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May 25, 2016

Ms. Jennifer Jambor-Raninen  
Modus Design Group  
8655 North 43<sup>rd</sup> Street  
Brown Deer, Wisconsin

*Via Email:* [Jennifer@DesignByModus.com](mailto:Jennifer@DesignByModus.com)

Reference:      *Limited Site Assessment Report*  
                  8655 N. 43<sup>rd</sup> Street  
                  Brown Deer, Wisconsin  
                  BRRTS# 02-41-550899

KEY ENGINEERING GROUP, LTD.  
File No. 2604006

Dear Ms. Jambor-Raninen:

The purpose of this letter is to document the results of the limited site investigation performed at the above referenced site by Key Engineering Group, Ltd. (KEY).

## SITE HISTORY

In January 2008, the Wisconsin Department of Natural Resources (WDNR) indicated a release discharged from the subject site had caused the contaminated soils and stressed vegetation on the adjacent west property owned by WE Energies.

*“...the subject site needs to conduct a subsurface investigation to determine if there are soil and or groundwater impacts on the site which have migrated to the offsite impacted area. According to the WDNR there is a drain that leads from the building to the outlet where the impacts were detected”.*

*Based on information submitted to the DNR, there were detections of DRO, benzene, naphthalene, and PCBs detected in soil within the adjoining ditch.*

A copy of the *Notice of Contamination* placed on the deed which was prepared by the WDNR is included as Appendix 1.

A site map depicting the approximate geographic location is presented as Figure 1. A site map depicting major site features and soil probe locations is presented as Figure 2.

## INVESTIGATION ACTIVITIES

### SOIL

On April 22, 2016, five soil probes (GP-1 through GP-5) were advanced on the property in and around the site structure. One surface soil sample (SS-1) was collected from the west adjacent WE Energies property within the apparent area previously sampled and indicated to be contaminated.

Soil probes were advanced to 8 to 14 feet below ground surface (bgs), the maximum depth due to the presence of auger refusal at each location, likely indicating bedrock.

Direct push technology was used to advance the probes. A 5-foot long stainless steel sampler with an acetate liner was driven to the desired sampling depth using stainless steel rods. Soil samples were collected and classified in the field in accordance with the Unified Soil Classification System. Each 2-foot soil sample interval was also field screened for the presence of volatile organic vapors using a photo-ionization detector (PID). No PID readings were observed in any of the soil samples collected during the site investigation. Nitrile gloves were used during sampling.

Two soil samples per boring were submitted for laboratory analysis. Soil samples were selected from the 2-4 feet bgs interval which represented the direct contact zone from all soil probe locations. Soil was also selected from GP-1 at 8-10 feet bgs, from GP-2 at 6-8 feet bgs, from GP-3 at 6-8 feet bgs, from GP-4 at 8-10 feet bgs and from GP-5 at 10-12 feet bgs.

Only surface soil samples were collected from SS-1 which was located in the WE Energies property. This sample was collected to determine what degree of impacts were present. We could not drill any borings outside the subject property. The intent of the site investigation was to determine if the subject site was significantly impacted and whether those impacts were potentially migrating offsite.

Samples were submitted under applicable chain of custody procedures to Pace Analytical Services Inc. (Pace) for analysis of volatile organic compounds (VOCs), polycyclic aromatic hydrocarbons (PAHs) and polychlorinated biphenyls (PCBs).

Soils on site consist of silty clay with trace gravel. Occasional mottling and silt and gravel were identified in the clay. Auger refusal was encountered at each borehole location at depths between 8 and 14 feet below grade. It appears that bedrock is present and preventing further vertical exploration.

## GROUNDWATER

One temporary groundwater well was installed at GP-1 and labeled as TW-1. Groundwater was encountered at a depth of about 9-10 feet. Due to probe refusal (potentially shallow bedrock), KEY was only able to install and sample one temporary well in the location of GP-1. One groundwater sample was collected from GP-1 and submitted to Pace for analysis of VOCs and PAHs.

Soil boring logs and borehole abandonment forms are presented in Attachment 2. Laboratory analytical report and chain of custody documentation are presented in Attachment 3.

## SOIL INVESTIGATION RESULTS

Soil sample analytical results are summarized in Table 1. Below is a summary of the probe location, lithology and analytical results.

**GP-1** was advanced to a depth of 12 feet bgs along the west wall of the site structure. Soils encountered included clay with trace amounts of silt and gravel. No VOCs, PAHs or PCBs were detected in soils analyzed from 2-4 feet and 8-10 feet in depth.

**GP-2** was advanced to a depth of 8 feet bgs at a location north of the site structure. Soils encountered at GP-2 included clay with trace amounts of silt and gravel. No VOCs, PAHs or PCBs were detected in soils analyzed from 2-4 feet and 6-8 feet in depth.

**GP-3** was advanced to a depth of feet bgs on the east side of the structure. Soils encountered included clay with silt and gravel to 8 feet bgs. No VOCs, PAHs or PCBs were detected in soils analyzed from 2-4 feet and 6-8 feet in depth.

**GP-4** was advanced to 10 feet bgs in the north interior section of the site structure. Approximately 5 inches of concrete flooring and 4 inches of crushed stone subgrade were present at GP-4. Soils encountered beneath the

floor at GP-4 included silty gravel and silty clay with small gravel. No VOCs, PAHs or PCBs were detected in soils analyzed from 2-4 feet and 8-10 feet in depth.

**GP-5** was advanced in the southern portion of the site structure in the area of the former floor drain. Soils encountered at GP-5 included silty gravel and silty clay with trace small gravel. No VOCs, PAHs or PCBs were detected in soils analyzed from 2-4 feet and 10-12 feet in depth.

One soil sample was collected in the area where the drainage had previously occurred onto the WE Energies property. Soils encountered at SS-1 included organic matter over silty clay. The soil sample was collected between 0.5 and 1.5 feet in depth. There were no VOCs detected in the soil sample.

Several PAHs were detected above their respective Non-Industrial Direct Contact Residual Contamination Levels (RCLs): benzo(a)pyrene at 1.5mg/kg, benzo(a)anthracene at 1.5mg/kg, benzo(b)fluoranthene at 1.2mg/kg, benzo(k)fluoranthene at 1.4mg/kg, chrysene at 1.8mg/kg, dibenzo(a,h)anthracene at 0.32mg/kg and indeno(1,2,3-cd)pyrene at 0.83mg/kg. Levels of benzo(a)pyrene, benzo(b)fluoranthene and chrysene, within SS-1, were also detected above their respective Protection of Groundwater RCLs.

## GROUNDWATER RESULTS

Four PAH compounds were detected in the groundwater sample collected from TW-1; chrysene at 0.027J µg/L, fluoranthene at 0.096J µg/L, phenanthrene at 0.13J µg/L and pyrene at 0.12J µg/L. Chrysene was detected above its Preventative Action Level (PAL) of 0.02 ug/l but below its Enforcement Standard (ES) of 0.2 ug/l. The results were J-Flagged by the laboratory. No VOCs were detected in TW-1.

There were no VOCs detected in the groundwater sample.

The laboratory reports and chain of custody documentation are presented in Attachment 3.

## CONCLUSIONS

Based on the soil data, there were no indications that a release has occurred at the subject site. The soils analyzed within the subject site building where the apparent source of the off-site release was suggested, did not register any impacts. In addition, soil samples analyzed from other locations around the site did not register any detectable concentrations of VOCs or PAHs. In addition, the PCBs which were detected in the ditch where the release was suggested were not detected at any boring location on the subject site.

The sample collected from the ditch area where the drain was identified, did indicate PAHs in soils. There were however no PCBs detected in this soils sample. In addition, there were no VOCs detected.

Low level PAH contamination was detected in groundwater collected from the east side of the subject site. Only one compound exceeded its PAL groundwater quality standard. Since this sample was collected from a temporary well, it would be expected to be biased high due to likely sedimentation present in the sample. It is likely that a groundwater quality sample would provide groundwater results below applicable standards.

It appears that the impacts which were identified in the WE Energies property, are likely limited to the area where the drainage occurred during historical building operations.

## RECOMMENDATIONS

The WDNR may require that the extent of the impacts within the WE Energies site be determined. In order to conduct work within the area, an off-site access will need to be obtained. It is our opinion that this information be submitted to the WDNR and a discussion with them occur to determine the appropriate action to address this release. There were minimal groundwater impacts detected in the temporary well, however we do not believe this is related to the drain which extends to the west. The groundwater data was detected to the east. The source of this could be related to various fill materials present at the site. There were no PAH detections in the soils.

## QUALIFICATIONS

Our assessment was performed using the degree of care and skill ordinarily exercised under similar circumstances, by environmental consultants practicing in this or similar localities. No other warranty or guarantee, expressed or implied, is made as to the conclusions and recommendations included in this report.

The findings of this assessment, to the best of knowledge, are valid as of the date of this assessment. However, changes in the conditions of a property can occur with the passage of time, whether due to natural processes or the works of man on this or adjacent properties. In addition, changes in applicable or appropriate standards may occur, whether they result from legislation, from the broadening of knowledge or from other reasons. Accordingly, the findings of this assessment may be invalidated wholly or partially by changes outside our control.

Specified information contained in this report has been obtained from secondary sources produced by entities other than Key Engineering Group, Ltd. Although care has been taken by Key Engineering Group, Ltd., in compiling this information, Key Engineering Group, Ltd., disclaims any and all liability for any errors, omissions or inaccuracies of the third parties in such in disclaims formation and data.

Please feel free to call us at (414) 224-8300 if you have any questions regarding this Phase II ESA report.

Sincerely,

KEY ENGINEERING GROUP, LTD.



Jason M. Kruchko, LEED GA  
Operation Manager



Kenneth W. Wein, CHMM  
Principal

Table 1	Summary of Soil Sample Analytical Results
Table 2	Summary of Groundwater Sample Analytical Results
Figure 1	Site Location Map
Figure 2	Soil Probe Locations
Attachment 1	WDNR Notice of Contamination
Attachment 2	Soil Boring Logs and Borehole Abandonment Forms
Attachment 3	Pace Analytical Laboratory Report

## Table 1

Table 1

## Soil Analytical Results

8655 N. 43rd St.  
Milwaukee, Wisconsin

PARAMETERS	Sample ID										EPA Web Calculator Values	
	GP-1/TW-1		GP-2		GP-3		GP-4		GP-5			
Date Collected	4/22/2016		4/22/16		4/22/16		4/22/16		4/22/16		4/22/16	
Depth (feet bgs)	2-4	8-10	2-4	6-8	2-4	6-8	2-4	8-10	2-4	10-12	0.5-1.5	
Saturated(s)/Unsaturated(u)	u	u	u	u	u	u	u	u	u	u	u	
Detected VOCs (mg/kg)											Non-Industrial Direct Contact RCL (mg/kg)	Protection of Groundwater RCL (mg/kg)
Benzene	<0.025	<0.025	<0.025	<0.026	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	1.49	0.0051
Bromobenzene	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	354	---
Bromoform	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	232	---
Bromomethane	<0.070	<0.070	<0.070	<0.025	<0.070	<0.070	<0.070	<0.070	<0.070	<0.070	10.3	0.0051
n-Butylbenzene	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	108	---
sec-Butylbenzene	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	145	---
tert-Butylbenzene	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	183	---
Carbon Tetrachloride	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	0.854	0.0039
Chlorobenzene	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	392	---
Chloroethane	<0.067	<0.067	<0.067	<0.025	<0.067	<0.067	<0.067	<0.067	<0.067	<0.067	---	0.2266
Chloroform	<0.046	<0.046	<0.046	<0.067	<0.046	<0.046	<0.046	<0.046	<0.046	<0.046	0.423	0.0033
Chloromethane	<0.025	<0.025	<0.025	<0.046	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	171	0.0155
2-Chlorotoluene	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	---	---
4-Chlorotoluene	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	---	---
1,2-Dibromo-3-chloropropane	<0.091	<0.091	<0.091	<0.025	<0.091	<0.091	<0.091	<0.091	<0.091	<0.091	0.008	0.0002
Dibromochloromethane	<0.025	<0.025	<0.025	<0.091	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	7.6	0.032
1,2-Dibromoethane (EDB)	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	0.047	---
Dibromomethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	36.6	---
1,2-Dichlorobenzene	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	376	1.168
1,3-Dichlorobenzene	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	297	1.1528
1,4-Dichlorobenzene	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	3.48	0.144
Dichlorodifluoromethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	135	3.0863
1,1-Dichloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	4.72	0.4834
1,2-Dichloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	0.608	0.0028
1,1-Dichloroethene	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	342	0.005
cis-1,2-Dichloroethene	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	156	0.0412
trans-1,2-Dichloroethene	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	1560	0.0626
1,2-Dichloropropane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	1.33	0.0033
1,3-Dichloropropane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	1490	---
2,2-Dichloropropane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	191	---
1,1-Dichloropropene	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	---	---
cis-1,3-Dichloropropene	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	1210	0.0003
trans-1,3-Dichloropropene	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	1510	0.0003
Di-isopropyl ether	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	2260	---
Ethylbenzene	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	7.47	1.57
Hexachlorobutadiene	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	1.51	---
Isopropylbenzene	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	---	---
p-Isopropyltoluene	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	162	---
Methylene chloride	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	60.7	0.0026
Methyl tert-butyl ether (MTBE)	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	59.4	0.027
Naphthalene	<0.040	<0.040	<0.040	<0.025	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	5.15	0.6582
n-Propylbenzene	<0.025	<0.025	<0.025	<0.040	<0.025	<0.025	<0.025	<0.02				

## Table 2

TABLE 2  
GROUNDWATER ANALYTICAL SUMMARY TABLE

8655 N. 43rd St.  
Brown Deer, Wisconsin

PARAMETERS	SAMPLE IDENTIFICATION	NR 140	
	TW-1/GP-1	ES	PAL
Date Collected	4/22/16	---	---
<b>Detected VOCs (µg/l)</b>			
Acetone	---	9000	1800
Benzene	<0.50	5	0.5
Bromobenzene	<0.23	---	---
Bromoform	<0.34	---	---
Bromochloromethane	<0.50	0.6	0.06
Bromodichloromethane	<0.50	4.4	0.44
Bromomethane	<2.4	10	1
n-Butylbenzene	<0.50	---	---
sec-Butylbenzene	<2.2	---	---
tert-Butylbenzene	<0.18	---	---
Carbon tetrachloride	<0.50	5	0.5
Chlorobenzene	<0.50	---	---
Chloroethane	<0.37	400	80
Chloroform	<2.5	6	0.6
Chloromethane	<0.50	30	3
2-Chlorotoluene	<0.50	---	---
4-Chlorotoluene	<0.21	---	---
1,2-Dibromo-3-chloropropane	<2.2	0.2	0.02
Dibromochloromethane	<0.50	60	6
Dibromoethane	<0.18	0.05	0.005
Dibromomethane	<0.43	---	---
1,2-Dichlorobenzene	<0.50	600	60
1,3-Dichlorobenzene	<0.50	600	120
1,4-Dichlorobenzene	<0.50	75	15
Dichlorodifluoromethane	<0.22	1000	200
1,1-Dichloroethane	<0.24	850	85
1,2-Dichloroethane	<0.17	5	0.5
1,1-Dichloroethene	<0.41	7	0.7
cis-1,2-Dichloroethene	<0.26	70	7
trans-1,2-Dichloroethene	<0.26	100	20
1,2-Dichloropropane	<0.23	5	0.5
1,3-Dichloropropane	<0.50	---	---
2,2-Dichloropropane	<0.48	---	---
1,1-Dichloropropene	<0.44	---	---
cis-1,3-Dichloropropene	<0.50	0.4	0.04
trans-1,3-Dichloropropene	<0.23	0.4	0.04
Disopropyl ether	<0.50	---	---
Ethylbenzene	<0.50	700	140
Hexachloro-1,3-butadiene	<2.1	---	---
p-Isopropyltoluene	<0.14	---	---
Isopropylbenzene	<0.50	---	---
Methylene Chloride	<0.23	5	0.5
Methyl-tert-butyl ether	<0.17	60	12
Naphthalene	<2.5	100	10
n-Propylbenzene	<0.50	---	---
Styrene	<0.50	100	10
1,1,1,2-Tetrachloroethane	<0.18	70	7
1,1,2,2-Tetrachloroethane	<0.25	0.2	0.02
Tetrachloroethene	<0.50	5	0.5
Toluene	<0.50	800	160
1,2,3-Trichlorobenzene	<2.1	---	---
1,2,4-Trichlorobenzene	<2.2	70	14
1,1,1-Trichloroethane	<0.50	200	40
1,1,2-Trichloroethane	<0.20	5	0.5
Trichloroethene	<0.33	5	0.5
Trichlorofluoromethane	<0.18	3,490	698
1,2,3-Trichloropropane	<0.50	60	12
1,2,4-Trimethylbenzene	<0.50	---	---
1,3,5-Trimethylbenzene	<0.50	---	---
Trimethylbenzenes	<0.075	480	96
Vinyl chloride	<0.18	0.2	0.02
o/m&p-Xylenes	<1.50	2,000	400
<b>PAHs (µg/l)</b>			
Acenaphthene	<0.028	---	---
Acenaphthylene	<0.027	---	---
Anthracene	<0.022	3,000	600
Benz(a)anthracene	<0.028	---	---
Benz(a)pyrene	<0.025	0.2	0.02
Benz(b)fluoranthene	<0.030	0.2	0.02
Benz(g,h,i)perylene	<0.019	---	---
Benz(k)fluoranthene	<0.031	---	---
Chrysene	0.027J	0.2	0.02
Dibenzo(a,h)anthracene	<0.031	---	---
Fluoranthrene	0.096J	400	80
Fluorene	<0.022	400	80
Indeno(1,2,3-cd)pyrene	<0.020	---	---
1-Methyl Naphthalene	<0.017	---	---
2-Methyl Naphthalene	<0.015	---	---
Naphthalene	<0.025	100	10
Phenanthrene	0.13J	---	---
Pyrene	0.12J	250	50

*Notes:*

Bold concentrations exceed NR 140 ES

Italicized concentrations exceed NR 140 PAL

--- not analyzed, not applicable or no standard established

ES - enforcement standard

J - Results between the limit of detection and limit of quantitation

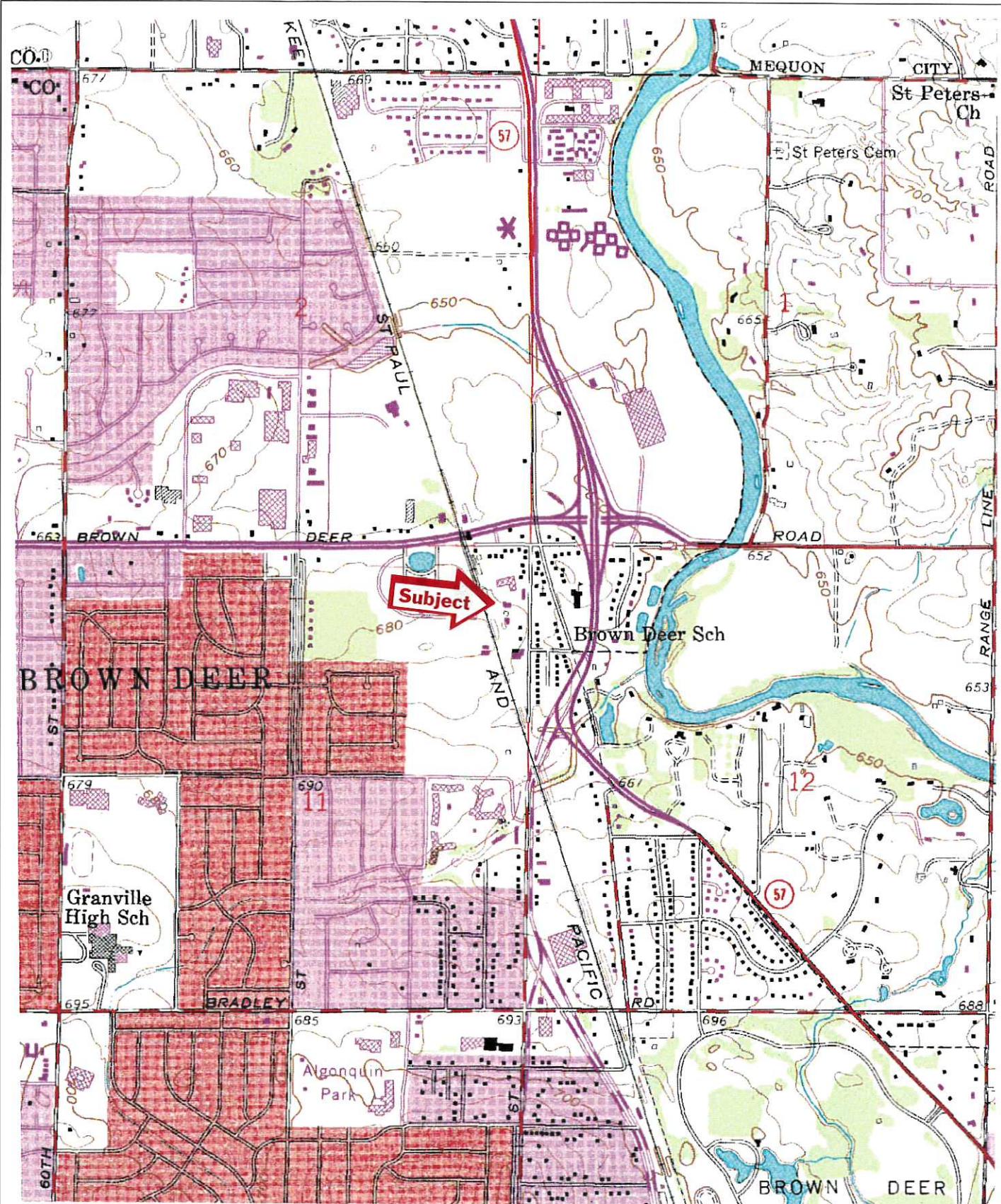
PAHs - polynuclear aromatic hydrocarbons

PAL - preventive action limit

µg/l - micrograms per liter

VOCs - volatile organic compounds

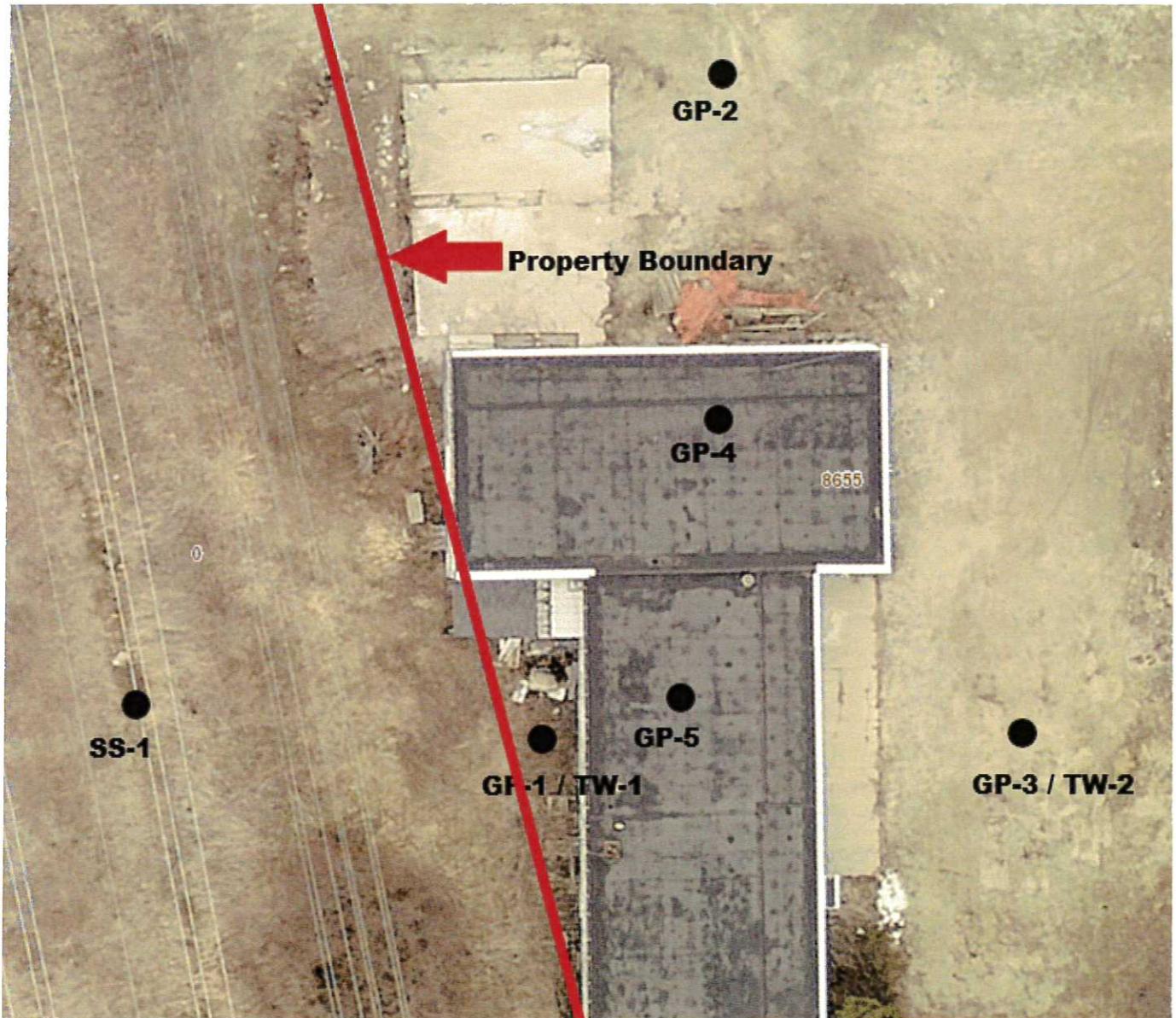
## Figures



Location: Brown Deer, WI	Map Year:
Project: 1604-0240	Date: 5/19/16
	Scale:  Series:

FIGURE 1  
SITE LOCATION MAP  
8655 N. 43RD STREET  
BROWN DEER, WISCONSIN





Location: Brown Deer, Wisconsin	Map Year:
Project: 1604-0240	Date: 5/19/16
	Scale: 1:24000 Series: 7.5'

FIGURE 2  
SITE DETAIL MAP  
8655 N. 43RD STREET  
BROWN DEER, WISCONSIN



## Attachment I

MILWAUKEE • WASHINGTON, D.C.  
[www.keyengineering.com](http://www.keyengineering.com)



\* 1 0 2 1 2 1 1 7 \*

DOC.# 10212117

Document Number

NOTICE OF CONTAMINATION

Legal Description of the Property:

Certified Survey Map No. 2322, NE Section 11, Township 8, Range 21E,  
Parcel 1

STATE OF WISCONSIN,

COUNTY OF Milwaukee

Recording Area

Name and Return Address:

John J. Hnat, CPG, PG  
Wisconsin Dept. of Natural Resources  
2300 Dr M L King Dr  
Milwaukee, WI 53212

0479987001

Parcel Identification Number (PIN)

I, Pamela A. Mylotta, being first duly sworn, state that:

1. I am a Remediation and Redevelopment Program Supervisor, employed by the Wisconsin Department of Natural Resources (hereinafter "the Department") at its Southeast Regional Office in Milwaukee, Wisconsin.
2. John J. Hnat, Project Manager/Hydrogeologist, employed by the Wisconsin Department of Natural Resources at its Southeast Regional Office in Milwaukee, Wisconsin, has personal knowledge of the facts herein set forth and believes the same to be true.
3. Based on information submitted to the Department, the Department has determined that contaminants discharged from the Bella Landscaping, LLC (formerly Hillcrest Landscaping) property to the adjacent WE Energy property, located at 8655 North 43<sup>rd</sup> Street, in the City of Brown Deer, County of Milwaukee, Wisconsin, which has the above legal description, has contaminated soil and stressed vegetation in the vicinity of a wood pile on the west side property line for hazardous wastes, as shown on the attached site map (Exhibit A) and photographs (Exhibit B, C, and D). Three soil boring locations (Exhibit "A") were analyzed for volatile organic compounds at the six-inch and one-to-two feet below ground surface. Laboratory analysis indicated the following results:
  - Diesel Range Organics (DRO) at the six-inch depth ranged from 340 to 13,000 parts per million (ppm) that is above the Chapter NR 720.09(4)(a), Wisconsin Administrative Code, soil cleanup standard of 100 ppm (subd. 1) and 250 ppm (subd. 2).

In Re: Property Located in the  
City of Brown Deer, Milwaukee County, Wisconsin  
Described above.

- Diesel Range Organics (DRO) at the one-to-two foot depth ranged from 640 to 2,300 ppm) that is above the Chapter NR 720.09(4)(a), Wisconsin Administrative Code, soil cleanup standard of 100 ppm (subd. 1) and 250 ppm (subd. 2).
  - Soil analysis indicates Benzene is above the Chapter NR 720, Wisconsin Administrative Code, Table 1, residual contaminant level based on protection of groundwater of 5.5 ppb. Benzene occurs at 56 ppb at the one-to-two foot depth.
  - Naphthalene (1,200 ppb) is above the soil cleanup level for Polycyclic Aromatic hydrocarbons (PAHs) groundwater pathway value of 0.4 ppm.
  - Evidence of Polychlorinated Biphenyls (PCBs) Aroclor 1254 (43 ppb to 60 ppb) and Aroclor 1260 (22 ppb) were analyzed in two of the three soil samples.
4. The Wisconsin Department of Natural Resources BRRTS number for this site is 02-41-550899, and the FID number is 341156860.
5. On October 5, 2007, WE Energies notified Scott Ferguson, Southeast Region Spill Coordinator, of the Wisconsin Department of Natural Resources ("the Department") of contamination being discharged onto their right-of-way from the Bella Landscaping property. The analytical results submitted by WE Energies indicated that Aroclor 1254 and 1260 (PCBs), trimethylbenzene (TMBs), naphthalene, xylenes, benzene, and ethylbenzene have contaminated the soil.
6. On January 23, 2008, Scott Ferguson notified the Redevelopment and Remediation Section of the Department of the discharge. A Responsible Party letter was sent to Hillcrest Landscaping, attention to Richard Briere, Registered Agent at 8655 North 43<sup>rd</sup> Street, Brown Deer Wisconsin on February 5, 2008.
7. On June 4, 2009, the Department sent a certified letter (No. 7007 3020 0000 6917 8556) to Hillcrest Landscaping at 8655 North 43<sup>rd</sup> Street Brown Deer, Wisconsin reminding them of their legal responsibilities to restore the environment to the extent practicable and minimize the harmful effects from the discharge. The letter also instructed them to provide the name of their environmental consultant that would conduct an environmental site investigation, the work plan and schedule. On June 11, 2009, the Department received the returned certified letter marked "Return to Sender Refused Unable to Forward" stamped on the letter. Online researching of the address for the property resulted in a new owner of the property called Bella Landscaping, LLC.
8. On June 11, 2009, the Department sent a certified letter (No. 7007 3020 0000 6917 8556) to Bella Landscaping at 8655 North 43<sup>rd</sup> Street Brown Deer, Wisconsin describing their legal responsibilities under the hazardous spill law, Section 292.11(3) Wisconsin Statutes. The letter also instructed them to provide the name of their environmental consultant that would conduct an environmental site investigation, the work plan and schedule.
9. On July 9, 2009, BT<sup>2</sup>, Inc. notified the Department that they had been contracted by Bella Landscaping as their environmental consultant.
10. On September 22, 2009, Christine Straate, Owner and CEO, of Bella Landscaping, notified the Department with a Work Plan and Schedule that would be completed within one month's time.
11. On August 9, 2012, the Department sent a certified (No. 7010 1670 0002 3141 2906) Notice of

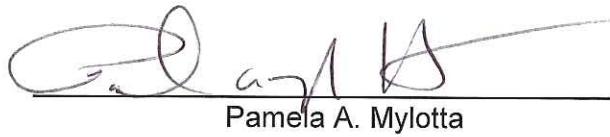
## AFFIDAVIT

Page 3 of 2

In Re: Property Located in the  
City of Brown Deer, Milwaukee County, Wisconsin  
Described above.

Noncompliance letter to Bella Landscaping to the attention of Christine Straate located at 8655 North 43<sup>rd</sup> Street Brown Deer, Wisconsin, reminding them that the Department had not received any information on the site investigation and/or remediation of the property. The Department also requested that within 30-days on receipt of the letter, a work plan, schedule, and start date with the required review fee for document review. This letter was returned to the Department marked, "Unclaimed" with three attempts by the US Postal Service on August 8, August 16, and August 27, 2012.

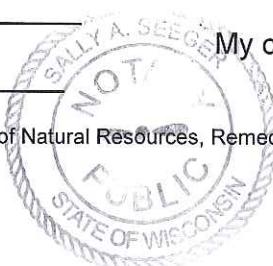
12. On October 17, 2012, the Department sent a Notice of Violation to Christine Straate, Registered Agent for Bella Landscaping located at 8655 North 43<sup>rd</sup> Street Brown Deer, Wisconsin, requesting an Enforcement Conference.
13. On November 19, 2012, the Department discussed the Notice of Violation with Christine Straate, Registered Agent. The Property is in the process of foreclosure and Bella Landscaping is no longer a viable business. The Department informed the Registered Agent that a Deed Affidavit would be filed at the Registered of Deeds Office in Milwaukee County.
14. The Department believes that the above-described contamination currently found in the soil on the Property with the above legal description will require subsequent purchasers of the Property to maintain a cap under 292.12, Wisconsin Statutes, to prevent exposure to contaminated soil and infiltration into the groundwater.



Pamela A. Mylotta

Subscribed and sworn to before me this Sunday day of 2, 2013.

Sally A. Seeger  
Notary Public, State of Wisconsin  
Milwaukee County



My commission expires on: May 23, 2016

This document was drafted by the Wisconsin Department of Natural Resources, Remediation and Redevelopment, Southeast Region Headquarters.

**Exhibit "A"**





View to the southeast, west side of 8655 N. 43<sup>rd</sup> Street.  
Discharge area visible in the center of the photo.



View directly to the east, looking at the west side of 8655 43<sup>rd</sup> Street.  
Discharge area in the middle of the photo.



View to the southeast, west side of 8655 N. 43<sup>rd</sup> Street.  
Shows flow of discharge from under the bark and debris to the west, and then southward along east side of ROW.



View to the south along east side of ROW.



View to the east from ROW of the discharge area.  
Some petroleum odor, and staining of bark and vegetation. No visible oil sheen.



View to the east.  
Water in the ditch dug away from the discharge point.

## Attachment 2

MILWAUKEE • WASHINGTON, D.C.  
[www.keyengineering.com](http://www.keyengineering.com)

Route To: Watershed/Wastewater  Waste Management   
Remediation/Development  Other

Page 1 of 1

Facility/Project Name	Brown Deer	License/Permit/Monitoring Number	Boring Number
Boring Drilled By: Name of crew chief (first, last) and Firm First Name: Dan Last Name: Fisher Firm: Horizon		Date Drilling Started <u>04/22/2016</u> m m d d y y y y	Date Drilling Completed <u>04/22/2016</u> m m d d y y y y
WI Unique Well No.	DNR Well ID No.	Final Static Water Level Feet MSL	Surface Elevation Feet MSL
Local Grid Origin <input type="checkbox"/> (estimated: <input type="checkbox"/> ) or Boring Location <input type="checkbox"/> State Plane _____ N, _____ E		Lat <u>0° 0' 0"</u> Long <u>0° 0' 0"</u>	Local Grid Location □ N   □ S   □ E   □ W
1/4 of _____ 1/4 of Section _____, T _____ N, R _____		Feet	
Facility ID	County	County Code	Civil Town/City/or Village
Milwaukee 41 Village of Brown Deer			

Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth in Feet (Below ground surface)	Soil/Rock Description And Geologic Origin For Each Major Unit	U SCS	Graphic Log	Well Diagram	PID/FID	Soil Properties					P 200	RQD/ Comments
									Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index			
48				4" silty clay, trace med. gravel, black				0/1	1/2	2/2					
				44" clay ultra silt, soft w/trace small gravel, tan/brown				0/1	2/2						
48		5		48" silty clay, brown w/orange mottling				0/1	4						
48		10		24" silt/w/clay, tan w/trace gravel				0/2	6	8	10				
24		12		6.5' O.B.E 12'				0/1	12	12					

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

Signature CANNE Firm KEY Engineering

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

Route To: Watershed/Wastewater  Waste Management   
Remediation/Development  Other

Page 1 of 1

Facility/Project Name <u>Brown Deer</u>			License/Permit/Monitoring Number		Boring Number <u>EIP-2</u>											
Boring Drilled By: Name of crew chief (first, last) and Firm First Name: <u>Don</u> Last Name: <u>Hisher</u> Firm: <u>Hanson</u>			Date Drilling Started <u>04/22/2016</u> m m d d y y y y	Date Drilling Completed <u>04/22/2016</u> m m d d y y y y	Drilling Method <u>Direct Push</u>											
WI Unique Well No.	DNR Well ID No.	Well Name	Final Static Water Level Feet MSL	Surface Elevation Feet MSL	Borehole Diameter 2 inches											
Local Grid Origin <input type="checkbox"/> (estimated: <input type="checkbox"/> ) or Boring Location <input type="checkbox"/> State Plane _____ N, _____ E			Lat <u>0 ° 0'</u>	Local Grid Location <input type="checkbox"/> N <input type="checkbox"/> E												
1/4 of _____ 1/4 of Section _____, T _____ N, R _____			Long <u>0 ° 0'</u>	Feet <input type="checkbox"/> S <input type="checkbox"/> W												
Facility ID		County <u>Milwaukee</u>	County Code <u>41</u>	Civil Town/City/ or Village <u>Village of Brown Deer</u>												
Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth in Feet (Below ground surface)	Soil/Rock Description And Geologic Origin For Each Major Unit				USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties				RQD/ Comments
				Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index					P 200				
60	5			<u>2" crushed gravel</u>								<u>0.1</u>	<u>—</u>	<u>2</u>		
60	5			<u>58" clay w/silt, tan w/trace gravel, brown/grey</u>								<u>0.1</u>	<u>—</u>	<u>4</u>		
36	8			<u>36" clay w/silt w/ med gravel trace w/ orange mottling, tan</u>								<u>0.1</u>	<u>—</u>	<u>4</u>		
				<u>48 E.O.B.E 8"</u> w/refusal									<u>8</u>			

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

Signature Cullen Firm Key Engineering

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Route To: Watershed/Wastewater  Waste Management   
Remediation/Development  Other

Page 1 of 1

Facility/Project Name		License/Permit/Monitoring Number		Boring Number
<u>Brown Deer</u>				<u>GP-3</u>
Boring Drilled By: Name of crew chief (first, last) and Firm		Date Drilling Started	Date Drilling Completed	Drilling Method
First Name: <u>Don</u>	Last Name: <u>Fisher</u>	<u>04/22/2016</u>	<u>04/22/2016</u>	<u>Direct Push</u>
Firm: <u>Honza</u>				
WI Unique Well No.	DNR Well ID No.	Well Name	Final Static Water Level Feet MSL	Surface Elevation Feet MSL
				Borehole Diameter <u>2</u> inches
Local Grid Origin <input type="checkbox"/> (estimated: <input type="checkbox"/> ) or Boring Location <input type="checkbox"/>	State Plane _____ N, _____ E		Lat <u>0° 0' 0"</u>	Local Grid Location
			Long <u>0° 0' 0"</u>	□ N   □ S   Feet   □ W
1/4 of _____ 1/4 of Section _____, T _____ N, R _____				
Facility ID	County	County Code	Civil Town/City/ or Village	
	<u>Milwaukee</u>	<u>41</u>	<u>Village of Brown Deer</u>	

Number and Type	Length Att. & Recovered (m)	Blow Counts	Depth in Feet (Below ground surface)	Soil/Rock Description And Geologic Origin For Each Major Unit	U S C S	Graphic Log	Well Diagram	P/D/FID	Soil Properties				RQD/ Comments
									Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	
10			5	12" crushed rock/gravel w/silt 10" clay w/silt, trace small gravel, dark brown 38" clay w/silt, trace med gravel, brown/tan				1.0	2				
24			5	24" clay w/silt, trace med gravel, brown w/orange mottling				0.2	4				
			8	40'.0. B6 8' w/ refusal				0.2	4				
								0.1	8				

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

Signature C. Coker

Firm KEY Engineering

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

Route To: Watershed/Wastewater  Waste Management   
Remediation/Development  Other

Page 1 of 1

Facility/Project Name <u>Braen Beer</u>		License/Permit/Monitoring Number		Boring Number <u>BP-4</u>
Boring Drilled By: Name of crew chief (first, last) and Firm First Name: <u>Dan</u> Last Name: <u>Fisher</u> Firm: <u>Hanson</u>		Date Drilling Started <u>04/22/2016</u> <u>mm dd yy</u>	Date Drilling Completed <u>04/22/2016</u> <u>mm dd yy</u>	Drilling Method <u>Direct Push</u>
WI Unique Well No.	DNR Well ID No.	Well Name	Final Static Water Level Feet MSL	Surface Elevation Feet MSL
Local Grid Origin <input type="checkbox"/> (estimated: <input type="checkbox"/> ) or Boring Location <input type="checkbox"/> State Plane _____ N, _____ E		Lat <u>0° 0' 0"</u>	Local Grid Location <input type="checkbox"/> N <input type="checkbox"/> S <input type="checkbox"/> E <input type="checkbox"/> W	
1/4 of _____ 1/4 of Section _____, T _____ N, R _____		Long <u>0° 0' 0"</u>	Feet	
Facility ID	County <u>Milwaukee</u>	County Code <u>41</u>	Civil Town/City/ or Village <u>Village of Braen Beer</u>	

Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth in Feet (Below ground surface)	Soil/Rock Description And Geologic Origin For Each Major Unit		U S C S	Graphic Log	Well Diagram	P/D/FID	Soil Properties					P 200	RQD/Comments
										Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index			
100			4"	crushed rock					0/1							
			24"	silt w/med gravel dark brown					0/1	2	2					
			32"	clay w/silt w/trace gravel, brown					0/1	4						
60	5		24"	clay w/trace silt, tough, brown					0/1	6						
			12"	clay w/silt, trace gravel, brown					0/1	6	6					
			24"	silt w/clay w/trace gravel, tan/brown					0/1	8	8					
10				6ft. O.B.C 10' vt refusal					0/1	10						

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

Signature Camer

Firm KBV engineering

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

Route To: Watershed/Wastewater  Waste Management   
Remediation/Development  Other

Page 1 of 1

Facility/Project Name <u>Brown Deer</u>			License/Permit/Monitoring Number		Boring Number <u>GP-5</u>	
Boring Drilled By: Name of crew chief (first, last) and Firm First Name: <u>Dan</u> Last Name: <u>Fisher</u> Firm: <u>Horizon</u>			Date Drilling Started <u>04/22/2016</u> mm dd yy yy	Date Drilling Completed <u>04/22/2016</u> mm dd yy yy	Drilling Method <u>Direct Push</u>	
WI Unique Well No.	DNR Well ID No.	Well Name	Final Static Water Level Feet MSL	Surface Elevation Feet MSL	Borehole Diameter 2 inches	
Local Grid Origin <input type="checkbox"/> (estimated: <input type="checkbox"/> ) or Boring Location <input type="checkbox"/> State Plane _____ N, _____ E			Lat <u>0° 0' 0"</u>	Local Grid Location <input type="checkbox"/> N <input type="checkbox"/> E	Long <u>0° 0' 0"</u>	Feet <input type="checkbox"/> S <input type="checkbox"/> W
1/4 of _____ 1/4 of Section _____, T _____ N, R _____						
Facility ID		County <u>Milwaukee</u>	County Code <u>411</u>	Civil Town/City/ or Village <u>Village of Brown Deer</u>		

Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth in Feet (Below ground surface)	Soil/Rock Description And Geologic Origin For Each Major Unit	U S C S.	Graphic Log	Well Diagram	PID/FID	Soil Properties					RQD/ Comments
									Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	
36			5	6" clay silt, ultra trace small gravel, dark brown 30" clay silt, ultra trace small gravel, red/brown				0 / 1	2	2				
48			5	6" clay silt, ultra trace small gravel, red/brown 4" silt/clay, trace gravel, brown 38" clay w/trace gravel, brown w/orange mottling				0 / 1	4	4				
			10	3" crushed rock				0 / 1	6	6				
42			14	31" silt w/trace small gravel, orange w/orange mottling LDE. O.BE 14' w/refusal				0 / 1	12	12				
								0 / 1	14	14				

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

Signature Cleme

Firm Kay Engineering

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

## Well / Drillhole / Borehole Filling & Sealing Report

Form 3300-005 (R 4/2015)

Page 1 of 2

**Notice:** Completion of this report is required by chs. 160, 281, 283, 289, 291-293, 295, and 299, Wis. Stats., and chs. NR 141 and 812, Wis. Adm. Code. In accordance with chs. 281, 289, 291-293, 295, and 299, Wis. Stats., failure to file this form may result in a forfeiture of between \$10-25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be used for any other purpose. Return form to the appropriate DNR office and bureau. See instructions on reverse for more information.

### Verification Only of Fill and Seal

#### Route to DNR Bureau:

- |   |   |   |
|---|---|---|
| <input type="checkbox"/> Drinking Water   | <input type="checkbox"/> Watershed/Wastewater | <input checked="" type="checkbox"/> Remediation/Redevelopment |
| <input type="checkbox"/> Waste Management | <input type="checkbox"/> Other:               |   |

### 1. Well Location Information

County **Milwaukee** WI Unique Well # of Removed Well

### 2. Facility / Owner Information

Facility Name <b>Brown Deer</b>			
Facility ID (FID or PWS) <b>FIP-1/HW-1</b>			
Latitude / Longitude (see instructions)		Format Code	Method Code
		<input type="checkbox"/> DD	<input type="checkbox"/> GPS008
		<input type="checkbox"/> DDM	<input type="checkbox"/> SCR002
			<input type="checkbox"/> OTH001
1/4 / 1/4	1/4	Section	Township
			N
or Gov't Lot #			E
Well Street Address	<b>8655 North 43rd St.</b>		
Well City, Village or Town	<b>Village of Brown Deer</b>		
Subdivision Name	Well ZIP Code		
Reason for Removal from Service	WI Unique Well # of Replacement Well		

### 3. Filled & Sealed Well / Drillhole / Borehole Information

<input type="checkbox"/> Monitoring Well	Original Construction Date (mm/dd/yyyy) <b>04/22/2016</b>
<input type="checkbox"/> Water Well	
<input checked="" type="checkbox"/> Borehole / Drillhole	If a Well Construction Report is available, please attach.

#### Construction Type:

<input type="checkbox"/> Drilled	<input type="checkbox"/> Driven (Sandpoint)	<input type="checkbox"/> Dug
<input checked="" type="checkbox"/> Other (specify): <b>Direct Push</b>		

#### Formation Type:

<input checked="" type="checkbox"/> Unconsolidated Formation	<input type="checkbox"/> Bedrock
--	----------------------------------

Total Well Depth From Ground Surface (ft.) <b>12</b>	Casing Diameter (in.) <b>2</b>
--	--------------------------------

Lower Drillhole Diameter (in.)	Casing Depth (ft.)
<b>—</b>	<b>—</b>

Was well annular space grouted?  Yes  No  Unknown

If yes, to what depth (feet)? <b>—</b>	Depth to Water (feet) <b>—</b>
--	--------------------------------

### 5. Material Used to Fill Well / Drillhole

**Bentonite Chips**

### 4. Pump, Liner, Screen, Casing & Sealing Material

- |                                       |   |  |   |
|---------------------------------------|---|--|---|
| Pump and piping removed?              | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No            | <input type="checkbox"/> N/A            |
| Liner(s) removed?                     | <input type="checkbox"/> Yes            | <input type="checkbox"/> No            | <input checked="" type="checkbox"/> N/A |
| Liner(s) perforated?                  | <input type="checkbox"/> Yes            | <input type="checkbox"/> No            | <input checked="" type="checkbox"/> N/A |
| Screen removed?                       | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No            | <input type="checkbox"/> N/A            |
| Casing left in place?                 | <input checked="" type="checkbox"/> Yes | <input checked="" type="checkbox"/> No | <input type="checkbox"/> N/A            |
| Was casing cut off below surface?     | <input type="checkbox"/>                | <input type="checkbox"/> Yes           | <input checked="" type="checkbox"/> N/A |
| Did sealing material rise to surface? | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No            | <input type="checkbox"/> N/A            |
| Did material settle after 24 hours?   | <input type="checkbox"/>                | <input type="checkbox"/> Yes           | <input checked="" type="checkbox"/> N/A |
| If yes, was hole retopped?            | <input type="checkbox"/>                | <input type="checkbox"/> Yes           | <input type="checkbox"/> N/A            |

If bentonite chips were used, were they hydrated with water from a known safe source?  Yes  No  N/A

#### Required Method of Placing Sealing Material

- |  |   |
|--|---|
| <input type="checkbox"/> Conductor Pipe-Gravity              | <input type="checkbox"/> Conductor Pipe-Pumped                      |
| <input type="checkbox"/> Screened & Poured (Bentonite Chips) | <input checked="" type="checkbox"/> Other (Explain): <b>gravity</b> |

#### Sealing Materials

- |   |  |
|---|--|
| <input type="checkbox"/> Neat Cement Grout            | <input type="checkbox"/> Concrete        |
| <input type="checkbox"/> Sand-Cement (Concrete) Grout | <input type="checkbox"/> Bentonite Chips |

#### For Monitoring Wells and Monitoring Well Boreholes Only:

- |   |   |
|---|---|
| <input type="checkbox"/> Bentonite Chips    | <input type="checkbox"/> Bentonite - Cement Grout |
| <input type="checkbox"/> Granular Bentonite | <input type="checkbox"/> Bentonite - Sand Slurry  |

From (ft.)	To (ft.)	No. Yards, Sacks Sealant or Volume (circle one)	Mix Ratio or Mud Weight
Surface	<b>12</b>	<b>0.264</b>	

### 6. Comments

### 7. Supervision of Work

Name of Person or Firm Doing Filling & Sealing <b>KY Engineering</b>	License #	Date of Filling & Sealing or Verification (mm/dd/yyyy) <b>04/22/2016</b>
--	-----------	--

#### DNR Use Only

Date Received	Noted By
---------------	----------

Comments	
----------	--

Street or Route <b>735 N. Water St. Suite 510</b>	Telephone Number <b>(414) 224 8300</b>
---	--

City <b>Milwaukee</b>	State <b>WI</b>	ZIP Code <b>53202</b>	Signature of Person Doing Work <b>Clement</b>	Date Signed <b>04/22/2016</b>
-----------------------	-----------------	-----------------------	---	-------------------------------

**Notice:** Completion of this report is required by chs. 160, 281, 283, 289, 291-293, 295, and 299, Wis. Stats., and chs. NR 141 and 812, Wis. Adm. Code. In accordance with chs. 281, 289, 291-293, 295, and 299, Wis. Stats., failure to file this form may result in a forfeiture of between \$10-25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be used for any other purpose. Return form to the appropriate DNR office and bureau. See instructions on reverse for more information.

**Verification Only of Fill and Seal**

**Route to DNR Bureau:**

- Drinking Water     Watershed/Wastewater  
 Waste Management     Other: \_\_\_\_\_

Remediation/Redevelopment

**1. Well Location Information**

County **Milwaukee** WI Unique Well # of Removed Well

Hicap #

Latitude / Longitude (see instructions)

N

Format Code

DD

Method Code

GPS008

SCR002

OTH001

DDM

W

Range

E

W

1/4 / 1/4  
or Gov't Lot #

Section

N

Township

E

W

Well Street Address

**865 N. 43rd St.**

Well City, Village or Town

**Village of Brown Deer**

Well ZIP Code

Subdivision Name

Lot #

Reason for Removal from Service

WI Unique Well # of Replacement Well

**3. Filled & Sealed Well / Drillhole / Borehole Information**

Monitoring Well

Original Construction Date (mm/dd/yyyy)

**04/22/2016**

Water Well

If a Well Construction Report is available, please attach.

Borehole / Drillhole

Construction Type:

Drilled

Driven (Sandpoint)

Dug

Other (specify):

**Direct push**

Formation Type:

Unconsolidated Formation

Bedrock

Total Well Depth From Ground Surface (ft.)

**8**

Casing Diameter (in.)

**2**

Lower Drillhole Diameter (in.)

**—**

Casing Depth (ft.)

**—**

Was well annular space grouted?

Yes

No

Unknown

If yes, to what depth (feet)?

Depth to Water (feet)

**5. Material Used to Fill Well / Drillhole**

**Bentonite chips**

**6. Comments**

**7. Supervision of Work**

Name of Person or Firm Doing Filling & Sealing

License #

Date of Filling & Sealing or Verification  
(mm/dd/yyyy) **04/22/2016**

**DNR Use Only**

Date Received

Noted By

Street or Route

**135 N. Glebe St. Suite 510**

Telephone Number

**(414) 224-8300**

Comments

City

**Milwaukee**

State

**WI**

ZIP Code

**53202**

Signature of Person Doing Work

**Camer**

Date Signed

**04/22/2016**

**Notice:** Completion of this report is required by chs. 160, 281, 283, 289, 291-293, 295, and 299, Wis. Stats., and chs. NR 141 and 812, Wis. Adm. Code. In accordance with chs. 281, 289, 291-293, 295, and 299, Wis. Stats., failure to file this form may result in a forfeiture of between \$10-25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be used for any other purpose. Return form to the appropriate DNR office and bureau. See instructions on reverse for more information.

<input type="checkbox"/> <b>Verification Only of Fill and Seal</b>				<b>Route to DNR Bureau:</b> <input type="checkbox"/> Drinking Water <input type="checkbox"/> Watershed/Wastewater <input type="checkbox"/> Waste Management <input type="checkbox"/> Other: _____		
<b>1. Well Location Information</b>				<b>2. Facility / Owner Information</b>		
County <i>Milwaukee</i>		WI Unique Well # of Removed Well _____		Hicap # _____		Facility Name <i>Brown Deer</i>
Latitude / Longitude (see instructions) _____ N _____ W		Format Code <input type="checkbox"/> DD <input type="checkbox"/> GPS008 <input type="checkbox"/> DDM <input type="checkbox"/> SCR002 _____ OTH001	Method Code <input type="checkbox"/> E <input type="checkbox"/> W	Facility ID (FID or PWS) _____		
1/4 / 1/4 or Gov't Lot # _____		Section _____	Township N	Range <input type="checkbox"/> E <input type="checkbox"/> W	License/Permit/Monitoring # <i>AP-3</i>	
Well Street Address <i>81655 N. 43rd St.</i>				Original Well Owner		
Well City, Village or Town <i>Village of Brown Deer</i>				Present Well Owner		
Subdivision Name _____				Mailing Address of Present Owner _____		
Reason for Removal from Service _____				City of Present Owner    State    ZIP Code _____		
<b>3. Filled &amp; Sealed Well / Drillhole / Borehole Information</b>				<b>4. Pump, Liner, Screen, Casing &amp; Sealing Material</b>		
<input type="checkbox"/> Monitoring Well <input type="checkbox"/> Water Well <input checked="" type="checkbox"/> Borehole / Drillhole		Original Construction Date (mm/dd/yyyy) <i>04/22/2016</i>		Pump and piping removed? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A Liner(s) removed? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A Liner(s) perforated? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A Screen removed? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A Casing left in place? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A  Was casing cut off below surface? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A Did sealing material rise to surface? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A Did material settle after 24 hours? If yes, was hole retopped?  If bentonite chips were used, were they hydrated with water from a known safe source? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A		
Construction Type: <input type="checkbox"/> Drilled <input type="checkbox"/> Driven (Sandpoint) <input type="checkbox"/> Dug <input checked="" type="checkbox"/> Other (specify): <i>Direct Push</i>						
Formation Type: <input checked="" type="checkbox"/> Unconsolidated Formation <input type="checkbox"/> Bedrock				Required Method of Placing Sealing Material <input type="checkbox"/> Conductor Pipe-Gravity <input type="checkbox"/> Conductor Pipe-Pumped <input type="checkbox"/> Screened & Poured (Bentonite Chips) <input checked="" type="checkbox"/> Other (Explain): <i>gravity</i>		
Total Well Depth From Ground Surface (ft.) <i>8</i>		Casing Diameter (in.) <i>2</i>		Sealing Materials <input type="checkbox"/> Neat Cement Grout <input type="checkbox"/> Concrete <input type="checkbox"/> Sand-Cement (Concrete) Grout <input type="checkbox"/> Bentonite Chips		
Lower Drillhole Diameter (in.) _____		Casing Depth (ft.) _____		For Monitoring Wells and Monitoring Well Boreholes Only: <input type="checkbox"/> Bentonite Chips <input type="checkbox"/> Bentonite - Cement Grout <input type="checkbox"/> Granular Bentonite <input type="checkbox"/> Bentonite - Sand Slurry		
<b>5. Material Used to Fill Well / Drillhole</b> <i>Bentonite Chips</i>				From (ft.)	To (ft.)	No. Yards, Sacks Sealant or Volume (circle one) _____ <i>0.176</i>
				Surface	<i>8</i>	
<b>6. Comments</b>						
<b>7. Supervision of Work</b>				<b>DNR Use Only</b>		
Name of Person or Firm Doing Filling & Sealing <i>KEY Engineering</i>		License # _____		Date of Filling & Sealing or Verification (mm/dd/yyyy) <i>04/22/2016</i>		Date Received _____
Street or Route <i>735 N. Water St. Suite</i>				Telephone Number <i>(414) 224 800</i>		Noted By _____
Comments _____						
City <i>Milwaukee</i>		State <i>WI</i>	ZIP Code <i>53202</i>	Signature of Person Doing Work <i>Cohen</i>		Date Signed <i>04/22/2016</i>

**Notice:** Completion of this report is required by chs. 160, 281, 283, 289, 291-293, 295, and 299, Wis. Stats., and chs. NR 141 and 812, Wis. Adm. Code. In accordance with chs. 281, 289, 291-293, 295, and 299, Wis. Stats., failure to file this form may result in a forfeiture of between \$10-25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be used for any other purpose. Return form to the appropriate DNR office and bureau. See instructions on reverse for more information.

**Verification Only of Fill and Seal**

**Route to DNR Bureau:**

- Drinking Water     Watershed/Wastewater  
 Waste Management     Other: \_\_\_\_\_

Remediation/Redevelopment

**1. Well Location Information**

County, Milwaukee WI Unique Well # of Removed Well

Hicap #

Latitude / Longitude (see instructions)

N

W

Format Code

Method Code

- DD     GPS008  
 DDM     SCR002  
     OTH001

1/4 / 1/4

1/4

Section

Township

Range

E

W

or Gov't Lot #

Well Street Address

865 N. 43rd St.

Well City, Village or Town

Milwaukee

Well ZIP Code

Subdivision Name

Lot #

Reason for Removal from Service

WI Unique Well # of Replacement Well

**3. Filled & Sealed Well / Drillhole / Borehole Information**

Monitoring Well

Original Construction Date (mm/dd/yyyy)

Water Well

04/24/2014

Borehole / Drillhole

If a Well Construction Report is available, please attach.

Construction Type:

Drilled

Driven (Sandpoint)

Dug

Other (specify):

Direct Push

Formation Type:

Unconsolidated Formation

Bedrock

Total Well Depth From Ground Surface (ft.)

10

Casing Diameter (in.)

2

Lower Drillhole Diameter (in.)

1

Casing Depth (ft.)

10

Was well annular space grouted?

Yes

No

Unknown

If yes, to what depth (feet)?

Depth to Water (feet)

**5. Material Used to Fill Well / Drillhole**

Bentonite chips

**2. Facility / Owner Information**

Facility Name

Brown Deer

Facility ID (FID or PWS)

GP-1

Original Well Owner

Present Well Owner

Mailing Address of Present Owner

City of Present Owner

State

ZIP Code

**4. Pump, Liner, Screen, Casing & Sealing Material**

Pump and piping removed?

Yes     No     N/A

Liner(s) removed?

Yes     No     N/A

Liner(s) perforated?

Yes     No     N/A

Screen removed?

Yes     No     N/A

Casing left in place?

Yes     No     N/A

Was casing cut off below surface?

Yes     No     N/A

Did sealing material rise to surface?

Yes     No     N/A

Did material settle after 24 hours?

Yes     No     N/A

If yes, was hole retopped?

Yes     No     N/A

If bentonite chips were used, were they hydrated with water from a known safe source?

Yes     No     N/A

Required Method of Placing Sealing Material

Conductor Pipe-Gravity

Conductor Pipe-Pumped

Screened & Poured (Bentonite Chips)

Other (Explain): gravity

Sealing Materials

Neat Cement Grout

Concrete

Sand-Cement (Concrete) Grout

Bentonite Chips

For Monitoring Wells and Monitoring Well Boreholes Only:

Bentonite Chips

Bentonite - Cement Grout

Granular Bentonite

Bentonite - Sand Slurry

**6. Comments**

**7. Supervision of Work**

Name of Person or Firm Doing Filling & Sealing

License #

Date of Filling & Sealing or Verification

(mm/dd/yyyy)

KET Engineering

04/24/2014

**DNR Use Only**

Date Received

Noted By

Street or Route

735 N. Water St. Suite 510

Telephone Number

(414) 219 8200

Comments

City

Milwaukee

State

WI

ZIP Code

53202

Signature of Person Doing Work

Colma

Date Signed

04/24/2014

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**Verification Only of Fill and Seal**

**Route to DNR Bureau:**

- Drinking Water  
 Waste Management

- Watershed/Wastewater  
 Other:

- Remediation/Redevelopment

**1. Well Location Information**

County **Milwaukee** WI Unique Well # of Removed Well

Hicap #

Latitude / Longitude (see instructions)

N

Format Code

- DD  
 DDM

Method Code

- GPS008  
 SCR002  
 OTH001

1/4 / 1/4

1/4

Section

Township

Range

- E  
 W

or Gov't Lot #

N

Well Street Address

**8605 N. 43rd St.**

Well City, Village or Town

**Village of Brown Deer**

Well ZIP Code

Subdivision Name

Lot #

Reason for Removal from Service

WI Unique Well # of Replacement Well

**3. Filled & Sealed Well / Drillhole / Borehole Information**

Monitoring Well

Original Construction Date (mm/dd/yyyy)

Water Well

**04/22/2014**

Borehole / Drillhole

If a Well Construction Report is available, please attach.

Construction Type:

Drilled

Driven (Sandpoint)

Dug

Other (specify):

**Direct Push**

Formation Type:

Unconsolidated Formation

Bedrock

Total Well Depth From Ground Surface (ft.)

**14**

Casing Diameter (in.)

**2**

Lower Drillhole Diameter (in.)

**—**

Casing Depth (ft.)

**—**

Was well annular space grouted?

Yes

No

Unknown

If yes, to what depth (feet)?

**—**

Depth to Water (feet)

**—**

**5. Material Used to Fill Well / Drillhole**

**Bentonite chips**

**2. Facility / Owner Information**

Facility Name

**Brown Deer**

Facility ID (FID or PWS)

**HP-5**

Original Well Owner

Mailing Address of Present Owner

**4. Pump, Liner, Screen, Casing & Sealing Material**

Pump and piping removed?  Yes  No  N/A

Liner(s) removed?

Liner(s) perforated?

Screen removed?

Casing left in place?

Was casing cut off below surface?

Did sealing material rise to surface?

Did material settle after 24 hours?

If yes, was hole retopped?

If bentonite chips were used, were they hydrated with water from a known safe source?

Required Method of Placing Sealing Material

- Conductor Pipe-Gravity  Conductor Pipe-Pumped  
 Screened & Poured  Other (Explain): \_\_\_\_\_  
(Bentonite Chips)

Sealing Materials

- Neat Cement Grout  Concrete  
 Sand-Cement (Concrete) Grout  Bentonite Chips

For Monitoring Wells and Monitoring Well Boreholes Only:

- Bentonite Chips  Bentonite - Cement Grout  
 Granular Bentonite  Bentonite - Sand Slurry

From (ft.)	To (ft.)	No. Yards, Sacks Sealant or Volume (circle one)	Mix Ratio or Mud Weight
Surface	<b>14</b>	<b>0.308</b>	

**6. Comments**

**7. Supervision of Work**

Name of Person or Firm Doing Filling & Sealing

**KEY Engineering**

License #

Date of Filling & Sealing or Verification

(mm/dd/yyyy) **04/22/2014**

**DNR Use Only**

Date Received

Noted By

Street or Route

**735 N. Water St. Suite 510**

Telephone Number

**(414) 224-3300**

Comments

City

**Milwaukee**

State

**WI**

ZIP Code

**53202**

Signature of Person Doing Work

**Clare**

Date Signed

**04/22/2014**

## Attachment 3

MILWAUKEE • WASHINGTON, D.C.  
[www.keyengineering.com](http://www.keyengineering.com)

May 09, 2016

Jason Kruchko  
KEY ENGINEERING GROUP, LTD.  
735 North Water St.  
Milwaukee, WI 53202

RE: Project: 2404006 BROWN DEER  
Pace Project No.: 40131320

Dear Jason Kruchko:

Enclosed are the analytical results for sample(s) received by the laboratory on April 25, 2016. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI 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  
Project Manager

Enclosures

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



## REPORT OF LABORATORY ANALYSIS

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## CERTIFICATIONS

Project: 2404006 BROWN DEER  
Pace Project No.: 40131320

---

### Green Bay Certification IDs

1241 Bellevue Street, Green Bay, WI 54302  
Florida/NELAP Certification #: E87948  
Illinois Certification #: 200050  
Kentucky Certification #: 82  
Louisiana Certification #: 04168  
Minnesota Certification #: 055-999-334  
Virginia VELAP ID: 460263  
North Dakota Certification #: R-150

South Carolina Certification #: 83006001  
Texas Certification #: T104704529-14-1  
US Dept of Agriculture #: S-76505  
Virginia VELAP Certification ID: 460263  
Virginia VELAP ID: 460263  
Wisconsin Certification #: 405132750  
Wisconsin DATCP Certification #: 105-444

## REPORT OF LABORATORY ANALYSIS

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## SAMPLE SUMMARY

Project: 2404006 BROWN DEER  
Pace Project No.: 40131320

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40131320001	GP-1 / TW-1 (2-4)	Solid	04/22/16 09:30	04/25/16 14:56
40131320002	GP-1 / TW-1 (8-10)	Solid	04/22/16 09:45	04/25/16 14:56
40131320003	GP-2 (2-4)	Solid	04/22/16 09:50	04/25/16 14:56
40131320004	GP-2 (6-8)	Solid	04/22/16 10:00	04/25/16 14:56
40131320005	GP-3 (2-4)	Solid	04/22/16 10:30	04/25/16 14:56
40131320006	GP-3 (6-8)	Solid	04/22/16 11:00	04/25/16 14:56
40131320007	GP-4 (2-4)	Solid	04/22/16 11:25	04/25/16 14:56
40131320008	GP-4 (8-10)	Solid	04/22/16 11:45	04/25/16 14:56
40131320009	GP-5 (2-4)	Solid	04/22/16 12:10	04/25/16 14:56
40131320010	GP-5 (10-12)	Solid	04/22/16 12:30	04/25/16 14:56
40131320011	SS-1 (0.5-1.5)	Solid	04/22/16 12:50	04/25/16 14:56
40131320012	TW-1 / GP-1	Water	04/22/16 13:00	04/25/16 14:56

## REPORT OF LABORATORY ANALYSIS

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## SAMPLE ANALYTE COUNT

Project: 2404006 BROWN DEER  
Pace Project No.: 40131320

Lab ID	Sample ID	Method	Analysts	Analytes Reported
40131320001	GP-1 / TW-1 (2-4)	EPA 8082	BLM	10
		EPA 8270 by SIM	ARO	20
		EPA 8260	SMT	64
		ASTM D2974-87	MAM	1
40131320002	GP-1 / TW-1 (8-10)	EPA 8082	BLM	10
		EPA 8270 by SIM	ARO	20
		EPA 8260	SMT	64
		ASTM D2974-87	MAM	1
40131320003	GP-2 (2-4)	EPA 8082	BLM	10
		EPA 8270 by SIM	ARO	20
		EPA 8260	SMT	64
		ASTM D2974-87	MAM	1
40131320004	GP-2 (6-8)	EPA 8082	BLM	10
		EPA 8270 by SIM	ARO	20
		EPA 8260	SMT	64
		ASTM D2974-87	MAM	1
40131320005	GP-3 (2-4)	EPA 8082	BLM	10
		EPA 8270 by SIM	ARO	20
		EPA 8260	SMT	64
		ASTM D2974-87	MAM	1
40131320006	GP-3 (6-8)	EPA 8082	BLM	10
		EPA 8270 by SIM	ARO	20
		EPA 8260	SMT	64
		ASTM D2974-87	MAM	1
40131320007	GP-4 (2-4)	EPA 8082	BLM	10
		EPA 8270 by SIM	ARO	20
		EPA 8260	SMT	64
		ASTM D2974-87	MAM	1
40131320008	GP-4 (8-10)	EPA 8082	BLM	10
		EPA 8270 by SIM	ARO	20
		EPA 8260	SMT	64
		ASTM D2974-87	MAM	1
40131320009	GP-5 (2-4)	EPA 8082	BLM	10
		EPA 8270 by SIM	ARO	20
		EPA 8260	SMT	64
		ASTM D2974-87	MAM	1
40131320010	GP-5 (10-12)	EPA 8082	BLM	10
		EPA 8270 by SIM	ARO	20
		EPA 8260	SMT	64
		ASTM D2974-87	MAM	1

## REPORT OF LABORATORY ANALYSIS

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## SAMPLE ANALYTE COUNT

Project: 2404006 BROWN DEER  
Pace Project No.: 40131320

Lab ID	Sample ID	Method	Analysts	Analytes Reported
40131320011	SS-1 (0.5-1.5)	EPA 8270 by SIM	ARO	20
		EPA 8260	SMT	64
		ASTM D2974-87	MAM	1
		EPA 8082	BLM	10
		EPA 8270 by SIM	ARO	20
		EPA 8260	SMT	64
40131320012	TW-1 / GP-1	ASTM D2974-87	MAM	1
		EPA 8082	BDS	10
		EPA 8270 by HVI	TPO	20
		EPA 8260	HNW	64

## REPORT OF LABORATORY ANALYSIS

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## SUMMARY OF DETECTION

Project: 2404006 BROWN DEER

Pace Project No.: 40131320

Lab Sample ID	Client Sample ID				Report Limit	Analyzed	Qualifiers
Method	Parameters	Result	Units				
<b>40131320001</b>	<b>GP-1 / TW-1 (2-4)</b>						
ASTM D2974-87	Percent Moisture	22.2	%		0.10	05/05/16 16:10	
<b>40131320002</b>	<b>GP-1 / TW-1 (8-10)</b>						
ASTM D2974-87	Percent Moisture	15.2	%		0.10	05/05/16 16:10	
<b>40131320003</b>	<b>GP-2 (2-4)</b>						
ASTM D2974-87	Percent Moisture	27.6	%		0.10	05/05/16 16:10	
<b>40131320004</b>	<b>GP-2 (6-8)</b>						
ASTM D2974-87	Percent Moisture	3.7	%		0.10	05/05/16 16:11	
<b>40131320005</b>	<b>GP-3 (2-4)</b>						
ASTM D2974-87	Percent Moisture	22.3	%		0.10	05/05/16 16:11	
<b>40131320006</b>	<b>GP-3 (6-8)</b>						
ASTM D2974-87	Percent Moisture	12.9	%		0.10	05/05/16 16:11	
<b>40131320007</b>	<b>GP-4 (2-4)</b>						
ASTM D2974-87	Percent Moisture	22.5	%		0.10	05/05/16 16:11	
<b>40131320008</b>	<b>GP-4 (8-10)</b>						
ASTM D2974-87	Percent Moisture	14.0	%		0.10	05/05/16 16:11	
<b>40131320009</b>	<b>GP-5 (2-4)</b>						
ASTM D2974-87	Percent Moisture	21.4	%		0.10	05/05/16 16:11	
<b>40131320010</b>	<b>GP-5 (10-12)</b>						
ASTM D2974-87	Percent Moisture	13.2	%		0.10	05/05/16 17:05	
<b>40131320011</b>	<b>SS-1 (0.5-1.5)</b>						
EPA 8270 by SIM	Acenaphthene	0.16	mg/kg		0.088	05/06/16 11:15	
EPA 8270 by SIM	Anthracene	1.1	mg/kg		0.088	05/06/16 11:15	
EPA 8270 by SIM	Benzo(a)anthracene	1.5	mg/kg		0.088	05/06/16 11:15	
EPA 8270 by SIM	Benzo(a)pyrene	1.5	mg/kg		0.088	05/06/16 11:15	
EPA 8270 by SIM	Benzo(b)fluoranthene	1.2	mg/kg		0.088	05/06/16 11:15	
EPA 8270 by SIM	Benzo(g,h,i)perylene	0.90	mg/kg		0.088	05/06/16 11:15	
EPA 8270 by SIM	Benzo(k)fluoranthene	1.4	mg/kg		0.088	05/06/16 11:15	
EPA 8270 by SIM	Chrysene	1.8	mg/kg		0.088	05/06/16 11:15	
EPA 8270 by SIM	Dibenz(a,h)anthracene	0.32	mg/kg		0.088	05/06/16 11:15	
EPA 8270 by SIM	Fluoranthene	3.9	mg/kg		0.088	05/06/16 11:15	
EPA 8270 by SIM	Fluorene	0.25	mg/kg		0.088	05/06/16 11:15	
EPA 8270 by SIM	Indeno(1,2,3-cd)pyrene	0.83	mg/kg		0.088	05/06/16 11:15	
EPA 8270 by SIM	Phenanthrene	2.5	mg/kg		0.088	05/06/16 11:15	
EPA 8270 by SIM	Pyrene	2.7	mg/kg		0.088	05/06/16 11:15	
ASTM D2974-87	Percent Moisture	24.2	%		0.10	05/05/16 17:05	
<b>40131320012</b>	<b>TW-1 / GP-1</b>						
EPA 8270 by HVI	Chrysene	0.027J	ug/L		0.28	04/29/16 16:17	
EPA 8270 by HVI	Fluoranthene	0.096J	ug/L		0.28	04/29/16 16:17	B
EPA 8270 by HVI	Phenanthrene	0.13J	ug/L		0.28	04/29/16 16:17	
EPA 8270 by HVI	Pyrene	0.12J	ug/L		0.28	04/29/16 16:17	B

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: 2404006 BROWN DEER

Pace Project No.: 40131320

Sample: GP-1 / TW-1 (2-4) Lab ID: 40131320001 Collected: 04/22/16 09:30 Received: 04/25/16 14:56 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
<b>8082 GCS PCB</b>	Analytical Method: EPA 8082 Preparation Method: EPA 3541								
PCB-1016 (Aroclor 1016)	<0.032	mg/kg	0.064	0.032	1	04/26/16 12:49	04/27/16 16:22	12674-11-2	
PCB-1221 (Aroclor 1221)	<0.032	mg/kg	0.064	0.032	1	04/26/16 12:49	04/27/16 16:22	11104-28-2	
PCB-1232 (Aroclor 1232)	<0.032	mg/kg	0.064	0.032	1	04/26/16 12:49	04/27/16 16:22	11141-16-5	
PCB-1242 (Aroclor 1242)	<0.032	mg/kg	0.064	0.032	1	04/26/16 12:49	04/27/16 16:22	53469-21-9	
PCB-1248 (Aroclor 1248)	<0.032	mg/kg	0.064	0.032	1	04/26/16 12:49	04/27/16 16:22	12672-29-6	
PCB-1254 (Aroclor 1254)	<0.032	mg/kg	0.064	0.032	1	04/26/16 12:49	04/27/16 16:22	11097-69-1	
PCB-1260 (Aroclor 1260)	<0.032	mg/kg	0.064	0.032	1	04/26/16 12:49	04/27/16 16:22	11096-82-5	
PCB, Total	<0.032	mg/kg	0.064	0.032	1	04/26/16 12:49	04/27/16 16:22	1336-36-3	
<b>Surrogates</b>									
Tetrachloro-m-xylene (S)	84	%	63-130		1	04/26/16 12:49	04/27/16 16:22	877-09-8	
Decachlorobiphenyl (S)	86	%	48-130		1	04/26/16 12:49	04/27/16 16:22	2051-24-3	
<b>8270 MSSV PAH by SIM</b>	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546								
Acenaphthene	<0.011	mg/kg	0.021	0.011	1	05/03/16 09:42	05/03/16 19:02	83-32-9	
Acenaphthylene	<0.0096	mg/kg	0.021	0.0096	1	05/03/16 09:42	05/03/16 19:02	208-96-8	
Anthracene	<0.011	mg/kg	0.021	0.011	1	05/03/16 09:42	05/03/16 19:02	120-12-7	
Benzo(a)anthracene	<0.0074	mg/kg	0.021	0.0074	1	05/03/16 09:42	05/03/16 19:02	56-55-3	
Benzo(a)pyrene	<0.0077	mg/kg	0.021	0.0077	1	05/03/16 09:42	05/03/16 19:02	50-32-8	
Benzo(b)fluoranthene	<0.011	mg/kg	0.021	0.011	1	05/03/16 09:42	05/03/16 19:02	205-99-2	
Benzo(g,h,i)perylene	<0.0082	mg/kg	0.021	0.0082	1	05/03/16 09:42	05/03/16 19:02	191-24-2	
Benzo(k)fluoranthene	<0.012	mg/kg	0.021	0.012	1	05/03/16 09:42	05/03/16 19:02	207-08-9	
Chrysene	<0.0099	mg/kg	0.021	0.0099	1	05/03/16 09:42	05/03/16 19:02	218-01-9	
Dibenz(a,h)anthracene	<0.0079	mg/kg	0.021	0.0079	1	05/03/16 09:42	05/03/16 19:02	53-70-3	
Fluoranthene	<0.011	mg/kg	0.021	0.011	1	05/03/16 09:42	05/03/16 19:02	206-44-0	
Fluorene	<0.011	mg/kg	0.021	0.011	1	05/03/16 09:42	05/03/16 19:02	86-73-7	
Indeno(1,2,3-cd)pyrene	<0.0081	mg/kg	0.021	0.0081	1	05/03/16 09:42	05/03/16 19:02	193-39-5	
1-Methylnaphthalene	<0.011	mg/kg	0.021	0.011	1	05/03/16 09:42	05/03/16 19:02	90-12-0	
2-Methylnaphthalene	<0.011	mg/kg	0.021	0.011	1	05/03/16 09:42	05/03/16 19:02	91-57-6	
Naphthalene	<0.011	mg/kg	0.021	0.011	1	05/03/16 09:42	05/03/16 19:02	91-20-3	
Phenanthrene	<0.011	mg/kg	0.021	0.011	1	05/03/16 09:42	05/03/16 19:02	85-01-8	
Pyrene	<0.011	mg/kg	0.021	0.011	1	05/03/16 09:42	05/03/16 19:02	129-00-0	
<b>Surrogates</b>									
2-Fluorobiphenyl (S)	53	%	26-130		1	05/03/16 09:42	05/03/16 19:02	321-60-8	
Terphenyl-d14 (S)	57	%	10-130		1	05/03/16 09:42	05/03/16 19:02	1718-51-0	
<b>8260 MSV Med Level Normal List</b>	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
Benzene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 18:54	71-43-2	W
Bromobenzene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 18:54	108-86-1	W
Bromochloromethane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 18:54	74-97-5	W
Bromodichloromethane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 18:54	75-27-4	W
Bromoform	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 18:54	75-25-2	W
Bromomethane	<0.070	mg/kg	0.25	0.070	1	04/26/16 14:09	04/27/16 18:54	74-83-9	W
n-Butylbenzene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 18:54	104-51-8	W
sec-Butylbenzene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 18:54	135-98-8	W
tert-Butylbenzene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 18:54	98-06-6	W

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: 2404006 BROWN DEER

Pace Project No.: 40131320

Sample: GP-1 / TW-1 (2-4) Lab ID: 40131320001 Collected: 04/22/16 09:30 Received: 04/25/16 14:56 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
<b>8260 MSV Med Level Normal List</b>	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
Carbon tetrachloride	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 18:54	56-23-5	W
Chlorobenzene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 18:54	108-90-7	W
Chloroethane	<0.067	mg/kg	0.25	0.067	1	04/26/16 14:09	04/27/16 18:54	75-00-3	W
Chloroform	<0.046	mg/kg	0.25	0.046	1	04/26/16 14:09	04/27/16 18:54	67-66-3	W
Chloromethane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 18:54	74-87-3	W
2-Chlorotoluene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 18:54	95-49-8	W
4-Chlorotoluene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 18:54	106-43-4	W
1,2-Dibromo-3-chloropropane	<0.091	mg/kg	0.25	0.091	1	04/26/16 14:09	04/27/16 18:54	96-12-8	W
Dibromochloromethane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 18:54	124-48-1	W
1,2-Dibromoethane (EDB)	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 18:54	106-93-4	W
Dibromomethane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 18:54	74-95-3	W
1,2-Dichlorobenzene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 18:54	95-50-1	W
1,3-Dichlorobenzene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 18:54	541-73-1	W
1,4-Dichlorobenzene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 18:54	106-46-7	W
Dichlorodifluoromethane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 18:54	75-71-8	W
1,1-Dichloroethane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 18:54	75-34-3	W
1,2-Dichloroethane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 18:54	107-06-2	W
1,1-Dichloroethene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 18:54	75-35-4	W
cis-1,2-Dichloroethene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 18:54	156-59-2	W
trans-1,2-Dichloroethene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 18:54	156-60-5	W
1,2-Dichloropropane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 18:54	78-87-5	W
1,3-Dichloropropane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 18:54	142-28-9	W
2,2-Dichloropropane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 18:54	594-20-7	W
1,1-Dichloropropene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 18:54	563-58-6	W
cis-1,3-Dichloropropene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 18:54	10061-01-5	W
trans-1,3-Dichloropropene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 18:54	10061-02-6	W
Diisopropyl ether	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 18:54	108-20-3	W
Ethylbenzene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 18:54	100-41-4	W
Hexachloro-1,3-butadiene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 18:54	87-68-3	W
Isopropylbenzene (Cumene)	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 18:54	98-82-8	W
p-Isopropyltoluene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 18:54	99-87-6	W
Methylene Chloride	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 18:54	75-09-2	W
Methyl-tert-butyl ether	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 18:54	1634-04-4	W
Naphthalene	<0.040	mg/kg	0.25	0.040	1	04/26/16 14:09	04/27/16 18:54	91-20-3	W
n-Propylbenzene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 18:54	103-65-1	W
Styrene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 18:54	100-42-5	W
1,1,1,2-Tetrachloroethane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 18:54	630-20-6	W
1,1,2,2-Tetrachloroethane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 18:54	79-34-5	W
Tetrachloroethene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 18:54	127-18-4	W
Toluene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 18:54	108-88-3	W
1,2,3-Trichlorobenzene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 18:54	87-61-6	W
1,2,4-Trichlorobenzene	<0.048	mg/kg	0.25	0.048	1	04/26/16 14:09	04/27/16 18:54	120-82-1	W
1,1,1-Trichloroethane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 18:54	71-55-6	W
1,1,2-Trichloroethane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 18:54	79-00-5	W
Trichloroethene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 18:54	79-01-6	W

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## ANALYTICAL RESULTS

Project: 2404006 BROWN DEER

Pace Project No.: 40131320

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**Sample: GP-1 / TW-1 (2-4)**      **Lab ID: 40131320001**      Collected: 04/22/16 09:30      Received: 04/25/16 14:56      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
<b>8260 MSV Med Level Normal List</b>	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
Trichlorofluoromethane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 18:54	75-69-4	W
1,2,3-Trichloropropane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 18:54	96-18-4	W
1,2,4-Trimethylbenzene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 18:54	95-63-6	W
1,3,5-Trimethylbenzene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 18:54	108-67-8	W
Vinyl chloride	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 18:54	75-01-4	W
m&p-Xylene	<0.050	mg/kg	0.12	0.050	1	04/26/16 14:09	04/27/16 18:54	179601-23-1	W
o-Xylene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 18:54	95-47-6	W
<b>Surrogates</b>									
Dibromofluoromethane (S)	100	%	53-165		1	04/26/16 14:09	04/27/16 18:54	1868-53-7	
Toluene-d8 (S)	99	%	54-163		1	04/26/16 14:09	04/27/16 18:54	2037-26-5	
4-Bromofluorobenzene (S)	84	%	48-138		1	04/26/16 14:09	04/27/16 18:54	460-00-4	
<b>Percent Moisture</b>	Analytical Method: ASTM D2974-87								
Percent Moisture	22.2	%	0.10	0.10	1			05/05/16 16:10	

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**Sample: GP-1 / TW-1 (8-10)**      **Lab ID: 40131320002**      Collected: 04/22/16 09:45      Received: 04/25/16 14:56      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
<b>8082 GCS PCB</b>	Analytical Method: EPA 8082 Preparation Method: EPA 3541								
PCB-1016 (Aroclor 1016)	<0.029	mg/kg	0.059	0.029	1	04/26/16 12:49	04/27/16 16:39	12674-11-2	
PCB-1221 (Aroclor 1221)	<0.029	mg/kg	0.059	0.029	1	04/26/16 12:49	04/27/16 16:39	11104-28-2	
PCB-1232 (Aroclor 1232)	<0.029	mg/kg	0.059	0.029	1	04/26/16 12:49	04/27/16 16:39	11141-16-5	
PCB-1242 (Aroclor 1242)	<0.029	mg/kg	0.059	0.029	1	04/26/16 12:49	04/27/16 16:39	53469-21-9	
PCB-1248 (Aroclor 1248)	<0.029	mg/kg	0.059	0.029	1	04/26/16 12:49	04/27/16 16:39	12672-29-6	
PCB-1254 (Aroclor 1254)	<0.029	mg/kg	0.059	0.029	1	04/26/16 12:49	04/27/16 16:39	11097-69-1	
PCB-1260 (Aroclor 1260)	<0.029	mg/kg	0.059	0.029	1	04/26/16 12:49	04/27/16 16:39	11096-82-5	
PCB, Total	<0.029	mg/kg	0.059	0.029	1	04/26/16 12:49	04/27/16 16:39	1336-36-3	
<b>Surrogates</b>									
Tetrachloro-m-xylene (S)	84	%	63-130		1	04/26/16 12:49	04/27/16 16:39	877-09-8	
Decachlorobiphenyl (S)	87	%	48-130		1	04/26/16 12:49	04/27/16 16:39	2051-24-3	
<b>8270 MSSV PAH by SIM</b>	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546								
Acenaphthene	<0.0098	mg/kg	0.020	0.0098	1	05/03/16 09:42	05/03/16 16:43	83-32-9	
Acenaphthylene	<0.0088	mg/kg	0.020	0.0088	1	05/03/16 09:42	05/03/16 16:43	208-96-8	
Anthracene	<0.010	mg/kg	0.020	0.010	1	05/03/16 09:42	05/03/16 16:43	120-12-7	
Benzo(a)anthracene	<0.0068	mg/kg	0.020	0.0068	1	05/03/16 09:42	05/03/16 16:43	56-55-3	
Benzo(a)pyrene	<0.0070	mg/kg	0.020	0.0070	1	05/03/16 09:42	05/03/16 16:43	50-32-8	
Benzo(b)fluoranthene	<0.0098	mg/kg	0.020	0.0098	1	05/03/16 09:42	05/03/16 16:43	205-99-2	
Benzo(g,h,i)perylene	<0.0075	mg/kg	0.020	0.0075	1	05/03/16 09:42	05/03/16 16:43	191-24-2	
Benzo(k)fluoranthene	<0.011	mg/kg	0.020	0.011	1	05/03/16 09:42	05/03/16 16:43	207-08-9	
Chrysene	<0.0091	mg/kg	0.020	0.0091	1	05/03/16 09:42	05/03/16 16:43	218-01-9	

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## ANALYTICAL RESULTS

Project: 2404006 BROWN DEER

Pace Project No.: 40131320

Sample: GP-1 / TW-1 (8-10) Lab ID: 40131320002 Collected: 04/22/16 09:45 Received: 04/25/16 14:56 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
<b>8270 MSSV PAH by SIM</b>	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546								
Dibenz(a,h)anthracene	<0.0072	mg/kg	0.020	0.0072	1	05/03/16 09:42	05/03/16 16:43	53-70-3	
Fluoranthene	<0.0098	mg/kg	0.020	0.0098	1	05/03/16 09:42	05/03/16 16:43	206-44-0	
Fluorene	<0.0098	mg/kg	0.020	0.0098	1	05/03/16 09:42	05/03/16 16:43	86-73-7	
Indeno(1,2,3-cd)pyrene	<0.0075	mg/kg	0.020	0.0075	1	05/03/16 09:42	05/03/16 16:43	193-39-5	
1-Methylnaphthalene	<0.0098	mg/kg	0.020	0.0098	1	05/03/16 09:42	05/03/16 16:43	90-12-0	
2-Methylnaphthalene	<0.0098	mg/kg	0.020	0.0098	1	05/03/16 09:42	05/03/16 16:43	91-57-6	
Naphthalene	<0.0098	mg/kg	0.020	0.0098	1	05/03/16 09:42	05/03/16 16:43	91-20-3	
Phenanthrene	<0.0098	mg/kg	0.020	0.0098	1	05/03/16 09:42	05/03/16 16:43	85-01-8	
Pyrene	<0.0098	mg/kg	0.020	0.0098	1	05/03/16 09:42	05/03/16 16:43	129-00-0	
<b>Surrogates</b>									
2-Fluorobiphenyl (S)	57	%	26-130		1	05/03/16 09:42	05/03/16 16:43	321-60-8	
Terphenyl-d14 (S)	65	%	10-130		1	05/03/16 09:42	05/03/16 16:43	1718-51-0	
<b>8260 MSV Med Level Normal List</b>	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
Benzene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 19:17	71-43-2	W
Bromobenzene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 19:17	108-86-1	W
Bromochloromethane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 19:17	74-97-5	W
Bromodichloromethane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 19:17	75-27-4	W
Bromoform	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 19:17	75-25-2	W
Bromomethane	<0.070	mg/kg	0.25	0.070	1	04/26/16 14:09	04/27/16 19:17	74-83-9	W
n-Butylbenzene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 19:17	104-51-8	W
sec-Butylbenzene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 19:17	135-98-8	W
tert-Butylbenzene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 19:17	98-06-6	W
Carbon tetrachloride	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 19:17	56-23-5	W
Chlorobenzene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 19:17	108-90-7	W
Chloroethane	<0.067	mg/kg	0.25	0.067	1	04/26/16 14:09	04/27/16 19:17	75-00-3	W
Chloroform	<0.046	mg/kg	0.25	0.046	1	04/26/16 14:09	04/27/16 19:17	67-66-3	W
Chloromethane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 19:17	74-87-3	W
2-Chlorotoluene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 19:17	95-49-8	W
4-Chlorotoluene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 19:17	106-43-4	W
1,2-Dibromo-3-chloropropane	<0.091	mg/kg	0.25	0.091	1	04/26/16 14:09	04/27/16 19:17	96-12-8	W
Dibromochloromethane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 19:17	124-48-1	W
1,2-Dibromoethane (EDB)	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 19:17	106-93-4	W
Dibromomethane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 19:17	74-95-3	W
1,2-Dichlorobenzene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 19:17	95-50-1	W
1,3-Dichlorobenzene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 19:17	541-73-1	W
1,4-Dichlorobenzene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 19:17	106-46-7	W
Dichlorodifluoromethane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 19:17	75-71-8	W
1,1-Dichloroethane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 19:17	75-34-3	W
1,2-Dichloroethane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 19:17	107-06-2	W
1,1-Dichloroethene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 19:17	75-35-4	W
cis-1,2-Dichloroethene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 19:17	156-59-2	W
trans-1,2-Dichloroethene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 19:17	156-60-5	W
1,2-Dichloropropane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 19:17	78-87-5	W
1,3-Dichloropropane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 19:17	142-28-9	W

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## ANALYTICAL RESULTS

Project: 2404006 BROWN DEER

Pace Project No.: 40131320

Sample: GP-1 / TW-1 (8-10) Lab ID: 40131320002 Collected: 04/22/16 09:45 Received: 04/25/16 14:56 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
<b>8260 MSV Med Level Normal List</b>	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
2,2-Dichloropropane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 19:17	594-20-7	W
1,1-Dichloropropene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 19:17	563-58-6	W
cis-1,3-Dichloropropene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 19:17	10061-01-5	W
trans-1,3-Dichloropropene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 19:17	10061-02-6	W
Diisopropyl ether	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 19:17	108-20-3	W
Ethylbenzene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 19:17	100-41-4	W
Hexachloro-1,3-butadiene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 19:17	87-68-3	W
Isopropylbenzene (Cumene)	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 19:17	98-82-8	W
p-Isopropyltoluene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 19:17	99-87-6	W
Methylene Chloride	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 19:17	75-09-2	W
Methyl-tert-butyl ether	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 19:17	1634-04-4	W
Naphthalene	<0.040	mg/kg	0.25	0.040	1	04/26/16 14:09	04/27/16 19:17	91-20-3	W
n-Propylbenzene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 19:17	103-65-1	W
Styrene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 19:17	100-42-5	W
1,1,1,2-Tetrachloroethane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 19:17	630-20-6	W
1,1,2,2-Tetrachloroethane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 19:17	79-34-5	W
Tetrachloroethene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 19:17	127-18-4	W
Toluene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 19:17	108-88-3	W
1,2,3-Trichlorobenzene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 19:17	87-61-6	W
1,2,4-Trichlorobenzene	<0.048	mg/kg	0.25	0.048	1	04/26/16 14:09	04/27/16 19:17	120-82-1	W
1,1,1-Trichloroethane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 19:17	71-55-6	W
1,1,2-Trichloroethane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 19:17	79-00-5	W
Trichloroethene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 19:17	79-01-6	W
Trichlorofluoromethane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 19:17	75-69-4	W
1,2,3-Trichloropropane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 19:17	96-18-4	W
1,2,4-Trimethylbenzene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 19:17	95-63-6	W
1,3,5-Trimethylbenzene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 19:17	108-67-8	W
Vinyl chloride	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 19:17	75-01-4	W
m&p-Xylene	<0.050	mg/kg	0.12	0.050	1	04/26/16 14:09	04/27/16 19:17	179601-23-1	W
o-Xylene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 19:17	95-47-6	W
<b>Surrogates</b>									
Dibromofluoromethane (S)	93	%	53-165		1	04/26/16 14:09	04/27/16 19:17	1868-53-7	
Toluene-d8 (S)	94	%	54-163		1	04/26/16 14:09	04/27/16 19:17	2037-26-5	
4-Bromofluorobenzene (S)	79	%	48-138		1	04/26/16 14:09	04/27/16 19:17	460-00-4	
<b>Percent Moisture</b>	Analytical Method: ASTM D2974-87								
Percent Moisture	15.2	%	0.10	0.10	1			05/05/16 16:10	

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## ANALYTICAL RESULTS

Project: 2404006 BROWN DEER

Pace Project No.: 40131320

Sample: GP-2 (2-4) Lab ID: 40131320003 Collected: 04/22/16 09:50 Received: 04/25/16 14:56 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
<b>8082 GCS PCB</b>		Analytical Method: EPA 8082 Preparation Method: EPA 3541							
PCB-1016 (Aroclor 1016)	<0.035	mg/kg	0.069	0.035	1	04/26/16 12:49	04/27/16 16:56	12674-11-2	
PCB-1221 (Aroclor 1221)	<0.035	mg/kg	0.069	0.035	1	04/26/16 12:49	04/27/16 16:56	11104-28-2	
PCB-1232 (Aroclor 1232)	<0.035	mg/kg	0.069	0.035	1	04/26/16 12:49	04/27/16 16:56	11141-16-5	
PCB-1242 (Aroclor 1242)	<0.035	mg/kg	0.069	0.035	1	04/26/16 12:49	04/27/16 16:56	53469-21-9	
PCB-1248 (Aroclor 1248)	<0.035	mg/kg	0.069	0.035	1	04/26/16 12:49	04/27/16 16:56	12672-29-6	
PCB-1254 (Aroclor 1254)	<0.035	mg/kg	0.069	0.035	1	04/26/16 12:49	04/27/16 16:56	11097-69-1	
PCB-1260 (Aroclor 1260)	<0.035	mg/kg	0.069	0.035	1	04/26/16 12:49	04/27/16 16:56	11096-82-5	
PCB, Total	<0.035	mg/kg	0.069	0.035	1	04/26/16 12:49	04/27/16 16:56	1336-36-3	
<b>Surrogates</b>									
Tetrachloro-m-xylene (S)	87	%	63-130		1	04/26/16 12:49	04/27/16 16:56	877-09-8	
Decachlorobiphenyl (S)	86	%	48-130		1	04/26/16 12:49	04/27/16 16:56	2051-24-3	
<b>8270 MSSV PAH by SIM</b>		Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546							
Acenaphthene	<0.012	mg/kg	0.023	0.012	1	05/03/16 09:42	05/03/16 19:20	83-32-9	
Acenaphthylene	<0.010	mg/kg	0.023	0.010	1	05/03/16 09:42	05/03/16 19:20	208-96-8	
Anthracene	<0.012	mg/kg	0.023	0.012	1	05/03/16 09:42	05/03/16 19:20	120-12-7	
Benzo(a)anthracene	<0.0080	mg/kg	0.023	0.0080	1	05/03/16 09:42	05/03/16 19:20	56-55-3	
Benzo(a)pyrene	<0.0082	mg/kg	0.023	0.0082	1	05/03/16 09:42	05/03/16 19:20	50-32-8	
Benzo(b)fluoranthene	<0.012	mg/kg	0.023	0.012	1	05/03/16 09:42	05/03/16 19:20	205-99-2	
Benzo(g,h,i)perylene	<0.0088	mg/kg	0.023	0.0088	1	05/03/16 09:42	05/03/16 19:20	191-24-2	
Benzo(k)fluoranthene	<0.013	mg/kg	0.023	0.013	1	05/03/16 09:42	05/03/16 19:20	207-08-9	
Chrysene	<0.011	mg/kg	0.023	0.011	1	05/03/16 09:42	05/03/16 19:20	218-01-9	
Dibenz(a,h)anthracene	<0.0084	mg/kg	0.023	0.0084	1	05/03/16 09:42	05/03/16 19:20	53-70-3	
Fluoranthene	<0.012	mg/kg	0.023	0.012	1	05/03/16 09:42	05/03/16 19:20	206-44-0	
Fluorene	<0.012	mg/kg	0.023	0.012	1	05/03/16 09:42	05/03/16 19:20	86-73-7	
Indeno(1,2,3-cd)pyrene	<0.0088	mg/kg	0.023	0.0088	1	05/03/16 09:42	05/03/16 19:20	193-39-5	
1-Methylnaphthalene	<0.012	mg/kg	0.023	0.012	1	05/03/16 09:42	05/03/16 19:20	90-12-0	
2-Methylnaphthalene	<0.012	mg/kg	0.023	0.012	1	05/03/16 09:42	05/03/16 19:20	91-57-6	
Naphthalene	<0.012	mg/kg	0.023	0.012	1	05/03/16 09:42	05/03/16 19:20	91-20-3	
Phenanthrene	<0.012	mg/kg	0.023	0.012	1	05/03/16 09:42	05/03/16 19:20	85-01-8	
Pyrene	<0.012	mg/kg	0.023	0.012	1	05/03/16 09:42	05/03/16 19:20	129-00-0	
<b>Surrogates</b>									
2-Fluorobiphenyl (S)	61	%	26-130		1	05/03/16 09:42	05/03/16 19:20	321-60-8	
Terphenyl-d14 (S)	68	%	10-130		1	05/03/16 09:42	05/03/16 19:20	1718-51-0	
<b>8260 MSV Med Level Normal List</b>		Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B							
Benzene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 19:40	71-43-2	W
Bromobenzene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 19:40	108-86-1	W
Bromochloromethane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 19:40	74-97-5	W
Bromodichloromethane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 19:40	75-27-4	W
Bromoform	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 19:40	75-25-2	W
Bromomethane	<0.070	mg/kg	0.25	0.070	1	04/26/16 14:09	04/27/16 19:40	74-83-9	W
n-Butylbenzene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 19:40	104-51-8	W
sec-Butylbenzene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 19:40	135-98-8	W
tert-Butylbenzene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 19:40	98-06-6	W

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## ANALYTICAL RESULTS

Project: 2404006 BROWN DEER

Pace Project No.: 40131320

Sample: GP-2 (2-4) Lab ID: 40131320003 Collected: 04/22/16 09:50 Received: 04/25/16 14:56 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
<b>8260 MSV Med Level Normal List</b>		Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B							
Carbon tetrachloride	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 19:40	56-23-5	W
Chlorobenzene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 19:40	108-90-7	W
Chloroethane	<0.067	mg/kg	0.25	0.067	1	04/26/16 14:09	04/27/16 19:40	75-00-3	W
Chloroform	<0.046	mg/kg	0.25	0.046	1	04/26/16 14:09	04/27/16 19:40	67-66-3	W
Chloromethane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 19:40	74-87-3	W
2-Chlorotoluene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 19:40	95-49-8	W
4-Chlorotoluene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 19:40	106-43-4	W
1,2-Dibromo-3-chloropropane	<0.091	mg/kg	0.25	0.091	1	04/26/16 14:09	04/27/16 19:40	96-12-8	W
Dibromochloromethane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 19:40	124-48-1	W
1,2-Dibromoethane (EDB)	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 19:40	106-93-4	W
Dibromomethane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 19:40	74-95-3	W
1,2-Dichlorobenzene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 19:40	95-50-1	W
1,3-Dichlorobenzene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 19:40	541-73-1	W
1,4-Dichlorobenzene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 19:40	106-46-7	W
Dichlorodifluoromethane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 19:40	75-71-8	W
1,1-Dichloroethane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 19:40	75-34-3	W
1,2-Dichloroethane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 19:40	107-06-2	W
1,1-Dichloroethene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 19:40	75-35-4	W
cis-1,2-Dichloroethene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 19:40	156-59-2	W
trans-1,2-Dichloroethene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 19:40	156-60-5	W
1,2-Dichloropropane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 19:40	78-87-5	W
1,3-Dichloropropane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 19:40	142-28-9	W
2,2-Dichloropropane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 19:40	594-20-7	W
1,1-Dichloropropene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 19:40	563-58-6	W
cis-1,3-Dichloropropene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 19:40	10061-01-5	W
trans-1,3-Dichloropropene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 19:40	10061-02-6	W
Diisopropyl ether	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 19:40	108-20-3	W
Ethylbenzene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 19:40	100-41-4	W
Hexachloro-1,3-butadiene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 19:40	87-68-3	W
Isopropylbenzene (Cumene)	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 19:40	98-82-8	W
p-Isopropyltoluene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 19:40	99-87-6	W
Methylene Chloride	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 19:40	75-09-2	W
Methyl-tert-butyl ether	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 19:40	1634-04-4	W
Naphthalene	<0.040	mg/kg	0.25	0.040	1	04/26/16 14:09	04/27/16 19:40	91-20-3	W
n-Propylbenzene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 19:40	103-65-1	W
Styrene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 19:40	100-42-5	W
1,1,1,2-Tetrachloroethane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 19:40	630-20-6	W
1,1,2,2-Tetrachloroethane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 19:40	79-34-5	W
Tetrachloroethene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 19:40	127-18-4	W
Toluene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 19:40	108-88-3	W
1,2,3-Trichlorobenzene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 19:40	87-61-6	W
1,2,4-Trichlorobenzene	<0.048	mg/kg	0.25	0.048	1	04/26/16 14:09	04/27/16 19:40	120-82-1	W
1,1,1-Trichloroethane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 19:40	71-55-6	W
1,1,2-Trichloroethane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 19:40	79-00-5	W
Trichloroethene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 19:40	79-01-6	W

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## ANALYTICAL RESULTS

Project: 2404006 BROWN DEER

Pace Project No.: 40131320

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**Sample: GP-2 (2-4)**      **Lab ID: 40131320003**      Collected: 04/22/16 09:50      Received: 04/25/16 14:56      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
<b>8260 MSV Med Level Normal List</b>	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
Trichlorofluoromethane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 19:40	75-69-4	W
1,2,3-Trichloropropane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 19:40	96-18-4	W
1,2,4-Trimethylbenzene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 19:40	95-63-6	W
1,3,5-Trimethylbenzene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 19:40	108-67-8	W
Vinyl chloride	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 19:40	75-01-4	W
m&p-Xylene	<0.050	mg/kg	0.12	0.050	1	04/26/16 14:09	04/27/16 19:40	179601-23-1	W
o-Xylene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 19:40	95-47-6	W
<b>Surrogates</b>									
Dibromofluoromethane (S)	96	%	53-165		1	04/26/16 14:09	04/27/16 19:40	1868-53-7	
Toluene-d8 (S)	96	%	54-163		1	04/26/16 14:09	04/27/16 19:40	2037-26-5	
4-Bromofluorobenzene (S)	83	%	48-138		1	04/26/16 14:09	04/27/16 19:40	460-00-4	
<b>Percent Moisture</b>	Analytical Method: ASTM D2974-87								
Percent Moisture	27.6	%	0.10	0.10	1			05/05/16 16:10	

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**Sample: GP-2 (6-8)**      **Lab ID: 40131320004**      Collected: 04/22/16 10:00      Received: 04/25/16 14:56      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
<b>8082 GCS PCB</b>	Analytical Method: EPA 8082 Preparation Method: EPA 3541								
PCB-1016 (Aroclor 1016)	<0.026	mg/kg	0.052	0.026	1	04/26/16 12:49	04/27/16 17:14	12674-11-2	
PCB-1221 (Aroclor 1221)	<0.026	mg/kg	0.052	0.026	1	04/26/16 12:49	04/27/16 17:14	11104-28-2	
PCB-1232 (Aroclor 1232)	<0.026	mg/kg	0.052	0.026	1	04/26/16 12:49	04/27/16 17:14	11141-16-5	
PCB-1242 (Aroclor 1242)	<0.026	mg/kg	0.052	0.026	1	04/26/16 12:49	04/27/16 17:14	53469-21-9	
PCB-1248 (Aroclor 1248)	<0.026	mg/kg	0.052	0.026	1	04/26/16 12:49	04/27/16 17:14	12672-29-6	
PCB-1254 (Aroclor 1254)	<0.026	mg/kg	0.052	0.026	1	04/26/16 12:49	04/27/16 17:14	11097-69-1	
PCB-1260 (Aroclor 1260)	<0.026	mg/kg	0.052	0.026	1	04/26/16 12:49	04/27/16 17:14	11096-82-5	
PCB, Total	<0.026	mg/kg	0.052	0.026	1	04/26/16 12:49	04/27/16 17:14	1336-36-3	
<b>Surrogates</b>									
Tetrachloro-m-xylene (S)	88	%	63-130		1	04/26/16 12:49	04/27/16 17:14	877-09-8	
Decachlorobiphenyl (S)	91	%	48-130		1	04/26/16 12:49	04/27/16 17:14	2051-24-3	
<b>8270 MSSV PAH by SIM</b>	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546								
Acenaphthene	<0.0087	mg/kg	0.017	0.0087	1	05/03/16 09:42	05/03/16 19:37	83-32-9	
Acenaphthylene	<0.0077	mg/kg	0.017	0.0077	1	05/03/16 09:42	05/03/16 19:37	208-96-8	
Anthracene	<0.0090	mg/kg	0.017	0.0090	1	05/03/16 09:42	05/03/16 19:37	120-12-7	
Benzo(a)anthracene	<0.0060	mg/kg	0.017	0.0060	1	05/03/16 09:42	05/03/16 19:37	56-55-3	
Benzo(a)pyrene	<0.0062	mg/kg	0.017	0.0062	1	05/03/16 09:42	05/03/16 19:37	50-32-8	
Benzo(b)fluoranthene	<0.0087	mg/kg	0.017	0.0087	1	05/03/16 09:42	05/03/16 19:37	205-99-2	
Benzo(g,h,i)perylene	<0.0066	mg/kg	0.017	0.0066	1	05/03/16 09:42	05/03/16 19:37	191-24-2	
Benzo(k)fluoranthene	<0.0096	mg/kg	0.017	0.0096	1	05/03/16 09:42	05/03/16 19:37	207-08-9	
Chrysene	<0.0080	mg/kg	0.017	0.0080	1	05/03/16 09:42	05/03/16 19:37	218-01-9	

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## ANALYTICAL RESULTS

Project: 2404006 BROWN DEER

Pace Project No.: 40131320

Sample: GP-2 (6-8) Lab ID: 40131320004 Collected: 04/22/16 10:00 Received: 04/25/16 14:56 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
<b>8270 MSSV PAH by SIM</b>	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546								
Dibenz(a,h)anthracene	<0.0063	mg/kg	0.017	0.0063	1	05/03/16 09:42	05/03/16 19:37	53-70-3	
Fluoranthene	<0.0087	mg/kg	0.017	0.0087	1	05/03/16 09:42	05/03/16 19:37	206-44-0	
Fluorene	<0.0087	mg/kg	0.017	0.0087	1	05/03/16 09:42	05/03/16 19:37	86-73-7	
Indeno(1,2,3-cd)pyrene	<0.0066	mg/kg	0.017	0.0066	1	05/03/16 09:42	05/03/16 19:37	193-39-5	
1-Methylnaphthalene	<0.0087	mg/kg	0.017	0.0087	1	05/03/16 09:42	05/03/16 19:37	90-12-0	
2-Methylnaphthalene	<0.0087	mg/kg	0.017	0.0087	1	05/03/16 09:42	05/03/16 19:37	91-57-6	
Naphthalene	<0.0087	mg/kg	0.017	0.0087	1	05/03/16 09:42	05/03/16 19:37	91-20-3	
Phenanthrene	<0.0087	mg/kg	0.017	0.0087	1	05/03/16 09:42	05/03/16 19:37	85-01-8	
Pyrene	<0.0087	mg/kg	0.017	0.0087	1	05/03/16 09:42	05/03/16 19:37	129-00-0	
<b>Surrogates</b>									
2-Fluorobiphenyl (S)	56	%	26-130		1	05/03/16 09:42	05/03/16 19:37	321-60-8	
Terphenyl-d14 (S)	65	%	10-130		1	05/03/16 09:42	05/03/16 19:37	1718-51-0	
<b>8260 MSV Med Level Normal List</b>	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
Benzene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:02	71-43-2	W
Bromobenzene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:02	108-86-1	W
Bromochloromethane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:02	74-97-5	W
Bromodichloromethane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:02	75-27-4	W
Bromoform	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:02	75-25-2	W
Bromomethane	<0.070	mg/kg	0.25	0.070	1	04/26/16 14:09	04/27/16 20:02	74-83-9	W
n-Butylbenzene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:02	104-51-8	W
sec-Butylbenzene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:02	135-98-8	W
tert-Butylbenzene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:02	98-06-6	W
Carbon tetrachloride	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:02	56-23-5	W
Chlorobenzene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:02	108-90-7	W
Chloroethane	<0.067	mg/kg	0.25	0.067	1	04/26/16 14:09	04/27/16 20:02	75-00-3	W
Chloroform	<0.046	mg/kg	0.25	0.046	1	04/26/16 14:09	04/27/16 20:02	67-66-3	W
Chloromethane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:02	74-87-3	W
2-Chlorotoluene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:02	95-49-8	W
4-Chlorotoluene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:02	106-43-4	W
1,2-Dibromo-3-chloropropane	<0.091	mg/kg	0.25	0.091	1	04/26/16 14:09	04/27/16 20:02	96-12-8	W
Dibromochloromethane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:02	124-48-1	W
1,2-Dibromoethane (EDB)	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:02	106-93-4	W
Dibromomethane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:02	74-95-3	W
1,2-Dichlorobenzene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:02	95-50-1	W
1,3-Dichlorobenzene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:02	541-73-1	W
1,4-Dichlorobenzene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:02	106-46-7	W
Dichlorodifluoromethane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:02	75-71-8	W
1,1-Dichloroethane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:02	75-34-3	W
1,2-Dichloroethane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:02	107-06-2	W
1,1-Dichloroethene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:02	75-35-4	W
cis-1,2-Dichloroethene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:02	156-59-2	W
trans-1,2-Dichloroethene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:02	156-60-5	W
1,2-Dichloropropane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:02	78-87-5	W
1,3-Dichloropropane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:02	142-28-9	W

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## ANALYTICAL RESULTS

Project: 2404006 BROWN DEER

Pace Project No.: 40131320

Sample: GP-2 (6-8) Lab ID: 40131320004 Collected: 04/22/16 10:00 Received: 04/25/16 14:56 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
<b>8260 MSV Med Level Normal List</b>	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
2,2-Dichloropropane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:02	594-20-7	W
1,1-Dichloropropene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:02	563-58-6	W
cis-1,3-Dichloropropene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:02	10061-01-5	W
trans-1,3-Dichloropropene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:02	10061-02-6	W
Diisopropyl ether	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:02	108-20-3	W
Ethylbenzene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:02	100-41-4	W
Hexachloro-1,3-butadiene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:02	87-68-3	W
Isopropylbenzene (Cumene)	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:02	98-82-8	W
p-Isopropyltoluene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:02	99-87-6	W
Methylene Chloride	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:02	75-09-2	W
Methyl-tert-butyl ether	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:02	1634-04-4	W
Naphthalene	<0.040	mg/kg	0.25	0.040	1	04/26/16 14:09	04/27/16 20:02	91-20-3	W
n-Propylbenzene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:02	103-65-1	W
Styrene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:02	100-42-5	W
1,1,1,2-Tetrachloroethane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:02	630-20-6	W
1,1,2,2-Tetrachloroethane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:02	79-34-5	W
Tetrachloroethene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:02	127-18-4	W
Toluene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:02	108-88-3	W
1,2,3-Trichlorobenzene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:02	87-61-6	W
1,2,4-Trichlorobenzene	<0.048	mg/kg	0.25	0.048	1	04/26/16 14:09	04/27/16 20:02	120-82-1	W
1,1,1-Trichloroethane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:02	71-55-6	W
1,1,2-Trichloroethane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:02	79-00-5	W
Trichloroethene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:02	79-01-6	W
Trichlorofluoromethane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:02	75-69-4	W
1,2,3-Trichloropropane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:02	96-18-4	W
1,2,4-Trimethylbenzene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:02	95-63-6	W
1,3,5-Trimethylbenzene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:02	108-67-8	W
Vinyl chloride	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:02	75-01-4	W
m&p-Xylene	<0.050	mg/kg	0.12	0.050	1	04/26/16 14:09	04/27/16 20:02	179601-23-1	W
o-Xylene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:02	95-47-6	W
<b>Surrogates</b>									
Dibromofluoromethane (S)	96	%	53-165		1	04/26/16 14:09	04/27/16 20:02	1868-53-7	
Toluene-d8 (S)	98	%	54-163		1	04/26/16 14:09	04/27/16 20:02	2037-26-5	
4-Bromofluorobenzene (S)	84	%	48-138		1	04/26/16 14:09	04/27/16 20:02	460-00-4	
<b>Percent Moisture</b>	Analytical Method: ASTM D2974-87								
Percent Moisture	3.7	%	0.10	0.10	1			05/05/16 16:11	

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## ANALYTICAL RESULTS

Project: 2404006 BROWN DEER

Pace Project No.: 40131320

Sample: GP-3 (2-4) Lab ID: 40131320005 Collected: 04/22/16 10:30 Received: 04/25/16 14:56 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
<b>8082 GCS PCB</b>		Analytical Method: EPA 8082 Preparation Method: EPA 3541							
PCB-1016 (Aroclor 1016)	<0.032	mg/kg	0.064	0.032	1	04/26/16 12:49	04/27/16 17:31	12674-11-2	
PCB-1221 (Aroclor 1221)	<0.032	mg/kg	0.064	0.032	1	04/26/16 12:49	04/27/16 17:31	11104-28-2	
PCB-1232 (Aroclor 1232)	<0.032	mg/kg	0.064	0.032	1	04/26/16 12:49	04/27/16 17:31	11141-16-5	
PCB-1242 (Aroclor 1242)	<0.032	mg/kg	0.064	0.032	1	04/26/16 12:49	04/27/16 17:31	53469-21-9	
PCB-1248 (Aroclor 1248)	<0.032	mg/kg	0.064	0.032	1	04/26/16 12:49	04/27/16 17:31	12672-29-6	
PCB-1254 (Aroclor 1254)	<0.032	mg/kg	0.064	0.032	1	04/26/16 12:49	04/27/16 17:31	11097-69-1	
PCB-1260 (Aroclor 1260)	<0.032	mg/kg	0.064	0.032	1	04/26/16 12:49	04/27/16 17:31	11096-82-5	
PCB, Total	<0.032	mg/kg	0.064	0.032	1	04/26/16 12:49	04/27/16 17:31	1336-36-3	
<b>Surrogates</b>									
Tetrachloro-m-xylene (S)	88	%	63-130		1	04/26/16 12:49	04/27/16 17:31	877-09-8	
Decachlorobiphenyl (S)	89	%	48-130		1	04/26/16 12:49	04/27/16 17:31	2051-24-3	
<b>8270 MSSV PAH by SIM</b>		Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546							
Acenaphthene	<0.011	mg/kg	0.021	0.011	1	05/03/16 09:42	05/04/16 11:22	83-32-9	
Acenaphthylene	<0.0096	mg/kg	0.021	0.0096	1	05/03/16 09:42	05/04/16 11:22	208-96-8	
Anthracene	<0.011	mg/kg	0.021	0.011	1	05/03/16 09:42	05/04/16 11:22	120-12-7	
Benzo(a)anthracene	<0.0074	mg/kg	0.021	0.0074	1	05/03/16 09:42	05/04/16 11:22	56-55-3	
Benzo(a)pyrene	<0.0077	mg/kg	0.021	0.0077	1	05/03/16 09:42	05/04/16 11:22	50-32-8	
Benzo(b)fluoranthene	<0.011	mg/kg	0.021	0.011	1	05/03/16 09:42	05/04/16 11:22	205-99-2	
Benzo(g,h,i)perylene	<0.0082	mg/kg	0.021	0.0082	1	05/03/16 09:42	05/04/16 11:22	191-24-2	
Benzo(k)fluoranthene	<0.012	mg/kg	0.021	0.012	1	05/03/16 09:42	05/04/16 11:22	207-08-9	
Chrysene	<0.0099	mg/kg	0.021	0.0099	1	05/03/16 09:42	05/04/16 11:22	218-01-9	
Dibenz(a,h)anthracene	<0.0079	mg/kg	0.021	0.0079	1	05/03/16 09:42	05/04/16 11:22	53-70-3	
Fluoranthene	<0.011	mg/kg	0.021	0.011	1	05/03/16 09:42	05/04/16 11:22	206-44-0	
Fluorene	<0.011	mg/kg	0.021	0.011	1	05/03/16 09:42	05/04/16 11:22	86-73-7	
Indeno(1,2,3-cd)pyrene	<0.0081	mg/kg	0.021	0.0081	1	05/03/16 09:42	05/04/16 11:22	193-39-5	
1-Methylnaphthalene	<0.011	mg/kg	0.021	0.011	1	05/03/16 09:42	05/04/16 11:22	90-12-0	
2-Methylnaphthalene	<0.011	mg/kg	0.021	0.011	1	05/03/16 09:42	05/04/16 11:22	91-57-6	
Naphthalene	<0.011	mg/kg	0.021	0.011	1	05/03/16 09:42	05/04/16 11:22	91-20-3	
Phenanthrene	<0.011	mg/kg	0.021	0.011	1	05/03/16 09:42	05/04/16 11:22	85-01-8	
Pyrene	<0.011	mg/kg	0.021	0.011	1	05/03/16 09:42	05/04/16 11:22	129-00-0	
<b>Surrogates</b>									
2-Fluorobiphenyl (S)	50	%	26-130		1	05/03/16 09:42	05/04/16 11:22	321-60-8	
Terphenyl-d14 (S)	62	%	10-130		1	05/03/16 09:42	05/04/16 11:22	1718-51-0	
<b>8260 MSV Med Level Normal List</b>		Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B							
Benzene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:25	71-43-2	W
Bromobenzene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:25	108-86-1	W
Bromochloromethane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:25	74-97-5	W
Bromodichloromethane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:25	75-27-4	W
Bromoform	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:25	75-25-2	W
Bromomethane	<0.070	mg/kg	0.25	0.070	1	04/26/16 14:09	04/27/16 20:25	74-83-9	W
n-Butylbenzene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:25	104-51-8	W
sec-Butylbenzene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:25	135-98-8	W
tert-Butylbenzene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:25	98-06-6	W

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: 2404006 BROWN DEER

Pace Project No.: 40131320

Sample: GP-3 (2-4) Lab ID: 40131320005 Collected: 04/22/16 10:30 Received: 04/25/16 14:56 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
<b>8260 MSV Med Level Normal List</b>		Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B							
Carbon tetrachloride	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:25	56-23-5	W
Chlorobenzene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:25	108-90-7	W
Chloroethane	<0.067	mg/kg	0.25	0.067	1	04/26/16 14:09	04/27/16 20:25	75-00-3	W
Chloroform	<0.046	mg/kg	0.25	0.046	1	04/26/16 14:09	04/27/16 20:25	67-66-3	W
Chloromethane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:25	74-87-3	W
2-Chlorotoluene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:25	95-49-8	W
4-Chlorotoluene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:25	106-43-4	W
1,2-Dibromo-3-chloropropane	<0.091	mg/kg	0.25	0.091	1	04/26/16 14:09	04/27/16 20:25	96-12-8	W
Dibromochloromethane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:25	124-48-1	W
1,2-Dibromoethane (EDB)	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:25	106-93-4	W
Dibromomethane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:25	74-95-3	W
1,2-Dichlorobenzene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:25	95-50-1	W
1,3-Dichlorobenzene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:25	541-73-1	W
1,4-Dichlorobenzene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:25	106-46-7	W
Dichlorodifluoromethane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:25	75-71-8	W
1,1-Dichloroethane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:25	75-34-3	W
1,2-Dichloroethane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:25	107-06-2	W
1,1-Dichloroethene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:25	75-35-4	W
cis-1,2-Dichloroethene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:25	156-59-2	W
trans-1,2-Dichloroethene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:25	156-60-5	W
1,2-Dichloropropane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:25	78-87-5	W
1,3-Dichloropropane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:25	142-28-9	W
2,2-Dichloropropane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:25	594-20-7	W
1,1-Dichloropropene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:25	563-58-6	W
cis-1,3-Dichloropropene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:25	10061-01-5	W
trans-1,3-Dichloropropene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:25	10061-02-6	W
Diisopropyl ether	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:25	108-20-3	W
Ethylbenzene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:25	100-41-4	W
Hexachloro-1,3-butadiene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:25	87-68-3	W
Isopropylbenzene (Cumene)	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:25	98-82-8	W
p-Isopropyltoluene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:25	99-87-6	W
Methylene Chloride	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:25	75-09-2	W
Methyl-tert-butyl ether	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:25	1634-04-4	W
Naphthalene	<0.040	mg/kg	0.25	0.040	1	04/26/16 14:09	04/27/16 20:25	91-20-3	W
n-Propylbenzene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:25	103-65-1	W
Styrene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:25	100-42-5	W
1,1,1,2-Tetrachloroethane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:25	630-20-6	W
1,1,2,2-Tetrachloroethane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:25	79-34-5	W
Tetrachloroethene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:25	127-18-4	W
Toluene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:25	108-88-3	W
1,2,3-Trichlorobenzene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:25	87-61-6	W
1,2,4-Trichlorobenzene	<0.048	mg/kg	0.25	0.048	1	04/26/16 14:09	04/27/16 20:25	120-82-1	W
1,1,1-Trichloroethane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:25	71-55-6	W
1,1,2-Trichloroethane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:25	79-00-5	W
Trichloroethene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:25	79-01-6	W

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## ANALYTICAL RESULTS

Project: 2404006 BROWN DEER

Pace Project No.: 40131320

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**Sample: GP-3 (2-4)**      **Lab ID: 40131320005**      Collected: 04/22/16 10:30      Received: 04/25/16 14:56      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
<b>8260 MSV Med Level Normal List</b>	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
Trichlorofluoromethane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:25	75-69-4	W
1,2,3-Trichloropropane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:25	96-18-4	W
1,2,4-Trimethylbenzene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:25	95-63-6	W
1,3,5-Trimethylbenzene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:25	108-67-8	W
Vinyl chloride	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:25	75-01-4	W
m&p-Xylene	<0.050	mg/kg	0.12	0.050	1	04/26/16 14:09	04/27/16 20:25	179601-23-1	W
o-Xylene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:25	95-47-6	W
<b>Surrogates</b>									
Dibromofluoromethane (S)	95	%	53-165		1	04/26/16 14:09	04/27/16 20:25	1868-53-7	
Toluene-d8 (S)	95	%	54-163		1	04/26/16 14:09	04/27/16 20:25	2037-26-5	
4-Bromofluorobenzene (S)	78	%	48-138		1	04/26/16 14:09	04/27/16 20:25	460-00-4	
<b>Percent Moisture</b>	Analytical Method: ASTM D2974-87								
Percent Moisture	22.3	%	0.10	0.10	1			05/05/16 16:11	

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**Sample: GP-3 (6-8)**      **Lab ID: 40131320006**      Collected: 04/22/16 11:00      Received: 04/25/16 14:56      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
<b>8082 GCS PCB</b>	Analytical Method: EPA 8082 Preparation Method: EPA 3541								
PCB-1016 (Aroclor 1016)	<0.029	mg/kg	0.057	0.029	1	04/26/16 12:49	04/27/16 17:48	12674-11-2	
PCB-1221 (Aroclor 1221)	<0.029	mg/kg	0.057	0.029	1	04/26/16 12:49	04/27/16 17:48	11104-28-2	
PCB-1232 (Aroclor 1232)	<0.029	mg/kg	0.057	0.029	1	04/26/16 12:49	04/27/16 17:48	11141-16-5	
PCB-1242 (Aroclor 1242)	<0.029	mg/kg	0.057	0.029	1	04/26/16 12:49	04/27/16 17:48	53469-21-9	
PCB-1248 (Aroclor 1248)	<0.029	mg/kg	0.057	0.029	1	04/26/16 12:49	04/27/16 17:48	12672-29-6	
PCB-1254 (Aroclor 1254)	<0.029	mg/kg	0.057	0.029	1	04/26/16 12:49	04/27/16 17:48	11097-69-1	
PCB-1260 (Aroclor 1260)	<0.029	mg/kg	0.057	0.029	1	04/26/16 12:49	04/27/16 17:48	11096-82-5	
PCB, Total	<0.029	mg/kg	0.057	0.029	1	04/26/16 12:49	04/27/16 17:48	1336-36-3	
<b>Surrogates</b>									
Tetrachloro-m-xylene (S)	89	%	63-130		1	04/26/16 12:49	04/27/16 17:48	877-09-8	
Decachlorobiphenyl (S)	90	%	48-130		1	04/26/16 12:49	04/27/16 17:48	2051-24-3	
<b>8270 MSSV PAH by SIM</b>	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546								
Acenaphthene	<0.0096	mg/kg	0.019	0.0096	1	05/03/16 09:42	05/04/16 11:40	83-32-9	
Acenaphthylene	<0.0086	mg/kg	0.019	0.0086	1	05/03/16 09:42	05/04/16 11:40	208-96-8	
Anthracene	<0.0099	mg/kg	0.019	0.0099	1	05/03/16 09:42	05/04/16 11:40	120-12-7	
Benzo(a)anthracene	<0.0066	mg/kg	0.019	0.0066	1	05/03/16 09:42	05/04/16 11:40	56-55-3	
Benzo(a)pyrene	<0.0068	mg/kg	0.019	0.0068	1	05/03/16 09:42	05/04/16 11:40	50-32-8	
Benzo(b)fluoranthene	<0.0096	mg/kg	0.019	0.0096	1	05/03/16 09:42	05/04/16 11:40	205-99-2	
Benzo(g,h,i)perylene	<0.0073	mg/kg	0.019	0.0073	1	05/03/16 09:42	05/04/16 11:40	191-24-2	
Benzo(k)fluoranthene	<0.011	mg/kg	0.019	0.011	1	05/03/16 09:42	05/04/16 11:40	207-08-9	
Chrysene	<0.0089	mg/kg	0.019	0.0089	1	05/03/16 09:42	05/04/16 11:40	218-01-9	

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## ANALYTICAL RESULTS

Project: 2404006 BROWN DEER

Pace Project No.: 40131320

Sample: GP-3 (6-8) Lab ID: 40131320006 Collected: 04/22/16 11:00 Received: 04/25/16 14:56 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
<b>8270 MSSV PAH by SIM</b>	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546								
Dibenz(a,h)anthracene	<0.0070	mg/kg	0.019	0.0070	1	05/03/16 09:42	05/04/16 11:40	53-70-3	
Fluoranthene	<0.0096	mg/kg	0.019	0.0096	1	05/03/16 09:42	05/04/16 11:40	206-44-0	
Fluorene	<0.0096	mg/kg	0.019	0.0096	1	05/03/16 09:42	05/04/16 11:40	86-73-7	
Indeno(1,2,3-cd)pyrene	<0.0073	mg/kg	0.019	0.0073	1	05/03/16 09:42	05/04/16 11:40	193-39-5	
1-Methylnaphthalene	<0.0096	mg/kg	0.019	0.0096	1	05/03/16 09:42	05/04/16 11:40	90-12-0	
2-Methylnaphthalene	<0.0096	mg/kg	0.019	0.0096	1	05/03/16 09:42	05/04/16 11:40	91-57-6	
Naphthalene	<0.0096	mg/kg	0.019	0.0096	1	05/03/16 09:42	05/04/16 11:40	91-20-3	
Phenanthrene	<0.0096	mg/kg	0.019	0.0096	1	05/03/16 09:42	05/04/16 11:40	85-01-8	
Pyrene	<0.0096	mg/kg	0.019	0.0096	1	05/03/16 09:42	05/04/16 11:40	129-00-0	
<b>Surrogates</b>									
2-Fluorobiphenyl (S)	59	%	26-130		1	05/03/16 09:42	05/04/16 11:40	321-60-8	
Terphenyl-d14 (S)	69	%	10-130		1	05/03/16 09:42	05/04/16 11:40	1718-51-0	
<b>8260 MSV Med Level Normal List</b>	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
Benzene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:47	71-43-2	W
Bromobenzene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:47	108-86-1	W
Bromochloromethane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:47	74-97-5	W
Bromodichloromethane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:47	75-27-4	W
Bromoform	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:47	75-25-2	W
Bromomethane	<0.070	mg/kg	0.25	0.070	1	04/26/16 14:09	04/27/16 20:47	74-83-9	W
n-Butylbenzene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:47	104-51-8	W
sec-Butylbenzene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:47	135-98-8	W
tert-Butylbenzene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:47	98-06-6	W
Carbon tetrachloride	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:47	56-23-5	W
Chlorobenzene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:47	108-90-7	W
Chloroethane	<0.067	mg/kg	0.25	0.067	1	04/26/16 14:09	04/27/16 20:47	75-00-3	W
Chloroform	<0.046	mg/kg	0.25	0.046	1	04/26/16 14:09	04/27/16 20:47	67-66-3	W
Chloromethane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:47	74-87-3	W
2-Chlorotoluene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:47	95-49-8	W
4-Chlorotoluene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:47	106-43-4	W
1,2-Dibromo-3-chloropropane	<0.091	mg/kg	0.25	0.091	1	04/26/16 14:09	04/27/16 20:47	96-12-8	W
Dibromochloromethane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:47	124-48-1	W
1,2-Dibromoethane (EDB)	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:47	106-93-4	W
Dibromomethane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:47	74-95-3	W
1,2-Dichlorobenzene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:47	95-50-1	W
1,3-Dichlorobenzene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:47	541-73-1	W
1,4-Dichlorobenzene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:47	106-46-7	W
Dichlorodifluoromethane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:47	75-71-8	W
1,1-Dichloroethane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:47	75-34-3	W
1,2-Dichloroethane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:47	107-06-2	W
1,1-Dichloroethene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:47	75-35-4	W
cis-1,2-Dichloroethene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:47	156-59-2	W
trans-1,2-Dichloroethene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:47	156-60-5	W
1,2-Dichloropropane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:47	78-87-5	W
1,3-Dichloropropane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:47	142-28-9	W

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## ANALYTICAL RESULTS

Project: 2404006 BROWN DEER

Pace Project No.: 40131320

Sample: GP-3 (6-8) Lab ID: 40131320006 Collected: 04/22/16 11:00 Received: 04/25/16 14:56 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
<b>8260 MSV Med Level Normal List</b>	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
2,2-Dichloropropane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:47	594-20-7	W
1,1-Dichloropropene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:47	563-58-6	W
cis-1,3-Dichloropropene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:47	10061-01-5	W
trans-1,3-Dichloropropene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:47	10061-02-6	W
Diisopropyl ether	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:47	108-20-3	W
Ethylbenzene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:47	100-41-4	W
Hexachloro-1,3-butadiene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:47	87-68-3	W
Isopropylbenzene (Cumene)	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:47	98-82-8	W
p-Isopropyltoluene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:47	99-87-6	W
Methylene Chloride	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:47	75-09-2	W
Methyl-tert-butyl ether	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:47	1634-04-4	W
Naphthalene	<0.040	mg/kg	0.25	0.040	1	04/26/16 14:09	04/27/16 20:47	91-20-3	W
n-Propylbenzene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:47	103-65-1	W
Styrene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:47	100-42-5	W
1,1,1,2-Tetrachloroethane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:47	630-20-6	W
1,1,2,2-Tetrachloroethane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:47	79-34-5	W
Tetrachloroethene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:47	127-18-4	W
Toluene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:47	108-88-3	W
1,2,3-Trichlorobenzene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:47	87-61-6	W
1,2,4-Trichlorobenzene	<0.048	mg/kg	0.25	0.048	1	04/26/16 14:09	04/27/16 20:47	120-82-1	W
1,1,1-Trichloroethane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:47	71-55-6	W
1,1,2-Trichloroethane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:47	79-00-5	W
Trichloroethene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:47	79-01-6	W
Trichlorofluoromethane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:47	75-69-4	W
1,2,3-Trichloropropane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:47	96-18-4	W
1,2,4-Trimethylbenzene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:47	95-63-6	W
1,3,5-Trimethylbenzene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:47	108-67-8	W
Vinyl chloride	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:47	75-01-4	W
m&p-Xylene	<0.050	mg/kg	0.12	0.050	1	04/26/16 14:09	04/27/16 20:47	179601-23-1	W
o-Xylene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 20:47	95-47-6	W
<b>Surrogates</b>									
Dibromofluoromethane (S)	105	%	53-165		1	04/26/16 14:09	04/27/16 20:47	1868-53-7	
Toluene-d8 (S)	105	%	54-163		1	04/26/16 14:09	04/27/16 20:47	2037-26-5	
4-Bromofluorobenzene (S)	90	%	48-138		1	04/26/16 14:09	04/27/16 20:47	460-00-4	
<b>Percent Moisture</b>	Analytical Method: ASTM D2974-87								
Percent Moisture	12.9	%	0.10	0.10	1			05/05/16 16:11	

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## ANALYTICAL RESULTS

Project: 2404006 BROWN DEER

Pace Project No.: 40131320

Sample: GP-4 (2-4) Lab ID: 40131320007 Collected: 04/22/16 11:25 Received: 04/25/16 14:56 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
<b>8082 GCS PCB</b>		Analytical Method: EPA 8082 Preparation Method: EPA 3541							
PCB-1016 (Aroclor 1016)	<0.032	mg/kg	0.065	0.032	1	04/26/16 12:49	04/27/16 18:06	12674-11-2	
PCB-1221 (Aroclor 1221)	<0.032	mg/kg	0.065	0.032	1	04/26/16 12:49	04/27/16 18:06	11104-28-2	
PCB-1232 (Aroclor 1232)	<0.032	mg/kg	0.065	0.032	1	04/26/16 12:49	04/27/16 18:06	11141-16-5	
PCB-1242 (Aroclor 1242)	<0.032	mg/kg	0.065	0.032	1	04/26/16 12:49	04/27/16 18:06	53469-21-9	
PCB-1248 (Aroclor 1248)	<0.032	mg/kg	0.065	0.032	1	04/26/16 12:49	04/27/16 18:06	12672-29-6	
PCB-1254 (Aroclor 1254)	<0.032	mg/kg	0.065	0.032	1	04/26/16 12:49	04/27/16 18:06	11097-69-1	
PCB-1260 (Aroclor 1260)	<0.032	mg/kg	0.065	0.032	1	04/26/16 12:49	04/27/16 18:06	11096-82-5	
PCB, Total	<0.032	mg/kg	0.065	0.032	1	04/26/16 12:49	04/27/16 18:06	1336-36-3	
<b>Surrogates</b>									
Tetrachloro-m-xylene (S)	88	%	63-130		1	04/26/16 12:49	04/27/16 18:06	877-09-8	
Decachlorobiphenyl (S)	90	%	48-130		1	04/26/16 12:49	04/27/16 18:06	2051-24-3	
<b>8270 MSSV PAH by SIM</b>		Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546							
Acenaphthene	<0.011	mg/kg	0.022	0.011	1	05/03/16 09:42	05/04/16 09:03	83-32-9	
Acenaphthylene	<0.0096	mg/kg	0.022	0.0096	1	05/03/16 09:42	05/04/16 09:03	208-96-8	
Anthracene	<0.011	mg/kg	0.022	0.011	1	05/03/16 09:42	05/04/16 09:03	120-12-7	
Benzo(a)anthracene	<0.0075	mg/kg	0.022	0.0075	1	05/03/16 09:42	05/04/16 09:03	56-55-3	
Benzo(a)pyrene	<0.0077	mg/kg	0.022	0.0077	1	05/03/16 09:42	05/04/16 09:03	50-32-8	
Benzo(b)fluoranthene	<0.011	mg/kg	0.022	0.011	1	05/03/16 09:42	05/04/16 09:03	205-99-2	
Benzo(g,h,i)perylene	<0.0082	mg/kg	0.022	0.0082	1	05/03/16 09:42	05/04/16 09:03	191-24-2	
Benzo(k)fluoranthene	<0.012	mg/kg	0.022	0.012	1	05/03/16 09:42	05/04/16 09:03	207-08-9	
Chrysene	<0.0099	mg/kg	0.022	0.0099	1	05/03/16 09:42	05/04/16 09:03	218-01-9	
Dibenz(a,h)anthracene	<0.0079	mg/kg	0.022	0.0079	1	05/03/16 09:42	05/04/16 09:03	53-70-3	
Fluoranthene	<0.011	mg/kg	0.022	0.011	1	05/03/16 09:42	05/04/16 09:03	206-44-0	
Fluorene	<0.011	mg/kg	0.022	0.011	1	05/03/16 09:42	05/04/16 09:03	86-73-7	
Indeno(1,2,3-cd)pyrene	<0.0082	mg/kg	0.022	0.0082	1	05/03/16 09:42	05/04/16 09:03	193-39-5	
1-Methylnaphthalene	<0.011	mg/kg	0.022	0.011	1	05/03/16 09:42	05/04/16 09:03	90-12-0	
2-Methylnaphthalene	<0.011	mg/kg	0.022	0.011	1	05/03/16 09:42	05/04/16 09:03	91-57-6	
Naphthalene	<0.011	mg/kg	0.022	0.011	1	05/03/16 09:42	05/04/16 09:03	91-20-3	
Phenanthrene	<0.011	mg/kg	0.022	0.011	1	05/03/16 09:42	05/04/16 09:03	85-01-8	
Pyrene	<0.011	mg/kg	0.022	0.011	1	05/03/16 09:42	05/04/16 09:03	129-00-0	
<b>Surrogates</b>									
2-Fluorobiphenyl (S)	47	%	26-130		1	05/03/16 09:42	05/04/16 09:03	321-60-8	
Terphenyl-d14 (S)	58	%	10-130		1	05/03/16 09:42	05/04/16 09:03	1718-51-0	
<b>8260 MSV Med Level Normal List</b>		Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B							
Benzene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:10	71-43-2	W
Bromobenzene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:10	108-86-1	W
Bromochloromethane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:10	74-97-5	W
Bromodichloromethane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:10	75-27-4	W
Bromoform	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:10	75-25-2	W
Bromomethane	<0.070	mg/kg	0.25	0.070	1	04/26/16 14:09	04/27/16 21:10	74-83-9	W
n-Butylbenzene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:10	104-51-8	W
sec-Butylbenzene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:10	135-98-8	W
tert-Butylbenzene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:10	98-06-6	W

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## ANALYTICAL RESULTS

Project: 2404006 BROWN DEER

Pace Project No.: 40131320

Sample: GP-4 (2-4) Lab ID: 40131320007 Collected: 04/22/16 11:25 Received: 04/25/16 14:56 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
<b>8260 MSV Med Level Normal List</b>	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
Carbon tetrachloride	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:10	56-23-5	W
Chlorobenzene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:10	108-90-7	W
Chloroethane	<0.067	mg/kg	0.25	0.067	1	04/26/16 14:09	04/27/16 21:10	75-00-3	W
Chloroform	<0.046	mg/kg	0.25	0.046	1	04/26/16 14:09	04/27/16 21:10	67-66-3	W
Chloromethane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:10	74-87-3	W
2-Chlorotoluene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:10	95-49-8	W
4-Chlorotoluene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:10	106-43-4	W
1,2-Dibromo-3-chloropropane	<0.091	mg/kg	0.25	0.091	1	04/26/16 14:09	04/27/16 21:10	96-12-8	W
Dibromochloromethane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:10	124-48-1	W
1,2-Dibromoethane (EDB)	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:10	106-93-4	W
Dibromomethane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:10	74-95-3	W
1,2-Dichlorobenzene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:10	95-50-1	W
1,3-Dichlorobenzene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:10	541-73-1	W
1,4-Dichlorobenzene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:10	106-46-7	W
Dichlorodifluoromethane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:10	75-71-8	W
1,1-Dichloroethane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:10	75-34-3	W
1,2-Dichloroethane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:10	107-06-2	W
1,1-Dichloroethene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:10	75-35-4	W
cis-1,2-Dichloroethene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:10	156-59-2	W
trans-1,2-Dichloroethene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:10	156-60-5	W
1,2-Dichloropropane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:10	78-87-5	W
1,3-Dichloropropane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:10	142-28-9	W
2,2-Dichloropropane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:10	594-20-7	W
1,1-Dichloropropene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:10	563-58-6	W
cis-1,3-Dichloropropene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:10	10061-01-5	W
trans-1,3-Dichloropropene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:10	10061-02-6	W
Diisopropyl ether	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:10	108-20-3	W
Ethylbenzene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:10	100-41-4	W
Hexachloro-1,3-butadiene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:10	87-68-3	W
Isopropylbenzene (Cumene)	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:10	98-82-8	W
p-Isopropyltoluene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:10	99-87-6	W
Methylene Chloride	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:10	75-09-2	W
Methyl-tert-butyl ether	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:10	1634-04-4	W
Naphthalene	<0.040	mg/kg	0.25	0.040	1	04/26/16 14:09	04/27/16 21:10	91-20-3	W
n-Propylbenzene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:10	103-65-1	W
Styrene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:10	100-42-5	W
1,1,1,2-Tetrachloroethane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:10	630-20-6	W
1,1,2,2-Tetrachloroethane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:10	79-34-5	W
Tetrachloroethene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:10	127-18-4	W
Toluene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:10	108-88-3	W
1,2,3-Trichlorobenzene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:10	87-61-6	W
1,2,4-Trichlorobenzene	<0.048	mg/kg	0.25	0.048	1	04/26/16 14:09	04/27/16 21:10	120-82-1	W
1,1,1-Trichloroethane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:10	71-55-6	W
1,1,2-Trichloroethane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:10	79-00-5	W
Trichloroethene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:10	79-01-6	W

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## ANALYTICAL RESULTS

Project: 2404006 BROWN DEER

Pace Project No.: 40131320

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**Sample: GP-4 (2-4)**      **Lab ID: 40131320007**      Collected: 04/22/16 11:25      Received: 04/25/16 14:56      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
<b>8260 MSV Med Level Normal List</b>	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
Trichlorofluoromethane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:10	75-69-4	W
1,2,3-Trichloropropane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:10	96-18-4	W
1,2,4-Trimethylbenzene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:10	95-63-6	W
1,3,5-Trimethylbenzene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:10	108-67-8	W
Vinyl chloride	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:10	75-01-4	W
m&p-Xylene	<0.050	mg/kg	0.12	0.050	1	04/26/16 14:09	04/27/16 21:10	179601-23-1	W
o-Xylene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:10	95-47-6	W
<b>Surrogates</b>									
Dibromofluoromethane (S)	107	%	53-165		1	04/26/16 14:09	04/27/16 21:10	1868-53-7	
Toluene-d8 (S)	106	%	54-163		1	04/26/16 14:09	04/27/16 21:10	2037-26-5	
4-Bromofluorobenzene (S)	89	%	48-138		1	04/26/16 14:09	04/27/16 21:10	460-00-4	
<b>Percent Moisture</b>	Analytical Method: ASTM D2974-87								
Percent Moisture	22.5	%	0.10	0.10	1			05/05/16 16:11	

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**Sample: GP-4 (8-10)**      **Lab ID: 40131320008**      Collected: 04/22/16 11:45      Received: 04/25/16 14:56      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
<b>8082 GCS PCB</b>	Analytical Method: EPA 8082 Preparation Method: EPA 3541								
PCB-1016 (Aroclor 1016)	<0.029	mg/kg	0.058	0.029	1	04/26/16 12:49	04/27/16 18:23	12674-11-2	
PCB-1221 (Aroclor 1221)	<0.029	mg/kg	0.058	0.029	1	04/26/16 12:49	04/27/16 18:23	11104-28-2	
PCB-1232 (Aroclor 1232)	<0.029	mg/kg	0.058	0.029	1	04/26/16 12:49	04/27/16 18:23	11141-16-5	
PCB-1242 (Aroclor 1242)	<0.029	mg/kg	0.058	0.029	1	04/26/16 12:49	04/27/16 18:23	53469-21-9	
PCB-1248 (Aroclor 1248)	<0.029	mg/kg	0.058	0.029	1	04/26/16 12:49	04/27/16 18:23	12672-29-6	
PCB-1254 (Aroclor 1254)	<0.029	mg/kg	0.058	0.029	1	04/26/16 12:49	04/27/16 18:23	11097-69-1	
PCB-1260 (Aroclor 1260)	<0.029	mg/kg	0.058	0.029	1	04/26/16 12:49	04/27/16 18:23	11096-82-5	
PCB, Total	<0.029	mg/kg	0.058	0.029	1	04/26/16 12:49	04/27/16 18:23	1336-36-3	
<b>Surrogates</b>									
Tetrachloro-m-xylene (S)	90	%	63-130		1	04/26/16 12:49	04/27/16 18:23	877-09-8	
Decachlorobiphenyl (S)	96	%	48-130		1	04/26/16 12:49	04/27/16 18:23	2051-24-3	
<b>8270 MSSV PAH by SIM</b>	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546								
Acenaphthene	<0.0097	mg/kg	0.019	0.0097	1	05/03/16 09:42	05/04/16 09:20	83-32-9	
Acenaphthylene	<0.0087	mg/kg	0.019	0.0087	1	05/03/16 09:42	05/04/16 09:20	208-96-8	
Anthracene	<0.010	mg/kg	0.019	0.010	1	05/03/16 09:42	05/04/16 09:20	120-12-7	
Benzo(a)anthracene	<0.0067	mg/kg	0.019	0.0067	1	05/03/16 09:42	05/04/16 09:20	56-55-3	
Benzo(a)pyrene	<0.0069	mg/kg	0.019	0.0069	1	05/03/16 09:42	05/04/16 09:20	50-32-8	
Benzo(b)fluoranthene	<0.0097	mg/kg	0.019	0.0097	1	05/03/16 09:42	05/04/16 09:20	205-99-2	
Benzo(g,h,i)perylene	<0.0074	mg/kg	0.019	0.0074	1	05/03/16 09:42	05/04/16 09:20	191-24-2	
Benzo(k)fluoranthene	<0.011	mg/kg	0.019	0.011	1	05/03/16 09:42	05/04/16 09:20	207-08-9	
Chrysene	<0.0090	mg/kg	0.019	0.0090	1	05/03/16 09:42	05/04/16 09:20	218-01-9	

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## ANALYTICAL RESULTS

Project: 2404006 BROWN DEER

Pace Project No.: 40131320

Sample: GP-4 (8-10) Lab ID: 40131320008 Collected: 04/22/16 11:45 Received: 04/25/16 14:56 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
<b>8270 MSSV PAH by SIM</b>	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546								
Dibenz(a,h)anthracene	<0.0071	mg/kg	0.019	0.0071	1	05/03/16 09:42	05/04/16 09:20	53-70-3	
Fluoranthene	<0.0097	mg/kg	0.019	0.0097	1	05/03/16 09:42	05/04/16 09:20	206-44-0	
Fluorene	<0.0097	mg/kg	0.019	0.0097	1	05/03/16 09:42	05/04/16 09:20	86-73-7	
Indeno(1,2,3-cd)pyrene	<0.0074	mg/kg	0.019	0.0074	1	05/03/16 09:42	05/04/16 09:20	193-39-5	
1-Methylnaphthalene	<0.0097	mg/kg	0.019	0.0097	1	05/03/16 09:42	05/04/16 09:20	90-12-0	
2-Methylnaphthalene	<0.0097	mg/kg	0.019	0.0097	1	05/03/16 09:42	05/04/16 09:20	91-57-6	
Naphthalene	<0.0097	mg/kg	0.019	0.0097	1	05/03/16 09:42	05/04/16 09:20	91-20-3	
Phenanthrene	<0.0097	mg/kg	0.019	0.0097	1	05/03/16 09:42	05/04/16 09:20	85-01-8	
Pyrene	<0.0097	mg/kg	0.019	0.0097	1	05/03/16 09:42	05/04/16 09:20	129-00-0	
<b>Surrogates</b>									
2-Fluorobiphenyl (S)	50	%	26-130		1	05/03/16 09:42	05/04/16 09:20	321-60-8	
Terphenyl-d14 (S)	62	%	10-130		1	05/03/16 09:42	05/04/16 09:20	1718-51-0	
<b>8260 MSV Med Level Normal List</b>	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
Benzene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:32	71-43-2	W
Bromobenzene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:32	108-86-1	W
Bromochloromethane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:32	74-97-5	W
Bromodichloromethane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:32	75-27-4	W
Bromoform	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:32	75-25-2	W
Bromomethane	<0.070	mg/kg	0.25	0.070	1	04/26/16 14:09	04/27/16 21:32	74-83-9	W
n-Butylbenzene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:32	104-51-8	W
sec-Butylbenzene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:32	135-98-8	W
tert-Butylbenzene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:32	98-06-6	W
Carbon tetrachloride	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:32	56-23-5	W
Chlorobenzene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:32	108-90-7	W
Chloroethane	<0.067	mg/kg	0.25	0.067	1	04/26/16 14:09	04/27/16 21:32	75-00-3	W
Chloroform	<0.046	mg/kg	0.25	0.046	1	04/26/16 14:09	04/27/16 21:32	67-66-3	W
Chloromethane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:32	74-87-3	W
2-Chlorotoluene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:32	95-49-8	W
4-Chlorotoluene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:32	106-43-4	W
1,2-Dibromo-3-chloropropane	<0.091	mg/kg	0.25	0.091	1	04/26/16 14:09	04/27/16 21:32	96-12-8	W
Dibromochloromethane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:32	124-48-1	W
1,2-Dibromoethane (EDB)	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:32	106-93-4	W
Dibromomethane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:32	74-95-3	W
1,2-Dichlorobenzene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:32	95-50-1	W
1,3-Dichlorobenzene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:32	541-73-1	W
1,4-Dichlorobenzene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:32	106-46-7	W
Dichlorodifluoromethane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:32	75-71-8	W
1,1-Dichloroethane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:32	75-34-3	W
1,2-Dichloroethane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:32	107-06-2	W
1,1-Dichloroethene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:32	75-35-4	W
cis-1,2-Dichloroethene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:32	156-59-2	W
trans-1,2-Dichloroethene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:32	156-60-5	W
1,2-Dichloropropane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:32	78-87-5	W
1,3-Dichloropropane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:32	142-28-9	W

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## ANALYTICAL RESULTS

Project: 2404006 BROWN DEER

Pace Project No.: 40131320

Sample: GP-4 (8-10) Lab ID: 40131320008 Collected: 04/22/16 11:45 Received: 04/25/16 14:56 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
<b>8260 MSV Med Level Normal List</b>	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
2,2-Dichloropropane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:32	594-20-7	W
1,1-Dichloropropene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:32	563-58-6	W
cis-1,3-Dichloropropene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:32	10061-01-5	W
trans-1,3-Dichloropropene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:32	10061-02-6	W
Diisopropyl ether	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:32	108-20-3	W
Ethylbenzene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:32	100-41-4	W
Hexachloro-1,3-butadiene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:32	87-68-3	W
Isopropylbenzene (Cumene)	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:32	98-82-8	W
p-Isopropyltoluene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:32	99-87-6	W
Methylene Chloride	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:32	75-09-2	W
Methyl-tert-butyl ether	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:32	1634-04-4	W
Naphthalene	<0.040	mg/kg	0.25	0.040	1	04/26/16 14:09	04/27/16 21:32	91-20-3	W
n-Propylbenzene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:32	103-65-1	W
Styrene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:32	100-42-5	W
1,1,1,2-Tetrachloroethane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:32	630-20-6	W
1,1,2,2-Tetrachloroethane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:32	79-34-5	W
Tetrachloroethene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:32	127-18-4	W
Toluene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:32	108-88-3	W
1,2,3-Trichlorobenzene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:32	87-61-6	W
1,2,4-Trichlorobenzene	<0.048	mg/kg	0.25	0.048	1	04/26/16 14:09	04/27/16 21:32	120-82-1	W
1,1,1-Trichloroethane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:32	71-55-6	W
1,1,2-Trichloroethane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:32	79-00-5	W
Trichloroethene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:32	79-01-6	W
Trichlorofluoromethane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:32	75-69-4	W
1,2,3-Trichloropropane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:32	96-18-4	W
1,2,4-Trimethylbenzene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:32	95-63-6	W
1,3,5-Trimethylbenzene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:32	108-67-8	W
Vinyl chloride	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:32	75-01-4	W
m&p-Xylene	<0.050	mg/kg	0.12	0.050	1	04/26/16 14:09	04/27/16 21:32	179601-23-1	W
o-Xylene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:32	95-47-6	W
<b>Surrogates</b>									
Dibromofluoromethane (S)	97	%	53-165		1	04/26/16 14:09	04/27/16 21:32	1868-53-7	
Toluene-d8 (S)	100	%	54-163		1	04/26/16 14:09	04/27/16 21:32	2037-26-5	
4-Bromofluorobenzene (S)	87	%	48-138		1	04/26/16 14:09	04/27/16 21:32	460-00-4	
<b>Percent Moisture</b>	Analytical Method: ASTM D2974-87								
Percent Moisture	14.0	%	0.10	0.10	1			05/05/16 16:11	

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## ANALYTICAL RESULTS

Project: 2404006 BROWN DEER

Pace Project No.: 40131320

Sample: GP-5 (2-4) Lab ID: 40131320009 Collected: 04/22/16 12:10 Received: 04/25/16 14:56 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
<b>8082 GCS PCB</b>		Analytical Method: EPA 8082 Preparation Method: EPA 3541							
PCB-1016 (Aroclor 1016)	<0.032	mg/kg	0.064	0.032	1	04/26/16 12:49	04/27/16 18:40	12674-11-2	
PCB-1221 (Aroclor 1221)	<0.032	mg/kg	0.064	0.032	1	04/26/16 12:49	04/27/16 18:40	11104-28-2	
PCB-1232 (Aroclor 1232)	<0.032	mg/kg	0.064	0.032	1	04/26/16 12:49	04/27/16 18:40	11141-16-5	
PCB-1242 (Aroclor 1242)	<0.032	mg/kg	0.064	0.032	1	04/26/16 12:49	04/27/16 18:40	53469-21-9	
PCB-1248 (Aroclor 1248)	<0.032	mg/kg	0.064	0.032	1	04/26/16 12:49	04/27/16 18:40	12672-29-6	
PCB-1254 (Aroclor 1254)	<0.032	mg/kg	0.064	0.032	1	04/26/16 12:49	04/27/16 18:40	11097-69-1	
PCB-1260 (Aroclor 1260)	<0.032	mg/kg	0.064	0.032	1	04/26/16 12:49	04/27/16 18:40	11096-82-5	
PCB, Total	<0.032	mg/kg	0.064	0.032	1	04/26/16 12:49	04/27/16 18:40	1336-36-3	
<b>Surrogates</b>									
Tetrachloro-m-xylene (S)	91	%	63-130		1	04/26/16 12:49	04/27/16 18:40	877-09-8	
Decachlorobiphenyl (S)	93	%	48-130		1	04/26/16 12:49	04/27/16 18:40	2051-24-3	
<b>8270 MSSV PAH by SIM</b>		Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546							
Acenaphthene	<0.011	mg/kg	0.021	0.011	1	05/03/16 09:42	05/04/16 09:38	83-32-9	
Acenaphthylene	<0.0095	mg/kg	0.021	0.0095	1	05/03/16 09:42	05/04/16 09:38	208-96-8	
Anthracene	<0.011	mg/kg	0.021	0.011	1	05/03/16 09:42	05/04/16 09:38	120-12-7	
Benzo(a)anthracene	<0.0074	mg/kg	0.021	0.0074	1	05/03/16 09:42	05/04/16 09:38	56-55-3	
Benzo(a)pyrene	<0.0076	mg/kg	0.021	0.0076	1	05/03/16 09:42	05/04/16 09:38	50-32-8	
Benzo(b)fluoranthene	<0.011	mg/kg	0.021	0.011	1	05/03/16 09:42	05/04/16 09:38	205-99-2	
Benzo(g,h,i)perylene	<0.0081	mg/kg	0.021	0.0081	1	05/03/16 09:42	05/04/16 09:38	191-24-2	
Benzo(k)fluoranthene	<0.012	mg/kg	0.021	0.012	1	05/03/16 09:42	05/04/16 09:38	207-08-9	
Chrysene	<0.0098	mg/kg	0.021	0.0098	1	05/03/16 09:42	05/04/16 09:38	218-01-9	
Dibenz(a,h)anthracene	<0.0078	mg/kg	0.021	0.0078	1	05/03/16 09:42	05/04/16 09:38	53-70-3	
Fluoranthene	<0.011	mg/kg	0.021	0.011	1	05/03/16 09:42	05/04/16 09:38	206-44-0	
Fluorene	<0.011	mg/kg	0.021	0.011	1	05/03/16 09:42	05/04/16 09:38	86-73-7	
Indeno(1,2,3-cd)pyrene	<0.0081	mg/kg	0.021	0.0081	1	05/03/16 09:42	05/04/16 09:38	193-39-5	
1-Methylnaphthalene	<0.011	mg/kg	0.021	0.011	1	05/03/16 09:42	05/04/16 09:38	90-12-0	
2-Methylnaphthalene	<0.011	mg/kg	0.021	0.011	1	05/03/16 09:42	05/04/16 09:38	91-57-6	
Naphthalene	<0.011	mg/kg	0.021	0.011	1	05/03/16 09:42	05/04/16 09:38	91-20-3	
Phenanthrene	<0.011	mg/kg	0.021	0.011	1	05/03/16 09:42	05/04/16 09:38	85-01-8	
Pyrene	<0.011	mg/kg	0.021	0.011	1	05/03/16 09:42	05/04/16 09:38	129-00-0	
<b>Surrogates</b>									
2-Fluorobiphenyl (S)	53	%	26-130		1	05/03/16 09:42	05/04/16 09:38	321-60-8	
Terphenyl-d14 (S)	66	%	10-130		1	05/03/16 09:42	05/04/16 09:38	1718-51-0	
<b>8260 MSV Med Level Normal List</b>		Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B							
Benzene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:55	71-43-2	W
Bromobenzene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:55	108-86-1	W
Bromochloromethane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:55	74-97-5	W
Bromodichloromethane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:55	75-27-4	W
Bromoform	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:55	75-25-2	W
Bromomethane	<0.070	mg/kg	0.25	0.070	1	04/26/16 14:09	04/27/16 21:55	74-83-9	W
n-Butylbenzene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:55	104-51-8	W
sec-Butylbenzene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:55	135-98-8	W
tert-Butylbenzene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:55	98-06-6	W

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## ANALYTICAL RESULTS

Project: 2404006 BROWN DEER

Pace Project No.: 40131320

Sample: GP-5 (2-4) Lab ID: 40131320009 Collected: 04/22/16 12:10 Received: 04/25/16 14:56 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
<b>8260 MSV Med Level Normal List</b>		Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B							
Carbon tetrachloride	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:55	56-23-5	W
Chlorobenzene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:55	108-90-7	W
Chloroethane	<0.067	mg/kg	0.25	0.067	1	04/26/16 14:09	04/27/16 21:55	75-00-3	W
Chloroform	<0.046	mg/kg	0.25	0.046	1	04/26/16 14:09	04/27/16 21:55	67-66-3	W
Chloromethane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:55	74-87-3	W
2-Chlorotoluene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:55	95-49-8	W
4-Chlorotoluene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:55	106-43-4	W
1,2-Dibromo-3-chloropropane	<0.091	mg/kg	0.25	0.091	1	04/26/16 14:09	04/27/16 21:55	96-12-8	W
Dibromochloromethane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:55	124-48-1	W
1,2-Dibromoethane (EDB)	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:55	106-93-4	W
Dibromomethane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:55	74-95-3	W
1,2-Dichlorobenzene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:55	95-50-1	W
1,3-Dichlorobenzene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:55	541-73-1	W
1,4-Dichlorobenzene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:55	106-46-7	W
Dichlorodifluoromethane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:55	75-71-8	W
1,1-Dichloroethane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:55	75-34-3	W
1,2-Dichloroethane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:55	107-06-2	W
1,1-Dichloroethene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:55	75-35-4	W
cis-1,2-Dichloroethene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:55	156-59-2	W
trans-1,2-Dichloroethene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:55	156-60-5	W
1,2-Dichloropropane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:55	78-87-5	W
1,3-Dichloropropane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:55	142-28-9	W
2,2-Dichloropropane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:55	594-20-7	W
1,1-Dichloropropene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:55	563-58-6	W
cis-1,3-Dichloropropene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:55	10061-01-5	W
trans-1,3-Dichloropropene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:55	10061-02-6	W
Diisopropyl ether	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:55	108-20-3	W
Ethylbenzene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:55	100-41-4	W
Hexachloro-1,3-butadiene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:55	87-68-3	W
Isopropylbenzene (Cumene)	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:55	98-82-8	W
p-Isopropyltoluene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:55	99-87-6	W
Methylene Chloride	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:55	75-09-2	W
Methyl-tert-butyl ether	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:55	1634-04-4	W
Naphthalene	<0.040	mg/kg	0.25	0.040	1	04/26/16 14:09	04/27/16 21:55	91-20-3	W
n-Propylbenzene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:55	103-65-1	W
Styrene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:55	100-42-5	W
1,1,1,2-Tetrachloroethane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:55	630-20-6	W
1,1,2,2-Tetrachloroethane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:55	79-34-5	W
Tetrachloroethene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:55	127-18-4	W
Toluene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:55	108-88-3	W
1,2,3-Trichlorobenzene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:55	87-61-6	W
1,2,4-Trichlorobenzene	<0.048	mg/kg	0.25	0.048	1	04/26/16 14:09	04/27/16 21:55	120-82-1	W
1,1,1-Trichloroethane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:55	71-55-6	W
1,1,2-Trichloroethane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:55	79-00-5	W
Trichloroethene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:55	79-01-6	W

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## ANALYTICAL RESULTS

Project: 2404006 BROWN DEER

Pace Project No.: 40131320

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**Sample: GP-5 (2-4)**      **Lab ID: 40131320009**      Collected: 04/22/16 12:10      Received: 04/25/16 14:56      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
<b>8260 MSV Med Level Normal List</b>	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
Trichlorofluoromethane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:55	75-69-4	W
1,2,3-Trichloropropane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:55	96-18-4	W
1,2,4-Trimethylbenzene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:55	95-63-6	W
1,3,5-Trimethylbenzene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:55	108-67-8	W
Vinyl chloride	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:55	75-01-4	W
m&p-Xylene	<0.050	mg/kg	0.12	0.050	1	04/26/16 14:09	04/27/16 21:55	179601-23-1	W
o-Xylene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 21:55	95-47-6	W
<b>Surrogates</b>									
Dibromofluoromethane (S)	100	%	53-165		1	04/26/16 14:09	04/27/16 21:55	1868-53-7	
Toluene-d8 (S)	100	%	54-163		1	04/26/16 14:09	04/27/16 21:55	2037-26-5	
4-Bromofluorobenzene (S)	84	%	48-138		1	04/26/16 14:09	04/27/16 21:55	460-00-4	
<b>Percent Moisture</b>	Analytical Method: ASTM D2974-87								
Percent Moisture	<b>21.4</b>	%	0.10	0.10	1			05/05/16 16:11	

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**Sample: GP-5 (10-12)**      **Lab ID: 40131320010**      Collected: 04/22/16 12:30      Received: 04/25/16 14:56      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
<b>8082 GCS PCB</b>	Analytical Method: EPA 8082 Preparation Method: EPA 3541								
PCB-1016 (Aroclor 1016)	<0.029	mg/kg	0.058	0.029	1	04/26/16 12:49	04/27/16 18:58	12674-11-2	
PCB-1221 (Aroclor 1221)	<0.029	mg/kg	0.058	0.029	1	04/26/16 12:49	04/27/16 18:58	11104-28-2	
PCB-1232 (Aroclor 1232)	<0.029	mg/kg	0.058	0.029	1	04/26/16 12:49	04/27/16 18:58	11141-16-5	
PCB-1242 (Aroclor 1242)	<0.029	mg/kg	0.058	0.029	1	04/26/16 12:49	04/27/16 18:58	53469-21-9	
PCB-1248 (Aroclor 1248)	<0.029	mg/kg	0.058	0.029	1	04/26/16 12:49	04/27/16 18:58	12672-29-6	
PCB-1254 (Aroclor 1254)	<0.029	mg/kg	0.058	0.029	1	04/26/16 12:49	04/27/16 18:58	11097-69-1	
PCB-1260 (Aroclor 1260)	<0.029	mg/kg	0.058	0.029	1	04/26/16 12:49	04/27/16 18:58	11096-82-5	
PCB, Total	<0.029	mg/kg	0.058	0.029	1	04/26/16 12:49	04/27/16 18:58	1336-36-3	
<b>Surrogates</b>									
Tetrachloro-m-xylene (S)	87	%	63-130		1	04/26/16 12:49	04/27/16 18:58	877-09-8	
Decachlorobiphenyl (S)	90	%	48-130		1	04/26/16 12:49	04/27/16 18:58	2051-24-3	
<b>8270 MSSV PAH by SIM</b>	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546								
Acenaphthene	<0.0096	mg/kg	0.019	0.0096	1	05/03/16 09:42	05/04/16 09:55	83-32-9	
Acenaphthylene	<0.0086	mg/kg	0.019	0.0086	1	05/03/16 09:42	05/04/16 09:55	208-96-8	
Anthracene	<0.010	mg/kg	0.019	0.010	1	05/03/16 09:42	05/04/16 09:55	120-12-7	
Benzo(a)anthracene	<0.0067	mg/kg	0.019	0.0067	1	05/03/16 09:42	05/04/16 09:55	56-55-3	
Benzo(a)pyrene	<0.0069	mg/kg	0.019	0.0069	1	05/03/16 09:42	05/04/16 09:55	50-32-8	
Benzo(b)fluoranthene	<0.0096	mg/kg	0.019	0.0096	1	05/03/16 09:42	05/04/16 09:55	205-99-2	
Benzo(g,h,i)perylene	<0.0073	mg/kg	0.019	0.0073	1	05/03/16 09:42	05/04/16 09:55	191-24-2	
Benzo(k)fluoranthene	<0.011	mg/kg	0.019	0.011	1	05/03/16 09:42	05/04/16 09:55	207-08-9	
Chrysene	<0.0089	mg/kg	0.019	0.0089	1	05/03/16 09:42	05/04/16 09:55	218-01-9	

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## ANALYTICAL RESULTS

Project: 2404006 BROWN DEER

Pace Project No.: 40131320

Sample: GP-5 (10-12) Lab ID: 40131320010 Collected: 04/22/16 12:30 Received: 04/25/16 14:56 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
<b>8270 MSSV PAH by SIM</b>	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546								
Dibenz(a,h)anthracene	<0.0070	mg/kg	0.019	0.0070	1	05/03/16 09:42	05/04/16 09:55	53-70-3	
Fluoranthene	<0.0096	mg/kg	0.019	0.0096	1	05/03/16 09:42	05/04/16 09:55	206-44-0	
Fluorene	<0.0096	mg/kg	0.019	0.0096	1	05/03/16 09:42	05/04/16 09:55	86-73-7	
Indeno(1,2,3-cd)pyrene	<0.0073	mg/kg	0.019	0.0073	1	05/03/16 09:42	05/04/16 09:55	193-39-5	
1-Methylnaphthalene	<0.0096	mg/kg	0.019	0.0096	1	05/03/16 09:42	05/04/16 09:55	90-12-0	
2-Methylnaphthalene	<0.0096	mg/kg	0.019	0.0096	1	05/03/16 09:42	05/04/16 09:55	91-57-6	
Naphthalene	<0.0096	mg/kg	0.019	0.0096	1	05/03/16 09:42	05/04/16 09:55	91-20-3	
Phenanthrene	<0.0096	mg/kg	0.019	0.0096	1	05/03/16 09:42	05/04/16 09:55	85-01-8	
Pyrene	<0.0096	mg/kg	0.019	0.0096	1	05/03/16 09:42	05/04/16 09:55	129-00-0	
<b>Surrogates</b>									
2-Fluorobiphenyl (S)	46	%	26-130		1	05/03/16 09:42	05/04/16 09:55	321-60-8	
Terphenyl-d14 (S)	62	%	10-130		1	05/03/16 09:42	05/04/16 09:55	1718-51-0	
<b>8260 MSV Med Level Normal List</b>	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
Benzene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 22:18	71-43-2	W
Bromobenzene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 22:18	108-86-1	W
Bromochloromethane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 22:18	74-97-5	W
Bromodichloromethane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 22:18	75-27-4	W
Bromoform	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 22:18	75-25-2	W
Bromomethane	<0.070	mg/kg	0.25	0.070	1	04/26/16 14:09	04/27/16 22:18	74-83-9	W
n-Butylbenzene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 22:18	104-51-8	W
sec-Butylbenzene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 22:18	135-98-8	W
tert-Butylbenzene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 22:18	98-06-6	W
Carbon tetrachloride	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 22:18	56-23-5	W
Chlorobenzene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 22:18	108-90-7	W
Chloroethane	<0.067	mg/kg	0.25	0.067	1	04/26/16 14:09	04/27/16 22:18	75-00-3	W
Chloroform	<0.046	mg/kg	0.25	0.046	1	04/26/16 14:09	04/27/16 22:18	67-66-3	W
Chloromethane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 22:18	74-87-3	W
2-Chlorotoluene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 22:18	95-49-8	W
4-Chlorotoluene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 22:18	106-43-4	W
1,2-Dibromo-3-chloropropane	<0.091	mg/kg	0.25	0.091	1	04/26/16 14:09	04/27/16 22:18	96-12-8	W
Dibromochloromethane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 22:18	124-48-1	W
1,2-Dibromoethane (EDB)	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 22:18	106-93-4	W
Dibromomethane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 22:18	74-95-3	W
1,2-Dichlorobenzene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 22:18	95-50-1	W
1,3-Dichlorobenzene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 22:18	541-73-1	W
1,4-Dichlorobenzene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 22:18	106-46-7	W
Dichlorodifluoromethane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 22:18	75-71-8	W
1,1-Dichloroethane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 22:18	75-34-3	W
1,2-Dichloroethane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 22:18	107-06-2	W
1,1-Dichloroethene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 22:18	75-35-4	W
cis-1,2-Dichloroethene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 22:18	156-59-2	W
trans-1,2-Dichloroethene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 22:18	156-60-5	W
1,2-Dichloropropane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 22:18	78-87-5	W
1,3-Dichloropropane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 22:18	142-28-9	W

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## ANALYTICAL RESULTS

Project: 2404006 BROWN DEER

Pace Project No.: 40131320

Sample: GP-5 (10-12) Lab ID: 40131320010 Collected: 04/22/16 12:30 Received: 04/25/16 14:56 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
<b>8260 MSV Med Level Normal List</b>	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
2,2-Dichloropropane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 22:18	594-20-7	W
1,1-Dichloropropene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 22:18	563-58-6	W
cis-1,3-Dichloropropene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 22:18	10061-01-5	W
trans-1,3-Dichloropropene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 22:18	10061-02-6	W
Diisopropyl ether	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 22:18	108-20-3	W
Ethylbenzene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 22:18	100-41-4	W
Hexachloro-1,3-butadiene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 22:18	87-68-3	W
Isopropylbenzene (Cumene)	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 22:18	98-82-8	W
p-Isopropyltoluene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 22:18	99-87-6	W
Methylene Chloride	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 22:18	75-09-2	W
Methyl-tert-butyl ether	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 22:18	1634-04-4	W
Naphthalene	<0.040	mg/kg	0.25	0.040	1	04/26/16 14:09	04/27/16 22:18	91-20-3	W
n-Propylbenzene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 22:18	103-65-1	W
Styrene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 22:18	100-42-5	W
1,1,1,2-Tetrachloroethane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 22:18	630-20-6	W
1,1,2,2-Tetrachloroethane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 22:18	79-34-5	W
Tetrachloroethene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 22:18	127-18-4	W
Toluene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 22:18	108-88-3	W
1,2,3-Trichlorobenzene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 22:18	87-61-6	W
1,2,4-Trichlorobenzene	<0.048	mg/kg	0.25	0.048	1	04/26/16 14:09	04/27/16 22:18	120-82-1	W
1,1,1-Trichloroethane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 22:18	71-55-6	W
1,1,2-Trichloroethane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 22:18	79-00-5	W
Trichloroethene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 22:18	79-01-6	W
Trichlorofluoromethane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 22:18	75-69-4	W
1,2,3-Trichloropropane	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 22:18	96-18-4	W
1,2,4-Trimethylbenzene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 22:18	95-63-6	W
1,3,5-Trimethylbenzene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 22:18	108-67-8	W
Vinyl chloride	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 22:18	75-01-4	W
m&p-Xylene	<0.050	mg/kg	0.12	0.050	1	04/26/16 14:09	04/27/16 22:18	179601-23-1	W
o-Xylene	<0.025	mg/kg	0.060	0.025	1	04/26/16 14:09	04/27/16 22:18	95-47-6	W
<b>Surrogates</b>									
Dibromofluoromethane (S)	109	%	53-165		1	04/26/16 14:09	04/27/16 22:18	1868-53-7	
Toluene-d8 (S)	111	%	54-163		1	04/26/16 14:09	04/27/16 22:18	2037-26-5	
4-Bromofluorobenzene (S)	92	%	48-138		1	04/26/16 14:09	04/27/16 22:18	460-00-4	
<b>Percent Moisture</b>	Analytical Method: ASTM D2974-87								
Percent Moisture	13.2	%	0.10	0.10	1			05/05/16 17:05	

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: 2404006 BROWN DEER

Pace Project No.: 40131320

Sample: SS-1 (0.5-1.5) Lab ID: 40131320011 Collected: 04/22/16 12:50 Received: 04/25/16 14:56 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
<b>8082 GCS PCB</b>		Analytical Method: EPA 8082 Preparation Method: EPA 3541							
PCB-1016 (Aroclor 1016)	<0.033	mg/kg	0.066	0.033	1	04/26/16 12:49	04/27/16 19:15	12674-11-2	
PCB-1221 (Aroclor 1221)	<0.033	mg/kg	0.066	0.033	1	04/26/16 12:49	04/27/16 19:15	11104-28-2	
PCB-1232 (Aroclor 1232)	<0.033	mg/kg	0.066	0.033	1	04/26/16 12:49	04/27/16 19:15	11141-16-5	
PCB-1242 (Aroclor 1242)	<0.033	mg/kg	0.066	0.033	1	04/26/16 12:49	04/27/16 19:15	53469-21-9	
PCB-1248 (Aroclor 1248)	<0.033	mg/kg	0.066	0.033	1	04/26/16 12:49	04/27/16 19:15	12672-29-6	
PCB-1254 (Aroclor 1254)	<0.033	mg/kg	0.066	0.033	1	04/26/16 12:49	04/27/16 19:15	11097-69-1	
PCB-1260 (Aroclor 1260)	<0.033	mg/kg	0.066	0.033	1	04/26/16 12:49	04/27/16 19:15	11096-82-5	
PCB, Total	<0.033	mg/kg	0.066	0.033	1	04/26/16 12:49	04/27/16 19:15	1336-36-3	
<b>Surrogates</b>									
Tetrachloro-m-xylene (S)	71	%	63-130		1	04/26/16 12:49	04/27/16 19:15	877-09-8	
Decachlorobiphenyl (S)	75	%	48-130		1	04/26/16 12:49	04/27/16 19:15	2051-24-3	
<b>8270 MSSV PAH by SIM</b>		Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546							
Acenaphthene	0.16	mg/kg	0.088	0.044	4	05/06/16 09:18	05/06/16 11:15	83-32-9	
Acenaphthylene	<0.039	mg/kg	0.088	0.039	4	05/06/16 09:18	05/06/16 11:15	208-96-8	
Anthracene	1.1	mg/kg	0.088	0.046	4	05/06/16 09:18	05/06/16 11:15	120-12-7	
Benzo(a)anthracene	1.5	mg/kg	0.088	0.030	4	05/06/16 09:18	05/06/16 11:15	56-55-3	
Benzo(a)pyrene	1.5	mg/kg	0.088	0.031	4	05/06/16 09:18	05/06/16 11:15	50-32-8	
Benzo(b)fluoranthene	1.2	mg/kg	0.088	0.044	4	05/06/16 09:18	05/06/16 11:15	205-99-2	
Benzo(g,h,i)perylene	0.90	mg/kg	0.088	0.033	4	05/06/16 09:18	05/06/16 11:15	191-24-2	
Benzo(k)fluoranthene	1.4	mg/kg	0.088	0.049	4	05/06/16 09:18	05/06/16 11:15	207-08-9	
Chrysene	1.8	mg/kg	0.088	0.041	4	05/06/16 09:18	05/06/16 11:15	218-01-9	
Dibenz(a,h)anthracene	0.32	mg/kg	0.088	0.032	4	05/06/16 09:18	05/06/16 11:15	53-70-3	
Fluoranthene	3.9	mg/kg	0.088	0.044	4	05/06/16 09:18	05/06/16 11:15	206-44-0	
Fluorene	0.25	mg/kg	0.088	0.044	4	05/06/16 09:18	05/06/16 11:15	86-73-7	
Indeno(1,2,3-cd)pyrene	0.83	mg/kg	0.088	0.033	4	05/06/16 09:18	05/06/16 11:15	193-39-5	
1-Methylnaphthalene	<0.044	mg/kg	0.088	0.044	4	05/06/16 09:18	05/06/16 11:15	90-12-0	
2-Methylnaphthalene	<0.044	mg/kg	0.088	0.044	4	05/06/16 09:18	05/06/16 11:15	91-57-6	
Naphthalene	<0.044	mg/kg	0.088	0.044	4	05/06/16 09:18	05/06/16 11:15	91-20-3	
Phenanthrene	2.5	mg/kg	0.088	0.044	4	05/06/16 09:18	05/06/16 11:15	85-01-8	
Pyrene	2.7	mg/kg	0.088	0.044	4	05/06/16 09:18	05/06/16 11:15	129-00-0	
<b>Surrogates</b>									
2-Fluorobiphenyl (S)	49	%	26-130		4	05/06/16 09:18	05/06/16 11:15	321-60-8	
Terphenyl-d14 (S)	61	%	10-130		4	05/06/16 09:18	05/06/16 11:15	1718-51-0	
<b>8260 MSV Med Level Normal List</b>		Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B							
Benzene	<0.025	mg/kg	0.060	0.025	1	04/27/16 07:00	04/27/16 09:44	71-43-2	W
Bromobenzene	<0.025	mg/kg	0.060	0.025	1	04/27/16 07:00	04/27/16 09:44	108-86-1	W
Bromochloromethane	<0.025	mg/kg	0.060	0.025	1	04/27/16 07:00	04/27/16 09:44	74-97-5	W
Bromodichloromethane	<0.025	mg/kg	0.060	0.025	1	04/27/16 07:00	04/27/16 09:44	75-27-4	W
Bromoform	<0.025	mg/kg	0.060	0.025	1	04/27/16 07:00	04/27/16 09:44	75-25-2	W
Bromomethane	<0.070	mg/kg	0.25	0.070	1	04/27/16 07:00	04/27/16 09:44	74-83-9	W
n-Butylbenzene	<0.025	mg/kg	0.060	0.025	1	04/27/16 07:00	04/27/16 09:44	104-51-8	W
sec-Butylbenzene	<0.025	mg/kg	0.060	0.025	1	04/27/16 07:00	04/27/16 09:44	135-98-8	W
tert-Butylbenzene	<0.025	mg/kg	0.060	0.025	1	04/27/16 07:00	04/27/16 09:44	98-06-6	W

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## ANALYTICAL RESULTS

Project: 2404006 BROWN DEER

Pace Project No.: 40131320

Sample: SS-1 (0.5-1.5) Lab ID: 40131320011 Collected: 04/22/16 12:50 Received: 04/25/16 14:56 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
<b>8260 MSV Med Level Normal List</b>	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
Carbon tetrachloride	<0.025	mg/kg	0.060	0.025	1	04/27/16 07:00	04/27/16 09:44	56-23-5	W
Chlorobenzene	<0.025	mg/kg	0.060	0.025	1	04/27/16 07:00	04/27/16 09:44	108-90-7	W
Chloroethane	<0.067	mg/kg	0.25	0.067	1	04/27/16 07:00	04/27/16 09:44	75-00-3	W
Chloroform	<0.046	mg/kg	0.25	0.046	1	04/27/16 07:00	04/27/16 09:44	67-66-3	W
Chloromethane	<0.025	mg/kg	0.060	0.025	1	04/27/16 07:00	04/27/16 09:44	74-87-3	W
2-Chlorotoluene	<0.025	mg/kg	0.060	0.025	1	04/27/16 07:00	04/27/16 09:44	95-49-8	W
4-Chlorotoluene	<0.025	mg/kg	0.060	0.025	1	04/27/16 07:00	04/27/16 09:44	106-43-4	W
1,2-Dibromo-3-chloropropane	<0.091	mg/kg	0.25	0.091	1	04/27/16 07:00	04/27/16 09:44	96-12-8	W
Dibromochloromethane	<0.025	mg/kg	0.060	0.025	1	04/27/16 07:00	04/27/16 09:44	124-48-1	W
1,2-Dibromoethane (EDB)	<0.025	mg/kg	0.060	0.025	1	04/27/16 07:00	04/27/16 09:44	106-93-4	W
Dibromomethane	<0.025	mg/kg	0.060	0.025	1	04/27/16 07:00	04/27/16 09:44	74-95-3	W
1,2-Dichlorobenzene	<0.025	mg/kg	0.060	0.025	1	04/27/16 07:00	04/27/16 09:44	95-50-1	W
1,3-Dichlorobenzene	<0.025	mg/kg	0.060	0.025	1	04/27/16 07:00	04/27/16 09:44	541-73-1	W
1,4-Dichlorobenzene	<0.025	mg/kg	0.060	0.025	1	04/27/16 07:00	04/27/16 09:44	106-46-7	W
Dichlorodifluoromethane	<0.025	mg/kg	0.060	0.025	1	04/27/16 07:00	04/27/16 09:44	75-71-8	W
1,1-Dichloroethane	<0.025	mg/kg	0.060	0.025	1	04/27/16 07:00	04/27/16 09:44	75-34-3	W
1,2-Dichloroethane	<0.025	mg/kg	0.060	0.025	1	04/27/16 07:00	04/27/16 09:44	107-06-2	W
1,1-Dichloroethene	<0.025	mg/kg	0.060	0.025	1	04/27/16 07:00	04/27/16 09:44	75-35-4	W
cis-1,2-Dichloroethene	<0.025	mg/kg	0.060	0.025	1	04/27/16 07:00	04/27/16 09:44	156-59-2	W
trans-1,2-Dichloroethene	<0.025	mg/kg	0.060	0.025	1	04/27/16 07:00	04/27/16 09:44	156-60-5	W
1,2-Dichloropropane	<0.025	mg/kg	0.060	0.025	1	04/27/16 07:00	04/27/16 09:44	78-87-5	W
1,3-Dichloropropane	<0.025	mg/kg	0.060	0.025	1	04/27/16 07:00	04/27/16 09:44	142-28-9	W
2,2-Dichloropropane	<0.025	mg/kg	0.060	0.025	1	04/27/16 07:00	04/27/16 09:44	594-20-7	W
1,1-Dichloropropene	<0.025	mg/kg	0.060	0.025	1	04/27/16 07:00	04/27/16 09:44	563-58-6	W
cis-1,3-Dichloropropene	<0.025	mg/kg	0.060	0.025	1	04/27/16 07:00	04/27/16 09:44	10061-01-5	W
trans-1,3-Dichloropropene	<0.025	mg/kg	0.060	0.025	1	04/27/16 07:00	04/27/16 09:44	10061-02-6	W
Diisopropyl ether	<0.025	mg/kg	0.060	0.025	1	04/27/16 07:00	04/27/16 09:44	108-20-3	W
Ethylbenzene	<0.025	mg/kg	0.060	0.025	1	04/27/16 07:00	04/27/16 09:44	100-41-4	W
Hexachloro-1,3-butadiene	<0.025	mg/kg	0.060	0.025	1	04/27/16 07:00	04/27/16 09:44	87-68-3	W
Isopropylbenzene (Cumene)	<0.025	mg/kg	0.060	0.025	1	04/27/16 07:00	04/27/16 09:44	98-82-8	W
p-Isopropyltoluene	<0.025	mg/kg	0.060	0.025	1	04/27/16 07:00	04/27/16 09:44	99-87-6	W
Methylene Chloride	<0.025	mg/kg	0.060	0.025	1	04/27/16 07:00	04/27/16 09:44	75-09-2	W
Methyl-tert-butyl ether	<0.025	mg/kg	0.060	0.025	1	04/27/16 07:00	04/27/16 09:44	1634-04-4	W
Naphthalene	<0.040	mg/kg	0.25	0.040	1	04/27/16 07:00	04/27/16 09:44	91-20-3	W
n-Propylbenzene	<0.025	mg/kg	0.060	0.025	1	04/27/16 07:00	04/27/16 09:44	103-65-1	W
Styrene	<0.025	mg/kg	0.060	0.025	1	04/27/16 07:00	04/27/16 09:44	100-42-5	W
1,1,1,2-Tetrachloroethane	<0.025	mg/kg	0.060	0.025	1	04/27/16 07:00	04/27/16 09:44	630-20-6	W
1,1,2,2-Tetrachloroethane	<0.025	mg/kg	0.060	0.025	1	04/27/16 07:00	04/27/16 09:44	79-34-5	W
Tetrachloroethene	<0.025	mg/kg	0.060	0.025	1	04/27/16 07:00	04/27/16 09:44	127-18-4	W
Toluene	<0.025	mg/kg	0.060	0.025	1	04/27/16 07:00	04/27/16 09:44	108-88-3	W
1,2,3-Trichlorobenzene	<0.025	mg/kg	0.060	0.025	1	04/27/16 07:00	04/27/16 09:44	87-61-6	W
1,2,4-Trichlorobenzene	<0.048	mg/kg	0.25	0.048	1	04/27/16 07:00	04/27/16 09:44	120-82-1	W
1,1,1-Trichloroethane	<0.025	mg/kg	0.060	0.025	1	04/27/16 07:00	04/27/16 09:44	71-55-6	W
1,1,2-Trichloroethane	<0.025	mg/kg	0.060	0.025	1	04/27/16 07:00	04/27/16 09:44	79-00-5	W
Trichloroethene	<0.025	mg/kg	0.060	0.025	1	04/27/16 07:00	04/27/16 09:44	79-01-6	W

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## ANALYTICAL RESULTS

Project: 2404006 BROWN DEER

Pace Project No.: 40131320

Sample: SS-1 (0.5-1.5) Lab ID: 40131320011 Collected: 04/22/16 12:50 Received: 04/25/16 14:56 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
<b>8260 MSV Med Level Normal List</b>	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
Trichlorofluoromethane	<0.025	mg/kg	0.060	0.025	1	04/27/16 07:00	04/27/16 09:44	75-69-4	W
1,2,3-Trichloropropane	<0.025	mg/kg	0.060	0.025	1	04/27/16 07:00	04/27/16 09:44	96-18-4	W
1,2,4-Trimethylbenzene	<0.025	mg/kg	0.060	0.025	1	04/27/16 07:00	04/27/16 09:44	95-63-6	W
1,3,5-Trimethylbenzene	<0.025	mg/kg	0.060	0.025	1	04/27/16 07:00	04/27/16 09:44	108-67-8	W
Vinyl chloride	<0.025	mg/kg	0.060	0.025	1	04/27/16 07:00	04/27/16 09:44	75-01-4	W
m&p-Xylene	<0.050	mg/kg	0.12	0.050	1	04/27/16 07:00	04/27/16 09:44	179601-23-1	W
o-Xylene	<0.025	mg/kg	0.060	0.025	1	04/27/16 07:00	04/27/16 09:44	95-47-6	W
<b>Surrogates</b>									
Dibromofluoromethane (S)	94	%	53-165		1	04/27/16 07:00	04/27/16 09:44	1868-53-7	
Toluene-d8 (S)	95	%	54-163		1	04/27/16 07:00	04/27/16 09:44	2037-26-5	
4-Bromofluorobenzene (S)	81	%	48-138		1	04/27/16 07:00	04/27/16 09:44	460-00-4	
<b>Percent Moisture</b>	Analytical Method: ASTM D2974-87								
Percent Moisture	24.2	%	0.10	0.10	1			05/05/16 17:05	

Sample: TW-1 / GP-1 Lab ID: 40131320012 Collected: 04/22/16 13:00 Received: 04/25/16 14:56 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8082 GCS PCB</b>	Analytical Method: EPA 8082 Preparation Method: EPA 3510								
PCB-1016 (Aroclor 1016)	<0.26	ug/L	0.52	0.26	1	04/27/16 08:30	04/28/16 22:21	12674-11-2	
PCB-1221 (Aroclor 1221)	<0.26	ug/L	0.52	0.26	1	04/27/16 08:30	04/28/16 22:21	11104-28-2	
PCB-1232 (Aroclor 1232)	<0.26	ug/L	0.52	0.26	1	04/27/16 08:30	04/28/16 22:21	11141-16-5	
PCB-1242 (Aroclor 1242)	<0.26	ug/L	0.52	0.26	1	04/27/16 08:30	04/28/16 22:21	53469-21-9	
PCB-1248 (Aroclor 1248)	<0.26	ug/L	0.52	0.26	1	04/27/16 08:30	04/28/16 22:21	12672-29-6	
PCB-1254 (Aroclor 1254)	<0.26	ug/L	0.52	0.26	1	04/27/16 08:30	04/28/16 22:21	11097-69-1	
PCB-1260 (Aroclor 1260)	<0.26	ug/L	0.52	0.26	1	04/27/16 08:30	04/28/16 22:21	11096-82-5	
PCB, Total	<0.26	ug/L	0.52	0.26	1	04/27/16 08:30	04/28/16 22:21	1336-36-3	
<b>Surrogates</b>									
Tetrachloro-m-xylene (S)	78	%	39-151		1	04/27/16 08:30	04/28/16 22:21	877-09-8	
Decachlorobiphenyl (S)	74	%	36-140		1	04/27/16 08:30	04/28/16 22:21	2051-24-3	
<b>8270 MSSV PAH by HVI</b>	Analytical Method: EPA 8270 by HVI Preparation Method: EPA 3510								
Acenaphthene	<0.028	ug/L	0.28	0.028	5	04/29/16 08:20	04/29/16 16:17	83-32-9	
Acenaphthylene	<0.027	ug/L	0.28	0.027	5	04/29/16 08:20	04/29/16 16:17	208-96-8	
Anthracene	<0.022	ug/L	0.28	0.022	5	04/29/16 08:20	04/29/16 16:17	120-12-7	
Benzo(a)anthracene	<0.028	ug/L	0.28	0.028	5	04/29/16 08:20	04/29/16 16:17	56-55-3	
Benzo(a)pyrene	<0.025	ug/L	0.28	0.025	5	04/29/16 08:20	04/29/16 16:17	50-32-8	
Benzo(b)fluoranthene	<0.030	ug/L	0.28	0.030	5	04/29/16 08:20	04/29/16 16:17	205-99-2	
Benzo(g,h,i)perylene	<0.019	ug/L	0.28	0.019	5	04/29/16 08:20	04/29/16 16:17	191-24-2	
Benzo(k)fluoranthene	<0.031	ug/L	0.28	0.031	5	04/29/16 08:20	04/29/16 16:17	207-08-9	
Chrysene	0.027J	ug/L	0.28	0.024	5	04/29/16 08:20	04/29/16 16:17	218-01-9	
Dibenz(a,h)anthracene	<0.031	ug/L	0.28	0.031	5	04/29/16 08:20	04/29/16 16:17	53-70-3	

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## ANALYTICAL RESULTS

Project: 2404006 BROWN DEER

Pace Project No.: 40131320

Sample: TW-1 / GP-1	Lab ID: 40131320012	Collected: 04/22/16 13:00	Received: 04/25/16 14:56	Matrix: Water					
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270 MSSV PAH by HVI</b>	Analytical Method: EPA 8270 by HVI Preparation Method: EPA 3510								
Fluoranthene	<b>0.096J</b>	ug/L	0.28	0.052	5	04/29/16 08:20	04/29/16 16:17	206-44-0	B
Fluorene	<0.022	ug/L	0.28	0.022	5	04/29/16 08:20	04/29/16 16:17	86-73-7	
Indeno(1,2,3-cd)pyrene	<0.020	ug/L	0.28	0.020	5	04/29/16 08:20	04/29/16 16:17	193-39-5	
1-Methylnaphthalene	<0.017	ug/L	0.28	0.017	5	04/29/16 08:20	04/29/16 16:17	90-12-0	
2-Methylnaphthalene	<0.015	ug/L	0.28	0.015	5	04/29/16 08:20	04/29/16 16:17	91-57-6	
Naphthalene	<0.025	ug/L	0.28	0.025	5	04/29/16 08:20	04/29/16 16:17	91-20-3	D3
Phenanthrene	0.13J	ug/L	0.28	0.043	5	04/29/16 08:20	04/29/16 16:17	85-01-8	
Pyrene	0.12J	ug/L	0.28	0.043	5	04/29/16 08:20	04/29/16 16:17	129-00-0	B
<b>Surrogates</b>									
2-Fluorobiphenyl (S)	43	%	25-130		5	04/29/16 08:20	04/29/16 16:17	321-60-8	
Terphenyl-d14 (S)	25	%	13-158		5	04/29/16 08:20	04/29/16 16:17	1718-51-0	
<b>8260 MSV</b>	Analytical Method: EPA 8260								
Benzene	<0.50	ug/L	1.0	0.50	1		05/04/16 08:58	71-43-2	
Bromobenzene	<0.23	ug/L	1.0	0.23	1		05/04/16 08:58	108-86-1	
Bromochloromethane	<0.34	ug/L	1.0	0.34	1		05/04/16 08:58	74-97-5	
Bromodichloromethane	<0.50	ug/L	1.0	0.50	1		05/04/16 08:58	75-27-4	
Bromoform	<0.50	ug/L	1.0	0.50	1		05/04/16 08:58	75-25-2	
Bromomethane	<2.4	ug/L	5.0	2.4	1		05/04/16 08:58	74-83-9	
n-Butylbenzene	<0.50	ug/L	1.0	0.50	1		05/04/16 08:58	104-51-8	
sec-Butylbenzene	<2.2	ug/L	5.0	2.2	1		05/04/16 08:58	135-98-8	
tert-Butylbenzene	<0.18	ug/L	1.0	0.18	1		05/04/16 08:58	98-06-6	
Carbon tetrachloride	<0.50	ug/L	1.0	0.50	1		05/04/16 08:58	56-23-5	
Chlorobenzene	<0.50	ug/L	1.0	0.50	1		05/04/16 08:58	108-90-7	
Chloroethane	<0.37	ug/L	1.0	0.37	1		05/04/16 08:58	75-00-3	
Chloroform	<2.5	ug/L	5.0	2.5	1		05/04/16 08:58	67-66-3	
Chloromethane	<0.50	ug/L	1.0	0.50	1		05/04/16 08:58	74-87-3	
2-Chlorotoluene	<0.50	ug/L	1.0	0.50	1		05/04/16 08:58	95-49-8	
4-Chlorotoluene	<0.21	ug/L	1.0	0.21	1		05/04/16 08:58	106-43-4	
1,2-Dibromo-3-chloropropane	<2.2	ug/L	5.0	2.2	1		05/04/16 08:58	96-12-8	
Dibromochloromethane	<0.50	ug/L	1.0	0.50	1		05/04/16 08:58	124-48-1	
1,2-Dibromoethane (EDB)	<0.18	ug/L	1.0	0.18	1		05/04/16 08:58	106-93-4	
Dibromomethane	<0.43	ug/L	1.0	0.43	1		05/04/16 08:58	74-95-3	
1,2-Dichlorobenzene	<0.50	ug/L	1.0	0.50	1		05/04/16 08:58	95-50-1	
1,3-Dichlorobenzene	<0.50	ug/L	1.0	0.50	1		05/04/16 08:58	541-73-1	
1,4-Dichlorobenzene	<0.50	ug/L	1.0	0.50	1		05/04/16 08:58	106-46-7	
Dichlorodifluoromethane	<0.22	ug/L	1.0	0.22	1		05/04/16 08:58	75-71-8	
1,1-Dichloroethane	<0.24	ug/L	1.0	0.24	1		05/04/16 08:58	75-34-3	
1,2-Dichloroethane	<0.17	ug/L	1.0	0.17	1		05/04/16 08:58	107-06-2	
1,1-Dichloroethene	<0.41	ug/L	1.0	0.41	1		05/04/16 08:58	75-35-4	
cis-1,2-Dichloroethene	<0.26	ug/L	1.0	0.26	1		05/04/16 08:58	156-59-2	
trans-1,2-Dichloroethene	<0.26	ug/L	1.0	0.26	1		05/04/16 08:58	156-60-5	
1,2-Dichloropropane	<0.23	ug/L	1.0	0.23	1		05/04/16 08:58	78-87-5	
1,3-Dichloropropane	<0.50	ug/L	1.0	0.50	1		05/04/16 08:58	142-28-9	
2,2-Dichloropropane	<0.48	ug/L	1.0	0.48	1		05/04/16 08:58	594-20-7	
1,1-Dichloropropene	<0.44	ug/L	1.0	0.44	1		05/04/16 08:58	563-58-6	

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: 2404006 BROWN DEER

Pace Project No.: 40131320

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**Sample: TW-1 / GP-1      Lab ID: 40131320012      Collected: 04/22/16 13:00      Received: 04/25/16 14:56      Matrix: Water**


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Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>	Analytical Method: EPA 8260								
cis-1,3-Dichloropropene	<0.50	ug/L	1.0	0.50	1		05/04/16 08:58	10061-01-5	
trans-1,3-Dichloropropene	<0.23	ug/L	1.0	0.23	1		05/04/16 08:58	10061-02-6	
Diisopropyl ether	<0.50	ug/L	1.0	0.50	1		05/04/16 08:58	108-20-3	
Ethylbenzene	<0.50	ug/L	1.0	0.50	1		05/04/16 08:58	100-41-4	
Hexachloro-1,3-butadiene	<2.1	ug/L	5.0	2.1	1		05/04/16 08:58	87-68-3	
Isopropylbenzene (Cumene)	<0.14	ug/L	1.0	0.14	1		05/04/16 08:58	98-82-8	
p-Isopropyltoluene	<0.50	ug/L	1.0	0.50	1		05/04/16 08:58	99-87-6	
Methylene Chloride	<0.23	ug/L	1.0	0.23	1		05/04/16 08:58	75-09-2	
Methyl-tert-butyl ether	<0.17	ug/L	1.0	0.17	1		05/04/16 08:58	1634-04-4	
Naphthalene	<2.5	ug/L	5.0	2.5	1		05/04/16 08:58	91-20-3	
n-Propylbenzene	<0.50	ug/L	1.0	0.50	1		05/04/16 08:58	103-65-1	
Styrene	<0.50	ug/L	1.0	0.50	1		05/04/16 08:58	100-42-5	
1,1,1,2-Tetrachloroethane	<0.18	ug/L	1.0	0.18	1		05/04/16 08:58	630-20-6	
1,1,2,2-Tetrachloroethane	<0.25	ug/L	1.0	0.25	1		05/04/16 08:58	79-34-5	
Tetrachloroethene	<0.50	ug/L	1.0	0.50	1		05/04/16 08:58	127-18-4	
Toluene	<0.50	ug/L	1.0	0.50	1		05/04/16 08:58	108-88-3	
1,2,3-Trichlorobenzene	<2.1	ug/L	5.0	2.1	1		05/04/16 08:58	87-61-6	
1,2,4-Trichlorobenzene	<2.2	ug/L	5.0	2.2	1		05/04/16 08:58	120-82-1	
1,1,1-Trichloroethane	<0.50	ug/L	1.0	0.50	1		05/04/16 08:58	71-55-6	
1,1,2-Trichloroethane	<0.20	ug/L	1.0	0.20	1		05/04/16 08:58	79-00-5	
Trichloroethene	<0.33	ug/L	1.0	0.33	1		05/04/16 08:58	79-01-6	
Trichlorofluoromethane	<0.18	ug/L	1.0	0.18	1		05/04/16 08:58	75-69-4	
1,2,3-Trichloropropane	<0.50	ug/L	1.0	0.50	1		05/04/16 08:58	96-18-4	
1,2,4-Trimethylbenzene	<0.50	ug/L	1.0	0.50	1		05/04/16 08:58	95-63-6	
1,3,5-Trimethylbenzene	<0.50	ug/L	1.0	0.50	1		05/04/16 08:58	108-67-8	
Vinyl chloride	<0.18	ug/L	1.0	0.18	1		05/04/16 08:58	75-01-4	
m&p-Xylene	<1.0	ug/L	2.0	1.0	1		05/04/16 08:58	179601-23-1	
o-Xylene	<0.50	ug/L	1.0	0.50	1		05/04/16 08:58	95-47-6	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	87	%	70-130		1		05/04/16 08:58	460-00-4	
Dibromofluoromethane (S)	115	%	70-130		1		05/04/16 08:58	1868-53-7	
Toluene-d8 (S)	95	%	70-130		1		05/04/16 08:58	2037-26-5	

## REPORT OF LABORATORY ANALYSIS

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## QUALITY CONTROL DATA

Project: 2404006 BROWN DEER

Pace Project No.: 40131320

QC Batch: MSV/33162 Analysis Method: EPA 8260  
QC Batch Method: EPA 5035/5030B Analysis Description: 8260 MSV Med Level Normal List

Associated Lab Samples: 40131320001, 40131320002, 40131320003, 40131320004, 40131320005, 40131320006, 40131320007,  
40131320008, 40131320009, 40131320010

METHOD BLANK:

1326073

Matrix: Solid

Associated Lab Samples: 40131320001, 40131320002, 40131320003, 40131320004, 40131320005, 40131320006, 40131320007,  
40131320008, 40131320009, 40131320010

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	mg/kg	<0.014	0.050	04/27/16 16:38	
1,1,1-Trichloroethane	mg/kg	<0.014	0.050	04/27/16 16:38	
1,1,2,2-Tetrachloroethane	mg/kg	<0.018	0.050	04/27/16 16:38	
1,1,2-Trichloroethane	mg/kg	<0.020	0.050	04/27/16 16:38	
1,1-Dichloroethane	mg/kg	<0.018	0.050	04/27/16 16:38	
1,1-Dichloroethene	mg/kg	<0.018	0.050	04/27/16 16:38	
1,1-Dichloropropene	mg/kg	<0.014	0.050	04/27/16 16:38	
1,2,3-Trichlorobenzene	mg/kg	<0.017	0.050	04/27/16 16:38	
1,2,3-Trichloropropane	mg/kg	<0.022	0.050	04/27/16 16:38	
1,2,4-Trichlorobenzene	mg/kg	<0.048	0.25	04/27/16 16:38	
1,2,4-Trimethylbenzene	mg/kg	<0.012	0.050	04/27/16 16:38	
1,2-Dibromo-3-chloropropane	mg/kg	<0.091	0.25	04/27/16 16:38	
1,2-Dibromoethane (EDB)	mg/kg	<0.015	0.050	04/27/16 16:38	
1,2-Dichlorobenzene	mg/kg	<0.016	0.050	04/27/16 16:38	
1,2-Dichloroethane	mg/kg	<0.015	0.050	04/27/16 16:38	
1,2-Dichloropropane	mg/kg	<0.017	0.050	04/27/16 16:38	
1,3,5-Trimethylbenzene	mg/kg	<0.014	0.050	04/27/16 16:38	
1,3-Dichlorobenzene	mg/kg	<0.013	0.050	04/27/16 16:38	
1,3-Dichloropropane	mg/kg	<0.012	0.050	04/27/16 16:38	
1,4-Dichlorobenzene	mg/kg	<0.016	0.050	04/27/16 16:38	
2,2-Dichloropropane	mg/kg	<0.013	0.050	04/27/16 16:38	
2-Chlorotoluene	mg/kg	<0.016	0.050	04/27/16 16:38	
4-Chlorotoluene	mg/kg	<0.013	0.050	04/27/16 16:38	
Benzene	mg/kg	<0.0092	0.020	04/27/16 16:38	
Bromobenzene	mg/kg	<0.021	0.050	04/27/16 16:38	
Bromochloromethane	mg/kg	<0.021	0.050	04/27/16 16:38	
Bromodichloromethane	mg/kg	<0.0098	0.050	04/27/16 16:38	
Bromoform	mg/kg	<0.020	0.050	04/27/16 16:38	
Bromomethane	mg/kg	<0.070	0.25	04/27/16 16:38	
Carbon tetrachloride	mg/kg	<0.012	0.050	04/27/16 16:38	
Chlorobenzene	mg/kg	<0.015	0.050	04/27/16 16:38	
Chloroethane	mg/kg	<0.067	0.25	04/27/16 16:38	
Chloroform	mg/kg	<0.046	0.25	04/27/16 16:38	
Chloromethane	mg/kg	<0.020	0.050	04/27/16 16:38	
cis-1,2-Dichloroethene	mg/kg	<0.017	0.050	04/27/16 16:38	
cis-1,3-Dichloropropene	mg/kg	<0.017	0.050	04/27/16 16:38	
Dibromochloromethane	mg/kg	<0.018	0.050	04/27/16 16:38	
Dibromomethane	mg/kg	<0.019	0.050	04/27/16 16:38	
Dichlorodifluoromethane	mg/kg	<0.012	0.050	04/27/16 16:38	
Diisopropyl ether	mg/kg	<0.018	0.050	04/27/16 16:38	

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## QUALITY CONTROL DATA

Project: 2404006 BROWN DEER

Pace Project No.: 40131320

METHOD BLANK: 1326073

Matrix: Solid

Associated Lab Samples: 40131320001, 40131320002, 40131320003, 40131320004, 40131320005, 40131320006, 40131320007,  
40131320008, 40131320009, 40131320010

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Ethylbenzene	mg/kg	<0.012	0.050	04/27/16 16:38	
Hexachloro-1,3-butadiene	mg/kg	<0.024	0.050	04/27/16 16:38	
Isopropylbenzene (Cumene)	mg/kg	<0.013	0.050	04/27/16 16:38	
m&p-Xylene	mg/kg	<0.034	0.10	04/27/16 16:38	
Methyl-tert-butyl ether	mg/kg	<0.013	0.050	04/27/16 16:38	
Methylene Chloride	mg/kg	<0.016	0.050	04/27/16 16:38	
n-Butylbenzene	mg/kg	<0.011	0.050	04/27/16 16:38	
n-Propylbenzene	mg/kg	<0.012	0.050	04/27/16 16:38	
Naphthalene	mg/kg	<0.040	0.25	04/27/16 16:38	
o-Xylene	mg/kg	<0.014	0.050	04/27/16 16:38	
p-Isopropyltoluene	mg/kg	<0.012	0.050	04/27/16 16:38	
sec-Butylbenzene	mg/kg	<0.012	0.050	04/27/16 16:38	
Styrene	mg/kg	<0.0090	0.050	04/27/16 16:38	
tert-Butylbenzene	mg/kg	<0.0095	0.050	04/27/16 16:38	
Tetrachloroethene	mg/kg	<0.013	0.050	04/27/16 16:38	
Toluene	mg/kg	<0.011	0.050	04/27/16 16:38	
trans-1,2-Dichloroethene	mg/kg	<0.016	0.050	04/27/16 16:38	
trans-1,3-Dichloropropene	mg/kg	<0.014	0.050	04/27/16 16:38	
Trichloroethene	mg/kg	<0.024	0.050	04/27/16 16:38	
Trichlorofluoromethane	mg/kg	<0.025	0.050	04/27/16 16:38	
Vinyl chloride	mg/kg	<0.021	0.050	04/27/16 16:38	
4-Bromofluorobenzene (S)	%	89	48-138	04/27/16 16:38	
Dibromofluoromethane (S)	%	106	53-165	04/27/16 16:38	
Toluene-d8 (S)	%	104	54-163	04/27/16 16:38	

LABORATORY CONTROL SAMPLE: 1326074

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	mg/kg	2.5	2.4	95	70-130	
1,1,2,2-Tetrachloroethane	mg/kg	2.5	2.6	102	70-130	
1,1,2-Trichloroethane	mg/kg	2.5	2.5	100	70-130	
1,1-Dichloroethane	mg/kg	2.5	2.3	92	70-133	
1,1-Dichloroethene	mg/kg	2.5	2.1	84	70-130	
1,2,4-Trichlorobenzene	mg/kg	2.5	2.3	94	70-130	
1,2-Dibromo-3-chloropropane	mg/kg	2.5	2.5	99	50-150	
1,2-Dibromoethane (EDB)	mg/kg	2.5	2.5	101	70-130	
1,2-Dichlorobenzene	mg/kg	2.5	2.3	94	70-130	
1,2-Dichloroethane	mg/kg	2.5	2.5	100	70-138	
1,2-Dichloropropane	mg/kg	2.5	2.5	99	70-130	
1,3-Dichlorobenzene	mg/kg	2.5	2.3	92	70-130	
1,4-Dichlorobenzene	mg/kg	2.5	2.4	95	70-130	
Benzene	mg/kg	2.5	2.5	99	70-130	
Bromodichloromethane	mg/kg	2.5	2.5	101	70-130	

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## QUALITY CONTROL DATA

Project: 2404006 BROWN DEER

Pace Project No.: 40131320

LABORATORY CONTROL SAMPLE: 1326074

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Bromoform	mg/kg	2.5	2.3	90	68-130	
Bromomethane	mg/kg	2.5	2.0	81	25-163	
Carbon tetrachloride	mg/kg	2.5	2.4	96	70-130	
Chlorobenzene	mg/kg	2.5	2.4	97	70-130	
Chloroethane	mg/kg	2.5	2.2	89	34-151	
Chloroform	mg/kg	2.5	2.3	94	70-130	
Chloromethane	mg/kg	2.5	1.6	66	52-130	
cis-1,2-Dichloroethene	mg/kg	2.5	2.3	91	70-130	
cis-1,3-Dichloropropene	mg/kg	2.5	2.3	94	70-130	
Dibromochloromethane	mg/kg	2.5	2.6	104	70-130	
Dichlorodifluoromethane	mg/kg	2.5	1.2	48	27-150	
Ethylbenzene	mg/kg	2.5	2.5	101	70-130	
Isopropylbenzene (Cumene)	mg/kg	2.5	2.4	95	70-130	
m&p-Xylene	mg/kg	5	5.2	104	70-130	
Methyl-tert-butyl ether	mg/kg	2.5	2.5	101	70-130	
Methylene Chloride	mg/kg	2.5	2.4	97	70-131	
o-Xylene	mg/kg	2.5	2.5	100	70-130	
Styrene	mg/kg	2.5	2.4	96	70-130	
Tetrachloroethene	mg/kg	2.5	2.6	103	70-130	
Toluene	mg/kg	2.5	2.6	103	70-130	
trans-1,2-Dichloroethene	mg/kg	2.5	2.2	87	70-130	
trans-1,3-Dichloropropene	mg/kg	2.5	2.6	103	70-130	
Trichloroethene	mg/kg	2.5	2.5	100	70-130	
Trichlorofluoromethane	mg/kg	2.5	2.0	82	50-150	
Vinyl chloride	mg/kg	2.5	1.8	74	57-130	
4-Bromofluorobenzene (S)	%			95	48-138	
Dibromofluoromethane (S)	%			96	53-165	
Toluene-d8 (S)	%			102	54-163	

MATRIX SPIKE &amp; MATRIX SPIKE DUPLICATE: 1326075      1326076

Parameter	Units	MS		MSD		MS Result	MS % Rec	MSD Result	MSD % Rec	% Rec Limits		Max	
		40131320002	Spike Conc.	Spike Conc.	MSD					RPD	RPD	Qual	
1,1,1-Trichloroethane	mg/kg	<0.025	1.4	1.4	1.3	1.2	87	82	70-130	5	20		
1,1,2,2-Tetrachloroethane	mg/kg	<0.025	1.4	1.4	1.5	1.5	99	102	70-130	4	20		
1,1,2-Trichloroethane	mg/kg	<0.025	1.4	1.4	1.4	1.4	94	96	70-130	2	20		
1,1-Dichloroethane	mg/kg	<0.025	1.4	1.4	1.3	1.2	91	84	64-133	8	20		
1,1-Dichloroethene	mg/kg	<0.025	1.4	1.4	1.1	0.91	75	62	56-130	20	24		
1,2,4-Trichlorobenzene	mg/kg	<0.048	1.4	1.4	1.4	1.3	98	92	70-130	6	20		
1,2-Dibromo-3-chloropropane	mg/kg	<0.091	1.4	1.4	1.5	1.4	100	92	50-150	8	20		
1,2-Dibromoethane (EDB)	mg/kg	<0.025	1.4	1.4	1.5	1.4	101	98	70-130	3	20		
1,2-Dichlorobenzene	mg/kg	<0.025	1.4	1.4	1.4	1.3	93	91	70-130	2	20		
1,2-Dichloroethane	mg/kg	<0.025	1.4	1.4	1.5	1.3	102	91	70-138	11	20		
1,2-Dichloropropane	mg/kg	<0.025	1.4	1.4	1.4	1.4	97	94	70-130	3	20		

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## REPORT OF LABORATORY ANALYSIS

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## QUALITY CONTROL DATA

Project: 2404006 BROWN DEER

Pace Project No.: 40131320

Parameter	Units	40131320002		MS		MSD		1326076		Max			
		Result	Spike Conc.	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec		RPD	RPD	Qual
									Limits				
1,3-Dichlorobenzene	mg/kg	<0.025	1.4	1.4	1.4	1.3	93	89	70-130	4	20		
1,4-Dichlorobenzene	mg/kg	<0.025	1.4	1.4	1.4	1.4	95	94	70-130	1	20		
Benzene	mg/kg	<0.025	1.4	1.4	1.4	1.3	97	90	70-130	8	20		
Bromodichloromethane	mg/kg	<0.025	1.4	1.4	1.4	1.4	97	93	70-130	4	20		
Bromoform	mg/kg	<0.025	1.4	1.4	1.4	1.4	97	92	65-130	5	20		
Bromomethane	mg/kg	<0.070	1.4	1.4	1.1	0.93	74	63	11-163	15	21		
Carbon tetrachloride	mg/kg	<0.025	1.4	1.4	1.3	1.2	87	81	70-130	8	20		
Chlorobenzene	mg/kg	<0.025	1.4	1.4	1.4	1.4	98	93	70-130	5	20		
Chloroethane	mg/kg	<0.067	1.4	1.4	0.83	0.80	56	54	17-151	3	20		
Chloroform	mg/kg	<0.046	1.4	1.4	1.3	1.3	91	87	70-130	4	20		
Chloromethane	mg/kg	<0.025	1.4	1.4	0.71	0.64	48	43	13-130	10	20		
cis-1,2-Dichloroethene	mg/kg	<0.025	1.4	1.4	1.3	1.2	87	81	70-130	7	20		
cis-1,3-Dichloropropene	mg/kg	<0.025	1.4	1.4	1.3	1.3	90	87	70-130	3	20		
Dibromochloromethane	mg/kg	<0.025	1.4	1.4	1.4	1.4	98	97	70-130	1	20		
Dichlorodifluoromethane	mg/kg	<0.025	1.4	1.4	0.31	0.29	21	20	10-150	7	21		
Ethylbenzene	mg/kg	<0.025	1.4	1.4	1.4	1.3	94	88	70-130	6	20		
Isopropylbenzene (Cumene)	mg/kg	<0.025	1.4	1.4	1.3	1.2	88	84	70-130	5	20		
m,p-Xylene	mg/kg	<0.050	2.9	2.9	2.9	2.7	97	93	70-130	4	20		
Methyl-tert-butyl ether	mg/kg	<0.025	1.4	1.4	1.4	1.4	98	96	70-130	1	20		
Methylene Chloride	mg/kg	<0.025	1.4	1.4	1.3	1.2	89	84	70-131	6	20		
o-Xylene	mg/kg	<0.025	1.4	1.4	1.4	1.3	93	90	70-130	3	20		
Styrene	mg/kg	<0.025	1.4	1.4	1.4	1.4	96	92	70-130	4	20		
Tetrachloroethene	mg/kg	<0.025	1.4	1.4	1.4	1.3	94	86	70-130	8	20		
Toluene	mg/kg	<0.025	1.4	1.4	1.5	1.4	101	95	70-130	6	20		
trans-1,2-Dichloroethene	mg/kg	<0.025	1.4	1.4	1.2	1.1	84	78	70-130	7	20		
trans-1,3-Dichloropropene	mg/kg	<0.025	1.4	1.4	1.5	1.4	99	95	70-130	3	20		
Trichloroethene	mg/kg	<0.025	1.4	1.4	1.4	1.3	96	89	70-130	7	20		
Trichlorofluoromethane	mg/kg	<0.025	1.4	1.4	1.1	0.87	75	59	40-150	24	31		
Vinyl chloride	mg/kg	<0.025	1.4	1.4	0.83	0.76	56	52	26-130	8	20		
4-Bromofluorobenzene (S)	%						92	92	48-138				
Dibromofluoromethane (S)	%						98	94	53-165				
Toluene-d8 (S)	%						100	98	54-163				

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## REPORT OF LABORATORY ANALYSIS

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## QUALITY CONTROL DATA

Project: 2404006 BROWN DEER

Pace Project No.: 40131320

QC Batch:	MSV/33172	Analysis Method:	EPA 8260
QC Batch Method:	EPA 5035/5030B	Analysis Description:	8260 MSV Med Level Normal List
Associated Lab Samples:	40131320011		

METHOD BLANK: 1326464 Matrix: Solid

Associated Lab Samples: 40131320011

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	mg/kg	<0.014	0.050	04/27/16 07:38	
1,1,1-Trichloroethane	mg/kg	<0.014	0.050	04/27/16 07:38	
1,1,2,2-Tetrachloroethane	mg/kg	<0.018	0.050	04/27/16 07:38	
1,1,2-Trichloroethane	mg/kg	<0.020	0.050	04/27/16 07:38	
1,1-Dichloroethane	mg/kg	<0.018	0.050	04/27/16 07:38	
1,1-Dichloroethene	mg/kg	<0.018	0.050	04/27/16 07:38	
1,1-Dichloropropene	mg/kg	<0.014	0.050	04/27/16 07:38	
1,2,3-Trichlorobenzene	mg/kg	<0.017	0.050	04/27/16 07:38	
1,2,3-Trichloropropane	mg/kg	<0.022	0.050	04/27/16 07:38	
1,2,4-Trichlorobenzene	mg/kg	<0.048	0.25	04/27/16 07:38	
1,2,4-Trimethylbenzene	mg/kg	<0.012	0.050	04/27/16 07:38	
1,2-Dibromo-3-chloropropane	mg/kg	<0.091	0.25	04/27/16 07:38	
1,2-Dibromoethane (EDB)	mg/kg	<0.015	0.050	04/27/16 07:38	
1,2-Dichlorobenzene	mg/kg	<0.016	0.050	04/27/16 07:38	
1,2-Dichloroethane	mg/kg	<0.015	0.050	04/27/16 07:38	
1,2-Dichloropropane	mg/kg	<0.017	0.050	04/27/16 07:38	
1,3,5-Trimethylbenzene	mg/kg	<0.014	0.050	04/27/16 07:38	
1,3-Dichlorobenzene	mg/kg	<0.013	0.050	04/27/16 07:38	
1,3-Dichloropropane	mg/kg	<0.012	0.050	04/27/16 07:38	
1,4-Dichlorobenzene	mg/kg	<0.016	0.050	04/27/16 07:38	
2,2-Dichloropropane	mg/kg	<0.013	0.050	04/27/16 07:38	
2-Chlorotoluene	mg/kg	<0.016	0.050	04/27/16 07:38	
4-Chlorotoluene	mg/kg	<0.013	0.050	04/27/16 07:38	
Benzene	mg/kg	<0.0092	0.020	04/27/16 07:38	
Bromobenzene	mg/kg	<0.021	0.050	04/27/16 07:38	
Bromochloromethane	mg/kg	<0.021	0.050	04/27/16 07:38	
Bromodichloromethane	mg/kg	<0.0098	0.050	04/27/16 07:38	
Bromoform	mg/kg	<0.020	0.050	04/27/16 07:38	
Bromomethane	mg/kg	<0.070	0.25	04/27/16 07:38	
Carbon tetrachloride	mg/kg	<0.012	0.050	04/27/16 07:38	
Chlorobenzene	mg/kg	<0.015	0.050	04/27/16 07:38	
Chloroethane	mg/kg	<0.067	0.25	04/27/16 07:38	
Chloroform	mg/kg	<0.046	0.25	04/27/16 07:38	
Chloromethane	mg/kg	<0.020	0.050	04/27/16 07:38	
cis-1,2-Dichloroethene	mg/kg	<0.017	0.050	04/27/16 07:38	
cis-1,3-Dichloropropene	mg/kg	<0.017	0.050	04/27/16 07:38	
Dibromochloromethane	mg/kg	<0.018	0.050	04/27/16 07:38	
Dibromomethane	mg/kg	<0.019	0.050	04/27/16 07:38	
Dichlorodifluoromethane	mg/kg	<0.012	0.050	04/27/16 07:38	
Diisopropyl ether	mg/kg	<0.018	0.050	04/27/16 07:38	
Ethylbenzene	mg/kg	<0.012	0.050	04/27/16 07:38	

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## QUALITY CONTROL DATA

Project: 2404006 BROWN DEER

Pace Project No.: 40131320

METHOD BLANK: 1326464

Matrix: Solid

Associated Lab Samples: 40131320011

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Hexachloro-1,3-butadiene	mg/kg	<0.024	0.050	04/27/16 07:38	
Isopropylbenzene (Cumene)	mg/kg	<0.013	0.050	04/27/16 07:38	
m&p-Xylene	mg/kg	<0.034	0.10	04/27/16 07:38	
Methyl-tert-butyl ether	mg/kg	<0.013	0.050	04/27/16 07:38	
Methylene Chloride	mg/kg	<0.016	0.050	04/27/16 07:38	
n-Butylbenzene	mg/kg	<0.011	0.050	04/27/16 07:38	
n-Propylbenzene	mg/kg	<0.012	0.050	04/27/16 07:38	
Naphthalene	mg/kg	<0.040	0.25	04/27/16 07:38	
o-Xylene	mg/kg	<0.014	0.050	04/27/16 07:38	
p-Isopropyltoluene	mg/kg	<0.012	0.050	04/27/16 07:38	
sec-Butylbenzene	mg/kg	<0.012	0.050	04/27/16 07:38	
Styrene	mg/kg	<0.0090	0.050	04/27/16 07:38	
tert-Butylbenzene	mg/kg	<0.0095	0.050	04/27/16 07:38	
Tetrachloroethene	mg/kg	<0.013	0.050	04/27/16 07:38	
Toluene	mg/kg	<0.011	0.050	04/27/16 07:38	
trans-1,2-Dichloroethene	mg/kg	<0.016	0.050	04/27/16 07:38	
trans-1,3-Dichloropropene	mg/kg	<0.014	0.050	04/27/16 07:38	
Trichloroethene	mg/kg	<0.024	0.050	04/27/16 07:38	
Trichlorofluoromethane	mg/kg	<0.025	0.050	04/27/16 07:38	
Vinyl chloride	mg/kg	<0.021	0.050	04/27/16 07:38	
4-Bromofluorobenzene (S)	%	88	48-138	04/27/16 07:38	
Dibromofluoromethane (S)	%	103	53-165	04/27/16 07:38	
Toluene-d8 (S)	%	102	54-163	04/27/16 07:38	

LABORATORY CONTROL SAMPLE: 1326465

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	mg/kg	2.5	2.5	99	70-130	
1,1,2,2-Tetrachloroethane	mg/kg	2.5	2.6	105	70-130	
1,1,2-Trichloroethane	mg/kg	2.5	2.6	103	70-130	
1,1-Dichloroethane	mg/kg	2.5	2.4	97	70-133	
1,1-Dichloroethene	mg/kg	2.5	2.3	90	70-130	
1,2,4-Trichlorobenzene	mg/kg	2.5	2.5	99	70-130	
1,2-Dibromo-3-chloropropane	mg/kg	2.5	2.5	98	50-150	
1,2-Dibromoethane (EDB)	mg/kg	2.5	2.6	104	70-130	
1,2-Dichlorobenzene	mg/kg	2.5	2.4	96	70-130	
1,2-Dichloroethane	mg/kg	2.5	2.6	104	70-138	
1,2-Dichloropropane	mg/kg	2.5	2.6	104	70-130	
1,3-Dichlorobenzene	mg/kg	2.5	2.4	97	70-130	
1,4-Dichlorobenzene	mg/kg	2.5	2.5	100	70-130	
Benzene	mg/kg	2.5	2.5	101	70-130	
Bromodichloromethane	mg/kg	2.5	2.6	105	70-130	
Bromoform	mg/kg	2.5	2.3	93	68-130	
Bromomethane	mg/kg	2.5	2.2	86	25-163	

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## QUALITY CONTROL DATA

Project: 2404006 BROWN DEER

Pace Project No.: 40131320

**LABORATORY CONTROL SAMPLE: 1326465**

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Carbon tetrachloride	mg/kg	2.5	2.5	101	70-130	
Chlorobenzene	mg/kg	2.5	2.5	101	70-130	
Chloroethane	mg/kg	2.5	2.4	95	34-151	
Chloroform	mg/kg	2.5	2.4	97	70-130	
Chloromethane	mg/kg	2.5	1.8	70	52-130	
cis-1,2-Dichloroethene	mg/kg	2.5	2.3	94	70-130	
cis-1,3-Dichloropropene	mg/kg	2.5	2.4	97	70-130	
Dibromochloromethane	mg/kg	2.5	2.7	108	70-130	
Dichlorodifluoromethane	mg/kg	2.5	1.3	51	27-150	
Ethylbenzene	mg/kg	2.5	2.7	106	70-130	
Isopropylbenzene (Cumene)	mg/kg	2.5	2.5	98	70-130	
m&p-Xylene	mg/kg	5	5.4	107	70-130	
Methyl-tert-butyl ether	mg/kg	2.5	2.5	99	70-130	
Methylene Chloride	mg/kg	2.5	2.5	101	70-131	
o-Xylene	mg/kg	2.5	2.6	102	70-130	
Styrene	mg/kg	2.5	2.5	99	70-130	
Tetrachloroethene	mg/kg	2.5	2.5	101	70-130	
Toluene	mg/kg	2.5	2.6	104	70-130	
trans-1,2-Dichloroethene	mg/kg	2.5	2.2	88	70-130	
trans-1,3-Dichloropropene	mg/kg	2.5	2.7	107	70-130	
Trichloroethene	mg/kg	2.5	2.6	106	70-130	
Trichlorofluoromethane	mg/kg	2.5	2.4	96	50-150	
Vinyl chloride	mg/kg	2.5	1.9	78	57-130	
4-Bromofluorobenzene (S)	%			99	48-138	
Dibromofluoromethane (S)	%			99	53-165	
Toluene-d8 (S)	%			103	54-163	

**MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1326466 1326467**

Parameter	Units	MS		MSD		MS Result	% Rec	MSD % Rec	% Rec Limits	RPD RPD	Max Qual
		40131320011	Spike Result	Spike Conc.	Conc.						
1,1,1-Trichloroethane	mg/kg	<0.025	1.6	1.6	1.4	1.4	88	86	70-130	2	20
1,1,2,2-Tetrachloroethane	mg/kg	<0.025	1.6	1.6	1.6	1.6	96	98	70-130	3	20
1,1,2-Trichloroethane	mg/kg	<0.025	1.6	1.6	1.6	1.6	96	98	70-130	1	20
1,1-Dichloroethane	mg/kg	<0.025	1.6	1.6	1.4	1.4	84	87	64-133	4	20
1,1-Dichloroethene	mg/kg	<0.025	1.6	1.6	1.3	1.2	77	73	56-130	6	24
1,2,4-Trichlorobenzene	mg/kg	<0.048	1.6	1.6	1.7	1.5	101	92	70-130	9	20
1,2-Dibromo-3-chloropropane	mg/kg	<0.091	1.6	1.6	1.6	1.5	96	89	50-150	8	20
1,2-Dibromoethane (EDB)	mg/kg	<0.025	1.6	1.6	1.7	1.7	102	102	70-130	1	20
1,2-Dichlorobenzene	mg/kg	<0.025	1.6	1.6	1.6	1.5	96	92	70-130	5	20
1,2-Dichloroethane	mg/kg	<0.025	1.6	1.6	1.7	1.6	100	95	70-138	5	20
1,2-Dichloropropane	mg/kg	<0.025	1.6	1.6	1.6	1.6	98	95	70-130	3	20
1,3-Dichlorobenzene	mg/kg	<0.025	1.6	1.6	1.6	1.5	95	90	70-130	5	20
1,4-Dichlorobenzene	mg/kg	<0.025	1.6	1.6	1.6	1.6	98	94	70-130	4	20

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## QUALITY CONTROL DATA

Project: 2404006 BROWN DEER

Pace Project No.: 40131320

Parameter	Units	40131320011		MS		MSD		1326467				
		Result	Spike Conc.	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max		
										RPD	RPD	Qual
Benzene	mg/kg	<0.025	1.6	1.6	1.6	1.5	95	92	70-130	3	20	
Bromodichloromethane	mg/kg	<0.025	1.6	1.6	1.6	1.6	99	99	70-130	1	20	
Bromoform	mg/kg	<0.025	1.6	1.6	1.6	1.6	96	98	65-130	2	20	
Bromomethane	mg/kg	<0.070	1.6	1.6	1.2	1.1	75	68	11-163	10	21	
Carbon tetrachloride	mg/kg	<0.025	1.6	1.6	1.5	1.4	91	87	70-130	4	20	
Chlorobenzene	mg/kg	<0.025	1.6	1.6	1.6	1.6	96	95	70-130	1	20	
Chloroethane	mg/kg	<0.067	1.6	1.6	0.95	0.90	57	55	17-151	5	20	
Chloroform	mg/kg	<0.046	1.6	1.6	1.6	1.5	95	90	70-130	5	20	
Chloromethane	mg/kg	<0.025	1.6	1.6	0.77	0.74	47	45	13-130	3	20	
cis-1,2-Dichloroethene	mg/kg	<0.025	1.6	1.6	1.4	1.4	87	85	70-130	3	20	
cis-1,3-Dichloropropene	mg/kg	<0.025	1.6	1.6	1.5	1.5	91	92	70-130	1	20	
Dibromochloromethane	mg/kg	<0.025	1.6	1.6	1.7	1.7	102	101	70-130	1	20	
Dichlorodifluoromethane	mg/kg	<0.025	1.6	1.6	0.37	0.34	22	20	10-150	9	21	
Ethylbenzene	mg/kg	<0.025	1.6	1.6	1.5	1.5	94	93	70-130	1	20	
Isopropylbenzene (Cumene)	mg/kg	<0.025	1.6	1.6	1.5	1.4	89	88	70-130	1	20	
m&p-Xylene	mg/kg	<0.050	3.3	3.3	3.2	3.2	98	97	70-130	1	20	
Methyl-tert-butyl ether	mg/kg	<0.025	1.6	1.6	1.6	1.6	98	95	70-130	2	20	
Methylene Chloride	mg/kg	<0.025	1.6	1.6	1.5	1.4	93	88	70-131	6	20	
o-Xylene	mg/kg	<0.025	1.6	1.6	1.6	1.6	95	95	70-130	1	20	
Styrene	mg/kg	<0.025	1.6	1.6	1.6	1.6	95	95	70-130	0	20	
Tetrachloroethene	mg/kg	<0.025	1.6	1.6	1.6	1.6	95	96	70-130	1	20	
Toluene	mg/kg	<0.025	1.6	1.6	1.6	1.6	99	99	70-130	0	20	
trans-1,2-Dichloroethene	mg/kg	<0.025	1.6	1.6	1.3	1.3	82	80	70-130	2	20	
trans-1,3-Dichloropropene	mg/kg	<0.025	1.6	1.6	1.6	1.6	99	98	70-130	1	20	
Trichloroethene	mg/kg	<0.025	1.6	1.6	1.6	1.6	96	94	70-130	2	20	
Trichlorofluoromethane	mg/kg	<0.025	1.6	1.6	1.3	1.3	77	77	40-150	0	31	
Vinyl chloride	mg/kg	<0.025	1.6	1.6	0.91	0.89	55	54	26-130	3	20	
4-Bromofluorobenzene (S)	%						91	90	48-138			
Dibromofluoromethane (S)	%						96	87	53-165			
Toluene-d8 (S)	%						95	93	54-163			

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## REPORT OF LABORATORY ANALYSIS

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## QUALITY CONTROL DATA

Project: 2404006 BROWN DEER

Pace Project No.: 40131320

QC Batch:	MSV/33267	Analysis Method:	EPA 8260
QC Batch Method:	EPA 8260	Analysis Description:	8260 MSV
Associated Lab Samples:	40131320012		

METHOD BLANK: 1329077                          Matrix: Water

Associated Lab Samples: 40131320012

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	<0.18	1.0	05/03/16 15:14	
1,1,1-Trichloroethane	ug/L	<0.50	1.0	05/03/16 15:14	
1,1,2,2-Tetrachloroethane	ug/L	<0.25	1.0	05/03/16 15:14	
1,1,2-Trichloroethane	ug/L	<0.20	1.0	05/03/16 15:14	
1,1-Dichloroethane	ug/L	<0.24	1.0	05/03/16 15:14	
1,1-Dichloroethene	ug/L	<0.41	1.0	05/03/16 15:14	
1,1-Dichloropropene	ug/L	<0.44	1.0	05/03/16 15:14	
1,2,3-Trichlorobenzene	ug/L	<2.1	5.0	05/03/16 15:14	
1,2,3-Trichloropropane	ug/L	<0.50	1.0	05/03/16 15:14	
1,2,4-Trichlorobenzene	ug/L	<2.2	5.0	05/03/16 15:14	
1,2,4-Trimethylbenzene	ug/L	<0.50	1.0	05/03/16 15:14	
1,2-Dibromo-3-chloropropane	ug/L	<2.2	5.0	05/03/16 15:14	
1,2-Dibromoethane (EDB)	ug/L	<0.18	1.0	05/03/16 15:14	
1,2-Dichlorobenzene	ug/L	<0.50	1.0	05/03/16 15:14	
1,2-Dichloroethane	ug/L	<0.17	1.0	05/03/16 15:14	
1,2-Dichloropropane	ug/L	<0.23	1.0	05/03/16 15:14	
1,3,5-Trimethylbenzene	ug/L	<0.50	1.0	05/03/16 15:14	
1,3-Dichlorobenzene	ug/L	<0.50	1.0	05/03/16 15:14	
1,3-Dichloropropane	ug/L	<0.50	1.0	05/03/16 15:14	
1,4-Dichlorobenzene	ug/L	<0.50	1.0	05/03/16 15:14	
2,2-Dichloropropane	ug/L	<0.48	1.0	05/03/16 15:14	
2-Chlorotoluene	ug/L	<0.50	1.0	05/03/16 15:14	
4-Chlorotoluene	ug/L	<0.21	1.0	05/03/16 15:14	
Benzene	ug/L	<0.50	1.0	05/03/16 15:14	
Bromobenzene	ug/L	<0.23	1.0	05/03/16 15:14	
Bromochloromethane	ug/L	<0.34	1.0	05/03/16 15:14	
Bromodichloromethane	ug/L	<0.50	1.0	05/03/16 15:14	
Bromoform	ug/L	<0.50	1.0	05/03/16 15:14	
Bromomethane	ug/L	<2.4	5.0	05/03/16 15:14	
Carbon tetrachloride	ug/L	<0.50	1.0	05/03/16 15:14	
Chlorobenzene	ug/L	<0.50	1.0	05/03/16 15:14	
Chloroethane	ug/L	<0.37	1.0	05/03/16 15:14	
Chloroform	ug/L	<2.5	5.0	05/03/16 15:14	
Chloromethane	ug/L	<0.50	1.0	05/03/16 15:14	
cis-1,2-Dichloroethene	ug/L	<0.26	1.0	05/03/16 15:14	
cis-1,3-Dichloropropene	ug/L	<0.50	1.0	05/03/16 15:14	
Dibromochloromethane	ug/L	<0.50	1.0	05/03/16 15:14	
Dibromomethane	ug/L	<0.43	1.0	05/03/16 15:14	
Dichlorodifluoromethane	ug/L	<0.22	1.0	05/03/16 15:14	
Diisopropyl ether	ug/L	<0.50	1.0	05/03/16 15:14	
Ethylbenzene	ug/L	<0.50	1.0	05/03/16 15:14	

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## QUALITY CONTROL DATA

Project: 2404006 BROWN DEER

Pace Project No.: 40131320

METHOD BLANK: 1329077

Matrix: Water

Associated Lab Samples: 40131320012

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Hexachloro-1,3-butadiene	ug/L	<2.1	5.0	05/03/16 15:14	
Isopropylbenzene (Cumene)	ug/L	<0.14	1.0	05/03/16 15:14	
m&p-Xylene	ug/L	<1.0	2.0	05/03/16 15:14	
Methyl-tert-butyl ether	ug/L	<0.17	1.0	05/03/16 15:14	
Methylene Chloride	ug/L	<0.23	1.0	05/03/16 15:14	
n-Butylbenzene	ug/L	<0.50	1.0	05/03/16 15:14	
n-Propylbenzene	ug/L	<0.50	1.0	05/03/16 15:14	
Naphthalene	ug/L	<2.5	5.0	05/03/16 15:14	
o-Xylene	ug/L	<0.50	1.0	05/03/16 15:14	
p-Isopropyltoluene	ug/L	<0.50	1.0	05/03/16 15:14	
sec-Butylbenzene	ug/L	<2.2	5.0	05/03/16 15:14	
Styrene	ug/L	<0.50	1.0	05/03/16 15:14	
tert-Butylbenzene	ug/L	<0.18	1.0	05/03/16 15:14	
Tetrachloroethene	ug/L	<0.50	1.0	05/03/16 15:14	
Toluene	ug/L	<0.50	1.0	05/03/16 15:14	
trans-1,2-Dichloroethene	ug/L	<0.26	1.0	05/03/16 15:14	
trans-1,3-Dichloropropene	ug/L	<0.23	1.0	05/03/16 15:14	
Trichloroethene	ug/L	<0.33	1.0	05/03/16 15:14	
Trichlorofluoromethane	ug/L	<0.18	1.0	05/03/16 15:14	
Vinyl chloride	ug/L	<0.18	1.0	05/03/16 15:14	
4-Bromofluorobenzene (S)	%	85	70-130	05/03/16 15:14	
Dibromofluoromethane (S)	%	113	70-130	05/03/16 15:14	
Toluene-d8 (S)	%	96	70-130	05/03/16 15:14	

LABORATORY CONTROL SAMPLE: 1329078

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	50	50.6	101	70-131	
1,1,2,2-Tetrachloroethane	ug/L	50	54.1	108	67-130	
1,1,2-Trichloroethane	ug/L	50	56.1	112	70-130	
1,1-Dichloroethane	ug/L	50	50.1	100	70-133	
1,1-Dichloroethene	ug/L	50	48.8	98	70-130	
1,2,4-Trichlorobenzene	ug/L	50	41.6	83	70-130	
1,2-Dibromo-3-chloropropane	ug/L	50	44.3	89	50-150	
1,2-Dibromoethane (EDB)	ug/L	50	50.9	102	70-130	
1,2-Dichlorobenzene	ug/L	50	50.1	100	70-130	
1,2-Dichloroethane	ug/L	50	51.3	103	70-130	
1,2-Dichloropropane	ug/L	50	57.9	116	70-130	
1,3-Dichlorobenzene	ug/L	50	48.6	97	70-130	
1,4-Dichlorobenzene	ug/L	50	51.8	104	70-130	
Benzene	ug/L	50	51.1	102	60-135	
Bromodichloromethane	ug/L	50	57.2	114	70-130	
Bromoform	ug/L	50	49.4	99	70-130	
Bromomethane	ug/L	50	37.9	76	33-130	

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## QUALITY CONTROL DATA

Project: 2404006 BROWN DEER

Pace Project No.: 40131320

LABORATORY CONTROL SAMPLE: 1329078

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Carbon tetrachloride	ug/L	50	53.4	107	70-138	
Chlorobenzene	ug/L	50	52.5	105	70-130	
Chloroethane	ug/L	50	55.6	111	51-130	
Chloroform	ug/L	50	54.2	108	70-130	
Chloromethane	ug/L	50	47.6	95	25-132	
cis-1,2-Dichloroethene	ug/L	50	45.2	90	69-130	
cis-1,3-Dichloropropene	ug/L	50	47.7	95	70-130	
Dibromochloromethane	ug/L	50	49.0	98	70-130	
Dichlorodifluoromethane	ug/L	50	30.5	61	23-130	
Ethylbenzene	ug/L	50	52.2	104	70-136	
Isopropylbenzene (Cumene)	ug/L	50	52.5	105	70-140	
m&p-Xylene	ug/L	100	109	109	70-138	
Methyl-tert-butyl ether	ug/L	50	41.7	83	66-138	
Methylene Chloride	ug/L	50	50.7	101	70-130	
o-Xylene	ug/L	50	51.4	103	70-134	
Styrene	ug/L	50	56.4	113	70-133	
Tetrachloroethene	ug/L	50	52.4	105	70-138	
Toluene	ug/L	50	53.1	106	70-130	
trans-1,2-Dichloroethene	ug/L	50	48.3	97	70-131	
trans-1,3-Dichloropropene	ug/L	50	41.7	83	69-130	
Trichloroethene	ug/L	50	55.4	111	70-130	
Trichlorofluoromethane	ug/L	50	53.7	107	50-150	
Vinyl chloride	ug/L	50	52.2	104	49-130	
4-Bromofluorobenzene (S)	%			102	70-130	
Dibromofluoromethane (S)	%			109	70-130	
Toluene-d8 (S)	%			97	70-130	

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## QUALITY CONTROL DATA

Project: 2404006 BROWN DEER

Pace Project No.: 40131320

QC Batch: OEXT/30247

Analysis Method: EPA 8082

QC Batch Method: EPA 3541

Analysis Description: 8082 GCS PCB

Associated Lab Samples: 40131320001, 40131320002, 40131320003, 40131320004, 40131320005, 40131320006, 40131320007,  
40131320008, 40131320009, 40131320010, 40131320011

METHOD BLANK: 1326024

Matrix: Solid

Associated Lab Samples: 40131320001, 40131320002, 40131320003, 40131320004, 40131320005, 40131320006, 40131320007,  
40131320008, 40131320009, 40131320010, 40131320011

Parameter	Units	Blank	Reporting	Analyzed	Qualifiers
		Result	Limit		
PCB-1016 (Aroclor 1016)	mg/kg	<0.025	0.050	04/27/16 14:55	
PCB-1221 (Aroclor 1221)	mg/kg	<0.025	0.050	04/27/16 14:55	
PCB-1232 (Aroclor 1232)	mg/kg	<0.025	0.050	04/27/16 14:55	
PCB-1242 (Aroclor 1242)	mg/kg	<0.025	0.050	04/27/16 14:55	
PCB-1248 (Aroclor 1248)	mg/kg	<0.025	0.050	04/27/16 14:55	
PCB-1254 (Aroclor 1254)	mg/kg	<0.025	0.050	04/27/16 14:55	
PCB-1260 (Aroclor 1260)	mg/kg	<0.025	0.050	04/27/16 14:55	
Decachlorobiphenyl (S)	%	92	48-130	04/27/16 14:55	
Tetrachloro-m-xylene (S)	%	87	63-130	04/27/16 14:55	

LABORATORY CONTROL SAMPLE: 1326025

Parameter	Units	Spike	LCS	LCS	% Rec	Qualifiers
		Conc.	Result	% Rec	Limits	
PCB-1016 (Aroclor 1016)	mg/kg		<0.025			
PCB-1221 (Aroclor 1221)	mg/kg		<0.025			
PCB-1232 (Aroclor 1232)	mg/kg		<0.025			
PCB-1242 (Aroclor 1242)	mg/kg		<0.025			
PCB-1248 (Aroclor 1248)	mg/kg		<0.025			
PCB-1254 (Aroclor 1254)	mg/kg		<0.025			
PCB-1260 (Aroclor 1260)	mg/kg	.5	0.49	99	55-130	
Decachlorobiphenyl (S)	%			96	48-130	
Tetrachloro-m-xylene (S)	%			89	63-130	

MATRIX SPIKE &amp; MATRIX SPIKE DUPLICATE: 1326026 1326027

Parameter	Units	MS	MSD	MS	MSD	MS	MSD	% Rec	% Rec	Max	
		40131320011	Spike	Spike	Spike	Result	Result	% Rec	% Rec	RPD	RPD
PCB-1016 (Aroclor 1016)	mg/kg	<0.033				<0.033	<0.033			20	
PCB-1221 (Aroclor 1221)	mg/kg	<0.033				<0.033	<0.033			20	
PCB-1232 (Aroclor 1232)	mg/kg	<0.033				<0.033	<0.033			20	
PCB-1242 (Aroclor 1242)	mg/kg	<0.033				<0.033	<0.033			20	
PCB-1248 (Aroclor 1248)	mg/kg	<0.033				<0.033	<0.033			20	
PCB-1254 (Aroclor 1254)	mg/kg	<0.033				<0.033	<0.033			20	
PCB-1260 (Aroclor 1260)	mg/kg	<0.033	.66	.66	0.61	0.61	92	92	40-130	0	20
Decachlorobiphenyl (S)	%						85	85	48-130		
Tetrachloro-m-xylene (S)	%						82	85	63-130		

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## QUALITY CONTROL DATA

Project: 2404006 BROWN DEER

Pace Project No.: 40131320

QC Batch:	OEXT/30256	Analysis Method:	EPA 8082
QC Batch Method:	EPA 3510	Analysis Description:	8082 GCS PCB
Associated Lab Samples:	40131320012		

METHOD BLANK: 1326215                          Matrix: Water

Associated Lab Samples: 40131320012

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
PCB-1016 (Aroclor 1016)	ug/L	<0.25	0.50	04/28/16 14:56	
PCB-1221 (Aroclor 1221)	ug/L	<0.25	0.50	04/28/16 14:56	
PCB-1232 (Aroclor 1232)	ug/L	<0.25	0.50	04/28/16 14:56	
PCB-1242 (Aroclor 1242)	ug/L	<0.25	0.50	04/28/16 14:56	
PCB-1248 (Aroclor 1248)	ug/L	<0.25	0.50	04/28/16 14:56	
PCB-1254 (Aroclor 1254)	ug/L	<0.25	0.50	04/28/16 14:56	
PCB-1260 (Aroclor 1260)	ug/L	<0.25	0.50	04/28/16 14:56	
Decachlorobiphenyl (S)	%	69	36-140	04/28/16 14:56	1q
Tetrachloro-m-xylene (S)	%	70	39-151	04/28/16 14:56	

LABORATORY CONTROL SAMPLE: 1326216

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
PCB-1016 (Aroclor 1016)	ug/L	5	4.4	88	61-130	
PCB-1221 (Aroclor 1221)	ug/L		<0.25			
PCB-1232 (Aroclor 1232)	ug/L		<0.25			
PCB-1242 (Aroclor 1242)	ug/L		<0.25			
PCB-1248 (Aroclor 1248)	ug/L		<0.25			
PCB-1254 (Aroclor 1254)	ug/L		<0.25			
PCB-1260 (Aroclor 1260)	ug/L	5	4.2	84	61-130	
Decachlorobiphenyl (S)	%			74	36-140	
Tetrachloro-m-xylene (S)	%			75	39-151	

MATRIX SPIKE &amp; MATRIX SPIKE DUPLICATE: 1326217                          1326218

Parameter	Units	MS Spike		MSD Spike		MS Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		40131158003	Result	Conc.	Conc.							
PCB-1016 (Aroclor 1016)	ug/L	ND	5.4	5.1	5.1	4.4	94	87	54-130	15	50	
PCB-1221 (Aroclor 1221)	ug/L	ND			<0.27	<0.25					50	
PCB-1232 (Aroclor 1232)	ug/L	ND			<0.27	<0.25					50	
PCB-1242 (Aroclor 1242)	ug/L	ND			<0.27	<0.25					50	
PCB-1248 (Aroclor 1248)	ug/L	ND			<0.27	<0.25					50	
PCB-1254 (Aroclor 1254)	ug/L	ND			<0.27	<0.25					50	
PCB-1260 (Aroclor 1260)	ug/L	ND	5.4	5.1	5.0	3.8	94	75	54-130	29	50	
Decachlorobiphenyl (S)	%							94	65	36-140		1q
Tetrachloro-m-xylene (S)	%							86	81	39-151		

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## QUALITY CONTROL DATA

Project: 2404006 BROWN DEER

Pace Project No.: 40131320

QC Batch:	OEXT/30305	Analysis Method:	EPA 8270 by SIM
QC Batch Method:	EPA 3546	Analysis Description:	8270/3546 MSSV PAH by SIM
Associated Lab Samples:	40131320001, 40131320002, 40131320003, 40131320004, 40131320005, 40131320006, 40131320007, 40131320008, 40131320009, 40131320010		

METHOD BLANK: 1329211                          Matrix: Solid

Associated Lab Samples: 40131320001, 40131320002, 40131320003, 40131320004, 40131320005, 40131320006, 40131320007,  
40131320008, 40131320009, 40131320010

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1-Methylnaphthalene	mg/kg	<0.0083	0.017	05/03/16 15:51	
2-Methylnaphthalene	mg/kg	<0.0083	0.017	05/03/16 15:51	
Acenaphthene	mg/kg	<0.0083	0.017	05/03/16 15:51	
Acenaphthylene	mg/kg	<0.0075	0.017	05/03/16 15:51	
Anthracene	mg/kg	<0.0086	0.017	05/03/16 15:51	
Benzo(a)anthracene	mg/kg	<0.0058	0.017	05/03/16 15:51	
Benzo(a)pyrene	mg/kg	<0.0060	0.017	05/03/16 15:51	
Benzo(b)fluoranthene	mg/kg	<0.0083	0.017	05/03/16 15:51	
Benzo(g,h,i)perylene	mg/kg	<0.0063	0.017	05/03/16 15:51	
Benzo(k)fluoranthene	mg/kg	<0.0092	0.017	05/03/16 15:51	
Chrysene	mg/kg	<0.0077	0.017	05/03/16 15:51	
Dibenz(a,h)anthracene	mg/kg	<0.0061	0.017	05/03/16 15:51	
Fluoranthene	mg/kg	<0.0083	0.017	05/03/16 15:51	
Fluorene	mg/kg	<0.0083	0.017	05/03/16 15:51	
Indeno(1,2,3-cd)pyrene	mg/kg	<0.0063	0.017	05/03/16 15:51	
Naphthalene	mg/kg	<0.0083	0.017	05/03/16 15:51	
Phenanthrene	mg/kg	<0.0083	0.017	05/03/16 15:51	
Pyrene	mg/kg	<0.0083	0.017	05/03/16 15:51	
2-Fluorobiphenyl (S)	%	66	26-130	05/03/16 15:51	
Terphenyl-d14 (S)	%	76	10-130	05/03/16 15:51	

LABORATORY CONTROL SAMPLE: 1329212

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1-Methylnaphthalene	mg/kg	.33	0.34	102	48-130	
2-Methylnaphthalene	mg/kg	.33	0.33	100	49-130	
Acenaphthene	mg/kg	.33	0.24	72	54-130	
Acenaphthylene	mg/kg	.33	0.24	72	56-130	
Anthracene	mg/kg	.33	0.30	90	70-130	
Benzo(a)anthracene	mg/kg	.33	0.25	76	58-130	
Benzo(a)pyrene	mg/kg	.33	0.29	88	58-130	
Benzo(b)fluoranthene	mg/kg	.33	0.25	74	50-130	
Benzo(g,h,i)perylene	mg/kg	.33	0.31	93	39-130	
Benzo(k)fluoranthene	mg/kg	.33	0.28	84	57-130	
Chrysene	mg/kg	.33	0.29	86	64-130	
Dibenz(a,h)anthracene	mg/kg	.33	0.30	89	44-130	
Fluoranthene	mg/kg	.33	0.29	87	59-130	
Fluorene	mg/kg	.33	0.24	72	56-130	

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## REPORT OF LABORATORY ANALYSIS

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## QUALITY CONTROL DATA

Project: 2404006 BROWN DEER

Pace Project No.: 40131320

LABORATORY CONTROL SAMPLE: 1329212

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Indeno(1,2,3-cd)pyrene	mg/kg	.33	0.29	88	45-130	
Naphthalene	mg/kg	.33	0.31	93	46-130	
Phenanthrene	mg/kg	.33	0.28	83	56-130	
Pyrene	mg/kg	.33	0.25	74	59-130	
2-Fluorobiphenyl (S)	%			73	26-130	
Terphenyl-d14 (S)	%			82	10-130	

MATRIX SPIKE &amp; MATRIX SPIKE DUPLICATE: 1329213      1329214

Parameter	Units	40131320002		MS Spike Conc.		MSD Spike Conc.		MS Result		MSD Result		MS % Rec		MSD % Rec		% Rec Limits		Max RPD		Max RPD		Qual	
		Result	Conc.	Result	Conc.	Result	Conc.	Result	Conc.	Result	Conc.	Result	Conc.	Result	Conc.	Result	Conc.	Result	Conc.	Result	Conc.	Result	Conc.
1-Methylnaphthalene	mg/kg	<0.0098	.39	.39	.39	0.37	0.36	95	92	41-130	3	24											
2-Methylnaphthalene	mg/kg	<0.0098	.39	.39	.39	0.37	0.36	94	91	42-130	4	25											
Acenaphthene	mg/kg	<0.0098	.39	.39	.39	0.28	0.27	71	70	49-130	1	27											
Acenaphthylene	mg/kg	<0.0088	.39	.39	.39	0.28	0.27	70	70	52-130	1	26											
Anthracene	mg/kg	<0.010	.39	.39	.39	0.35	0.32	89	81	61-130	9	29											
Benzo(a)anthracene	mg/kg	<0.0068	.39	.39	.39	0.29	0.28	73	71	45-130	4	28											
Benzo(a)pyrene	mg/kg	<0.0070	.39	.39	.39	0.33	0.32	83	82	39-130	1	34											
Benzo(b)fluoranthene	mg/kg	<0.0098	.39	.39	.39	0.29	0.30	73	77	30-130	5	43											
Benzo(g,h,i)perylene	mg/kg	<0.0075	.39	.39	.39	0.34	0.34	87	86	24-130	2	34											
Benzo(k)fluoranthene	mg/kg	<0.011	.39	.39	.39	0.32	0.30	83	77	41-130	6	32											
Chrysene	mg/kg	<0.0091	.39	.39	.39	0.33	0.31	83	78	46-130	6	37											
Dibenz(a,h)anthracene	mg/kg	<0.0072	.39	.39	.39	0.33	0.32	84	83	33-130	2	34											
Fluoranthene	mg/kg	<0.0098	.39	.39	.39	0.34	0.31	86	78	41-130	10	25											
Fluorene	mg/kg	<0.0098	.39	.39	.39	0.28	0.27	71	69	49-130	4	30											
Indeno(1,2,3-cd)pyrene	mg/kg	<0.0075	.39	.39	.39	0.33	0.32	83	82	30-130	1	28											
Naphthalene	mg/kg	<0.0098	.39	.39	.39	0.33	0.34	84	86	39-130	3	26											
Phenanthrene	mg/kg	<0.0098	.39	.39	.39	0.32	0.29	82	75	47-130	9	26											
Pyrene	mg/kg	<0.0098	.39	.39	.39	0.28	0.27	72	69	37-130	4	30											
2-Fluorobiphenyl (S)	%																						
Terphenyl-d14 (S)	%																						

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## QUALITY CONTROL DATA

Project: 2404006 BROWN DEER

Pace Project No.: 40131320

QC Batch:	OEXT/30328	Analysis Method:	EPA 8270 by SIM
QC Batch Method:	EPA 3546	Analysis Description:	8270/3546 MSSV PAH by SIM
Associated Lab Samples: 40131320011			

METHOD BLANK: 1331006 Matrix: Solid

Associated Lab Samples: 40131320011

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1-Methylnaphthalene	mg/kg	<0.0083	0.017	05/06/16 10:40	
2-Methylnaphthalene	mg/kg	<0.0083	0.017	05/06/16 10:40	
Acenaphthene	mg/kg	<0.0083	0.017	05/06/16 10:40	
Acenaphthylene	mg/kg	<0.0075	0.017	05/06/16 10:40	
Anthracene	mg/kg	<0.0086	0.017	05/06/16 10:40	
Benzo(a)anthracene	mg/kg	<0.0058	0.017	05/06/16 10:40	
Benzo(a)pyrene	mg/kg	<0.0060	0.017	05/06/16 10:40	
Benzo(b)fluoranthene	mg/kg	<0.0083	0.017	05/06/16 10:40	
Benzo(g,h,i)perylene	mg/kg	<0.0063	0.017	05/06/16 10:40	
Benzo(k)fluoranthene	mg/kg	<0.0092	0.017	05/06/16 10:40	
Chrysene	mg/kg	<0.0077	0.017	05/06/16 10:40	
Dibenz(a,h)anthracene	mg/kg	<0.0061	0.017	05/06/16 10:40	
Fluoranthene	mg/kg	<0.0083	0.017	05/06/16 10:40	
Fluorene	mg/kg	<0.0083	0.017	05/06/16 10:40	
Indeno(1,2,3-cd)pyrene	mg/kg	<0.0063	0.017	05/06/16 10:40	
Naphthalene	mg/kg	<0.0083	0.017	05/06/16 10:40	
Phenanthrene	mg/kg	<0.0083	0.017	05/06/16 10:40	
Pyrene	mg/kg	<0.0083	0.017	05/06/16 10:40	
2-Fluorobiphenyl (S)	%	72	26-130	05/06/16 10:40	
Terphenyl-d14 (S)	%	78	10-130	05/06/16 10:40	

LABORATORY CONTROL SAMPLE: 1331007

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1-Methylnaphthalene	mg/kg	.33	0.31	92	48-130	
2-Methylnaphthalene	mg/kg	.33	0.30	91	49-130	
Acenaphthene	mg/kg	.33	0.28	84	54-130	
Acenaphthylene	mg/kg	.33	0.28	83	56-130	
Anthracene	mg/kg	.33	0.35	105	70-130	
Benzo(a)anthracene	mg/kg	.33	0.28	83	58-130	
Benzo(a)pyrene	mg/kg	.33	0.34	102	58-130	
Benzo(b)fluoranthene	mg/kg	.33	0.30	89	50-130	
Benzo(g,h,i)perylene	mg/kg	.33	0.35	106	39-130	
Benzo(k)fluoranthene	mg/kg	.33	0.34	101	57-130	
Chrysene	mg/kg	.33	0.33	99	64-130	
Dibenz(a,h)anthracene	mg/kg	.33	0.34	102	44-130	
Fluoranthene	mg/kg	.33	0.33	100	59-130	
Fluorene	mg/kg	.33	0.28	84	56-130	
Indeno(1,2,3-cd)pyrene	mg/kg	.33	0.34	101	45-130	
Naphthalene	mg/kg	.33	0.30	91	46-130	

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## QUALITY CONTROL DATA

Project: 2404006 BROWN DEER

Pace Project No.: 40131320

LABORATORY CONTROL SAMPLE: 1331007

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Phenanthrene	mg/kg	.33	0.31	94	56-130	
Pyrene	mg/kg	.33	0.28	84	59-130	
2-Fluorobiphenyl (S)	%			80	26-130	
Terphenyl-d14 (S)	%			91	10-130	

MATRIX SPIKE &amp; MATRIX SPIKE DUPLICATE: 1331008      1331009

Parameter	Units	40131644007 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Max RPD	Qual
1-Methylnaphthalene	mg/kg	<18.9 ug/kg	.37	.37	0.31	0.32	82	83	41-130	1	24	
2-Methylnaphthalene	mg/kg	<18.9 ug/kg	.37	.37	0.31	0.31	80	81	42-130	1	25	
Acenaphthene	mg/kg	<18.9 ug/kg	.37	.37	0.27	0.27	70	73	49-130	3	27	
Acenaphthylene	mg/kg	<18.9 ug/kg	.37	.37	0.27	0.28	72	75	52-130	4	26	
Anthracene	mg/kg	<18.9 ug/kg	.37	.37	0.33	0.35	88	92	61-130	5	29	
Benzo(a)anthracene	mg/kg	<18.9 ug/kg	.37	.37	0.27	0.28	70	73	45-130	4	28	
Benzo(a)pyrene	mg/kg	<18.9 ug/kg	.37	.37	0.31	0.31	80	82	39-130	3	34	
Benzo(b)fluoranthene	mg/kg	<18.9 ug/kg	.37	.37	0.26	0.27	69	72	30-130	4	43	
Benzo(g,h,i)perylene	mg/kg	<18.9 ug/kg	.37	.37	0.32	0.33	82	85	24-130	4	34	
Benzo(k)fluoranthene	mg/kg	<18.9 ug/kg	.37	.37	0.32	0.32	85	85	41-130	0	32	
Chrysene	mg/kg	<18.9 ug/kg	.37	.37	0.32	0.32	82	84	46-130	2	37	
Dibenz(a,h)anthracene	mg/kg	<18.9 ug/kg	.37	.37	0.30	0.31	80	82	33-130	2	34	
Fluoranthene	mg/kg	<18.9 ug/kg	.37	.37	0.32	0.33	85	88	41-130	3	25	
Fluorene	mg/kg	<18.9 ug/kg	.37	.37	0.27	0.28	72	74	49-130	3	30	
Indeno(1,2,3-cd)pyrene	mg/kg	<18.9 ug/kg	.37	.37	0.30	0.31	79	81	30-130	2	28	
Naphthalene	mg/kg	<18.9 ug/kg	.37	.37	0.30	0.30	79	80	39-130	0	26	
Phenanthrene	mg/kg	<18.9 ug/kg	.37	.37	0.31	0.32	80	82	47-130	2	26	
Pyrene	mg/kg	<18.9 ug/kg	.37	.37	0.27	0.28	71	73	37-130	3	30	
2-Fluorobiphenyl (S)	%						67	62	26-130			
Terphenyl-d14 (S)	%						75	71	10-130			

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## QUALITY CONTROL DATA

Project: 2404006 BROWN DEER

Pace Project No.: 40131320

QC Batch:	OEXT/30275	Analysis Method:	EPA 8270 by HVI
QC Batch Method:	EPA 3510	Analysis Description:	8270 Water PAH by HVI
Associated Lab Samples:	40131320012		

METHOD BLANK: 1327576                          Matrix: Water

Associated Lab Samples: 40131320012

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1-Methylnaphthalene	ug/L	<0.0031	0.050	04/29/16 14:37	
2-Methylnaphthalene	ug/L	<0.0028	0.050	04/29/16 14:37	
Acenaphthene	ug/L	<0.0050	0.050	04/29/16 14:37	
Acenaphthylene	ug/L	<0.0049	0.050	04/29/16 14:37	
Anthracene	ug/L	<0.0040	0.050	04/29/16 14:37	
Benzo(a)anthracene	ug/L	<0.0051	0.050	04/29/16 14:37	
Benzo(a)pyrene	ug/L	<0.0044	0.050	04/29/16 14:37	
Benzo(b)fluoranthene	ug/L	<0.0053	0.050	04/29/16 14:37	
Benzo(g,h,i)perylene	ug/L	<0.0035	0.050	04/29/16 14:37	
Benzo(k)fluoranthene	ug/L	<0.0056	0.050	04/29/16 14:37	
Chrysene	ug/L	<0.0042	0.050	04/29/16 14:37	
Dibenz(a,h)anthracene	ug/L	<0.0056	0.050	04/29/16 14:37	
Fluoranthene	ug/L	0.011J	0.050	04/29/16 14:37	
Fluorene	ug/L	<0.0040	0.050	04/29/16 14:37	
Indeno(1,2,3-cd)pyrene	ug/L	<0.0036	0.050	04/29/16 14:37	
Naphthalene	ug/L	<0.0045	0.050	04/29/16 14:37	
Phenanthrene	ug/L	<0.0077	0.050	04/29/16 14:37	
Pyrene	ug/L	0.018J	0.050	04/29/16 14:37	
2-Fluorobiphenyl (S)	%	55	25-130	04/29/16 14:37	
Terphenyl-d14 (S)	%	95	13-158	04/29/16 14:37	

LABORATORY CONTROL SAMPLE: 1327577

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1-Methylnaphthalene	ug/L	2	1.1	54	35-130	
2-Methylnaphthalene	ug/L	2	1.1	54	36-130	
Acenaphthene	ug/L	2	1.1	55	41-130	
Acenaphthylene	ug/L	2	1.0	52	41-130	
Anthracene	ug/L	2	1.4	69	38-130	
Benzo(a)anthracene	ug/L	2	1.5	74	49-130	
Benzo(a)pyrene	ug/L	2	1.9	96	69-143	
Benzo(b)fluoranthene	ug/L	2	2.1	103	63-146	
Benzo(g,h,i)perylene	ug/L	2	1.6	78	10-145	
Benzo(k)fluoranthene	ug/L	2	2.0	101	64-152	
Chrysene	ug/L	2	1.9	95	64-156	
Dibenz(a,h)anthracene	ug/L	2	1.4	70	10-143	
Fluoranthene	ug/L	2	1.5	75	54-134	
Fluorene	ug/L	2	0.96	48	44-130	
Indeno(1,2,3-cd)pyrene	ug/L	2	1.9	94	39-140	
Naphthalene	ug/L	2	1.1	56	35-130	

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## QUALITY CONTROL DATA

Project: 2404006 BROWN DEER

Pace Project No.: 40131320

LABORATORY CONTROL SAMPLE: 1327577

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Phenanthrene	ug/L	2	1.6	79	51-130	
Pyrene	ug/L	2	1.6	82	61-140	
2-Fluorobiphenyl (S)	%			55	25-130	
Terphenyl-d14 (S)	%			92	13-158	

MATRIX SPIKE &amp; MATRIX SPIKE DUPLICATE: 1327578      1327579

Parameter	Units	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	Max		Qual
		40131259005	Result	Spike Conc.	MS Result				RPD	RPD	
1-Methylnaphthalene	ug/L	0.14	1.9	2.2	1.2	1.3	53	55	16-130	15	30
2-Methylnaphthalene	ug/L	<0.0028	1.9	2.2	1.0	1.1	52	53	33-130	13	30
Acenaphthene	ug/L	<0.0050	1.9	2.2	0.97	1.1	50	52	29-130	17	27
Acenaphthylene	ug/L	<0.0049	1.9	2.2	0.91	1.1	47	49	33-130	16	27
Anthracene	ug/L	<0.0040	1.9	2.2	1.1	1.3	58	60	26-130	16	31
Benzo(a)anthracene	ug/L	<0.0051	1.9	2.2	1.3	1.4	67	64	27-130	9	36
Benzo(a)pyrene	ug/L	<0.0044	1.9	2.2	1.6	1.7	84	78	16-151	5	44
Benzo(b)fluoranthene	ug/L	<0.0053	1.9	2.2	1.7	1.8	88	85	30-142	9	41
Benzo(g,h,i)perylene	ug/L	<0.0035	1.9	2.2	1.1	1.2	60	56	10-130	6	50
Benzo(k)fluoranthene	ug/L	<0.0056	1.9	2.2	1.6	1.7	85	78	24-152	4	41
Chrysene	ug/L	<0.0042	1.9	2.2	1.7	1.8	88	84	40-152	8	33
Dibenz(a,h)anthracene	ug/L	<0.0056	1.9	2.2	1.2	1.3	62	60	10-130	9	50
Fluoranthene	ug/L	0.010J	1.9	2.2	1.3	1.3	69	60	39-140	1	30
Fluorene	ug/L	<0.0040	1.9	2.2	0.98	1.2	51	54	35-130	19	26
Indeno(1,2,3-cd)pyrene	ug/L	<0.0036	1.9	2.2	1.5	1.5	76	70	10-130	4	50
Naphthalene	ug/L	0.056	1.9	2.2	1.1	1.2	55	54	29-130	10	31
Phenanthrene	ug/L	0.0093J	1.9	2.2	1.3	1.6	68	71	48-130	16	25
Pyrene	ug/L	0.018J	1.9	2.2	1.6	1.5	80	68	42-143	4	25
2-Fluorobiphenyl (S)	%						48	51	25-130		
Terphenyl-d14 (S)	%						76	66	13-158		

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## QUALITY CONTROL DATA

Project: 2404006 BROWN DEER  
 Pace Project No.: 40131320

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QC Batch:	PMST/12694	Analysis Method:	ASTM D2974-87
QC Batch Method:	ASTM D2974-87	Analysis Description:	Dry Weight/Percent Moisture
Associated Lab Samples:	40131320001, 40131320002, 40131320003, 40131320004, 40131320005, 40131320006, 40131320007, 40131320008, 40131320009		

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SAMPLE DUPLICATE: 1330888

Parameter	Units	40131317001 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	7.0	7.2	3	10	

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## QUALITY CONTROL DATA

Project: 2404006 BROWN DEER

Pace Project No.: 40131320

QC Batch: PMST/12695 Analysis Method: ASTM D2974-87

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

Associated Lab Samples: 40131320010, 40131320011

SAMPLE DUPLICATE: 1330908

Parameter	Units	40131320010 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	13.2	13.5	2	10	

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## QUALIFIERS

Project: 2404006 BROWN DEER

Pace Project No.: 40131320

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### 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.

### BATCH QUALIFIERS

Batch: MSSV/8996

[IP] Benzo(b)fluoranthene and benzo(k)fluoranthene were in the check standard but did not meet the resolution criteria in SW846 Method 8270C. Whereas sample results included are reported as individual isomers, the lab and the customer must recognize them as an isomeric pair.

Batch: MSSV/9007

[IP] Benzo(b)fluoranthene and benzo(k)fluoranthene were in the check standard but did not meet the resolution criteria in SW846 Method 8270C. Whereas sample results included are reported as individual isomers, the lab and the customer must recognize them as an isomeric pair.

### ANALYTE QUALIFIERS

- 1q Surrogate recovery was outside the State of South Carolina laboratory control limits of 70-130. Recovery did pass in-house, control charted limits. No sample volume available for re-extract.
- B Analyte was detected in the associated method blank.
- D3 Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.
- W Non-detect results are reported on a wet weight basis.

## REPORT OF LABORATORY ANALYSIS

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**QUALITY CONTROL DATA CROSS REFERENCE TABLE**

Project: 2404006 BROWN DEER  
Pace Project No.: 40131320

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40131320001	GP-1 / TW-1 (2-4)	EPA 3541	OEXT/30247	EPA 8082	GCSV/14314
40131320002	GP-1 / TW-1 (8-10)	EPA 3541	OEXT/30247	EPA 8082	GCSV/14314
40131320003	GP-2 (2-4)	EPA 3541	OEXT/30247	EPA 8082	GCSV/14314
40131320004	GP-2 (6-8)	EPA 3541	OEXT/30247	EPA 8082	GCSV/14314
40131320005	GP-3 (2-4)	EPA 3541	OEXT/30247	EPA 8082	GCSV/14314
40131320006	GP-3 (6-8)	EPA 3541	OEXT/30247	EPA 8082	GCSV/14314
40131320007	GP-4 (2-4)	EPA 3541	OEXT/30247	EPA 8082	GCSV/14314
40131320008	GP-4 (8-10)	EPA 3541	OEXT/30247	EPA 8082	GCSV/14314
40131320009	GP-5 (2-4)	EPA 3541	OEXT/30247	EPA 8082	GCSV/14314
40131320010	GP-5 (10-12)	EPA 3541	OEXT/30247	EPA 8082	GCSV/14314
40131320011	SS-1 (0.5-1.5)	EPA 3541	OEXT/30247	EPA 8082	GCSV/14314
40131320012	TW-1 / GP-1	EPA 3510	OEXT/30256	EPA 8082	GCSV/14325
40131320001	GP-1 / TW-1 (2-4)	EPA 3546	OEXT/30305	EPA 8270 by SIM	MSSV/8996
40131320002	GP-1 / TW-1 (8-10)	EPA 3546	OEXT/30305	EPA 8270 by SIM	MSSV/8996
40131320003	GP-2 (2-4)	EPA 3546	OEXT/30305	EPA 8270 by SIM	MSSV/8996
40131320004	GP-2 (6-8)	EPA 3546	OEXT/30305	EPA 8270 by SIM	MSSV/8996
40131320005	GP-3 (2-4)	EPA 3546	OEXT/30305	EPA 8270 by SIM	MSSV/8996
40131320006	GP-3 (6-8)	EPA 3546	OEXT/30305	EPA 8270 by SIM	MSSV/8996
40131320007	GP-4 (2-4)	EPA 3546	OEXT/30305	EPA 8270 by SIM	MSSV/8996
40131320008	GP-4 (8-10)	EPA 3546	OEXT/30305	EPA 8270 by SIM	MSSV/8996
40131320009	GP-5 (2-4)	EPA 3546	OEXT/30305	EPA 8270 by SIM	MSSV/8996
40131320010	GP-5 (10-12)	EPA 3546	OEXT/30305	EPA 8270 by SIM	MSSV/8996
40131320011	SS-1 (0.5-1.5)	EPA 3546	OEXT/30328	EPA 8270 by SIM	MSSV/9007
40131320012	TW-1 / GP-1	EPA 3510	OEXT/30275	EPA 8270 by HVI	MSSV/8983
40131320001	GP-1 / TW-1 (2-4)	EPA 5035/5030B	MSV/33162	EPA 8260	MSV/33163
40131320002	GP-1 / TW-1 (8-10)	EPA 5035/5030B	MSV/33162	EPA 8260	MSV/33163
40131320003	GP-2 (2-4)	EPA 5035/5030B	MSV/33162	EPA 8260	MSV/33163
40131320004	GP-2 (6-8)	EPA 5035/5030B	MSV/33162	EPA 8260	MSV/33163
40131320005	GP-3 (2-4)	EPA 5035/5030B	MSV/33162	EPA 8260	MSV/33163
40131320006	GP-3 (6-8)	EPA 5035/5030B	MSV/33162	EPA 8260	MSV/33163
40131320007	GP-4 (2-4)	EPA 5035/5030B	MSV/33162	EPA 8260	MSV/33163
40131320008	GP-4 (8-10)	EPA 5035/5030B	MSV/33162	EPA 8260	MSV/33163
40131320009	GP-5 (2-4)	EPA 5035/5030B	MSV/33162	EPA 8260	MSV/33163
40131320010	GP-5 (10-12)	EPA 5035/5030B	MSV/33162	EPA 8260	MSV/33163
40131320011	SS-1 (0.5-1.5)	EPA 5035/5030B	MSV/33172	EPA 8260	MSV/33183
40131320012	TW-1 / GP-1	EPA 8260	MSV/33267		
40131320001	GP-1 / TW-1 (2-4)	ASTM D2974-87	PMST/12694		
40131320002	GP-1 / TW-1 (8-10)	ASTM D2974-87	PMST/12694		
40131320003	GP-2 (2-4)	ASTM D2974-87	PMST/12694		
40131320004	GP-2 (6-8)	ASTM D2974-87	PMST/12694		
40131320005	GP-3 (2-4)	ASTM D2974-87	PMST/12694		
40131320006	GP-3 (6-8)	ASTM D2974-87	PMST/12694		
40131320007	GP-4 (2-4)	ASTM D2974-87	PMST/12694		
40131320008	GP-4 (8-10)	ASTM D2974-87	PMST/12694		
40131320009	GP-5 (2-4)	ASTM D2974-87	PMST/12694		

**REPORT OF LABORATORY ANALYSIS**

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## QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 2404006 BROWN DEER  
Pace Project No.: 40131320

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40131320010	GP-5 (10-12)	ASTM D2974-87	PMST/12695		
40131320011	SS-1 (0.5-1.5)	ASTM D2974-87	PMST/12695		

## REPORT OF LABORATORY ANALYSIS

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(Please Print Clearly)

**Company Name:** KEY Engineering  
**Branch/Location:** Milwaukee  
**Project Contact:** Jason Knueko  
**Phone:** 414 224 8300

**Project Number:** 21004000  
**Project State:** WI  
**Sampled By (Print):** Chelser Ames  
**Sampled By (Sign):** 

**PO #:**   
**Data Package Options**  
 EPA Level III  
 EPA Level IV  
 NOT needed on your sample

**MS/MSD**  
 On your sample  
 (Billable)  
 NOT needed on your sample

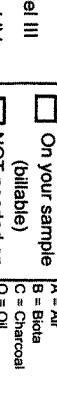
**Matrix Codes**  
A = Air  
B = Biota  
C = Charcoal  
O = Oil  
S = Soil  
W = Sludge  
W = Water  
DW = Drinking Water  
GW = Ground Water  
SW = Surface Water  
WW = Waste Water  
WP = Wipe

**PRESERVATION (CODE)\***  
 H=H2SO4  
 H=HCl  
 I=Sodium Bisulfite Solution  
 J=NaOH  
 N=None  
 D=HNO3  
 E=DI Water  
 F=Methanol  
 G=NaOH

**FILTERED?**  
 Y/N  
 Pick Letter

**Analyses Requested**  
 VOC  
 PAH  
 PCB  
 SVOC

**Program:**  
 Analyses Requested

**PO #:**   
**Data Package Options**  
 EPA Level III  
 EPA Level IV  
 NOT needed on your sample

**MS/MSD**  
 On your sample  
 (Billable)  
 NOT needed on your sample

**Matrix Codes**  
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 H=HCl  
 I=Sodium Bisulfite Solution  
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 N=None  
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 E=DI Water  
 F=Methanol  
 G=NaOH

**FILTERED?**  
 Y/N  
 Pick Letter

**Analyses Requested**  
 VOC  
 PAH  
 PCB  
 SVOC

**Program:**  
 Analyses Requested

**Data Package Options**  
 EPA Level III  
 EPA Level IV  
 NOT needed on your sample

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 On your sample  
 (Billable)  
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 H=HCl  
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 J=NaOH  
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 F=Methanol  
 G=NaOH

**FILTERED?**  
 Y/N  
 Pick Letter

**Analyses Requested**  
 VOC  
 PAH  
 PCB  
 SVOC

**Program:**  
 Analyses Requested

**Data Package Options**  
 EPA Level III  
 EPA Level IV  
 NOT needed on your sample

**MS/MSD**  
 On your sample  
 (Billable)  
 NOT needed on your sample

**Matrix Codes**  
A = Air  
B = Biota  
C = Charcoal  
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W = Sludge  
W = Water  
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WP = Wipe

**PRESERVATION (CODE)\***  
 H=H2SO4  
 H=HCl  
 I=Sodium Bisulfite Solution  
 J=NaOH  
 N=None  
 D=HNO3  
 E=DI Water  
 F=Methanol  
 G=NaOH

**FILTERED?**  
 Y/N  
 Pick Letter

**Analyses Requested**  
 VOC  
 PAH  
 PCB  
 SVOC

**Program:**  
 Analyses Requested

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

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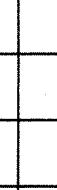
**PACE ANALYTICAL®**  
www.pacelabs.com

## CHAIN OF CUSTODY

\*Presentation Codes  
A=H2O B=HCl C=H2SO4 D=HNO3 E=DI Water F=Methanol G=NaOH

**Mail To Company:** KEY Engineering  
**Mail To Address:** 735 N. Water St. Suite 310 Milwaukee WI 53202

**Invoice To Contact:** Chelser Ames  
**Invoice To Company:** KEY Engineering

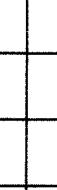
**Invoice To Address:** 

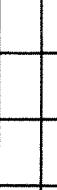
**Quote #:** 40131320  
**Date Needed:** 

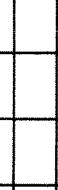
**Analyses Requested:** VOC, PAH, PCB, SVOC

**Comments:** 

**Client:** 

**Lab Comments (Lab Use Only):** 

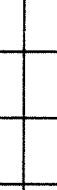
**Profile #:** 

**Received By:** 

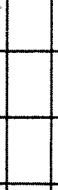
**Date/Time:** 4/25/04 10:02 AM

**Received By:** 

**Date/Time:** 4/25/04 12:00 PM

**Received By:** 

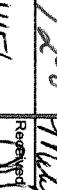
**Date/Time:** 4/25/04 12:00 PM

**Received By:** 

**Date/Time:** 4/25/04 12:00 PM

**Received By:** 

**Date/Time:** 4/25/04 12:00 PM

**Received By:** 

**Date/Time:** 4/25/04 12:00 PM

**Received By:** 

**Date/Time:** 4/25/04 12:00 PM



# Sample Condition Upon Receipt

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

Project #:

WO# : 40131320



40131320

Client Name: Kay EngCourier:  FedEx  UPS  Client  Pace Other: \_\_\_\_\_

Tracking #: \_\_\_\_\_

Custody Seal on Cooler/Box Present:  yes  no Seals intact:  yes  noCustody Seal on Samples Present:  yes  no Seals intact:  yes  noPacking Material:  Bubble Wrap  Bubble Bags  None  OtherThermometer Used: NAType of Ice: Wet Blue Dry None Samples on ice, cooling process has begunCooler Temperature Uncorr:  /Corr: 20)Biological Tissue is Frozen:  yes noTemp 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.

Comments: \_\_\_\_\_

Person examining contents:

Date: 4/25/16Initials: CKS

Chain of Custody Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody Filled Out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Chain of Custody Relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler Name & Signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples Arrived within Hold Time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.
- VOA Samples frozen upon receipt	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Date/Time: _____
Short Hold Time Analysis (<72hr):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	6.
Rush Turn Around Time Requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	7.
Sufficient Volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	8.
Correct Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
-Pace Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
-Pace IR Containers Used:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Containers Intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	10.
Filtered volume received for Dissolved tests	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	11.
Sample Labels match COC:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	12. no collection times, 001 vial no collect date, 012 + add all ID Thy 1 only Hazard 4/25/16
-Includes date/time/ID/Analysis Matrix: <u>WIS</u>		
All containers needing preservation have been checked. (Non-Compliance noted in 13.)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	13. <input type="checkbox"/> HNO <sub>3</sub> <input type="checkbox"/> H <sub>2</sub> SO <sub>4</sub> <input type="checkbox"/> NaOH <input type="checkbox"/> NaOH +ZnAct
All containers needing preservation are found to be in compliance with EPA recommendation. (HNO <sub>3</sub> , H <sub>2</sub> SO <sub>4</sub> <2; NaOH+ZnAct ≥9, NaOH ≥12) exceptions: VOA, coliform, TOC, TOX, TOH, O&G, WIDROW, Phenolics, OTHER: <u> </u>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	
Headspace in VOA Vials (>6mm):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	14.
Trip Blank Present:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	15.
Trip Blank Custody Seals Present	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> 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: \_\_\_\_\_

005 vial tape weight covered4/25/16 DProject Manager Review: JJ for DMDate: 4-25-16