Seymour
Environmental Services, Inc.

Tel: 608-838-9120

September 14, 2015

PECFA ID - 53563-1032-02

Mr. Shawn Wenzel
Wisconsin Department of Natural Resources
2514 Morse Street
Janesville, Wisconsin 53545

Re: Investigation Update
Bob's Citgo
602 W. Madison Avenue - Milton, Wisconsin
BRRTS: 03-54-000193

Dear Mr. Wenzel:

Seymour Environmental Services, Inc. is pleased to present the results of the recent vapor intrusion assessment and groundwater monitoring. Additionally, a brief summary of previous findings and recommendations for additional work are included.

SUMMARY OF PREVIOUS FINDINGS

This environmental investigation was initiated as part of a potential real estate transaction and because the site has an open Department of Natural Resources (DNR) case number. The current owner was told that a spill had occurred but had been dealt with at the time of discovery. This issue resurfaced with the prospect of transferring the property in 2005.

On August 24, 2005 Seymour conducted soil sampling around the tank system including the dispensers. Soil samples collected from the borings were analyzed for gasoline range organics (GRO), diesel range organics (DRO), petroleum volatile organic compounds (PVOCs), and lead. Contaminants present at levels that exceed the RCL included benzene, ethylbenzene, MTBE, toluene, trimethylbenzenes, xylenes and naphthalene.

Since significant soil contamination was identified a groundwater monitoring network of 6 wells was installed between October 2010 and September 2011. Data from those monitoring wells indicated that groundwater flow is toward the west. Sampling showed that groundwater at all six wells contained compounds present above the ES. The most widespread contaminant was MTBE, which was present above the limit of detection in all of the wells.

In August 2013 four additional monitoring wells were installed at the site to further delimit the extent of groundwater contamination. Three of the wells were installed to the south and west of the existing monitoring network and one well (MW-10) was installed in the upgradient direction (east). Groundwater monitoring data showed that petroleum impacted groundwater extends westward from the site to Division Street which is ~ 400 feet west. No petroleum contamination was present in the groundwater at MW-10 which is east of the site.

Based on the data collected at the site a report was prepared and submitted to the WDNR. In response to the data included in the report the WDNR requested that additional work be conducted at the site. Specifically, the work requested included conducting additional groundwater monitoring and vapor sampling to evaluate the vapor migration potential in the building at the site.

RECENT ENVIRONMENTAL ACTIVITIES

Groundwater Monitoring

On May 28, 2015 groundwater monitoring was conducted. The monitoring consisted of water level/product measurement and groundwater sample collection at the ten wells at the site. Groundwater samples were analyzed for PVOCs+naphthalene. Results of the recent groundwater monitoring are compiled in Table 1. Figure 1 shows the May 2015 groundwater monitoring data.

Water level data collected in May 2015 is consistent with historic data from the site. The data show that the water-table is present slightly deeper than 50 feet below grade. Free-phase product was present at one well, MW-2. The apparent product thickness was 0.68 feet; this is lower than previous thickness measurements, which exceeded 3 feet on several occasions. The water level data shows that water-table on the subject parcel, particularly in MW-2, is significantly higher than on the surrounding properties. The measured water-level variation across the monitoring network is inconsistent with the relatively high conductivity materials in the aquifer. It appears that a "perched" area of saturated conditions exist in the area of the tank bed.

Groundwater chemistry data confirms that petroleum-related contamination originating at the site extends to the west approximately 400 feet. The highest contaminant levels were present in the groundwater at MW-1, which is located immediately to the northwest of the tank basin. Very high levels of PVOCs also were present in the other two monitoring wells on the subject property (MW-2 and MW-3). One of these wells, MW-2, is located on the east side of the tank bed and has consistently contained free-phase product. The other on site well, MW-3, is located immediately west of the dispenser island at the front (south) of the property. In addition to the monitoring wells located on the subject property MW-5 contained numerous PVOCs above the NR140 groundwater quality standards,. This well is located on the Milton Fire Department property and is approximately 200 feet west of the tank bed.

Limited contamination exceeding NR140 standards was noted in the remaining six monitoring wells. Benzene exceeded the ES in groundwater at MW-7 and the PAL at MW-8; these wells are located along Division Street ~ 400 feet west of the site. The MTBE level exceeded the ES in groundwater at MW-4 and MW-7. No PVOCs were detected in the groundwater samples collected from MW-6 and MW-9 located to the west of the site and south of Madison Avenue. No PVOCs were detected in the groundwater at MW-10 which is located on the north side of Madison Avenue ~80 feet east of the site.

Vapor Migration Sampling

Vapor migration sampling was conducted at the site in June 2015. Sampling included collection of sub-slab samples beneath the building on the subject parcel as well as indoor and outdoor air samples. This was the first round of vapor sampling.

On May 28, 2015 two sub-slab vapor probes were installed at the building on the subject property. One of the sub-slab probes was installed along the east side of the building close to a former tank bed with known soil contamination (SS-1), and the other in the northern extension of the building near the underground storage tank basin (SS-2).

To install the sub-slab probes a 1.25" hole was drilled through the concrete floor and advanced to a depth of approximately 10 inches. The concrete slab varied from 5 to 6 inches. A stainless steel sampling tip attached to a length of 1/4 OD Teflon tubing was placed in the hole. The area around the probe was filled with clean filtered sand (#30) to ~1 inch below the concrete floor slab. Granular bentonite was placed above the sand and extended upward to the just below the base of the floor. The bentonite was hydrated to provide a seal. The remaining borehole was sealed with hydraulic cement.

Vapor sampling was conducted at the site on June 9-10, 2015. The vapor samples were collected using a 6-liter Summa canister provided by the Wisconsin State Lab of Hygiene. The sub-slab sampling canisters were equipped with a regulator so that the canister filled over a 30-minute period limiting the flow to approximately 200 ml/min. The canisters used to collect indoor and outdoor air samples were equipped with regulators so that they filled over a 24 hour period. The vapor sample was analyzed for VOCs (TO15).

Prior to collecting the sub-slab and soil gas samples a plastic well was placed around the sampling probe and sealed to the floor/ground with putty. A vacuum test was performed to ensure that the sampling lines did not leak. A vacuum of 17-18 inches Hg was applied to the sampling line. The vacuum was checked and fittings were tightened if leakage was noted. After the lines appeared to be tight the vacuum was monitored for a 5-minute period. No vacuum loss was noted during the monitoring period. After the vacuum test was passed the area within the containment well was filled with an 80 pound bentonite slurry mix to the 100 ml mark on the well. A small amount of air (~50 ml) was pumped into the ground via the sampling probe to look for leakage in the seal. No air bubbles were noted within the bentonite slurry inside the containment well so the surface seal appeared to be tight. Subsequently, 250 ml of vapor was pumped out of the sampling probe to purge the area around the point. Lastly, after the vacuum and surface leakage tests were completed satisfactorily the valve on the Summa canister was opened to collect the vapor sample.

Both the indoor and outdoor air samples contained a number of analytes. This was not unexpected since the site is located in a commercial area and a convenience store and gasoline station is operating at the site. Compounds present in these samples included petroleum-related constituents (benzene, ethylbenzene ...), refrigerant-related constituents (trichlorofluoramethane, dichlorodifluoranmethane), and miscellaneous other VOCs. In total 23 different VOCs were detected in the air samples with the majority of the compounds present at less than 1 vppb. All of the petroleum and refrigerant related compounds detected were present at concentrations substantially below the indoor air standard for non-residential properties. One compound, acrolein, was present above the indoor air standard. Acrolein was present in the outdoor air at 0.39 vppb and indoor air at 0.70 vppb. The indoor air quality standard established by the USEPA for acrolein is 0.03 ppbv. Acrolein is not a commonly used industrial chemical although it is used in a number of pesticides. It is produced as a by-product of partial combustion of organic materials and is a component in cigarette smoke and frying oils. Results of the vapor sampling are summarized in Table 2.

Five compounds were identified in the sub-slab vapor samples, 1,2,4 trimethylbenzene, acetone, methyl ethyl ketone (MEK), trichlorofluoromethane, and tetrachloroethene (PCE). With the exception of PCE all of the compounds were present at higher levels in the indoor and/or outdoor air samples. The VOC concentrations detected in the sub-slab samples all were substantially below the WDNR sub-slab screening levels based on the 0.1 attenuation factor as cited in RR800. For example PCE was present at 0.66 vppb (SS-1) and 0.46 vppb (SS-2); the indoor air standard at non-residential properties for PCE is 27 vppb with a sub-slab screening levels of 270 vppb.

CONCLUSIONS AND RECOMMENDATIONS

Groundwater containing petroleum-related VOCs in excess of NR140 ESs originates at the subject parcel and extends to the west to the limit of the monitoring network (over 400 feet). At the most downgradient well, MW-7, two compounds are present in the groundwater at concentrations exceeding the ES, benzene (18.8 ug/l) and MTBE (126 ug/l). The concentrations of each of these compounds were lower in the May 2015 sampling than in the initial sampling conducted in September 2013. During the most recent two monitoring events no PVOCs were present in the groundwater samples collected at the two monitoring wells south of Madison Avenue (MW-6 and MW-9) or the monitoring well east of the site (MW-10).

Vapor analytical data show that numerous VOCs are present in the ambient air outside the building as well as the interior building air. All of the compounds detected were present below indoor air quality standards with the exception of acrolein. Data collected from the subslab vapors indicate limited accumulation of VOCs beneath the building has occurred. Only low VOC levels were detected in the subslab vapors and the detected levels of all compounds present were below indoor air quality standards. All of the compounds detected in the subslab vapors were present at higher levels in the ambient air samples both inside and outside the building with the exception of tetrachloroethene (PCE). Based on the initial vapor monitoring data it appears that vapor intrusion is not an immediate concern at the building.

Based on the data collected to date and the remaining question regarding the severity of the contamination we recommend that the following actions be considered.

- Conduct additional groundwater monitoring to evaluate contaminant concentration trends in the downgradient wells to determine whether additional monitoring wells will be required.
- Conduct the previously-approved vapor sampling at the site (two more rounds).

Please call me at 608-838-9120 if you have any questions or would like additional information.

Sincerely,
Seymour Environmental Services, Inc.

Robyn Seymour, P.G.
Hydrogeologist

TABLES 1 - Summary of Groundwater Monitoring Data (May 2015)
2 - Summary of Vapor Analytical Data (June 2015)

FIGURES 1 - Groundwater Monitoring Data (May 2015)
2 - Vapor Sampling Locations (June 2015)

LAB REPORTS

TABLE 1
SUMMARY OF GROUNDWATER MONITORING DATA (May 28, 2015)
Former Bob's CITGO
602 West Madison Avenue - Milton, Wisconsin

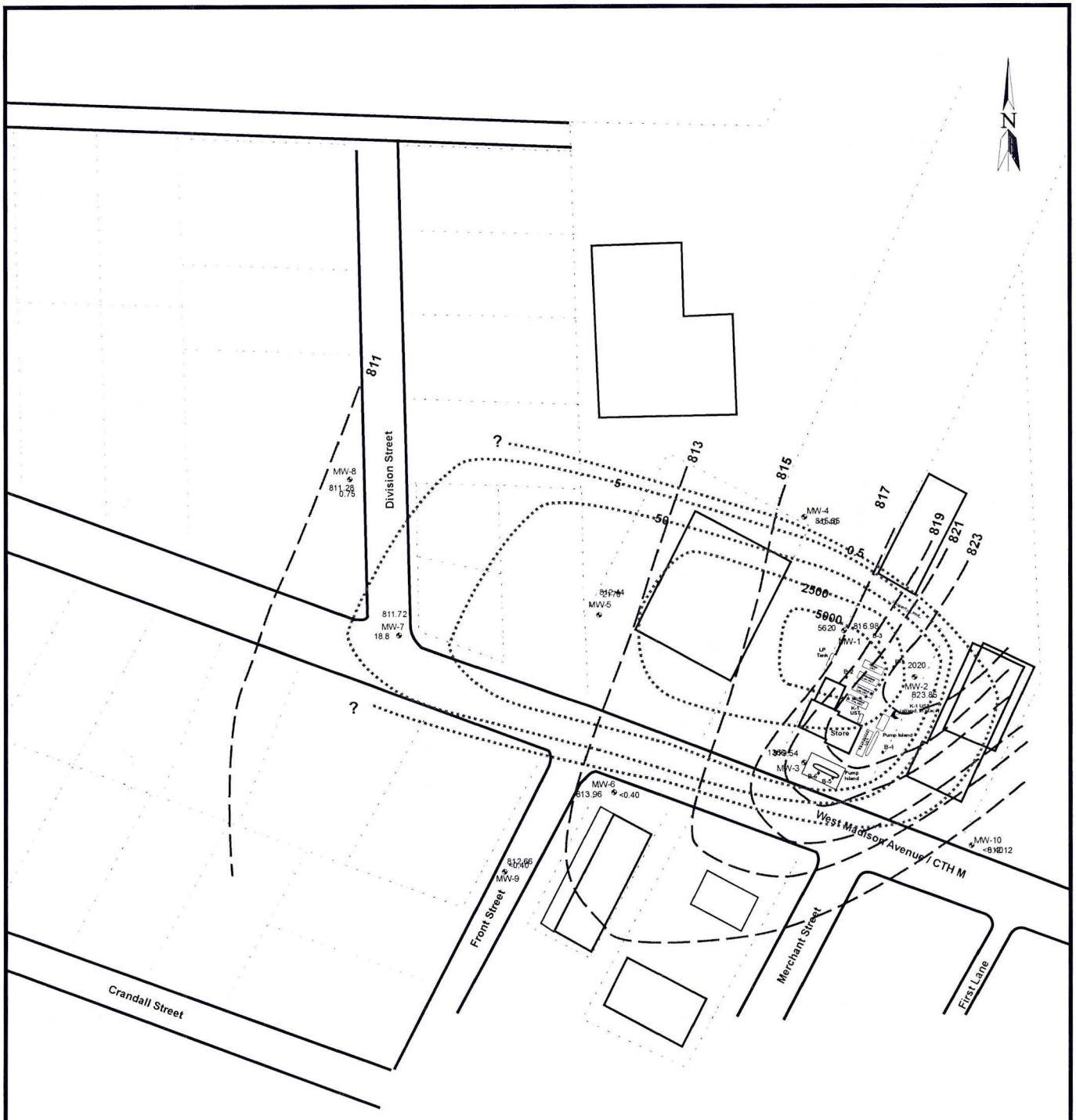
Sample I.D.	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	MW-9	MW-10	NR140 ES	NR140 PAL
Groundwater Depth (ft)	57.51	50.25	55.51	58.95	62.76	60.84	63.54	67.17	61.91	64.56	--	--
Free-phase Product (ft)	--	0.68	--	--	--	--	--	--	--	--	--	--
Groundwater Elevation	816.98	823.85	819.54	815.65	812.44	813.96	811.72	811.28	812.66	812.12	--	--
PVOCs												
Benzene	**5620**	**2020**	**1360**	<0.40	**2170**	<0.40	**18.8**	0.75(J)	<0.40	<0.40	5	0.5
1,2 Dichloroethane	na	na	na	na	na	na	na	na	na	na	5	0.5
Ethylbenzene	**2060**	**3400**	**3040**	<0.39	**917**	<0.39	1.3	<0.39	<0.39	<0.39	700	140
Methyl-tert-butyl ether	**160**	**49.6**	<24.2	**95.0**	**105**	<0.48	**126**	10.3	<0.48	<0.48	60	12
Toluene	**12800**	**2560**	**719**	<0.39	**1690**	<0.39	<0.39	<0.39	<0.39	<0.39	800	160
1,3,5 Trimethylbenzene	394	843	732	<0.42	197	<0.42	<0.42	1.6	<0.42	<0.42	ns	ns
1,2,4 Trimethylbenzene	1460	3000	2610	<0.42	703	<0.42	<0.42	<0.42	<0.42	<0.42	ns	ns
Total Trimethylbenzenes	**1854**	**3843**	**3342**	<0.84	**900**	<0.84	<0.84	1.6	<0.84	<0.84	480	96
Xylenes, -m, -p	6390	10200	9150	<0.80	2450	<0.80	1.1	<0.80	<0.80	<0.80	ns	ns
Xylene, -o	2970	3950	3460	<0.45	1470	<0.45	4.1	<0.45	<0.45	<0.45	ns	ns
Total Xylenes	**9360**	**14150**	**12610**	<1.25	**3920**	<1.25	5.2	<1.25	<1.25	<1.25	2000	400
Naphthalene	**567**	**826**	**831**	<0.42	**275**	<0.42	1.7	0.67(J)	<0.42	<0.42	100	10

- All results are listed in ug/l
- na = not analyzed
- ns = no standard established
- NR140 PAL = Preventative Action Limit (exceedances bold)
- NR140 ES = Enforcement Standard (exceedances shaded)
- (J) = Detected below the limit of quantitation

TABLE 2
SUMMARY OF INITIAL VAPOR MIGRATION SAMPLING (June 9, 2015)
Former Bob's CITGO
602 West Madison Avenue - Milton, Wisconsin

	Sample Results				Standards / Screening Levels (non-residential)			
Sample	SS-1	SS-2	Indoor	Outdoor	Indoor Air Standard (ug/m3)	Indoor Air Standard (ppbV)	Subslab Screening (10 X)	Sunslab SCreening (33 X)
Benzene	<0.085	<0.085	**0.37**	**0.45**	16	4.9	49	163
Ethylbenzene	<0.085	<0.085	**0.55**	**0.36**	49	11	110	367
n-Hexane	<0.085	<0.085	**0.73**	**1.1**	3100	865	8,651	28833
MTBE	<0.085	<0.085	<0.085	<0.085	470	130	1300	4333
Toluene	<0.085	<0.085	**1.5**	**1.6**	22000	5700	57000	190000
1,2,4 Trimethylbenzene	<0.085	0.32	**0.67**	**0.66**	31	6.2	62	207
1,3,5 Trimethylbenzene	<0.085	<0.085	**0.36**	**0.33**	ne	ne	ne	ne
m&p Xylenes	<0.17	<0.17	**2.1**	**1.2**	880	200	2000	6667
o Xylene	<0.085	<0.085	**0.57**	**0.49**	440	100	1000	3333
Ethyl Acetate	<0.085	<0.085	**0.78**	<0.085	ne	ne	ne	ne
Cyclohexane	<0.085	<0.085	<0.085	**0.28**	26000	7,430	74,299	247667
Propene (propylene)	<0.085	<0.085	<0.085	<0.085	13000	7,430	74,299	247667
Heptane	<0.085	<0.085	**0.20 F**	**0.36**	ne	ne	ne	ne
Vinyl Acetate	<0.085	<0.085	**0.85**	**0.86**	880	246	2,458	8200
Acetone	**0.68**	**0.77**	**11**	**7.2**	140000	57,972	579,718	1932400
Methylene Chloride	<0.085	<0.085	**0.13 F**	<0.085	2600	740	7400	24667
Tetrachloroethene	**0.66**	**0.46**	<0.085	<0.085	180	27	270	900
Trichloroethene	<0.085	<0.085	<0.085	<0.085	8.8	1.6	16	53
cis 1,2 Dichloroethene	<0.085	<0.085	<0.085	<0.085	ne	ne	ne	ne
trans 1,2 Dichloroethene	<0.085	<0.085	<0.085	<0.085	260	65	650	2167
Vinyl chloride	<0.085	<0.085	<0.085	<0.085	28	11	110	367
Trichlorofluoromethane	**3.8**	**2.1**	**5.6**	**0.23 F**		540	5400	18000
MEK	**0.24 F**	**0.23 F**	**0.94**	**0.80**	22000	6239	62391	207969
Dichlorodifluoromethane	<0.085	<0.085	**2.9**	**0.43**		88	880	2933
Acrolein	<0.085	<0.085	**0.70**	**0.39**	0.088	0.03	0.32	1
Tetrahydrofuran	<0.085	<0.085	**0.20 F**	<0.085	--	ne	ne	ne
Carbontetrachloride	<0.085	<0.085	**0.20 F**	<0.085		3.1	31	103
Styrene	<0.085	<0.085	**0.37**	<0.085	4400	864	8639	28798
Chloromethane	<0.085	<0.085	**13**	**11**		190	1900	6333
1-ethyl-4-methyl benzene	<0.085	<0.085	**0.34**	**0.35**	--	ne	ne	ne

- All results are listed in ppbV
- ne = no standard established
- Detected compounds shown in bold
- Indoor Air Standard (exceedances underlined)
- Subslab Screening (10X) = Based on former WDNR attenuation factor of 0.1
- Subslab Screening (33X) = Based on new WDNR attenuation factor of 0.03 (exceedances shaded)



LEGEND

♦ - Geoprobe Location

MW-1 ◔ - Monitoring Well

0 120' 240'

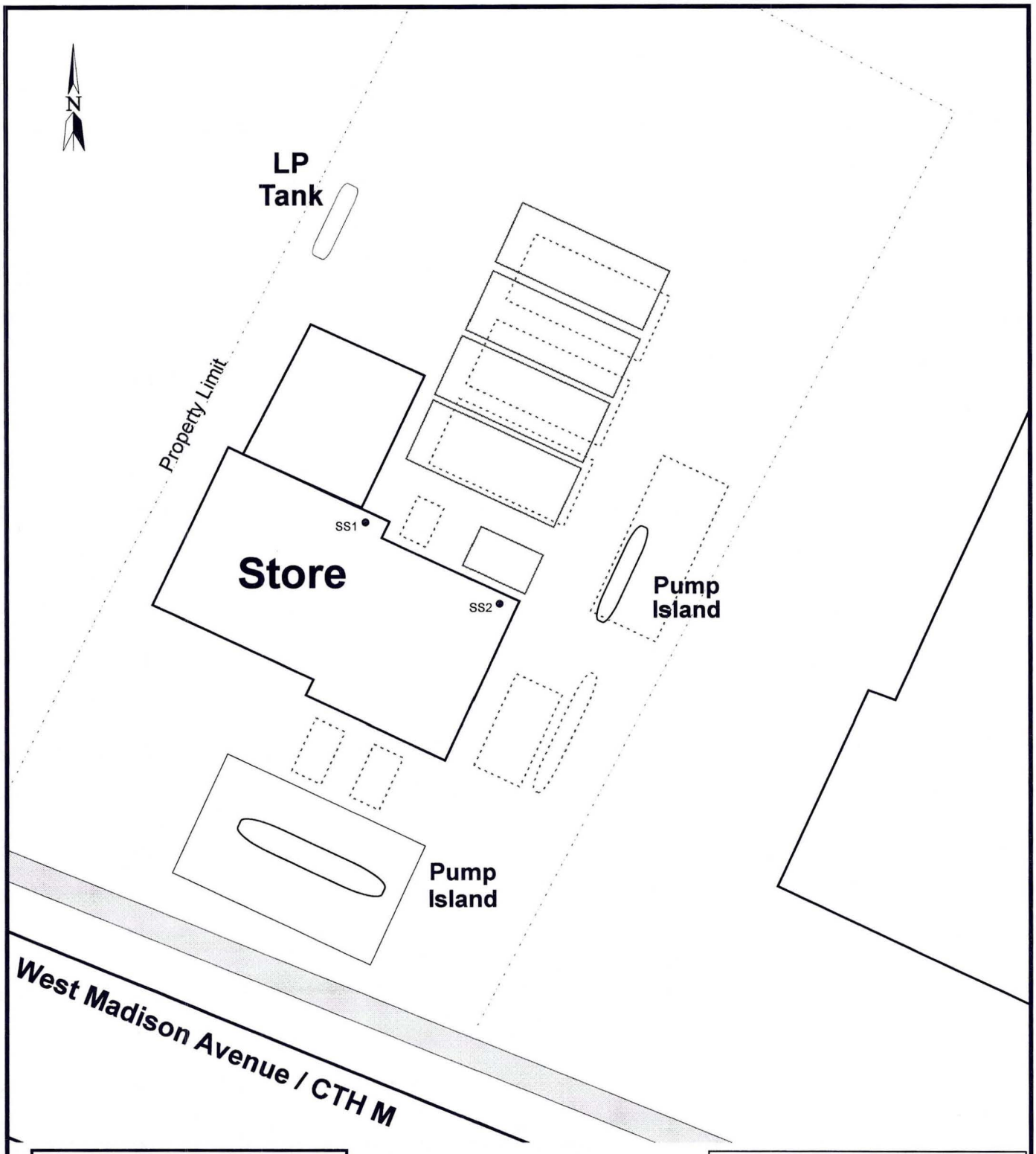
1 INCH = 120 FEET
SCALE IS APPROXIMATE

FILE/PATH: D:\PROJECTS\BOBSCITGO\ Bob's-basemap.cdr
DATE: 07/21/2005
PREPARED: MDF APPROVED:
SOURCE: FIELD MEASUREMENTS

SEYMOUR ENVIRONMENTAL SERVICES, INC.

GROUNDWATER MONITORING DATA (May 2015)
Bob's Citgo
602 W. Madison Avenue
Milton, Wisconsin

FIGURE 1



LEGEND

SS1
• Sub Slab Sampling Location

0 20' 40'

1 INCH = 20 FEET
SCALE IS APPROXIMATE

FILE/PATH: D:\PROJECTS\BOBSCITGO\ Bob's-basemap.cdr
DATE: 08/21/2015
PREPARED: MDF APPROVED:
SOURCE:
FIELD MEASUREMENTS

SEYMOUR ENVIRONMENTAL SERVICES, INC.

SITE LAYOUT and VAPOR SAMPLING POINTS
Bob's Citgo
602 W. Madison Avenue
Milton, Wisconsin

FIGURE
2

Wisconsin State Laboratory of Hygiene
2601 Agriculture Drive, PO Box 7996
Madison, WI 53707-7996
(800)442-4618 - FAX (608)224-6213
http://www.slh.wisc.edu

Laboratory Report

D.F. Kurtycz, M.D., Medical Director - Charles D. Brokopp, Dr.P.H., Director

Environmental Health Division

WDNR LAB ID: 113133790 NELAP LAB ID: E37658 EPA LAB ID: WI00007 WI DATCP ID: 105-415

WSLH Sample: 199368001

Report To:
SEYMOUR ENV SERVICES
2531 DYRESON RD
P.O. BOX 398
MCFARLAND, WI 53558

Invoice To:
SEYMOUR ENV SERVICES
2531 DYRESON RD
P.O. BOX 398
MCFARLAND, WI 53558
Customer ID: 13810

Field #: SS-1
Project No: BOB'S CITGO
Collection End: 6/9/2015 11:16:00 AM
Collection Start: 06/09/15 10:45
Collected By: MOF/ MRS
Date Received: 6/12/2015
Date Reported: 6/30/2015
Sample Reason:

ID#:
Sample Location:
Sample Description:
Sample Type: SB-SUB SLAB
Waterbody:
Point or Outfall:
Sample Depth:
Program Code:
Region Code:
County:

OC-Volatiles

Analyte	Analysis Method	Result	Units	LOD	LOQ
Prep Date 06/24/15 Analysis Date	06/24/15				
Propene	EPA TO-15	ND	ppbv	0.085	0.28
Dichlorodifluoromethane	EPA TO-15	ND	ppbv	0.085	0.28
Chloromethane	EPA TO-15	ND	ppbv	0.085	0.28
1,2-Dichlorotetrafluoroethane	EPA TO-15	ND	ppbv	0.085	0.33
Vinyl chloride	EPA TO-15	ND	ppbv	0.085	0.28
1,3-Butadiene	EPA TO-15	ND	ppbv	0.085	0.28
Bromomethane	EPA TO-15	ND	ppbv	0.085	0.28
Chloroethane	EPA TO-15	ND	ppbv	0.085	0.28
Acrolein	EPA TO-15	ND	ppbv	0.085	0.28
Acetone	EPA TO-15	0.68	ppbv	0.085	0.28
Trichlorofluoromethane	EPA TO-15	3.8	ppbv	0.085	0.28
1,1-Dichloroethene	EPA TO-15	ND	ppbv	0.085	0.28
Methylene chloride	EPA TO-15	ND	ppbv	0.085	0.28
Carbon disulfide	EPA TO-15	ND	ppbv	0.085	0.28
Trichlorotrifluoroethane	EPA TO-15	ND	ppbv	0.085	0.28

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D.F. Kurtycz, M.D., Medical Director - Charles D. Brokopp, Dr.P.H., Director

Environmental Health Division

WDNR LAB ID: 113133790 NELAP LAB ID: E37658 EPA LAB ID: WI00007 WI DATCP ID: 105-415

WSLH Sample: 199368001

OC-Volatiles

Analyte	Analysis Method	Result	Units	LOD	LOQ
Prep Date 06/24/15 Analysis Date 06/24/15					
trans-1,2-Dichloroethene	EPA TO-15	ND	ppbv	0.085	0.28
1,1-Dichloroethane	EPA TO-15	ND	ppbv	0.085	0.28
Methyl tert-Butyl ether (MTBE)	EPA TO-15	ND	ppbv	0.085	0.28
Vinyl acetate	EPA TO-15	ND	ppbv	0.085	0.28
Methyl Ethyl Ketone (MEK)	EPA TO-15	0.24F	ppbv	0.085	0.28
The Upper QC limit for the calibration check is exceeded.					
cis-1,2-Dichloroethene	EPA TO-15	ND	ppbv	0.085	0.28
Hexane	EPA TO-15	ND	ppbv	0.085	0.28
Chloroform	EPA TO-15	ND	ppbv	0.085	0.28
Ethyl acetate	EPA TO-15	ND	ppbv	0.085	0.28
Tetrahydrofuran	EPA TO-15	ND	ppbv	0.085	0.28
1,2-Dichloroethane	EPA TO-15	ND	ppbv	0.085	0.28
1,1,1-Trichloroethane	EPA TO-15	ND	ppbv	0.085	0.28
Benzene	EPA TO-15	ND	ppbv	0.085	0.28
Carbon tetrachloride	EPA TO-15	ND	ppbv	0.085	0.28
Cyclohexane	EPA TO-15	ND	ppbv	0.085	0.28
1,2-Dichloropropane	EPA TO-15	ND	ppbv	0.085	0.28
Bromodichloromethane	EPA TO-15	ND	ppbv	0.085	0.33
Trichloroethene	EPA TO-15	ND	ppbv	0.085	0.28
1,4 Dioxane	EPA TO-15	ND	ppbv	0.085	0.28
n-Heptane	EPA TO-15	ND	ppbv	0.085	0.28
cis-1,3-Dichloropropene	EPA TO-15	ND	ppbv	0.085	0.28
4-Methyl-2-pentanone (MIBK)	EPA TO-15	ND	ppbv	0.085	0.28
trans-1,3-Dichloropropene	EPA TO-15	ND	ppbv	0.085	0.28
1,1,2-Trichloroethane	EPA TO-15	ND	ppbv	0.085	0.28
Toluene	EPA TO-15	ND	ppbv	0.085	0.28
2-Hexanone	EPA TO-15	ND	ppbv	0.085	0.28
Chlorodibromomethane	EPA TO-15	ND	ppbv	0.085	0.28
1,2-Dibromoethane	EPA TO-15	ND	ppbv	0.085	0.28

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Laboratory Report

D.F. Kurtycz, M.D., Medical Director - Charles D. Brokopp, Dr.P.H., Director

Environmental Health Division

WDNR LAB ID: 113133790 NELAP LAB ID: E37658 EPA LAB ID: WI00007 WI DATCP ID: 105-415

WSLH Sample: 199368001

OC-Volatiles

Analyte	Analysis Method	Result	Units	LOD	LOQ
Prep Date 06/24/15 Analysis Date	06/24/15				
Tetrachloroethene	EPA TO-15	0.66	ppbv	0.085	0.28
Chlorobenzene	EPA TO-15	ND	ppbv	0.085	0.28
Ethyl Benzene	EPA TO-15	ND	ppbv	0.085	0.28
m,p-Xylene	EPA TO-15	ND	ppbv	0.17	0.56
Bromoform	EPA TO-15	ND	ppbv	0.085	0.28
Styrene	EPA TO-15	ND	ppbv	0.085	0.28
1,1,2,2-Tetrachloroethane	EPA TO-15	ND	ppbv	0.085	0.28
o-Xylene	EPA TO-15	ND	ppbv	0.085	0.28
1-ethyl-4-methyl benzene	EPA TO-15	ND	ppbv	0.085	0.28
1,3,5-Trimethylbenzene	EPA TO-15	ND	ppbv	0.085	0.28
1,2,4-Trimethylbenzene	EPA TO-15	ND	ppbv	0.085	0.28
Benzyl chloride	EPA TO-15	ND	ppbv	0.085	0.28
1,3-Dichlorobenzene	EPA TO-15	ND	ppbv	0.085	0.28
1,4-Dichlorobenzene	EPA TO-15	ND	ppbv	0.085	0.28
1,2-Dichlorobenzene	EPA TO-15	ND	ppbv	0.085	0.28
1,2,4-Trichlorobenzene	EPA TO-15	ND	ppbv	0.085	0.28
Hexachlorobutadiene	EPA TO-15	ND	ppbv	0.085	0.28

List of Abbreviations:

LOD = Level of detection
LOQ = Level of quantification
ND = None detected. Results are less than the LOD
F next to result = Result is between LOD and LOQ
Z next to result = Result is between 0 (zero) and LOD
if LOD=LOQ, Limits were not statistically derived

Test results for NELAP accredited tests are certified to meet the requirements of the NELAC standards. For a list of accredited analytes see http://www.slh.wisc.edu/about/compliance/nelac-laboratory-accreditation
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Laboratory Report

D.F. Kurtycz, M.D., Medical Director - Charles D. Brokopp, Dr.P.H., Director

Environmental Health Division

WDNR LAB ID: 113133790 NELAP LAB ID: E37658 EPA LAB ID: WI00007 WI DATCP ID: 105-415

WSLH Sample: 199368001

Responsible Party

Microbiology: Sharon Kluender, Lab Manager, 608-224-6262
Inorganic Chemistry: Tracy Hanke, Lab Manager, 608-224-6270
Metals: DeWayne Kennedy-Parker, Lab Manager, 608-224-6282
Organic Chemistry: Al Spallato, Lab Manager, 608-224-6269
Emergency Chemical Response: Noel Stanton, Lab Manager, 608-224-6251

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Environmental Health Division

WDNR LAB ID: 113133790 NELAP LAB ID: E37658 EPA LAB ID: WI00007 WI DATCP ID: 105-415

WSLH Sample: 199368002

Report To:
SEYMOUR ENV SERVICES
2531 DYRESON RD
P.O. BOX 398
MCFARLAND, WI 53558

Invoice To:
SEYMOUR ENV SERVICES
2531 DYRESON RD
P.O. BOX 398
MCFARLAND, WI 53558
Customer ID: 13810

Field #: SS-2
Project No: BOB'S CITGO
Collection End: 6/9/2015 11:40:00 AM
Collection Start: 06/09/15 1106
Collected By: MOF/ MRS
Date Received: 6/12/2015
Date Reported: 6/30/2015
Sample Reason:

ID#:
Sample Location:
Sample Description:
Sample Type: SB-SUB SLAB
Waterbody:
Point or Outfall:
Sample Depth:
Program Code:
Region Code:
County:

OC-Volatiles

Analyte	Analysis Method	Result	Units	LOD	LOQ
Prep Date 06/24/15 Analysis Date	06/24/15				
Propene	EPA TO-15	ND	ppbv	0.085	0.28
Dichlorodifluoromethane	EPA TO-15	ND	ppbv	0.085	0.28
Chloromethane	EPA TO-15	ND	ppbv	0.085	0.28
1,2-Dichlorotetrafluoroethane	EPA TO-15	ND	ppbv	0.085	0.33
Vinyl chloride	EPA TO-15	ND	ppbv	0.085	0.28
1,3-Butadiene	EPA TO-15	ND	ppbv	0.085	0.28
Bromomethane	EPA TO-15	ND	ppbv	0.085	0.28
Chloroethane	EPA TO-15	ND	ppbv	0.085	0.28
Acrolein	EPA TO-15	ND	ppbv	0.085	0.28
Acetone	EPA TO-15	0.77	ppbv	0.085	0.28
Trichlorofluoromethane	EPA TO-15	2.1	ppbv	0.085	0.28
1,1-Dichloroethene	EPA TO-15	ND	ppbv	0.085	0.28
Methylene chloride	EPA TO-15	ND	ppbv	0.085	0.28
Carbon disulfide	EPA TO-15	ND	ppbv	0.085	0.28
Trichlorotrifluoroethane	EPA TO-15	ND	ppbv	0.085	0.28

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D.F. Kurtycz, M.D., Medical Director - Charles D. Brokopp, Dr.P.H., Director

Environmental Health Division

WDNR LAB ID: 113133790 NELAP LAB ID: E37658 EPA LAB ID: WI00007 WI DATCP ID: 105-415

WSLH Sample: 199368002

OC-Volatiles

Analyte	Analysis Method	Result	Units	LOD	LOQ
Prep Date 06/24/15 Analysis Date 06/24/15					
trans-1,2-Dichloroethene	EPA TO-15	ND	ppbv	0.085	0.28
1,1-Dichloroethane	EPA TO-15	ND	ppbv	0.085	0.28
Methyl tert-Butyl ether (MTBE)	EPA TO-15	ND	ppbv	0.085	0.28
Vinyl acetate	EPA TO-15	ND	ppbv	0.085	0.28
Methyl Ethyl Ketone (MEK)	EPA TO-15	0.23F	ppbv	0.085	0.28
The Upper QC limit for the calibration check is exceeded.					
cis-1,2-Dichloroethene	EPA TO-15	ND	ppbv	0.085	0.28
Hexane	EPA TO-15	ND	ppbv	0.085	0.28
Chloroform	EPA TO-15	ND	ppbv	0.085	0.28
Ethyl acetate	EPA TO-15	ND	ppbv	0.085	0.28
Tetrahydrofuran	EPA TO-15	ND	ppbv	0.085	0.28
1,2-Dichloroethane	EPA TO-15	ND	ppbv	0.085	0.28
1,1,1-Trichloroethane	EPA TO-15	ND	ppbv	0.085	0.28
Benzene	EPA TO-15	ND	ppbv	0.085	0.28
Carbon tetrachloride	EPA TO-15	ND	ppbv	0.085	0.28
Cyclohexane	EPA TO-15	ND	ppbv	0.085	0.28
1,2-Dichloropropane	EPA TO-15	ND	ppbv	0.085	0.28
Bromodichloromethane	EPA TO-15	ND	ppbv	0.085	0.33
Trichloroethene	EPA TO-15	ND	ppbv	0.085	0.28
1,4 Dioxane	EPA TO-15	ND	ppbv	0.085	0.28
n-Heptane	EPA TO-15	ND	ppbv	0.085	0.28
cis-1,3-Dichloropropene	EPA TO-15	ND	ppbv	0.085	0.28
4-Methyl-2-pentanone (MIBK)	EPA TO-15	ND	ppbv	0.085	0.28
trans-1,3-Dichloropropene	EPA TO-15	ND	ppbv	0.085	0.28
1,1,2-Trichloroethane	EPA TO-15	ND	ppbv	0.085	0.28
Toluene	EPA TO-15	ND	ppbv	0.085	0.28
2-Hexanone	EPA TO-15	ND	ppbv	0.085	0.28
Chlorodibromomethane	EPA TO-15	ND	ppbv	0.085	0.28
1,2-Dibromoethane	EPA TO-15	ND	ppbv	0.085	0.28

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Laboratory Report

D.F. Kurtycz, M.D., Medical Director - Charles D. Brokopp, Dr.P.H., Director

Environmental Health Division

WDNR LAB ID: 113133790 NELAP LAB ID: E37658 EPA LAB ID: WI00007 WI DATCP ID: 105-415

WSLH Sample: 199368002

OC-Volatiles

Analyte	Analysis Method	Result	Units	LOD	LOQ
Prep Date 06/24/15 Analysis Date 06/24/15					
Tetrachloroethene	EPA TO-15	0.46	ppbv	0.085	0.28
Chlorobenzene	EPA TO-15	ND	ppbv	0.085	0.28
Ethyl Benzene	EPA TO-15	ND	ppbv	0.085	0.28
m,p-Xylene	EPA TO-15	ND	ppbv	0.17	0.56
Bromoform	EPA TO-15	ND	ppbv	0.085	0.28
Styrene	EPA TO-15	ND	ppbv	0.085	0.28
1,1,2,2-Tetrachloroethane	EPA TO-15	ND	ppbv	0.085	0.28
o-Xylene	EPA TO-15	ND	ppbv	0.085	0.28
1-ethyl-4-methyl benzene	EPA TO-15	ND	ppbv	0.085	0.28
1,3,5-Trimethylbenzene	EPA TO-15	ND	ppbv	0.085	0.28
1,2,4-Trimethylbenzene	EPA TO-15	0.32	ppbv	0.085	0.28
The Upper QC limit for the calibration check is exceeded.					
Benzyl chloride	EPA TO-15	ND	ppbv	0.085	0.28
1,3-Dichlorobenzene	EPA TO-15	ND	ppbv	0.085	0.28
1,4-Dichlorobenzene	EPA TO-15	ND	ppbv	0.085	0.28
1,2-Dichlorobenzene	EPA TO-15	ND	ppbv	0.085	0.28
1,2,4-Trichlorobenzene	EPA TO-15	ND	ppbv	0.085	0.28
Hexachlorobutadiene	EPA TO-15	ND	ppbv	0.085	0.28

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Laboratory Report

D.F. Kurtycz, M.D., Medical Director - Charles D. Brokopp, Dr.P.H., Director

Environmental Health Division

WDNR LAB ID: 113133790 NELAP LAB ID: E37658 EPA LAB ID: WI00007 WI DATCP ID: 105-415

WSLH Sample: 199368002

List of Abbreviations:

LOD = Level of detection
LOQ = Level of quantification
ND = None detected. Results are less than the LOD
F next to result = Result is between LOD and LOQ
Z next to result = Result is between 0 (zero) and LOD
if LOD=LOQ, Limits were not statistically derived

Test results for NELAP accredited tests are certified to meet the requirements of the NELAC standards. For a list of accredited analytes see http://www.slh.wisc.edu/about/compliance/nelac-laboratory-accreditation
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Responsible Party

Microbiology: Sharon Kluender, Lab Manager, 608-224-6262
Inorganic Chemistry: Tracy Hanke, Lab Manager, 608-224-6270
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D.F. Kurtycz, M.D., Medical Director - Charles D. Brokopp, Dr.P.H., Director

Environmental Health Division

WDNR LAB ID: 113133790 NELAP LAB ID: E37658 EPA LAB ID: WI00007 WI DATCP ID: 105-415

WSLH Sample: 199368003

Report To:
SEYMOUR ENV SERVICES
2531 DYRESON RD
P.O. BOX 398
MCFARLAND, WI 53558

Invoice To:
SEYMOUR ENV SERVICES
2531 DYRESON RD
P.O. BOX 398
MCFARLAND, WI 53558
Customer ID: 13810

Field #: INDOOR
Project No: BOB'S CITGO
Collection End: 6/10/2015 11:38:00 AM
Collection Start: 06/09/15 1112
Collected By: MOF/ MRS
Date Received: 6/12/2015
Date Reported: 6/30/2015
Sample Reason:

ID#:
Sample Location:
Sample Description:
Sample Type: AI-INDOOR AIR
Waterbody:
Point or Outfall:
Sample Depth:
Program Code:
Region Code:
County:

OC-Volatiles

Analyte	Analysis Method	Result	Units	LOD	LOQ
Prep Date 06/22/15 Analysis Date 06/22/15					
Propene	EPA TO-15	<1.04	ppbv	0.085	0.28
Interference					
The Lower QC limit for the calibration check is exceeded.					
Dichlorodifluoromethane	EPA TO-15	2.9	ppbv	0.085	0.28
1,2-Dichlorotetrafluoroethane	EPA TO-15	ND	ppbv	0.085	0.33
Vinyl chloride	EPA TO-15	ND	ppbv	0.085	0.28
1,3-Butadiene	EPA TO-15	ND	ppbv	0.085	0.28
Bromomethane	EPA TO-15	ND	ppbv	0.085	0.28
Chloroethane	EPA TO-15	ND	ppbv	0.085	0.28
Acrolein	EPA TO-15	0.70	ppbv	0.085	0.28
Trichlorofluoromethane	EPA TO-15	5.6	ppbv	0.085	0.28
1,1-Dichloroethene	EPA TO-15	ND	ppbv	0.085	0.28
Methylene chloride	EPA TO-15	0.13F	ppbv	0.085	0.28
Carbon disulfide	EPA TO-15	ND	ppbv	0.085	0.28
Trichlorotrifluoroethane	EPA TO-15	ND	ppbv	0.085	0.28

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Environmental Health Division

WDNR LAB ID: 113133790 NELAP LAB ID: E37658 EPA LAB ID: WI00007 WI DATCP ID: 105-415

WSLH Sample: 199368003

OC-Volatiles

Analyte	Analysis Method	Result	Units	LOD	LOQ
Prep Date 06/22/15 Analysis Date	06/22/15				
trans-1,2-Dichloroethene	EPA TO-15	ND	ppbv	0.085	0.28
1,1-Dichloroethane	EPA TO-15	ND	ppbv	0.085	0.28
Methyl tert-Butyl ether (MTBE)	EPA TO-15	ND	ppbv	0.085	0.28
Vinyl acetate	EPA TO-15	0.85	ppbv	0.085	0.28
Methyl Ethyl Ketone (MEK)	EPA TO-15	0.94	ppbv	0.085	0.28
cis-1,2-Dichloroethene	EPA TO-15	ND	ppbv	0.085	0.28
Hexane	EPA TO-15	0.73	ppbv	0.085	0.28
Chloroform	EPA TO-15	ND	ppbv	0.085	0.28
Ethyl acetate	EPA TO-15	0.78	ppbv	0.085	0.28
Tetrahydrofuran	EPA TO-15	0.20F	ppbv	0.085	0.28
1,2-Dichloroethane	EPA TO-15	ND	ppbv	0.085	0.28
1,1,1-Trichloroethane	EPA TO-15	ND	ppbv	0.085	0.28
Benzene	EPA TO-15	0.37	ppbv	0.085	0.28
Carbon tetrachloride	EPA TO-15	0.20F	ppbv	0.085	0.28
Cyclohexane	EPA TO-15	ND	ppbv	0.085	0.28
1,2-Dichloropropane	EPA TO-15	ND	ppbv	0.085	0.28
Bromodichloromethane	EPA TO-15	ND	ppbv	0.085	0.33
Trichloroethene	EPA TO-15	ND	ppbv	0.085	0.28
1,4 Dioxane	EPA TO-15	ND	ppbv	0.085	0.28
n-Heptane	EPA TO-15	0.20F	ppbv	0.085	0.28
cis-1,3-Dichloropropene	EPA TO-15	ND	ppbv	0.085	0.28
4-Methyl-2-pentanone (MIBK)	EPA TO-15	ND	ppbv	0.085	0.28
trans-1,3-Dichloropropene	EPA TO-15	ND	ppbv	0.085	0.28
1,1,2-Trichloroethane	EPA TO-15	ND	ppbv	0.085	0.28
Toluene	EPA TO-15	1.5	ppbv	0.085	0.28
2-Hexanone	EPA TO-15	ND	ppbv	0.085	0.28
Chlorodibromomethane	EPA TO-15	ND	ppbv	0.085	0.28
1,2-Dibromoethane	EPA TO-15	ND	ppbv	0.085	0.28
Tetrachloroethene	EPA TO-15	ND	ppbv	0.085	0.28

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Laboratory Report

D.F. Kurtycz, M.D., Medical Director - Charles D. Brokopp, Dr.P.H., Director

Environmental Health Division

WDNR LAB ID: 113133790 NELAP LAB ID: E37658 EPA LAB ID: WI00007 WI DATCP ID: 105-415

WSLH Sample: 199368003

OC-Volatiles

Analyte	Analysis Method	Result	Units	LOD	LOQ
Prep Date 06/22/15 Analysis Date 06/22/15					
Chlorobenzene	EPA TO-15	ND	ppbv	0.085	0.28
Ethyl Benzene	EPA TO-15	0.55	ppbv	0.085	0.28
m,p-Xylene	EPA TO-15	2.1	ppbv	0.17	0.56
Bromoform	EPA TO-15	ND	ppbv	0.085	0.28
Styrene	EPA TO-15	0.37	ppbv	0.085	0.28
1,1,2,2-Tetrachloroethane	EPA TO-15	ND	ppbv	0.085	0.28
o-Xylene	EPA TO-15	0.57	ppbv	0.085	0.28
1-ethyl-4-methyl benzene	EPA TO-15	0.34	ppbv	0.085	0.28
The Upper QC limit for the calibration check is exceeded.					
1,3,5-Trimethylbenzene	EPA TO-15	0.36	ppbv	0.085	0.28
The Upper QC limit for the calibration check is exceeded.					
1,2,4-Trimethylbenzene	EPA TO-15	0.67	ppbv	0.085	0.28
The Upper QC limit for the calibration check is exceeded.					
Benzyl chloride	EPA TO-15	ND	ppbv	0.085	0.28
1,3-Dichlorobenzene	EPA TO-15	ND	ppbv	0.085	0.28
1,4-Dichlorobenzene	EPA TO-15	ND	ppbv	0.085	0.28
1,2-Dichlorobenzene	EPA TO-15	ND	ppbv	0.085	0.28
1,2,4-Trichlorobenzene	EPA TO-15	ND	ppbv	0.085	0.28
Hexachlorobutadiene	EPA TO-15	ND	ppbv	0.085	0.28
Prep Date 06/22/15 Analysis Date 06/22/15					
Chloromethane	EPA TO-15	13	ppbv	2.1	7.0
Acetone	EPA TO-15	11	ppbv	2.1	7.0
Compound detected in lab blank.					

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Laboratory Report

D.F. Kurtycz, M.D., Medical Director - Charles D. Brokopp, Dr.P.H., Director

Environmental Health Division

WDNR LAB ID: 113133790 NELAP LAB ID: E37658 EPA LAB ID: WI00007 WI DATCP ID: 105-415

WSLH Sample: 199368003

List of Abbreviations:

LOD = Level of detection
LOQ = Level of quantification
ND = None detected. Results are less than the LOD
F next to result = Result is between LOD and LOQ
Z next to result = Result is between 0 (zero) and LOD
if LOD=LOQ, Limits were not statistically derived

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Laboratory Report

D.F. Kurtycz, M.D., Medical Director - Charles D. Brokopp, Dr.P.H., Director

Environmental Health Division

WDNR LAB ID: 113133790 NELAP LAB ID: E37658 EPA LAB ID: WI00007 WI DATCP ID: 105-415

WSLH Sample: 199368004

Report To:
SEYMOUR ENV SERVICES
2531 DYRESON RD
P.O. BOX 398
MCFARLAND, WI 53558

Invoice To:
SEYMOUR ENV SERVICES
2531 DYRESON RD
P.O. BOX 398
MCFARLAND, WI 53558
Customer ID: 13810

Field #: OUTDOOR
Project No: BOB'S CITGO
Collection End: 6/10/2015 11:54:00 AM
Collection Start: 06/09/15 1140
Collected By: MOF/ MRS
Date Received: 6/12/2015
Date Reported: 6/30/2015
Sample Reason:

ID#:
Sample Location:
Sample Description:
Sample Type: AR-AIR
Waterbody:
Point or Outfall:
Sample Depth:
Program Code:
Region Code:
County:

OC-Volatiles

Analyte	Analysis Method	Result	Units	LOD	LOQ
Prep Date 06/24/15 Analysis Date 06/24/15					
Propene	EPA TO-15	ND	ppbv	0.085	0.28
Dichlorodifluoromethane	EPA TO-15	0.43	ppbv	0.085	0.28
Chloromethane	EPA TO-15	11	ppbv	0.085	0.28
Results are approximate, above upper calibration range.					
1,2-Dichlorotetrafluoroethane	EPA TO-15	ND	ppbv	0.085	0.33
Vinyl chloride	EPA TO-15	ND	ppbv	0.085	0.28
1,3-Butadiene	EPA TO-15	ND	ppbv	0.085	0.28
Bromomethane	EPA TO-15	ND	ppbv	0.085	0.28
Chloroethane	EPA TO-15	ND	ppbv	0.085	0.28
Acrolein	EPA TO-15	0.39	ppbv	0.085	0.28
Acetone	EPA TO-15	7.2	ppbv	0.085	0.28
Trichlorofluoromethane	EPA TO-15	0.23F	ppbv	0.085	0.28
1,1-Dichloroethene	EPA TO-15	ND	ppbv	0.085	0.28
Methylene chloride	EPA TO-15	ND	ppbv	0.085	0.28
Carbon disulfide	EPA TO-15	ND	ppbv	0.085	0.28

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Environmental Health Division

WDNR LAB ID: 113133790 NELAP LAB ID: E37658 EPA LAB ID: WI00007 WI DATCP ID: 105-415

WSLH Sample: 199368004

OC-Volatiles

Analyte	Analysis Method	Result	Units	LOD	LOQ
Prep Date 06/24/15 Analysis Date 06/24/15					
Trichlorotrifluoroethane	EPA TO-15	ND	ppbv	0.085	0.28
trans-1,2-Dichloroethene	EPA TO-15	ND	ppbv	0.085	0.28
1,1-Dichloroethane	EPA TO-15	ND	ppbv	0.085	0.28
Methyl tert-Butyl ether (MTBE)	EPA TO-15	ND	ppbv	0.085	0.28
Vinyl acetate	EPA TO-15	0.86	ppbv	0.085	0.28
Methyl Ethyl Ketone (MEK)	EPA TO-15	0.80	ppbv	0.085	0.28
The Upper QC limit for the calibration check is exceeded.					
cis-1,2-Dichloroethene	EPA TO-15	ND	ppbv	0.085	0.28
Hexane	EPA TO-15	1.1	ppbv	0.085	0.28
Chloroform	EPA TO-15	ND	ppbv	0.085	0.28
Ethyl acetate	EPA TO-15	ND	ppbv	0.085	0.28
Tetrahydrofuran	EPA TO-15	ND	ppbv	0.085	0.28
1,2-Dichloroethane	EPA TO-15	ND	ppbv	0.085	0.28
1,1,1-Trichloroethane	EPA TO-15	ND	ppbv	0.085	0.28
Benzene	EPA TO-15	0.45	ppbv	0.085	0.28
Carbon tetrachloride	EPA TO-15	ND	ppbv	0.085	0.28
Cyclohexane	EPA TO-15	0.28	ppbv	0.085	0.28
1,2-Dichloropropane	EPA TO-15	ND	ppbv	0.085	0.28
Bromodichloromethane	EPA TO-15	ND	ppbv	0.085	0.33
Trichloroethene	EPA TO-15	ND	ppbv	0.085	0.28
1,4 Dioxane	EPA TO-15	ND	ppbv	0.085	0.28
n-Heptane	EPA TO-15	0.36	ppbv	0.085	0.28
cis-1,3-Dichloropropene	EPA TO-15	ND	ppbv	0.085	0.28
4-Methyl-2-pentanone (MIBK)	EPA TO-15	ND	ppbv	0.085	0.28
trans-1,3-Dichloropropene	EPA TO-15	ND	ppbv	0.085	0.28
1,1,2-Trichloroethane	EPA TO-15	ND	ppbv	0.085	0.28
Toluene	EPA TO-15	1.6	ppbv	0.085	0.28
2-Hexanone	EPA TO-15	ND	ppbv	0.085	0.28
Chlorodibromomethane	EPA TO-15	ND	ppbv	0.085	0.28

Wisconsin State Laboratory of Hygiene
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Madison, WI 53707-7996
(800)442-4618 - FAX (608)224-6213
http://www.slh.wisc.edu

Laboratory Report

D.F. Kurtycz, M.D., Medical Director - Charles D. Brokopp, Dr.P.H., Director

Environmental Health Division

WDNR LAB ID: 113133790 NELAP LAB ID: E37658 EPA LAB ID: WI00007 WI DATCP ID: 105-415

WSLH Sample: 199368004

OC-Volatiles

Analyte	Analysis Method	Result	Units	LOD	LOQ
Prep Date 06/24/15 Analysis Date 06/24/15					
1,2-Dibromoethane	EPA TO-15	ND	ppbv	0.085	0.28
Tetrachloroethene	EPA TO-15	ND	ppbv	0.085	0.28
Chlorobenzene	EPA TO-15	ND	ppbv	0.085	0.28
Ethyl Benzene	EPA TO-15	0.36	ppbv	0.085	0.28
m,p-Xylene	EPA TO-15	1.2	ppbv	0.17	0.56
The Upper QC limit for the calibration check is exceeded.					
Bromoform	EPA TO-15	ND	ppbv	0.085	0.28
Styrene	EPA TO-15	ND	ppbv	0.085	0.28
1,1,2,2-Tetrachloroethane	EPA TO-15	ND	ppbv	0.085	0.28
o-Xylene	EPA TO-15	0.49	ppbv	0.085	0.28
1-ethyl-4-methyl benzene	EPA TO-15	0.35	ppbv	0.085	0.28
The Upper QC limit for the calibration check is exceeded.					
1,3,5-Trimethylbenzene	EPA TO-15	0.33	ppbv	0.085	0.28
The Upper QC limit for the calibration check is exceeded.					
1,2,4-Trimethylbenzene	EPA TO-15	0.66	ppbv	0.085	0.28
The Upper QC limit for the calibration check is exceeded.					
Benzyl chloride	EPA TO-15	ND	ppbv	0.085	0.28
1,3-Dichlorobenzene	EPA TO-15	ND	ppbv	0.085	0.28
1,4-Dichlorobenzene	EPA TO-15	ND	ppbv	0.085	0.28
1,2-Dichlorobenzene	EPA TO-15	ND	ppbv	0.085	0.28
1,2,4-Trichlorobenzene	EPA TO-15	ND	ppbv	0.085	0.28
Hexachlorobutadiene	EPA TO-15	ND	ppbv	0.085	0.28

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Laboratory Report

D.F. Kurtycz, M.D., Medical Director - Charles D. Brokopp, Dr.P.H., Director

Environmental Health Division

WDNR LAB ID: 113133790 NELAP LAB ID: E37658 EPA LAB ID: WI00007 WI DATCP ID: 105-415

WSLH Sample: 199368004

List of Abbreviations:

LOD = Level of detection
LOQ = Level of quantification
ND = None detected. Results are less than the LOD
F next to result = Result is between LOD and LOQ
Z next to result = Result is between 0 (zero) and LOD
if LOD=LOQ, Limits were not statistically derived

Test results for NELAP accredited tests are certified to meet the requirements of the NELAC standards. For a list of accredited analytes see http://www.slh.wisc.edu/about/compliance/nelac-laboratory-accreditation
Results, LOD and LOQ values have been adjusted for analytical dilutions and percent moisture where applicable.
Results relate only to the items tested.

The water microbiology unit analyzes samples as received and not all samples are tested for preservation before analysis is performed.

Responsible Party

Microbiology: Sharon Kluender, Lab Manager, 608-224-6262
Inorganic Chemistry: Tracy Hanke, Lab Manager, 608-224-6270
Metals: DeWayne Kennedy-Parker, Lab Manager, 608-224-6282
Organic Chemistry: Al Spallato, Lab Manager, 608-224-6269
Emergency Chemical Response: Noel Stanton, Lab Manager, 608-224-6251

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

June 08, 2015

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

RE: Project: 10370.00 BOB'S CITGO
Pace Project No.: 40115747

Dear Robyn Seymour:
Enclosed are the analytical results for sample(s) received by the laboratory on June 02, 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
dan.milewsky@pacelabs.com
Project Manager

Enclosures

Pace Analytical Services, Inc.
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CERTIFICATIONS

Project: 10370.00 BOB'S CITGO
Pace Project No.: 40115747

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.
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SAMPLE SUMMARY

Project: 10370.00 BOB'S CITGO
Pace Project No.: 40115747

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40115747001	**MW-10**	Water	05/28/15 10:30	06/02/15 07:45
40115747002	**MW-9**	Water	05/28/15 11:20	06/02/15 07:45
40115747003	**MW-8**	Water	05/28/15 11:50	06/02/15 07:45
40115747004	**MW-7**	Water	05/28/15 12:15	06/02/15 07:45
40115747005	**MW-4**	Water	05/28/15 12:45	06/02/15 07:45
40115747006	**MW-6**	Water	05/28/15 13:00	06/02/15 07:45
40115747007	**MW-5**	Water	05/28/15 13:15	06/02/15 07:45
40115747008	**MW-3**	Water	05/28/15 13:50	06/02/15 07:45
40115747009	**MW-1**	Water	05/28/15 14:00	06/02/15 07:45
40115747010	**MW-2**	Water	05/28/15 14:15	06/02/15 07:45

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SAMPLE ANALYTE COUNT

Project: 10370.00 BOB'S CITGO
Pace Project No.: 40115747

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
40115747001	**MW-10**	WI MOD GRO	PMS	10	PASI-G
40115747002	**MW-9**	WI MOD GRO	PMS	10	PASI-G
40115747003	**MW-8**	WI MOD GRO	PMS	10	PASI-G
40115747004	**MW-7**	WI MOD GRO	PMS	10	PASI-G
40115747005	**MW-4**	WI MOD GRO	PMS	10	PASI-G
40115747006	**MW-6**	WI MOD GRO	PMS	10	PASI-G
40115747007	**MW-5**	WI MOD GRO	LCF	10	PASI-G
40115747008	**MW-3**	WI MOD GRO	PMS	10	PASI-G
40115747009	**MW-1**	WI MOD GRO	PMS	10	PASI-G
40115747010	**MW-2**	WI MOD GRO	PMS	10	PASI-G

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PROJECT NARRATIVE

Project: 10370.00 BOB'S CITGO
Pace Project No.: 40115747

Method: **WI MOD GRO**
Description: WIGRO GCV
Client: SEYMOUR ENVIRONMENTAL SERVICES, INC.
Date: June 08, 2015

General Information:
10 samples were analyzed for WI MOD GRO. All samples were received in acceptable condition with any exceptions noted below.

pH: Post-analysis pH measurement indicates insufficient VOA sample preservation.
- MW-5 (Lab ID: 40115747007)
- MW-8 (Lab ID: 40115747003)

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.

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ANALYTICAL RESULTS

Project: 10370.00 BOB'S CITGO
Pace Project No.: 40115747

Sample: MW-10 **Lab ID: 40115747001** Collected: 05/28/15 10:30 Received: 06/02/15 07:45 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV	Analytical Method: WI MOD GRO								
Benzene	**<0.40**	ug/L	1.0	0.40	1		06/03/15 13:41	71-43-2	
Ethylbenzene	**<0.39**	ug/L	1.0	0.39	1		06/03/15 13:41	100-41-4	
Methyl-tert-butyl ether	**<0.48**	ug/L	1.0	0.48	1		06/03/15 13:41	1634-04-4	
Naphthalene	**<0.42**	ug/L	1.0	0.42	1		06/03/15 13:41	91-20-3	
Toluene	**<0.39**	ug/L	1.0	0.39	1		06/03/15 13:41	108-88-3	
1,2,4-Trimethylbenzene	**<0.42**	ug/L	1.0	0.42	1		06/03/15 13:41	95-63-6	
1,3,5-Trimethylbenzene	**<0.42**	ug/L	1.0	0.42	1		06/03/15 13:41	108-67-8	
m&p-Xylene	**<0.80**	ug/L	2.0	0.80	1		06/03/15 13:41	179601-23-1	
o-Xylene	**<0.45**	ug/L	1.0	0.45	1		06/03/15 13:41	95-47-6	
Surrogates									
a,a,a-Trifluorotoluene (S)	98	%	80-120		1		06/03/15 13:41	98-08-8	

Sample: MW-9 **Lab ID: 40115747002** Collected: 05/28/15 11:20 Received: 06/02/15 07:45 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV	Analytical Method: WI MOD GRO								
Benzene	**<0.40**	ug/L	1.0	0.40	1		06/03/15 20:07	71-43-2	
Ethylbenzene	**<0.39**	ug/L	1.0	0.39	1		06/03/15 20:07	100-41-4	
Methyl-tert-butyl ether	**<0.48**	ug/L	1.0	0.48	1		06/03/15 20:07	1634-04-4	
Naphthalene	**<0.42**	ug/L	1.0	0.42	1		06/03/15 20:07	91-20-3	
Toluene	**<0.39**	ug/L	1.0	0.39	1		06/03/15 20:07	108-88-3	
1,2,4-Trimethylbenzene	**<0.42**	ug/L	1.0	0.42	1		06/03/15 20:07	95-63-6	
1,3,5-Trimethylbenzene	**<0.42**	ug/L	1.0	0.42	1		06/03/15 20:07	108-67-8	
m&p-Xylene	**<0.80**	ug/L	2.0	0.80	1		06/03/15 20:07	179601-23-1	
o-Xylene	**<0.45**	ug/L	1.0	0.45	1		06/03/15 20:07	95-47-6	
Surrogates									
a,a,a-Trifluorotoluene (S)	99	%	80-120		1		06/03/15 20:07	98-08-8	HS

Sample: MW-8 **Lab ID: 40115747003** Collected: 05/28/15 11:50 Received: 06/02/15 07:45 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV	Analytical Method: WI MOD GRO								
Benzene	**0.75J**	ug/L	1.0	0.40	1		06/03/15 20:32	71-43-2	
Ethylbenzene	**<0.39**	ug/L	1.0	0.39	1		06/03/15 20:32	100-41-4	
Methyl-tert-butyl ether	**10.3**	ug/L	1.0	0.48	1		06/03/15 20:32	1634-04-4	
Naphthalene	**0.67J**	ug/L	1.0	0.42	1		06/03/15 20:32	91-20-3	
Toluene	**<0.39**	ug/L	1.0	0.39	1		06/03/15 20:32	108-88-3	
1,2,4-Trimethylbenzene	**<0.42**	ug/L	1.0	0.42	1		06/03/15 20:32	95-63-6	
1,3,5-Trimethylbenzene	**1.6**	ug/L	1.0	0.42	1		06/03/15 20:32	108-67-8	
m&p-Xylene	**<0.80**	ug/L	2.0	0.80	1		06/03/15 20:32	179601-23-1	
o-Xylene	**<0.45**	ug/L	1.0	0.45	1		06/03/15 20:32	95-47-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
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ANALYTICAL RESULTS

Project: 10370.00 BOB'S CITGO
Pace Project No.: 40115747

Sample: MW-8 **Lab ID: 40115747003** Collected: 05/28/15 11:50 Received: 06/02/15 07:45 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV	Analytical Method: WI MOD GRO								
Surrogates									
a,a,a-Trifluorotoluene (S)	99	%	80-120		1		06/03/15 20:32	98-08-8	HS,pH

Sample: MW-7 **Lab ID: 40115747004** Collected: 05/28/15 12:15 Received: 06/02/15 07:45 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV	Analytical Method: WI MOD GRO								
Benzene	**18.8**	ug/L	1.0	0.40	1		06/03/15 18:50	71-43-2	
Ethylbenzene	**1.3**	ug/L	1.0	0.39	1		06/03/15 18:50	100-41-4	
Methyl-tert-butyl ether	**126**	ug/L	1.0	0.48	1		06/03/15 18:50	1634-04-4	
Naphthalene	**1.7**	ug/L	1.0	0.42	1		06/03/15 18:50	91-20-3	
Toluene	**<0.39**	ug/L	1.0	0.39	1		06/03/15 18:50	108-88-3	
1,2,4-Trimethylbenzene	**<0.42**	ug/L	1.0	0.42	1		06/03/15 18:50	95-63-6	
1,3,5-Trimethylbenzene	**<0.42**	ug/L	1.0	0.42	1		06/03/15 18:50	108-67-8	
m&p-Xylene	**1.1J**	ug/L	2.0	0.80	1		06/03/15 18:50	179601-23-1	
o-Xylene	**4.1**	ug/L	1.0	0.45	1		06/03/15 18:50	95-47-6	
Surrogates									
a,a,a-Trifluorotoluene (S)	99	%	80-120		1		06/03/15 18:50	98-08-8	

Sample: MW-4 **Lab ID: 40115747005** Collected: 05/28/15 12:45 Received: 06/02/15 07:45 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV	Analytical Method: WI MOD GRO								
Benzene	**<0.40**	ug/L	1.0	0.40	1		06/03/15 19:15	71-43-2	
Ethylbenzene	**<0.39**	ug/L	1.0	0.39	1		06/03/15 19:15	100-41-4	
Methyl-tert-butyl ether	**95.0**	ug/L	1.0	0.48	1		06/03/15 19:15	1634-04-4	
Naphthalene	**<0.42**	ug/L	1.0	0.42	1		06/03/15 19:15	91-20-3	
Toluene	**<0.39**	ug/L	1.0	0.39	1		06/03/15 19:15	108-88-3	
1,2,4-Trimethylbenzene	**<0.42**	ug/L	1.0	0.42	1		06/03/15 19:15	95-63-6	
1,3,5-Trimethylbenzene	**<0.42**	ug/L	1.0	0.42	1		06/03/15 19:15	108-67-8	
m&p-Xylene	**<0.80**	ug/L	2.0	0.80	1		06/03/15 19:15	179601-23-1	
o-Xylene	**<0.45**	ug/L	1.0	0.45	1		06/03/15 19:15	95-47-6	
Surrogates									
a,a,a-Trifluorotoluene (S)	98	%	80-120		1		06/03/15 19:15	98-08-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
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(920)469-2436

ANALYTICAL RESULTS

Project: 10370.00 BOB'S CITGO
Pace Project No.: 40115747

Sample: MW-6 **Lab ID: 40115747006** Collected: 05/28/15 13:00 Received: 06/02/15 07:45 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV	Analytical Method: WI MOD GRO								
Benzene	**<0.40**	ug/L	1.0	0.40	1		06/03/15 19:41	71-43-2	
Ethylbenzene	**<0.39**	ug/L	1.0	0.39	1		06/03/15 19:41	100-41-4	
Methyl-tert-butyl ether	**<0.48**	ug/L	1.0	0.48	1		06/03/15 19:41	1634-04-4	
Naphthalene	**<0.42**	ug/L	1.0	0.42	1		06/03/15 19:41	91-20-3	
Toluene	**<0.39**	ug/L	1.0	0.39	1		06/03/15 19:41	108-88-3	
1,2,4-Trimethylbenzene	**<0.42**	ug/L	1.0	0.42	1		06/03/15 19:41	95-63-6	
1,3,5-Trimethylbenzene	**<0.42**	ug/L	1.0	0.42	1		06/03/15 19:41	108-67-8	
m&p-Xylene	**<0.80**	ug/L	2.0	0.80	1		06/03/15 19:41	179601-23-1	
o-Xylene	**<0.45**	ug/L	1.0	0.45	1		06/03/15 19:41	95-47-6	
Surrogates									
a,a,a-Trifluorotoluene (S)	98	%	80-120		1		06/03/15 19:41	98-08-8	

Sample: MW-5 **Lab ID: 40115747007** Collected: 05/28/15 13:15 Received: 06/02/15 07:45 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV	Analytical Method: WI MOD GRO								
Benzene	**2170**	ug/L	25.0	9.9	25		06/04/15 22:48	71-43-2	
Ethylbenzene	**917**	ug/L	25.0	9.8	25		06/04/15 22:48	100-41-4	
Methyl-tert-butyl ether	**105**	ug/L	25.0	12.1	25		06/04/15 22:48	1634-04-4	
Naphthalene	**275**	ug/L	25.0	10.6	25		06/04/15 22:48	91-20-3	
Toluene	**1690**	ug/L	25.0	9.7	25		06/04/15 22:48	108-88-3	
1,2,4-Trimethylbenzene	**703**	ug/L	25.0	10.4	25		06/04/15 22:48	95-63-6	
1,3,5-Trimethylbenzene	**197**	ug/L	25.0	10.4	25		06/04/15 22:48	108-67-8	
m&p-Xylene	**2450**	ug/L	50.0	20.0	25		06/04/15 22:48	179601-23-1	
o-Xylene	**1470**	ug/L	25.0	11.2	25		06/04/15 22:48	95-47-6	
Surrogates									
a,a,a-Trifluorotoluene (S)	97	%	80-120		25		06/04/15 22:48	98-08-8	pH

Sample: MW-3 **Lab ID: 40115747008** Collected: 05/28/15 13:50 Received: 06/02/15 07:45 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV	Analytical Method: WI MOD GRO								
Benzene	**1360**	ug/L	50.0	19.8	50		06/03/15 17:58	71-43-2	
Ethylbenzene	**3040**	ug/L	50.0	19.6	50		06/03/15 17:58	100-41-4	
Methyl-tert-butyl ether	**<24.2**	ug/L	50.0	24.2	50		06/03/15 17:58	1634-04-4	
Naphthalene	**831**	ug/L	50.0	21.2	50		06/03/15 17:58	91-20-3	
Toluene	**719**	ug/L	50.0	19.4	50		06/03/15 17:58	108-88-3	
1,2,4-Trimethylbenzene	**2610**	ug/L	50.0	20.9	50		06/03/15 17:58	95-63-6	
1,3,5-Trimethylbenzene	**732**	ug/L	50.0	20.8	50		06/03/15 17:58	108-67-8	
m&p-Xylene	**9150**	ug/L	100	40.0	50		06/03/15 17:58	179601-23-1	
o-Xylene	**3460**	ug/L	50.0	22.4	50		06/03/15 17:58	95-47-6	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: 10370.00 BOB'S CITGO
Pace Project No.: 40115747

Sample: MW-3 **Lab ID: 40115747008** Collected: 05/28/15 13:50 Received: 06/02/15 07:45 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV	Analytical Method: WI MOD GRO								
Surrogates									
a,a,a-Trifluorotoluene (S)	98	%	80-120		50		06/03/15 17:58	98-08-8	

Sample: MW-1 **Lab ID: 40115747009** Collected: 05/28/15 14:00 Received: 06/02/15 07:45 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV	Analytical Method: WI MOD GRO								
Benzene	**5620**	ug/L	125	49.5	125		06/03/15 18:24	71-43-2	
Ethylbenzene	**2060**	ug/L	125	49.1	125		06/03/15 18:24	100-41-4	
Methyl-tert-butyl ether	**160**	ug/L	125	60.6	125		06/03/15 18:24	1634-04-4	
Naphthalene	**567**	ug/L	125	53.0	125		06/03/15 18:24	91-20-3	
Toluene	**12800**	ug/L	125	48.5	125		06/03/15 18:24	108-88-3	
1,2,4-Trimethylbenzene	**1460**	ug/L	125	52.2	125		06/03/15 18:24	95-63-6	
1,3,5-Trimethylbenzene	**394**	ug/L	125	52.0	125		06/03/15 18:24	108-67-8	
m&p-Xylene	**6390**	ug/L	250	99.9	125		06/03/15 18:24	179601-23-1	
o-Xylene	**2970**	ug/L	125	56.1	125		06/03/15 18:24	95-47-6	
Surrogates									
a,a,a-Trifluorotoluene (S)	96	%	80-120		125		06/03/15 18:24	98-08-8	

Sample: MW-2 **Lab ID: 40115747010** Collected: 05/28/15 14:15 Received: 06/02/15 07:45 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV	Analytical Method: WI MOD GRO								
Benzene	**2020**	ug/L	20.0	7.9	20		06/03/15 17:07	71-43-2	
Ethylbenzene	**3400**	ug/L	20.0	7.9	20		06/03/15 17:07	100-41-4	
Methyl-tert-butyl ether	**49.6**	ug/L	20.0	9.7	20		06/03/15 17:07	1634-04-4	
Naphthalene	**826**	ug/L	20.0	8.5	20		06/03/15 17:07	91-20-3	
Toluene	**2560**	ug/L	20.0	7.8	20		06/03/15 17:07	108-88-3	
1,2,4-Trimethylbenzene	**3000**	ug/L	20.0	8.4	20		06/03/15 17:07	95-63-6	
1,3,5-Trimethylbenzene	**843**	ug/L	20.0	8.3	20		06/03/15 17:07	108-67-8	
m&p-Xylene	**10200**	ug/L	40.0	16.0	20		06/03/15 17:07	179601-23-1	
o-Xylene	**3950**	ug/L	20.0	9.0	20		06/03/15 17:07	95-47-6	
Surrogates									
a,a,a-Trifluorotoluene (S)	101	%	80-120		20		06/03/15 17:07	98-08-8	

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: 10370.00 BOB'S CITGO
Pace Project No.: 40115747

QC Batch: GCV/14499 Analysis Method: WI MOD GRO
QC Batch Method: WI MOD GRO Analysis Description: WIGRO GCV Water
Associated Lab Samples: 40115747001, 40115747002, 40115747003, 40115747004, 40115747005, 40115747006, 40115747007, 40115747008, 40115747009, 40115747010

METHOD BLANK: 1168140 Matrix: Water
Associated Lab Samples: 40115747001, 40115747002, 40115747003, 40115747004, 40115747005, 40115747006, 40115747007, 40115747008, 40115747009, 40115747010

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,2,4-Trimethylbenzene	ug/L	<0.42	1.0	06/03/15 09:16	
1,3,5-Trimethylbenzene	ug/L	<0.42	1.0	06/03/15 09:16	
Benzene	ug/L	<0.40	1.0	06/03/15 09:16	
Ethylbenzene	ug/L	<0.39	1.0	06/03/15 09:16	
m&p-Xylene	ug/L	<0.80	2.0	06/03/15 09:16	
Methyl-tert-butyl ether	ug/L	<0.48	1.0	06/03/15 09:16	
Naphthalene	ug/L	<0.42	1.0	06/03/15 09:16	
o-Xylene	ug/L	<0.45	1.0	06/03/15 09:16	
Toluene	ug/L	<0.39	1.0	06/03/15 09:16	
a,a,a-Trifluorotoluene (S)	%	97	80-120	06/03/15 09:16	

LABORATORY CONTROL SAMPLE & LCSD: 1168141 1168142

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
1,2,4-Trimethylbenzene	ug/L	20	20.1	19.9	101	100	80-120	1	20	
1,3,5-Trimethylbenzene	ug/L	20	19.9	19.7	99	98	80-120	1	20	
Benzene	ug/L	20	19.4	19.3	97	97	80-120	0	20	
Ethylbenzene	ug/L	20	19.8	19.8	99	99	80-120	0	20	
m&p-Xylene	ug/L	40	39.7	39.4	99	99	80-120	1	20	
Methyl-tert-butyl ether	ug/L	20	18.6	18.5	93	92	80-120	1	20	
Naphthalene	ug/L	20	18.1	18.4	90	92	80-120	2	20	
o-Xylene	ug/L	20	19.7	19.5	98	98	80-120	1	20	
Toluene	ug/L	20	19.5	19.5	98	98	80-120	0	20	
a,a,a-Trifluorotoluene (S)	%				98	98	80-120			

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1168895 1168896

Parameter	Units	40115527004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,2,4-Trimethylbenzene	ug/L	897	200	200	1220	1200	160	151	29-200	2	20	
1,3,5-Trimethylbenzene	ug/L	672	200	200	991	979	160	154	57-171	1	20	
Benzene	ug/L	140	200	200	340	340	100	100	69-150	0	20	
Ethylbenzene	ug/L	572	200	200	830	818	129	123	80-146	1	20	
m&p-Xylene	ug/L	662	400	400	1140	1130	120	117	65-173	1	20	
Methyl-tert-butyl ether	ug/L	<4.8	200	200	184	192	92	96	80-120	4	20	
Naphthalene	ug/L	157	200	200	367	381	105	112	66-137	4	20	
o-Xylene	ug/L	6.9J	200	200	217	220	105	107	79-144	1	20	

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: 10370.00 BOB'S CITGO
Pace Project No.: 40115747

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1168895 1168896

Parameter	Units	40115527004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Toluene	ug/L	7.6J	200	200	209	212	101	102	67-156	1	20	
a,a,a-Trifluorotoluene (S)	%						100	99	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

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QUALIFIERS

Project: 10370.00 BOB'S CITGO
Pace Project No.: 40115747

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

HS	Results are from sample aliquot taken from VOA vial with headspace (air bubble greater than 6 mm diameter).
pH	Post-analysis pH measurement indicates insufficient VOA sample preservation.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 10370.00 BOB'S CITGO
Pace Project No.: 40115747

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40115747001	**MW-10**	WI MOD GRO	GCV/14499		
40115747002	**MW-9**	WI MOD GRO	GCV/14499		
40115747003	**MW-8**	WI MOD GRO	GCV/14499		
40115747004	**MW-7**	WI MOD GRO	GCV/14499		
40115747005	**MW-4**	WI MOD GRO	GCV/14499		
40115747006	**MW-6**	WI MOD GRO	GCV/14499		
40115747007	**MW-5**	WI MOD GRO	GCV/14499		
40115747008	**MW-3**	WI MOD GRO	GCV/14499		
40115747009	**MW-1**	WI MOD GRO	GCV/14499		
40115747010	**MW-2**	WI MOD GRO	GCV/14499		

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

40115747

CHAIN OF COUSTODY

(Please Print Clearly)

Company Name:	Seymour Environ
Branch/Location:	McFarland
Project Contact:	Robyn Seymour
Phone:	608-838-9120
Project Number:	10370.00
Project Name:	Bob's C-Tgo
Project State:	WI
Sampled By (Print):	Mark R. Seymour
Sampled By (Sign):	Mark R. Seymour
PO #:	Regulatory Program:

*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

FILTERED? (YES/NO) Y/N: N
PRESERVATION (CODE)* Pick Letter: B
Analyses Requested: PVOC + Naph

Quote #:	
Mail To Contact:	Robyn Seymour
Mail To Company:	Seymour Environ
Mail To Address:	2531 Dyreson Rd McFarland, WI 53558
Invoice To Contact:	
Invoice To Company:	
Invoice To Address:	
Invoice To Phone:	

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

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

Matrix Codes
A = Air, B = Biota, C = Charcoal, O = Oil, S = Soil, Sl = 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	PVOC + Naph	CLIENT COMMENTS	LAB COMMENTS (Lab Use Only)	Profile #
001	MW-10	5/28/15	10:30	GW	X		3-40ml VB	
002	MW-9		11:20	GW	X			
003	MW-8		11:50	GW	X			
004	MW-7		12:15	GW	X			
005	MW-4		12:45	GW	X			
006	MW-6		13:00	GW	X			
007	MW-5		13:15	GW	X			
008	MW-3		13:50	GW	X	Sheen on water		
009	MW-1		14:00	GW	X			
010	MW-2		14:15	GW	X	Hot!		

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:
Mark R Seymour	6/1/15 pm		
Deerham	6-2-15 0745	Susan K [illegible]	6-2-15 0745

PACE Project No. 40115747
Receipt Temp = ROT °C
Sample Receipt pH OK / Adjusted
Cooler Custody Seal Present / Not Present
Intact / Not Intact

Version 6.0 06/14/06

C019a(27Jun2006)

ORIGINAL