



**CIVIL & ENVIRONMENTAL
ENGINEERING, SURVEYING**

June 6, 2019

Wisconsin Department of Natural Resources

Attn: Ms. Carrie Stoltz
107 Sutliff Avenue
Rhineland, WI 54501



Subject:

Update Report
Burnett Oil Company
26504 Minnow Avenue
Webster, WI
BRRTS #02-07-282564
PECFA #54893-8024-14

Dear Ms. Stoltz:

Enclosed is the Update Report for the above-mentioned site. REI has identified residual soil contamination beyond the subject property boundary. Groundwater analytical results document no petroleum related groundwater contamination above detection limits in any of the locations sampled in 2017.

REI is recommending the completion of a soil excavation to remove the documented soil contamination. REI is not recommending further groundwater sampling at this time.

Please call me with questions or comments toll free at 877-734-7745 or contact me electronically at dlarsen@reiengineering.com.

Sincerely,
REI Engineering, Inc.

David N. Larsen P.G.
Senior Hydrogeologist/Project Manager

Enclosure (A/S)

cc: Burnett County, Attn: Mr. Nathan Ehalt, 7410 County Road K, #116, Siren, WI 54872



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4080 N. 20th Avenue Wausau, WI 54401
715-675-9784 REIengineering.com



REI

**CIVIL & ENVIRONMENTAL
ENGINEERING, SURVEYING**

UPDATE REPORT

**BURNETT OIL COMPANY
WEBSTER, WISCONSIN**

**WDNR BRRTS #02-07-282564
PECFA #54893-8024-14
REI PROJECT #6962**



**COMPREHENSIVE
SERVICES WITH
PRACTICAL
SOLUTIONS**



UPDATE REPORT

**BURNETT OIL COMPANY
26504 MINNOW AVENUE
WEBSTER, WI 54893**

**BRRTS #02-07-282564
PECFA #54893-8024-14
REI #6962**



PREPARED FOR:

**Burnett County
Attn: Mr. Nathan Ehalt
7410 Cty Road K, #116
Siren, WI 54872**

JUNE 2019

UPDATE REPORT

**BURNETT OIL COMPANY
26504 MINNOW AVENUE
WEBSTER, WI 54893**

**BRRTS #02-07-282564
PECFA #54893-8024-14
REI #6962**

The recommendations contained in this report are based on the information obtained from our study of the site and were arrived at in accordance with accepted hydrogeologic and engineering practices at this time and location.

"I, David N. Larsen, hereby certify that I am a hydrogeologist as that term is defined in s. NR 712.03 (1), Wis. Adm. Code, am registered in accordance with the requirements of Ch. GHSS 2, Wis. Adm. Code, or licensed in accordance with the requirements of Ch. GHSS 3, Wis. Admn. Code, and that to the best of my knowledge, all the information contained in this document is correct and the document was prepared in compliance with all applicable requirements in chs. NR 700 to 726, Wis. Adm. Code."



Hydrogeologist

June 5, 2019

Date

"I, Brian J. Bailey, hereby certify that I am a scientist as that term is defined in s. NR 712.03 (3), Wis. Adm. Code, and that, to the best of my knowledge, all the information contained in this document is correct and the document was prepared in compliance with all applicable requirements in chs. NR 700 to 726, Wis. Adm. Code."



Environmental Scientist

June 5, 2019

Date

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UPDATE REPORT

**BURNETT OIL COMPANY
26504 MINNOW AVENUE
WEBSTER, WI 54893**

**BRRTS #02-07-282564
PECFA #54893-8024-14
REI #6962**

1.0 INTRODUCTION

The Burnett Oil Company site is located in the NE ¼ of the SE ¼ of Section 08, Township 39 North, Range 16 West, in the Village of Webster, Burnett County, Wisconsin (Figure 1). The site address is 26504 Minnow Avenue, Webster, Wisconsin, 54893. Wisconsin Transverse Mercator (WTM) coordinates are 336177, 603362.

Following the completion of the Environmental Site Investigation Report, it was determined that additional soil sampling was required to adequately define the degree and extent of the historic petroleum release to the west into Minnow Road.

2.0 SUMMARY OF ACTIVITIES

2.1 Geoprobe Borings

REI was on-site to oversee the advancement of five (5) Geoprobe push borings (GP11-GP15) on May 2, 2018. Gestra Engineering, Inc., Milwaukee, WI was subcontracted to complete the Geoprobe advancement. Each of the borings were completed to a depth of twelve (12) feet below ground surface (bgs).

Figure 2 documents the locations of the soil borings advanced during the site investigation. Soil Boring Logs (WDNR Form 4400-122) and Borehole Abandonment Forms (WDNR Form 3300-5) are included in Appendix A.

A total of ten (10) soil samples were collected and submitted for laboratory analysis during this scope of services. Soil samples were obtained to define the lateral and vertical extent of the petroleum contamination in the subsurface immediately west of the subject property.

Borings were advanced in the west ditch of Minnow Avenue and also in Minnow Avenue. Minnow Avenue is a gravel covered road and is owned by Burnett County.

Analytical results from all soil sample events were directly compared against the State of Wisconsin's cleanup criteria listed in Chapter NR720. Numerous soil sample locations document the presence of petroleum compounds exceeding the NR720.09(04) Residual Contaminant Level (RCL). Additionally, direct contact exceedances were identified in many of the shallow soil samples collected at the site. Soil analytical results are summarized on Tables 1a-c. A copy of the laboratory analytical report for the May 2, 2018 sample event is included in Appendix B. Figure 3 presents the estimated extent of petroleum related soil contamination.

2.2 Soil Stockpile Sampling Results

The Village of Webster has a soil stockpile located on Village property one (1) block south of the former Burnett Oil site. The Village of Webster wants the stockpile removed from its current location and made it available to be used as backfill for the proposed soil excavation at the Burnett Oil investigation.

REI personnel collected two (2) composite soil samples and submitted them for analysis of PAH's, VOC's and RCRA metals. The analytical results are summarized in Table 1e and document a single NR720.09(04) Residual Contaminant Level (RCL) exceedance. The exceedance was for the Non-Industrial Not to Exceed Direct Contact RCL for benzo(a)pyrene.

The proposed soil excavation would extend to a depth of approximately twelve (12) feet bls. If the Village of Webster soil stockpile were to be placed in the bottom of the proposed excavation, the soil would be at a depth greater than four (4) feet and the direct contact RCL would not apply.

3.0 Conclusion

REI is recommending the completion of a soil excavation at the Burnett Oil site to remove the known contaminant mass and limit any potential contaminant loading to groundwater. Figure 4 presents the locations and depth of the proposed soil excavation scope of services.

Groundwater has not been impacted by the petroleum release and has been observed at a depth of approximately thirty (30) feet bls. Additional groundwater sampling is not recommended at this time.

Table 1a
 Summary of Soil Analytical Results
 Geoprobe Borings
 Burnett Oil Company
 Webster, Wisconsin

Sample Location-->	GPI		GP2		GP3		GP4		GP5		GP6	
	Date-->		8/10/16		8/10/16		8/10/16		8/10/16		8/10/16	
	Sample Depth--(Feet)>	Percent Moisture-->	2-4	6-7	2-3	8-9	14-15	2-4	14-15	2-4	9-10	19-20
Lead (mg/kg)	NR.140	13.50	40.3	3.8	8.7	20.3	1.2 ¹	2.3	0.93 ¹	11.1	4.2	0.99 ¹
Petroleum VOC's (µg/kg)												
Benzene	1,490	5.1	< 2,560	1,410	< 586	< 247	< 27.8	< 34.2	< 41.0	4,670	13,300	< 26.0
Ethylbenzene	7,470	1,570	33,700	6,450	1,530	993	< 27.8	< 34.2	< 41.0	24,800	51,100	< 26.0
Toluene	818,000	1,107	< 2,560	1,240	< 586	< 247	< 27.8	< 34.2	< 41.0	2,140	68,100	< 26.0
Xylenes (Total)	258,000	3,940	210,900	35,200	6,150	3,590	< 55.6	< 66.5	< 82.0	192,500	308,400	< 52.1
Methyl tert Butyl Ether	59,400	27	< 2,560	< 200	< 586	< 247	< 27.8	< 34.2	< 41.0	< 906	< 1,710	< 26.0
1,2,4-Trimethylbenzene	89,800	NS	250,000	23,900	18,400	11,100	36.4 ¹	< 34.2	< 41.0	120,000	179,000	< 26.0
1,3,5-Trimethylbenzene	182,000	NS	118,000	10,500	10,100	5,090	< 27.8	< 34.2	< 41.0	44,600	64,900	< 26.0
Triethylbenzenes (Total)	NS	1,379	368,000	34,400	28,500	16,190	36.4 ¹	< 34.2	< 41.0	164,600	243,900	< 26.0
Naphthalene	5,150	688.7	110,000	9,150	26,300	14,100	306	< 34.2	< 41.0	37,600	66,800	< 26.0
PAH Compounds (µg/kg)												
Acenaphthene	3,440,000	NS	1,890 ¹	< 253	199 ¹	240	< 10.5	NA	NA	NA	NA	NA
Acenaphthylene	NS	NS	< 1,450	< 227	< 96.4	109 ¹	< 9.4	NA	NA	NA	NA	NA
Anthracene	17,200,000	197,744.2	< 1,680	< 262	< 114	< 107	< 10.9	NA	NA	NA	NA	NA
Benzo(a)Anthracene	148	NS	< 1,120	< 175	< 72.6	< 71.6	< 7.3	NA	NA	NA	NA	NA
Benzo(a)Pyrene	15	470	< 1,160	< 181	< 78.6	< 73.9	< 7.5	NA	NA	NA	NA	NA
Benzo(b)Fluoranthene	148	480	< 1,620	< 253	< 110	< 103	< 10.5	NA	NA	NA	NA	NA
Benzo(g,h)Perylene	NS	NS	< 1,230	< 193	< 83.8	< 78.7	< 8.0	NA	NA	NA	NA	NA
Benzo(k)Fluoranthene	1,480	NS	< 1,790	< 280	< 122	< 114	< 11.6	NA	NA	NA	NA	NA
Chrysene	14,800	145.1	< 1,500	< 234	< 102	< 95.5	< 9.7	NA	NA	NA	NA	NA
Dibenzo(a,h)anthracene	15	NS	< 1,190	< 186	< 80.7	< 75.8	< 7.7	NA	NA	NA	NA	NA
Fluoranthene	2,290,000	88,817.9	< 1,620	< 253	< 110	< 103	< 10.5	NA	NA	NA	NA	NA
Fluorene	2,290,000	14,814.8	4,210	< 253	347	408	< 10.5	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)Pyrene	148	NS	< 1,230	< 192	< 83.6	< 78.5	< 8.0	NA	NA	NA	NA	NA
1-Methyl Naphthalene	15,600	NS	35,500	4,350	2,260	3,350	< 10.5	NA	NA	NA	NA	NA
2-Methyl Naphthalene	229,000	NS	49,000	6,450	2,910	4,230	< 10.5	NA	NA	NA	NA	NA
Naphthalene	5,150	688.7	26,700	3,740	897	1,310	< 10.5	NA	NA	NA	NA	NA
Phenanthrene	NS	NS	4,910	388 ¹	407	491	< 10.5	NA	NA	NA	NA	NA
Pyrene	1,720,000	54,472.5	< 1,620	< 253	< 110	< 103	< 10.5	NA	NA	NA	NA	NA

Notes:

NTEDC - Not To Exceed Direct Contact Residual Contaminant Level (RCL)

GW - RCL Protective of Groundwater Quality

< - Concentration below listed laboratory detection limit

GW - RCL exceedance

NTEDC RCL exceedance

NS - No Standard

NA - Not Analyzed

¹ = Estimated Value between detection limit and quantification limit

**Table 1b
Summary of Soil Analytical Results
Geoprobe Borings
Burnett Oil Company
Webster, Wisconsin**

Sample Location--> Date-->	GP7 6/12/17		GP8 6/12/17		GP9 6/12/17		GP10 6/12/17			
	2.5-3.0 16.4	13-15 3.9	18-20 4.0	2-4 14.9	6-8 11.9	5-6 16.7	19-20 3.6	2-4 10		
Sample Depth--(Feet)> Percent Moisture-->	18-20 4.0	13-15 3.9	18-20 4.0	2-4 14.9	6-8 11.9	5-6 16.7	19-20 3.6	2-4 10		
Non-Industrial Not To-Exceed DC RCL	NR 140 Groundwater Pathway Protection (DF=2)									
Lead (mg/kg)	400	0.88 ^J	1.0 ^J	3.2	1.9	4.8	0.79 ^J	2.7	2.8	0.84 ^J
Petroleum VOC's (µg/kg)										
Benzene	1,600	< 25	< 25	< 29.1	< 25	< 25	< 26.6	< 26.6	< 820	< 37.9
Ethylbenzene	8,020	< 125	< 25	< 29.1	< 25	< 25	< 26.6	< 26.6	9,550	< 37.9
Toluene	818,000	< 125	< 25	< 29.1	< 25	< 25	< 26.6	< 26.6	< 820	< 37.9
Xylenes (Total)	260,000	< 250	< 50	< 58.1	< 50	< 50	< 53.2	< 53.2	20,800	< 75.8
Methyl tert Butyl Ether	63,800	< 125	< 25	< 29.1	< 25	< 25	< 26.6	< 26.6	< 820	< 37.9
1,2,4-Trimethylbenzene	219,000	< 125	< 25	< 29.1	< 25	< 25	< 26.6	< 26.6	24,000	< 37.9
1,3,5-Trimethylbenzene	182,000	< 125	< 25	< 29.1	< 25	< 25	< 26.6	< 26.6	12,200	< 37.9
Trimethylbenzenes (Total)	NS	< 125	< 25	< 29.1	< 25	< 25	< 26.6	< 26.6	36,200	< 37.9
Naphthalene	5,520	6,870	26.9 ^J	< 29.1	< 25	< 25	< 26.6	< 26.6	41,400	< 37.9

Notes:

NTEDC - Not To Exceed Direct Contact Residual Contaminant Level (RCL)

GW - RCL Protective of Groundwater Quality

< - Concentration below listed laboratory detection limit

NTEDC RCL exceedance

NS - No Standard

NA - Not Analyzed

^J = Estimated Value between detection limit and quantification limit

**Table 1c
Summary of Soil Analytical Results
Geoprobe Borings
Burnett Oil Company
Webster, Wisconsin**

	Sample Location-->		GP11		GP12		GP13		GP14		GP15	
	Date-->		5/2/18		5/2/18		5/2/18		5/2/18		5/2/18	
	Sample Depth--(Feet)>	Percent Moisture-->	2-4	10-12	2-4	10-12	2-4	10-12	2-4	10-12	2-4	10-12
	NR 140 Groundwater Pathway Protection (DF=2)		5.7	4.0	7.9	2.9	9.2	2.9	13.6	4.7	31.2	3.5
	Non-Industrial Not-To-Exceed DC RCL											
Petroleum VOC's (µg/kg)												
Benzene	1,600	5.1	58.3'	100	< 25	< 25.5	2,900	< 25	< 25	< 25	< 625	< 25
Ethylbenzene	8,020	1,570	54.6'	96	< 25	< 25.5	8,450	< 25	< 25	< 25	1,480'	< 25
Toluene	818,000	1,107	230	360	< 25	39.3'	760	< 25	< 25	< 25	< 625	< 25
Xylenes (Total)	260,000	3,940	165	381.4	< 50	< 51	40,400	< 50	< 50	< 50	< 1,250	< 50
Methyl tert Butyl Ether	63,800	27	< 28.1	< 30.5	< 25	< 25.5	< 250	< 25	< 25	< 25	< 625	< 25
1,2,4-Trimethylbenzene	219,000	NS	36.9'	91.7	41.7'	< 25.5	24,800	< 25	< 25	40.0'	7,600	< 25
1,3,5-Trimethylbenzene	182,000	NS	< 28.1	< 30.5	< 25	< 25.5	10,300	< 25	< 25	< 25	5,740	< 25
Trimethylbenzenes (Total)	NS	1,379	36.9'	91.7	< 25	< 25.5	35,100	< 25	< 25	< 25	13,340	< 25
Naphthalene	5,320	658.7	188	33.6'	< 25	< 25.5	10,700	< 25	< 25	< 25	< 25	< 25

Notes:

NTEDC - Not To Exceed Direct Contact Residual Contaminant Level (RCL)

GW - RCL Protective of Groundwater Quality

< - Concentration below listed laboratory detection limit

GW - RCL exceedance

NTEDC RCL exceedance

NS - No Standard

NA - Not Analyzed

' = Estimated Value between detection limit and quantification limit

Bold
Bold

Table 1d
Summary of Soil Analytical Results
Monitoring Wells
Burnett Oil Company
Webster, Wisconsin

	Sample Location-->	MW1				MW4			
		9/14/16				9/15/16			
		Date-->	2-4	14-16	26-28	2-3	12-14	24-26	
Sample Depth--(Feet)>	13.10%	4.70%	5.40%	10.90%	4.10%	4.50%			
Percent Moisture-->									
Non-Industrial Not To Exceed DC RCL	NR 140 Groundwater Pathway Protection (DF=2)								
Lead (mg/kg)	400	13.50	0.57 ^J	0.94 ^J	25.6	1.9	1.1 ^J		
Petroleum VOC's (µg/kg)									
Benzene	1,490	5.1	< 25.0	< 25.0	2,560^J	< 25.0	< 25.0		
Ethylbenzene	7,470	1,570	< 25.0	< 25.0	13,100	< 25.0	< 25.0		
Toluene	818,000	1,107	< 25.0	< 25.0	2,510^J	< 25.0	< 25.0		
Xylenes (Total)	258,000	3,940	< 50.0	< 50.0	133,100	< 50.0	< 50.0		
Methyl tert Butyl Ether	59,400	27	< 25.0	< 25.0	< 1,000	< 25.0	< 25.0		
1,2,4-Trimethylbenzene	89,800	NS	< 25.0	< 25.0	128,000	< 25.0	< 25.0		
1,3,5-Trimethylbenzene	182,000	NS	< 25.0	< 25.0	52,500	< 25.0	< 25.0		
Trimethylbenzenes (Total)	NS	1,379	< 25.0	< 25.0	180,500	< 25.0	< 25.0		
Naphthalene	5,150	658.7	< 25.0	< 25.0	53,500	< 25.0	< 25.0		

Notes:

NTEDC - Not To Exceed Direct Contact Residual Contaminant Level (RCL)

GW - RCL Protective of Groundwater Quality

< - Concentration below listed laboratory detection limit

GW - RCL exceedance

NTEDC RCL exceedance

NS - No Standard

NA - Not Analyzed

^J = Estimated Value between detection limit and quantification limit

Table 1e
Summary of Soil Analytical Results
Vuilage of Webster Soil Stockpile
Burnett Oil Company
Webster, Wisconsin

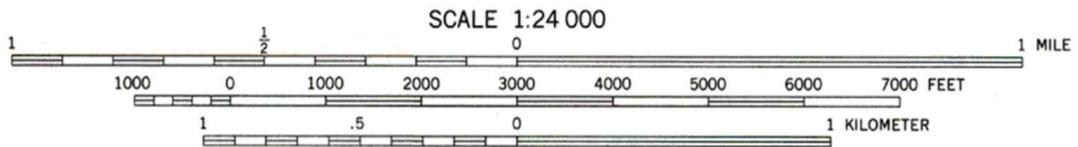
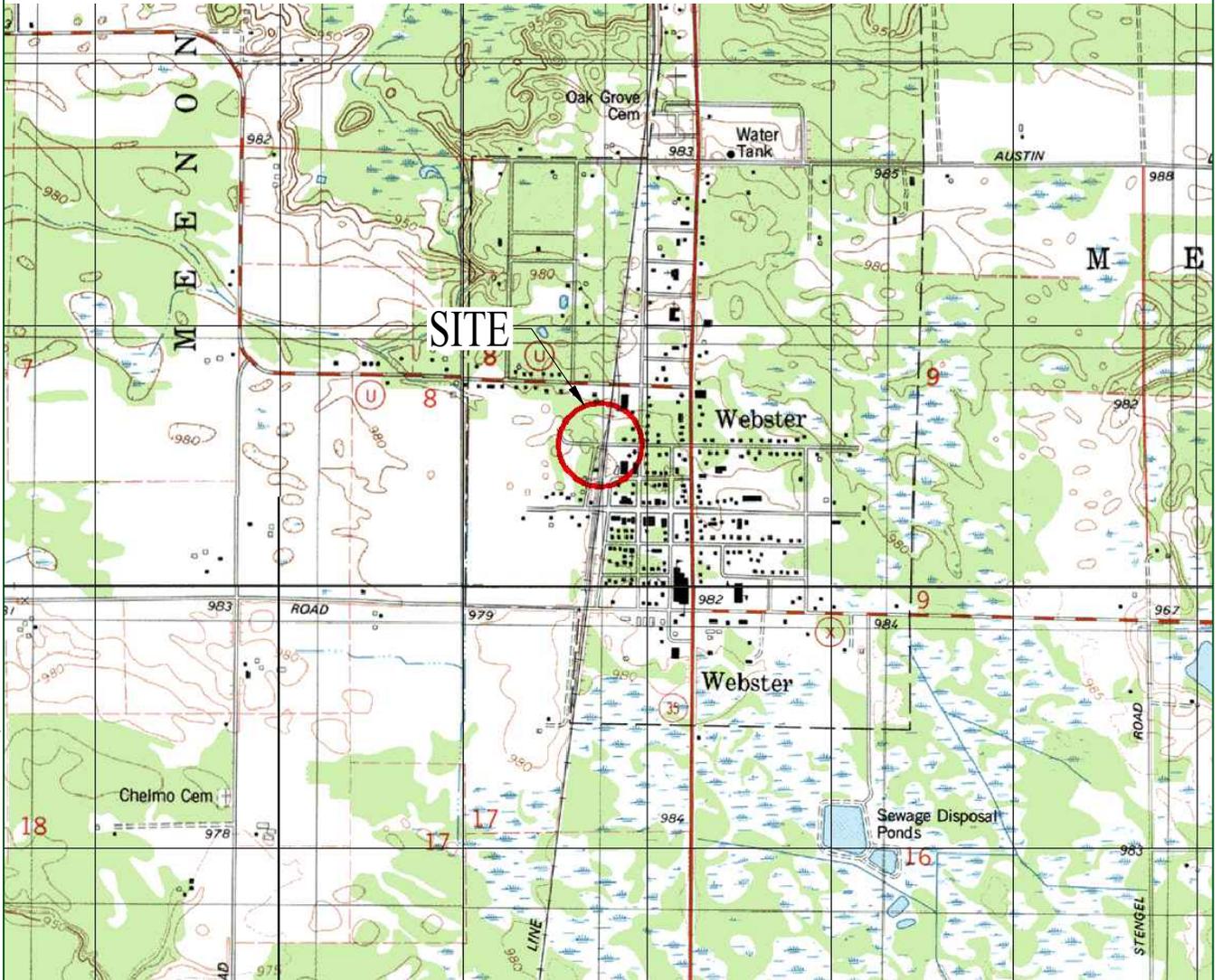
PAH's (µg/kg)	Sample Location-->				Groundwater Pathway Protection RCL	Composite 1	Composite 2
	Saturated (S) vs Unsaturated (U)-->		Date-->				
	Non-Industrial Not-to-Exceed DC RCL	Industrial Not-to-Exceed DC RCL	Percent Moisture-->	5/2/18			
Acenaphthene	3,590,000	45,200,000	8.0%	5/2/18	Unsaturated	4.20%	
Acenaphthylene							
Anthracene	17,900,000	100,000,000	196,949.20	21.8	7.5 ^f		
Benzo (a) Anthracene	1,140	20,800	--	96.3	47		
Benzo (a) Pyrene	115	2,110	470	124	61.9		
Benzo (b) Fluoranthene	1,150	21,100	478.1	205	83.4		
Benzo (g,h,i) Perylene	--	--	--	122	45.3		
Benzo (k) Fluoranthene	11,500	211,000	--	96.9	73.2		
Chrysene	115,000	2,110,000	144.2	138	68.9		
Dibenzo (a,h) Anthracene	115	2,110	--	38	16.1		
Fluoranthene	2,390,000	30,100,000	88,877.80	242	125		
Fluorene	2,390,000	30,100,000	14,829.90	5.1 ^f	< 4.3		
Indeno (1,2,3-cd) Pyrene	1,150	21,100	--	101	37		
1-Methyl Naphthalene	17,600	72,200	--	< 4.4	< 4.2		
2-Methyl Naphthalene	239,000	3,010,000	--	< 5.4	< 5.2		
Naphthalene	5,520	21,100	658.2	< 9.2	< 8.8		
Phenanthrene	--	--	--	99	40.5		
Pyrene	1,790,000	22,600,000	54,945.50	195	97.1		
PVOC's (µg/kg)							
Benzene	1,600	7,070	5.1	< 25	< 25		
Ethylbenzene	8,020	35,400	1,970	< 25	< 25		
Methyl-tert-butyl ether (MTBE)	63,800	282,000	27	< 25	< 25		
Naphthalene	5,520	24,100	658.2	< 40	< 40		
Toluene	818,000	818,000	1,107.20	< 25	< 25		
1,2,4-Trimethylbenzene (TMB)	219,000	219,000	1,378.70	< 25	< 25		
1,3,5-Trimethylbenzene (TMB)	182,000	182,000		< 25	< 25		
m&p-Xylene	260,000	260,000	3,960	< 50	< 50		
o-Xylene				< 25	< 25		
Metals (mg/kg)							
Arsenic (As)	0.667	3	0.584	< 1.1	< 1.1		
Barium (Ba)	15,300	100,000	164.8	31	21.7		
Cadmium (Cd)	71.1	985	0.752	< 0.14	0.13 ^f		
Total Chromium (Cr)	--	--	360,000	18.5	20.7		
Lead (Pb)	400	800	27	11	4.1		
Selenium (Se)	391	5,840	0.52	< 1.2	< 1.1		
Silver (Ag)	391	5,840	0.8491	< 0.37	< 0.35		
Mercury (Hg)	3.13	3.13	0.206	< 0.012	< 0.011		

Notes:
 NR 720 Standards Obtained From WDNR RR Programs' Soil RCL Spreadsheet
 This site is assessed as **Non-Industrial**
 Cumulative RCL Calculated on: **11/1/2018**
 RCL = Residual Contaminant Level
 DC = Direct Contact
 µg/kg = Parts Per Billion (ppb)
 mg/kg = Parts Per Million (ppm)
 < = Concentration Below Laboratory Detection Limit
 - = Not Sampled/Collected
 -- = No Standard/Not Applicable
 † = Estimated concentration at or above the Limit of Detection (LOD) and below the Limit of Quantitation (LOQ)

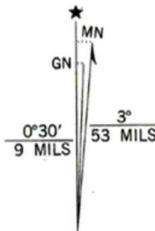
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<u>Underlined</u>

= Exceeds NR720 Groundwater Pathway Protection
 = Exceeds NR720 Non-Industrial Not-To-Exceed DC RCL
 = Exceeds NR720 Industrial Not-To-Exceed DC RCL

DRAWING FILE: P:\6900-6999\6962 - BURNETT OIL\DWG\6962-VICN.DWG LAYOUT: 6962-VICN PLOTTED: MAR 10, 2017 - 9:24AM PLOTTED BY: ALANG



CONTOUR INTERVAL 10 FEET
NATIONAL GEODETIC VERTICAL DATUM OF 1929



UTM GRID AND 1982 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET



WEBSTER, WIS.

NE/4 WEBSTER 15' QUADRANGLE
N4552.5-W9215/7.5

1982

DMA 2575 IV NE-SERIES V861

REI Engineering, INC.

BURNETT OIL COMPANY
26514 MINNOW AVENUE
WEBSTER, WISCONSIN 54893

FIGURE 1 : SITE VICINITY MAP

PROJECT NO.

6962AxUC

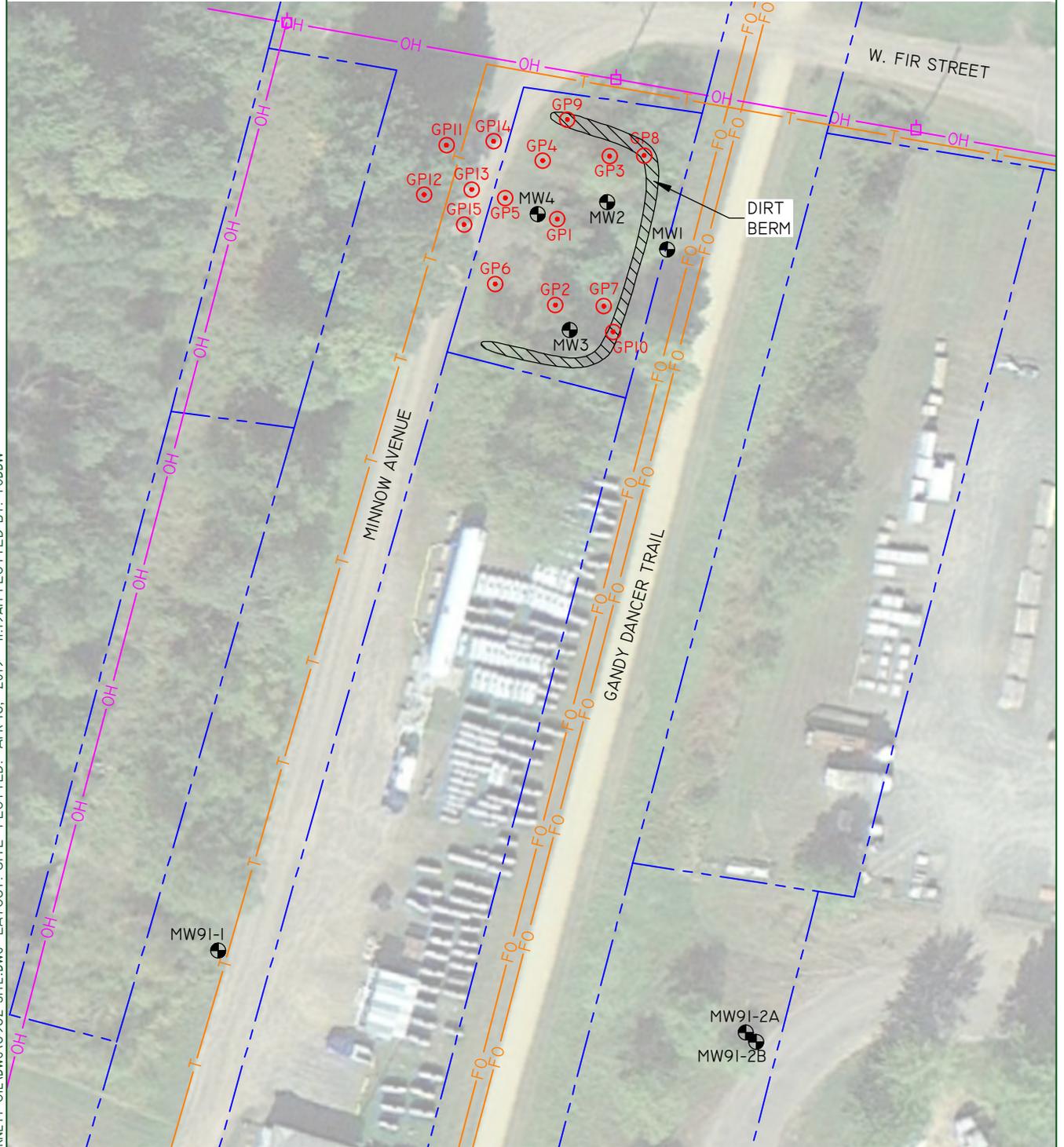
DRAWN BY:

A/JG

DATE:

3/10/2017

DRAWING FILE: P:\6900-6999\6962 - BURNETT OIL\DWG\6962-SITE.DWG LAYOUT: SITE PLOTTED: APR 16, 2019 - 11:19AM PLOTTED BY: ToddW



LEGEND

0 60
SCALE: 1" = 60'

- GEOPROBE
- MONITORING WELL
- UTILITY POLE
- OVERHEAD UTILITIES
- UNDERGROUND TELEPHONE
- UNDERGROUND FIBER OPTIC LINE
- PROPERTY LINE (APPROXIMATE)



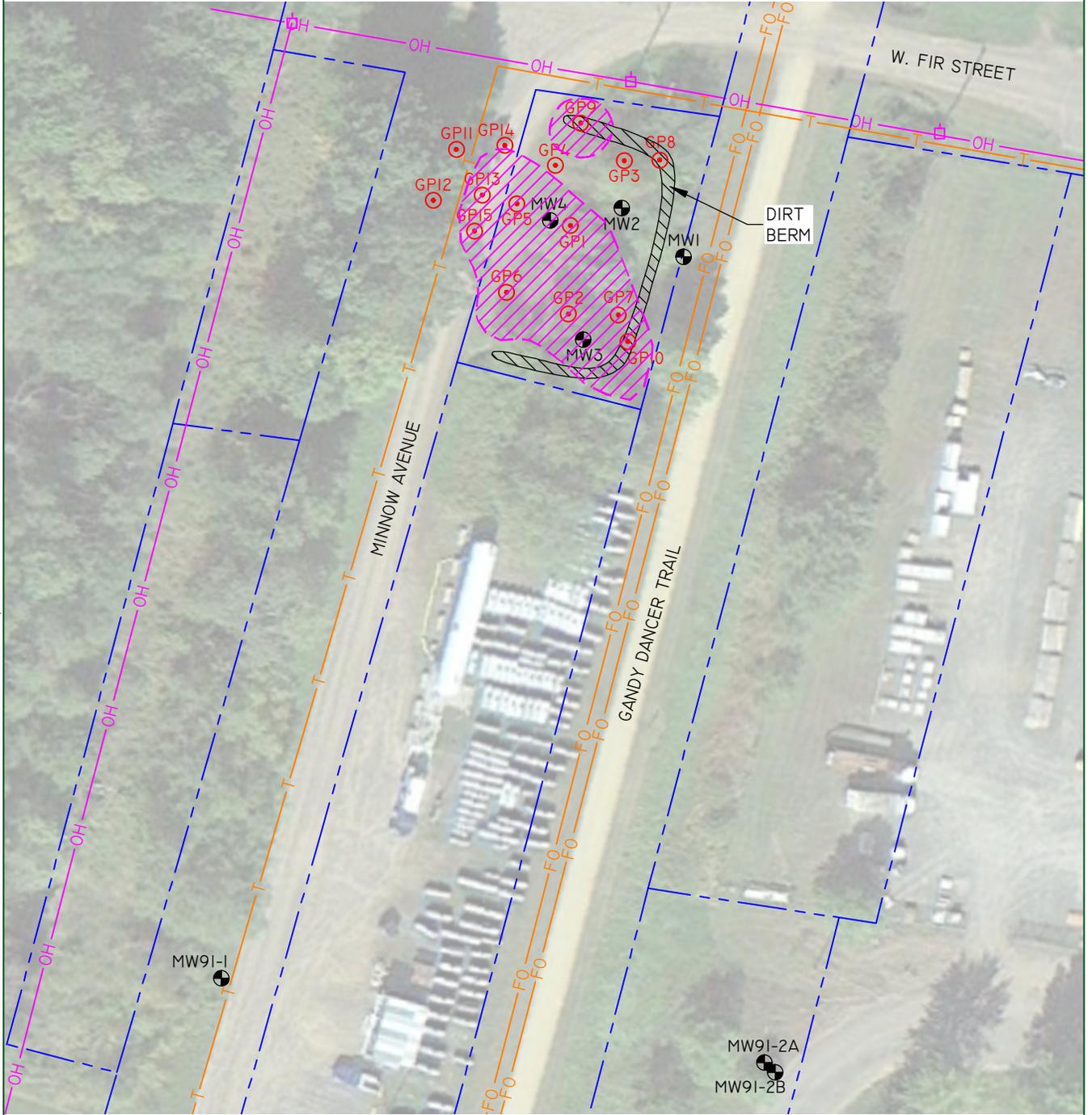
REI Engineering, INC.

BURNETT OIL COMPANY
26514 MINNOW AVENUE
WEBSTER, WISCONSIN 54893

FIGURE 2 : DETAILED SITE MAP

PROJECT NO.	DRAWN BY:	DATE:
6962AxUC	TAW	4/16/2019

DRAWING FILE: P:\6900-6999\6962 - BURNETT OIL\DWG\6962-soil_CONTAM-RESIDUAL.DWG LAYOUT: SC PLOTTED: JUN 05, 2019 - 3:59PM PLOTTED BY: TODDW



LEGEND

0 60
SCALE: 1" = 60'

- GEOPROBE
- MONITORING WELL
- UTILITY POLE
- OVERHEAD UTILITIES
- UNDERGROUND TELEPHONE
- UNDERGROUND FIBER OPTIC LINE
- PROPERTY LINE (APPROXIMATE)
- AREA OF RESIDUAL PETROLEUM CONTAMINATED SOIL



REI Engineering, INC.

BURNETT OIL COMPANY
26514 MINNOW AVENUE
WEBSTER, WISCONSIN 54893

FIGURE 3 : AREA OF RESIDUAL SOIL CONTAMINATION

PROJECT NO.	DRAWN BY:	DATE:
6962AxUC	TAW	5/30/2019

DRAWING FILE: P:\6900-6999\6962 - BURNETT OIL\DWG\6962-P-EXCAV LAYOUT: P-EXCAV PLOTTED: JUN 05, 2019 - 4:06PM PLOTTED BY: ToddW



LEGEND

0 60
SCALE: 1" = 60'

- GEOPROBE
- MONITORING WELL
- UTILITY POLE
- OVERHEAD UTILITIES
- UNDERGROUND TELEPHONE
- UNDERGROUND FIBER OPTIC LINE
- PROPERTY LINE (APPROXIMATE)
- AREA OF PROPOSED EXCAVATION
- 4-FT DEPTH
- 10-FT DEPTH



REI Engineering, INC.

BURNETT OIL COMPANY
26514 MINNOW AVENUE
WEBSTER, WISCONSIN 54893

FIGURE 4 : AREA OF PROPOSED EXCAVATION

PROJECT NO.	DRAWN BY:	DATE:
6962AxUC	TAW	5/30/2019

APPENDIX A

SOIL BORING LOGS AND ABANDONMENT FORMS



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

Facility/Project Name Burnett Oil		License/Permit/Monitoring Number BRRTS#02-07-282564		Boring Number GP11	
Boring Drilled By: Name of crew chief (first, last) and Firm Mitch Panfil - Gestra Engineering			Date Drilling Started 5/2/18	Date Drilling Completed 5/2/18	Drilling Method Geoprobe
WI Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level	Surface Elevation 0	Borehole Diameter 2.25" 2-11
Local Grid Origin <input type="checkbox"/> (estimated) <input type="checkbox"/> or Boring Location <input checked="" type="checkbox"/> State Plane			Lat	Local Grid Location N <input type="checkbox"/> E <input type="checkbox"/> S <input type="checkbox"/> W <input type="checkbox"/>	
Facility ID		County Burnett	County Code 07	Civil Town/City/or Village Webster	

Sample Number	Type	Length Art. & Recovered (in)	Blow Counts	Depth In Feet	Soil/ Rock Description And Geologic Origin For Each Major Unit	U.S.C.S.	Graphic	Well	PID/FID	Soil Properties					RQD/ Comments
										Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	
1		42		0	TOPSOIL Wet topsoil				0.0 ppm						
				1	SAND Brown sand (F-M) with clay	SC									
				2	CLAY Grey clay with mottles	CL									
2		42		3	SAND Brown sand (F-M)			SW	0.0 ppm						
				4			0.0 ppm								
				6			0.0 ppm								
				8			0.0 ppm								
3		18		10	SAND Light brown dry sand (F-M)			0.0 ppm							
				11											
				12	EOB EOB @12' BLS										
				13											
				14											
				15											

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

Signature *[Signature]* (Fred Kosch REI) Firm **REI Engineering, Inc.**
4080 North 20th Avenue, Wausau, WI

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

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

Facility/Project Name Burnett Oil		License/Permit/Monitoring Number BRRS#02-07-282564		Boring Number GP12	
Boring Drilled By: Name of crew chief (first, last) and Firm Mitch Panfil - Gestra Engineering			Date Drilling Started 5/2/18	Date Drilling Completed 5/2/18	Drilling Method Geoprobe
WI Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level	Surface Elevation 0	Borehole Diameter 2.25" 1-12
Local Grid Origin <input type="checkbox"/> (estimated) <input type="checkbox"/> or Boring Location <input checked="" type="checkbox"/> State Plane			Lat	Local Grid Location N <input type="checkbox"/> E <input type="checkbox"/> S <input type="checkbox"/> W <input type="checkbox"/>	
Facility ID		County Burnett	County Code 07	Civil Town/City/or Village Webster	

Sample		Blow Counts	Depth In Feet	Soil/ Rock Description And Geologic Origin For Each Major Unit	U.S.C.S.	Graphic	Well	PID/FID	Soil Properties					RQD/ Comments
Number	Type								Length Att. & Recovered (in)	Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	
1		32	0	TOPSOIL Wet topsoil	CL			0.0 ppm						
			1	CLAY Brown/grey clay with fine sand and mottles										
2		30	2	SAND Brown sand (F-M)	SW			0.0 ppm						
			3											
			4											
			5											
3		18	6	SAND Brown sand (F-C)				0.0 ppm						
			7	SAND Light brown dry sand (F-C)										
			10	EOB EOB @12' BLS				0.0 ppm						

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

Signature Jed Rasch REI Firm REI Engineering, Inc.
4080 North 20th Avenue, Wausau, WI

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

Facility/Project Name Burnett Oil		License/Permit/Monitoring Number BRRTS#02-07-282564		Boring Number GP13	
Boring Drilled By: Name of crew chief (first, last) and Firm Mitch Panfil - Gestra Engineering			Date Drilling Started 5/2/18	Date Drilling Completed 5/2/18	Drilling Method Geoprobe
WI Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level	Surface Elevation 0	Borehole Diameter 2.25" 2-13
Local Grid Origin <input type="checkbox"/> (estimated) <input type="checkbox"/> or Boring Location <input checked="" type="checkbox"/> State Plane			Lat Long	Local Grid Location N <input type="checkbox"/> E <input type="checkbox"/> S <input type="checkbox"/> W <input type="checkbox"/>	
Facility ID		County Burnett	County Code 07	Civil Town/City/or Village Webster	

Sample			Blow Counts	Depth In Feet	Soil/ Rock Description And Geologic Origin For Each Major Unit	U.S.C.S.	Graphic	Well	PID/FID	Soil Properties					ROD/ Comments
Number	Type	Length Att. & Recovered (in)								Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	
1		38		1	GRAVEL Crushed gravel				1436 ppm						
				2	CLAY Brown/grey clay with fine sand and mottles	CL			173 ppm						
2		36		5	SAND Dark brown sand (F-M) -Petro Odor				1574 ppm						
				6		SW			432 ppm						
3		18		10	SAND Light brown dry sand (F-C)				6.8 ppm						
				12	EOB EOB @12' BLS										

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

Signature *Jack Kosch* (Jack Kosch REI) Firm REI Engineering, Inc.
4080 North 20th Avenue, Wausau, WI

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

Facility/Project Name Burnett Oil		License/Permit/Monitoring Number BRRTS#02-07-282564		Boring Number GP14	
Boring Drilled By: Name of crew chief (first, last) and Firm Mitch Panfil - Gestra Engineering			Date Drilling Started 5/2/18	Date Drilling Completed 5/2/18	Drilling Method Geoprobe
WI Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level	Surface Elevation 0	Borehole Diameter 2.25" 1-14
Local Grid Origin <input type="checkbox"/> (estimated) <input type="checkbox"/> or Boring Location <input checked="" type="checkbox"/> State Plane			Lat Long	Local Grid Location N <input type="checkbox"/> E <input type="checkbox"/> S <input type="checkbox"/> W <input type="checkbox"/>	
Facility ID		County Burnett	County Code 07	Civil Town/City/or Village Webster	

Sample		Blow Counts	Depth In Feet	Soil/ Rock Description And Geologic Origin For Each Major Unit	U.S.C.S.	Graphic	Well	PID/FID	Soil Properties					ROD/ Comments
Number	Type								Length Att. & Recovered (in)	Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	
1		38	1	GRAVEL Crushed gravel	CL			3.8 ppm						
			2	CLAY Stained grey clay										
2		40	3	SAND Dark brown sand (F-M)	SW			1.8 ppm						
			4											
			5	SAND Brown sand (F-M)										
3		22	6					0.2 ppm						
			7											
			8					11.2 ppm						
			9					68 ppm						
			10	SAND Brown Sand (F-C)				0.4 ppm						
			11											
			12	EOB EOB @12' BLS										
			13											
			14											
			15											

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

Signature *Jed Kersch (Jed Kersch REI)* Firm REI Engineering, Inc.
 4080 North 20th Avenue, Wausau, WI

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

Facility/Project Name Burnett Oil		License/Permit/Monitoring Number BRRTS#02-07-282564		Boring Number GP15	
Boring Drilled By: Name of crew chief (first, last) and Firm Mitch Panfil - Gestra Engineering			Date Drilling Started 5/2/18	Date Drilling Completed 5/2/18	Drilling Method Geoprobe
WI Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level	Surface Elevation 0	Borehole Diameter 2.25" 1-15
Local Grid Origin <input type="checkbox"/> (estimated) <input type="checkbox"/> or Boring Location <input checked="" type="checkbox"/>			Lat	Local Grid Location N <input type="checkbox"/> E <input type="checkbox"/> S <input type="checkbox"/> W <input type="checkbox"/>	
State Plane		County Burnett		County Code 07	Civil Town/City/or Village Webster
Facility ID		County Burnett		County Code 07	Civil Town/City/or Village Webster

Sample Number	Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/ Rock Description And Geologic Origin For Each Major Unit	U.S.C.S.	Graphic	Well	PID/FID	Soil Properties					RQD/ Comments
										Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	
1		38		1	GRAVEL Crushed gravel				0.0 ppm						
				2	SAND Brown/black sand (F-M) with clay	SW									
				3	CLAY Brown/grey clay with mottles	CL									
2		42		4	SAND Grey/black sand (F-M)			115 ppm							
				5	SAND Brown Sand (F-M)			439 ppm							
				6	SAND Brown Sand (F-M)										
3		22		7	SAND Brown Sand (F-M)				5.0 ppm						
				8	SAND Light brown sand (F-C)	SW									
				9					0.2 ppm						
				10											
				11											
				12	EOB EOB @12' BLS										
				13											
				14											
				15											

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

Signature *[Signature]* Firm REI Engineering, Inc.
 4080 North 20th Avenue, Wausau, WI

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Route to DNR Bureau:

Verification Only of Fill and Seal

- Drinking Water Watershed/Wastewater Remediation/Redevelopment
 Waste Management Other: _____

1. Well Location Information **2. Facility / Owner Information**

County Burnett		WI Unique Well # of Removed Well GP-11		Hicap #	
Latitude / Longitude (see instructions) _____ N _____ W		Format Code <input type="checkbox"/> DD <input type="checkbox"/> DDM		Method Code <input type="checkbox"/> GPS008 <input type="checkbox"/> SCR002 <input type="checkbox"/> OTH001	
1/4 NE	1/4 SE	Section 08	Township T39 N	Range 16	<input type="checkbox"/> E <input checked="" type="checkbox"/> W
Well Street Address 26504 Minnow Ave		Well ZIP Code 54893			
Well City, Village or Town Village of Webster		Lot #			
Reason for Removal from Service Temporary Borehole		WI Unique Well # of Replacement Well GP11			

Facility Name Burnett Oil		
Facility ID (FID or PWS)		
License/Permit/Monitoring # 02-07-282564		
Original Well Owner Burnett County		
Present Well Owner Burnett County		
Mailing Address of Present Owner 7410 County HWY K		
City of Present Owner Siren	State WI	ZIP Code 54872

3. Filled & Sealed Well / Drillhole / Borehole Information

<input type="checkbox"/> Monitoring Well	Original Construction Date (mm/dd/yyyy) 5/2/18
<input type="checkbox"/> Water Well	
<input checked="" type="checkbox"/> Borehole / Drillhole	If a Well Construction Report is available, please attach.
Construction Type: <input type="checkbox"/> Drilled <input type="checkbox"/> Driven (Sandpoint) <input type="checkbox"/> Dug <input checked="" type="checkbox"/> Other (specify): Geoprobe	
Formation Type: <input checked="" type="checkbox"/> Unconsolidated Formation <input type="checkbox"/> Bedrock	
Total Well Depth From Ground Surface (ft.) 12'	Casing Diameter (in.) 2"
Lower Drillhole Diameter (in.)	Casing Depth (ft.)
Was well annular space grouted? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown	
If yes, to what depth (feet)?	Depth to Water (feet)

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

Pump and piping removed?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
Liner(s) removed?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
Liner(s) perforated?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
Screen removed?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
Casing left in place?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
Was casing cut off below surface?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
Did sealing material rise to surface?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
Did material settle after 24 hours?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A
If yes, was hole retopped?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
If bentonite chips were used, were they hydrated with water from a known safe source?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A
Required Method of Placing Sealing Material <input checked="" type="checkbox"/> Conductor Pipe-Gravity <input type="checkbox"/> Conductor Pipe-Pumped <input type="checkbox"/> Screened & Poured (Bentonite Chips) <input type="checkbox"/> Other (Explain): _____	
Sealing Materials <input type="checkbox"/> Neat Cement Grout <input type="checkbox"/> Concrete <input type="checkbox"/> Sand-Cement (Concrete) Grout <input type="checkbox"/> Bentonite Chips	
For Monitoring Wells and Monitoring Well Boreholes Only: <input checked="" type="checkbox"/> Bentonite Chips <input type="checkbox"/> Bentonite - Cement Grout <input type="checkbox"/> Granular Bentonite <input type="checkbox"/> Bentonite - Sand Slurry	

5. Material Used to Fill Well / Drillhole

	From (ft.)	To (ft.)	No. Yards, Sacks Sealant or Volume (circle one)	Mix Ratio or Mud Weight
3/8" bentonite Chips	Surface	12'	1/3 bag	

6. Comments

7. Supervision of Work

Name of Person or Firm Doing Filling & Sealing Gestra (Mitch Panfil), REI Engineering		License #	Date of Filling & Sealing or Verification (mm/dd/yyyy) 5/2/18	DNR Use Only	
Street or Route 4080 N. 20th Avenue		State WI	ZIP Code 54401	Date Received	Noted By
City Wausau		Telephone Number (715) 675-9784		Comments	
Signature of Person Doing Work <i>Jed Kosch REI</i>				Date Signed 5/11/18	

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

Route to DNR Bureau:

Verification Only of Fill and Seal

- Drinking Water Watershed/Wastewater Remediation/Redevelopment
 Waste Management Other: _____

1. Well Location Information

County Burnett	WI Unique Well # of Removed Well GP-12	Hicap #
Latitude / Longitude (see instructions) _____ N _____ W	Format Code <input type="checkbox"/> DD <input type="checkbox"/> DDM	Method Code <input type="checkbox"/> GPS008 <input type="checkbox"/> SCR002 <input type="checkbox"/> OTH001
1/4 1/4 NE or Gov't Lot #	Section 08	Township T39 N
Well Street Address 26504 Minnow Ave	Range 16	Range <input type="checkbox"/> E <input checked="" type="checkbox"/> W
Well City, Village or Town Village of Webster	Well ZIP Code 54893	
Subdivision Name	Lot #	

2. Facility / Owner Information

Facility Name Burnett Oil		
Facility ID (FID or PWS)		
License/Permit/Monitoring # 02-07-282564		
Original Well Owner Burnett County		
Present Well Owner Burnett County		
Mailing Address of Present Owner 7410 County HWY K		
City of Present Owner Siren	State WI	ZIP Code 54872

3. Filled & Sealed Well / Drillhole / Borehole Information

Reason for Removal from Service Temporary Borehole	WI Unique Well # of Replacement Well GP12
<input type="checkbox"/> Monitoring Well <input type="checkbox"/> Water Well <input checked="" type="checkbox"/> Borehole / Drillhole	Original Construction Date (mm/dd/yyyy) 5/2/18 If a Well Construction Report is available, please attach.
Construction Type: <input type="checkbox"/> Drilled <input type="checkbox"/> Driven (Sandpoint) <input type="checkbox"/> Dug <input checked="" type="checkbox"/> Other (specify): <u>Geoprobe</u>	
Formation Type: <input checked="" type="checkbox"/> Unconsolidated Formation <input type="checkbox"/> Bedrock	
Total Well Depth From Ground Surface (ft.) 12'	Casing Diameter (in.) 2"
Lower Drillhole Diameter (in.)	Casing Depth (ft.)
Was well annular space grouted? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown	
If yes, to what depth (feet)?	Depth to Water (feet)

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

Pump and piping removed?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
Liner(s) removed?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
Liner(s) perforated?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
Screen removed?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
Casing left in place?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
Was casing cut off below surface?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
Did sealing material rise to surface?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
Did material settle after 24 hours?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A
If yes, was hole retopped?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
If bentonite chips were used, were they hydrated with water from a known safe source?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A
Required Method of Placing Sealing Material	<input checked="" type="checkbox"/> Conductor Pipe-Gravity <input type="checkbox"/> Conductor Pipe-Pumped <input type="checkbox"/> Screened & Poured (Bentonite Chips) <input type="checkbox"/> Other (Explain): _____
Sealing Materials	<input type="checkbox"/> Neat Cement Grout <input type="checkbox"/> Concrete <input type="checkbox"/> Sand-Cement (Concrete) Grout <input type="checkbox"/> Bentonite Chips
For Monitoring Wells and Monitoring Well Boreholes Only:	<input checked="" type="checkbox"/> Bentonite Chips <input type="checkbox"/> Bentonite - Cement Grout <input type="checkbox"/> Granular Bentonite <input type="checkbox"/> Bentonite - Sand Slurry

5. Material Used to Fill Well / Drillhole

	From (ft.)	To (ft.)	No. Yards, Sacks Sealant or Volume (circle one)	Mix Ratio or Mud Weight
3/8" bentonite Chips	Surface	12'	1/3 bag	

6. Comments

7. Supervision of Work

Name of Person or Firm Doing Filling & Sealing Gestra (Mitch Panfil), REI Engineering	License #	Date of Filling & Sealing or Verification (mm/dd/yyyy) 5/2/18	DNR Use Only	
Street or Route 4080 N. 20th Avenue	City Wausau	State WI	ZIP Code 54401	Telephone Number (715) 675-9784
Signature of Person Doing Work <i>[Signature]</i> (Jed Kasch REI)			Date Received	Noted By
Comments			Date Signed 5/11/18	

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

Route to DNR Bureau:

Verification Only of Fill and Seal

- Drinking Water Watershed/Wastewater Remediation/Redevelopment
 Waste Management Other: _____

1. Well Location Information **2. Facility / Owner Information**

County: Burnett
 WI Unique Well # of Removed Well: GP-13
 Hicap #: _____
 Latitude / Longitude (see instructions): _____ N _____ W
 Format Code: DD DDM
 Method Code: GPS008 SCR002 OTH001
 1/4 NE 1/4 SE Section: 08 Township: T39 N Range: 16 E W
 Well Street Address: 26504 Minnow Ave
 Well City, Village or Town: Village of Webster Well ZIP Code: 54893
 Subdivision Name: _____ Lot #: _____

Facility Name: Burnett Oil
 Facility ID (FID or PWS): _____
 License/Permit/Monitoring #: 02-07-282564
 Original Well Owner: Burnett County
 Present Well Owner: Burnett County
 Mailing Address of Present Owner: 7410 County HWY K
 City of Present Owner: Siren State: WI ZIP Code: 54872

Reason for Removal from Service: Temporary Borehole
 WI Unique Well # of Replacement Well: GP13

3. Filled & Sealed Well / Drillhole / Borehole Information

Monitoring Well
 Water Well
 Borehole / Drillhole
 Original Construction Date (mm/dd/yyyy): 5/2/18
 If a Well Construction Report is available, please attach.

Construction Type:
 Drilled Driven (Sandpoint) Dug
 Other (specify): Geoprobe

Formation Type:
 Unconsolidated Formation Bedrock

Total Well Depth From Ground Surface (ft.): 12' Casing Diameter (in.): 2"

Lower Drillhole Diameter (in.): _____ Casing Depth (ft.): _____

Was well annular space grouted? Yes No Unknown

If yes, to what depth (feet)? _____ Depth to Water (feet): _____

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

Pump and piping removed? Yes No N/A
 Liner(s) removed? Yes No N/A
 Liner(s) perforated? Yes No N/A
 Screen removed? Yes No N/A
 Casing left in place? Yes No N/A
 Was casing cut off below surface? Yes No N/A
 Did sealing material rise to surface? Yes No N/A
 Did material settle after 24 hours? Yes No N/A
 If yes, was hole retopped? Yes No N/A
 If bentonite chips were used, were they hydrated with water from a known safe source? Yes No N/A

Required Method of Placing Sealing Material

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

Sealing Materials:
 Neat Cement Grout Concrete
 Sand-Cement (Concrete) Grout Bentonite Chips

For Monitoring Wells and Monitoring Well Boreholes Only:
 Bentonite Chips Bentonite - Cement Grout
 Granular Bentonite Bentonite - Sand Slurry

5. Material Used to Fill Well / Drillhole

Material	From (ft.)	To (ft.)	No. Yards, Sacks Sealant or Volume (circle one)	Mix Ratio or Mud Weight
3/8" bentonite Chips	Surface	12'	1/3 bag	

6. Comments

7. Supervision of Work **DNR Use Only**

Name of Person or Firm Doing Filling & Sealing: Gestra (Mitch Panfil), REI Engineering License #: _____ Date of Filling & Sealing or Verification (mm/dd/yyyy): 5/2/18
 Street or Route: 4080 N. 20th Avenue Telephone Number: (715) 675-9784
 City: Wausau State: WI ZIP Code: 54401 Signature of Person Doing Work: *Jed Karch (REI)* Date Signed: 5/11/18

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

Verification Only of Fill and Seal

Route to DNR Bureau:

Drinking Water Watershed/Wastewater Remediation/Redevelopment

Waste Management Other: _____

1. Well Location Information **2. Facility / Owner Information**

County Burnett	WI Unique Well # of Removed Well GP-14	Hicap #	Facility Name Burnett Oil
Latitude / Longitude (see instructions) _____ N _____ W	Format Code <input type="checkbox"/> DD <input type="checkbox"/> DDM	Method Code <input type="checkbox"/> GPS008 <input type="checkbox"/> SCR002 <input type="checkbox"/> OTH001	Facility ID (FID or PWS)
1/4 1/4 NE 1/4 SE	Section 08	Township T39 N	License/Permit/Monitoring # 02-07-282564
or Gov't Lot #	Range 16	<input type="checkbox"/> E <input checked="" type="checkbox"/> W	Original Well Owner Burnett County
Well Street Address 26504 Minnow Ave	Well ZIP Code 54893		Present Well Owner Burnett County
Well City, Village or Town Village of Webster	Mailing Address of Present Owner 7410 County HWY K		City of Present Owner Siren
Subdivision Name	Lot #	State WI	ZIP Code 54872

Reason for Removal from Service
Temporary Borehole

WI Unique Well # of Replacement Well
GP14

3. Filled & Sealed Well / Drillhole / Borehole Information

Monitoring Well Original Construction Date (mm/dd/yyyy)
5/2/18

Water Well

Borehole / Drillhole If a Well Construction Report is available, please attach.

Construction Type:

Drilled Driven (Sandpoint) Dug

Other (specify): Geoprobe

Formation Type:

Unconsolidated Formation Bedrock

Total Well Depth From Ground Surface (ft.) Casing Diameter (in.)
12' 2"

Lower Drillhole Diameter (in.) Casing Depth (ft.)

Was well annular space grouted? Yes No Unknown

If yes, to what depth (feet)? Depth to Water (feet)

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

Pump and piping removed? Yes No N/A

Liner(s) removed? Yes No N/A

Liner(s) perforated? Yes No N/A

Screen removed? Yes No N/A

Casing left in place? Yes No N/A

Was casing cut off below surface? Yes No N/A

Did sealing material rise to surface? Yes No N/A

Did material settle after 24 hours? Yes No N/A

If yes, was hole retopped? Yes No N/A

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

Required Method of Placing Sealing Material

Conductor Pipe-Gravity Conductor Pipe-Pumped

Screened & Poured (Bentonite Chips) Other (Explain): _____

Sealing Materials

Neat Cement Grout Concrete

Sand-Cement (Concrete) Grout Bentonite Chips

For Monitoring Wells and Monitoring Well Boreholes Only:

Bentonite Chips Bentonite - Cement Grout

Granular Bentonite Bentonite - Sand Slurry

5. Material Used to Fill Well / Drillhole

	From (ft.)	To (ft.)	No. Yards, Sacks Sealant or Volume (circle one)	Mix Ratio or Mud Weight
3/8" bentonite Chips	Surface	12'	1/3 bag	

6. Comments

7. Supervision of Work

Name of Person or Firm Doing Filling & Sealing Gestra (Mitch Panfil), REI Engineering	License #	Date of Filling & Sealing or Verification (mm/dd/yyyy) 5/2/18	DNR Use Only	
Street or Route 4080 N. 20th Avenue	Telephone Number (715) 675-9784	Date Received	Noted By	
City Wausau	State WI	ZIP Code 54401	Signature of Person Doing Work <i>9/11/18 (Jed Kersch REI)</i>	Date Signed 5/11/18

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

Verification Only of Fill and Seal

Route to DNR Bureau:

Drinking Water Watershed/Wastewater Remediation/Redevelopment

Waste Management Other: _____

1. Well Location Information **2. Facility / Owner Information**

County Burnett		WI Unique Well # of Removed Well GP-15		Hicap #		Facility Name Burnett Oil	
Latitude / Longitude (see instructions) _____ N _____ W		Format Code <input type="checkbox"/> DD <input type="checkbox"/> DDM		Method Code <input type="checkbox"/> GPS008 <input type="checkbox"/> SCR002 <input type="checkbox"/> OTH001		Facility ID (FID or PWS)	
1/4 1/4 NE 1/4 SE		Section 08		Township T39 N		Range 16 <input type="checkbox"/> E <input checked="" type="checkbox"/> W	
or Gov't Lot #		Well Street Address 26504 Minnow Ave		Well City, Village or Town Village of Webster		Well ZIP Code 54893	
Subdivision Name		Well ZIP Code 54893		City of Present Owner Siren		State WI	ZIP Code 54872

3. Filled & Sealed Well / Drillhole / Borehole Information **4. Pump, Liner, Screen, Casing & Sealing Material**

Reason for Removal from Service Temporary Borehole		WI Unique Well # of Replacement Well GP15		<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A			
<input type="checkbox"/> Monitoring Well <input type="checkbox"/> Water Well <input checked="" type="checkbox"/> Borehole / Drillhole		Original Construction Date (mm/dd/yyyy) 5/2/18		<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A			
Construction Type: <input type="checkbox"/> Drilled <input type="checkbox"/> Driven (Sandpoint) <input type="checkbox"/> Dug <input checked="" type="checkbox"/> Other (specify): Geoprobe		If a Well Construction Report is available, please attach.		Required Method of Placing Sealing Material <input checked="" type="checkbox"/> Conductor Pipe-Gravity <input type="checkbox"/> Conductor Pipe-Pumped <input type="checkbox"/> Screened & Poured (Bentonite Chips) <input type="checkbox"/> Other (Explain): _____			
Formation Type: <input checked="" type="checkbox"/> Unconsolidated Formation <input type="checkbox"/> Bedrock		Total Well Depth From Ground Surface (ft.) 12'		Casing Diameter (in.) 2"		Sealing Materials <input type="checkbox"/> Neat Cement Grout <input type="checkbox"/> Concrete <input type="checkbox"/> Sand-Cement (Concrete) Grout <input type="checkbox"/> Bentonite Chips	
Lower Drillhole Diameter (in.)		Casing Depth (ft.)		For Monitoring Wells and Monitoring Well Boreholes Only: <input checked="" type="checkbox"/> Bentonite Chips <input type="checkbox"/> Bentonite - Cement Grout <input type="checkbox"/> Granular Bentonite <input type="checkbox"/> Bentonite - Sand Slurry			
Was well annular space grouted? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown		If yes, to what depth (feet)?		Depth to Water (feet)			

5. Material Used to Fill Well / Drillhole	From (ft.)	To (ft.)	No. Yards, Sacks Sealant or Volume (circle one)	Mix Ratio or Mud Weight
3/8" bentonite Chips	Surface	12'	1/3 bag	

6. Comments

7. Supervision of Work			DNR Use Only		
Name of Person or Firm Doing Filling & Sealing Gestra (Mitch Panfil), REI Engineering		License #	Date of Filling & Sealing or Verification (mm/dd/yyyy) 5/2/18	Date Received	Noted By
Street or Route 4080 N. 20th Avenue		Telephone Number (715) 675-9784		Comments	
City Wausau	State WI	ZIP Code 54401	Signature of Person Doing Work <i>[Signature]</i> (Jed Kosch REI)		Date Signed 5/11/18

APPENDIX B

LABORATORY ANALYTICAL REPORT



May 25, 2018

DAVID LARSEN
REI
4080 NORTH 20TH AVENUE
Wausau, WI 54401

RE: Project: 6962 BURNETT OIL
Pace Project No.: 40168662

Dear DAVID LARSEN:

Enclosed are the analytical results for sample(s) received by the laboratory on May 07, 2018. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,



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

Enclosures



REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: 6962 BURNETT OIL

Pace Project No.: 40168662

Green Bay Certification IDs

1241 Bellevue Street, Green Bay, WI 54302

Florida/NELAP Certification #: E87948

Illinois Certification #: 200050

Kentucky UST Certification #: 82

Louisiana Certification #: 04168

Minnesota Certification #: 055-999-334

New York Certification #: 12064

North Dakota Certification #: R-150

Virginia VELAP ID: 460263

South Carolina Certification #: 83006001

Texas Certification #: T104704529-14-1

Wisconsin Certification #: 405132750

Wisconsin DATCP Certification #: 105-444

USDA Soil Permit #: P330-16-00157

Federal Fish & Wildlife Permit #: LE51774A-0

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SAMPLE SUMMARY

Project: 6962 BURNETT OIL

Pace Project No.: 40168662

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40168662001	GP11 @ 2-4	Solid	05/02/18 12:00	05/07/18 09:00
40168662002	GP11 @ 10-12	Solid	05/02/18 12:10	05/07/18 09:00
40168662003	GP12 @ 2-4	Solid	05/02/18 12:30	05/07/18 09:00
40168662004	GP12 @ 10-12	Solid	05/02/18 12:35	05/07/18 09:00
40168662005	GP13 @ 2-4	Solid	05/02/18 13:00	05/07/18 09:00
40168662006	GP13 @ 10-12	Solid	05/02/18 13:10	05/07/18 09:00
40168662007	GP14 @ 2-4	Solid	05/02/18 13:30	05/07/18 09:00
40168662008	GP14 @ 10-12	Solid	05/02/18 13:40	05/07/18 09:00
40168662009	GP15 @ 2-4	Solid	05/02/18 14:00	05/07/18 09:00
40168662010	GP15 @ 10-12	Solid	05/02/18 14:15	05/07/18 09:00
40168662011	COMPOSITE 1	Solid	05/01/18 00:00	05/07/18 09:00
40168662012	COMPOSITE 2	Solid	05/01/18 00:00	05/07/18 09:00

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SAMPLE ANALYTE COUNT

Project: 6962 BURNETT OIL

Pace Project No.: 40168662

Lab ID	Sample ID	Method	Analysts	Analytes Reported
40168662001	GP11 @ 2-4	WI MOD GRO	ALD	10
		ASTM D2974-87	AH	1
40168662002	GP11 @ 10-12	WI MOD GRO	ALD	10
		ASTM D2974-87	AH	1
40168662003	GP12 @ 2-4	WI MOD GRO	ALD	10
		ASTM D2974-87	AH	1
40168662004	GP12 @ 10-12	WI MOD GRO	ALD	10
		ASTM D2974-87	AH	1
40168662005	GP13 @ 2-4	WI MOD GRO	ALD	10
		ASTM D2974-87	AH	1
40168662006	GP13 @ 10-12	WI MOD GRO	ALD	10
		ASTM D2974-87	AH	1
40168662007	GP14 @ 2-4	WI MOD GRO	ALD	10
		ASTM D2974-87	AH	1
40168662008	GP14 @ 10-12	WI MOD GRO	ALD	10
		ASTM D2974-87	AH	1
40168662009	GP15 @ 2-4	WI MOD GRO	ALD	10
		ASTM D2974-87	AH	1
40168662010	GP15 @ 10-12	WI MOD GRO	ALD	10
		ASTM D2974-87	AH	1
40168662011	COMPOSITE 1	EPA 6010	JLD	7
		EPA 7471	AJT	1
		EPA 8270 by SIM	ARO	20
		EPA 8260	MDS	64
		ASTM D2974-87	AH	1
40168662012	COMPOSITE 2	EPA 6010	JLD	7
		EPA 7471	AJT	1
		EPA 8270 by SIM	RJN	20
		EPA 8260	MDS	64
		ASTM D2974-87	AH	1

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 6962 BURNETT OIL
Pace Project No.: 40168662

Sample: GP11 @ 2-4 **Lab ID: 40168662001** Collected: 05/02/18 12:00 Received: 05/07/18 09:00 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	58.3J	ug/kg	71.5	29.8	1	05/11/18 08:45	05/11/18 16:40	71-43-2	
Ethylbenzene	54.6J	ug/kg	71.5	29.8	1	05/11/18 08:45	05/11/18 16:40	100-41-4	
Methyl-tert-butyl ether	<28.1	ug/kg	67.4	28.1	1	05/11/18 08:45	05/11/18 16:40	1634-04-4	W
Naphthalene	188	ug/kg	71.5	29.8	1	05/11/18 08:45	05/11/18 16:40	91-20-3	
Toluene	230	ug/kg	71.5	29.8	1	05/11/18 08:45	05/11/18 16:40	108-88-3	
1,2,4-Trimethylbenzene	36.9J	ug/kg	71.5	29.8	1	05/11/18 08:45	05/11/18 16:40	95-63-6	
1,3,5-Trimethylbenzene	<28.1	ug/kg	67.4	28.1	1	05/11/18 08:45	05/11/18 16:40	108-67-8	W
m&p-Xylene	165	ug/kg	143	59.5	1	05/11/18 08:45	05/11/18 16:40	179601-23-1	
o-Xylene	66.4J	ug/kg	71.5	29.8	1	05/11/18 08:45	05/11/18 16:40	95-47-6	
Surrogates									
a,a,a-Trifluorotoluene (S)	101	%	80-120		1	05/11/18 08:45	05/11/18 16:40	98-08-8	
Percent Moisture Analytical Method: ASTM D2974-87									
Percent Moisture	5.7	%	0.10	0.10	1		05/19/18 08:16		

Sample: GP11 @ 10-12 **Lab ID: 40168662002** Collected: 05/02/18 12:10 Received: 05/07/18 09:00 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	100	ug/kg	77.2	32.2	1	05/11/18 08:45	05/11/18 13:25	71-43-2	
Ethylbenzene	96.0	ug/kg	77.2	32.2	1	05/11/18 08:45	05/11/18 13:25	100-41-4	
Methyl-tert-butyl ether	<30.5	ug/kg	73.2	30.5	1	05/11/18 08:45	05/11/18 13:25	1634-04-4	W
Naphthalene	35.6J	ug/kg	77.2	32.2	1	05/11/18 08:45	05/11/18 13:25	91-20-3	
Toluene	360	ug/kg	77.2	32.2	1	05/11/18 08:45	05/11/18 13:25	108-88-3	
1,2,4-Trimethylbenzene	91.7	ug/kg	77.2	32.2	1	05/11/18 08:45	05/11/18 13:25	95-63-6	
1,3,5-Trimethylbenzene	<30.5	ug/kg	73.2	30.5	1	05/11/18 08:45	05/11/18 13:25	108-67-8	W
m&p-Xylene	290	ug/kg	154	64.3	1	05/11/18 08:45	05/11/18 13:25	179601-23-1	
o-Xylene	91.4	ug/kg	77.2	32.2	1	05/11/18 08:45	05/11/18 13:25	95-47-6	
Surrogates									
a,a,a-Trifluorotoluene (S)	103	%	80-120		1	05/11/18 08:45	05/11/18 13:25	98-08-8	
Percent Moisture Analytical Method: ASTM D2974-87									
Percent Moisture	5.2	%	0.10	0.10	1		05/19/18 08:16		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 6962 BURNETT OIL
Pace Project No.: 40168662

Sample: GP12 @ 2-4 **Lab ID: 40168662003** Collected: 05/02/18 12:30 Received: 05/07/18 09:00 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	60.0	25.0	1	05/11/18 08:45	05/11/18 13:51	71-43-2	W
Ethylbenzene	<25.0	ug/kg	60.0	25.0	1	05/11/18 08:45	05/11/18 13:51	100-41-4	W
Methyl-tert-butyl ether	<25.0	ug/kg	60.0	25.0	1	05/11/18 08:45	05/11/18 13:51	1634-04-4	W
Naphthalene	<25.0	ug/kg	60.0	25.0	1	05/11/18 08:45	05/11/18 13:51	91-20-3	W
Toluene	<25.0	ug/kg	60.0	25.0	1	05/11/18 08:45	05/11/18 13:51	108-88-3	W
1,2,4-Trimethylbenzene	41.7J	ug/kg	65.1	27.1	1	05/11/18 08:45	05/11/18 13:51	95-63-6	
1,3,5-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	05/11/18 08:45	05/11/18 13:51	108-67-8	W
m&p-Xylene	<50.0	ug/kg	120	50.0	1	05/11/18 08:45	05/11/18 13:51	179601-23-1	W
o-Xylene	<25.0	ug/kg	60.0	25.0	1	05/11/18 08:45	05/11/18 13:51	95-47-6	W
Surrogates									
a,a,a-Trifluorotoluene (S)	100	%	80-120		1	05/11/18 08:45	05/11/18 13:51	98-08-8	
Percent Moisture Analytical Method: ASTM D2974-87									
Percent Moisture	7.9	%	0.10	0.10	1		05/19/18 08:16		

Sample: GP12 @ 10-12 **Lab ID: 40168662004** Collected: 05/02/18 12:35 Received: 05/07/18 09:00 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	<25.5	ug/kg	61.2	25.5	1	05/11/18 08:45	05/11/18 14:16	71-43-2	W
Ethylbenzene	<25.5	ug/kg	61.2	25.5	1	05/11/18 08:45	05/11/18 14:16	100-41-4	W
Methyl-tert-butyl ether	<25.5	ug/kg	61.2	25.5	1	05/11/18 08:45	05/11/18 14:16	1634-04-4	W
Naphthalene	<25.5	ug/kg	61.2	25.5	1	05/11/18 08:45	05/11/18 14:16	91-20-3	W
Toluene	39.3J	ug/kg	63.1	26.3	1	05/11/18 08:45	05/11/18 14:16	108-88-3	
1,2,4-Trimethylbenzene	<25.5	ug/kg	61.2	25.5	1	05/11/18 08:45	05/11/18 14:16	95-63-6	W
1,3,5-Trimethylbenzene	<25.5	ug/kg	61.2	25.5	1	05/11/18 08:45	05/11/18 14:16	108-67-8	W
m&p-Xylene	<51.0	ug/kg	122	51.0	1	05/11/18 08:45	05/11/18 14:16	179601-23-1	W
o-Xylene	<25.5	ug/kg	61.2	25.5	1	05/11/18 08:45	05/11/18 14:16	95-47-6	W
Surrogates									
a,a,a-Trifluorotoluene (S)	100	%	80-120		1	05/11/18 08:45	05/11/18 14:16	98-08-8	
Percent Moisture Analytical Method: ASTM D2974-87									
Percent Moisture	2.9	%	0.10	0.10	1		05/19/18 08:16		

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ANALYTICAL RESULTS

Project: 6962 BURNETT OIL

Pace Project No.: 40168662

Sample: GP13 @ 2-4 **Lab ID: 40168662005** Collected: 05/02/18 13:00 Received: 05/07/18 09:00 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	2900	ug/kg	661	275	10	05/11/18 08:45	05/11/18 17:05	71-43-2	
Ethylbenzene	8450	ug/kg	661	275	10	05/11/18 08:45	05/11/18 17:05	100-41-4	
Methyl-tert-butyl ether	<250	ug/kg	600	250	10	05/11/18 08:45	05/11/18 17:05	1634-04-4	W
Naphthalene	10700	ug/kg	661	275	10	05/11/18 08:45	05/11/18 17:05	91-20-3	
Toluene	760	ug/kg	661	275	10	05/11/18 08:45	05/11/18 17:05	108-88-3	
1,2,4-Trimethylbenzene	24800	ug/kg	661	275	10	05/11/18 08:45	05/11/18 17:05	95-63-6	
1,3,5-Trimethylbenzene	10300	ug/kg	661	275	10	05/11/18 08:45	05/11/18 17:05	108-67-8	
m&p-Xylene	27900	ug/kg	1320	551	10	05/11/18 08:45	05/11/18 17:05	179601-23-1	
o-Xylene	12500	ug/kg	661	275	10	05/11/18 08:45	05/11/18 17:05	95-47-6	
Surrogates									
a,a,a-Trifluorotoluene (S)	107	%	80-120		10	05/11/18 08:45	05/11/18 17:05	98-08-8	D3
Percent Moisture Analytical Method: ASTM D2974-87									
Percent Moisture	9.2	%	0.10	0.10	1		05/19/18 08:16		

Sample: GP13 @ 10-12 **Lab ID: 40168662006** Collected: 05/02/18 13:10 Received: 05/07/18 09:00 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	60.0	25.0	1	05/11/18 08:45	05/11/18 14:42	71-43-2	W
Ethylbenzene	<25.0	ug/kg	60.0	25.0	1	05/11/18 08:45	05/11/18 14:42	100-41-4	W
Methyl-tert-butyl ether	<25.0	ug/kg	60.0	25.0	1	05/11/18 08:45	05/11/18 14:42	1634-04-4	W
Naphthalene	<25.0	ug/kg	60.0	25.0	1	05/11/18 08:45	05/11/18 14:42	91-20-3	W
Toluene	<25.0	ug/kg	60.0	25.0	1	05/11/18 08:45	05/11/18 14:42	108-88-3	W
1,2,4-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	05/11/18 08:45	05/11/18 14:42	95-63-6	W
1,3,5-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	05/11/18 08:45	05/11/18 14:42	108-67-8	W
m&p-Xylene	<50.0	ug/kg	120	50.0	1	05/11/18 08:45	05/11/18 14:42	179601-23-1	W
o-Xylene	<25.0	ug/kg	60.0	25.0	1	05/11/18 08:45	05/11/18 14:42	95-47-6	W
Surrogates									
a,a,a-Trifluorotoluene (S)	101	%	80-120		1	05/11/18 08:45	05/11/18 14:42	98-08-8	
Percent Moisture Analytical Method: ASTM D2974-87									
Percent Moisture	2.9	%	0.10	0.10	1		05/19/18 08:16		

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ANALYTICAL RESULTS

Project: 6962 BURNETT OIL

Pace Project No.: 40168662

Sample: GP14 @ 2-4 **Lab ID: 40168662007** Collected: 05/02/18 13:30 Received: 05/07/18 09:00 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	60.0	25.0	1	05/11/18 08:45	05/11/18 15:08	71-43-2	W
Ethylbenzene	<25.0	ug/kg	60.0	25.0	1	05/11/18 08:45	05/11/18 15:08	100-41-4	W
Methyl-tert-butyl ether	<25.0	ug/kg	60.0	25.0	1	05/11/18 08:45	05/11/18 15:08	1634-04-4	W
Naphthalene	<25.0	ug/kg	60.0	25.0	1	05/11/18 08:45	05/11/18 15:08	91-20-3	W
Toluene	<25.0	ug/kg	60.0	25.0	1	05/11/18 08:45	05/11/18 15:08	108-88-3	W
1,2,4-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	05/11/18 08:45	05/11/18 15:08	95-63-6	W
1,3,5-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	05/11/18 08:45	05/11/18 15:08	108-67-8	W
m&p-Xylene	<50.0	ug/kg	120	50.0	1	05/11/18 08:45	05/11/18 15:08	179601-23-1	W
o-Xylene	<25.0	ug/kg	60.0	25.0	1	05/11/18 08:45	05/11/18 15:08	95-47-6	W
Surrogates									
a,a,a-Trifluorotoluene (S)	102	%	80-120		1	05/11/18 08:45	05/11/18 15:08	98-08-8	
Percent Moisture Analytical Method: ASTM D2974-87									
Percent Moisture	13.6	%	0.10	0.10	1		05/19/18 08:16		

Sample: GP14 @ 10-12 **Lab ID: 40168662008** Collected: 05/02/18 13:40 Received: 05/07/18 09:00 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	60.0	25.0	1	05/11/18 08:45	05/11/18 19:38	71-43-2	W
Ethylbenzene	<25.0	ug/kg	60.0	25.0	1	05/11/18 08:45	05/11/18 19:38	100-41-4	W
Methyl-tert-butyl ether	<25.0	ug/kg	60.0	25.0	1	05/11/18 08:45	05/11/18 19:38	1634-04-4	W
Naphthalene	<25.0	ug/kg	60.0	25.0	1	05/11/18 08:45	05/11/18 19:38	91-20-3	W
Toluene	<25.0	ug/kg	60.0	25.0	1	05/11/18 08:45	05/11/18 19:38	108-88-3	W
1,2,4-Trimethylbenzene	40.0J	ug/kg	62.9	26.2	1	05/11/18 08:45	05/11/18 19:38	95-63-6	
1,3,5-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	05/11/18 08:45	05/11/18 19:38	108-67-8	W
m&p-Xylene	<50.0	ug/kg	120	50.0	1	05/11/18 08:45	05/11/18 19:38	179601-23-1	W
o-Xylene	<25.0	ug/kg	60.0	25.0	1	05/11/18 08:45	05/11/18 19:38	95-47-6	W
Surrogates									
a,a,a-Trifluorotoluene (S)	100	%	80-120		1	05/11/18 08:45	05/11/18 19:38	98-08-8	
Percent Moisture Analytical Method: ASTM D2974-87									
Percent Moisture	4.7	%	0.10	0.10	1		05/19/18 08:17		

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ANALYTICAL RESULTS

Project: 6962 BURNETT OIL

Pace Project No.: 40168662

Sample: GP15 @ 2-4 **Lab ID: 40168662009** Collected: 05/02/18 14:00 Received: 05/07/18 09:00 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	<625	ug/kg	1500	625	25	05/11/18 08:45	05/11/18 17:31	71-43-2	W
Ethylbenzene	1480J	ug/kg	2180	908	25	05/11/18 08:45	05/11/18 17:31	100-41-4	
Methyl-tert-butyl ether	<625	ug/kg	1500	625	25	05/11/18 08:45	05/11/18 17:31	1634-04-4	W
Naphthalene	14700	ug/kg	2180	908	25	05/11/18 08:45	05/11/18 17:31	91-20-3	
Toluene	<625	ug/kg	1500	625	25	05/11/18 08:45	05/11/18 17:31	108-88-3	W
1,2,4-Trimethylbenzene	7600	ug/kg	2180	908	25	05/11/18 08:45	05/11/18 17:31	95-63-6	
1,3,5-Trimethylbenzene	5740	ug/kg	2180	908	25	05/11/18 08:45	05/11/18 17:31	108-67-8	
m&p-Xylene	<1250	ug/kg	3000	1250	25	05/11/18 08:45	05/11/18 17:31	179601-23-1	W
o-Xylene	<625	ug/kg	1500	625	25	05/11/18 08:45	05/11/18 17:31	95-47-6	W
Surrogates									
a,a,a-Trifluorotoluene (S)	102	%	80-120		25	05/11/18 08:45	05/11/18 17:31	98-08-8	D3
Percent Moisture Analytical Method: ASTM D2974-87									
Percent Moisture	31.2	%	0.10	0.10	1		05/19/18 08:17		

Sample: GP15 @ 10-12 **Lab ID: 40168662010** Collected: 05/02/18 14:15 Received: 05/07/18 09:00 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	60.0	25.0	1	05/11/18 08:45	05/11/18 20:04	71-43-2	W
Ethylbenzene	<25.0	ug/kg	60.0	25.0	1	05/11/18 08:45	05/11/18 20:04	100-41-4	W
Methyl-tert-butyl ether	<25.0	ug/kg	60.0	25.0	1	05/11/18 08:45	05/11/18 20:04	1634-04-4	W
Naphthalene	<25.0	ug/kg	60.0	25.0	1	05/11/18 08:45	05/11/18 20:04	91-20-3	W
Toluene	<25.0	ug/kg	60.0	25.0	1	05/11/18 08:45	05/11/18 20:04	108-88-3	W
1,2,4-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	05/11/18 08:45	05/11/18 20:04	95-63-6	W
1,3,5-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	05/11/18 08:45	05/11/18 20:04	108-67-8	W
m&p-Xylene	<50.0	ug/kg	120	50.0	1	05/11/18 08:45	05/11/18 20:04	179601-23-1	W
o-Xylene	<25.0	ug/kg	60.0	25.0	1	05/11/18 08:45	05/11/18 20:04	95-47-6	W
Surrogates									
a,a,a-Trifluorotoluene (S)	102	%	80-120		1	05/11/18 08:45	05/11/18 20:04	98-08-8	
Percent Moisture Analytical Method: ASTM D2974-87									
Percent Moisture	3.5	%	0.10	0.10	1		05/19/18 08:17		

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ANALYTICAL RESULTS

Project: 6962 BURNETT OIL

Pace Project No.: 40168662

Sample: COMPOSITE 1 **Lab ID: 40168662011** Collected: 05/01/18 00:00 Received: 05/07/18 09:00 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
6010 MET ICP									
Analytical Method: EPA 6010 Preparation Method: EPA 3050									
Arsenic	<1.1	mg/kg	5.4	1.1	1	05/14/18 17:30	05/15/18 13:41	7440-38-2	
Barium	31.0	mg/kg	0.54	0.16	1	05/14/18 17:30	05/15/18 13:41	7440-39-3	
Cadmium	<0.14	mg/kg	0.54	0.14	1	05/14/18 17:30	05/15/18 13:41	7440-43-9	
Chromium	18.5	mg/kg	1.1	0.30	1	05/14/18 17:30	05/15/18 13:41	7440-47-3	
Lead	11.0	mg/kg	1.4	0.47	1	05/14/18 17:30	05/15/18 13:41	7439-92-1	
Selenium	<1.2	mg/kg	5.4	1.2	1	05/14/18 17:30	05/15/18 13:41	7782-49-2	
Silver	<0.37	mg/kg	1.1	0.37	1	05/14/18 17:30	05/15/18 13:41	7440-22-4	
7471 Mercury									
Analytical Method: EPA 7471 Preparation Method: EPA 7471									
Mercury	<0.012	mg/kg	0.040	0.012	1	05/15/18 11:49	05/16/18 09:32	7439-97-6	
8270 MSSV PAH by SIM									
Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546									
Acenaphthene	<4.2	ug/kg	14.0	4.2	1	05/09/18 08:49	05/10/18 14:04	83-32-9	
Acenaphthylene	5.4J	ug/kg	12.0	3.6	1	05/09/18 08:49	05/10/18 14:04	208-96-8	
Anthracene	21.8	ug/kg	20.7	6.2	1	05/09/18 08:49	05/10/18 14:04	120-12-7	
Benzo(a)anthracene	96.3	ug/kg	11.5	3.4	1	05/09/18 08:49	05/10/18 14:04	56-55-3	
Benzo(a)pyrene	124	ug/kg	9.1	2.7	1	05/09/18 08:49	05/10/18 14:04	50-32-8	
Benzo(b)fluoranthene	205	ug/kg	10.2	3.1	1	05/09/18 08:49	05/10/18 14:04	205-99-2	
Benzo(g,h,i)perylene	122	ug/kg	7.4	2.2	1	05/09/18 08:49	05/10/18 14:04	191-24-2	
Benzo(k)fluoranthene	96.9	ug/kg	9.1	2.7	1	05/09/18 08:49	05/10/18 14:04	207-08-9	
Chrysene	138	ug/kg	12.2	3.7	1	05/09/18 08:49	05/10/18 14:04	218-01-9	
Dibenz(a,h)anthracene	38.0	ug/kg	8.1	2.4	1	05/09/18 08:49	05/10/18 14:04	53-70-3	
Fluoranthene	242	ug/kg	18.9	5.7	1	05/09/18 08:49	05/10/18 14:04	206-44-0	
Fluorene	5.1J	ug/kg	15.0	4.5	1	05/09/18 08:49	05/10/18 14:04	86-73-7	
Indeno(1,2,3-cd)pyrene	101	ug/kg	8.0	2.4	1	05/09/18 08:49	05/10/18 14:04	193-39-5	
1-Methylnaphthalene	<4.4	ug/kg	14.6	4.4	1	05/09/18 08:49	05/10/18 14:04	90-12-0	
2-Methylnaphthalene	<5.4	ug/kg	18.2	5.4	1	05/09/18 08:49	05/10/18 14:04	91-57-6	
Naphthalene	<9.2	ug/kg	30.6	9.2	1	05/09/18 08:49	05/10/18 14:04	91-20-3	
Phenanthrene	99.0	ug/kg	42.2	12.7	1	05/09/18 08:49	05/10/18 14:04	85-01-8	
Pyrene	195	ug/kg	16.3	4.9	1	05/09/18 08:49	05/10/18 14:04	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	66	%	10-115		1	05/09/18 08:49	05/10/18 14:04	321-60-8	
Terphenyl-d14 (S)	78	%	10-121		1	05/09/18 08:49	05/10/18 14:04	1718-51-0	
8260 MSV Med Level Normal List									
Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B									
Benzene	<25.0	ug/kg	60.0	25.0	1	05/09/18 08:30	05/09/18 19:00	71-43-2	W
Bromobenzene	<25.0	ug/kg	60.0	25.0	1	05/09/18 08:30	05/09/18 19:00	108-86-1	W
Bromochloromethane	<25.0	ug/kg	60.0	25.0	1	05/09/18 08:30	05/09/18 19:00	74-97-5	W
Bromodichloromethane	<25.0	ug/kg	60.0	25.0	1	05/09/18 08:30	05/09/18 19:00	75-27-4	W
Bromoform	<25.0	ug/kg	60.0	25.0	1	05/09/18 08:30	05/09/18 19:00	75-25-2	W
Bromomethane	<69.9	ug/kg	250	69.9	1	05/09/18 08:30	05/09/18 19:00	74-83-9	W
n-Butylbenzene	<25.0	ug/kg	60.0	25.0	1	05/09/18 08:30	05/09/18 19:00	104-51-8	W
sec-Butylbenzene	<25.0	ug/kg	60.0	25.0	1	05/09/18 08:30	05/09/18 19:00	135-98-8	W
tert-Butylbenzene	<25.0	ug/kg	60.0	25.0	1	05/09/18 08:30	05/09/18 19:00	98-06-6	W
Carbon tetrachloride	<25.0	ug/kg	60.0	25.0	1	05/09/18 08:30	05/09/18 19:00	56-23-5	W

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ANALYTICAL RESULTS

Project: 6962 BURNETT OIL

Pace Project No.: 40168662

Sample: **COMPOSITE 1** Lab ID: **40168662011** Collected: 05/01/18 00:00 Received: 05/07/18 09:00 Matrix: Solid

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

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level Normal List									
Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B									
Chlorobenzene	<25.0	ug/kg	60.0	25.0	1	05/09/18 08:30	05/09/18 19:00	108-90-7	W
Chloroethane	<67.0	ug/kg	250	67.0	1	05/09/18 08:30	05/09/18 19:00	75-00-3	W
Chloroform	<46.4	ug/kg	250	46.4	1	05/09/18 08:30	05/09/18 19:00	67-66-3	W
Chloromethane	<25.0	ug/kg	60.0	25.0	1	05/09/18 08:30	05/09/18 19:00	74-87-3	W
2-Chlorotoluene	<25.0	ug/kg	60.0	25.0	1	05/09/18 08:30	05/09/18 19:00	95-49-8	W
4-Chlorotoluene	<25.0	ug/kg	60.0	25.0	1	05/09/18 08:30	05/09/18 19:00	106-43-4	W
1,2-Dibromo-3-chloropropane	<91.2	ug/kg	250	91.2	1	05/09/18 08:30	05/09/18 19:00	96-12-8	W
Dibromochloromethane	<25.0	ug/kg	60.0	25.0	1	05/09/18 08:30	05/09/18 19:00	124-48-1	W
1,2-Dibromoethane (EDB)	<25.0	ug/kg	60.0	25.0	1	05/09/18 08:30	05/09/18 19:00	106-93-4	W
Dibromomethane	<25.0	ug/kg	60.0	25.0	1	05/09/18 08:30	05/09/18 19:00	74-95-3	W
1,2-Dichlorobenzene	<25.0	ug/kg	60.0	25.0	1	05/09/18 08:30	05/09/18 19:00	95-50-1	W
1,3-Dichlorobenzene	<25.0	ug/kg	60.0	25.0	1	05/09/18 08:30	05/09/18 19:00	541-73-1	W
1,4-Dichlorobenzene	<25.0	ug/kg	60.0	25.0	1	05/09/18 08:30	05/09/18 19:00	106-46-7	W
Dichlorodifluoromethane	<25.0	ug/kg	60.0	25.0	1	05/09/18 08:30	05/09/18 19:00	75-71-8	W
1,1-Dichloroethane	<25.0	ug/kg	60.0	25.0	1	05/09/18 08:30	05/09/18 19:00	75-34-3	W
1,2-Dichloroethane	<25.0	ug/kg	60.0	25.0	1	05/09/18 08:30	05/09/18 19:00	107-06-2	W
1,1-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	05/09/18 08:30	05/09/18 19:00	75-35-4	W
cis-1,2-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	05/09/18 08:30	05/09/18 19:00	156-59-2	W
trans-1,2-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	05/09/18 08:30	05/09/18 19:00	156-60-5	W
1,2-Dichloropropane	<25.0	ug/kg	60.0	25.0	1	05/09/18 08:30	05/09/18 19:00	78-87-5	W
1,3-Dichloropropane	<25.0	ug/kg	60.0	25.0	1	05/09/18 08:30	05/09/18 19:00	142-28-9	W
2,2-Dichloropropane	<25.0	ug/kg	60.0	25.0	1	05/09/18 08:30	05/09/18 19:00	594-20-7	W
1,1-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	05/09/18 08:30	05/09/18 19:00	563-58-6	W
cis-1,3-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	05/09/18 08:30	05/09/18 19:00	10061-01-5	W
trans-1,3-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	05/09/18 08:30	05/09/18 19:00	10061-02-6	W
Diisopropyl ether	<25.0	ug/kg	60.0	25.0	1	05/09/18 08:30	05/09/18 19:00	108-20-3	W
Ethylbenzene	<25.0	ug/kg	60.0	25.0	1	05/09/18 08:30	05/09/18 19:00	100-41-4	W
Hexachloro-1,3-butadiene	<25.0	ug/kg	60.0	25.0	1	05/09/18 08:30	05/09/18 19:00	87-68-3	W
Isopropylbenzene (Cumene)	<25.0	ug/kg	60.0	25.0	1	05/09/18 08:30	05/09/18 19:00	98-82-8	W
p-Isopropyltoluene	<25.0	ug/kg	60.0	25.0	1	05/09/18 08:30	05/09/18 19:00	99-87-6	W
Methylene Chloride	<25.0	ug/kg	60.0	25.0	1	05/09/18 08:30	05/09/18 19:00	75-09-2	W
Methyl-tert-butyl ether	<25.0	ug/kg	60.0	25.0	1	05/09/18 08:30	05/09/18 19:00	1634-04-4	W
Naphthalene	<40.0	ug/kg	250	40.0	1	05/09/18 08:30	05/09/18 19:00	91-20-3	W
n-Propylbenzene	<25.0	ug/kg	60.0	25.0	1	05/09/18 08:30	05/09/18 19:00	103-65-1	W
Styrene	<25.0	ug/kg	60.0	25.0	1	05/09/18 08:30	05/09/18 19:00	100-42-5	W
1,1,1,2-Tetrachloroethane	<25.0	ug/kg	60.0	25.0	1	05/09/18 08:30	05/09/18 19:00	630-20-6	W
1,1,2,2-Tetrachloroethane	<25.0	ug/kg	60.0	25.0	1	05/09/18 08:30	05/09/18 19:00	79-34-5	W
Tetrachloroethene	<25.0	ug/kg	60.0	25.0	1	05/09/18 08:30	05/09/18 19:00	127-18-4	W
Toluene	<25.0	ug/kg	60.0	25.0	1	05/09/18 08:30	05/09/18 19:00	108-88-3	W
1,2,3-Trichlorobenzene	<25.0	ug/kg	60.0	25.0	1	05/09/18 08:30	05/09/18 19:00	87-61-6	W
1,2,4-Trichlorobenzene	<47.6	ug/kg	250	47.6	1	05/09/18 08:30	05/09/18 19:00	120-82-1	L2,W
1,1,1-Trichloroethane	<25.0	ug/kg	60.0	25.0	1	05/09/18 08:30	05/09/18 19:00	71-55-6	W
1,1,2-Trichloroethane	<25.0	ug/kg	60.0	25.0	1	05/09/18 08:30	05/09/18 19:00	79-00-5	W
Trichloroethene	<25.0	ug/kg	60.0	25.0	1	05/09/18 08:30	05/09/18 19:00	79-01-6	W
Trichlorofluoromethane	<25.0	ug/kg	60.0	25.0	1	05/09/18 08:30	05/09/18 19:00	75-69-4	W

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 6962 BURNETT OIL

Pace Project No.: 40168662

Sample: COMPOSITE 1 **Lab ID: 40168662011** Collected: 05/01/18 00:00 Received: 05/07/18 09:00 Matrix: Solid

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

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level Normal List Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B									
1,2,3-Trichloropropane	<25.0	ug/kg	60.0	25.0	1	05/09/18 08:30	05/09/18 19:00	96-18-4	W
1,2,4-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	05/09/18 08:30	05/09/18 19:00	95-63-6	W
1,3,5-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	05/09/18 08:30	05/09/18 19:00	108-67-8	W
Vinyl chloride	<25.0	ug/kg	60.0	25.0	1	05/09/18 08:30	05/09/18 19:00	75-01-4	W
m&p-Xylene	<50.0	ug/kg	120	50.0	1	05/09/18 08:30	05/09/18 19:00	179601-23-1	W
o-Xylene	<25.0	ug/kg	60.0	25.0	1	05/09/18 08:30	05/09/18 19:00	95-47-6	W
Surrogates									
Dibromofluoromethane (S)	76	%	68-130		1	05/09/18 08:30	05/09/18 19:00	1868-53-7	
Toluene-d8 (S)	72	%	68-149		1	05/09/18 08:30	05/09/18 19:00	2037-26-5	
4-Bromofluorobenzene (S)	61	%	58-141		1	05/09/18 08:30	05/09/18 19:00	460-00-4	
Percent Moisture Analytical Method: ASTM D2974-87									
Percent Moisture	8.0	%	0.10	0.10	1		05/19/18 08:17		

Sample: COMPOSITE 2 **Lab ID: 40168662012** Collected: 05/01/18 00:00 Received: 05/07/18 09:00 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
6010 MET ICP Analytical Method: EPA 6010 Preparation Method: EPA 3050									
Arsenic	<1.1	mg/kg	5.1	1.1	1	05/14/18 17:30	05/15/18 13:48	7440-38-2	
Barium	21.7	mg/kg	0.51	0.15	1	05/14/18 17:30	05/15/18 13:48	7440-39-3	
Cadmium	0.13J	mg/kg	0.51	0.13	1	05/14/18 17:30	05/15/18 13:48	7440-43-9	
Chromium	20.7	mg/kg	1.0	0.28	1	05/14/18 17:30	05/15/18 13:48	7440-47-3	
Lead	4.1	mg/kg	1.3	0.44	1	05/14/18 17:30	05/15/18 13:48	7439-92-1	
Selenium	<1.1	mg/kg	5.1	1.1	1	05/14/18 17:30	05/15/18 13:48	7782-49-2	
Silver	<0.35	mg/kg	1.0	0.35	1	05/14/18 17:30	05/15/18 13:48	7440-22-4	
7471 Mercury Analytical Method: EPA 7471 Preparation Method: EPA 7471									
Mercury	<0.011	mg/kg	0.036	0.011	1	05/15/18 11:49	05/16/18 09:39	7439-97-6	
8270 MSSV PAH by SIM Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546									
Acenaphthene	<4.0	ug/kg	13.4	4.0	1	05/09/18 08:49	05/11/18 15:57	83-32-9	
Acenaphthylene	<3.4	ug/kg	11.5	3.4	1	05/09/18 08:49	05/11/18 15:57	208-96-8	
Anthracene	7.5J	ug/kg	19.8	5.9	1	05/09/18 08:49	05/11/18 15:57	120-12-7	
Benzo(a)anthracene	47.0	ug/kg	11.0	3.3	1	05/09/18 08:49	05/11/18 15:57	56-55-3	
Benzo(a)pyrene	61.9	ug/kg	8.7	2.6	1	05/09/18 08:49	05/11/18 15:57	50-32-8	
Benzo(b)fluoranthene	83.4	ug/kg	9.8	2.9	1	05/09/18 08:49	05/11/18 15:57	205-99-2	
Benzo(g,h,i)perylene	45.3	ug/kg	7.1	2.1	1	05/09/18 08:49	05/11/18 15:57	191-24-2	
Benzo(k)fluoranthene	73.2	ug/kg	8.7	2.6	1	05/09/18 08:49	05/11/18 15:57	207-08-9	
Chrysene	68.9	ug/kg	11.7	3.5	1	05/09/18 08:49	05/11/18 15:57	218-01-9	
Dibenz(a,h)anthracene	16.1	ug/kg	7.8	2.3	1	05/09/18 08:49	05/11/18 15:57	53-70-3	
Fluoranthene	125	ug/kg	18.1	5.4	1	05/09/18 08:49	05/11/18 15:57	206-44-0	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 6962 BURNETT OIL

Pace Project No.: 40168662

Sample: COMPOSITE 2 **Lab ID: 40168662012** Collected: 05/01/18 00:00 Received: 05/07/18 09:00 Matrix: Solid

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

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAH by SIM									
Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546									
Fluorene	<4.3	ug/kg	14.4	4.3	1	05/09/18 08:49	05/11/18 15:57	86-73-7	
Indeno(1,2,3-cd)pyrene	37.0	ug/kg	7.6	2.3	1	05/09/18 08:49	05/11/18 15:57	193-39-5	
1-Methylnaphthalene	<4.2	ug/kg	14.0	4.2	1	05/09/18 08:49	05/11/18 15:57	90-12-0	
2-Methylnaphthalene	<5.2	ug/kg	17.4	5.2	1	05/09/18 08:49	05/11/18 15:57	91-57-6	
Naphthalene	<8.8	ug/kg	29.3	8.8	1	05/09/18 08:49	05/11/18 15:57	91-20-3	
Phenanthrene	40.5	ug/kg	40.4	12.1	1	05/09/18 08:49	05/11/18 15:57	85-01-8	
Pyrene	97.1	ug/kg	15.6	4.7	1	05/09/18 08:49	05/11/18 15:57	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	64	%	10-115		1	05/09/18 08:49	05/11/18 15:57	321-60-8	
Terphenyl-d14 (S)	78	%	10-121		1	05/09/18 08:49	05/11/18 15:57	1718-51-0	
8260 MSV Med Level Normal List									
Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B									
Benzene	<25.0	ug/kg	60.0	25.0	1	05/09/18 08:30	05/09/18 16:18	71-43-2	W
Bromobenzene	<25.0	ug/kg	60.0	25.0	1	05/09/18 08:30	05/09/18 16:18	108-86-1	W
Bromochloromethane	<25.0	ug/kg	60.0	25.0	1	05/09/18 08:30	05/09/18 16:18	74-97-5	W
Bromodichloromethane	<25.0	ug/kg	60.0	25.0	1	05/09/18 08:30	05/09/18 16:18	75-27-4	W
Bromoform	<25.0	ug/kg	60.0	25.0	1	05/09/18 08:30	05/09/18 16:18	75-25-2	W
Bromomethane	<69.9	ug/kg	250	69.9	1	05/09/18 08:30	05/09/18 16:18	74-83-9	W
n-Butylbenzene	<25.0	ug/kg	60.0	25.0	1	05/09/18 08:30	05/09/18 16:18	104-51-8	W
sec-Butylbenzene	<25.0	ug/kg	60.0	25.0	1	05/09/18 08:30	05/09/18 16:18	135-98-8	W
tert-Butylbenzene	<25.0	ug/kg	60.0	25.0	1	05/09/18 08:30	05/09/18 16:18	98-06-6	W
Carbon tetrachloride	<25.0	ug/kg	60.0	25.0	1	05/09/18 08:30	05/09/18 16:18	56-23-5	W
Chlorobenzene	<25.0	ug/kg	60.0	25.0	1	05/09/18 08:30	05/09/18 16:18	108-90-7	W
Chloroethane	<67.0	ug/kg	250	67.0	1	05/09/18 08:30	05/09/18 16:18	75-00-3	W
Chloroform	<46.4	ug/kg	250	46.4	1	05/09/18 08:30	05/09/18 16:18	67-66-3	W
Chloromethane	<25.0	ug/kg	60.0	25.0	1	05/09/18 08:30	05/09/18 16:18	74-87-3	W
2-Chlorotoluene	<25.0	ug/kg	60.0	25.0	1	05/09/18 08:30	05/09/18 16:18	95-49-8	W
4-Chlorotoluene	<25.0	ug/kg	60.0	25.0	1	05/09/18 08:30	05/09/18 16:18	106-43-4	W
1,2-Dibromo-3-chloropropane	<91.2	ug/kg	250	91.2	1	05/09/18 08:30	05/09/18 16:18	96-12-8	W
Dibromochloromethane	<25.0	ug/kg	60.0	25.0	1	05/09/18 08:30	05/09/18 16:18	124-48-1	W
1,2-Dibromoethane (EDB)	<25.0	ug/kg	60.0	25.0	1	05/09/18 08:30	05/09/18 16:18	106-93-4	W
Dibromomethane	<25.0	ug/kg	60.0	25.0	1	05/09/18 08:30	05/09/18 16:18	74-95-3	W
1,2-Dichlorobenzene	<25.0	ug/kg	60.0	25.0	1	05/09/18 08:30	05/09/18 16:18	95-50-1	W
1,3-Dichlorobenzene	<25.0	ug/kg	60.0	25.0	1	05/09/18 08:30	05/09/18 16:18	541-73-1	W
1,4-Dichlorobenzene	<25.0	ug/kg	60.0	25.0	1	05/09/18 08:30	05/09/18 16:18	106-46-7	W
Dichlorodifluoromethane	<25.0	ug/kg	60.0	25.0	1	05/09/18 08:30	05/09/18 16:18	75-71-8	W
1,1-Dichloroethane	<25.0	ug/kg	60.0	25.0	1	05/09/18 08:30	05/09/18 16:18	75-34-3	W
1,2-Dichloroethane	<25.0	ug/kg	60.0	25.0	1	05/09/18 08:30	05/09/18 16:18	107-06-2	W
1,1-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	05/09/18 08:30	05/09/18 16:18	75-35-4	W
cis-1,2-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	05/09/18 08:30	05/09/18 16:18	156-59-2	W
trans-1,2-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	05/09/18 08:30	05/09/18 16:18	156-60-5	W
1,2-Dichloropropane	<25.0	ug/kg	60.0	25.0	1	05/09/18 08:30	05/09/18 16:18	78-87-5	W
1,3-Dichloropropane	<25.0	ug/kg	60.0	25.0	1	05/09/18 08:30	05/09/18 16:18	142-28-9	W
2,2-Dichloropropane	<25.0	ug/kg	60.0	25.0	1	05/09/18 08:30	05/09/18 16:18	594-20-7	W
1,1-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	05/09/18 08:30	05/09/18 16:18	563-58-6	W

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 6962 BURNETT OIL

Pace Project No.: 40168662

Sample: COMPOSITE 2 **Lab ID: 40168662012** Collected: 05/01/18 00:00 Received: 05/07/18 09:00 Matrix: Solid

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

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level Normal List Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B									
cis-1,3-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	05/09/18 08:30	05/09/18 16:18	10061-01-5	W
trans-1,3-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	05/09/18 08:30	05/09/18 16:18	10061-02-6	W
Diisopropyl ether	<25.0	ug/kg	60.0	25.0	1	05/09/18 08:30	05/09/18 16:18	108-20-3	W
Ethylbenzene	<25.0	ug/kg	60.0	25.0	1	05/09/18 08:30	05/09/18 16:18	100-41-4	W
Hexachloro-1,3-butadiene	<25.0	ug/kg	60.0	25.0	1	05/09/18 08:30	05/09/18 16:18	87-68-3	W
Isopropylbenzene (Cumene)	<25.0	ug/kg	60.0	25.0	1	05/09/18 08:30	05/09/18 16:18	98-82-8	W
p-Isopropyltoluene	<25.0	ug/kg	60.0	25.0	1	05/09/18 08:30	05/09/18 16:18	99-87-6	W
Methylene Chloride	<25.0	ug/kg	60.0	25.0	1	05/09/18 08:30	05/09/18 16:18	75-09-2	W
Methyl-tert-butyl ether	<25.0	ug/kg	60.0	25.0	1	05/09/18 08:30	05/09/18 16:18	1634-04-4	W
Naphthalene	<40.0	ug/kg	250	40.0	1	05/09/18 08:30	05/09/18 16:18	91-20-3	W
n-Propylbenzene	<25.0	ug/kg	60.0	25.0	1	05/09/18 08:30	05/09/18 16:18	103-65-1	W
Styrene	<25.0	ug/kg	60.0	25.0	1	05/09/18 08:30	05/09/18 16:18	100-42-5	W
1,1,1,2-Tetrachloroethane	<25.0	ug/kg	60.0	25.0	1	05/09/18 08:30	05/09/18 16:18	630-20-6	W
1,1,2,2-Tetrachloroethane	<25.0	ug/kg	60.0	25.0	1	05/09/18 08:30	05/09/18 16:18	79-34-5	W
Tetrachloroethene	<25.0	ug/kg	60.0	25.0	1	05/09/18 08:30	05/09/18 16:18	127-18-4	W
Toluene	<25.0	ug/kg	60.0	25.0	1	05/09/18 08:30	05/09/18 16:18	108-88-3	W
1,2,3-Trichlorobenzene	<25.0	ug/kg	60.0	25.0	1	05/09/18 08:30	05/09/18 16:18	87-61-6	W
1,2,4-Trichlorobenzene	<47.6	ug/kg	250	47.6	1	05/09/18 08:30	05/09/18 16:18	120-82-1	L2,W
1,1,1-Trichloroethane	<25.0	ug/kg	60.0	25.0	1	05/09/18 08:30	05/09/18 16:18	71-55-6	W
1,1,2-Trichloroethane	<25.0	ug/kg	60.0	25.0	1	05/09/18 08:30	05/09/18 16:18	79-00-5	W
Trichloroethene	<25.0	ug/kg	60.0	25.0	1	05/09/18 08:30	05/09/18 16:18	79-01-6	W
Trichlorofluoromethane	<25.0	ug/kg	60.0	25.0	1	05/09/18 08:30	05/09/18 16:18	75-69-4	W
1,2,3-Trichloropropane	<25.0	ug/kg	60.0	25.0	1	05/09/18 08:30	05/09/18 16:18	96-18-4	W
1,2,4-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	05/09/18 08:30	05/09/18 16:18	95-63-6	W
1,3,5-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	05/09/18 08:30	05/09/18 16:18	108-67-8	W
Vinyl chloride	<25.0	ug/kg	60.0	25.0	1	05/09/18 08:30	05/09/18 16:18	75-01-4	W
m&p-Xylene	<50.0	ug/kg	120	50.0	1	05/09/18 08:30	05/09/18 16:18	179601-23-1	W
o-Xylene	<25.0	ug/kg	60.0	25.0	1	05/09/18 08:30	05/09/18 16:18	95-47-6	W
Surrogates									
Dibromofluoromethane (S)	98	%	68-130		1	05/09/18 08:30	05/09/18 16:18	1868-53-7	
Toluene-d8 (S)	92	%	68-149		1	05/09/18 08:30	05/09/18 16:18	2037-26-5	
4-Bromofluorobenzene (S)	80	%	58-141		1	05/09/18 08:30	05/09/18 16:18	460-00-4	
Percent Moisture Analytical Method: ASTM D2974-87									
Percent Moisture	4.2	%	0.10	0.10	1		05/19/18 08:17		

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 6962 BURNETT OIL

Pace Project No.: 40168662

QC Batch:	288552	Analysis Method:	WI MOD GRO
QC Batch Method:	TPH GRO/PVOC WI ext.	Analysis Description:	WIGRO Solid GCV
Associated Lab Samples:	40168662001, 40168662002, 40168662003, 40168662004, 40168662005, 40168662006, 40168662007, 40168662008, 40168662009, 40168662010		

METHOD BLANK:	1688687	Matrix:	Solid
Associated Lab Samples:	40168662001, 40168662002, 40168662003, 40168662004, 40168662005, 40168662006, 40168662007, 40168662008, 40168662009, 40168662010		

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,2,4-Trimethylbenzene	ug/kg	<25.0	50.0	05/11/18 09:35	
1,3,5-Trimethylbenzene	ug/kg	<25.0	50.0	05/11/18 09:35	
Benzene	ug/kg	<25.0	50.0	05/11/18 09:35	
Ethylbenzene	ug/kg	<25.0	50.0	05/11/18 09:35	
m&p-Xylene	ug/kg	<50.0	100	05/11/18 09:35	
Methyl-tert-butyl ether	ug/kg	<25.0	50.0	05/11/18 09:35	
Naphthalene	ug/kg	<25.0	50.0	05/11/18 09:35	
o-Xylene	ug/kg	<25.0	50.0	05/11/18 09:35	
Toluene	ug/kg	<25.0	50.0	05/11/18 09:35	
a,a,a-Trifluorotoluene (S)	%	101	80-120	05/11/18 09:35	

LABORATORY CONTROL SAMPLE & LCSD: 1688688 1688689

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	1060	1060	106	106	80-120	0	20	
1,3,5-Trimethylbenzene	ug/kg	1000	1020	1020	102	102	80-120	0	20	
Benzene	ug/kg	1000	987	1000	99	100	80-120	2	20	
Ethylbenzene	ug/kg	1000	1040	1040	104	104	80-120	0	20	
m&p-Xylene	ug/kg	2000	2060	2040	103	102	80-120	1	20	
Methyl-tert-butyl ether	ug/kg	1000	945	947	95	95	80-120	0	20	
Naphthalene	ug/kg	1000	1040	1040	104	104	80-120	0	20	
o-Xylene	ug/kg	1000	1020	1020	102	102	80-120	0	20	
Toluene	ug/kg	1000	1020	1020	102	102	80-120	0	20	
a,a,a-Trifluorotoluene (S)	%				101	101	80-120			

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

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QUALITY CONTROL DATA

Project: 6962 BURNETT OIL
Pace Project No.: 40168662

QC Batch: 288898 Analysis Method: EPA 7471
QC Batch Method: EPA 7471 Analysis Description: 7471 Mercury
Associated Lab Samples: 40168662011, 40168662012

METHOD BLANK: 1690498 Matrix: Solid
Associated Lab Samples: 40168662011, 40168662012

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	mg/kg	<0.011	0.037	05/16/18 09:28	

LABORATORY CONTROL SAMPLE: 1690499

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/kg	.83	0.87	105	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1690500 1690501

Parameter	Units	40168662011		1690501		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result						
Mercury	mg/kg	<0.012	.9	.9	0.94	0.98	104	108	85-115	4	20

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QUALITY CONTROL DATA

Project: 6962 BURNETT OIL
Pace Project No.: 40168662

QC Batch: 288666 Analysis Method: EPA 6010
QC Batch Method: EPA 3050 Analysis Description: 6010 MET
Associated Lab Samples: 40168662011, 40168662012

METHOD BLANK: 1689310 Matrix: Solid
Associated Lab Samples: 40168662011, 40168662012

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Arsenic	mg/kg	<1.0	5.0	05/15/18 13:36	
Barium	mg/kg	<0.15	0.50	05/15/18 13:36	
Cadmium	mg/kg	<0.13	0.50	05/15/18 13:36	
Chromium	mg/kg	<0.28	1.0	05/15/18 13:36	
Lead	mg/kg	<0.43	1.3	05/15/18 13:36	
Selenium	mg/kg	<1.1	5.0	05/15/18 13:36	
Silver	mg/kg	<0.34	1.0	05/15/18 13:36	

LABORATORY CONTROL SAMPLE: 1689311

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/kg	50	50.6	101	80-120	
Barium	mg/kg	50	52.2	104	80-120	
Cadmium	mg/kg	50	51.1	102	80-120	
Chromium	mg/kg	50	51.6	103	80-120	
Lead	mg/kg	50	51.7	103	80-120	
Selenium	mg/kg	50	49.6	99	80-120	
Silver	mg/kg	25	25.7	103	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1689312 1689313

Parameter	Units	40168662011		1689313		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result						
Arsenic	mg/kg	<1.1	53.9	54	50.7	51.1	92	92	75-125	1	20
Barium	mg/kg	31.0	53.9	54	89.0	92.5	107	114	75-125	4	20
Cadmium	mg/kg	<0.14	53.9	54	51.8	52.1	96	96	75-125	1	20
Chromium	mg/kg	18.5	53.9	54	69.6	73.9	95	102	75-125	6	20
Lead	mg/kg	11.0	53.9	54	65.5	59.5	101	90	75-125	10	20
Selenium	mg/kg	<1.2	53.9	54	48.0	49.3	89	91	75-125	3	20
Silver	mg/kg	<0.37	27	27.1	26.5	26.7	97	98	75-125	1	20

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QUALITY CONTROL DATA

Project: 6962 BURNETT OIL
Pace Project No.: 40168662

QC Batch: 288300 Analysis Method: EPA 8260
QC Batch Method: EPA 5035/5030B Analysis Description: 8260 MSV Med Level Normal List
Associated Lab Samples: 40168662011, 40168662012

METHOD BLANK: 1686853 Matrix: Solid
Associated Lab Samples: 40168662011, 40168662012

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	<13.7	50.0	05/09/18 09:44	
1,1,1-Trichloroethane	ug/kg	<14.4	50.0	05/09/18 09:44	
1,1,2,2-Tetrachloroethane	ug/kg	<17.5	50.0	05/09/18 09:44	
1,1,2-Trichloroethane	ug/kg	<20.2	50.0	05/09/18 09:44	
1,1-Dichloroethane	ug/kg	<17.6	50.0	05/09/18 09:44	
1,1-Dichloroethene	ug/kg	<17.6	50.0	05/09/18 09:44	
1,1-Dichloropropene	ug/kg	<14.0	50.0	05/09/18 09:44	
1,2,3-Trichlorobenzene	ug/kg	<17.0	50.0	05/09/18 09:44	
1,2,3-Trichloropropane	ug/kg	<22.3	50.0	05/09/18 09:44	
1,2,4-Trichlorobenzene	ug/kg	<47.6	250	05/09/18 09:44	
1,2,4-Trimethylbenzene	ug/kg	<12.2	50.0	05/09/18 09:44	
1,2-Dibromo-3-chloropropane	ug/kg	<91.2	250	05/09/18 09:44	
1,2-Dibromoethane (EDB)	ug/kg	<14.7	50.0	05/09/18 09:44	
1,2-Dichlorobenzene	ug/kg	<16.2	50.0	05/09/18 09:44	
1,2-Dichloroethane	ug/kg	<15.0	50.0	05/09/18 09:44	
1,2-Dichloropropane	ug/kg	<16.8	50.0	05/09/18 09:44	
1,3,5-Trimethylbenzene	ug/kg	<14.5	50.0	05/09/18 09:44	
1,3-Dichlorobenzene	ug/kg	<13.2	50.0	05/09/18 09:44	
1,3-Dichloropropane	ug/kg	<12.0	50.0	05/09/18 09:44	
1,4-Dichlorobenzene	ug/kg	<15.9	50.0	05/09/18 09:44	
2,2-Dichloropropane	ug/kg	<12.6	50.0	05/09/18 09:44	
2-Chlorotoluene	ug/kg	<15.8	50.0	05/09/18 09:44	
4-Chlorotoluene	ug/kg	<13.0	50.0	05/09/18 09:44	
Benzene	ug/kg	<9.2	20.0	05/09/18 09:44	
Bromobenzene	ug/kg	<20.6	50.0	05/09/18 09:44	
Bromochloromethane	ug/kg	<21.4	50.0	05/09/18 09:44	
Bromodichloromethane	ug/kg	<9.8	50.0	05/09/18 09:44	
Bromoform	ug/kg	<19.8	50.0	05/09/18 09:44	
Bromomethane	ug/kg	<69.9	250	05/09/18 09:44	
Carbon tetrachloride	ug/kg	<12.1	50.0	05/09/18 09:44	
Chlorobenzene	ug/kg	<14.8	50.0	05/09/18 09:44	
Chloroethane	ug/kg	<67.0	250	05/09/18 09:44	
Chloroform	ug/kg	<46.4	250	05/09/18 09:44	
Chloromethane	ug/kg	<20.4	50.0	05/09/18 09:44	
cis-1,2-Dichloroethene	ug/kg	<16.6	50.0	05/09/18 09:44	
cis-1,3-Dichloropropene	ug/kg	<16.6	50.0	05/09/18 09:44	
Dibromochloromethane	ug/kg	<17.9	50.0	05/09/18 09:44	
Dibromomethane	ug/kg	<19.3	50.0	05/09/18 09:44	
Dichlorodifluoromethane	ug/kg	<12.3	50.0	05/09/18 09:44	
Diisopropyl ether	ug/kg	<17.7	50.0	05/09/18 09:44	
Ethylbenzene	ug/kg	<12.4	50.0	05/09/18 09:44	

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QUALITY CONTROL DATA

Project: 6962 BURNETT OIL

Pace Project No.: 40168662

METHOD BLANK: 1686853

Matrix: Solid

Associated Lab Samples: 40168662011, 40168662012

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Hexachloro-1,3-butadiene	ug/kg	41.1J	50.0	05/09/18 09:44	
Isopropylbenzene (Cumene)	ug/kg	<12.6	50.0	05/09/18 09:44	
m&p-Xylene	ug/kg	<34.4	100	05/09/18 09:44	
Methyl-tert-butyl ether	ug/kg	<12.7	50.0	05/09/18 09:44	
Methylene Chloride	ug/kg	<16.2	50.0	05/09/18 09:44	
n-Butylbenzene	ug/kg	<10.5	50.0	05/09/18 09:44	
n-Propylbenzene	ug/kg	<11.6	50.0	05/09/18 09:44	
Naphthalene	ug/kg	<40.0	250	05/09/18 09:44	
o-Xylene	ug/kg	<14.0	50.0	05/09/18 09:44	
p-Isopropyltoluene	ug/kg	<12.0	50.0	05/09/18 09:44	
sec-Butylbenzene	ug/kg	<11.9	50.0	05/09/18 09:44	
Styrene	ug/kg	<9.0	50.0	05/09/18 09:44	
tert-Butylbenzene	ug/kg	<9.5	50.0	05/09/18 09:44	
Tetrachloroethene	ug/kg	<12.9	50.0	05/09/18 09:44	
Toluene	ug/kg	<11.2	50.0	05/09/18 09:44	
trans-1,2-Dichloroethene	ug/kg	<16.5	50.0	05/09/18 09:44	
trans-1,3-Dichloropropene	ug/kg	<14.4	50.0	05/09/18 09:44	
Trichloroethene	ug/kg	<23.6	50.0	05/09/18 09:44	
Trichlorofluoromethane	ug/kg	<24.7	50.0	05/09/18 09:44	
Vinyl chloride	ug/kg	<21.1	50.0	05/09/18 09:44	
4-Bromofluorobenzene (S)	%	70	58-141	05/09/18 09:44	
Dibromofluoromethane (S)	%	80	68-130	05/09/18 09:44	
Toluene-d8 (S)	%	80	68-149	05/09/18 09:44	

LABORATORY CONTROL SAMPLE: 1686854

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/kg	2500	2140	86	61-122	
1,1,2,2-Tetrachloroethane	ug/kg	2500	2470	99	73-130	
1,1,2-Trichloroethane	ug/kg	2500	2190	87	70-130	
1,1-Dichloroethane	ug/kg	2500	2170	87	63-124	
1,1-Dichloroethene	ug/kg	2500	1760	71	53-117	
1,2,4-Trichlorobenzene	ug/kg	2500	1890	76	78-130	L2
1,2-Dibromo-3-chloropropane	ug/kg	2500	2120	85	49-140	
1,2-Dibromoethane (EDB)	ug/kg	2500	2240	90	70-130	
1,2-Dichlorobenzene	ug/kg	2500	2160	86	70-130	
1,2-Dichloroethane	ug/kg	2500	2120	85	56-135	
1,2-Dichloropropane	ug/kg	2500	2180	87	77-122	
1,3-Dichlorobenzene	ug/kg	2500	2060	82	70-130	
1,4-Dichlorobenzene	ug/kg	2500	2150	86	70-130	
Benzene	ug/kg	2500	2110	85	66-130	
Bromodichloromethane	ug/kg	2500	2250	90	62-135	
Bromoform	ug/kg	2500	2030	81	68-130	
Bromomethane	ug/kg	2500	1710	68	29-137	

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QUALITY CONTROL DATA

Project: 6962 BURNETT OIL

Pace Project No.: 40168662

LABORATORY CONTROL SAMPLE: 1686854

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Carbon tetrachloride	ug/kg	2500	2180	87	57-130	
Chlorobenzene	ug/kg	2500	2150	86	70-130	
Chloroethane	ug/kg	2500	2010	81	36-144	
Chloroform	ug/kg	2500	2140	86	69-115	
Chloromethane	ug/kg	2500	2000	80	32-126	
cis-1,2-Dichloroethene	ug/kg	2500	2010	80	65-130	
cis-1,3-Dichloropropene	ug/kg	2500	2140	86	70-130	
Dibromochloromethane	ug/kg	2500	2170	87	70-130	
Dichlorodifluoromethane	ug/kg	2500	1470	59	10-99	
Ethylbenzene	ug/kg	2500	2090	84	82-122	
Isopropylbenzene (Cumene)	ug/kg	2500	2080	83	70-130	
m&p-Xylene	ug/kg	5000	4250	85	70-130	
Methyl-tert-butyl ether	ug/kg	2500	1970	79	63-134	
Methylene Chloride	ug/kg	2500	1920	77	56-123	
o-Xylene	ug/kg	2500	2140	86	70-130	
Styrene	ug/kg	2500	2240	89	70-130	
Tetrachloroethene	ug/kg	2500	2160	87	70-131	
Toluene	ug/kg	2500	2150	86	80-120	
trans-1,2-Dichloroethene	ug/kg	2500	1990	80	66-130	
trans-1,3-Dichloropropene	ug/kg	2500	2180	87	68-130	
Trichloroethene	ug/kg	2500	2110	84	70-130	
Trichlorofluoromethane	ug/kg	2500	1810	72	37-149	
Vinyl chloride	ug/kg	2500	2030	81	43-128	
4-Bromofluorobenzene (S)	%			78	58-141	
Dibromofluoromethane (S)	%			86	68-130	
Toluene-d8 (S)	%			83	68-149	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1686855 1686856

Parameter	Units	40168727002		MSD		MS		MSD		% Rec Limits	RPD	Max RPD	Qual
		Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec					
1,1,1-Trichloroethane	ug/kg	<25.0	1530	1530	1320	1170	86	76	57-123	13	20		
1,1,2,2-Tetrachloroethane	ug/kg	<25.0	1530	1530	1670	1690	109	111	73-135	1	20		
1,1,2-Trichloroethane	ug/kg	<25.0	1530	1530	1400	1400	92	92	70-130	0	20		
1,1-Dichloroethane	ug/kg	<25.0	1530	1530	1370	1300	90	85	63-124	5	20		
1,1-Dichloroethene	ug/kg	<25.0	1530	1530	1050	859	69	56	48-117	20	23		
1,2,4-Trichlorobenzene	ug/kg	<47.6	1530	1530	1400	1340	91	87	78-145	5	20		
1,2-Dibromo-3-chloropropane	ug/kg	<91.2	1530	1530	1480	1570	97	103	38-168	6	22		
1,2-Dibromoethane (EDB)	ug/kg	<25.0	1530	1530	1480	1490	97	97	70-130	1	20		
1,2-Dichlorobenzene	ug/kg	<25.0	1530	1530	1450	1410	95	92	70-130	3	20		
1,2-Dichloroethane	ug/kg	<25.0	1530	1530	1220	1310	80	86	56-145	7	20		
1,2-Dichloropropane	ug/kg	<25.0	1530	1530	1330	1300	87	85	77-123	3	20		
1,3-Dichlorobenzene	ug/kg	<25.0	1530	1530	1450	1310	95	86	70-130	10	20		
1,4-Dichlorobenzene	ug/kg	<25.0	1530	1530	1520	1390	99	91	70-130	9	20		

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QUALITY CONTROL DATA

Project: 6962 BURNETT OIL

Pace Project No.: 40168662

Parameter	Units	1686855		1686856		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	RPD	Qual
		40168727002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result								
Benzene	ug/kg	<25.0	1530	1530	1240	1210	81	79	65-130	2	20		
Bromodichloromethane	ug/kg	<25.0	1530	1530	1400	1320	92	86	59-141	6	20		
Bromoform	ug/kg	<25.0	1530	1530	1460	1540	96	101	59-141	5	20		
Bromomethane	ug/kg	<69.9	1530	1530	1060	1030	69	68	28-139	3	20		
Carbon tetrachloride	ug/kg	<25.0	1530	1530	1360	1170	89	76	50-130	15	20		
Chlorobenzene	ug/kg	<25.0	1530	1530	1430	1360	94	89	70-130	5	20		
Chloroethane	ug/kg	<67.0	1530	1530	1200	1150	79	75	36-144	5	20		
Chloroform	ug/kg	<46.4	1530	1530	1350	1280	88	84	68-122	5	20		
Chloromethane	ug/kg	<25.0	1530	1530	1210	1120	79	73	30-126	7	20		
cis-1,2-Dichloroethene	ug/kg	<25.0	1530	1530	1260	1170	83	77	63-130	7	20		
cis-1,3-Dichloropropene	ug/kg	<25.0	1530	1530	1380	1260	90	82	70-130	9	20		
Dibromochloromethane	ug/kg	<25.0	1530	1530	1450	1460	95	95	66-136	0	20		
Dichlorodifluoromethane	ug/kg	<25.0	1530	1530	974	830	64	54	10-99	16	33		
Ethylbenzene	ug/kg	<25.0	1530	1530	1340	1250	87	81	80-122	7	20		
Isopropylbenzene (Cumene)	ug/kg	<25.0	1530	1530	1340	1240	88	81	70-130	7	20		
m&p-Xylene	ug/kg	<50.0	3060	3060	2760	2550	90	83	70-130	8	20		
Methyl-tert-butyl ether	ug/kg	<25.0	1530	1530	1290	1260	84	83	63-134	2	20		
Methylene Chloride	ug/kg	<25.0	1530	1530	888	1130	58	74	56-127	24	20	R1	
o-Xylene	ug/kg	<25.0	1530	1530	1380	1290	90	84	70-130	6	20		
Styrene	ug/kg	<25.0	1530	1530	1450	1380	95	90	70-130	5	20		
Tetrachloroethene	ug/kg	<25.0	1530	1530	1320	1300	86	85	70-131	2	20		
Toluene	ug/kg	<25.0	1530	1530	1310	1350	86	88	80-120	3	20		
trans-1,2-Dichloroethene	ug/kg	<25.0	1530	1530	1270	1090	83	71	60-130	15	20		
trans-1,3-Dichloropropene	ug/kg	<25.0	1530	1530	1420	1400	93	91	68-130	1	20		
Trichloroethene	ug/kg	<25.0	1530	1530	1330	1270	87	83	70-130	5	20		
Trichlorofluoromethane	ug/kg	<25.0	1530	1530	1140	1030	75	68	37-149	10	24		
Vinyl chloride	ug/kg	<25.0	1530	1530	1170	1070	76	70	39-128	8	20		
4-Bromofluorobenzene (S)	%						74	74	58-141				
Dibromofluoromethane (S)	%						84	84	68-130				
Toluene-d8 (S)	%						79	80	68-149				

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QUALITY CONTROL DATA

Project: 6962 BURNETT OIL
Pace Project No.: 40168662

QC Batch: 288270 Analysis Method: EPA 8270 by SIM
QC Batch Method: EPA 3546 Analysis Description: 8270/3546 MSSV PAH by SIM
Associated Lab Samples: 40168662011, 40168662012

METHOD BLANK: 1686646 Matrix: Solid
Associated Lab Samples: 40168662011, 40168662012

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1-Methylnaphthalene	ug/kg	<4.0	13.4	05/09/18 11:41	
2-Methylnaphthalene	ug/kg	<5.0	16.7	05/09/18 11:41	
Acenaphthene	ug/kg	<3.9	12.9	05/09/18 11:41	
Acenaphthylene	ug/kg	<3.3	11.0	05/09/18 11:41	
Anthracene	ug/kg	<5.7	19.0	05/09/18 11:41	
Benzo(a)anthracene	ug/kg	<3.2	10.6	05/09/18 11:41	
Benzo(a)pyrene	ug/kg	<2.5	8.4	05/09/18 11:41	
Benzo(b)fluoranthene	ug/kg	<2.8	9.4	05/09/18 11:41	
Benzo(g,h,i)perylene	ug/kg	<2.0	6.8	05/09/18 11:41	
Benzo(k)fluoranthene	ug/kg	<2.5	8.4	05/09/18 11:41	
Chrysene	ug/kg	<3.4	11.2	05/09/18 11:41	
Dibenz(a,h)anthracene	ug/kg	<2.2	7.5	05/09/18 11:41	
Fluoranthene	ug/kg	<5.2	17.4	05/09/18 11:41	
Fluorene	ug/kg	<4.1	13.8	05/09/18 11:41	
Indeno(1,2,3-cd)pyrene	ug/kg	<2.2	7.3	05/09/18 11:41	
Naphthalene	ug/kg	<8.4	28.1	05/09/18 11:41	
Phenanthrene	ug/kg	<11.7	38.8	05/09/18 11:41	
Pyrene	ug/kg	<4.5	15.0	05/09/18 11:41	
2-Fluorobiphenyl (S)	%	71	10-115	05/09/18 11:41	
Terphenyl-d14 (S)	%	85	10-121	05/09/18 11:41	

LABORATORY CONTROL SAMPLE: 1686647

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1-Methylnaphthalene	ug/kg	333	262	79	48-99	
2-Methylnaphthalene	ug/kg	333	255	76	47-91	
Acenaphthene	ug/kg	333	253	76	53-98	
Acenaphthylene	ug/kg	333	250	75	52-96	
Anthracene	ug/kg	333	272	81	55-105	
Benzo(a)anthracene	ug/kg	333	275	83	55-98	
Benzo(a)pyrene	ug/kg	333	271	81	57-100	
Benzo(b)fluoranthene	ug/kg	333	283	85	57-103	
Benzo(g,h,i)perylene	ug/kg	333	251	75	39-103	
Benzo(k)fluoranthene	ug/kg	333	274	82	53-111	
Chrysene	ug/kg	333	284	85	55-102	
Dibenz(a,h)anthracene	ug/kg	333	263	79	47-97	
Fluoranthene	ug/kg	333	278	84	51-118	
Fluorene	ug/kg	333	254	76	55-99	
Indeno(1,2,3-cd)pyrene	ug/kg	333	270	81	47-108	
Naphthalene	ug/kg	333	258	78	48-95	

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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QUALITY CONTROL DATA

Project: 6962 BURNETT OIL

Pace Project No.: 40168662

LABORATORY CONTROL SAMPLE: 1686647

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Phenanthrene	ug/kg	333	276	83	55-105	
Pyrene	ug/kg	333	269	81	58-106	
2-Fluorobiphenyl (S)	%			75	10-115	
Terphenyl-d14 (S)	%			93	10-121	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1686648 1686649

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		40168629013 Result	Spike Conc.	Spike Conc.	Conc.								
1-Methylnaphthalene	ug/kg	<4.3	352	354	354	260	256	73	72	41-99	2	30	
2-Methylnaphthalene	ug/kg	<5.3	352	354	354	254	240	71	67	41-91	6	27	
Acenaphthene	ug/kg	<4.1	352	354	354	236	216	67	61	46-98	9	25	
Acenaphthylene	ug/kg	<3.5	352	354	354	233	208	66	59	43-96	11	26	
Anthracene	ug/kg	<6.0	352	354	354	250	227	71	64	44-105	10	29	
Benzo(a)anthracene	ug/kg	4.7J	352	354	354	263	243	73	67	39-98	8	29	
Benzo(a)pyrene	ug/kg	4.7J	352	354	354	264	245	74	68	38-100	8	35	
Benzo(b)fluoranthene	ug/kg	4.4J	352	354	354	281	245	79	68	32-105	14	34	
Benzo(g,h,i)perylene	ug/kg	2.4J	352	354	354	157	145	44	40	12-103	8	35	
Benzo(k)fluoranthene	ug/kg	4.1J	352	354	354	264	265	74	74	30-115	0	37	
Chrysene	ug/kg	6.5J	352	354	354	278	256	77	71	46-102	8	27	
Dibenz(a,h)anthracene	ug/kg	<2.4	352	354	354	205	182	58	51	32-97	11	35	
Fluoranthene	ug/kg	8.3J	352	354	354	283	263	78	72	32-118	7	37	
Fluorene	ug/kg	<4.4	352	354	354	236	210	67	59	44-99	12	28	
Indeno(1,2,3-cd)pyrene	ug/kg	<2.3	352	354	354	203	182	57	51	20-111	11	33	
Naphthalene	ug/kg	<8.9	352	354	354	243	223	69	63	39-97	8	30	
Phenanthrene	ug/kg	<12.3	352	354	354	271	251	76	70	34-110	8	39	
Pyrene	ug/kg	9.3J	352	354	354	292	261	80	71	37-109	11	33	
2-Fluorobiphenyl (S)	%							67	61	10-115			
Terphenyl-d14 (S)	%							84	73	10-121			

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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QUALITY CONTROL DATA

Project: 6962 BURNETT OIL

Pace Project No.: 40168662

QC Batch:	289384	Analysis Method:	ASTM D2974-87
QC Batch Method:	ASTM D2974-87	Analysis Description:	Dry Weight/Percent Moisture
Associated Lab Samples:	40168662001, 40168662002, 40168662003, 40168662004, 40168662005, 40168662006, 40168662007, 40168662008, 40168662009, 40168662010, 40168662011, 40168662012		

SAMPLE DUPLICATE: 1693680

Parameter	Units	40168656045 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	9.3	9.5	2	10	

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REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: 6962 BURNETT OIL

Pace Project No.: 40168662

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

- | | |
|----|--|
| D3 | Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference. |
| L2 | Analyte recovery in the laboratory control sample (LCS) was below QC limits. Results may be biased low. |
| R1 | RPD value was outside control limits. |
| W | Non-detect results are reported on a wet weight basis. |

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 6962 BURNETT OIL
Pace Project No.: 40168662

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40168662001	GP11 @ 2-4	TPH GRO/PVOC WI ext.	288552	WI MOD GRO	288583
40168662002	GP11 @ 10-12	TPH GRO/PVOC WI ext.	288552	WI MOD GRO	288583
40168662003	GP12 @ 2-4	TPH GRO/PVOC WI ext.	288552	WI MOD GRO	288583
40168662004	GP12 @ 10-12	TPH GRO/PVOC WI ext.	288552	WI MOD GRO	288583
40168662005	GP13 @ 2-4	TPH GRO/PVOC WI ext.	288552	WI MOD GRO	288583
40168662006	GP13 @ 10-12	TPH GRO/PVOC WI ext.	288552	WI MOD GRO	288583
40168662007	GP14 @ 2-4	TPH GRO/PVOC WI ext.	288552	WI MOD GRO	288583
40168662008	GP14 @ 10-12	TPH GRO/PVOC WI ext.	288552	WI MOD GRO	288583
40168662009	GP15 @ 2-4	TPH GRO/PVOC WI ext.	288552	WI MOD GRO	288583
40168662010	GP15 @ 10-12	TPH GRO/PVOC WI ext.	288552	WI MOD GRO	288583
40168662011	COMPOSITE 1	EPA 3050	288666	EPA 6010	288940
40168662012	COMPOSITE 2	EPA 3050	288666	EPA 6010	288940
40168662011	COMPOSITE 1	EPA 7471	288898	EPA 7471	288970
40168662012	COMPOSITE 2	EPA 7471	288898	EPA 7471	288970
40168662011	COMPOSITE 1	EPA 3546	288270	EPA 8270 by SIM	288296
40168662012	COMPOSITE 2	EPA 3546	288270	EPA 8270 by SIM	288296
40168662011	COMPOSITE 1	EPA 5035/5030B	288300	EPA 8260	288301
40168662012	COMPOSITE 2	EPA 5035/5030B	288300	EPA 8260	288301
40168662001	GP11 @ 2-4	ASTM D2974-87	289384		
40168662002	GP11 @ 10-12	ASTM D2974-87	289384		
40168662003	GP12 @ 2-4	ASTM D2974-87	289384		
40168662004	GP12 @ 10-12	ASTM D2974-87	289384		
40168662005	GP13 @ 2-4	ASTM D2974-87	289384		
40168662006	GP13 @ 10-12	ASTM D2974-87	289384		
40168662007	GP14 @ 2-4	ASTM D2974-87	289384		
40168662008	GP14 @ 10-12	ASTM D2974-87	289384		
40168662009	GP15 @ 2-4	ASTM D2974-87	289384		
40168662010	GP15 @ 10-12	ASTM D2974-87	289384		
40168662011	COMPOSITE 1	ASTM D2974-87	289384		
40168662012	COMPOSITE 2	ASTM D2974-87	289384		

REPORT OF LABORATORY ANALYSIS

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1241 Bellevue Street, Green Bay, WI 54302

Document Name:
Sample Condition Upon Receipt (SCUR)

Document No.:
F-GB-C-031-Rev.07

Document Revised: 25Apr2018

Issuing Authority:
Pace Green Bay Quality Office

Sample Condition Upon Receipt Form (SCUR)

Project #:

Client Name:

RED

Courier: CS Logistics Fed Ex Speedee UPS **Waltco**
 Client Pace Other: _____

AFFIX WORKORDER LABEL HERE

Tracking #: 1712685-1

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

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

Packing Material: Bubble Wrap Bubble Bags None Other _____

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

Cooler Temperature Uncorr: ROD / Corr: _____

Temp Blank Present: yes no

Biological Tissue is Frozen: yes no

Person examining contents:

Date: 5/8/18
Initials: SSM

Temp should be above freezing to 6°C.
Biota Samples may be received at ≤ 0°C.

Chain of Custody Present:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	1. <u>dry weight volume from previous receipt project</u>
Chain of Custody Filled Out:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	2. <u>SSM 5/8/18</u>
Chain of Custody Relinquished:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	3.
Sampler Name & Signature on COC:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	4.
Samples Arrived within Hold Time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	5.
- VOA Samples frozen upon receipt	<input type="checkbox"/> Yes <input type="checkbox"/> No	Date/Time:
Short Hold Time Analysis (<72hr):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	6.
Rush Turn Around Time Requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	7. <u>SSM 5/8/18</u>
Sufficient Volume:		8. <u>NO volume received</u> <u>F011-012 All Received 5-7-18 SSM 5/8/18</u>
For Analysis: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	MS/MSD: <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Correct Containers Used:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	9.
-Pace Containers Used:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	
-Pace IR Containers Used:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Containers Intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	10.
Filtered volume received for Dissolved tests	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.
Sample Labels match COC:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	12. <u>No dates out collected "12:00" CO3-ID" GP 12 02</u> <u>SSM 5/8/18</u>
-Includes date/time/ID/Analysis Matrix: <u>S</u>		
Trip Blank Present:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	13.
Trip Blank Custody Seals Present	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Pace Trip Blank Lot # (if purchased):		

Client Notification/ Resolution:

If checked, see attached form for additional comments

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: _____

Date: _____

 1241 Bellevue Street, Green Bay, WI 54302	Document Name: Sample Condition Upon Receipt (SCUR)	Document Revised: 25Apr2018
	Document No.: F-GB-C-031-Rev.07	Issuing Authority: Pace Green Bay Quality Office

Sample Condition Upon Receipt Form (SCUR)

Project #:

Client Name: REI

WO#: **40168662**



Courier: CS Logistics Fed Ex Speedee UPS Waltco
 Client Pace Other: _____

Tracking #: 1709827

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

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

Packing Material: Bubble Wrap Bubble Bags None Other

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

Cooler Temperature Uncorr: _____ /Corr: R01

Temp Blank Present: yes no Biological Tissue is Frozen: yes no

Person examining contents: SP/KA
 Date: 5/7/18
 Initials: SP/KA

Temp should be above freezing to 6°C.
 Biota Samples may be received at ≤ 0°C.

Chain of Custody Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody Filled Out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Chain of Custody Relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler Name & Signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples Arrived within Hold Time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	5.
- VOA Samples frozen upon receipt	<input type="checkbox"/> Yes <input type="checkbox"/> No	Date/Time: _____
Short Hold Time Analysis (<72hr):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	6.
Rush Turn Around Time Requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	7.
Sufficient Volume:		8.
For Analysis: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No MS/MSD: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A		
Correct Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	9.
-Pace Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
-Pace IR Containers Used:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Containers Intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	10.
Filtered volume received for Dissolved tests	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.
Sample Labels match COC:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	12. <i>see attached form No dry weight volume 002 & no time 5/7/18 SP/KA</i>
-Includes date/time/ID/Analysis Matrix:		
Trip Blank Present:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	13.
Trip Blank Custody Seals Present	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Pace Trip Blank Lot # (if purchased):		

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

Person Contacted: _____ Date/Time: _____

Comments/ Resolution:
Received 5/4/18. PM emailed client regarding missing dry weights.
Missing volume to be received from client 5/7/18 on 5-8-18 per Dave Larson 5-7-18

Project Manager Review: [Signature]

Date: 5-7-18
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