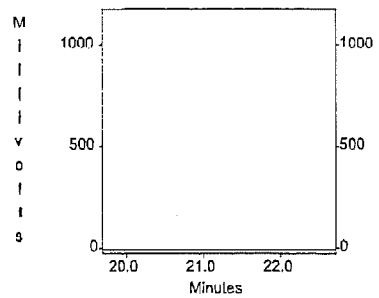
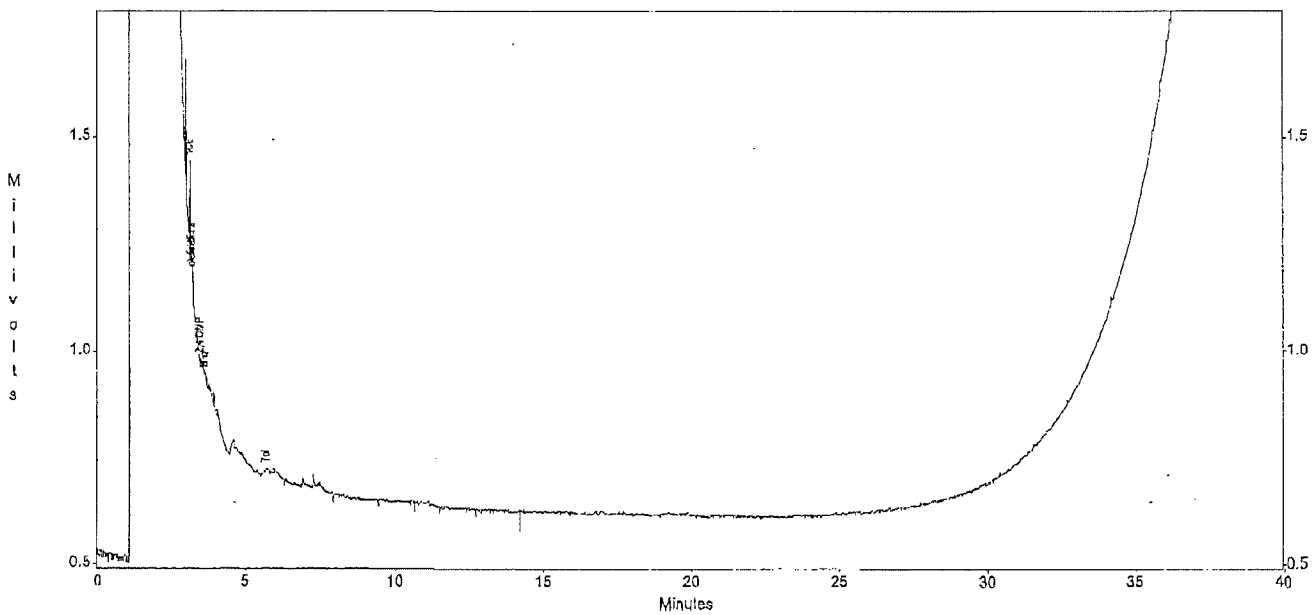


c:\ezchrom\chrom\17073\solvent.sl -- Channel A



c:\ezchrom\chrom\17073\solvent.sl -- Channel A



Channel A Results

Peak	Area	Height
nC6	417	213
olefin c	0	0
olefin a	104	62
olefin b	93	49
2,4 DMP	61	31
Bnz	98	31
Isooctane	0	0
nC7	0	0
MCHX	0	0
Tol	82	13
nC8	0	0
EB	0	0
m/p xyl	0	0
o xyl	0	0
nC9	0	0
1,2,4 TMB	0	0
nC10	0	0
nC11	0	0
Naph	0	0
nC12	0	0
IP13	0	0
IP14	0	0
nC13	0	0
IP15	0	0
nC14	0	0
IP16	0	0
nC15	0	0
nC16	0	0
IP18	0	0
nC17	0	0
Pristane	0	0
nC18	0	0
Phytane	0	0
nC19	0	0
nC20	0	0
nC21	0	0
nC22	0	0
nC23	0	0
nC24	0	0
nC25	0	0
nC26	0	0
nC27	0	0
nC28	0	0
nC29	0	0
nC30	0	0
nC31	0	0
nC32	0	0
nC33	0	0
nC34	0	0
nC35	0	0
nC36	0	0
nC37	0	0
nC38	0	0
nC39	0	0
nC40	0	0

BURNS & McDONNELL Request for Chemical Analysis and Chain of Custody Record

Burns & McDonnell Engineering
1431 Opus Place
Downers Grove, Illinois 60515
Phone: (630) 724-3200 Fax: (630) 724-3201
Attention: Lance Summers
lpsummers@burnsmcd.com

Laboratory: GW/S Environmental Consulting
Address: 11619 S. Hudson Place
City/State/ZIP: Tulsa, OK 74137
Telephone: 918-293-9549

Document Control No.: 99566-002-2017
Lab. Reference No. or Episode No.:

Project Number: 99566
Site Name: ASIG MLE

Sample Number: Group or SWMU Name	Sample Number: Sample Point	Sample Number: Sample Designator	Sample Event: Round	Sample Event: Year	Sample Depth (in feet): From	Sample Depth (in feet): To	Sample Collected: Date	Sample Collected: Time	Sample Type / Matrix: Liquid	Sample Type / Matrix: Solid	Sample Type / Matrix: Gas	Number of Containers	Parameter/Method Code: Chlorides 325.3						Remarks
Storm	Grate-02						6-15-17	0823	X			1	X						
Outfall	1-02						↓	0850	↓			1	X						
Outfall	2-02						↓	0912	↓			1	X						

6-16-17

Sampler (signature): Lance Summers
Sampler (signature):
Custody Seal Number: tracking 5061167340004
Special Instructions: 48 hr TAT

Relinquished By (signature)	Date/Time	Received By (signature)	Date/Time	Ice Present in Container	Temperature Upon Receipt
1.	6-19-17 1000	Rene W. Schmidt	6-20-17	Yes ☐ No ☐	
2. Rene W. Schmidt	6-20-17		6-20-17/1205	Laboratory Comments:	

040915 Form WCD-KC1-CHI

GW/S Environmental Consulting LLC

GENE W. SCHMIDT, CGWP & PHG
Specializing in Forensics of Petroleum Hydrocarbon
Contamination of Groundwater and Soils
www.gwsconsulting.co

11619 S. Hudson Place
Tulsa, Oklahoma 74137-8532

(O) 918-298-9849
envirodog@aol.com

Facsimile Transmittal Sheet

To: LANCE SUMMERS

From: Gene W. Schmidt

Phone:

Pages: 13

Fax: 1.630.724.3201

Date: 22 JUNE 17

CC:

Phone:

Fax Phone:

Notes/Comments

GW/S Environmental Consulting LLC
GENE W. SCHMIDT, CGWP & PHG
Specializing in Forensics of Petroleum Hydrocarbon Contamination of Groundwater and Soils
www.gwsconsulting.co

22 June 2017

Lance Summers
BURNS &MCDONNELL ENGINEERING
1431 Opus Place
Downers Grove, IL 60515

ASIG MKE-03 SERIES

Attached are the gas chromatograms for the water samples, Storm Grate-03, Outfall 01-03 and Outfall 012-03, collected on 20 June 2017 and received by us on 21 June 2017 for our analytical examination and forensic evaluation. Next day turnaround was requested.

None of the three water samples contain any detectable concentrations of petroleum products or petroleum components to allow for any forensic evaluation or the presence of petroleum products other than the fact that no petroleum products were detected. Apparently, the water samples are not in near by contact with any petroleum products or petroleum components. The lack of detectable petroleum products or components in the subject samples are the same as those sample results reported to you on 21 June 2017.

Gene W. Schmidt

Gene W. Schmidt

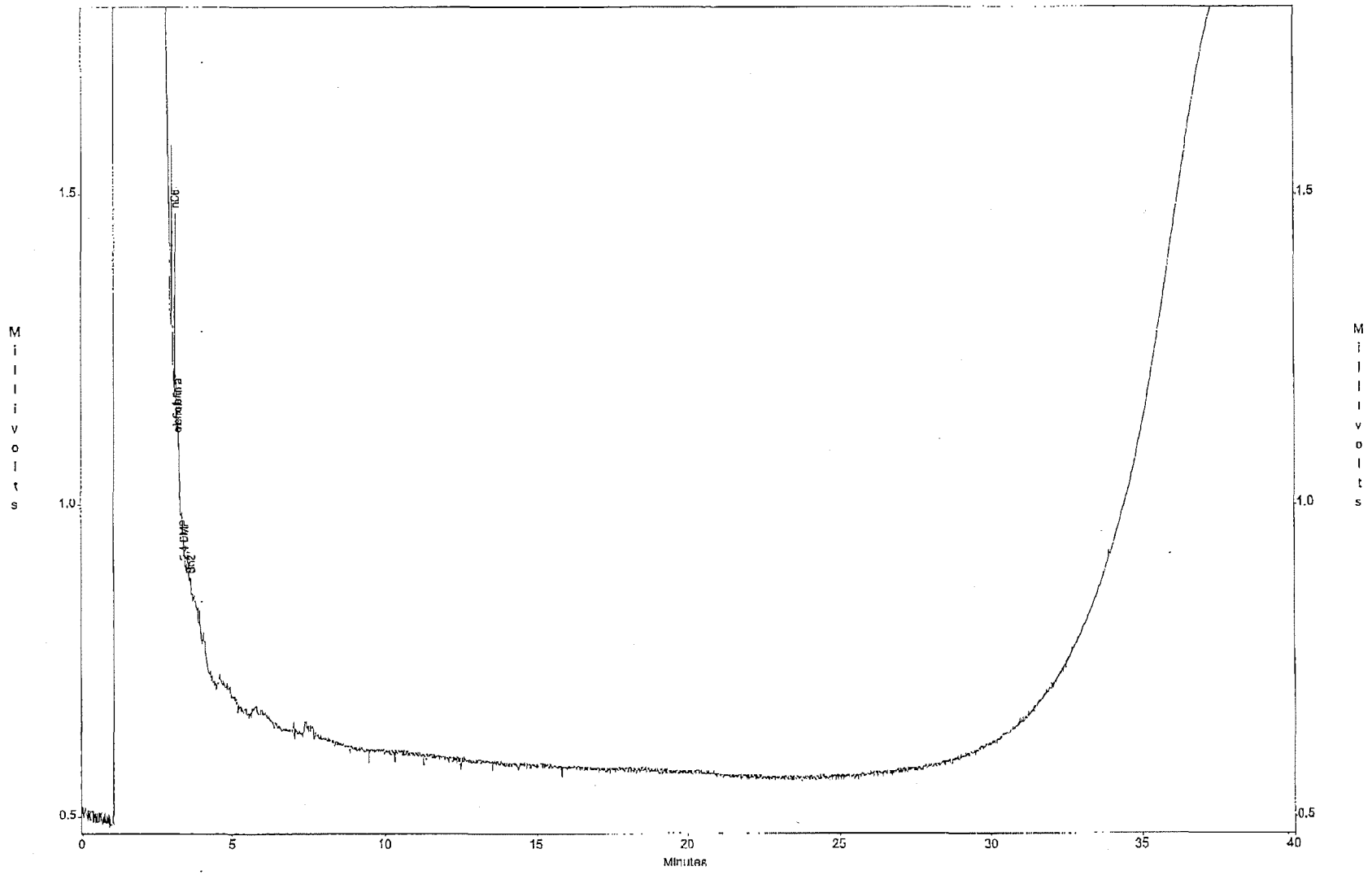
Attachments

11619 S. Hudson Place • Tulsa, Oklahoma 74137-8532
(O) 918-298-9849 ~ (C) 918-261-4650 ~ envirodog@aol.com

Torkelson Geochemistry, Inc.

ASIG MKE Site
Sample ID : Storm Grate-03
Acquired : Jun 21, 2017 19:01:23

c:\ezchrom\chrom\17073\strmgrt3.sl2 -- Channel A



GW/S Environmental
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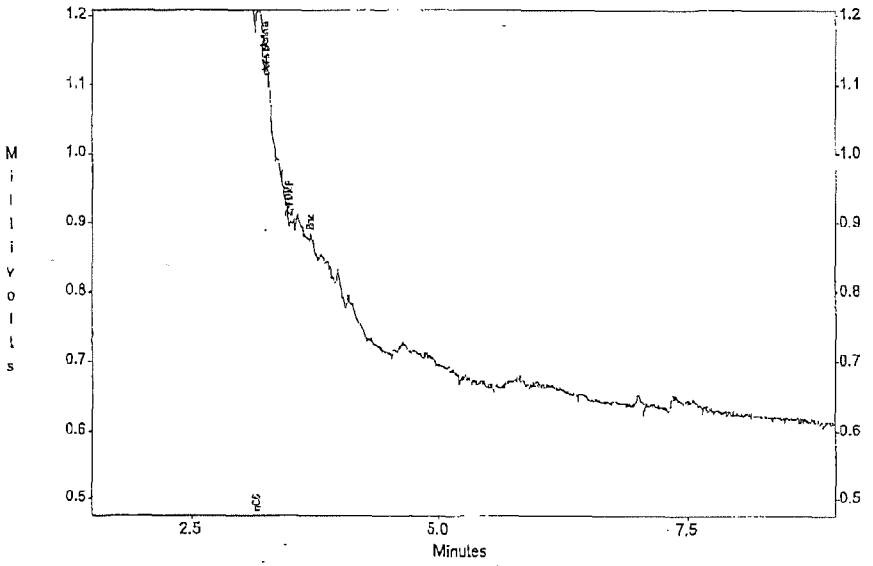
p.3

Torkelson Geochemistry, Inc.

ASIG MKE Site
Sample ID : Storm Grate-03
Acquired : Jun 21, 2017 19:01:23

c:\ezchrom\chrom\17073\strmgrt3.sl2 -- Channel A



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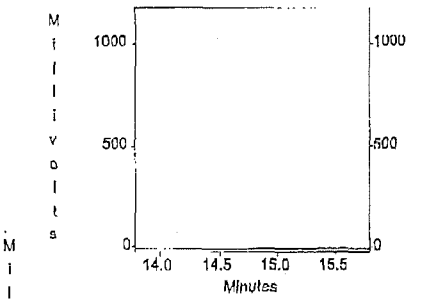

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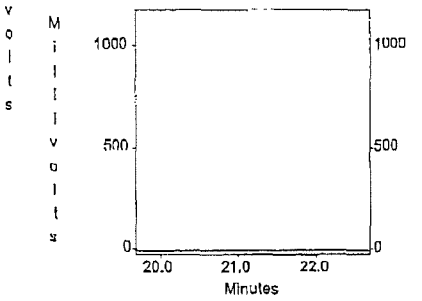

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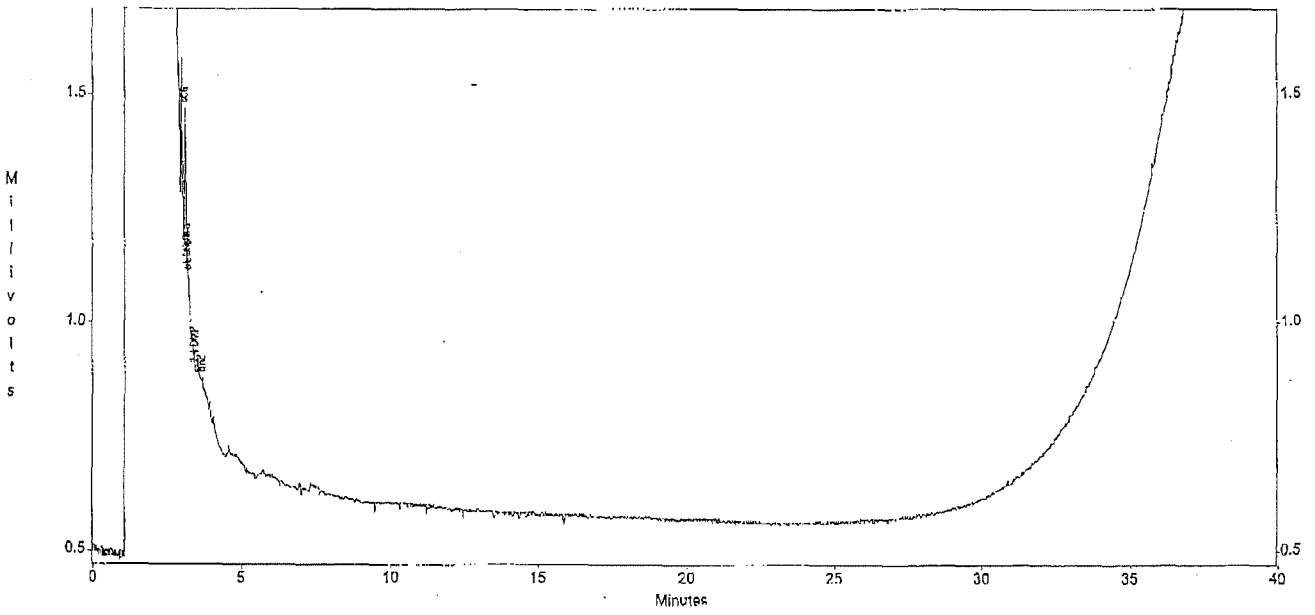


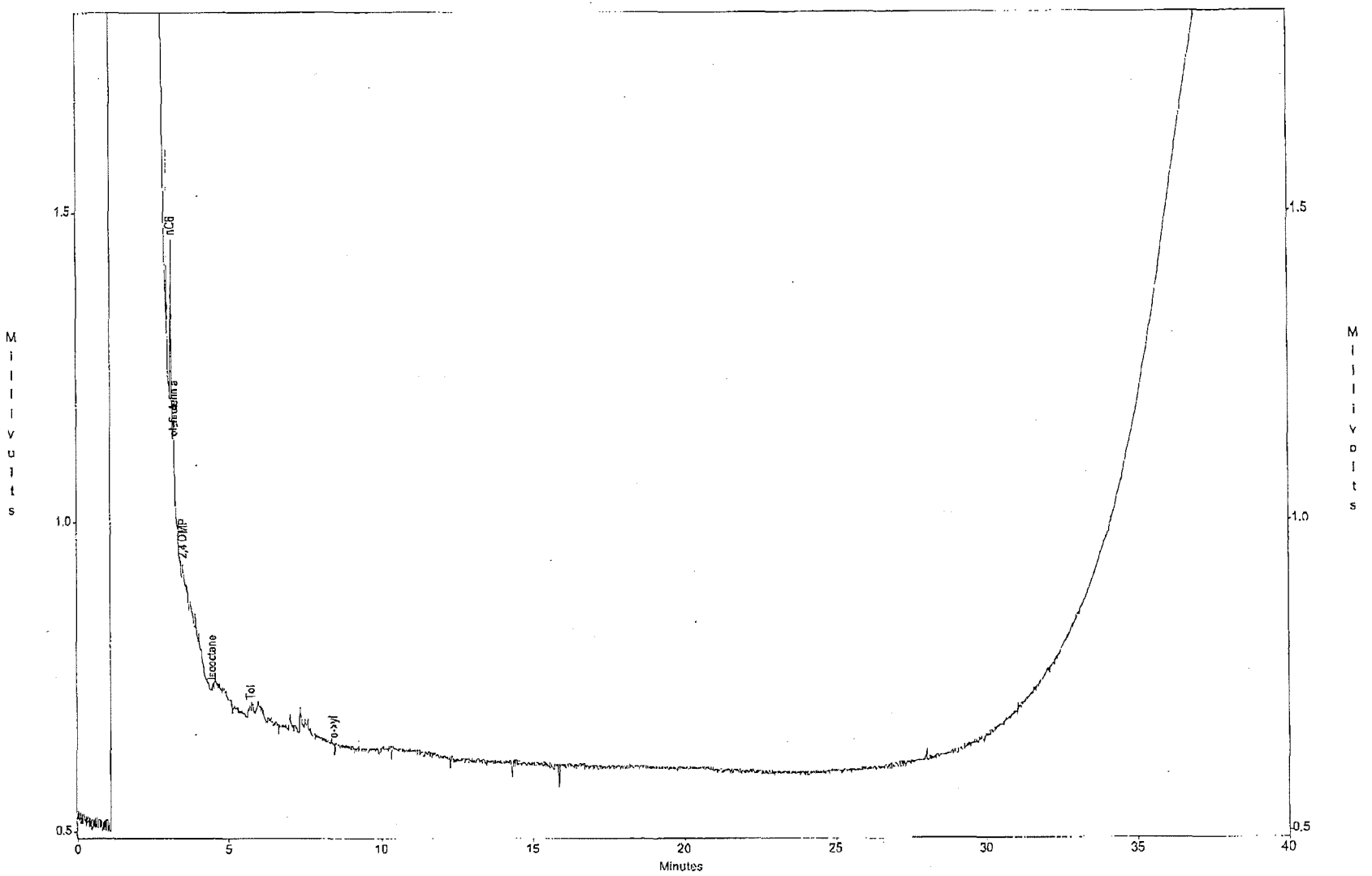
Channel A Results

Peak	Area	Height
nC6	579	336
olefin c	0	0
olefin a	110	71
olefin b	123	61
2,4 DMP	13	9
Bnz	14	13
Isooctane	0	0
nC7	0	0
MCHX	0	0
Tol	0	0
nC8	0	0
EB	0	0
m/p-xyl	0	0
o-xyl	0	0
nC9	0	0
1,2,4 TMB	0	0
nC10	0	0
nC11	0	0
Nash	0	0
nC12	0	0
IP13	0	0
IP14	0	0
nC13	0	0
IP15	0	0
nC14	0	0
IP16	0	0
nC15	0	0
nC16	0	0
IP18	0	0
nC17	0	0
Pristane	0	0
nC18	0	0
Phytane	0	0
nC19	0	0
nC20	0	0
nC21	0	0
nC22	0	0
nC23	0	0
nC24	0	0
nC25	0	0
nC26	0	0
nC27	0	0
nC28	0	0
nC29	0	0
nC30	0	0
nC31	0	0
nC32	0	0
nC33	0	0
nC34	0	0
nC35	0	0
nC36	0	0
nC37	0	0
nC38	0	0
nC39	0	0
nC40	0	0

Torkelson Geochemistry, Inc.

ASIG MKE Site
Sample ID : Outfall 01-03
Acquired : Jun 21, 2017 16:33:03

c:\ezchrom\chrom\17073\outfl1-3.sl -- Channel A

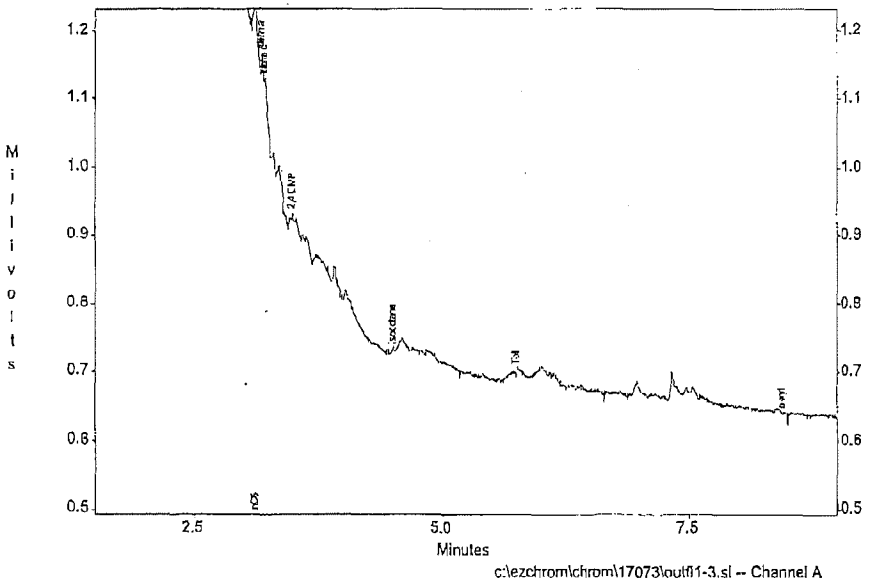


GW/S Environmental
9182989849
p.5

Torkelson Geochemistry, Inc.

ASIG MKE Site
Sample ID : Outfall 01-03
Acquired : Jun 21, 2017 16:33:03

c:\ezchrom\chrom\17073\outfl1-3.sl -- Channel A



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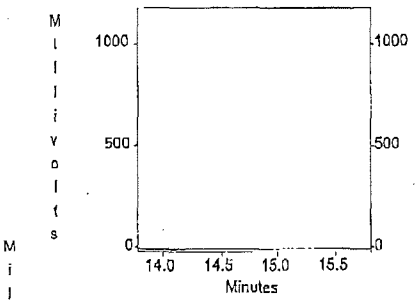

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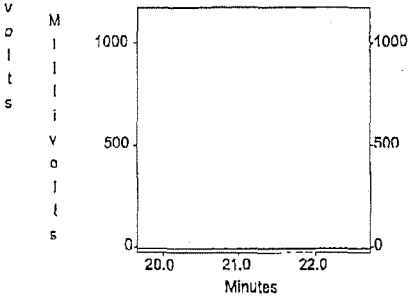

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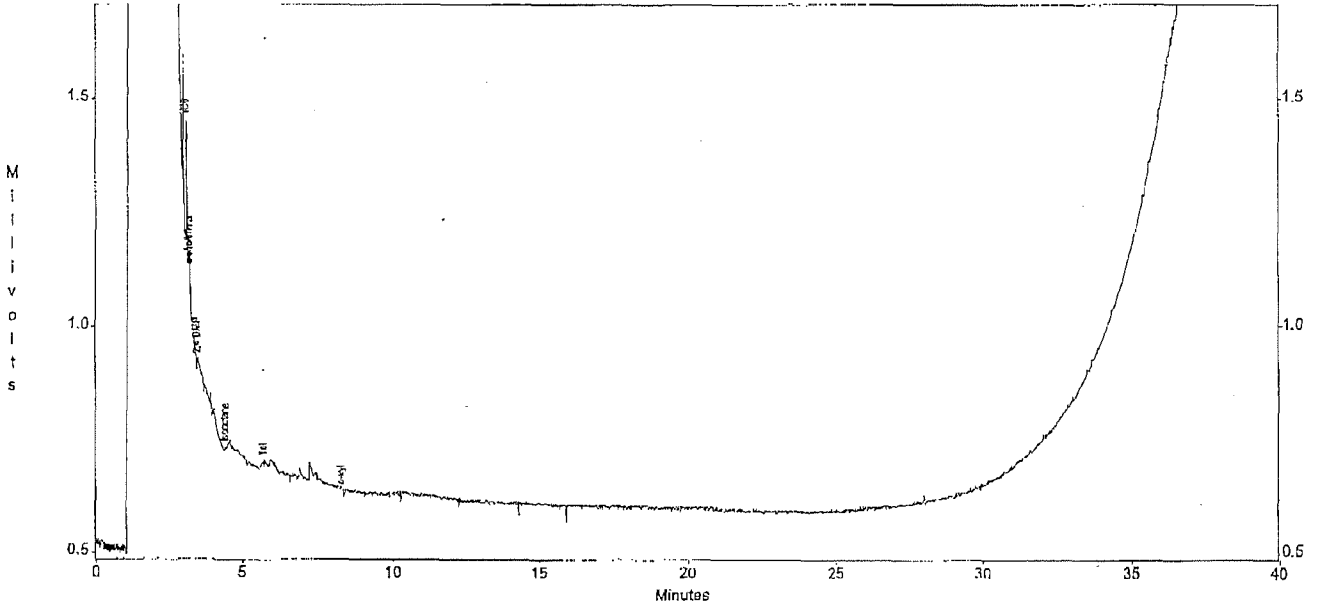


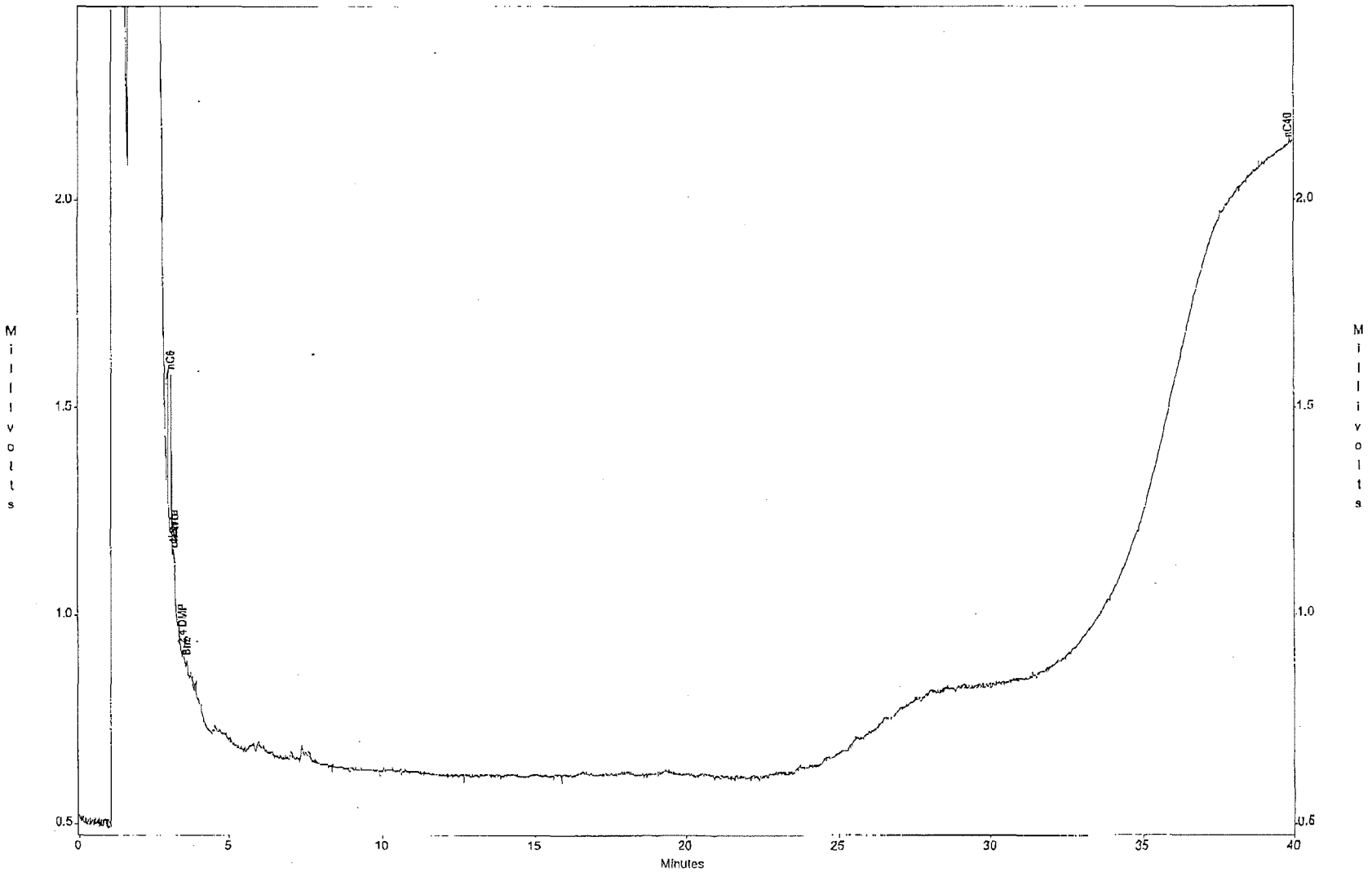
Channel A Results

Peak	Area	Height
nC6	542	292
olefin a	107	74
olefin b	106	60
olefin c	0	0
2,4 DMP	54	36
Benz	0	0
Isooctane	10	7
nC7	0	0
MCHX	0	0
Tol	37	8
nC8	0	0
EB	0	0
m/p xyl	0	0
o-xyl	39	9
nC9	0	0
1,2,4 TMB	0	0
nC10	0	0
nC11	0	0
Naph	0	0
nC12	0	0
IP13	0	0
IP14	0	0
nC13	0	0
IP15	0	0
nC14	0	0
IP16	0	0
nC15	0	0
nC16	0	0
IP18	0	0
nC17	0	0
Pristane	0	0
nC18	0	0
Phytane	0	0
nC19	0	0
nC20	0	0
nC21	0	0
nC22	0	0
nC23	0	0
nC24	0	0
nC25	0	0
nC26	0	0
nC27	0	0
nC28	0	0
nC29	0	0
nC30	0	0
nC31	0	0
nC32	0	0
nC33	0	0
nC34	0	0
nC35	0	0
nC36	0	0
nC37	0	0
nC38	0	0
nC39	0	0
nC40	0	0

Torkelson Geochemistry, Inc.

ASIG MKE Site
Sample ID : Outfall 02-03
Acquired : Jun 21, 2017 17:22:05

c:\ezchrom\chrom\17073\outfl2-3.sl -- Channel A

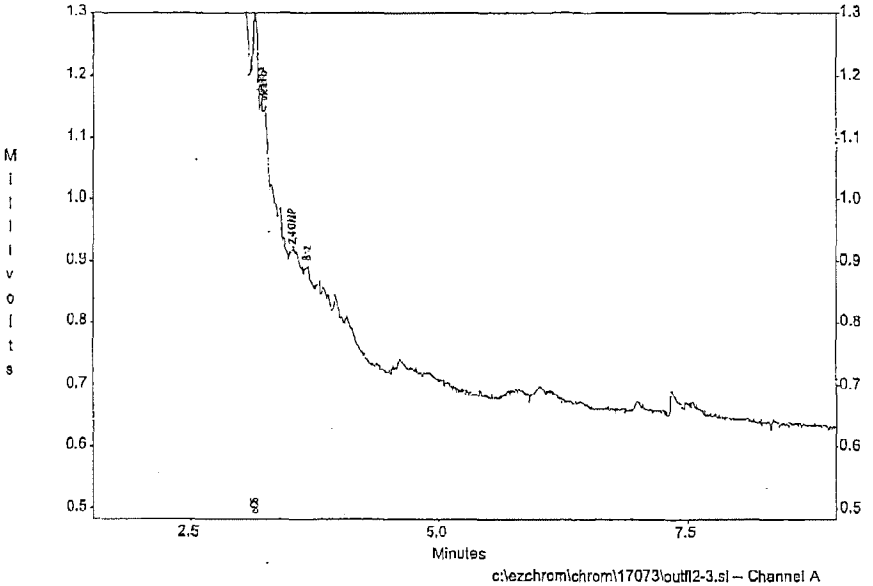


GW/S Environmental
9182989849
p.7

Torkelson Geochemistry, Inc.

ASIG MKE Site
Sample ID : Outfall 02-03
Acquired : Jun 21, 2017 17:22:05

c:\ezchrom\chrom\17073\outfl2-3.sl -- Channel A



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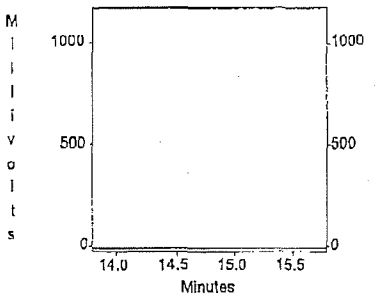
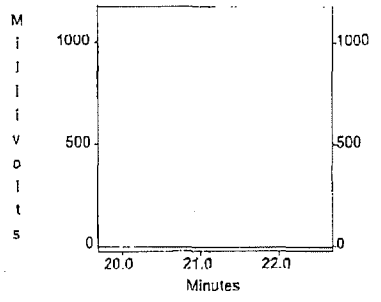
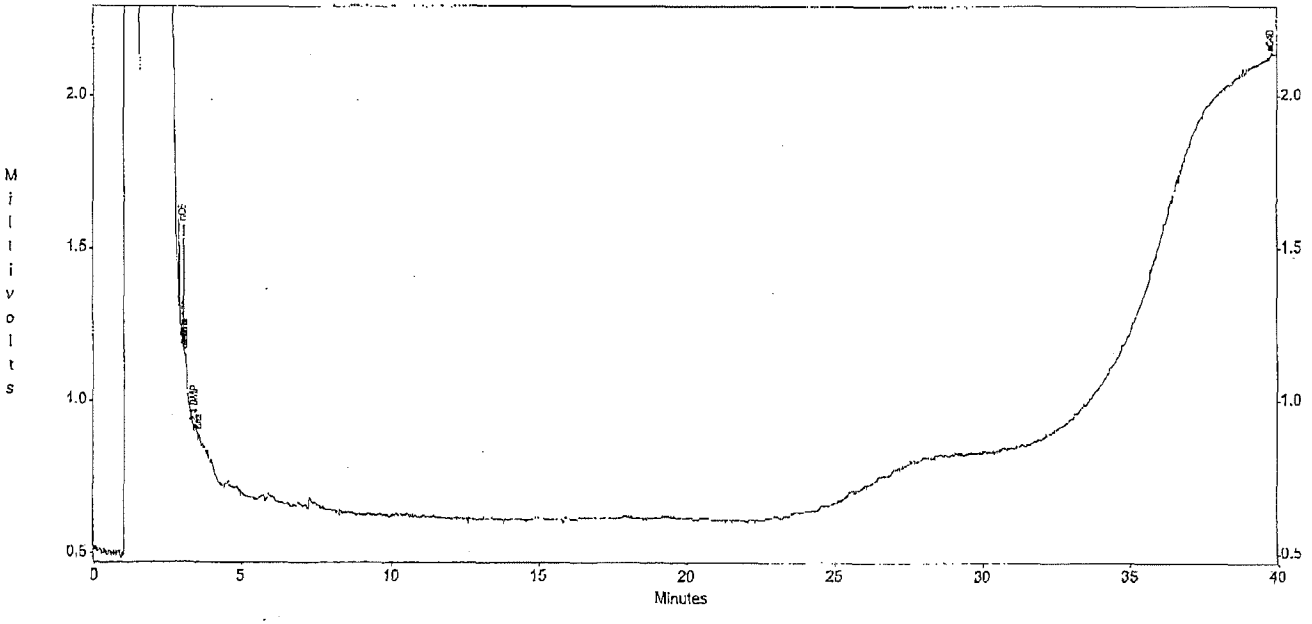


c:\ezchrom\chrom\17073\outfl2-3.sl -- Channel A



c:\ezchrom\chrom\17073\outfl2-3.sl -- Channel A



Channel A Results

Peak	Area	Height
nC6	657	421
olefin a	57	63
olefin b	163	85
olefin c	0	0
2,4 DMP	24	11
Benz	60	23
Isooctane	0	0
nC7	0	0
MeOH	0	0
Tol	0	0
nC8	0	0
EB	0	0
m/p xyl	0	0
o xyl	0	0
nC9	0	0
1,2,4 TMB	0	0
nC10	0	0
nC11	0	0
Naph	0	0
nC12	0	0
IP13	0	0
IP14	0	0
nC13	0	0
IP15	0	0
nC14	0	0
IP16	0	0
nC15	0	0
nC16	0	0
IP18	0	0
nC17	0	0
Pristane	0	0
nC18	0	0
Phytane	0	0
nC19	0	0
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nC31	0	0
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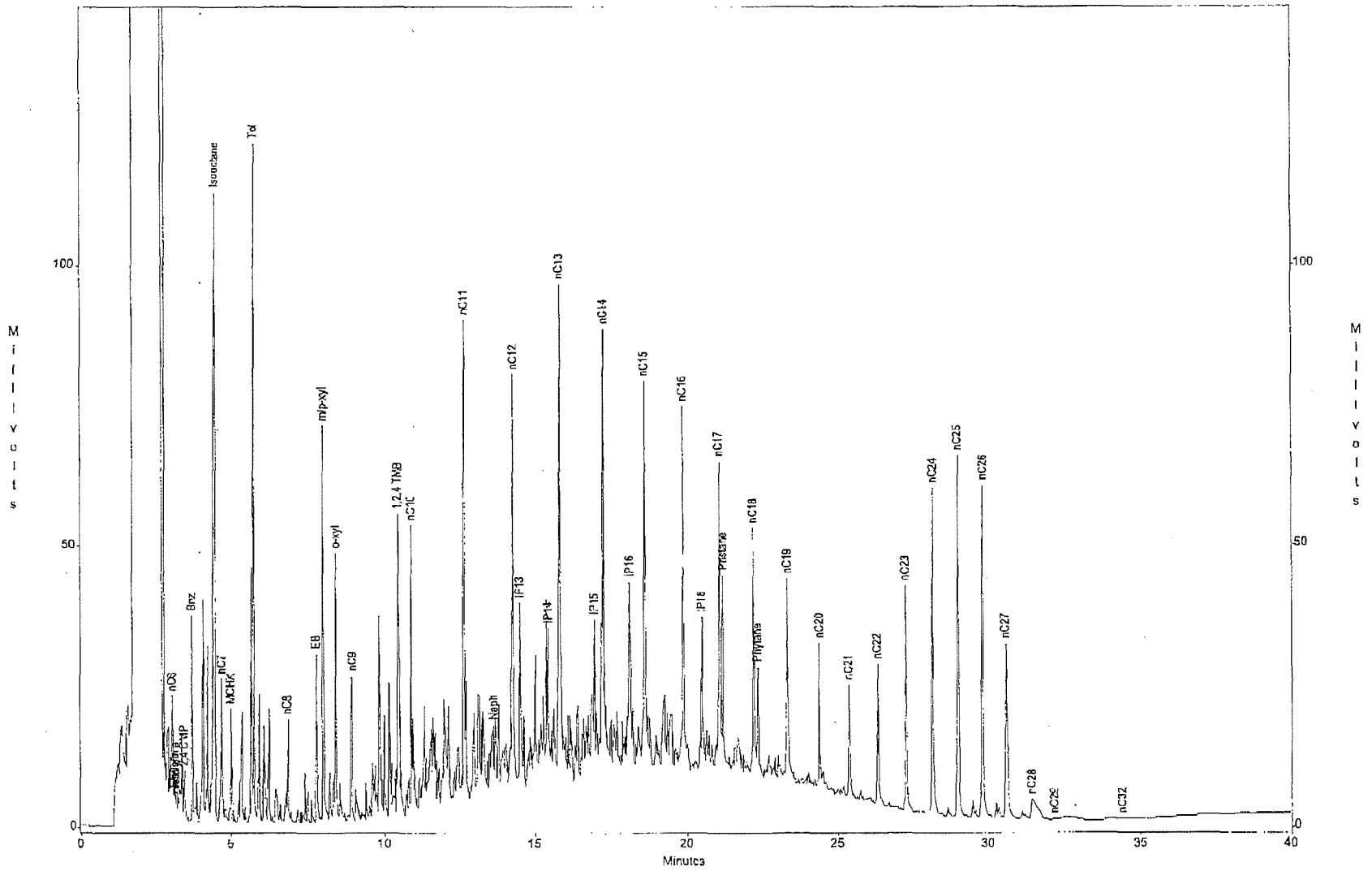
nC33	0	0
nC34	0	0
nC35	0	0
nC36	0	0
nC37	0	0
nC38	0	0
nC39	0	0
nC40	70	1

Torkelson Geochemistry, Inc.

ASIG MKE Site
Sample ID : Gas/Dies/Wax std
Acquired : Jun 21, 2017 11:38:46

c:\ezchrom\chrom\17073\gadiwax.sl2 -- Channel A

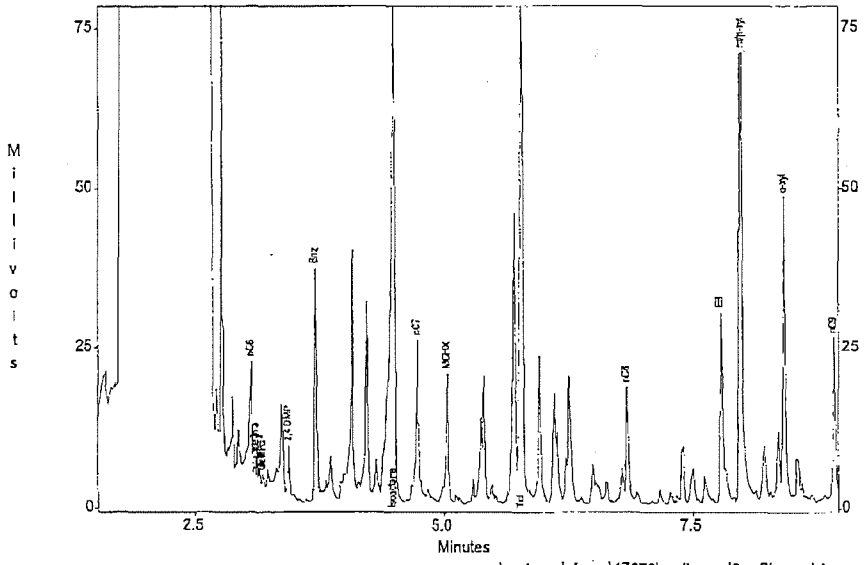


GW/S Environmental
9182989849
p.9

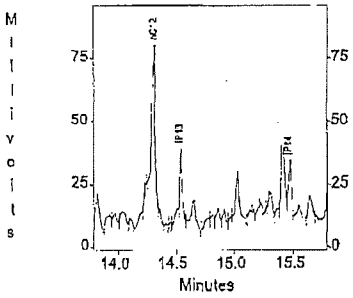
Torkelson Geochemistry, Inc.

ASIG MKE Site
Sample ID : Gas/Dies/Wax std
Acquired : Jun 21, 2017 11:38:46

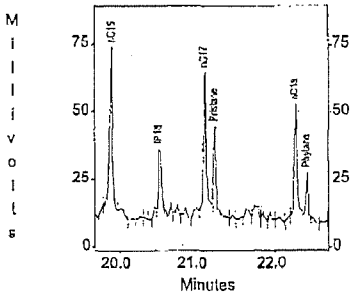
c:\ezchrom\chrom\17073\gadiwax.sl2 -- Channel A



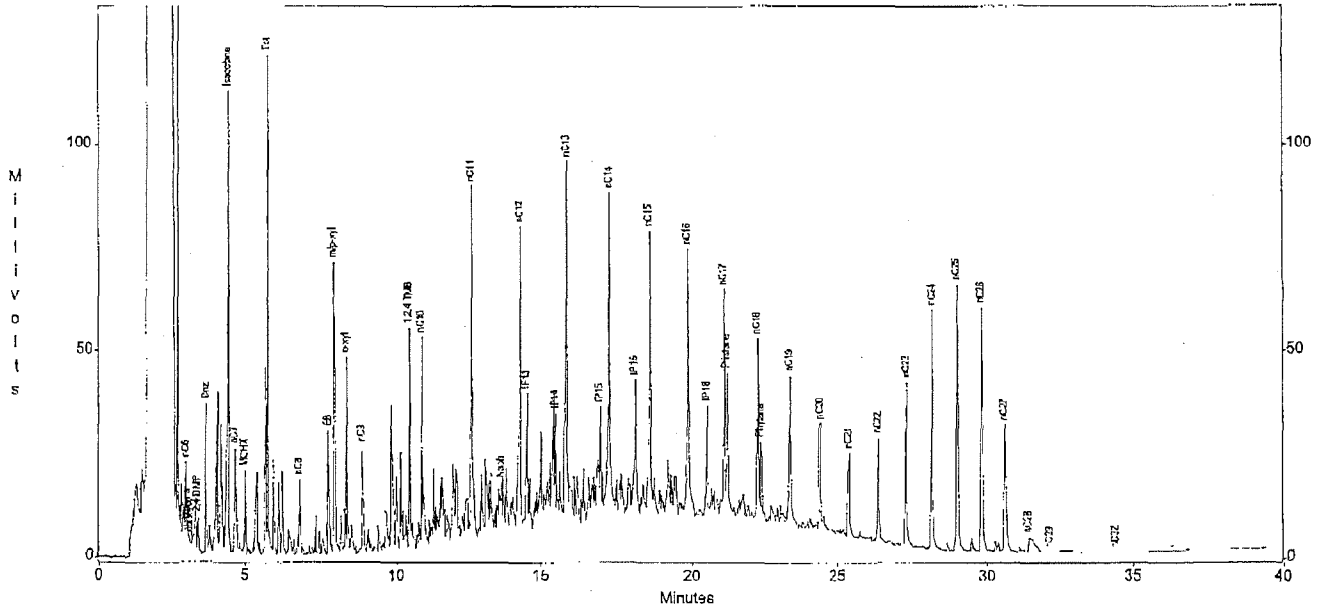
c:\ezchrom\chrom\17073\gadiwax.sl2 -- Channel A



c:\ezchrom\chrom\17073\gadiwax.sl2 -- Channel A



c:\ezchrom\chrom\17073\gadiwax.sl2 -- Channel A



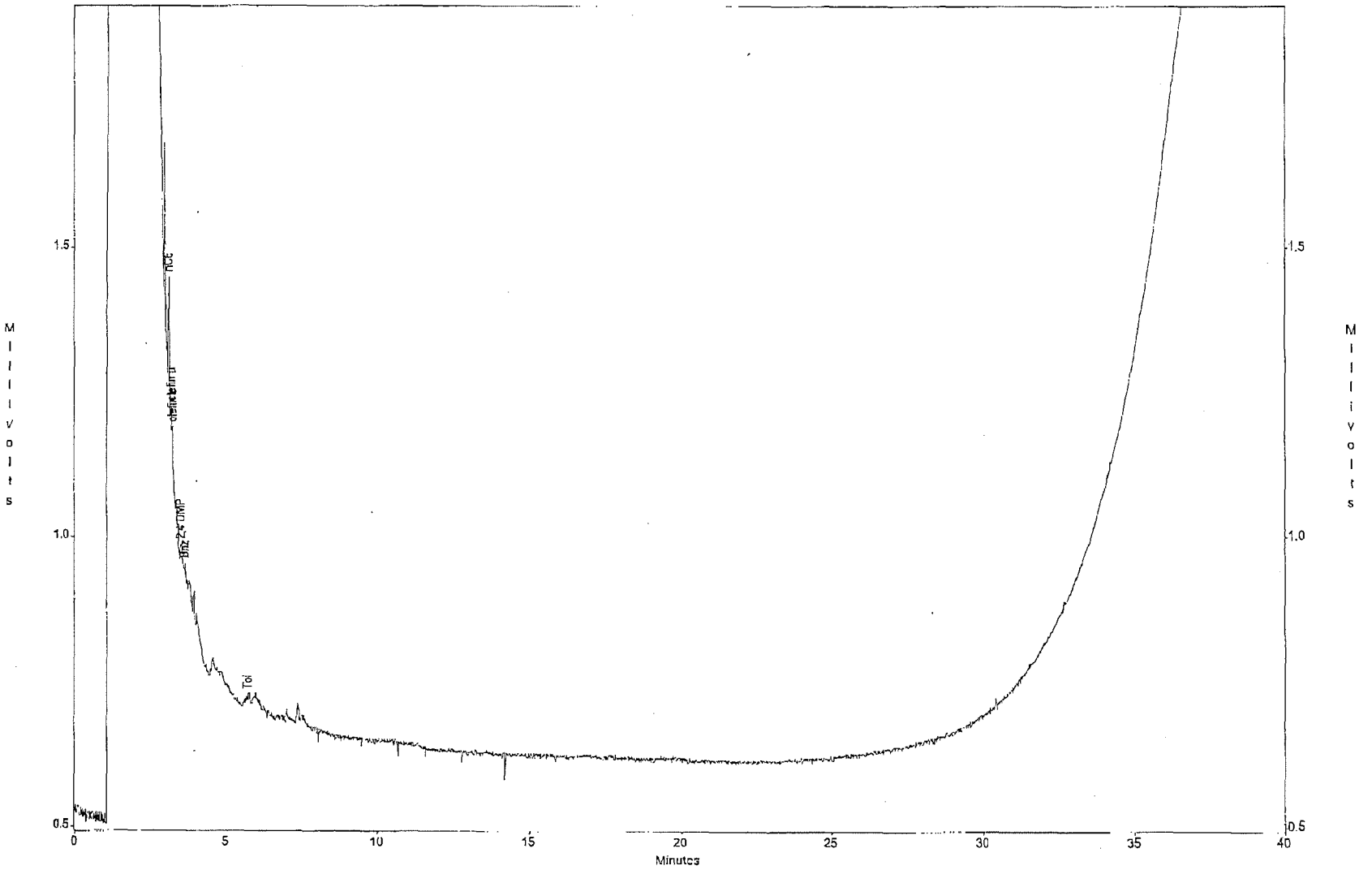
Channel A Results

Peak	Area	Height
nC6	27281	10252
olefin a	4187	4035
olefin b	2316	2041
olefin c	1854	1574
2,4 DMP	11279	7995
Bnz	50202	36325
Isooctane	215327	111882
nC7	45559	25384
MCHX	34263	20195
Tol	224887	120684
nC8	30157	18071
EB	50614	29753
m/p xyl	189804	70456
o-xyl	89216	47634
nC9	49261	25595
1,2,4 TMB	134560	53442
nC10	111153	51003
nC11	189804	85091
Naph	24189	12049
nC12	182172	73260
IP13	66267	32858
IP14	37610	23339
nC13	207894	86279
IP15	39553	24900
nC14	193817	75107
IP16	87113	32223
nC15	177442	68272
nC16	182043	64320
IP18	57788	24629
nC17	148138	54199
Pristane	80556	34204
nC18	120869	43726
Phytane	45552	19048
nC19	96522	36274
nC20	67534	25674
nC21	49371	19567
nC22	63028	24863
nC23	108161	39853
nC24	162830	57997
nC25	167665	64288
nC26	177206	56993
nC27	116917	30761
nC28	10627	3590
nC29	712	163
nC30	0	0
nC31	0	0
nC32	27	11
nC33	0	0
nC34	0	0
nC35	0	0
nC36	0	0
nC37	0	0
nC38	0	0
nC39	0	0
nC40	0	0

Torkelson Geochemistry, Inc.

ASIG MKE Site
Sample ID : Solvent
Acquired : Jun 21, 2017 12:27:38

c:\ezchrom\chrom\17073\solvent.sl -- Channel A

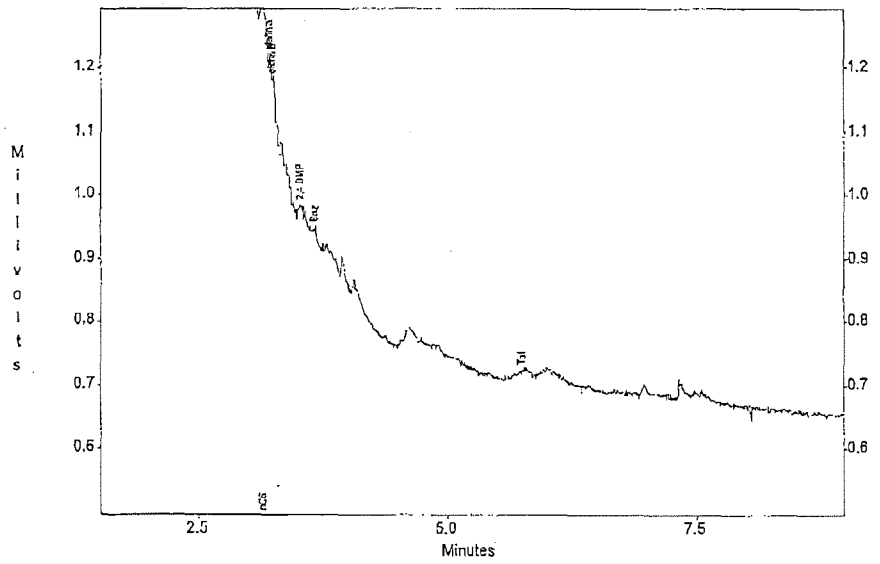


GW/S Environmental
9182989849
p.11

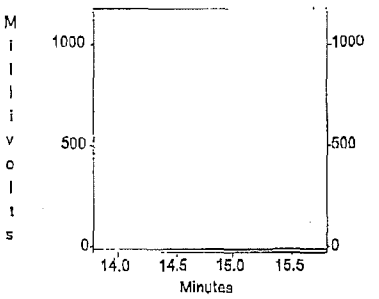
Torkelson Geochemistry, Inc.

ASIG MKE Site
Sample ID : Solvent
Acquired : Jun 21, 2017 12:27:38

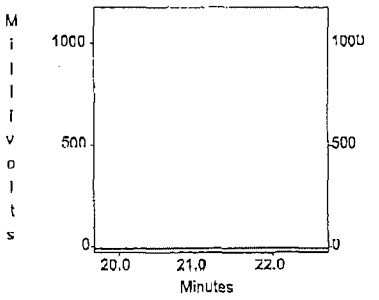
c:\ezchrom\chrom\17073\solvent.sl -- Channel A



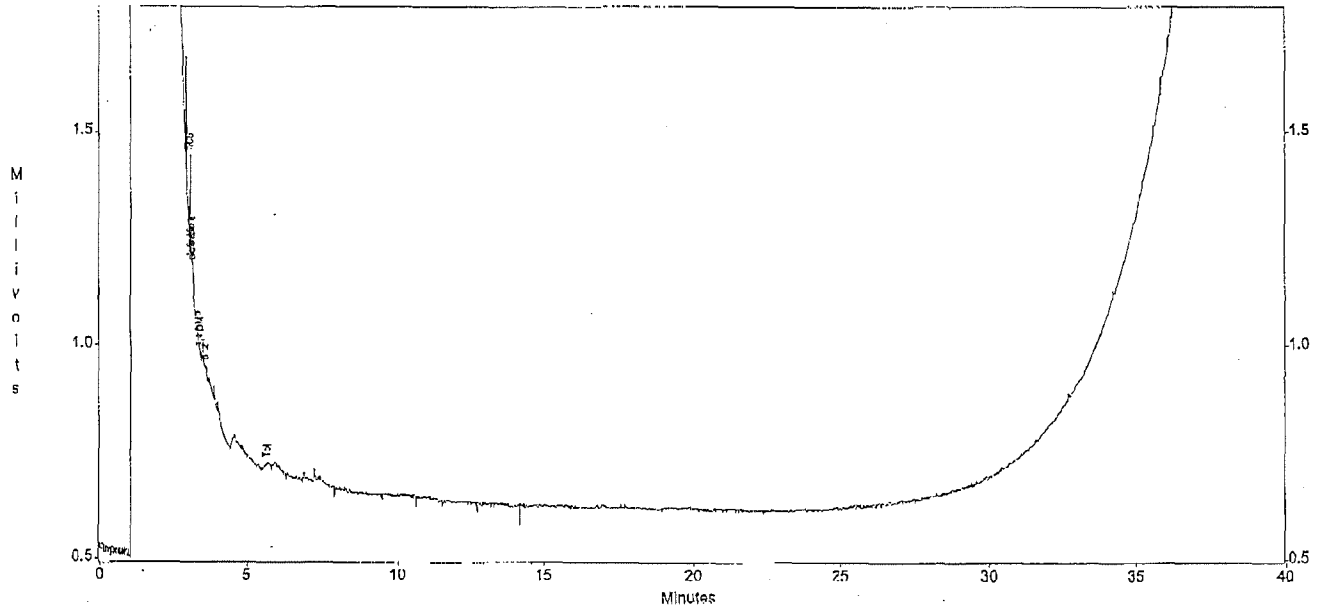
c:\ezchrom\chrom\17073\solvent.sl -- Channel A



c:\ezchrom\chrom\17073\solvent.sl -- Channel A



c:\ezchrom\chrom\17073\solvent.sl -- Channel A



Channel A Results

Peak	Area	Height
nC6	417	213
olefin c	0	0
olefin a	104	62
olefin b	93	49
2,4 DMP	61	31
Benz	98	31
Isooctane	0	0
nC7	0	0
MCHX	0	0
Tol	82	13
nC8	0	0
EB	0	0
m/p-xyl	0	0
o-xyl	0	0
nC9	0	0
1,2,4 TMB	0	0
nC10	0	0
nC11	0	0
Naph	0	0
nC12	0	0
IP13	0	0
IP14	0	0
nC13	0	0
IP15	0	0
nC14	0	0
IP16	0	0
nC15	0	0
nC16	0	0
IP18	0	0
nC17	0	0
Pristane	0	0
nC18	0	0
Phytane	0	0
nC19	0	0
nC20	0	0
nC21	0	0
nC22	0	0
nC23	0	0
nC24	0	0
nC25	0	0
nC26	0	0
nC27	0	0
nC28	0	0
nC29	0	0
nC30	0	0
nC31	0	0
nC32	0	0
nC33	0	0
nC34	0	0
nC35	0	0
nC36	0	0
nC37	0	0
nC38	0	0
nC39	0	0
nC40	0	0

BURNS & McDONNELL™ Request for Chemical Analysis and Chain of Custody Record

Burns & McDonnell Engineering
1431 Opus Place
Downers Grove, Illinois 60515
Phone: (630) 724-3200 Fax: (630) 724-3201
Attention: Lance Summers
lpsummers@burnsmcd.com

Laboratory: GW/S Environmental Consulting
Address: 11619 S. Hudson Place
City/State/ZIP: Tulsa, OK 74137
Telephone: 918-258-9849

Document Control No.: 99566-003-2017
Lab. Reference No. or Episode No.:

Project Number: ~~MKE-ASI6~~ 99566
Site Name: MKE-ASI6

Sample Number: Group or SWMU Name	Sample Number: Sample Point	Sample Number: Sample Designator	Sample Event: Round	Sample Event: Year	Sample Depth (in feet): From	Sample Depth (in feet): To	Sample Collected: Date	Sample Collected: Time	Sample Type / Matrix: Liquid	Solid	Gas	Number of Containers	Parameter/Method Code: GW FIELD Fingerprint						Remarks
Storm	Grate	-03					6-2017	1650	X			1	X						
Outfall	01	-03					↓	1700	↓			1	X						
Outfall	02	-03					↓	1720	↓			1	X						

Sampler (signature): Lance Summers
Sampler (signature):
Custody Seal Number: 99566-001-0620, 99566-002-0620
Fedex 806116783990
Special Instructions: 48 hr TAT

Relinquished By (signature)	Date/Time	Received By (signature)	Date/Time
1.	6-20-17 1400	Lance W. Schumacher	6-22-17 9:30a
2. Lance W. Schumacher	6-22-17 8:45a		6-21-17/0845

Ice Present In Container: Yes ☐ No ☐
Temperature Upon Receipt:
Laboratory Comments:

040915 Form WCD-KC1-CHI

GW/S Environmental 9182989849 p.13

ATTACHMENT I
BURNS & McDONNELL SAMPLE LABORATORY ANALYTICAL REPORTS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

May 15, 2017

Jeff Grubich
Burns & McDonnell
1431 Opus Place, Suite 400
Downers Grove, IL 60515

RE: Project: 97859 MKE HYDRANT SPILL
Pace Project No.: 40149727

Dear Jeff Grubich:
Enclosed are the analytical results for sample(s) received by the laboratory on May 10, 2017. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,

Brian Basten
brian.basten@pacelabs.com
(920)469-2436
Project Manager

Enclosures

cc: Lance Summers, Burns and McDonnell

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Green Bay, WI 54302
(920)469-2436

CERTIFICATIONS

Project: 97859 MKE HYDRANT SPILL
Pace Project No.: 40149727

Green Bay Certification IDs

1241 Bellevue Street, Green Bay, WI 54302
Florida/NELAP Certification #: E87948
Illinois Certification #: 200050
Kentucky UST Certification #: 82
Louisiana Certification #: 04168
Minnesota Certification #: 055-999-334
New York Certification #: 12064
North Dakota Certification #: R-150
Virginia VELAP ID: 460263
South Carolina Certification #: 83006001
Texas Certification #: T104704529-14-1
Wisconsin Certification #: 405132750
Wisconsin DATCP Certification #: 105-444
USDA Soil Permit #: P330-16-00157
Federal Fish & Wildlife Permit #: LE51774A-0

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1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

SAMPLE SUMMARY

Project: 97859 MKE HYDRANT SPILL
Pace Project No.: 40149727

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40149727001	**60C**	Solid	05/08/17 13:30	05/10/17 09:10
40149727002	**WASTE CHARACTERIZATION**	Solid	05/08/17 13:30	05/10/17 09:10

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Green Bay, WI 54302
(920)469-2436

SAMPLE ANALYTE COUNT

Project: 97859 MKE HYDRANT SPILL
Pace Project No.: 40149727

Lab ID	Sample ID	Method	Analysts	Analytes Reported
40149727001	**60C**	EPA 8270 by SIM	ARO	18
		EPA 8260	SMT	64
		ASTM D2974-87	KTS	1

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ANALYTICAL RESULTS

Project: 97859 MKE HYDRANT SPILL
Pace Project No.: 40149727

Sample: 60C **Lab ID: 40149727001** Collected: 05/08/17 13:30 Received: 05/10/17 09:10 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546								
Acenaphthene	**867**	ug/kg	619	186	40	05/11/17 09:05	05/12/17 19:31	83-32-9	
Acenaphthylene	**337J**	ug/kg	528	158	40	05/11/17 09:05	05/12/17 19:31	208-96-8	
Anthracene	**1060**	ug/kg	912	274	40	05/11/17 09:05	05/12/17 19:31	120-12-7	
Benzo(a)anthracene	**3500**	ug/kg	509	152	40	05/11/17 09:05	05/12/17 19:31	56-55-3	
Benzo(a)pyrene	**3700**	ug/kg	402	121	40	05/11/17 09:05	05/12/17 19:31	50-32-8	
Benzo(b)fluoranthene	**5150**	ug/kg	452	136	40	05/11/17 09:05	05/12/17 19:31	205-99-2	
Benzo(g,h,i)perylene	**2350**	ug/kg	325	97.6	40	05/11/17 09:05	05/12/17 19:31	191-24-2	
Benzo(k)fluoranthene	**1960**	ug/kg	401	120	40	05/11/17 09:05	05/12/17 19:31	207-08-9	
Chrysene	**3870**	ug/kg	538	162	40	05/11/17 09:05	05/12/17 19:31	218-01-9	
Dibenz(a,h)anthracene	**643**	ug/kg	358	107	40	05/11/17 09:05	05/12/17 19:31	53-70-3	
Fluoranthene	**7100**	ug/kg	835	250	40	05/11/17 09:05	05/12/17 19:31	206-44-0	
Fluorene	**1090**	ug/kg	663	199	40	05/11/17 09:05	05/12/17 19:31	86-73-7	
Indeno(1,2,3-cd)pyrene	**1940**	ug/kg	352	106	40	05/11/17 09:05	05/12/17 19:31	193-39-5	
Naphthalene	**7860**	ug/kg	1350	404	40	05/11/17 09:05	05/12/17 19:31	91-20-3	
Phenanthrene	**2910**	ug/kg	1860	559	40	05/11/17 09:05	05/12/17 19:31	85-01-8	
Pyrene	**5840**	ug/kg	720	217	40	05/11/17 09:05	05/12/17 19:31	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	0	%	25-81		40	05/11/17 09:05	05/12/17 19:31	321-60-8	S4
Terphenyl-d14 (S)	0	%	29-98		40	05/11/17 09:05	05/12/17 19:31	1718-51-0	S4
8260 MSV Med Level Normal List	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
1,1,1,2-Tetrachloroethane	**<500**	ug/kg	1200	500	20	05/11/17 07:15	05/11/17 10:06	630-20-6	W
1,1,1-Trichloroethane	**<500**	ug/kg	1200	500	20	05/11/17 07:15	05/11/17 10:06	71-55-6	W
1,1,2,2-Tetrachloroethane	**<500**	ug/kg	1200	500	20	05/11/17 07:15	05/11/17 10:06	79-34-5	W
1,1,2-Trichloroethane	**<500**	ug/kg	1200	500	20	05/11/17 07:15	05/11/17 10:06	79-00-5	W
1,1-Dichloroethane	**<500**	ug/kg	1200	500	20	05/11/17 07:15	05/11/17 10:06	75-34-3	W
1,1-Dichloroethene	**<500**	ug/kg	1200	500	20	05/11/17 07:15	05/11/17 10:06	75-35-4	W
1,1-Dichloropropene	**<500**	ug/kg	1200	500	20	05/11/17 07:15	05/11/17 10:06	563-58-6	W
1,2,3-Trichlorobenzene	**<500**	ug/kg	1200	500	20	05/11/17 07:15	05/11/17 10:06	87-61-6	W
1,2,3-Trichloropropane	**<500**	ug/kg	1200	500	20	05/11/17 07:15	05/11/17 10:06	96-18-4	W
1,2,4-Trichlorobenzene	**<951**	ug/kg	5000	951	20	05/11/17 07:15	05/11/17 10:06	120-82-1	L1,W
1,2,4-Trimethylbenzene	**54400**	ug/kg	1440	600	20	05/11/17 07:15	05/11/17 10:06	95-63-6	
1,2-Dibromo-3-chloropropane	**<1820**	ug/kg	5000	1820	20	05/11/17 07:15	05/11/17 10:06	96-12-8	W
1,2-Dibromoethane (EDB)	**<500**	ug/kg	1200	500	20	05/11/17 07:15	05/11/17 10:06	106-93-4	W
1,2-Dichlorobenzene	**<500**	ug/kg	1200	500	20	05/11/17 07:15	05/11/17 10:06	95-50-1	W
1,2-Dichloroethane	**<500**	ug/kg	1200	500	20	05/11/17 07:15	05/11/17 10:06	107-06-2	W
1,2-Dichloropropane	**<500**	ug/kg	1200	500	20	05/11/17 07:15	05/11/17 10:06	78-87-5	W
1,3,5-Trimethylbenzene	**28400**	ug/kg	1440	600	20	05/11/17 07:15	05/11/17 10:06	108-67-8	
1,3-Dichlorobenzene	**<500**	ug/kg	1200	500	20	05/11/17 07:15	05/11/17 10:06	541-73-1	W
1,3-Dichloropropane	**<500**	ug/kg	1200	500	20	05/11/17 07:15	05/11/17 10:06	142-28-9	W
1,4-Dichlorobenzene	**<500**	ug/kg	1200	500	20	05/11/17 07:15	05/11/17 10:06	106-46-7	W
2,2-Dichloropropane	**<500**	ug/kg	1200	500	20	05/11/17 07:15	05/11/17 10:06	594-20-7	W
2-Chlorotoluene	**<500**	ug/kg	1200	500	20	05/11/17 07:15	05/11/17 10:06	95-49-8	W
4-Chlorotoluene	**<500**	ug/kg	1200	500	20	05/11/17 07:15	05/11/17 10:06	106-43-4	W
Benzene	**<500**	ug/kg	1200	500	20	05/11/17 07:15	05/11/17 10:06	71-43-2	W

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Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: 97859 MKE HYDRANT SPILL
Pace Project No.: 40149727

Sample: 60C **Lab ID: 40149727001** Collected: 05/08/17 13:30 Received: 05/10/17 09:10 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level Normal List	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
Bromobenzene	**<500**	ug/kg	1200	500	20	05/11/17 07:15	05/11/17 10:06	108-86-1	W
Bromochloromethane	**<500**	ug/kg	1200	500	20	05/11/17 07:15	05/11/17 10:06	74-97-5	W
Bromodichloromethane	**<500**	ug/kg	1200	500	20	05/11/17 07:15	05/11/17 10:06	75-27-4	W
Bromoform	**<500**	ug/kg	1200	500	20	05/11/17 07:15	05/11/17 10:06	75-25-2	W
Bromomethane	**<1400**	ug/kg	5000	1400	20	05/11/17 07:15	05/11/17 10:06	74-83-9	W
Carbon tetrachloride	**<500**	ug/kg	1200	500	20	05/11/17 07:15	05/11/17 10:06	56-23-5	W
Chlorobenzene	**<500**	ug/kg	1200	500	20	05/11/17 07:15	05/11/17 10:06	108-90-7	W
Chloroethane	**<1340**	ug/kg	5000	1340	20	05/11/17 07:15	05/11/17 10:06	75-00-3	W
Chloroform	**<929**	ug/kg	5000	929	20	05/11/17 07:15	05/11/17 10:06	67-66-3	W
Chloromethane	**<500**	ug/kg	1200	500	20	05/11/17 07:15	05/11/17 10:06	74-87-3	W
Dibromochloromethane	**<500**	ug/kg	1200	500	20	05/11/17 07:15	05/11/17 10:06	124-48-1	W
Dibromomethane	**<500**	ug/kg	1200	500	20	05/11/17 07:15	05/11/17 10:06	74-95-3	W
Dichlorodifluoromethane	**<500**	ug/kg	1200	500	20	05/11/17 07:15	05/11/17 10:06	75-71-8	W
Diisopropyl ether	**<500**	ug/kg	1200	500	20	05/11/17 07:15	05/11/17 10:06	108-20-3	W
Ethylbenzene	**<500**	ug/kg	1200	500	20	05/11/17 07:15	05/11/17 10:06	100-41-4	W
Hexachloro-1,3-butadiene	**<500**	ug/kg	1200	500	20	05/11/17 07:15	05/11/17 10:06	87-68-3	W
Isopropylbenzene (Cumene)	**<500**	ug/kg	1200	500	20	05/11/17 07:15	05/11/17 10:06	98-82-8	W
Methyl-tert-butyl ether	**<500**	ug/kg	1200	500	20	05/11/17 07:15	05/11/17 10:06	1634-04-4	W
Methylene Chloride	**<500**	ug/kg	1200	500	20	05/11/17 07:15	05/11/17 10:06	75-09-2	W
Naphthalene	**14700**	ug/kg	6000	961	20	05/11/17 07:15	05/11/17 10:06	91-20-3	
Styrene	**<500**	ug/kg	1200	500	20	05/11/17 07:15	05/11/17 10:06	100-42-5	W
Tetrachloroethene	**<500**	ug/kg	1200	500	20	05/11/17 07:15	05/11/17 10:06	127-18-4	W
Toluene	**<500**	ug/kg	1200	500	20	05/11/17 07:15	05/11/17 10:06	108-88-3	W
Trichloroethene	**<500**	ug/kg	1200	500	20	05/11/17 07:15	05/11/17 10:06	79-01-6	W
Trichlorofluoromethane	**<500**	ug/kg	1200	500	20	05/11/17 07:15	05/11/17 10:06	75-69-4	W
Vinyl chloride	**<500**	ug/kg	1200	500	20	05/11/17 07:15	05/11/17 10:06	75-01-4	W
cis-1,2-Dichloroethene	**<500**	ug/kg	1200	500	20	05/11/17 07:15	05/11/17 10:06	156-59-2	W
cis-1,3-Dichloropropene	**<500**	ug/kg	1200	500	20	05/11/17 07:15	05/11/17 10:06	10061-01-5	W
m&p-Xylene	**22100**	ug/kg	2880	1200	20	05/11/17 07:15	05/11/17 10:06	179601-23-1	
n-Butylbenzene	**<500**	ug/kg	1200	500	20	05/11/17 07:15	05/11/17 10:06	104-51-8	W
n-Propylbenzene	**<500**	ug/kg	1200	500	20	05/11/17 07:15	05/11/17 10:06	103-65-1	W
o-Xylene	**20500**	ug/kg	1440	600	20	05/11/17 07:15	05/11/17 10:06	95-47-6	
p-Isopropyltoluene	**3860**	ug/kg	1440	600	20	05/11/17 07:15	05/11/17 10:06	99-87-6	
sec-Butylbenzene	**1050J**	ug/kg	1440	600	20	05/11/17 07:15	05/11/17 10:06	135-98-8	
tert-Butylbenzene	**<500**	ug/kg	1200	500	20	05/11/17 07:15	05/11/17 10:06	98-06-6	W
trans-1,2-Dichloroethene	**<500**	ug/kg	1200	500	20	05/11/17 07:15	05/11/17 10:06	156-60-5	W
trans-1,3-Dichloropropene	**<500**	ug/kg	1200	500	20	05/11/17 07:15	05/11/17 10:06	10061-02-6	W
Surrogates									
Dibromofluoromethane (S)	0	%	53-165		20	05/11/17 07:15	05/11/17 10:06	1868-53-7	S4
Toluene-d8 (S)	0	%	54-163		20	05/11/17 07:15	05/11/17 10:06	2037-26-5	S4
4-Bromofluorobenzene (S)	0	%	48-138		20	05/11/17 07:15	05/11/17 10:06	460-00-4	S4
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**16.7**	%	0.10	0.10	1		05/10/17 19:08		

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 97859 MKE HYDRANT SPILL
Pace Project No.: 40149727

QC Batch: 255289
QC Batch Method: EPA 5035/5030B
Associated Lab Samples: 40149727001

Analysis Method: EPA 8260
Analysis Description: 8260 MSV Med Level Normal List

METHOD BLANK: 1505154
Matrix: Solid
Associated Lab Samples: 40149727001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	<13.7	50.0	05/11/17 09:43	
1,1,1-Trichloroethane	ug/kg	<14.4	50.0	05/11/17 09:43	
1,1,2,2-Tetrachloroethane	ug/kg	<17.5	50.0	05/11/17 09:43	
1,1,2-Trichloroethane	ug/kg	<20.2	50.0	05/11/17 09:43	
1,1-Dichloroethane	ug/kg	<17.6	50.0	05/11/17 09:43	
1,1-Dichloroethene	ug/kg	<17.6	50.0	05/11/17 09:43	
1,1-Dichloropropene	ug/kg	<14.0	50.0	05/11/17 09:43	
1,2,3-Trichlorobenzene	ug/kg	<17.0	50.0	05/11/17 09:43	
1,2,3-Trichloropropane	ug/kg	<22.3	50.0	05/11/17 09:43	
1,2,4-Trichlorobenzene	ug/kg	<47.6	250	05/11/17 09:43	
1,2,4-Trimethylbenzene	ug/kg	<12.2	50.0	05/11/17 09:43	
1,2-Dibromo-3-chloropropane	ug/kg	<91.2	250	05/11/17 09:43	
1,2-Dibromoethane (EDB)	ug/kg	<14.7	50.0	05/11/17 09:43	
1,2-Dichlorobenzene	ug/kg	<16.2	50.0	05/11/17 09:43	
1,2-Dichloroethane	ug/kg	<15.0	50.0	05/11/17 09:43	
1,2-Dichloropropane	ug/kg	<16.8	50.0	05/11/17 09:43	
1,3,5-Trimethylbenzene	ug/kg	<14.5	50.0	05/11/17 09:43	
1,3-Dichlorobenzene	ug/kg	<13.2	50.0	05/11/17 09:43	
1,3-Dichloropropane	ug/kg	<12.0	50.0	05/11/17 09:43	
1,4-Dichlorobenzene	ug/kg	<15.9	50.0	05/11/17 09:43	
2,2-Dichloropropane	ug/kg	<12.6	50.0	05/11/17 09:43	
2-Chlorotoluene	ug/kg	<15.8	50.0	05/11/17 09:43	
4-Chlorotoluene	ug/kg	<13.0	50.0	05/11/17 09:43	
Benzene	ug/kg	<9.2	20.0	05/11/17 09:43	
Bromobenzene	ug/kg	<20.6	50.0	05/11/17 09:43	
Bromochloromethane	ug/kg	<21.4	50.0	05/11/17 09:43	
Bromodichloromethane	ug/kg	<9.8	50.0	05/11/17 09:43	
Bromoform	ug/kg	<19.8	50.0	05/11/17 09:43	
Bromomethane	ug/kg	<69.9	250	05/11/17 09:43	
Carbon tetrachloride	ug/kg	<12.1	50.0	05/11/17 09:43	
Chlorobenzene	ug/kg	<14.8	50.0	05/11/17 09:43	
Chloroethane	ug/kg	<67.0	250	05/11/17 09:43	
Chloroform	ug/kg	<46.4	250	05/11/17 09:43	
Chloromethane	ug/kg	<20.4	50.0	05/11/17 09:43	
cis-1,2-Dichloroethene	ug/kg	<16.6	50.0	05/11/17 09:43	
cis-1,3-Dichloropropene	ug/kg	<16.6	50.0	05/11/17 09:43	
Dibromochloromethane	ug/kg	<17.9	50.0	05/11/17 09:43	
Dibromomethane	ug/kg	<19.3	50.0	05/11/17 09:43	
Dichlorodifluoromethane	ug/kg	<12.3	50.0	05/11/17 09:43	
Diisopropyl ether	ug/kg	<17.7	50.0	05/11/17 09:43	
Ethylbenzene	ug/kg	<12.4	50.0	05/11/17 09:43	

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QUALITY CONTROL DATA

Project: 97859 MKE HYDRANT SPILL
Pace Project No.: 40149727

METHOD BLANK: 1505154 Matrix: Solid
Associated Lab Samples: 40149727001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Hexachloro-1,3-butadiene	ug/kg	<24.5	50.0	05/11/17 09:43	
Isopropylbenzene (Cumene)	ug/kg	<12.6	50.0	05/11/17 09:43	
m&p-Xylene	ug/kg	<34.4	100	05/11/17 09:43	
Methyl-tert-butyl ether	ug/kg	<12.7	50.0	05/11/17 09:43	
Methylene Chloride	ug/kg	<16.2	50.0	05/11/17 09:43	
n-Butylbenzene	ug/kg	<10.5	50.0	05/11/17 09:43	
n-Propylbenzene	ug/kg	<11.6	50.0	05/11/17 09:43	
Naphthalene	ug/kg	<40.0	250	05/11/17 09:43	
o-Xylene	ug/kg	<14.0	50.0	05/11/17 09:43	
p-Isopropyltoluene	ug/kg	<12.0	50.0	05/11/17 09:43	
sec-Butylbenzene	ug/kg	<11.9	50.0	05/11/17 09:43	
Styrene	ug/kg	<9.0	50.0	05/11/17 09:43	
tert-Butylbenzene	ug/kg	<9.5	50.0	05/11/17 09:43	
Tetrachloroethene	ug/kg	<12.9	50.0	05/11/17 09:43	
Toluene	ug/kg	<11.2	50.0	05/11/17 09:43	
trans-1,2-Dichloroethene	ug/kg	<16.5	50.0	05/11/17 09:43	
trans-1,3-Dichloropropene	ug/kg	<14.4	50.0	05/11/17 09:43	
Trichloroethene	ug/kg	<23.6	50.0	05/11/17 09:43	
Trichlorofluoromethane	ug/kg	<24.7	50.0	05/11/17 09:43	
Vinyl chloride	ug/kg	<21.1	50.0	05/11/17 09:43	
4-Bromofluorobenzene (S)	%	94	48-138	05/11/17 09:43	
Dibromofluoromethane (S)	%	90	53-165	05/11/17 09:43	
Toluene-d8 (S)	%	104	54-163	05/11/17 09:43	

LABORATORY CONTROL SAMPLE: 1505155

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/kg	2500	2030	81	70-130	
1,1,2,2-Tetrachloroethane	ug/kg	2500	2270	91	70-130	
1,1,2-Trichloroethane	ug/kg	2500	2570	103	70-130	
1,1-Dichloroethane	ug/kg	2500	2210	88	70-133	
1,1-Dichloroethene	ug/kg	2500	2080	83	70-130	
1,2,4-Trichlorobenzene	ug/kg	2500	3280	131	70-130	L1
1,2-Dibromo-3-chloropropane	ug/kg	2500	2060	83	50-150	
1,2-Dibromoethane (EDB)	ug/kg	2500	2690	108	70-130	
1,2-Dichlorobenzene	ug/kg	2500	2610	104	70-130	
1,2-Dichloroethane	ug/kg	2500	2230	89	70-138	
1,2-Dichloropropane	ug/kg	2500	2510	100	70-130	
1,3-Dichlorobenzene	ug/kg	2500	2660	106	70-130	
1,4-Dichlorobenzene	ug/kg	2500	2720	109	70-130	
Benzene	ug/kg	2500	2360	95	70-130	
Bromodichloromethane	ug/kg	2500	2190	88	70-130	
Bromoform	ug/kg	2500	2150	86	68-130	
Bromomethane	ug/kg	2500	1780	71	25-163	

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QUALITY CONTROL DATA

Project: 97859 MKE HYDRANT SPILL
Pace Project No.: 40149727

LABORATORY CONTROL SAMPLE: 1505155

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Carbon tetrachloride	ug/kg	2500	1900	76	70-130	
Chlorobenzene	ug/kg	2500	2710	109	70-130	
Chloroethane	ug/kg	2500	1720	69	34-151	
Chloroform	ug/kg	2500	2230	89	70-130	
Chloromethane	ug/kg	2500	1610	64	52-130	
cis-1,2-Dichloroethene	ug/kg	2500	2290	92	70-130	
cis-1,3-Dichloropropene	ug/kg	2500	2320	93	70-130	
Dibromochloromethane	ug/kg	2500	2290	92	70-130	
Dichlorodifluoromethane	ug/kg	2500	1230	49	27-150	
Ethylbenzene	ug/kg	2500	2780	111	70-130	
Isopropylbenzene (Cumene)	ug/kg	2500	2960	119	70-130	
m&p-Xylene	ug/kg	5000	5700	114	70-130	
Methyl-tert-butyl ether	ug/kg	2500	2350	94	70-130	
Methylene Chloride	ug/kg	2500	2310	92	70-131	
o-Xylene	ug/kg	2500	2880	115	70-130	
Styrene	ug/kg	2500	2850	114	70-130	
Tetrachloroethene	ug/kg	2500	3020	121	70-130	
Toluene	ug/kg	2500	2790	112	70-130	
trans-1,2-Dichloroethene	ug/kg	2500	2190	88	70-130	
trans-1,3-Dichloropropene	ug/kg	2500	2330	93	70-130	
Trichloroethene	ug/kg	2500	2590	104	70-130	
Trichlorofluoromethane	ug/kg	2500	2120	85	50-150	
Vinyl chloride	ug/kg	2500	1850	74	57-130	
4-Bromofluorobenzene (S)	%			106	48-138	
Dibromofluoromethane (S)	%			102	53-165	
Toluene-d8 (S)	%			112	54-163	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1505156 1505157

Parameter	Units	40149633001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1-Trichloroethane	ug/kg	<25.0	1250	1250	951	985	76	79	70-130	3	20	
1,1,2,2-Tetrachloroethane	ug/kg	<25.0	1250	1250	1230	1160	98	93	70-130	5	20	
1,1,2-Trichloroethane	ug/kg	<25.0	1250	1250	1350	1340	108	107	70-130	1	20	
1,1-Dichloroethane	ug/kg	<25.0	1250	1250	1100	1100	88	88	64-133	0	20	
1,1-Dichloroethene	ug/kg	<25.0	1250	1250	1000	980	80	78	56-130	2	24	
1,2,4-Trichlorobenzene	ug/kg	<47.6	1250	1250	1770	1690	142	135	70-130	5	20	
1,2-Dibromo-3-chloropropane	ug/kg	<91.2	1250	1250	1010	915	81	73	50-150	10	20	
1,2-Dibromoethane (EDB)	ug/kg	<25.0	1250	1250	1390	1310	111	105	70-130	5	20	
1,2-Dichlorobenzene	ug/kg	<25.0	1250	1250	1480	1370	118	110	70-130	8	20	
1,2-Dichloroethane	ug/kg	<25.0	1250	1250	1080	1100	87	88	70-138	2	20	
1,2-Dichloropropane	ug/kg	<25.0	1250	1250	1350	1250	108	100	70-130	8	20	
1,3-Dichlorobenzene	ug/kg	<25.0	1250	1250	1480	1380	118	110	70-130	7	20	
1,4-Dichlorobenzene	ug/kg	<25.0	1250	1250	1530	1400	122	112	70-130	9	20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 97859 MKE HYDRANT SPILL
Pace Project No.: 40149727

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1505156 1505157

Parameter	Units	40149633001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Benzene	ug/kg	<25.0	1250	1250	1160	1200	93	96	70-130	3	20	
Bromodichloromethane	ug/kg	<25.0	1250	1250	1130	1060	90	85	70-130	6	20	
Bromoform	ug/kg	<25.0	1250	1250	1110	1080	89	87	65-130	2	20	
Bromomethane	ug/kg	<69.9	1250	1250	920	864	74	69	11-163	6	21	
Carbon tetrachloride	ug/kg	<25.0	1250	1250	828	888	66	71	70-130	7	20	
Chlorobenzene	ug/kg	<25.0	1250	1250	1430	1360	114	109	70-130	5	20	
Chloroethane	ug/kg	<67.0	1250	1250	809	815	65	65	17-151	1	20	
Chloroform	ug/kg	<46.4	1250	1250	1090	1110	88	89	70-130	1	20	
Chloromethane	ug/kg	<25.0	1250	1250	724	719	58	58	13-130	1	20	
cis-1,2-Dichloroethene	ug/kg	<25.0	1250	1250	1170	1220	93	98	70-130	5	20	
cis-1,3-Dichloropropene	ug/kg	<25.0	1250	1250	1140	1090	92	88	70-130	4	20	
Dibromochloromethane	ug/kg	<25.0	1250	1250	1130	1080	91	86	70-130	5	20	
Dichlorodifluoromethane	ug/kg	<25.0	1250	1250	414	436	33	35	10-150	5	21	
Ethylbenzene	ug/kg	<25.0	1250	1250	1410	1370	113	109	70-130	3	20	
Isopropylbenzene (Cumene)	ug/kg	<25.0	1250	1250	1510	1450	121	116	70-130	4	20	
m&p-Xylene	ug/kg	<50.0	2500	2500	2890	2890	115	115	70-130	0	20	
Methyl-tert-butyl ether	ug/kg	<25.0	1250	1250	1120	1140	90	92	70-130	2	20	
Methylene Chloride	ug/kg	<25.0	1250	1250	1180	1170	94	93	70-131	1	20	
o-Xylene	ug/kg	<25.0	1250	1250	1430	1450	114	116	70-130	2	20	
Styrene	ug/kg	<25.0	1250	1250	1490	1400	119	112	70-130	6	20	
Tetrachloroethene	ug/kg	<25.0	1250	1250	1580	1570	126	126	70-130	0	20	
Toluene	ug/kg	<25.0	1250	1250	1460	1390	117	112	70-130	5	20	
trans-1,2-Dichloroethene	ug/kg	<25.0	1250	1250	1100	1070	88	86	70-130	3	20	
trans-1,3-Dichloropropene	ug/kg	<25.0	1250	1250	1190	1120	95	90	70-130	6	20	
Trichloroethene	ug/kg	<25.0	1250	1250	1270	1230	101	99	70-130	3	20	
Trichlorofluoromethane	ug/kg	<25.0	1250	1250	957	981	77	78	40-150	2	31	
Vinyl chloride	ug/kg	<25.0	1250	1250	862	801	69	64	26-130	7	20	
4-Bromofluorobenzene (S)	%						125	125	48-138			
Dibromofluoromethane (S)	%						109	114	53-165			
Toluene-d8 (S)	%						131	132	54-163			

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QUALITY CONTROL DATA

Project: 97859 MKE HYDRANT SPILL
Pace Project No.: 40149727

QC Batch: 255290 | Analysis Method: EPA 8270 by SIM
QC Batch Method: EPA 3546 | Analysis Description: 8270/3546 MSSV PAH by SIM
Associated Lab Samples: 40149727001

METHOD BLANK: 1505158 | Matrix: Solid
Associated Lab Samples: 40149727001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Acenaphthene	ug/kg	<3.9	12.9	05/11/17 16:42	
Acenaphthylene	ug/kg	<3.3	11.0	05/11/17 16:42	
Anthracene	ug/kg	<5.7	19.0	05/11/17 16:42	
Benzo(a)anthracene	ug/kg	<3.2	10.6	05/11/17 16:42	
Benzo(a)pyrene	ug/kg	<2.5	8.4	05/11/17 16:42	
Benzo(b)fluoranthene	ug/kg	<2.8	9.4	05/11/17 16:42	
Benzo(g,h,i)perylene	ug/kg	<2.0	6.8	05/11/17 16:42	
Benzo(k)fluoranthene	ug/kg	<2.5	8.4	05/11/17 16:42	
Chrysene	ug/kg	<3.4	11.2	05/11/17 16:42	
Dibenz(a,h)anthracene	ug/kg	<2.2	7.4	05/11/17 16:42	
Fluoranthene	ug/kg	<5.2	17.4	05/11/17 16:42	
Fluorene	ug/kg	<4.1	13.8	05/11/17 16:42	
Indeno(1,2,3-cd)pyrene	ug/kg	<2.2	7.3	05/11/17 16:42	
Naphthalene	ug/kg	<8.4	28.1	05/11/17 16:42	
Phenanthrene	ug/kg	<11.6	38.8	05/11/17 16:42	
Pyrene	ug/kg	<4.5	15.0	05/11/17 16:42	
2-Fluorobiphenyl (S)	%	75	25-81	05/11/17 16:42	
Terphenyl-d14 (S)	%	87	29-98	05/11/17 16:42	

LABORATORY CONTROL SAMPLE: 1505159

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Acenaphthene	ug/kg	333	283	85	52-97	
Acenaphthylene	ug/kg	333	278	84	49-97	
Anthracene	ug/kg	333	294	88	62-101	
Benzo(a)anthracene	ug/kg	333	251	75	53-95	
Benzo(a)pyrene	ug/kg	333	268	81	57-108	
Benzo(b)fluoranthene	ug/kg	333	251	75	53-113	
Benzo(g,h,i)perylene	ug/kg	333	302	90	43-114	
Benzo(k)fluoranthene	ug/kg	333	265	79	66-116	
Chrysene	ug/kg	333	276	83	64-109	
Dibenz(a,h)anthracene	ug/kg	333	314	94	50-105	
Fluoranthene	ug/kg	333	278	83	58-107	
Fluorene	ug/kg	333	286	86	52-99	
Indeno(1,2,3-cd)pyrene	ug/kg	333	314	94	51-113	
Naphthalene	ug/kg	333	255	77	50-91	
Phenanthrene	ug/kg	333	287	86	57-101	
Pyrene	ug/kg	333	259	78	50-102	
2-Fluorobiphenyl (S)	%			77	25-81	
Terphenyl-d14 (S)	%			82	29-98	

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QUALITY CONTROL DATA

Project: 97859 MKE HYDRANT SPILL
Pace Project No.: 40149727

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1505160 1505161

Parameter	Units	40149533010 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Acenaphthene	ug/kg	<4.6	393	393	336	332	85	84	46-97	1	26	
Acenaphthylene	ug/kg	4.9J	393	393	326	309	82	77	47-97	5	29	
Anthracene	ug/kg	<6.7	393	393	344	315	87	79	50-101	9	28	
Benzo(a)anthracene	ug/kg	<3.7	393	393	276	259	70	66	48-95	7	28	
Benzo(a)pyrene	ug/kg	<3.0	393	393	282	272	72	69	47-108	4	36	
Benzo(b)fluoranthene	ug/kg	<3.3	393	393	262	305	67	78	42-113	15	34	
Benzo(g,h,i)perylene	ug/kg	<2.4	393	393	309	300	78	76	18-114	3	30	
Benzo(k)fluoranthene	ug/kg	<3.0	393	393	288	242	73	61	50-116	18	27	
Chrysene	ug/kg	5.6J	393	393	308	297	77	74	55-109	4	28	
Dibenz(a,h)anthracene	ug/kg	<2.6	393	393	329	317	84	81	39-105	4	29	
Fluoranthene	ug/kg	8.2J	393	393	300	276	74	68	41-107	8	28	
Fluorene	ug/kg	21.0	393	393	340	354	81	85	48-99	4	28	
Indeno(1,2,3-cd)pyrene	ug/kg	<2.6	393	393	327	316	83	80	27-113	4	30	
Naphthalene	ug/kg	<9.9	393	393	306	287	78	73	40-91	6	37	
Phenanthrene	ug/kg	26.4J	393	393	338	334	79	78	46-101	1	40	
Pyrene	ug/kg	6.7J	393	393	288	272	72	67	50-102	6	31	
2-Fluorobiphenyl (S)	%						74	61	25-81			
Terphenyl-d14 (S)	%						68	57	29-98			

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

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1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

QUALITY CONTROL DATA

Project: 97859 MKE HYDRANT SPILL
Pace Project No.: 40149727

QC Batch: 255257
QC Batch Method: ASTM D2974-87
Associated Lab Samples: 40149727001

Analysis Method: ASTM D2974-87
Analysis Description: Dry Weight/Percent Moisture

SAMPLE DUPLICATE: 1505071

Parameter	Units	40149587001 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	6.8	6.8	1	10	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: 97859 MKE HYDRANT SPILL
Pace Project No.: 40149727

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above LOD.

J - Estimated concentration at or above the LOD and below the LOQ.

LOD - Limit of Detection adjusted for dilution factor and percent moisture.

LOQ - Limit of Quantitation adjusted for dilution factor and percent moisture.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected at or above the adjusted LOD.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

L1	Analyte recovery in the laboratory control sample (LCS) was above QC limits. Results may be biased high.
S4	Surrogate recovery not evaluated against control limits due to sample dilution.
W	Non-detect results are reported on a wet weight basis.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 97859 MKE HYDRANT SPILL
Pace Project No.: 40149727

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40149727001	**60C**	EPA 3546	255290	EPA 8270 by SIM	255355
40149727001	**60C**	EPA 5035/5030B	255289	EPA 8260	255294
40149727001	**60C**	ASTM D2974-87	255257		

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BURNS & McDONNELL℠ Request for Chemical Analysis and Chain of Custody Record

40149727

Burns & McDonnell Engineering
1431 Opus Place
Downers Grove, Illinois 60515
Phone: (630) 724-3200 Fax: (630) 724-3201
Attention: Jeff Grubich jgrubich@burnsmcd.com
lpsummers@burnsmcd.com

Laboratory: Pace Analytical
Address: 1241 Bellevue St #9
City/State/ZIP: Green Bay, WI 54302
Telephone: 920-469-2436

Document Control No.: 2017-97859-001
Lab. Reference No. or Episode No.:

Project Number: 97859
Site Name: MKE Hydrant Spill

	Sample Number: Group or SWMU Name	Sample Point	Sample Designator	Sample Event: Round	Year	Sample Depth (in feet): From	To	Sample Collected: Date	Time	Sample Type: Matrix: Liquid	Solid	Gas	Number of Containers	Parameter/Method Code: BTEX	PAHs	Waste Characterization				Remarks
001	60c							5-8-17	1330		x		5	x	x			1-4oz pA, 1-4oz pg A, 3-40mL vEEF		
002	Waste	Characterization						↓	1330		↓		6			6-4oz pg A				[Hold]

5-9-17

Sampler (signature): Lance Summers

Sampler (signature):

Custody Seal Number: 97859-132451, 97859-132450

Special Instructions: ~~STD TAT~~ JMG 24-hr TAT

Relinquished By (signature)	Date/Time	Received By (signature)	Date/Time
1.	5-9-17 0730	5/9/17 0730	5/9/17 0730
2.	5/9/17 0930	Katrina Wendel	5/9/17 0920

Ice Present in Container: Yes [X] No [ ]

Temperature Upon Receipt: 5

Laboratory Comments:

CS Logistics 5/10/17 0910 5/10/17 0910

040915 Form WCD-KC1-CHI

Sample Condition Upon Receipt

Pace Analytical

Pace Analytical Services, Inc.
1241 Bellevue Street, Suite 9
Green Bay, WI 54302

Project #: **WO# : 40149727**

40149727

Client Name: Burns + McDonnell

Courier: ☐ Fed Ex ☐ UPS ☐ Client ☐ Pace Other: CS Logistics

Tracking #:

Custody Seal on Cooler/Box Present: ☒ yes ☐ no Seals intact: ☒ yes ☐ no

Custody Seal on Samples Present: ☐ yes ☐ no Seals intact: ☐ yes ☐ no

Packing Material: ☒ Bubble Wrap ☒ Bubble Bags ☐ None ☐ Other

Thermometer Used SR-53 **Type of Ice:** ~~Wet~~ Blue Dry None ☒ Samples on ice, cooling process has begun

Cooler Temperature Uncorr: 5 /Corr: 5 **Biological Tissue is Frozen:** ☐ yes ☐ no

Temp Blank Present: ☒ yes ☐ no

Person examining contents:
Date: 5/10/17
Initials: SSA

Temp should be above freezing to 6°C for all sample except Biota.
Frozen Biota Samples should be received ≤ 0°C.

		Comments:
Chain of Custody Present:	☒Yes ☐No ☐N/A	1.
Chain of Custody Filled Out:	☒Yes ☐No ☐N/A	2.
Chain of Custody Relinquished:	☒Yes ☐No ☐N/A	3.
Sampler Name & Signature on COC:	☒Yes ☐No ☐N/A	4.
Samples Arrived within Hold Time:	☐Yes ☒No ☐N/A	5.
- VOA Samples frozen upon receipt	~~☐Yes~~ ☒No	Date/Time: 5/10/17 1900 SSA 5/10/17
Short Hold Time Analysis (<72hr):	☐Yes ☒No ☐N/A	6.
Rush Turn Around Time Requested:	☒Yes ☐No ☐N/A	7. 24 hr TAT SSA 5/10/17
Sufficient Volume:	☒Yes ☐No ☐N/A	8.
Correct Containers Used:	☒Yes ☐No ☐N/A	9.
-Pace Containers Used:	☒Yes ☐No ☐N/A	
-Pace IR Containers Used:	☐Yes ☐No ☒N/A	
Containers Intact:	☒Yes ☐No ☐N/A	10.
Filtered volume received for Dissolved tests	☐Yes ☒No ☐N/A	11.
Sample Labels match COC: -Includes date/time/ID/Analysis Matrix: S	☐Yes ☒No ☐N/A	12. No labels on samples at all, placed by "60c" or "Waste" written on caps SSA 5/10/17
All containers needing preservation have been checked. (Non-Compliance noted in 13.)	☐Yes ☐No ☒N/A	13. ☐ HNO3 ☐ H2SO4 ☐ NaOH ☐ NaOH +ZnAct
All containers needing preservation are found to be in compliance with EPA recommendation. (HNO3, H2SO4 ≤2; NaOH+ZnAct ≥9, NaOH ≥12)	☐Yes ☐No ☒N/A	
exceptions: VOA, coliform, TOC, TOX, TOH, O&G, WIDROW, Phenolics, OTHER:	☐Yes ☒No	Initial when completed / Lab Std #ID of preservative / Date/Time:
Headspace in VOA Vials (>6mm):	☐Yes ☐No ☒N/A	14.
Trip Blank Present:	☐Yes ☒No ☐N/A	15.
Trip Blank Custody Seals Present	☐Yes ☐No ☒N/A	
Pace Trip Blank Lot # (if purchased):		

Client Notification/ Resolution: If checked, see attached form for additional comments ☐

Person Contacted: Date/Time:

Comments/ Resolution:

Project Manager Review: **Date:** 5-10-17

F-GB-C-031-Rev.03 (9April2015) SCUR Form

May 15, 2017

Burns and McDonnell
Attn: Jeff Grubich
1431 Opus Place, Suite 400
Downers Grove, IL 60515

Project: General Mitchell Airport AISG Release

Dear Jeff Grubich,

Enclosed is a copy of the laboratory report for the following work order(s) received by Pace Analytical:

Work Order	**Received**	**Description**
1705286	05/13/2017	Laboratory Services

This report relates only to the sample(s) as received. Test results are in compliance with the requirements of the National Environmental Laboratory Accreditation Program (NELAP) and/or one of the following certification programs:

ANAB DoD-ELAP/ISO17025 (#ADE-1542); Arkansas DEP (#88-0730/13-049-0); Georgia EPD (#026-999-161/1023062); Illinois DEP (#200026/003329); Kentucky DEP (AL123065/#0021); Michigan DPH (#0034); Minnesota DPH (#026-999-161/1023062); New York ELAP (#11776/53116); North Carolina DNRE (#659); Virginia DCLS (#460153/7952); Wisconsin DNR (#999472650); USDA Soil Import Permit (#P330-14-00305).

Any qualification or narration of results, including sample acceptance requirements and test exceptions to the above referenced programs, is presented in the Statement of Data Qualifications section of this report. Estimates of analytical uncertainties and certification documents for the test results contained within this report are available upon request. LOD and LOQ values associated with samples requiring a dilution have been adjusted based on the dilution factor.

If you have any questions or require further information, please do not hesitate to contact me.

Sincerely,

Gary L. Wood
Client Services Manager

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PROJECT TECHNICAL NARRATIVE(s)

Semivolatile Organic Compounds by EPA Method 8270D - Selective Ion Monitoring

Narrative: Manual integration was required on the analytes listed below. All manual integrations were performed and reviewed in accordance with laboratory quality assurance policy.

Analysis: USEPA-8270D (SIM)

1704464-BS1		Benzo(b)fluoranthene
1704464-MS1		Benzo(b)fluoranthene
1704464-MSD1		Benzo(b)fluoranthene
1705286-01	MKE-SB01-001	Benzo(b)fluoranthene
1705286-02	MKE-SB02-001	Benzo(g,h,i)perylene
1705286-02	MKE-SB02-001	Benzo(k)fluoranthene
1705286-02	MKE-SB02-001	Naphthalene
1705286-03	MKE-SB03-001	Benzo(g,h,i)perylene
1705286-03	MKE-SB03-001	Benzo(k)fluoranthene
1705286-04	MKE-SB04-001	2-Methylnapthalene-d10
1705286-04	MKE-SB04-001	Benzo(b)fluoranthene
1705286-04	MKE-SB04-001	Naphthalene

Narrative: The analyte concentration in the associated MB was greater than the MDL but less than the RL. The positive sample result, which was greater than 5 times the MB value, is not qualified.

Analysis: USEPA-8270D (SIM)

Sample/Analyte:	1705286-01	MKE-SB01-001	Fluoranthene
	1705286-01	MKE-SB01-001	Phenanthrene
	1705286-01	MKE-SB01-001	Pyrene
	1705286-03	MKE-SB03-001	Pyrene
	1705286-04	MKE-SB04-001	Fluoranthene
	1705286-04	MKE-SB04-001	Phenanthrene
	1705286-04	MKE-SB04-001	Pyrene

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STATEMENT OF DATA QUALIFICATIONS

Volatile Organic Compounds by EPA Method 8260B (5035A High Level)

Qualification: The analyte concentration in the associated MB was greater than the MDL but less than the RL. The positive sample result, which was less than 5 times the MB value, is considered estimated.

Analysis: USEPA-8260B

Sample/Analyte:		
1705286-01	MKE-SB01-001	n-Butylbenzene

Qualification: The RPD between the MS and MSD results exceeded the laboratory or method control limit.

Analysis: USEPA-8260B

Sample/Analyte:		
1705286-04	MKE-SB04-001	2,2-Dichloropropane
1705286-04	MKE-SB04-001	n-Propylbenzene

Qualification: The following reported test methods and analyte(s) are exceptions to our NELAP Fields of Accreditation, or for which accreditation is not required, applicable, or available.

Analysis: USEPA-8260B

Analyte(s): Isopropyl Ether

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STATEMENT OF DATA QUALIFICATIONS

Semivolatile Organic Compounds by EPA Method 8270D - Selective Ion Monitoring

Qualification: The analyte concentration in the associated MB was greater than the MDL but less than the RL. The positive sample result, which was less than 5 times the MB value, is considered estimated.

Analysis: USEPA-8270D (SIM)

Sample/Analyte:			
	1705286-02	MKE-SB02-001	Fluoranthene
	1705286-02	MKE-SB02-001	Phenanthrene
	1705286-02	MKE-SB02-001	Pyrene
	1705286-03	MKE-SB03-001	Fluoranthene
	1705286-03	MKE-SB03-001	Phenanthrene

Qualification: The MS and/or MSD recovery was outside the laboratory or method control limit.

Analysis: USEPA-8270D (SIM)

Sample/Analyte:			
	1705286-01	MKE-SB01-001	Naphthalene

Qualification: One or more surrogate recoveries for the sample were less than the lower control limit but greater than or equal to 10%. All results and reporting limits are considered estimated.

Analysis: USEPA-8270D (SIM)

Sample: 1705286-02 MKE-SB02-001

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ANALYTICAL REPORT

Client:	**Burns and McDonnell**	Work Order:	**1705286**
Project:	General Mitchell Airport AISG Release	Description:	Laboratory Services
Client Sample ID:	**MKE-SB01-001**	Sampled:	05/12/17 12:05
Lab Sample ID:	**1705286-01**	Sampled By:	Client
Matrix:	Soil	Received:	05/13/17 13:10
Unit:	ug/kg dry	Prepared:	05/14/17 12:00 By: DLV
Dilution Factor:	1	Analyzed:	05/14/17 20:12 By: DLV
QC Batch:	1704472	Analytical Batch:	7E15026
Percent Solids:	73		

Volatile Organic Compounds by EPA Method 8260B (5035A High Level)

CAS Number	Analyte	Analytical Result	LOQ	LOD
71-43-2	Benzene	NDU	64	19
108-86-1	Bromobenzene	NDU	28	8.3
74-97-5	Bromochloromethane	NDU	72	22
75-27-4	Bromodichloromethane	NDU	50	15
75-25-2	Bromoform	NDU	48	14
74-83-9	Bromomethane	NDU	68	20
*104-51-8	n-Butylbenzene	**37B**	21	6.4
135-98-8	sec-Butylbenzene	**34J**	57	17
98-06-6	tert-Butylbenzene	NDU	53	16
56-23-5	Carbon Tetrachloride	NDU	32	9.7
108-90-7	Chlorobenzene	NDU	12	3.7
75-00-3	Chloroethane	NDU	56	17
67-66-3	Chloroform	NDU	48	14
74-87-3	Chloromethane	NDU	71	21
95-49-8	2-Chlorotoluene	NDU	64	19
106-43-4	4-Chlorotoluene	NDU	13	3.8
96-12-8	1,2-Dibromo-3-chloropropane	NDU	86	26
124-48-1	Dibromochloromethane	NDU	46	14
106-93-4	1,2-Dibromoethane	NDU	47	14
74-95-3	Dibromomethane	NDU	31	9.4
95-50-1	1,2-Dichlorobenzene	NDU	62	19
541-73-1	1,3-Dichlorobenzene	NDU	51	15
106-46-7	1,4-Dichlorobenzene	NDU	24	7.3
75-71-8	Dichlorodifluoromethane	NDU	26	7.8
75-34-3	1,1-Dichloroethane	NDU	46	14
107-06-2	1,2-Dichloroethane	NDU	60	18
75-35-4	1,1-Dichloroethene	NDU	38	11
156-59-2	cis-1,2-Dichloroethene	NDU	29	8.8
156-60-5	trans-1,2-Dichloroethene	NDU	50	15
78-87-5	1,2-Dichloropropane	NDU	25	7.6
142-28-9	1,3-Dichloropropane	NDU	30	9.1

Continued on next page

*See Statement of Data Qualifications

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ANALYTICAL REPORT

Client:	**Burns and McDonnell**	Work Order:	**1705286**
Project:	General Mitchell Airport AISG Release	Description:	Laboratory Services
Client Sample ID:	**MKE-SB01-001**	Sampled:	05/12/17 12:05
Lab Sample ID:	**1705286-01**	Sampled By:	Client
Matrix:	Soil	Received:	05/13/17 13:10
Unit:	ug/kg dry	Prepared:	05/14/17 12:00 By: DLV
Dilution Factor:	1	Analyzed:	05/14/17 20:12 By: DLV
QC Batch:	1704472	Analytical Batch:	7E15026
Percent Solids:	73		

Volatile Organic Compounds by EPA Method 8260B (5035A High Level) (Continued)

CAS Number	Analyte	Analytical Result	LOQ	LOD
594-20-7	2,2-Dichloropropane	NDU	64	19
563-58-6	1,1-Dichloropropene	NDU	62	19
10061-01-5	cis-1,3-Dichloropropene	NDU	50	15
10061-02-6	trans-1,3-Dichloropropene	NDU	50	15
100-41-4	Ethylbenzene	**170**	49	15
87-68-3	Hexachlorobutadiene	NDU	67	20
98-82-8	Isopropylbenzene	**47**	10	3.1
108-20-3	Isopropyl Ether	NDU	140	43
99-87-6	4-Isopropyltoluene	**58J**	59	18
1634-04-4	Methyl tert-Butyl Ether	NDU	22	6.5
75-09-2	Methylene Chloride	NDU	67	20
91-20-3	Naphthalene	**360**	100	30
103-65-1	n-Propylbenzene	**82**	57	17
100-42-5	Styrene	NDU	11	3.4
630-20-6	1,1,1,2-Tetrachloroethane	NDU	32	9.7
79-34-5	1,1,2,2-Tetrachloroethane	NDU	58	18
127-18-4	Tetrachloroethene	NDU	25	7.5
108-88-3	Toluene	NDU	47	14
87-61-6	1,2,3-Trichlorobenzene	NDU	34	10
120-82-1	1,2,4-Trichlorobenzene	NDU	35	10
71-55-6	1,1,1-Trichloroethane	NDU	52	16
79-00-5	1,1,2-Trichloroethane	NDU	34	10
79-01-6	Trichloroethene	NDU	33	9.8
75-69-4	Trichlorofluoromethane	NDU	63	19
96-18-4	1,2,3-Trichloropropane	NDU	53	16
95-63-6	1,2,4-Trimethylbenzene	**1300**	46	14
108-67-8	1,3,5-Trimethylbenzene	**19**	17	5.2
75-01-4	Vinyl Chloride	NDU	69	21
179601-23-1	Xylene, Meta + Para	**38**	22	6.7
95-47-6	Xylene, Ortho	NDU	46	14

Continued on next page

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ANALYTICAL REPORT

Client:	**Burns and McDonnell**	Work Order:	**1705286**
Project:	General Mitchell Airport AISG Release	Description:	Laboratory Services
Client Sample ID:	**MKE-SB01-001**	Sampled:	05/12/17 12:05
Lab Sample ID:	**1705286-01**	Sampled By:	Client
Matrix:	Soil	Received:	05/13/17 13:10
Unit:	ug/L	Prepared:	05/14/17 12:00 By: DLV
Dilution Factor:	1	Analyzed:	05/14/17 20:12 By: DLV
QC Batch:	1704472	Analytical Batch:	7E15026
Percent Solids:	73		

Volatile Organic Compounds by EPA Method 8260B (5035A High Level) (Continued)

CAS Number	Analyte	Analytical Result	LOQ	LOD

Surrogates:	***% Recovery***	***Control Limits***
Dibromofluoromethane	*85*	*75-123*
1,2-Dichloroethane-d4	*99*	*83-116*
Toluene-d8	*98*	*85-113*
4-Bromofluorobenzene	*97*	*81-117*

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ANALYTICAL REPORT

Client:	**Burns and McDonnell**	Work Order:	**1705286**
Project:	General Mitchell Airport AISG Release	Description:	Laboratory Services
Client Sample ID:	**MKE-SB01-001**	Sampled:	05/12/17 12:05
Lab Sample ID:	**1705286-01**	Sampled By:	Client
Matrix:	Soil	Received:	05/13/17 13:10
Unit:	ug/kg dry	Prepared:	05/15/17 08:02 By: ALK
Dilution Factor:	4	Analyzed:	05/15/17 13:38 By: JLB
QC Batch:	1704464	Analytical Batch:	7E15056
Percent Solids:	73		

Semivolatile Organic Compounds by EPA Method 8270D - Selective Ion Monitoring

CAS Number	Analyte	Analytical Result	LOQ	LOD
83-32-9	Acenaphthene	**11**	2.9	0.87
208-96-8	Acenaphthylene	**1.8J**	2.7	0.82
120-12-7	Anthracene	**3.7J**	4.0	1.2
56-55-3	Benzo(a)anthracene	**7.3**	6.3	1.9
50-32-8	Benzo(a)pyrene	**5.5J**	8.7	2.6
205-99-2	Benzo(b)fluoranthene	**5.5J**	6.3	1.9
191-24-2	Benzo(g,h,i)perylene	**3.7J**	12	3.5
207-08-9	Benzo(k)fluoranthene	**3.7J**	4.4	1.3
218-01-9	Chrysene	**7.3**	2.9	0.87
53-70-3	Dibenz(a,h)anthracene	NDU	14	4.1
206-44-0	Fluoranthene	**15**	5.4	1.6
86-73-7	Fluorene	**5.5**	3.1	0.93
193-39-5	Indeno(1,2,3-cd)pyrene	**3.7J**	11	3.4
*91-20-3	Naphthalene	**68**	4.5	1.4
85-01-8	Phenanthrene	**13**	4.5	1.4
129-00-0	Pyrene	**15**	4.9	1.5

Surrogates:	***% Recovery***	***Control Limits***
2-Methylnapthalene-d10	*84*	*50-150*
Fluoranthene-d10	*80*	*50-150*

*See Statement of Data Qualifications

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ANALYTICAL REPORT

Client:	**Burns and McDonnell**	Work Order:	**1705286**
Project:	General Mitchell Airport AISG Release	Description:	Laboratory Services
Client Sample ID:	**MKE-SB01-001**	Sampled:	05/12/17 12:05
Lab Sample ID:	**1705286-01**	Sampled By:	Client
Matrix:	Soil	Received:	05/13/17 13:10

Physical/Chemical Parameters by EPA/APHA/ASTM Methods

Analyte	Analytical Result	LOQ	LOD	Unit	Dilution Factor	Method	Date Time Analyzed	By	QC Batch
Percent Solids	**73**	0.3	0.1	%	1	USEPA-3550C	05/13/17 14:45	LLH	1704473

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ANALYTICAL REPORT

Client:	**Burns and McDonnell**	Work Order:	**1705286**
Project:	General Mitchell Airport AISG Release	Description:	Laboratory Services
Client Sample ID:	**MKE-SB02-001**	Sampled:	05/12/17 13:10
Lab Sample ID:	**1705286-02**	Sampled By:	Client
Matrix:	Soil	Received:	05/13/17 13:10
Unit:	ug/kg dry	Prepared:	05/14/17 12:00 By: DLV
Dilution Factor:	1	Analyzed:	05/14/17 20:36 By: DLV
QC Batch:	1704472	Analytical Batch:	7E15026
Percent Solids:	79		

Volatile Organic Compounds by EPA Method 8260B (5035A High Level)

CAS Number	Analyte	Analytical Result	LOQ	LOD
71-43-2	Benzene	NDU	59	18
108-86-1	Bromobenzene	NDU	26	7.7
74-97-5	Bromochloromethane	NDU	67	20
75-27-4	Bromodichloromethane	NDU	46	14
75-25-2	Bromoform	NDU	44	13
74-83-9	Bromomethane	NDU	63	19
104-51-8	n-Butylbenzene	NDU	20	5.9
135-98-8	sec-Butylbenzene	NDU	53	16
98-06-6	tert-Butylbenzene	NDU	49	15
56-23-5	Carbon Tetrachloride	NDU	30	8.9
108-90-7	Chlorobenzene	NDU	11	3.4
75-00-3	Chloroethane	NDU	52	16
67-66-3	Chloroform	NDU	44	13
74-87-3	Chloromethane	NDU	65	20
95-49-8	2-Chlorotoluene	NDU	59	18
106-43-4	4-Chlorotoluene	NDU	12	3.5
96-12-8	1,2-Dibromo-3-chloropropane	NDU	80	24
124-48-1	Dibromochloromethane	NDU	43	13
106-93-4	1,2-Dibromoethane	NDU	44	13
74-95-3	Dibromomethane	NDU	29	8.7
95-50-1	1,2-Dichlorobenzene	NDU	57	17
541-73-1	1,3-Dichlorobenzene	NDU	47	14
106-46-7	1,4-Dichlorobenzene	NDU	23	6.8
75-71-8	Dichlorodifluoromethane	NDU	24	7.2
75-34-3	1,1-Dichloroethane	NDU	42	13
107-06-2	1,2-Dichloroethane	NDU	56	17
75-35-4	1,1-Dichloroethene	NDU	35	11
156-59-2	cis-1,2-Dichloroethene	NDU	27	8.2
156-60-5	trans-1,2-Dichloroethene	NDU	46	14
78-87-5	1,2-Dichloropropane	NDU	23	7.1
142-28-9	1,3-Dichloropropane	NDU	28	8.4

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ANALYTICAL REPORT

Client:	**Burns and McDonnell**	Work Order:	**1705286**
Project:	General Mitchell Airport AISG Release	Description:	Laboratory Services
Client Sample ID:	**MKE-SB02-001**	Sampled:	05/12/17 13:10
Lab Sample ID:	**1705286-02**	Sampled By:	Client
Matrix:	Soil	Received:	05/13/17 13:10
Unit:	ug/kg dry	Prepared:	05/14/17 12:00 By: DLV
Dilution Factor:	1	Analyzed:	05/14/17 20:36 By: DLV
QC Batch:	1704472	Analytical Batch:	7E15026
Percent Solids:	79		

Volatile Organic Compounds by EPA Method 8260B (5035A High Level) (Continued)

CAS Number	Analyte	Analytical Result	LOQ	LOD
594-20-7	2,2-Dichloropropane	NDU	59	18
563-58-6	1,1-Dichloropropene	NDU	57	17
10061-01-5	cis-1,3-Dichloropropene	NDU	47	14
10061-02-6	trans-1,3-Dichloropropene	NDU	46	14
100-41-4	Ethylbenzene	NDU	45	14
87-68-3	Hexachlorobutadiene	NDU	62	19
98-82-8	Isopropylbenzene	NDU	9.7	2.9
108-20-3	Isopropyl Ether	NDU	130	40
99-87-6	4-Isopropyltoluene	NDU	55	17
1634-04-4	Methyl tert-Butyl Ether	NDU	20	6.0
75-09-2	Methylene Chloride	NDU	62	19
91-20-3	Naphthalene	NDU	94	28
103-65-1	n-Propylbenzene	NDU	53	16
100-42-5	Styrene	NDU	10	3.2
630-20-6	1,1,1,2-Tetrachloroethane	NDU	30	8.9
79-34-5	1,1,2,2-Tetrachloroethane	NDU	54	16
127-18-4	Tetrachloroethene	NDU	23	6.9
108-88-3	Toluene	NDU	43	13
87-61-6	1,2,3-Trichlorobenzene	NDU	31	9.3
120-82-1	1,2,4-Trichlorobenzene	NDU	32	9.7
71-55-6	1,1,1-Trichloroethane	NDU	48	14
79-00-5	1,1,2-Trichloroethane	NDU	32	9.6
79-01-6	Trichloroethene	NDU	30	9.1
75-69-4	Trichlorofluoromethane	NDU	58	18
96-18-4	1,2,3-Trichloropropane	NDU	49	15
95-63-6	1,2,4-Trimethylbenzene	NDU	42	13
108-67-8	1,3,5-Trimethylbenzene	NDU	16	4.8
75-01-4	Vinyl Chloride	NDU	64	19
179601-23-1	Xylene, Meta + Para	NDU	21	6.2
95-47-6	Xylene, Ortho	NDU	42	13

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ANALYTICAL REPORT

Client:	**Burns and McDonnell**	Work Order:	**1705286**
Project:	General Mitchell Airport AISG Release	Description:	Laboratory Services
Client Sample ID:	**MKE-SB02-001**	Sampled:	05/12/17 13:10
Lab Sample ID:	**1705286-02**	Sampled By:	Client
Matrix:	Soil	Received:	05/13/17 13:10
Unit:	ug/L	Prepared:	05/14/17 12:00 By: DLV
Dilution Factor:	1	Analyzed:	05/14/17 20:36 By: DLV
QC Batch:	1704472	Analytical Batch:	7E15026
Percent Solids:	79		

Volatile Organic Compounds by EPA Method 8260B (5035A High Level) (Continued)

CAS Number	Analyte	Analytical Result	LOQ	LOD

Surrogates:	***% Recovery***	***Control Limits***
Dibromofluoromethane	*87*	*75-123*
1,2-Dichloroethane-d4	*101*	*83-116*
Toluene-d8	*100*	*85-113*
4-Bromofluorobenzene	*96*	*81-117*

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ANALYTICAL REPORT

Client:	**Burns and McDonnell**	Work Order:	**1705286**
Project:	General Mitchell Airport AISG Release	Description:	Laboratory Services
Client Sample ID:	**MKE-SB02-001**	Sampled:	05/12/17 13:10
Lab Sample ID:	**1705286-02**	Sampled By:	Client
Matrix:	Soil	Received:	05/13/17 13:10
Unit:	ug/kg dry	Prepared:	05/15/17 08:02 By: ALK
Dilution Factor:	1	Analyzed:	05/15/17 12:02 By: JLB
QC Batch:	1704464	Analytical Batch:	7E15056
Percent Solids:	79		

*Semivolatile Organic Compounds by EPA Method 8270D - Selective Ion Monitoring

CAS Number	Analyte	Analytical Result	LOQ	LOD
83-32-9	Acenaphthene	NDU	0.67	0.20
208-96-8	Acenaphthylene	NDU	0.63	0.19
120-12-7	Anthracene	NDU	0.92	0.28
56-55-3	Benzo(a)anthracene	NDU	1.5	0.44
50-32-8	Benzo(a)pyrene	NDU	2.0	0.60
205-99-2	Benzo(b)fluoranthene	NDU	1.5	0.44
191-24-2	Benzo(g,h,i)perylene	**0.83J**	2.7	0.82
207-08-9	Benzo(k)fluoranthene	**0.42J**	1.0	0.30
218-01-9	Chrysene	**1.7**	0.67	0.20
53-70-3	Dibenz(a,h)anthracene	NDU	3.1	0.95
*206-44-0	Fluoranthene	**0.42PB**	1.3	0.38
86-73-7	Fluorene	NDU	0.71	0.21
193-39-5	Indeno(1,2,3-cd)pyrene	NDU	2.6	0.79
91-20-3	Naphthalene	NDU	1.0	0.32
*85-01-8	Phenanthrene	**0.42PB**	1.0	0.32
*129-00-0	Pyrene	**1.2B**	1.1	0.34

Surrogates:	***% Recovery***	***Control Limits***
2-Methylnapthalene-d10	***34***	*50-150*
Fluoranthene-d10	***35***	*50-150*

*See Statement of Data Qualifications

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ANALYTICAL REPORT

Client:	**Burns and McDonnell**	Work Order:	**1705286**
Project:	General Mitchell Airport AISG Release	Description:	Laboratory Services
Client Sample ID:	**MKE-SB02-001**	Sampled:	05/12/17 13:10
Lab Sample ID:	**1705286-02**	Sampled By:	Client
Matrix:	Soil	Received:	05/13/17 13:10

Physical/Chemical Parameters by EPA/APHA/ASTM Methods

Analyte	Analytical Result	LOQ	LOD	Unit	Dilution Factor	Method	Date Time Analyzed	By	QC Batch
Percent Solids	**79**	0.3	0.1	%	1	USEPA-3550C	05/13/17 14:45	LLH	1704473

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ANALYTICAL REPORT

Client:	**Burns and McDonnell**	Work Order:	**1705286**
Project:	General Mitchell Airport AISG Release	Description:	Laboratory Services
Client Sample ID:	**MKE-SB03-001**	Sampled:	05/12/17 14:40
Lab Sample ID:	**1705286-03**	Sampled By:	Client
Matrix:	Soil	Received:	05/13/17 13:10
Unit:	ug/kg dry	Prepared:	05/14/17 12:00 By: DLV
Dilution Factor:	1	Analyzed:	05/14/17 21:00 By: DLV
QC Batch:	1704472	Analytical Batch:	7E15026
Percent Solids:	79		

Volatile Organic Compounds by EPA Method 8260B (5035A High Level)

CAS Number	Analyte	Analytical Result	LOQ	LOD
71-43-2	Benzene	NDU	60	18
108-86-1	Bromobenzene	NDU	26	7.7
74-97-5	Bromochloromethane	NDU	67	20
75-27-4	Bromodichloromethane	NDU	46	14
75-25-2	Bromoform	NDU	44	13
74-83-9	Bromomethane	NDU	63	19
104-51-8	n-Butylbenzene	NDU	20	6.0
135-98-8	sec-Butylbenzene	NDU	53	16
98-06-6	tert-Butylbenzene	NDU	49	15
56-23-5	Carbon Tetrachloride	NDU	30	9.0
108-90-7	Chlorobenzene	NDU	11	3.4
75-00-3	Chloroethane	NDU	52	16
67-66-3	Chloroform	NDU	44	13
74-87-3	Chloromethane	NDU	66	20
95-49-8	2-Chlorotoluene	NDU	60	18
106-43-4	4-Chlorotoluene	NDU	12	3.6
96-12-8	1,2-Dibromo-3-chloropropane	NDU	80	24
124-48-1	Dibromochloromethane	NDU	43	13
106-93-4	1,2-Dibromoethane	NDU	44	13
74-95-3	Dibromomethane	NDU	29	8.8
95-50-1	1,2-Dichlorobenzene	NDU	58	17
541-73-1	1,3-Dichlorobenzene	NDU	47	14
106-46-7	1,4-Dichlorobenzene	NDU	23	6.9
75-71-8	Dichlorodifluoromethane	NDU	24	7.2
75-34-3	1,1-Dichloroethane	NDU	43	13
107-06-2	1,2-Dichloroethane	NDU	56	17
75-35-4	1,1-Dichloroethene	NDU	35	11
156-59-2	cis-1,2-Dichloroethene	NDU	27	8.2
156-60-5	trans-1,2-Dichloroethene	NDU	46	14
78-87-5	1,2-Dichloropropane	NDU	24	7.1
142-28-9	1,3-Dichloropropane	NDU	28	8.5

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ANALYTICAL REPORT

Client:	**Burns and McDonnell**	Work Order:	**1705286**
Project:	General Mitchell Airport AISG Release	Description:	Laboratory Services
Client Sample ID:	**MKE-SB03-001**	Sampled:	05/12/17 14:40
Lab Sample ID:	**1705286-03**	Sampled By:	Client
Matrix:	Soil	Received:	05/13/17 13:10
Unit:	ug/kg dry	Prepared:	05/14/17 12:00 By: DLV
Dilution Factor:	1	Analyzed:	05/14/17 21:00 By: DLV
QC Batch:	1704472	Analytical Batch:	7E15026
Percent Solids:	79		

Volatile Organic Compounds by EPA Method 8260B (5035A High Level) (Continued)

CAS Number	Analyte	Analytical Result	LOQ	LOD
594-20-7	2,2-Dichloropropane	NDU	60	18
563-58-6	1,1-Dichloropropene	NDU	58	17
10061-01-5	cis-1,3-Dichloropropene	NDU	47	14
10061-02-6	trans-1,3-Dichloropropene	NDU	46	14
100-41-4	Ethylbenzene	NDU	46	14
87-68-3	Hexachlorobutadiene	NDU	62	19
98-82-8	Isopropylbenzene	NDU	9.7	2.9
108-20-3	Isopropyl Ether	NDU	130	40
99-87-6	4-Isopropyltoluene	NDU	55	17
1634-04-4	Methyl tert-Butyl Ether	NDU	20	6.1
75-09-2	Methylene Chloride	NDU	62	19
91-20-3	Naphthalene	NDU	95	28
103-65-1	n-Propylbenzene	NDU	53	16
100-42-5	Styrene	NDU	11	3.2
630-20-6	1,1,1,2-Tetrachloroethane	NDU	30	9.0
79-34-5	1,1,2,2-Tetrachloroethane	NDU	55	16
127-18-4	Tetrachloroethene	NDU	23	7.0
108-88-3	Toluene	NDU	44	13
87-61-6	1,2,3-Trichlorobenzene	NDU	31	9.4
120-82-1	1,2,4-Trichlorobenzene	NDU	33	9.8
71-55-6	1,1,1-Trichloroethane	NDU	49	15
79-00-5	1,1,2-Trichloroethane	NDU	32	9.6
79-01-6	Trichloroethene	NDU	30	9.1
75-69-4	Trichlorofluoromethane	NDU	59	18
96-18-4	1,2,3-Trichloropropane	NDU	49	15
95-63-6	1,2,4-Trimethylbenzene	NDU	43	13
108-67-8	1,3,5-Trimethylbenzene	NDU	16	4.8
75-01-4	Vinyl Chloride	NDU	64	19
179601-23-1	Xylene, Meta + Para	NDU	21	6.2
95-47-6	Xylene, Ortho	NDU	43	13

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ANALYTICAL REPORT

Client:	**Burns and McDonnell**	Work Order:	**1705286**
Project:	General Mitchell Airport AISG Release	Description:	Laboratory Services
Client Sample ID:	**MKE-SB03-001**	Sampled:	05/12/17 14:40
Lab Sample ID:	**1705286-03**	Sampled By:	Client
Matrix:	Soil	Received:	05/13/17 13:10
Unit:	ug/L	Prepared:	05/14/17 12:00 By: DLV
Dilution Factor:	1	Analyzed:	05/14/17 21:00 By: DLV
QC Batch:	1704472	Analytical Batch:	7E15026
Percent Solids:	79		

Volatile Organic Compounds by EPA Method 8260B (5035A High Level) (Continued)

CAS Number	Analyte	Analytical Result	LOQ	LOD

Surrogates:	***% Recovery***	***Control Limits***
Dibromofluoromethane	*87*	*75-123*
1,2-Dichloroethane-d4	*98*	*83-116*
Toluene-d8	*96*	*85-113*
4-Bromofluorobenzene	*94*	*81-117*

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ANALYTICAL REPORT

Client:	**Burns and McDonnell**	Work Order:	**1705286**
Project:	General Mitchell Airport AISG Release	Description:	Laboratory Services
Client Sample ID:	**MKE-SB03-001**	Sampled:	05/12/17 14:40
Lab Sample ID:	**1705286-03**	Sampled By:	Client
Matrix:	Soil	Received:	05/13/17 13:10
Unit:	ug/kg dry	Prepared:	05/15/17 08:02 By: ALK
Dilution Factor:	1	Analyzed:	05/15/17 12:34 By: JLB
QC Batch:	1704464	Analytical Batch:	7E15056
Percent Solids:	79		

Semivolatile Organic Compounds by EPA Method 8270D - Selective Ion Monitoring

CAS Number	Analyte	Analytical Result	LOQ	LOD
83-32-9	Acenaphthene	**0.42J**	0.68	0.20
208-96-8	Acenaphthylene	**0.42J**	0.63	0.19
120-12-7	Anthracene	**0.42J**	0.93	0.28
56-55-3	Benzo(a)anthracene	NDU	1.5	0.44
50-32-8	Benzo(a)pyrene	NDU	2.0	0.61
205-99-2	Benzo(b)fluoranthene	NDU	1.5	0.44
191-24-2	Benzo(g,h,i)perylene	**1.7J**	2.7	0.82
207-08-9	Benzo(k)fluoranthene	**0.42J**	1.0	0.30
218-01-9	Chrysene	**1.7**	0.68	0.20
53-70-3	Dibenz(a,h)anthracene	NDU	3.2	0.95
*206-44-0	Fluoranthene	**0.83PB**	1.3	0.38
86-73-7	Fluorene	**0.42J**	0.72	0.22
193-39-5	Indeno(1,2,3-cd)pyrene	NDU	2.7	0.80
91-20-3	Naphthalene	**8.3**	1.1	0.32
*85-01-8	Phenanthrene	**1.2B**	1.1	0.32
129-00-0	Pyrene	**2.1**	1.1	0.34

Surrogates:	***% Recovery***	***Control Limits***
2-Methylnapthalene-d10	*79*	*50-150*
Fluoranthene-d10	*69*	*50-150*

*See Statement of Data Qualifications

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ANALYTICAL REPORT

Client:	**Burns and McDonnell**	Work Order:	**1705286**
Project:	General Mitchell Airport AISG Release	Description:	Laboratory Services
Client Sample ID:	**MKE-SB03-001**	Sampled:	05/12/17 14:40
Lab Sample ID:	**1705286-03**	Sampled By:	Client
Matrix:	Soil	Received:	05/13/17 13:10

Physical/Chemical Parameters by EPA/APHA/ASTM Methods

Analyte	Analytical Result	LOQ	LOD	Unit	Dilution Factor	Method	Date Time Analyzed	By	QC Batch
Percent Solids	**79**	0.3	0.1	%	1	USEPA-3550C	05/13/17 14:45	LLH	1704473

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ANALYTICAL REPORT

Client:	**Burns and McDonnell**	Work Order:	**1705286**
Project:	General Mitchell Airport AISG Release	Description:	Laboratory Services
Client Sample ID:	**MKE-SB04-001**	Sampled:	05/12/17 15:05
Lab Sample ID:	**1705286-04**	Sampled By:	Client
Matrix:	Soil	Received:	05/13/17 13:10
Unit:	ug/kg dry	Prepared:	05/14/17 12:00 By: DLV
Dilution Factor:	1	Analyzed:	05/14/17 21:24 By: DLV
QC Batch:	1704472	Analytical Batch:	7E15026
Percent Solids:	78		

Volatile Organic Compounds by EPA Method 8260B (5035A High Level)

CAS Number	Analyte	Analytical Result	LOQ	LOD
71-43-2	Benzene	NDU	60	18
108-86-1	Bromobenzene	NDU	26	7.8
74-97-5	Bromochloromethane	NDU	68	20
75-27-4	Bromodichloromethane	NDU	47	14
75-25-2	Bromoform	NDU	45	13
74-83-9	Bromomethane	NDU	64	19
104-51-8	n-Butylbenzene	NDU	20	6.0
135-98-8	sec-Butylbenzene	NDU	54	16
98-06-6	tert-Butylbenzene	NDU	50	15
56-23-5	Carbon Tetrachloride	NDU	30	9.1
108-90-7	Chlorobenzene	NDU	12	3.5
75-00-3	Chloroethane	NDU	53	16
67-66-3	Chloroform	NDU	45	13
74-87-3	Chloromethane	NDU	67	20
95-49-8	2-Chlorotoluene	NDU	60	18
106-43-4	4-Chlorotoluene	NDU	12	3.6
96-12-8	1,2-Dibromo-3-chloropropane	NDU	81	24
124-48-1	Dibromochloromethane	NDU	44	13
106-93-4	1,2-Dibromoethane	NDU	44	13
74-95-3	Dibromomethane	NDU	29	8.8
95-50-1	1,2-Dichlorobenzene	NDU	58	18
541-73-1	1,3-Dichlorobenzene	NDU	48	14
106-46-7	1,4-Dichlorobenzene	NDU	23	6.9
75-71-8	Dichlorodifluoromethane	NDU	24	7.3
75-34-3	1,1-Dichloroethane	NDU	43	13
107-06-2	1,2-Dichloroethane	NDU	57	17
75-35-4	1,1-Dichloroethene	NDU	36	11
156-59-2	cis-1,2-Dichloroethene	NDU	28	8.3
156-60-5	trans-1,2-Dichloroethene	NDU	47	14
78-87-5	1,2-Dichloropropane	NDU	24	7.2
142-28-9	1,3-Dichloropropane	NDU	29	8.6

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ANALYTICAL REPORT

Client:	**Burns and McDonnell**	Work Order:	**1705286**
Project:	General Mitchell Airport AISG Release	Description:	Laboratory Services
Client Sample ID:	**MKE-SB04-001**	Sampled:	05/12/17 15:05
Lab Sample ID:	**1705286-04**	Sampled By:	Client
Matrix:	Soil	Received:	05/13/17 13:10
Unit:	ug/kg dry	Prepared:	05/14/17 12:00 By: DLV
Dilution Factor:	1	Analyzed:	05/14/17 21:24 By: DLV
QC Batch:	1704472	Analytical Batch:	7E15026
Percent Solids:	78		

Volatile Organic Compounds by EPA Method 8260B (5035A High Level) (Continued)

CAS Number	Analyte	Analytical Result	LOQ	LOD
*594-20-7	2,2-Dichloropropane	NDU	60	18
563-58-6	1,1-Dichloropropene	NDU	58	18
10061-01-5	cis-1,3-Dichloropropene	NDU	47	14
10061-02-6	trans-1,3-Dichloropropene	NDU	47	14
100-41-4	Ethylbenzene	NDU	46	14
87-68-3	Hexachlorobutadiene	NDU	63	19
98-82-8	Isopropylbenzene	NDU	9.8	2.9
108-20-3	Isopropyl Ether	NDU	130	40
99-87-6	4-Isopropyltoluene	NDU	56	17
1634-04-4	Methyl tert-Butyl Ether	NDU	20	6.2
75-09-2	Methylene Chloride	NDU	63	19
91-20-3	Naphthalene	NDU	96	29
*103-65-1	n-Propylbenzene	NDU	54	16
100-42-5	Styrene	NDU	11	3.2
630-20-6	1,1,1,2-Tetrachloroethane	NDU	30	9.1
79-34-5	1,1,2,2-Tetrachloroethane	NDU	55	17
127-18-4	Tetrachloroethene	NDU	23	7.0
108-88-3	Toluene	NDU	44	13
87-61-6	1,2,3-Trichlorobenzene	NDU	32	9.5
120-82-1	1,2,4-Trichlorobenzene	NDU	33	9.9
71-55-6	1,1,1-Trichloroethane	NDU	49	15
79-00-5	1,1,2-Trichloroethane	NDU	32	9.7
79-01-6	Trichloroethene	NDU	31	9.2
75-69-4	Trichlorofluoromethane	NDU	59	18
96-18-4	1,2,3-Trichloropropane	NDU	50	15
95-63-6	1,2,4-Trimethylbenzene	NDU	43	13
108-67-8	1,3,5-Trimethylbenzene	NDU	16	4.9
75-01-4	Vinyl Chloride	NDU	65	19
179601-23-1	Xylene, Meta + Para	NDU	21	6.3
95-47-6	Xylene, Ortho	NDU	43	13

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*See Statement of Data Qualifications

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ANALYTICAL REPORT

Client:	**Burns and McDonnell**	Work Order:	**1705286**
Project:	General Mitchell Airport AISG Release	Description:	Laboratory Services
Client Sample ID:	**MKE-SB04-001**	Sampled:	05/12/17 15:05
Lab Sample ID:	**1705286-04**	Sampled By:	Client
Matrix:	Soil	Received:	05/13/17 13:10
Unit:	ug/L	Prepared:	05/14/17 12:00 By: DLV
Dilution Factor:	1	Analyzed:	05/14/17 21:24 By: DLV
QC Batch:	1704472	Analytical Batch:	7E15026
Percent Solids:	78		

Volatile Organic Compounds by EPA Method 8260B (5035A High Level) (Continued)

CAS Number	Analyte	Analytical Result	LOQ	LOD

Surrogates:	***% Recovery***	***Control Limits***
Dibromofluoromethane	*86*	*75-123*
1,2-Dichloroethane-d4	*100*	*83-116*
Toluene-d8	*98*	*85-113*
4-Bromofluorobenzene	*97*	*81-117*

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ANALYTICAL REPORT

Client:	**Burns and McDonnell**	Work Order:	**1705286**
Project:	General Mitchell Airport AISG Release	Description:	Laboratory Services
Client Sample ID:	**MKE-SB04-001**	Sampled:	05/12/17 15:05
Lab Sample ID:	**1705286-04**	Sampled By:	Client
Matrix:	Soil	Received:	05/13/17 13:10
Unit:	ug/kg dry	Prepared:	05/15/17 08:02 By: ALK
Dilution Factor:	1	Analyzed:	05/15/17 13:05 By: JLB
QC Batch:	1704464	Analytical Batch:	7E15056
Percent Solids:	78		

Semivolatile Organic Compounds by EPA Method 8270D - Selective Ion Monitoring

CAS Number	Analyte	Analytical Result	LOQ	LOD
83-32-9	Acenaphthene	**1.3**	0.68	0.21
208-96-8	Acenaphthylene	**0.43J**	0.64	0.19
120-12-7	Anthracene	**2.2**	0.94	0.28
56-55-3	Benzo(a)anthracene	**3.5**	1.5	0.45
50-32-8	Benzo(a)pyrene	**2.6**	2.0	0.62
205-99-2	Benzo(b)fluoranthene	**3.0**	1.5	0.45
191-24-2	Benzo(g,h,i)perylene	**2.2J**	2.8	0.83
207-08-9	Benzo(k)fluoranthene	**2.2**	1.0	0.31
218-01-9	Chrysene	**3.9**	0.68	0.21
53-70-3	Dibenz(a,h)anthracene	NDU	3.2	0.96
206-44-0	Fluoranthene	**7.0**	1.3	0.38
86-73-7	Fluorene	**1.3**	0.73	0.22
193-39-5	Indeno(1,2,3-cd)pyrene	**1.7J**	2.7	0.81
91-20-3	Naphthalene	**0.87J**	1.1	0.32
85-01-8	Phenanthrene	**7.0**	1.1	0.32
129-00-0	Pyrene	**7.4**	1.2	0.35

Surrogates:	***% Recovery***	***Control Limits***
2-Methylnapthalene-d10	*70*	*50-150*
Fluoranthene-d10	*76*	*50-150*

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ANALYTICAL REPORT

Client:	**Burns and McDonnell**	Work Order:	**1705286**
Project:	General Mitchell Airport AISG Release	Description:	Laboratory Services
Client Sample ID:	**MKE-SB04-001**	Sampled:	05/12/17 15:05
Lab Sample ID:	**1705286-04**	Sampled By:	Client
Matrix:	Soil	Received:	05/13/17 13:10

Physical/Chemical Parameters by EPA/APHA/ASTM Methods

Analyte	Analytical Result	LOQ	LOD	Unit	Dilution Factor	Method	Date Time Analyzed	By	QC Batch
Percent Solids	**78**	0.3	0.1	%	1	USEPA-3550C	05/13/17 14:45	LLH	1704473

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QUALITY CONTROL REPORT

Volatile Organic Compounds by EPA Method 8260B (5035A High Level)

QC Batch: 1704472 5035A High Concentration (MeOH) - MS/USEPA-8260B

Method Blank Analyzed: 05/14/2017 By: DLV
Unit: ug/kg wet Analytical Batch: 7E15026

Analyte	Sample Conc.	Spike Qty.	Result	Spike % Rec.	Control Limits	RPD	RPD Limits	LOQ	LOD
Benzene			ND U					47	14
Bromobenzene			ND U					20	6.1
Bromochloromethane			ND U					53	16
Bromodichloromethane			ND U					37	11
Bromoform			ND U					35	10
Bromomethane			ND U			--		50	15
n-Butylbenzene			**7.0 J**			--		16	4.7
sec-Butylbenzene			ND U					42	13
tert-Butylbenzene			ND U					39	12
Carbon Tetrachloride			ND U					24	7.1
Chlorobenzene			ND U					9.0	2.7
Chloroethane			ND U					41	12
Chloroform			ND U					35	10
Chloromethane			ND U					52	16
2-Chlorotoluene			ND U					47	14
4-Chlorotoluene			ND U					9.3	2.8
1,2-Dibromo-3-chloropropane			ND U					63	19
Dibromochloromethane			ND U					34	10
1,2-Dibromoethane			ND U					35	10
Dibromomethane			ND U					23	6.9
1,2-Dichlorobenzene			ND U					46	14
1,3-Dichlorobenzene			ND U					37	11
1,4-Dichlorobenzene			ND U					18	5.4
Dichlorodifluoromethane			ND U					19	5.7
1,1-Dichloroethane			ND U					34	10
1,2-Dichloroethane			ND U					44	13
1,1-Dichloroethene			ND U					28	8.4
cis-1,2-Dichloroethene			ND U					22	6.5
trans-1,2-Dichloroethene			ND U					37	11
1,2-Dichloropropane			ND U					19	5.6
1,3-Dichloropropane			ND U					22	6.7
2,2-Dichloropropane			ND U					47	14
1,1-Dichloropropene			ND U					46	14
cis-1,3-Dichloropropene			ND U					37	11
trans-1,3-Dichloropropene			ND U					37	11
Ethylbenzene			ND U					36	11

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QUALITY CONTROL REPORT

Volatile Organic Compounds by EPA Method 8260B (5035A High Level) (Continued)

Analyte	Sample Conc.	Spike Qty.	Result	Spike % Rec.	Control Limits	RPD	RPD Limits	LOQ	LOD

QC Batch: 1704472 (Continued) 5035A High Concentration (MeOH) - MS/USEPA-8260B

Method Blank (Continued) Analyzed: 05/14/2017 By: DLV
Unit: ug/kg wet Analytical Batch: 7E15026

Hexachlorobutadiene			ND U					49	15
Isopropylbenzene			ND U					7.7	2.3
Isopropyl Ether			ND U					100	31
4-Isopropyltoluene			ND U					44	13
Methyl tert-Butyl Ether			ND U					16	4.8
Methylene Chloride			**35 J**			--		49	15
Naphthalene			ND U					75	22
n-Propylbenzene			ND U					42	13
Styrene			ND U					8.3	2.5
1,1,1,2-Tetrachloroethane			ND U					24	7.1
1,1,2,2-Tetrachloroethane			ND U					43	13
Tetrachloroethene			ND U					18	5.5
Toluene			ND U					34	10
1,2,3-Trichlorobenzene			ND U					25	7.4
1,2,4-Trichlorobenzene			ND U					26	7.7
1,1,1-Trichloroethane			ND U					38	12
1,1,2-Trichloroethane			ND U					25	7.6
Trichloroethene			ND U					24	7.2
Trichlorofluoromethane			ND U					46	14
1,2,3-Trichloropropane			ND U					39	12
1,2,4-Trimethylbenzene			ND U					34	10
1,3,5-Trimethylbenzene			ND U					13	3.8
Vinyl Chloride			ND U					51	15
Xylene, Meta + Para			ND U					16	4.9
Xylene, Ortho			ND U					34	10

Method Blank Analyzed: 05/14/2017 By: DLV
Unit: ug/L Analytical Batch: 7E15026

Surrogates:		
Dibromofluoromethane	*86*	*75-123*
1,2-Dichloroethane-d4	*99*	*83-116*
Toluene-d8	*98*	*85-113*
4-Bromofluorobenzene	*98*	*81-117*

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QUALITY CONTROL REPORT

Volatile Organic Compounds by EPA Method 8260B (5035A High Level) (Continued)

QC Batch: 1704472 (Continued) 5035A High Concentration (MeOH) - MS/USEPA-8260B

Laboratory Control Sample Analyzed: 05/14/2017 By: DLV
Unit: ug/kg wet Analytical Batch: 7E15026

Analyte	Sample Conc.	Spike Qty.	Result	Spike % Rec.	Control Limits	RPD	RPD Limits	LOQ	LOD
Benzene		2000	**1970**	98	85-118	--		47.0	14
Bromobenzene		2000	**1920**	96	89-116	--		20.3	6.1
Bromochloromethane		2000	**1950**	98	81-121	--		52.9	16
Bromodichloromethane		2000	**2050**	103	80-123	--		36.6	11
Bromoform		2000	**1910**	95	58-128	--		35.0	10
Bromomethane		2000	**1920**	96	57-139	--		49.6	15
n-Butylbenzene		2000	**2070**	104	75-125	--		15.7	4.7
sec-Butylbenzene		2000	**1990**	100	84-121	--		42.0	13
tert-Butylbenzene		2000	**1980**	99	86-121	--		38.6	12
Carbon Tetrachloride		2000	**1830**	92	76-125	--		23.6	7.1
Chlorobenzene		2000	**1970**	99	86-114	--		8.99	2.7
Chloroethane		2000	**1790**	89	76-123	--		41.3	12
Chloroform		2000	**1980**	99	86-118	--		35.0	10
Chloromethane		2000	**1880**	94	73-123	--		51.9	16
2-Chlorotoluene		2000	**1950**	98	88-119	--		47.0	14
4-Chlorotoluene		2000	**1970**	99	84-119	--		9.32	2.8
1,2-Dibromo-3-chloropropane		2000	**1820**	91	51-132	--		63.3	19
Dibromochloromethane		2000	**1950**	98	72-119	--		34.0	10
1,2-Dibromoethane		2000	**1980**	99	81-118	--		34.6	10
Dibromomethane		2000	**2010**	101	83-117	--		23.0	6.9
1,2-Dichlorobenzene		2000	**1940**	97	82-124	--		45.6	14
1,3-Dichlorobenzene		2000	**1940**	97	85-119	--		37.3	11
1,4-Dichlorobenzene		2000	**1920**	96	85-119	--		18.0	5.4
Dichlorodifluoromethane		2000	**1960**	98	68-135	--		19.0	5.7
1,1-Dichloroethane		2000	**1980**	99	81-121	--		33.6	10
1,2-Dichloroethane		2000	**1960**	98	82-119	--		44.3	13
1,1-Dichloroethene		2000	**1940**	97	80-121	--		28.0	8.4
cis-1,2-Dichloroethene		2000	**1940**	97	85-118	--		21.6	6.5
trans-1,2-Dichloroethene		2000	**1940**	97	85-117	--		36.6	11
1,2-Dichloropropane		2000	**1970**	98	80-122	--		18.6	5.6
1,3-Dichloropropane		2000	**1950**	97	84-114	--		22.3	6.7
2,2-Dichloropropane		2000	**2010**	101	56-132	--		47.0	14
1,1-Dichloropropene		2000	**1940**	97	86-119	--		45.6	14
cis-1,3-Dichloropropene		2000	**1680**	84	79-121	--		37.0	11
trans-1,3-Dichloropropene		2000	**1970**	98	73-125	--		36.6	11
Ethylbenzene		2000	**1980**	99	84-116	--		36.0	11

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QUALITY CONTROL REPORT

Volatile Organic Compounds by EPA Method 8260B (5035A High Level) (Continued)

QC Batch: 1704472 (Continued) 5035A High Concentration (MeOH) - MS/USEPA-8260B

Laboratory Control Sample (Continued) Analyzed: 05/14/2017 By: DLV
Unit: ug/kg wet Analytical Batch: 7E15026

Analyte	Sample Conc.	Spike Qty.	Result	Spike % Rec.	Control Limits	RPD	RPD Limits	LOQ	LOD
Hexachlorobutadiene		2000	**2020**	101	60-135	--		49.0	15
Isopropylbenzene		2000	**1960**	98	82-125	--		7.66	2.3
4-Isopropyltoluene		2000	**2010**	100	82-122	--		43.6	13
Methyl tert-Butyl Ether		2000	**1950**	97	81-119	--		16.0	4.8
Methylene Chloride		2000	**1970**	99	78-123	--		49.0	15
Naphthalene		2000	**1760**	88	53-133	--		74.6	22
n-Propylbenzene		2000	**2020**	101	85-121	--		42.0	13
Styrene		2000	**2050**	102	79-115	--		8.32	2.5
1,1,1,2-Tetrachloroethane		2000	**2050**	102	83-116	--		23.6	7.1
1,1,2,2-Tetrachloroethane		2000	**1990**	100	75-125	--		43.0	13
Tetrachloroethene		2000	**1950**	98	85-116	--		18.3	5.5
Toluene		2000	**1960**	98	86-120	--		34.3	10
1,2,3-Trichlorobenzene		2000	**2090**	105	66-129	--		24.6	7.4
1,2,4-Trichlorobenzene		2000	**2070**	103	66-133	--		25.6	7.7
1,1,1-Trichloroethane		2000	**1880**	94	84-121	--		38.3	12
1,1,2-Trichloroethane		2000	**1960**	98	85-120	--		25.3	7.6
Trichloroethene		2000	**1950**	98	83-125	--		24.0	7.2
Trichlorofluoromethane		2000	**1920**	96	82-123	--		46.3	14
1,2,3-Trichloropropane		2000	**2010**	100	73-125	--		39.0	12
1,2,4-Trimethylbenzene		2000	**2010**	100	85-118	--		33.6	10
1,3,5-Trimethylbenzene		2000	**1980**	99	85-119	--		12.7	3.8
Vinyl Chloride		2000	**1960**	98	77-124	--		50.6	15
Xylene, Meta + Para		4000	**4000**	100	84-118	--		16.3	4.9
Xylene, Ortho		2000	**1980**	99	85-115	--		33.6	10

Laboratory Control Sample Analyzed: 05/14/2017 By: DLV
Unit: ug/L Analytical Batch: 7E15026

Surrogates:		
Dibromofluoromethane	*102*	*75-123*
1,2-Dichloroethane-d4	*99*	*83-116*
Toluene-d8	*101*	*85-113*
4-Bromofluorobenzene	*101*	*81-117*

Matrix Spike 1705286-04 MKE-SB04-001 Analyzed: 05/14/2017 By: DLV
Unit: ug/kg dry Analytical Batch: 7E15026

Benzene	ND U	2560	**2600**	101	85-125	--		60.2	18

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QUALITY CONTROL REPORT

Volatile Organic Compounds by EPA Method 8260B (5035A High Level) (Continued)

QC Batch: 1704472 (Continued) 5035A High Concentration (MeOH) - MS/USEPA-8260B

Matrix Spike (Continued) 1705286-04 MKE-SB04-001 — Analyzed: 05/14/2017 By: DLV

Unit: ug/kg dry — Analytical Batch: 7E15026

Analyte	Sample Conc.	Spike Qty.	Result	Spike % Rec.	Control Limits	RPD	RPD Limits	LOQ	LOD
Bromobenzene	ND U	2560	**2460**	96	82-115	--		26.0	7.8
Bromochloromethane	ND U	2560	**2620**	102	85-126	--		67.9	20
Bromodichloromethane	ND U	2560	**2430**	95	78-124	--		46.9	14
Bromoform	ND U	2560	**2240**	87	75-118	--		44.8	13
Bromomethane	ND U	2560	**2520**	98	70-135	--		63.6	19
n-Butylbenzene	ND U	2560	**2610**	102	71-122	--		20.1	6.0
sec-Butylbenzene	ND U	2560	**2550**	100	84-117	--		53.8	16
tert-Butylbenzene	ND U	2560	**2560**	100	84-118	--		49.5	15
Carbon Tetrachloride	ND U	2560	**2250**	88	71-130	--		30.3	9.1
Chlorobenzene	ND U	2560	**2550**	100	86-118	--		11.5	3.5
Chloroethane	ND U	2560	**2520**	98	32-136	--		52.9	16
Chloroform	ND U	2560	**2580**	100	86-126	--		44.8	13
Chloromethane	ND U	2560	**2640**	103	70-142	--		66.6	20
2-Chlorotoluene	ND U	2560	**2510**	98	82-119	--		60.2	18
4-Chlorotoluene	ND U	2560	**2490**	97	79-115	--		11.9	3.6
1,2-Dibromo-3-chloropropane	ND U	2560	**2080**	81	69-125	--		81.1	24
Dibromochloromethane	ND U	2560	**2340**	91	57-121	--		43.5	13
1,2-Dibromoethane	ND U	2560	**2540**	99	72-124	--		44.4	13
Dibromomethane	ND U	2560	**2520**	98	86-119	--		29.4	8.8
1,2-Dichlorobenzene	ND U	2560	**2490**	97	85-121	--		58.5	18
1,3-Dichlorobenzene	ND U	2560	**2490**	97	86-116	--		47.8	14
1,4-Dichlorobenzene	ND U	2560	**2430**	95	87-115	--		23.0	6.9
Dichlorodifluoromethane	ND U	2560	**2880**	112	65-133	--		24.3	7.3
1,1-Dichloroethane	ND U	2560	**2590**	101	85-127	--		43.1	13
1,2-Dichloroethane	ND U	2560	**2630**	103	82-125	--		56.8	17
1,1-Dichloroethene	ND U	2560	**2480**	97	81-135	--		35.8	11
cis-1,2-Dichloroethene	ND U	2560	**2530**	99	88-125	--		27.7	8.3
trans-1,2-Dichloroethene	ND U	2560	**2550**	100	81-135	--		46.9	14
1,2-Dichloropropane	ND U	2560	**2600**	101	78-132	--		23.9	7.2
1,3-Dichloropropane	ND U	2560	**2550**	99	70-121	--		28.6	8.6
2,2-Dichloropropane	ND U	2560	**2160**	84	43-124	--		60.2	18
1,1-Dichloropropene	ND U	2560	**2500**	98	82-129	--		58.5	18
cis-1,3-Dichloropropene	ND U	2560	**2020**	79	70-124	--		47.4	14
trans-1,3-Dichloropropene	ND U	2560	**2330**	91	63-122	--		46.9	14
Ethylbenzene	ND U	2560	**2530**	99	80-122	--		46.1	14
Hexachlorobutadiene	ND U	2560	**2520**	98	78-134	--		62.7	19

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QUALITY CONTROL REPORT

Volatile Organic Compounds by EPA Method 8260B (5035A High Level) (Continued)

QC Batch: 1704472 (Continued) 5035A High Concentration (MeOH) - MS/USEPA-8260B

Matrix Spike (Continued) 1705286-04 MKE-SB04-001 — Analyzed: 05/14/2017 By: DLV
Unit: ug/kg dry — Analytical Batch: 7E15026

Analyte	Sample Conc.	Spike Qty.	Result	Spike % Rec.	Control Limits	RPD	RPD Limits	LOQ	LOD
Isopropylbenzene	ND U	2560	**2530**	99	84-120	--		9.81	2.9
4-Isopropyltoluene	ND U	2560	**2570**	100	82-116	--		55.9	17
Methyl tert-Butyl Ether	ND U	2560	**2580**	101	63-134	--		20.5	6.2
Methylene Chloride	ND U	2560	**2640**	103	78-139	--		62.7	19
Naphthalene	ND U	2560	**2170**	85	67-119	--		95.6	29
n-Propylbenzene	ND U	2560	**2540**	99	73-124	--		53.8	16
Styrene	ND U	2560	**2650**	103	80-117	--		10.7	3.2
1,1,1,2-Tetrachloroethane	ND U	2560	**2490**	97	82-116	--		30.3	9.1
1,1,2,2-Tetrachloroethane	ND U	2560	**2510**	98	64-122	--		55.0	17
Tetrachloroethene	ND U	2560	**2480**	97	74-130	--		23.5	7.0
Toluene	ND U	2560	**2550**	99	81-128	--		44.0	13
1,2,3-Trichlorobenzene	ND U	2560	**2560**	100	77-126	--		31.6	9.5
1,2,4-Trichlorobenzene	ND U	2560	**2540**	99	76-131	--		32.9	9.9
1,1,1-Trichloroethane	ND U	2560	**2340**	91	84-126	--		49.1	15
1,1,2-Trichloroethane	ND U	2560	**2540**	99	81-124	--		32.4	9.7
Trichloroethene	ND U	2560	**2450**	96	90-130	--		30.7	9.2
Trichlorofluoromethane	ND U	2560	**2530**	99	50-155	--		59.3	18
1,2,3-Trichloropropane	ND U	2560	**2610**	102	69-114	--		49.9	15
1,2,4-Trimethylbenzene	ND U	2560	**2630**	103	79-114	--		43.1	13
1,3,5-Trimethylbenzene	ND U	2560	**2560**	100	83-112	--		16.2	4.9
Vinyl Chloride	ND U	2560	**2640**	103	63-148	--		64.9	19
Xylene, Meta + Para	ND U	5130	**5160**	101	77-128	--		20.9	6.3
Xylene, Ortho	ND U	2560	**2590**	101	83-121	--		43.1	13

Matrix Spike 1705286-04 MKE-SB04-001 — Analyzed: 05/14/2017 By: DLV
Unit: ug/L — Analytical Batch: 7E15026

Surrogates:		
Dibromofluoromethane	*100*	*75-123*
1,2-Dichloroethane-d4	*101*	*83-116*
Toluene-d8	*101*	*85-113*
4-Bromofluorobenzene	*103*	*81-117*

Matrix Spike Duplicate 1705286-04 MKE-SB04-001 — Analyzed: 05/14/2017 By: DLV
Unit: ug/kg dry — Analytical Batch: 7E15026

Benzene	ND U	2560	**2690**	105	85-125	4	9	60.2	18

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QUALITY CONTROL REPORT

Volatile Organic Compounds by EPA Method 8260B (5035A High Level) (Continued)

QC Batch: 1704472 (Continued) 5035A High Concentration (MeOH) - MS/USEPA-8260B

Matrix Spike Duplicate (Continued) 1705286-04 MKE-SB04-001 Analyzed: 05/14/2017 By: DLV
Unit: ug/kg dry Analytical Batch: 7E15026

Analyte	Sample Conc.	Spike Qty.	Result	Spike % Rec.	Control Limits	RPD	RPD Limits	LOQ	LOD
Bromobenzene	ND U	2560	**2610**	102	82-115	6	11	26.0	7.8
Bromochloromethane	ND U	2560	**2710**	106	85-126	3	10	67.9	20
Bromodichloromethane	ND U	2560	**2640**	103	78-124	8	9	46.9	14
Bromoform	ND U	2560	**2380**	93	75-118	6	11	44.8	13
Bromomethane	ND U	2560	**2720**	106	70-135	8	24	63.6	19
n-Butylbenzene	ND U	2560	**2840**	111	71-122	9	12	20.1	6.0
sec-Butylbenzene	ND U	2560	**2780**	108	84-117	9	10	53.8	16
tert-Butylbenzene	ND U	2560	**2780**	108	84-118	8	12	49.5	15
Carbon Tetrachloride	ND U	2560	**2420**	95	71-130	8	14	30.3	9.1
Chlorobenzene	ND U	2560	**2690**	105	86-118	5	11	11.5	3.5
Chloroethane	ND U	2560	**2640**	103	32-136	5	21	52.9	16
Chloroform	ND U	2560	**2690**	105	86-126	4	7	44.8	13
Chloromethane	ND U	2560	**2820**	110	70-142	7	15	66.6	20
2-Chlorotoluene	ND U	2560	**2690**	105	82-119	7	20	60.2	18
4-Chlorotoluene	ND U	2560	**2670**	104	79-115	7	11	11.9	3.6
1,2-Dibromo-3-chloropropane	ND U	2560	**2280**	89	69-125	9	11	81.1	24
Dibromochloromethane	ND U	2560	**2530**	99	57-121	8	12	43.5	13
1,2-Dibromoethane	ND U	2560	**2630**	103	72-124	4	11	44.4	13
Dibromomethane	ND U	2560	**2590**	101	86-119	3	7	29.4	8.8
1,2-Dichlorobenzene	ND U	2560	**2640**	103	85-121	6	10	58.5	18
1,3-Dichlorobenzene	ND U	2560	**2670**	104	86-116	7	8	47.8	14
1,4-Dichlorobenzene	ND U	2560	**2630**	103	87-115	8	9	23.0	6.9
Dichlorodifluoromethane	ND U	2560	**3070**	120	65-133	6	12	24.3	7.3
1,1-Dichloroethane	ND U	2560	**2680**	105	85-127	3	9	43.1	13
1,2-Dichloroethane	ND U	2560	**2710**	106	82-125	3	8	56.8	17
1,1-Dichloroethene	ND U	2560	**2630**	102	81-135	6	11	35.8	11
cis-1,2-Dichloroethene	ND U	2560	**2670**	104	88-125	5	9	27.7	8.3
trans-1,2-Dichloroethene	ND U	2560	**2710**	106	81-135	6	10	46.9	14
1,2-Dichloropropane	ND U	2560	**2720**	106	78-132	5	11	23.9	7.2
1,3-Dichloropropane	ND U	2560	**2610**	102	70-121	2	8	28.6	8.6
2,2-Dichloropropane	ND U	2560	**2390**	93	43-124	**10**	9	60.2	18
1,1-Dichloropropene	ND U	2560	**2660**	104	82-129	6	9	58.5	18
cis-1,3-Dichloropropene	ND U	2560	**2200**	86	70-124	9	10	47.4	14
trans-1,3-Dichloropropene	ND U	2560	**2520**	98	63-122	8	9	46.9	14
Ethylbenzene	ND U	2560	**2690**	105	80-122	6	10	46.1	14
Hexachlorobutadiene	ND U	2560	**2810**	110	78-134	11	14	62.7	19

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QUALITY CONTROL REPORT

Volatile Organic Compounds by EPA Method 8260B (5035A High Level) (Continued)

QC Batch: 1704472 (Continued) 5035A High Concentration (MeOH) - MS/USEPA-8260B

Matrix Spike Duplicate (Continued) 1705286-04 MKE-SB04-001 — Analyzed: 05/14/2017 By: DLV
Unit: ug/kg dry — Analytical Batch: 7E15026

Analyte	Sample Conc.	Spike Qty.	Result	Spike % Rec.	Control Limits	RPD	RPD Limits	LOQ	LOD
Isopropylbenzene	ND U	2560	**2760**	108	84-120	8	9	9.81	2.9
4-Isopropyltoluene	ND U	2560	**2790**	109	82-116	8	13	55.9	17
Methyl tert-Butyl Ether	ND U	2560	**2690**	105	63-134	4	11	20.5	6.2
Methylene Chloride	ND U	2560	**2710**	106	78-139	3	9	62.7	19
Naphthalene	ND U	2560	**2390**	93	67-119	10	15	95.6	29
n-Propylbenzene	ND U	2560	**2800**	109	73-124	**10**	8	53.8	16
Styrene	ND U	2560	**2780**	108	80-117	5	10	10.7	3.2
1,1,1,2-Tetrachloroethane	ND U	2560	**2690**	105	82-116	8	10	30.3	9.1
1,1,2,2-Tetrachloroethane	ND U	2560	**2670**	104	64-122	6	14	55.0	17
Tetrachloroethene	ND U	2560	**2680**	104	74-130	8	11	23.5	7.0
Toluene	ND U	2560	**2680**	104	81-128	5	10	44.0	13
1,2,3-Trichlorobenzene	ND U	2560	**2830**	110	77-126	10	16	31.6	9.5
1,2,4-Trichlorobenzene	ND U	2560	**2810**	109	76-131	10	11	32.9	9.9
1,1,1-Trichloroethane	ND U	2560	**2550**	99	84-126	8	9	49.1	15
1,1,2-Trichloroethane	ND U	2560	**2630**	103	81-124	3	8	32.4	9.7
Trichloroethene	ND U	2560	**2610**	102	90-130	6	12	30.7	9.2
Trichlorofluoromethane	ND U	2560	**2700**	105	50-155	7	13	59.3	18
1,2,3-Trichloropropane	ND U	2560	**2720**	106	69-114	4	14	49.9	15
1,2,4-Trimethylbenzene	ND U	2560	**2810**	110	79-114	7	11	43.1	13
1,3,5-Trimethylbenzene	ND U	2560	**2750**	107	83-112	7	12	16.2	4.9
Vinyl Chloride	ND U	2560	**2880**	112	63-148	9	11	64.9	19
Xylene, Meta + Para	ND U	5130	**5440**	106	77-128	5	10	20.9	6.3
Xylene, Ortho	ND U	2560	**2720**	106	83-121	5	9	43.1	13

Matrix Spike Duplicate 1705286-04 MKE-SB04-001 — Analyzed: 05/14/2017 By: DLV
Unit: ug/L — Analytical Batch: 7E15026

Surrogates:		
Dibromofluoromethane	*102*	*75-123*
1,2-Dichloroethane-d4	*102*	*83-116*
Toluene-d8	*100*	*85-113*
4-Bromofluorobenzene	*102*	*81-117*

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QUALITY CONTROL REPORT

Semivolatile Organic Compounds by EPA Method 8270D - Selective Ion Monitoring

QC Batch: 1704464 3545A PFE Extraction/USEPA-8270D (SIM)

Method Blank — Analyzed: 05/15/2017 By: JLB
Unit: ug/kg wet — Analytical Batch: 7E15056

Analyte	Sample Conc.	Spike Qty.	Result	Spike % Rec.	Control Limits	RPD	RPD Limits	LOQ	LOD
Acenaphthene			ND U					0.53	0.16
Acenaphthylene			ND U					0.50	0.15
Anthracene			ND U					0.73	0.22
Benzo(a)anthracene			ND U					1.2	0.35
Benzo(a)pyrene			ND U					1.6	0.48
Benzo(b)fluoranthene			ND U					1.2	0.35
Benzo(g,h,i)perylene			ND U					2.2	0.65
Benzo(k)fluoranthene			ND U					0.80	0.24
Chrysene			ND U					0.53	0.16
Dibenz(a,h)anthracene			ND U					2.5	0.75
Fluoranthene			**0.33 J**			--		1.0	0.30
Fluorene			ND U					0.57	0.17
Indeno(1,2,3-cd)pyrene			ND U					2.1	0.63
Naphthalene			ND U					0.83	0.25
Phenanthrene			**0.33 J**			--		0.83	0.25
Pyrene			**0.33 J**			--		0.90	0.27
Surrogates:									
2-Methylnapthalene-d10				*73*	*50-150*				
Fluoranthene-d10				*77*	*50-150*				

Laboratory Control Sample — Analyzed: 05/15/2017 By: JLB
Unit: ug/kg wet — Analytical Batch: 7E15056

Analyte	Sample Conc.	Spike Qty.	Result	Spike % Rec.	Control Limits	RPD	RPD Limits	LOQ	LOD
Acenaphthene		16.8	**13.1**	78	45-110	--		0.533	0.16
Acenaphthylene		16.8	**13.8**	82	45-105	--		0.500	0.15
Anthracene		16.8	**12.8**	76	55-105	--		0.733	0.22
Benzo(a)anthracene		16.8	**13.4**	80	50-110	--		1.17	0.35
Benzo(a)pyrene		16.8	**13.8**	82	50-110	--		1.60	0.48
Benzo(b)fluoranthene		16.8	**13.4**	80	45-115	--		1.17	0.35
Benzo(g,h,i)perylene		16.8	**14.4**	86	40-125	--		2.16	0.65
Benzo(k)fluoranthene		16.8	**15.1**	90	45-125	--		0.799	0.24

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QUALITY CONTROL REPORT

Semivolatile Organic Compounds by EPA Method 8270D - Selective Ion Monitoring (Continued)

QC Batch: 1704464 (Continued) 3545A PFE Extraction/USEPA-8270D (SIM)

Laboratory Control Sample (Continued) Analyzed: 05/15/2017 By: JLB
Unit: ug/kg wet Analytical Batch: 7E15056

Analyte	Sample Conc.	Spike Qty.	Result	Spike % Rec.	Control Limits	RPD	RPD Limits	LOQ	LOD
Chrysene		16.8	**14.4**	86	55-110	--		0.533	0.16
Dibenz(a,h)anthracene		16.8	**14.8**	88	40-125	--		2.50	0.75
Fluoranthene		16.8	**13.1**	78	55-115	--		0.999	0.30
Fluorene		16.8	**13.1**	78	50-110	--		0.566	0.17
Indeno(1,2,3-cd)pyrene		16.8	**13.4**	80	40-120	--		2.10	0.63
Naphthalene		16.8	**13.8**	82	40-105	--		0.832	0.25
Phenanthrene		16.8	**13.4**	80	50-110	--		0.832	0.25
Pyrene		16.8	**14.1**	84	45-125	--		0.899	0.27
Surrogates:									
2-Methylnapthalene-d10				*80*	*50-150*				
Fluoranthene-d10				*87*	*50-150*				

Matrix Spike 1705286-01 MKE-SB01-001 Analyzed: 05/15/2017 By: JLB
Unit: ug/kg dry Analytical Batch: 7E15056

Analyte	Sample Conc.	Spike Qty.	Result	Spike % Rec.	Control Limits	RPD	RPD Limits	LOQ	LOD
Acenaphthene	11.0	23.1	**25.9**	65	45-110	--		2.90	0.87
Acenaphthylene	1.83 J	23.1	**18.5**	72	45-105	--		2.72	0.82
Anthracene	3.65 J	23.1	**22.2**	80	55-105	--		3.99	1.2
Benzo(a)anthracene	7.31	23.1	**29.6**	96	50-110	--		6.35	1.9
Benzo(a)pyrene	5.48 J	23.1	**25.9**	88	50-110	--		8.70	2.6
Benzo(b)fluoranthene	5.48 J	23.1	**27.8**	96	45-115	--		6.35	1.9
Benzo(g,h,i)perylene	3.65 J	23.1	**24.1**	88	40-125	--		11.8	3.5
Benzo(k)fluoranthene	3.65 J	23.1	**25.9**	96	45-125	--		4.35	1.3
Chrysene	7.31	23.1	**31.5**	104	55-110	--		2.90	0.87
Dibenz(a,h)anthracene	ND U	23.1	**22.2**	96	40-125	--		13.6	4.1
Fluoranthene	14.6	23.1	**38.9**	105	55-115	--		5.44	1.6
Fluorene	5.48	23.1	**22.2**	72	50-110	--		3.08	0.93
Indeno(1,2,3-cd)pyrene	3.65 J	23.1	**27.8**	104	40-120	--		11.4	3.4
Naphthalene	67.6	23.1	**77.8**	44	40-105	--		4.53	1.4
Phenanthrene	12.8	23.1	**33.3**	89	50-110	--		4.53	1.4
Pyrene	14.6	23.1	**40.7**	113	45-125	--		4.89	1.5

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QUALITY CONTROL REPORT

Semivolatile Organic Compounds by EPA Method 8270D - Selective Ion Monitoring (Continued)

QC Batch: 1704464 (Continued) 3545A PFE Extraction/USEPA-8270D (SIM)

Matrix Spike (Continued) 1705286-01 MKE-SB01-001 — Analyzed: 05/15/2017 By: JLB
Unit: ug/kg dry — Analytical Batch: 7E15056

Analyte	Sample Conc.	Spike Qty.	Result	Spike % Rec.	Control Limits	RPD	RPD Limits	LOQ	LOD
Surrogates:									
2-Methylnapthalene-d10				*80*	*50-150*				
Fluoranthene-d10				*84*	*50-150*				

Matrix Spike Duplicate 1705286-01 MKE-SB01-001 — Analyzed: 05/15/2017 By: JLB
Unit: ug/kg dry — Analytical Batch: 7E15056

Analyte	Sample Conc.	Spike Qty.	Result	Spike % Rec.	Control Limits	RPD	RPD Limits	LOQ	LOD
Acenaphthene	11.0	22.4	**21.5**	47	45-110	19	30	2.90	0.87
Acenaphthylene	1.83 J	22.4	**16.1**	64	45-105	14	30	2.72	0.82
Anthracene	3.65 J	22.4	**21.5**	80	55-105	3	30	3.99	1.2
Benzo(a)anthracene	7.31	22.4	**26.9**	87	50-110	10	30	6.35	1.9
Benzo(a)pyrene	5.48 J	22.4	**25.1**	88	50-110	3	30	8.70	2.6
Benzo(b)fluoranthene	5.48 J	22.4	**25.1**	88	45-115	10	30	6.35	1.9
Benzo(g,h,i)perylene	3.65 J	22.4	**23.3**	88	40-125	3	30	11.8	3.5
Benzo(k)fluoranthene	3.65 J	22.4	**25.1**	96	45-125	3	30	4.35	1.3
Chrysene	7.31	22.4	**28.7**	95	55-110	9	30	2.90	0.87
Dibenz(a,h)anthracene	ND U	22.4	**21.5**	96	40-125	3	30	13.6	4.1
Fluoranthene	14.6	22.4	**34.0**	87	55-115	13	30	5.44	1.6
Fluorene	5.48	22.4	**21.5**	72	50-110	3	30	3.08	0.93
Indeno(1,2,3-cd)pyrene	3.65 J	22.4	**25.1**	96	40-120	10	30	11.4	3.4
Naphthalene	67.6	22.4	**60.9**	**0**	40-105	24	30	4.53	1.4
Phenanthrene	12.8	22.4	**30.4**	79	50-110	9	30	4.53	1.4
Pyrene	14.6	22.4	**37.6**	103	45-125	8	30	4.89	1.5
Surrogates:									
2-Methylnapthalene-d10				*68*	*50-150*				

Continued on next page

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QUALITY CONTROL REPORT

Semivolatile Organic Compounds by EPA Method 8270D - Selective Ion Monitoring (Continued)

Analyte	Sample Conc.	Spike Qty.	Result	Spike % Rec.	Control Limits	RPD	RPD Limits	LOQ	LOD

QC Batch: 1704464 (Continued) 3545A PFE Extraction/USEPA-8270D (SIM)

Matrix Spike Duplicate (Continued) 1705286-01 MKE-SB01-001 Analyzed: 05/15/2017 By: JLB

Unit: ug/kg dry Analytical Batch: 7E15056

Surrogates (Continued):

Fluoranthene-d10	*84*	*50-150*

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QUALITY CONTROL REPORT

Physical/Chemical Parameters by EPA/APHA/ASTM Methods

QC Type	Sample Conc.	Spike Qty.	Result	Unit	Spike % Rec.	Control Limits	RPD	RPD Limits	LOQ	LOD
Analyte: Percent Solids/USEPA-3550C										
QC Batch: 1704473 (General Inorganic Prep)							Analyzed: 05/13/2017		By: LLH	
Method Blank			ND U	%					0.3	
1705286-04 [MKE-SB04-001]										
Duplicate	78		**77**	%			1	5	0.3	

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PRETREATMENT SUMMARY PAGE

Client: **Burns and McDonnell**
Project: **General Mitchell Airport AISG Release**

Pretreatment	Lab Sample ID	Batch	By	Date & Time Prepared
USEPA-3545A Pressurized Fluid Extraction (PFE)	1705286-01	1704464	ALK	05/15/17 08:02
	1705286-02	1704464	ALK	05/15/17 08:02
	1705286-03	1704464	ALK	05/15/17 08:02
	1705286-04	1704464	ALK	05/15/17 08:02
USEPA-5035A High Concentration (MeOH) P&T	1705286-01	1704472	DLV	05/14/17 12:00
	1705286-02	1704472	DLV	05/14/17 12:00
	1705286-03	1704472	DLV	05/14/17 12:00
	1705286-04	1704472	DLV	05/14/17 12:00

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31.1, #732W, Cart 1 E:1705280

BURNS & McDONNELL

Request for Chemical Analysis and Chain of Custody Record #16742

1 OF 1

Burns & McDonnell Engineering
1431 Opus Place
Downers Grove, Illinois 60515
Phone: (630) 724-3200 Fax: (630) 724-3201

Attention: JEFF GRUBICH
jgrubich@burnsmcd.com

Laboratory: PACE ANALYTICAL
Address: 5560 CORPORATE EXCHANGE COURT
City/State/ZIP: GRAND RAPIDS, MI 49512
Telephone: 616-975-4500

Document Control No.: 99566-2017-001
Lab. Reference No. or Episode No.:

Project Number: 99566

Site Name: MKE- RESPONSE SUPPORT

	Sample Number			Sample Event		Sample Depth (in feet)		Sample Collected		Sample Type: Matrix			Number of Containers	Parameter/Method Code: VOCs	PAHs				Remarks
	Group or SWMU Name	Sample Point	Sample Designator	Round	Year	From	To	Date	Time	Liquid	Solid	Gas							
1.	MKE- SB01- 001					4.1	5.1	5/12/17	1205		X		3	X	X				24- HOUR TAT
2.	MKE- SB02- 001					5.5	6.2	5/12/17	1310		X		3	X	X				24- HOUR TAT
3.	MKE- SB03- 001					4.0	5.0	5/12/17	1440		X		3	X	X				24- HOUR TAT
4.	MKE- SB04- 001					4.0	5.0	5/12/17	1505		X		3	X	X				24- HOUR TAT

5/12/17

Sampler (signature):

Sampler (signature):

Custody Seal Number
99566-109728
99566-109729

Special Instructions: 24- HOUR TAT

Relinquished By (signature): 1.
Date/Time 5/12/17 1830

Received By (signature):
Date/Time

Ice Present in Container: Yes ☐ No ☐

Temperature Upon Receipt:

Relinquished By (signature): 2.
Date/Time

Received By (signature)
Date/Time 5.13.17 1310

Laboratory Comments:

040915 Form WCD-KC1-CHI

SAMPLE RECEIVING / LOG-IN CHECKLIST

Pace Analytical®

Client: Burns & McDonnell
Receipt Record Page/Line #: 31.1
Work Order #: 17052816
New / Add To
Project Chemist | Sample #s

Recorded by (initials/date): WC 5.13.17
☑ Cooler ☐ Box ☐ Other
Qty Received: 1
Thermometer Used: ☑ IR Gun (#202) ☐ Digital Thermometer (#54) ☐ Other (#_____)
☐ See Additional Cooler Information Form

Cooler #	—	Time	1315
Custody Seals:	☐ None ☑ Present / Intact ☐ Present / Not Intact		
Coolant Type:	☐ Loose Ice ☑ Bagged Ice ☐ Blue Ice ☐ None		
Coolant Location:	Dispersed / (Top) / Middle / (Bottom)		
Temp Blank Present:	☐ Yes ☑ No		
If Present, Temperature Blank Location is:	☐ Representative ☐ Not Representative		

	Observed °C	Correction Factor °C	Actual °C
Temp Blank			
Sample 1:	5.1	–	5.1
Sample 2:	5.1	–	5.1
Sample 3:	4.2	–	4.2
3 Sample Average °C:			4.8

☐ Cooler ID on COC?
☐ VOC Trip Blank received?

Cooler #		Time	
Custody Seals:	☐ None ☐ Present / Intact ☐ Present / Not Intact		
Coolant Type:	☐ Loose Ice ☐ Bagged Ice ☐ Blue Ice ☐ None		
Coolant Location:	Dispersed / Top / Middle / Bottom		
Temp Blank Present:	☐ Yes ☐ No		
If Present, Temperature Blank Location is:	☐ Representative ☐ Not Representative		

	Observed °C	Correction Factor °C	Actual °C
Temp Blank:			
Sample 1:			
Sample 2:			
Sample 3:			
3 Sample Average °C:			

☐ Cooler ID on COC?
☐ VOC Trip Blank received?

Cooler #		Time	
Custody Seals:	☐ None ☐ Present / Intact ☐ Present / Not Intact		
Coolant Type:	☐ Loose Ice ☐ Bagged Ice ☐ Blue Ice ☐ None		
Coolant Location:	Dispersed / Top / Middle / Bottom		
Temp Blank Present:	☐ Yes ☐ No		
If Present, Temperature Blank Location is:	☐ Representative ☐ Not Representative		

	Observed °C	Correction Factor °C	Actual °C
Temp Blank:			
Sample 1:			
Sample 2:			
Sample 3:			
3 Sample Average °C:			

☐ Cooler ID on COC?
☐ VOC Trip Blank received?

Cooler #		Time	
Custody Seals:	☐ None ☐ Present / Intact ☐ Present / Not Intact		
Coolant Type:	☐ Loose Ice ☐ Bagged Ice ☐ Blue Ice ☐ None		
Coolant Location:	Dispersed / Top / Middle / Bottom		
Temp Blank Present:	☐ Yes ☐ No		
If Present, Temperature Blank Location is:	☐ Representative ☐ Not Representative		

	Observed °C	Correction Factor °C	Actual °C
Temp Blank:			
Sample 1:			
Sample 2:			
Sample 3:			
3 Sample Average °C:			

☐ Cooler ID on COC?
☐ VOC Trip Blank received?

If any shaded areas checked, complete Sample Receiving Non-Conformance and/or Inventory Form

Paperwork Received

Yes	No	
☑	☐	Chain of Custody record(s)? If No, Initiated By _____
☑		Received for Lab Signed/Date/Time?
☑	☐	Shipping document?
☐	☑	Other _____

COC Information

☐ Pace COC ☑ Other _____
COC ID Numbers:

Check COC for Accuracy

Yes	No	
☑	☐	Analysis Requested?
☑	☐	Sample ID matches COC?
☑	☐	Sample Date and Time matches COC?
☑		Container type completed on COC?
☑	☐	All container types indicated are received?

Check Sample Preservation

N/A	Yes	No	
	☐	☑	Temperature Blank OR average sample temperature, ≥6° C?
☑	☐	☐	If either is ≥6° C, was thermal preservation required?
☑	☐		If "Yes", Project Chemist Approval Initials _____
☑	☐		If "Yes" Completed Non Con Cooler - Cont Inventory Form?
☑	☐		Completed Sample Preservation Verification Form?
☑	☐	☐	Samples chemically preserved correctly?
☑	☐		If "No", added orange tag?
☑	☑		Received pre-preserved VOC soils?

☑ MeOH ☐ Na_2SO_4

Check for Short Hold-Time Prep/Analyses

☐ Bacteriological
☐ Air Bags
☐ EnCores / Methanol Pre-Preserved
☐ Formaldehyde/Aldehyde
☐ Green-tagged containers
☐ Yellow/White-tagged 1 L ambers (SV Prep-Lab)

AFTER HOURS ONLY:
COPIES OF COC TO LAB AREA(S)
☐ NONE RECEIVED
☑ RECEIVED, COCs TO LAB(S)

Sample Condition Summary

N/A	Yes	No	
	☐	☑	Broken containers/lids?
	☐	☑	Missing or incomplete labels?
	☐	☑	Illegible information on labels?
	☐	☑	Low volume received?
	☐	☑	Inappropriate or non-Pace containers received?
☑	☐	☐	VOC vials / TOX containers have headspace?
☑	☐	☑	Extra sample locations / containers not listed on COC?

Notes

Rush

☐ Trip Blank received ☐ Trip Blank not listed on COC

Cooler Received (Date/Time)	Paperwork Delivered (Date/Time)	≤1 Hour Goal Met?
5.13.17 1310	5.13.17 1321	(Yes) / No

ATTACHMENT J
DRILLING LOGS

Drilling Log

BURNS McDONNELL	Project Name: MKE Release Support	Project No.: 99566	Boring/Monitoring Well Number: MKE-SB01
	Coordinates:	Ground Elevation:	Page: 1 of 1
	Total Depth (feet): 16 / Hole Size (inches): 2.25	Driller: Kevin Collins	
Drilling Rig: Geoprobe 54DT		Drilling Company: Direct Push Analytical Corp.	
Date: 5/12/2017	Logged By: Jason Blazier	Reviewed by: Lance Summers	Approved by: Alan Schmidt

Elevation (MSL)	Depth (feet bgs)	Description	Graphic Log	Sample Type	Sample Interval	Blow Counts per 0.5'	N Value	Sample Recovery/Length (feet)	Penetrometer (tsf)	PID Reading (ppm)	Remarks
	1	CONCRETE - drilled without sampling		NA	NA	NA	NA	NA	NA	NA	
	2	FILL: coarse to fine sandy gravel sub-base, dark Gray (2.5Y 4/1), moist, wet at top from coring		DT	1	PUSH	NA	0.9/2	NA	0.3 2.7	
	3	dark gray to pale Yellow (2.5Y 7/3) (2.5')									
	4	CLAY (CL): olive Gray (2.5Y 4/2), trace fine sand, very stiff, medium plasticity, moist		DT	2	PUSH	NA	2.4/4	2.5 1.5	1.2 0.2 0.2 0.2	Sampled 4.1'-5.1' (SB01-001) (1205)
	5	olive gray to grayish Brown (2.5Y 5/2), very stiff to stiff									
	6										
	7										
	8	grayish brown to Brown (10YR 5/3), stiff to very stiff		DT	3	PUSH	NA	3.3/4	3.0 3.75 3.5 3.5	0.0 0.0 0.1 0.1	No free water observed
	9	brown to dark grayish Brown (10YR 4/6)									
	10										
	11										
	12			DT	4	PUSH	NA	4.0/4	4.0 3.5 3.25 3.5	0.0 0.0 0.0 0.0	
	13										
	14										
	15										
	16	End of boring at 16 feet bgs.									Abandoned with bentonite on 5/12/2017 DT = Dual Tube Sampler
	17										

Depth to water while drilling

Depth to water after drilling

Drilling Log

BURNS McDONNELL	Project Name: MKE Release Support	Project No.: 99566	Boring/Monitoring Well Number: MKE-SB02
	Coordinates:	Ground Elevation:	Page: 1 of 1
	Total Depth (feet): 16 / Hole Size (inches): 2.25	Driller: Kevin Collins	
Drilling Rig: Geoprobe 54DT		Drilling Company: Direct Push Analytical Corp.	
Date: 5/12/2017	Logged By: Jason Blazier	Reviewed by: Lance Summers	Approved by: Alan Schmidt

Elevation (MSL)	Depth (feet bgs)	Description	Graphic Log	Sample Type	Sample Interval	Blow Counts per 0.5'	N Value	Sample Recovery/Length (feet)	Penetrometer (tsf)	PID Reading (ppm)	Remarks
	1	CONCRETE - drilled without sampling		NA	NA	NA	NA	NA	NA	NA	
	2	FILL: coarse to fine sandy gravel sub-base, light brownish Gray (2.5Y 6/2), dry little asphalt material (2.3')		DT	1	PUSH	NA	1.7/2.5	3.0	1.2 1.4 0.3 0.2	
	3	CLAY (CL): Gray (2.5Y 5/1), olive mottling, trace fine gravel, trace coarse to fine sand, very stiff, medium plasticity, moist									
	4	very stiff to stiff (4.0')		DT	2	PUSH	NA	2.7/4	1.0 3.0 3.0	0.2 0.0 0.0	Sampled 5.5'-6.2' (SB02-001) (1310)
	5	gray to Brown (2.5Y 5/2), no mottling, stiff to very stiff									
	6										
	7										
	8			DT	3	PUSH	NA	4.0/4	3.5 3.5 4.0	0.1 0.2 0.0	No free water observed
	9	gray to dark grayish Brown (10YR 4/2)									
	10										
	11										
	12			DT	4	PUSH	NA	4.0/4	3.0 3.5 2.5 2.0	0.0 0.0 0.0 0.0	
	13										
	14										
	15										
	16	End of boring at 16 feet bgs.									Abandoned with bentonite on 5/12/2017 DT = Dual Tube Sampler
	17										

Depth to water while drilling

Depth to water after drilling

Drilling Log

BURNS McDONNELL	Project Name: MKE Release Support	Project No.: 99566	Boring/Monitoring Well Number: MKE-SB03
	Coordinates:	Ground Elevation:	Page: 1 of 1
	Total Depth (feet): 16 / Hole Size (inches): 2.25	Driller: Kevin Collins	
Drilling Rig: Geoprobe 54DT		Drilling Company: Direct Push Analytical Corp.	
Date: 5/12/2017	Logged By: Jason Blazier	Reviewed by: Lance Summers	Approved by: Alan Schmidt

Elevation (MSL)	Depth (feet bgs)	Description	Graphic Log	Sample Type	Sample Interval	Blow Counts per 0.5'	N Value	Sample Recovery/Length (feet)	Penetrometer (tsf)	PID Reading (ppm)	Remarks
	1	CONCRETE - drilled without sampling		NA	NA	NA	NA	NA	NA	NA	
	2	FILL: coarse to fine sandy gravel sub-base, grayish Brown (2.5Y 5/2), wet from coring		DT	1	PUSH	NA	1.3/1.9	2.5	2.0 3.6 0.3 0.3	
	3	CLAY (CL): Gray (2.5Y 5/1), olive mottling, trace fine gravel, trace coarse to fine sand, very stiff, medium plasticity, moist									
	4	gray to Brown (2.5Y 5/2), no mottling (4.0')		DT	2	PUSH	NA	3.5/4	2.5 3.0 1.5 2.5	0.2 0.2 0.2 0.2 0.2	Sampled 4.0'-5.0' (SB03-001) (1440)
	5										
	6	stiff (6'-7')									
	7										
	8			DT	3	PUSH	NA	4.0/4	2.75 2.5 1.75 3.0 2.5	0.2 0.2 0.2 0.2 0.2	No free water observed
	9	brown to grayish Brown (10YR 5/2)									
	10	stiff (9.5'-10.5')									
	11										
	12			DT	4	PUSH	NA	4.0/4	2.75 2.5 3.5 2.5 2.75	0.2 0.2 0.2 0.2 0.2	
	13										
	14										
	15										
	16	End of boring at 16 feet bgs.									Abandoned with bentonite on 5/12/2017 DT = Dual Tube Sampler
	17										

Depth to water while drilling

Depth to water after drilling

Drilling Log

BURNS McDONNELL	Project Name: MKE Release Support	Project No.: 99566	Boring/Monitoring Well Number: MKE-SB04
	Coordinates:	Ground Elevation:	Page: 1 of 1
	Total Depth (feet): 16 / Hole Size (inches): 2.25	Driller: Kevin Collins	
Drilling Rig: Geoprobe 54DT		Drilling Company: Direct Push Analytical Corp.	
Date: 5/12/2017	Logged By: Jason Blazier	Reviewed by: Lance Summers	Approved by: Alan Schmidt

Elevation (MSL)	Depth (feet bgs)	Description	Graphic Log	Sample Type	Sample Interval	Blow Counts per 0.5'	N Value	Sample Recovery/Length (feet)	Penetrometer (tsf)	PID Reading (ppm)	Remarks
	1	CONCRETE - drilled without sampling		NA	NA	NA	NA	NA	NA	NA	
	2	FILL: coarse to fine sandy gravel sub-base, light olive Brown (2.5Y 5/3), wet from coring, slight solvent-like odor little asphalt material (2.5'-2.7')		DT	1	PUSH	NA	1.6/2	4.5+	1.7 7.1 0.8 0.2	
	3	CLAY (CL): Gray (2.5Y 5/1), olive mottling, trace fine gravel, trace coarse to fine sand, hard, low plasticity, moist									
	4			DT	2	PUSH	NA	3.5/4	4.0	0.2	Sampled 4.0'-5.0' (SB04-001) (1505)
	5	gray to grayish Brown (10YR 5/2), no mottling, hard to very stiff							3.5	0.2	
	6								3.0	0.2	
	7								4.0	0.2	
	8			DT	3	PUSH	NA	4.0/4	3.0	0.2	
	9								4.0	0.2	
	10								3.5	0.2	No free water observed
	11								3.25	0.2	
	12			DT	4	PUSH	NA	4.0/4	2.0	0.1	
	13								3.5	0.1	
	14									0.1	
	15								3.0	0.1	
	16	End of boring at 16 feet bgs.									Abandoned with bentonite on 5/12/2017 DT = Dual Tube Sampler
	17										

Depth to water while drilling

Depth to water after drilling