SITE INVESTIGATION REPORT
DT LIQUOR AND CONVENIENCE STORE
3019 STATE HIGHWAY 60 NORTH
CUBA CITY, WISCONSIN 53807
BRRTS: 03-22-262317

PREPARED FOR:

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AND

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APRIL 2016

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1.0 INTRODUCTION

1.1 Project History

William Davis retained Seymour Environmental Services, Inc. (Seymour) to complete an investigation at the former DT Liquor and Convenience Store at 3019 State Highway 80 in Cuba City, Wisconsin (Figure 1). The work is being done in response to contamination that was discovered during tank removals on October 24, 2000. The initial environmental investigation was conducted by METCO in 2006. Seymour took over the project as the consultant and PECFA agent in 2014.

We have defined the extent of the soil contamination and determined that the groundwater has not been impacted over any Wisconsin Department of Natural Resources (WDNR) standards. We are recommending that the soil contamination be excavated to remove the direct contact and groundwater protection threats.

1.2 Site and Consultant Information

Site Address: DT Liquor and Convenience Store
3019 State Highway 80 North
Cuba City, Wisconsin 53807
Grant County
NW ¼ of the SE ¼ of Section 25 Township 2 North, Range 1 West

Consultants: Seymour Environmental Services, Inc.
2531 Dyreson Road
McFarland, Wisconsin 53558
Contact: Robyn Seymour (608) 838-9120

Northern Environmental
1203 Storbeck Drive
Waupun, Wisconsin 53963

METCO
2956 Airport Road
La Crosse, Wisconsin 54603

Drilling Contractors: Badger State Drilling
360 Business Park Circle
Stoughton, Wisconsin 53589
Contact: Mark Garwick (608) 877-9770

On-Site Environmental Services
P.O. Box 280
Sun Prairie, Wisconsin 53590

Laboratories: Pace Analytical

1241 Bellevue Street, Suite 9
Green Bay, Wisconsin 54302
Contact: Dan Milewsky (920) 469-2436

Synergy Environmental Lab
1990 Prospect Court
Appleton, Wisconsin 54914

U.S. Analytical Lab
1090 Kimberly Avenue
Kimberly, Wisconsin 54136

2.0 BACKGROUND INFORMATION

2.1 Summary of Previous Investigation

DT Liquor and Convenience Store was a gas station/convenience store. On October 24, 2000 four underground storage tanks (USTs) were removed at the site. The USTs included a 4,000 gallon leaded gasoline, a 2,000-gallon unleaded gasoline, a 1,000-gallon diesel and a 750-gallon fuel oil. Wiederholt Excavating and Trenching removed the tanks. A closure assessment was conducted by Northern Environmental Technologies (Northern). Northern collected 13 soil samples as part of the tank closure assessment. Field observations and sample analysis during the tank closure identified petroleum contamination at two locations, beneath the dispenser island and near fuel oil tank. No petroleum contamination was noted in the soil around the primary tank bed. The site layout and closure sampling locations are shown on Figure 2 and soil analytical results are summarized on Table 1.

In December 2006 METCO conducted a geoprobe investigation at the site to characterize the soil contamination. Soil sampling was conducted at four borings; three of the borings were located near the dispenser and one boring was located near the fuel oil tank. The sample locations are shown on Figure 3. Soil samples were collected continuously during drilling. The 20 samples collected were field screened for organic vapors; elevated organic vapor levels were only identified in the samples from the boring located at the dispenser (G-1). Based on the field screening data 8 of the samples were analyzed for GRO or DRO and petroleum volatile organic compounds plus naphthalene (PVOCs+naph). Additional analyses were performed on three shallow soil samples to evaluate direct contact hazard. Each of these shallow soil samples was analyzed for lead and the one collected near the fuel oil tank was analyzed for PAHs.

Sampling results indicate that the gasoline-related contamination is restricted to the immediate area of the former dispenser (Figure 3). Contamination in this area extended from approximately 4 feet below grade to a depth of 19 feet where bedrock was encountered. Sampling conducted near the fuel oil tank indicated that only limited contamination is present in that area. No PVOCs were detected in that area and only low levels of PAHs were present. The PAH and lead levels noted in the soil sample were below direct contact hazard levels for non-industrial sites. Soil analytical results from this investigation are summarized in Table 2.

2.2 Regional Setting

Cuba City is located in the driftless area of southwestern Wisconsin. This area is characterized by rugged steep-walled valleys and high relief. Drainage patterns are typically dendritic where streams that have cut deeply into the flat bedrock. DT Liquor and Convenience Store is located on a broad ridge at an elevation of approximately 1,005 feet. Surface water at the site drains to the east and into roadside ditches located along STH 80. The surface water continues to flow eastward to an unnamed perennial stream. This stream discharges to the Galena River approximately 2.5 miles northeast of the site.

Soils at the site are mapped as Tama Silt Loam. These soils are characterized as silty clays, which develop from the weathering of the carbonate bedrock. Soil encountered during drilling at the site was generally clay with slight silt. Bedrock at the site is present between 18 and 19 feet below grade. Bedrock underlying the site is the Decorah-Platteville Formation. This formation is a thinly bedded carbonate.

The water table in Cuba City is typically present within Decorah-Platteville Formation at a depth of 50 to 60 feet below grade. Groundwater flow is highly variable as it typically mimics the surface topography. The Decorah-Platteville carbonates are modest produces of groundwater. Locally, the formation is used for water supply purposes for older wells and wells with lower water usage requirements. Newer wells in the area, and wells with higher flow requirements, typically extend into the underlying St. Peter Sandstone to provide sufficient groundwater.

During installation of monitoring well MW-1 groundwater was present ~65 feet below the surface.

2.3 Potential Receptors

Potential contaminant receptors near the site generally are limited to groundwater receptors. Underground utilities in the area are located within the Highway 80 right-of-way approximately 25 feet beyond the limit of identified contamination. The vapor intrusion pathway was assessed and we determined that vapor intrusion is not a threat to the building at the site or neighboring buildings. Cuba City has a municipal well (Cuba City Well #2) approximately 600 feet southwest of the property. The nearest private well to the site is located approximately 150 feet northwest of the site. Figure 4 shows the locations of neighboring wells.

3.0 SITE INVESTIGATION ACTIVITIES

3.1 Monitoring Well Installation

On March 6, 2015 Seymour met Badger State Drilling (Badger) at the site to install a single monitoring well near the former dispenser where contamination was identified in contact with bedrock. The boring for the well was drilled using hollow-stem augers through the unconsolidated deposits and air rotary in the bedrock. No sampling was conducted during the drilling. During drilling groundwater was noted at ~ 65 feet below the surface. The monitoring well was set at 75 feet with a 15-foot screen. Seymour developed the well on March 7, 2015. The monitoring well location is shown on Figure 5.

3.2 Additional Soil Investigation

On March 9, 2015 Badger and Seymour returned to the site to installed two soil borings to bedrock near the former dispenser island to further delimit the extent of soil contamination. The borings were installed approximately 20 feet south (B-5) and north (B-6) of METCO boring G-1, which had compounds present above standards (Figure 5). During drilling soil samples were collected continuously. The soil samples were field screened with an organic vapor meter equipped with a 10.6 eV bulb. Obvious contamination starting at approximately 12 feet below grade was noted in B-5. No contamination was noted in B-6.

Soil at the site was mainly clay/silty clay turning to sand just above the bedrock. Bedrock was encountered at 19 feet.

Two soil samples were selected for analysis from each boring. The soil samples were submitted to Pace Analytical for analysis of petroleum volatile organic compounds (PVOCs), polynuclear aromatic compounds (PAHs) and lead. Analytical data confirm that soil contamination exceeding the WDNR groundwater protection RCLs is present around the former dispenser. This soil contamination extends to B-5 south of the dispensers. At B-5 PVOC and naphthalene levels in the soil slightly above the bedrock exceed groundwater protection RCLs. Based on field observations this contamination extends from 12 to 19 feet below grade. No contaminants were present above groundwater protection RCLs in the soil samples from B-6 located to the north of the dispenser. No soil exceeding direct contact hazard levels from PVOCs, PAHs or lead was identified at either boring. Soil analytical results from the sampling are summarized in Table 3.

3.3 Groundwater Monitoring

Groundwater monitoring has been conducted at the site on two occasions, March 9 and June 18, 2015. During each event groundwater level data and a groundwater sample was collected. Water level data was 64.46 and 63.52 respectively. Groundwater samples were analyzed for PAHs and volatile organic compounds (VOCs).

Low levels of petroleum-related contaminants were identified in the groundwater during each of the monitoring events. Toluene was the only VOC present above the detection limit. Toluene was detected in the March 2015 sample and was present below the limit of quantitation. Toluene was not detected in the groundwater sample collected in June 2015. A number of PAHs were detected in the groundwater sample collected in March 2015 but no compound was present above NR140 groundwater quality standards. All of the PAHs were present below the limit of quantitation with the exception of 1-methylnaphthalene. Only one PAH, chrysene, was detected in the groundwater sample collected in June 2015. The chrysene level present (0.032 ug/l) exceeded the NR140 preventative action limit. The results of the groundwater sampling indicate that the soil contamination present near the dispenser has caused only a limited impact on groundwater quality. The groundwater results are summarized on Table 4.

3.4 Hazard Evaluation

Based on the data collected an evaluation of the environmental concerns for applicable routes of exposure was performed. Potential exposure routes considered include direct contact hazard

from ingestion/inhalation, vapor migration and intrusion at the building on site, and groundwater protection. Hazard evaluation data and evaluation criteria are described below.

Direct Contact Hazard

Six soil samples were collected from the shallow soil (<4 feet) within the direct contact hazard zone. Each of the samples was analyzed for PVOCs. Additionally, 3 of the samples were analyzed for PAHs and 5 samples were analyzed for lead. Analytical data were compared to the default direct contact hazard levels for non-industrial sites listed in the WDNR R&R RCL calculator. No PVOCs, PAHs, or lead were present in the shallow samples at concentrations exceeding the applicable direct contact hazard levels.

Vapor Intrusion

Vapor intrusion pathway screening was conducted using the criteria outlined in RR-800. The screening criteria generally consider the separation distance between identified areas of contamination and structures where potentially hazardous vapors may accumulate. A separation distance of 5 feet between petroleum contaminated soils/groundwater and a building is considered to be sufficient to allow aerobic degradation of off-gassing contaminants. Details of the vapor intrusion screening are compiled in Table 5. Based on the screening analysis the contamination identified at the site does not appear to represent a vapor intrusion threat.

Groundwater Protection Pathway

Soil contamination identified at the site exceeds the default groundwater protection levels listed in the WDNR R&R RCL calculator. The identified contamination generally is present from ~8 to 19 feet below grade where bedrock is encountered.

4.0 DISCUSSION and RECOMMENDATIONS

A total of twenty-four soil samples were analyzed from the site after the tank closure sampling. Petroleum compounds above the present WDNR groundwater protection RCLs are present in samples in three of the sampling locations surrounding the former dispensers. The most severe contamination was identified at G-1 just above the bedrock. A sample collected during the tank removal assessment indicated that the soil contamination radiating from the dispenser does start shallow, as expected.

Soil contaminated with PVOCs in this boring extends from beneath the dispenser to bedrock at 19 feet. The estimated extent of the soil contamination is shown on Figure 3. This contamination extends over an area of 800 square feet (~16 by 50 feet) and is present from about 4 to 19 feet below grade. The estimated volume of contaminated soil is 650 cubic yards.

Since a municipal well and private wells are located near the subject site we recommend removal of the contaminated soil around the former dispensers. This will alleviate the need for continuing obligations to prevent the contamination from spreading to the groundwater and potentially water supply wells.

Once you have had a chance to review this data please call us to discuss. If you agree with our approach we will submit a budget request for the excavation.

Sincerely,
Seymour Environmental Services, Inc.

Robyn Seymour

Robyn Seymour

TABLES

TABLE 1
TANK CLOSURE ASSESSMENT SOIL ANALYTICAL DATA
DT Liquor and Convenience Store
3019 State Highway 80 North - Cuba City, WI

SAMPLE	Depth (ft)	PID	DRO	GRO	Benzene	1,2 Dichloroethane	Ethylbenzene	Methyl-tert-butyl ether	Toluene	1,3,5 Trimethylbenzene	1,2,4 Trimethylbenzene	Total Trimethylbenzenes	Total Xylenes	Naphthalene
Tank Closure (10/24/00)														
1	11	0	na	<10	na	na	na	na	na	na	na	na	na	na
2	11	0	na	<10	na	na	na	na	na	na	na	na	na	na
3	11	0	na	<10	na	na	na	na	na	na	na	na	na	na
4	11	0	na	<10	na	na	na	na	na	na	na	na	na	na
5	11	0	na	<10	na	na	na	na	na	na	na	na	na	na
6	10	0	na	<10	na	na	na	na	na	na	na	na	na	na
7	10	0	na	<10	na	na	na	na	na	na	na	na	na	na
8	4	22	na	<10	na	na	na	na	na	na	na	na	na	na
9	4-5	>2000	na	**10000**	na	na	na	na	na	na	na	na	na	na
10	4	69	na	<10	na	na	na	na	na	na	na	na	na	na
11	5	0	<10	na	na	na	na	na	na	na	na	na	na	na
12	6	164	**8700**	na	na	na	na	na	na	na	na	na	na	na
13	4	56	na	<10	na	na	na	na	na	na	na	na	na	na
Groundwater Protection			ns	ns	5.1	2.8	1570	27	1107	ns	ns	1379	3940	658.7
Direct Contact Hazard			ns	ns	1490	608	7470	59400	818000	182000	89800	ns	258000	5150

- DRO and GRO reported in mg/kg
- PVOCs are reported in ug/kg
- na = not analyzed
- ns = no standard established
- Groundwater Protection RCL (exceedances bold)
- Non-industrial Direct Contact Hazard Level (exceedances underlined)
- Soil standards from R&R Calculator using Wisconsin defaults

TABLE 2
INITIAL ASSESSMENT SOIL ANALYTICAL DATA (METCO - 12/24/2000)
DT Liquor and Convenience Store
3019 State Highway 80 North - Cuba City, WI

SAMPLE	G1-1	G1-3	G1-5	G2-1	G2-3	G2-5	G3-1	G3-5	G4-1	G4-5	GW Prot.	Direct Contact
Depth (ft)	3.5	12	19	3.5	12	19	3.5	19	3.5	19	RCLs	Non-indust
PID	100	250	400	0	0	0	0	0	0	0	ns	ns
DRO	na	na	na	60	11	na	na	na	na	na	ns	ns
GRO	<10	13.4	3030	na	na	na	<10	<10	<10	<10	ns	ns
PVOCs												
Benzene	<25.0	**226**	**9100**	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	5.1	1490
1,2 Dichloroethane	<25.0	na	na	na	na	na	<25.0	na	<25.0	na	2.8	608
Ethylbenzene	<25.0	920	**98000**	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	1570	7470
Methyl-tert-butyl ether	<25.0	<25.0	<1250	<25.0	<25.0	<25.0	<25.0	<25.0	48	<25.0	27	59400
Toluene	<25.0	90	**157000**	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	1107	818000
1,3,5 Trimethylbenzene	<25.0	360	88000	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	ns	182000
1,2,4 Trimethylbenzene	<25.0	1370	279000	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	ns	89800
Total Trimethylbenzenes	<50.0	**1730**	**367000**	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	1379	ns
Total Xylenes	<75.0	1440	**532000**	<75.0	<75.0	<75.0	<75.0	<75.0	<75.0	<75.0	3940	258000
Naphthalene	<25.0	**880**	**63000**	na	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	658.7	5150
PAHs												
Acenaphthene	na	na	na	<17	na	na	na	na	na	na	ns	3,440,000
Acenaphthylene	na	na	na	<19	na	na	na	na	na	na	ns	ns
Anthracene	na	na	na	<11	na	na	na	na	na	na	196,744	17,200,000
Benzo(a)anthracene	na	na	na	<12	na	na	na	na	na	na	ns	148
Benzo(a)pyrene	na	na	na	<8.1	na	na	na	na	na	na	470	15
Benzo(b)fluoranthene	na	na	na	<7.5	na	na	na	na	na	na	480	148
Benzo(g,h,i)perylene	na	na	na	13	na	na	na	na	na	na	ns	ns
Benzo(k)fluoranthene	na	na	na	<14	na	na	na	na	na	na	ns	1,480
Dibenzo(a,h)anthracene	na	na	na	<11	na	na	na	na	na	na	ns	15
Chrysene	na	na	na	<20	na	na	na	na	na	na	145.1	14,800
Fluoranthene	na	na	na	<7.4	na	na	na	na	na	na	88,818	2,290,000
Fluorene	na	na	na	<9.5	na	na	na	na	na	na	14,815	2,290,000
Indeno(1,2,3-cd)pyrene	na	na	na	<9.5	na	na	na	na	na	na	ns	148
1-Methylnaphthalene	na	na	na	<11	na	na	na	na	na	na	ns	15,600
2-Methylnaphthalene	na	na	na	<12	na	na	na	na	na	na	ns	229,000
Naphthalene	na	na	na	<17	na	na	na	na	na	na	658.7	5,150
Phenanthrene	na	na	na	<8.9	na	na	na	na	na	na	ns	ns
Pyrene	na	na	na	<11	na	na	na	na	na	na	54,772	1,720,000
METALS												
Lead	**110**	na	na	na	na	na	18	na	19	na	27	400

- DRO and GRO and Metals reported in mg/kg
- PVOCs and PAHs are reported in ug/kg
- na = not analyzed
- ns = no standard established
- Groundwater Protection RCL (exceedances bold)
- Non-industrial Direct Contact Hazard Level (exceedances underlined)
- Soil standards from R&R Calculator using Wisconsin defaults

TABLE 3
SOIL ANALYTICAL FROM RECENT ASSESSMENT (SEYMOUR - 03/09/2015)
DT Liquor and Convenience Store
3019 State Highway 80 North - Cuba City, WI

SAMPLE	B-5	B-5	B-6	B-6	GW Prot	Direct Contact
Depth (ft)	2-4	15-17	2-4	15-17	RCLs	Non-Indust
PID	0	1580	20	0	ns	ns
DRO	na	na	na	na	ns	ns
GRO	na	na	na	na	ns	ns
PVOCs						
Benzene	<25.0	**1890**	<25.0	<25.0	5.1	1490
1,2 Dichloroethane	na	na	na	na	2.8	608
Ethylbenzene	<25.0	**26600**	<25.0	<25.0	1570	7470
Methyl-tert-butyl ether	<25.0	<250	<25.0	<25.0	27	59400
Toluene	<25.0	**13200**	<25.0	<25.0	1107	818000
1,3,5 Trimethylbenzene	<25.0	25500	44.4	<25.0	ns	182000
1,2,4 Trimethylbenzene	<25.0	78400	136	<25.0	ns	89800
Total Trimethylbenzenes	<50.0	**103900**	180.4	<50.0	1379	ns
Xylenes, -m, -p	<50.0	100000	89.6	<50.0	ns	ns
Xylene, -o	<25.0	37400	<25.0	<25.0	ns	ns
Total Xylenes	<75.0	**137400**	89.6	<75.0	3940	258000
Naphthalene	na	na	na	na	658.7	5150
PAHs						
Acenaphthene	<10.4	<240	<10.7	<10.6	ns	3,440,000
Acenaphthylene	<9.3	<215	<9.5	<9.4	ns	ns
Anthracene	<10.8	<249	<11.1	<11.0	196,744	17,200,000
Benzo(a)anthracene	<7.2	<167	<7.4	<7.3	ns	148
Benzo(a)pyrene	<7.4	<172	<7.6	<7.6	470	15
Benzo(b)fluoranthene	<10.4	<240	<10.7	<10.6	480	148
Benzo(g,h,i)perylene	<7.9	<183	<8.1	<8.0	ns	ns
Benzo(k)fluoranthene	<11.5	<266	<11.8	<11.7	ns	1,480
Dibenzo(a,h)anthracene	<7.6	<176	<7.8	<7.7	ns	15
Chrysene	<9.6	<222	14.1	<9.8	145.1	14,800
Fluoranthene	<10.4	<240	<10.7	<10.6	88,818	2,290,000
Fluorene	<10.4	<240	<10.7	<10.6	14,815	2,290,000
Indeno(1,2,3-cd)pyrene	<7.9	<183	<8.1	<8.0	ns	148
1-Methylnaphthalene	<10.4	8430	35.4	<10.6	ns	15,600
2-Methylnaphthalene	<10.4	17900	75.8	<10.6	ns	229,000
Naphthalene	<10.4	**14900**	38.8	<10.6	658.7	5,150
Phenanthrene	<10.4	<240	<10.7	<10.6	ns	ns
Pyrene	<10.4	<240	<10.7	<10.6	54,772	1,720,000
METALS						
Lead	11.6	17.9	11.1	17.0	27	400

- DRO and GRO and Metals reported in mg/kg
- PVOCs and PAHs are reported in ug/kg
- na = not analyzed
- ns = no standard established
- GW Prot RCL = Groundwater Protection RCL (exceedances bold)
- Non-industrial Direct Contact Hazard Level (exceedances underlined)
- Soil standards from R&R Calculator using Wisconsin defaults

TABLE 4
SUMMARY OF GROUNDWATER ANALYTICAL DATA
DT Liquor and Convenience Store
3019 State Highway 80 North - Cuba City, WI

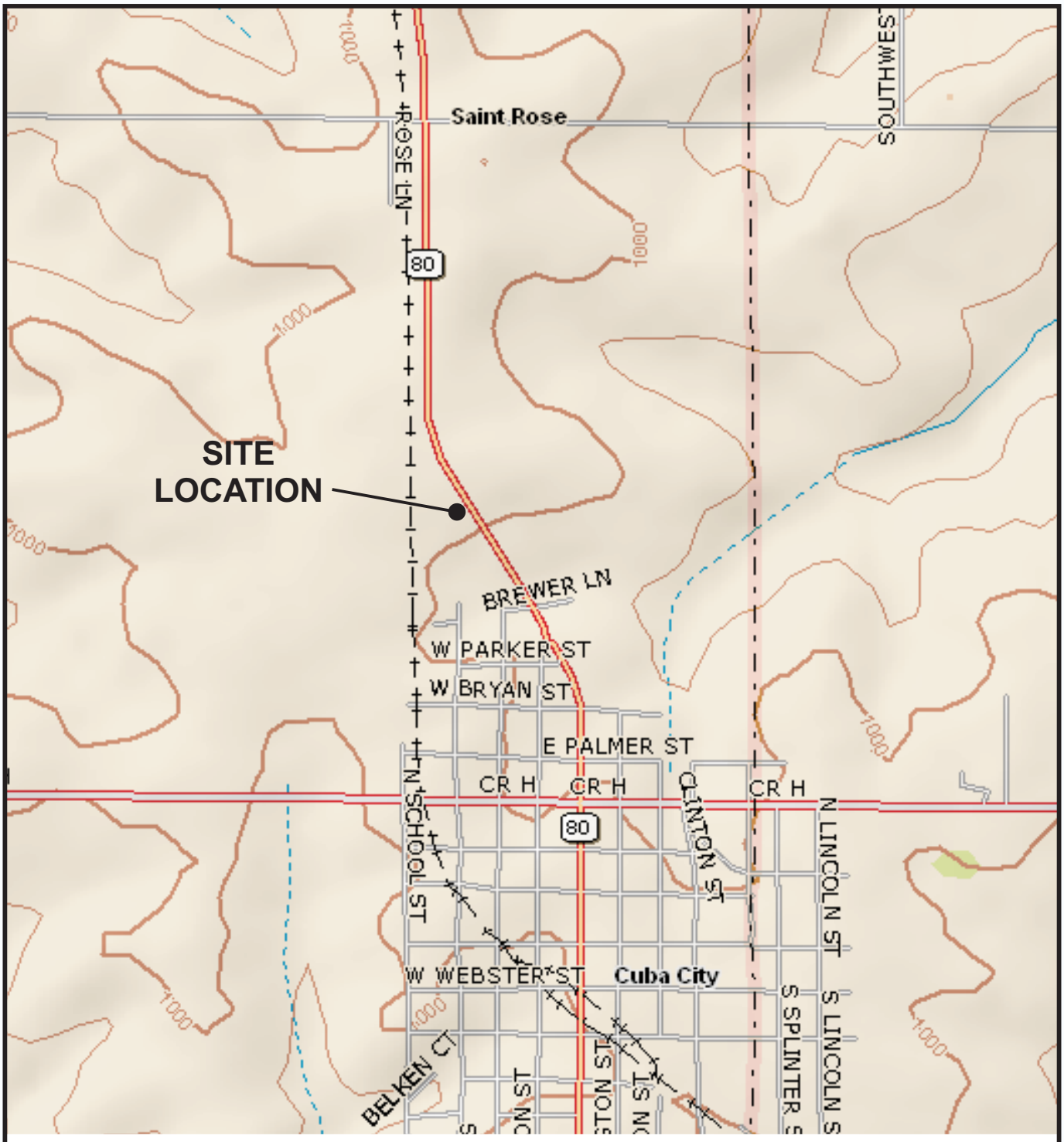
Sample I.D.	MW-1		NR140	
			PAL	ES
Date	03/09/15	06/18/15	--	--
GW Depth (ft)	64.46	63.52	--	--
Select VOCs				
Benzene	<0.50	<0.50	0.5	5
1,2 Dichloroethane	<0.17	<0.17	0.5	5
Ethylbenzene	<0.50	<0.50	140	700
Methyl-tert-butyl ether	<0.17	<0.17	12	60
Toluene	0.94 (J)	<0.50	160	800
1,3,5 Trimethylbenzene	<0.50	<0.50	ns	ns
1,2,4 Trimethylbenzene	<0.50	<0.50	ns	ns
Total Trimethylbenzenes	<1.5	<1.5	96	480
Xylenes, -m, -p	<1.0	<1.0	ns	ns
Xylene, -o	<0.50	<0.50	ns	ns
Total Xylenes	<1.5	<1.5	400	2000
Naphthalene	<2.5	<2.5	10	100
PAHs				
Acenaphthene	0.0096 (J)	<0.0045	ns	ns
Acenaphthylene	0.0065 (J)	<0.0045	ns	ns
Anthracene	<0.0040	<0.0037	600	3000
Benzo(a)anthracene	0.0095 (J)	<0.0047	ns	ns
Benzo(a)pyrene	<0.0044	<0.0040	0.02	0.2
Benzo(b)fluoranthene	<0.0053	<0.0048	0.02	0.2
Benzo(g,h,i)perylene	<0.0035	<0.0032	ns	ns
Benzo(k)fluoranthene	<0.0056	<0.0051	ns	ns
Dibenzo(a,h)anthracene	<0.0056	<0.0051	ns	ns
Chrysene	0.0055 (J)	**0.032**	0.02	0.2
Fluoranthene	0.0097 (J)	<0.0085	80	400
Fluorene	0.045 (J)	<0.0037	80	400
Indeno(1,2,3-cd)pyrene	<0.0036	<0.0033	ns	ns
1-Methylnaphthalene	0.12	<0.0028	ns	ns
2-Methylnaphthalene	0.026 (J)	<0.0025	ns	ns
Naphthalene	0.016 (J)	<0.0041	10	100
Phenanthrene	0.027 (J)	<0.0070	ns	ns
Pyrene	0.024 (J)	<0.0070	50	250
METALS				
Lead	na	na	1.5	15

- All results are reported in ug/l
- na = not analyzed
- ns = no standard established
- (J) = Results estimated by lab; below quantitative limit
- NR140 PAL = Preventative action limit (exceedances bold)
- NR140 ES = Enforcement standard (exceedances shaded)

TABLE 5
INITAL VAPOR INTRUSION SCREENING
DT LIQUOR and CONVENIENCE - CUBA CITY, WISCONSIN

WDNR VAPOR SCREENING CRITERIA- PETROLEUM	SITE CONDITIONS COMPARED TO VAPOR SCREENING
Petroleum-related contaminants can be detected by smell and causes irritation of the mucous membrane. Building occupants should be asked if they have noted petroleum odors.	Occupants in the adjacent building on site do not report noting petroleum odors. Therefore, immediate assessment of vapor intrusion potential is not required.
Free-phase product that has the potential for off-gassing vapors underlies a building or is within 30 feet, horizontally or vertically, of a building foundation	Free-phase product has not been identified at the site. The water table is present at a depth of over 60 feet. Thus, even if free-phase product was present, it would not be within 30 feet of the building.
Petroleum contaminated soil with the potential for off-gassing vapors are within 5 feet or less of a building foundation	The petroleum contaminated soils do not appear to be within 5 feet of the building foundation. Only low levels of soil contamination were identified in the borings near to the building.
Benzene concentration in groundwater underlying a building is > 1,000 ppb and there is less than 20 feet of unsaturated soil between the groundwater and the building foundation	Benzene was not detected in groundwater at the property. Therefore, benzene in the groundwater is less than 1,000 ug/l screening level cited in the guidance. Additionally, the groundwater is over 60 feet deep.
Groundwater contaminated with petroleum product above the Wisconsin's groundwater preventative action limit (PAL) is entering a building or in contact with the building's foundation, or is on water intercepted by the building's foundation drain system, including sumps	Groundwater should not come into contact with the building foundation or drain system since the water-table at the site is located at a depth of approximately 65 feet.
Petroleum vapors are present that may migrate from the petroleum source and move through preferential pathways (sewer lines, fractured bedrock, etc.) into a building	There is no indication of migration of petroleum vapors via preferential pathways. Utilities from the site do not extend onto or beneath the neighboring parcel.
Where no petroleum odors are detected, vapor intrusion can be ruled out at most petroleum releases based on the presence of 5 feet (in the horizontal and vertical direction) of clean, unsaturated soil with an oxygen content $\geq$ 5% between the residual petroleum and the building.	

FIGURES



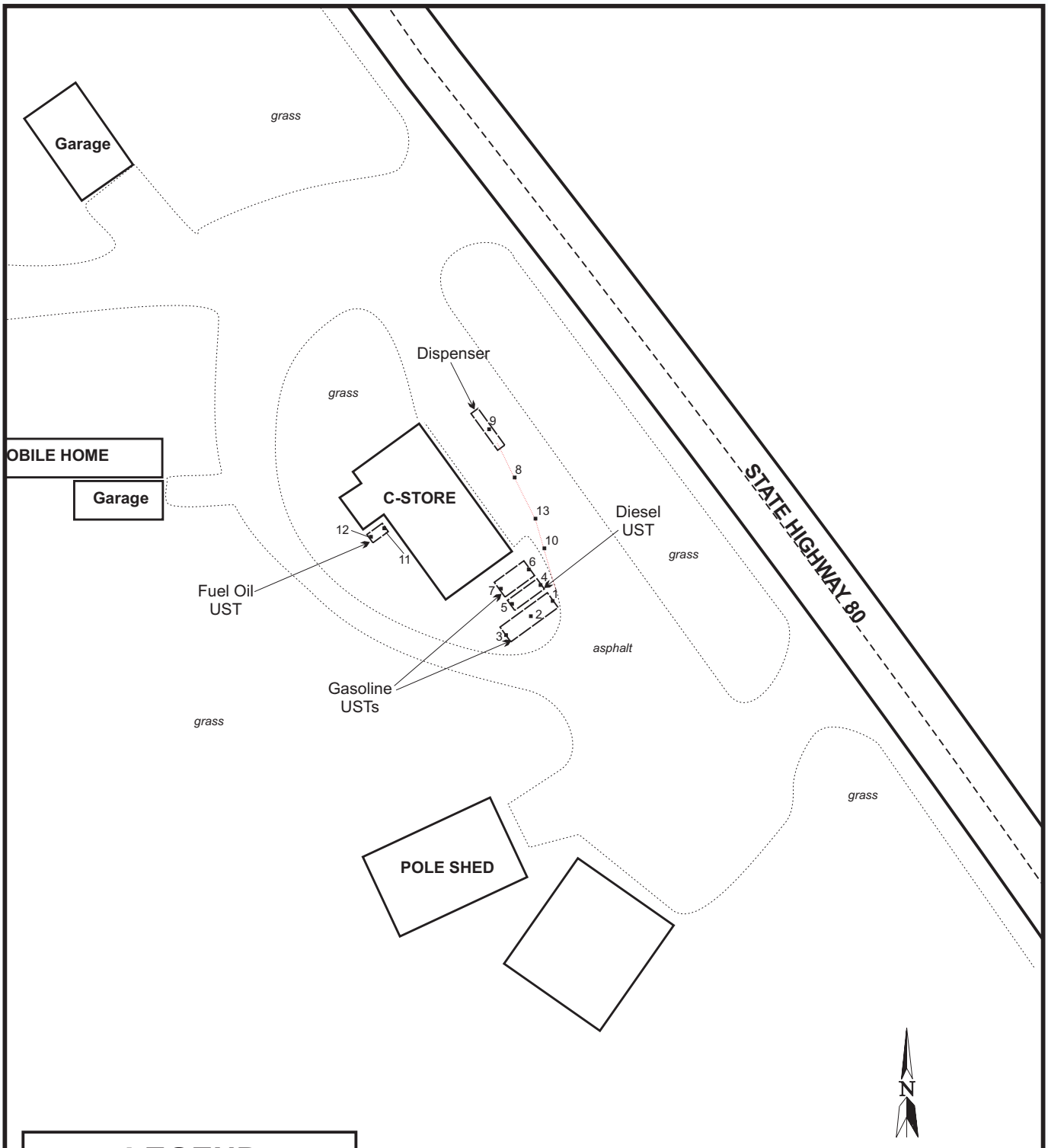
N

0 1200' 2400'

1 INCH = 1200 FEET
SCALE IS APPROXIMATE

FILE/PATH: D:\PROJECTS\DT LIQUOR\Location.cdr
DATE: 11/11/2014
PREPARED: MDF APPROVED:
SOURCE: DeLORME TOPO USA

SEYMOUR ENVIRONMENTAL SERVICES, INC.	SITE LOCATION DT LIQUOR PROPERTY 3019 State Highway 80 North Cuba City, Wisconsin	FIGURE 1



LEGEND

[8] ▪ - Tank Closure Sample (2000)

0 50' 100'

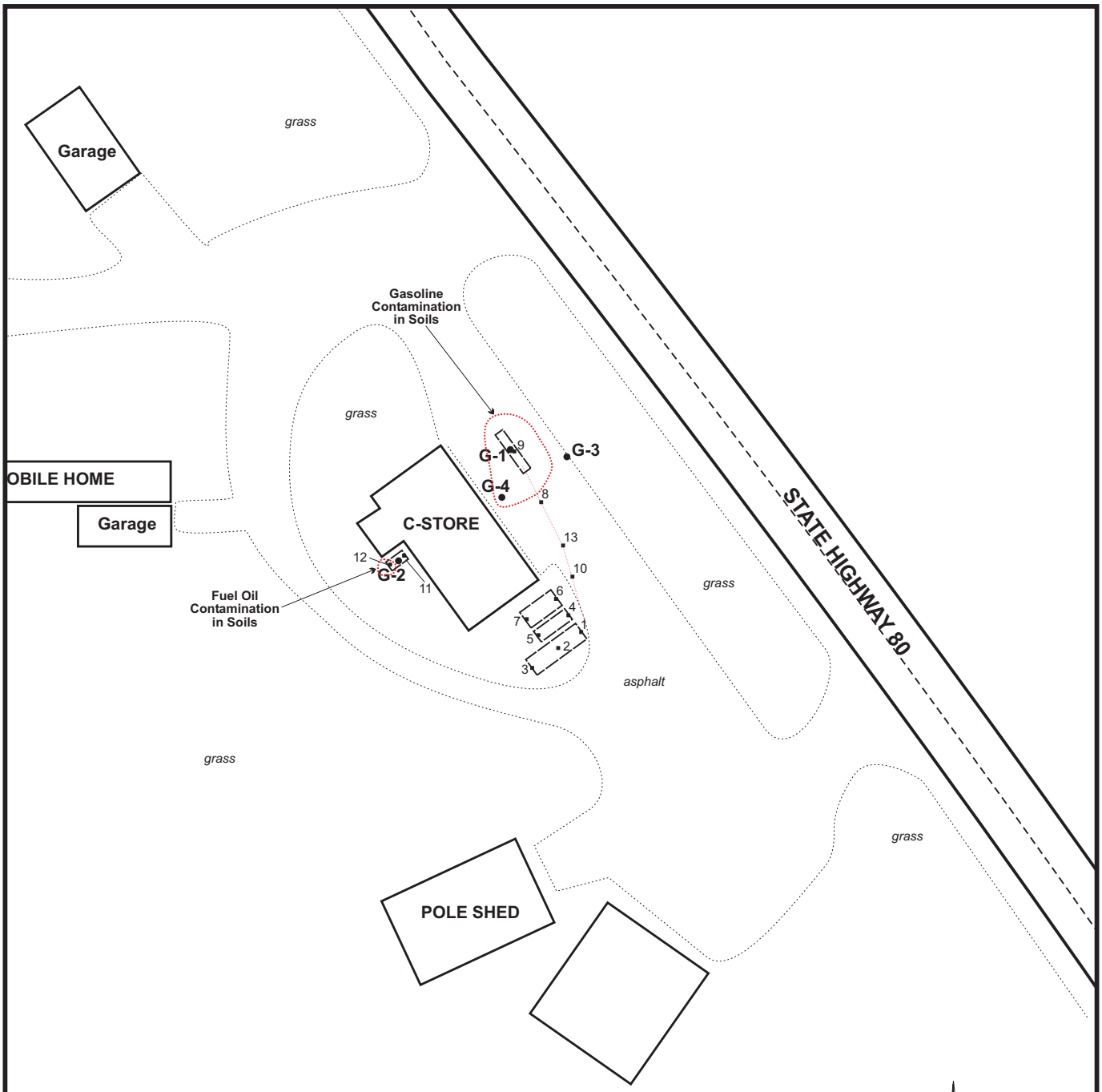
1 INCH = 100 FEET
SCALE IS APPROXIMATE

FILE/PATH: D:\PROJECTS\DTLIQUOR\Layout.cdr
DATE: 04/29/2013
PREPARED: MDF APPROVED:
SOURCE:
Grant County Public Mapping
METCO

SEYMOUR ENVIRONMENTAL SERVICES, INC.

SITE LAYOUT / TANK CLOSURE DATA
DT LIQUOR PROPERTY
3019 State Highway 80 North
Cuba City, Wisconsin

FIGURE
2



LEGEND

8 ▪ - Tank Closure Sample (2000)

G-3 ● - Geoprobe Location (2006)

0 50' 100'

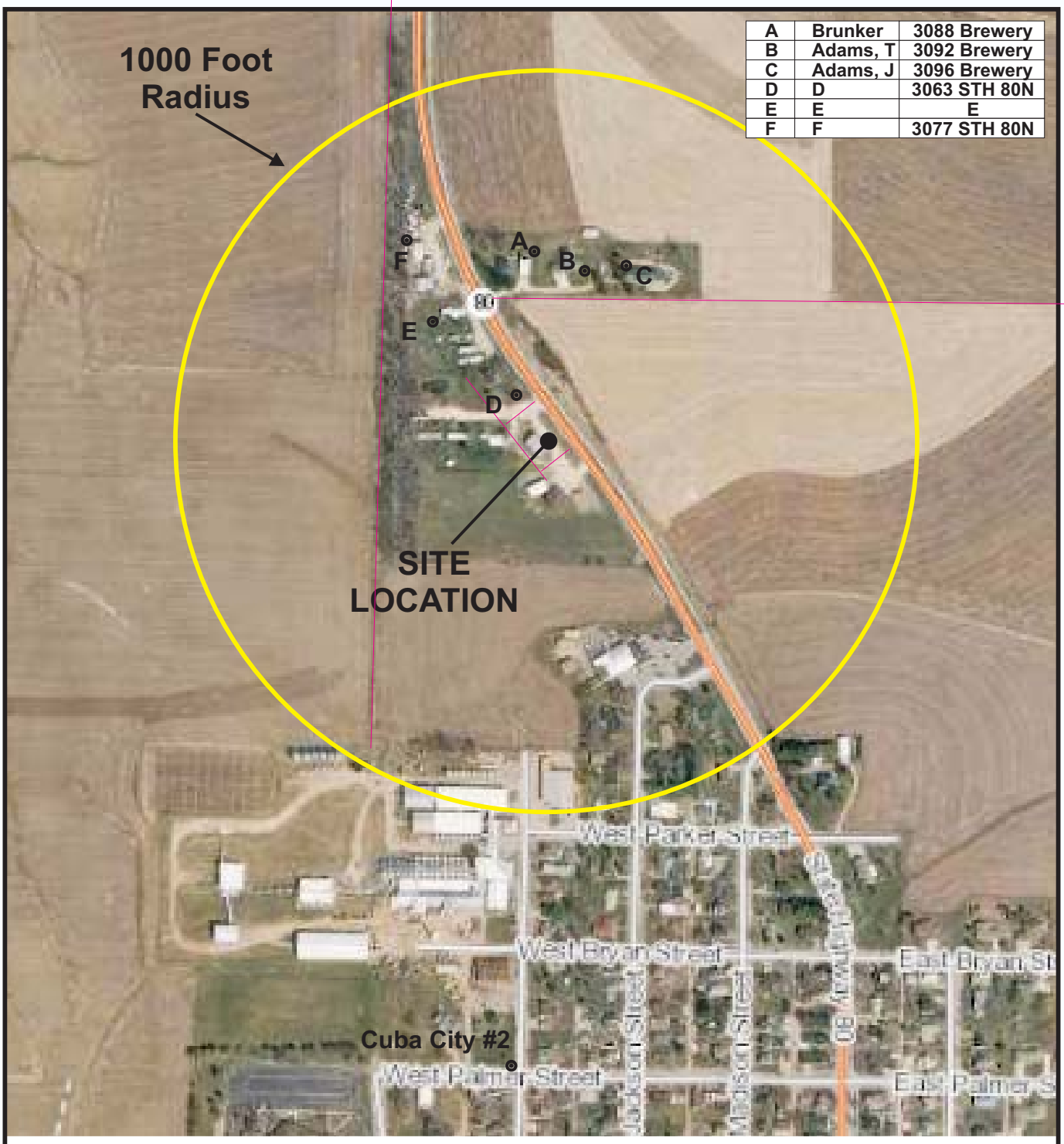
1 INCH = 100 FEET
SCALE IS APPROXIMATE

FILE/PATH: D:\PROJECTS\DTLIQUOR\ Layout.cdr
DATE: 04/29/2013
PREPARED: MDF APPROVED:
SOURCE:
Grant County Public Mapping
METCO

SEYMOUR ENVIRONMENTAL SERVICES, INC.

SOIL SAMPLING DATA (Dec. 2006)
DT LIQUOR PROPERTY
3019 State Highway 80 North
Cuba City, Wisconsin

FIGURE
3



A	Brunker	3088 Brewery
B	Adams, T	3092 Brewery
C	Adams, J	3096 Brewery
D	D	3063 STH 80N
E	E	E
F	F	3077 STH 80N

N

0 400' 800'

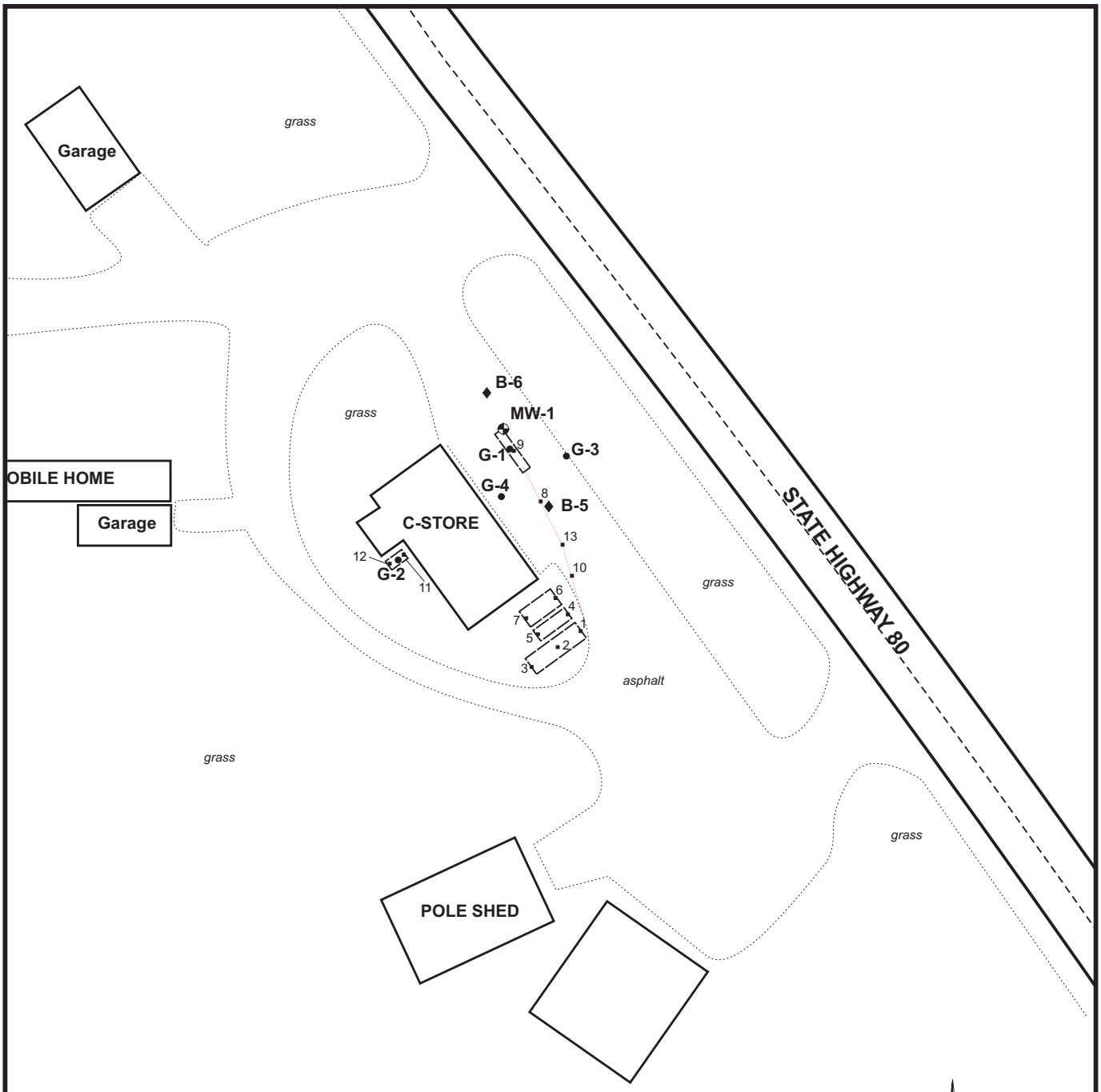
1 INCH = 400 FEET
SCALE IS APPROXIMATE

FILE/PATH: D:\PROJECTS\DT LIQUOR\Location.cdr
DATE: 11/11/2014
PREPARED: MDF APPROVED:
SOURCE:
RR Site Maps
Field Measurements

SEYMOUR ENVIRONMENTAL SERVICES, INC.

WATER SUPPLY WELLS
DT LIQUOR PROPERTY
3019 State Highway 80 North
Cuba City, Wisconsin

FIGURE
4



LEGEND

8 ▪ - Tank Closure Sample (2000)

G-3 ● - Geoprobe Location (2006)

B-5 ♦ - Boring Location (2015)

MW-1 ⊕ - Monitoring Well

0 50' 100'

1 INCH = 100 FEET
SCALE IS APPROXIMATE

FILE/PATH: D:\PROJECTS\DTLIQUOR\ Layout.cdr

DATE: 04/29/2015

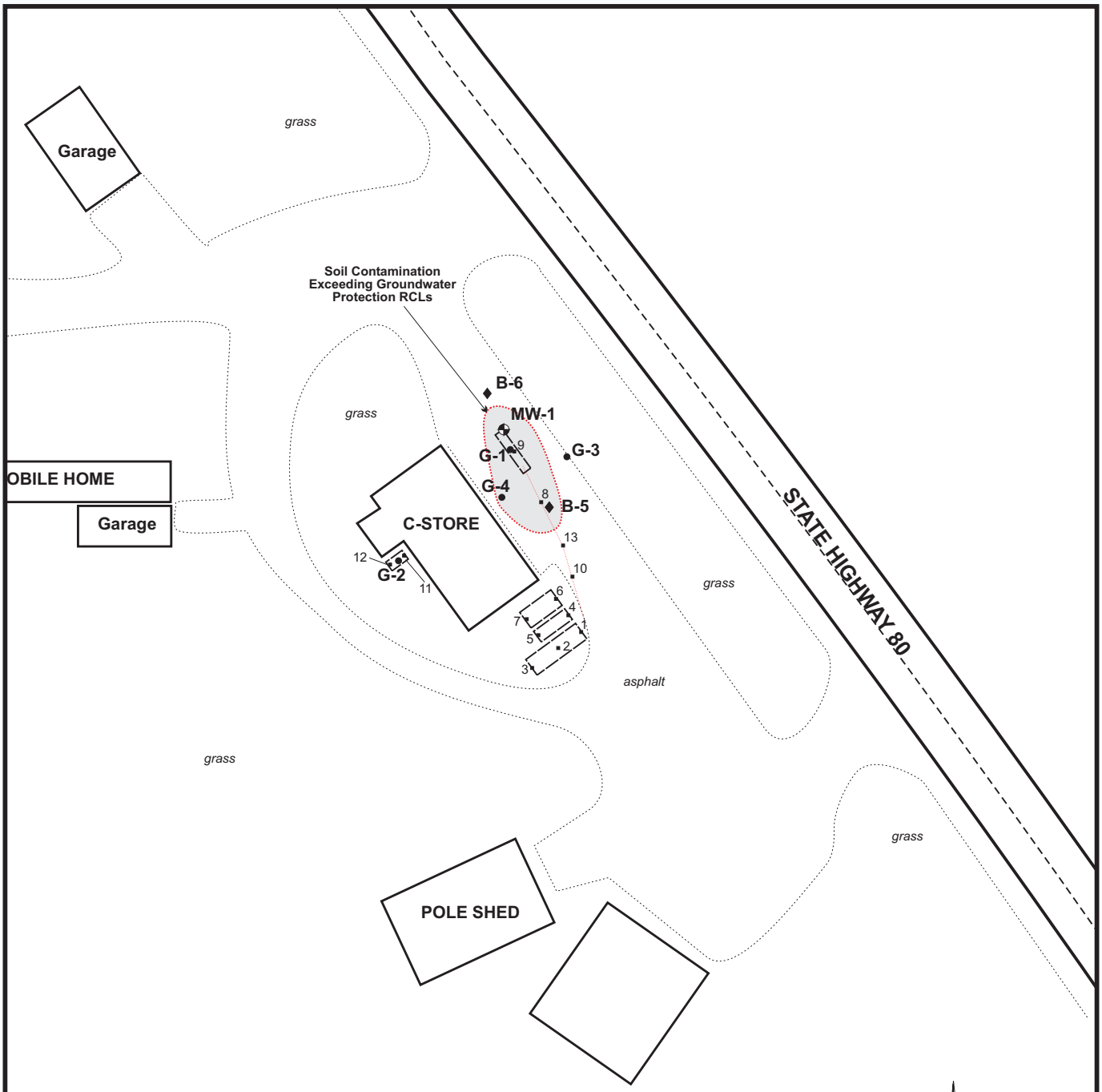
PREPARED: MDF APPROVED:

SOURCE:
Grant County Public Mapping
METCO

SEYMOUR ENVIRONMENTAL SERVICES, INC.

SAMPLING LOCATIONS (March 2015)
DT LIQUOR PROPERTY
3019 State Highway 80 North
Cuba City, Wisconsin

FIGURE
5



LEGEND

8 ▪ - Tank Closure Sample (2000)

G-3 ● - Geoprobe Location (2006)

B-5 ♦ - Boring Location (2015)

MW-1 ⊕ - Monitoring Well

0 50' 100'

1 INCH = 100 FEET
SCALE IS APPROXIMATE

FILE/PATH: D:\PROJECTS\DTLIQUOR\Layout.cdr

DATE: 04/29/2015

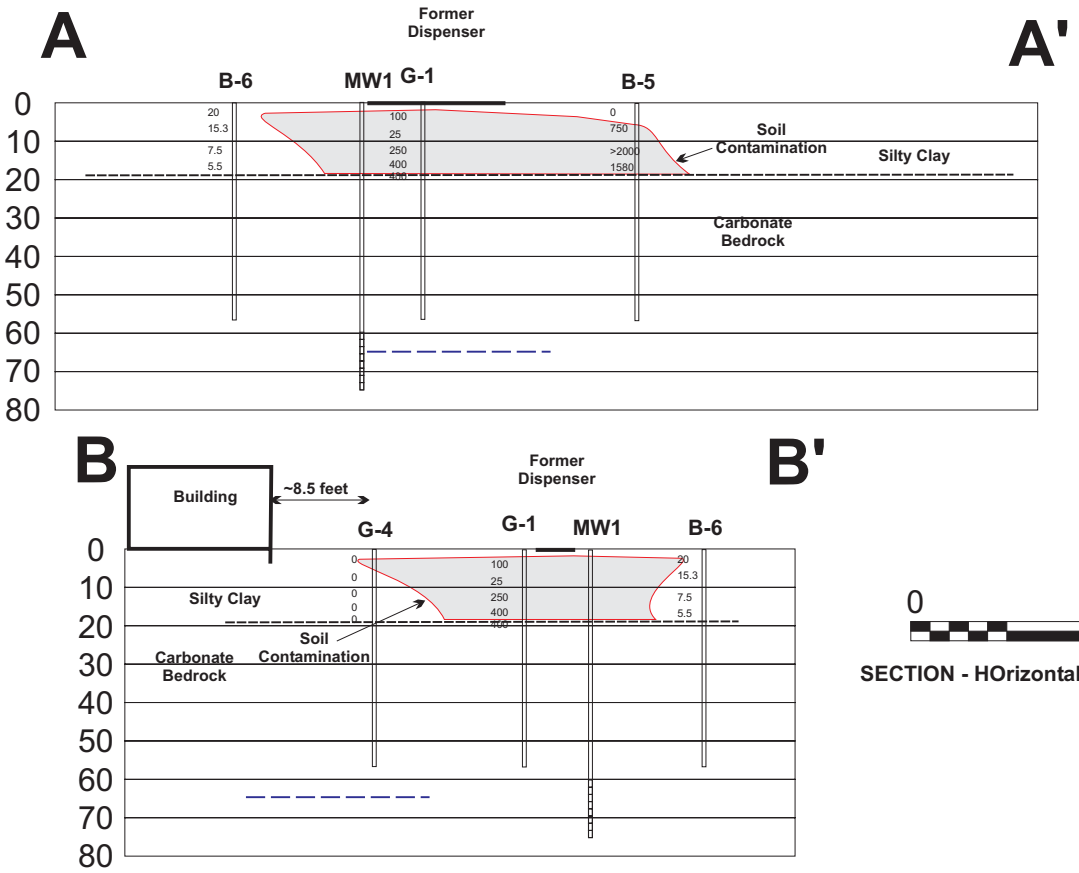
PREPARED: MDF APPROVED:

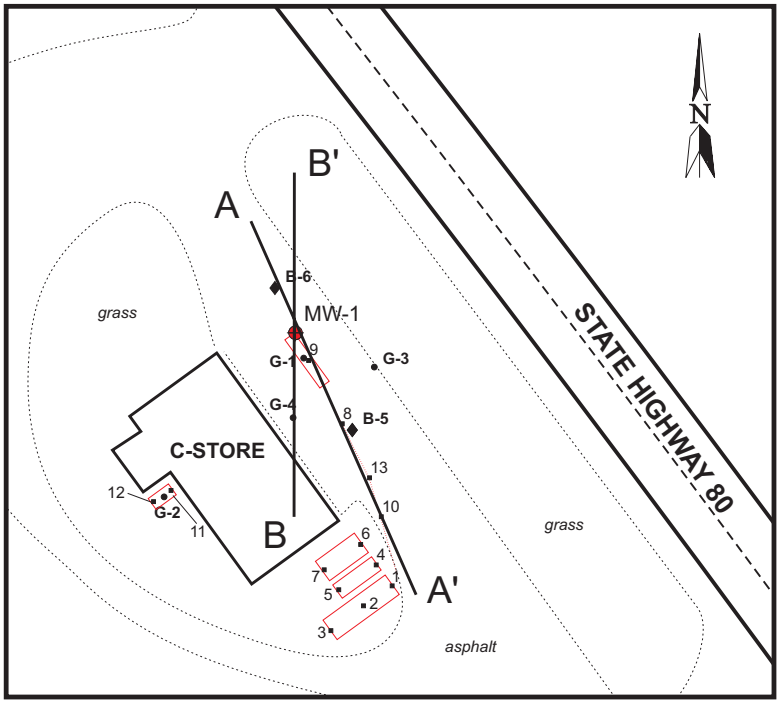
SOURCE:
Grant County Public Mapping
METCO

SEYMOUR ENVIRONMENTAL SERVICES, INC.

IDENTIFIED SOIL CONTAMINATION
DT LIQUOR PROPERTY
3019 State Highway 80 North
Cuba City, Wisconsin

FIGURE 6





0 50' 100'

1 INCH = 50 FEET
SCALE IS APPROXIMATE

FILE/PATH: D:\PROJECTS\DTLIQUOR\Xsect.cdr
DATE: 04/29/2015
PREPARED: MDF APPROVED:
SOURCE:
Grant County Public Mapping
METCO

SEYMOUR ENVIRONMENTAL SERVICES, INC.

CROSS-SECTIONS SHOWING CONTAMINATION
DT LIQUOR PROPERTY
3019 State Highway 80 North
Cuba City, Wisconsin

FIGURE
7

APPENDIX A

BORING LOGS
AND
WELL CONSTRUCTION FORM

State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION
Form 4400-122

Facility/Project Name	Project Number	License/Permit/Monitoring Number
DT Liquor	03022-262317	MW-1
Boring Drilled by		**Date Installed**
Badger State (Alex Plummer) Seymour Environmental (Robyn Seymour)		03/06/2015
Boring or Well Number / **WI Unique Well Number (assigned by DNR)**	**Borehole Diameter**	**Water Level** / **Surface Elevation**
MW-1 / VU 856	2-inch	65 ft
NW ¼ of SE ¼ of Section 25 T 2 N R 1 W	Grid Location (if applicable)	
County Grant / County Code 22	Civil Town Cuba City	

SAMPLE	RECOVERY	DEPTH (ft)	SOIL/ROCK DESCRIPTION	WELL DIAGRAM	USCS	RQD	Stable OVM (vppm)	Soil Properties q	W	LL	PL	P200	Blow Count
		Surf	Gravel Base coarse-sandy gravel Blind drilled to 19 ft, hc odor 8 ft-19		GW								
		20	Cutting-slightly silty clay, Same as above, dense		CL								
			Set auger at 20 ft Air drilled to 79 ft Set well at 75										

Signature	Robyn Seymour	Firm: Seymour Environmental Services, Inc.

State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION
Form 4400-122
Page 1 of 1

Facility/Project Name	Project Number	License/Permit/Monitoring Number
DT Liquor	03022-262317	B-5
Boring Drilled by		**Date Installed**
Badger State (Alex Plummer) Seymour Environmental (Robyn Seymour)		03/09/2015
Boring or Well Number / **WI Unique Well Number (assigned by DNR)**	**Borehole Diameter**	**Water Level** / **Surface Elevation**
B-5	2-inch	na
SW ¼ of NE ¼ of Section 28 T 4 N R 13 E	Grid Location (if applicable)	
County Grant	County Code 22	Civil Town Cuba City

SAMPLE	RECOVERY	DEPTH (ft)	SOIL/ROCK DESCRIPTION	WELL DIAGRAM	USCS	RQD	Stable OVM (vppm)	Soil Properties q	W	LL	PL	P200	Blow Count
		Surf	Gravel										
1			Medium brown slightly silty clay		CL		0						8, 18
		5	Gray brown sandy silt with clay		CL								5, 5
			Slight hc odor Gray stained cuttings		CL		750						
		10											
			Gray brown stiff clay, hc odor		CL		>2000						
		15											
2					CL		1580						3, 4
		17											4, 3
		20	End of Boring										

Signature	Robyn Seymour	Firm: Seymour Environmental Services, Inc.

State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION
Form 4400-122
Page 1 of 1

Facility/Project Name	Project Number	License/Permit/Monitoring Number
DT Liquor	03022-262317	B-6
Boring Drilled by		**Date Installed**
Badger State (Alex Plummer) Seymour Environmental (Robyn Seymour)		03/09/2015
Boring or Well Number / **WI Unique Well Number (assigned by DNR)**	**Borehole Diameter**	**Water Level** / **Surface Elevation**
B-6	2-inch	na
SW ¼ of NE ¼ of Section 28 T 4 N R 13 E	Grid Location (if applicable)	
County Grant	County Code 22	Civil Town Cuba City

SAMPLE	RECOVERY	DEPTH (ft)	SOIL/ROCK DESCRIPTION	WELL DIAGRAM	USCS	RQD	Stable OVM (vppm)	Soil Properties q	W	LL	PL	P200	Blow Count
1		Surf 5	Gravel Medium brown slightly silty clay		CL CL		20						20, 12 5, 6
		10	Medium brown slightly silty clay		CL		15.3						
		15	Brown stiff clay, hc odor		CL		7.5						
2		17 20	End of Boring		CL		5.5						6, 5 5, 7

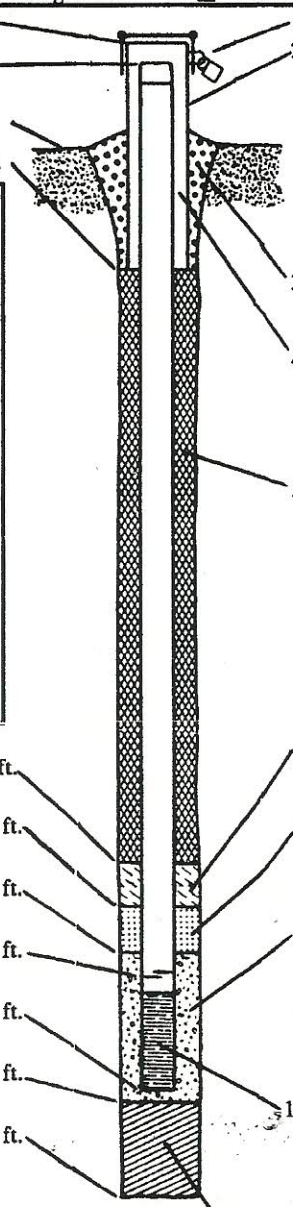
Signature	Robyn Seymour	Firm: Seymour Environmental Services, Inc.

State of Wisconsin
Department of Natural Resources

Route to: Solid Waste ☐ Haz. Waste ☐ Wastewater ☐
Env. Response & Repair ☐ Underground Tanks ☐ Other ☐ _____

MONITORING WELL CONSTRUCTION
Form 4400-113A Rev. 4-90

Facility/Project Name	Local Grid Location of Well ☐N. ☐S. _____ft. ☐E. ☐W. _____ft.	Well Name MW-1
Facility License, Permit or Monitoring Number _ _ _ _ _ _ _ _	Grid Origin Location Lat. _____ Long. _____ or St. Plane _____ ft. N, _____ ft. E.	Wis. Unique Well Number / DNR Well Number
Type of Well Water Table Observation Well ☐ 11 Piezometer ☐ 12	Section Location of Waste/Source ___1/4 of ___ 1/4 of Sec. ___, T. ___ N, R. ___ ☐E. ☐W.	Date Well Installed 03/10/15 (m m d d y y)
Distance Well Is From Waste/Source Boundary ft.	Location of Well Relative to Waste/Source u ☐ Upgradient s ☐ Sidegradient d ☐ Downgradient n ☐ Not Known	Well Installed By: (Person's Name and Firm) Badger State Drilling Alex Plummer
Is Well A Point of Enforcement Std. Application? ☐ Yes ☐ No		



A. Protective pipe, top elevation Flush ft. MSL
B. Well casing, top elevation _____ ft. MSL
C. Land surface elevation _____ ft. MSL
D. Surface seal, bottom _____ ft. MSL or _____ ft.

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

13. Sieve analysis attached? ☐ Yes ☐ No

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

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

16. Drilling additives used? ☐ Yes ☑ No

Describe _____

17. Source of water (attach analysis):

E. Bentonite seal, top _____ ft. MSL or 2 ft.
F. Fine sand, top _____ ft. MSL or 63 ft.
G. Filter pack, top _____ ft. MSL or 64 ft.
H. Screen joint, top _____ ft. MSL or 65 ft.
I. Well bottom _____ ft. MSL or 75 ft.
J. Filter pack, bottom _____ ft. MSL or 79 ft.
K. Borehole, bottom _____ ft. MSL or 79 ft.
L. Borehole, diameter 10"/6" in.
M. O.D. well casing 2.38 in.
N. I.D. well casing 2.0 in.

1. Cap and lock? ☐ Yes ☐ No
2. Protective cover pipe:
a. Inside diameter: 6. in.
b. Length: 2 ft.
c. Material: Steel ☑ 04; Other ☐ __
d. Additional protection? ☐ Yes ☐ No
If yes, describe: _____
3. Surface seal: Bentonite ☐ 30; Concrete ☐ 01; Other ☑ OHIO #5
4. Material between well casing and protective pipe: Bentonite ☑ 30; Annular space seal ☐ __; Other ☐ __
5. Annular space seal: a. Granular Bentonite ☐ 33
b. _____Lbs/gal mud weight . . . Bentonite-sand slurry ☐ 35
c. _____Lbs/gal mud weight . . . . . Bentonite slurry ☐ 31
d. _____ % Bentonite . . . . . Bentonite-cement grout ☐ 50
e. _____Ft³ volume added for any of the above
f. How installed: Tremie ☐ 01; Tremie pumped ☐ 02; Gravity ☑ 08
6. Bentonite seal: a. Bentonite granules ☐ 33
b. ☐1/4 in. ☑3/8 in. ☐1/2 in. Bentonite pellets ☑ 32
c. _____ Other ☐ __
7. Fine sand material: Manufacturer, product name & mesh size
a. RED flint #15
b. Volume added _____ ft³
8. Filter pack material: Manufacturer, product name and mesh size
a. OHIO #5
b. Volume added _____ ft³
9. Well casing: Flush threaded PVC schedule 40 ☑ 23; Flush threaded PVC schedule 80 ☐ 24; Other ☐ __
10. Screen material: Sch 40 PVC
a. Screen type: Factory cut ☑ 11; Continuous slot ☐ 01; Other ☐ __
b. Manufacturer Mono flux
c. Slot size: 0.010 in.
d. Slotted length: __.__ ft.
11. Backfill material (below filter pack): None ☐ 14; Other ☐ OHIO #5

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

Signature _____ Firm Badger State Drilling Inc.

Please complete both sides of this form and return to the appropriate DNR office listed at the top of this form as required by chs. 144, 147 and 160, Wis. Stats., and ch. NR 141, Wis. Ad. Code. In accordance with ch.144, Wis Stats., failure to file this form may result in a forfeiture of not less than $10, nor more than $5000 for each day of violation. In accordance with ch. 147, Wis. Stats., failure to file this form may result in a forfeiture of not more than $10,000 for each day of violation. NOTE: Shaded areas are for DNR use only. See instructions for more information including where the completed form should be sent.

APPENDIX B

LABORATORY REPORTS

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

June 29, 2015

Robyn Seymour
Seymour Environmental Services, INC.
2531 Dyreson Road
Mc Farland, WI 53558

RE: Project: DT LIQUOR
Pace Project No.: 40116998

Dear Robyn Seymour:
Enclosed are the analytical results for sample(s) received by the laboratory on June 23, 2015. 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

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

CERTIFICATIONS

Project: DT LIQUOR
Pace Project No.: 40116998

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
North Dakota Certification #: R-150
South Carolina Certification #: 83006001
Texas Certification #: T104704529-14-1
US Dept of Agriculture #: S-76505
Wisconsin Certification #: 405132750

REPORT OF LABORATORY ANALYSIS

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

SAMPLE SUMMARY

Project: DT LIQUOR
Pace Project No.: 40116998

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40116998001	**MW-1**	Water	06/18/15 08:00	06/23/15 08:15

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

SAMPLE ANALYTE COUNT

Project: DT LIQUOR
Pace Project No.: 40116998

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
40116998001	**MW-1**	EPA 8270 by HVI	TPO	20	PASI-G
		EPA 8260	LAP	64	PASI-G

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

PROJECT NARRATIVE

Project: DT LIQUOR
Pace Project No.: 40116998

Method: **EPA 8270 by HVI**
Description: 8270 MSSV PAH by HVI
Client: SEYMOUR ENVIRONMENTAL SERVICES, INC.
Date: June 29, 2015

General Information:
1 sample was analyzed for EPA 8270 by HVI. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3510 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

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

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

QC Batch: OEXT/27045

B: Analyte was detected in the associated method blank.

- BLANK for HBN 196715 [OEXT/270 (Lab ID: 1182061)
  - Chrysene

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: OEXT/27045

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 40117051001

R1: RPD value was outside control limits.

- MSD (Lab ID: 1182064)
  - Benzo(a)pyrene
  - Benzo(b)fluoranthene
  - Benzo(g,h,i)perylene
  - Benzo(k)fluoranthene

REPORT OF LABORATORY ANALYSIS

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

PROJECT NARRATIVE

Project: DT LIQUOR
Pace Project No.: 40116998

Method: **EPA 8270 by HVI**
Description: 8270 MSSV PAH by HVI
Client: SEYMOUR ENVIRONMENTAL SERVICES, INC.
Date: June 29, 2015

QC Batch: OEXT/27045

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 40117051001

R1: RPD value was outside control limits.

- Dibenz(a,h)anthracene
- Indeno(1,2,3-cd)pyrene

Additional Comments:

REPORT OF LABORATORY ANALYSIS

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

PROJECT NARRATIVE

Project: DT LIQUOR
Pace Project No.: 40116998

Method: **EPA 8260**
Description: 8260 MSV
Client: SEYMOUR ENVIRONMENTAL SERVICES, INC.
Date: June 29, 2015

General Information:
1 sample was analyzed for EPA 8260. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

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

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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

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

ANALYTICAL RESULTS

Project: DT LIQUOR
Pace Project No.: 40116998

Sample: MW-1 **Lab ID: 40116998001** Collected: 06/18/15 08:00 Received: 06/23/15 08:15 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAH by HVI	Analytical Method: EPA 8270 by HVI Preparation Method: EPA 3510								
Acenaphthene	**<0.0045**	ug/L	0.045	0.0045	1	06/24/15 09:50	06/26/15 14:11	83-32-9	
Acenaphthylene	**<0.0045**	ug/L	0.045	0.0045	1	06/24/15 09:50	06/26/15 14:11	208-96-8	
Anthracene	**<0.0037**	ug/L	0.045	0.0037	1	06/24/15 09:50	06/26/15 14:11	120-12-7	
Benzo(a)anthracene	**<0.0047**	ug/L	0.045	0.0047	1	06/24/15 09:50	06/26/15 14:11	56-55-3	
Benzo(a)pyrene	**<0.0040**	ug/L	0.045	0.0040	1	06/24/15 09:50	06/26/15 14:11	50-32-8	
Benzo(b)fluoranthene	**<0.0048**	ug/L	0.045	0.0048	1	06/24/15 09:50	06/26/15 14:11	205-99-2	
Benzo(g,h,i)perylene	**<0.0032**	ug/L	0.045	0.0032	1	06/24/15 09:50	06/26/15 14:11	191-24-2	
Benzo(k)fluoranthene	**<0.0051**	ug/L	0.045	0.0051	1	06/24/15 09:50	06/26/15 14:11	207-08-9	
Chrysene	**0.032J**	ug/L	0.045	0.0039	1	06/24/15 09:50	06/26/15 14:11	218-01-9	B
Dibenz(a,h)anthracene	**<0.0051**	ug/L	0.045	0.0051	1	06/24/15 09:50	06/26/15 14:11	53-70-3	
Fluoranthene	**<0.0085**	ug/L	0.045	0.0085	1	06/24/15 09:50	06/26/15 14:11	206-44-0	
Fluorene	**<0.0037**	ug/L	0.045	0.0037	1	06/24/15 09:50	06/26/15 14:11	86-73-7	
Indeno(1,2,3-cd)pyrene	**<0.0033**	ug/L	0.045	0.0033	1	06/24/15 09:50	06/26/15 14:11	193-39-5	
1-Methylnaphthalene	**<0.0028**	ug/L	0.045	0.0028	1	06/24/15 09:50	06/26/15 14:11	90-12-0	
2-Methylnaphthalene	**<0.0025**	ug/L	0.045	0.0025	1	06/24/15 09:50	06/26/15 14:11	91-57-6	
Naphthalene	**<0.0041**	ug/L	0.045	0.0041	1	06/24/15 09:50	06/26/15 14:11	91-20-3	
Phenanthrene	**<0.0070**	ug/L	0.045	0.0070	1	06/24/15 09:50	06/26/15 14:11	85-01-8	
Pyrene	**<0.0070**	ug/L	0.045	0.0070	1	06/24/15 09:50	06/26/15 14:11	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	58	%	40-130		1	06/24/15 09:50	06/26/15 14:11	321-60-8	
Terphenyl-d14 (S)	56	%	26-135		1	06/24/15 09:50	06/26/15 14:11	1718-51-0	
8260 MSV	Analytical Method: EPA 8260								
Benzene	**<0.50**	ug/L	1.0	0.50	1		06/25/15 15:36	71-43-2	
Bromobenzene	**<0.23**	ug/L	1.0	0.23	1		06/25/15 15:36	108-86-1	
Bromochloromethane	**<0.34**	ug/L	1.0	0.34	1		06/25/15 15:36	74-97-5	
Bromodichloromethane	**<0.50**	ug/L	1.0	0.50	1		06/25/15 15:36	75-27-4	
Bromoform	**<0.50**	ug/L	1.0	0.50	1		06/25/15 15:36	75-25-2	
Bromomethane	**<2.4**	ug/L	5.0	2.4	1		06/25/15 15:36	74-83-9	
n-Butylbenzene	**<0.50**	ug/L	1.0	0.50	1		06/25/15 15:36	104-51-8	
sec-Butylbenzene	**<2.2**	ug/L	5.0	2.2	1		06/25/15 15:36	135-98-8	
tert-Butylbenzene	**<0.18**	ug/L	1.0	0.18	1		06/25/15 15:36	98-06-6	
Carbon tetrachloride	**<0.50**	ug/L	1.0	0.50	1		06/25/15 15:36	56-23-5	
Chlorobenzene	**<0.50**	ug/L	1.0	0.50	1		06/25/15 15:36	108-90-7	
Chloroethane	**<0.37**	ug/L	1.0	0.37	1		06/25/15 15:36	75-00-3	
Chloroform	**<2.5**	ug/L	5.0	2.5	1		06/25/15 15:36	67-66-3	
Chloromethane	**<0.50**	ug/L	1.0	0.50	1		06/25/15 15:36	74-87-3	
2-Chlorotoluene	**<0.50**	ug/L	1.0	0.50	1		06/25/15 15:36	95-49-8	
4-Chlorotoluene	**<0.21**	ug/L	1.0	0.21	1		06/25/15 15:36	106-43-4	
1,2-Dibromo-3-chloropropane	**<2.2**	ug/L	5.0	2.2	1		06/25/15 15:36	96-12-8	
Dibromochloromethane	**<0.50**	ug/L	1.0	0.50	1		06/25/15 15:36	124-48-1	
1,2-Dibromoethane (EDB)	**<0.18**	ug/L	1.0	0.18	1		06/25/15 15:36	106-93-4	
Dibromomethane	**<0.43**	ug/L	1.0	0.43	1		06/25/15 15:36	74-95-3	
1,2-Dichlorobenzene	**<0.50**	ug/L	1.0	0.50	1		06/25/15 15:36	95-50-1	
1,3-Dichlorobenzene	**<0.50**	ug/L	1.0	0.50	1		06/25/15 15:36	541-73-1	
1,4-Dichlorobenzene	**<0.50**	ug/L	1.0	0.50	1		06/25/15 15:36	106-46-7	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: DT LIQUOR
Pace Project No.: 40116998

Sample: MW-1 **Lab ID: 40116998001** Collected: 06/18/15 08:00 Received: 06/23/15 08:15 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
Dichlorodifluoromethane	**<0.22**	ug/L	1.0	0.22	1		06/25/15 15:36	75-71-8	
1,1-Dichloroethane	**<0.24**	ug/L	1.0	0.24	1		06/25/15 15:36	75-34-3	
1,2-Dichloroethane	**<0.17**	ug/L	1.0	0.17	1		06/25/15 15:36	107-06-2	
1,1-Dichloroethene	**<0.41**	ug/L	1.0	0.41	1		06/25/15 15:36	75-35-4	
cis-1,2-Dichloroethene	**<0.26**	ug/L	1.0	0.26	1		06/25/15 15:36	156-59-2	
trans-1,2-Dichloroethene	**<0.26**	ug/L	1.0	0.26	1		06/25/15 15:36	156-60-5	
1,2-Dichloropropane	**<0.23**	ug/L	1.0	0.23	1		06/25/15 15:36	78-87-5	
1,3-Dichloropropane	**<0.50**	ug/L	1.0	0.50	1		06/25/15 15:36	142-28-9	
2,2-Dichloropropane	**<0.48**	ug/L	1.0	0.48	1		06/25/15 15:36	594-20-7	
1,1-Dichloropropene	**<0.44**	ug/L	1.0	0.44	1		06/25/15 15:36	563-58-6	
cis-1,3-Dichloropropene	**<0.50**	ug/L	1.0	0.50	1		06/25/15 15:36	10061-01-5	
trans-1,3-Dichloropropene	**<0.23**	ug/L	1.0	0.23	1		06/25/15 15:36	10061-02-6	
Diisopropyl ether	**<0.50**	ug/L	1.0	0.50	1		06/25/15 15:36	108-20-3	
Ethylbenzene	**<0.50**	ug/L	1.0	0.50	1		06/25/15 15:36	100-41-4	
Hexachloro-1,3-butadiene	**<2.1**	ug/L	5.0	2.1	1		06/25/15 15:36	87-68-3	
Isopropylbenzene (Cumene)	**<0.14**	ug/L	1.0	0.14	1		06/25/15 15:36	98-82-8	
p-Isopropyltoluene	**<0.50**	ug/L	1.0	0.50	1		06/25/15 15:36	99-87-6	
Methylene Chloride	**<0.23**	ug/L	1.0	0.23	1		06/25/15 15:36	75-09-2	
Methyl-tert-butyl ether	**<0.17**	ug/L	1.0	0.17	1		06/25/15 15:36	1634-04-4	
Naphthalene	**<2.5**	ug/L	5.0	2.5	1		06/25/15 15:36	91-20-3	
n-Propylbenzene	**<0.50**	ug/L	1.0	0.50	1		06/25/15 15:36	103-65-1	
Styrene	**<0.50**	ug/L	1.0	0.50	1		06/25/15 15:36	100-42-5	
1,1,1,2-Tetrachloroethane	**<0.18**	ug/L	1.0	0.18	1		06/25/15 15:36	630-20-6	
1,1,2,2-Tetrachloroethane	**<0.25**	ug/L	1.0	0.25	1		06/25/15 15:36	79-34-5	
Tetrachloroethene	**<0.50**	ug/L	1.0	0.50	1		06/25/15 15:36	127-18-4	
Toluene	**<0.50**	ug/L	1.0	0.50	1		06/25/15 15:36	108-88-3	
1,2,3-Trichlorobenzene	**<2.1**	ug/L	5.0	2.1	1		06/25/15 15:36	87-61-6	
1,2,4-Trichlorobenzene	**<2.2**	ug/L	5.0	2.2	1		06/25/15 15:36	120-82-1	
1,1,1-Trichloroethane	**<0.50**	ug/L	1.0	0.50	1		06/25/15 15:36	71-55-6	
1,1,2-Trichloroethane	**<0.20**	ug/L	1.0	0.20	1		06/25/15 15:36	79-00-5	
Trichloroethene	**<0.33**	ug/L	1.0	0.33	1		06/25/15 15:36	79-01-6	
Trichlorofluoromethane	**<0.18**	ug/L	1.0	0.18	1		06/25/15 15:36	75-69-4	
1,2,3-Trichloropropane	**<0.50**	ug/L	1.0	0.50	1		06/25/15 15:36	96-18-4	
1,2,4-Trimethylbenzene	**<0.50**	ug/L	1.0	0.50	1		06/25/15 15:36	95-63-6	
1,3,5-Trimethylbenzene	**<0.50**	ug/L	1.0	0.50	1		06/25/15 15:36	108-67-8	
Vinyl chloride	**<0.18**	ug/L	1.0	0.18	1		06/25/15 15:36	75-01-4	
m&p-Xylene	**<1.0**	ug/L	2.0	1.0	1		06/25/15 15:36	179601-23-1	
o-Xylene	**<0.50**	ug/L	1.0	0.50	1		06/25/15 15:36	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	103	%	70-130		1		06/25/15 15:36	460-00-4	
Dibromofluoromethane (S)	101	%	70-130		1		06/25/15 15:36	1868-53-7	
Toluene-d8 (S)	101	%	70-130		1		06/25/15 15:36	2037-26-5	

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: DT LIQUOR
Pace Project No.: 40116998

QC Batch: MSV/29126
QC Batch Method: EPA 8260
Analysis Method: EPA 8260
Analysis Description: 8260 MSV
Associated Lab Samples: 40116998001

METHOD BLANK: 1182707
Matrix: Water
Associated Lab Samples: 40116998001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	<0.18	1.0	06/25/15 06:59	
1,1,1-Trichloroethane	ug/L	<0.50	1.0	06/25/15 06:59	
1,1,2,2-Tetrachloroethane	ug/L	<0.25	1.0	06/25/15 06:59	
1,1,2-Trichloroethane	ug/L	<0.20	1.0	06/25/15 06:59	
1,1-Dichloroethane	ug/L	<0.24	1.0	06/25/15 06:59	
1,1-Dichloroethene	ug/L	<0.41	1.0	06/25/15 06:59	
1,1-Dichloropropene	ug/L	<0.44	1.0	06/25/15 06:59	
1,2,3-Trichlorobenzene	ug/L	<2.1	5.0	06/25/15 06:59	
1,2,3-Trichloropropane	ug/L	<0.50	1.0	06/25/15 06:59	
1,2,4-Trichlorobenzene	ug/L	<2.2	5.0	06/25/15 06:59	
1,2,4-Trimethylbenzene	ug/L	<0.50	1.0	06/25/15 06:59	
1,2-Dibromo-3-chloropropane	ug/L	<2.2	5.0	06/25/15 06:59	
1,2-Dibromoethane (EDB)	ug/L	<0.18	1.0	06/25/15 06:59	
1,2-Dichlorobenzene	ug/L	<0.50	1.0	06/25/15 06:59	
1,2-Dichloroethane	ug/L	<0.17	1.0	06/25/15 06:59	
1,2-Dichloropropane	ug/L	<0.23	1.0	06/25/15 06:59	
1,3,5-Trimethylbenzene	ug/L	<0.50	1.0	06/25/15 06:59	
1,3-Dichlorobenzene	ug/L	<0.50	1.0	06/25/15 06:59	
1,3-Dichloropropane	ug/L	<0.50	1.0	06/25/15 06:59	
1,4-Dichlorobenzene	ug/L	<0.50	1.0	06/25/15 06:59	
2,2-Dichloropropane	ug/L	<0.48	1.0	06/25/15 06:59	
2-Chlorotoluene	ug/L	<0.50	1.0	06/25/15 06:59	
4-Chlorotoluene	ug/L	<0.21	1.0	06/25/15 06:59	
Benzene	ug/L	<0.50	1.0	06/25/15 06:59	
Bromobenzene	ug/L	<0.23	1.0	06/25/15 06:59	
Bromochloromethane	ug/L	<0.34	1.0	06/25/15 06:59	
Bromodichloromethane	ug/L	<0.50	1.0	06/25/15 06:59	
Bromoform	ug/L	<0.50	1.0	06/25/15 06:59	
Bromomethane	ug/L	<2.4	5.0	06/25/15 06:59	
Carbon tetrachloride	ug/L	<0.50	1.0	06/25/15 06:59	
Chlorobenzene	ug/L	<0.50	1.0	06/25/15 06:59	
Chloroethane	ug/L	<0.37	1.0	06/25/15 06:59	
Chloroform	ug/L	<2.5	5.0	06/25/15 06:59	
Chloromethane	ug/L	<0.50	1.0	06/25/15 06:59	
cis-1,2-Dichloroethene	ug/L	<0.26	1.0	06/25/15 06:59	
cis-1,3-Dichloropropene	ug/L	<0.50	1.0	06/25/15 06:59	
Dibromochloromethane	ug/L	<0.50	1.0	06/25/15 06:59	
Dibromomethane	ug/L	<0.43	1.0	06/25/15 06:59	
Dichlorodifluoromethane	ug/L	<0.22	1.0	06/25/15 06:59	
Diisopropyl ether	ug/L	<0.50	1.0	06/25/15 06:59	
Ethylbenzene	ug/L	<0.50	1.0	06/25/15 06:59	

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: DT LIQUOR
Pace Project No.: 40116998

METHOD BLANK: 1182707 Matrix: Water
Associated Lab Samples: 40116998001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Hexachloro-1,3-butadiene	ug/L	<2.1	5.0	06/25/15 06:59	
Isopropylbenzene (Cumene)	ug/L	<0.14	1.0	06/25/15 06:59	
m&p-Xylene	ug/L	<1.0	2.0	06/25/15 06:59	
Methyl-tert-butyl ether	ug/L	<0.17	1.0	06/25/15 06:59	
Methylene Chloride	ug/L	<0.23	1.0	06/25/15 06:59	
n-Butylbenzene	ug/L	<0.50	1.0	06/25/15 06:59	
n-Propylbenzene	ug/L	<0.50	1.0	06/25/15 06:59	
Naphthalene	ug/L	<2.5	5.0	06/25/15 06:59	
o-Xylene	ug/L	<0.50	1.0	06/25/15 06:59	
p-Isopropyltoluene	ug/L	<0.50	1.0	06/25/15 06:59	
sec-Butylbenzene	ug/L	<2.2	5.0	06/25/15 06:59	
Styrene	ug/L	<0.50	1.0	06/25/15 06:59	
tert-Butylbenzene	ug/L	<0.18	1.0	06/25/15 06:59	
Tetrachloroethene	ug/L	<0.50	1.0	06/25/15 06:59	
Toluene	ug/L	<0.50	1.0	06/25/15 06:59	
trans-1,2-Dichloroethene	ug/L	<0.26	1.0	06/25/15 06:59	
trans-1,3-Dichloropropene	ug/L	<0.23	1.0	06/25/15 06:59	
Trichloroethene	ug/L	<0.33	1.0	06/25/15 06:59	
Trichlorofluoromethane	ug/L	<0.18	1.0	06/25/15 06:59	
Vinyl chloride	ug/L	<0.18	1.0	06/25/15 06:59	
4-Bromofluorobenzene (S)	%	105	70-130	06/25/15 06:59	
Dibromofluoromethane (S)	%	106	70-130	06/25/15 06:59	
Toluene-d8 (S)	%	107	70-130	06/25/15 06:59	

LABORATORY CONTROL SAMPLE & LCSD: 1182708 1182709

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
1,1,1-Trichloroethane	ug/L	50	57.2	59.7	114	119	70-130	4	20	
1,1,2,2-Tetrachloroethane	ug/L	50	44.6	44.7	89	89	70-130	0	20	
1,1,2-Trichloroethane	ug/L	50	50.1	51.0	100	102	70-130	2	20	
1,1-Dichloroethane	ug/L	50	54.0	52.8	108	106	70-130	2	20	
1,1-Dichloroethene	ug/L	50	52.3	54.6	105	109	70-130	4	20	
1,2,4-Trichlorobenzene	ug/L	50	51.5	53.0	103	106	70-130	3	20	
1,2-Dibromo-3-chloropropane	ug/L	50	44.6	47.9	89	96	50-150	7	20	
1,2-Dibromoethane (EDB)	ug/L	50	51.7	53.8	103	108	70-130	4	20	
1,2-Dichlorobenzene	ug/L	50	50.5	50.7	101	101	70-130	0	20	
1,2-Dichloroethane	ug/L	50	57.2	58.1	114	116	70-131	2	20	
1,2-Dichloropropane	ug/L	50	52.6	52.8	105	106	70-130	0	20	
1,3-Dichlorobenzene	ug/L	50	49.9	49.2	100	98	70-130	2	20	
1,4-Dichlorobenzene	ug/L	50	50.3	49.9	101	100	70-130	1	20	
Benzene	ug/L	50	51.3	51.7	103	103	70-130	1	20	
Bromodichloromethane	ug/L	50	57.4	57.3	115	115	70-130	0	20	
Bromoform	ug/L	50	43.4	45.3	87	91	68-130	4	20	
Bromomethane	ug/L	50	58.8	63.4	118	127	38-137	8	20	

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: DT LIQUOR
Pace Project No.: 40116998

LABORATORY CONTROL SAMPLE & LCSD: 1182708 1182709

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Carbon tetrachloride	ug/L	50	62.3	64.0	125	128	70-130	3	20	
Chlorobenzene	ug/L	50	55.1	53.7	110	107	70-130	2	20	
Chloroethane	ug/L	50	53.0	50.8	106	102	70-136	4	20	
Chloroform	ug/L	50	55.2	55.9	110	112	70-130	1	20	
Chloromethane	ug/L	50	48.6	49.5	97	99	48-144	2	20	
cis-1,2-Dichloroethene	ug/L	50	50.4	50.9	101	102	70-130	1	20	
cis-1,3-Dichloropropene	ug/L	50	47.5	48.6	95	97	70-130	2	20	
Dibromochloromethane	ug/L	50	49.0	49.4	98	99	70-130	1	20	
Dichlorodifluoromethane	ug/L	50	49.6	49.7	99	99	33-157	0	20	
Ethylbenzene	ug/L	50	58.0	57.2	116	114	70-132	1	20	
Isopropylbenzene (Cumene)	ug/L	50	60.2	60.0	120	120	70-130	0	20	
m&p-Xylene	ug/L	100	117	116	117	116	70-131	1	20	
Methyl-tert-butyl ether	ug/L	50	44.6	46.3	89	93	48-141	4	20	
Methylene Chloride	ug/L	50	48.6	52.2	97	104	70-130	7	20	
o-Xylene	ug/L	50	55.5	57.6	111	115	70-131	4	20	
Styrene	ug/L	50	56.9	56.0	114	112	70-130	2	20	
Tetrachloroethene	ug/L	50	56.2	55.1	112	110	70-130	2	20	
Toluene	ug/L	50	55.3	55.7	111	111	70-130	1	20	
trans-1,2-Dichloroethene	ug/L	50	53.0	53.1	106	106	70-130	0	20	
trans-1,3-Dichloropropene	ug/L	50	47.7	48.7	95	97	70-130	2	20	
Trichloroethene	ug/L	50	57.4	58.2	115	116	70-130	1	20	
Trichlorofluoromethane	ug/L	50	55.5	56.3	111	113	50-150	1	20	
Vinyl chloride	ug/L	50	53.3	52.9	107	106	65-142	1	20	
4-Bromofluorobenzene (S)	%				105	102	70-130			
Dibromofluoromethane (S)	%				101	106	70-130			
Toluene-d8 (S)	%				105	105	70-130			

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: DT LIQUOR
Pace Project No.: 40116998

QC Batch: OEXT/27045
QC Batch Method: EPA 3510
Analysis Method: EPA 8270 by HVI
Analysis Description: 8270 Water PAH by HVI
Associated Lab Samples: 40116998001

METHOD BLANK: 1182061 Matrix: Water
Associated Lab Samples: 40116998001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1-Methylnaphthalene	ug/L	0.0066J	0.050	06/24/15 20:17	
2-Methylnaphthalene	ug/L	0.0088J	0.050	06/24/15 20:17	
Acenaphthene	ug/L	<0.0050	0.050	06/24/15 20:17	
Acenaphthylene	ug/L	<0.0049	0.050	06/24/15 20:17	
Anthracene	ug/L	<0.0040	0.050	06/24/15 20:17	
Benzo(a)anthracene	ug/L	<0.0051	0.050	06/24/15 20:17	
Benzo(a)pyrene	ug/L	<0.0044	0.050	06/24/15 20:17	
Benzo(b)fluoranthene	ug/L	<0.0053	0.050	06/24/15 20:17	
Benzo(g,h,i)perylene	ug/L	<0.0035	0.050	06/24/15 20:17	
Benzo(k)fluoranthene	ug/L	<0.0056	0.050	06/24/15 20:17	
Chrysene	ug/L	0.036J	0.050	06/24/15 20:17	
Dibenz(a,h)anthracene	ug/L	<0.0056	0.050	06/24/15 20:17	
Fluoranthene	ug/L	<0.0094	0.050	06/24/15 20:17	
Fluorene	ug/L	<0.0040	0.050	06/24/15 20:17	
Indeno(1,2,3-cd)pyrene	ug/L	<0.0036	0.050	06/24/15 20:17	
Naphthalene	ug/L	0.014J	0.050	06/24/15 20:17	
Phenanthrene	ug/L	0.019J	0.050	06/24/15 20:17	
Pyrene	ug/L	<0.0077	0.050	06/24/15 20:17	
2-Fluorobiphenyl (S)	%	76	40-130	06/24/15 20:17	
Terphenyl-d14 (S)	%	112	26-135	06/24/15 20:17	

LABORATORY CONTROL SAMPLE: 1182062

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1-Methylnaphthalene	ug/L	2	1.4	68	46-130	
2-Methylnaphthalene	ug/L	2	1.4	69	47-130	
Acenaphthene	ug/L	2	1.4	68	49-130	
Acenaphthylene	ug/L	2	1.3	64	44-130	
Anthracene	ug/L	2	1.5	77	53-130	
Benzo(a)anthracene	ug/L	2	1.5	76	49-130	
Benzo(a)pyrene	ug/L	2	1.9	95	47-130	
Benzo(b)fluoranthene	ug/L	2	2.0	102	54-133	
Benzo(g,h,i)perylene	ug/L	2	1.5	74	33-132	
Benzo(k)fluoranthene	ug/L	2	2.2	110	59-143	
Chrysene	ug/L	2	2.7	136	70-157	
Dibenz(a,h)anthracene	ug/L	2	1.3	63	24-130	
Fluoranthene	ug/L	2	1.9	93	59-130	
Fluorene	ug/L	2	1.3	67	49-130	
Indeno(1,2,3-cd)pyrene	ug/L	2	1.8	92	52-130	
Naphthalene	ug/L	2	1.2	61	45-130	

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: DT LIQUOR
Pace Project No.: 40116998

LABORATORY CONTROL SAMPLE: 1182062

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Phenanthrene	ug/L	2	1.6	79	60-130	
Pyrene	ug/L	2	1.9	96	64-147	
2-Fluorobiphenyl (S)	%			69	40-130	
Terphenyl-d14 (S)	%			93	26-135	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1182063 1182064

Parameter	Units	40117051001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1-Methylnaphthalene	ug/L	3.2	2	2	5.0	4.4	94	62	27-130	13	42	
2-Methylnaphthalene	ug/L	0.046J	2	2	1.9	1.7	92	81	33-130	13	37	
Acenaphthene	ug/L	7.7	2	2	9.8	8.4	105	38	32-130	15	35	
Acenaphthylene	ug/L	0.68	2	2	2.5	2.2	90	74	34-130	14	29	
Anthracene	ug/L	0.84	2	2	2.7	2.3	92	71	31-130	17	29	
Benzo(a)anthracene	ug/L	<0.0051	2	2	1.7	1.4	83	68	35-135	20	20	
Benzo(a)pyrene	ug/L	<0.0044	2	2	1.5	1.0	74	51	21-139	37	22	R1
Benzo(b)fluoranthene	ug/L	0.0073J	2	2	1.7	1.3	83	65	26-144	25	20	R1
Benzo(g,h,i)perylene	ug/L	<0.0035	2	2	1.3	0.89	63	45	10-142	35	20	R1
Benzo(k)fluoranthene	ug/L	<0.0056	2	2	1.7	1.3	87	66	21-155	28	20	R1
Chrysene	ug/L	0.10	2	2	2.4	2.0	117	97	46-157	17	20	
Dibenz(a,h)anthracene	ug/L	<0.0056	2	2	1.2	0.87	61	44	10-143	33	20	R1
Fluoranthene	ug/L	0.91	2	2	2.8	2.4	95	73	35-138	17	20	
Fluorene	ug/L	3.6	2	2	5.8	4.9	110	65	28-130	17	27	
Indeno(1,2,3-cd)pyrene	ug/L	<0.0036	2	2	1.3	0.89	63	44	16-139	35	20	R1
Naphthalene	ug/L	1.4	2	2	2.9	2.6	75	59	35-130	11	39	
Phenanthrene	ug/L	0.45	2	2	2.5	2.1	101	83	41-131	16	22	
Pyrene	ug/L	1.3	2	2	3.5	2.9	106	79	50-151	16	20	
2-Fluorobiphenyl (S)	%						91	79	40-130			
Terphenyl-d14 (S)	%						91	76	26-135			

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

REPORT OF LABORATORY ANALYSIS

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

QUALIFIERS

Project: DT LIQUOR
Pace Project No.: 40116998

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.

LABORATORIES

PASI-G	Pace Analytical Services - Green Bay

ANALYTE QUALIFIERS

B	Analyte was detected in the associated method blank.
R1	RPD value was outside control limits.

Pace Analytical Services, Inc.
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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: DT LIQUOR
Pace Project No.: 40116998

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40116998001	**MW-1**	EPA 3510	OEXT/27045	EPA 8270 by HVI	MSSV/8033
40116998001	**MW-1**	EPA 8260	MSV/29126		

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

Page 1 of

KEW

40116998

CHAIN OF CUSTODY

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

(Please Print Clearly)	
Company Name:	Seymour Env.
Branch/Location:	
Project Contact:	Robyn Seymour
Phone:	6082259407
Project Number:	
Project Name:	DT Liquor
Project State:	Wisconsin
Sampled By (Print):	Robyn Seymour
Sampled By (Sign):	Robyn Seymour
PO #:	Regulatory Program:

Quote #:	
Mail To Contact:	R. Seymour
Mail To Company:	Seymour Env
Mail To Address:	2531 Pyresan Road McFarland, WI
Invoice To Contact:	
Invoice To Company:	
Invoice To Address:	
Invoice To Phone:	

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

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

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

PACE LAB #	CLIENT FIELD ID	COLLECTION DATE	COLLECTION TIME	MATRIX	FILTERED? (YES/NO) Y/N	PRESERVATION (CODE)* Pick Letter	Analyses Requested: VOC	Analyses Requested: PAH	CLIENT COMMENTS	LAB COMMENTS (Lab Use Only)	Profile #
001	MW-1	6/18	0900	GW			X	X		3-40ml VB, 2-100ml Jar	

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

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

Email #1:	
Email #2:	
Telephone:	
Fax:	

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

Relinquished By:	Date/Time:	Received By:	Date/Time:
Robyn Seymour	6/22		
Dunham	6-23-15 815	Mari McKay	6-23-15 815

PACE Project No.: 40116998

Receipt Temp = 20.1 °C

Sample Receipt pH: OK / Adjusted

Cooler Custody Seal: Present / Not Present; Intact / Not Intact

Version 6.0 06/14/06

C019a(27Jun2006)

ORIGINAL

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

March 24, 2015

Robyn Seymour
Seymour Environmental Services, INC.
2531 Dyreson Road
Mc Farland, WI 53558

RE: Project: DT LIQUOR
Pace Project No.: 40111882

Dear Robyn Seymour:
Enclosed are the analytical results for sample(s) received by the laboratory on March 19, 2015. 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,

Tod Noltemeyer

Tod Noltemeyer for
Dan Milewsky
dan.milewsky@pacelabs.com
Project Manager

Enclosures

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

CERTIFICATIONS

Project: DT LIQUOR
Pace Project No.: 40111882

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
North Dakota Certification #: R-150
South Carolina Certification #: 83006001
Texas Certification #: T104704529-14-1
US Dept of Agriculture #: S-76505
Wisconsin Certification #: 405132750

REPORT OF LABORATORY ANALYSIS

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

SAMPLE SUMMARY

Project: DT LIQUOR
Pace Project No.: 40111882

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40111882001	**MW-1**	Water	03/13/15 13:00	03/19/15 08:30

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SAMPLE ANALYTE COUNT

Project: DT LIQUOR
Pace Project No.: 40111882

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
40111882001	**MW-1**	EPA 8270 by HVI	RJN	20	PASI-G
		EPA 8260	LAP	64	PASI-G

Pace Analytical Services, Inc.
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PROJECT NARRATIVE

Project: DT LIQUOR
Pace Project No.: 40111882

Method: **EPA 8270 by HVI**
Description: 8270 MSSV PAH by HVI
Client: SEYMOUR ENVIRONMENTAL SERVICES, INC.
Date: March 24, 2015

General Information:
1 sample was analyzed for EPA 8270 by HVI. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3510 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

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

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

QC Batch: OEXT/26047

B: Analyte was detected in the associated method blank.

- BLANK for HBN 187919 [OEXT/260 (Lab ID: 1129860)
  - Pyrene

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

Pace Analytical Services, Inc.
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PROJECT NARRATIVE

Project: DT LIQUOR
Pace Project No.: 40111882

Method: **EPA 8260**
Description: 8260 MSV
Client: SEYMOUR ENVIRONMENTAL SERVICES, INC.
Date: March 24, 2015

General Information:
1 sample was analyzed for EPA 8260. All samples were received in acceptable condition with any exceptions noted below.

pH: Post-analysis pH measurement indicates insufficient VOA sample preservation.
- MW-1 (Lab ID: 40111882001)

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

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

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

QC Batch: MSV/27805

R1: RPD value was outside control limits.
- LCSD (Lab ID: 1129804)
  - Bromomethane

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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

Pace Analytical Services, Inc.
1241 Bellevue Street - Suite 9
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(920)469-2436

ANALYTICAL RESULTS

Project: DT LIQUOR
Pace Project No.: 40111882

Sample: MW-1 **Lab ID: 40111882001** Collected: 03/13/15 13:00 Received: 03/19/15 08:30 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAH by HVI	Analytical Method: EPA 8270 by HVI Preparation Method: EPA 3510								
Acenaphthene	**0.0096J**	ug/L	0.050	0.0050	1	03/20/15 08:40	03/20/15 15:27	83-32-9	
Acenaphthylene	**0.0065J**	ug/L	0.050	0.0049	1	03/20/15 08:40	03/20/15 15:27	208-96-8	
Anthracene	**<0.0040**	ug/L	0.050	0.0040	1	03/20/15 08:40	03/20/15 15:27	120-12-7	
Benzo(a)anthracene	**0.0095J**	ug/L	0.050	0.0051	1	03/20/15 08:40	03/20/15 15:27	56-55-3	
Benzo(a)pyrene	**<0.0044**	ug/L	0.050	0.0044	1	03/20/15 08:40	03/20/15 15:27	50-32-8	
Benzo(b)fluoranthene	**<0.0053**	ug/L	0.050	0.0053	1	03/20/15 08:40	03/20/15 15:27	205-99-2	
Benzo(g,h,i)perylene	**<0.0035**	ug/L	0.050	0.0035	1	03/20/15 08:40	03/20/15 15:27	191-24-2	
Benzo(k)fluoranthene	**<0.0056**	ug/L	0.050	0.0056	1	03/20/15 08:40	03/20/15 15:27	207-08-9	
Chrysene	**0.0055J**	ug/L	0.050	0.0042	1	03/20/15 08:40	03/20/15 15:27	218-01-9	
Dibenz(a,h)anthracene	**<0.0056**	ug/L	0.050	0.0056	1	03/20/15 08:40	03/20/15 15:27	53-70-3	
Fluoranthene	**0.0097J**	ug/L	0.050	0.0094	1	03/20/15 08:40	03/20/15 15:27	206-44-0	
Fluorene	**0.045J**	ug/L	0.050	0.0040	1	03/20/15 08:40	03/20/15 15:27	86-73-7	
Indeno(1,2,3-cd)pyrene	**<0.0036**	ug/L	0.050	0.0036	1	03/20/15 08:40	03/20/15 15:27	193-39-5	
1-Methylnaphthalene	**0.12**	ug/L	0.050	0.0031	1	03/20/15 08:40	03/20/15 15:27	90-12-0	
2-Methylnaphthalene	**0.026J**	ug/L	0.050	0.0028	1	03/20/15 08:40	03/20/15 15:27	91-57-6	
Naphthalene	**0.016J**	ug/L	0.050	0.0045	1	03/20/15 08:40	03/20/15 15:27	91-20-3	
Phenanthrene	**0.027J**	ug/L	0.050	0.0077	1	03/20/15 08:40	03/20/15 15:27	85-01-8	
Pyrene	**0.024J**	ug/L	0.050	0.0077	1	03/20/15 08:40	03/20/15 15:27	129-00-0	B
Surrogates									
2-Fluorobiphenyl (S)	63	%	40-130		1	03/20/15 08:40	03/20/15 15:27	321-60-8	
Terphenyl-d14 (S)	74	%	26-135		1	03/20/15 08:40	03/20/15 15:27	1718-51-0	
8260 MSV	Analytical Method: EPA 8260								
Benzene	**<0.50**	ug/L	1.0	0.50	1		03/20/15 18:37	71-43-2	
Bromobenzene	**<0.23**	ug/L	1.0	0.23	1		03/20/15 18:37	108-86-1	
Bromochloromethane	**<0.34**	ug/L	1.0	0.34	1		03/20/15 18:37	74-97-5	
Bromodichloromethane	**<0.50**	ug/L	1.0	0.50	1		03/20/15 18:37	75-27-4	
Bromoform	**<0.50**	ug/L	1.0	0.50	1		03/20/15 18:37	75-25-2	
Bromomethane	**<2.4**	ug/L	5.0	2.4	1		03/20/15 18:37	74-83-9	
n-Butylbenzene	**<0.50**	ug/L	1.0	0.50	1		03/20/15 18:37	104-51-8	
sec-Butylbenzene	**<2.2**	ug/L	5.0	2.2	1		03/20/15 18:37	135-98-8	
tert-Butylbenzene	**<0.18**	ug/L	1.0	0.18	1		03/20/15 18:37	98-06-6	
Carbon tetrachloride	**<0.50**	ug/L	1.0	0.50	1		03/20/15 18:37	56-23-5	
Chlorobenzene	**<0.50**	ug/L	1.0	0.50	1		03/20/15 18:37	108-90-7	
Chloroethane	**<0.37**	ug/L	1.0	0.37	1		03/20/15 18:37	75-00-3	
Chloroform	**<2.5**	ug/L	5.0	2.5	1		03/20/15 18:37	67-66-3	
Chloromethane	**<0.50**	ug/L	1.0	0.50	1		03/20/15 18:37	74-87-3	
2-Chlorotoluene	**<0.50**	ug/L	1.0	0.50	1		03/20/15 18:37	95-49-8	
4-Chlorotoluene	**<0.21**	ug/L	1.0	0.21	1		03/20/15 18:37	106-43-4	
1,2-Dibromo-3-chloropropane	**<2.2**	ug/L	5.0	2.2	1		03/20/15 18:37	96-12-8	
Dibromochloromethane	**<0.50**	ug/L	1.0	0.50	1		03/20/15 18:37	124-48-1	
1,2-Dibromoethane (EDB)	**<0.18**	ug/L	1.0	0.18	1		03/20/15 18:37	106-93-4	
Dibromomethane	**<0.43**	ug/L	1.0	0.43	1		03/20/15 18:37	74-95-3	
1,2-Dichlorobenzene	**<0.50**	ug/L	1.0	0.50	1		03/20/15 18:37	95-50-1	
1,3-Dichlorobenzene	**<0.50**	ug/L	1.0	0.50	1		03/20/15 18:37	541-73-1	
1,4-Dichlorobenzene	**<0.50**	ug/L	1.0	0.50	1		03/20/15 18:37	106-46-7	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: DT LIQUOR
Pace Project No.: 40111882

Sample: MW-1 **Lab ID: 40111882001** Collected: 03/13/15 13:00 Received: 03/19/15 08:30 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
Dichlorodifluoromethane	**<0.22**	ug/L	1.0	0.22	1		03/20/15 18:37	75-71-8	
1,1-Dichloroethane	**<0.24**	ug/L	1.0	0.24	1		03/20/15 18:37	75-34-3	
1,2-Dichloroethane	**<0.17**	ug/L	1.0	0.17	1		03/20/15 18:37	107-06-2	
1,1-Dichloroethene	**<0.41**	ug/L	1.0	0.41	1		03/20/15 18:37	75-35-4	
cis-1,2-Dichloroethene	**<0.26**	ug/L	1.0	0.26	1		03/20/15 18:37	156-59-2	
trans-1,2-Dichloroethene	**<0.26**	ug/L	1.0	0.26	1		03/20/15 18:37	156-60-5	
1,2-Dichloropropane	**<0.23**	ug/L	1.0	0.23	1		03/20/15 18:37	78-87-5	
1,3-Dichloropropane	**<0.50**	ug/L	1.0	0.50	1		03/20/15 18:37	142-28-9	
2,2-Dichloropropane	**<0.48**	ug/L	1.0	0.48	1		03/20/15 18:37	594-20-7	
1,1-Dichloropropene	**<0.44**	ug/L	1.0	0.44	1		03/20/15 18:37	563-58-6	
cis-1,3-Dichloropropene	**<0.50**	ug/L	1.0	0.50	1		03/20/15 18:37	10061-01-5	
trans-1,3-Dichloropropene	**<0.23**	ug/L	1.0	0.23	1		03/20/15 18:37	10061-02-6	
Diisopropyl ether	**<0.50**	ug/L	1.0	0.50	1		03/20/15 18:37	108-20-3	
Ethylbenzene	**<0.50**	ug/L	1.0	0.50	1		03/20/15 18:37	100-41-4	
Hexachloro-1,3-butadiene	**<2.1**	ug/L	5.0	2.1	1		03/20/15 18:37	87-68-3	
Isopropylbenzene (Cumene)	**<0.14**	ug/L	1.0	0.14	1		03/20/15 18:37	98-82-8	
p-Isopropyltoluene	**<0.50**	ug/L	1.0	0.50	1		03/20/15 18:37	99-87-6	
Methylene Chloride	**<0.23**	ug/L	1.0	0.23	1		03/20/15 18:37	75-09-2	
Methyl-tert-butyl ether	**<0.17**	ug/L	1.0	0.17	1		03/20/15 18:37	1634-04-4	
Naphthalene	**<2.5**	ug/L	5.0	2.5	1		03/20/15 18:37	91-20-3	
n-Propylbenzene	**<0.50**	ug/L	1.0	0.50	1		03/20/15 18:37	103-65-1	
Styrene	**<0.50**	ug/L	1.0	0.50	1		03/20/15 18:37	100-42-5	
1,1,1,2-Tetrachloroethane	**<0.18**	ug/L	1.0	0.18	1		03/20/15 18:37	630-20-6	
1,1,2,2-Tetrachloroethane	**<0.25**	ug/L	1.0	0.25	1		03/20/15 18:37	79-34-5	
Tetrachloroethene	**<0.50**	ug/L	1.0	0.50	1		03/20/15 18:37	127-18-4	
Toluene	**0.94J**	ug/L	1.0	0.50	1		03/20/15 18:37	108-88-3	
1,2,3-Trichlorobenzene	**<2.1**	ug/L	5.0	2.1	1		03/20/15 18:37	87-61-6	
1,2,4-Trichlorobenzene	**<2.2**	ug/L	5.0	2.2	1		03/20/15 18:37	120-82-1	
1,1,1-Trichloroethane	**<0.50**	ug/L	1.0	0.50	1		03/20/15 18:37	71-55-6	
1,1,2-Trichloroethane	**<0.20**	ug/L	1.0	0.20	1		03/20/15 18:37	79-00-5	
Trichloroethene	**<0.33**	ug/L	1.0	0.33	1		03/20/15 18:37	79-01-6	
Trichlorofluoromethane	**<0.18**	ug/L	1.0	0.18	1		03/20/15 18:37	75-69-4	
1,2,3-Trichloropropane	**<0.50**	ug/L	1.0	0.50	1		03/20/15 18:37	96-18-4	
1,2,4-Trimethylbenzene	**<0.50**	ug/L	1.0	0.50	1		03/20/15 18:37	95-63-6	
1,3,5-Trimethylbenzene	**<0.50**	ug/L	1.0	0.50	1		03/20/15 18:37	108-67-8	
Vinyl chloride	**<0.18**	ug/L	1.0	0.18	1		03/20/15 18:37	75-01-4	
m&p-Xylene	**<1.0**	ug/L	2.0	1.0	1		03/20/15 18:37	179601-23-1	
o-Xylene	**<0.50**	ug/L	1.0	0.50	1		03/20/15 18:37	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	88	%	70-130		1		03/20/15 18:37	460-00-4	pH
Dibromofluoromethane (S)	107	%	70-130		1		03/20/15 18:37	1868-53-7	
Toluene-d8 (S)	99	%	70-130		1		03/20/15 18:37	2037-26-5	

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: DT LIQUOR
Pace Project No.: 40111882

QC Batch: MSV/27805
QC Batch Method: EPA 8260
Analysis Method: EPA 8260
Analysis Description: 8260 MSV
Associated Lab Samples: 40111882001

METHOD BLANK: 1129802
Matrix: Water
Associated Lab Samples: 40111882001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	<0.18	1.0	03/20/15 08:45	
1,1,1-Trichloroethane	ug/L	<0.50	1.0	03/20/15 08:45	
1,1,2,2-Tetrachloroethane	ug/L	<0.25	1.0	03/20/15 08:45	
1,1,2-Trichloroethane	ug/L	<0.20	1.0	03/20/15 08:45	
1,1-Dichloroethane	ug/L	<0.24	1.0	03/20/15 08:45	
1,1-Dichloroethene	ug/L	<0.41	1.0	03/20/15 08:45	
1,1-Dichloropropene	ug/L	<0.44	1.0	03/20/15 08:45	
1,2,3-Trichlorobenzene	ug/L	<2.1	5.0	03/20/15 08:45	
1,2,3-Trichloropropane	ug/L	<0.50	1.0	03/20/15 08:45	
1,2,4-Trichlorobenzene	ug/L	<2.2	5.0	03/20/15 08:45	
1,2,4-Trimethylbenzene	ug/L	<0.50	1.0	03/20/15 08:45	
1,2-Dibromo-3-chloropropane	ug/L	<2.2	5.0	03/20/15 08:45	
1,2-Dibromoethane (EDB)	ug/L	<0.18	1.0	03/20/15 08:45	
1,2-Dichlorobenzene	ug/L	<0.50	1.0	03/20/15 08:45	
1,2-Dichloroethane	ug/L	<0.17	1.0	03/20/15 08:45	
1,2-Dichloropropane	ug/L	<0.23	1.0	03/20/15 08:45	
1,3,5-Trimethylbenzene	ug/L	<0.50	1.0	03/20/15 08:45	
1,3-Dichlorobenzene	ug/L	<0.50	1.0	03/20/15 08:45	
1,3-Dichloropropane	ug/L	<0.50	1.0	03/20/15 08:45	
1,4-Dichlorobenzene	ug/L	<0.50	1.0	03/20/15 08:45	
2,2-Dichloropropane	ug/L	<0.48	1.0	03/20/15 08:45	
2-Chlorotoluene	ug/L	<0.50	1.0	03/20/15 08:45	
4-Chlorotoluene	ug/L	<0.21	1.0	03/20/15 08:45	
Benzene	ug/L	<0.50	1.0	03/20/15 08:45	
Bromobenzene	ug/L	<0.23	1.0	03/20/15 08:45	
Bromochloromethane	ug/L	<0.34	1.0	03/20/15 08:45	
Bromodichloromethane	ug/L	<0.50	1.0	03/20/15 08:45	
Bromoform	ug/L	<0.50	1.0	03/20/15 08:45	
Bromomethane	ug/L	<2.4	5.0	03/20/15 08:45	
Carbon tetrachloride	ug/L	<0.50	1.0	03/20/15 08:45	
Chlorobenzene	ug/L	<0.50	1.0	03/20/15 08:45	
Chloroethane	ug/L	<0.37	1.0	03/20/15 08:45	
Chloroform	ug/L	<2.5	5.0	03/20/15 08:45	
Chloromethane	ug/L	<0.50	1.0	03/20/15 08:45	
cis-1,2-Dichloroethene	ug/L	<0.26	1.0	03/20/15 08:45	
cis-1,3-Dichloropropene	ug/L	<0.50	1.0	03/20/15 08:45	
Dibromochloromethane	ug/L	<0.50	1.0	03/20/15 08:45	
Dibromomethane	ug/L	<0.43	1.0	03/20/15 08:45	
Dichlorodifluoromethane	ug/L	<0.22	1.0	03/20/15 08:45	
Diisopropyl ether	ug/L	<0.50	1.0	03/20/15 08:45	
Ethylbenzene	ug/L	<0.50	1.0	03/20/15 08:45	

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: DT LIQUOR
Pace Project No.: 40111882

METHOD BLANK: 1129802 Matrix: Water
Associated Lab Samples: 40111882001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Hexachloro-1,3-butadiene	ug/L	<2.1	5.0	03/20/15 08:45	
Isopropylbenzene (Cumene)	ug/L	<0.14	1.0	03/20/15 08:45	
m&p-Xylene	ug/L	<1.0	2.0	03/20/15 08:45	
Methyl-tert-butyl ether	ug/L	<0.17	1.0	03/20/15 08:45	
Methylene Chloride	ug/L	<0.23	1.0	03/20/15 08:45	
n-Butylbenzene	ug/L	<0.50	1.0	03/20/15 08:45	
n-Propylbenzene	ug/L	<0.50	1.0	03/20/15 08:45	
Naphthalene	ug/L	<2.5	5.0	03/20/15 08:45	
o-Xylene	ug/L	<0.50	1.0	03/20/15 08:45	
p-Isopropyltoluene	ug/L	<0.50	1.0	03/20/15 08:45	
sec-Butylbenzene	ug/L	<2.2	5.0	03/20/15 08:45	
Styrene	ug/L	<0.50	1.0	03/20/15 08:45	
tert-Butylbenzene	ug/L	<0.18	1.0	03/20/15 08:45	
Tetrachloroethene	ug/L	<0.50	1.0	03/20/15 08:45	
Toluene	ug/L	<0.50	1.0	03/20/15 08:45	
trans-1,2-Dichloroethene	ug/L	<0.26	1.0	03/20/15 08:45	
trans-1,3-Dichloropropene	ug/L	<0.23	1.0	03/20/15 08:45	
Trichloroethene	ug/L	<0.33	1.0	03/20/15 08:45	
Trichlorofluoromethane	ug/L	<0.18	1.0	03/20/15 08:45	
Vinyl chloride	ug/L	<0.18	1.0	03/20/15 08:45	
4-Bromofluorobenzene (S)	%	89	70-130	03/20/15 08:45	
Dibromofluoromethane (S)	%	104	70-130	03/20/15 08:45	
Toluene-d8 (S)	%	99	70-130	03/20/15 08:45	

LABORATORY CONTROL SAMPLE & LCSD: 1129803 1129804

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
1,1,1-Trichloroethane	ug/L	50	56.9	57.0	114	114	70-130	0	20	
1,1,2,2-Tetrachloroethane	ug/L	50	50.6	50.6	101	101	70-130	0	20	
1,1,2-Trichloroethane	ug/L	50	52.2	52.0	104	104	70-130	0	20	
1,1-Dichloroethane	ug/L	50	54.6	54.8	109	110	70-130	0	20	
1,1-Dichloroethene	ug/L	50	57.3	58.1	115	116	70-130	1	20	
1,2,4-Trichlorobenzene	ug/L	50	49.1	49.4	98	99	70-130	1	20	
1,2-Dibromo-3-chloropropane	ug/L	50	40.9	40.3	82	81	50-150	2	20	
1,2-Dibromoethane (EDB)	ug/L	50	53.2	53.6	106	107	70-130	1	20	
1,2-Dichlorobenzene	ug/L	50	54.7	54.1	109	108	70-130	1	20	
1,2-Dichloroethane	ug/L	50	51.4	51.4	103	103	70-131	0	20	
1,2-Dichloropropane	ug/L	50	53.6	52.4	107	105	70-130	2	20	
1,3-Dichlorobenzene	ug/L	50	55.4	55.0	111	110	70-130	1	20	
1,4-Dichlorobenzene	ug/L	50	54.7	53.7	109	107	70-130	2	20	
Benzene	ug/L	50	50.9	50.9	102	102	70-130	0	20	
Bromodichloromethane	ug/L	50	53.5	53.4	107	107	70-130	0	20	
Bromoform	ug/L	50	51.2	51.5	102	103	68-130	0	20	
Bromomethane	ug/L	50	38.3	47.2	77	94	38-137	21	20	R1

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: DT LIQUOR
Pace Project No.: 40111882

LABORATORY CONTROL SAMPLE & LCSD: 1129803 1129804

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Carbon tetrachloride	ug/L	50	56.9	57.9	114	116	70-130	2	20	
Chlorobenzene	ug/L	50	55.6	55.5	111	111	70-130	0	20	
Chloroethane	ug/L	50	55.3	54.7	111	109	70-136	1	20	
Chloroform	ug/L	50	55.2	55.8	110	112	70-130	1	20	
Chloromethane	ug/L	50	44.5	48.1	89	96	48-144	8	20	
cis-1,2-Dichloroethene	ug/L	50	53.2	54.1	106	108	70-130	2	20	
cis-1,3-Dichloropropene	ug/L	50	46.6	46.8	93	94	70-130	0	20	
Dibromochloromethane	ug/L	50	55.4	56.0	111	112	70-130	1	20	
Dichlorodifluoromethane	ug/L	50	53.4	53.8	107	108	33-157	1	20	
Ethylbenzene	ug/L	50	52.4	52.6	105	105	70-132	0	20	
Isopropylbenzene (Cumene)	ug/L	50	52.1	53.4	104	107	70-130	2	20	
m&p-Xylene	ug/L	100	108	110	108	110	70-131	1	20	
Methyl-tert-butyl ether	ug/L	50	47.9	48.6	96	97	48-141	1	20	
Methylene Chloride	ug/L	50	54.2	52.8	108	106	70-130	3	20	
o-Xylene	ug/L	50	53.4	54.3	107	109	70-131	2	20	
Styrene	ug/L	50	50.2	49.6	100	99	70-130	1	20	
Tetrachloroethene	ug/L	50	55.2	55.2	110	110	70-130	0	20	
Toluene	ug/L	50	54.0	54.2	108	108	70-130	0	20	
trans-1,2-Dichloroethene	ug/L	50	56.2	58.6	112	117	70-130	4	20	
trans-1,3-Dichloropropene	ug/L	50	44.2	45.5	88	91	70-130	3	20	
Trichloroethene	ug/L	50	55.8	55.4	112	111	70-130	1	20	
Trichlorofluoromethane	ug/L	50	62.4	62.3	125	125	50-150	0	20	
Vinyl chloride	ug/L	50	54.5	56.1	109	112	65-142	3	20	
4-Bromofluorobenzene (S)	%				91	93	70-130			
Dibromofluoromethane (S)	%				107	107	70-130			
Toluene-d8 (S)	%				97	100	70-130			

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1129829 1129830

Parameter	Units	40111861001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1-Trichloroethane	ug/L	<0.50	50	50	55.3	56.1	111	112	70-130	1	20	
1,1,2,2-Tetrachloroethane	ug/L	<0.25	50	50	49.8	45.9	100	92	70-130	8	20	
1,1,2-Trichloroethane	ug/L	<0.20	50	50	51.8	51.2	104	102	70-130	1	20	
1,1-Dichloroethane	ug/L	<0.24	50	50	53.2	53.2	106	106	70-134	0	20	
1,1-Dichloroethene	ug/L	<0.41	50	50	56.3	55.6	113	111	70-139	1	20	
1,2,4-Trichlorobenzene	ug/L	<2.2	50	50	50.5	49.6	100	98	70-130	2	20	
1,2-Dibromo-3-chloropropane	ug/L	<2.2	50	50	39.7	36.5	79	73	50-150	8	20	
1,2-Dibromoethane (EDB)	ug/L	<0.18	50	50	53.2	50.4	106	101	70-130	5	20	
1,2-Dichlorobenzene	ug/L	<0.50	50	50	53.7	52.9	107	106	70-130	2	20	
1,2-Dichloroethane	ug/L	<0.17	50	50	51.0	49.8	102	100	70-132	2	20	
1,2-Dichloropropane	ug/L	<0.23	50	50	49.9	51.8	100	104	70-130	4	20	
1,3-Dichlorobenzene	ug/L	<0.50	50	50	53.7	53.4	107	107	70-130	0	20	
1,4-Dichlorobenzene	ug/L	<0.50	50	50	53.8	53.2	108	106	70-130	1	20	

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: DT LIQUOR
Pace Project No.: 40111882

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1129829 1129830

Parameter	Units	40111861001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Benzene	ug/L	<0.50	50	50	50.0	50.0	100	100	70-130	0	20	
Bromodichloromethane	ug/L	<0.50	50	50	53.3	52.3	107	105	70-132	2	20	
Bromoform	ug/L	<0.50	50	50	51.4	47.0	103	94	68-130	9	20	
Bromomethane	ug/L	<2.4	50	50	41.2	46.7	82	93	38-141	12	20	
Carbon tetrachloride	ug/L	<0.50	50	50	56.9	56.8	114	114	70-130	0	20	
Chlorobenzene	ug/L	<0.50	50	50	54.9	53.8	110	108	70-130	2	20	
Chloroethane	ug/L	<0.37	50	50	54.6	52.0	109	104	66-152	5	20	
Chloroform	ug/L	<2.5	50	50	54.8	53.8	110	108	70-130	2	20	
Chloromethane	ug/L	<0.50	50	50	46.3	45.2	93	90	44-151	2	20	
cis-1,2-Dichloroethene	ug/L	<0.26	50	50	53.2	52.1	106	104	70-130	2	20	
cis-1,3-Dichloropropene	ug/L	<0.50	50	50	46.1	45.4	92	91	70-130	2	20	
Dibromochloromethane	ug/L	<0.50	50	50	55.2	53.8	110	108	70-130	3	20	
Dichlorodifluoromethane	ug/L	<0.22	50	50	51.6	50.1	103	100	29-160	3	20	
Ethylbenzene	ug/L	<0.50	50	50	52.1	51.4	104	103	70-132	1	20	
Isopropylbenzene (Cumene)	ug/L	<0.14	50	50	52.3	52.1	105	104	70-130	0	20	
m&p-Xylene	ug/L	<1.0	100	100	109	108	109	108	70-131	1	20	
Methyl-tert-butyl ether	ug/L	<0.17	50	50	48.6	45.1	97	90	48-143	7	20	
Methylene Chloride	ug/L	<0.23	50	50	52.2	51.1	104	102	70-130	2	20	
o-Xylene	ug/L	<0.50	50	50	53.7	53.3	107	107	70-131	1	20	
Styrene	ug/L	<0.50	50	50	51.8	50.3	104	101	70-130	3	20	
Tetrachloroethene	ug/L	<0.50	50	50	54.1	53.5	108	107	70-130	1	20	
Toluene	ug/L	<0.50	50	50	53.5	53.2	107	106	70-130	0	20	
trans-1,2-Dichloroethene	ug/L	<0.26	50	50	56.5	55.3	113	111	70-132	2	20	
trans-1,3-Dichloropropene	ug/L	<0.23	50	50	45.1	42.6	90	85	70-130	6	20	
Trichloroethene	ug/L	<0.33	50	50	54.2	54.5	108	109	70-130	0	20	
Trichlorofluoromethane	ug/L	<0.18	50	50	61.7	61.4	123	123	50-153	0	20	
Vinyl chloride	ug/L	<0.18	50	50	53.6	53.4	107	107	60-155	0	20	
4-Bromofluorobenzene (S)	%						93	93	70-130			
Dibromofluoromethane (S)	%						105	108	70-130			
Toluene-d8 (S)	%						98	99	70-130			

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: DT LIQUOR
Pace Project No.: 40111882

QC Batch: OEXT/26047
QC Batch Method: EPA 3510
Analysis Method: EPA 8270 by HVI
Analysis Description: 8270 Water PAH by HVI
Associated Lab Samples: 40111882001

METHOD BLANK: 1129860 Matrix: Water
Associated Lab Samples: 40111882001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1-Methylnaphthalene	ug/L	<0.0031	0.050	03/20/15 14:20	
2-Methylnaphthalene	ug/L	<0.0028	0.050	03/20/15 14:20	
Acenaphthene	ug/L	<0.0050	0.050	03/20/15 14:20	
Acenaphthylene	ug/L	<0.0049	0.050	03/20/15 14:20	
Anthracene	ug/L	<0.0040	0.050	03/20/15 14:20	
Benzo(a)anthracene	ug/L	<0.0051	0.050	03/20/15 14:20	
Benzo(a)pyrene	ug/L	<0.0044	0.050	03/20/15 14:20	
Benzo(b)fluoranthene	ug/L	<0.0053	0.050	03/20/15 14:20	
Benzo(g,h,i)perylene	ug/L	<0.0035	0.050	03/20/15 14:20	
Benzo(k)fluoranthene	ug/L	<0.0056	0.050	03/20/15 14:20	
Chrysene	ug/L	<0.0042	0.050	03/20/15 14:20	
Dibenz(a,h)anthracene	ug/L	<0.0056	0.050	03/20/15 14:20	
Fluoranthene	ug/L	<0.0094	0.050	03/20/15 14:20	
Fluorene	ug/L	<0.0040	0.050	03/20/15 14:20	
Indeno(1,2,3-cd)pyrene	ug/L	<0.0036	0.050	03/20/15 14:20	
Naphthalene	ug/L	<0.0045	0.050	03/20/15 14:20	
Phenanthrene	ug/L	<0.0077	0.050	03/20/15 14:20	
Pyrene	ug/L	0.012J	0.050	03/20/15 14:20	
2-Fluorobiphenyl (S)	%	56	40-130	03/20/15 14:20	
Terphenyl-d14 (S)	%	98	26-135	03/20/15 14:20	

LABORATORY CONTROL SAMPLE: 1129861

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1-Methylnaphthalene	ug/L	2	1.1	54	46-130	
2-Methylnaphthalene	ug/L	2	1.1	55	47-130	
Acenaphthene	ug/L	2	1.3	63	49-130	
Acenaphthylene	ug/L	2	1.3	63	44-130	
Anthracene	ug/L	2	1.5	73	53-130	
Benzo(a)anthracene	ug/L	2	1.8	88	49-130	
Benzo(a)pyrene	ug/L	2	1.5	75	47-130	
Benzo(b)fluoranthene	ug/L	2	1.8	88	54-133	
Benzo(g,h,i)perylene	ug/L	2	1.4	70	33-132	
Benzo(k)fluoranthene	ug/L	2	1.5	74	59-143	
Chrysene	ug/L	2	1.9	93	70-157	
Dibenz(a,h)anthracene	ug/L	2	1.3	64	24-130	
Fluoranthene	ug/L	2	1.7	86	59-130	
Fluorene	ug/L	2	1.5	74	49-130	
Indeno(1,2,3-cd)pyrene	ug/L	2	1.7	87	52-130	
Naphthalene	ug/L	2	0.98	49	45-130	

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: DT LIQUOR
Pace Project No.: 40111882

LABORATORY CONTROL SAMPLE: 1129861

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Phenanthrene	ug/L	2	1.4	71	60-130	
Pyrene	ug/L	2	1.8	89	64-147	
2-Fluorobiphenyl (S)	%			57	40-130	
Terphenyl-d14 (S)	%			98	26-135	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1129862 1129863

Parameter	Units	40111882001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1-Methylnaphthalene	ug/L	0.12	2	2	1.2	1.0	55	45	27-130	17	42	
2-Methylnaphthalene	ug/L	0.026J	2	2	1.2	0.99	58	48	33-130	17	37	
Acenaphthene	ug/L	0.0096J	2	2	1.3	1.1	64	54	32-130	16	35	
Acenaphthylene	ug/L	0.0065J	2	2	1.3	1.1	65	55	34-130	16	29	
Anthracene	ug/L	<0.0040	2	2	1.4	1.2	69	59	31-130	16	29	
Benzo(a)anthracene	ug/L	0.0095J	2	2	1.3	1.1	63	56	35-135	12	20	
Benzo(a)pyrene	ug/L	<0.0044	2	2	0.91	0.82	46	41	21-139	11	22	
Benzo(b)fluoranthene	ug/L	<0.0053	2	2	1.0	0.91	50	46	26-144	10	20	
Benzo(g,h,i)perylene	ug/L	<0.0035	2	2	0.87	0.80	43	40	10-142	8	20	
Benzo(k)fluoranthene	ug/L	<0.0056	2	2	0.89	0.77	45	39	21-155	14	20	
Chrysene	ug/L	0.0055J	2	2	1.4	1.2	68	59	46-157	14	20	
Dibenz(a,h)anthracene	ug/L	<0.0056	2	2	0.87	0.83	43	41	10-143	5	20	
Fluoranthene	ug/L	0.0097J	2	2	1.4	1.2	69	60	35-138	15	20	
Fluorene	ug/L	0.045J	2	2	1.5	1.3	74	62	28-130	17	27	
Indeno(1,2,3-cd)pyrene	ug/L	<0.0036	2	2	0.95	0.84	47	42	16-139	12	20	
Naphthalene	ug/L	0.016J	2	2	1.0	0.89	51	44	35-130	16	39	
Phenanthrene	ug/L	0.027J	2	2	1.4	1.2	67	57	41-131	16	22	
Pyrene	ug/L	0.024J	2	2	1.5	1.2	72	61	50-151	16	20	
2-Fluorobiphenyl (S)	%						60	51	40-130			
Terphenyl-d14 (S)	%						76	62	26-135			

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

REPORT OF LABORATORY ANALYSIS

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

QUALIFIERS

Project: DT LIQUOR
Pace Project No.: 40111882

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.

LABORATORIES

PASI-G	Pace Analytical Services - Green Bay

ANALYTE QUALIFIERS

B	Analyte was detected in the associated method blank.
R1	RPD value was outside control limits.
pH	Post-analysis pH measurement indicates insufficient VOA sample preservation.

Pace Analytical Services, Inc.
1241 Bellevue Street - Suite 9
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(920)469-2436

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: DT LIQUOR
Pace Project No.: 40111882

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40111882001	**MW-1**	EPA 3510	OEXT/26047	EPA 8270 by HVI	MSSV/7726
40111882001	**MW-1**	EPA 8260	MSV/27805		

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

Pace Analytical®
www.pacelabs.com

CHAIN OF CUSTODY

40111882

(Please Print Clearly)	
Company Name:	Seymour Env.
Branch/Location:	
Project Contact:	Robyn Seymour
Phone:	608-225-9407
Project Number:	
Project Name:	DT Liquor
Project State:	Wisconsin
Sampled By (Print):	Robyn Seymour
Sampled By (Sign):	Robyn Seymour
PO #:	Regulatory Program:

Quote #:	
Mail To Contact:	Robyn Seymour
Mail To Company:	2531 Seymour Env.
Mail To Address:	2531 Pyreson McFarland, WI
Invoice To Contact:	Robyn Seymour
Invoice To Company:	Seymour Env.
Invoice To Address:	
Invoice To Phone:	

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

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

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

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

PACE LAB #	CLIENT FIELD ID	COLLECTION DATE	COLLECTION TIME	MATRIX	FILTERED? (YES/NO) Y/N	PRESERVATION (CODE)* Pick Letter	Analyses Requested: VOC's	PAH	CLIENT COMMENTS	LAB COMMENTS (Lab Use Only)	Profile #
001	MW-1	3/13	1300	GW			X	X		1-1Liter A 3-40ml B	

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

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

Email #1:	
Email #2:	
Telephone:	
Fax:	

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

Relinquished By:	Date/Time:	Received By:	Date/Time:
Robyn Seymour	3/17/15		
Dunham Exp	3/19/15 0830	Kathleen Wendel	3/19/15 0830

PACE Project No.: 40111882

Receipt Temp = R01 °C

Sample Receipt pH: OK / Adjusted

Cooler Custody Seal: Present / Not Present

Intact / Not Intact

Version 6.0 06/14/06

C019a(27Jun2006)

ORIGINAL

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

March 26, 2015

Robyn Seymour
Seymour Environmental Services, INC.
2531 Dyreson Road
Mc Farland, WI 53558

RE: Project: DT LIQUOR
Pace Project No.: 40111544

Dear Robyn Seymour:
Enclosed are the analytical results for sample(s) received by the laboratory on March 12, 2015. 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,

Tod Noltemeyer

Tod Noltemeyer for
Dan Milewsky
dan.milewsky@pacelabs.com
Project Manager

Enclosures

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

CERTIFICATIONS

Project: DT LIQUOR
Pace Project No.: 40111544

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
North Dakota Certification #: R-150
South Carolina Certification #: 83006001
Texas Certification #: T104704529-14-1
US Dept of Agriculture #: S-76505
Wisconsin Certification #: 405132750

REPORT OF LABORATORY ANALYSIS

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

SAMPLE SUMMARY

Project: DT LIQUOR
Pace Project No.: 40111544

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40111544001	**B-5, 2-4**	Solid	03/09/15 15:45	03/12/15 07:50
40111544002	**B-5, 15-17**	Solid	03/09/15 16:00	03/12/15 07:50
40111544003	**B-6, 2-4**	Solid	03/09/15 16:40	03/12/15 07:50
40111544004	**B-6, 15-17**	Solid	03/09/15 17:00	03/12/15 07:50

REPORT OF LABORATORY ANALYSIS

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

SAMPLE ANALYTE COUNT

Project: DT LIQUOR
Pace Project No.: 40111544

Lab ID	Sample ID	Method	Analysts	Analytes Reported
40111544001	**B-5, 2-4**	WI MOD GRO	LCF	9
		EPA 6010	DLB	1
		EPA 8270 by SIM	ARO	20
		ASTM D2974-87	SKW	1
40111544002	**B-5, 15-17**	WI MOD GRO	LCF	9
		EPA 6010	DLB	1
		EPA 8270 by SIM	ARO	20
		ASTM D2974-87	SKW	1
40111544003	**B-6, 2-4**	WI MOD GRO	LCF	9
		EPA 6010	DLB	1
		EPA 8270 by SIM	ARO	20
		ASTM D2974-87	SKW	1
40111544004	**B-6, 15-17**	WI MOD GRO	LCF	9
		EPA 6010	DLB	1
		EPA 8270 by SIM	ARO	20
		ASTM D2974-87	SKW	1

Pace Analytical Services, Inc.
1241 Bellevue Street - Suite 9
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(920)469-2436

ANALYTICAL RESULTS

Project: DT LIQUOR
Pace Project No.: 40111544

Sample: B-5, 2-4 **Lab ID: 40111544001** Collected: 03/09/15 15:45 Received: 03/12/15 07:50 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
WIGRO GCV	Analytical Method: WI MOD GRO Preparation Method: TPH GRO/PVOC WI ext.								
Benzene	**<25.0**	ug/kg	50.0	25.0	1	03/13/15 07:03	03/13/15 18:11	71-43-2	W
Ethylbenzene	**<25.0**	ug/kg	50.0	25.0	1	03/13/15 07:03	03/13/15 18:11	100-41-4	W
Methyl-tert-butyl ether	**<25.0**	ug/kg	50.0	25.0	1	03/13/15 07:03	03/13/15 18:11	1634-04-4	W
Toluene	**<25.0**	ug/kg	50.0	25.0	1	03/13/15 07:03	03/13/15 18:11	108-88-3	W
1,2,4-Trimethylbenzene	**<25.0**	ug/kg	50.0	25.0	1	03/13/15 07:03	03/13/15 18:11	95-63-6	W
1,3,5-Trimethylbenzene	**<25.0**	ug/kg	50.0	25.0	1	03/13/15 07:03	03/13/15 18:11	108-67-8	W
m&p-Xylene	**<50.0**	ug/kg	100	50.0	1	03/13/15 07:03	03/13/15 18:11	179601-23-1	W
o-Xylene	**<25.0**	ug/kg	50.0	25.0	1	03/13/15 07:03	03/13/15 18:11	95-47-6	W
Surrogates									
a,a,a-Trifluorotoluene (S)	103	%	80-120		1	03/13/15 07:03	03/13/15 18:11	98-08-8	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Lead	**11.6**	mg/kg	1.1	0.49	1	03/16/15 14:15	03/18/15 12:44	7439-92-1	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546								
Acenaphthene	**<10.4**	ug/kg	20.8	10.4	1	03/18/15 08:32	03/24/15 17:14	83-32-9	
Acenaphthylene	**<9.3**	ug/kg	20.8	9.3	1	03/18/15 08:32	03/24/15 17:14	208-96-8	
Anthracene	**<10.8**	ug/kg	20.8	10.8	1	03/18/15 08:32	03/24/15 17:14	120-12-7	
Benzo(a)anthracene	**<7.2**	ug/kg	20.8	7.2	1	03/18/15 08:32	03/24/15 17:14	56-55-3	
Benzo(a)pyrene	**<7.4**	ug/kg	20.8	7.4	1	03/18/15 08:32	03/24/15 17:14	50-32-8	
Benzo(b)fluoranthene	**<10.4**	ug/kg	20.8	10.4	1	03/18/15 08:32	03/24/15 17:14	205-99-2	
Benzo(g,h,i)perylene	**<7.9**	ug/kg	20.8	7.9	1	03/18/15 08:32	03/24/15 17:14	191-24-2	
Benzo(k)fluoranthene	**<11.5**	ug/kg	20.8	11.5	1	03/18/15 08:32	03/24/15 17:14	207-08-9	
Chrysene	**<9.6**	ug/kg	20.8	9.6	1	03/18/15 08:32	03/24/15 17:14	218-01-9	
Dibenz(a,h)anthracene	**<7.6**	ug/kg	20.8	7.6	1	03/18/15 08:32	03/24/15 17:14	53-70-3	
Fluoranthene	**<10.4**	ug/kg	20.8	10.4	1	03/18/15 08:32	03/24/15 17:14	206-44-0	
Fluorene	**<10.4**	ug/kg	20.8	10.4	1	03/18/15 08:32	03/24/15 17:14	86-73-7	
Indeno(1,2,3-cd)pyrene	**<7.9**	ug/kg	20.8	7.9	1	03/18/15 08:32	03/24/15 17:14	193-39-5	
1-Methylnaphthalene	**<10.4**	ug/kg	20.8	10.4	1	03/18/15 08:32	03/24/15 17:14	90-12-0	
2-Methylnaphthalene	**<10.4**	ug/kg	20.8	10.4	1	03/18/15 08:32	03/24/15 17:14	91-57-6	
Naphthalene	**<10.4**	ug/kg	20.8	10.4	1	03/18/15 08:32	03/24/15 17:14	91-20-3	
Phenanthrene	**<10.4**	ug/kg	20.8	10.4	1	03/18/15 08:32	03/24/15 17:14	85-01-8	
Pyrene	**<10.4**	ug/kg	20.8	10.4	1	03/18/15 08:32	03/24/15 17:14	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	43	%	39-130		1	03/18/15 08:32	03/24/15 17:14	321-60-8	
Terphenyl-d14 (S)	42	%	37-130		1	03/18/15 08:32	03/24/15 17:14	1718-51-0	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**20.0**	%	0.10	0.10	1		03/24/15 14:39		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: DT LIQUOR
Pace Project No.: 40111544

Sample: B-5, 15-17 **Lab ID: 40111544002** Collected: 03/09/15 16:00 Received: 03/12/15 07:50 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
WIGRO GCV	Analytical Method: WI MOD GRO Preparation Method: TPH GRO/PVOC WI ext.								
Benzene	**1890**	ug/kg	721	361	10	03/13/15 07:03	03/13/15 13:54	71-43-2	
Ethylbenzene	**26600**	ug/kg	721	361	10	03/13/15 07:03	03/13/15 13:54	100-41-4	
Methyl-tert-butyl ether	**<250**	ug/kg	500	250	10	03/13/15 07:03	03/13/15 13:54	1634-04-4	W
Toluene	**13200**	ug/kg	721	361	10	03/13/15 07:03	03/13/15 13:54	108-88-3	
1,2,4-Trimethylbenzene	**78400**	ug/kg	721	361	10	03/13/15 07:03	03/13/15 13:54	95-63-6	
1,3,5-Trimethylbenzene	**25500**	ug/kg	721	361	10	03/13/15 07:03	03/13/15 13:54	108-67-8	
m&p-Xylene	**100000**	ug/kg	1440	721	10	03/13/15 07:03	03/13/15 13:54	179601-23-1	
o-Xylene	**37400**	ug/kg	721	361	10	03/13/15 07:03	03/13/15 13:54	95-47-6	
Surrogates									
a,a,a-Trifluorotoluene (S)	112	%	80-120		10	03/13/15 07:03	03/13/15 13:54	98-08-8	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Lead	**17.9**	mg/kg	7.0	3.0	5	03/16/15 14:15	03/18/15 13:56	7439-92-1	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546								
Acenaphthene	**<240**	ug/kg	481	240	20	03/18/15 08:32	03/23/15 19:16	83-32-9	
Acenaphthylene	**<215**	ug/kg	481	215	20	03/18/15 08:32	03/23/15 19:16	208-96-8	
Anthracene	**<249**	ug/kg	481	249	20	03/18/15 08:32	03/23/15 19:16	120-12-7	
Benzo(a)anthracene	**<167**	ug/kg	481	167	20	03/18/15 08:32	03/23/15 19:16	56-55-3	
Benzo(a)pyrene	**<172**	ug/kg	481	172	20	03/18/15 08:32	03/23/15 19:16	50-32-8	
Benzo(b)fluoranthene	**<240**	ug/kg	481	240	20	03/18/15 08:32	03/23/15 19:16	205-99-2	
Benzo(g,h,i)perylene	**<183**	ug/kg	481	183	20	03/18/15 08:32	03/23/15 19:16	191-24-2	
Benzo(k)fluoranthene	**<266**	ug/kg	481	266	20	03/18/15 08:32	03/23/15 19:16	207-08-9	
Chrysene	**<222**	ug/kg	481	222	20	03/18/15 08:32	03/23/15 19:16	218-01-9	
Dibenz(a,h)anthracene	**<176**	ug/kg	481	176	20	03/18/15 08:32	03/23/15 19:16	53-70-3	
Fluoranthene	**<240**	ug/kg	481	240	20	03/18/15 08:32	03/23/15 19:16	206-44-0	
Fluorene	**<240**	ug/kg	481	240	20	03/18/15 08:32	03/23/15 19:16	86-73-7	
Indeno(1,2,3-cd)pyrene	**<183**	ug/kg	481	183	20	03/18/15 08:32	03/23/15 19:16	193-39-5	
1-Methylnaphthalene	**8430**	ug/kg	481	240	20	03/18/15 08:32	03/23/15 19:16	90-12-0	
2-Methylnaphthalene	**17900**	ug/kg	481	240	20	03/18/15 08:32	03/23/15 19:16	91-57-6	
Naphthalene	**14900**	ug/kg	481	240	20	03/18/15 08:32	03/23/15 19:16	91-20-3	
Phenanthrene	**<240**	ug/kg	481	240	20	03/18/15 08:32	03/23/15 19:16	85-01-8	
Pyrene	**<240**	ug/kg	481	240	20	03/18/15 08:32	03/23/15 19:16	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	68	%	39-130		20	03/18/15 08:32	03/23/15 19:16	321-60-8	
Terphenyl-d14 (S)	65	%	37-130		20	03/18/15 08:32	03/23/15 19:16	1718-51-0	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**30.7**	%	0.10	0.10	1		03/24/15 14:39		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: DT LIQUOR
Pace Project No.: 40111544

Sample: B-6, 2-4 **Lab ID: 40111544003** Collected: 03/09/15 16:40 Received: 03/12/15 07:50 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
WIGRO GCV	Analytical Method: WI MOD GRO Preparation Method: TPH GRO/PVOC WI ext.								
Benzene	**<25.0**	ug/kg	50.0	25.0	1	03/13/15 07:03	03/13/15 18:36	71-43-2	W
Ethylbenzene	**<25.0**	ug/kg	50.0	25.0	1	03/13/15 07:03	03/13/15 18:36	100-41-4	W
Methyl-tert-butyl ether	**<25.0**	ug/kg	50.0	25.0	1	03/13/15 07:03	03/13/15 18:36	1634-04-4	W
Toluene	**<25.0**	ug/kg	50.0	25.0	1	03/13/15 07:03	03/13/15 18:36	108-88-3	W
1,2,4-Trimethylbenzene	**136**	ug/kg	64.0	32.0	1	03/13/15 07:03	03/13/15 18:36	95-63-6	
1,3,5-Trimethylbenzene	**44.4J**	ug/kg	64.0	32.0	1	03/13/15 07:03	03/13/15 18:36	108-67-8	
m&p-Xylene	**86.9J**	ug/kg	128	64.0	1	03/13/15 07:03	03/13/15 18:36	179601-23-1	
o-Xylene	**<25.0**	ug/kg	50.0	25.0	1	03/13/15 07:03	03/13/15 18:36	95-47-6	W
Surrogates									
a,a,a-Trifluorotoluene (S)	103	%	80-120		1	03/13/15 07:03	03/13/15 18:36	98-08-8	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Lead	**11.1**	mg/kg	1.2	0.52	1	03/16/15 14:15	03/18/15 12:49	7439-92-1	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546								
Acenaphthene	**<10.7**	ug/kg	21.3	10.7	1	03/18/15 08:32	03/24/15 16:39	83-32-9	
Acenaphthylene	**<9.5**	ug/kg	21.3	9.5	1	03/18/15 08:32	03/24/15 16:39	208-96-8	
Anthracene	**<11.1**	ug/kg	21.3	11.1	1	03/18/15 08:32	03/24/15 16:39	120-12-7	
Benzo(a)anthracene	**<7.4**	ug/kg	21.3	7.4	1	03/18/15 08:32	03/24/15 16:39	56-55-3	
Benzo(a)pyrene	**<7.6**	ug/kg	21.3	7.6	1	03/18/15 08:32	03/24/15 16:39	50-32-8	
Benzo(b)fluoranthene	**<10.7**	ug/kg	21.3	10.7	1	03/18/15 08:32	03/24/15 16:39	205-99-2	
Benzo(g,h,i)perylene	**<8.1**	ug/kg	21.3	8.1	1	03/18/15 08:32	03/24/15 16:39	191-24-2	
Benzo(k)fluoranthene	**<11.8**	ug/kg	21.3	11.8	1	03/18/15 08:32	03/24/15 16:39	207-08-9	
Chrysene	**14.1J**	ug/kg	21.3	9.9	1	03/18/15 08:32	03/24/15 16:39	218-01-9	
Dibenz(a,h)anthracene	**<7.8**	ug/kg	21.3	7.8	1	03/18/15 08:32	03/24/15 16:39	53-70-3	
Fluoranthene	**<10.7**	ug/kg	21.3	10.7	1	03/18/15 08:32	03/24/15 16:39	206-44-0	
Fluorene	**<10.7**	ug/kg	21.3	10.7	1	03/18/15 08:32	03/24/15 16:39	86-73-7	
Indeno(1,2,3-cd)pyrene	**<8.1**	ug/kg	21.3	8.1	1	03/18/15 08:32	03/24/15 16:39	193-39-5	
1-Methylnaphthalene	**35.4**	ug/kg	21.3	10.7	1	03/18/15 08:32	03/24/15 16:39	90-12-0	
2-Methylnaphthalene	**75.8**	ug/kg	21.3	10.7	1	03/18/15 08:32	03/24/15 16:39	91-57-6	
Naphthalene	**38.8**	ug/kg	21.3	10.7	1	03/18/15 08:32	03/24/15 16:39	91-20-3	
Phenanthrene	**<10.7**	ug/kg	21.3	10.7	1	03/18/15 08:32	03/24/15 16:39	85-01-8	
Pyrene	**<10.7**	ug/kg	21.3	10.7	1	03/18/15 08:32	03/24/15 16:39	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	47	%	39-130		1	03/18/15 08:32	03/24/15 16:39	321-60-8	
Terphenyl-d14 (S)	43	%	37-130		1	03/18/15 08:32	03/24/15 16:39	1718-51-0	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**21.8**	%	0.10	0.10	1		03/24/15 14:39		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: DT LIQUOR
Pace Project No.: 40111544

Sample: B-6, 15-17 **Lab ID: 40111544004** Collected: 03/09/15 17:00 Received: 03/12/15 07:50 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
WIGRO GCV	Analytical Method: WI MOD GRO Preparation Method: TPH GRO/PVOC WI ext.								
Benzene	**<25.0**	ug/kg	50.0	25.0	1	03/13/15 07:03	03/13/15 19:02	71-43-2	W
Ethylbenzene	**<25.0**	ug/kg	50.0	25.0	1	03/13/15 07:03	03/13/15 19:02	100-41-4	W
Methyl-tert-butyl ether	**<25.0**	ug/kg	50.0	25.0	1	03/13/15 07:03	03/13/15 19:02	1634-04-4	W
Toluene	**<25.0**	ug/kg	50.0	25.0	1	03/13/15 07:03	03/13/15 19:02	108-88-3	W
1,2,4-Trimethylbenzene	**<25.0**	ug/kg	50.0	25.0	1	03/13/15 07:03	03/13/15 19:02	95-63-6	W
1,3,5-Trimethylbenzene	**<25.0**	ug/kg	50.0	25.0	1	03/13/15 07:03	03/13/15 19:02	108-67-8	W
m&p-Xylene	**<50.0**	ug/kg	100	50.0	1	03/13/15 07:03	03/13/15 19:02	179601-23-1	W
o-Xylene	**<25.0**	ug/kg	50.0	25.0	1	03/13/15 07:03	03/13/15 19:02	95-47-6	W
Surrogates									
a,a,a-Trifluorotoluene (S)	104	%	80-120		1	03/13/15 07:03	03/13/15 19:02	98-08-8	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Lead	**17.0**	mg/kg	5.7	2.5	5	03/16/15 14:15	03/18/15 13:58	7439-92-1	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546								
Acenaphthene	**<10.6**	ug/kg	21.1	10.6	1	03/23/15 08:55	03/23/15 19:33	83-32-9	
Acenaphthylene	**<9.4**	ug/kg	21.1	9.4	1	03/23/15 08:55	03/23/15 19:33	208-96-8	
Anthracene	**<11.0**	ug/kg	21.1	11.0	1	03/23/15 08:55	03/23/15 19:33	120-12-7	
Benzo(a)anthracene	**<7.3**	ug/kg	21.1	7.3	1	03/23/15 08:55	03/23/15 19:33	56-55-3	
Benzo(a)pyrene	**<7.6**	ug/kg	21.1	7.6	1	03/23/15 08:55	03/23/15 19:33	50-32-8	
Benzo(b)fluoranthene	**<10.6**	ug/kg	21.1	10.6	1	03/23/15 08:55	03/23/15 19:33	205-99-2	
Benzo(g,h,i)perylene	**<8.0**	ug/kg	21.1	8.0	1	03/23/15 08:55	03/23/15 19:33	191-24-2	
Benzo(k)fluoranthene	**<11.7**	ug/kg	21.1	11.7	1	03/23/15 08:55	03/23/15 19:33	207-08-9	
Chrysene	**<9.8**	ug/kg	21.1	9.8	1	03/23/15 08:55	03/23/15 19:33	218-01-9	
Dibenz(a,h)anthracene	**<7.7**	ug/kg	21.1	7.7	1	03/23/15 08:55	03/23/15 19:33	53-70-3	
Fluoranthene	**<10.6**	ug/kg	21.1	10.6	1	03/23/15 08:55	03/23/15 19:33	206-44-0	
Fluorene	**<10.6**	ug/kg	21.1	10.6	1	03/23/15 08:55	03/23/15 19:33	86-73-7	
Indeno(1,2,3-cd)pyrene	**<8.0**	ug/kg	21.1	8.0	1	03/23/15 08:55	03/23/15 19:33	193-39-5	
1-Methylnaphthalene	**<10.6**	ug/kg	21.1	10.6	1	03/23/15 08:55	03/23/15 19:33	90-12-0	
2-Methylnaphthalene	**<10.6**	ug/kg	21.1	10.6	1	03/23/15 08:55	03/23/15 19:33	91-57-6	
Naphthalene	**<10.6**	ug/kg	21.1	10.6	1	03/23/15 08:55	03/23/15 19:33	91-20-3	
Phenanthrene	**<10.6**	ug/kg	21.1	10.6	1	03/23/15 08:55	03/23/15 19:33	85-01-8	
Pyrene	**<10.6**	ug/kg	21.1	10.6	1	03/23/15 08:55	03/23/15 19:33	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	52	%	39-130		1	03/23/15 08:55	03/23/15 19:33	321-60-8	
Terphenyl-d14 (S)	50	%	37-130		1	03/23/15 08:55	03/23/15 19:33	1718-51-0	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**21.1**	%	0.10	0.10	1		03/24/15 14:39		

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: DT LIQUOR
Pace Project No.: 40111544

QC Batch: GCV/14068 Analysis Method: WI MOD GRO
QC Batch Method: TPH GRO/PVOC WI ext. Analysis Description: WIGRO Solid GCV
Associated Lab Samples: 40111544001, 40111544002, 40111544003, 40111544004

METHOD BLANK: 1126930 Matrix: Solid
Associated Lab Samples: 40111544001, 40111544002, 40111544003, 40111544004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,2,4-Trimethylbenzene	ug/kg	<25.0	50.0	03/13/15 08:46	
1,3,5-Trimethylbenzene	ug/kg	<25.0	50.0	03/13/15 08:46	
Benzene	ug/kg	<25.0	50.0	03/13/15 08:46	
Ethylbenzene	ug/kg	<25.0	50.0	03/13/15 08:46	
m&p-Xylene	ug/kg	<50.0	100	03/13/15 08:46	
Methyl-tert-butyl ether	ug/kg	<25.0	50.0	03/13/15 08:46	
o-Xylene	ug/kg	<25.0	50.0	03/13/15 08:46	
Toluene	ug/kg	<25.0	50.0	03/13/15 08:46	
a,a,a-Trifluorotoluene (S)	%	104	80-120	03/13/15 08:46	

LABORATORY CONTROL SAMPLE & LCSD: 1126931 1126932

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
1,2,4-Trimethylbenzene	ug/kg	1000	1030	1040	103	104	80-120	1	20	
1,3,5-Trimethylbenzene	ug/kg	1000	1010	1020	101	102	80-120	1	20	
Benzene	ug/kg	1000	1030	1050	103	105	80-120	2	20	
Ethylbenzene	ug/kg	1000	1050	1060	105	106	80-120	1	20	
m&p-Xylene	ug/kg	2000	2070	2080	103	104	80-120	1	20	
Methyl-tert-butyl ether	ug/kg	1000	1060	1080	106	108	80-120	2	20	
o-Xylene	ug/kg	1000	1030	1040	103	104	80-120	1	20	
Toluene	ug/kg	1000	1030	1040	103	104	80-120	2	20	
a,a,a-Trifluorotoluene (S)	%				103	104	80-120			

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: DT LIQUOR
Pace Project No.: 40111544

QC Batch: MPRP/11583 Analysis Method: EPA 6010
QC Batch Method: EPA 3050 Analysis Description: 6010 MET
Associated Lab Samples: 40111544001, 40111544002, 40111544003, 40111544004

METHOD BLANK: 1128254 Matrix: Solid
Associated Lab Samples: 40111544001, 40111544002, 40111544003, 40111544004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Lead	mg/kg	<0.43	1.0	03/18/15 12:16	

LABORATORY CONTROL SAMPLE: 1128255

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Lead	mg/kg	50	51.3	103	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1128256 1128257

Parameter	Units	40111375001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Lead	mg/kg	<0.43	50.1	50	50.5	50.8	100	101	75-125	1	20	

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: DT LIQUOR
Pace Project No.: 40111544

QC Batch: OEXT/26028 Analysis Method: EPA 8270 by SIM
QC Batch Method: EPA 3546 Analysis Description: 8270/3546 MSSV PAH by SIM
Associated Lab Samples: 40111544001, 40111544002, 40111544003

METHOD BLANK: 1128868 Matrix: Solid
Associated Lab Samples: 40111544001, 40111544002, 40111544003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1-Methylnaphthalene	ug/kg	<8.3	16.7	03/20/15 12:11	
2-Methylnaphthalene	ug/kg	<8.3	16.7	03/20/15 12:11	
Acenaphthene	ug/kg	<8.3	16.7	03/20/15 12:11	
Acenaphthylene	ug/kg	<7.5	16.7	03/20/15 12:11	
Anthracene	ug/kg	<8.6	16.7	03/20/15 12:11	
Benzo(a)anthracene	ug/kg	<5.8	16.7	03/20/15 12:11	
Benzo(a)pyrene	ug/kg	<6.0	16.7	03/20/15 12:11	
Benzo(b)fluoranthene	ug/kg	<8.3	16.7	03/20/15 12:11	
Benzo(g,h,i)perylene	ug/kg	<6.3	16.7	03/20/15 12:11	
Benzo(k)fluoranthene	ug/kg	<9.2	16.7	03/20/15 12:11	
Chrysene	ug/kg	<7.7	16.7	03/20/15 12:11	
Dibenz(a,h)anthracene	ug/kg	<6.1	16.7	03/20/15 12:11	
Fluoranthene	ug/kg	<8.3	16.7	03/20/15 12:11	
Fluorene	ug/kg	<8.3	16.7	03/20/15 12:11	
Indeno(1,2,3-cd)pyrene	ug/kg	<6.3	16.7	03/20/15 12:11	
Naphthalene	ug/kg	<8.3	16.7	03/20/15 12:11	
Phenanthrene	ug/kg	<8.3	16.7	03/20/15 12:11	
Pyrene	ug/kg	<8.3	16.7	03/20/15 12:11	
2-Fluorobiphenyl (S)	%	62	39-130	03/20/15 12:11	
Terphenyl-d14 (S)	%	65	37-130	03/20/15 12:11	

LABORATORY CONTROL SAMPLE: 1128869

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1-Methylnaphthalene	ug/kg	333	210	63	53-130	
2-Methylnaphthalene	ug/kg	333	201	60	52-130	
Acenaphthene	ug/kg	333	218	65	54-130	
Acenaphthylene	ug/kg	333	215	65	55-130	
Anthracene	ug/kg	333	241	72	64-130	
Benzo(a)anthracene	ug/kg	333	235	71	50-130	
Benzo(a)pyrene	ug/kg	333	233	70	46-130	
Benzo(b)fluoranthene	ug/kg	333	245	74	43-130	
Benzo(g,h,i)perylene	ug/kg	333	196	59	48-130	
Benzo(k)fluoranthene	ug/kg	333	231	69	55-130	
Chrysene	ug/kg	333	237	71	62-130	
Dibenz(a,h)anthracene	ug/kg	333	227	68	49-130	
Fluoranthene	ug/kg	333	231	69	57-130	
Fluorene	ug/kg	333	218	65	57-130	
Indeno(1,2,3-cd)pyrene	ug/kg	333	224	67	50-130	
Naphthalene	ug/kg	333	197	59	48-130	

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: DT LIQUOR
Pace Project No.: 40111544

LABORATORY CONTROL SAMPLE: 1128869

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Phenanthrene	ug/kg	333	231	69	51-130	
Pyrene	ug/kg	333	233	70	55-130	
2-Fluorobiphenyl (S)	%			58	39-130	
Terphenyl-d14 (S)	%			64	37-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1128870 1128871

Parameter	Units	40111728001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1-Methylnaphthalene	ug/kg	<10.9	434	434	259	260	59	59	50-130	0	30	
2-Methylnaphthalene	ug/kg	<10.9	434	434	250	249	57	56	44-130	0	32	
Acenaphthene	ug/kg	<10.9	434	434	273	253	63	58	46-130	7	26	
Acenaphthylene	ug/kg	<9.7	434	434	271	253	62	58	49-130	7	23	
Anthracene	ug/kg	<11.3	434	434	304	267	70	61	52-130	13	28	
Benzo(a)anthracene	ug/kg	<7.5	434	434	292	247	67	57	34-130	17	36	
Benzo(a)pyrene	ug/kg	<7.8	434	434	295	247	68	57	34-130	18	40	
Benzo(b)fluoranthene	ug/kg	<10.9	434	434	285	248	66	57	22-130	14	40	
Benzo(g,h,i)perylene	ug/kg	<8.3	434	434	229	176	53	40	24-130	26	35	
Benzo(k)fluoranthene	ug/kg	<12.0	434	434	307	250	71	58	41-130	21	37	
Chrysene	ug/kg	<10.1	434	434	297	253	68	58	49-130	16	33	
Dibenz(a,h)anthracene	ug/kg	<8.0	434	434	277	225	64	52	27-130	21	31	
Fluoranthene	ug/kg	<10.9	434	434	292	250	67	57	34-130	16	37	
Fluorene	ug/kg	<10.9	434	434	277	248	64	57	45-130	11	25	
Indeno(1,2,3-cd)pyrene	ug/kg	<8.3	434	434	271	215	62	49	30-130	23	34	
Naphthalene	ug/kg	<10.9	434	434	237	242	54	55	38-130	2	30	
Phenanthrene	ug/kg	<10.9	434	434	297	258	67	58	38-130	14	34	
Pyrene	ug/kg	<10.9	434	434	292	250	67	57	35-130	16	35	
2-Fluorobiphenyl (S)	%						52	50	39-130			
Terphenyl-d14 (S)	%						57	49	37-130			

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: DT LIQUOR
Pace Project No.: 40111544

QC Batch: OEXT/26056
QC Batch Method: EPA 3546
Analysis Method: EPA 8270 by SIM
Analysis Description: 8270/3546 MSSV PAH by SIM
Associated Lab Samples: 40111544004

METHOD BLANK: 1130800
Matrix: Solid
Associated Lab Samples: 40111544004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1-Methylnaphthalene	ug/kg	<8.3	16.7	03/23/15 13:16	
2-Methylnaphthalene	ug/kg	<8.3	16.7	03/23/15 13:16	
Acenaphthene	ug/kg	<8.3	16.7	03/23/15 13:16	
Acenaphthylene	ug/kg	<7.5	16.7	03/23/15 13:16	
Anthracene	ug/kg	<8.6	16.7	03/23/15 13:16	
Benzo(a)anthracene	ug/kg	<5.8	16.7	03/23/15 13:16	
Benzo(a)pyrene	ug/kg	<6.0	16.7	03/23/15 13:16	
Benzo(b)fluoranthene	ug/kg	<8.3	16.7	03/23/15 13:16	
Benzo(g,h,i)perylene	ug/kg	<6.3	16.7	03/23/15 13:16	
Benzo(k)fluoranthene	ug/kg	<9.2	16.7	03/23/15 13:16	
Chrysene	ug/kg	<7.7	16.7	03/23/15 13:16	
Dibenz(a,h)anthracene	ug/kg	<6.1	16.7	03/23/15 13:16	
Fluoranthene	ug/kg	<8.3	16.7	03/23/15 13:16	
Fluorene	ug/kg	<8.3	16.7	03/23/15 13:16	
Indeno(1,2,3-cd)pyrene	ug/kg	<6.3	16.7	03/23/15 13:16	
Naphthalene	ug/kg	<8.3	16.7	03/23/15 13:16	
Phenanthrene	ug/kg	<8.3	16.7	03/23/15 13:16	
Pyrene	ug/kg	<8.3	16.7	03/23/15 13:16	
2-Fluorobiphenyl (S)	%	67	39-130	03/23/15 13:16	
Terphenyl-d14 (S)	%	68	37-130	03/23/15 13:16	

LABORATORY CONTROL SAMPLE: 1130801

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1-Methylnaphthalene	ug/kg	333	260	78	53-130	
2-Methylnaphthalene	ug/kg	333	247	74	52-130	
Acenaphthene	ug/kg	333	266	80	54-130	
Acenaphthylene	ug/kg	333	265	79	55-130	
Anthracene	ug/kg	333	286	86	64-130	
Benzo(a)anthracene	ug/kg	333	262	79	50-130	
Benzo(a)pyrene	ug/kg	333	271	81	46-130	
Benzo(b)fluoranthene	ug/kg	333	265	79	43-130	
Benzo(g,h,i)perylene	ug/kg	333	295	89	48-130	
Benzo(k)fluoranthene	ug/kg	333	257	77	55-130	
Chrysene	ug/kg	333	272	82	62-130	
Dibenz(a,h)anthracene	ug/kg	333	294	88	49-130	
Fluoranthene	ug/kg	333	264	79	57-130	
Fluorene	ug/kg	333	258	77	57-130	
Indeno(1,2,3-cd)pyrene	ug/kg	333	303	91	50-130	
Naphthalene	ug/kg	333	246	74	48-130	

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: DT LIQUOR
Pace Project No.: 40111544

LABORATORY CONTROL SAMPLE: 1130801

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Phenanthrene	ug/kg	333	270	81	51-130	
Pyrene	ug/kg	333	251	75	55-130	
2-Fluorobiphenyl (S)	%			71	39-130	
Terphenyl-d14 (S)	%			70	37-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1130802 1130803

Parameter	Units	40111909005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1-Methylnaphthalene	ug/kg	291	402	402	408	360	29	17	50-130	12	30	M1
2-Methylnaphthalene	ug/kg	387	402	402	438	364	13	-6	44-130	19	32	M1
Acenaphthene	ug/kg	36.0	402	402	317	299	70	65	46-130	6	26	
Acenaphthylene	ug/kg	<20.1	402	402	306	297	73	71	49-130	3	23	
Anthracene	ug/kg	<20.1	402	402	339	320	81	76	52-130	6	28	
Benzo(a)anthracene	ug/kg	<20.1	402	402	305	288	75	71	34-130	6	36	
Benzo(a)pyrene	ug/kg	<20.1	402	402	316	300	79	74	34-130	5	40	
Benzo(b)fluoranthene	ug/kg	<20.1	402	402	292	273	73	68	22-130	7	40	
Benzo(g,h,i)perylene	ug/kg	<20.1	402	402	337	317	84	79	24-130	6	35	
Benzo(k)fluoranthene	ug/kg	<20.1	402	402	320	306	79	76	41-130	4	37	
Chrysene	ug/kg	<20.1	402	402	313	301	77	74	49-130	4	33	
Dibenz(a,h)anthracene	ug/kg	<20.1	402	402	341	320	85	80	27-130	6	31	
Fluoranthene	ug/kg	<20.1	402	402	314	293	76	71	34-130	7	37	
Fluorene	ug/kg	62.2	402	402	318	298	64	59	45-130	6	25	
Indeno(1,2,3-cd)pyrene	ug/kg	<20.1	402	402	347	328	86	81	30-130	6	34	
Naphthalene	ug/kg	108	402	402	317	315	52	51	38-130	1	30	
Phenanthrene	ug/kg	104	402	402	364	323	65	54	38-130	12	34	
Pyrene	ug/kg	20.4	402	402	301	279	70	64	35-130	8	35	
2-Fluorobiphenyl (S)	%						63	63	39-130			
Terphenyl-d14 (S)	%						64	61	37-130			

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: DT LIQUOR
Pace Project No.: 40111544

QC Batch: PMST/10989 Analysis Method: ASTM D2974-87
QC Batch Method: ASTM D2974-87 Analysis Description: Dry Weight/Percent Moisture
Associated Lab Samples: 40111544001, 40111544002, 40111544003, 40111544004

SAMPLE DUPLICATE: 1131299

Parameter	Units	40112066001 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	7.1	7.3	2	10	

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

REPORT OF LABORATORY ANALYSIS

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

QUALIFIERS

Project: DT LIQUOR
Pace Project No.: 40111544

DEFINITIONS

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

ND - Not Detected at or above LOD.

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

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

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

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

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

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
W	Non-detect results are reported on a wet weight basis.

Pace Analytical Services, Inc.
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Green Bay, WI 54302
(920)469-2436

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: DT LIQUOR
Pace Project No.: 40111544

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40111544001	**B-5, 2-4**	TPH GRO/PVOC WI ext.	GCV/14068	WI MOD GRO	GCV/14075
40111544002	**B-5, 15-17**	TPH GRO/PVOC WI ext.	GCV/14068	WI MOD GRO	GCV/14075
40111544003	**B-6, 2-4**	TPH GRO/PVOC WI ext.	GCV/14068	WI MOD GRO	GCV/14075
40111544004	**B-6, 15-17**	TPH GRO/PVOC WI ext.	GCV/14068	WI MOD GRO	GCV/14075
40111544001	**B-5, 2-4**	EPA 3050	MPRP/11583	EPA 6010	ICP/10296
40111544002	**B-5, 15-17**	EPA 3050	MPRP/11583	EPA 6010	ICP/10296
40111544003	**B-6, 2-4**	EPA 3050	MPRP/11583	EPA 6010	ICP/10296
40111544004	**B-6, 15-17**	EPA 3050	MPRP/11583	EPA 6010	ICP/10296
40111544001	**B-5, 2-4**	EPA 3546	OEXT/26028	EPA 8270 by SIM	MSSV/7718
40111544002	**B-5, 15-17**	EPA 3546	OEXT/26028	EPA 8270 by SIM	MSSV/7718
40111544003	**B-6, 2-4**	EPA 3546	OEXT/26028	EPA 8270 by SIM	MSSV/7718
40111544004	**B-6, 15-17**	EPA 3546	OEXT/26056	EPA 8270 by SIM	MSSV/7729
40111544001	**B-5, 2-4**	ASTM D2974-87	PMST/10989		
40111544002	**B-5, 15-17**	ASTM D2974-87	PMST/10989		
40111544003	**B-6, 2-4**	ASTM D2974-87	PMST/10989		
40111544004	**B-6, 15-17**	ASTM D2974-87	PMST/10989		

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

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40111544

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CHAIN OF CUSTODY

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

(Please Print Clearly)	
Company Name:	Seymour Env
Branch/Location:	
Project Contact:	Robyn Seymour
Phone:	6082259407
Project Number:	
Project Name:	DT Liquor
Project State:	Wisconsin
Sampled By (Print):	Robyn Seymour
Sampled By (Sign):	Robyn Seymour
PO #:	Regulatory Program:

Quote #:	
Mail To Contact:	Robyn Seymour
Mail To Company:	Seymour Env.
Mail To Address:	2531 Dyreson Road McFarland, WI
Invoice To Contact:	
Invoice To Company:	
Invoice To Address:	
Invoice To Phone:	

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

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

Matrix Codes

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

PACE LAB #	CLIENT FIELD ID	COLLECTION DATE	COLLECTION TIME	MATRIX	FILTERED? (YES/NO) Y/N	PRESERVATION (CODE)* Pick Letter	Analyses Requested: RVOC	PAH	Lead	CLIENT COMMENTS	LAB COMMENTS (Lab Use Only)	Profile #
001	B-5, 2-4	3/9	1545	S			X	X	X	1-40mlVF	1-40zpA 1-100mlag A	
002	B-5, 15-17		1600				X	X	X			
003	B-6, 2-4		1640				X	X	X			
004	B-6, 15-17		1700				X	X	X			

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

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

Email #1:	
Email #2:	
Telephone:	
Fax:	

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

Relinquished By:	Date/Time:	Received By:	Date/Time:
Robyn Seymour	3/11/15		
Dunham Exp	3/12/15 0750	Kathleen Wandel	3/12/15 0750

PACE Project No.
40111544

Receipt Temp = R01 °C

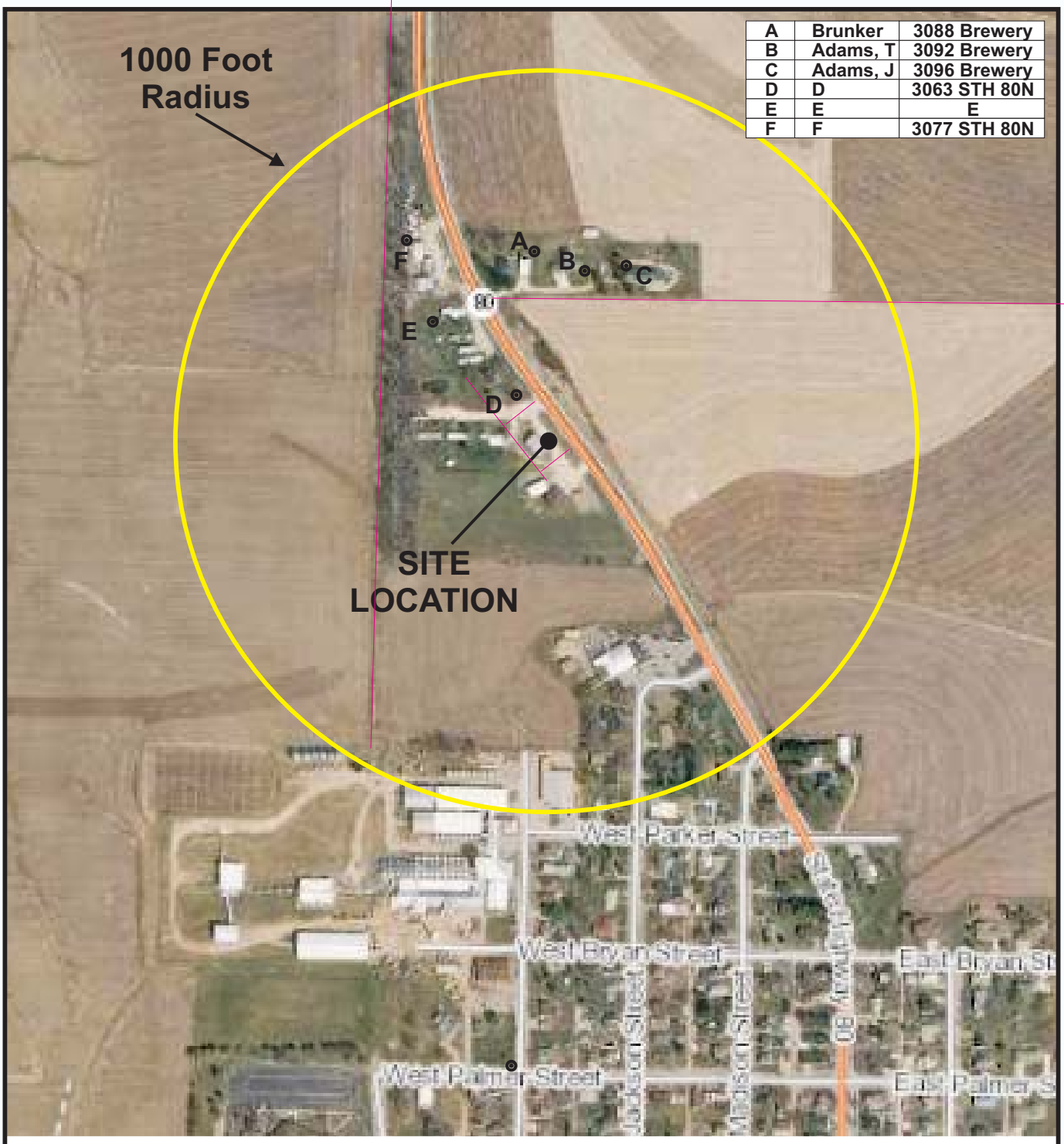
Sample Receipt pH
OK / Adjusted

Cooler Custody Seal
Present / Not Present
Intact / Not Intact

Version 6.0 06/14/06

C019a(27Jun2006)

ORIGINAL



A	Brunker	3088 Brewery
B	Adams, T	3092 Brewery
C	Adams, J	3096 Brewery
D	D	3063 STH 80N
E	E	E
F	F	3077 STH 80N

N

0 400' 800'

1 INCH = 400 FEET
SCALE IS APPROXIMATE

FILE/PATH: D:\PROJECTS\DT LIQUOR\Location.cdr
DATE: 11/11/2014
PREPARED: MDF APPROVED:
SOURCE:
RR Site Maps
Field Measurements

SEYMOUR ENVIRONMENTAL SERVICES, INC.

WATER SUPPLY WELLS
DT LIQUOR PROPERTY
3019 State Highway 80 North
Cuba City, Wisconsin

FIGURE
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