SITE INVESTIGATION REPORT

Fraser Shipyard Punch Shed Addition
1 Clough Avenue, Superior, WI

BRRTs No. 02-16-562599
ET Project No. 14-1004

January 19, 2016

Prepared by:
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Duluth, MN 55807

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1.0 EXECUTIVE SUMMARY

Environmental Troubleshooters, Inc. (ET) has completed the site investigation for the Punch Shed Addition (BRRTs No. 02-16-562599) at the Fraser Shipyard in Superior, Wisconsin. Contamination was observed at the site during drilling of a geotechnical boring and test pits during the engineering design phase of the project.

The site investigation included four test pits and 11 push probe soil borings. Soil and groundwater samples were analyzed to determine the nature, degree and extent of contamination. The following is a summary of findings and recommendations:

- Site geology consists predominantly sand and gravel fill from surface to depths of 4 to 11 feet, overlying 2 to 4 feet of intermittent peat, clay and silt lenses, overlying clay to 28 feet below ground surface (bgs).
- Perched groundwater was encountered intermittently at approximately four feet bgs within fill overlying the clay unit.
- Contamination at the site consists of predominantly polynuclear aromatic hydrocarbon (PAHs) with a high naphthalene fraction and lower levels of volatile organic compounds (VOCs).
- PAHs exceed NR720 industrial residual contaminant levels (I-RCLs) in soil and enforcement standards (ESs) in groundwater.
- The site is a gated, century old shipyard that regularly uses hazardous substances for maintenance and repair of large ore boats and other vessels. Residual soil contamination beneath the road and building does not pose a significant increased exposure risk to site personnel. There are no on-site wells or drinking well receptors within 1,000 feet of the site.
- Soil and groundwater contamination have been adequately delineated to request conditional closure with GIS registration and a cover maintenance plan.
- Approximately 800 cubic yards were excavated during construction to place and compact geotechnically suitable materials for the construction of the building. The excavation represents a significant contaminant mass removal. The contaminated soils were profiled and hauled under manifest to the VONCO V landfill in Duluth, Minnesota for disposal. As excavation was not implemented as a remedial effort to remove contaminated soils, confirmation sampling was not conducted.

"I, _Tom Muhich_, 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. Adm. Code, and that, to the best of my knowledge, all of 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."

Tom Muhich, PG, CHMM (Reviewer)

January 19, 2016
Date

"I, _John McCarthy_, 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 of 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."

John McCarthy, CHMM (Author) _January 19, 2016_____
Project Manager Date
jmccarthy@etsmn.com

2.0 INTRODUCTION/SITE DESCRIPTION

Fraser Shipyard (FSI) is located at 1 Clough Avenue in Superior, Wisconsin. The 60-acre shipyard includes portions of the southern half of Section 11 and northern half of Section 14, T49N, R14W, in Douglas County, Wisconsin. The specific historic release area is located in the SE ¼ of the SW ¼ of Section 11, T49N, R14W (WTM 360353, 697977) . Figure 1 depicts the site location on a topographic map. Figure 2 depicts the entire shipyard on an aerial photograph, including the Punch Shed Building Addition and historic areas of concerns (AOCs). Figure 3 is a site plan depicting the punch shed addition AOC.

In 2014, FSI was planning for construction of a 5,500 square foot addition to the Punch Shed Building. In anticipation of construction, FSI excavated test pits and a geotechnical boring in the footprint of the building. During these activities, petroleum contamination was observed in site soils. FSI contracted ET to assess the contamination. ET performed three sampling events under initial and supplemental site investigation work plans (SIWP). This site investigation (SI) report has been prepared in accordance with NR716.

The purpose of the SI was to define and characterize the contaminants, hydrogeology and receptors at the site. The SI was conducted on behalf of: Fraser Shipyards Inc., 1 Clough Ave., Superior, WI 54880. The FSI contact is Mr. Tom Curelli at (715) 394-7787; tcurelli@frasershipyards.com .

3.0 CHRONOLOGY OF ENVIRONMENTAL ACTIVITIES

- October 16, 2014: Geotechnical boring contractor (EPC Engineering) reports hydrocarbon odors in boring drilled for building engineering design.
- October 27, 2014: ET oversees four test pits within planned building addition footprint. The objectives were to determine the nature of contaminants observed during geotechnical sampling, assess whether clean up would be required prior to construction and to profile encountered soils for off-site disposal, as necessary.
- February 5, 2015: ET submits the Site Investigation Work Plan (SIWP) to delineate the degree and extent of contaminants detected in the October 2014 test pit sampling.

- March 24, 2015: ET implements SIWP, including seven push probe borings with the collection of soil and groundwater samples. Delineation incomplete.
- May 8, 2015: ET submits Supplemental SIWP (incorrectly dated February 5, 2015) to complete the delineation not achieved in the first round of soil borings.
- June 29, 2015: ET implements supplemental SIWP and completes adequate delineation to request closure with institutional and engineering controls.

4.0 GEOLOGY AND HYDROGEOLOGY

EPC was hired to drill one geotechnical soil boring in the northeast corner of the punch shed addition footprint to provide design engineers with data for structural building design. EPC's boring (SP-14-1) documents 4 feet of sand, underlain by 3.5 feet of clay, then 1.5 feet of peat, then by 19 feet of clay, followed interbedded sands and clays to a depth of 61 feet. Bedrock was not encountered during drilling. "Petroleum-like" odors were observed by EPC at a depth of 2 – 4 feet in the boring. Groundwater stabilized in the peat lens at 8.5 feet below grade surface (bgs) during drilling, but wet conditions were also noted on top of the clay lens at a depth of 4 feet bgs. A copy of the EPC report, which also discusses the regional geologic setting is included as Attachment 1. Regionally groundwater flows toward the St. Louis River, although seasonal river fluctuations and seiche effects from Lake Superior often counteract the flow leading to unpredictable contaminant distribution patterns. The perched groundwater at the site is not used as a water supply.

5.0 CONTAMINANT RECEPTORS

The nearest surface water body is Howard Bay of the St. Louis River, located 125 feet NNE of the building addition. No other sensitive ecosystems or habitats, and no federally listed endangered species have been identified in proximity to the spill site.

According to FSI, there are no known potable or industrial extraction wells located on site. According to the Wisconsin Department of Agriculture, Trade and Consumer Protection (DATCP) well constructors database there are no wells within 1,200 feet of the spill area.

The Punch Shed Building Addition spill site lies near the center of the 60-acre Fraser Shipyard which lies within an industrial district of Superior, Wisconsin. The nearest residence is approximately 1,000 feet from the spill area and is up-gradient. Based on the distance from the source area, ET does not anticipate conducting a vapor intrusion investigation.

6.0 SOIL & GROUNDWATER CONTAMINANT INVESTIGATION

The purpose of the soil contaminant investigation was to delineate the source, nature, degree, distribution, and extent of petroleum hydrocarbon contamination in the vicinity of the Punch Shed Addition.

ET advanced four test pits (TP-1 through TP-4) and 11 push probe soil borings (GP-1 through GP-11) in the area of the building addition. Figure 4 depicts the geotechnical

boring, test pit and push probe locations relative to the footprint of the new building addition. Figures 4 and 5 depict the soil I-RCL exceedances for benzo(a)pyrene equivalents [B(a)P] and naphthalene, respectively. Figures 6 and 7 depict the groundwater preventive action limit (PAL) and enforcement standard (ES) exceedances for B(a)P and naphthalene, respectively. Figures 8, 9a and 9b depict the cross-section transects, cross-sections A-A' and B-B', respectively. Table 1 summarizes the photoionization detector (PID) readings recorded during boring completion. Tables 2 and 3 summarize the soil and groundwater analytical results, respectively. Appendix A includes copies of the geotechnical, test pit and soil push probe boring logs. Appendix B includes copies of the laboratory analytical reports. A summary of the investigative findings is presented below.

Test Pits

Test Pit soil samples were analyzed for gasoline range organics (GRO), Resource Conservation and Recovery Act (RCRA) metals, PAHs and VOCs. Groundwater samples were not collected from the test pits for laboratory analysis. Soil results include:

- GRO concentrations ranged from 72.1 to 837 milligrams per kilogram (mg/kg). There is not an established I-RCL for GRO.
- RCRA metals concentrations were all below I-RCLs, except arsenic in test pits TP-1 and TP-3 which yielded 8.5 and 10.6 mg/kg, respectively, when analyzed via EPA method 6020. All arsenic EPA 6010 concentrations and test pits TP-2 and TP-4 were below the I-RCL of 8 mg/kg. Based on the limited I-RCL exceedances, no additional RCRA metals assessment was recommended. This recommendation was agreed to by Ms. Erin Endsley of the WDNR via e-mail on February 3, 2015.
- VOC concentrations were all below I-RCLs, except 1,2,3-trichloropropane (TCP) which is a solvent for paint and varnish removal and a cleaning and degreasing agent. The 1,2,3-TCP was only detected in test pit TP-1 and the source is unknown. Although below the I-RCLs in the footprint of the Punch Shed Addition, petroleum-related VOCs (i.e. benzene, toluene, ethylbenzene, xylenes, 1,2,4- and 1,3,5-trimethylbenzene) and chlorinated solvent related VOCs (i.e. tetrachloroethylene [PCE], trichloroethylene [TCE], and cis-1,2-dichloroethylene [DCE]) were also detected suggesting a proximal but unidentified source for these compounds. Additional assessment to determine the apparent up-gradient source for these VOCs was recommended in the SIWP.
- PAH concentrations exceeded the I-RCLs in test pits TP-1, TP-2 and TP-4. During excavation of test pit TP-4, a 1/8th inch thick layer of degraded, non-aqueous phase liquid (NAPL) was observed. The soil sample from TP-4 yielded I-RCL exceedances for benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, and dibenzo(a,h)anthracene. Test pits TP-1 and TP-2 also yielded B(a)P I-RCL exceedances. As with the VOCs noted above, there was no known source for the PAHs and additional assessment was recommended in the SIWP to attempt to delineate the extent and identify the source.
- Two composite samples SP-1 (composited from TP-3 and TP-4) and SP-2 (composited from TP-1 and TP-2) were also analyzed for VOCs, toxicity characteristic leaching procedure (TCLP) metals, diesel range organics (DRO) and polychlorinated biphenyls (PCBs) for characterization profiling of the soil for

disposal at a landfill during building footing construction. Samples documented that soils planned for excavation and permitted landfill disposal did not exceed characteristically hazardous criteria. Approximately 800 tons of contaminated soils were excavated and hauled under manifest to VONCO V in Duluth, MN. Figures 4 and 5 depict areas of excavation relative to B(a)P and naphthalene soil contamination extents. Table 4 summarizes the soil stockpile laboratory results. Copies of manifests and disposal tickets are included in Appendix C.

Initial Push Probe Soil Borings

In March 2015, ET oversaw the advancement of seven push probe soil borings in accordance with the SIWP dated February 5, 2015. Soil and groundwater samples were analyzed for VOCs and PAHs.

- Multiple PAH compounds were detected in soil above the I-RCLs and in groundwater above the PALs and ESs. The PAHs were adequately delineated in the northwest, north and northeast directions, but additional delineation was recommended in the southwest, south and southeast directions.
- As discussed in the initial SIWP, RCRA metals were adequately delineated during the test pit sampling event, so no further analyses were performed.
- The second sampling event adequately defined the extent of VOCs, except naphthalene, which was to continue to be investigated as a PAH. No additional VOC sampling was recommended.

Supplemental Push Probe Borings

In June 2015, ET oversaw the advancement of four push probe soil borings in accordance with the Supplemental SIWP submitted May 8, 2015 (though misdated February 5, 2015 as the initial SIWP). Soil and groundwater samples were analyzed for PAHs.

- Multiple PAH compounds were detected in soil above the I-RCLs and in groundwater above the PALs and ESs. PAHs have been adequately delineated and no further investigation is recommended.

7.0 CONCLUSIONS/JUSTIFICATION FOR CLOSURE

- Although the specific sources for VOC and PAH contamination at the site was not identified, delineation has been adequately achieved to request conditional site closure with institutional and engineering controls. The absence of an identifiable source for a spill at a shipyard that has been operating for more than 100 years is not uncommon.
- Site geology consists predominantly of sand and gravel fill overlying an extensive clay till unit.
- Groundwater contamination in excess of the NR140 ES is limited to the site. The impacted shallow groundwater appears to be perched.
- Based on a review of available potable well records, no domestic or municipal wells are located within 1,000 feet of the site.

8.0 LIST OF PREVIOUS REPORTS

- Site Investigation Work Plan. Environmental Troubleshooters, February 5, 2015.
- Supplemental Site Investigation Work Plan. Environmental Troubleshooters, February 5, 2015 (should have been dated May 8, 2015).

9.0 REFERENCES

- Subsurface Soil Exploration Report (EPC Engineering & Testing, October 16, 2014).

10.0 CERTIFICATION / SIGNATURES

This Site Investigation Report has been prepared in accordance with generally accepted engineering and hydrogeologic principles and practices of this time and location. Interpretations and recommendations in this report are based on available data, and additional data may result in revised interpretations and recommendations. This report is intended for use by the client and ET for its intended purpose only at the time of preparation. The report may be unsuitable for other uses, and reliance on its contents by anyone other than the client is done at the sole risk of the user. ET accepts no responsibility for application or interpretation of the results by anyone other than the client. Pursuant to Section 716.15(2)(b), required signatures and related certifications are included in Section 1.0.

FIGURES

Legend

Approximate Property Line

N

2,000 1,000 0 2,000 4,000 Feet

SCALE: 1/24000

1 inch = 2,000 feet

Source: USGS Duluth & Superior 7 1/2" Quadrangle Map

FIGURE 1

Site Location

RJS Fraser Shipyard
Superior, Wisconsin

PROJECT #: 14-1004	
DATE: 11/20/2014	**CREATED BY:** CGIS
FILE NAME:	//GIS/2014 Projects/14-1004 /Projects/Figure1

Legend

- Approximate Property Line
- AOC
- Railroads

500 250 0 500 1,000 Feet

SCALE: 1/6000

1 inch = 500 feet

N

FIGURE 2

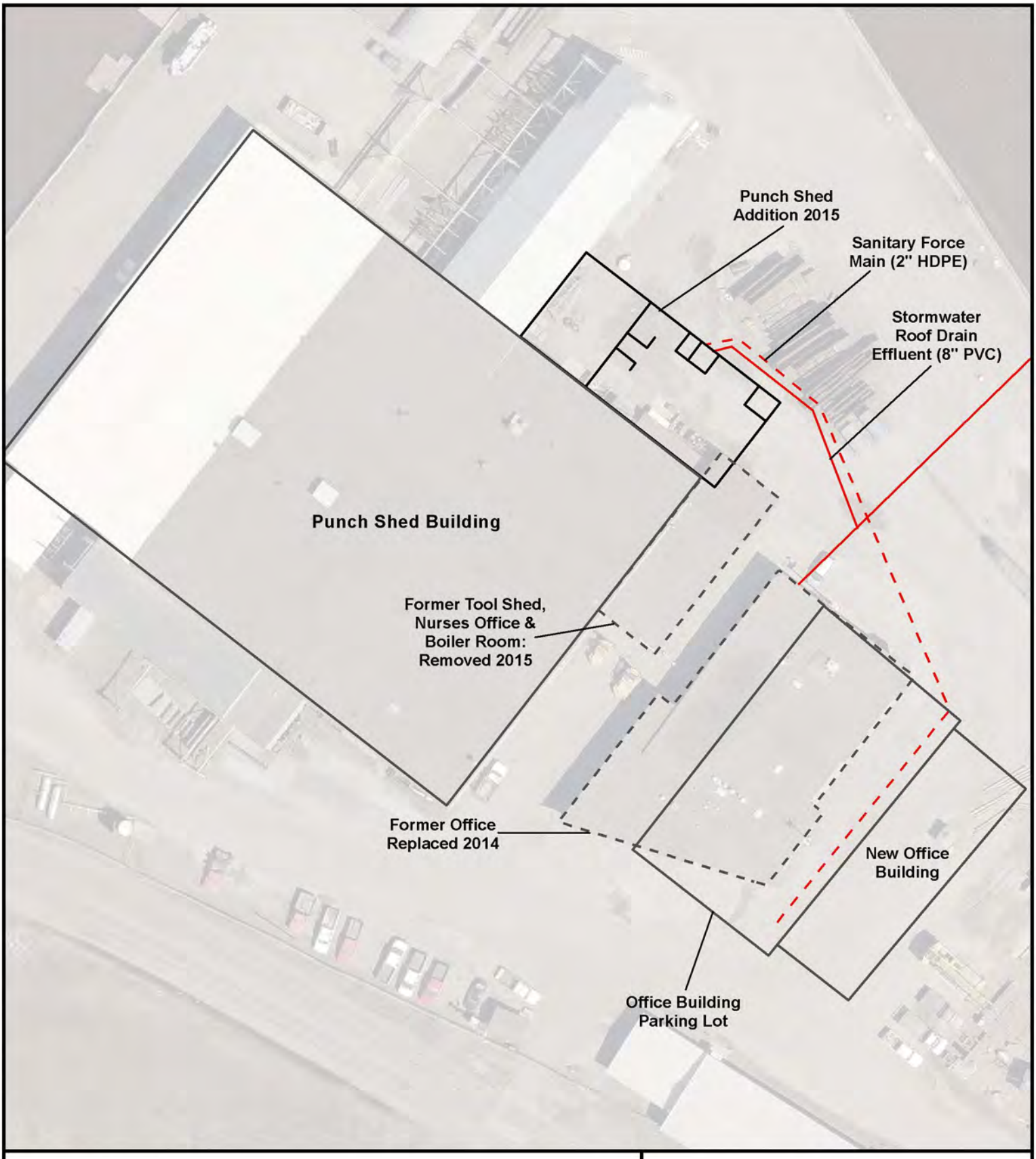
Property Site Map

RJS Fraser Shipyard
Superior, Wisconsin

PROJECT #: 14-1004

DATE: 01/14/2016 CGIS

FILE NAME: //GIS/2014 Projects/14-1004 /Projects/Figure2



Legend

- – – Former Building Footprint
- —— Building Footprint

N

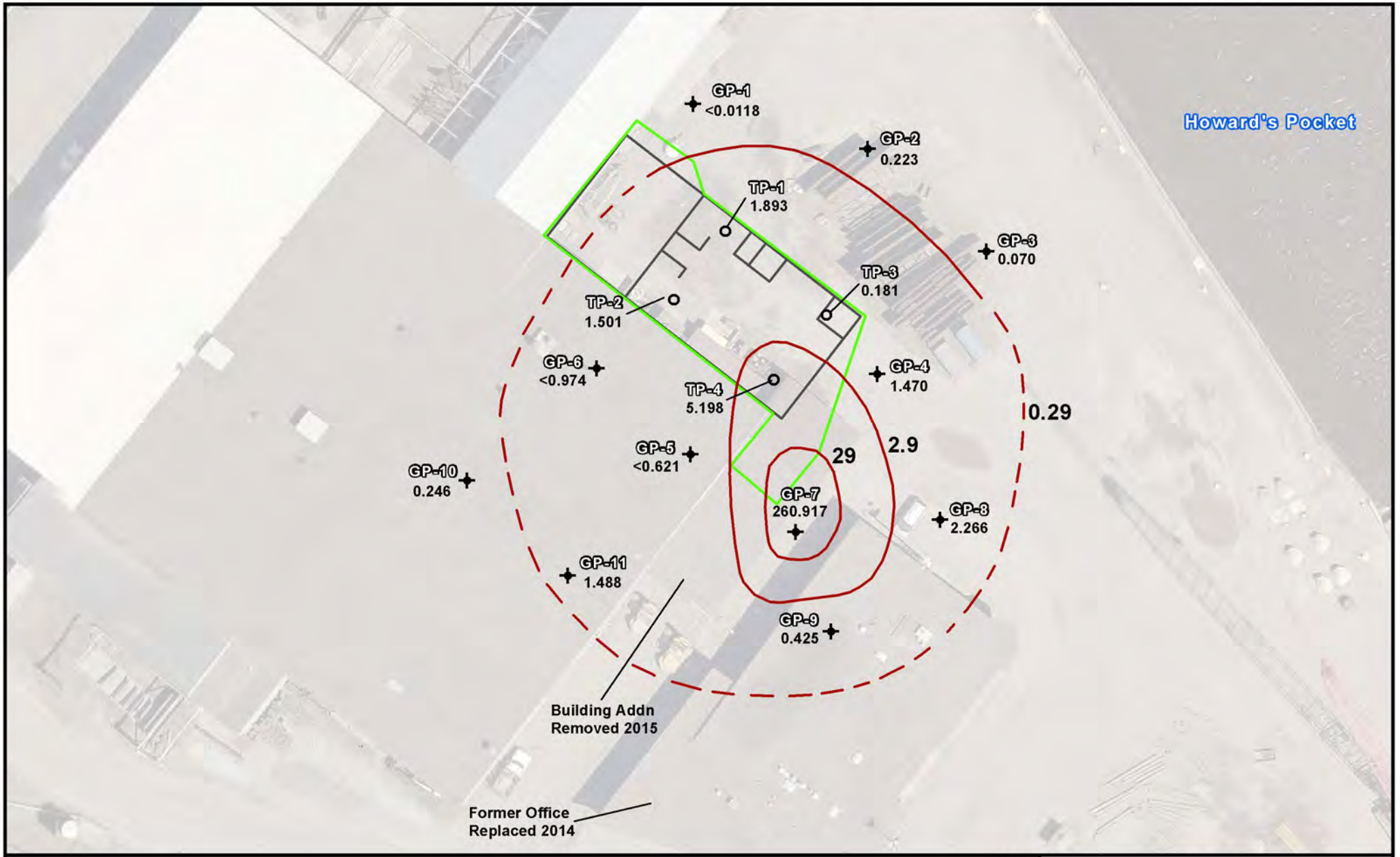
0 30 60 120 Feet

SCALE: 1:720
1 inch = 60 feet
Source: St. Louis County Aerial Imagery, circa Spring 2013

FIGURE 3
Site Plan

RJS Fraser Shipyard
Superior, Wisconsin

PROJECT #: 14-1004	
DATE: 01/14/2016	**CREATED BY:** CGIS
FILE NAME:	//GIS/2014 Projects/14-1004 /Projects/Figure3



Legend

- Geoprobe Borings
- Excavation Test Pits
- Construction Related Excavation Extent

B(a)P Equivalents in Soil RCL-I = 0.29

50 25 0 50 100 Feet

SCALE: 1/600
1 inch = 50 feet

Source: St. Louis County Aerial Imagery, circa Spring 2013

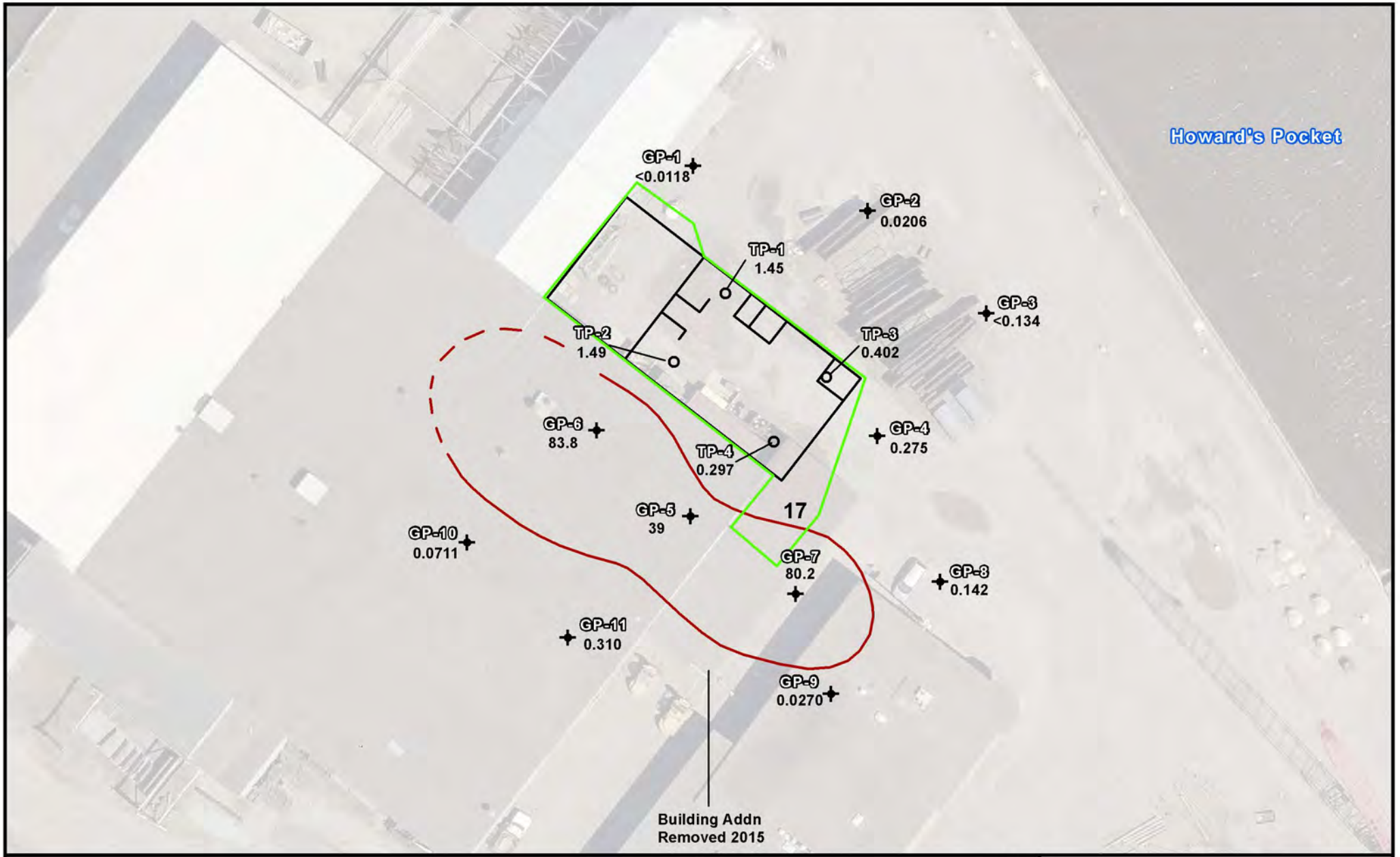
N

FIGURE 4

Benzo(a)Pyrene Equivalents in Soil

RJS Fraser Shipyard
Superior, Wisconsin

PROJECT #: 14-1004	
DATE: 01/14/2016	CGIS
FILE NAME: //GIS/2014 Projects/14-1004 /Projects/Figure4	



Legend

- Geoprobe Borings
- Excavation Test Pits
- Construction Related Excavation Extent

Naphthalene in Soil
RCL-I = 17 mg/kg

50 25 0 50 100 Feet

SCALE: 1/600
1 inch = 50 feet

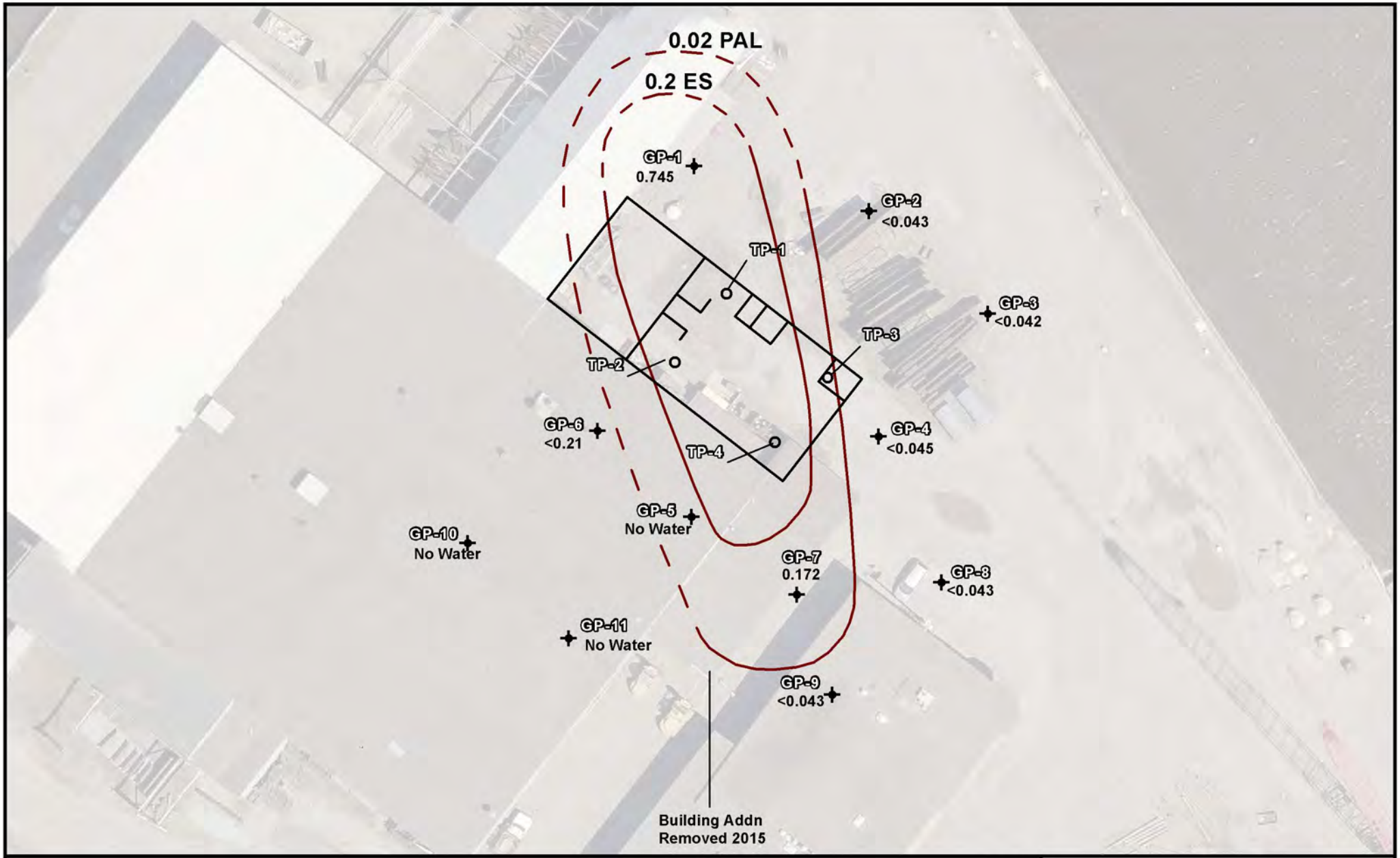
Source: St. Louis County Aerial Imagery, circa Spring 2013

N

FIGURE 5
Naphthalene in Soil

RJS Fraser Shipyard
Superior, Wisconsin

PROJECT #: 14-1004	
DATE: 01/14/2016	CGIS
FILE NAME: //GIS/2014 Projects/14-1004 /Projects/Figure5	



Legend

- Geoprobe Borings
- Excavation Test Pits

ES Enforcement Standard - 0.2 µg/L

PAL Preventative Action Limit - 0.2 µg/L

50 25 0 50 100 Feet

SCALE: 1/600

1 inch = 50 feet

Source: St. Louis County Aerial Imagery, circa Spring 2013

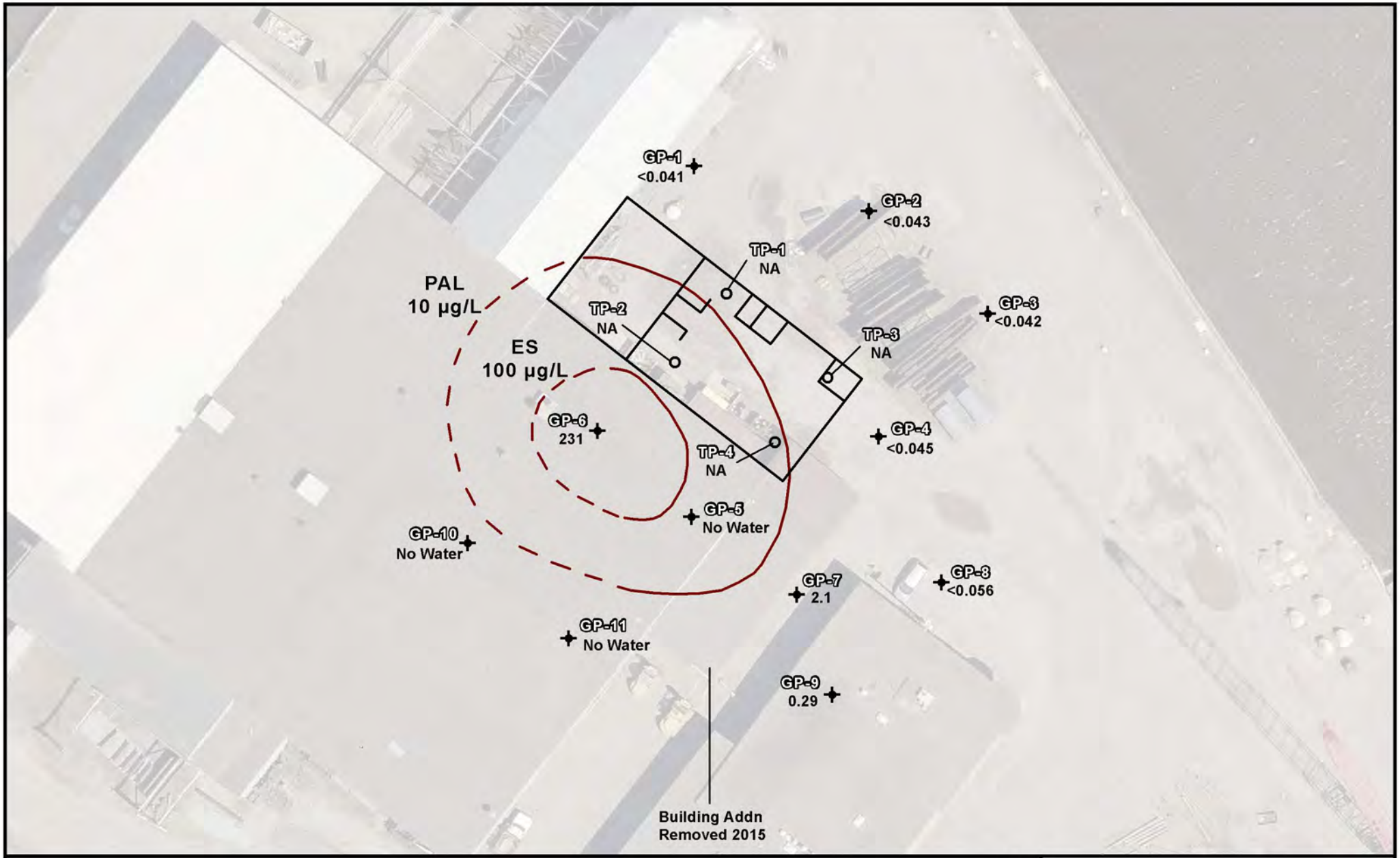
N

FIGURE 6

Benzo(a)Pyrene Equivalents in Groundwater

RJS Fraser Shipyard
Superior, Wisconsin

PROJECT #: 14-1004	
DATE: 12/29/2015	CGIS
FILE NAME: //GIS/2014 Projects/14-1004 /Projects/Figure6	



Legend

- Geoprobe Borings
- Excavation Test Pits

ES Enforcement Standard - 100 µg/L

PAL Preventative Action Limit - 10 µg/L

50 25 0 50 100 Feet

SCALE: 1/600

1 inch = 50 feet

Source: St. Louis County Aerial Imagery, circa Spring 2013

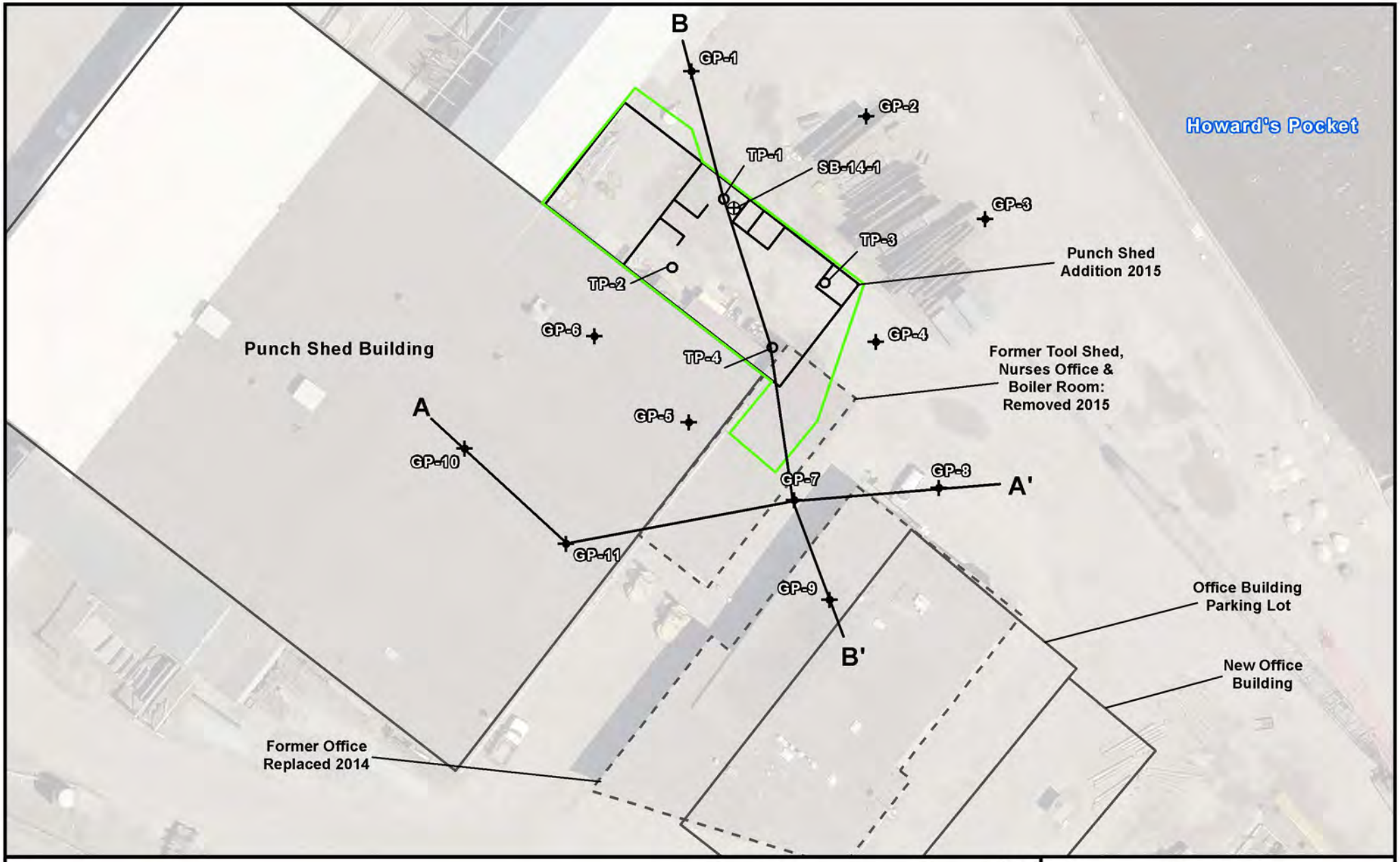
N

FIGURE 7

Naphthalene in Groundwater

RJS Fraser Shipyard
Superior, Wisconsin

PROJECT #: 14-1004	
DATE: 12/29/2015	CGIS
FILE NAME: //GIS/2014 Projects/14-1004 /Projects/Figure7	



Legend

- Geoprobe Borings
- Excavation Test Pits
- Construction Related Excavation Extent

50 25 0 50 100 Feet

SCALE: 1/600

1 inch = 50 feet

Source: St. Louis County Aerial Imagery, circa Spring 2013

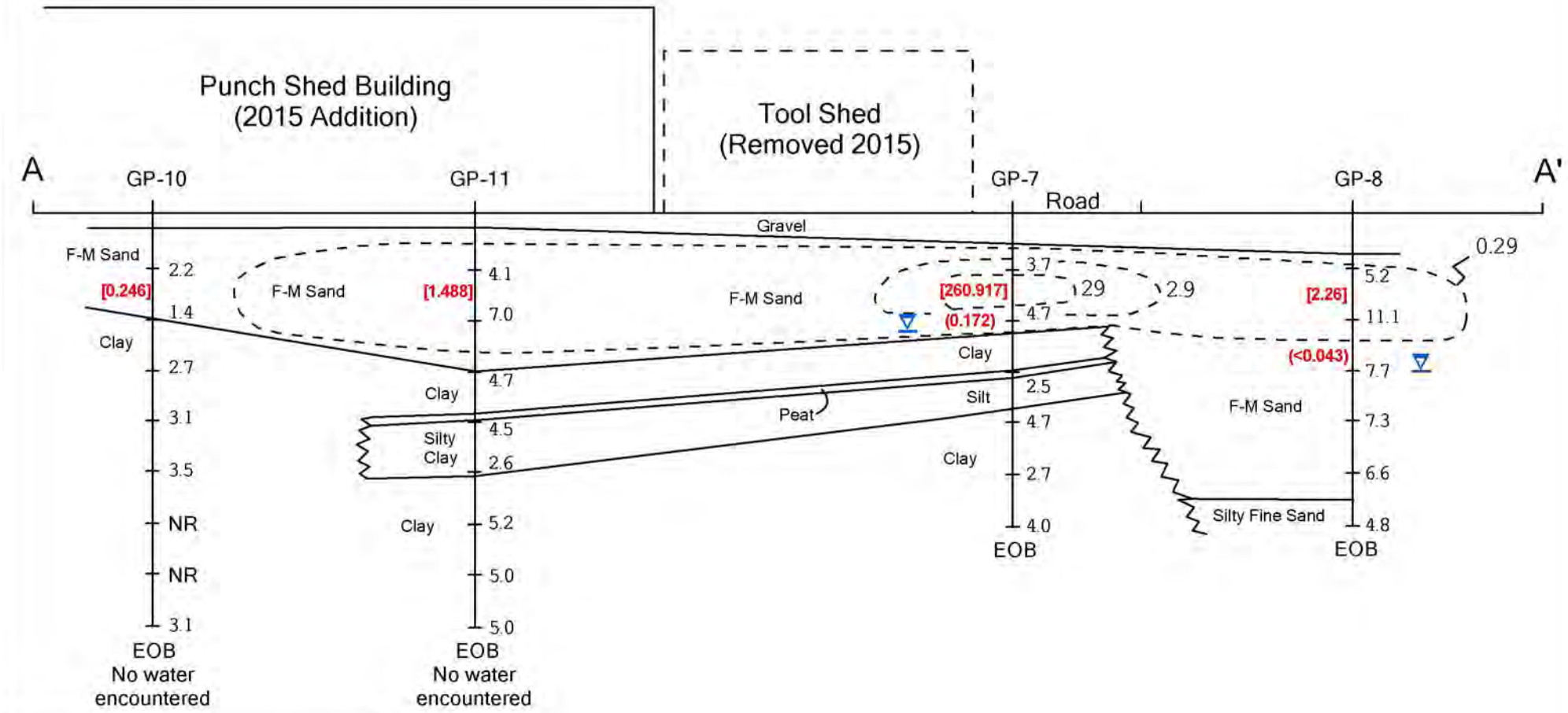
N

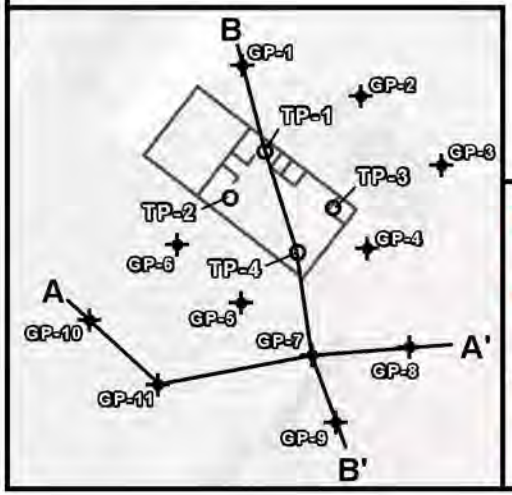
FIGURE 8

Cross Section Transects

RJS Fraser Shipyard
Superior, Wisconsin

PROJECT #: 14-1004	
DATE: 01/14/2016	CGIS
FILE NAME: //GIS/2014 Projects/14-1004 /Projects/Figure8	





[0.246] Benzo(a)Pyrene - B(a)P equivalents in soil - mg/kg

(0.172) B(a)P equivalents in groundwater - µg/kg

0.29 B(a)P equivalents in soil Industrial RCL isopleths

Water table depth

NR No Recovery

2.2 PID Reading

EOB End of boring

Vertical Scale 1" = 5'

Horizontal Scale 1" = 20'

FIGURE 9A

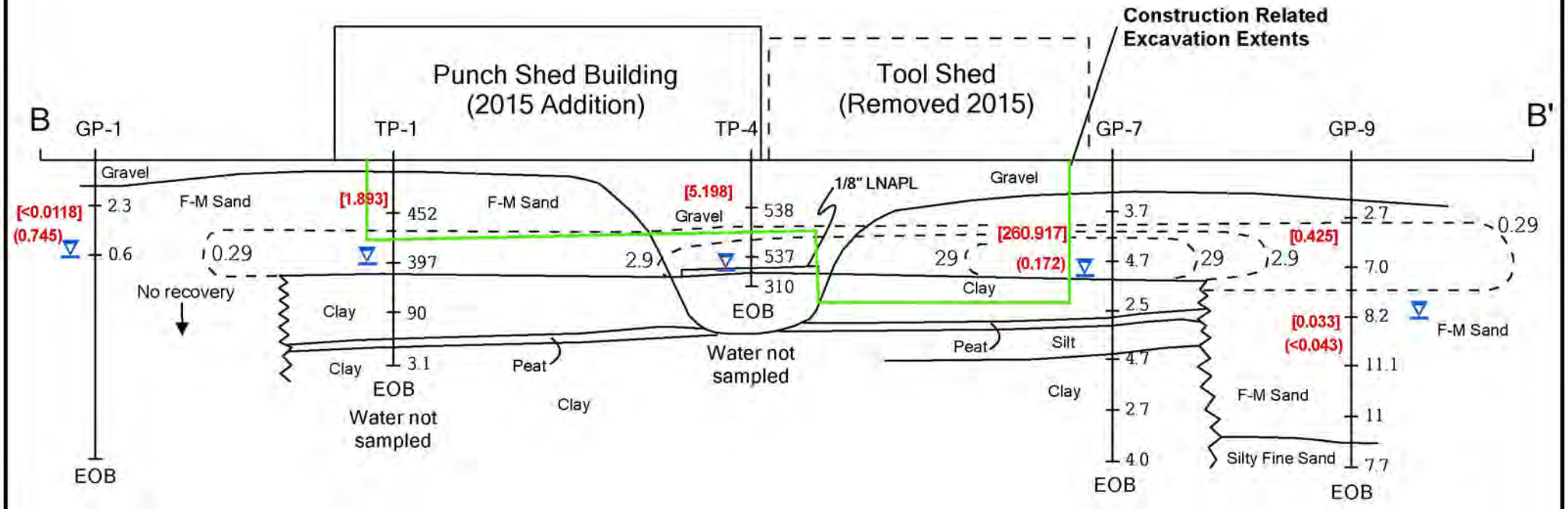
Geologic Cross Section A-A'

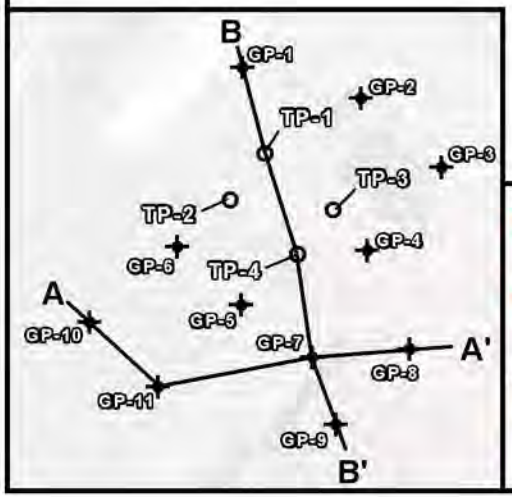
RJS Fraser Shipyard
Superior, Wisconsin

PROJECT #: 14-1004

DATE: 01/14/2016 CREATED BY: CGIS

FILE NAME: //GIS/2014 Projects/14-1004 Projects/Figure9a





[0.246] Benzo(a)Pyrene - B(a)P equivalents in soil - mg/kg

(0.172) B(a)P equivalents in groundwater - µg/kg

0.29 B(a)P equivalents in soil Industrial RCL isopleths

Water table depth

NR No Recovery

2.2 PID Reading

EOB End of boring

Vertical Scale 1" = 5'

Horizontal Scale 1" = 20'

FIGURE 9B

Geologic Cross Section B-B'

RJS Fraser Shipyard
Superior, Wisconsin

PROJECT #:14-1004

DATE:01/14/2016 | CREATED BY:CGIS

FILE NAME: //GIS/2014 Projects/14-1004 Projects/Figure9b

TABLES

Table 1: PID Readings
Fraser Shipyard Punch Shed Addition

Boring No.	GP-1	GP-2	GP-3	GP-4	GP-5
Date/ Depth	3/24/2015	3/24/2015	3/24/2015	3/24/2015	3/24/2015
0-2	2.3	5.4	5.1	3.8	219
2-4	0.6	9.3	4.6	3.4	556
4-6	--	5.3	4.3	1.3	265
6-8	--	7.0	4.1	3.2	468
8-10	--	4.7	5.4	3.4	3.6
10-12	--	6.6	4.1	1.7	14.3
12-14	EOB	EOB	EOB	EOB	EOB
14-16					

Boring No.	GP-6	GP-7	GP-8	GP-9	GP-10	GP-11
Date/ Depth	3/24/2015	3/24/2015	6/29/2015	6/29/2015	6/29/2015	6/29/2015
0-2	8.2	3.7	5.2	2.7	2.2	4.1
2-4	6.1	4.7	11.1	7.0	1.4	7.0
4-6	395	2.5	7.7	8.2	2.7	4.7
6-8	386	4.7	7.3	11.1	3.1	4.5
8-10	3.2	2.7	6.6	11.0	3.5	2.6
10-12	4.0	4.0	4.8	7.7	--	5.2
12-14	EOB	EOB	EOB	EOB	EOB	--
14-16						--
16-18						EOB

--	Poor sample recovery. No screening performed
0.6	Interval collected for analysis based on PID reading, staining and recovery.
EOB	End of boring above.

Table 2: Fraser Shipyard Punch Shed Addition
Soil Analytical Summary

All results in mg/kg (ppm)		Test Pits				RI Soil Borings	
	Boring / Test Pit	TP-1	TP-2	TP-3	TP-4	GP-1	GP-2
	Sample ID	TP1 0-2'	TP2 2-4'	TP3 0-2'	TP4 0-2'	GP1 2-4'	GP2 2-4'
	Sample Depth (ft)	0-2	2-4	0-2	0-2	2-4	2-4
	Total Depth	8	6	6	5		
	Refusal?	N	N	N	N	N	N
	Date	10/27/14	10/27/14	10/27/14	10/27/14	3/24/15	3/24/15
	Ind. - RCL						
Gasoline Range Organics	NE	**837**	**572**	**72.1**	**156**	--	--
RCRA Metals (total)							
Arsenic via 6010	8	**7.7**	**1.2**	**7.7**	**3.9**	--	--
Arsenic via 6020	8	**8.5**	**2.6**	**10.6**	**5.1**	--	--
Barium	220000	**87.3**	**18.4**	**49.9**	**109**	--	--
Cadmium	980	**0.58**	**0.13**	**0.36**	**1.4**	--	--
Chromium	1800000	**12**	**5.5**	**10.1**	**42.4**	--	--
Lead	800	**296**	**41.5**	**118**	**212**	--	--
Mercury	3.13	**0.061**	**0.022**	**0.036**	**0.11**	--	--
Selenium	5800	**2.4**	**0.53**	**2.0**	**3.5**	--	--
Silver	5800	**0.065**	<0.045	<0.055	**24.5**	--	--
VOCs							
Acetone	670000	<0.594	<1.120	<0.604	<0.575	<1.150	<1.250
Allyl Chloride	3.2	<0.0078	<0.147	<0.0079	<0.0075	<0.229	<0.250
Benzene	5.1	**0.0525**	<0.0224	**0.0605**	<0.0115	<0.0229	<0.025
Bromobenzene	1800	<0.0103	<0.0194	<0.0105	<0.010	<0.0573	<0.0624
Bromochloromethane	630	<0.0081	<0.0152	<0.0082	<0.0078	<0.229	<0.250
Bromodichloromethane	1.3	<0.0106	<0.0199	<0.0107	<0.0102	<0.0573	<0.0624
Bromoform	290	<0.119	<0.224	<0.121	<0.115	<0.229	<0.250
Bromomethane	30	<0.297	<0.560	<0.302	<0.288	<0.573	<0.624
2-Butanone (MEK)	190000	<0.148	<0.280	<0.151	<0.144	<0.286	<0.312
n-Butylbenzene	58000	**0.426**	**0.795**	<0.0073	<0.0070	<0.0573	<0.0624
sec-Butylbenzene	120000	**0.298**	**0.261**	**0.0285**	<0.0068	<0.0573	<0.0624
tert-Butylbenzene	120000	<0.0297	<0.0560	<0.0302	<0.0288	<0.0573	<0.0624
Carbon Tetrachloride	2.9	**0.0753**	<0.0181	<0.0098	<0.0093	<0.229	<0.250
Chlorobenzene	1300	<0.0091	<0.0172	<0.0093	<0.0088	<0.0573	<0.0624
Chloroethane	460	**3.140**	<0.0282	**0.753**	<0.0145	<0.573	<0.624
Chloroform	1.4	<0.0090	<0.0171	<0.0092	<0.0088	<0.0573	<0.0624
Chloromethane (methyl chloride)	460	<0.0108	<0.0204	<0.0110	<0.0105	<0.229	<0.250
2-Chlorotoluene	23000	**0.423**	<0.0560	<0.0302	<0.0288	<0.0573	<0.0624
4-Chlorotoluene	23000	<0.0297	<0.0560	<0.0302	<0.0288	<0.0573	<0.0624
1,2-Dibromo-3-chloropropane	0.06	<0.0315	<0.0593	<0.0320	<0.0305	<0.573	<0.624
Dibromochloromethane	3.2	<0.0128	<0.0242	<0.0130	<0.0124	<0.0573	<0.0624
1,2-Dibromoethane (EDB)	0.16	<0.0073	<0.0138	<0.0074	<0.0071	<0.0573	<0.0624
Dibromomethane	98	<0.0166	<0.0314	<0.0169	<0.0161	<0.0573	<0.0624
1,2-Dichlorobenzene	9300	<0.0297	<0.0560	<0.0302	<0.0288	<0.0573	<0.0624
1,3-Dichlorobenzene	NE	<0.0297	<0.0560	<0.0302	<0.0288	<0.0573	<0.0624
1,4-Dichlorobenzene	11	<0.0297	<0.0560	<0.0302	<0.0288	<0.0573	<0.0624
Dichlorodifluoromethane	370	<0.0274	<0.0517	<0.0279	<0.0266	<0.229	<0.250

NE - Not Established -- Not Analyzed
Bold Text - Reported above detection limit.
Bold Text and Box - Exceeds regulatory limit.

Table 2: Fraser Shipyard Punch Shed Addition
Soil Analytical Summary

All results in mg/kg (ppm)		Test Pits				RI Soil Borings	
	Boring / Test Pit	TP-1	TP-2	TP-3	TP-4	GP-1	GP-2
	Sample ID	TP1 0-2'	TP2 2-4'	TP3 0-2'	TP4 0-2'	GP1 2-4'	GP2 2-4'
	Sample Depth (ft)	0-2	2-4	0-2	0-2	2-4	2-4
	Total Depth	8	6	6	5		
	Refusal?	N	N	N	N	N	N
	Date	10/27/14	10/27/14	10/27/14	10/27/14	3/24/15	3/24/15
1,1-Dichloroethane (DCA)	16	**2.660**	**0.0766**	**0.0885**	**0.0702**	<0.0573	<0.0624
1,2-Dichloroethane	2	<0.0140	<0.264	<0.0142	<0.0136	<0.0573	<0.0624
1,1-Dichloroethene	1000	0.0516	<0.0224	<0.0121	<0.0115	<0.229	<0.250
cis-1,2-Dichloroethene (DCE)	2300	<0.0121	<0.0228	<0.0123	**0.137**	<0.0573	<0.0624
trans-1,2-Dichloroethene	23000	<0.0118	<0.0222	<0.0120	**0.0402**	<0.229	<0.250
Dichlorofluoromethane	NE	<0.297	<0.560	<0.302	<0.288	<0.573	<0.624
1,2-Dichloropropane	23000	<0.0095	<0.0180	<0.0097	<0.0092	<0.0573	<0.0624
1,3-Dichloropropane	2500	<0.0297	<0.0560	<0.0302	<0.0288	<0.0573	<0.0624
2,2-Dichloropropane	NE	<0.0079	<0.0150	<0.0081	<0.0077	<0.229	<0.250
1,1-Dichloropropene	NE	<0.0097	<0.0183	<0.0099	<0.0094	<0.0573	<0.0624
cis-1,3-Dichloropropene	8.2	<0.0075	<0.0141	<0.0076	<0.0072	<0.0573	<0.0624
trans-1,3-Dichloropropene	8.2	<0.0084	<0.0158	<0.0085	<0.0081	<0.0573	<0.0624
Diethyl Ether (Ethyl Ether)	230000	<0.0126	<0.0237	<0.0128	<0.0122	<0.229	<0.250
Ethylbenzene	25	**0.163**	**0.0901**	**0.130**	**0.0407**	<0.0573	<0.0624
Hexachloro-1,3-butadiene	30	<0.148	<0.280	<0.151	<0.144	<0.286	<0.312
Isopropylbenzene (cumene)	9900	0.0933	0.0845	0.0560	<0.0288	<0.0573	<0.0624
p-Isopropyltoluene	NE	**0.976**	**1.57**	**0.0373**	**0.126**	<0.0573	<0.0624
Methylene Chloride	1000	<0.0119	<0.224	<0.121	<0.115	<0.229	<0.250
4-Methyl-2-pentanone (MIBK)	56000	**0.318**	<0.280	<0.151	<0.144	<0.286	<0.312
Methyl-tert-butyl-ether (MTBE)	210	<0.0297	<0.0560	<0.0302	<0.0288	<0.0573	<0.0624
Naphthalene	17	**2.27**	**4.39**	**0.473**	**0.641**	<0.229	<0.250
n-Propylbenzene	22000	**0.181**	**0.242**	**0.0753**	<0.0070	<0.0573	<0.0624
Styrene	35000	<0.0089	<0.0167	<0.0090	<0.0086	<0.0573	<0.0624
1,1,1,2-Tetrachloroethane	8.8	<0.0297	<0.0560	<0.0302	<0.0288	<0.0573	<0.0624
1,1,2,2-Tetrachloroethane	2.7	<0.0081	<0.0154	<0.0083	<0.0079	<0.0573	<0.0624
Tetrachloroethene (PCE)	100	<0.0214	<0.0404	<0.0218	**0.331**	<0.0573	<0.0624
Tetrahydrofuran (THF)	NE	<0.0759	<0.143	<0.0771	<0.0735	<2.290	<2.500
Toluene	47000	**0.27**	**0.0235**	**0.306**	**0.0962**	<0.0573	<0.0624
1,2,3-Trichlorobenzene	660	<0.0141	<0.0266	<0.0144	<0.0137	<0.0573	<0.0624
1,2,4-Trichlorobenzene	110	<0.0108	<0.0204	<0.0110	<0.0105	<0.0573	<0.0624
1,1,1-Trichloroethane (TCA)	36000	**0.472**	**0.535**	<0.0302	**0.0757**	<0.0573	<0.0624
1,1,2-Trichloroethane (TCA)	5	<0.0100	<0.0189	<0.0102	<0.0097	<0.0573	<0.0624
Trichloroethene (TCE)	6	<0.0074	<0.0139	<0.0075	**0.421**	<0.0573	<0.0624
Trichlorofluoromethane	3100	<0.0106	<0.0199	<0.0107	<0.0102	<0.229	<0.250
1,2,3-Trichloropropane*	0.11	**0.369**	<0.0149	<0.0080	<0.0076	<0.229	<0.250
1,1,2-Trichlorofluoroethane	NE	<0.0248	<0.0468	<0.0252	<0.0240	<0.229	<0.250
1,2,4-Trimethylbenzene	240	**3.25**	**3.67**	**0.305**	**0.138**	<0.0573	<0.0624
1,3,5-Trimethylbenzene	12000	**3.88**	**1.53**	**0.124**	**0.096**	<0.0573	<0.0624
Vinyl Chloride	1.7	<0.0088	<0.0166	<0.0090	<0.0085	<0.0229	<0.0250
Xylene (total)	2500	**0.937**	**0.692**	**0.814**	**0.209**	<0.172	<0.187

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Table 2: Fraser Shipyard Punch Shed Addition
Soil Analytical Summary

All results in mg/kg (ppm)		Test Pits				RI Soil Borings	
	Boring / Test Pit	TP-1	TP-2	TP-3	TP-4	GP-1	GP-2
	Sample ID	TP1 0-2'	TP2 2-4'	TP3 0-2'	TP4 0-2'	GP1 2-4'	GP2 2-4'
	Sample Depth (ft)	0-2	2-4	0-2	0-2	2-4	2-4
	Total Depth	8	6	6	5		
	Refusal?	N	N	N	N	N	N
	Date	10/27/14	10/27/14	10/27/14	10/27/14	3/24/15	3/24/15
PAHs							
Acenaphthene	45000	**0.589**	**0.342**	<0.0597	**0.748**	<0.0118	**0.0154**
Acenaphthylene		**0.566**	**0.210**	**0.105**	<0.282	<0.0118	**0.0384**
Anthracene	230000	**0.409**	**0.468**	**0.061**	**1.490**	<0.0118	**0.0509**
Benzo(a)anthracene	2.9	**1.000**	**1.090**	**0.108**	**3.350**	<0.0118	**0.1310**
Benzo(a)pyrene [B(a)P]	0.29	**1.150**	**1.010**	**0.126**	**3.530**	<0.0118	**0.1750**
Benzo(b)fluoranthene	2.9	**2.000**	**1.250**	**0.280**	**4.400**	<0.0118	**0.2280**
Benzo(g,h,i)perylene		**1.170**	**0.723**	**0.176**	**2.480**	<0.0118	**0.1280**
Benzo(k)fluoranthene	29	**0.935**	**0.636**	**0.128**	**2.200**	<0.0118	**0.0744**
Chrysene	290	**1.340**	**1.230**	**0.189**	**3.950**	<0.0118	**0.1770**
Dibenzo(a,h)anthracene	0.29	**0.333**	**0.193**	<0.0597	**0.666**	<0.0118	<0.0125
Fluoranthene	30000	**2.190**	**2.400**	**0.207**	**7.550**	<0.0118	**0.3280**
Fluorene	30000	**1.200**	**0.389**	<0.0597	**0.968**	<0.0118	**0.0180**
Indeno(1,2,3-cd)pyrene	2.9	**0.990**	**0.566**	**0.146**	**2.010**	<0.0118	**0.1080**
Naphthalene	17	**1.450**	**1.490**	**0.402**	**0.297**	<0.0118	**0.0206**
Phenanthrene		**1.450**	**2.390**	**0.254**	**5.620**	<0.0118	**0.2480**
Pyrene	23000	**2.020**	**2.410**	**0.213**	**6.180**	<0.0118	**0.3750**
B(a)P Equivalents	0.29	**1.893**	**1.501**	**0.181**	**5.198**	ND	**0.223**

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Table 2: Fraser Shipyard Punch Shed Addition
Soil Analytical Summary (cont)

All results in mg/kg (ppm)		RI Soil Borings					
	Boring / Test Pit	GP-3	GP-4	GP-5	GP-50	GP-6	GP-7
	Sample ID	GP3 2-4'	GP4 2-4'	GP5 4-8'	GP-5	GP6 4-8'	GP7 2-4'
	Sample Depth (ft)	2-4	2-4	4-8	Duplicate	4-8	2-4
	Total Depth						
	Refusal?	N	N	N		N	N
	Date	3/24/15	3/24/15	3/25/15	3/25/15	3/24/15	3/24/15
	Ind. - RCL						
Gasoline Range Organics	NE	--	--	--	--	--	--
RCRA Metals (total)							
Arsenic via 6010	8	--	--	--	--	--	--
Arsenic via 6020	8	--	--	--	--	--	--
Barium	220000	--	--	--	--	--	--
Cadmium	980	--	--	--	--	--	--
Chromium	1800000	--	--	--	--	--	--
Lead	800	--	--	--	--	--	--
Mercury	3.13	--	--	--	--	--	--
Selenium	5800	--	--	--	--	--	--
Silver	5800	--	--	--	--	--	--
VOCs							
Acetone	670000	<1.350	<1.270	<6.210	<7.090	<1.900	<1.160
Allyl Chloride	3.2	<0.269	<0.254	<1.240	<1.420	<0.379	<0.232
Benzene	5.1	<0.0269	<0.0254	<0.124	<0.124	<0.0379	<0.0232
Bromobenzene	1800	<0.0673	<0.0636	<0.310	<0.354	<0.0949	<0.0580
Bromochloromethane	630	<0.269	<0.254	<1.240	<1.420	<0.379	<0.232
Bromodichloromethane	1.3	<0.0673	<0.0636	<0.310	<0.354	<0.0949	<0.0580
Bromoform	290	<0.269	<0.254	<1.240	<1.420	<0.379	<0.232
Bromomethane	30	<0.673	<0.636	<3.100	<3.540	<0.949	<0.580
2-Butanone (MEK)	190000	<0.336	<0.318	<1.550	<1.770	<0.474	<0.290
n-Butylbenzene	58000	<0.0673	<0.0636	<0.310	**1.330**	**4.980**	**0.107**
sec-Butylbenzene	120000	<0.0673	<0.0636	<0.310	**0.614**	**0.320**	<0.0580
tert-Butylbenzene	120000	<0.0673	<0.0636	<0.310	<0.354	<0.0949	<0.0580
Carbon Tetrachloride	2.9	<0.269	<0.254	<1.240	<1.420	<0.379	<0.232
Chlorobenzene	1300	<0.0673	<0.0636	<0.310	<0.354	<0.0949	<0.0580
Chloroethane	460	<0.673	<0.636	<3.100	<3.540	<0.949	<0.580
Chloroform	1.4	<0.0673	<0.0636	<0.310	<0.354	<0.0949	<0.0580
Chloromethane (methyl chloride)	460	<0.269	<0.254	<1.240	<1.420	<0.379	<0.232
2-Chlorotoluene	23000	<0.0673	<0.0636	<0.310	<0.354	<0.0949	<0.0580
4-Chlorotoluene	23000	<0.0673	<0.0636	<0.310	<0.354	<0.0949	<0.0580
1,2-Dibromo-3-chloropropane	0.06	<0.673	<0.636	<3.100	<3.540	<0.949	<0.580
Dibromochloromethane	3.2	<0.0673	<0.0636	<0.310	<0.354	<0.0949	<0.0580
1,2-Dibromoethane (EDB)	0.16	<0.0673	<0.0636	<0.310	<0.354	<0.0949	<0.0580
Dibromomethane	98	<0.0673	<0.0636	<0.310	<0.354	<0.0949	<0.0580
1,2-Dichlorobenzene	9300	<0.0673	<0.0636	<0.310	<0.354	<0.0949	<0.0580
1,3-Dichlorobenzene	NE	<0.0673	<0.0636	<0.310	<0.354	<0.0949	<0.0580
1,4-Dichlorobenzene	11	<0.0673	<0.0636	<0.310	<0.354	<0.0949	<0.0580
Dichlorodifluoromethane	370	<0.269	<0.254	<1.240	<1.420	<0.379	<0.232

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Bold Text - Reported above detection limit.
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Table 2: Fraser Shipyard Punch Shed Addition
Soil Analytical Summary (cont)

All results in mg/kg (ppm)		RI Soil Borings					
	Boring / Test Pit	GP-3	GP-4	GP-5	GP-50	GP-6	GP-7
	Sample ID	GP3 2-4'	GP4 2-4'	GP5 4-8'	GP-5	GP6 4-8'	GP7 2-4'
	Sample Depth (ft)	2-4	2-4	4-8	Duplicate	4-8	2-4
	Total Depth						
	Refusal?	N	N	N		N	N
	Date	3/24/15	3/24/15	3/25/15	3/25/15	3/24/15	3/24/15
1,1-Dichloroethane (DCA)	16	<0.0673	**0.142**	<0.310	<0.354	<0.0949	<0.0580
1,2-Dichloroethane	2	<0.0673	<0.0636	<0.310	<0.354	<0.0949	<0.0580
1,1-Dichloroethene	1000	<0.269	<0.254	<1.240	<1.420	<0.379	<0.232
cis-1,2-Dichloroethene (DCE)	2300	<0.0673	<0.0636	<0.310	<0.354	<0.0949	<0.580
trans-1,2-Dichloroethene	23000	<0.269	<0.254	<1.240	<1.420	<0.379	<0.232
Dichlorofluoromethane	NE	<0.673	<0.636	<3.100	<3.540	<0.949	<0.580
1,2-Dichloropropane	23000	<0.0673	<0.0636	<0.310	<0.354	<0.0949	<0.0580
1,3-Dichloropropane	2500	<0.0673	<0.0636	<0.310	<0.354	<0.0949	<0.0580
2,2-Dichloropropane	NE	<0.269	<0.254	<1.240	<1.420	<0.379	<0.232
1,1-Dichloropropene	NE	<0.0673	<0.0636	<0.310	<0.354	<0.0949	<0.0580
cis-1,3-Dichloropropene	8.2	<0.0673	<0.0636	<0.310	<0.354	<0.0949	<0.0580
trans-1,3-Dichloropropene	8.2	<0.0673	<0.0636	<0.310	<0.354	<0.0949	<0.0580
Diethyl Ether (Ethyl Ether)	230000	<0.269	<0.254	<1.240	<1.420	<0.379	<0.232
Ethylbenzene	25	<0.0673	<0.0636	<0.310	**0.406**	**0.301**	**0.088**
Hexachloro-1,3-butadiene	30	<0.336	<0.318	<1.550	<1.770	<0.474	<0.290
Isopropylbenzene (cumene)	9900	<0.0673	<0.0636	<0.310	<0.354	**0.268**	<0.0580
p-Isopropyltoluene	NE	<0.0673	<0.0636	**1.88**	**3.180**	**1.680**	<0.0580
Methylene Chloride	1000	<0.269	<0.254	<1.240	<1.420	<0.379	<0.232
4-Methyl-2-pentanone (MIBK)	56000	<0.336	<0.318	<1.550	<1.770	<0.474	<0.290
Methyl-tert-butyl-ether (MTBE)	210	<0.0673	<0.0636	<0.310	<0.354	<0.0949	<0.0580
Naphthalene	17	<0.269	<0.254	**18.80**	**33.700**	**67.500**	**10.300**
n-Propylbenzene	22000	<0.0673	<0.0636	<0.310	**0.527**	**0.553**	<0.0580
Styrene	35000	<0.0673	<0.0636	<0.310	<0.354	<0.0949	<0.0580
1,1,1,2-Tetrachloroethane	8.8	<0.0673	<0.0636	<0.310	<0.354	<0.0949	<0.0580
1,1,2,2-Tetrachloroethane	2.7	<0.0673	<0.0636	<0.310	<0.354	<0.0949	<0.0580
Tetrachloroethene (PCE)	100	<0.0673	<0.0636	<0.310	<0.354	<0.0949	<0.0580
Tetrahydrofuran (THF)	NE	<2.690	<2.540	<12.400	<14.200	<3.790	<2.320
Toluene	47000	<0.0673	<0.0636	<0.310	<0.354	<0.0949	**0.224**
1,2,3-Trichlorobenzene	660	<0.0673	<0.0636	<0.310	<0.354	<0.0949	<0.0580
1,2,4-Trichlorobenzene	110	<0.0673	<0.0636	<0.310	<0.354	<0.0949	<0.0580
1,1,1-Trichloroethane (TCA)	36000	<0.0673	<0.0636	<0.310	<0.354	<0.0949	**0.460**
1,1,2-Trichloroethane (TCA)	5	<0.0673	<0.0636	<0.310	<0.354	<0.0949	<0.0580
Trichloroethene (TCE)	6	<0.0673	<0.0636	<0.310	<0.354	<0.0949	<0.0580
Trichlorofluoromethane	3100	<0.269	<0.254	<1.240	<1.420	<0.379	<0.232
1,2,3-Trichloropropane*	0.11	<0.269	<0.254	<1.240	<1.420	<0.379	<0.232
1,1,2-Trichlorofluoroethane	NE	<0.269	<0.254	<1.240	<1.420	<0.379	<0.232
1,2,4-Trimethylbenzene	240	<0.0673	**0.142**	**6.390**	**11.200**	**13.100**	**0.200**
1,3,5-Trimethylbenzene	12000	<0.0673	**0.103**	**3.000**	**3.720**	**4.720**	**0.0712**
Vinyl Chloride	1.7	<0.0269	<0.0254	<0.124	<0.142	<0.0379	<0.0232
Xylene (total)	2500	<0.202	<0.191	<0.931	**3.280**	**4.570**	**0.749**

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Table 2: Fraser Shipyard Punch Shed Addition
Soil Analytical Summary (cont)

All results in mg/kg (ppm)		RI Soil Borings					
	Boring / Test Pit	GP-3	GP-4	GP-5	GP-50	GP-6	GP-7
	Sample ID	GP3 2-4'	GP4 2-4'	GP5 4-8'	GP-5	GP6 4-8'	GP7 2-4'
	Sample Depth (ft)	2-4	2-4	4-8	Duplicate	4-8	2-4
	Total Depth						
	Refusal?	N	N	N		N	N
	Date	3/24/15	3/24/15	3/25/15	3/25/15	3/24/15	3/24/15
PAHs							
Acenaphthene	45000	<0.0134	**0.246**	**3.080**	**2.240**	**6.970**	**121.000**
Acenaphthylene		<0.0134	**0.163**	<0.621	<0.673	<0.979	**1.070**
Anthracene	230000	**0.0180**	**0.406**	<0.621	<0.673	<0.979	**182.000**
Benzo(a)anthracene	2.9	**0.0470**	**0.980**	<0.621	<0.673	<0.979	**215.000**
Benzo(a)pyrene [B(a)P]	0.29	**0.0541**	**1.150**	<0.621	<0.673	<0.979	**204.000**
Benzo(b)fluoranthene	2.9	**0.0705**	**1.500**	<0.621	<0.673	<0.979	**237.000**
Benzo(g,h,i)perylene		**0.0402**	**0.751**	<0.621	<0.673	<0.979	**113.000**
Benzo(k)fluoranthene	29	**0.0282**	**0.601**	<0.621	<0.673	<0.979	**101.000**
Chrysene	290	**0.0616**	**1.250**	<0.621	<0.673	<0.979	**207.000**
Dibenzo(a,h)anthracene	0.29	<0.0134	<0.0132	<0.621	<0.673	<0.979	<0.0573
Fluoranthene	30000	**0.1220**	**2.800**	<0.621	<0.673	<0.979	**645.000**
Fluorene	30000	<0.0134	**0.268**	**2.190**	**1.690**	**3.640**	**112.000**
Indeno(1,2,3-cd)pyrene	2.9	**0.0333**	**0.648**	<0.621	<0.673	<0.979	**105.000**
Naphthalene	17	<0.0134	**0.275**	**39.000**	**20.000**	**83.800**	**80.200**
Phenanthrene		**0.0959**	**2.660**	**3.560**	**2.290**	**2.470**	**838.000**
Pyrene	23000	**0.1510**	**3.870**	**1.730**	**1.190**	**2.800**	**684.000**
B(a)P Equivalents	0.29	**0.070**	**1.470**	**ND**	**ND**	**ND**	**260.917**

NE - Not Established -- Not Analyzed
Bold Text - Reported above detection limit.
Bold Text and Box - Exceeds regulatory limit.

Table 2: Fraser Shipyard Punch Shed
Soil Analytical Summary (cont)

All results in mg/kg (ppm)		Supplemental RI Borings				
	Boring / Test Pit	GP-8	GP-9		GP-10	GP-11
	Sample ID	GP8 2-4	GP9 2-4'	GP9 6-8'	GP10 2-4'	GP11 2-4'
	Sample Depth (ft)	2-4	2-4	6-8	2-4	2-4
	Total Depth					
	Refusal?	N	N	N	N	N
	Date	3/24/15	3/24/15	3/24/15	3/24/15	3/24/15
	Ind. - RCL					
Gasoline Range Organics	NE	--	--	--	--	--
RCRA Metals (total)						
Arsenic via 6010	8	--	--	--	--	--
Arsenic via 6020	8	--	--	--	--	--
Barium	220000	--	--	--	--	--
Cadmium	980	--	--	--	--	--
Chromium	1800000	--	--	--	--	--
Lead	800	--	--	--	--	--
Mercury	3.13	--	--	--	--	--
Selenium	5800	--	--	--	--	--
Silver	5800	--	--	--	--	--
VOCs						
Acetone	670000	--	--	--	--	--
Allyl Chloride	3.2	--	--	--	--	--
Benzene	5.1	--	--	--	--	--
Bromobenzene	1800	--	--	--	--	--
Bromochloromethane	630	--	--	--	--	--
Bromodichloromethane	1.3	--	--	--	--	--
Bromoform	290	--	--	--	--	--
Bromomethane	30	--	--	--	--	--
2-Butanone (MEK)	190000	--	--	--	--	--
n-Butylbenzene	58000	--	--	--	--	--
sec-Butylbenzene	120000	--	--	--	--	--
tert-Butylbenzene	120000	--	--	--	--	--
Carbon Tetrachloride	2.9	--	--	--	--	--
Chlorobenzene	1300	--	--	--	--	--
Chloroethane	460	--	--	--	--	--
Chloroform	1.4	--	--	--	--	--
Chloromethane (methyl chloride)	460	--	--	--	--	--
2-Chlorotoluene	23000	--	--	--	--	--
4-Chlorotoluene	23000	--	--	--	--	--
1,2-Dibromo-3-chloropropane	0.06	--	--	--	--	--
Dibromochloromethane	3.2	--	--	--	--	--
1,2-Dibromoethane (EDB)	0.16	--	--	--	--	--
Dibromomethane	98	--	--	--	--	--
1,2-Dichlorobenzene	9300	--	--	--	--	--
1,3-Dichlorobenzene	NE	--	--	--	--	--
1,4-Dichlorobenzene	11	--	--	--	--	--
Dichlorodifluoromethane	370	--	--	--	--	--

NE - Not Established -- Not Analyzed
Bold Text - Reported above detection limit.
Bold Text and Box - Exceeds regulatory limit.

Table 2: Fraser Shipyard Punch Shed
Soil Analytical Summary (cont)

All results in mg/kg (ppm)		Supplemental RI Borings				
	Boring / Test Pit	GP-8	GP-9		GP-10	GP-11
	Sample ID	GP8 2-4	GP9 2-4'	GP9 6-8'	GP10 2-4'	GP11 2-4'
	Sample Depth (ft)	2-4	2-4	6-8	2-4	2-4
	Total Depth					
	Refusal?	N	N	N	N	N
	Date	3/24/15	3/24/15	3/24/15	3/24/15	3/24/15
1,1-Dichloroethane (DCA)	16	--	--	--	--	--
1,2-Dichloroethane	2	--	--	--	--	--
1,1-Dichloroethene	1000	--	--	--	--	--
cis-1,2-Dichloroethene (DCE)	2300	--	--	--	--	--
trans-1,2-Dichloroethene	23000	--	--	--	--	--
Dichlorofluoromethane	NE	--	--	--	--	--
1,2-Dichloropropane	23000	--	--	--	--	--
1,3-Dichloropropane	2500	--	--	--	--	--
2,2-Dichloropropane	NE	--	--	--	--	--
1,1-Dichloropropene	NE	--	--	--	--	--
cis-1,3-Dichloropropene	8.2	--	--	--	--	--
trans-1,3-Dichloropropene	8.2	--	--	--	--	--
Diethyl Ether (Ethyl Ether)	230000	--	--	--	--	--
Ethylbenzene	25	--	--	--	--	--
Hexachloro-1,3-butadiene	30	--	--	--	--	--
Isopropylbenzene (cumene)	9900	--	--	--	--	--
p-Isopropyltoluene	NE	--	--	--	--	--
Methylene Chloride	1000	--	--	--	--	--
4-Methyl-2-pentanone (MIBK)	56000	--	--	--	--	--
Methyl-tert-butyl-ether (MTBE)	210	--	--	--	--	--
Naphthalene	17	--	--	--	--	--
n-Propylbenzene	22000	--	--	--	--	--
Styrene	35000	--	--	--	--	--
1,1,1,2-Tetrachloroethane	8.8	--	--	--	--	--
1,1,2,2-Tetrachloroethane	2.7	--	--	--	--	--
Tetrachloroethene (PCE)	100	--	--	--	--	--
Tetrahydrofuran (THF)	NE	--	--	--	--	--
Toluene	47000	--	--	--	--	--
1,2,3-Trichlorobenzene	660	--	--	--	--	--
1,2,4-Trichlorobenzene	110	--	--	--	--	--
1,1,1-Trichloroethane (TCA)	36000	--	--	--	--	--
1,1,2-Trichloroethane (TCA)	5	--	--	--	--	--
Trichloroethene (TCE)	6	--	--	--	--	--
Trichlorofluoromethane	3100	--	--	--	--	--
1,2,3-Trichloropropane*	0.11	--	--	--	--	--
1,1,2-Trichlorofluoroethane	NE	--	--	--	--	--
1,2,4-Trimethylbenzene	240	--	--	--	--	--
1,3,5-Trimethylbenzene	12000	--	--	--	--	--
Vinyl Chloride	1.7	--	--	--	--	--
Xylene (total)	2500	--	--	--	--	--

NE - Not Established -- Not Analyzed
Bold Text - Reported above detection limit.
Bold Text and Box - Exceeds regulatory limit.

Table 2: Fraser Shipyard Punch Shed Soil Analytical Summary (cont)

All results in mg/kg (ppm)		Supplemental RI Borings				
	Boring / Test Pit	GP-8	GP-9		GP-10	GP-11
	Sample ID	GP8 2-4	GP9 2-4'	GP9 6-8'	GP10 2-4'	GP11 2-4'
	Sample Depth (ft)	2-4	2-4	6-8	2-4	2-4
	Total Depth					
	Refusal?	N	N	N	N	N
	Date	3/24/15	3/24/15	3/24/15	3/24/15	3/24/15
PAHs						
Acenaphthene	45000	**0.268**	**0.0359**	<0.0125	**0.0156**	**0.081**
Acenaphthylene		**0.120**	**0.0135**	<0.0125	**0.0304**	**0.0582**
Anthracene	230000	**0.544**	**0.0785**	<0.0125	**0.0643**	**0.362**
Benzo(a)anthracene	2.9	**1.340**	**0.272**	**0.0183**	**0.185**	**0.980**
Benzo(a)pyrene [B(a)P]	0.29	**1.540**	**0.287**	**0.0262**	**0.151**	**0.983**
Benzo(b)fluoranthene	2.9	**1.760**	**0.339**	**0.0352**	**0.206**	**1.260**
Benzo(g,h,i)perylene		**1.080**	**0.181**	**0.0194**	**0.120**	**0.763**
Benzo(k)fluoranthene	29	**0.674**	**0.137**	**0.0131**	**0.0633**	**0.494**
Chrysene	290	**1.560**	**0.309**	**0.0316**	**0.243**	**1.570**
Dibenzo(a,h)anthracene	0.29	**0.320**	**0.0591**	<0.0125	**0.0458**	**0.213**
Fluoranthene	30000	**3.110**	**0.608**	**0.0983**	**0.267**	**1.790**
Fluorene	30000	**0.274**	**0.0344**	<0.0125	**0.0288**	**0.173**
Indeno(1,2,3-cd)pyrene	2.9	**0.878**	**0.162**	**0.0153**	**0.0911**	**0.611**
Naphthalene	17	**0.142**	**0.0270**	<0.0125	**0.0711**	**0.310**
Phenanthrene		**2.940**	**0.462**	**0.0948**	**0.365**	**1.500**
Pyrene	23000	**3.120**	**0.576**	**0.0822**	**0.299**	**1.920**
B(a)P Equivalents	0.29	**2.266**	**0.425**	**0.033**	**0.246**	**1.488**

NE - Not Established -- Not Analyzed
Bold Text - Reported above detection limit.
Bold Text and Box - Exceeds regulatory limit.

Table 3: Groundwater Analytical Summary Table

Fraser Shipyard - Punch Shed Addition

All results in ug/L

	Sample ID		GP-1	GP-2	GP-3	GP-4
	Sample Depth (ft)/DTW					
	Generic ES/PAL***					
	ES	PAL				
VOCs						
Acetone	9000	1800	<20.0	<20.0	<20.0	**33.5**
Allyl Chloride	NP	NP	<4.0	<4.0	<4.0	<4.0
Benzene	5	0.5	<1.0	<1.0	<1.0	<1.0
Bromobenzene	NP	NP	<1.0	<1.0	<1.0	<1.0
Bromochloromethane	NP	NP	<4.0	<4.0	<4.0	<4.0
Bromodichloromethane	0.6	0.06	<1.0	<1.0	<1.0	<1.0
Bromoform	4.4	0.44	<4.0	<4.0	<4.0	<4.0
Bromomethane	10	1	<4.0	<4.0	<4.0	<4.0
2-Butanone (MEK)	4000	800	<5.0	<5.0	<5.0	<5.0
n-Butylbenzene	NP	NP	<1.0	<1.0	<1.0	<1.0
sec-Butylbenzene	NP	NP	<1.0	<1.0	<1.0	<1.0
tert-Butylbenzene	NP	NP	<1.0	<1.0	<1.0	<1.0
Carbon Tetrachloride	5	0.5	<1.0	<1.0	<1.0	<1.0
Chlorobenzene	NP	NP	<1.0	<1.0	<1.0	<1.0
Chloroethane	400	80	<1.0	**3.4**	<1.0	<1.0
Chloroform	6	0.6	<1.0	<1.0	<1.0	<1.0
Chloromethane (methyl chloride	30	3	<4.0	<4.0	<4.0	<4.0
2-Chlorotoluene	NP	NP	<1.0	<1.0	<1.0	<1.0
4-Chlorotoluene	NP	NP	<1.0	<1.0	<1.0	<1.0
1,2-Dibromo-3-chloropropane	0.2	0.02	<4.0	<4.0	<4.0	<4.0
Dibromochloromethane	60	6	<1.0	<1.0	<1.0	<1.0
1,2-Dibromoethane (EDB)	0.05	0.005	<1.0	<1.0	<1.0	<1.0
Dibromomethane	NP	NP	<4.0	<4.0	<4.0	<4.0
1,2-Dichlorobenzene	600	60	<1.0	<1.0	<1.0	<1.0
1,3-Dichlorobenzene	600	120	<1.0	<1.0	<1.0	<1.0
1,4-Dichlorobenzene	75	15	<1.0	<1.0	<1.0	<1.0
Dichlorodifluoromethane	1000	200	<4.0	<4.0	<4.0	<4.0
1,1-Dichloroethane (DCA)	850	85	<1.0	<1.0	<1.0	<1.0
1,2-Dichloroethane	5	0.5	<1.0	<1.0	<1.0	<1.0
1,1-Dichloroethene	7	0.7	<1.0	<1.0	<1.0	<1.0
cis-1,2-Dichloroethene (DCE)	70	7	<1.0	<1.0	<1.0	<1.0
trans-1,2-Dichloroethene	100	20	<1.0	<1.0	<1.0	<1.0
Dichlorofluoromethane	NP	NP	<1.0	<1.0	<1.0	<1.0
1,2-Dichloropropane	5	0.5	<4.0	<4.0	<4.0	<4.0
1,3-Dichloropropane	0.4	0.04	<1.0	<1.0	<1.0	<1.0
2,2-Dichloropropane	NP	NP	<4.0	<4.0	<4.0	<4.0
1,1-Dichloropropene	NP	NP	<1.0	<1.0	<1.0	<1.0
cis-1,3-Dichloropropene	NP	NP	<4.0	<4.0	<4.0	<4.0
trans-1,3-Dichloropropene	NP	NP	<4.0	<4.0	<4.0	<4.0
Diethyl Ether (Ethyl Ether)	1000	100	<4.0	<4.0	<4.0	<4.0
Ethylbenzene	700	140	<1.0	<1.0	<1.0	<1.0

Table 3: Groundwater Analytical Summary Table

Fraser Shipyard - Punch Shed Addition

All results in ug/L

	Sample ID		GP-1	GP-2	GP-3	GP-4
	Sample Depth (ft)/DTW					
	Generic ES/PAL***					
	ES	PAL				
Hexachloro-1,3-butadiene	NP	NP	<1.0	**1.0**	<1.0	<1.0
Isopropylbenzene (cumene)	NP	NP	<1.0	<1.0	<1.0	<1.0
p-Isopropyltoluene	NP	NP	**4.8**	<1.0	<1.0	<1.0
Methylene Chloride	5	0.5	<4.0	<4.0	<4.0	<4.0
4-Methyl-2-pentanone (MIBK)	500	50	<5.0	<5.0	<5.0	<5.0
Methyl-tert-butyl-ether (MTBE)	60	12	<1.0	<1.0	<1.0	<1.0
Naphthalene	100	10	<4.0	<4.0	<4.0	<4.0
n-Propylbenzene	NP	NP	<1.0	<1.0	<1.0	<1.0
Styrene	100	10	<1.0	<1.0	<1.0	<1.0
1,1,1,2-Tetrachloroethane	70	7	<1.0	<1.0	<1.0	<1.0
1,1,2,2-Tetrachloroethane	0.2	0.02	<1.0	<1.0	<1.0	<1.0
Tetrachloroethene (PCE)	5	0.5	<1.0	<1.0	<1.0	<1.0
Tetrahydrofuran (THF)	50	10	<10.0	<10.0	<10.0	<10.0
Toluene	800	160	<1.0	<1.0	<1.0	<1.0
1,2,3-Trichlorobenzene	NP	NP	<1.0	<1.0	<1.0	<1.0
1,2,4-Trichlorobenzene	70	14	<1.0	<1.0	<1.0	<1.0
1,1,1-Trichloroethane (TCA)	200	40	<1.0	<1.0	<1.0	<1.0
1,1,2-Trichloroethane (TCA)	5	0.5	<1.0	<1.0	<1.0	<1.0
Trichloroethene (TCE)	5	0.5	<0.40	<0.40	<0.40	<0.40
Trichlorofluoromethane	NP	NP	<1.0	<1.0	<1.0	<1.0
1,2,3-Trichloropropane*	60	12	<4.0	<4.0	<4.0	<4.0
1,1,2-Trichlorofluoroethane	NP	NP	<1.0	<1.0	<1.0	<1.0
1,2,4-Trimethylbenzene	480	96	<1.0	<1.0	<1.0	<1.0
1,3,5-Trimethylbenzene			<1.0	<1.0	<1.0	<1.0
Vinyl Chloride	0.2	0.02	<0.40	<0.40	<0.40	<0.40
Xylene (total)	2000	400	<3.0	<3.0	<3.0	<3.0
PAHs						
Acenaphthene	NP	NP	**1.2**	**0.19**	**0.15**	<0.045
Acenaphthylene	NP	NP	**0.17**	<0.043	<0.042	<0.045
Anthracene	3000	600	**0.18**	<0.043	<0.042	<0.045
Benzo(a)anthracene	NP	NP	**0.43**	<0.043	<0.042	<0.045
Benzo(a)pyrene	0.2	0.02	***0.57***	<0.043	<0.042	<0.045
Benzo(b)fluoranthene	0.2	0.02	***0.84***	<0.043	<0.042	<0.045
Benzo(g,h,i)perylene	NP	NP	**0.52**	<0.043	<0.042	<0.045
Benzo(k)fluoranthene	NP	NP	**0.27**	<0.043	<0.042	<0.045
Chrysene	0.2	0.02	***0.63***	<0.043	<0.042	<0.045
Dibenzo(a,h)anthracene	NP	NP	<0.041	<0.043	<0.042	<0.045
Fluoranthene	400	80	**1.4**	**0.078**	<0.042	<0.045
Fluorene	400	80	**0.35**	**0.17**	<0.042	<0.045
Indeno(1,2,3-cd)pyrene	NP	NP	**0.45**	<0.043	<0.042	<0.045
Naphthalene	100	10	<0.041	<0.043	<0.042	<0.045
Phenanthrene	NP	NP	**0.89**	**0.11**	**0.083**	<0.045
Pyrene	250	50	**1.2**	**0.07**	<0.042	<0.045
BaP Equivalents	0.2	0.02	***0.745***	**<**		

29.5	Exceeds WDNR Preventive Action Limit & Enforcement Standard
0.081	Exceeds WDNR PAL, but not ES
0.35	Detected above reporting limit
--	Not analyzed
NP	Not published

Table 3: Groundwater Analytical Summary Table

Fraser Shipyard - Punch Shed Addition

All results in ug/L

	Sample ID		GP-6	GP-7	GP-8	GP-81	GP-9
	Sample Depth (ft)/DTW					GP-8 Dup	
	Generic ES/PAL***						
	ES	PAL					
VOCs							
Acetone	9000	1800	**60.5**	<20.0	--	--	--
Allyl Chloride	NP	NP	<4.0	<4.0	--	--	--
Benzene	5	0.5	<1.0	<1.0	--	--	--
Bromobenzene	NP	NP	<1.0	<1.0	--	--	--
Bromochloromethane	NP	NP	<4.0	<4.0	--	--	--
Bromodichloromethane	0.6	0.06	<1.0	<1.0	--	--	--
Bromoform	4.4	0.44	<4.0	<4.0	--	--	--
Bromomethane	10	1	<4.0	<4.0	--	--	--
2-Butanone (MEK)	4000	800	**14.5**	<5.0	--	--	--
n-Butylbenzene	NP	NP	**2.7**	<1.0	--	--	--
sec-Butylbenzene	NP	NP	**1.6**	<1.0	--	--	--
tert-Butylbenzene	NP	NP	<1.0	<1.0	--	--	--
Carbon Tetrachloride	5	0.5	<1.0	<1.0	--	--	--
Chlorobenzene	NP	NP	<1.0	<1.0	--	--	--
Chloroethane	400	80	<1.0	<1.0	--	--	--
Chloroform	6	0.6	<1.0	<1.0	--	--	--
Chloromethane (methyl chloride	30	3	<4.0	<4.0	--	--	--
2-Chlorotoluene	NP	NP	<1.0	<1.0	--	--	--
4-Chlorotoluene	NP	NP	<1.0	<1.0	--	--	--
1,2-Dibromo-3-chloropropane	0.2	0.02	<4.0	<4.0	--	--	--
Dibromochloromethane	60	6	<1.0	<1.0	--	--	--
1,2-Dibromoethane (EDB)	0.05	0.005	<1.0	<1.0	--	--	--
Dibromomethane	NP	NP	<4.0	<4.0	--	--	--
1,2-Dichlorobenzene	600	60	<1.0	<1.0	--	--	--
1,3-Dichlorobenzene	600	120	<1.0	<1.0	--	--	--
1,4-Dichlorobenzene	75	15	<1.0	<1.0	--	--	--
Dichlorodifluoromethane	1000	200	<4.0	<4.0	--	--	--
1,1-Dichloroethane (DCA)	850	85	<1.0	<1.0	--	--	--
1,2-Dichloroethane	5	0.5	<1.0	<1.0	--	--	--
1,1-Dichloroethene	7	0.7	<1.0	<1.0	--	--	--
cis-1,2-Dichloroethene (DCE)	70	7	<1.0	<1.0	--	--	--
trans-1,2-Dichloroethene	100	20	<1.0	<1.0	--	--	--
Dichlorofluoromethane	NP	NP	<1.0	<1.0	--	--	--
1,2-Dichloropropane	5	0.5	<4.0	<4.0	--	--	--
1,3-Dichloropropane	0.4	0.04	<1.0	<1.0	--	--	--
2,2-Dichloropropane	NP	NP	<4.0	<4.0	--	--	--
1,1-Dichloropropene	NP	NP	<1.0	<1.0	--	--	--
cis-1,3-Dichloropropene	NP	NP	<4.0	<4.0	--	--	--
trans-1,3-Dichloropropene	NP	NP	<4.0	<4.0	--	--	--
Diethyl Ether (Ethyl Ether)	1000	100	<4.0	<4.0	--	--	--
Ethylbenzene	700	140	**4.6**	<1.0	--	--	--

Table 3: Groundwater Analytical Summary Table

Fraser Shipyard - Punch Shed Addition

All results in ug/L

	Sample ID		GP-6	GP-7	GP-8	GP-81	GP-9
	Sample Depth (ft)/DTW					GP-8 Dup	
	Generic ES/PAL***						
	ES	PAL					
Hexachloro-1,3-butadiene	NP	NP	<1.0	<1.0	--	--	--
Isopropylbenzene (cumene)	NP	NP	**2.1**	<1.0	--	--	--
p-Isopropyltoluene	NP	NP	**12.1**	<1.0	--	--	--
Methylene Chloride	5	0.5	<4.0	<4.0	--	--	--
4-Methyl-2-pentanone (MIBK)	500	50	<5.0	<5.0	--	--	--
Methyl-tert-butyl-ether (MTBE)	60	12	<1.0	<1.0	--	--	--
Naphthalene	100	10	***228***	<4.0	--	--	--
n-Propylbenzene	NP	NP	**2.8**	<1.0	--	--	--
Styrene	100	10	<1.0	<1.0	--	--	--
1,1,1,2-Tetrachloroethane	70	7	<1.0	<1.0	--	--	--
1,1,2,2-Tetrachloroethane	0.2	0.02	<1.0	<1.0	--	--	--
Tetrachloroethene (PCE)	5	0.5	<1.0	<1.0	--	--	--
Tetrahydrofuran (THF)	50	10	<10.0	<10.0	--	--	--
Toluene	800	160	**1.8**	<1.0	--	--	--
1,2,3-Trichlorobenzene	NP	NP	<1.0	<1.0	--	--	--
1,2,4-Trichlorobenzene	70	14	<1.0	<1.0	--	--	--
1,1,1-Trichloroethane (TCA)	200	40	<1.0	<1.0	--	--	--
1,1,2-Trichloroethane (TCA)	5	0.5	<1.0	<1.0	--	--	--
Trichloroethene (TCE)	5	0.5	<0.40	<0.40	--	--	--
Trichlorofluoromethane	NP	NP	<1.0	<1.0	--	--	--
1,2,3-Trichloropropane*	60	12	<4.0	<4.0	--	--	--
1,1,2-Trichlorofluoroethane	NP	NP	<1.0	<1.0	--	--	--
1,2,4-Trimethylbenzene	480	96	**96.4**	<1.0	--	--	--
1,3,5-Trimethylbenzene			**32.6**	<1.0	--	--	--
Vinyl Chloride	0.2	0.02	<0.40	<0.40	--	--	--
Xylene (total)	2000	400	**49.7**	<3.0	--	--	--
PAHs							
Acenaphthene	NP	NP	**4.4**	**3.0**	**0.78**	**0.71**	1.4
Acenaphthylene	NP	NP	<0.21	<0.043	<0.043	**0.092**	<0.043
Anthracene	3000	600	<0.21	**1.1**	**0.079**	**0.073**	0.17
Benzo(a)anthracene	NP	NP	<0.21	**0.15**	<0.043	<0.042	<0.043
Benzo(a)pyrene	0.2	0.02	<0.21	**0.14**	<0.043	<0.042	<0.043
Benzo(b)fluoranthene	0.2	0.02	<0.21	**0.16**	<0.043	<0.042	<0.043
Benzo(g,h,i)perylene	NP	NP	<0.21	<0.043	<0.043	<0.042	<0.043
Benzo(k)fluoranthene	NP	NP	<0.21	**0.068**	<0.043	<0.042	<0.043
Chrysene	0.2	0.02	<0.21	**0.16**	<0.043	<0.042	<0.043
Dibenzo(a,h)anthracene	NP	NP	<0.21	<0.043	<0.043	<0.042	<0.043
Fluoranthene	400	80	<0.21	**0.9**	**0.087**	**0.086**	0.17
Fluorene	400	80	**2.3**	**1.6**	**0.56**	**0.51**	0.46
Indeno(1,2,3-cd)pyrene	NP	NP	<0.21	<0.043	<0.043	<0.042	<0.043
Naphthalene	100	10	***231***	**2.1**	**0.056**	**0.064**	0.29
Phenanthrene	NP	NP	**0.92**	**4.2**	<0.043	<0.042	1.5
Pyrene	250	50	<0.21	**0.7**	**0.063**	**0.068**	0.14
BaP Equivalents	0.2	0.02		**0.172**			

29.5	Exceeds WDNR Prevent
0.081	Exceeds WDNR PAL, bu
0.35	Detected above reportin
--	Not analyzed
NP	Not published

Table 4: Fraser Shipyard Punch Shed
Stockpile Soil Analytical Summary

All results in mg/kg (ppm)	Boring / Test Pit	SP-1	SP-2
	Sample Depth (ft)	0-2	0-2
	Date	10/27/14	10/27/14
	Ind. - RCL	TP-3 & TP-4	TP-1 & TP-2
Diesel Range Organics	NE	6200	4590
PCBs		All non-detect	All non-detect
Total RCRA Metals			
Arsenic via 6010	8	7.9	8.3
Arsenic via 6020	8	7.3	7.3
Barium	220000	83.6	74.7
Cadmium	980	0.61	0.7
Chromium	1800000	14.9	12.7
Lead	800	203	249
Mercury	3.13	0.11	0.053
Selenium	5800	2	2.6
Silver	5800	1.7	0.11
TCLP RCRA Metals			
Arsenic		<0.0158	<0.0158
Barium		0.8	0.987
Cadmium		0.0015	0.0034
Chromium		<0.0250	<0.0250
Lead		0.11	0.24
Mercury		<0.000078	<0.000078
Selenium		<0.0359	<0.0332
Silver		<0.0032	<0.0032
VOCs			
Acetone	670000	<0.543	<0.548
Allyl Chloride	3.2	<0.0071	<0.0072
Benzene	5.1	0.0335	0.0355
Bromobenzene	1800	<0.0094	<0.0095
Bromochloromethane	630	<0.0074	<0.0075
Bromodichloromethane	1.3	<0.0097	<0.0097
Bromoform	290	<0.109	<0.110
Bromomethane	30	<0.272	<0.274
2-Butanone (MEK)	190000	<0.136	<0.137
n-Butylbenzene	58000	0.0922	0.327
sec-Butylbenzene	120000	<0.0064	0.168
tert-Butylbenzene	120000	<0.0272	<0.0274
Carbon Tetrachloride	2.9	<0.0088	<0.0088
Chlorobenzene	1300	<0.0084	<0.0084
Chloroethane	460	0.168	1.3
Chloroform	1.4	<0.0083	<0.0083
Chloromethane (methyl chloride)	460	<0.0099	<0.010
2-Chlorotoluene	23000	<0.0272	0.214
4-Chlorotoluene	23000	<0.0272	<0.0274
1,2-Dibromo-3-chloropropane	0.06	<0.0288	<0.0290
Dibromochloromethane	3.2	<0.0117	<0.0118
1,2-Dibromoethane (EDB)	0.16	<0.0067	<0.0067
Dibromomethane	98	<0.0152	<0.0153
1,2-Dichlorobenzene	9300	<0.0272	<0.0274
1,3-Dichlorobenzene		<0.0272	<0.0274

Table 4: Fraser Shipyard Punch Shed
Stockpile Soil Analytical Summary

	Boring / Test Pit	SP-1	SP-2
1,4-Dichlorobenzene	11	<0.0272	<0.0274
Dichlorodifluoromethane	370	<0.0251	<0.0253
1,1-Dichloroethane (DCA)	16	0.445	5.79
1,2-Dichloroethane	2	<0.0128	0.278
1,1-Dichloroethene	1000	<0.0109	0.637
cis-1,2-Dichloroethene (DCE)	2300	0.0295	<0.0112
trans-1,2-Dichloroethene	23000	<0.0108	<0.0109
Dichlorofluoromethane		<0.272	<0.274
1,2-Dichloropropane	23000	<0.0087	<0.0088
1,3-Dichloropropane	2500	<0.0272	<0.0274
2,2-Dichloropropane		<0.0073	<0.0073
1,1-Dichloropropene		<0.0089	<0.0089
cis-1,3-Dichloropropene	8.2	<0.0068	<0.0069
trans-1,3-Dichloropropene	8.2	<0.0077	<0.0077
Diethyl Ether (Ethyl Ether)	230000	<0.0115	<0.0116
Ethylbenzene	25	0.0862	0.133
Hexachloro-1,3-butadiene	30	<0.136	<0.137
Isopropylbenzene (cumene)	9900	0.039	0.057
p-Isopropyltoluene		0.214	0.59
Methylene Chloride (dichloromethane)	1000	<0.109	<0.110
4-Methyl-2-pentanone (MIBK)	56000	<0.136	0.276
Methyl-tert-butyl-ether (MTBE)	210	<0.0272	<0.0274
Naphthalene	17	1.88	1.86
n-Propylbenzene	22000	0.0449	0.107
Styrene	35000	<0.0081	<0.0082
1,1,1,2-Tetrachloroethane (PCA)	8.8	<0.0272	<0.0274
1,1,2,2-Tetrachloroethane (PCA)	2.7	<0.0075	<0.0075
Tetrachloroethene (PCE)	100	<0.0196	0.169
Tetrahydrofuran (THF)		<0.0695	<0.0700
Toluene	47000	0.204	0.353
1,2,3-Trichlorobenzene	660	<0.0129	<0.0130
1,2,4-Trichlorobenzene	110	<0.0099	<0.0100
1,1,1-Trichloroethane (TCA)	36000	<0.0272	35
1,1,2-Trichloroethane (TCA)	5	<0.0092	<0.0093
Trichloroethene (TCE)	6	0.0185	0.0204
Trichlorofluoromethane	3100	<0.0097	<0.0097
1,2,3-Trichloropropane*	0.11	<0.0072	**0.247**
1,1,2-Trichlorofluoroethane		<0.0227	<0.0229
1,2,4-Trimethylbenzene	240	0.546	1.64
1,3,5-Trimethylbenzene	12000	0.477	1.85
Vinyl Chloride	1.7	<0.0081	0.0136
Xylene (total)	2500	0.603	0.914

*1,2,3-Trichloropropane (TCP) was historically used as a solvent for paint and varnish removal, as a cleaning and degreasing agent, and as a cleaning and maintenance solvent.

APPENDIX A

Soil Boring Logs and Sealing Forms

SOIL BORING LOG INFORMATION

Facility/Project Name: Fraser Shipyard Punch Shed Bldg Addition
Project Number: 14-1004

Boring Drilled By (Firm Name and Crew Chief):
RJS Excavator and Operator
Chief Driller: NA
Environmental Scientist: John McCarthy

Boring Number: TP-1
Well Number (If Applicable):
Drilling Method Used: Excavator

Date of Drilling: 10/27/2014

Boring Location:
Northwest portion of new building footprint

Depth of Boring (ft): 8
Screen Interval (ft): NA
Water Sample Depth (ft): NA
Soil Sample Interval (ft): 0-2
Water Table Depth (ft): 4
Boring Elevation:

Interval	*Length Attempted and Recovered*	*Depth in Feet*	*Soil/Rock Description*	*USCS*	*Moisture*	*PID (ppm)*
0'-2'	24"/24"	0' - 1'	6": Clean Class V compacted cover. 6": Red fine sand. 12": Brown fine - medium sand with gravel. Stained with petroleum odor.	GP SP SW	Low	452
2'-4'	24"/24"	2' - 3'	Same as above, but with dimensional lumber present at 36" depth.	SW	Low	397
4'-6'	24"/24"	4' - 5'	6": Same as above. 18": Red silty clay. Low odor. No staining.	SW CH	Moderate - Saturated above clay, low in clay	90
6'-8'	24"/24"	6' - 7' - 8'	Interbedded red silty clay and peat with gray reduction spots.	CH/PT	Low	3.1

End of Boring - 8 feet

SOIL BORING LOG INFORMATION

Facility/Project Name: Fraser Shipyard Punch Shed Bldg Addition
Project Number: 14-1004

Boring Drilled By (Firm Name and Crew Chief):
RJS Excavator and Operator
Chief Driller: NA
Environmental Scientist: John McCarthy

Boring Number: TP-2
Well Number (If Applicable):
Drilling Method Used: Excavator

Date of Drilling: 10/27/2014

Boring Location:
Southwest portion of new building footprint

Depth of Boring (ft): 6
Screen Interval (ft): NA
Water Sample Depth (ft): NA
Soil Sample Interval (ft): 2-4
Water Table Depth (ft): 4
Boring Elevation:

Interval	*Length Attempted and Recovered*	*Depth in Feet*	*Soil/Rock Description*	*USCS*	*Moisture*	*PID (ppm)*
0'-2'	24"/24"	0' - 1'	6": Clean Class V compacted cover. 6": Red fine sand. 12": Brown fine - medium sand with gravel. Stained with petroleum odor.	GP SP SW	Low	13
2'-4'	24"/24"	2' - 3'	Same as above, but with dimensional lumber present at 36" depth. Strong gasoline-type odor.	SW	Low	233
4'-6'	24"/24"	4' - 5' - 6'	6": Same as above. 18": Red silty clay. Low odor. No staining.	SW CH	Moderate - Saturated above clay, low in clay	112

End of Boring - 6 feet

SOIL BORING LOG INFORMATION

Facility/Project Name: Fraser Shipyard Punch Shed Bldg Addition
Project Number: 14-1004

Boring Drilled By (Firm Name and Crew Chief):
RJS Excavator and Operator
Chief Driller: NA
Environmental Scientist: John McCarthy

Boring Number: TP-3
Well Number (If Applicable):
Drilling Method Used: Excavator

Date of Drilling: 10/27/2014

Boring Location:
Northeast corner of new building footprint

Depth of Boring (ft): 6
Screen Interval (ft): NA
Water Sample Depth (ft): NA
Soil Sample Interval (ft): 0-2
Water Table Depth (ft): 4
Boring Elevation:

Interval	*Length Attempted and Recovered*	*Depth in Feet*	*Soil/Rock Description*	*USCS*	*Moisture*	*PID (ppm)*
		0'	6": Clean Class V compacted cover.	GP		
		-	6": Red fine sand.	SP		
0'-2'	24"/24"	1'	12": Brown fine - medium sand with gravel. Stained with minor petroleum odor.	SW	Low	22
		-				
		2'	Same as above, but with dimensional lumber present at 36" depth.	SW		
		-				
2'-4'	24"/24"	3			Low	16.8
		-				
		4'	6": Same as above.	SW		
		-	18": Red silty clay. No odor or staining.	CH	Moderate - Saturated above clay, low in clay	
4'-6'	24"/24"	5'				8.5
		-				
		6'				

End of Boring - 6 feet

SOIL BORING LOG INFORMATION

Facility/Project Name: Fraser Shipyard Punch Shed Bldg Addition
Project Number: 14-1004

Boring Drilled By (Firm Name and Crew Chief):
RJS Excavator and Operator
Chief Driller: NA
Environmental Scientist: John McCarthy

Boring Number: TP-4
Well Number (If Applicable):
Drilling Method Used: Excavator

Date of Drilling: 10/27/2014

Boring Location:
Southeast corner of new building footprint

Depth of Boring (ft): 5
Screen Interval (ft): NA
Water Sample Depth (ft): NA
Soil Sample Interval (ft): 0-2
Water Table Depth (ft): 4
Boring Elevation:

Interval	*Length Attempted and Recovered*	*Depth in Feet*	*Soil/Rock Description*	*USCS*	*Moisture*	*PID (ppm)*
0'-2'	24"/24"	0' - 1'	Coarse sandy gravel. Heavy staining and degraded fuel oil type petroleum odor.	GW	Low	538
2'-4'	24"/24"	2' - 3'	Same as above, but with dimensional lumber present at 36" depth.	GW	Low	537
4'-5'	12"/12"	4' - 5' - 6'	Same as above, but with ~1/8" degraded free product. Low PID reading due to water saturation and degraded condition.	GW	High	310

End of Boring - 5 feet

SOIL BORING LOG INFORMATION

Facility/Project Name: Fraser Shipyard LSI

Project Number: 14-1004

Boring Drilled By (Firm Name and crew Chief): Environmental Troubleshooters, Inc.

Boring Number: PSA GP-1

Well Number (If Applicable):

Chief Driller: Joe Fye

Scientist: John McCarthy

Drilling Method Used: Geoprobe

Date Drilling Occurred: 3/24/2015

Depth of Boring (ft): 12

Screen Interval (ft): 1.5-11.5

Boring Location:

Water Sample Depth (ft): 1.5-11.5

Soil Sample Interval (ft): 2-4

Water Table Depth (ft): 4

Boring Elevation: n/a

Interval	*Length Recovered and Attempted*	*Depth in Feet*	*Soil/Rock Description*	*USCS*	*PID (ppm)*
0'-2'		0' -	18" Black/brown sandy gravel fill, minor staining. 6" Brown fine sand, moderate moisture.		
	24"/24"	1' -		SW	2.3
2'-4'		2' -	Same as previous interval, saturated.		
	24"/24"	3' -		SW	0.6
4'-6'		4' -	No recovery		
	0"/24"	5' -			-
6'-8'		6' -	No recovery		
	0"/24"	7' -			-
8'-10'		8' -	No recovery		
	0"/24"	9' -			-
10'-12'		10' -	No recovery		
	0"/24"	11' -			-

End of Boring: 12.0 ft

SOIL BORING LOG INFORMATION

Facility/Project Name: **Fraser Shipyard LSI**

Project Number: **14-1004**

Boring Drilled By (Firm Name and crew Chief): **Environmental Troubleshooters, Inc.**

Boring Number: **PSA GP-2**

Well Number (If Applicable):

Chief Driller: **Joe Fye**

Scientist: **John McCarthy**

Drilling Method Used: **Geoprobe**

Date Drilling Occurred: **3/24/2015**

Depth of Boring (ft): **12**

Screen Interval (ft): **1.5-11.5**

Boring Location:

Water Sample Depth (ft): **1.5-11.5**

Soil Sample Interval (ft): **2-4**

Water Table Depth (ft): **4**

Boring Elevation: **n/a**

Interval	*Length Recovered and Attempted*	*Depth in Feet*	*Soil/Rock Description*	*USCS*	*PID (ppm)*
0'-2'	24"/24"	0' - 1' -	Brown sandy gravel with black staining at 18"-24", moderate moisture.	GW	5.4
2'-4'	24"/24"	2' - 3' -	Brown fine sand, saturated at 3 - 4'.	SP	9.3
4'-6'	24"/24"	4' - 5' -	6" Same as previous interval (saturated); 18" Fatty red clay, high plasticity, low density, moist	SP CH	5.3
6'-8'	24"/24"	6' - 7' -	Same as previous interval	CH	7.0
8'-10'	24"/24"	8' - 9' -	6" Fine sand with gravel; saturated. 6" Reddish brown silt, dense, low plasticity. Grades to dense, low plasticity clay to 12'.	SP ML/CL	4.7
10'-12'	24"/24"	10' - 11' -	See above interval	CL	6.6

End of Boring: 12.0 ft

SOIL BORING LOG INFORMATION

Facility/Project Name: **Fraser Shipyard LSI**

Project Number: **14-1004**

Boring Drilled By (Firm Name and crew Chief): **Environmental Troubleshooters, Inc.**

Boring Number: **PSA GP-3**

Well Number (If Applicable):

Chief Driller: **Joe Fye**

Scientist: **John McCarthy**

Drilling Method Used: **Geoprobe**

Date Drilling Occurred: **3/24/2015**

Depth of Boring (ft): **12**

Screen Interval (ft): **1.5-11.5**

Boring Location:

Water Sample Depth (ft): **1.5-11.5**

Soil Sample Interval (ft): **2-4**

Water Table Depth (ft): **4**

Boring Elevation: **n/a**

Interval	*Length Recovered and Attempted*	*Depth in Feet*	*Soil/Rock Description*	*USCS*	*PID (ppm)*
0'-2'		0'	6" Brown sandy gravel		
	24"/24"	- 1' -	18" Brown fine sand, unconsolidated, intermittent black staining. Moderate moisture.	SW SP	5.1
2'-4'		2'	Same as previous interval		
	24"/24"	- 3' -		SP	4.6
4'-6'		4'	12" same as previous interval, 4" dimensional lumber,		
	24"/24"	- 5' -	8" same as previous interval	SP	4.3
6'-8'		6'	Same as previous interval		
	24"/24"	- 7' -		SP	4.1
8'-10'		8'	3" Black / brown peat.		
	24"/24"	- 9' -	3" Grayish brown silt, dense 18" Red clay with reduction spots	PT ML CL	5.4
10'-12'		10'	Same as last 18" in previous interval		
	24"/24"	- 11' -		CL	4.1

End of Boring: 12.0 ft

SOIL BORING LOG INFORMATION

Facility/Project Name:
Fraser Shipyard LSI

Project Number: **14-1004**

Boring Drilled By (Firm Name and crew Chief):
Environmental Troubleshooters, Inc.

Boring Number: **PSA GP-4**

Well Number (If Applicable):

Chief Driller: **Joe Fye**

Scientist: **John McCarthy**

Drilling Method Used: **Geoprobe**

Date Drilling Occurred: **3/24/2015**

Depth of Boring (ft): **12**
Screen Interval (ft): **1.5-11.5**

Boring Location:

Water Sample Depth (ft): **1.5-11.5**
Soil Sample Interval (ft): **2-4**
Water Table Depth (ft): **4**
Boring Elevation: **n/a**

Interval	*Length Recovered and Attempted*	*Depth in Feet*	*Soil/Rock Description*	*USCS*	*PID (ppm)*
0'-2'		0' -	6" Reddish brown fine - medium sand. 6" Brown sandy gravel with black staining.	SP	
	24"/24"	1' -	12" Brown fine sand, moderate moisture	GW SP	3.8
2'-4'		2' -	15" Same as previous interval. 9" Black stained sand with gravel, unconsalidated,		
	24"/24"	3' -	saturated	GW	3.4
4'-6'		4' -	Red silty clay, dense, saturated		
	24"/24"	5' -		CL	1.3
6'-8'		6' -	6" Same as previous interval 2" Black peat	CL	
	24"/24"	7' -	16" Red silty clay, moderate dense and plasticity, moderate moisture	PT CL	3.2
8'-10'		8' -	Red silty clay increases in density and decreases in plasticity to 12'.		
	24"/24"	9' -		CL	3.4
10'-12'		10' -	See prior interval.		
	24"/24"	11' -		CL	1.7

End of Boring: 12.0 ft

SOIL BORING LOG INFORMATION

Facility/Project Name: **Fraser Shipyard LSI**

Project Number: **14-1004**

Boring Drilled By (Firm Name and crew Chief): **Environmental Troubleshooters, Inc.**

Boring Number: **PSA GP-5**

Well Number (If Applicable):

Chief Driller: **Joe Fye**

Scientist: **John McCarthy**

Drilling Method Used: **Geoprobe**

Date Drilling Occurred: **3/25/2015**

Depth of Boring (ft): **12**

Screen Interval (ft): **n/a**

Boring Location:

Water Sample Depth (ft): **n/a**

Soil Sample Interval (ft): **4-8**

Water Table Depth (ft): **n/a**

Boring Elevation: **n/a**

Interval	*Length Recovered and Attempted*	*Depth in Feet*	*Soil/Rock Description*	*USCS*	*PID (ppm)*
0'-2'		0' -	6" Concrete 6" Tan brick and sand		
	12"/24"	1' -		SW	219
2'-4'		2' -	Red gravelly clay, dense, low plasticity		
	6"/24"	3' -		GC	556
4'-6'		4' -	Same as previous interval		
	24"/24"	5' -		GC	265
6'-8'		6' -	12" same as previous interval 5" peat, strong petroleum odor (degraded)	GC	
	24"/24"	7' -	7" red clay, moderate plasticity, low density	PT CL	468
8'-10'		8' -	Red clay increases in density and decreases in plasticity to 12'. Reduction spots present.		
	24"/24"	9' -		CL	3.6
10'-12'		10' -	See prior interval.		
	24"/24"	11' -		CL	14.3

End of Boring: 12.0 ft

SOIL BORING LOG INFORMATION

Facility/Project Name: **Fraser Shipyard LSI**

Project Number: **14-1004**

Boring Drilled By (Firm Name and crew Chief): **Environmental Troubleshooters, Inc.**

Boring Number: **PSA GP-6**

Well Number (If Applicable):

Chief Driller: **Joe Fye**

Scientist: **John McCarthy**

Drilling Method Used: **Geoprobe**

Date Drilling Occurred: **3/24/2015**

Depth of Boring (ft): **12**

Screen Interval (ft): **1.5-11.5**

Boring Location:

Water Sample Depth (ft): **1.5-11.5**

Soil Sample Interval (ft): **4-8**

Water Table Depth (ft): **4**

Boring Elevation: **n/a**

Interval	*Length Recovered and Attempted*	*Depth in Feet*	*Soil/Rock Description*	*USCS*	*PID (ppm)*
0'-2'	8"/24"	0' - 1' -	6" Concrete 2" Brown fine-course sand (sub-base material), low moisture.	Fill	8.2
2'-4'	8"/24"	2' - 3' -	4" Buff brick 4" Red brick, low moisture.	Fill	6.1
4'-6'	24"/24"	4' - 5' -	3" Black sand with gravel, petroleum odor (degraded) moderate moisture. 15" Red clay, dense, low plasticity, low moisture 6" Black peat, strong petroleum odor (degraded), moderate moisture	SP CL PT	395
6'-8'	24"/24"	6' - 7' -	20" Red clay, dense, low moisture. 4" Black sand, petroleum odor, unconsolidated, moderate moisture.	CL	386
8'-10'	24"/24"	8' - 9' -	Red clay, dense, low moisture	CL	3.2
10'-12'	24"/24"	10' - 11' -	Same as previous interval	CL	4.0

End of Boring: 12.0 ft

SOIL BORING LOG INFORMATION

Facility/Project Name: **Fraser Shipyard LSI**

Project Number: **14-1004**

Boring Drilled By (Firm Name and crew Chief): **Environmental Troubleshooters, Inc.**

Boring Number: **PSA GP-7**

Well Number (If Applicable):

Chief Driller: **Joe Fye**

Scientist: **John McCarthy**

Drilling Method Used: **Geoprobe**

Date Drilling Occurred: **3/24/2015**

Depth of Boring (ft): **12**

Screen Interval (ft): **1.5-11.5**

Boring Location:

Water Sample Depth (ft): **1.5-11.5**

Soil Sample Interval (ft): **2-4**

Water Table Depth (ft): **4**

Boring Elevation: **n/a**

Interval	*Length Recovered and Attempted*	*Depth in Feet*	*Soil/Rock Description*	*USCS*	*PID (ppm)*
0'-2'	14"/24"	0' - 1' -	12" Brown gravelly sand fill, unconsolidated, includes black staining (8-12"). Saturated after 6" depth. 2" Brown fine sand.	GW SP	3.7
2'-4'	14"/24"	2' - 3' -	Brown fine sand.	SP	4.7
4'-6'	24"/24"	4' - 5' -	4" Same as previous interval. 20" Red silty clay, dense, low moisture.	SP CL	2.5
6'-8'	24"/24"	6' - 7' -	6" Blackish brown peat 3" Gray brown silt 15" Red clay, grading from high moist plastic to low moist dense, red, moderate moisture.	PT ML CL	4.7
8'-10'	24"/24"	8' - 9' -	Clay, red, dense, low plasticity, low moisture	CL	2.7
10'-12'	24"/24"	10' - 11' -	Same as prior interval.	CL	4.0

End of Boring: 12.0 ft

SOIL BORING LOG INFORMATION

Facility/Project Name:
Fraser Shipyard LSI

Project Number: **14-1004**

Boring Drilled By (Firm Name and crew Chief):
Environmental Troubleshooters, Inc.

Boring Number: **PSA GP-8**

Well Number (If Applicable):

Chief Driller: **Joe Fye**

Scientist: **John McCarthy**

Drilling Method Used: **Geoprobe**

Date Drilling Occurred: **6/29/2015**

Depth of Boring (ft): **12**
Screen Interval (ft): **1.5-11.5**

Boring Location:

Water Sample Depth (ft): **1.5-11.5**
Soil Sample Interval (ft): **2-4**
Water Table Depth (ft): **4**
Boring Elevation: **n/a**

Interval	*Length Recovered and Attempted*	*Depth in Feet*	*Soil/Rock Description*	*USCS*	*PID (ppm)*
0'-2'	12"/24"	0' - 1' -	8" Brown gravelly sand fill, unconsolidated. 4" Dark brown sandy gravel, staining, low moisture	SW GW	5.2
2'-4'	12"/24"	2' - 3' -	4" Same as previous interval 8" Reddish brown fine - medium sand, moderate moisture.	GW SP	11.1
4'-6'	20"/24"	4' - 5' -	Brown fine - medium sand, very moist.	SP	7.7
6'-8'	20"/24"	6' - 7' -	Same as previous interval, saturated	SP	7.3
8'-10'	24"/24"	8' - 9' -	Same as previous interval	SP	6.6
10'-12'	24"/24"	10' - 11' -	12" Same as previous interval. 12" Brown silty fine sand, saturated.	SP SM	4.8

End of Boring: 12.0 ft

SOIL BORING LOG INFORMATION

Facility/Project Name:
Fraser Shipyard LSI

Project Number: **14-1004**

Boring Drilled By (Firm Name and crew Chief):
Environmental Troubleshooters, Inc.

Boring Number: **PSA GP-9**

Well Number (If Applicable):

Chief Driller: **Joe Fye**

Scientist: **John McCarthy**

Drilling Method Used: **Geoprobe**

Date Drilling Occurred: **6/29/2015**

Depth of Boring (ft): **12**
Screen Interval (ft): **1.5-11.5**

Boring Location:

Water Sample Depth (ft): **1.5-11.5**
Soil Sample Interval (ft): **2-4, 6-8**
Water Table Depth (ft): **4**
Boring Elevation: **n/a**

Interval	*Length Recovered and Attempted*	*Depth in Feet*	*Soil/Rock Description*	*USCS*	*PID (ppm)*
0'-2'	12"/24"	0' - 1' -	12" Dark brown sandy gravel, staining, low moisture	SW GW	2.7
2'-4'	12"/24"	2' - 3' -	4" Same as previous interval 8" Reddish brown fine - medium sand, moderate moisture.	GW SP	7.0
4'-6'	20"/24"	4' - 5' -	Brown fine - medium sand, very moist.	SP	8.2
6'-8'	20"/24"	6' - 7' -	Same as previous interval, saturated	SP	11.1
8'-10'	24"/24"	8' - 9' -	Same as previous interval	SP	11.0
10'-12'	24"/24"	10' - 11' -	12" Same as previous interval. 12" Brown silty fine sand, saturated.	SP SM	7.7

End of Boring: 12.0 ft

SOIL BORING LOG INFORMATION

Facility/Project Name: Fraser Shipyard LSI
Project Number: 14-1004
Boring Drilled By (Firm Name and crew Chief): Environmental Troubleshooters, Inc.
Boring Number: PSA GP-10
Well Number (If Applicable):
Chief Driller: Joe Fye
Scientist: John McCarthy
Drilling Method Used: Geoprobe

Date Drilling Occurred: 6/29/2015
Depth of Boring (ft): 12
Screen Interval (ft): n/a
Boring Location:
Water Sample Depth (ft): n/a
Soil Sample Interval (ft): 2-4
Water Table Depth (ft): 4
Boring Elevation: n/a

Interval	*Length Recovered and Attempted*	*Depth in Feet*	*Soil/Rock Description*	*USCS*	*PID (ppm)*
0'-2'	16"/24"	0' - 1' -	6" Brown sandy gravel. 6" Reddish brown fine - medium sand. 4" Black stained fine to medium sand, low moisture.	GW SP	2.2
2'-4'	16"/24"	2' - 3' -	Brown fine - medium sand, moderate moisture.	SP	1.4
4'-6'	16"/24"	4' - 5' -	Red fatty clay, medium dense, high plasticity, moderate moisture.	CH	2.7
6'-8'	16"/24"	6' - 7' -	Same as previous interval, moderate high moisture	CH	3.1
8'-10'	24"/24"	8' - 9' -	Same as previous interval, low moisture	CH	3.5
10'-12'	24"/24"	10' - 11' -	Same as previous interval	CH	No reading
12'-14	24"/24"	12' - 13' -	Same as previous interval	CH	No reading
14'-16'	24"/24"	14' - 15' -	Same as previous interval	CH	3.1

End of Boring: 16.0 ft

SOIL BORING LOG INFORMATION

Facility/Project Name: Fraser Shipyard LSI
Project Number: 14-1004
Boring Drilled By (Firm Name and crew Chief): Environmental Troubleshooters, Inc.
Boring Number: PSA GP-11
Well Number (If Applicable):
Chief Driller: Joe Fye
Scientist: John McCarthy
Drilling Method Used: Geoprobe

Date Drilling Occurred: 6/29/2015
Depth of Boring (ft): 16
Screen Interval (ft): n/a
Boring Location:
Water Sample Depth (ft): n/a
Soil Sample Interval (ft): 2-4
Water Table Depth (ft): n/a
Boring Elevation: n/a

Interval	*Length Recovered and Attempted*	*Depth in Feet*	*Soil/Rock Description*	*USCS*	*PID (ppm)*
0'-2'	16"/24"	0' - 1' -	4" Black / dark brown sandy gravel. 4" Class V. 8" Black / dark brown fine to medium sand, low moisture.	GW SP	4.1
2'-4'	16"/24"	2' - 3' -	10" Red fine sand. 6" Light grayish brown fine sand, low moisture.	SP	7.0
4'-6'	24"/24"	4' - 5' -	Red clay, medium dense, high plasticity, low moisture	CH	4.7
6'-8'	24"/24"	6' - 7' -	20" same as previous interval. 4" Peat, low moisture.	CH PT	4.5
8'-10'	24"/24"	8' - 9' -	Reddish black, organic stained, silty clay, low moisture.	ML/CL	2.6
10'-12'	24"/24"	10' - 11' -	6" Same as previous interval. 18" Red fatty clay, low density, high plasticity, low moisture	CL CH	5.2
12'-14	24"/24"	12' - 13' -	Same as previous interval,	CH	No reading
14'-16'	24"/24"	14' - 15' -	Same as previous interval	CH	No reading

End of Boring: 16.0 ft

State of Wis., Dept. of Natural Resources
dnr.wi.gov

Well / Drillhole / Borehole Filling & Sealing Report

Form 3300-005 (R 4/2015)

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

County	WI Unique Well # of Removed Well	Hicap #
Douglas	PSA-GP-1	

Latitude / Longitude (see instructions): 46° 44. 187' N / 92° 5. 381' W
Format Code: ☐ DD ■ DDM
Method Code: ☐ GPS008 ■ SCR002 ☐ OTH001

¼ / ¼ or Gov't Lot #	¼	Section	Township	Range
SE/SE	SW	11	49 N	☐ E ■ W 14

Well Street Address: 1 Clough Avenue

Well City, Village or Town	Well ZIP Code
Superior	54880

Subdivision Name	Lot #

Reason for Removal from Service	WI Unique Well # of Replacement Well

2. Facility / Owner Information

Facility Name: Fraser Shipyard
Facility ID (FID or PWS):
License/Permit/Monitoring #:
Original Well Owner:
Present Well Owner:
Mailing Address of Present Owner:

City of Present Owner	State	ZIP Code
Superior	WI	54880

3. Filled & Sealed Well / Drillhole / Borehole Information

☐ Monitoring Well
☐ Water Well
■ Borehole / Drillhole

Original Construction Date (mm/dd/yyyy): 03/24/2015
If a Well Construction Report is available, please attach.

Construction Type:
☐ Drilled ☐ Driven (Sandpoint) ☐ Dug
■ Other (specify): Push Probe

Formation Type:
■ Unconsolidated Formation ☐ Bedrock

Total Well Depth From Ground Surface (ft.)	Casing Diameter (in.)
12	N/A

Lower Drillhole Diameter (in.)	Casing Depth (ft.)
N/A	N/A

Was well annular space grouted? ☐ Yes ■ No ☐ Unknown

If yes, to what depth (feet)?	Depth to Water (feet)
N/A	4

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? N/A	☐ 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? N/A	☐ 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
Bentonite Liquid Grout	Surface	12	1/8	

6. Comments

7. Supervision of Work

Name of Person or Firm Doing Filling & Sealing	License #	Date of Filling & Sealing or Verification (mm/dd/yyyy)
Environmental Troubleshooters		03/24/2015

Street or Route	Telephone Number
3825 Grand Avenue	(218) 722-6013

City	State	ZIP Code	Signature of Person Doing Work	Date Signed
Duluth	MN	55807		

DNR Use Only

Date Received	Noted By

Comments:

Instructions

Well Filling and Sealing

Wisconsin Administrative Code (NR 811, NR 812, and NR 141 requires well owners to permanently fill and seal any unused wells/ drillholes/boreholes on their property. **As of June 1, 2008 water supply wells can only be filled and sealed by licensed well drillers and pump installers.**

1. Remove any pump, pump piping, debris or other obstacles that could interfere with the sealing operation.
2. Except when bentonite chips are used, the sealing material must be placed with the use of a conductor (tremie) pipe to fill the entire well column to the top with required sealing material. Refer to NR 812 and NR 141 for more details on filling and sealing requirements.

General Instructions: Fill out Well/Drillhole/Borehole Filling & Sealing Report Form 3300-005 as completely as possible for each well or borehole filled and sealed. Information should be provided for every box on the form where available. Sign each form. Please note that these forms are subject to change. (Personally identifiable information on these forms is not intended to be used for any other purpose.)

Verification Only of Fill and Seal: If you are only verifying that filling and sealing has previously occurred on a well and are NOT performing any filling and sealing work on the well, check the box near the top of the form. Complete Parts 1 and 2 of the form completely and any information you can provide in Parts 3, 4 and 5. You must provide comments in Part 6 as to the method used to verify both the filling and sealing of the well. Complete Part 7, including the date of Filling and Sealing or verification. It will be implied that you did do the filling and sealing work or the verification as stated in Part 7.

Route to: Check the appropriate routing box on the top of the form to assure proper routing to the DNR program requiring this well be filled and sealed. Mail the form and any attachments to the Department of Natural Resources, PO Box 7921, Madison, WI 53707-7921.

If you do any work to fill or seal the well, you must complete this form as intended and do not check the Verification Only of Fill and Seal box.

(1) **WELL LOCATION INFORMATION**

WI Unique Well #: Fill in the 2 alphabetic and 3 numeric Wisconsin Unique Well Number (WUWN) of the well being filled and sealed. Check the well, sample tap in the house or the fuse box for a WUWN if one has been assigned to the well.

Hicap #: If this was a high capacity well, enter the number assigned to the well by the Department.

Well Location: Locate the well by Public Land Survey (Gov't Lot or ¼ ¼, ¼, Section, Township and Range) AND latitude and longitude coordinates, using GPS or on-line map locators.

Format Code: Check which format you are reporting in: DD = Decimal Degrees __ __ . __ __ __ __ __° or DDM = Degrees Decimal Minutes __ __° __ __ . __ __ __' (Place decimal point appropriately).

Method Code: Check which method you are using to determine latitude/longitude: GPS008 = GPS Receiver; SCR002 = Online Map/ Viewer; OTH001 = Other.

(2) **FACILITY / OWNER INFORMATION**

If the well is located at a commercial or government facility, fill in the name of landfill, wastewater treatment facility, surface impoundment, spill or project.

Facility ID: Fill in the nine digits Facility ID (FID or PWS) assigned to the site by the Department.

License/Permit/Monitoring #: Fill in number assigned to facility by the Department. If unknown, leave blank.

Present Well Owner: Fill in the name, address, city, state and ZIP code of the present owner.

(3) **FILLED & SEALED WELL/DRILLHOLE/BOREHOLE INFORMATION**

Original Construction Date: Fill in the original date of construction for the well or boring in mm/dd/yyyy format. This section should include information about the original well.

Depth to Water: Enter depth to water from ground surface.

(4) **PUMP, LINER, SCREEN, CASING, & SEALING MATERIAL:** Check only one box where Yes, No or Not Applicable is indicated. Check all boxes which apply otherwise.

(5) **MATERIAL USED TO FILL THE WELL/DRILLHOLE:** Enter the description of the filling material, the depth From and To, circle one measurement unit (Yards, Sacks or Volume), and enter the mix ratio or mud weight (in pounds per gallon).

(6) **COMMENTS:** Describe any of the above boxes in more detail or add information as required to describe the filling and sealing procedures.

(7) **NAME OF PERSON OR FIRM DOING SEALING WORK:** Enter the name (first and last) or firm name, address, and phone number of the person who supervised the work.

Date of Filling & Sealing or Verification: List Month/Day/Year (mm/dd/yyyy) the well was filled & sealed or verified filled & sealed.

State of Wis., Dept. of Natural Resources
dnr.wi.gov

Well / Drillhole / Borehole Filling & Sealing Report

Form 3300-005 (R 4/2015)

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

County	WI Unique Well # of Removed Well	Hicap #
Douglas	PSA-GP-2	

Latitude / Longitude (see instructions): 46° 44.184' N, 92° 5.363' W
Format Code: ☐ DD ■ DDM
Method Code: ☐ GPS008 ■ SCR002 ☐ OTH001

¼ / ¼	¼	Section	Township	Range
SE/SE	SW	11	49 N	☐ E ■ W

or Gov't Lot #

Well Street Address: 1 Clough Avenue

Well City, Village or Town	Well ZIP Code
Superior	54880

Subdivision Name	Lot #

Reason for Removal from Service	WI Unique Well # of Replacement Well

2. Facility / Owner Information

Facility Name: Fraser Shipyard
Facility ID (FID or PWS):
License/Permit/Monitoring #:
Original Well Owner:
Present Well Owner:
Mailing Address of Present Owner:

City of Present Owner	State	ZIP Code
Superior	WI	54880

3. Filled & Sealed Well / Drillhole / Borehole Information

☐ Monitoring Well
☐ Water Well
■ Borehole / Drillhole

Original Construction Date (mm/dd/yyyy): 03/24/2015
If a Well Construction Report is available, please attach.

Construction Type:
☐ Drilled ☐ Driven (Sandpoint) ☐ Dug
■ Other (specify): Push Probe

Formation Type:
■ Unconsolidated Formation ☐ Bedrock

Total Well Depth From Ground Surface (ft.)	Casing Diameter (in.)
12	N/A

Lower Drillhole Diameter (in.)	Casing Depth (ft.)
N/A	N/A

Was well annular space grouted? ☐ Yes ☐ No ☐ Unknown

If yes, to what depth (feet)?	Depth to Water (feet)
N/A	4.5

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? N/A	☐ 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? N/A	☐ 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
Bentonite Liquid Grout	Surface	12	1/8	

6. Comments

7. Supervision of Work

Name of Person or Firm Doing Filling & Sealing	License #	Date of Filling & Sealing or Verification (mm/dd/yyyy)
Environmental Troubleshooters		03/24/2015

Street or Route	Telephone Number
3825 Grand Avenue	(218) 722-6013

City	State	ZIP Code	Signature of Person Doing Work	Date Signed
Duluth	MN	55807		

DNR Use Only

Date Received	Noted By

Comments:

Instructions

Well Filling and Sealing

Wisconsin Administrative Code (NR 811, NR 812, and NR 141 requires well owners to permanently fill and seal any unused wells/ drillholes/boreholes on their property. **As of June 1, 2008 water supply wells can only be filled and sealed by licensed well drillers and pump installers.**

1. Remove any pump, pump piping, debris or other obstacles that could interfere with the sealing operation.
2. Except when bentonite chips are used, the sealing material must be placed with the use of a conductor (tremie) pipe to fill the entire well column to the top with required sealing material. Refer to NR 812 and NR 141 for more details on filling and sealing requirements.

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Verification Only of Fill and Seal: If you are only verifying that filling and sealing has previously occurred on a well and are NOT performing any filling and sealing work on the well, check the box near the top of the form. Complete Parts 1 and 2 of the form completely and any information you can provide in Parts 3, 4 and 5. You must provide comments in Part 6 as to the method used to verify both the filling and sealing of the well. Complete Part 7, including the date of Filling and Sealing or verification. It will be implied that you did do the filling and sealing work or the verification as stated in Part 7.

Route to: Check the appropriate routing box on the top of the form to assure proper routing to the DNR program requiring this well be filled and sealed. Mail the form and any attachments to the Department of Natural Resources, PO Box 7921, Madison, WI 53707-7921.

If you do any work to fill or seal the well, you must complete this form as intended and do not check the Verification Only of Fill and Seal box.

(1) **WELL LOCATION INFORMATION**

WI Unique Well #: Fill in the 2 alphabetic and 3 numeric Wisconsin Unique Well Number (WUWN) of the well being filled and sealed. Check the well, sample tap in the house or the fuse box for a WUWN if one has been assigned to the well.

Hicap #: If this was a high capacity well, enter the number assigned to the well by the Department.

Well Location: Locate the well by Public Land Survey (Gov't Lot or ¼ ¼, ¼, Section, Township and Range) AND latitude and longitude coordinates, using GPS or on-line map locators.

Format Code: Check which format you are reporting in: DD = Decimal Degrees __ __ . __ __ __ __ __° or DDM = Degrees Decimal Minutes __ __° __ __ . __ __ __' (Place decimal point appropriately).

Method Code: Check which method you are using to determine latitude/longitude: GPS008 = GPS Receiver; SCR002 = Online Map/ Viewer; OTH001 = Other.

(2) **FACILITY / OWNER INFORMATION**

If the well is located at a commercial or government facility, fill in the name of landfill, wastewater treatment facility, surface impoundment, spill or project.

Facility ID: Fill in the nine digits Facility ID (FID or PWS) assigned to the site by the Department.

License/Permit/Monitoring #: Fill in number assigned to facility by the Department. If unknown, leave blank.

Present Well Owner: Fill in the name, address, city, state and ZIP code of the present owner.

(3) **FILLED & SEALED WELL/DRILLHOLE/BOREHOLE INFORMATION**

Original Construction Date: Fill in the original date of construction for the well or boring in mm/dd/yyyy format. This section should include information about the original well.

Depth to Water: Enter depth to water from ground surface.

(4) **PUMP, LINER, SCREEN, CASING, & SEALING MATERIAL:** Check only one box where Yes, No or Not Applicable is indicated. Check all boxes which apply otherwise.

(5) **MATERIAL USED TO FILL THE WELL/DRILLHOLE:** Enter the description of the filling material, the depth From and To, circle one measurement unit (Yards, Sacks or Volume), and enter the mix ratio or mud weight (in pounds per gallon).

(6) **COMMENTS:** Describe any of the above boxes in more detail or add information as required to describe the filling and sealing procedures.

(7) **NAME OF PERSON OR FIRM DOING SEALING WORK:** Enter the name (first and last) or firm name, address, and phone number of the person who supervised the work.

Date of Filling & Sealing or Verification: List Month/Day/Year (mm/dd/yyyy) the well was filled & sealed or verified filled & sealed.

State of Wis., Dept. of Natural Resources
dnr.wi.gov

Well / Drillhole / Borehole Filling & Sealing Report

Form 3300-005 (R 4/2015)

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

County	WI Unique Well # of Removed Well	Hicap #
Douglas	GP-3	

Latitude / Longitude (see instructions)	Format Code	Method Code
46° 44.178' N	☐ DD	☐ GPS008
92° 5.355' W	■ DDM	■ SCR002 ☐ OTH001

¼ / ¼ SE/SE	¼ SW	Section	Township	Range
or Gov't Lot #		11	49 N	14 ☐ E ■ W

Well Street Address: 1 Clough Avenue

Well City, Village or Town	Well ZIP Code
Superior	54880

Subdivision Name	Lot #

Reason for Removal from Service	WI Unique Well # of Replacement Well

2. Facility / Owner Information

Facility Name: Fraser Shipyard

Facility ID (FID or PWS):

License/Permit/Monitoring #:

Original Well Owner:

Present Well Owner:

Mailing Address of Present Owner:

City of Present Owner	State	ZIP Code
Superior	WI	54880

3. Filled & Sealed Well / Drillhole / Borehole Information

☐ Monitoring Well
☐ Water Well
■ Borehole / Drillhole

Original Construction Date (mm/dd/yyyy): 03/24/2015

If a Well Construction Report is available, please attach.

Construction Type:
☐ Drilled ☐ Driven (Sandpoint) ☐ Dug
■ Other (specify): Push Probe

Formation Type:
■ Unconsolidated Formation ☐ Bedrock

Total Well Depth From Ground Surface (ft.)	Casing Diameter (in.)
12	N/A

Lower Drillhole Diameter (in.)	Casing Depth (ft.)
N/A	N/A

Was well annular space grouted? ☐ Yes ☐ No ☐ Unknown

If yes, to what depth (feet)?	Depth to Water (feet)
N/A	8

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

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
Bentonite Liquid Grout	Surface	12	Y8	

6. Comments

7. Supervision of Work

Name of Person or Firm Doing Filling & Sealing	License #	Date of Filling & Sealing or Verification (mm/dd/yyyy)
Environmental Troubleshooters		03/24/2015

Street or Route	Telephone Number
3825 Grand Avenue	(218) 722-6013

City	State	ZIP Code
Duluth	MN	55807

Signature of Person Doing Work:

Date Signed:

DNR Use Only

Date Received	Noted By

Comments:

Instructions

Well Filling and Sealing

Wisconsin Administrative Code (NR 811, NR 812, and NR 141 requires well owners to permanently fill and seal any unused wells/ drillholes/boreholes on their property. **As of June 1, 2008 water supply wells can only be filled and sealed by licensed well drillers and pump installers.**

1. Remove any pump, pump piping, debris or other obstacles that could interfere with the sealing operation.
2. Except when bentonite chips are used, the sealing material must be placed with the use of a conductor (tremie) pipe to fill the entire well column to the top with required sealing material. Refer to NR 812 and NR 141 for more details on filling and sealing requirements.

General Instructions: Fill out Well/Drillhole/Borehole Filling & Sealing Report Form 3300-005 as completely as possible for each well or borehole filled and sealed. Information should be provided for every box on the form where available. Sign each form. Please note that these forms are subject to change. (Personally identifiable information on these forms is not intended to be used for any other purpose.)

Verification Only of Fill and Seal: If you are only verifying that filling and sealing has previously occurred on a well and are NOT performing any filling and sealing work on the well, check the box near the top of the form. Complete Parts 1 and 2 of the form completely and any information you can provide in Parts 3, 4 and 5. You must provide comments in Part 6 as to the method used to verify both the filling and sealing of the well. Complete Part 7, including the date of Filling and Sealing or verification. It will be implied that you did do the filling and sealing work or the verification as stated in Part 7.

Route to: Check the appropriate routing box on the top of the form to assure proper routing to the DNR program requiring this well be filled and sealed. Mail the form and any attachments to the Department of Natural Resources, PO Box 7921, Madison, WI 53707-7921.

If you do any work to fill or seal the well, you must complete this form as intended and do not check the Verification Only of Fill and Seal box.

(1) **WELL LOCATION INFORMATION**

WI Unique Well #: Fill in the 2 alphabetic and 3 numeric Wisconsin Unique Well Number (WUWN) of the well being filled and sealed. Check the well, sample tap in the house or the fuse box for a WUWN if one has been assigned to the well.

Hicap #: If this was a high capacity well, enter the number assigned to the well by the Department.

Well Location: Locate the well by Public Land Survey (Gov't Lot or ¼ ¼, ¼, Section, Township and Range) AND latitude and longitude coordinates, using GPS or on-line map locators.

Format Code: Check which format you are reporting in: DD = Decimal Degrees __ __ . __ __ __ __ __° or DDM = Degrees Decimal Minutes __ __° __ __ . __ __ __' (Place decimal point appropriately).

Method Code: Check which method you are using to determine latitude/longitude: GPS008 = GPS Receiver; SCR002 = Online Map/ Viewer; OTH001 = Other.

(2) **FACILITY / OWNER INFORMATION**

If the well is located at a commercial or government facility, fill in the name of landfill, wastewater treatment facility, surface impoundment, spill or project.

Facility ID: Fill in the nine digits Facility ID (FID or PWS) assigned to the site by the Department.

License/Permit/Monitoring #: Fill in number assigned to facility by the Department. If unknown, leave blank.

Present Well Owner: Fill in the name, address, city, state and ZIP code of the present owner.

(3) **FILLED & SEALED WELL/DRILLHOLE/BOREHOLE INFORMATION**

Original Construction Date: Fill in the original date of construction for the well or boring in mm/dd/yyyy format. This section should include information about the original well.

Depth to Water: Enter depth to water from ground surface.

(4) **PUMP, LINER, SCREEN, CASING, & SEALING MATERIAL:** Check only one box where Yes, No or Not Applicable is indicated. Check all boxes which apply otherwise.

(5) **MATERIAL USED TO FILL THE WELL/DRILLHOLE:** Enter the description of the filling material, the depth From and To, circle one measurement unit (Yards, Sacks or Volume), and enter the mix ratio or mud weight (in pounds per gallon).

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(7) **NAME OF PERSON OR FIRM DOING SEALING WORK:** Enter the name (first and last) or firm name, address, and phone number of the person who supervised the work.

Date of Filling & Sealing or Verification: List Month/Day/Year (mm/dd/yyyy) the well was filled & sealed or verified filled & sealed.

State of Wis., Dept. of Natural Resources
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Well / Drillhole / Borehole Filling & Sealing Report

Form 3300-005 (R 4/2015)

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☐ **Verification Only of Fill and Seal**

Route to DNR Bureau:
☐ Drinking Water ☐ Watershed/Wastewater ■ Remediation/Redevelopment
☐ Waste Management ☐ Other:

1. Well Location Information

County	WI Unique Well # of Removed Well	Hicap #
Douglas	GP-4	

Latitude / Longitude (see instructions)	Format Code	Method Code
46° 44.170' N	☐ DD	☐ GPS008
92° 5.364' W	■ DDM	■ SCR002 ☐ OTH001

¼ / ¼	¼	Section	Township	Range
SE/SE	SW	11	49 N	14 ☐ E ■ W

or Gov't Lot #

Well Street Address: 1 Clough Avenue

Well City, Village or Town	Well ZIP Code
Superior	54880

Subdivision Name	Lot #

Reason for Removal from Service	WI Unique Well # of Replacement Well

2. Facility / Owner Information

Facility Name: Fraser Shipyard

Facility ID (FID or PWS):

License/Permit/Monitoring #:

Original Well Owner:

Present Well Owner:

Mailing Address of Present Owner:

City of Present Owner	State	ZIP Code
Superior	WI	54880

3. Filled & Sealed Well / Drillhole / Borehole Information

☐ Monitoring Well
☐ Water Well
■ Borehole / Drillhole

Original Construction Date (mm/dd/yyyy): 03/24/2015

If a Well Construction Report is available, please attach.

Construction Type:
☐ Drilled ☐ Driven (Sandpoint) ☐ Dug
■ Other (specify): Push Probe

Formation Type:
■ Unconsolidated Formation ☐ Bedrock

Total Well Depth From Ground Surface (ft.)	Casing Diameter (in.)
12	N/A

Lower Drillhole Diameter (in.)	Casing Depth (ft.)
N/A	N/A

Was well annular space grouted? ☐ Yes ☐ No ☐ Unknown

If yes, to what depth (feet)?	Depth to Water (feet)
N/A	7

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? N/A	☐ 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? N/A	☐ 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
Bentonite Liquid Grout	Surface	12	1/8	

6. Comments

7. Supervision of Work

Name of Person or Firm Doing Filling & Sealing	License #	Date of Filling & Sealing or Verification (mm/dd/yyyy)
Environmental Troubleshooters		03/24/2015

Street or Route	Telephone Number
3825 Grand Avenue	(218) 722-6013

City	State	ZIP Code
Duluth	MN	55807

Signature of Person Doing Work:

Date Signed:

DNR Use Only

Date Received	Noted By

Comments:

Instructions

Well Filling and Sealing

Wisconsin Administrative Code (NR 811, NR 812, and NR 141 requires well owners to permanently fill and seal any unused wells/ drillholes/boreholes on their property. **As of June 1, 2008 water supply wells can only be filled and sealed by licensed well drillers and pump installers.**

1. Remove any pump, pump piping, debris or other obstacles that could interfere with the sealing operation.
2. Except when bentonite chips are used, the sealing material must be placed with the use of a conductor (tremie) pipe to fill the entire well column to the top with required sealing material. Refer to NR 812 and NR 141 for more details on filling and sealing requirements.

General Instructions: Fill out Well/Drillhole/Borehole Filling & Sealing Report Form 3300-005 as completely as possible for each well or borehole filled and sealed. Information should be provided for every box on the form where available. Sign each form. Please note that these forms are subject to change. (Personally identifiable information on these forms is not intended to be used for any other purpose.)

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Route to: Check the appropriate routing box on the top of the form to assure proper routing to the DNR program requiring this well be filled and sealed. Mail the form and any attachments to the Department of Natural Resources, PO Box 7921, Madison, WI 53707-7921.

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(1) **WELL LOCATION INFORMATION**

WI Unique Well #: Fill in the 2 alphabetic and 3 numeric Wisconsin Unique Well Number (WUWN) of the well being filled and sealed. Check the well, sample tap in the house or the fuse box for a WUWN if one has been assigned to the well.

Hicap #: If this was a high capacity well, enter the number assigned to the well by the Department.

Well Location: Locate the well by Public Land Survey (Gov't Lot or ¼ ¼, ¼, Section, Township and Range) AND latitude and longitude coordinates, using GPS or on-line map locators.

Format Code: Check which format you are reporting in: DD = Decimal Degrees __ __ . __ __ __ __ __° or DDM = Degrees Decimal Minutes __ __° __ __ . __ __ __' (Place decimal point appropriately).

Method Code: Check which method you are using to determine latitude/longitude: GPS008 = GPS Receiver; SCR002 = Online Map/ Viewer; OTH001 = Other.

(2) **FACILITY / OWNER INFORMATION**

If the well is located at a commercial or government facility, fill in the name of landfill, wastewater treatment facility, surface impoundment, spill or project.

Facility ID: Fill in the nine digits Facility ID (FID or PWS) assigned to the site by the Department.

License/Permit/Monitoring #: Fill in number assigned to facility by the Department. If unknown, leave blank.

Present Well Owner: Fill in the name, address, city, state and ZIP code of the present owner.

(3) **FILLED & SEALED WELL/DRILLHOLE/BOREHOLE INFORMATION**

Original Construction Date: Fill in the original date of construction for the well or boring in mm/dd/yyyy format. This section should include information about the original well.

Depth to Water: Enter depth to water from ground surface.

(4) **PUMP, LINER, SCREEN, CASING, & SEALING MATERIAL:** Check only one box where Yes, No or Not Applicable is indicated. Check all boxes which apply otherwise.

(5) **MATERIAL USED TO FILL THE WELL/DRILLHOLE:** Enter the description of the filling material, the depth From and To, circle one measurement unit (Yards, Sacks or Volume), and enter the mix ratio or mud weight (in pounds per gallon).

(6) **COMMENTS:** Describe any of the above boxes in more detail or add information as required to describe the filling and sealing procedures.

(7) **NAME OF PERSON OR FIRM DOING SEALING WORK:** Enter the name (first and last) or firm name, address, and phone number of the person who supervised the work.

Date of Filling & Sealing or Verification: List Month/Day/Year (mm/dd/yyyy) the well was filled & sealed or verified filled & sealed.

State of Wis., Dept. of Natural Resources
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Well / Drillhole / Borehole Filling & Sealing Report

Form 3300-005 (R 4/2015)

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☐ **Verification Only of Fill and Seal**

Route to DNR Bureau:
☐ Drinking Water ☐ Watershed/Wastewater ■ Remediation/Redevelopment
☐ Waste Management ☐ Other: _____

1. Well Location Information

County	WI Unique Well # of Removed Well	Hicap #
Douglas	GP-S	

Latitude / Longitude (see instructions): 46° 44.165' N / 92° 5.383' W
Format Code: ☐ DD ■ DDM
Method Code: ☐ GPS008 ■ SCR002 ☐ OTH001

¼ / ¼	¼	Section	Township	Range
SE/SE	SW	11	49 N	14 ☐ E ■ W

or Gov't Lot #

Well Street Address: 1 Clough Avenue

Well City, Village or Town	Well ZIP Code
Superior	54880

Subdivision Name	Lot #

Reason for Removal from Service	WI Unique Well # of Replacement Well

2. Facility / Owner Information

Facility Name: Fraser Shipyard
Facility ID (FID or PWS):
License/Permit/Monitoring #:
Original Well Owner:
Present Well Owner:
Mailing Address of Present Owner:

City of Present Owner	State	ZIP Code
Superior	WI	54880

3. Filled & Sealed Well / Drillhole / Borehole Information

☐ Monitoring Well
☐ Water Well
■ Borehole / Drillhole

Original Construction Date (mm/dd/yyyy): 03/24/2015
If a Well Construction Report is available, please attach.

Construction Type:
☐ Drilled ☐ Driven (Sandpoint) ☐ Dug
■ Other (specify): Push Probe

Formation Type:
■ Unconsolidated Formation ☐ Bedrock

Total Well Depth From Ground Surface (ft.)	Casing Diameter (in.)
12	N/A

Lower Drillhole Diameter (in.)	Casing Depth (ft.)
N/A	N/A

Was well annular space grouted? ☐ Yes ☐ No ☐ Unknown

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

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
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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

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
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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

5. Material Used to Fill Well / Drillhole	From (ft.)	To (ft.)	No. Yards, Sacks Sealant or Volume (circle one)	Mix Ratio or Mud Weight
Bentonite Liquid Grout	Surface	12	1/8	

6. Comments

No water present

7. Supervision of Work

Name of Person or Firm Doing Filling & Sealing	License #	Date of Filling & Sealing or Verification (mm/dd/yyyy)
Environmental Troubleshooters		03/24/2015

Street or Route	Telephone Number
3825 Grand Avenue	(218) 722-6013

City	State	ZIP Code	Signature of Person Doing Work	Date Signed
Duluth	MN	55807		

DNR Use Only

Date Received	Noted By

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Instructions

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Well Location: Locate the well by Public Land Survey (Gov't Lot or ¼ ¼, ¼, Section, Township and Range) AND latitude and longitude coordinates, using GPS or on-line map locators.

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License/Permit/Monitoring #: Fill in number assigned to facility by the Department. If unknown, leave blank.

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State of Wis., Dept. of Natural Resources
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Well / Drillhole / Borehole Filling & Sealing Report

Form 3300-005 (R 4/2015)

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

County	WI Unique Well # of Removed Well	Hicap #
Douglas	GP-6	

Latitude / Longitude (see instructions)	Format Code	Method Code
46° 44.170` N	☐ DD	☐ GPS008
92° 5.392` W	■ DDM	■ SCR002 ☐ OTH001

¼ / ¼ SE/SE	¼ SW	Section	Township	Range
or Gov't Lot #		11	49 N	14 ☐ E ■ W

Well Street Address: 1 Clough Avenue

Well City, Village or Town	Well ZIP Code
Superior	54880

Subdivision Name	Lot #

Reason for Removal from Service	WI Unique Well # of Replacement Well

2. Facility / Owner Information

Facility Name: Fraser Shipyard

Facility ID (FID or PWS):

License/Permit/Monitoring #:

Original Well Owner:

Present Well Owner:

Mailing Address of Present Owner:

City of Present Owner	State	ZIP Code
Superior	WI	54880

3. Filled & Sealed Well / Drillhole / Borehole Information

☐ Monitoring Well
☐ Water Well
■ Borehole / Drillhole

Original Construction Date (mm/dd/yyyy): 03/24/2015

If a Well Construction Report is available, please attach.

Construction Type:
☐ Drilled ☐ Driven (Sandpoint) ☐ Dug
■ Other (specify): Push Probe

Formation Type:
■ Unconsolidated Formation ☐ Bedrock

Total Well Depth From Ground Surface (ft.)	Casing Diameter (in.)
12	N/A

Lower Drillhole Diameter (in.)	Casing Depth (ft.)
N/A	N/A

Was well annular space grouted? ☐ Yes ☐ No ☐ Unknown

If yes, to what depth (feet)?	Depth to Water (feet)
N/A	6

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? N/A	☐ 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? N/A	☐ 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

5. Material Used to Fill Well / Drillhole	From (ft.)	To (ft.)	No. Yards, Sacks Sealant or Volume (circle one)	Mix Ratio or Mud Weight
Bentonite Liquid Grout	Surface	12	1/8	

6. Comments

7. Supervision of Work

Name of Person or Firm Doing Filling & Sealing	License #	Date of Filling & Sealing or Verification (mm/dd/yyyy)
Environmental Troubleshooters		03/24/2015

Street or Route	Telephone Number
3825 Grand Avenue	(218) 722-6013

City	State	ZIP Code
Duluth	MN	55807

Signature of Person Doing Work:

Date Signed:

DNR Use Only

Date Received	Noted By

Comments:

Instructions

Well Filling and Sealing

Wisconsin Administrative Code (NR 811, NR 812, and NR 141 requires well owners to permanently fill and seal any unused wells/ drillholes/boreholes on their property. **As of June 1, 2008 water supply wells can only be filled and sealed by licensed well drillers and pump installers.**

1. Remove any pump, pump piping, debris or other obstacles that could interfere with the sealing operation.
2. Except when bentonite chips are used, the sealing material must be placed with the use of a conductor (tremie) pipe to fill the entire well column to the top with required sealing material. Refer to NR 812 and NR 141 for more details on filling and sealing requirements.

General Instructions: Fill out Well/Drillhole/Borehole Filling & Sealing Report Form 3300-005 as completely as possible for each well or borehole filled and sealed. Information should be provided for every box on the form where available. Sign each form. Please note that these forms are subject to change. (Personally identifiable information on these forms is not intended to be used for any other purpose.)

Verification Only of Fill and Seal: If you are only verifying that filling and sealing has previously occurred on a well and are NOT performing any filling and sealing work on the well, check the box near the top of the form. Complete Parts 1 and 2 of the form completely and any information you can provide in Parts 3, 4 and 5. You must provide comments in Part 6 as to the method used to verify both the filling and sealing of the well. Complete Part 7, including the date of Filling and Sealing or verification. It will be implied that you did do the filling and sealing work or the verification as stated in Part 7.

Route to: Check the appropriate routing box on the top of the form to assure proper routing to the DNR program requiring this well be filled and sealed. Mail the form and any attachments to the Department of Natural Resources, PO Box 7921, Madison, WI 53707-7921.

If you do any work to fill or seal the well, you must complete this form as intended and do not check the Verification Only of Fill and Seal box.

(1) **WELL LOCATION INFORMATION**

WI Unique Well #: Fill in the 2 alphabetic and 3 numeric Wisconsin Unique Well Number (WUWN) of the well being filled and sealed. Check the well, sample tap in the house or the fuse box for a WUWN if one has been assigned to the well.

Hicap #: If this was a high capacity well, enter the number assigned to the well by the Department.

Well Location: Locate the well by Public Land Survey (Gov't Lot or ¼ ¼, ¼, Section, Township and Range) AND latitude and longitude coordinates, using GPS or on-line map locators.

Format Code: Check which format you are reporting in: DD = Decimal Degrees __ __ . __ __ __ __ __° or DDM = Degrees Decimal Minutes __ __° __ __ . __ __ __' (Place decimal point appropriately).

Method Code: Check which method you are using to determine latitude/longitude: GPS008 = GPS Receiver; SCR002 = Online Map/ Viewer; OTH001 = Other.

(2) **FACILITY / OWNER INFORMATION**

If the well is located at a commercial or government facility, fill in the name of landfill, wastewater treatment facility, surface impoundment, spill or project.

Facility ID: Fill in the nine digits Facility ID (FID or PWS) assigned to the site by the Department.

License/Permit/Monitoring #: Fill in number assigned to facility by the Department. If unknown, leave blank.

Present Well Owner: Fill in the name, address, city, state and ZIP code of the present owner.

(3) **FILLED & SEALED WELL/DRILLHOLE/BOREHOLE INFORMATION**

Original Construction Date: Fill in the original date of construction for the well or boring in mm/dd/yyyy format. This section should include information about the original well.

Depth to Water: Enter depth to water from ground surface.

(4) **PUMP, LINER, SCREEN, CASING, & SEALING MATERIAL:** Check only one box where Yes, No or Not Applicable is indicated. Check all boxes which apply otherwise.

(5) **MATERIAL USED TO FILL THE WELL/DRILLHOLE:** Enter the description of the filling material, the depth From and To, circle one measurement unit (Yards, Sacks or Volume), and enter the mix ratio or mud weight (in pounds per gallon).

(6) **COMMENTS:** Describe any of the above boxes in more detail or add information as required to describe the filling and sealing procedures.

(7) **NAME OF PERSON OR FIRM DOING SEALING WORK:** Enter the name (first and last) or firm name, address, and phone number of the person who supervised the work.

Date of Filling & Sealing or Verification: List Month/Day/Year (mm/dd/yyyy) the well was filled & sealed or verified filled & sealed.

State of Wis., Dept. of Natural Resources
dnr.wi.gov

Well / Drillhole / Borehole Filling & Sealing Report

Form 3300-005 (R 4/2015)

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☐ **Verification Only of Fill and Seal**

Route to DNR Bureau:
☐ Drinking Water ☐ Watershed/Wastewater ■ Remediation/Redevelopment
☐ Waste Management ☐ Other:

1. Well Location Information

County	WI Unique Well # of Removed Well	Hicap #
Douglas	GP-7	

Latitude / Longitude (see instructions): 46° 44.159' N / 92° 5.373' W
Format Code: ☐ DD ■ DDM
Method Code: ☐ GPS008 ■ SCR002 ☐ OTH001

¼ / ¼ or Gov't Lot #	¼	Section	Township	Range
SE/SE	SW	11	49 N	14 ☐ E ■ W

Well Street Address: 1 Clough Avenue
Well City, Village or Town: Superior
Well ZIP Code: 54880
Subdivision Name:
Lot #:
Reason for Removal from Service:
WI Unique Well # of Replacement Well:

2. Facility / Owner Information

Facility Name: Fraser Shipyard
Facility ID (FID or PWS):
License/Permit/Monitoring #:
Original Well Owner:
Present Well Owner:
Mailing Address of Present Owner:
City of Present Owner: Superior
State: WI
ZIP Code: 54880

3. Filled & Sealed Well / Drillhole / Borehole Information

☐ Monitoring Well ☐ Water Well ■ Borehole / Drillhole
Original Construction Date (mm/dd/yyyy): 03/24/2015
If a Well Construction Report is available, please attach.

Construction Type:
☐ Drilled ☐ Driven (Sandpoint) ☐ Dug. ■ Other (specify): Push Probe

Formation Type:
■ Unconsolidated Formation ☐ Bedrock

Total Well Depth From Ground Surface (ft.)	Casing Diameter (in.)
12	N/A
Lower Drillhole Diameter (in.)	**Casing Depth (ft.)**
N/A	N/A

Was well annular space grouted? ☐ Yes ☐ No ☐ Unknown

If yes, to what depth (feet)?	Depth to Water (feet)
N/A	4.5

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? N/A	☐ 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? N/A	☐ 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
Bentonite Liquid Grout	Surface	12	1/8	

6. Comments

7. Supervision of Work

Name of Person or Firm Doing Filling & Sealing	License #	Date of Filling & Sealing or Verification (mm/dd/yyyy)
Environmental Troubleshooters		03/24/2015

Street or Route	Telephone Number
3825 Grand Avenue	(218) 722-6013

City	State	ZIP Code	Signature of Person Doing Work	Date Signed
Duluth	MN	55807		

DNR Use Only

Date Received	Noted By

Comments:

Instructions

Well Filling and Sealing

Wisconsin Administrative Code (NR 811, NR 812, and NR 141 requires well owners to permanently fill and seal any unused wells/ drillholes/boreholes on their property. **As of June 1, 2008 water supply wells can only be filled and sealed by licensed well drillers and pump installers.**

1. Remove any pump, pump piping, debris or other obstacles that could interfere with the sealing operation.
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Hicap #: If this was a high capacity well, enter the number assigned to the well by the Department.

Well Location: Locate the well by Public Land Survey (Gov't Lot or ¼ ¼, ¼, Section, Township and Range) AND latitude and longitude coordinates, using GPS or on-line map locators.

Format Code: Check which format you are reporting in: DD = Decimal Degrees __ __ . __ __ __ __ __° or DDM = Degrees Decimal Minutes __ __° __ __ . __ __ __' (Place decimal point appropriately).

Method Code: Check which method you are using to determine latitude/longitude: GPS008 = GPS Receiver; SCR002 = Online Map/ Viewer; OTH001 = Other.

(2) **FACILITY / OWNER INFORMATION**

If the well is located at a commercial or government facility, fill in the name of landfill, wastewater treatment facility, surface impoundment, spill or project.

Facility ID: Fill in the nine digits Facility ID (FID or PWS) assigned to the site by the Department.

License/Permit/Monitoring #: Fill in number assigned to facility by the Department. If unknown, leave blank.

Present Well Owner: Fill in the name, address, city, state and ZIP code of the present owner.

(3) **FILLED & SEALED WELL/DRILLHOLE/BOREHOLE INFORMATION**

Original Construction Date: Fill in the original date of construction for the well or boring in mm/dd/yyyy format. This section should include information about the original well.

Depth to Water: Enter depth to water from ground surface.

(4) **PUMP, LINER, SCREEN, CASING, & SEALING MATERIAL:** Check only one box where Yes, No or Not Applicable is indicated. Check all boxes which apply otherwise.

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State of Wis., Dept. of Natural Resources
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Well / Drillhole / Borehole Filling & Sealing Report

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Route to DNR Bureau:
☐ Drinking Water ☐ Watershed/Wastewater ■ Remediation/Redevelopment
☐ Waste Management ☐ Other: _____

1. Well Location Information

County	WI Unique Well # of Removed Well	Hicap #
Douglas	PSA-GP-8	

Latitude / Longitude (see instructions): 46° 44.158' N, 92° 5.356' W
Format Code: ☐ DD ■ DDM
Method Code: ☐ GPS008 ■ SCR002 ☐ OTH001

¼ / ¼	¼	Section	Township	Range
SE/SE	SW	11	49 N	☐ E ■ W

or Gov't Lot #

Well Street Address: 1 Clough Avenue

Well City, Village or Town	Well ZIP Code
Superior	54880

Subdivision Name	Lot #

Reason for Removal from Service	WI Unique Well # of Replacement Well

2. Facility / Owner Information

Facility Name: Fraser Shipyard
Facility ID (FID or PWS):
License/Permit/Monitoring #:
Original Well Owner:
Present Well Owner:
Mailing Address of Present Owner:

City of Present Owner	State	ZIP Code
Superior	WI	54880

3. Filled & Sealed Well / Drillhole / Borehole Information

☐ Monitoring Well
☐ Water Well
■ Borehole / Drillhole

Original Construction Date (mm/dd/yyyy): 03/24/2015

If a Well Construction Report is available, please attach.

Construction Type:
☐ Drilled ☐ Driven (Sandpoint) ☐ Dug
■ Other (specify): Push Probe

Formation Type:
■ Unconsolidated Formation ☐ Bedrock

Total Well Depth From Ground Surface (ft.)	Casing Diameter (in.)
12	N/A

Lower Drillhole Diameter (in.)	Casing Depth (ft.)
N/A	N/A

Was well annular space grouted? ☐ Yes ☐ No ☐ Unknown

If yes, to what depth (feet)?	Depth to Water (feet)
N/A	6

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? N/A	☐ Yes	☐ No	☐ N/A
Screen removed?	☐ Yes	☐ No	☐ N/A
Casing left in place?	☐ Yes	☐ No	☐ N/A
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If bentonite chips were used, were they hydrated with water from a known safe source?	☐ Yes	☐ No	☐ N/A

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5. Material Used to Fill Well / Drillhole

	From (ft.)	To (ft.)	No. Yards, Sacks, Sealant or Volume (circle one)	Mix Ratio or Mud Weight
Bentonite Liquid Grout	Surface	12	Y8	

6. Comments

7. Supervision of Work

Name of Person or Firm Doing Filling & Sealing	License #	Date of Filling & Sealing or Verification (mm/dd/yyyy)
Environmental Troubleshooters		03/24/2015

Street or Route	Telephone Number
3825 Grand Avenue	(218) 722-6013

City	State	ZIP Code	Signature of Person Doing Work	Date Signed
Duluth	MN	55807		

DNR Use Only

Date Received	Noted By

Comments:

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Hicap #: If this was a high capacity well, enter the number assigned to the well by the Department.

Well Location: Locate the well by Public Land Survey (Gov't Lot or ¼ ¼, ¼, Section, Township and Range) AND latitude and longitude coordinates, using GPS or on-line map locators.

Format Code: Check which format you are reporting in: DD = Decimal Degrees __ __ . __ __ __ __ __° or DDM = Degrees Decimal Minutes __ __° __ __ . __ __ __' (Place decimal point appropriately).

Method Code: Check which method you are using to determine latitude/longitude: GPS008 = GPS Receiver; SCR002 = Online Map/ Viewer; OTH001 = Other.

(2) **FACILITY / OWNER INFORMATION**

If the well is located at a commercial or government facility, fill in the name of landfill, wastewater treatment facility, surface impoundment, spill or project.

Facility ID: Fill in the nine digits Facility ID (FID or PWS) assigned to the site by the Department.

License/Permit/Monitoring #: Fill in number assigned to facility by the Department. If unknown, leave blank.

Present Well Owner: Fill in the name, address, city, state and ZIP code of the present owner.

(3) **FILLED & SEALED WELL/DRILLHOLE/BOREHOLE INFORMATION**

Original Construction Date: Fill in the original date of construction for the well or boring in mm/dd/yyyy format. This section should include information about the original well.

Depth to Water: Enter depth to water from ground surface.

(4) **PUMP, LINER, SCREEN, CASING, & SEALING MATERIAL:** Check only one box where Yes, No or Not Applicable is indicated. Check all boxes which apply otherwise.

(5) **MATERIAL USED TO FILL THE WELL/DRILLHOLE:** Enter the description of the filling material, the depth From and To, circle one measurement unit (Yards, Sacks or Volume), and enter the mix ratio or mud weight (in pounds per gallon).

(6) **COMMENTS:** Describe any of the above boxes in more detail or add information as required to describe the filling and sealing procedures.

(7) **NAME OF PERSON OR FIRM DOING SEALING WORK:** Enter the name (first and last) or firm name, address, and phone number of the person who supervised the work.

Date of Filling & Sealing or Verification: List Month/Day/Year (mm/dd/yyyy) the well was filled & sealed or verified filled & sealed.

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Well / Drillhole / Borehole Filling & Sealing Report

Form 3300-005 (R 4/2015)

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☐ **Verification Only of Fill and Seal**

Route to DNR Bureau:
☐ Drinking Water ☐ Watershed/Wastewater ■ Remediation/Redevelopment
☐ Waste Management ☐ Other: _____

1. Well Location Information

County	WI Unique Well # of Removed Well	Hicap #
Douglas	PSA-GP-9	

Latitude / Longitude (see instructions): 46° 44.152' N / 92° 5.365' W
Format Code: ☐ DD ■ DDM
Method Code: ☐ GPS008 ■ SCR002 ☐ OTH001

¼ / ¼	¼	Section	Township	Range
SE/SE	SW	11	49 N	14 ☐ E ■ W

or Gov't Lot #

Well Street Address: 1 Clough Avenue

Well City, Village or Town	Well ZIP Code
Superior	54880

Subdivision Name	Lot #

Reason for Removal from Service	WI Unique Well # of Replacement Well

2. Facility / Owner Information

Facility Name: Fraser Shipyard
Facility ID (FID or PWS):
License/Permit/Monitoring #:
Original Well Owner:
Present Well Owner:
Mailing Address of Present Owner:

City of Present Owner	State	ZIP Code
Superior	WI	54880

3. Filled & Sealed Well / Drillhole / Borehole Information

☐ Monitoring Well
☐ Water Well
■ Borehole / Drillhole

Original Construction Date (mm/dd/yyyy): 03/24/2015

If a Well Construction Report is available, please attach.

Construction Type:
☐ Drilled ☐ Driven (Sandpoint) ☐ Dug
■ Other (specify): Push Probe

Formation Type:
■ Unconsolidated Formation ☐ Bedrock

Total Well Depth From Ground Surface (ft.)	Casing Diameter (in.)
12	N/A

Lower Drillhole Diameter (in.)	Casing Depth (ft.)
N/A	N/A

Was well annular space grouted? ☐ Yes ☐ No ☐ Unknown

If yes, to what depth (feet)?	Depth to Water (feet)
N/A	6

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

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 Used to Fill Well / Drillhole	From (ft.)	To (ft.)	No. Yards, Sacks Sealant or Volume (circle one)	Mix Ratio or Mud Weight
Bentonite Liquid Grout	Surface	12	1/8	

6. Comments

7. Supervision of Work

Name of Person or Firm Doing Filling & Sealing	License #	Date of Filling & Sealing or Verification (mm/dd/yyyy)
Environmental Troubleshooters		03/24/2015

Street or Route	Telephone Number
3825 Grand Avenue	(218) 722-6013

City	State	ZIP Code	Signature of Person Doing Work	Date Signed
Duluth	MN	55807		

DNR Use Only

Date Received	Noted By

Comments:

Instructions

Well Filling and Sealing

Wisconsin Administrative Code (NR 811, NR 812, and NR 141 requires well owners to permanently fill and seal any unused wells/ drillholes/boreholes on their property. **As of June 1, 2008 water supply wells can only be filled and sealed by licensed well drillers and pump installers.**

1. Remove any pump, pump piping, debris or other obstacles that could interfere with the sealing operation.
2. Except when bentonite chips are used, the sealing material must be placed with the use of a conductor (tremie) pipe to fill the entire well column to the top with required sealing material. Refer to NR 812 and NR 141 for more details on filling and sealing requirements.

General Instructions: Fill out Well/Drillhole/Borehole Filling & Sealing Report Form 3300-005 as completely as possible for each well or borehole filled and sealed. Information should be provided for every box on the form where available. Sign each form. Please note that these forms are subject to change. (Personally identifiable information on these forms is not intended to be used for any other purpose.)

Verification Only of Fill and Seal: If you are only verifying that filling and sealing has previously occurred on a well and are NOT performing any filling and sealing work on the well, check the box near the top of the form. Complete Parts 1 and 2 of the form completely and any information you can provide in Parts 3, 4 and 5. You must provide comments in Part 6 as to the method used to verify both the filling and sealing of the well. Complete Part 7, including the date of Filling and Sealing or verification. It will be implied that you did do the filling and sealing work or the verification as stated in Part 7.

Route to: Check the appropriate routing box on the top of the form to assure proper routing to the DNR program requiring this well be filled and sealed. Mail the form and any attachments to the Department of Natural Resources, PO Box 7921, Madison, WI 53707-7921.

If you do any work to fill or seal the well, you must complete this form as intended and do not check the Verification Only of Fill and Seal box.

(1) **WELL LOCATION INFORMATION**

WI Unique Well #: Fill in the 2 alphabetic and 3 numeric Wisconsin Unique Well Number (WUWN) of the well being filled and sealed. Check the well, sample tap in the house or the fuse box for a WUWN if one has been assigned to the well.

Hicap #: If this was a high capacity well, enter the number assigned to the well by the Department.

Well Location: Locate the well by Public Land Survey (Gov't Lot or ¼ ¼, ¼, Section, Township and Range) AND latitude and longitude coordinates, using GPS or on-line map locators.

Format Code: Check which format you are reporting in: DD = Decimal Degrees __ __ . __ __ __ __ __° or DDM = Degrees Decimal Minutes __ __° __ __ . __ __ __' (Place decimal point appropriately).

Method Code: Check which method you are using to determine latitude/longitude: GPS008 = GPS Receiver; SCR002 = Online Map/ Viewer; OTH001 = Other.

(2) **FACILITY / OWNER INFORMATION**

If the well is located at a commercial or government facility, fill in the name of landfill, wastewater treatment facility, surface impoundment, spill or project.

Facility ID: Fill in the nine digits Facility ID (FID or PWS) assigned to the site by the Department.

License/Permit/Monitoring #: Fill in number assigned to facility by the Department. If unknown, leave blank.

Present Well Owner: Fill in the name, address, city, state and ZIP code of the present owner.

(3) **FILLED & SEALED WELL/DRILLHOLE/BOREHOLE INFORMATION**

Original Construction Date: Fill in the original date of construction for the well or boring in mm/dd/yyyy format. This section should include information about the original well.

Depth to Water: Enter depth to water from ground surface.

(4) **PUMP, LINER, SCREEN, CASING, & SEALING MATERIAL:** Check only one box where Yes, No or Not Applicable is indicated. Check all boxes which apply otherwise.

(5) **MATERIAL USED TO FILL THE WELL/DRILLHOLE:** Enter the description of the filling material, the depth From and To, circle one measurement unit (Yards, Sacks or Volume), and enter the mix ratio or mud weight (in pounds per gallon).

(6) **COMMENTS:** Describe any of the above boxes in more detail or add information as required to describe the filling and sealing procedures.

(7) **NAME OF PERSON OR FIRM DOING SEALING WORK:** Enter the name (first and last) or firm name, address, and phone number of the person who supervised the work.

Date of Filling & Sealing or Verification: List Month/Day/Year (mm/dd/yyyy) the well was filled & sealed or verified filled & sealed.

State of Wis., Dept. of Natural Resources
dnr.wi.gov

Well / Drillhole / Borehole Filling & Sealing Report

Form 3300-005 (R 4/2015)

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

County	WI Unique Well # of Removed Well	Hicap #
Douglas	PSA - GP-10	

Latitude / Longitude (see instructions): 46° 44.162' N / 92° 5.404' W
Format Code: ☐ DD ■ DDM
Method Code: ☐ GPS008 ■ SCR002 ☐ OTH001

¼ / ¼ SE/SE	¼ SW	Section	Township	Range
or Gov't Lot #		11	49 N	14 ☐ E ■ W

Well Street Address: 1 Clough Avenue

Well City, Village or Town	Well ZIP Code
Superior	54880

Subdivision Name	Lot #

Reason for Removal from Service	WI Unique Well # of Replacement Well

2. Facility / Owner Information

Facility Name: Fraser Shipyard
Facility ID (FID or PWS):
License/Permit/Monitoring #:
Original Well Owner:
Present Well Owner:
Mailing Address of Present Owner:

City of Present Owner	State	ZIP Code
Superior	WI	54880

3. Filled & Sealed Well / Drillhole / Borehole Information

☐ Monitoring Well
☐ Water Well
■ Borehole / Drillhole

Original Construction Date (mm/dd/yyyy): 03/24/2015
If a Well Construction Report is available, please attach.

Construction Type:
☐ Drilled ☐ Driven (Sandpoint) ☐ Dug
■ Other (specify): Push Probe

Formation Type:
■ Unconsolidated Formation ☐ Bedrock

Total Well Depth From Ground Surface (ft.)	Casing Diameter (in.)
16	N/A
Lower Drillhole Diameter (in.)	**Casing Depth (ft.)**
N/A	N/A

Was well annular space grouted? ☐ Yes ☐ No ☐ Unknown

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

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? N/A	☐ 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? N/A	☐ 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
Bentonite Liquid Grout	Surface	16	1/8	

6. Comments

No water present

7. Supervision of Work

Name of Person or Firm Doing Filling & Sealing	License #	Date of Filling & Sealing or Verification (mm/dd/yyyy)
Environmental Troubleshooters		03/24/2015

Street or Route	Telephone Number
3825 Grand Avenue	(218) 722-6013

City	State	ZIP Code
Duluth	MN	55807

Signature of Person Doing Work:
Date Signed:

DNR Use Only

Date Received	Noted By

Comments:

Instructions

Well Filling and Sealing

Wisconsin Administrative Code (NR 811, NR 812, and NR 141 requires well owners to permanently fill and seal any unused wells/ drillholes/boreholes on their property. **As of June 1, 2008 water supply wells can only be filled and sealed by licensed well drillers and pump installers.**

1. Remove any pump, pump piping, debris or other obstacles that could interfere with the sealing operation.
2. Except when bentonite chips are used, the sealing material must be placed with the use of a conductor (tremie) pipe to fill the entire well column to the top with required sealing material. Refer to NR 812 and NR 141 for more details on filling and sealing requirements.

General Instructions: Fill out Well/Drillhole/Borehole Filling & Sealing Report Form 3300-005 as completely as possible for each well or borehole filled and sealed. Information should be provided for every box on the form where available. Sign each form. Please note that these forms are subject to change. (Personally identifiable information on these forms is not intended to be used for any other purpose.)

Verification Only of Fill and Seal: If you are only verifying that filling and sealing has previously occurred on a well and are NOT performing any filling and sealing work on the well, check the box near the top of the form. Complete Parts 1 and 2 of the form completely and any information you can provide in Parts 3, 4 and 5. You must provide comments in Part 6 as to the method used to verify both the filling and sealing of the well. Complete Part 7, including the date of Filling and Sealing or verification. It will be implied that you did do the filling and sealing work or the verification as stated in Part 7.

Route to: Check the appropriate routing box on the top of the form to assure proper routing to the DNR program requiring this well be filled and sealed. Mail the form and any attachments to the Department of Natural Resources, PO Box 7921, Madison, WI 53707-7921.

If you do any work to fill or seal the well, you must complete this form as intended and do not check the Verification Only of Fill and Seal box.

(1) **WELL LOCATION INFORMATION**

WI Unique Well #: Fill in the 2 alphabetic and 3 numeric Wisconsin Unique Well Number (WUWN) of the well being filled and sealed. Check the well, sample tap in the house or the fuse box for a WUWN if one has been assigned to the well.

Hicap #: If this was a high capacity well, enter the number assigned to the well by the Department.

Well Location: Locate the well by Public Land Survey (Gov't Lot or ¼ ¼, ¼, Section, Township and Range) AND latitude and longitude coordinates, using GPS or on-line map locators.

Format Code: Check which format you are reporting in: DD = Decimal Degrees __ __ . __ __ __ __ __° or DDM = Degrees Decimal Minutes __ __° __ __ . __ __ __' (Place decimal point appropriately).

Method Code: Check which method you are using to determine latitude/longitude: GPS008 = GPS Receiver; SCR002 = Online Map/ Viewer; OTH001 = Other.

(2) **FACILITY / OWNER INFORMATION**

If the well is located at a commercial or government facility, fill in the name of landfill, wastewater treatment facility, surface impoundment, spill or project.

Facility ID: Fill in the nine digits Facility ID (FID or PWS) assigned to the site by the Department.

License/Permit/Monitoring #: Fill in number assigned to facility by the Department. If unknown, leave blank.

Present Well Owner: Fill in the name, address, city, state and ZIP code of the present owner.

(3) **FILLED & SEALED WELL/DRILLHOLE/BOREHOLE INFORMATION**

Original Construction Date: Fill in the original date of construction for the well or boring in mm/dd/yyyy format. This section should include information about the original well.

Depth to Water: Enter depth to water from ground surface.

(4) **PUMP, LINER, SCREEN, CASING, & SEALING MATERIAL:** Check only one box where Yes, No or Not Applicable is indicated. Check all boxes which apply otherwise.

(5) **MATERIAL USED TO FILL THE WELL/DRILLHOLE:** Enter the description of the filling material, the depth From and To, circle one measurement unit (Yards, Sacks or Volume), and enter the mix ratio or mud weight (in pounds per gallon).

(6) **COMMENTS:** Describe any of the above boxes in more detail or add information as required to describe the filling and sealing procedures.

(7) **NAME OF PERSON OR FIRM DOING SEALING WORK:** Enter the name (first and last) or firm name, address, and phone number of the person who supervised the work.

Date of Filling & Sealing or Verification: List Month/Day/Year (mm/dd/yyyy) the well was filled & sealed or verified filled & sealed.

State of Wis., Dept. of Natural Resources
dnr.wi.gov

Well / Drillhole / Borehole Filling & Sealing Report

Form 3300-005 (R 4/2015)

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

County	WI Unique Well # of Removed Well	Hicap #
Douglas	GP-11	

Latitude / Longitude (see instructions)	Format Code	Method Code
46° 44.157' N	☐ DD	☐ GPS008
92° 5.395' W	■ DDM	■ SCR002 ☐ OTH001

¼ / ¼ SE/SE	¼ SW	Section	Township	Range
or Gov't Lot #		11	49 N	14 ☐ E ■ W

Well Street Address: 1 Clough Avenue

Well City, Village or Town	Well ZIP Code
Superior	54880

Subdivision Name	Lot #

Reason for Removal from Service	WI Unique Well # of Replacement Well

2. Facility / Owner Information

Facility Name: Fraser Shipyard

Facility ID (FID or PWS):

License/Permit/Monitoring #:

Original Well Owner:

Present Well Owner:

Mailing Address of Present Owner:

City of Present Owner	State	ZIP Code
Superior	WI	54880

3. Filled & Sealed Well / Drillhole / Borehole Information

☐ Monitoring Well
☐ Water Well
■ Borehole / Drillhole

Original Construction Date (mm/dd/yyyy): 03/24/2015

If a Well Construction Report is available, please attach.

Construction Type:
☐ Drilled ☐ Driven (Sandpoint) ☐ Dug
■ Other (specify): Push Probe

Formation Type:
■ Unconsolidated Formation ☐ Bedrock

Total Well Depth From Ground Surface (ft.)	Casing Diameter (in.)
16	N/A

Lower Drillhole Diameter (in.)	Casing Depth (ft.)
N/A	N/A

Was well annular space grouted? ☐ Yes ☐ No ☐ Unknown

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

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? N/A	☐ 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? N/A	☐ 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
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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

5. Material Used to Fill Well / Drillhole	From (ft.)	To (ft.)	No. Yards, Sacks Sealant or Volume (circle one)	Mix Ratio or Mud Weight
Bentonite Liquid Grout	Surface			

6. Comments

No water present.

7. Supervision of Work

Name of Person or Firm Doing Filling & Sealing	License #	Date of Filling & Sealing or Verification (mm/dd/yyyy)
Environmental Troubleshooters		03/24/2015

Street or Route	Telephone Number
3825 Grand Avenue	(218) 722-6013

City	State	ZIP Code	Signature of Person Doing Work	Date Signed
Duluth	MN	55807		

DNR Use Only

Date Received	Noted By

Comments:

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Hicap #: If this was a high capacity well, enter the number assigned to the well by the Department.

Well Location: Locate the well by Public Land Survey (Gov't Lot or ¼ ¼, ¼, Section, Township and Range) AND latitude and longitude coordinates, using GPS or on-line map locators.

Format Code: Check which format you are reporting in: DD = Decimal Degrees __ __ . __ __ __ __ __° or DDM = Degrees Decimal Minutes __ __° __ __ . __ __ __' (Place decimal point appropriately).

Method Code: Check which method you are using to determine latitude/longitude: GPS008 = GPS Receiver; SCR002 = Online Map/ Viewer; OTH001 = Other.

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If the well is located at a commercial or government facility, fill in the name of landfill, wastewater treatment facility, surface impoundment, spill or project.

Facility ID: Fill in the nine digits Facility ID (FID or PWS) assigned to the site by the Department.

License/Permit/Monitoring #: Fill in number assigned to facility by the Department. If unknown, leave blank.

Present Well Owner: Fill in the name, address, city, state and ZIP code of the present owner.

(3) **FILLED & SEALED WELL/DRILLHOLE/BOREHOLE INFORMATION**

Original Construction Date: Fill in the original date of construction for the well or boring in mm/dd/yyyy format. This section should include information about the original well.

Depth to Water: Enter depth to water from ground surface.

(4) **PUMP, LINER, SCREEN, CASING, & SEALING MATERIAL:** Check only one box where Yes, No or Not Applicable is indicated. Check all boxes which apply otherwise.

(5) **MATERIAL USED TO FILL THE WELL/DRILLHOLE:** Enter the description of the filling material, the depth From and To, circle one measurement unit (Yards, Sacks or Volume), and enter the mix ratio or mud weight (in pounds per gallon).

(6) **COMMENTS:** Describe any of the above boxes in more detail or add information as required to describe the filling and sealing procedures.

(7) **NAME OF PERSON OR FIRM DOING SEALING WORK:** Enter the name (first and last) or firm name, address, and phone number of the person who supervised the work.

Date of Filling & Sealing or Verification: List Month/Day/Year (mm/dd/yyyy) the well was filled & sealed or verified filled & sealed.

APPENDIX B

Laboratory Analytical Reports

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

November 20, 2014

Mr. John McCarthy
Environmental Troubleshooters
3825 Grand Avenue
Duluth, MN 55807

RE: Project: 14-1004 Fraser Shipyard REV2
Pace Project No.: 10286797

Dear Mr. McCarthy:
Enclosed are the analytical results for sample(s) received by the laboratory on October 28, 2014. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

This report was revised to add TCLP Pb for Pace samples 001 and 002 at the client's request. The report was further revised November 20, 2014 to include TCLP results for all RCRA metals and PCBs for samples 001 and 002.

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

Sincerely,

Lori Castille
lori.castille@pacelabs.com
Project Manager

Enclosures

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

CERTIFICATIONS

Project: 14-1004 Fraser Shipyard REV2
Pace Project No.: 10286797

Minnesota Certification IDs

1700 Elm Street SE Suite 200, Minneapolis, MN 55414
A2LA Certification #: 2926.01
Alaska Certification #: UST-078
Alaska Certification #MN00064
Alabama Certification #40770
Arizona Certification #: AZ-0014
Arkansas Certification #: 88-0680
California Certification #: 01155CA
Colorado Certification #Pace
Connecticut Certification #: PH-0256
EPA Region 8 Certification #: 8TMS-L
Florida/NELAP Certification #: E87605
Guam Certification #:14-008r
Georgia Certification #: 959
Georgia EPD #: Pace
Idaho Certification #: MN00064
Hawaii Certification #MN00064
Illinois Certification #: 200011
Indiana Certification#C-MN-01
Iowa Certification #: 368
Kansas Certification #: E-10167
Kentucky Dept of Envi. Protection - DW #90062
Kentucky Dept of Envi. Protection - WW #:90062
Louisiana DEQ Certification #: 3086
Louisiana DHH #: LA140001
Maine Certification #: 2013011
Maryland Certification #: 322
Michigan DEPH Certification #: 9909
Minnesota Certification #: 027-053-137
Mississippi Certification #: Pace
Montana Certification #: MT0092
Nevada Certification #: MN_00064
Nebraska Certification #: Pace
New Jersey Certification #: MN-002
New York Certification #: 11647
North Carolina Certification #: 530
North Carolina State Public Health #: 27700
North Dakota Certification #: R-036
Ohio EPA #: 4150
Ohio VAP Certification #: CL101
Oklahoma Certification #: 9507
Oregon Certification #: MN200001
Oregon Certification #: MN300001
Pennsylvania Certification #: 68-00563
Puerto Rico Certification
Saipan (CNMI) #:MP0003
South Carolina #:74003001
Texas Certification #: T104704192
Tennessee Certification #: 02818
Utah Certification #: MN000642013-4
Virginia DGS Certification #: 251
Virginia/VELAP Certification #: Pace
Washington Certification #: C486
West Virginia Certification #: 382
West Virginia DHHR #:9952C
Wisconsin Certification #: 999407970

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

SAMPLE SUMMARY

Project: 14-1004 Fraser Shipyard REV2
Pace Project No.: 10286797

Lab ID	Sample ID	Matrix	Date Collected	Date Received
10286797001	**SP-1**	Solid	10/27/14 10:30	10/28/14 09:30
10286797002	**SP-2**	Solid	10/27/14 11:00	10/28/14 09:30
10286797003	**TP1 0-2**	Solid	10/27/14 09:20	10/28/14 09:30
10286797004	**TP2 2-4**	Solid	10/27/14 10:00	10/28/14 09:30
10286797005	**TP3 0-2**	Solid	10/27/14 10:15	10/28/14 09:30
10286797006	**TP4 0-2**	Solid	10/27/14 10:30	10/28/14 09:30
10286797007	**TRIP BLANK**	Solid	10/27/14 00:00	10/28/14 09:30

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SAMPLE ANALYTE COUNT

Project: 14-1004 Fraser Shipyard REV2
Pace Project No.: 10286797

Lab ID	Sample ID	Method	Analysts	Analytes Reported
10286797001	**SP-1**	EPA 8082	KL1	11
		WI MOD DRO	JRH	2
		EPA 6010	IP	7
		EPA 6010	IP	7
		EPA 6020A	TT3	1
		EPA 7470A	DM	1
		EPA 7471	DM	1
		ASTM D2974	JDL	1
		EPA 8260	AAN1	70
10286797002	**SP-2**	EPA 8082	KL1	11
		WI MOD DRO	MT	2
		EPA 6010	IP	7
		EPA 6010	IP	7
		EPA 6020A	TT3	1
		EPA 7470A	DM	1
		EPA 7471	DM	1
		ASTM D2974	JDL	1
		EPA 8260	EB2, MJH	70
10286797003	**TP1 0-2**	WI MOD GRO	MS2	2
		EPA 6010	IP	7
		EPA 6020A	TT3	1
		EPA 7471	DM	1
		ASTM D2974	JDL	1
		EPA 8270 by SIM	AS1	18
		EPA 8260	EB2, MJH	70
10286797004	**TP2 2-4**	WI MOD GRO	MS2	2
		EPA 6010	IP	7
		EPA 6020A	TT3	1
		EPA 7471	DM	1
		ASTM D2974	JDL	1
		EPA 8270 by SIM	AS1	18
		EPA 8260	MJH	70
10286797005	**TP3 0-2**	WI MOD GRO	MS2	2
		EPA 6010	IP	7
		EPA 6020A	TT3	1
		EPA 7471	DM	1
		ASTM D2974	JDL	1

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: 14-1004 Fraser Shipyard REV2
Pace Project No.: 10286797

Lab ID	Sample ID	Method	Analysts	Analytes Reported
		EPA 8270 by SIM	AS1	18
		EPA 8260	EB2	70
10286797006	**TP4 0-2**	WI MOD GRO	MS2	2
		EPA 6010	IP	7
		EPA 6020A	TT3	1
		EPA 7471	DM	1
		ASTM D2974	JDL	1
		EPA 8270 by SIM	AS1	18
		EPA 8260	MJH	70
10286797007	**TRIP BLANK**	EPA 8260	MJH	70

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ANALYTICAL RESULTS

Project: 14-1004 Fraser Shipyard REV2
Pace Project No.: 10286797

Sample: SP-1 **Lab ID: 10286797001** Collected: 10/27/14 10:30 Received: 10/28/14 09:30 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB	Analytical Method: EPA 8082 Preparation Method: EPA 3550								
PCB-1016 (Aroclor 1016)	**<170**	ug/kg	374	170	10	11/17/14 14:40	11/18/14 17:06	12674-11-2	
PCB-1221 (Aroclor 1221)	**<56.7**	ug/kg	374	56.7	10	11/17/14 14:40	11/18/14 17:06	11104-28-2	
PCB-1232 (Aroclor 1232)	**<90.7**	ug/kg	374	90.7	10	11/17/14 14:40	11/18/14 17:06	11141-16-5	
PCB-1242 (Aroclor 1242)	**<68.1**	ug/kg	374	68.1	10	11/17/14 14:40	11/18/14 17:06	53469-21-9	
PCB-1248 (Aroclor 1248)	**<79.4**	ug/kg	374	79.4	10	11/17/14 14:40	11/18/14 17:06	12672-29-6	
PCB-1254 (Aroclor 1254)	**<79.4**	ug/kg	374	79.4	10	11/17/14 14:40	11/18/14 17:06	11097-69-1	
PCB-1260 (Aroclor 1260)	**<170**	ug/kg	374	170	10	11/17/14 14:40	11/18/14 17:06	11096-82-5	
PCB-1262 (Aroclor 1262)	**<68.1**	ug/kg	374	68.1	10	11/17/14 14:40	11/18/14 17:06	37324-23-5	
PCB-1268 (Aroclor 1268)	**<56.7**	ug/kg	374	56.7	10	11/17/14 14:40	11/18/14 17:06	11100-14-4	
Surrogates									
Tetrachloro-m-xylene (S)	0	%.	50-128		10	11/17/14 14:40	11/18/14 17:06	877-09-8	D3,S4
Decachlorobiphenyl (S)	0	%.	55-130		10	11/17/14 14:40	11/18/14 17:06	2051-24-3	S4
WIDRO GCS	Analytical Method: WI MOD DRO Preparation Method: WI MOD DRO								
Diesel Range Organics	**6200**	mg/kg	964	145	20	10/29/14 00:00	11/01/14 15:16		
Surrogates									
n-Triacontane (S)	0	%.	50-150		20	10/29/14 00:00	11/01/14 15:16	638-68-6	S4
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Arsenic	**7.9**	mg/kg	0.98	0.29	1	10/30/14 12:25	10/31/14 13:49	7440-38-2	
Barium	**83.6**	mg/kg	0.49	0.054	1	10/30/14 12:25	10/31/14 13:49	7440-39-3	M1
Cadmium	**0.61**	mg/kg	0.15	0.017	1	10/30/14 12:25	10/31/14 13:49	7440-43-9	
Chromium	**14.9**	mg/kg	0.49	0.064	1	10/30/14 12:25	10/31/14 13:49	7440-47-3	
Lead	**203**	mg/kg	0.98	0.073	1	10/30/14 12:25	10/31/14 13:49	7439-92-1	M1
Selenium	**2.0**	mg/kg	0.74	0.33	1	10/30/14 12:25	10/31/14 13:49	7782-49-2	
Silver	**1.7**	mg/kg	0.49	0.049	1	10/30/14 12:25	10/31/14 13:49	7440-22-4	
6010 MET ICP, TCLP	Analytical Method: EPA 6010 Preparation Method: EPA 3010 Leachate Method/Date: EPA 1311; 11/12/14 11:08 Initial pH: 8.68; Final pH: 1.58								
Arsenic	**<15.8**	ug/L	100	15.8	1	11/12/14 16:47	11/14/14 12:29	7440-38-2	
Barium	**800**	ug/L	500	250	1	11/12/14 16:47	11/14/14 12:29	7440-39-3	
Cadmium	**1.5J**	ug/L	15.0	1.2	1	11/12/14 16:47	11/14/14 12:29	7440-43-9	
Chromium	**<25.0**	ug/L	50.0	25.0	1	11/12/14 16:47	11/14/14 12:29	7440-47-3	
Lead	**0.11**	mg/L	0.050	0.0089	1	11/12/14 16:47	11/14/14 12:29	7439-92-1	
Selenium	**35.9J**	ug/L	100	33.2	1	11/12/14 16:47	11/14/14 12:29	7782-49-2	
Silver	**<3.2**	ug/L	50.0	3.2	1	11/12/14 16:47	11/14/14 12:29	7440-22-4	
6020A MET ICPMS	Analytical Method: EPA 6020A Preparation Method: EPA 3050								
Arsenic	**7.3**	mg/kg	0.53	0.13	20	11/04/14 11:10	11/05/14 11:45	7440-38-2	
7470 Mercury, TCLP	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Leachate Method/Date: EPA 1311; 11/18/14 17:04 Initial pH: 8.68; Final pH: 1.58								
Mercury	**<0.078**	ug/L	0.60	0.078	1	11/18/14 20:40	11/19/14 10:22	7439-97-6	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 14-1004 Fraser Shipyard REV2
Pace Project No.: 10286797

Sample: SP-1 **Lab ID: 10286797001** Collected: 10/27/14 10:30 Received: 10/28/14 09:30 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
7471 Mercury	Analytical Method: EPA 7471 Preparation Method: EPA 7471								
Mercury	**0.11**	mg/kg	0.020	0.0059	1	10/30/14 17:08	10/31/14 10:31	7439-97-6	
Dry Weight	Analytical Method: ASTM D2974								
Percent Moisture	**12.1**	%	0.10	0.10	1		10/30/14 15:42		
8260 MSV 5030 Med Level	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
Acetone	**<543**	ug/kg	1090	543	1	10/30/14 18:24	11/03/14 13:32	67-64-1	
Allyl chloride	**<7.1**	ug/kg	217	7.1	1	10/30/14 18:24	11/03/14 13:32	107-05-1	
Benzene	**33.5**	ug/kg	21.7	10.9	1	10/30/14 18:24	11/03/14 13:32	71-43-2	
Bromobenzene	**<9.4**	ug/kg	54.3	9.4	1	10/30/14 18:24	11/03/14 13:32	108-86-1	
Bromochloromethane	**<7.4**	ug/kg	54.3	7.4	1	10/30/14 18:24	11/03/14 13:32	74-97-5	
Bromodichloromethane	**<9.7**	ug/kg	54.3	9.7	1	10/30/14 18:24	11/03/14 13:32	75-27-4	
Bromoform	**<109**	ug/kg	217	109	1	10/30/14 18:24	11/03/14 13:32	75-25-2	
Bromomethane	**<272**	ug/kg	543	272	1	10/30/14 18:24	11/03/14 13:32	74-83-9	
2-Butanone (MEK)	**<136**	ug/kg	272	136	1	10/30/14 18:24	11/03/14 13:32	78-93-3	
n-Butylbenzene	**92.2**	ug/kg	54.3	6.6	1	10/30/14 18:24	11/03/14 13:32	104-51-8	B
sec-Butylbenzene	**<6.4**	ug/kg	54.3	6.4	1	10/30/14 18:24	11/03/14 13:32	135-98-8	
tert-Butylbenzene	**<27.2**	ug/kg	54.3	27.2	1	10/30/14 18:24	11/03/14 13:32	98-06-6	
Carbon tetrachloride	**<8.8**	ug/kg	54.3	8.8	1	10/30/14 18:24	11/03/14 13:32	56-23-5	
Chlorobenzene	**<8.4**	ug/kg	54.3	8.4	1	10/30/14 18:24	11/03/14 13:32	108-90-7	
Chloroethane	**168J**	ug/kg	543	13.7	1	10/30/14 18:24	11/03/14 13:32	75-00-3	
Chloroform	**<8.3**	ug/kg	54.3	8.3	1	10/30/14 18:24	11/03/14 13:32	67-66-3	
Chloromethane	**<9.9**	ug/kg	217	9.9	1	10/30/14 18:24	11/03/14 13:32	74-87-3	
2-Chlorotoluene	**<27.2**	ug/kg	54.3	27.2	1	10/30/14 18:24	11/03/14 13:32	95-49-8	
4-Chlorotoluene	**<27.2**	ug/kg	54.3	27.2	1	10/30/14 18:24	11/03/14 13:32	106-43-4	
1,2-Dibromo-3-chloropropane	**<28.8**	ug/kg	543	28.8	1	10/30/14 18:24	11/03/14 13:32	96-12-8	
Dibromochloromethane	**<11.7**	ug/kg	54.3	11.7	1	10/30/14 18:24	11/03/14 13:32	124-48-1	
1,2-Dibromoethane (EDB)	**<6.7**	ug/kg	54.3	6.7	1	10/30/14 18:24	11/03/14 13:32	106-93-4	
Dibromomethane	**<15.2**	ug/kg	54.3	15.2	1	10/30/14 18:24	11/03/14 13:32	74-95-3	
1,2-Dichlorobenzene	**<27.2**	ug/kg	54.3	27.2	1	10/30/14 18:24	11/03/14 13:32	95-50-1	
1,3-Dichlorobenzene	**<27.2**	ug/kg	54.3	27.2	1	10/30/14 18:24	11/03/14 13:32	541-73-1	
1,4-Dichlorobenzene	**<27.2**	ug/kg	54.3	27.2	1	10/30/14 18:24	11/03/14 13:32	106-46-7	
Dichlorodifluoromethane	**<25.1**	ug/kg	217	25.1	1	10/30/14 18:24	11/03/14 13:32	75-71-8	
1,1-Dichloroethane	**445**	ug/kg	54.3	7.6	1	10/30/14 18:24	11/03/14 13:32	75-34-3	
1,2-Dichloroethane	**<12.8**	ug/kg	54.3	12.8	1	10/30/14 18:24	11/03/14 13:32	107-06-2	
1,1-Dichloroethene	**<10.9**	ug/kg	54.3	10.9	1	10/30/14 18:24	11/03/14 13:32	75-35-4	
cis-1,2-Dichloroethene	**29.5J**	ug/kg	54.3	11.1	1	10/30/14 18:24	11/03/14 13:32	156-59-2	
trans-1,2-Dichloroethene	**<10.8**	ug/kg	54.3	10.8	1	10/30/14 18:24	11/03/14 13:32	156-60-5	
Dichlorofluoromethane	**<272**	ug/kg	543	272	1	10/30/14 18:24	11/03/14 13:32	75-43-4	
1,2-Dichloropropane	**<8.7**	ug/kg	54.3	8.7	1	10/30/14 18:24	11/03/14 13:32	78-87-5	
1,3-Dichloropropane	**<27.2**	ug/kg	54.3	27.2	1	10/30/14 18:24	11/03/14 13:32	142-28-9	
2,2-Dichloropropane	**<7.3**	ug/kg	217	7.3	1	10/30/14 18:24	11/03/14 13:32	594-20-7	
1,1-Dichloropropene	**<8.9**	ug/kg	54.3	8.9	1	10/30/14 18:24	11/03/14 13:32	563-58-6	
cis-1,3-Dichloropropene	**<6.8**	ug/kg	54.3	6.8	1	10/30/14 18:24	11/03/14 13:32	10061-01-5	
trans-1,3-Dichloropropene	**<7.7**	ug/kg	54.3	7.7	1	10/30/14 18:24	11/03/14 13:32	10061-02-6	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 14-1004 Fraser Shipyard REV2
Pace Project No.: 10286797

Sample: SP-1 **Lab ID: 10286797001** Collected: 10/27/14 10:30 Received: 10/28/14 09:30 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5030 Med Level	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
Diethyl ether (Ethyl ether)	**<11.5**	ug/kg	217	11.5	1	10/30/14 18:24	11/03/14 13:32	60-29-7	
Ethylbenzene	**86.2**	ug/kg	54.3	6.8	1	10/30/14 18:24	11/03/14 13:32	100-41-4	
Hexachloro-1,3-butadiene	**<136**	ug/kg	272	136	1	10/30/14 18:24	11/03/14 13:32	87-68-3	
Isopropylbenzene (Cumene)	**39.0J**	ug/kg	54.3	27.2	1	10/30/14 18:24	11/03/14 13:32	98-82-8	
p-Isopropyltoluene	**214**	ug/kg	54.3	7.9	1	10/30/14 18:24	11/03/14 13:32	99-87-6	
Methylene Chloride	**<109**	ug/kg	217	109	1	10/30/14 18:24	11/03/14 13:32	75-09-2	
4-Methyl-2-pentanone (MIBK)	**<136**	ug/kg	272	136	1	10/30/14 18:24	11/03/14 13:32	108-10-1	
Methyl-tert-butyl ether	**<27.2**	ug/kg	54.3	27.2	1	10/30/14 18:24	11/03/14 13:32	1634-04-4	
Naphthalene	**1880**	ug/kg	217	109	1	10/30/14 18:24	11/03/14 13:32	91-20-3	
n-Propylbenzene	**44.9J**	ug/kg	54.3	6.6	1	10/30/14 18:24	11/03/14 13:32	103-65-1	
Styrene	**<8.1**	ug/kg	54.3	8.1	1	10/30/14 18:24	11/03/14 13:32	100-42-5	
1,1,1,2-Tetrachloroethane	**<27.2**	ug/kg	54.3	27.2	1	10/30/14 18:24	11/03/14 13:32	630-20-6	
1,1,2,2-Tetrachloroethane	**<7.5**	ug/kg	54.3	7.5	1	10/30/14 18:24	11/03/14 13:32	79-34-5	
Tetrachloroethene	**<19.6**	ug/kg	54.3	19.6	1	10/30/14 18:24	11/03/14 13:32	127-18-4	
Tetrahydrofuran	**<69.5**	ug/kg	2170	69.5	1	10/30/14 18:24	11/03/14 13:32	109-99-9	
Toluene	**204**	ug/kg	54.3	7.4	1	10/30/14 18:24	11/03/14 13:32	108-88-3	
1,2,3-Trichlorobenzene	**<12.9**	ug/kg	54.3	12.9	1	10/30/14 18:24	11/03/14 13:32	87-61-6	
1,2,4-Trichlorobenzene	**<9.9**	ug/kg	54.3	9.9	1	10/30/14 18:24	11/03/14 13:32	120-82-1	
1,1,1-Trichloroethane	**<27.2**	ug/kg	54.3	27.2	1	10/30/14 18:24	11/03/14 13:32	71-55-6	
1,1,2-Trichloroethane	**<9.2**	ug/kg	54.3	9.2	1	10/30/14 18:24	11/03/14 13:32	79-00-5	
Trichloroethene	**18.5J**	ug/kg	54.3	6.8	1	10/30/14 18:24	11/03/14 13:32	79-01-6	
Trichlorofluoromethane	**<9.7**	ug/kg	217	9.7	1	10/30/14 18:24	11/03/14 13:32	75-69-4	CL
1,2,3-Trichloropropane	**<7.2**	ug/kg	217	7.2	1	10/30/14 18:24	11/03/14 13:32	96-18-4	
1,1,2-Trichlorotrifluoroethane	**<22.7**	ug/kg	217	22.7	1	10/30/14 18:24	11/03/14 13:32	76-13-1	
1,2,4-Trimethylbenzene	**546**	ug/kg	54.3	27.2	1	10/30/14 18:24	11/03/14 13:32	95-63-6	
1,3,5-Trimethylbenzene	**477**	ug/kg	54.3	27.2	1	10/30/14 18:24	11/03/14 13:32	108-67-8	
Vinyl chloride	**<8.1**	ug/kg	21.7	8.1	1	10/30/14 18:24	11/03/14 13:32	75-01-4	
Xylene (Total)	**603**	ug/kg	163	21.3	1	10/30/14 18:24	11/03/14 13:32	1330-20-7	
Surrogates									
1,2-Dichloroethane-d4 (S)	103	%.	74-125		1	10/30/14 18:24	11/03/14 13:32	17060-07-0	
Toluene-d8 (S)	102	%.	75-125		1	10/30/14 18:24	11/03/14 13:32	2037-26-5	
4-Bromofluorobenzene (S)	108	%.	75-125		1	10/30/14 18:24	11/03/14 13:32	460-00-4	

Sample: SP-2 **Lab ID: 10286797002** Collected: 10/27/14 11:00 Received: 10/28/14 09:30 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB	Analytical Method: EPA 8082 Preparation Method: EPA 3550								
PCB-1016 (Aroclor 1016)	**<85.2**	ug/kg	187	85.2	5	11/17/14 14:40	11/18/14 16:50	12674-11-2	
PCB-1221 (Aroclor 1221)	**<28.4**	ug/kg	187	28.4	5	11/17/14 14:40	11/18/14 16:50	11104-28-2	
PCB-1232 (Aroclor 1232)	**<45.4**	ug/kg	187	45.4	5	11/17/14 14:40	11/18/14 16:50	11141-16-5	
PCB-1242 (Aroclor 1242)	**<34.1**	ug/kg	187	34.1	5	11/17/14 14:40	11/18/14 16:50	53469-21-9	
PCB-1248 (Aroclor 1248)	**<39.7**	ug/kg	187	39.7	5	11/17/14 14:40	11/18/14 16:50	12672-29-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
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ANALYTICAL RESULTS

Project: 14-1004 Fraser Shipyard REV2
Pace Project No.: 10286797

Sample: SP-2 **Lab ID: 10286797002** Collected: 10/27/14 11:00 Received: 10/28/14 09:30 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB	Analytical Method: EPA 8082 Preparation Method: EPA 3550								
PCB-1254 (Aroclor 1254)	**<39.7**	ug/kg	187	39.7	5	11/17/14 14:40	11/18/14 16:50	11097-69-1	
PCB-1260 (Aroclor 1260)	**<85.2**	ug/kg	187	85.2	5	11/17/14 14:40	11/18/14 16:50	11096-82-5	
PCB-1262 (Aroclor 1262)	**<34.1**	ug/kg	187	34.1	5	11/17/14 14:40	11/18/14 16:50	37324-23-5	
PCB-1268 (Aroclor 1268)	**<28.4**	ug/kg	187	28.4	5	11/17/14 14:40	11/18/14 16:50	11100-14-4	
Surrogates									
Tetrachloro-m-xylene (S)	74	%.	50-128		5	11/17/14 14:40	11/18/14 16:50	877-09-8	D3
Decachlorobiphenyl (S)	102	%.	55-130		5	11/17/14 14:40	11/18/14 16:50	2051-24-3	
WIDRO GCS	Analytical Method: WI MOD DRO Preparation Method: WI MOD DRO								
Diesel Range Organics	**4590**	mg/kg	853	128	100	10/31/14 00:00	11/04/14 13:50		
Surrogates									
n-Triacontane (S)	0	%.	50-150		100	10/31/14 00:00	11/04/14 13:50	638-68-6	S4
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Arsenic	**8.3**	mg/kg	1.0	0.30	1	10/30/14 12:25	10/31/14 14:53	7440-38-2	
Barium	**74.7**	mg/kg	0.52	0.057	1	10/30/14 12:25	10/31/14 14:53	7440-39-3	
Cadmium	**0.70**	mg/kg	0.16	0.018	1	10/30/14 12:25	10/31/14 14:53	7440-43-9	
Chromium	**12.7**	mg/kg	0.52	0.068	1	10/30/14 12:25	10/31/14 14:53	7440-47-3	
Lead	**249**	mg/kg	1.0	0.077	1	10/30/14 12:25	10/31/14 14:53	7439-92-1	
Selenium	**2.6**	mg/kg	0.78	0.35	1	10/30/14 12:25	10/31/14 14:53	7782-49-2	
Silver	**0.11J**	mg/kg	0.52	0.052	1	10/30/14 12:25	10/31/14 14:53	7440-22-4	B
6010 MET ICP, TCLP	Analytical Method: EPA 6010 Preparation Method: EPA 3010 Leachate Method/Date: EPA 1311; 11/12/14 11:08 Initial pH: 8.58; Final pH: 2.42								
Arsenic	**<15.8**	ug/L	100	15.8	1	11/12/14 16:47	11/14/14 12:36	7440-38-2	
Barium	**987**	ug/L	500	250	1	11/12/14 16:47	11/14/14 12:36	7440-39-3	
Cadmium	**3.4J**	ug/L	15.0	1.2	1	11/12/14 16:47	11/14/14 12:36	7440-43-9	
Chromium	**<25.0**	ug/L	50.0	25.0	1	11/12/14 16:47	11/14/14 12:36	7440-47-3	
Lead	**0.24**	mg/L	0.050	0.0089	1	11/12/14 16:47	11/14/14 12:36	7439-92-1	
Selenium	**<33.2**	ug/L	100	33.2	1	11/12/14 16:47	11/14/14 12:36	7782-49-2	
Silver	**<3.2**	ug/L	50.0	3.2	1	11/12/14 16:47	11/14/14 12:36	7440-22-4	
6020A MET ICPMS	Analytical Method: EPA 6020A Preparation Method: EPA 3050								
Arsenic	**7.3**	mg/kg	0.43	0.10	20	11/04/14 11:10	11/05/14 11:31	7440-38-2	
7470 Mercury, TCLP	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Leachate Method/Date: EPA 1311; 11/18/14 17:04 Initial pH: 8.58; Final pH: 2.42								
Mercury	**<0.078**	ug/L	0.60	0.078	1	11/18/14 20:40	11/19/14 10:29	7439-97-6	
7471 Mercury	Analytical Method: EPA 7471 Preparation Method: EPA 7471								
Mercury	**0.053**	mg/kg	0.020	0.0060	1	10/30/14 17:08	10/31/14 10:37	7439-97-6	
Dry Weight	Analytical Method: ASTM D2974								
Percent Moisture	**11.9**	%	0.10	0.10	1		10/30/14 16:48		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

ANALYTICAL RESULTS

Project: 14-1004 Fraser Shipyard REV2
Pace Project No.: 10286797

Sample: SP-2 **Lab ID: 10286797002** Collected: 10/27/14 11:00 Received: 10/28/14 09:30 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5030 Med Level	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
Acetone	**<548**	ug/kg	1100	548	1	11/03/14 18:04	11/07/14 02:30	67-64-1	
Allyl chloride	**<7.2**	ug/kg	219	7.2	1	11/03/14 18:04	11/07/14 02:30	107-05-1	
Benzene	**35.5**	ug/kg	21.9	11.0	1	11/03/14 18:04	11/07/14 02:30	71-43-2	
Bromobenzene	**<9.5**	ug/kg	54.8	9.5	1	11/03/14 18:04	11/07/14 02:30	108-86-1	
Bromochloromethane	**<7.5**	ug/kg	54.8	7.5	1	11/03/14 18:04	11/07/14 02:30	74-97-5	
Bromodichloromethane	**<9.7**	ug/kg	54.8	9.7	1	11/03/14 18:04	11/07/14 02:30	75-27-4	
Bromoform	**<110**	ug/kg	219	110	1	11/03/14 18:04	11/07/14 02:30	75-25-2	L3
Bromomethane	**<274**	ug/kg	548	274	1	11/03/14 18:04	11/07/14 02:30	74-83-9	
2-Butanone (MEK)	**<137**	ug/kg	274	137	1	11/03/14 18:04	11/07/14 02:30	78-93-3	
n-Butylbenzene	**327**	ug/kg	54.8	6.6	1	11/03/14 18:04	11/07/14 02:30	104-51-8	B
sec-Butylbenzene	**168**	ug/kg	54.8	6.5	1	11/03/14 18:04	11/07/14 02:30	135-98-8	B
tert-Butylbenzene	**<27.4**	ug/kg	54.8	27.4	1	11/03/14 18:04	11/07/14 02:30	98-06-6	
Carbon tetrachloride	**<8.8**	ug/kg	54.8	8.8	1	11/03/14 18:04	11/07/14 02:30	56-23-5	L3
Chlorobenzene	**<8.4**	ug/kg	54.8	8.4	1	11/03/14 18:04	11/07/14 02:30	108-90-7	
Chloroethane	**1300**	ug/kg	548	13.8	1	11/03/14 18:04	11/07/14 02:30	75-00-3	
Chloroform	**<8.3**	ug/kg	54.8	8.3	1	11/03/14 18:04	11/07/14 02:30	67-66-3	
Chloromethane	**<10**	ug/kg	219	10	1	11/03/14 18:04	11/07/14 02:30	74-87-3	
2-Chlorotoluene	**214**	ug/kg	54.8	27.4	1	11/03/14 18:04	11/07/14 02:30	95-49-8	
4-Chlorotoluene	**<27.4**	ug/kg	54.8	27.4	1	11/03/14 18:04	11/07/14 02:30	106-43-4	
1,2-Dibromo-3-chloropropane	**<29.0**	ug/kg	548	29.0	1	11/03/14 18:04	11/07/14 02:30	96-12-8	
Dibromochloromethane	**<11.8**	ug/kg	54.8	11.8	1	11/03/14 18:04	11/07/14 02:30	124-48-1	L3
1,2-Dibromoethane (EDB)	**<6.7**	ug/kg	54.8	6.7	1	11/03/14 18:04	11/07/14 02:30	106-93-4	
Dibromomethane	**<15.3**	ug/kg	54.8	15.3	1	11/03/14 18:04	11/07/14 02:30	74-95-3	
1,2-Dichlorobenzene	**<27.4**	ug/kg	54.8	27.4	1	11/03/14 18:04	11/07/14 02:30	95-50-1	
1,3-Dichlorobenzene	**<27.4**	ug/kg	54.8	27.4	1	11/03/14 18:04	11/07/14 02:30	541-73-1	
1,4-Dichlorobenzene	**<27.4**	ug/kg	54.8	27.4	1	11/03/14 18:04	11/07/14 02:30	106-46-7	
Dichlorodifluoromethane	**<25.3**	ug/kg	219	25.3	1	11/03/14 18:04	11/07/14 02:30	75-71-8	
1,1-Dichloroethane	**5790**	ug/kg	54.8	7.7	1	11/03/14 18:04	11/07/14 02:30	75-34-3	
1,2-Dichloroethane	**278**	ug/kg	54.8	12.9	1	11/03/14 18:04	11/07/14 02:30	107-06-2	
1,1-Dichloroethene	**637**	ug/kg	54.8	10.9	1	11/03/14 18:04	11/07/14 02:30	75-35-4	
cis-1,2-Dichloroethene	**<11.2**	ug/kg	54.8	11.2	1	11/03/14 18:04	11/07/14 02:30	156-59-2	
trans-1,2-Dichloroethene	**<10.9**	ug/kg	54.8	10.9	1	11/03/14 18:04	11/07/14 02:30	156-60-5	
Dichlorofluoromethane	**<274**	ug/kg	548	274	1	11/03/14 18:04	11/07/14 02:30	75-43-4	
1,2-Dichloropropane	**<8.8**	ug/kg	54.8	8.8	1	11/03/14 18:04	11/07/14 02:30	78-87-5	
1,3-Dichloropropane	**<27.4**	ug/kg	54.8	27.4	1	11/03/14 18:04	11/07/14 02:30	142-28-9	
2,2-Dichloropropane	**<7.3**	ug/kg	219	7.3	1	11/03/14 18:04	11/07/14 02:30	594-20-7	
1,1-Dichloropropene	**<8.9**	ug/kg	54.8	8.9	1	11/03/14 18:04	11/07/14 02:30	563-58-6	
cis-1,3-Dichloropropene	**<6.9**	ug/kg	54.8	6.9	1	11/03/14 18:04	11/07/14 02:30	10061-01-5	
trans-1,3-Dichloropropene	**<7.7**	ug/kg	54.8	7.7	1	11/03/14 18:04	11/07/14 02:30	10061-02-6	
Diethyl ether (Ethyl ether)	**<11.6**	ug/kg	219	11.6	1	11/03/14 18:04	11/07/14 02:30	60-29-7	
Ethylbenzene	**133**	ug/kg	54.8	6.9	1	11/03/14 18:04	11/07/14 02:30	100-41-4	
Hexachloro-1,3-butadiene	**<137**	ug/kg	274	137	1	11/03/14 18:04	11/07/14 02:30	87-68-3	
Isopropylbenzene (Cumene)	**57.0**	ug/kg	54.8	27.4	1	11/03/14 18:04	11/07/14 02:30	98-82-8	
p-Isopropyltoluene	**590**	ug/kg	54.8	7.9	1	11/03/14 18:04	11/07/14 02:30	99-87-6	
Methylene Chloride	**<110**	ug/kg	219	110	1	11/03/14 18:04	11/07/14 02:30	75-09-2	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
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ANALYTICAL RESULTS

Project: 14-1004 Fraser Shipyard REV2
Pace Project No.: 10286797

Sample: SP-2 **Lab ID: 10286797002** Collected: 10/27/14 11:00 Received: 10/28/14 09:30 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5030 Med Level	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
4-Methyl-2-pentanone (MIBK)	**276**	ug/kg	274	137	1	11/03/14 18:04	11/07/14 02:30	108-10-1	
Methyl-tert-butyl ether	**<27.4**	ug/kg	54.8	27.4	1	11/03/14 18:04	11/07/14 02:30	1634-04-4	
Naphthalene	**1860**	ug/kg	219	110	1	11/03/14 18:04	11/07/14 02:30	91-20-3	
n-Propylbenzene	**107**	ug/kg	54.8	6.6	1	11/03/14 18:04	11/07/14 02:30	103-65-1	
Styrene	**<8.2**	ug/kg	54.8	8.2	1	11/03/14 18:04	11/07/14 02:30	100-42-5	
1,1,1,2-Tetrachloroethane	**<27.4**	ug/kg	54.8	27.4	1	11/03/14 18:04	11/07/14 02:30	630-20-6	
1,1,2,2-Tetrachloroethane	**<7.5**	ug/kg	54.8	7.5	1	11/03/14 18:04	11/07/14 02:30	79-34-5	
Tetrachloroethene	**169**	ug/kg	54.8	19.8	1	11/03/14 18:04	11/07/14 02:30	127-18-4	
Tetrahydrofuran	**<70.0**	ug/kg	2190	70.0	1	11/03/14 18:04	11/07/14 02:30	109-99-9	
Toluene	**353**	ug/kg	54.8	7.4	1	11/03/14 18:04	11/07/14 02:30	108-88-3	
1,2,3-Trichlorobenzene	**<13.0**	ug/kg	54.8	13.0	1	11/03/14 18:04	11/07/14 02:30	87-61-6	
1,2,4-Trichlorobenzene	**<10**	ug/kg	54.8	10	1	11/03/14 18:04	11/07/14 02:30	120-82-1	
1,1,1-Trichloroethane	**35000**	ug/kg	274	137	5	11/03/14 18:04	11/07/14 00:13	71-55-6	
1,1,2-Trichloroethane	**<9.3**	ug/kg	54.8	9.3	1	11/03/14 18:04	11/07/14 02:30	79-00-5	
Trichloroethene	**20.4J**	ug/kg	54.8	6.8	1	11/03/14 18:04	11/07/14 02:30	79-01-6	
Trichlorofluoromethane	**<9.7**	ug/kg	219	9.7	1	11/03/14 18:04	11/07/14 02:30	75-69-4	CH,SS
1,2,3-Trichloropropane	**247**	ug/kg	219	7.3	1	11/03/14 18:04	11/07/14 02:30	96-18-4	
1,1,2-Trichlorotrifluoroethane	**<22.9**	ug/kg	219	22.9	1	11/03/14 18:04	11/07/14 02:30	76-13-1	
1,2,4-Trimethylbenzene	**1640**	ug/kg	54.8	27.4	1	11/03/14 18:04	11/07/14 02:30	95-63-6	
1,3,5-Trimethylbenzene	**1850**	ug/kg	54.8	27.4	1	11/03/14 18:04	11/07/14 02:30	108-67-8	
Vinyl chloride	**13.6J**	ug/kg	21.9	8.1	1	11/03/14 18:04	11/07/14 02:30	75-01-4	
Xylene (Total)	**914**	ug/kg	164	21.5	1	11/03/14 18:04	11/07/14 02:30	1330-20-7	
Surrogates									
1,2-Dichloroethane-d4 (S)	97	%.	74-125		1	11/03/14 18:04	11/07/14 02:30	17060-07-0	
Toluene-d8 (S)	101	%.	75-125		1	11/03/14 18:04	11/07/14 02:30	2037-26-5	
4-Bromofluorobenzene (S)	102	%.	75-125		1	11/03/14 18:04	11/07/14 02:30	460-00-4	

Sample: TP1 0-2 **Lab ID: 10286797003** Collected: 10/27/14 09:20 Received: 10/28/14 09:30 Matrix: Solid

Results reported on a "dry-weight" basis

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.								
Gasoline Range Organics	**837**	mg/kg	121	60.4	10	11/05/14 09:19	11/06/14 14:51		
Surrogates									
a,a,a-Trifluorotoluene (S)	97	%.	80-125		10	11/05/14 09:19	11/06/14 14:51	98-08-8	CH
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Arsenic	**7.7**	mg/kg	0.91	0.27	1	10/30/14 12:25	10/31/14 14:59	7440-38-2	
Barium	**87.3**	mg/kg	0.46	0.050	1	10/30/14 12:25	10/31/14 14:59	7440-39-3	
Cadmium	**0.58**	mg/kg	0.14	0.016	1	10/30/14 12:25	10/31/14 14:59	7440-43-9	
Chromium	**12.0**	mg/kg	0.46	0.059	1	10/30/14 12:25	10/31/14 14:59	7440-47-3	
Lead	**296**	mg/kg	0.91	0.068	1	10/30/14 12:25	10/31/14 14:59	7439-92-1	
Selenium	**2.4**	mg/kg	0.69	0.31	1	10/30/14 12:25	10/31/14 14:59	7782-49-2	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

ANALYTICAL RESULTS

Project: 14-1004 Fraser Shipyard REV2
Pace Project No.: 10286797

Sample: TP1 0-2 **Lab ID: 10286797003** Collected: 10/27/14 09:20 Received: 10/28/14 09:30 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Silver	**0.065J**	mg/kg	0.46	0.046	1	10/30/14 12:25	10/31/14 14:59	7440-22-4	B
6020A MET ICPMS	Analytical Method: EPA 6020A Preparation Method: EPA 3050								
Arsenic	**8.5**	mg/kg	0.55	0.13	20	11/04/14 11:10	11/05/14 11:34	7440-38-2	
7471 Mercury	Analytical Method: EPA 7471 Preparation Method: EPA 7471								
Mercury	**0.061**	mg/kg	0.021	0.0064	1	10/30/14 17:08	10/31/14 10:43	7439-97-6	
Dry Weight	Analytical Method: ASTM D2974								
Percent Moisture	**14.5**	%	0.10	0.10	1		10/30/14 16:48		
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3550								
Acenaphthene	**589**	ug/kg	585	292	10	10/29/14 10:34	11/03/14 16:32	83-32-9	
Acenaphthylene	**566J**	ug/kg	585	292	10	10/29/14 10:34	11/03/14 16:32	208-96-8	
Anthracene	**409J**	ug/kg	585	292	10	10/29/14 10:34	11/03/14 16:32	120-12-7	
Benzo(a)anthracene	**1000**	ug/kg	585	292	10	10/29/14 10:34	11/03/14 16:32	56-55-3	
Benzo(a)pyrene	**1150**	ug/kg	585	292	10	10/29/14 10:34	11/03/14 16:32	50-32-8	
Benzo(b)fluoranthene	**2000**	ug/kg	585	16.4	10	10/29/14 10:34	11/03/14 16:32	205-99-2	
Benzo(g,h,i)perylene	**1170**	ug/kg	585	292	10	10/29/14 10:34	11/03/14 16:32	191-24-2	
Benzo(k)fluoranthene	**935**	ug/kg	585	292	10	10/29/14 10:34	11/03/14 16:32	207-08-9	
Chrysene	**1340**	ug/kg	585	292	10	10/29/14 10:34	11/03/14 16:32	218-01-9	
Dibenz(a,h)anthracene	**333J**	ug/kg	585	292	10	10/29/14 10:34	11/03/14 16:32	53-70-3	
Fluoranthene	**2190**	ug/kg	585	292	10	10/29/14 10:34	11/03/14 16:32	206-44-0	
Fluorene	**1200**	ug/kg	585	292	10	10/29/14 10:34	11/03/14 16:32	86-73-7	
Indeno(1,2,3-cd)pyrene	**990**	ug/kg	585	292	10	10/29/14 10:34	11/03/14 16:32	193-39-5	
Naphthalene	**1450**	ug/kg	585	292	10	10/29/14 10:34	11/03/14 16:32	91-20-3	
Phenanthrene	**1450**	ug/kg	585	292	10	10/29/14 10:34	11/03/14 16:32	85-01-8	
Pyrene	**2020**	ug/kg	585	13.4	10	10/29/14 10:34	11/03/14 16:32	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	0	%.	30-150		10	10/29/14 10:34	11/03/14 16:32	321-60-8	D4,P3, S4
Terphenyl-d14 (S)	0	%.	30-150		10	10/29/14 10:34	11/03/14 16:32	1718-51-0	S4
8260 MSV 5030 Med Level	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
Acetone	**<594**	ug/kg	1190	594	1	11/04/14 15:13	11/07/14 02:47	67-64-1	
Allyl chloride	**<7.8**	ug/kg	237	7.8	1	11/04/14 15:13	11/07/14 02:47	107-05-1	
Benzene	**52.5**	ug/kg	23.7	11.9	1	11/04/14 15:13	11/07/14 02:47	71-43-2	
Bromobenzene	**<10.3**	ug/kg	59.4	10.3	1	11/04/14 15:13	11/07/14 02:47	108-86-1	
Bromochloromethane	**<8.1**	ug/kg	59.4	8.1	1	11/04/14 15:13	11/07/14 02:47	74-97-5	
Bromodichloromethane	**<10.6**	ug/kg	59.4	10.6	1	11/04/14 15:13	11/07/14 02:47	75-27-4	
Bromoform	**<119**	ug/kg	237	119	1	11/04/14 15:13	11/07/14 02:47	75-25-2	
Bromomethane	**<297**	ug/kg	594	297	1	11/04/14 15:13	11/07/14 02:47	74-83-9	
2-Butanone (MEK)	**<148**	ug/kg	297	148	1	11/04/14 15:13	11/07/14 02:47	78-93-3	
n-Butylbenzene	**426**	ug/kg	59.4	7.2	1	11/04/14 15:13	11/07/14 02:47	104-51-8	
sec-Butylbenzene	**298**	ug/kg	59.4	7.0	1	11/04/14 15:13	11/07/14 02:47	135-98-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
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ANALYTICAL RESULTS

Project: 14-1004 Fraser Shipyard REV2
Pace Project No.: 10286797

Sample: TP1 0-2 **Lab ID: 10286797003** Collected: 10/27/14 09:20 Received: 10/28/14 09:30 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5030 Med Level	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
tert-Butylbenzene	**<29.7**	ug/kg	59.4	29.7	1	11/04/14 15:13	11/07/14 02:47	98-06-6	
Carbon tetrachloride	**75.3**	ug/kg	59.4	9.6	1	11/04/14 15:13	11/07/14 02:47	56-23-5	
Chlorobenzene	**<9.1**	ug/kg	59.4	9.1	1	11/04/14 15:13	11/07/14 02:47	108-90-7	
Chloroethane	**3140J**	ug/kg	5940	150	10	11/04/14 15:13	11/05/14 09:33	75-00-3	CL
Chloroform	**<9.0**	ug/kg	59.4	9.0	1	11/04/14 15:13	11/07/14 02:47	67-66-3	
Chloromethane	**<10.8**	ug/kg	237	10.8	1	11/04/14 15:13	11/07/14 02:47	74-87-3	
2-Chlorotoluene	**423**	ug/kg	59.4	29.7	1	11/04/14 15:13	11/07/14 02:47	95-49-8	
4-Chlorotoluene	**<29.7**	ug/kg	59.4	29.7	1	11/04/14 15:13	11/07/14 02:47	106-43-4	
1,2-Dibromo-3-chloropropane	**<31.5**	ug/kg	594	31.5	1	11/04/14 15:13	11/07/14 02:47	96-12-8	
Dibromochloromethane	**<12.8**	ug/kg	59.4	12.8	1	11/04/14 15:13	11/07/14 02:47	124-48-1	
1,2-Dibromoethane (EDB)	**<7.3**	ug/kg	59.4	7.3	1	11/04/14 15:13	11/07/14 02:47	106-93-4	
Dibromomethane	**<16.6**	ug/kg	59.4	16.6	1	11/04/14 15:13	11/07/14 02:47	74-95-3	
1,2-Dichlorobenzene	**<29.7**	ug/kg	59.4	29.7	1	11/04/14 15:13	11/07/14 02:47	95-50-1	
1,3-Dichlorobenzene	**<29.7**	ug/kg	59.4	29.7	1	11/04/14 15:13	11/07/14 02:47	541-73-1	
1,4-Dichlorobenzene	**<29.7**	ug/kg	59.4	29.7	1	11/04/14 15:13	11/07/14 02:47	106-46-7	
Dichlorodifluoromethane	**<27.4**	ug/kg	237	27.4	1	11/04/14 15:13	11/07/14 02:47	75-71-8	
1,1-Dichloroethane	**2660**	ug/kg	59.4	8.3	1	11/04/14 15:13	11/07/14 02:47	75-34-3	
1,2-Dichloroethane	**<14.0**	ug/kg	59.4	14.0	1	11/04/14 15:13	11/07/14 02:47	107-06-2	
1,1-Dichloroethene	**51.6J**	ug/kg	59.4	11.9	1	11/04/14 15:13	11/07/14 02:47	75-35-4	
cis-1,2-Dichloroethene	**<12.1**	ug/kg	59.4	12.1	1	11/04/14 15:13	11/07/14 02:47	156-59-2	
trans-1,2-Dichloroethene	**<11.8**	ug/kg	59.4	11.8	1	11/04/14 15:13	11/07/14 02:47	156-60-5	
Dichlorofluoromethane	**<297**	ug/kg	594	297	1	11/04/14 15:13	11/07/14 02:47	75-43-4	
1,2-Dichloropropane	**<9.5**	ug/kg	59.4	9.5	1	11/04/14 15:13	11/07/14 02:47	78-87-5	
1,3-Dichloropropane	**<29.7**	ug/kg	59.4	29.7	1	11/04/14 15:13	11/07/14 02:47	142-28-9	
2,2-Dichloropropane	**<7.9**	ug/kg	237	7.9	1	11/04/14 15:13	11/07/14 02:47	594-20-7	
1,1-Dichloropropene	**<9.7**	ug/kg	59.4	9.7	1	11/04/14 15:13	11/07/14 02:47	563-58-6	
cis-1,3-Dichloropropene	**<7.5**	ug/kg	59.4	7.5	1	11/04/14 15:13	11/07/14 02:47	10061-01-5	
trans-1,3-Dichloropropene	**<8.4**	ug/kg	59.4	8.4	1	11/04/14 15:13	11/07/14 02:47	10061-02-6	
Diethyl ether (Ethyl ether)	**<12.6**	ug/kg	237	12.6	1	11/04/14 15:13	11/07/14 02:47	60-29-7	
Ethylbenzene	**163**	ug/kg	59.4	7.5	1	11/04/14 15:13	11/07/14 02:47	100-41-4	
Hexachloro-1,3-butadiene	**<148**	ug/kg	297	148	1	11/04/14 15:13	11/07/14 02:47	87-68-3	
Isopropylbenzene (Cumene)	**93.3**	ug/kg	59.4	29.7	1	11/04/14 15:13	11/07/14 02:47	98-82-8	
p-Isopropyltoluene	**976**	ug/kg	59.4	8.6	1	11/04/14 15:13	11/07/14 02:47	99-87-6	
Methylene Chloride	**<119**	ug/kg	237	119	1	11/04/14 15:13	11/07/14 02:47	75-09-2	
4-Methyl-2-pentanone (MIBK)	**318**	ug/kg	297	148	1	11/04/14 15:13	11/07/14 02:47	108-10-1	
Methyl-tert-butyl ether	**<29.7**	ug/kg	59.4	29.7	1	11/04/14 15:13	11/07/14 02:47	1634-04-4	
Naphthalene	**2270**	ug/kg	237	119	1	11/04/14 15:13	11/07/14 02:47	91-20-3	
n-Propylbenzene	**181**	ug/kg	59.4	7.2	1	11/04/14 15:13	11/07/14 02:47	103-65-1	
Styrene	**<8.9**	ug/kg	59.4	8.9	1	11/04/14 15:13	11/07/14 02:47	100-42-5	
1,1,1,2-Tetrachloroethane	**<29.7**	ug/kg	59.4	29.7	1	11/04/14 15:13	11/07/14 02:47	630-20-6	
1,1,2,2-Tetrachloroethane	**<8.1**	ug/kg	59.4	8.1	1	11/04/14 15:13	11/07/14 02:47	79-34-5	
Tetrachloroethene	**<21.4**	ug/kg	59.4	21.4	1	11/04/14 15:13	11/07/14 02:47	127-18-4	
Tetrahydrofuran	**<75.9**	ug/kg	2370	75.9	1	11/04/14 15:13	11/07/14 02:47	109-99-9	
Toluene	**270**	ug/kg	59.4	8.1	1	11/04/14 15:13	11/07/14 02:47	108-88-3	
1,2,3-Trichlorobenzene	**<14.1**	ug/kg	59.4	14.1	1	11/04/14 15:13	11/07/14 02:47	87-61-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

ANALYTICAL RESULTS

Project: 14-1004 Fraser Shipyard REV2
Pace Project No.: 10286797

Sample: TP1 0-2 **Lab ID: 10286797003** Collected: 10/27/14 09:20 Received: 10/28/14 09:30 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5030 Med Level	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
1,2,4-Trichlorobenzene	**<10.8**	ug/kg	59.4	10.8	1	11/04/14 15:13	11/07/14 02:47	120-82-1	
1,1,1-Trichloroethane	**472**	ug/kg	59.4	29.7	1	11/04/14 15:13	11/07/14 02:47	71-55-6	
1,1,2-Trichloroethane	**<10.0**	ug/kg	59.4	10.0	1	11/04/14 15:13	11/07/14 02:47	79-00-5	
Trichloroethene	**<7.4**	ug/kg	59.4	7.4	1	11/04/14 15:13	11/07/14 02:47	79-01-6	
Trichlorofluoromethane	**<10.6**	ug/kg	237	10.6	1	11/04/14 15:13	11/07/14 02:47	75-69-4	CH,SS
1,2,3-Trichloropropane	**369**	ug/kg	237	7.9	1	11/04/14 15:13	11/07/14 02:47	96-18-4	
1,1,2-Trichlorotrifluoroethane	**<24.8**	ug/kg	237	24.8	1	11/04/14 15:13	11/07/14 02:47	76-13-1	
1,2,4-Trimethylbenzene	**3250**	ug/kg	59.4	29.7	1	11/04/14 15:13	11/07/14 02:47	95-63-6	
1,3,5-Trimethylbenzene	**3880**	ug/kg	59.4	29.7	1	11/04/14 15:13	11/07/14 02:47	108-67-8	
Vinyl chloride	**<8.8**	ug/kg	23.7	8.8	1	11/04/14 15:13	11/07/14 02:47	75-01-4	
Xylene (Total)	**937**	ug/kg	178	23.3	1	11/04/14 15:13	11/07/14 02:47	1330-20-7	
Surrogates									
1,2-Dichloroethane-d4 (S)	98	%.	74-125		1	11/04/14 15:13	11/07/14 02:47	17060-07-0	
Toluene-d8 (S)	102	%.	75-125		1	11/04/14 15:13	11/07/14 02:47	2037-26-5	
4-Bromofluorobenzene (S)	108	%.	75-125		1	11/04/14 15:13	11/07/14 02:47	460-00-4	

Sample: TP2 2-4 **Lab ID: 10286797004** Collected: 10/27/14 10:00 Received: 10/28/14 09:30 Matrix: Solid

Results reported on a "dry-weight" basis

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.								
Gasoline Range Organics	**572**	mg/kg	109	54.4	10	11/05/14 09:19	11/06/14 15:11		
Surrogates									
a,a,a-Trifluorotoluene (S)	107	%.	80-125		10	11/05/14 09:19	11/06/14 15:11	98-08-8	CH
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Arsenic	**1.2**	mg/kg	0.89	0.26	1	10/30/14 12:25	10/31/14 15:05	7440-38-2	
Barium	**18.4**	mg/kg	0.45	0.049	1	10/30/14 12:25	10/31/14 15:05	7440-39-3	
Cadmium	**0.13J**	mg/kg	0.13	0.015	1	10/30/14 12:25	10/31/14 15:05	7440-43-9	
Chromium	**5.5**	mg/kg	0.45	0.058	1	10/30/14 12:25	10/31/14 15:05	7440-47-3	
Lead	**41.5**	mg/kg	0.89	0.066	1	10/30/14 12:25	10/31/14 15:05	7439-92-1	
Selenium	**0.53J**	mg/kg	0.67	0.30	1	10/30/14 12:25	10/31/14 15:05	7782-49-2	
Silver	**<0.045**	mg/kg	0.45	0.045	1	10/30/14 12:25	10/31/14 15:05	7440-22-4	
6020A MET ICPMS	Analytical Method: EPA 6020A Preparation Method: EPA 3050								
Arsenic	**2.6**	mg/kg	0.52	0.12	20	11/04/14 11:10	11/05/14 11:36	7440-38-2	
7471 Mercury	Analytical Method: EPA 7471 Preparation Method: EPA 7471								
Mercury	**0.022**	mg/kg	0.021	0.0064	1	10/30/14 17:08	10/31/14 10:45	7439-97-6	
Dry Weight	Analytical Method: ASTM D2974								
Percent Moisture	**12.0**	%	0.10	0.10	1		10/30/14 16:48		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

ANALYTICAL RESULTS

Project: 14-1004 Fraser Shipyard REV2
Pace Project No.: 10286797

Sample: TP2 2-4 **Lab ID: 10286797004** Collected: 10/27/14 10:00 Received: 10/28/14 09:30 Matrix: Solid

Results reported on a "dry-weight" basis

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 3550								
Acenaphthene	**342**	ug/kg	114	56.8	10	10/29/14 10:34	11/03/14 16:53	83-32-9	
Acenaphthylene	**210**	ug/kg	114	56.8	10	10/29/14 10:34	11/03/14 16:53	208-96-8	
Anthracene	**468**	ug/kg	114	56.8	10	10/29/14 10:34	11/03/14 16:53	120-12-7	
Benzo(a)anthracene	**1090**	ug/kg	114	56.8	10	10/29/14 10:34	11/03/14 16:53	56-55-3	
Benzo(a)pyrene	**1010**	ug/kg	114	56.8	10	10/29/14 10:34	11/03/14 16:53	50-32-8	
Benzo(b)fluoranthene	**1250**	ug/kg	114	3.2	10	10/29/14 10:34	11/03/14 16:53	205-99-2	
Benzo(g,h,i)perylene	**723**	ug/kg	114	56.8	10	10/29/14 10:34	11/03/14 16:53	191-24-2	
Benzo(k)fluoranthene	**636**	ug/kg	114	56.8	10	10/29/14 10:34	11/03/14 16:53	207-08-9	
Chrysene	**1230**	ug/kg	114	56.8	10	10/29/14 10:34	11/03/14 16:53	218-01-9	
Dibenz(a,h)anthracene	**193**	ug/kg	114	56.8	10	10/29/14 10:34	11/03/14 16:53	53-70-3	
Fluoranthene	**2400**	ug/kg	114	56.8	10	10/29/14 10:34	11/03/14 16:53	206-44-0	
Fluorene	**389**	ug/kg	114	56.8	10	10/29/14 10:34	11/03/14 16:53	86-73-7	
Indeno(1,2,3-cd)pyrene	**566**	ug/kg	114	56.8	10	10/29/14 10:34	11/03/14 16:53	193-39-5	
Naphthalene	**1490**	ug/kg	114	56.8	10	10/29/14 10:34	11/03/14 16:53	91-20-3	
Phenanthrene	**2390**	ug/kg	114	56.8	10	10/29/14 10:34	11/03/14 16:53	85-01-8	
Pyrene	**2410**	ug/kg	114	2.6	10	10/29/14 10:34	11/03/14 16:53	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	141	%.	30-150		10	10/29/14 10:34	11/03/14 16:53	321-60-8	D4
Terphenyl-d14 (S)	96	%.	30-150		10	10/29/14 10:34	11/03/14 16:53	1718-51-0	
8260 MSV 5030 Med Level	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
Acetone	**<1120**	ug/kg	2240	1120	2	11/04/14 15:13	11/07/14 00:47	67-64-1	
Allyl chloride	**<14.7**	ug/kg	448	14.7	2	11/04/14 15:13	11/07/14 00:47	107-05-1	
Benzene	**<22.4**	ug/kg	44.8	22.4	2	11/04/14 15:13	11/07/14 00:47	71-43-2	
Bromobenzene	**<19.4**	ug/kg	112	19.4	2	11/04/14 15:13	11/07/14 00:47	108-86-1	
Bromochloromethane	**<15.2**	ug/kg	112	15.2	2	11/04/14 15:13	11/07/14 00:47	74-97-5	
Bromodichloromethane	**<19.9**	ug/kg	112	19.9	2	11/04/14 15:13	11/07/14 00:47	75-27-4	
Bromoform	**<224**	ug/kg	448	224	2	11/04/14 15:13	11/07/14 00:47	75-25-2	
Bromomethane	**<560**	ug/kg	1120	560	2	11/04/14 15:13	11/07/14 00:47	74-83-9	
2-Butanone (MEK)	**<280**	ug/kg	560	280	2	11/04/14 15:13	11/07/14 00:47	78-93-3	
n-Butylbenzene	**795**	ug/kg	112	13.6	2	11/04/14 15:13	11/07/14 00:47	104-51-8	
sec-Butylbenzene	**261**	ug/kg	112	13.2	2	11/04/14 15:13	11/07/14 00:47	135-98-8	B
tert-Butylbenzene	**<56.0**	ug/kg	112	56.0	2	11/04/14 15:13	11/07/14 00:47	98-06-6	
Carbon tetrachloride	**<18.1**	ug/kg	112	18.1	2	11/04/14 15:13	11/07/14 00:47	56-23-5	
Chlorobenzene	**<17.2**	ug/kg	112	17.2	2	11/04/14 15:13	11/07/14 00:47	108-90-7	
Chloroethane	**<28.2**	ug/kg	1120	28.2	2	11/04/14 15:13	11/07/14 00:47	75-00-3	
Chloroform	**<17.1**	ug/kg	112	17.1	2	11/04/14 15:13	11/07/14 00:47	67-66-3	
Chloromethane	**<20.4**	ug/kg	448	20.4	2	11/04/14 15:13	11/07/14 00:47	74-87-3	
2-Chlorotoluene	**<56.0**	ug/kg	112	56.0	2	11/04/14 15:13	11/07/14 00:47	95-49-8	
4-Chlorotoluene	**<56.0**	ug/kg	112	56.0	2	11/04/14 15:13	11/07/14 00:47	106-43-4	
1,2-Dibromo-3-chloropropane	**<59.3**	ug/kg	1120	59.3	2	11/04/14 15:13	11/07/14 00:47	96-12-8	
Dibromochloromethane	**<24.2**	ug/kg	112	24.2	2	11/04/14 15:13	11/07/14 00:47	124-48-1	
1,2-Dibromoethane (EDB)	**<13.8**	ug/kg	112	13.8	2	11/04/14 15:13	11/07/14 00:47	106-93-4	
Dibromomethane	**<31.4**	ug/kg	112	31.4	2	11/04/14 15:13	11/07/14 00:47	74-95-3	
1,2-Dichlorobenzene	**<56.0**	ug/kg	112	56.0	2	11/04/14 15:13	11/07/14 00:47	95-50-1	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

ANALYTICAL RESULTS

Project: 14-1004 Fraser Shipyard REV2
Pace Project No.: 10286797

Sample: TP2 2-4 **Lab ID: 10286797004** Collected: 10/27/14 10:00 Received: 10/28/14 09:30 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5030 Med Level	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
1,3-Dichlorobenzene	**<56.0**	ug/kg	112	56.0	2	11/04/14 15:13	11/07/14 00:47	541-73-1	
1,4-Dichlorobenzene	**<56.0**	ug/kg	112	56.0	2	11/04/14 15:13	11/07/14 00:47	106-46-7	
Dichlorodifluoromethane	**<51.7**	ug/kg	448	51.7	2	11/04/14 15:13	11/07/14 00:47	75-71-8	
1,1-Dichloroethane	**76.6J**	ug/kg	112	15.7	2	11/04/14 15:13	11/07/14 00:47	75-34-3	
1,2-Dichloroethane	**<26.4**	ug/kg	112	26.4	2	11/04/14 15:13	11/07/14 00:47	107-06-2	
1,1-Dichloroethene	**<22.4**	ug/kg	112	22.4	2	11/04/14 15:13	11/07/14 00:47	75-35-4	
cis-1,2-Dichloroethene	**<22.8**	ug/kg	112	22.8	2	11/04/14 15:13	11/07/14 00:47	156-59-2	
trans-1,2-Dichloroethene	**<22.2**	ug/kg	112	22.2	2	11/04/14 15:13	11/07/14 00:47	156-60-5	
Dichlorofluoromethane	**<560**	ug/kg	1120	560	2	11/04/14 15:13	11/07/14 00:47	75-43-4	
1,2-Dichloropropane	**<18.0**	ug/kg	112	18.0	2	11/04/14 15:13	11/07/14 00:47	78-87-5	
1,3-Dichloropropane	**<56.0**	ug/kg	112	56.0	2	11/04/14 15:13	11/07/14 00:47	142-28-9	
2,2-Dichloropropane	**<15.0**	ug/kg	448	15.0	2	11/04/14 15:13	11/07/14 00:47	594-20-7	
1,1-Dichloropropene	**<18.3**	ug/kg	112	18.3	2	11/04/14 15:13	11/07/14 00:47	563-58-6	
cis-1,3-Dichloropropene	**<14.1**	ug/kg	112	14.1	2	11/04/14 15:13	11/07/14 00:47	10061-01-5	
trans-1,3-Dichloropropene	**<15.8**	ug/kg	112	15.8	2	11/04/14 15:13	11/07/14 00:47	10061-02-6	
Diethyl ether (Ethyl ether)	**<23.7**	ug/kg	448	23.7	2	11/04/14 15:13	11/07/14 00:47	60-29-7	
Ethylbenzene	**90.1J**	ug/kg	112	14.1	2	11/04/14 15:13	11/07/14 00:47	100-41-4	
Hexachloro-1,3-butadiene	**<280**	ug/kg	560	280	2	11/04/14 15:13	11/07/14 00:47	87-68-3	
Isopropylbenzene (Cumene)	**84.5J**	ug/kg	112	56.0	2	11/04/14 15:13	11/07/14 00:47	98-82-8	
p-Isopropyltoluene	**1570**	ug/kg	112	16.2	2	11/04/14 15:13	11/07/14 00:47	99-87-6	
Methylene Chloride	**<224**	ug/kg	448	224	2	11/04/14 15:13	11/07/14 00:47	75-09-2	
4-Methyl-2-pentanone (MIBK)	**<280**	ug/kg	560	280	2	11/04/14 15:13	11/07/14 00:47	108-10-1	
Methyl-tert-butyl ether	**<56.0**	ug/kg	112	56.0	2	11/04/14 15:13	11/07/14 00:47	1634-04-4	
Naphthalene	**4390**	ug/kg	448	224	2	11/04/14 15:13	11/07/14 00:47	91-20-3	
n-Propylbenzene	**242**	ug/kg	112	13.6	2	11/04/14 15:13	11/07/14 00:47	103-65-1	
Styrene	**<16.7**	ug/kg	112	16.7	2	11/04/14 15:13	11/07/14 00:47	100-42-5	
1,1,1,2-Tetrachloroethane	**<56.0**	ug/kg	112	56.0	2	11/04/14 15:13	11/07/14 00:47	630-20-6	
1,1,2,2-Tetrachloroethane	**<15.4**	ug/kg	112	15.4	2	11/04/14 15:13	11/07/14 00:47	79-34-5	
Tetrachloroethene	**<40.4**	ug/kg	112	40.4	2	11/04/14 15:13	11/07/14 00:47	127-18-4	
Tetrahydrofuran	**<143**	ug/kg	4480	143	2	11/04/14 15:13	11/07/14 00:47	109-99-9	
Toluene	**23.5J**	ug/kg	112	15.2	2	11/04/14 15:13	11/07/14 00:47	108-88-3	
1,2,3-Trichlorobenzene	**<26.6**	ug/kg	112	26.6	2	11/04/14 15:13	11/07/14 00:47	87-61-6	
1,2,4-Trichlorobenzene	**<20.4**	ug/kg	112	20.4	2	11/04/14 15:13	11/07/14 00:47	120-82-1	
1,1,1-Trichloroethane	**535**	ug/kg	112	56.0	2	11/04/14 15:13	11/07/14 00:47	71-55-6	
1,1,2-Trichloroethane	**<18.9**	ug/kg	112	18.9	2	11/04/14 15:13	11/07/14 00:47	79-00-5	
Trichloroethene	**<13.9**	ug/kg	112	13.9	2	11/04/14 15:13	11/07/14 00:47	79-01-6	
Trichlorofluoromethane	**<19.9**	ug/kg	448	19.9	2	11/04/14 15:13	11/07/14 00:47	75-69-4	CH,SS
1,2,3-Trichloropropane	**<14.9**	ug/kg	448	14.9	2	11/04/14 15:13	11/07/14 00:47	96-18-4	
1,1,2-Trichlorotrifluoroethane	**<46.8**	ug/kg	448	46.8	2	11/04/14 15:13	11/07/14 00:47	76-13-1	
1,2,4-Trimethylbenzene	**3670**	ug/kg	112	56.0	2	11/04/14 15:13	11/07/14 00:47	95-63-6	
1,3,5-Trimethylbenzene	**1530**	ug/kg	112	56.0	2	11/04/14 15:13	11/07/14 00:47	108-67-8	
Vinyl chloride	**<16.6**	ug/kg	44.8	16.6	2	11/04/14 15:13	11/07/14 00:47	75-01-4	
Xylene (Total)	**692**	ug/kg	336	44.0	2	11/04/14 15:13	11/07/14 00:47	1330-20-7	
Surrogates									
1,2-Dichloroethane-d4 (S)	86	%.	74-125		2	11/04/14 15:13	11/07/14 00:47	17060-07-0	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

ANALYTICAL RESULTS

Project: 14-1004 Fraser Shipyard REV2
Pace Project No.: 10286797

Sample: TP2 2-4 **Lab ID: 10286797004** Collected: 10/27/14 10:00 Received: 10/28/14 09:30 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5030 Med Level	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
Surrogates									
Toluene-d8 (S)	101	%.	75-125		2	11/04/14 15:13	11/07/14 00:47	2037-26-5	
4-Bromofluorobenzene (S)	101	%.	75-125		2	11/04/14 15:13	11/07/14 00:47	460-00-4	

Sample: TP3 0-2 **Lab ID: 10286797005** Collected: 10/27/14 10:15 Received: 10/28/14 09:30 Matrix: Solid

Results reported on a "dry-weight" basis

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.								
Gasoline Range Organics	**72.1**	mg/kg	11.8	5.9	1	11/05/14 09:19	11/06/14 15:30		
Surrogates									
a,a,a-Trifluorotoluene (S)	101	%.	80-125		1	11/05/14 09:19	11/06/14 15:30	98-08-8	CH
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Arsenic	**7.7**	mg/kg	1.1	0.32	1	10/30/14 12:25	10/31/14 15:11	7440-38-2	
Barium	**49.9**	mg/kg	0.55	0.060	1	10/30/14 12:25	10/31/14 15:11	7440-39-3	
Cadmium	**0.36**	mg/kg	0.16	0.019	1	10/30/14 12:25	10/31/14 15:11	7440-43-9	
Chromium	**10.1**	mg/kg	0.55	0.071	1	10/30/14 12:25	10/31/14 15:11	7440-47-3	
Lead	**118**	mg/kg	1.1	0.081	1	10/30/14 12:25	10/31/14 15:11	7439-92-1	
Selenium	**2.0**	mg/kg	0.82	0.37	1	10/30/14 12:25	10/31/14 15:11	7782-49-2	
Silver	**<0.055**	mg/kg	0.55	0.055	1	10/30/14 12:25	10/31/14 15:11	7440-22-4	
6020A MET ICPMS	Analytical Method: EPA 6020A Preparation Method: EPA 3050								
Arsenic	**10.6**	mg/kg	0.56	0.13	20	11/04/14 11:10	11/05/14 11:39	7440-38-2	
7471 Mercury	Analytical Method: EPA 7471 Preparation Method: EPA 7471								
Mercury	**0.036**	mg/kg	0.024	0.0072	1	10/30/14 17:08	10/31/14 10:47	7439-97-6	
Dry Weight	Analytical Method: ASTM D2974								
Percent Moisture	**16.2**	%	0.10	0.10	1		10/30/14 16:49		
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3550								
Acenaphthene	**<59.7**	ug/kg	119	59.7	10	10/29/14 10:34	11/03/14 17:14	83-32-9	
Acenaphthylene	**105J**	ug/kg	119	59.7	10	10/29/14 10:34	11/03/14 17:14	208-96-8	
Anthracene	**61.1J**	ug/kg	119	59.7	10	10/29/14 10:34	11/03/14 17:14	120-12-7	
Benzo(a)anthracene	**108J**	ug/kg	119	59.7	10	10/29/14 10:34	11/03/14 17:14	56-55-3	
Benzo(a)pyrene	**126**	ug/kg	119	59.7	10	10/29/14 10:34	11/03/14 17:14	50-32-8	
Benzo(b)fluoranthene	**280**	ug/kg	119	3.3	10	10/29/14 10:34	11/03/14 17:14	205-99-2	
Benzo(g,h,i)perylene	**176**	ug/kg	119	59.7	10	10/29/14 10:34	11/03/14 17:14	191-24-2	
Benzo(k)fluoranthene	**128**	ug/kg	119	59.7	10	10/29/14 10:34	11/03/14 17:14	207-08-9	
Chrysene	**189**	ug/kg	119	59.7	10	10/29/14 10:34	11/03/14 17:14	218-01-9	
Dibenz(a,h)anthracene	**<59.7**	ug/kg	119	59.7	10	10/29/14 10:34	11/03/14 17:14	53-70-3	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
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ANALYTICAL RESULTS

Project: 14-1004 Fraser Shipyard REV2
Pace Project No.: 10286797

Sample: TP3 0-2 **Lab ID: 10286797005** Collected: 10/27/14 10:15 Received: 10/28/14 09:30 Matrix: Solid

Results reported on a "dry-weight" basis

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 3550								
Fluoranthene	**207**	ug/kg	119	59.7	10	10/29/14 10:34	11/03/14 17:14	206-44-0	
Fluorene	**<59.7**	ug/kg	119	59.7	10	10/29/14 10:34	11/03/14 17:14	86-73-7	
Indeno(1,2,3-cd)pyrene	**146**	ug/kg	119	59.7	10	10/29/14 10:34	11/03/14 17:14	193-39-5	
Naphthalene	**402**	ug/kg	119	59.7	10	10/29/14 10:34	11/03/14 17:14	91-20-3	
Phenanthrene	**254**	ug/kg	119	59.7	10	10/29/14 10:34	11/03/14 17:14	85-01-8	
Pyrene	**213**	ug/kg	119	2.7	10	10/29/14 10:34	11/03/14 17:14	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	79	%.	30-150		10	10/29/14 10:34	11/03/14 17:14	321-60-8	D4
Terphenyl-d14 (S)	89	%.	30-150		10	10/29/14 10:34	11/03/14 17:14	1718-51-0	
8260 MSV 5030 Med Level	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
Acetone	**<604**	ug/kg	1210	604	1	11/04/14 15:13	11/07/14 01:24	67-64-1	
Allyl chloride	**<7.9**	ug/kg	241	7.9	1	11/04/14 15:13	11/07/14 01:24	107-05-1	
Benzene	**60.5**	ug/kg	24.1	12.1	1	11/04/14 15:13	11/07/14 01:24	71-43-2	
Bromobenzene	**<10.5**	ug/kg	60.4	10.5	1	11/04/14 15:13	11/07/14 01:24	108-86-1	
Bromochloromethane	**<8.2**	ug/kg	60.4	8.2	1	11/04/14 15:13	11/07/14 01:24	74-97-5	
Bromodichloromethane	**<10.7**	ug/kg	60.4	10.7	1	11/04/14 15:13	11/07/14 01:24	75-27-4	
Bromoform	**<121**	ug/kg	241	121	1	11/04/14 15:13	11/07/14 01:24	75-25-2	
Bromomethane	**<302**	ug/kg	604	302	1	11/04/14 15:13	11/07/14 01:24	74-83-9	
2-Butanone (MEK)	**<151**	ug/kg	302	151	1	11/04/14 15:13	11/07/14 01:24	78-93-3	
n-Butylbenzene	**<7.3**	ug/kg	60.4	7.3	1	11/04/14 15:13	11/07/14 01:24	104-51-8	
sec-Butylbenzene	**28.5J**	ug/kg	60.4	7.1	1	11/04/14 15:13	11/07/14 01:24	135-98-8	B
tert-Butylbenzene	**<30.2**	ug/kg	60.4	30.2	1	11/04/14 15:13	11/07/14 01:24	98-06-6	
Carbon tetrachloride	**<9.8**	ug/kg	60.4	9.8	1	11/04/14 15:13	11/07/14 01:24	56-23-5	
Chlorobenzene	**<9.3**	ug/kg	60.4	9.3	1	11/04/14 15:13	11/07/14 01:24	108-90-7	
Chloroethane	**753**	ug/kg	604	15.2	1	11/04/14 15:13	11/07/14 01:24	75-00-3	
Chloroform	**<9.2**	ug/kg	60.4	9.2	1	11/04/14 15:13	11/07/14 01:24	67-66-3	
Chloromethane	**<11.0**	ug/kg	241	11.0	1	11/04/14 15:13	11/07/14 01:24	74-87-3	
2-Chlorotoluene	**<30.2**	ug/kg	60.4	30.2	1	11/04/14 15:13	11/07/14 01:24	95-49-8	
4-Chlorotoluene	**<30.2**	ug/kg	60.4	30.2	1	11/04/14 15:13	11/07/14 01:24	106-43-4	
1,2-Dibromo-3-chloropropane	**<32.0**	ug/kg	604	32.0	1	11/04/14 15:13	11/07/14 01:24	96-12-8	
Dibromochloromethane	**<13.0**	ug/kg	60.4	13.0	1	11/04/14 15:13	11/07/14 01:24	124-48-1	
1,2-Dibromoethane (EDB)	**<7.4**	ug/kg	60.4	7.4	1	11/04/14 15:13	11/07/14 01:24	106-93-4	
Dibromomethane	**<16.9**	ug/kg	60.4	16.9	1	11/04/14 15:13	11/07/14 01:24	74-95-3	
1,2-Dichlorobenzene	**<30.2**	ug/kg	60.4	30.2	1	11/04/14 15:13	11/07/14 01:24	95-50-1	
1,3-Dichlorobenzene	**<30.2**	ug/kg	60.4	30.2	1	11/04/14 15:13	11/07/14 01:24	541-73-1	
1,4-Dichlorobenzene	**<30.2**	ug/kg	60.4	30.2	1	11/04/14 15:13	11/07/14 01:24	106-46-7	
Dichlorodifluoromethane	**<27.9**	ug/kg	241	27.9	1	11/04/14 15:13	11/07/14 01:24	75-71-8	
1,1-Dichloroethane	**88.5**	ug/kg	60.4	8.4	1	11/04/14 15:13	11/07/14 01:24	75-34-3	
1,2-Dichloroethane	**<14.2**	ug/kg	60.4	14.2	1	11/04/14 15:13	11/07/14 01:24	107-06-2	
1,1-Dichloroethene	**<12.1**	ug/kg	60.4	12.1	1	11/04/14 15:13	11/07/14 01:24	75-35-4	
cis-1,2-Dichloroethene	**<12.3**	ug/kg	60.4	12.3	1	11/04/14 15:13	11/07/14 01:24	156-59-2	
trans-1,2-Dichloroethene	**<12.0**	ug/kg	60.4	12.0	1	11/04/14 15:13	11/07/14 01:24	156-60-5	
Dichlorofluoromethane	**<302**	ug/kg	604	302	1	11/04/14 15:13	11/07/14 01:24	75-43-4	
1,2-Dichloropropane	**<9.7**	ug/kg	60.4	9.7	1	11/04/14 15:13	11/07/14 01:24	78-87-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

ANALYTICAL RESULTS

Project: 14-1004 Fraser Shipyard REV2
Pace Project No.: 10286797

Sample: TP3 0-2 **Lab ID: 10286797005** Collected: 10/27/14 10:15 Received: 10/28/14 09:30 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5030 Med Level	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
1,3-Dichloropropane	**<30.2**	ug/kg	60.4	30.2	1	11/04/14 15:13	11/07/14 01:24	142-28-9	
2,2-Dichloropropane	**<8.1**	ug/kg	241	8.1	1	11/04/14 15:13	11/07/14 01:24	594-20-7	
1,1-Dichloropropene	**<9.9**	ug/kg	60.4	9.9	1	11/04/14 15:13	11/07/14 01:24	563-58-6	
cis-1,3-Dichloropropene	**<7.6**	ug/kg	60.4	7.6	1	11/04/14 15:13	11/07/14 01:24	10061-01-5	
trans-1,3-Dichloropropene	**<8.5**	ug/kg	60.4	8.5	1	11/04/14 15:13	11/07/14 01:24	10061-02-6	
Diethyl ether (Ethyl ether)	**<12.8**	ug/kg	241	12.8	1	11/04/14 15:13	11/07/14 01:24	60-29-7	
Ethylbenzene	**130**	ug/kg	60.4	7.6	1	11/04/14 15:13	11/07/14 01:24	100-41-4	
Hexachloro-1,3-butadiene	**<151**	ug/kg	302	151	1	11/04/14 15:13	11/07/14 01:24	87-68-3	
Isopropylbenzene (Cumene)	**56.0J**	ug/kg	60.4	30.2	1	11/04/14 15:13	11/07/14 01:24	98-82-8	
p-Isopropyltoluene	**37.3J**	ug/kg	60.4	8.8	1	11/04/14 15:13	11/07/14 01:24	99-87-6	B
Methylene Chloride	**<121**	ug/kg	241	121	1	11/04/14 15:13	11/07/14 01:24	75-09-2	
4-Methyl-2-pentanone (MIBK)	**<151**	ug/kg	302	151	1	11/04/14 15:13	11/07/14 01:24	108-10-1	
Methyl-tert-butyl ether	**<30.2**	ug/kg	60.4	30.2	1	11/04/14 15:13	11/07/14 01:24	1634-04-4	
Naphthalene	**473**	ug/kg	241	121	1	11/04/14 15:13	11/07/14 01:24	91-20-3	
n-Propylbenzene	**75.3**	ug/kg	60.4	7.3	1	11/04/14 15:13	11/07/14 01:24	103-65-1	
Styrene	**<9.0**	ug/kg	60.4	9.0	1	11/04/14 15:13	11/07/14 01:24	100-42-5	
1,1,1,2-Tetrachloroethane	**<30.2**	ug/kg	60.4	30.2	1	11/04/14 15:13	11/07/14 01:24	630-20-6	
1,1,2,2-Tetrachloroethane	**<8.3**	ug/kg	60.4	8.3	1	11/04/14 15:13	11/07/14 01:24	79-34-5	
Tetrachloroethene	**<21.8**	ug/kg	60.4	21.8	1	11/04/14 15:13	11/07/14 01:24	127-18-4	
Tetrahydrofuran	**<77.1**	ug/kg	2410	77.1	1	11/04/14 15:13	11/07/14 01:24	109-99-9	
Toluene	**306**	ug/kg	60.4	8.2	1	11/04/14 15:13	11/07/14 01:24	108-88-3	
1,2,3-Trichlorobenzene	**<14.4**	ug/kg	60.4	14.4	1	11/04/14 15:13	11/07/14 01:24	87-61-6	
1,2,4-Trichlorobenzene	**<11.0**	ug/kg	60.4	11.0	1	11/04/14 15:13	11/07/14 01:24	120-82-1	
1,1,1-Trichloroethane	**<30.2**	ug/kg	60.4	30.2	1	11/04/14 15:13	11/07/14 01:24	71-55-6	
1,1,2-Trichloroethane	**<10.2**	ug/kg	60.4	10.2	1	11/04/14 15:13	11/07/14 01:24	79-00-5	
Trichloroethene	**<7.5**	ug/kg	60.4	7.5	1	11/04/14 15:13	11/07/14 01:24	79-01-6	
Trichlorofluoromethane	**<10.7**	ug/kg	241	10.7	1	11/04/14 15:13	11/07/14 01:24	75-69-4	CH,SS
1,2,3-Trichloropropane	**<8.0**	ug/kg	241	8.0	1	11/04/14 15:13	11/07/14 01:24	96-18-4	
1,1,2-Trichlorotrifluoroethane	**<25.2**	ug/kg	241	25.2	1	11/04/14 15:13	11/07/14 01:24	76-13-1	
1,2,4-Trimethylbenzene	**305**	ug/kg	60.4	30.2	1	11/04/14 15:13	11/07/14 01:24	95-63-6	
1,3,5-Trimethylbenzene	**124**	ug/kg	60.4	30.2	1	11/04/14 15:13	11/07/14 01:24	108-67-8	
Vinyl chloride	**<9.0**	ug/kg	24.1	9.0	1	11/04/14 15:13	11/07/14 01:24	75-01-4	
Xylene (Total)	**814**	ug/kg	181	23.7	1	11/04/14 15:13	11/07/14 01:24	1330-20-7	
Surrogates									
1,2-Dichloroethane-d4 (S)	95	%.	74-125		1	11/04/14 15:13	11/07/14 01:24	17060-07-0	
Toluene-d8 (S)	105	%.	75-125		1	11/04/14 15:13	11/07/14 01:24	2037-26-5	
4-Bromofluorobenzene (S)	102	%.	75-125		1	11/04/14 15:13	11/07/14 01:24	460-00-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
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ANALYTICAL RESULTS

Project: 14-1004 Fraser Shipyard REV2
Pace Project No.: 10286797

Sample: TP4 0-2 **Lab ID: 10286797006** Collected: 10/27/14 10:30 Received: 10/28/14 09:30 Matrix: Solid

Results reported on a "dry-weight" basis

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.								
Gasoline Range Organics	**156**	mg/kg	121	60.7	10	11/05/14 09:19	11/06/14 14:31		
Surrogates									
a,a,a-Trifluorotoluene (S)	113	%.	80-125		10	11/05/14 09:19	11/06/14 14:31	98-08-8	CH
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Arsenic	**3.9**	mg/kg	0.87	0.25	1	10/30/14 12:25	10/31/14 15:16	7440-38-2	
Barium	**109**	mg/kg	0.44	0.048	1	10/30/14 12:25	10/31/14 15:16	7440-39-3	
Cadmium	**1.4**	mg/kg	0.13	0.015	1	10/30/14 12:25	10/31/14 15:16	7440-43-9	
Chromium	**42.4**	mg/kg	0.44	0.057	1	10/30/14 12:25	10/31/14 15:16	7440-47-3	
Lead	**212**	mg/kg	0.87	0.065	1	10/30/14 12:25	10/31/14 15:16	7439-92-1	
Selenium	**3.5**	mg/kg	0.66	0.30	1	10/30/14 12:25	10/31/14 15:16	7782-49-2	
Silver	**24.5**	mg/kg	0.44	0.044	1	10/30/14 12:25	10/31/14 15:16	7440-22-4	
6020A MET ICPMS	Analytical Method: EPA 6020A Preparation Method: EPA 3050								
Arsenic	**5.1**	mg/kg	0.49	0.12	20	11/04/14 11:10	11/05/14 11:42	7440-38-2	
7471 Mercury	Analytical Method: EPA 7471 Preparation Method: EPA 7471								
Mercury	**0.11**	mg/kg	0.021	0.0063	1	10/30/14 17:08	10/31/14 10:49	7439-97-6	
Dry Weight	Analytical Method: ASTM D2974								
Percent Moisture	**11.3**	%	0.10	0.10	1		10/30/14 16:49		
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3550								
Acenaphthene	**748**	ug/kg	564	282	5	10/29/14 10:34	11/03/14 16:10	83-32-9	
Acenaphthylene	**<282**	ug/kg	564	282	5	10/29/14 10:34	11/03/14 16:10	208-96-8	
Anthracene	**1490**	ug/kg	564	282	5	10/29/14 10:34	11/03/14 16:10	120-12-7	
Benzo(a)anthracene	**3350**	ug/kg	564	282	5	10/29/14 10:34	11/03/14 16:10	56-55-3	
Benzo(a)pyrene	**3530**	ug/kg	564	282	5	10/29/14 10:34	11/03/14 16:10	50-32-8	
Benzo(b)fluoranthene	**4400**	ug/kg	564	15.8	5	10/29/14 10:34	11/03/14 16:10	205-99-2	
Benzo(g,h,i)perylene	**2480**	ug/kg	564	282	5	10/29/14 10:34	11/03/14 16:10	191-24-2	
Benzo(k)fluoranthene	**2200**	ug/kg	564	282	5	10/29/14 10:34	11/03/14 16:10	207-08-9	
Chrysene	**3950**	ug/kg	564	282	5	10/29/14 10:34	11/03/14 16:10	218-01-9	
Dibenz(a,h)anthracene	**666**	ug/kg	564	282	5	10/29/14 10:34	11/03/14 16:10	53-70-3	
Fluoranthene	**7550**	ug/kg	564	282	5	10/29/14 10:34	11/03/14 16:10	206-44-0	
Fluorene	**968**	ug/kg	564	282	5	10/29/14 10:34	11/03/14 16:10	86-73-7	
Indeno(1,2,3-cd)pyrene	**2010**	ug/kg	564	282	5	10/29/14 10:34	11/03/14 16:10	193-39-5	
Naphthalene	**297J**	ug/kg	564	282	5	10/29/14 10:34	11/03/14 16:10	91-20-3	
Phenanthrene	**5620**	ug/kg	564	282	5	10/29/14 10:34	11/03/14 16:10	85-01-8	
Pyrene	**6180**	ug/kg	564	13.0	5	10/29/14 10:34	11/03/14 16:10	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	0	%.	30-150		5	10/29/14 10:34	11/03/14 16:10	321-60-8	D4,P3, S4
Terphenyl-d14 (S)	0	%.	30-150		5	10/29/14 10:34	11/03/14 16:10	1718-51-0	S4

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

ANALYTICAL RESULTS

Project: 14-1004 Fraser Shipyard REV2
Pace Project No.: 10286797

Sample: TP4 0-2 **Lab ID: 10286797006** Collected: 10/27/14 10:30 Received: 10/28/14 09:30 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5030 Med Level	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
Acetone	**<575**	ug/kg	1150	575	1	11/04/14 15:13	11/05/14 09:16	67-64-1	
Allyl chloride	**<7.5**	ug/kg	230	7.5	1	11/04/14 15:13	11/05/14 09:16	107-05-1	
Benzene	**<11.5**	ug/kg	23.0	11.5	1	11/04/14 15:13	11/05/14 09:16	71-43-2	
Bromobenzene	**<10**	ug/kg	57.5	10	1	11/04/14 15:13	11/05/14 09:16	108-86-1	
Bromochloromethane	**<7.8**	ug/kg	57.5	7.8	1	11/04/14 15:13	11/05/14 09:16	74-97-5	
Bromodichloromethane	**<10.2**	ug/kg	57.5	10.2	1	11/04/14 15:13	11/05/14 09:16	75-27-4	
Bromoform	**<115**	ug/kg	230	115	1	11/04/14 15:13	11/05/14 09:16	75-25-2	
Bromomethane	**<288**	ug/kg	575	288	1	11/04/14 15:13	11/05/14 09:16	74-83-9	
2-Butanone (MEK)	**<144**	ug/kg	288	144	1	11/04/14 15:13	11/05/14 09:16	78-93-3	
n-Butylbenzene	**<7.0**	ug/kg	57.5	7.0	1	11/04/14 15:13	11/05/14 09:16	104-51-8	
sec-Butylbenzene	**<6.8**	ug/kg	57.5	6.8	1	11/04/14 15:13	11/05/14 09:16	135-98-8	
tert-Butylbenzene	**<28.8**	ug/kg	57.5	28.8	1	11/04/14 15:13	11/05/14 09:16	98-06-6	
Carbon tetrachloride	**<9.3**	ug/kg	57.5	9.3	1	11/04/14 15:13	11/05/14 09:16	56-23-5	
Chlorobenzene	**<8.8**	ug/kg	57.5	8.8	1	11/04/14 15:13	11/05/14 09:16	108-90-7	
Chloroethane	**<14.5**	ug/kg	575	14.5	1	11/04/14 15:13	11/05/14 09:16	75-00-3	CL
Chloroform	**<8.8**	ug/kg	57.5	8.8	1	11/04/14 15:13	11/05/14 09:16	67-66-3	
Chloromethane	**<10.5**	ug/kg	230	10.5	1	11/04/14 15:13	11/05/14 09:16	74-87-3	
2-Chlorotoluene	**<28.8**	ug/kg	57.5	28.8	1	11/04/14 15:13	11/05/14 09:16	95-49-8	
4-Chlorotoluene	**<28.8**	ug/kg	57.5	28.8	1	11/04/14 15:13	11/05/14 09:16	106-43-4	
1,2-Dibromo-3-chloropropane	**<30.5**	ug/kg	575	30.5	1	11/04/14 15:13	11/05/14 09:16	96-12-8	
Dibromochloromethane	**<12.4**	ug/kg	57.5	12.4	1	11/04/14 15:13	11/05/14 09:16	124-48-1	
1,2-Dibromoethane (EDB)	**<7.1**	ug/kg	57.5	7.1	1	11/04/14 15:13	11/05/14 09:16	106-93-4	
Dibromomethane	**<16.1**	ug/kg	57.5	16.1	1	11/04/14 15:13	11/05/14 09:16	74-95-3	
1,2-Dichlorobenzene	**<28.8**	ug/kg	57.5	28.8	1	11/04/14 15:13	11/05/14 09:16	95-50-1	
1,3-Dichlorobenzene	**<28.8**	ug/kg	57.5	28.8	1	11/04/14 15:13	11/05/14 09:16	541-73-1	
1,4-Dichlorobenzene	**<28.8**	ug/kg	57.5	28.8	1	11/04/14 15:13	11/05/14 09:16	106-46-7	
Dichlorodifluoromethane	**<26.6**	ug/kg	230	26.6	1	11/04/14 15:13	11/05/14 09:16	75-71-8	
1,1-Dichloroethane	**70.2**	ug/kg	57.5	8.0	1	11/04/14 15:13	11/05/14 09:16	75-34-3	
1,2-Dichloroethane	**<13.6**	ug/kg	57.5	13.6	1	11/04/14 15:13	11/05/14 09:16	107-06-2	
1,1-Dichloroethene	**<11.5**	ug/kg	57.5	11.5	1	11/04/14 15:13	11/05/14 09:16	75-35-4	
cis-1,2-Dichloroethene	**137**	ug/kg	57.5	11.7	1	11/04/14 15:13	11/05/14 09:16	156-59-2	
trans-1,2-Dichloroethene	**40.2J**	ug/kg	57.5	11.4	1	11/04/14 15:13	11/05/14 09:16	156-60-5	
Dichlorofluoromethane	**<288**	ug/kg	575	288	1	11/04/14 15:13	11/05/14 09:16	75-43-4	
1,2-Dichloropropane	**<9.2**	ug/kg	57.5	9.2	1	11/04/14 15:13	11/05/14 09:16	78-87-5	
1,3-Dichloropropane	**<28.8**	ug/kg	57.5	28.8	1	11/04/14 15:13	11/05/14 09:16	142-28-9	
2,2-Dichloropropane	**<7.7**	ug/kg	230	7.7	1	11/04/14 15:13	11/05/14 09:16	594-20-7	
1,1-Dichloropropene	**<9.4**	ug/kg	57.5	9.4	1	11/04/14 15:13	11/05/14 09:16	563-58-6	
cis-1,3-Dichloropropene	**<7.2**	ug/kg	57.5	7.2	1	11/04/14 15:13	11/05/14 09:16	10061-01-5	
trans-1,3-Dichloropropene	**<8.1**	ug/kg	57.5	8.1	1	11/04/14 15:13	11/05/14 09:16	10061-02-6	
Diethyl ether (Ethyl ether)	**<12.2**	ug/kg	230	12.2	1	11/04/14 15:13	11/05/14 09:16	60-29-7	
Ethylbenzene	**40.7J**	ug/kg	57.5	7.2	1	11/04/14 15:13	11/05/14 09:16	100-41-4	
Hexachloro-1,3-butadiene	**<144**	ug/kg	288	144	1	11/04/14 15:13	11/05/14 09:16	87-68-3	
Isopropylbenzene (Cumene)	**<28.8**	ug/kg	57.5	28.8	1	11/04/14 15:13	11/05/14 09:16	98-82-8	
p-Isopropyltoluene	**126**	ug/kg	57.5	8.3	1	11/04/14 15:13	11/05/14 09:16	99-87-6	B
Methylene Chloride	**<115**	ug/kg	230	115	1	11/04/14 15:13	11/05/14 09:16	75-09-2	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
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ANALYTICAL RESULTS

Project: 14-1004 Fraser Shipyard REV2
Pace Project No.: 10286797

Sample: TP4 0-2 **Lab ID: 10286797006** Collected: 10/27/14 10:30 Received: 10/28/14 09:30 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5030 Med Level	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
4-Methyl-2-pentanone (MIBK)	**<144**	ug/kg	288	144	1	11/04/14 15:13	11/05/14 09:16	108-10-1	
Methyl-tert-butyl ether	**<28.8**	ug/kg	57.5	28.8	1	11/04/14 15:13	11/05/14 09:16	1634-04-4	
Naphthalene	**641**	ug/kg	230	115	1	11/04/14 15:13	11/05/14 09:16	91-20-3	
n-Propylbenzene	**<7.0**	ug/kg	57.5	7.0	1	11/04/14 15:13	11/05/14 09:16	103-65-1	
Styrene	**<8.6**	ug/kg	57.5	8.6	1	11/04/14 15:13	11/05/14 09:16	100-42-5	
1,1,1,2-Tetrachloroethane	**<28.8**	ug/kg	57.5	28.8	1	11/04/14 15:13	11/05/14 09:16	630-20-6	
1,1,2,2-Tetrachloroethane	**<7.9**	ug/kg	57.5	7.9	1	11/04/14 15:13	11/05/14 09:16	79-34-5	
Tetrachloroethene	**331**	ug/kg	57.5	20.8	1	11/04/14 15:13	11/05/14 09:16	127-18-4	
Tetrahydrofuran	**<73.5**	ug/kg	2300	73.5	1	11/04/14 15:13	11/05/14 09:16	109-99-9	
Toluene	**96.2**	ug/kg	57.5	7.8	1	11/04/14 15:13	11/05/14 09:16	108-88-3	
1,2,3-Trichlorobenzene	**<13.7**	ug/kg	57.5	13.7	1	11/04/14 15:13	11/05/14 09:16	87-61-6	
1,2,4-Trichlorobenzene	**<10.5**	ug/kg	57.5	10.5	1	11/04/14 15:13	11/05/14 09:16	120-82-1	
1,1,1-Trichloroethane	**75.7**	ug/kg	57.5	28.8	1	11/04/14 15:13	11/05/14 09:16	71-55-6	
1,1,2-Trichloroethane	**<9.7**	ug/kg	57.5	9.7	1	11/04/14 15:13	11/05/14 09:16	79-00-5	
Trichloroethene	**421**	ug/kg	57.5	7.2	1	11/04/14 15:13	11/05/14 09:16	79-01-6	
Trichlorofluoromethane	**<10.2**	ug/kg	230	10.2	1	11/04/14 15:13	11/05/14 09:16	75-69-4	CL
1,2,3-Trichloropropane	**<7.6**	ug/kg	230	7.6	1	11/04/14 15:13	11/05/14 09:16	96-18-4	
1,1,2-Trichlorotrifluoroethane	**<24.0**	ug/kg	230	24.0	1	11/04/14 15:13	11/05/14 09:16	76-13-1	
1,2,4-Trimethylbenzene	**138**	ug/kg	57.5	28.8	1	11/04/14 15:13	11/05/14 09:16	95-63-6	
1,3,5-Trimethylbenzene	**96.0**	ug/kg	57.5	28.8	1	11/04/14 15:13	11/05/14 09:16	108-67-8	
Vinyl chloride	**<8.5**	ug/kg	23.0	8.5	1	11/04/14 15:13	11/05/14 09:16	75-01-4	
Xylene (Total)	**209**	ug/kg	173	22.6	1	11/04/14 15:13	11/05/14 09:16	1330-20-7	
Surrogates									
1,2-Dichloroethane-d4 (S)	93	%.	74-125		1	11/04/14 15:13	11/05/14 09:16	17060-07-0	
Toluene-d8 (S)	102	%.	75-125		1	11/04/14 15:13	11/05/14 09:16	2037-26-5	
4-Bromofluorobenzene (S)	105	%.	75-125		1	11/04/14 15:13	11/05/14 09:16	460-00-4	

Sample: TRIP BLANK **Lab ID: 10286797007** Collected: 10/27/14 00:00 Received: 10/28/14 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5030 Med Level	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
Acetone	**<500**	ug/kg	1000	500	1	11/04/14 15:13	11/05/14 04:21	67-64-1	
Allyl chloride	**<6.6**	ug/kg	200	6.6	1	11/04/14 15:13	11/05/14 04:21	107-05-1	
Benzene	**<10.0**	ug/kg	20.0	10.0	1	11/04/14 15:13	11/05/14 04:21	71-43-2	
Bromobenzene	**<8.7**	ug/kg	50.0	8.7	1	11/04/14 15:13	11/05/14 04:21	108-86-1	
Bromochloromethane	**<6.8**	ug/kg	50.0	6.8	1	11/04/14 15:13	11/05/14 04:21	74-97-5	
Bromodichloromethane	**<8.9**	ug/kg	50.0	8.9	1	11/04/14 15:13	11/05/14 04:21	75-27-4	
Bromoform	**<100**	ug/kg	200	100	1	11/04/14 15:13	11/05/14 04:21	75-25-2	
Bromomethane	**<250**	ug/kg	500	250	1	11/04/14 15:13	11/05/14 04:21	74-83-9	
2-Butanone (MEK)	**<125**	ug/kg	250	125	1	11/04/14 15:13	11/05/14 04:21	78-93-3	
n-Butylbenzene	**23.3J**	ug/kg	50.0	6.1	1	11/04/14 15:13	11/05/14 04:21	104-51-8	B
sec-Butylbenzene	**10.1J**	ug/kg	50.0	5.9	1	11/04/14 15:13	11/05/14 04:21	135-98-8	B

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

ANALYTICAL RESULTS

Project: 14-1004 Fraser Shipyard REV2
Pace Project No.: 10286797

Sample: TRIP BLANK **Lab ID: 10286797007** Collected: 10/27/14 00:00 Received: 10/28/14 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5030 Med Level	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
tert-Butylbenzene	**<25.0**	ug/kg	50.0	25.0	1	11/04/14 15:13	11/05/14 04:21	98-06-6	
Carbon tetrachloride	**<8.1**	ug/kg	50.0	8.1	1	11/04/14 15:13	11/05/14 04:21	56-23-5	
Chlorobenzene	**<7.7**	ug/kg	50.0	7.7	1	11/04/14 15:13	11/05/14 04:21	108-90-7	
Chloroethane	**<12.6**	ug/kg	500	12.6	1	11/04/14 15:13	11/05/14 04:21	75-00-3	CL
Chloroform	**<7.6**	ug/kg	50.0	7.6	1	11/04/14 15:13	11/05/14 04:21	67-66-3	
Chloromethane	**<9.1**	ug/kg	200	9.1	1	11/04/14 15:13	11/05/14 04:21	74-87-3	
2-Chlorotoluene	**<25.0**	ug/kg	50.0	25.0	1	11/04/14 15:13	11/05/14 04:21	95-49-8	
4-Chlorotoluene	**<25.0**	ug/kg	50.0	25.0	1	11/04/14 15:13	11/05/14 04:21	106-43-4	
1,2-Dibromo-3-chloropropane	**<26.5**	ug/kg	500	26.5	1	11/04/14 15:13	11/05/14 04:21	96-12-8	
Dibromochloromethane	**<10.8**	ug/kg	50.0	10.8	1	11/04/14 15:13	11/05/14 04:21	124-48-1	
1,2-Dibromoethane (EDB)	**<6.2**	ug/kg	50.0	6.2	1	11/04/14 15:13	11/05/14 04:21	106-93-4	
Dibromomethane	**<14.0**	ug/kg	50.0	14.0	1	11/04/14 15:13	11/05/14 04:21	74-95-3	
1,2-Dichlorobenzene	**<25.0**	ug/kg	50.0	25.0	1	11/04/14 15:13	11/05/14 04:21	95-50-1	
1,3-Dichlorobenzene	**<25.0**	ug/kg	50.0	25.0	1	11/04/14 15:13	11/05/14 04:21	541-73-1	
1,4-Dichlorobenzene	**<25.0**	ug/kg	50.0	25.0	1	11/04/14 15:13	11/05/14 04:21	106-46-7	
Dichlorodifluoromethane	**<23.1**	ug/kg	200	23.1	1	11/04/14 15:13	11/05/14 04:21	75-71-8	
1,1-Dichloroethane	**<7.0**	ug/kg	50.0	7.0	1	11/04/14 15:13	11/05/14 04:21	75-34-3	
1,2-Dichloroethane	**<11.8**	ug/kg	50.0	11.8	1	11/04/14 15:13	11/05/14 04:21	107-06-2	
1,1-Dichloroethene	**<10**	ug/kg	50.0	10	1	11/04/14 15:13	11/05/14 04:21	75-35-4	
cis-1,2-Dichloroethene	**<10.2**	ug/kg	50.0	10.2	1	11/04/14 15:13	11/05/14 04:21	156-59-2	
trans-1,2-Dichloroethene	**<9.9**	ug/kg	50.0	9.9	1	11/04/14 15:13	11/05/14 04:21	156-60-5	
Dichlorofluoromethane	**<250**	ug/kg	500	250	1	11/04/14 15:13	11/05/14 04:21	75-43-4	
1,2-Dichloropropane	**<8.0**	ug/kg	50.0	8.0	1	11/04/14 15:13	11/05/14 04:21	78-87-5	
1,3-Dichloropropane	**<25.0**	ug/kg	50.0	25.0	1	11/04/14 15:13	11/05/14 04:21	142-28-9	
2,2-Dichloropropane	**<6.7**	ug/kg	200	6.7	1	11/04/14 15:13	11/05/14 04:21	594-20-7	
1,1-Dichloropropene	**<8.2**	ug/kg	50.0	8.2	1	11/04/14 15:13	11/05/14 04:21	563-58-6	
cis-1,3-Dichloropropene	**<6.3**	ug/kg	50.0	6.3	1	11/04/14 15:13	11/05/14 04:21	10061-01-5	
trans-1,3-Dichloropropene	**<7.0**	ug/kg	50.0	7.0	1	11/04/14 15:13	11/05/14 04:21	10061-02-6	
Diethyl ether (Ethyl ether)	**<10.6**	ug/kg	200	10.6	1	11/04/14 15:13	11/05/14 04:21	60-29-7	
Ethylbenzene	**<6.3**	ug/kg	50.0	6.3	1	11/04/14 15:13	11/05/14 04:21	100-41-4	
Hexachloro-1,3-butadiene	**<125**	ug/kg	250	125	1	11/04/14 15:13	11/05/14 04:21	87-68-3	
Isopropylbenzene (Cumene)	**<25.0**	ug/kg	50.0	25.0	1	11/04/14 15:13	11/05/14 04:21	98-82-8	
p-Isopropyltoluene	**10.8J**	ug/kg	50.0	7.2	1	11/04/14 15:13	11/05/14 04:21	99-87-6	B
Methylene Chloride	**<100**	ug/kg	200	100	1	11/04/14 15:13	11/05/14 04:21	75-09-2	
4-Methyl-2-pentanone (MIBK)	**<125**	ug/kg	250	125	1	11/04/14 15:13	11/05/14 04:21	108-10-1	
Methyl-tert-butyl ether	**<25.0**	ug/kg	50.0	25.0	1	11/04/14 15:13	11/05/14 04:21	1634-04-4	
Naphthalene	**<100**	ug/kg	200	100	1	11/04/14 15:13	11/05/14 04:21	91-20-3	
n-Propylbenzene	**<6.1**	ug/kg	50.0	6.1	1	11/04/14 15:13	11/05/14 04:21	103-65-1	
Styrene	**<7.5**	ug/kg	50.0	7.5	1	11/04/14 15:13	11/05/14 04:21	100-42-5	
1,1,1,2-Tetrachloroethane	**<25.0**	ug/kg	50.0	25.0	1	11/04/14 15:13	11/05/14 04:21	630-20-6	
1,1,2,2-Tetrachloroethane	**<6.9**	ug/kg	50.0	6.9	1	11/04/14 15:13	11/05/14 04:21	79-34-5	
Tetrachloroethene	**<18.0**	ug/kg	50.0	18.0	1	11/04/14 15:13	11/05/14 04:21	127-18-4	
Tetrahydrofuran	**<63.9**	ug/kg	2000	63.9	1	11/04/14 15:13	11/05/14 04:21	109-99-9	
Toluene	**<6.8**	ug/kg	50.0	6.8	1	11/04/14 15:13	11/05/14 04:21	108-88-3	
1,2,3-Trichlorobenzene	**<11.9**	ug/kg	50.0	11.9	1	11/04/14 15:13	11/05/14 04:21	87-61-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
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(612)607-1700

ANALYTICAL RESULTS

Project: 14-1004 Fraser Shipyard REV2
Pace Project No.: 10286797

Sample: TRIP BLANK **Lab ID: 10286797007** Collected: 10/27/14 00:00 Received: 10/28/14 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5030 Med Level	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
1,2,4-Trichlorobenzene	**<9.1**	ug/kg	50.0	9.1	1	11/04/14 15:13	11/05/14 04:21	120-82-1	
1,1,1-Trichloroethane	**<25.0**	ug/kg	50.0	25.0	1	11/04/14 15:13	11/05/14 04:21	71-55-6	
1,1,2-Trichloroethane	**<8.5**	ug/kg	50.0	8.5	1	11/04/14 15:13	11/05/14 04:21	79-00-5	
Trichloroethene	**<6.2**	ug/kg	50.0	6.2	1	11/04/14 15:13	11/05/14 04:21	79-01-6	
Trichlorofluoromethane	**<8.9**	ug/kg	200	8.9	1	11/04/14 15:13	11/05/14 04:21	75-69-4	CL
1,2,3-Trichloropropane	**<6.6**	ug/kg	200	6.6	1	11/04/14 15:13	11/05/14 04:21	96-18-4	
1,1,2-Trichlorotrifluoroethane	**<20.9**	ug/kg	200	20.9	1	11/04/14 15:13	11/05/14 04:21	76-13-1	
1,2,4-Trimethylbenzene	**<25.0**	ug/kg	50.0	25.0	1	11/04/14 15:13	11/05/14 04:21	95-63-6	
1,3,5-Trimethylbenzene	**<25.0**	ug/kg	50.0	25.0	1	11/04/14 15:13	11/05/14 04:21	108-67-8	
Vinyl chloride	**<7.4**	ug/kg	20.0	7.4	1	11/04/14 15:13	11/05/14 04:21	75-01-4	
Xylene (Total)	**<19.6**	ug/kg	150	19.6	1	11/04/14 15:13	11/05/14 04:21	1330-20-7	
Surrogates									
1,2-Dichloroethane-d4 (S)	95	%.	74-125		1	11/04/14 15:13	11/05/14 04:21	17060-07-0	
Toluene-d8 (S)	101	%.	75-125		1	11/04/14 15:13	11/05/14 04:21	2037-26-5	
4-Bromofluorobenzene (S)	104	%.	75-125		1	11/04/14 15:13	11/05/14 04:21	460-00-4	

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 14-1004 Fraser Shipyard REV2
Pace Project No.: 10286797

QC Batch: GCV/12886 Analysis Method: WI MOD GRO
QC Batch Method: TPH GRO/PVOC WI ext. Analysis Description: WIGRO Solid GCV
Associated Lab Samples: 10286797003, 10286797004, 10286797005, 10286797006

METHOD BLANK: 1836328 Matrix: Solid
Associated Lab Samples: 10286797003, 10286797004, 10286797005, 10286797006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Gasoline Range Organics	mg/kg	<5.0	10.0	11/06/14 14:12	
a,a,a-Trifluorotoluene (S)	%.	117	80-125	11/06/14 14:12	CH

LABORATORY CONTROL SAMPLE & LCSD: 1836329 1836330

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Gasoline Range Organics	mg/kg	50	41.6	44.2	83	88	80-120	6	20	
a,a,a-Trifluorotoluene (S)	%.				115	113	80-125			CH

MATRIX SPIKE SAMPLE: 1836331

Parameter	Units	10287056006 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Gasoline Range Organics	mg/kg	ND	50.9	54.4	105	80-120	
a,a,a-Trifluorotoluene (S)	%.				116	80-125	CH

SAMPLE DUPLICATE: 1836332

Parameter	Units	10287056007 Result	Dup Result	RPD	Max RPD	Qualifiers
Gasoline Range Organics	mg/kg	ND	<5.3		20	
a,a,a-Trifluorotoluene (S)	%.	117	115	1		CH

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 14-1004 Fraser Shipyard REV2
Pace Project No.: 10286797

QC Batch: MERP/12172 Analysis Method: EPA 7470A
QC Batch Method: EPA 7470A Analysis Description: 7470 Mercury TCLP
Associated Lab Samples: 10286797001, 10286797002

METHOD BLANK: 1846979 Matrix: Water
Associated Lab Samples: 10286797001, 10286797002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	ug/L	<0.078	0.60	11/19/14 10:17	

METHOD BLANK: 1845743 Matrix: Water
Associated Lab Samples: 10286797001, 10286797002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	ug/L	<0.078	0.60	11/19/14 10:32	

LABORATORY CONTROL SAMPLE: 1846980

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	15	16.0	107	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1846981 1846982

Parameter	Units	10286797001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	ug/L	<0.078	15	15	15.9	15.7	106	105	75-125	1	20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 14-1004 Fraser Shipyard REV2
Pace Project No.: 10286797

QC Batch: MERP/12008 Analysis Method: EPA 7471
QC Batch Method: EPA 7471 Analysis Description: 7471 Mercury
Associated Lab Samples: 10286797001, 10286797002, 10286797003, 10286797004, 10286797005, 10286797006

METHOD BLANK: 1830021 Matrix: Solid
Associated Lab Samples: 10286797001, 10286797002, 10286797003, 10286797004, 10286797005, 10286797006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	mg/kg	<0.0060	0.020	10/31/14 10:26	

LABORATORY CONTROL SAMPLE: 1830022

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/kg	.45	0.44	96	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1830023 1830024

Parameter	Units	10286797001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/kg	0.11	.53	.53	0.59	0.57	89	85	75-125	4	20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 14-1004 Fraser Shipyard REV2
Pace Project No.: 10286797

QC Batch: MPRP/50209 Analysis Method: EPA 6010
QC Batch Method: EPA 3050 Analysis Description: 6010 MET
Associated Lab Samples: 10286797001, 10286797002, 10286797003, 10286797004, 10286797005, 10286797006

METHOD BLANK: 1830027 Matrix: Solid
Associated Lab Samples: 10286797001, 10286797002, 10286797003, 10286797004, 10286797005, 10286797006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Arsenic	mg/kg	<0.26	0.91	10/31/14 13:41	
Barium	mg/kg	<0.050	0.45	10/31/14 13:41	
Cadmium	mg/kg	<0.015	0.14	10/31/14 13:41	
Chromium	mg/kg	<0.059	0.45	10/31/14 13:41	
Lead	mg/kg	<0.067	0.91	10/31/14 13:41	
Selenium	mg/kg	<0.31	0.68	10/31/14 13:41	
Silver	mg/kg	0.052J	0.45	10/31/14 13:41	

LABORATORY CONTROL SAMPLE: 1830028

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/kg	47.2	42.2	90	80-120	
Barium	mg/kg	47.2	44.4	94	80-120	
Cadmium	mg/kg	47.2	42.8	91	80-120	
Chromium	mg/kg	47.2	44.0	93	80-120	
Lead	mg/kg	47.2	42.8	91	80-120	
Selenium	mg/kg	47.2	39.4	84	80-120	
Silver	mg/kg	23.6	23.0	97	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1830029 1830030

Parameter	Units	10286797001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Arsenic	mg/kg	7.9	52.2	47.5	53.4	52.5	87	94	75-125	2	30	
Barium	mg/kg	83.6	52.2	47.5	116	120	62	78	75-125	4	30	M1
Cadmium	mg/kg	0.61	52.2	47.5	46.2	44.8	87	93	75-125	3	30	
Chromium	mg/kg	14.9	52.2	47.5	60.4	60.9	87	97	75-125	1	30	
Lead	mg/kg	203	52.2	47.5	228	235	48	67	75-125	3	30	M1
Selenium	mg/kg	2.0	52.2	47.5	45.2	44.3	83	89	75-125	2	30	
Silver	mg/kg	1.7	26.1	23.7	27.3	25.8	98	102	75-125	6	30	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 14-1004 Fraser Shipyard REV2
Pace Project No.: 10286797

QC Batch: MPRP/50561 Analysis Method: EPA 6010
QC Batch Method: EPA 3010 Analysis Description: 6010 MET TCLP
Associated Lab Samples: 10286797001, 10286797002

METHOD BLANK: 1842214 Matrix: Water
Associated Lab Samples: 10286797001, 10286797002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Arsenic	ug/L	<15.8	100	11/14/14 11:24	
Barium	ug/L	<250	500	11/14/14 11:24	
Cadmium	ug/L	<1.2	15.0	11/14/14 11:24	
Chromium	ug/L	<25.0	50.0	11/14/14 11:24	
Lead	mg/L	<0.0089	0.050	11/14/14 11:24	
Selenium	ug/L	<33.2	100	11/14/14 11:24	
Silver	ug/L	4.9J	50.0	11/14/14 11:24	

METHOD BLANK: 1840902 Matrix: Water
Associated Lab Samples: 10286797001, 10286797002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Arsenic	ug/L	<15.8	100	11/14/14 11:36	
Barium	ug/L	<250	500	11/14/14 11:36	
Cadmium	ug/L	<1.2	15.0	11/14/14 11:36	
Chromium	ug/L	<25.0	50.0	11/14/14 11:36	
Lead	mg/L	<0.0089	0.050	11/14/14 11:36	
Selenium	ug/L	<33.2	100	11/14/14 11:36	
Silver	ug/L	<3.2	50.0	11/14/14 11:36	

METHOD BLANK: 1840903 Matrix: Water
Associated Lab Samples: 10286797001, 10286797002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Arsenic	ug/L	<15.8	100	11/14/14 11:43	
Barium	ug/L	<250	500	11/14/14 11:43	
Cadmium	ug/L	<1.2	15.0	11/14/14 11:43	
Chromium	ug/L	<25.0	50.0	11/14/14 11:43	
Lead	mg/L	<0.0089	0.050	11/14/14 11:43	
Selenium	ug/L	<33.2	100	11/14/14 11:43	
Silver	ug/L	7.1J	50.0	11/14/14 11:43	

LABORATORY CONTROL SAMPLE: 1842215

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Arsenic	ug/L	5000	5160	103	80-120	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
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(612)607-1700

QUALITY CONTROL DATA

Project: 14-1004 Fraser Shipyard REV2
Pace Project No.: 10286797

LABORATORY CONTROL SAMPLE: 1842215

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Barium	ug/L	5000	5000	100	80-120	
Cadmium	ug/L	5000	4980	100	80-120	
Chromium	ug/L	5000	4910	98	80-120	
Lead	mg/L	5	4.9	99	80-120	
Selenium	ug/L	5000	5190	104	80-120	
Silver	ug/L	2500	2400	96	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1842216 1842217

Parameter	Units	10287326001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Arsenic	ug/L	ND	5000	5000	5300	5200	106	104	75-125	2	30	
Barium	ug/L	ND	5000	5000	5260	5160	102	100	75-125	2	30	
Cadmium	ug/L	ND	5000	5000	5070	4970	101	99	75-125	2	30	
Chromium	ug/L	ND	5000	5000	5010	4910	100	98	75-125	2	30	
Lead	mg/L	ND	5	5	5.0	4.9	100	97	75-125	3	30	
Selenium	ug/L	ND	5000	5000	5360	5180	107	104	75-125	3	30	
Silver	ug/L	ND	2500	2500	2450	2390	98	95	75-125	2	30	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 14-1004 Fraser Shipyard REV2
Pace Project No.: 10286797

QC Batch: MPRP/50368 Analysis Method: EPA 6020A
QC Batch Method: EPA 3050 Analysis Description: 6020A Solids UPD4
Associated Lab Samples: 10286797001, 10286797002, 10286797003, 10286797004, 10286797005, 10286797006

METHOD BLANK: 1834955 Matrix: Solid
Associated Lab Samples: 10286797001, 10286797002, 10286797003, 10286797004, 10286797005, 10286797006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Arsenic	mg/kg	<0.093	0.39	11/05/14 10:57	

LABORATORY CONTROL SAMPLE: 1834956

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/kg	16.7	14.9	90	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1834957 1834958

Parameter	Units	10286797001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Arsenic	mg/kg	7.3	19.8	15.9	25.5	25.1	92	112	75-125	1	20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 14-1004 Fraser Shipyard REV2
Pace Project No.: 10286797

QC Batch: MPRP/50257
QC Batch Method: ASTM D2974
Analysis Method: ASTM D2974
Analysis Description: Dry Weight/Percent Moisture
Associated Lab Samples: 10286797001

SAMPLE DUPLICATE: 1831574

Parameter	Units	10286792005 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	12.5	12.2	2	30	

SAMPLE DUPLICATE: 1831575

Parameter	Units	10286795012 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	9.9	12.7	25	30	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 14-1004 Fraser Shipyard REV2
Pace Project No.: 10286797

QC Batch: MPRP/50258 Analysis Method: ASTM D2974
QC Batch Method: ASTM D2974 Analysis Description: Dry Weight/Percent Moisture
Associated Lab Samples: 10286797002, 10286797003, 10286797004, 10286797005, 10286797006

SAMPLE DUPLICATE: 1831691

Parameter	Units	10286792004 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	12.3	12.1	2	30	

SAMPLE DUPLICATE: 1831692

Parameter	Units	10286797004 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	12.0	12.0	0	30	

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QUALITY CONTROL DATA

Project: 14-1004 Fraser Shipyard REV2
Pace Project No.: 10286797

QC Batch: MSV/29130
QC Batch Method: EPA 5035/5030B
Analysis Method: EPA 8260
Analysis Description: 8260 MSV 5030 Med Level
Associated Lab Samples: 10286797001

METHOD BLANK: 1830597
Matrix: Solid
Associated Lab Samples: 10286797001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	<25.0	50.0	10/31/14 02:11	
1,1,1-Trichloroethane	ug/kg	<25.0	50.0	10/31/14 02:11	
1,1,2,2-Tetrachloroethane	ug/kg	<6.9	50.0	10/31/14 02:11	
1,1,2-Trichloroethane	ug/kg	<8.5	50.0	10/31/14 02:11	
1,1,2-Trichlorotrifluoroethane	ug/kg	<20.9	200	10/31/14 02:11	
1,1-Dichloroethane	ug/kg	<7.0	50.0	10/31/14 02:11	
1,1-Dichloroethene	ug/kg	<10	50.0	10/31/14 02:11	
1,1-Dichloropropene	ug/kg	<8.2	50.0	10/31/14 02:11	
1,2,3-Trichlorobenzene	ug/kg	<11.9	50.0	10/31/14 02:11	
1,2,3-Trichloropropane	ug/kg	<6.6	200	10/31/14 02:11	
1,2,4-Trichlorobenzene	ug/kg	29.5J	50.0	10/31/14 02:11	
1,2,4-Trimethylbenzene	ug/kg	<25.0	50.0	10/31/14 02:11	
1,2-Dibromo-3-chloropropane	ug/kg	<26.5	500	10/31/14 02:11	
1,2-Dibromoethane (EDB)	ug/kg	<6.2	50.0	10/31/14 02:11	
1,2-Dichlorobenzene	ug/kg	<25.0	50.0	10/31/14 02:11	
1,2-Dichloroethane	ug/kg	<11.8	50.0	10/31/14 02:11	
1,2-Dichloropropane	ug/kg	<8.0	50.0	10/31/14 02:11	
1,3,5-Trimethylbenzene	ug/kg	<25.0	50.0	10/31/14 02:11	
1,3-Dichlorobenzene	ug/kg	<25.0	50.0	10/31/14 02:11	
1,3-Dichloropropane	ug/kg	<25.0	50.0	10/31/14 02:11	
1,4-Dichlorobenzene	ug/kg	<25.0	50.0	10/31/14 02:11	
2,2-Dichloropropane	ug/kg	<6.7	200	10/31/14 02:11	
2-Butanone (MEK)	ug/kg	<125	250	10/31/14 02:11	
2-Chlorotoluene	ug/kg	<25.0	50.0	10/31/14 02:11	
4-Chlorotoluene	ug/kg	<25.0	50.0	10/31/14 02:11	
4-Methyl-2-pentanone (MIBK)	ug/kg	<125	250	10/31/14 02:11	
Acetone	ug/kg	<500	1000	10/31/14 02:11	
Allyl chloride	ug/kg	<6.6	200	10/31/14 02:11	
Benzene	ug/kg	<10.0	20.0	10/31/14 02:11	
Bromobenzene	ug/kg	<8.7	50.0	10/31/14 02:11	
Bromochloromethane	ug/kg	<6.8	50.0	10/31/14 02:11	
Bromodichloromethane	ug/kg	<8.9	50.0	10/31/14 02:11	
Bromoform	ug/kg	<100	200	10/31/14 02:11	
Bromomethane	ug/kg	<250	500	10/31/14 02:11	
Carbon tetrachloride	ug/kg	<8.1	50.0	10/31/14 02:11	
Chlorobenzene	ug/kg	<7.7	50.0	10/31/14 02:11	
Chloroethane	ug/kg	<12.6	500	10/31/14 02:11	
Chloroform	ug/kg	<7.6	50.0	10/31/14 02:11	
Chloromethane	ug/kg	<9.1	200	10/31/14 02:11	
cis-1,2-Dichloroethene	ug/kg	<10.2	50.0	10/31/14 02:11	
cis-1,3-Dichloropropene	ug/kg	<6.3	50.0	10/31/14 02:11	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA

Project: 14-1004 Fraser Shipyard REV2
Pace Project No.: 10286797

METHOD BLANK: 1830597 Matrix: Solid
Associated Lab Samples: 10286797001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Dibromochloromethane	ug/kg	<10.8	50.0	10/31/14 02:11	
Dibromomethane	ug/kg	<14.0	50.0	10/31/14 02:11	
Dichlorodifluoromethane	ug/kg	<23.1	200	10/31/14 02:11	
Dichlorofluoromethane	ug/kg	<250	500	10/31/14 02:11	
Diethyl ether (Ethyl ether)	ug/kg	<10.6	200	10/31/14 02:11	
Ethylbenzene	ug/kg	<6.3	50.0	10/31/14 02:11	
Hexachloro-1,3-butadiene	ug/kg	<125	250	10/31/14 02:11	
Isopropylbenzene (Cumene)	ug/kg	<25.0	50.0	10/31/14 02:11	
Methyl-tert-butyl ether	ug/kg	<25.0	50.0	10/31/14 02:11	
Methylene Chloride	ug/kg	<100	200	10/31/14 02:11	
n-Butylbenzene	ug/kg	31.6J	50.0	10/31/14 02:11	
n-Propylbenzene	ug/kg	<6.1	50.0	10/31/14 02:11	
Naphthalene	ug/kg	<100	200	10/31/14 02:11	
p-Isopropyltoluene	ug/kg	14.2J	50.0	10/31/14 02:11	
sec-Butylbenzene	ug/kg	17.2J	50.0	10/31/14 02:11	
Styrene	ug/kg	<7.5	50.0	10/31/14 02:11	
tert-Butylbenzene	ug/kg	<25.0	50.0	10/31/14 02:11	
Tetrachloroethene	ug/kg	<18.0	50.0	10/31/14 02:11	
Tetrahydrofuran	ug/kg	<63.9	2000	10/31/14 02:11	
Toluene	ug/kg	<6.8	50.0	10/31/14 02:11	
trans-1,2-Dichloroethene	ug/kg	<9.9	50.0	10/31/14 02:11	
trans-1,3-Dichloropropene	ug/kg	<7.0	50.0	10/31/14 02:11	
Trichloroethene	ug/kg	<6.2	50.0	10/31/14 02:11	
Trichlorofluoromethane	ug/kg	<8.9	200	10/31/14 02:11	
Vinyl chloride	ug/kg	<7.4	20.0	10/31/14 02:11	
Xylene (Total)	ug/kg	<19.6	150	10/31/14 02:11	
1,2-Dichloroethane-d4 (S)	%.	101	74-125	10/31/14 02:11	
4-Bromofluorobenzene (S)	%.	104	75-125	10/31/14 02:11	
Toluene-d8 (S)	%.	104	75-125	10/31/14 02:11	

LABORATORY CONTROL SAMPLE: 1830598

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	1000	1210	121	68-125	
1,1,1-Trichloroethane	ug/kg	1000	1070	107	62-125	
1,1,2,2-Tetrachloroethane	ug/kg	1000	1010	101	61-127	
1,1,2-Trichloroethane	ug/kg	1000	1110	111	70-125	
1,1,2-Trichlorotrifluoroethane	ug/kg	1000	1060	106	56-149	
1,1-Dichloroethane	ug/kg	1000	1080	108	60-127	
1,1-Dichloroethene	ug/kg	1000	1020	102	63-125	
1,1-Dichloropropene	ug/kg	1000	1080	108	67-125	
1,2,3-Trichlorobenzene	ug/kg	1000	1080	108	63-132	
1,2,3-Trichloropropane	ug/kg	1000	1070	107	67-125	
1,2,4-Trichlorobenzene	ug/kg	1000	936	94	64-132	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA

Project: 14-1004 Fraser Shipyard REV2
Pace Project No.: 10286797

LABORATORY CONTROL SAMPLE: 1830598

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2,4-Trimethylbenzene	ug/kg	1000	1070	107	64-125	
1,2-Dibromo-3-chloropropane	ug/kg	2500	2460	98	56-132	
1,2-Dibromoethane (EDB)	ug/kg	1000	1080	108	72-125	
1,2-Dichlorobenzene	ug/kg	1000	1060	106	68-125	
1,2-Dichloroethane	ug/kg	1000	1030	103	69-125	
1,2-Dichloropropane	ug/kg	1000	1030	103	73-125	
1,3,5-Trimethylbenzene	ug/kg	1000	1090	109	64-125	
1,3-Dichlorobenzene	ug/kg	1000	1070	107	67-125	
1,3-Dichloropropane	ug/kg	1000	1130	113	71-125	
1,4-Dichlorobenzene	ug/kg	1000	1050	105	69-125	
2,2-Dichloropropane	ug/kg	1000	1150	115	53-131	
2-Butanone (MEK)	ug/kg	5000	4580	92	52-131	
2-Chlorotoluene	ug/kg	1000	1130	113	66-125	
4-Chlorotoluene	ug/kg	1000	1130	113	52-131	
4-Methyl-2-pentanone (MIBK)	ug/kg	5000	5400	108	64-125	
Acetone	ug/kg	5000	4470	89	42-150	
Allyl chloride	ug/kg	1000	1070	107	58-128	
Benzene	ug/kg	1000	1110	111	71-125	
Bromobenzene	ug/kg	1000	1040	104	69-125	
Bromochloromethane	ug/kg	1000	1030	103	75-125	
Bromodichloromethane	ug/kg	1000	1070	107	69-125	
Bromoform	ug/kg	1000	1210	121	62-125	
Bromomethane	ug/kg	1000	1130	113	62-125	
Carbon tetrachloride	ug/kg	1000	1190	119	66-125	
Chlorobenzene	ug/kg	1000	1100	110	75-125	
Chloroethane	ug/kg	1000	1010	101	61-125	
Chloroform	ug/kg	1000	1040	104	72-125	
Chloromethane	ug/kg	1000	1020	102	59-125	
cis-1,2-Dichloroethene	ug/kg	1000	1100	110	74-125	
cis-1,3-Dichloropropene	ug/kg	1000	1100	110	68-125	
Dibromochloromethane	ug/kg	1000	1190	119	65-125	
Dibromomethane	ug/kg	1000	1030	103	72-125	
Dichlorodifluoromethane	ug/kg	1000	856	86	39-125	
Dichlorofluoromethane	ug/kg	1000	977	98	64-127	
Diethyl ether (Ethyl ether)	ug/kg	1000	1050	105	66-125	
Ethylbenzene	ug/kg	1000	1090	109	69-125	
Hexachloro-1,3-butadiene	ug/kg	1000	1010	101	53-150	
Isopropylbenzene (Cumene)	ug/kg	1000	1120	112	70-125	
Methyl-tert-butyl ether	ug/kg	1000	1070	107	69-125	
Methylene Chloride	ug/kg	1000	1050	105	71-125	
n-Butylbenzene	ug/kg	1000	1160	116	59-133	
n-Propylbenzene	ug/kg	1000	1090	109	64-125	
Naphthalene	ug/kg	1000	948	95	61-131	
p-Isopropyltoluene	ug/kg	1000	1100	110	63-127	
sec-Butylbenzene	ug/kg	1000	1100	110	64-125	
Styrene	ug/kg	1000	1080	108	74-125	
tert-Butylbenzene	ug/kg	1000	1070	107	66-125	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA

Project: 14-1004 Fraser Shipyard REV2
Pace Project No.: 10286797

LABORATORY CONTROL SAMPLE: 1830598

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Tetrachloroethene	ug/kg	1000	1060	106	68-125	
Tetrahydrofuran	ug/kg	10000	9350	94	68-125	
Toluene	ug/kg	1000	1090	109	70-125	
trans-1,2-Dichloroethene	ug/kg	1000	1080	108	68-125	
trans-1,3-Dichloropropene	ug/kg	1000	1080	108	70-125	
Trichloroethene	ug/kg	1000	1010	101	71-125	
Trichlorofluoromethane	ug/kg	1000	934	93	62-132	
Vinyl chloride	ug/kg	1000	1060	106	55-125	
Xylene (Total)	ug/kg	3000	3170	106	74-125	
1,2-Dichloroethane-d4 (S)	%.			103	74-125	
4-Bromofluorobenzene (S)	%.			102	75-125	
Toluene-d8 (S)	%.			103	75-125	

MATRIX SPIKE SAMPLE: 1830599

Parameter	Units	10286119001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	ND	1270	1210	96	63-140	
1,1,1-Trichloroethane	ug/kg	ND	1270	1080	85	54-149	
1,1,2,2-Tetrachloroethane	ug/kg	ND	1270	2540	201	46-150	M1
1,1,2-Trichloroethane	ug/kg	ND	1270	3130	247	62-141	M1
1,1,2-Trichlorotrifluoroethane	ug/kg	ND	1270	910	72	65-150	
1,1-Dichloroethane	ug/kg	ND	1270	1060	84	57-145	
1,1-Dichloroethene	ug/kg	ND	1270	953	75	58-137	
1,1-Dichloropropene	ug/kg	ND	1270	1080	85	61-141	
1,2,3-Trichlorobenzene	ug/kg	ND	1270	1690	133	62-147	
1,2,3-Trichloropropane	ug/kg	ND	1270	1620	128	65-141	
1,2,4-Trichlorobenzene	ug/kg	ND	1270	1370	108	64-147	
1,2,4-Trimethylbenzene	ug/kg	548	1270	1260	56	59-144	M1
1,2-Dibromo-3-chloropropane	ug/kg	ND	3170	2940	93	56-147	
1,2-Dibromoethane (EDB)	ug/kg	ND	1270	1130	89	66-135	
1,2-Dichlorobenzene	ug/kg	ND	1270	1210	95	63-143	
1,2-Dichloroethane	ug/kg	ND	1270	1030	81	57-145	
1,2-Dichloropropane	ug/kg	ND	1270	982	77	62-139	
1,3,5-Trimethylbenzene	ug/kg	529	1270	1280	59	60-144	M1
1,3-Dichlorobenzene	ug/kg	ND	1270	1200	95	61-146	
1,3-Dichloropropane	ug/kg	ND	1270	1100	86	63-138	
1,4-Dichlorobenzene	ug/kg	ND	1270	1150	90	60-145	
2,2-Dichloropropane	ug/kg	ND	1270	1070	84	54-143	
2-Butanone (MEK)	ug/kg	ND	6340	28900	456	45-150	M1
2-Chlorotoluene	ug/kg	ND	1270	1260	99	62-140	
4-Chlorotoluene	ug/kg	ND	1270	1270	100	60-143	
4-Methyl-2-pentanone (MIBK)	ug/kg	ND	6340	36100	569	58-146	M1
Acetone	ug/kg	ND	6340	4610	73	30-150	
Allyl chloride	ug/kg	ND	1270	958	75	55-142	
Benzene	ug/kg	ND	1270	1130	88	61-134	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA

Project: 14-1004 Fraser Shipyard REV2
Pace Project No.: 10286797

MATRIX SPIKE SAMPLE: 1830599

Parameter	Units	10286119001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Bromobenzene	ug/kg	ND	1270	1130	89	64-143	
Bromochloromethane	ug/kg	ND	1270	982	77	62-141	
Bromodichloromethane	ug/kg	ND	1270	1090	86	57-146	
Bromoform	ug/kg	ND	1270	1240	98	60-136	
Bromomethane	ug/kg	ND	1270	1250	99	54-141	
Carbon tetrachloride	ug/kg	ND	1270	1140	89	50-150	
Chlorobenzene	ug/kg	ND	1270	1200	95	67-135	
Chloroethane	ug/kg	ND	1270	915	72	46-150	
Chloroform	ug/kg	ND	1270	1050	80	60-141	
Chloromethane	ug/kg	ND	1270	957	75	46-133	
cis-1,2-Dichloroethene	ug/kg	ND	1270	1060	83	64-138	
cis-1,3-Dichloropropene	ug/kg	ND	1270	1060	83	64-138	
Dibromochloromethane	ug/kg	ND	1270	1150	91	56-145	
Dibromomethane	ug/kg	ND	1270	1010	79	62-138	
Dichlorodifluoromethane	ug/kg	ND	1270	539	42	30-136	
Dichlorofluoromethane	ug/kg	ND	1270	989	78	47-150	
Diethyl ether (Ethyl ether)	ug/kg	ND	1270	1030	81	59-137	
Ethylbenzene	ug/kg	ND	1270	1120	83	63-135	
Hexachloro-1,3-butadiene	ug/kg	ND	1270	1770	138	65-150	
Isopropylbenzene (Cumene)	ug/kg	182	1270	1210	81	65-137	
Methyl-tert-butyl ether	ug/kg	ND	1270	1050	83	56-143	
Methylene Chloride	ug/kg	ND	1270	1010	80	62-133	
n-Butylbenzene	ug/kg	471	1270	3150	211	58-148	M1
n-Propylbenzene	ug/kg	478	1270	1370	70	60-142	
Naphthalene	ug/kg	ND	1270	1470	96	61-146	
p-Isopropyltoluene	ug/kg	ND	1270	1360	104	61-145	
sec-Butylbenzene	ug/kg	173	1270	1840	132	57-147	
Styrene	ug/kg	ND	1270	1070	85	67-137	
tert-Butylbenzene	ug/kg	ND	1270	1300	103	57-149	
Tetrachloroethene	ug/kg	ND	1270	1060	84	66-138	
Tetrahydrofuran	ug/kg	ND	12700	9660	76	53-145	
Toluene	ug/kg	ND	1270	1070	81	67-132	
trans-1,2-Dichloroethene	ug/kg	ND	1270	1040	82	61-136	
trans-1,3-Dichloropropene	ug/kg	ND	1270	984	78	60-140	
Trichloroethene	ug/kg	ND	1270	945	74	58-150	
Trichlorofluoromethane	ug/kg	ND	1270	900	71	53-150	
Vinyl chloride	ug/kg	ND	1270	965	76	45-139	
Xylene (Total)	ug/kg	ND	3800	3190	84	66-136	
1,2-Dichloroethane-d4 (S)	%.				101	74-125	
4-Bromofluorobenzene (S)	%.				127	75-125	S5
Toluene-d8 (S)	%.				107	75-125	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 14-1004 Fraser Shipyard REV2
Pace Project No.: 10286797

SAMPLE DUPLICATE: 1830600

Parameter	Units	10286119003 Result	Dup Result	RPD	Max RPD	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	ND	<123		30	
1,1,1-Trichloroethane	ug/kg	ND	<123		30	
1,1,2,2-Tetrachloroethane	ug/kg	ND	<33.7		30	
1,1,2-Trichloroethane	ug/kg	ND	<41.5		30	
1,1,2-Trichlorotrifluoroethane	ug/kg	ND	<103		30	
1,1-Dichloroethane	ug/kg	ND	<34.3		30	
1,1-Dichloroethene	ug/kg	ND	<49.0		30	
1,1-Dichloropropene	ug/kg	ND	<40.1		30	
1,2,3-Trichlorobenzene	ug/kg	ND	<58.4		30	
1,2,3-Trichloropropane	ug/kg	ND	<32.6		30	
1,2,4-Trichlorobenzene	ug/kg	ND	<44.6		30	
1,2,4-Trimethylbenzene	ug/kg	961	462	70	30	D6
1,2-Dibromo-3-chloropropane	ug/kg	ND	<130		30	
1,2-Dibromoethane (EDB)	ug/kg	ND	<30.2		30	
1,2-Dichlorobenzene	ug/kg	ND	<123		30	
1,2-Dichloroethane	ug/kg	ND	<57.9		30	
1,2-Dichloropropane	ug/kg	ND	<39.4		30	
1,3,5-Trimethylbenzene	ug/kg	763	345	76	30	D6
1,3-Dichlorobenzene	ug/kg	ND	<123		30	
1,3-Dichloropropane	ug/kg	ND	<123		30	
1,4-Dichlorobenzene	ug/kg	ND	<123		30	
2,2-Dichloropropane	ug/kg	ND	<32.8		30	
2-Butanone (MEK)	ug/kg	ND	<613		30	
2-Chlorotoluene	ug/kg	ND	<123		30	
4-Chlorotoluene	ug/kg	ND	<123		30	
4-Methyl-2-pentanone (MIBK)	ug/kg	ND	<613		30	
Acetone	ug/kg	ND	<2450		30	
Allyl chloride	ug/kg	ND	<32.2		30	
Benzene	ug/kg	ND	<49.1		30	
Bromobenzene	ug/kg	ND	<42.5		30	
Bromochloromethane	ug/kg	ND	<33.4		30	
Bromodichloromethane	ug/kg	ND	<43.7		30	
Bromoform	ug/kg	ND	<491		30	
Bromomethane	ug/kg	ND	<1230		30	
Carbon tetrachloride	ug/kg	ND	<39.6		30	
Chlorobenzene	ug/kg	ND	<37.7		30	
Chloroethane	ug/kg	ND	<61.8		30	
Chloroform	ug/kg	ND	<37.4		30	
Chloromethane	ug/kg	ND	<44.7		30	
cis-1,2-Dichloroethene	ug/kg	ND	<50.0		30	
cis-1,3-Dichloropropene	ug/kg	ND	<30.8		30	
Dibromochloromethane	ug/kg	ND	<53.0		30	
Dibromomethane	ug/kg	ND	<68.7		30	
Dichlorodifluoromethane	ug/kg	ND	<113		30	
Dichlorofluoromethane	ug/kg	ND	<1230		30	
Diethyl ether (Ethyl ether)	ug/kg	ND	<52.0		30	
Ethylbenzene	ug/kg	ND	<30.8		30	

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REPORT OF LABORATORY ANALYSIS

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(612)607-1700

QUALITY CONTROL DATA

Project: 14-1004 Fraser Shipyard REV2
Pace Project No.: 10286797

SAMPLE DUPLICATE: 1830600

Parameter	Units	10286119003 Result	Dup Result	RPD	Max RPD	Qualifiers
Hexachloro-1,3-butadiene	ug/kg	ND	<613		30	
Isopropylbenzene (Cumene)	ug/kg	594	476	22	30	
Methyl-tert-butyl ether	ug/kg	ND	<123		30	
Methylene Chloride	ug/kg	ND	<491		30	
n-Butylbenzene	ug/kg	9370	8130	14	30	
n-Propylbenzene	ug/kg	4440	3730	18	30	
Naphthalene	ug/kg	ND	<491		30	
p-Isopropyltoluene	ug/kg	405	427	5	30	
sec-Butylbenzene	ug/kg	3880	3280	17	30	
Styrene	ug/kg	ND	<36.7		30	
tert-Butylbenzene	ug/kg	ND	<123		30	
Tetrachloroethene	ug/kg	ND	<88.6		30	
Tetrahydrofuran	ug/kg	ND	<314		30	
Toluene	ug/kg	ND	40.1J		30	
trans-1,2-Dichloroethene	ug/kg	ND	<48.7		30	
trans-1,3-Dichloropropene	ug/kg	ND	<34.5		30	
Trichloroethene	ug/kg	ND	<30.5		30	
Trichlorofluoromethane	ug/kg	ND	<43.7		30	
Vinyl chloride	ug/kg	ND	<36.4		30	
Xylene (Total)	ug/kg	ND	<96.4		30	
1,2-Dichloroethane-d4 (S)	%.	98	99	15		
4-Bromofluorobenzene (S)	%.	120	121	15		
Toluene-d8 (S)	%.	101	100	17		

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REPORT OF LABORATORY ANALYSIS

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(612)607-1700

QUALITY CONTROL DATA

Project: 14-1004 Fraser Shipyard REV2
Pace Project No.: 10286797

QC Batch: MSV/29185
QC Batch Method: EPA 5035/5030B
Analysis Method: EPA 8260
Analysis Description: 8260 MSV 5030 Med Level
Associated Lab Samples: 10286797002

METHOD BLANK: 1833881
Matrix: Solid
Associated Lab Samples: 10286797002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	<25.0	50.0	11/04/14 15:57	
1,1,1-Trichloroethane	ug/kg	<25.0	50.0	11/04/14 15:57	
1,1,2,2-Tetrachloroethane	ug/kg	<6.9	50.0	11/04/14 15:57	
1,1,2-Trichloroethane	ug/kg	<8.5	50.0	11/04/14 15:57	
1,1,2-Trichlorotrifluoroethane	ug/kg	<20.9	200	11/04/14 15:57	
1,1-Dichloroethane	ug/kg	<7.0	50.0	11/04/14 15:57	
1,1-Dichloroethene	ug/kg	<10	50.0	11/04/14 15:57	
1,1-Dichloropropene	ug/kg	<8.2	50.0	11/04/14 15:57	
1,2,3-Trichlorobenzene	ug/kg	18.7J	50.0	11/04/14 15:57	
1,2,3-Trichloropropane	ug/kg	<6.6	200	11/04/14 15:57	
1,2,4-Trichlorobenzene	ug/kg	47.9J	50.0	11/04/14 15:57	
1,2,4-Trimethylbenzene	ug/kg	<25.0	50.0	11/04/14 15:57	
1,2-Dibromo-3-chloropropane	ug/kg	<26.5	500	11/04/14 15:57	
1,2-Dibromoethane (EDB)	ug/kg	<6.2	50.0	11/04/14 15:57	
1,2-Dichlorobenzene	ug/kg	<25.0	50.0	11/04/14 15:57	
1,2-Dichloroethane	ug/kg	<11.8	50.0	11/04/14 15:57	
1,2-Dichloropropane	ug/kg	<8.0	50.0	11/04/14 15:57	
1,3,5-Trimethylbenzene	ug/kg	<25.0	50.0	11/04/14 15:57	
1,3-Dichlorobenzene	ug/kg	<25.0	50.0	11/04/14 15:57	
1,3-Dichloropropane	ug/kg	<25.0	50.0	11/04/14 15:57	
1,4-Dichlorobenzene	ug/kg	<25.0	50.0	11/04/14 15:57	
2,2-Dichloropropane	ug/kg	<6.7	200	11/04/14 15:57	
2-Butanone (MEK)	ug/kg	<125	250	11/04/14 15:57	
2-Chlorotoluene	ug/kg	<25.0	50.0	11/04/14 15:57	
4-Chlorotoluene	ug/kg	<25.0	50.0	11/04/14 15:57	
4-Methyl-2-pentanone (MIBK)	ug/kg	<125	250	11/04/14 15:57	
Acetone	ug/kg	<500	1000	11/04/14 15:57	
Allyl chloride	ug/kg	<6.6	200	11/04/14 15:57	
Benzene	ug/kg	<10.0	20.0	11/04/14 15:57	
Bromobenzene	ug/kg	<8.7	50.0	11/04/14 15:57	
Bromochloromethane	ug/kg	<6.8	50.0	11/04/14 15:57	
Bromodichloromethane	ug/kg	<8.9	50.0	11/04/14 15:57	
Bromoform	ug/kg	<100	200	11/04/14 15:57	
Bromomethane	ug/kg	<250	500	11/04/14 15:57	
Carbon tetrachloride	ug/kg	<8.1	50.0	11/04/14 15:57	
Chlorobenzene	ug/kg	<7.7	50.0	11/04/14 15:57	
Chloroethane	ug/kg	<12.6	500	11/04/14 15:57	CL
Chloroform	ug/kg	<7.6	50.0	11/04/14 15:57	
Chloromethane	ug/kg	<9.1	200	11/04/14 15:57	
cis-1,2-Dichloroethene	ug/kg	<10.2	50.0	11/04/14 15:57	
cis-1,3-Dichloropropene	ug/kg	<6.3	50.0	11/04/14 15:57	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA

Project: 14-1004 Fraser Shipyard REV2
Pace Project No.: 10286797

METHOD BLANK: 1833881 Matrix: Solid
Associated Lab Samples: 10286797002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Dibromochloromethane	ug/kg	<10.8	50.0	11/04/14 15:57	
Dibromomethane	ug/kg	<14.0	50.0	11/04/14 15:57	
Dichlorodifluoromethane	ug/kg	<23.1	200	11/04/14 15:57	
Dichlorofluoromethane	ug/kg	<250	500	11/04/14 15:57	
Diethyl ether (Ethyl ether)	ug/kg	<10.6	200	11/04/14 15:57	
Ethylbenzene	ug/kg	<6.3	50.0	11/04/14 15:57	
Hexachloro-1,3-butadiene	ug/kg	<125	250	11/04/14 15:57	
Isopropylbenzene (Cumene)	ug/kg	<25.0	50.0	11/04/14 15:57	
Methyl-tert-butyl ether	ug/kg	<25.0	50.0	11/04/14 15:57	
Methylene Chloride	ug/kg	<100	200	11/04/14 15:57	
n-Butylbenzene	ug/kg	35.7J	50.0	11/04/14 15:57	
n-Propylbenzene	ug/kg	<6.1	50.0	11/04/14 15:57	
Naphthalene	ug/kg	<100	200	11/04/14 15:57	
p-Isopropyltoluene	ug/kg	25.5J	50.0	11/04/14 15:57	
sec-Butylbenzene	ug/kg	21.4J	50.0	11/04/14 15:57	
Styrene	ug/kg	<7.5	50.0	11/04/14 15:57	
tert-Butylbenzene	ug/kg	<25.0	50.0	11/04/14 15:57	
Tetrachloroethene	ug/kg	<18.0	50.0	11/04/14 15:57	
Tetrahydrofuran	ug/kg	<63.9	2000	11/04/14 15:57	
Toluene	ug/kg	<6.8	50.0	11/04/14 15:57	
trans-1,2-Dichloroethene	ug/kg	<9.9	50.0	11/04/14 15:57	
trans-1,3-Dichloropropene	ug/kg	<7.0	50.0	11/04/14 15:57	
Trichloroethene	ug/kg	<6.2	50.0	11/04/14 15:57	
Trichlorofluoromethane	ug/kg	<8.9	200	11/04/14 15:57	CL
Vinyl chloride	ug/kg	<7.4	20.0	11/04/14 15:57	
Xylene (Total)	ug/kg	<19.6	150	11/04/14 15:57	
1,2-Dichloroethane-d4 (S)	%.	97	74-125	11/04/14 15:57	
4-Bromofluorobenzene (S)	%.	106	75-125	11/04/14 15:57	
Toluene-d8 (S)	%.	104	75-125	11/04/14 15:57	

LABORATORY CONTROL SAMPLE: 1833882

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	1000	1230	123	68-125	
1,1,1-Trichloroethane	ug/kg	1000	1050	105	62-125	
1,1,2,2-Tetrachloroethane	ug/kg	1000	1020	102	61-127	
1,1,2-Trichloroethane	ug/kg	1000	1090	109	70-125	
1,1,2-Trichlorotrifluoroethane	ug/kg	1000	1140	114	56-149	
1,1-Dichloroethane	ug/kg	1000	1000	100	60-127	
1,1-Dichloroethene	ug/kg	1000	1130	113	63-125	
1,1-Dichloropropene	ug/kg	1000	1060	106	67-125	
1,2,3-Trichlorobenzene	ug/kg	1000	1240	124	63-132	
1,2,3-Trichloropropane	ug/kg	1000	1080	108	67-125	
1,2,4-Trichlorobenzene	ug/kg	1000	1030	103	64-132	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA

Project: 14-1004 Fraser Shipyard REV2
Pace Project No.: 10286797

LABORATORY CONTROL SAMPLE: 1833882

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2,4-Trimethylbenzene	ug/kg	1000	1190	119	64-125	
1,2-Dibromo-3-chloropropane	ug/kg	2500	2860	114	56-132	
1,2-Dibromoethane (EDB)	ug/kg	1000	1180	118	72-125	
1,2-Dichlorobenzene	ug/kg	1000	1080	108	68-125	
1,2-Dichloroethane	ug/kg	1000	937	94	69-125	
1,2-Dichloropropane	ug/kg	1000	1020	102	73-125	
1,3,5-Trimethylbenzene	ug/kg	1000	1120	112	64-125	
1,3-Dichlorobenzene	ug/kg	1000	1100	110	67-125	
1,3-Dichloropropane	ug/kg	1000	1180	118	71-125	
1,4-Dichlorobenzene	ug/kg	1000	1050	105	69-125	
2,2-Dichloropropane	ug/kg	1000	1030	103	53-131	
2-Butanone (MEK)	ug/kg	5000	5410	108	52-131	
2-Chlorotoluene	ug/kg	1000	1120	112	66-125	
4-Chlorotoluene	ug/kg	1000	1090	109	52-131	
4-Methyl-2-pentanone (MIBK)	ug/kg	5000	5820	116	64-125	
Acetone	ug/kg	5000	5100	102	42-150	
Allyl chloride	ug/kg	1000	1020	102	58-128	
Benzene	ug/kg	1000	1100	110	71-125	
Bromobenzene	ug/kg	1000	1080	108	69-125	
Bromochloromethane	ug/kg	1000	1070	107	75-125	
Bromodichloromethane	ug/kg	1000	1100	110	69-125	
Bromoform	ug/kg	1000	1340	134	62-125	L0
Bromomethane	ug/kg	1000	1030	103	62-125	
Carbon tetrachloride	ug/kg	1000	1260	126	66-125	L0
Chlorobenzene	ug/kg	1000	1130	113	75-125	
Chloroethane	ug/kg	1000	863	86	61-125	CL
Chloroform	ug/kg	1000	1070	107	72-125	
Chloromethane	ug/kg	1000	1110	111	59-125	
cis-1,2-Dichloroethene	ug/kg	1000	1140	114	74-125	
cis-1,3-Dichloropropene	ug/kg	1000	1070	107	68-125	
Dibromochloromethane	ug/kg	1000	1270	127	65-125	L0
Dibromomethane	ug/kg	1000	1160	116	72-125	
Dichlorodifluoromethane	ug/kg	1000	890	89	39-125	
Dichlorofluoromethane	ug/kg	1000	979	98	64-127	
Diethyl ether (Ethyl ether)	ug/kg	1000	1100	110	66-125	
Ethylbenzene	ug/kg	1000	1090	109	69-125	
Hexachloro-1,3-butadiene	ug/kg	1000	988	99	53-150	
Isopropylbenzene (Cumene)	ug/kg	1000	1140	114	70-125	
Methyl-tert-butyl ether	ug/kg	1000	1120	112	69-125	
Methylene Chloride	ug/kg	1000	1130	113	71-125	
n-Butylbenzene	ug/kg	1000	1150	115	59-133	
n-Propylbenzene	ug/kg	1000	1070	107	64-125	
Naphthalene	ug/kg	1000	1130	113	61-131	
p-Isopropyltoluene	ug/kg	1000	1150	115	63-127	
sec-Butylbenzene	ug/kg	1000	1070	107	64-125	
Styrene	ug/kg	1000	1140	114	74-125	
tert-Butylbenzene	ug/kg	1000	1080	108	66-125	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA

Project: 14-1004 Fraser Shipyard REV2
Pace Project No.: 10286797

LABORATORY CONTROL SAMPLE: 1833882

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Tetrachloroethene	ug/kg	1000	1070	107	68-125	
Tetrahydrofuran	ug/kg	10000	10400	104	68-125	
Toluene	ug/kg	1000	1120	112	70-125	
trans-1,2-Dichloroethene	ug/kg	1000	1140	114	68-125	
trans-1,3-Dichloropropene	ug/kg	1000	1100	110	70-125	
Trichloroethene	ug/kg	1000	1020	102	71-125	
Trichlorofluoromethane	ug/kg	1000	935	94	62-132	CL
Vinyl chloride	ug/kg	1000	1090	109	55-125	
Xylene (Total)	ug/kg	3000	3250	108	74-125	
1,2-Dichloroethane-d4 (S)	%.			93	74-125	
4-Bromofluorobenzene (S)	%.			102	75-125	
Toluene-d8 (S)	%.			104	75-125	

MATRIX SPIKE SAMPLE: 1834403

Parameter	Units	10287265001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	ND	1380	1870	136	63-140	
1,1,1-Trichloroethane	ug/kg	ND	1380	1540	112	54-149	
1,1,2,2-Tetrachloroethane	ug/kg	ND	1380	1610	117	46-150	
1,1,2-Trichloroethane	ug/kg	ND	1380	1660	120	62-141	
1,1,2-Trichlorotrifluoroethane	ug/kg	ND	1380	1670	121	65-150	
1,1-Dichloroethane	ug/kg	ND	1380	1480	107	57-145	
1,1-Dichloroethene	ug/kg	ND	1380	1690	123	58-137	
1,1-Dichloropropene	ug/kg	ND	1380	1590	115	61-141	
1,2,3-Trichlorobenzene	ug/kg	ND	1380	1980	144	62-147	
1,2,3-Trichloropropane	ug/kg	ND	1380	1740	127	65-141	
1,2,4-Trichlorobenzene	ug/kg	ND	1380	1750	126	64-147	
1,2,4-Trimethylbenzene	ug/kg	0.20 mg/kg	1380	2380	159	59-144	M1
1,2-Dibromo-3-chloropropane	ug/kg	ND	3440	4560	133	56-147	
1,2-Dibromoethane (EDB)	ug/kg	ND	1380	1690	123	66-135	
1,2-Dichlorobenzene	ug/kg	ND	1380	1680	122	63-143	
1,2-Dichloroethane	ug/kg	ND	1380	1390	101	57-145	
1,2-Dichloropropane	ug/kg	ND	1380	1530	111	62-139	
1,3,5-Trimethylbenzene	ug/kg	ND	1380	1950	139	60-144	
1,3-Dichlorobenzene	ug/kg	ND	1380	1730	126	61-146	
1,3-Dichloropropane	ug/kg	ND	1380	1670	121	63-138	
1,4-Dichlorobenzene	ug/kg	ND	1380	1620	118	60-145	
2,2-Dichloropropane	ug/kg	ND	1380	1510	110	54-143	
2-Butanone (MEK)	ug/kg	ND	6890	8250	120	45-150	
2-Chlorotoluene	ug/kg	ND	1380	1720	125	62-140	
4-Chlorotoluene	ug/kg	ND	1380	1670	122	60-143	
4-Methyl-2-pentanone (MIBK)	ug/kg	ND	6890	9210	134	58-146	
Acetone	ug/kg	ND	6890	7760	113	30-150	
Allyl chloride	ug/kg	ND	1380	1500	109	55-142	
Benzene	ug/kg	0.20 mg/kg	1380	1650	105	61-134	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
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Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA

Project: 14-1004 Fraser Shipyard REV2
Pace Project No.: 10286797

MATRIX SPIKE SAMPLE: 1834403

Parameter	Units	10287265001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Bromobenzene	ug/kg	ND	1380	1650	120	64-143	
Bromochloromethane	ug/kg	ND	1380	1520	110	62-141	
Bromodichloromethane	ug/kg	ND	1380	1660	121	57-146	
Bromoform	ug/kg	ND	1380	1940	141	60-136	M0
Bromomethane	ug/kg	ND	1380	1620	118	54-141	
Carbon tetrachloride	ug/kg	ND	1380	1860	135	50-150	
Chlorobenzene	ug/kg	ND	1380	1660	121	67-135	
Chloroethane	ug/kg	ND	1380	1170	85	46-150	CL
Chloroform	ug/kg	ND	1380	1640	119	60-141	
Chloromethane	ug/kg	ND	1380	1550	113	46-133	
cis-1,2-Dichloroethene	ug/kg	ND	1380	1670	121	64-138	
cis-1,3-Dichloropropene	ug/kg	ND	1380	1570	114	64-138	
Dibromochloromethane	ug/kg	ND	1380	1850	134	56-145	
Dibromomethane	ug/kg	ND	1380	1690	123	62-138	
Dichlorodifluoromethane	ug/kg	ND	1380	1120	81	30-136	
Dichlorofluoromethane	ug/kg	ND	1380	1490	108	47-150	
Diethyl ether (Ethyl ether)	ug/kg	ND	1380	1600	116	59-137	
Ethylbenzene	ug/kg	0.22 mg/kg	1380	1630	102	63-135	
Hexachloro-1,3-butadiene	ug/kg	ND	1380	1720	122	65-150	
Isopropylbenzene (Cumene)	ug/kg	0.077 mg/kg	1380	1800	125	65-137	
Methyl-tert-butyl ether	ug/kg	ND	1380	1680	122	56-143	
Methylene Chloride	ug/kg	ND	1380	1660	120	62-133	
n-Butylbenzene	ug/kg	ND	1380	1960	140	58-148	
n-Propylbenzene	ug/kg	0.11 mg/kg	1380	1810	124	60-142	
Naphthalene	ug/kg	0.31 mg/kg	1380	2010	124	61-146	
p-Isopropyltoluene	ug/kg	ND	1380	2000	143	61-145	
sec-Butylbenzene	ug/kg	ND	1380	1740	124	57-147	
Styrene	ug/kg	ND	1380	1670	121	67-137	
tert-Butylbenzene	ug/kg	ND	1380	1730	125	57-149	
Tetrachloroethene	ug/kg	ND	1380	1550	112	66-138	
Tetrahydrofuran	ug/kg	ND	13800	15700	114	53-145	
Toluene	ug/kg	1.3 mg/kg	1380	1600	22	67-132	M1
trans-1,2-Dichloroethene	ug/kg	ND	1380	1690	122	61-136	
trans-1,3-Dichloropropene	ug/kg	ND	1380	1580	115	60-140	
Trichloroethene	ug/kg	ND	1380	1520	110	58-150	
Trichlorofluoromethane	ug/kg	ND	1380	1120	81	53-150	CL
Vinyl chloride	ug/kg	ND	1380	1530	111	45-139	
Xylene (Total)	ug/kg	1.0 mg/kg	4130	4810	92	66-136	
1,2-Dichloroethane-d4 (S)	%.				94	74-125	
4-Bromofluorobenzene (S)	%.				106	75-125	
Toluene-d8 (S)	%.				102	75-125	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 14-1004 Fraser Shipyard REV2
Pace Project No.: 10286797

SAMPLE DUPLICATE: 1834404

Parameter	Units	10287265002 Result	Dup Result	RPD	Max RPD	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	ND	<32.3		30	
1,1,1-Trichloroethane	ug/kg	ND	<32.3		30	
1,1,2,2-Tetrachloroethane	ug/kg	ND	<8.9		30	
1,1,2-Trichloroethane	ug/kg	ND	<10.9		30	
1,1,2-Trichlorotrifluoroethane	ug/kg	ND	<27.0		30	
1,1-Dichloroethane	ug/kg	ND	<9.0		30	
1,1-Dichloroethene	ug/kg	ND	<12.9		30	
1,1-Dichloropropene	ug/kg	ND	<10.6		30	
1,2,3-Trichlorobenzene	ug/kg	ND	<15.4		30	
1,2,3-Trichloropropane	ug/kg	ND	<8.6		30	
1,2,4-Trichlorobenzene	ug/kg	ND	<11.7		30	
1,2,4-Trimethylbenzene	ug/kg	ND	<32.3		30	
1,2-Dibromo-3-chloropropane	ug/kg	ND	<34.2		30	
1,2-Dibromoethane (EDB)	ug/kg	ND	<8.0		30	
1,2-Dichlorobenzene	ug/kg	ND	<32.3		30	
1,2-Dichloroethane	ug/kg	ND	<15.2		30	
1,2-Dichloropropane	ug/kg	ND	<10.4		30	
1,3,5-Trimethylbenzene	ug/kg	ND	<32.3		30	
1,3-Dichlorobenzene	ug/kg	ND	<32.3		30	
1,3-Dichloropropane	ug/kg	ND	<32.3		30	
1,4-Dichlorobenzene	ug/kg	ND	<32.3		30	
2,2-Dichloropropane	ug/kg	ND	<8.6		30	
2-Butanone (MEK)	ug/kg	ND	<162		30	
2-Chlorotoluene	ug/kg	ND	<32.3		30	
4-Chlorotoluene	ug/kg	ND	<32.3		30	
4-Methyl-2-pentanone (MIBK)	ug/kg	ND	<162		30	
Acetone	ug/kg	ND	<646		30	
Allyl chloride	ug/kg	ND	<8.5		30	
Benzene	ug/kg	ND	<12.9		30	
Bromobenzene	ug/kg	ND	<11.2		30	
Bromochloromethane	ug/kg	ND	<8.8		30	
Bromodichloromethane	ug/kg	ND	<11.5		30	
Bromoform	ug/kg	ND	<129		30	
Bromomethane	ug/kg	ND	<323		30	
Carbon tetrachloride	ug/kg	ND	<10.4		30	
Chlorobenzene	ug/kg	ND	<9.9		30	
Chloroethane	ug/kg	ND	<16.3		30	CL
Chloroform	ug/kg	ND	<9.8		30	
Chloromethane	ug/kg	ND	<11.8		30	
cis-1,2-Dichloroethene	ug/kg	ND	<13.2		30	
cis-1,3-Dichloropropene	ug/kg	ND	<8.1		30	
Dibromochloromethane	ug/kg	ND	<14.0		30	
Dibromomethane	ug/kg	ND	<18.1		30	
Dichlorodifluoromethane	ug/kg	ND	<29.8		30	
Dichlorofluoromethane	ug/kg	ND	<323		30	
Diethyl ether (Ethyl ether)	ug/kg	ND	<13.7		30	
Ethylbenzene	ug/kg	ND	<8.1		30	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
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(612)607-1700

QUALITY CONTROL DATA

Project: 14-1004 Fraser Shipyard REV2
Pace Project No.: 10286797

SAMPLE DUPLICATE: 1834404

Parameter	Units	10287265002 Result	Dup Result	RPD	Max RPD	Qualifiers
Hexachloro-1,3-butadiene	ug/kg	ND	<162		30	
Isopropylbenzene (Cumene)	ug/kg	ND	<32.3		30	
Methyl-tert-butyl ether	ug/kg	ND	<32.3		30	
Methylene Chloride	ug/kg	ND	<129		30	
n-Butylbenzene	ug/kg	ND	<7.8		30	
n-Propylbenzene	ug/kg	ND	<7.8		30	
Naphthalene	ug/kg	ND	<129		30	
p-Isopropyltoluene	ug/kg	ND	20.7J		30	
sec-Butylbenzene	ug/kg	ND	<7.6		30	
Styrene	ug/kg	ND	<9.7		30	
tert-Butylbenzene	ug/kg	ND	<32.3		30	
Tetrachloroethene	ug/kg	ND	<23.3		30	
Tetrahydrofuran	ug/kg	ND	<82.6		30	
Toluene	ug/kg	ND	29.1J		30	
trans-1,2-Dichloroethene	ug/kg	ND	<12.8		30	
trans-1,3-Dichloropropene	ug/kg	ND	<9.1		30	
Trichloroethene	ug/kg	ND	<8.0		30	
Trichlorofluoromethane	ug/kg	ND	<11.5		30	CL
Vinyl chloride	ug/kg	ND	<9.6		30	
Xylene (Total)	ug/kg	ND	<25.4		30	
1,2-Dichloroethane-d4 (S)	%.	97	97	1		
4-Bromofluorobenzene (S)	%.	104	103	1		
Toluene-d8 (S)	%.	103	104	1		

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA

Project: 14-1004 Fraser Shipyard REV2
Pace Project No.: 10286797

QC Batch: MSV/29194 Analysis Method: EPA 8260
QC Batch Method: EPA 5035/5030B Analysis Description: 8260 MSV 5030 Med Level
Associated Lab Samples: 10286797003, 10286797004, 10286797005, 10286797006, 10286797007

METHOD BLANK: 1834775 Matrix: Solid
Associated Lab Samples: 10286797003, 10286797004, 10286797005, 10286797006, 10286797007

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	<25.0	50.0	11/05/14 03:46	
1,1,1-Trichloroethane	ug/kg	<25.0	50.0	11/05/14 03:46	
1,1,2,2-Tetrachloroethane	ug/kg	<6.9	50.0	11/05/14 03:46	
1,1,2-Trichloroethane	ug/kg	<8.5	50.0	11/05/14 03:46	
1,1,2-Trichlorotrifluoroethane	ug/kg	<20.9	200	11/05/14 03:46	
1,1-Dichloroethane	ug/kg	<7.0	50.0	11/05/14 03:46	
1,1-Dichloroethene	ug/kg	<10	50.0	11/05/14 03:46	
1,1-Dichloropropene	ug/kg	<8.2	50.0	11/05/14 03:46	
1,2,3-Trichlorobenzene	ug/kg	<11.9	50.0	11/05/14 03:46	
1,2,3-Trichloropropane	ug/kg	<6.6	200	11/05/14 03:46	
1,2,4-Trichlorobenzene	ug/kg	<9.1	50.0	11/05/14 03:46	
1,2,4-Trimethylbenzene	ug/kg	<25.0	50.0	11/05/14 03:46	
1,2-Dibromo-3-chloropropane	ug/kg	<26.5	500	11/05/14 03:46	
1,2-Dibromoethane (EDB)	ug/kg	<6.2	50.0	11/05/14 03:46	
1,2-Dichlorobenzene	ug/kg	<25.0	50.0	11/05/14 03:46	
1,2-Dichloroethane	ug/kg	<11.8	50.0	11/05/14 03:46	
1,2-Dichloropropane	ug/kg	<8.0	50.0	11/05/14 03:46	
1,3,5-Trimethylbenzene	ug/kg	<25.0	50.0	11/05/14 03:46	
1,3-Dichlorobenzene	ug/kg	<25.0	50.0	11/05/14 03:46	
1,3-Dichloropropane	ug/kg	<25.0	50.0	11/05/14 03:46	
1,4-Dichlorobenzene	ug/kg	<25.0	50.0	11/05/14 03:46	
2,2-Dichloropropane	ug/kg	<6.7	200	11/05/14 03:46	
2-Butanone (MEK)	ug/kg	<125	250	11/05/14 03:46	
2-Chlorotoluene	ug/kg	<25.0	50.0	11/05/14 03:46	
4-Chlorotoluene	ug/kg	<25.0	50.0	11/05/14 03:46	
4-Methyl-2-pentanone (MIBK)	ug/kg	<125	250	11/05/14 03:46	
Acetone	ug/kg	<500	1000	11/05/14 03:46	
Allyl chloride	ug/kg	<6.6	200	11/05/14 03:46	
Benzene	ug/kg	<10.0	20.0	11/05/14 03:46	
Bromobenzene	ug/kg	<8.7	50.0	11/05/14 03:46	
Bromochloromethane	ug/kg	<6.8	50.0	11/05/14 03:46	
Bromodichloromethane	ug/kg	<8.9	50.0	11/05/14 03:46	
Bromoform	ug/kg	<100	200	11/05/14 03:46	
Bromomethane	ug/kg	<250	500	11/05/14 03:46	
Carbon tetrachloride	ug/kg	<8.1	50.0	11/05/14 03:46	
Chlorobenzene	ug/kg	<7.7	50.0	11/05/14 03:46	
Chloroethane	ug/kg	<12.6	500	11/05/14 03:46	CL
Chloroform	ug/kg	<7.6	50.0	11/05/14 03:46	
Chloromethane	ug/kg	<9.1	200	11/05/14 03:46	
cis-1,2-Dichloroethene	ug/kg	<10.2	50.0	11/05/14 03:46	
cis-1,3-Dichloropropene	ug/kg	<6.3	50.0	11/05/14 03:46	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
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(612)607-1700

QUALITY CONTROL DATA

Project: 14-1004 Fraser Shipyard REV2
Pace Project No.: 10286797

METHOD BLANK: 1834775 Matrix: Solid
Associated Lab Samples: 10286797003, 10286797004, 10286797005, 10286797006, 10286797007

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Dibromochloromethane	ug/kg	<10.8	50.0	11/05/14 03:46	
Dibromomethane	ug/kg	<14.0	50.0	11/05/14 03:46	
Dichlorodifluoromethane	ug/kg	<23.1	200	11/05/14 03:46	
Dichlorofluoromethane	ug/kg	<250	500	11/05/14 03:46	
Diethyl ether (Ethyl ether)	ug/kg	<10.6	200	11/05/14 03:46	
Ethylbenzene	ug/kg	<6.3	50.0	11/05/14 03:46	
Hexachloro-1,3-butadiene	ug/kg	<125	250	11/05/14 03:46	
Isopropylbenzene (Cumene)	ug/kg	<25.0	50.0	11/05/14 03:46	
Methyl-tert-butyl ether	ug/kg	<25.0	50.0	11/05/14 03:46	
Methylene Chloride	ug/kg	<100	200	11/05/14 03:46	
n-Butylbenzene	ug/kg	32.1J	50.0	11/05/14 03:46	
n-Propylbenzene	ug/kg	<6.1	50.0	11/05/14 03:46	
Naphthalene	ug/kg	<100	200	11/05/14 03:46	
p-Isopropyltoluene	ug/kg	22.0J	50.0	11/05/14 03:46	
sec-Butylbenzene	ug/kg	23.0J	50.0	11/05/14 03:46	
Styrene	ug/kg	<7.5	50.0	11/05/14 03:46	
tert-Butylbenzene	ug/kg	<25.0	50.0	11/05/14 03:46	
Tetrachloroethene	ug/kg	<18.0	50.0	11/05/14 03:46	
Tetrahydrofuran	ug/kg	<63.9	2000	11/05/14 03:46	
Toluene	ug/kg	<6.8	50.0	11/05/14 03:46	
trans-1,2-Dichloroethene	ug/kg	<9.9	50.0	11/05/14 03:46	
trans-1,3-Dichloropropene	ug/kg	<7.0	50.0	11/05/14 03:46	
Trichloroethene	ug/kg	<6.2	50.0	11/05/14 03:46	
Trichlorofluoromethane	ug/kg	<8.9	200	11/05/14 03:46	CL
Vinyl chloride	ug/kg	<7.4	20.0	11/05/14 03:46	
Xylene (Total)	ug/kg	<19.6	150	11/05/14 03:46	
1,2-Dichloroethane-d4 (S)	%.	94	74-125	11/05/14 03:46	
4-Bromofluorobenzene (S)	%.	103	75-125	11/05/14 03:46	
Toluene-d8 (S)	%.	101	75-125	11/05/14 03:46	

LABORATORY CONTROL SAMPLE: 1834776

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	1000	1120	112	68-125	
1,1,1-Trichloroethane	ug/kg	1000	995	100	62-125	
1,1,2,2-Tetrachloroethane	ug/kg	1000	844	84	61-127	
1,1,2-Trichloroethane	ug/kg	1000	963	96	70-125	
1,1,2-Trichlorotrifluoroethane	ug/kg	1000	1090	109	56-149	
1,1-Dichloroethane	ug/kg	1000	959	96	60-127	
1,1-Dichloroethene	ug/kg	1000	1060	106	63-125	
1,1-Dichloropropene	ug/kg	1000	1000	100	67-125	
1,2,3-Trichlorobenzene	ug/kg	1000	848	85	63-132	
1,2,3-Trichloropropane	ug/kg	1000	900	90	67-125	
1,2,4-Trichlorobenzene	ug/kg	1000	790	79	64-132	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
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(612)607-1700

QUALITY CONTROL DATA

Project: 14-1004 Fraser Shipyard REV2
Pace Project No.: 10286797

LABORATORY CONTROL SAMPLE: 1834776

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2,4-Trimethylbenzene	ug/kg	1000	1200	120	64-125	
1,2-Dibromo-3-chloropropane	ug/kg	2500	2090	84	56-132	
1,2-Dibromoethane (EDB)	ug/kg	1000	1010	101	72-125	
1,2-Dichlorobenzene	ug/kg	1000	1060	106	68-125	
1,2-Dichloroethane	ug/kg	1000	895	89	69-125	
1,2-Dichloropropane	ug/kg	1000	994	99	73-125	
1,3,5-Trimethylbenzene	ug/kg	1000	1100	110	64-125	
1,3-Dichlorobenzene	ug/kg	1000	1060	106	67-125	
1,3-Dichloropropane	ug/kg	1000	1040	104	71-125	
1,4-Dichlorobenzene	ug/kg	1000	1010	101	69-125	
2,2-Dichloropropane	ug/kg	1000	962	96	53-131	
2-Butanone (MEK)	ug/kg	5000	4160	83	52-131	
2-Chlorotoluene	ug/kg	1000	1090	109	66-125	
4-Chlorotoluene	ug/kg	1000	1080	108	52-131	
4-Methyl-2-pentanone (MIBK)	ug/kg	5000	4430	89	64-125	
Acetone	ug/kg	5000	4760	95	42-150	
Allyl chloride	ug/kg	1000	967	97	58-128	
Benzene	ug/kg	1000	1070	107	71-125	
Bromobenzene	ug/kg	1000	1060	106	69-125	
Bromochloromethane	ug/kg	1000	1010	101	75-125	
Bromodichloromethane	ug/kg	1000	1030	103	69-125	
Bromoform	ug/kg	1000	1120	112	62-125	
Bromomethane	ug/kg	1000	858	86	62-125	
Carbon tetrachloride	ug/kg	1000	1210	121	66-125	
Chlorobenzene	ug/kg	1000	1070	107	75-125	
Chloroethane	ug/kg	1000	662	66	61-125	CL
Chloroform	ug/kg	1000	1040	104	72-125	
Chloromethane	ug/kg	1000	862	86	59-125	
cis-1,2-Dichloroethene	ug/kg	1000	1090	109	74-125	
cis-1,3-Dichloropropene	ug/kg	1000	1000	100	68-125	
Dibromochloromethane	ug/kg	1000	1140	114	65-125	
Dibromomethane	ug/kg	1000	1080	108	72-125	
Dichlorodifluoromethane	ug/kg	1000	643	64	39-125	
Dichlorofluoromethane	ug/kg	1000	723	72	64-127	
Diethyl ether (Ethyl ether)	ug/kg	1000	969	97	66-125	
Ethylbenzene	ug/kg	1000	1030	103	69-125	
Hexachloro-1,3-butadiene	ug/kg	1000	925	92	53-150	
Isopropylbenzene (Cumene)	ug/kg	1000	1080	108	70-125	
Methyl-tert-butyl ether	ug/kg	1000	1010	101	69-125	
Methylene Chloride	ug/kg	1000	1090	109	71-125	
n-Butylbenzene	ug/kg	1000	1120	112	59-133	
n-Propylbenzene	ug/kg	1000	1060	106	64-125	
Naphthalene	ug/kg	1000	813	81	61-131	
p-Isopropyltoluene	ug/kg	1000	1130	113	63-127	
sec-Butylbenzene	ug/kg	1000	1060	106	64-125	
Styrene	ug/kg	1000	1070	107	74-125	
tert-Butylbenzene	ug/kg	1000	1060	106	66-125	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA

Project: 14-1004 Fraser Shipyard REV2
Pace Project No.: 10286797

LABORATORY CONTROL SAMPLE: 1834776

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Tetrachloroethene	ug/kg	1000	973	97	68-125	
Tetrahydrofuran	ug/kg	10000	10000	100	68-125	
Toluene	ug/kg	1000	1040	104	70-125	
trans-1,2-Dichloroethene	ug/kg	1000	1100	110	68-125	
trans-1,3-Dichloropropene	ug/kg	1000	966	97	70-125	
Trichloroethene	ug/kg	1000	973	97	71-125	
Trichlorofluoromethane	ug/kg	1000	755	76	62-132	CL
Vinyl chloride	ug/kg	1000	828	83	55-125	
Xylene (Total)	ug/kg	3000	3000	100	74-125	
1,2-Dichloroethane-d4 (S)	%.			92	74-125	
4-Bromofluorobenzene (S)	%.			103	75-125	
Toluene-d8 (S)	%.			101	75-125	

MATRIX SPIKE SAMPLE: 1834777

Parameter	Units	10287153001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	ND	1220	1690	138	63-140	
1,1,1-Trichloroethane	ug/kg	ND	1220	1380	112	54-149	
1,1,2,2-Tetrachloroethane	ug/kg	ND	1220	1290	105	46-150	
1,1,2-Trichloroethane	ug/kg	ND	1220	1470	120	62-141	
1,1,2-Trichlorotrifluoroethane	ug/kg	ND	1220	1500	123	65-150	
1,1-Dichloroethane	ug/kg	ND	1220	1320	107	57-145	
1,1-Dichloroethene	ug/kg	ND	1220	1450	119	58-137	
1,1-Dichloropropene	ug/kg	ND	1220	1410	115	61-141	
1,2,3-Trichlorobenzene	ug/kg	ND	1220	1520	124	62-147	
1,2,3-Trichloropropane	ug/kg	ND	1220	1390	114	65-141	
1,2,4-Trichlorobenzene	ug/kg	ND	1220	1260	103	64-147	
1,2,4-Trimethylbenzene	ug/kg	ND	1220	1670	136	59-144	
1,2-Dibromo-3-chloropropane	ug/kg	ND	3070	3300	108	56-147	
1,2-Dibromoethane (EDB)	ug/kg	ND	1220	1520	124	66-135	
1,2-Dichlorobenzene	ug/kg	ND	1220	1540	126	63-143	
1,2-Dichloroethane	ug/kg	ND	1220	1250	102	57-145	
1,2-Dichloropropane	ug/kg	ND	1220	1410	115	62-139	
1,3,5-Trimethylbenzene	ug/kg	ND	1220	1620	132	60-144	
1,3-Dichlorobenzene	ug/kg	ND	1220	1590	130	61-146	
1,3-Dichloropropane	ug/kg	ND	1220	1530	125	63-138	
1,4-Dichlorobenzene	ug/kg	ND	1220	1510	124	60-145	
2,2-Dichloropropane	ug/kg	ND	1220	1310	107	54-143	
2-Butanone (MEK)	ug/kg	ND	6120	5750	94	45-150	
2-Chlorotoluene	ug/kg	ND	1220	1610	131	62-140	
4-Chlorotoluene	ug/kg	ND	1220	1580	129	60-143	
4-Methyl-2-pentanone (MIBK)	ug/kg	ND	6120	6700	109	58-146	
Acetone	ug/kg	ND	6120	7050	115	30-150	
Allyl chloride	ug/kg	ND	1220	1330	108	55-142	
Benzene	ug/kg	ND	1220	1490	121	61-134	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
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(612)607-1700

QUALITY CONTROL DATA

Project: 14-1004 Fraser Shipyard REV2
Pace Project No.: 10286797

MATRIX SPIKE SAMPLE: 1834777

Parameter	Units	10287153001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Bromobenzene	ug/kg	ND	1220	1510	123	64-143	
Bromochloromethane	ug/kg	ND	1220	1420	116	62-141	
Bromodichloromethane	ug/kg	ND	1220	1530	125	57-146	
Bromoform	ug/kg	ND	1220	1640	134	60-136	
Bromomethane	ug/kg	ND	1220	1320	107	54-141	
Carbon tetrachloride	ug/kg	ND	1220	1650	135	50-150	
Chlorobenzene	ug/kg	ND	1220	1530	125	67-135	
Chloroethane	ug/kg	ND	1220	1060	86	46-150	CL
Chloroform	ug/kg	ND	1220	1450	118	60-141	
Chloromethane	ug/kg	ND	1220	1340	110	46-133	
cis-1,2-Dichloroethene	ug/kg	ND	1220	1560	127	64-138	
cis-1,3-Dichloropropene	ug/kg	ND	1220	1470	120	64-138	
Dibromochloromethane	ug/kg	ND	1220	1660	135	56-145	
Dibromomethane	ug/kg	ND	1220	1570	128	62-138	
Dichlorodifluoromethane	ug/kg	ND	1220	967	79	30-136	
Dichlorofluoromethane	ug/kg	ND	1220	1260	103	47-150	
Diethyl ether (Ethyl ether)	ug/kg	ND	1220	1370	112	59-137	
Ethylbenzene	ug/kg	ND	1220	1470	120	63-135	
Hexachloro-1,3-butadiene	ug/kg	ND	1220	1410	115	65-150	
Isopropylbenzene (Cumene)	ug/kg	ND	1220	1580	129	65-137	
Methyl-tert-butyl ether	ug/kg	ND	1220	1430	117	56-143	
Methylene Chloride	ug/kg	ND	1220	1490	121	62-133	
n-Butylbenzene	ug/kg	ND	1220	1610	130	58-148	
n-Propylbenzene	ug/kg	ND	1220	1550	126	60-142	
Naphthalene	ug/kg	ND	1220	1290	105	61-146	
p-Isopropyltoluene	ug/kg	ND	1220	1650	135	61-145	
sec-Butylbenzene	ug/kg	ND	1220	1550	127	57-147	
Styrene	ug/kg	ND	1220	1570	128	67-137	
tert-Butylbenzene	ug/kg	ND	1220	1580	129	57-149	
Tetrachloroethene	ug/kg	ND	1220	1470	120	66-138	
Tetrahydrofuran	ug/kg	ND	12200	14900	121	53-145	
Toluene	ug/kg	ND	1220	1480	121	67-132	
trans-1,2-Dichloroethene	ug/kg	ND	1220	1500	122	61-136	
trans-1,3-Dichloropropene	ug/kg	ND	1220	1420	116	60-140	
Trichloroethene	ug/kg	ND	1220	1400	114	58-150	
Trichlorofluoromethane	ug/kg	ND	1220	1200	98	53-150	CL
Vinyl chloride	ug/kg	ND	1220	1360	111	45-139	
Xylene (Total)	ug/kg	ND	3670	4420	120	66-136	
1,2-Dichloroethane-d4 (S)	%.				87	74-125	
4-Bromofluorobenzene (S)	%.				103	75-125	
Toluene-d8 (S)	%.				102	75-125	

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QUALITY CONTROL DATA

Project: 14-1004 Fraser Shipyard REV2
Pace Project No.: 10286797

SAMPLE DUPLICATE: 1834778

Parameter	Units	10287153002 Result	Dup Result	RPD	Max RPD	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	ND	<28.6		30	
1,1,1-Trichloroethane	ug/kg	ND	<28.6		30	
1,1,2,2-Tetrachloroethane	ug/kg	ND	<7.8		30	
1,1,2-Trichloroethane	ug/kg	ND	<9.7		30	
1,1,2-Trichlorotrifluoroethane	ug/kg	ND	<23.9		30	
1,1-Dichloroethane	ug/kg	ND	<8.0		30	
1,1-Dichloroethene	ug/kg	ND	<11.4		30	
1,1-Dichloropropene	ug/kg	ND	<9.3		30	
1,2,3-Trichlorobenzene	ug/kg	ND	<13.6		30	
1,2,3-Trichloropropane	ug/kg	ND	<7.6		30	
1,2,4-Trichlorobenzene	ug/kg	ND	<10.4		30	
1,2,4-Trimethylbenzene	ug/kg	ND	<28.6		30	
1,2-Dibromo-3-chloropropane	ug/kg	ND	<30.3		30	
1,2-Dibromoethane (EDB)	ug/kg	ND	<7.0		30	
1,2-Dichlorobenzene	ug/kg	ND	<28.6		30	
1,2-Dichloroethane	ug/kg	ND	<13.5		30	
1,2-Dichloropropane	ug/kg	ND	<9.2		30	
1,3,5-Trimethylbenzene	ug/kg	ND	<28.6		30	
1,3-Dichlorobenzene	ug/kg	ND	<28.6		30	
1,3-Dichloropropane	ug/kg	ND	<28.6		30	
1,4-Dichlorobenzene	ug/kg	ND	<28.6		30	
2,2-Dichloropropane	ug/kg	ND	<7.6		30	
2-Butanone (MEK)	ug/kg	ND	<143		30	
2-Chlorotoluene	ug/kg	ND	<28.6		30	
4-Chlorotoluene	ug/kg	ND	<28.6		30	
4-Methyl-2-pentanone (MIBK)	ug/kg	ND	<143		30	
Acetone	ug/kg	ND	<572		30	
Allyl chloride	ug/kg	ND	<7.5		30	
Benzene	ug/kg	ND	<11.4		30	
Bromobenzene	ug/kg	ND	<9.9		30	
Bromochloromethane	ug/kg	ND	<7.8		30	
Bromodichloromethane	ug/kg	ND	<10.2		30	
Bromoform	ug/kg	ND	<114		30	
Bromomethane	ug/kg	ND	<286		30	
Carbon tetrachloride	ug/kg	ND	<9.2		30	
Chlorobenzene	ug/kg	ND	<8.8		30	
Chloroethane	ug/kg	ND	<14.4		30	CL
Chloroform	ug/kg	ND	<8.7		30	
Chloromethane	ug/kg	ND	<10.4		30	
cis-1,2-Dichloroethene	ug/kg	ND	<11.7		30	
cis-1,3-Dichloropropene	ug/kg	ND	<7.2		30	
Dibromochloromethane	ug/kg	ND	<12.3		30	
Dibromomethane	ug/kg	ND	<16.0		30	
Dichlorodifluoromethane	ug/kg	ND	<26.4		30	
Dichlorofluoromethane	ug/kg	ND	<286		30	
Diethyl ether (Ethyl ether)	ug/kg	ND	<12.1		30	
Ethylbenzene	ug/kg	ND	<7.2		30	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA

Project: 14-1004 Fraser Shipyard REV2
Pace Project No.: 10286797

SAMPLE DUPLICATE: 1834778

Parameter	Units	10287153002 Result	Dup Result	RPD	Max RPD	Qualifiers
Hexachloro-1,3-butadiene	ug/kg	ND	<143		30	
Isopropylbenzene (Cumene)	ug/kg	ND	<28.6		30	
Methyl-tert-butyl ether	ug/kg	ND	<28.6		30	
Methylene Chloride	ug/kg	ND	<114		30	
n-Butylbenzene	ug/kg	ND	12.8J		30	
n-Propylbenzene	ug/kg	ND	<6.9		30	
Naphthalene	ug/kg	ND	<114		30	
p-Isopropyltoluene	ug/kg	ND	<8.3		30	
sec-Butylbenzene	ug/kg	ND	<6.7		30	
Styrene	ug/kg	ND	<8.5		30	
tert-Butylbenzene	ug/kg	ND	<28.6		30	
Tetrachloroethene	ug/kg	ND	<20.6		30	
Tetrahydrofuran	ug/kg	ND	<73.1		30	
Toluene	ug/kg	ND	<7.8		30	
trans-1,2-Dichloroethene	ug/kg	ND	<11.3		30	
trans-1,3-Dichloropropene	ug/kg	ND	<8.0		30	
Trichloroethene	ug/kg	ND	<7.1		30	
Trichlorofluoromethane	ug/kg	ND	<10.2		30	CL
Vinyl chloride	ug/kg	ND	<8.5		30	
Xylene (Total)	ug/kg	ND	<22.5		30	
1,2-Dichloroethane-d4 (S)	%.	93	93	5		
4-Bromofluorobenzene (S)	%.	103	102	6		
Toluene-d8 (S)	%.	102	101	6		

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
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(612)607-1700

QUALITY CONTROL DATA

Project: 14-1004 Fraser Shipyard REV2
Pace Project No.: 10286797

QC Batch: OEXT/27291 Analysis Method: EPA 8082
QC Batch Method: EPA 3550 Analysis Description: 8082 GCS PCB
Associated Lab Samples: 10286797001, 10286797002

METHOD BLANK: 1845775 Matrix: Solid
Associated Lab Samples: 10286797001, 10286797002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
PCB-1016 (Aroclor 1016)	ug/kg	<15.0	33.0	11/18/14 14:43	
PCB-1221 (Aroclor 1221)	ug/kg	<5.0	33.0	11/18/14 14:43	
PCB-1232 (Aroclor 1232)	ug/kg	<8.0	33.0	11/18/14 14:43	
PCB-1242 (Aroclor 1242)	ug/kg	<6.0	33.0	11/18/14 14:43	
PCB-1248 (Aroclor 1248)	ug/kg	<7.0	33.0	11/18/14 14:43	
PCB-1254 (Aroclor 1254)	ug/kg	<7.0	33.0	11/18/14 14:43	
PCB-1260 (Aroclor 1260)	ug/kg	<15.0	33.0	11/18/14 14:43	
PCB-1262 (Aroclor 1262)	ug/kg	<6.0	33.0	11/18/14 14:43	
PCB-1268 (Aroclor 1268)	ug/kg	<5.0	33.0	11/18/14 14:43	
Decachlorobiphenyl (S)	%.	92	55-130	11/18/14 14:43	
Tetrachloro-m-xylene (S)	%.	96	50-128	11/18/14 14:43	

LABORATORY CONTROL SAMPLE: 1845776

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
PCB-1016 (Aroclor 1016)	ug/kg	667	598	90	62-125	
PCB-1260 (Aroclor 1260)	ug/kg	667	612	92	61-125	
Decachlorobiphenyl (S)	%.			99	55-130	
Tetrachloro-m-xylene (S)	%.			96	50-128	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1845777 1845778

Parameter	Units	10286797001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
PCB-1016 (Aroclor 1016)	ug/kg	<170	759	759	722	722	95	95	34-125	0	30	
PCB-1260 (Aroclor 1260)	ug/kg	<170	759	759	691	654	91	86	30-128	6	30	
Decachlorobiphenyl (S)	%.						0	0	55-130			S4
Tetrachloro-m-xylene (S)	%.						0	0	50-128			D3,S4

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
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(612)607-1700

QUALITY CONTROL DATA

Project: 14-1004 Fraser Shipyard REV2
Pace Project No.: 10286797

QC Batch: OEXT/27066 Analysis Method: EPA 8270 by SIM
QC Batch Method: EPA 3550 Analysis Description: 8270 Solid PAH by SIM MSSV
Associated Lab Samples: 10286797003, 10286797004, 10286797005, 10286797006

METHOD BLANK: 1829953 Matrix: Solid
Associated Lab Samples: 10286797003, 10286797004, 10286797005, 10286797006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Acenaphthene	ug/kg	<5.0	10.0	11/03/14 10:31	
Acenaphthylene	ug/kg	<5.0	10.0	11/03/14 10:31	
Anthracene	ug/kg	<5.0	10.0	11/03/14 10:31	
Benzo(a)anthracene	ug/kg	<5.0	10.0	11/03/14 10:31	
Benzo(a)pyrene	ug/kg	<5.0	10.0	11/03/14 10:31	
Benzo(b)fluoranthene	ug/kg	<0.28	10.0	11/03/14 10:31	
Benzo(g,h,i)perylene	ug/kg	<5.0	10.0	11/03/14 10:31	
Benzo(k)fluoranthene	ug/kg	<5.0	10.0	11/03/14 10:31	
Chrysene	ug/kg	<5.0	10.0	11/03/14 10:31	
Dibenz(a,h)anthracene	ug/kg	<5.0	10.0	11/03/14 10:31	
Fluoranthene	ug/kg	<5.0	10.0	11/03/14 10:31	
Fluorene	ug/kg	<5.0	10.0	11/03/14 10:31	
Indeno(1,2,3-cd)pyrene	ug/kg	<5.0	10.0	11/03/14 10:31	
Naphthalene	ug/kg	<5.0	10.0	11/03/14 10:31	
Phenanthrene	ug/kg	<5.0	10.0	11/03/14 10:31	
Pyrene	ug/kg	<0.23	10.0	11/03/14 10:31	
2-Fluorobiphenyl (S)	%.	61	30-150	11/03/14 10:31	
Terphenyl-d14 (S)	%.	74	30-150	11/03/14 10:31	

LABORATORY CONTROL SAMPLE: 1829954

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Acenaphthene	ug/kg	33.3	20.0	60	46-125	
Acenaphthylene	ug/kg	33.3	19.6	59	45-125	
Anthracene	ug/kg	33.3	26.1	78	56-125	
Benzo(a)anthracene	ug/kg	33.3	22.1	66	64-125	
Benzo(a)pyrene	ug/kg	33.3	23.3	70	66-125	
Benzo(b)fluoranthene	ug/kg	33.3	26.9	81	65-125	
Benzo(g,h,i)perylene	ug/kg	33.3	24.2	73	60-125	
Benzo(k)fluoranthene	ug/kg	33.3	24.2	73	60-125	
Chrysene	ug/kg	33.3	26.9	81	60-125	
Dibenz(a,h)anthracene	ug/kg	33.3	23.8	71	59-125	
Fluoranthene	ug/kg	33.3	25.1	75	70-125	
Fluorene	ug/kg	33.3	21.1	63	55-125	
Indeno(1,2,3-cd)pyrene	ug/kg	33.3	22.9	69	60-125	
Naphthalene	ug/kg	33.3	21.0	63	43-125	
Phenanthrene	ug/kg	33.3	22.9	69	60-125	
Pyrene	ug/kg	33.3	25.3	76	67-125	
2-Fluorobiphenyl (S)	%.			67	30-150	
Terphenyl-d14 (S)	%.			79	30-150	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA

Project: 14-1004 Fraser Shipyard REV2
Pace Project No.: 10286797

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1829955 1829956

Parameter	Units	10286582016 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Acenaphthene	ug/kg	897	37.8	37.6	323J	819	-1520	-206	30-150		30	M1
Acenaphthylene	ug/kg	ND	37.8	37.6	<284	433J	-1340	-194	30-150		30	M1
Anthracene	ug/kg	ND	37.8	37.6	<284	<282	0	0	30-150		30	M1
Benzo(a)anthracene	ug/kg	ND	37.8	37.6	<284	440J	-1100	60	30-150		30	M1
Benzo(a)pyrene	ug/kg	ND	37.8	37.6	<284	<282	0	0	30-150		30	M1
Benzo(b)fluoranthene	ug/kg	ND	37.8	37.6	<15.9	<15.8	0	0	30-150		30	M1
Benzo(g,h,i)perylene	ug/kg	ND	37.8	37.6	<284	<282	0	0	30-150		30	M1
Benzo(k)fluoranthene	ug/kg	ND	37.8	37.6	<284	<282	0	0	30-150		30	M1
Chrysene	ug/kg	ND	37.8	37.6	<284	421J	-1050	65	30-150		30	M1
Dibenz(a,h)anthracene	ug/kg	ND	37.8	37.6	<284	<282	0	0	30-150		30	M1
Fluoranthene	ug/kg	ND	37.8	37.6	<284	<282	0	0	30-150		30	M1
Fluorene	ug/kg	2120	37.8	37.6	1040	2180	-2860	154	30-150	71	30	M1,R1
Indeno(1,2,3-cd)pyrene	ug/kg	ND	37.8	37.6	<284	<282	0	0	30-150		30	M1
Naphthalene	ug/kg	8640	37.8	37.6	3930	9060	-12500	1100	30-150	79	30	M1,R1
Phenanthrene	ug/kg	5170	37.8	37.6	2570	5080	-6890	-240	30-150	66	30	M1,R1
Pyrene	ug/kg	ND	37.8	37.6	<13.1	550J	-1360	98	30-150		30	M1
2-Fluorobiphenyl (S)	%.						0	0	30-150			D4,P3,S4
Terphenyl-d14 (S)	%.						0	0	30-150			S0

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REPORT OF LABORATORY ANALYSIS

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(612)607-1700

QUALITY CONTROL DATA

Project: 14-1004 Fraser Shipyard REV2
Pace Project No.: 10286797

QC Batch: OEXT/27075 Analysis Method: WI MOD DRO
QC Batch Method: WI MOD DRO Analysis Description: WIDRO GCS
Associated Lab Samples: 10286797001

METHOD BLANK: 1830318 Matrix: Solid
Associated Lab Samples: 10286797001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Diesel Range Organics	mg/kg	2.6J	10.0	10/31/14 17:36	
n-Triacontane (S)	%.	85	50-150	10/31/14 17:36	

LABORATORY CONTROL SAMPLE & LCSD: 1830319 1830320

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Diesel Range Organics	mg/kg	80	70.3	75.4	88	94	70-120	7	20	
n-Triacontane (S)	%.				85	81	50-150			

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REPORT OF LABORATORY ANALYSIS

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(612)607-1700

QUALITY CONTROL DATA

Project: 14-1004 Fraser Shipyard REV2
Pace Project No.: 10286797

QC Batch: OEXT/27099 Analysis Method: WI MOD DRO
QC Batch Method: WI MOD DRO Analysis Description: WIDRO GCS
Associated Lab Samples: 10286797002

METHOD BLANK: 1831900 Matrix: Solid
Associated Lab Samples: 10286797002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Diesel Range Organics	mg/kg	3.0J	10.0	11/03/14 17:21	
n-Triacontane (S)	%.	94	50-150	11/03/14 17:21	

LABORATORY CONTROL SAMPLE & LCSD: 1831901 1831902

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Diesel Range Organics	mg/kg	80	74.4	79.0	93	99	70-120	6	20	
n-Triacontane (S)	%.				101	100	50-150			

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REPORT OF LABORATORY ANALYSIS

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(612)607-1700

QUALIFIERS

Project: 14-1004 Fraser Shipyard REV2
Pace Project No.: 10286797

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

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.

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

LOD - Limit of Detection.

LOQ - Limit of Quantitation.

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

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

B	Analyte was detected in the associated method blank.
CH	The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased high.
CL	The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased low.
D3	Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.
D4	Sample was diluted due to the presence of high levels of target analytes.
D6	The relative percent difference (RPD) between the sample and sample duplicate exceeded laboratory control limits.
L0	Analyte recovery in the laboratory control sample (LCS) was outside QC limits.
L3	Analyte recovery in the laboratory control sample (LCS) exceeded QC limits. Analyte presence below reporting limits in associated samples. Results unaffected by high bias.
M0	Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
P3	Sample extract could not be concentrated to the routine final volume, resulting in elevated reporting limits.
R1	RPD value was outside control limits.
S0	Surrogate recovery outside laboratory control limits.
S4	Surrogate recovery not evaluated against control limits due to sample dilution.
S5	Surrogate recovery outside control limits due to matrix interferences (not confirmed by re-analysis).
SS	This analyte did not meet the secondary source verification criteria for the initial calibration. The reported result should be considered an estimated value.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 14-1004 Fraser Shipyard REV2
Pace Project No.: 10286797

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
10286797001	**SP-1**	EPA 3550	OEXT/27291	EPA 8082	GCSV/14521
10286797002	**SP-2**	EPA 3550	OEXT/27291	EPA 8082	GCSV/14521
10286797001	**SP-1**	WI MOD DRO	OEXT/27075	WI MOD DRO	GCSV/14399
10286797002	**SP-2**	WI MOD DRO	OEXT/27099	WI MOD DRO	GCSV/14424
10286797003	**TP1 0-2**	TPH GRO/PVOC WI ext.	GCV/12886	WI MOD GRO	GCV/12889
10286797004	**TP2 2-4**	TPH GRO/PVOC WI ext.	GCV/12886	WI MOD GRO	GCV/12889
10286797005	**TP3 0-2**	TPH GRO/PVOC WI ext.	GCV/12886	WI MOD GRO	GCV/12889
10286797006	**TP4 0-2**	TPH GRO/PVOC WI ext.	GCV/12886	WI MOD GRO	GCV/12889
10286797001	**SP-1**	EPA 3050	MPRP/50209	EPA 6010	ICP/21504
10286797002	**SP-2**	EPA 3050	MPRP/50209	EPA 6010	ICP/21504
10286797003	**TP1 0-2**	EPA 3050	MPRP/50209	EPA 6010	ICP/21504
10286797004	**TP2 2-4**	EPA 3050	MPRP/50209	EPA 6010	ICP/21504
10286797005	**TP3 0-2**	EPA 3050	MPRP/50209	EPA 6010	ICP/21504
10286797006	**TP4 0-2**	EPA 3050	MPRP/50209	EPA 6010	ICP/21504
10286797001	**SP-1**	EPA 3010	MPRP/50561	EPA 6010	ICP/21702
10286797002	**SP-2**	EPA 3010	MPRP/50561	EPA 6010	ICP/21702
10286797001	**SP-1**	EPA 3050	MPRP/50368	EPA 6020A	ICPM/22372
10286797002	**SP-2**	EPA 3050	MPRP/50368	EPA 6020A	ICPM/22372
10286797003	**TP1 0-2**	EPA 3050	MPRP/50368	EPA 6020A	ICPM/22372
10286797004	**TP2 2-4**	EPA 3050	MPRP/50368	EPA 6020A	ICPM/22372
10286797005	**TP3 0-2**	EPA 3050	MPRP/50368	EPA 6020A	ICPM/22372
10286797006	**TP4 0-2**	EPA 3050	MPRP/50368	EPA 6020A	ICPM/22372
10286797001	**SP-1**	EPA 7470A	MERP/12172	EPA 7470A	MERC/14056
10286797002	**SP-2**	EPA 7470A	MERP/12172	EPA 7470A	MERC/14056
10286797001	**SP-1**	EPA 7471	MERP/12008	EPA 7471	MERC/13887
10286797002	**SP-2**	EPA 7471	MERP/12008	EPA 7471	MERC/13887
10286797003	**TP1 0-2**	EPA 7471	MERP/12008	EPA 7471	MERC/13887
10286797004	**TP2 2-4**	EPA 7471	MERP/12008	EPA 7471	MERC/13887
10286797005	**TP3 0-2**	EPA 7471	MERP/12008	EPA 7471	MERC/13887
10286797006	**TP4 0-2**	EPA 7471	MERP/12008	EPA 7471	MERC/13887
10286797001	**SP-1**	ASTM D2974	MPRP/50257		
10286797002	**SP-2**	ASTM D2974	MPRP/50258		
10286797003	**TP1 0-2**	ASTM D2974	MPRP/50258		
10286797004	**TP2 2-4**	ASTM D2974	MPRP/50258		
10286797005	**TP3 0-2**	ASTM D2974	MPRP/50258		
10286797006	**TP4 0-2**	ASTM D2974	MPRP/50258		
10286797003	**TP1 0-2**	EPA 3550	OEXT/27066	EPA 8270 by SIM	MSSV/11356
10286797004	**TP2 2-4**	EPA 3550	OEXT/27066	EPA 8270 by SIM	MSSV/11356
10286797005	**TP3 0-2**	EPA 3550	OEXT/27066	EPA 8270 by SIM	MSSV/11356
10286797006	**TP4 0-2**	EPA 3550	OEXT/27066	EPA 8270 by SIM	MSSV/11356
10286797001	**SP-1**	EPA 5035/5030B	MSV/29130	EPA 8260	MSV/29155
10286797002	**SP-2**	EPA 5035/5030B	MSV/29185	EPA 8260	MSV/29197

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

Project: 14-1004 Fraser Shipyard REV2
Pace Project No.: 10286797

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
10286797003	**TP1 0-2**	EPA 5035/5030B	MSV/29194	EPA 8260	MSV/29210
10286797004	**TP2 2-4**	EPA 5035/5030B	MSV/29194	EPA 8260	MSV/29210
10286797005	**TP3 0-2**	EPA 5035/5030B	MSV/29194	EPA 8260	MSV/29210
10286797006	**TP4 0-2**	EPA 5035/5030B	MSV/29194	EPA 8260	MSV/29210
10286797007	**TRIP BLANK**	EPA 5035/5030B	MSV/29194	EPA 8260	MSV/29210

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CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

RUSH
102814 RT

10286797

Page: 1 of 1

1556361

Section A
Required Client Information:

Company:	Env. Troubleshooters
Address:	3825 Grand Ave Duluth, MN 55807
Email To:	jmccarthy@etsmn.com
Phone:	218 7226013
Fax:	—
Requested Due Date/TAT:	5 day

Section B
Required Project Information:

Report To:	Same
Copy To:	Same
Purchase Order No.:	
Project Name:	Fraser Shipyard
Project Number:	14-1004

Section C
Invoice Information:

Attention:	Same
Company Name:	Same
Address:	Same
Pace Quote Reference:	ET14
Pace Project Manager:	Lori Castille
Pace Profile #:	

REGULATORY AGENCY

- ☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
- ☒ UST ☐ RCRA ☐ OTHER ______

Site Location STATE: WI

Section D
Required Client Information

SAMPLE ID
(A-Z, 0-9 / ,-)
Sample IDs MUST BE UNIQUE

Matrix Codes MATRIX	CODE
Drinking Water	DW
Water	WT
Waste Water	WW
Product	P
Soil/Solid	SL
Oil	OL
Wipe	WP
Air	AR
Tissue	TS
Other	OT

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test	DRO	~~GRO~~ VOCs	RCRA Metals	GRO	PAHs	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	SP-1	SL	C	10/27/14	1030				8	5						3			X	X	X				001
2	SP-2	SL	C	10/27/14	1100				8	5						3			X	X	X				002
3																									
4	TP1 0-2	SL	G	10/27/14	0920				7	3						4			~~X~~	X	X	X	X		003
5																									
6	TP2 2-4	SL	G	10/27/14	1000				7	3						4				X	X	X	X		004
7																									
8	TP3 0-2	SL	G	10/27/14	1015				7	3						4				X	X	X	X		005
9																									
10	TP4 0-2	SL	G	10/27/14	1030				7	3						4				X	X	X	X		006
11																									
12																									

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
TP1 0-2 No DRO	John McCarthy /ET	10/27/14	1530	[signature]	10/27/14	1530		Y		
	[signature]	10/27/14	1730	[signature] / PACE	10-28-14	0930	1.7	Y	Y	Y

ORIGINAL

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: John McCarthy

SIGNATURE of SAMPLER: [signature]

DATE Signed (MM/DD/YY): 10/27/14

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

F-ALL-Q-020rev.07, 15-May-2007

Pace Analytical®	Document Name: Sample Condition Upon Receipt Form	Document Revised: 28Feb2014 Page 1 of 1
	Document No.: F-MN-L-213-rev.09	Issuing Authority: Pace Minnesota Quality Office

Sample Condition Upon Receipt

Client Name: Environmental Troubleshooters

Project #: WO#: 10286797

10286797

Courier: ☑ Fed Ex ☐ UPS ☐ USPS ☐ Client

☐ Commercial ☐ Pace ☐ SpeeDee ☐ Other: _____

Tracking Number: 7716 4175 6905

Custody Seal on Cooler/Box Present? ☑ Yes ☐ No Seals Intact? ☑ Yes ☐ No

Optional: Proj. Due Date: Proj. Name:

Packing Material: ☐ Bubble Wrap ☑ Bubble Bags ☐ None ☐ Other: _____ Temp Blank? ☑ Yes ☐ No

Thermom. Used: ☐ B88A9130516413 ☑ B88A912167504 ☐ B88A9132521491 Type of Ice: ☑ Wet ☐ Blue ☐ None ☐ Samples on ice, cooling process has begun

Cooler Temp Read (°C): 1.3 Cooler Temp Corrected (°C): 1.7 Biological Tissue Frozen? ☐ Yes ☐ No ☑ N/A

Temp should be above freezing to 6°C Correction Factor: +0.4 Date and Initials of Person Examining Contents: 10-28-14/AT

				Comments:
Chain of Custody Present?	☑ Yes	☐ No	☐ N/A	1.
Chain of Custody Filled Out?	☑ Yes	☐ No	☐ N/A	2.
Chain of Custody Relinquished?	☑ Yes	☐ No	☐ N/A	3.
Sampler Name and/or Signature on COC?	☑ Yes	☐ No	☐ N/A	4.
Samples Arrived within Hold Time?	☑ Yes	☐ No	☐ N/A	5.
Short Hold Time Analysis (<72 hr)?	☐ Yes	☑ No	☐ N/A	6.
Rush Turn Around Time Requested?	☑ Yes	☐ No	☐ N/A	7. 5 day
Sufficient Volume?	☑ Yes	☐ No	☐ N/A	8.
Correct Containers Used?	☑ Yes	☐ No	☐ N/A	9.
-Pace Containers Used?	☑ Yes	☐ No	☐ N/A	
Containers Intact?	☑ Yes	☐ No	☐ N/A	10.
Filtered Volume Received for Dissolved Tests?	☐ Yes	☐ No	☑ N/A	11.
Sample Labels Match COC? -Includes Date/Time/ID/Analysis Matrix: SL	☑ Yes	☐ No	☐ N/A	12.
All containers needing acid/base preservation have been checked?	☐ Yes	☐ No	☑ N/A	13. ☐ HNO_3 ☐ H_2SO_4 ☐ NaOH ☐ HCl Sample #
All containers needing preservation are found to be in compliance with EPA recommendation? (HNO_3, H_2SO_4, HCl<2; NaOH >9 Sulfide, NaOH>12 Cyanide)	☐ Yes	☐ No	☑ N/A	
Exceptions: VOA, Coliform, TOC, Oil and Grease, DRO/8015 (water) DOC	☐ Yes	☑ No		Initial when completed: _____ Lot # of added preservative: _____
Headspace in VOA Vials (>6mm)?	☐ Yes	☐ No	☑ N/A	14.
Trip Blank Present?	☑ Yes	☐ No	☐ N/A	15.
Trip Blank Custody Seals Present? 10294145	☐ Yes	☑ No	☐ N/A	
Pace Trip Blank Lot # (if purchased): Seal Not Present				

CLIENT NOTIFICATION/RESOLUTION Field Data Required? ☐ Yes ☐ No

Person Contacted: _____ Date/Time: _____

Comments/Resolution: _____

Project Manager Review: _____ Date: 10/29/14

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e out of hold, incorrect preservative, out of temp, incorrect containers)

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

April 12, 2015

Mr. John McCarthy
Environmental Troubleshooters
3825 Grand Avenue
Duluth, MN 55807

RE: Project: 14-1004 FSY
Pace Project No.: 10300801

Dear Mr. McCarthy:
Enclosed are the analytical results for sample(s) received by the laboratory on March 26, 2015. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,

Lori Castille
lori.castille@pacelabs.com
Project Manager

Enclosures

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

CERTIFICATIONS

Project: 14-1004 FSY
Pace Project No.: 10300801

Minnesota Certification IDs

1700 Elm Street SE Suite 200, Minneapolis, MN 55414
A2LA Certification #: 2926.01
Alaska Certification #: UST-078
Alaska Certification #MN00064
Alabama Certification #40770
Arizona Certification #: AZ-0014
Arkansas Certification #: 88-0680
California Certification #: 01155CA
Colorado Certification #Pace
Connecticut Certification #: PH-0256
EPA Region 8 Certification #: 8TMS-L
Florida/NELAP Certification #: E87605
Guam Certification #:14-008r
Georgia Certification #: 959
Georgia EPD #: Pace
Idaho Certification #: MN00064
Hawaii Certification #MN00064
Illinois Certification #: 200011
Indiana Certification#C-MN-01
Iowa Certification #: 368
Kansas Certification #: E-10167
Kentucky Dept of Envi. Protection - DW #90062
Kentucky Dept of Envi. Protection - WW #:90062
Louisiana DEQ Certification #: 3086
Louisiana DHH #: LA140001
Maine Certification #: 2013011
Maryland Certification #: 322
Michigan DEPH Certification #: 9909
Minnesota Certification #: 027-053-137
Mississippi Certification #: Pace
Montana Certification #: MT0092
Nevada Certification #: MN_00064
Nebraska Certification #: Pace
New Jersey Certification #: MN-002
New York Certification #: 11647
North Carolina Certification #: 530
North Carolina State Public Health #: 27700
North Dakota Certification #: R-036
Ohio EPA #: 4150
Ohio VAP Certification #: CL101
Oklahoma Certification #: 9507
Oregon Certification #: MN200001
Oregon Certification #: MN300001
Pennsylvania Certification #: 68-00563
Puerto Rico Certification
Saipan (CNMI) #:MP0003
South Carolina #:74003001
Texas Certification #: T104704192
Tennessee Certification #: 02818
Utah Certification #: MN000642013-4
Virginia DGS Certification #: 251
Virginia/VELAP Certification #: Pace
Washington Certification #: C486
West Virginia Certification #: 382
West Virginia DHHR #:9952C
Wisconsin Certification #: 999407970

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SAMPLE SUMMARY

Project: 14-1004 FSY
Pace Project No.: 10300801

Lab ID	Sample ID	Matrix	Date Collected	Date Received
10300801001	**GP1 2-4**	Solid	03/24/15 10:10	03/26/15 18:07
10300801002	**GP2 2-4**	Solid	03/24/15 11:00	03/26/15 18:07
10300801003	**GP3 2-4**	Solid	03/24/15 11:45	03/26/15 18:07
10300801004	**GP4 2-4**	Solid	03/24/15 13:20	03/26/15 18:07
10300801005	**GP5 4-8**	Solid	03/25/15 10:30	03/26/15 18:07
10300801006	**GP6 4-8**	Solid	03/24/15 16:00	03/26/15 18:07
10300801007	**GP7 2-4**	Solid	03/24/15 14:00	03/26/15 18:07
10300801008	**GP50 4-8**	Solid	03/25/15 10:35	03/26/15 18:07
10300801009	**Trip Blank**	Solid	03/24/15 00:00	03/26/15 18:07
10300802001	**GP1W**	Water	03/25/15 10:40	03/26/15 18:07
10300802002	**GP2W**	Water	03/25/15 10:55	03/26/15 18:07
10300802003	**GP3W**	Water	03/25/15 11:10	03/26/15 18:07
10300802004	**GP4W**	Water	03/25/15 11:40	03/26/15 18:07
10300802005	**GP6W**	Water	03/25/15 13:20	03/26/15 18:07
10300802006	**GP7W**	Water	03/25/15 13:40	03/26/15 18:07
10300802007	**Trip Blank**	Water	03/25/15 00:00	03/26/15 18:07

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(612)607-1700

SAMPLE ANALYTE COUNT

Project: 14-1004 FSY
Pace Project No.: 10300801

Lab ID	Sample ID	Method	Analysts	Analytes Reported
10300801001	**GP1 2-4**	ASTM D2974	JDL	1
		EPA 8270D by SIM	LT	18
		EPA 8260	AMT	70
10300801002	**GP2 2-4**	ASTM D2974	JDL	1
		EPA 8270D by SIM	LT	18
		EPA 8260	AMT	70
10300801003	**GP3 2-4**	ASTM D2974	JDL	1
		EPA 8270D by SIM	LT	18
		EPA 8260	AMT	70
10300801004	**GP4 2-4**	ASTM D2974	JDL	1
		EPA 8270D by SIM	LT	18
		EPA 8260	AMT	70
10300801005	**GP5 4-8**	ASTM D2974	JDL	1
		EPA 8270D by SIM	LT	18
		EPA 8260	AMT	70
10300801006	**GP6 4-8**	ASTM D2974	JDL	1
		EPA 8270D by SIM	LT	18
		EPA 8260	AMT, SH2	70
10300801007	**GP7 2-4**	ASTM D2974	JDL	1
		EPA 8270D by SIM	LT	18
		EPA 8260	AMT	70
10300801008	**GP50 4-8**	ASTM D2974	JDL	1
		EPA 8270D by SIM	LT	18
		EPA 8260	SH2	70
10300801009	**Trip Blank**	EPA 8260	AMT	70
10300802001	**GP1W**	EPA 8270D by SIM	LT	18
		EPA 8260	AJC	70
10300802002	**GP2W**	EPA 8270D by SIM	LT	18
		EPA 8260	AJC	70
10300802003	**GP3W**	EPA 8270D by SIM	LT	18
		EPA 8260	AJC	70
10300802004	**GP4W**	EPA 8270D by SIM	LT	18
		EPA 8260	AJC	70
10300802005	**GP6W**	EPA 8270D by SIM	LT	18
		EPA 8260	AJC	70
10300802006	**GP7W**	EPA 8270D by SIM	LT	18
		EPA 8260	AJC	70

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

SAMPLE ANALYTE COUNT

Project: 14-1004 FSY
Pace Project No.: 10300801

Lab ID	Sample ID	Method	Analysts	Analytes Reported
10300802007	**Trip Blank**	EPA 8260	AJC	70

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

ANALYTICAL RESULTS

Project: 14-1004 FSY
Pace Project No.: 10300801

Sample: GP1 2-4 **Lab ID: 10300801001** Collected: 03/24/15 10:10 Received: 03/26/15 18:07 Matrix: Solid

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

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Dry Weight	Analytical Method: ASTM D2974							
Percent Moisture	**15.5**	%	0.10	1		03/27/15 11:31		
8270D MSSV PAH by SIM	Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3550							
Acenaphthene	ND	ug/kg	11.8	1	03/27/15 11:21	03/30/15 15:45	83-32-9	
Acenaphthylene	ND	ug/kg	11.8	1	03/27/15 11:21	03/30/15 15:45	208-96-8	
Anthracene	ND	ug/kg	11.8	1	03/27/15 11:21	03/30/15 15:45	120-12-7	
Benzo(a)anthracene	ND	ug/kg	11.8	1	03/27/15 11:21	03/30/15 15:45	56-55-3	
Benzo(a)pyrene	ND	ug/kg	11.8	1	03/27/15 11:21	03/30/15 15:45	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	11.8	1	03/27/15 11:21	03/30/15 15:45	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	11.8	1	03/27/15 11:21	03/30/15 15:45	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	11.8	1	03/27/15 11:21	03/30/15 15:45	207-08-9	
Chrysene	ND	ug/kg	11.8	1	03/27/15 11:21	03/30/15 15:45	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	11.8	1	03/27/15 11:21	03/30/15 15:45	53-70-3	
Fluoranthene	ND	ug/kg	11.8	1	03/27/15 11:21	03/30/15 15:45	206-44-0	
Fluorene	ND	ug/kg	11.8	1	03/27/15 11:21	03/30/15 15:45	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	11.8	1	03/27/15 11:21	03/30/15 15:45	193-39-5	
Naphthalene	ND	ug/kg	11.8	1	03/27/15 11:21	03/30/15 15:45	91-20-3	
Phenanthrene	ND	ug/kg	11.8	1	03/27/15 11:21	03/30/15 15:45	85-01-8	
Pyrene	ND	ug/kg	11.8	1	03/27/15 11:21	03/30/15 15:45	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	62	%.	55-125	1	03/27/15 11:21	03/30/15 15:45	321-60-8	
p-Terphenyl-d14 (S)	69	%.	30-150	1	03/27/15 11:21	03/30/15 15:45	1718-51-0	
8260 MSV 5030 Med Level	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B							
Acetone	ND	ug/kg	1150	1	04/01/15 09:05	04/01/15 16:27	67-64-1	
Allyl chloride	ND	ug/kg	229	1	04/01/15 09:05	04/01/15 16:27	107-05-1	
Benzene	ND	ug/kg	22.9	1	04/01/15 09:05	04/01/15 16:27	71-43-2	
Bromobenzene	ND	ug/kg	57.3	1	04/01/15 09:05	04/01/15 16:27	108-86-1	
Bromochloromethane	ND	ug/kg	229	1	04/01/15 09:05	04/01/15 16:27	74-97-5	
Bromodichloromethane	ND	ug/kg	57.3	1	04/01/15 09:05	04/01/15 16:27	75-27-4	
Bromoform	ND	ug/kg	229	1	04/01/15 09:05	04/01/15 16:27	75-25-2	
Bromomethane	ND	ug/kg	573	1	04/01/15 09:05	04/01/15 16:27	74-83-9	
2-Butanone (MEK)	ND	ug/kg	286	1	04/01/15 09:05	04/01/15 16:27	78-93-3	
n-Butylbenzene	ND	ug/kg	57.3	1	04/01/15 09:05	04/01/15 16:27	104-51-8	
sec-Butylbenzene	ND	ug/kg	57.3	1	04/01/15 09:05	04/01/15 16:27	135-98-8	
tert-Butylbenzene	ND	ug/kg	57.3	1	04/01/15 09:05	04/01/15 16:27	98-06-6	
Carbon tetrachloride	ND	ug/kg	229	1	04/01/15 09:05	04/01/15 16:27	56-23-5	
Chlorobenzene	ND	ug/kg	57.3	1	04/01/15 09:05	04/01/15 16:27	108-90-7	
Chloroethane	ND	ug/kg	573	1	04/01/15 09:05	04/01/15 16:27	75-00-3	
Chloroform	ND	ug/kg	57.3	1	04/01/15 09:05	04/01/15 16:27	67-66-3	
Chloromethane	ND	ug/kg	229	1	04/01/15 09:05	04/01/15 16:27	74-87-3	
2-Chlorotoluene	ND	ug/kg	57.3	1	04/01/15 09:05	04/01/15 16:27	95-49-8	
4-Chlorotoluene	ND	ug/kg	57.3	1	04/01/15 09:05	04/01/15 16:27	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/kg	573	1	04/01/15 09:05	04/01/15 16:27	96-12-8	
Dibromochloromethane	ND	ug/kg	57.3	1	04/01/15 09:05	04/01/15 16:27	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/kg	57.3	1	04/01/15 09:05	04/01/15 16:27	106-93-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

ANALYTICAL RESULTS

Project: 14-1004 FSY
Pace Project No.: 10300801

Sample: GP1 2-4 **Lab ID: 10300801001** Collected: 03/24/15 10:10 Received: 03/26/15 18:07 Matrix: Solid

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

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5030 Med Level	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B							
Dibromomethane	ND	ug/kg	57.3	1	04/01/15 09:05	04/01/15 16:27	74-95-3	
1,2-Dichlorobenzene	ND	ug/kg	57.3	1	04/01/15 09:05	04/01/15 16:27	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	57.3	1	04/01/15 09:05	04/01/15 16:27	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	57.3	1	04/01/15 09:05	04/01/15 16:27	106-46-7	
Dichlorodifluoromethane	ND	ug/kg	229	1	04/01/15 09:05	04/01/15 16:27	75-71-8	
1,1-Dichloroethane	ND	ug/kg	57.3	1	04/01/15 09:05	04/01/15 16:27	75-34-3	
1,2-Dichloroethane	ND	ug/kg	57.3	1	04/01/15 09:05	04/01/15 16:27	107-06-2	
1,1-Dichloroethene	ND	ug/kg	229	1	04/01/15 09:05	04/01/15 16:27	75-35-4	
cis-1,2-Dichloroethene	ND	ug/kg	57.3	1	04/01/15 09:05	04/01/15 16:27	156-59-2	
trans-1,2-Dichloroethene	ND	ug/kg	229	1	04/01/15 09:05	04/01/15 16:27	156-60-5	
Dichlorofluoromethane	ND	ug/kg	573	1	04/01/15 09:05	04/01/15 16:27	75-43-4	
1,2-Dichloropropane	ND	ug/kg	57.3	1	04/01/15 09:05	04/01/15 16:27	78-87-5	
1,3-Dichloropropane	ND	ug/kg	57.3	1	04/01/15 09:05	04/01/15 16:27	142-28-9	
2,2-Dichloropropane	ND	ug/kg	229	1	04/01/15 09:05	04/01/15 16:27	594-20-7	
1,1-Dichloropropene	ND	ug/kg	57.3	1	04/01/15 09:05	04/01/15 16:27	563-58-6	
cis-1,3-Dichloropropene	ND	ug/kg	57.3	1	04/01/15 09:05	04/01/15 16:27	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/kg	57.3	1	04/01/15 09:05	04/01/15 16:27	10061-02-6	
Diethyl ether (Ethyl ether)	ND	ug/kg	229	1	04/01/15 09:05	04/01/15 16:27	60-29-7	
Ethylbenzene	ND	ug/kg	57.3	1	04/01/15 09:05	04/01/15 16:27	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/kg	286	1	04/01/15 09:05	04/01/15 16:27	87-68-3	
Isopropylbenzene (Cumene)	ND	ug/kg	57.3	1	04/01/15 09:05	04/01/15 16:27	98-82-8	
p-Isopropyltoluene	ND	ug/kg	57.3	1	04/01/15 09:05	04/01/15 16:27	99-87-6	
Methylene Chloride	ND	ug/kg	229	1	04/01/15 09:05	04/01/15 16:27	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	286	1	04/01/15 09:05	04/01/15 16:27	108-10-1	
Methyl-tert-butyl ether	ND	ug/kg	57.3	1	04/01/15 09:05	04/01/15 16:27	1634-04-4	
Naphthalene	ND	ug/kg	229	1	04/01/15 09:05	04/01/15 16:27	91-20-3	
n-Propylbenzene	ND	ug/kg	57.3	1	04/01/15 09:05	04/01/15 16:27	103-65-1	
Styrene	ND	ug/kg	57.3	1	04/01/15 09:05	04/01/15 16:27	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/kg	57.3	1	04/01/15 09:05	04/01/15 16:27	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/kg	57.3	1	04/01/15 09:05	04/01/15 16:27	79-34-5	
Tetrachloroethene	ND	ug/kg	57.3	1	04/01/15 09:05	04/01/15 16:27	127-18-4	
Tetrahydrofuran	ND	ug/kg	2290	1	04/01/15 09:05	04/01/15 16:27	109-99-9	
Toluene	ND	ug/kg	57.3	1	04/01/15 09:05	04/01/15 16:27	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/kg	57.3	1	04/01/15 09:05	04/01/15 16:27	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/kg	57.3	1	04/01/15 09:05	04/01/15 16:27	120-82-1	
1,1,1-Trichloroethane	ND	ug/kg	57.3	1	04/01/15 09:05	04/01/15 16:27	71-55-6	
1,1,2-Trichloroethane	ND	ug/kg	57.3	1	04/01/15 09:05	04/01/15 16:27	79-00-5	
Trichloroethene	ND	ug/kg	57.3	1	04/01/15 09:05	04/01/15 16:27	79-01-6	
Trichlorofluoromethane	ND	ug/kg	229	1	04/01/15 09:05	04/01/15 16:27	75-69-4	
1,2,3-Trichloropropane	ND	ug/kg	229	1	04/01/15 09:05	04/01/15 16:27	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/kg	229	1	04/01/15 09:05	04/01/15 16:27	76-13-1	
1,2,4-Trimethylbenzene	ND	ug/kg	57.3	1	04/01/15 09:05	04/01/15 16:27	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/kg	57.3	1	04/01/15 09:05	04/01/15 16:27	108-67-8	
Vinyl chloride	ND	ug/kg	22.9	1	04/01/15 09:05	04/01/15 16:27	75-01-4	
Xylene (Total)	ND	ug/kg	172	1	04/01/15 09:05	04/01/15 16:27	1330-20-7	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

ANALYTICAL RESULTS

Project: 14-1004 FSY
Pace Project No.: 10300801

Sample: GP1 2-4 **Lab ID: 10300801001** Collected: 03/24/15 10:10 Received: 03/26/15 18:07 Matrix: Solid

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

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5030 Med Level	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B							
Surrogates								
1,2-Dichloroethane-d4 (S)	88	%.	55-150	1	04/01/15 09:05	04/01/15 16:27	17060-07-0	
Toluene-d8 (S)	100	%.	61-125	1	04/01/15 09:05	04/01/15 16:27	2037-26-5	
4-Bromofluorobenzene (S)	99	%.	54-131	1	04/01/15 09:05	04/01/15 16:27	460-00-4	

Sample: GP2 2-4 **Lab ID: 10300801002** Collected: 03/24/15 11:00 Received: 03/26/15 18:07 Matrix: Solid

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

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Dry Weight	Analytical Method: ASTM D2974							
Percent Moisture	**20.1**	%	0.10	1		03/27/15 12:32		
8270D MSSV PAH by SIM	Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3550							
Acenaphthene	**15.4**	ug/kg	12.5	1	03/27/15 11:21	03/30/15 16:07	83-32-9	
Acenaphthylene	**38.4**	ug/kg	12.5	1	03/27/15 11:21	03/30/15 16:07	208-96-8	
Anthracene	**50.9**	ug/kg	12.5	1	03/27/15 11:21	03/30/15 16:07	120-12-7	
Benzo(a)anthracene	**131**	ug/kg	12.5	1	03/27/15 11:21	03/30/15 16:07	56-55-3	
Benzo(a)pyrene	**175**	ug/kg	12.5	1	03/27/15 11:21	03/30/15 16:07	50-32-8	
Benzo(b)fluoranthene	**228**	ug/kg	12.5	1	03/27/15 11:21	03/30/15 16:07	205-99-2	
Benzo(g,h,i)perylene	**128**	ug/kg	12.5	1	03/27/15 11:21	03/30/15 16:07	191-24-2	
Benzo(k)fluoranthene	**74.4**	ug/kg	12.5	1	03/27/15 11:21	03/30/15 16:07	207-08-9	
Chrysene	**177**	ug/kg	12.5	1	03/27/15 11:21	03/30/15 16:07	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	12.5	1	03/27/15 11:21	03/30/15 16:07	53-70-3	
Fluoranthene	**328**	ug/kg	12.5	1	03/27/15 11:21	03/30/15 16:07	206-44-0	
Fluorene	**18.0**	ug/kg	12.5	1	03/27/15 11:21	03/30/15 16:07	86-73-7	
Indeno(1,2,3-cd)pyrene	**108**	ug/kg	12.5	1	03/27/15 11:21	03/30/15 16:07	193-39-5	
Naphthalene	**20.6**	ug/kg	12.5	1	03/27/15 11:21	03/30/15 16:07	91-20-3	
Phenanthrene	**248**	ug/kg	12.5	1	03/27/15 11:21	03/30/15 16:07	85-01-8	
Pyrene	**375**	ug/kg	12.5	1	03/27/15 11:21	03/30/15 16:07	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	72	%.	55-125	1	03/27/15 11:21	03/30/15 16:07	321-60-8	
p-Terphenyl-d14 (S)	72	%.	30-150	1	03/27/15 11:21	03/30/15 16:07	1718-51-0	
8260 MSV 5030 Med Level	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B							
Acetone	ND	ug/kg	1250	1	04/01/15 09:05	04/01/15 16:48	67-64-1	
Allyl chloride	ND	ug/kg	250	1	04/01/15 09:05	04/01/15 16:48	107-05-1	
Benzene	ND	ug/kg	25.0	1	04/01/15 09:05	04/01/15 16:48	71-43-2	
Bromobenzene	ND	ug/kg	62.4	1	04/01/15 09:05	04/01/15 16:48	108-86-1	
Bromochloromethane	ND	ug/kg	250	1	04/01/15 09:05	04/01/15 16:48	74-97-5	
Bromodichloromethane	ND	ug/kg	62.4	1	04/01/15 09:05	04/01/15 16:48	75-27-4	
Bromoform	ND	ug/kg	250	1	04/01/15 09:05	04/01/15 16:48	75-25-2	
Bromomethane	ND	ug/kg	624	1	04/01/15 09:05	04/01/15 16:48	74-83-9	
2-Butanone (MEK)	ND	ug/kg	312	1	04/01/15 09:05	04/01/15 16:48	78-93-3	
n-Butylbenzene	ND	ug/kg	62.4	1	04/01/15 09:05	04/01/15 16:48	104-51-8	

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
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ANALYTICAL RESULTS

Project: 14-1004 FSY
Pace Project No.: 10300801

Sample: GP2 2-4 **Lab ID: 10300801002** Collected: 03/24/15 11:00 Received: 03/26/15 18:07 Matrix: Solid

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

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5030 Med Level	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B							
sec-Butylbenzene	ND	ug/kg	62.4	1	04/01/15 09:05	04/01/15 16:48	135-98-8	
tert-Butylbenzene	ND	ug/kg	62.4	1	04/01/15 09:05	04/01/15 16:48	98-06-6	
Carbon tetrachloride	ND	ug/kg	250	1	04/01/15 09:05	04/01/15 16:48	56-23-5	
Chlorobenzene	ND	ug/kg	62.4	1	04/01/15 09:05	04/01/15 16:48	108-90-7	
Chloroethane	ND	ug/kg	624	1	04/01/15 09:05	04/01/15 16:48	75-00-3	
Chloroform	ND	ug/kg	62.4	1	04/01/15 09:05	04/01/15 16:48	67-66-3	
Chloromethane	ND	ug/kg	250	1	04/01/15 09:05	04/01/15 16:48	74-87-3	
2-Chlorotoluene	ND	ug/kg	62.4	1	04/01/15 09:05	04/01/15 16:48	95-49-8	
4-Chlorotoluene	ND	ug/kg	62.4	1	04/01/15 09:05	04/01/15 16:48	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/kg	624	1	04/01/15 09:05	04/01/15 16:48	96-12-8	
Dibromochloromethane	ND	ug/kg	62.4	1	04/01/15 09:05	04/01/15 16:48	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/kg	62.4	1	04/01/15 09:05	04/01/15 16:48	106-93-4	
Dibromomethane	ND	ug/kg	62.4	1	04/01/15 09:05	04/01/15 16:48	74-95-3	
1,2-Dichlorobenzene	ND	ug/kg	62.4	1	04/01/15 09:05	04/01/15 16:48	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	62.4	1	04/01/15 09:05	04/01/15 16:48	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	62.4	1	04/01/15 09:05	04/01/15 16:48	106-46-7	
Dichlorodifluoromethane	ND	ug/kg	250	1	04/01/15 09:05	04/01/15 16:48	75-71-8	
1,1-Dichloroethane	ND	ug/kg	62.4	1	04/01/15 09:05	04/01/15 16:48	75-34-3	
1,2-Dichloroethane	ND	ug/kg	62.4	1	04/01/15 09:05	04/01/15 16:48	107-06-2	
1,1-Dichloroethene	ND	ug/kg	250	1	04/01/15 09:05	04/01/15 16:48	75-35-4	
cis-1,2-Dichloroethene	ND	ug/kg	62.4	1	04/01/15 09:05	04/01/15 16:48	156-59-2	
trans-1,2-Dichloroethene	ND	ug/kg	250	1	04/01/15 09:05	04/01/15 16:48	156-60-5	
Dichlorofluoromethane	ND	ug/kg	624	1	04/01/15 09:05	04/01/15 16:48	75-43-4	
1,2-Dichloropropane	ND	ug/kg	62.4	1	04/01/15 09:05	04/01/15 16:48	78-87-5	
1,3-Dichloropropane	ND	ug/kg	62.4	1	04/01/15 09:05	04/01/15 16:48	142-28-9	
2,2-Dichloropropane	ND	ug/kg	250	1	04/01/15 09:05	04/01/15 16:48	594-20-7	
1,1-Dichloropropene	ND	ug/kg	62.4	1	04/01/15 09:05	04/01/15 16:48	563-58-6	
cis-1,3-Dichloropropene	ND	ug/kg	62.4	1	04/01/15 09:05	04/01/15 16:48	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/kg	62.4	1	04/01/15 09:05	04/01/15 16:48	10061-02-6	
Diethyl ether (Ethyl ether)	ND	ug/kg	250	1	04/01/15 09:05	04/01/15 16:48	60-29-7	
Ethylbenzene	ND	ug/kg	62.4	1	04/01/15 09:05	04/01/15 16:48	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/kg	312	1	04/01/15 09:05	04/01/15 16:48	87-68-3	
Isopropylbenzene (Cumene)	ND	ug/kg	62.4	1	04/01/15 09:05	04/01/15 16:48	98-82-8	
p-Isopropyltoluene	ND	ug/kg	62.4	1	04/01/15 09:05	04/01/15 16:48	99-87-6	
Methylene Chloride	ND	ug/kg	250	1	04/01/15 09:05	04/01/15 16:48	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	312	1	04/01/15 09:05	04/01/15 16:48	108-10-1	
Methyl-tert-butyl ether	ND	ug/kg	62.4	1	04/01/15 09:05	04/01/15 16:48	1634-04-4	
Naphthalene	ND	ug/kg	250	1	04/01/15 09:05	04/01/15 16:48	91-20-3	
n-Propylbenzene	ND	ug/kg	62.4	1	04/01/15 09:05	04/01/15 16:48	103-65-1	
Styrene	ND	ug/kg	62.4	1	04/01/15 09:05	04/01/15 16:48	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/kg	62.4	1	04/01/15 09:05	04/01/15 16:48	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/kg	62.4	1	04/01/15 09:05	04/01/15 16:48	79-34-5	
Tetrachloroethene	ND	ug/kg	62.4	1	04/01/15 09:05	04/01/15 16:48	127-18-4	
Tetrahydrofuran	ND	ug/kg	2500	1	04/01/15 09:05	04/01/15 16:48	109-99-9	
Toluene	ND	ug/kg	62.4	1	04/01/15 09:05	04/01/15 16:48	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/kg	62.4	1	04/01/15 09:05	04/01/15 16:48	87-61-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

ANALYTICAL RESULTS

Project: 14-1004 FSY
Pace Project No.: 10300801

Sample: GP2 2-4 **Lab ID: 10300801002** Collected: 03/24/15 11:00 Received: 03/26/15 18:07 Matrix: Solid

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

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5030 Med Level	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B							
1,2,4-Trichlorobenzene	ND	ug/kg	62.4	1	04/01/15 09:05	04/01/15 16:48	120-82-1	
1,1,1-Trichloroethane	ND	ug/kg	62.4	1	04/01/15 09:05	04/01/15 16:48	71-55-6	
1,1,2-Trichloroethane	ND	ug/kg	62.4	1	04/01/15 09:05	04/01/15 16:48	79-00-5	
Trichloroethene	ND	ug/kg	62.4	1	04/01/15 09:05	04/01/15 16:48	79-01-6	
Trichlorofluoromethane	ND	ug/kg	250	1	04/01/15 09:05	04/01/15 16:48	75-69-4	
1,2,3-Trichloropropane	ND	ug/kg	250	1	04/01/15 09:05	04/01/15 16:48	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/kg	250	1	04/01/15 09:05	04/01/15 16:48	76-13-1	
1,2,4-Trimethylbenzene	ND	ug/kg	62.4	1	04/01/15 09:05	04/01/15 16:48	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/kg	62.4	1	04/01/15 09:05	04/01/15 16:48	108-67-8	
Vinyl chloride	ND	ug/kg	25.0	1	04/01/15 09:05	04/01/15 16:48	75-01-4	
Xylene (Total)	ND	ug/kg	187	1	04/01/15 09:05	04/01/15 16:48	1330-20-7	
Surrogates								
1,2-Dichloroethane-d4 (S)	92	%.	55-150	1	04/01/15 09:05	04/01/15 16:48	17060-07-0	
Toluene-d8 (S)	100	%.	61-125	1	04/01/15 09:05	04/01/15 16:48	2037-26-5	
4-Bromofluorobenzene (S)	97	%.	54-131	1	04/01/15 09:05	04/01/15 16:48	460-00-4	

Sample: GP3 2-4 **Lab ID: 10300801003** Collected: 03/24/15 11:45 Received: 03/26/15 18:07 Matrix: Solid

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

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Dry Weight	Analytical Method: ASTM D2974							
Percent Moisture	**25.4**	%	0.10	1		03/27/15 12:32		
8270D MSSV PAH by SIM	Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3550							
Acenaphthene	ND	ug/kg	13.4	1	03/27/15 11:21	03/30/15 16:28	83-32-9	
Acenaphthylene	ND	ug/kg	13.4	1	03/27/15 11:21	03/30/15 16:28	208-96-8	
Anthracene	**18.0**	ug/kg	13.4	1	03/27/15 11:21	03/30/15 16:28	120-12-7	
Benzo(a)anthracene	**47.0**	ug/kg	13.4	1	03/27/15 11:21	03/30/15 16:28	56-55-3	
Benzo(a)pyrene	**54.1**	ug/kg	13.4	1	03/27/15 11:21	03/30/15 16:28	50-32-8	
Benzo(b)fluoranthene	**70.5**	ug/kg	13.4	1	03/27/15 11:21	03/30/15 16:28	205-99-2	
Benzo(g,h,i)perylene	**40.2**	ug/kg	13.4	1	03/27/15 11:21	03/30/15 16:28	191-24-2	
Benzo(k)fluoranthene	**28.2**	ug/kg	13.4	1	03/27/15 11:21	03/30/15 16:28	207-08-9	
Chrysene	**61.6**	ug/kg	13.4	1	03/27/15 11:21	03/30/15 16:28	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	13.4	1	03/27/15 11:21	03/30/15 16:28	53-70-3	
Fluoranthene	**122**	ug/kg	13.4	1	03/27/15 11:21	03/30/15 16:28	206-44-0	
Fluorene	ND	ug/kg	13.4	1	03/27/15 11:21	03/30/15 16:28	86-73-7	
Indeno(1,2,3-cd)pyrene	**33.3**	ug/kg	13.4	1	03/27/15 11:21	03/30/15 16:28	193-39-5	
Naphthalene	ND	ug/kg	13.4	1	03/27/15 11:21	03/30/15 16:28	91-20-3	
Phenanthrene	**95.9**	ug/kg	13.4	1	03/27/15 11:21	03/30/15 16:28	85-01-8	
Pyrene	**151**	ug/kg	13.4	1	03/27/15 11:21	03/30/15 16:28	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	68	%.	55-125	1	03/27/15 11:21	03/30/15 16:28	321-60-8	
p-Terphenyl-d14 (S)	67	%.	30-150	1	03/27/15 11:21	03/30/15 16:28	1718-51-0	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
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ANALYTICAL RESULTS

Project: 14-1004 FSY
Pace Project No.: 10300801

Sample: GP3 2-4 **Lab ID: 10300801003** Collected: 03/24/15 11:45 Received: 03/26/15 18:07 Matrix: Solid

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

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5030 Med Level	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B							
Acetone	ND	ug/kg	1350	1	04/01/15 09:05	04/01/15 19:38	67-64-1	
Allyl chloride	ND	ug/kg	269	1	04/01/15 09:05	04/01/15 19:38	107-05-1	
Benzene	ND	ug/kg	26.9	1	04/01/15 09:05	04/01/15 19:38	71-43-2	
Bromobenzene	ND	ug/kg	67.3	1	04/01/15 09:05	04/01/15 19:38	108-86-1	
Bromochloromethane	ND	ug/kg	269	1	04/01/15 09:05	04/01/15 19:38	74-97-5	
Bromodichloromethane	ND	ug/kg	67.3	1	04/01/15 09:05	04/01/15 19:38	75-27-4	
Bromoform	ND	ug/kg	269	1	04/01/15 09:05	04/01/15 19:38	75-25-2	
Bromomethane	ND	ug/kg	673	1	04/01/15 09:05	04/01/15 19:38	74-83-9	
2-Butanone (MEK)	ND	ug/kg	336	1	04/01/15 09:05	04/01/15 19:38	78-93-3	
n-Butylbenzene	ND	ug/kg	67.3	1	04/01/15 09:05	04/01/15 19:38	104-51-8	
sec-Butylbenzene	ND	ug/kg	67.3	1	04/01/15 09:05	04/01/15 19:38	135-98-8	
tert-Butylbenzene	ND	ug/kg	67.3	1	04/01/15 09:05	04/01/15 19:38	98-06-6	
Carbon tetrachloride	ND	ug/kg	269	1	04/01/15 09:05	04/01/15 19:38	56-23-5	
Chlorobenzene	ND	ug/kg	67.3	1	04/01/15 09:05	04/01/15 19:38	108-90-7	
Chloroethane	ND	ug/kg	673	1	04/01/15 09:05	04/01/15 19:38	75-00-3	
Chloroform	ND	ug/kg	67.3	1	04/01/15 09:05	04/01/15 19:38	67-66-3	
Chloromethane	ND	ug/kg	269	1	04/01/15 09:05	04/01/15 19:38	74-87-3	
2-Chlorotoluene	ND	ug/kg	67.3	1	04/01/15 09:05	04/01/15 19:38	95-49-8	
4-Chlorotoluene	ND	ug/kg	67.3	1	04/01/15 09:05	04/01/15 19:38	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/kg	673	1	04/01/15 09:05	04/01/15 19:38	96-12-8	
Dibromochloromethane	ND	ug/kg	67.3	1	04/01/15 09:05	04/01/15 19:38	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/kg	67.3	1	04/01/15 09:05	04/01/15 19:38	106-93-4	
Dibromomethane	ND	ug/kg	67.3	1	04/01/15 09:05	04/01/15 19:38	74-95-3	
1,2-Dichlorobenzene	ND	ug/kg	67.3	1	04/01/15 09:05	04/01/15 19:38	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	67.3	1	04/01/15 09:05	04/01/15 19:38	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	67.3	1	04/01/15 09:05	04/01/15 19:38	106-46-7	
Dichlorodifluoromethane	ND	ug/kg	269	1	04/01/15 09:05	04/01/15 19:38	75-71-8	
1,1-Dichloroethane	ND	ug/kg	67.3	1	04/01/15 09:05	04/01/15 19:38	75-34-3	
1,2-Dichloroethane	ND	ug/kg	67.3	1	04/01/15 09:05	04/01/15 19:38	107-06-2	
1,1-Dichloroethene	ND	ug/kg	269	1	04/01/15 09:05	04/01/15 19:38	75-35-4	
cis-1,2-Dichloroethene	ND	ug/kg	67.3	1	04/01/15 09:05	04/01/15 19:38	156-59-2	
trans-1,2-Dichloroethene	ND	ug/kg	269	1	04/01/15 09:05	04/01/15 19:38	156-60-5	
Dichlorofluoromethane	ND	ug/kg	673	1	04/01/15 09:05	04/01/15 19:38	75-43-4	
1,2-Dichloropropane	ND	ug/kg	67.3	1	04/01/15 09:05	04/01/15 19:38	78-87-5	
1,3-Dichloropropane	ND	ug/kg	67.3	1	04/01/15 09:05	04/01/15 19:38	142-28-9	
2,2-Dichloropropane	ND	ug/kg	269	1	04/01/15 09:05	04/01/15 19:38	594-20-7	
1,1-Dichloropropene	ND	ug/kg	67.3	1	04/01/15 09:05	04/01/15 19:38	563-58-6	
cis-1,3-Dichloropropene	ND	ug/kg	67.3	1	04/01/15 09:05	04/01/15 19:38	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/kg	67.3	1	04/01/15 09:05	04/01/15 19:38	10061-02-6	
Diethyl ether (Ethyl ether)	ND	ug/kg	269	1	04/01/15 09:05	04/01/15 19:38	60-29-7	
Ethylbenzene	ND	ug/kg	67.3	1	04/01/15 09:05	04/01/15 19:38	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/kg	336	1	04/01/15 09:05	04/01/15 19:38	87-68-3	
Isopropylbenzene (Cumene)	ND	ug/kg	67.3	1	04/01/15 09:05	04/01/15 19:38	98-82-8	
p-Isopropyltoluene	ND	ug/kg	67.3	1	04/01/15 09:05	04/01/15 19:38	99-87-6	
Methylene Chloride	ND	ug/kg	269	1	04/01/15 09:05	04/01/15 19:38	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	336	1	04/01/15 09:05	04/01/15 19:38	108-10-1	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

ANALYTICAL RESULTS

Project: 14-1004 FSY
Pace Project No.: 10300801

Sample: GP3 2-4 **Lab ID: 10300801003** Collected: 03/24/15 11:45 Received: 03/26/15 18:07 Matrix: Solid

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

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5030 Med Level	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B							
Methyl-tert-butyl ether	ND	ug/kg	67.3	1	04/01/15 09:05	04/01/15 19:38	1634-04-4	
Naphthalene	ND	ug/kg	269	1	04/01/15 09:05	04/01/15 19:38	91-20-3	
n-Propylbenzene	ND	ug/kg	67.3	1	04/01/15 09:05	04/01/15 19:38	103-65-1	
Styrene	ND	ug/kg	67.3	1	04/01/15 09:05	04/01/15 19:38	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/kg	67.3	1	04/01/15 09:05	04/01/15 19:38	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/kg	67.3	1	04/01/15 09:05	04/01/15 19:38	79-34-5	
Tetrachloroethene	ND	ug/kg	67.3	1	04/01/15 09:05	04/01/15 19:38	127-18-4	
Tetrahydrofuran	ND	ug/kg	2690	1	04/01/15 09:05	04/01/15 19:38	109-99-9	
Toluene	ND	ug/kg	67.3	1	04/01/15 09:05	04/01/15 19:38	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/kg	67.3	1	04/01/15 09:05	04/01/15 19:38	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/kg	67.3	1	04/01/15 09:05	04/01/15 19:38	120-82-1	
1,1,1-Trichloroethane	ND	ug/kg	67.3	1	04/01/15 09:05	04/01/15 19:38	71-55-6	
1,1,2-Trichloroethane	ND	ug/kg	67.3	1	04/01/15 09:05	04/01/15 19:38	79-00-5	
Trichloroethene	ND	ug/kg	67.3	1	04/01/15 09:05	04/01/15 19:38	79-01-6	
Trichlorofluoromethane	ND	ug/kg	269	1	04/01/15 09:05	04/01/15 19:38	75-69-4	
1,2,3-Trichloropropane	ND	ug/kg	269	1	04/01/15 09:05	04/01/15 19:38	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/kg	269	1	04/01/15 09:05	04/01/15 19:38	76-13-1	
1,2,4-Trimethylbenzene	ND	ug/kg	67.3	1	04/01/15 09:05	04/01/15 19:38	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/kg	67.3	1	04/01/15 09:05	04/01/15 19:38	108-67-8	
Vinyl chloride	ND	ug/kg	26.9	1	04/01/15 09:05	04/01/15 19:38	75-01-4	
Xylene (Total)	ND	ug/kg	202	1	04/01/15 09:05	04/01/15 19:38	1330-20-7	
Surrogates								
1,2-Dichloroethane-d4 (S)	91	%.	55-150	1	04/01/15 09:05	04/01/15 19:38	17060-07-0	
Toluene-d8 (S)	101	%.	61-125	1	04/01/15 09:05	04/01/15 19:38	2037-26-5	
4-Bromofluorobenzene (S)	98	%.	54-131	1	04/01/15 09:05	04/01/15 19:38	460-00-4	

Sample: GP4 2-4 **Lab ID: 10300801004** Collected: 03/24/15 13:20 Received: 03/26/15 18:07 Matrix: Solid

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

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Dry Weight	Analytical Method: ASTM D2974							
Percent Moisture	**24.4**	%	0.10	1		03/27/15 12:32		
8270D MSSV PAH by SIM	Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3550							
Acenaphthene	**246**	ug/kg	13.2	1	03/27/15 11:21	03/30/15 16:50	83-32-9	
Acenaphthylene	**163**	ug/kg	13.2	1	03/27/15 11:21	03/30/15 16:50	208-96-8	
Anthracene	**406**	ug/kg	13.2	1	03/27/15 11:21	03/30/15 16:50	120-12-7	
Benzo(a)anthracene	**980**	ug/kg	132	10	03/27/15 11:21	03/31/15 12:13	56-55-3	
Benzo(a)pyrene	**1150**	ug/kg	132	10	03/27/15 11:21	03/31/15 12:13	50-32-8	
Benzo(b)fluoranthene	**1500**	ug/kg	132	10	03/27/15 11:21	03/31/15 12:13	205-99-2	
Benzo(g,h,i)perylene	**751**	ug/kg	132	10	03/27/15 11:21	03/31/15 12:13	191-24-2	
Benzo(k)fluoranthene	**601**	ug/kg	132	10	03/27/15 11:21	03/31/15 12:13	207-08-9	
Chrysene	**1250**	ug/kg	132	10	03/27/15 11:21	03/31/15 12:13	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	13.2	1	03/27/15 11:21	03/30/15 16:50	53-70-3	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

ANALYTICAL RESULTS

Project: 14-1004 FSY
Pace Project No.: 10300801

Sample: GP4 2-4 **Lab ID: 10300801004** Collected: 03/24/15 13:20 Received: 03/26/15 18:07 Matrix: Solid

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

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8270D MSSV PAH by SIM	Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3550							
Fluoranthene	**2800**	ug/kg	132	10	03/27/15 11:21	03/31/15 12:13	206-44-0	
Fluorene	**268**	ug/kg	13.2	1	03/27/15 11:21	03/30/15 16:50	86-73-7	
Indeno(1,2,3-cd)pyrene	**648**	ug/kg	132	10	03/27/15 11:21	03/31/15 12:13	193-39-5	
Naphthalene	**275**	ug/kg	13.2	1	03/27/15 11:21	03/30/15 16:50	91-20-3	
Phenanthrene	**2660**	ug/kg	132	10	03/27/15 11:21	03/31/15 12:13	85-01-8	
Pyrene	**3870**	ug/kg	132	10	03/27/15 11:21	03/31/15 12:13	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	56	%.	55-125	1	03/27/15 11:21	03/30/15 16:50	321-60-8	
p-Terphenyl-d14 (S)	64	%.	30-150	1	03/27/15 11:21	03/30/15 16:50	1718-51-0	
8260 MSV 5030 Med Level	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B							
Acetone	ND	ug/kg	1270	1	04/01/15 09:05	04/01/15 22:19	67-64-1	
Allyl chloride	ND	ug/kg	254	1	04/01/15 09:05	04/01/15 22:19	107-05-1	
Benzene	ND	ug/kg	25.4	1	04/01/15 09:05	04/01/15 22:19	71-43-2	
Bromobenzene	ND	ug/kg	63.6	1	04/01/15 09:05	04/01/15 22:19	108-86-1	
Bromochloromethane	ND	ug/kg	254	1	04/01/15 09:05	04/01/15 22:19	74-97-5	
Bromodichloromethane	ND	ug/kg	63.6	1	04/01/15 09:05	04/01/15 22:19	75-27-4	
Bromoform	ND	ug/kg	254	1	04/01/15 09:05	04/01/15 22:19	75-25-2	
Bromomethane	ND	ug/kg	636	1	04/01/15 09:05	04/01/15 22:19	74-83-9	
2-Butanone (MEK)	ND	ug/kg	318	1	04/01/15 09:05	04/01/15 22:19	78-93-3	
n-Butylbenzene	ND	ug/kg	63.6	1	04/01/15 09:05	04/01/15 22:19	104-51-8	
sec-Butylbenzene	ND	ug/kg	63.6	1	04/01/15 09:05	04/01/15 22:19	135-98-8	
tert-Butylbenzene	ND	ug/kg	63.6	1	04/01/15 09:05	04/01/15 22:19	98-06-6	
Carbon tetrachloride	ND	ug/kg	254	1	04/01/15 09:05	04/01/15 22:19	56-23-5	
Chlorobenzene	ND	ug/kg	63.6	1	04/01/15 09:05	04/01/15 22:19	108-90-7	
Chloroethane	ND	ug/kg	636	1	04/01/15 09:05	04/01/15 22:19	75-00-3	
Chloroform	ND	ug/kg	63.6	1	04/01/15 09:05	04/01/15 22:19	67-66-3	
Chloromethane	ND	ug/kg	254	1	04/01/15 09:05	04/01/15 22:19	74-87-3	
2-Chlorotoluene	ND	ug/kg	63.6	1	04/01/15 09:05	04/01/15 22:19	95-49-8	
4-Chlorotoluene	ND	ug/kg	63.6	1	04/01/15 09:05	04/01/15 22:19	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/kg	636	1	04/01/15 09:05	04/01/15 22:19	96-12-8	
Dibromochloromethane	ND	ug/kg	63.6	1	04/01/15 09:05	04/01/15 22:19	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/kg	63.6	1	04/01/15 09:05	04/01/15 22:19	106-93-4	
Dibromomethane	ND	ug/kg	63.6	1	04/01/15 09:05	04/01/15 22:19	74-95-3	
1,2-Dichlorobenzene	ND	ug/kg	63.6	1	04/01/15 09:05	04/01/15 22:19	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	63.6	1	04/01/15 09:05	04/01/15 22:19	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	63.6	1	04/01/15 09:05	04/01/15 22:19	106-46-7	
Dichlorodifluoromethane	ND	ug/kg	254	1	04/01/15 09:05	04/01/15 22:19	75-71-8	
1,1-Dichloroethane	**142**	ug/kg	63.6	1	04/01/15 09:05	04/01/15 22:19	75-34-3	
1,2-Dichloroethane	ND	ug/kg	63.6	1	04/01/15 09:05	04/01/15 22:19	107-06-2	
1,1-Dichloroethene	ND	ug/kg	254	1	04/01/15 09:05	04/01/15 22:19	75-35-4	
cis-1,2-Dichloroethene	ND	ug/kg	63.6	1	04/01/15 09:05	04/01/15 22:19	156-59-2	
trans-1,2-Dichloroethene	ND	ug/kg	254	1	04/01/15 09:05	04/01/15 22:19	156-60-5	
Dichlorofluoromethane	ND	ug/kg	636	1	04/01/15 09:05	04/01/15 22:19	75-43-4	
1,2-Dichloropropane	ND	ug/kg	63.6	1	04/01/15 09:05	04/01/15 22:19	78-87-5	
1,3-Dichloropropane	ND	ug/kg	63.6	1	04/01/15 09:05	04/01/15 22:19	142-28-9	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

ANALYTICAL RESULTS

Project: 14-1004 FSY
Pace Project No.: 10300801

Sample: GP4 2-4 **Lab ID: 10300801004** Collected: 03/24/15 13:20 Received: 03/26/15 18:07 Matrix: Solid

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

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5030 Med Level	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B							
2,2-Dichloropropane	ND	ug/kg	254	1	04/01/15 09:05	04/01/15 22:19	594-20-7	
1,1-Dichloropropene	ND	ug/kg	63.6	1	04/01/15 09:05	04/01/15 22:19	563-58-6	
cis-1,3-Dichloropropene	ND	ug/kg	63.6	1	04/01/15 09:05	04/01/15 22:19	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/kg	63.6	1	04/01/15 09:05	04/01/15 22:19	10061-02-6	
Diethyl ether (Ethyl ether)	ND	ug/kg	254	1	04/01/15 09:05	04/01/15 22:19	60-29-7	
Ethylbenzene	ND	ug/kg	63.6	1	04/01/15 09:05	04/01/15 22:19	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/kg	318	1	04/01/15 09:05	04/01/15 22:19	87-68-3	
Isopropylbenzene (Cumene)	ND	ug/kg	63.6	1	04/01/15 09:05	04/01/15 22:19	98-82-8	
p-Isopropyltoluene	ND	ug/kg	63.6	1	04/01/15 09:05	04/01/15 22:19	99-87-6	
Methylene Chloride	ND	ug/kg	254	1	04/01/15 09:05	04/01/15 22:19	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	318	1	04/01/15 09:05	04/01/15 22:19	108-10-1	
Methyl-tert-butyl ether	ND	ug/kg	63.6	1	04/01/15 09:05	04/01/15 22:19	1634-04-4	
Naphthalene	ND	ug/kg	254	1	04/01/15 09:05	04/01/15 22:19	91-20-3	
n-Propylbenzene	ND	ug/kg	63.6	1	04/01/15 09:05	04/01/15 22:19	103-65-1	
Styrene	ND	ug/kg	63.6	1	04/01/15 09:05	04/01/15 22:19	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/kg	63.6	1	04/01/15 09:05	04/01/15 22:19	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/kg	63.6	1	04/01/15 09:05	04/01/15 22:19	79-34-5	
Tetrachloroethene	ND	ug/kg	63.6	1	04/01/15 09:05	04/01/15 22:19	127-18-4	
Tetrahydrofuran	ND	ug/kg	2540	1	04/01/15 09:05	04/01/15 22:19	109-99-9	
Toluene	ND	ug/kg	63.6	1	04/01/15 09:05	04/01/15 22:19	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/kg	63.6	1	04/01/15 09:05	04/01/15 22:19	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/kg	63.6	1	04/01/15 09:05	04/01/15 22:19	120-82-1	
1,1,1-Trichloroethane	ND	ug/kg	63.6	1	04/01/15 09:05	04/01/15 22:19	71-55-6	
1,1,2-Trichloroethane	ND	ug/kg	63.6	1	04/01/15 09:05	04/01/15 22:19	79-00-5	
Trichloroethene	ND	ug/kg	63.6	1	04/01/15 09:05	04/01/15 22:19	79-01-6	
Trichlorofluoromethane	ND	ug/kg	254	1	04/01/15 09:05	04/01/15 22:19	75-69-4	
1,2,3-Trichloropropane	ND	ug/kg	254	1	04/01/15 09:05	04/01/15 22:19	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/kg	254	1	04/01/15 09:05	04/01/15 22:19	76-13-1	
1,2,4-Trimethylbenzene	**142**	ug/kg	63.6	1	04/01/15 09:05	04/01/15 22:19	95-63-6	
1,3,5-Trimethylbenzene	**103**	ug/kg	63.6	1	04/01/15 09:05	04/01/15 22:19	108-67-8	
Vinyl chloride	ND	ug/kg	25.4	1	04/01/15 09:05	04/01/15 22:19	75-01-4	
Xylene (Total)	ND	ug/kg	191	1	04/01/15 09:05	04/01/15 22:19	1330-20-7	
Surrogates								
1,2-Dichloroethane-d4 (S)	90	%.	55-150	1	04/01/15 09:05	04/01/15 22:19	17060-07-0	
Toluene-d8 (S)	102	%.	61-125	1	04/01/15 09:05	04/01/15 22:19	2037-26-5	
4-Bromofluorobenzene (S)	98	%.	54-131	1	04/01/15 09:05	04/01/15 22:19	460-00-4	

Sample: GP5 4-8 **Lab ID: 10300801005** Collected: 03/25/15 10:30 Received: 03/26/15 18:07 Matrix: Solid

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

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Dry Weight	Analytical Method: ASTM D2974							
Percent Moisture	**19.5**	%	0.10	1		03/27/15 12:32		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

ANALYTICAL RESULTS

Project: 14-1004 FSY
Pace Project No.: 10300801

Sample: GP5 4-8 **Lab ID: 10300801005** Collected: 03/25/15 10:30 Received: 03/26/15 18:07 Matrix: Solid

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

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8270D MSSV PAH by SIM	Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3550							
Acenaphthene	**3080**	ug/kg	621	50	03/27/15 11:21	03/31/15 11:08	83-32-9	
Acenaphthylene	ND	ug/kg	621	50	03/27/15 11:21	03/31/15 11:08	208-96-8	
Anthracene	ND	ug/kg	621	50	03/27/15 11:21	03/31/15 11:08	120-12-7	
Benzo(a)anthracene	ND	ug/kg	621	50	03/27/15 11:21	03/31/15 11:08	56-55-3	
Benzo(a)pyrene	ND	ug/kg	621	50	03/27/15 11:21	03/31/15 11:08	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	621	50	03/27/15 11:21	03/31/15 11:08	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	621	50	03/27/15 11:21	03/31/15 11:08	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	621	50	03/27/15 11:21	03/31/15 11:08	207-08-9	
Chrysene	ND	ug/kg	621	50	03/27/15 11:21	03/31/15 11:08	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	621	50	03/27/15 11:21	03/31/15 11:08	53-70-3	
Fluoranthene	ND	ug/kg	621	50	03/27/15 11:21	03/31/15 11:08	206-44-0	
Fluorene	**2190**	ug/kg	621	50	03/27/15 11:21	03/31/15 11:08	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	621	50	03/27/15 11:21	03/31/15 11:08	193-39-5	
Naphthalene	**39000**	ug/kg	1240	100	03/27/15 11:21	03/31/15 11:52	91-20-3	
Phenanthrene	**3560**	ug/kg	621	50	03/27/15 11:21	03/31/15 11:08	85-01-8	
Pyrene	**1730**	ug/kg	621	50	03/27/15 11:21	03/31/15 11:08	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	179	%.	55-125	50	03/27/15 11:21	03/31/15 11:08	321-60-8	D3,S4
p-Terphenyl-d14 (S)	48	%.	30-150	50	03/27/15 11:21	03/31/15 11:08	1718-51-0	
8260 MSV 5030 Med Level	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B							
Acetone	ND	ug/kg	6210	5	04/01/15 14:03	04/08/15 02:17	67-64-1	
Allyl chloride	ND	ug/kg	1240	5	04/01/15 14:03	04/08/15 02:17	107-05-1	
Benzene	ND	ug/kg	124	5	04/01/15 14:03	04/08/15 02:17	71-43-2	
Bromobenzene	ND	ug/kg	310	5	04/01/15 14:03	04/08/15 02:17	108-86-1	
Bromochloromethane	ND	ug/kg	310	5	04/01/15 14:03	04/08/15 02:17	74-97-5	
Bromodichloromethane	ND	ug/kg	310	5	04/01/15 14:03	04/08/15 02:17	75-27-4	
Bromoform	ND	ug/kg	1240	5	04/01/15 14:03	04/08/15 02:17	75-25-2	
Bromomethane	ND	ug/kg	3100	5	04/01/15 14:03	04/08/15 02:17	74-83-9	
2-Butanone (MEK)	ND	ug/kg	1550	5	04/01/15 14:03	04/08/15 02:17	78-93-3	
n-Butylbenzene	ND	ug/kg	310	5	04/01/15 14:03	04/08/15 02:17	104-51-8	
sec-Butylbenzene	ND	ug/kg	310	5	04/01/15 14:03	04/08/15 02:17	135-98-8	
tert-Butylbenzene	ND	ug/kg	310	5	04/01/15 14:03	04/08/15 02:17	98-06-6	
Carbon tetrachloride	ND	ug/kg	310	5	04/01/15 14:03	04/08/15 02:17	56-23-5	
Chlorobenzene	ND	ug/kg	310	5	04/01/15 14:03	04/08/15 02:17	108-90-7	
Chloroethane	ND	ug/kg	3100	5	04/01/15 14:03	04/08/15 02:17	75-00-3	
Chloroform	ND	ug/kg	310	5	04/01/15 14:03	04/08/15 02:17	67-66-3	
Chloromethane	ND	ug/kg	1240	5	04/01/15 14:03	04/08/15 02:17	74-87-3	
2-Chlorotoluene	ND	ug/kg	310	5	04/01/15 14:03	04/08/15 02:17	95-49-8	
4-Chlorotoluene	ND	ug/kg	310	5	04/01/15 14:03	04/08/15 02:17	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/kg	3100	5	04/01/15 14:03	04/08/15 02:17	96-12-8	
Dibromochloromethane	ND	ug/kg	310	5	04/01/15 14:03	04/08/15 02:17	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/kg	310	5	04/01/15 14:03	04/08/15 02:17	106-93-4	
Dibromomethane	ND	ug/kg	310	5	04/01/15 14:03	04/08/15 02:17	74-95-3	
1,2-Dichlorobenzene	ND	ug/kg	310	5	04/01/15 14:03	04/08/15 02:17	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	310	5	04/01/15 14:03	04/08/15 02:17	541-73-1	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

ANALYTICAL RESULTS

Project: 14-1004 FSY
Pace Project No.: 10300801

Sample: GP5 4-8 **Lab ID: 10300801005** Collected: 03/25/15 10:30 Received: 03/26/15 18:07 Matrix: Solid

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

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5030 Med Level	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B							
1,4-Dichlorobenzene	ND	ug/kg	310	5	04/01/15 14:03	04/08/15 02:17	106-46-7	
Dichlorodifluoromethane	ND	ug/kg	1240	5	04/01/15 14:03	04/08/15 02:17	75-71-8	
1,1-Dichloroethane	ND	ug/kg	310	5	04/01/15 14:03	04/08/15 02:17	75-34-3	
1,2-Dichloroethane	ND	ug/kg	310	5	04/01/15 14:03	04/08/15 02:17	107-06-2	
1,1-Dichloroethene	ND	ug/kg	310	5	04/01/15 14:03	04/08/15 02:17	75-35-4	
cis-1,2-Dichloroethene	ND	ug/kg	310	5	04/01/15 14:03	04/08/15 02:17	156-59-2	
trans-1,2-Dichloroethene	ND	ug/kg	310	5	04/01/15 14:03	04/08/15 02:17	156-60-5	
Dichlorofluoromethane	ND	ug/kg	3100	5	04/01/15 14:03	04/08/15 02:17	75-43-4	
1,2-Dichloropropane	ND	ug/kg	310	5	04/01/15 14:03	04/08/15 02:17	78-87-5	
1,3-Dichloropropane	ND	ug/kg	310	5	04/01/15 14:03	04/08/15 02:17	142-28-9	
2,2-Dichloropropane	ND	ug/kg	1240	5	04/01/15 14:03	04/08/15 02:17	594-20-7	
1,1-Dichloropropene	ND	ug/kg	310	5	04/01/15 14:03	04/08/15 02:17	563-58-6	
cis-1,3-Dichloropropene	ND	ug/kg	310	5	04/01/15 14:03	04/08/15 02:17	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/kg	310	5	04/01/15 14:03	04/08/15 02:17	10061-02-6	
Diethyl ether (Ethyl ether)	ND	ug/kg	1240	5	04/01/15 14:03	04/08/15 02:17	60-29-7	
Ethylbenzene	ND	ug/kg	310	5	04/01/15 14:03	04/08/15 02:17	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/kg	1550	5	04/01/15 14:03	04/08/15 02:17	87-68-3	
Isopropylbenzene (Cumene)	ND	ug/kg	310	5	04/01/15 14:03	04/08/15 02:17	98-82-8	
p-Isopropyltoluene	**1880**	ug/kg	310	5	04/01/15 14:03	04/08/15 02:17	99-87-6	
Methylene Chloride	ND	ug/kg	1240	5	04/01/15 14:03	04/08/15 02:17	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	1550	5	04/01/15 14:03	04/08/15 02:17	108-10-1	
Methyl-tert-butyl ether	ND	ug/kg	310	5	04/01/15 14:03	04/08/15 02:17	1634-04-4	
Naphthalene	**18800**	ug/kg	1240	5	04/01/15 14:03	04/08/15 02:17	91-20-3	
n-Propylbenzene	ND	ug/kg	310	5	04/01/15 14:03	04/08/15 02:17	103-65-1	
Styrene	ND	ug/kg	310	5	04/01/15 14:03	04/08/15 02:17	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/kg	310	5	04/01/15 14:03	04/08/15 02:17	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/kg	310	5	04/01/15 14:03	04/08/15 02:17	79-34-5	
Tetrachloroethene	ND	ug/kg	310	5	04/01/15 14:03	04/08/15 02:17	127-18-4	
Tetrahydrofuran	ND	ug/kg	12400	5	04/01/15 14:03	04/08/15 02:17	109-99-9	
Toluene	ND	ug/kg	621	5	04/01/15 14:03	04/08/15 02:17	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/kg	310	5	04/01/15 14:03	04/08/15 02:17	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/kg	310	5	04/01/15 14:03	04/08/15 02:17	120-82-1	
1,1,1-Trichloroethane	ND	ug/kg	310	5	04/01/15 14:03	04/08/15 02:17	71-55-6	
1,1,2-Trichloroethane	ND	ug/kg	310	5	04/01/15 14:03	04/08/15 02:17	79-00-5	
Trichloroethene	ND	ug/kg	310	5	04/01/15 14:03	04/08/15 02:17	79-01-6	
Trichlorofluoromethane	ND	ug/kg	1240	5	04/01/15 14:03	04/08/15 02:17	75-69-4	
1,2,3-Trichloropropane	ND	ug/kg	1240	5	04/01/15 14:03	04/08/15 02:17	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/kg	3100	5	04/01/15 14:03	04/08/15 02:17	76-13-1	
1,2,4-Trimethylbenzene	**6390**	ug/kg	310	5	04/01/15 14:03	04/08/15 02:17	95-63-6	
1,3,5-Trimethylbenzene	**3000**	ug/kg	310	5	04/01/15 14:03	04/08/15 02:17	108-67-8	
Vinyl chloride	ND	ug/kg	124	5	04/01/15 14:03	04/08/15 02:17	75-01-4	
Xylene (Total)	**1830**	ug/kg	931	5	04/01/15 14:03	04/08/15 02:17	1330-20-7	
Surrogates								
1,2-Dichloroethane-d4 (S)	87	%.	55-150	5	04/01/15 14:03	04/08/15 02:17	17060-07-0	
Toluene-d8 (S)	97	%.	61-125	5	04/01/15 14:03	04/08/15 02:17	2037-26-5	
4-Bromofluorobenzene (S)	103	%.	54-131	5	04/01/15 14:03	04/08/15 02:17	460-00-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

ANALYTICAL RESULTS

Project: 14-1004 FSY
Pace Project No.: 10300801

Sample: GP6 4-8 **Lab ID: 10300801006** Collected: 03/24/15 16:00 Received: 03/26/15 18:07 Matrix: Solid

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

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Dry Weight	Analytical Method: ASTM D2974							
Percent Moisture	**49.1**	%	0.10	1		03/27/15 12:33		
8270D MSSV PAH by SIM	Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3550							
Acenaphthene	**6970**	ug/kg	979	50	03/27/15 11:21	03/31/15 10:25	83-32-9	
Acenaphthylene	ND	ug/kg	979	50	03/27/15 11:21	03/31/15 10:25	208-96-8	
Anthracene	ND	ug/kg	979	50	03/27/15 11:21	03/31/15 10:25	120-12-7	
Benzo(a)anthracene	ND	ug/kg	979	50	03/27/15 11:21	03/31/15 10:25	56-55-3	
Benzo(a)pyrene	ND	ug/kg	979	50	03/27/15 11:21	03/31/15 10:25	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	979	50	03/27/15 11:21	03/31/15 10:25	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	979	50	03/27/15 11:21	03/31/15 10:25	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	979	50	03/27/15 11:21	03/31/15 10:25	207-08-9	
Chrysene	ND	ug/kg	979	50	03/27/15 11:21	03/31/15 10:25	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	979	50	03/27/15 11:21	03/31/15 10:25	53-70-3	
Fluoranthene	ND	ug/kg	979	50	03/27/15 11:21	03/31/15 10:25	206-44-0	
Fluorene	**3640**	ug/kg	979	50	03/27/15 11:21	03/31/15 10:25	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	979	50	03/27/15 11:21	03/31/15 10:25	193-39-5	
Naphthalene	**83800**	ug/kg	3920	200	03/27/15 11:21	03/31/15 11:30	91-20-3	
Phenanthrene	**2470**	ug/kg	979	50	03/27/15 11:21	03/31/15 10:25	85-01-8	
Pyrene	**2800**	ug/kg	979	50	03/27/15 11:21	03/31/15 10:25	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	505	%.	55-125	50	03/27/15 11:21	03/31/15 10:25	321-60-8	D3,S4
p-Terphenyl-d14 (S)	49	%.	30-150	50	03/27/15 11:21	03/31/15 10:25	1718-51-0	
8260 MSV 5030 Med Level	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B							
Acetone	ND	ug/kg	1900	1	04/01/15 09:05	04/01/15 22:39	67-64-1	
Allyl chloride	ND	ug/kg	379	1	04/01/15 09:05	04/01/15 22:39	107-05-1	
Benzene	ND	ug/kg	37.9	1	04/01/15 09:05	04/01/15 22:39	71-43-2	
Bromobenzene	ND	ug/kg	94.9	1	04/01/15 09:05	04/01/15 22:39	108-86-1	
Bromochloromethane	ND	ug/kg	379	1	04/01/15 09:05	04/01/15 22:39	74-97-5	
Bromodichloromethane	ND	ug/kg	94.9	1	04/01/15 09:05	04/01/15 22:39	75-27-4	
Bromoform	ND	ug/kg	379	1	04/01/15 09:05	04/01/15 22:39	75-25-2	
Bromomethane	ND	ug/kg	949	1	04/01/15 09:05	04/01/15 22:39	74-83-9	
2-Butanone (MEK)	ND	ug/kg	474	1	04/01/15 09:05	04/01/15 22:39	78-93-3	
n-Butylbenzene	**4980**	ug/kg	94.9	1	04/01/15 09:05	04/01/15 22:39	104-51-8	
sec-Butylbenzene	**320**	ug/kg	94.9	1	04/01/15 09:05	04/01/15 22:39	135-98-8	
tert-Butylbenzene	ND	ug/kg	94.9	1	04/01/15 09:05	04/01/15 22:39	98-06-6	
Carbon tetrachloride	ND	ug/kg	379	1	04/01/15 09:05	04/01/15 22:39	56-23-5	
Chlorobenzene	ND	ug/kg	94.9	1	04/01/15 09:05	04/01/15 22:39	108-90-7	
Chloroethane	ND	ug/kg	949	1	04/01/15 09:05	04/01/15 22:39	75-00-3	
Chloroform	ND	ug/kg	94.9	1	04/01/15 09:05	04/01/15 22:39	67-66-3	
Chloromethane	ND	ug/kg	379	1	04/01/15 09:05	04/01/15 22:39	74-87-3	
2-Chlorotoluene	ND	ug/kg	94.9	1	04/01/15 09:05	04/01/15 22:39	95-49-8	
4-Chlorotoluene	ND	ug/kg	94.9	1	04/01/15 09:05	04/01/15 22:39	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/kg	949	1	04/01/15 09:05	04/01/15 22:39	96-12-8	
Dibromochloromethane	ND	ug/kg	94.9	1	04/01/15 09:05	04/01/15 22:39	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/kg	94.9	1	04/01/15 09:05	04/01/15 22:39	106-93-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

ANALYTICAL RESULTS

Project: 14-1004 FSY
Pace Project No.: 10300801

Sample: GP6 4-8 **Lab ID: 10300801006** Collected: 03/24/15 16:00 Received: 03/26/15 18:07 Matrix: Solid

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

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5030 Med Level	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B							
Dibromomethane	ND	ug/kg	94.9	1	04/01/15 09:05	04/01/15 22:39	74-95-3	
1,2-Dichlorobenzene	ND	ug/kg	94.9	1	04/01/15 09:05	04/01/15 22:39	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	94.9	1	04/01/15 09:05	04/01/15 22:39	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	94.9	1	04/01/15 09:05	04/01/15 22:39	106-46-7	
Dichlorodifluoromethane	ND	ug/kg	379	1	04/01/15 09:05	04/01/15 22:39	75-71-8	
1,1-Dichloroethane	ND	ug/kg	94.9	1	04/01/15 09:05	04/01/15 22:39	75-34-3	
1,2-Dichloroethane	ND	ug/kg	94.9	1	04/01/15 09:05	04/01/15 22:39	107-06-2	
1,1-Dichloroethene	ND	ug/kg	379	1	04/01/15 09:05	04/01/15 22:39	75-35-4	
cis-1,2-Dichloroethene	ND	ug/kg	94.9	1	04/01/15 09:05	04/01/15 22:39	156-59-2	
trans-1,2-Dichloroethene	ND	ug/kg	379	1	04/01/15 09:05	04/01/15 22:39	156-60-5	
Dichlorofluoromethane	ND	ug/kg	949	1	04/01/15 09:05	04/01/15 22:39	75-43-4	
1,2-Dichloropropane	ND	ug/kg	94.9	1	04/01/15 09:05	04/01/15 22:39	78-87-5	
1,3-Dichloropropane	ND	ug/kg	94.9	1	04/01/15 09:05	04/01/15 22:39	142-28-9	
2,2-Dichloropropane	ND	ug/kg	379	1	04/01/15 09:05	04/01/15 22:39	594-20-7	
1,1-Dichloropropene	ND	ug/kg	94.9	1	04/01/15 09:05	04/01/15 22:39	563-58-6	
cis-1,3-Dichloropropene	ND	ug/kg	94.9	1	04/01/15 09:05	04/01/15 22:39	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/kg	94.9	1	04/01/15 09:05	04/01/15 22:39	10061-02-6	
Diethyl ether (Ethyl ether)	ND	ug/kg	379	1	04/01/15 09:05	04/01/15 22:39	60-29-7	
Ethylbenzene	**301**	ug/kg	94.9	1	04/01/15 09:05	04/01/15 22:39	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/kg	474	1	04/01/15 09:05	04/01/15 22:39	87-68-3	
Isopropylbenzene (Cumene)	**268**	ug/kg	94.9	1	04/01/15 09:05	04/01/15 22:39	98-82-8	
p-Isopropyltoluene	**1680**	ug/kg	94.9	1	04/01/15 09:05	04/01/15 22:39	99-87-6	
Methylene Chloride	ND	ug/kg	379	1	04/01/15 09:05	04/01/15 22:39	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	474	1	04/01/15 09:05	04/01/15 22:39	108-10-1	
Methyl-tert-butyl ether	ND	ug/kg	94.9	1	04/01/15 09:05	04/01/15 22:39	1634-04-4	
Naphthalene	**67500**	ug/kg	1900	5	04/01/15 09:05	04/08/15 15:19	91-20-3	
n-Propylbenzene	**553**	ug/kg	94.9	1	04/01/15 09:05	04/01/15 22:39	103-65-1	
Styrene	ND	ug/kg	94.9	1	04/01/15 09:05	04/01/15 22:39	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/kg	94.9	1	04/01/15 09:05	04/01/15 22:39	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/kg	94.9	1	04/01/15 09:05	04/01/15 22:39	79-34-5	
Tetrachloroethene	ND	ug/kg	94.9	1	04/01/15 09:05	04/01/15 22:39	127-18-4	
Tetrahydrofuran	ND	ug/kg	3790	1	04/01/15 09:05	04/01/15 22:39	109-99-9	
Toluene	ND	ug/kg	190	1	04/01/15 09:05	04/01/15 22:39	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/kg	94.9	1	04/01/15 09:05	04/01/15 22:39	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/kg	94.9	1	04/01/15 09:05	04/01/15 22:39	120-82-1	
1,1,1-Trichloroethane	ND	ug/kg	94.9	1	04/01/15 09:05	04/01/15 22:39	71-55-6	
1,1,2-Trichloroethane	ND	ug/kg	94.9	1	04/01/15 09:05	04/01/15 22:39	79-00-5	
Trichloroethene	ND	ug/kg	94.9	1	04/01/15 09:05	04/01/15 22:39	79-01-6	
Trichlorofluoromethane	ND	ug/kg	379	1	04/01/15 09:05	04/01/15 22:39	75-69-4	
1,2,3-Trichloropropane	ND	ug/kg	379	1	04/01/15 09:05	04/01/15 22:39	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/kg	379	1	04/01/15 09:05	04/01/15 22:39	76-13-1	
1,2,4-Trimethylbenzene	**13100**	ug/kg	94.9	1	04/01/15 09:05	04/01/15 22:39	95-63-6	
1,3,5-Trimethylbenzene	**4720**	ug/kg	94.9	1	04/01/15 09:05	04/01/15 22:39	108-67-8	
Vinyl chloride	ND	ug/kg	37.9	1	04/01/15 09:05	04/01/15 22:39	75-01-4	
Xylene (Total)	**4570**	ug/kg	285	1	04/01/15 09:05	04/01/15 22:39	1330-20-7	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
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ANALYTICAL RESULTS

Project: 14-1004 FSY
Pace Project No.: 10300801

Sample: GP6 4-8 **Lab ID: 10300801006** Collected: 03/24/15 16:00 Received: 03/26/15 18:07 Matrix: Solid

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

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5030 Med Level	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B							
Surrogates								
1,2-Dichloroethane-d4 (S)	91	%.	55-150	1	04/01/15 09:05	04/01/15 22:39	17060-07-0	
Toluene-d8 (S)	105	%.	61-125	1	04/01/15 09:05	04/01/15 22:39	2037-26-5	
4-Bromofluorobenzene (S)	93	%.	54-131	1	04/01/15 09:05	04/01/15 22:39	460-00-4	

Sample: GP7 2-4 **Lab ID: 10300801007** Collected: 03/24/15 14:00 Received: 03/26/15 18:07 Matrix: Solid

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

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Dry Weight	Analytical Method: ASTM D2974							
Percent Moisture	**13.0**	%	0.10	1		03/27/15 12:33		
8270D MSSV PAH by SIM	Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3550							
Acenaphthene	**121000**	ug/kg	5730	50	03/27/15 11:21	03/31/15 12:35	83-32-9	
Acenaphthylene	**1070**	ug/kg	573	5	03/27/15 11:21	03/30/15 18:17	208-96-8	
Anthracene	**182000**	ug/kg	5730	50	03/27/15 11:21	03/31/15 12:35	120-12-7	
Benzo(a)anthracene	**215000**	ug/kg	11500	100	03/27/15 11:21	03/31/15 12:57	56-55-3	
Benzo(a)pyrene	**204000**	ug/kg	11500	100	03/27/15 11:21	03/31/15 12:57	50-32-8	
Benzo(b)fluoranthene	**237000**	ug/kg	11500	100	03/27/15 11:21	03/31/15 12:57	205-99-2	
Benzo(g,h,i)perylene	**113000**	ug/kg	5730	50	03/27/15 11:21	03/31/15 12:35	191-24-2	
Benzo(k)fluoranthene	**101000**	ug/kg	5730	50	03/27/15 11:21	03/31/15 12:35	207-08-9	
Chrysene	**207000**	ug/kg	11500	100	03/27/15 11:21	03/31/15 12:57	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	573	5	03/27/15 11:21	03/30/15 18:17	53-70-3	
Fluoranthene	**645000**	ug/kg	57300	500	03/27/15 11:21	03/31/15 13:40	206-44-0	
Fluorene	**112000**	ug/kg	5730	50	03/27/15 11:21	03/31/15 12:35	86-73-7	
Indeno(1,2,3-cd)pyrene	**105000**	ug/kg	5730	50	03/27/15 11:21	03/31/15 12:35	193-39-5	
Naphthalene	**80200**	ug/kg	5730	50	03/27/15 11:21	03/31/15 12:35	91-20-3	
Phenanthrene	**838000**	ug/kg	57300	500	03/27/15 11:21	03/31/15 13:40	85-01-8	
Pyrene	**684000**	ug/kg	57300	500	03/27/15 11:21	03/31/15 13:40	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	98	%.	55-125	5	03/27/15 11:21	03/30/15 18:17	321-60-8	D3,P3
p-Terphenyl-d14 (S)	281	%.	30-150	5	03/27/15 11:21	03/30/15 18:17	1718-51-0	S4
8260 MSV 5030 Med Level	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B							
Acetone	ND	ug/kg	1160	1	04/01/15 09:05	04/02/15 00:18	67-64-1	
Allyl chloride	ND	ug/kg	232	1	04/01/15 09:05	04/02/15 00:18	107-05-1	
Benzene	ND	ug/kg	23.2	1	04/01/15 09:05	04/02/15 00:18	71-43-2	
Bromobenzene	ND	ug/kg	58.0	1	04/01/15 09:05	04/02/15 00:18	108-86-1	
Bromochloromethane	ND	ug/kg	232	1	04/01/15 09:05	04/02/15 00:18	74-97-5	
Bromodichloromethane	ND	ug/kg	58.0	1	04/01/15 09:05	04/02/15 00:18	75-27-4	
Bromoform	ND	ug/kg	232	1	04/01/15 09:05	04/02/15 00:18	75-25-2	
Bromomethane	ND	ug/kg	580	1	04/01/15 09:05	04/02/15 00:18	74-83-9	
2-Butanone (MEK)	ND	ug/kg	290	1	04/01/15 09:05	04/02/15 00:18	78-93-3	
n-Butylbenzene	**107**	ug/kg	58.0	1	04/01/15 09:05	04/02/15 00:18	104-51-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

ANALYTICAL RESULTS

Project: 14-1004 FSY
Pace Project No.: 10300801

Sample: GP7 2-4 **Lab ID: 10300801007** Collected: 03/24/15 14:00 Received: 03/26/15 18:07 Matrix: Solid

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

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5030 Med Level	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B							
sec-Butylbenzene	ND	ug/kg	58.0	1	04/01/15 09:05	04/02/15 00:18	135-98-8	
tert-Butylbenzene	ND	ug/kg	58.0	1	04/01/15 09:05	04/02/15 00:18	98-06-6	
Carbon tetrachloride	ND	ug/kg	232	1	04/01/15 09:05	04/02/15 00:18	56-23-5	
Chlorobenzene	ND	ug/kg	58.0	1	04/01/15 09:05	04/02/15 00:18	108-90-7	
Chloroethane	ND	ug/kg	580	1	04/01/15 09:05	04/02/15 00:18	75-00-3	
Chloroform	ND	ug/kg	58.0	1	04/01/15 09:05	04/02/15 00:18	67-66-3	
Chloromethane	ND	ug/kg	232	1	04/01/15 09:05	04/02/15 00:18	74-87-3	
2-Chlorotoluene	ND	ug/kg	58.0	1	04/01/15 09:05	04/02/15 00:18	95-49-8	
4-Chlorotoluene	ND	ug/kg	58.0	1	04/01/15 09:05	04/02/15 00:18	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/kg	580	1	04/01/15 09:05	04/02/15 00:18	96-12-8	
Dibromochloromethane	ND	ug/kg	58.0	1	04/01/15 09:05	04/02/15 00:18	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/kg	58.0	1	04/01/15 09:05	04/02/15 00:18	106-93-4	
Dibromomethane	ND	ug/kg	58.0	1	04/01/15 09:05	04/02/15 00:18	74-95-3	
1,2-Dichlorobenzene	ND	ug/kg	58.0	1	04/01/15 09:05	04/02/15 00:18	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	58.0	1	04/01/15 09:05	04/02/15 00:18	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	58.0	1	04/01/15 09:05	04/02/15 00:18	106-46-7	
Dichlorodifluoromethane	ND	ug/kg	232	1	04/01/15 09:05	04/02/15 00:18	75-71-8	
1,1-Dichloroethane	ND	ug/kg	58.0	1	04/01/15 09:05	04/02/15 00:18	75-34-3	
1,2-Dichloroethane	ND	ug/kg	58.0	1	04/01/15 09:05	04/02/15 00:18	107-06-2	
1,1-Dichloroethene	ND	ug/kg	232	1	04/01/15 09:05	04/02/15 00:18	75-35-4	
cis-1,2-Dichloroethene	ND	ug/kg	58.0	1	04/01/15 09:05	04/02/15 00:18	156-59-2	
trans-1,2-Dichloroethene	ND	ug/kg	232	1	04/01/15 09:05	04/02/15 00:18	156-60-5	
Dichlorofluoromethane	ND	ug/kg	580	1	04/01/15 09:05	04/02/15 00:18	75-43-4	
1,2-Dichloropropane	ND	ug/kg	58.0	1	04/01/15 09:05	04/02/15 00:18	78-87-5	
1,3-Dichloropropane	ND	ug/kg	58.0	1	04/01/15 09:05	04/02/15 00:18	142-28-9	
2,2-Dichloropropane	ND	ug/kg	232	1	04/01/15 09:05	04/02/15 00:18	594-20-7	
1,1-Dichloropropene	ND	ug/kg	58.0	1	04/01/15 09:05	04/02/15 00:18	563-58-6	
cis-1,3-Dichloropropene	ND	ug/kg	58.0	1	04/01/15 09:05	04/02/15 00:18	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/kg	58.0	1	04/01/15 09:05	04/02/15 00:18	10061-02-6	
Diethyl ether (Ethyl ether)	ND	ug/kg	232	1	04/01/15 09:05	04/02/15 00:18	60-29-7	
Ethylbenzene	**88.0**	ug/kg	58.0	1	04/01/15 09:05	04/02/15 00:18	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/kg	290	1	04/01/15 09:05	04/02/15 00:18	87-68-3	
Isopropylbenzene (Cumene)	ND	ug/kg	58.0	1	04/01/15 09:05	04/02/15 00:18	98-82-8	
p-Isopropyltoluene	ND	ug/kg	58.0	1	04/01/15 09:05	04/02/15 00:18	99-87-6	
Methylene Chloride	ND	ug/kg	232	1	04/01/15 09:05	04/02/15 00:18	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	290	1	04/01/15 09:05	04/02/15 00:18	108-10-1	
Methyl-tert-butyl ether	ND	ug/kg	58.0	1	04/01/15 09:05	04/02/15 00:18	1634-04-4	
Naphthalene	**10300**	ug/kg	232	1	04/01/15 09:05	04/02/15 00:18	91-20-3	
n-Propylbenzene	ND	ug/kg	58.0	1	04/01/15 09:05	04/02/15 00:18	103-65-1	
Styrene	ND	ug/kg	58.0	1	04/01/15 09:05	04/02/15 00:18	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/kg	58.0	1	04/01/15 09:05	04/02/15 00:18	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/kg	58.0	1	04/01/15 09:05	04/02/15 00:18	79-34-5	
Tetrachloroethene	ND	ug/kg	58.0	1	04/01/15 09:05	04/02/15 00:18	127-18-4	
Tetrahydrofuran	ND	ug/kg	2320	1	04/01/15 09:05	04/02/15 00:18	109-99-9	
Toluene	**224**	ug/kg	58.0	1	04/01/15 09:05	04/02/15 00:18	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/kg	58.0	1	04/01/15 09:05	04/02/15 00:18	87-61-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

ANALYTICAL RESULTS

Project: 14-1004 FSY
Pace Project No.: 10300801

Sample: GP7 2-4 **Lab ID: 10300801007** Collected: 03/24/15 14:00 Received: 03/26/15 18:07 Matrix: Solid

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

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5030 Med Level	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B							
1,2,4-Trichlorobenzene	ND	ug/kg	58.0	1	04/01/15 09:05	04/02/15 00:18	120-82-1	
1,1,1-Trichloroethane	**460**	ug/kg	58.0	1	04/01/15 09:05	04/02/15 00:18	71-55-6	
1,1,2-Trichloroethane	ND	ug/kg	58.0	1	04/01/15 09:05	04/02/15 00:18	79-00-5	
Trichloroethene	ND	ug/kg	58.0	1	04/01/15 09:05	04/02/15 00:18	79-01-6	
Trichlorofluoromethane	ND	ug/kg	232	1	04/01/15 09:05	04/02/15 00:18	75-69-4	
1,2,3-Trichloropropane	ND	ug/kg	232	1	04/01/15 09:05	04/02/15 00:18	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/kg	232	1	04/01/15 09:05	04/02/15 00:18	76-13-1	
1,2,4-Trimethylbenzene	**200**	ug/kg	58.0	1	04/01/15 09:05	04/02/15 00:18	95-63-6	
1,3,5-Trimethylbenzene	**71.2**	ug/kg	58.0	1	04/01/15 09:05	04/02/15 00:18	108-67-8	
Vinyl chloride	ND	ug/kg	23.2	1	04/01/15 09:05	04/02/15 00:18	75-01-4	
Xylene (Total)	**749**	ug/kg	174	1	04/01/15 09:05	04/02/15 00:18	1330-20-7	
Surrogates								
1,2-Dichloroethane-d4 (S)	87	%.	55-150	1	04/01/15 09:05	04/02/15 00:18	17060-07-0	
Toluene-d8 (S)	100	%.	61-125	1	04/01/15 09:05	04/02/15 00:18	2037-26-5	
4-Bromofluorobenzene (S)	97	%.	54-131	1	04/01/15 09:05	04/02/15 00:18	460-00-4	

Sample: GP50 4-8 **Lab ID: 10300801008** Collected: 03/25/15 10:35 Received: 03/26/15 18:07 Matrix: Solid

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

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Dry Weight	Analytical Method: ASTM D2974							
Percent Moisture	**25.7**	%	0.10	1		03/27/15 12:33		
8270D MSSV PAH by SIM	Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3550							
Acenaphthene	**2240**	ug/kg	673	50	03/27/15 11:21	03/31/15 10:47	83-32-9	
Acenaphthylene	ND	ug/kg	673	50	03/27/15 11:21	03/31/15 10:47	208-96-8	
Anthracene	ND	ug/kg	673	50	03/27/15 11:21	03/31/15 10:47	120-12-7	
Benzo(a)anthracene	ND	ug/kg	673	50	03/27/15 11:21	03/31/15 10:47	56-55-3	
Benzo(a)pyrene	ND	ug/kg	673	50	03/27/15 11:21	03/31/15 10:47	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	673	50	03/27/15 11:21	03/31/15 10:47	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	673	50	03/27/15 11:21	03/31/15 10:47	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	673	50	03/27/15 11:21	03/31/15 10:47	207-08-9	
Chrysene	ND	ug/kg	673	50	03/27/15 11:21	03/31/15 10:47	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	673	50	03/27/15 11:21	03/31/15 10:47	53-70-3	
Fluoranthene	ND	ug/kg	673	50	03/27/15 11:21	03/31/15 10:47	206-44-0	
Fluorene	**1690**	ug/kg	673	50	03/27/15 11:21	03/31/15 10:47	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	673	50	03/27/15 11:21	03/31/15 10:47	193-39-5	
Naphthalene	**20000**	ug/kg	673	50	03/27/15 11:21	03/31/15 10:47	91-20-3	
Phenanthrene	**2290**	ug/kg	673	50	03/27/15 11:21	03/31/15 10:47	85-01-8	
Pyrene	**1190**	ug/kg	673	50	03/27/15 11:21	03/31/15 10:47	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	231	%.	55-125	50	03/27/15 11:21	03/31/15 10:47	321-60-8	D3,S4
p-Terphenyl-d14 (S)	48	%.	30-150	50	03/27/15 11:21	03/31/15 10:47	1718-51-0	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
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ANALYTICAL RESULTS

Project: 14-1004 FSY
Pace Project No.: 10300801

Sample: GP50 4-8 **Lab ID: 10300801008** Collected: 03/25/15 10:35 Received: 03/26/15 18:07 Matrix: Solid

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

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5030 Med Level	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B							
Acetone	ND	ug/kg	7090	5	04/02/15 15:40	04/08/15 21:12	67-64-1	
Allyl chloride	ND	ug/kg	1420	5	04/02/15 15:40	04/08/15 21:12	107-05-1	
Benzene	ND	ug/kg	142	5	04/02/15 15:40	04/08/15 21:12	71-43-2	
Bromobenzene	ND	ug/kg	354	5	04/02/15 15:40	04/08/15 21:12	108-86-1	
Bromochloromethane	ND	ug/kg	354	5	04/02/15 15:40	04/08/15 21:12	74-97-5	
Bromodichloromethane	ND	ug/kg	354	5	04/02/15 15:40	04/08/15 21:12	75-27-4	
Bromoform	ND	ug/kg	1420	5	04/02/15 15:40	04/08/15 21:12	75-25-2	
Bromomethane	ND	ug/kg	3540	5	04/02/15 15:40	04/08/15 21:12	74-83-9	
2-Butanone (MEK)	ND	ug/kg	1770	5	04/02/15 15:40	04/08/15 21:12	78-93-3	
n-Butylbenzene	**1330**	ug/kg	354	5	04/02/15 15:40	04/08/15 21:12	104-51-8	
sec-Butylbenzene	**614**	ug/kg	354	5	04/02/15 15:40	04/08/15 21:12	135-98-8	
tert-Butylbenzene	ND	ug/kg	354	5	04/02/15 15:40	04/08/15 21:12	98-06-6	
Carbon tetrachloride	ND	ug/kg	354	5	04/02/15 15:40	04/08/15 21:12	56-23-5	
Chlorobenzene	ND	ug/kg	354	5	04/02/15 15:40	04/08/15 21:12	108-90-7	
Chloroethane	ND	ug/kg	3540	5	04/02/15 15:40	04/08/15 21:12	75-00-3	
Chloroform	ND	ug/kg	354	5	04/02/15 15:40	04/08/15 21:12	67-66-3	
Chloromethane	ND	ug/kg	1420	5	04/02/15 15:40	04/08/15 21:12	74-87-3	
2-Chlorotoluene	ND	ug/kg	354	5	04/02/15 15:40	04/08/15 21:12	95-49-8	
4-Chlorotoluene	ND	ug/kg	354	5	04/02/15 15:40	04/08/15 21:12	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/kg	3540	5	04/02/15 15:40	04/08/15 21:12	96-12-8	
Dibromochloromethane	ND	ug/kg	354	5	04/02/15 15:40	04/08/15 21:12	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/kg	354	5	04/02/15 15:40	04/08/15 21:12	106-93-4	
Dibromomethane	ND	ug/kg	354	5	04/02/15 15:40	04/08/15 21:12	74-95-3	
1,2-Dichlorobenzene	ND	ug/kg	354	5	04/02/15 15:40	04/08/15 21:12	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	354	5	04/02/15 15:40	04/08/15 21:12	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	354	5	04/02/15 15:40	04/08/15 21:12	106-46-7	
Dichlorodifluoromethane	ND	ug/kg	1420	5	04/02/15 15:40	04/08/15 21:12	75-71-8	
1,1-Dichloroethane	ND	ug/kg	354	5	04/02/15 15:40	04/08/15 21:12	75-34-3	
1,2-Dichloroethane	ND	ug/kg	354	5	04/02/15 15:40	04/08/15 21:12	107-06-2	
1,1-Dichloroethene	ND	ug/kg	354	5	04/02/15 15:40	04/08/15 21:12	75-35-4	
cis-1,2-Dichloroethene	ND	ug/kg	354	5	04/02/15 15:40	04/08/15 21:12	156-59-2	
trans-1,2-Dichloroethene	ND	ug/kg	354	5	04/02/15 15:40	04/08/15 21:12	156-60-5	
Dichlorofluoromethane	ND	ug/kg	3540	5	04/02/15 15:40	04/08/15 21:12	75-43-4	
1,2-Dichloropropane	ND	ug/kg	354	5	04/02/15 15:40	04/08/15 21:12	78-87-5	
1,3-Dichloropropane	ND	ug/kg	354	5	04/02/15 15:40	04/08/15 21:12	142-28-9	
2,2-Dichloropropane	ND	ug/kg	1420	5	04/02/15 15:40	04/08/15 21:12	594-20-7	
1,1-Dichloropropene	ND	ug/kg	354	5	04/02/15 15:40	04/08/15 21:12	563-58-6	
cis-1,3-Dichloropropene	ND	ug/kg	354	5	04/02/15 15:40	04/08/15 21:12	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/kg	354	5	04/02/15 15:40	04/08/15 21:12	10061-02-6	
Diethyl ether (Ethyl ether)	ND	ug/kg	1420	5	04/02/15 15:40	04/08/15 21:12	60-29-7	
Ethylbenzene	**406**	ug/kg	354	5	04/02/15 15:40	04/08/15 21:12	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/kg	1770	5	04/02/15 15:40	04/08/15 21:12	87-68-3	
Isopropylbenzene (Cumene)	ND	ug/kg	354	5	04/02/15 15:40	04/08/15 21:12	98-82-8	
p-Isopropyltoluene	**3180**	ug/kg	354	5	04/02/15 15:40	04/08/15 21:12	99-87-6	
Methylene Chloride	ND	ug/kg	1420	5	04/02/15 15:40	04/08/15 21:12	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	1770	5	04/02/15 15:40	04/08/15 21:12	108-10-1	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
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(612)607-1700

ANALYTICAL RESULTS

Project: 14-1004 FSY
Pace Project No.: 10300801

Sample: GP50 4-8 **Lab ID: 10300801008** Collected: 03/25/15 10:35 Received: 03/26/15 18:07 Matrix: Solid

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

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5030 Med Level	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B							
Methyl-tert-butyl ether	ND	ug/kg	354	5	04/02/15 15:40	04/08/15 21:12	1634-04-4	
Naphthalene	**33700**	ug/kg	1420	5	04/02/15 15:40	04/08/15 21:12	91-20-3	
n-Propylbenzene	**527**	ug/kg	354	5	04/02/15 15:40	04/08/15 21:12	103-65-1	
Styrene	ND	ug/kg	354	5	04/02/15 15:40	04/08/15 21:12	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/kg	354	5	04/02/15 15:40	04/08/15 21:12	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/kg	354	5	04/02/15 15:40	04/08/15 21:12	79-34-5	
Tetrachloroethene	ND	ug/kg	354	5	04/02/15 15:40	04/08/15 21:12	127-18-4	
Tetrahydrofuran	ND	ug/kg	14200	5	04/02/15 15:40	04/08/15 21:12	109-99-9	
Toluene	ND	ug/kg	709	5	04/02/15 15:40	04/08/15 21:12	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/kg	354	5	04/02/15 15:40	04/08/15 21:12	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/kg	354	5	04/02/15 15:40	04/08/15 21:12	120-82-1	
1,1,1-Trichloroethane	ND	ug/kg	354	5	04/02/15 15:40	04/08/15 21:12	71-55-6	
1,1,2-Trichloroethane	ND	ug/kg	354	5	04/02/15 15:40	04/08/15 21:12	79-00-5	
Trichloroethene	ND	ug/kg	354	5	04/02/15 15:40	04/08/15 21:12	79-01-6	
Trichlorofluoromethane	ND	ug/kg	1420	5	04/02/15 15:40	04/08/15 21:12	75-69-4	
1,2,3-Trichloropropane	ND	ug/kg	1420	5	04/02/15 15:40	04/08/15 21:12	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/kg	3540	5	04/02/15 15:40	04/08/15 21:12	76-13-1	L3
1,2,4-Trimethylbenzene	**11200**	ug/kg	354	5	04/02/15 15:40	04/08/15 21:12	95-63-6	
1,3,5-Trimethylbenzene	**3720**	ug/kg	354	5	04/02/15 15:40	04/08/15 21:12	108-67-8	
Vinyl chloride	ND	ug/kg	142	5	04/02/15 15:40	04/08/15 21:12	75-01-4	
Xylene (Total)	**3280**	ug/kg	1060	5	04/02/15 15:40	04/08/15 21:12	1330-20-7	
Surrogates								
1,2-Dichloroethane-d4 (S)	90	%.	55-150	5	04/02/15 15:40	04/08/15 21:12	17060-07-0	
Toluene-d8 (S)	98	%.	61-125	5	04/02/15 15:40	04/08/15 21:12	2037-26-5	
4-Bromofluorobenzene (S)	102	%.	54-131	5	04/02/15 15:40	04/08/15 21:12	460-00-4	

Sample: Trip Blank **Lab ID: 10300801009** Collected: 03/24/15 00:00 Received: 03/26/15 18:07 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5030 Med Level	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B							
Acetone	ND	ug/kg	1000	1	04/01/15 09:05	04/01/15 16:04	67-64-1	
Allyl chloride	ND	ug/kg	200	1	04/01/15 09:05	04/01/15 16:04	107-05-1	
Benzene	ND	ug/kg	20.0	1	04/01/15 09:05	04/01/15 16:04	71-43-2	
Bromobenzene	ND	ug/kg	50.0	1	04/01/15 09:05	04/01/15 16:04	108-86-1	
Bromochloromethane	ND	ug/kg	200	1	04/01/15 09:05	04/01/15 16:04	74-97-5	
Bromodichloromethane	ND	ug/kg	50.0	1	04/01/15 09:05	04/01/15 16:04	75-27-4	
Bromoform	ND	ug/kg	200	1	04/01/15 09:05	04/01/15 16:04	75-25-2	
Bromomethane	ND	ug/kg	500	1	04/01/15 09:05	04/01/15 16:04	74-83-9	
2-Butanone (MEK)	ND	ug/kg	250	1	04/01/15 09:05	04/01/15 16:04	78-93-3	
n-Butylbenzene	ND	ug/kg	50.0	1	04/01/15 09:05	04/01/15 16:04	104-51-8	
sec-Butylbenzene	ND	ug/kg	50.0	1	04/01/15 09:05	04/01/15 16:04	135-98-8	
tert-Butylbenzene	ND	ug/kg	50.0	1	04/01/15 09:05	04/01/15 16:04	98-06-6	
Carbon tetrachloride	ND	ug/kg	200	1	04/01/15 09:05	04/01/15 16:04	56-23-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

ANALYTICAL RESULTS

Project: 14-1004 FSY
Pace Project No.: 10300801

Sample: Trip Blank **Lab ID: 10300801009** Collected: 03/24/15 00:00 Received: 03/26/15 18:07 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5030 Med Level	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B							
Chlorobenzene	ND	ug/kg	50.0	1	04/01/15 09:05	04/01/15 16:04	108-90-7	
Chloroethane	ND	ug/kg	500	1	04/01/15 09:05	04/01/15 16:04	75-00-3	
Chloroform	ND	ug/kg	50.0	1	04/01/15 09:05	04/01/15 16:04	67-66-3	
Chloromethane	ND	ug/kg	200	1	04/01/15 09:05	04/01/15 16:04	74-87-3	
2-Chlorotoluene	ND	ug/kg	50.0	1	04/01/15 09:05	04/01/15 16:04	95-49-8	
4-Chlorotoluene	ND	ug/kg	50.0	1	04/01/15 09:05	04/01/15 16:04	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/kg	500	1	04/01/15 09:05	04/01/15 16:04	96-12-8	
Dibromochloromethane	ND	ug/kg	50.0	1	04/01/15 09:05	04/01/15 16:04	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/kg	50.0	1	04/01/15 09:05	04/01/15 16:04	106-93-4	
Dibromomethane	ND	ug/kg	50.0	1	04/01/15 09:05	04/01/15 16:04	74-95-3	
1,2-Dichlorobenzene	ND	ug/kg	50.0	1	04/01/15 09:05	04/01/15 16:04	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	50.0	1	04/01/15 09:05	04/01/15 16:04	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	50.0	1	04/01/15 09:05	04/01/15 16:04	106-46-7	
Dichlorodifluoromethane	ND	ug/kg	200	1	04/01/15 09:05	04/01/15 16:04	75-71-8	
1,1-Dichloroethane	ND	ug/kg	50.0	1	04/01/15 09:05	04/01/15 16:04	75-34-3	
1,2-Dichloroethane	ND	ug/kg	50.0	1	04/01/15 09:05	04/01/15 16:04	107-06-2	
1,1-Dichloroethene	ND	ug/kg	200	1	04/01/15 09:05	04/01/15 16:04	75-35-4	
cis-1,2-Dichloroethene	ND	ug/kg	50.0	1	04/01/15 09:05	04/01/15 16:04	156-59-2	
trans-1,2-Dichloroethene	ND	ug/kg	200	1	04/01/15 09:05	04/01/15 16:04	156-60-5	
Dichlorofluoromethane	ND	ug/kg	500	1	04/01/15 09:05	04/01/15 16:04	75-43-4	
1,2-Dichloropropane	ND	ug/kg	50.0	1	04/01/15 09:05	04/01/15 16:04	78-87-5	
1,3-Dichloropropane	ND	ug/kg	50.0	1	04/01/15 09:05	04/01/15 16:04	142-28-9	
2,2-Dichloropropane	ND	ug/kg	200	1	04/01/15 09:05	04/01/15 16:04	594-20-7	
1,1-Dichloropropene	ND	ug/kg	50.0	1	04/01/15 09:05	04/01/15 16:04	563-58-6	
cis-1,3-Dichloropropene	ND	ug/kg	50.0	1	04/01/15 09:05	04/01/15 16:04	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/kg	50.0	1	04/01/15 09:05	04/01/15 16:04	10061-02-6	
Diethyl ether (Ethyl ether)	ND	ug/kg	200	1	04/01/15 09:05	04/01/15 16:04	60-29-7	
Ethylbenzene	ND	ug/kg	50.0	1	04/01/15 09:05	04/01/15 16:04	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/kg	250	1	04/01/15 09:05	04/01/15 16:04	87-68-3	
Isopropylbenzene (Cumene)	ND	ug/kg	50.0	1	04/01/15 09:05	04/01/15 16:04	98-82-8	
p-Isopropyltoluene	ND	ug/kg	50.0	1	04/01/15 09:05	04/01/15 16:04	99-87-6	
Methylene Chloride	ND	ug/kg	200	1	04/01/15 09:05	04/01/15 16:04	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	250	1	04/01/15 09:05	04/01/15 16:04	108-10-1	
Methyl-tert-butyl ether	ND	ug/kg	50.0	1	04/01/15 09:05	04/01/15 16:04	1634-04-4	
Naphthalene	ND	ug/kg	200	1	04/01/15 09:05	04/01/15 16:04	91-20-3	
n-Propylbenzene	ND	ug/kg	50.0	1	04/01/15 09:05	04/01/15 16:04	103-65-1	
Styrene	ND	ug/kg	50.0	1	04/01/15 09:05	04/01/15 16:04	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/kg	50.0	1	04/01/15 09:05	04/01/15 16:04	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/kg	50.0	1	04/01/15 09:05	04/01/15 16:04	79-34-5	
Tetrachloroethene	ND	ug/kg	50.0	1	04/01/15 09:05	04/01/15 16:04	127-18-4	
Tetrahydrofuran	ND	ug/kg	2000	1	04/01/15 09:05	04/01/15 16:04	109-99-9	
Toluene	ND	ug/kg	50.0	1	04/01/15 09:05	04/01/15 16:04	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/kg	50.0	1	04/01/15 09:05	04/01/15 16:04	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/kg	50.0	1	04/01/15 09:05	04/01/15 16:04	120-82-1	
1,1,1-Trichloroethane	ND	ug/kg	50.0	1	04/01/15 09:05	04/01/15 16:04	71-55-6	
1,1,2-Trichloroethane	ND	ug/kg	50.0	1	04/01/15 09:05	04/01/15 16:04	79-00-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

ANALYTICAL RESULTS

Project: 14-1004 FSY
Pace Project No.: 10300801

Sample: Trip Blank **Lab ID: 10300801009** Collected: 03/24/15 00:00 Received: 03/26/15 18:07 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5030 Med Level	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B							
Trichloroethene	ND	ug/kg	50.0	1	04/01/15 09:05	04/01/15 16:04	79-01-6	
Trichlorofluoromethane	ND	ug/kg	200	1	04/01/15 09:05	04/01/15 16:04	75-69-4	
1,2,3-Trichloropropane	ND	ug/kg	200	1	04/01/15 09:05	04/01/15 16:04	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/kg	200	1	04/01/15 09:05	04/01/15 16:04	76-13-1	
1,2,4-Trimethylbenzene	ND	ug/kg	50.0	1	04/01/15 09:05	04/01/15 16:04	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/kg	50.0	1	04/01/15 09:05	04/01/15 16:04	108-67-8	
Vinyl chloride	ND	ug/kg	20.0	1	04/01/15 09:05	04/01/15 16:04	75-01-4	
Xylene (Total)	ND	ug/kg	150	1	04/01/15 09:05	04/01/15 16:04	1330-20-7	
Surrogates								
1,2-Dichloroethane-d4 (S)	87	%.	55-150	1	04/01/15 09:05	04/01/15 16:04	17060-07-0	
Toluene-d8 (S)	98	%.	61-125	1	04/01/15 09:05	04/01/15 16:04	2037-26-5	
4-Bromofluorobenzene (S)	100	%.	54-131	1	04/01/15 09:05	04/01/15 16:04	460-00-4	

Sample: GP1W **Lab ID: 10300802001** Collected: 03/25/15 10:40 Received: 03/26/15 18:07 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8270D MSSV PAH by SIM	Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3510							
Acenaphthene	**1.2**	ug/L	0.041	1	03/31/15 13:40	04/02/15 11:38	83-32-9	
Acenaphthylene	**0.17**	ug/L	0.041	1	03/31/15 13:40	04/02/15 11:38	208-96-8	
Anthracene	**0.18**	ug/L	0.041	1	03/31/15 13:40	04/02/15 11:38	120-12-7	
Benzo(a)anthracene	**0.43**	ug/L	0.041	1	03/31/15 13:40	04/02/15 11:38	56-55-3	
Benzo(a)pyrene	**0.57**	ug/L	0.041	1	03/31/15 13:40	04/02/15 11:38	50-32-8	
Benzo(b)fluoranthene	**0.84**	ug/L	0.041	1	03/31/15 13:40	04/02/15 11:38	205-99-2	
Benzo(g,h,i)perylene	**0.52**	ug/L	0.041	1	03/31/15 13:40	04/02/15 11:38	191-24-2	
Benzo(k)fluoranthene	**0.27**	ug/L	0.041	1	03/31/15 13:40	04/02/15 11:38	207-08-9	
Chrysene	**0.63**	ug/L	0.041	1	03/31/15 13:40	04/02/15 11:38	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.041	1	03/31/15 13:40	04/02/15 11:38	53-70-3	
Fluoranthene	**1.4**	ug/L	0.041	1	03/31/15 13:40	04/02/15 11:38	206-44-0	
Fluorene	**0.35**	ug/L	0.041	1	03/31/15 13:40	04/02/15 11:38	86-73-7	
Indeno(1,2,3-cd)pyrene	**0.45**	ug/L	0.041	1	03/31/15 13:40	04/02/15 11:38	193-39-5	
Naphthalene	ND	ug/L	0.041	1	03/31/15 13:40	04/02/15 11:38	91-20-3	
Phenanthrene	**0.89**	ug/L	0.041	1	03/31/15 13:40	04/02/15 11:38	85-01-8	
Pyrene	**1.2**	ug/L	0.041	1	03/31/15 13:40	04/02/15 11:38	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	76	%.	52-125	1	03/31/15 13:40	04/02/15 11:38	321-60-8	
p-Terphenyl-d14 (S)	70	%.	62-125	1	03/31/15 13:40	04/02/15 11:38	1718-51-0	
8260 VOC	Analytical Method: EPA 8260							
Acetone	ND	ug/L	20.0	1		04/04/15 03:55	67-64-1	
Allyl chloride	ND	ug/L	4.0	1		04/04/15 03:55	107-05-1	
Benzene	ND	ug/L	1.0	1		04/04/15 03:55	71-43-2	
Bromobenzene	ND	ug/L	1.0	1		04/04/15 03:55	108-86-1	
Bromochloromethane	ND	ug/L	4.0	1		04/04/15 03:55	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	1		04/04/15 03:55	75-27-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

ANALYTICAL RESULTS

Project: 14-1004 FSY
Pace Project No.: 10300801

Sample: GP1W **Lab ID: 10300802001** Collected: 03/25/15 10:40 Received: 03/26/15 18:07 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 VOC	Analytical Method: EPA 8260							
Bromoform	ND	ug/L	4.0	1		04/04/15 03:55	75-25-2	
Bromomethane	ND	ug/L	4.0	1		04/04/15 03:55	74-83-9	
2-Butanone (MEK)	ND	ug/L	5.0	1		04/04/15 03:55	78-93-3	
n-Butylbenzene	ND	ug/L	1.0	1		04/04/15 03:55	104-51-8	C0,L2
sec-Butylbenzene	ND	ug/L	1.0	1		04/04/15 03:55	135-98-8	
tert-Butylbenzene	ND	ug/L	1.0	1		04/04/15 03:55	98-06-6	
Carbon tetrachloride	ND	ug/L	1.0	1		04/04/15 03:55	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		04/04/15 03:55	108-90-7	
Chloroethane	ND	ug/L	1.0	1		04/04/15 03:55	75-00-3	
Chloroform	ND	ug/L	1.0	1		04/04/15 03:55	67-66-3	
Chloromethane	ND	ug/L	4.0	1		04/04/15 03:55	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	1		04/04/15 03:55	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	1		04/04/15 03:55	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	4.0	1		04/04/15 03:55	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		04/04/15 03:55	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		04/04/15 03:55	106-93-4	
Dibromomethane	ND	ug/L	4.0	1		04/04/15 03:55	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		04/04/15 03:55	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		04/04/15 03:55	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		04/04/15 03:55	106-46-7	
Dichlorodifluoromethane	ND	ug/L	4.0	1		04/04/15 03:55	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	1		04/04/15 03:55	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		04/04/15 03:55	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		04/04/15 03:55	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		04/04/15 03:55	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		04/04/15 03:55	156-60-5	
Dichlorofluoromethane	ND	ug/L	1.0	1		04/04/15 03:55	75-43-4	
1,2-Dichloropropane	ND	ug/L	4.0	1		04/04/15 03:55	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	1		04/04/15 03:55	142-28-9	
2,2-Dichloropropane	ND	ug/L	4.0	1		04/04/15 03:55	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	1		04/04/15 03:55	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	4.0	1		04/04/15 03:55	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	4.0	1		04/04/15 03:55	10061-02-6	
Diethyl ether (Ethyl ether)	ND	ug/L	4.0	1		04/04/15 03:55	60-29-7	
Ethylbenzene	ND	ug/L	1.0	1		04/04/15 03:55	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	1		04/04/15 03:55	87-68-3	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	1		04/04/15 03:55	98-82-8	
p-Isopropyltoluene	**4.8**	ug/L	1.0	1		04/04/15 03:55	99-87-6	
Methylene Chloride	ND	ug/L	4.0	1		04/04/15 03:55	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	1		04/04/15 03:55	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	1		04/04/15 03:55	1634-04-4	
Naphthalene	ND	ug/L	4.0	1		04/04/15 03:55	91-20-3	C0,L2
n-Propylbenzene	ND	ug/L	1.0	1		04/04/15 03:55	103-65-1	
Styrene	ND	ug/L	1.0	1		04/04/15 03:55	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		04/04/15 03:55	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		04/04/15 03:55	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		04/04/15 03:55	127-18-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

ANALYTICAL RESULTS

Project: 14-1004 FSY
Pace Project No.: 10300801

Sample: GP1W **Lab ID: 10300802001** Collected: 03/25/15 10:40 Received: 03/26/15 18:07 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 VOC	Analytical Method: EPA 8260							
Tetrahydrofuran	ND	ug/L	10.0	1		04/04/15 03:55	109-99-9	
Toluene	ND	ug/L	1.0	1		04/04/15 03:55	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		04/04/15 03:55	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		04/04/15 03:55	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		04/04/15 03:55	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		04/04/15 03:55	79-00-5	
Trichloroethene	ND	ug/L	0.40	1		04/04/15 03:55	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		04/04/15 03:55	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	4.0	1		04/04/15 03:55	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		04/04/15 03:55	76-13-1	
1,2,4-Trimethylbenzene	ND	ug/L	1.0	1		04/04/15 03:55	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	1.0	1		04/04/15 03:55	108-67-8	
Vinyl chloride	ND	ug/L	0.40	1		04/04/15 03:55	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1		04/04/15 03:55	1330-20-7	
Surrogates								
1,2-Dichloroethane-d4 (S)	98	%.	75-125	1		04/04/15 03:55	17060-07-0	
Toluene-d8 (S)	97	%.	75-125	1		04/04/15 03:55	2037-26-5	
4-Bromofluorobenzene (S)	102	%.	75-125	1		04/04/15 03:55	460-00-4	

Sample: GP2W **Lab ID: 10300802002** Collected: 03/25/15 10:55 Received: 03/26/15 18:07 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8270D MSSV PAH by SIM	Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3510							
Acenaphthene	**0.19**	ug/L	0.043	1	03/31/15 13:40	04/02/15 12:00	83-32-9	
Acenaphthylene	ND	ug/L	0.043	1	03/31/15 13:40	04/02/15 12:00	208-96-8	
Anthracene	ND	ug/L	0.043	1	03/31/15 13:40	04/02/15 12:00	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.043	1	03/31/15 13:40	04/02/15 12:00	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.043	1	03/31/15 13:40	04/02/15 12:00	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.043	1	03/31/15 13:40	04/02/15 12:00	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.043	1	03/31/15 13:40	04/02/15 12:00	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.043	1	03/31/15 13:40	04/02/15 12:00	207-08-9	
Chrysene	ND	ug/L	0.043	1	03/31/15 13:40	04/02/15 12:00	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.043	1	03/31/15 13:40	04/02/15 12:00	53-70-3	
Fluoranthene	**0.078**	ug/L	0.043	1	03/31/15 13:40	04/02/15 12:00	206-44-0	
Fluorene	**0.17**	ug/L	0.043	1	03/31/15 13:40	04/02/15 12:00	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.043	1	03/31/15 13:40	04/02/15 12:00	193-39-5	
Naphthalene	ND	ug/L	0.043	1	03/31/15 13:40	04/02/15 12:00	91-20-3	
Phenanthrene	**0.11**	ug/L	0.043	1	03/31/15 13:40	04/02/15 12:00	85-01-8	
Pyrene	**0.070**	ug/L	0.043	1	03/31/15 13:40	04/02/15 12:00	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	74	%.	52-125	1	03/31/15 13:40	04/02/15 12:00	321-60-8	
p-Terphenyl-d14 (S)	67	%.	62-125	1	03/31/15 13:40	04/02/15 12:00	1718-51-0	
8260 VOC	Analytical Method: EPA 8260							
Acetone	ND	ug/L	20.0	1		04/08/15 17:14	67-64-1	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

ANALYTICAL RESULTS

Project: 14-1004 FSY
Pace Project No.: 10300801

Sample: GP2W **Lab ID: 10300802002** Collected: 03/25/15 10:55 Received: 03/26/15 18:07 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 VOC	Analytical Method: EPA 8260							
Allyl chloride	ND	ug/L	4.0	1		04/08/15 17:14	107-05-1	
Benzene	ND	ug/L	1.0	1		04/08/15 17:14	71-43-2	
Bromobenzene	ND	ug/L	1.0	1		04/08/15 17:14	108-86-1	
Bromochloromethane	ND	ug/L	1.0	1		04/08/15 17:14	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	1		04/08/15 17:14	75-27-4	
Bromoform	ND	ug/L	4.0	1		04/08/15 17:14	75-25-2	
Bromomethane	ND	ug/L	4.0	1		04/08/15 17:14	74-83-9	
2-Butanone (MEK)	ND	ug/L	5.0	1		04/08/15 17:14	78-93-3	
n-Butylbenzene	ND	ug/L	1.0	1		04/08/15 17:14	104-51-8	
sec-Butylbenzene	ND	ug/L	1.0	1		04/08/15 17:14	135-98-8	L3
tert-Butylbenzene	ND	ug/L	1.0	1		04/08/15 17:14	98-06-6	
Carbon tetrachloride	ND	ug/L	1.0	1		04/08/15 17:14	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		04/08/15 17:14	108-90-7	
Chloroethane	**3.4**	ug/L	1.0	1		04/08/15 17:14	75-00-3	
Chloroform	ND	ug/L	1.0	1		04/08/15 17:14	67-66-3	
Chloromethane	ND	ug/L	4.0	1		04/08/15 17:14	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	1		04/08/15 17:14	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	1		04/08/15 17:14	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	4.0	1		04/08/15 17:14	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		04/08/15 17:14	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		04/08/15 17:14	106-93-4	
Dibromomethane	ND	ug/L	4.0	1		04/08/15 17:14	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		04/08/15 17:14	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		04/08/15 17:14	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		04/08/15 17:14	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	1		04/08/15 17:14	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	1		04/08/15 17:14	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		04/08/15 17:14	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		04/08/15 17:14	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		04/08/15 17:14	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		04/08/15 17:14	156-60-5	
Dichlorofluoromethane	ND	ug/L	1.0	1		04/08/15 17:14	75-43-4	
1,2-Dichloropropane	ND	ug/L	4.0	1		04/08/15 17:14	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	1		04/08/15 17:14	142-28-9	
2,2-Dichloropropane	ND	ug/L	4.0	1		04/08/15 17:14	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	1		04/08/15 17:14	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	4.0	1		04/08/15 17:14	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	4.0	1		04/08/15 17:14	10061-02-6	
Diethyl ether (Ethyl ether)	ND	ug/L	10.0	1		04/08/15 17:14	60-29-7	
Ethylbenzene	ND	ug/L	1.0	1		04/08/15 17:14	100-41-4	
Hexachloro-1,3-butadiene	**1.0**	ug/L	1.0	1		04/08/15 17:14	87-68-3	B,C8,L1
Isopropylbenzene (Cumene)	ND	ug/L	1.0	1		04/08/15 17:14	98-82-8	
p-Isopropyltoluene	ND	ug/L	1.0	1		04/08/15 17:14	99-87-6	L3
Methylene Chloride	ND	ug/L	4.0	1		04/08/15 17:14	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	1		04/08/15 17:14	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	1		04/08/15 17:14	1634-04-4	
Naphthalene	ND	ug/L	4.0	1		04/08/15 17:14	91-20-3	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
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ANALYTICAL RESULTS

Project: 14-1004 FSY
Pace Project No.: 10300801

Sample: GP2W **Lab ID: 10300802002** Collected: 03/25/15 10:55 Received: 03/26/15 18:07 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 VOC	Analytical Method: EPA 8260							
n-Propylbenzene	ND	ug/L	1.0	1		04/08/15 17:14	103-65-1	
Styrene	ND	ug/L	1.0	1		04/08/15 17:14	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		04/08/15 17:14	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		04/08/15 17:14	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		04/08/15 17:14	127-18-4	
Tetrahydrofuran	ND	ug/L	10.0	1		04/08/15 17:14	109-99-9	
Toluene	ND	ug/L	1.0	1		04/08/15 17:14	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		04/08/15 17:14	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		04/08/15 17:14	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		04/08/15 17:14	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		04/08/15 17:14	79-00-5	
Trichloroethene	ND	ug/L	0.40	1		04/08/15 17:14	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		04/08/15 17:14	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	4.0	1		04/08/15 17:14	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		04/08/15 17:14	76-13-1	
1,2,4-Trimethylbenzene	ND	ug/L	1.0	1		04/08/15 17:14	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	1.0	1		04/08/15 17:14	108-67-8	
Vinyl chloride	ND	ug/L	0.40	1		04/08/15 17:14	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1		04/08/15 17:14	1330-20-7	
Surrogates								
1,2-Dichloroethane-d4 (S)	103	%.	75-125	1		04/08/15 17:14	17060-07-0	
Toluene-d8 (S)	100	%.	75-125	1		04/08/15 17:14	2037-26-5	
4-Bromofluorobenzene (S)	103	%.	75-125	1		04/08/15 17:14	460-00-4	

Sample: GP3W **Lab ID: 10300802003** Collected: 03/25/15 11:10 Received: 03/26/15 18:07 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8270D MSSV PAH by SIM	Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3510							
Acenaphthene	**0.15**	ug/L	0.042	1	03/31/15 13:40	04/02/15 12:21	83-32-9	
Acenaphthylene	ND	ug/L	0.042	1	03/31/15 13:40	04/02/15 12:21	208-96-8	
Anthracene	ND	ug/L	0.042	1	03/31/15 13:40	04/02/15 12:21	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.042	1	03/31/15 13:40	04/02/15 12:21	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.042	1	03/31/15 13:40	04/02/15 12:21	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.042	1	03/31/15 13:40	04/02/15 12:21	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.042	1	03/31/15 13:40	04/02/15 12:21	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.042	1	03/31/15 13:40	04/02/15 12:21	207-08-9	
Chrysene	ND	ug/L	0.042	1	03/31/15 13:40	04/02/15 12:21	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.042	1	03/31/15 13:40	04/02/15 12:21	53-70-3	
Fluoranthene	ND	ug/L	0.042	1	03/31/15 13:40	04/02/15 12:21	206-44-0	
Fluorene	ND	ug/L	0.042	1	03/31/15 13:40	04/02/15 12:21	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.042	1	03/31/15 13:40	04/02/15 12:21	193-39-5	
Naphthalene	ND	ug/L	0.042	1	03/31/15 13:40	04/02/15 12:21	91-20-3	
Phenanthrene	**0.083**	ug/L	0.042	1	03/31/15 13:40	04/02/15 12:21	85-01-8	
Pyrene	ND	ug/L	0.042	1	03/31/15 13:40	04/02/15 12:21	129-00-0	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
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ANALYTICAL RESULTS

Project: 14-1004 FSY
Pace Project No.: 10300801

Sample: GP3W **Lab ID: 10300802003** Collected: 03/25/15 11:10 Received: 03/26/15 18:07 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8270D MSSV PAH by SIM	Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3510							
Surrogates								
2-Fluorobiphenyl (S)	77	%.	52-125	1	03/31/15 13:40	04/02/15 12:21	321-60-8	
p-Terphenyl-d14 (S)	65	%.	62-125	1	03/31/15 13:40	04/02/15 12:21	1718-51-0	
8260 VOC	Analytical Method: EPA 8260							
Acetone	ND	ug/L	20.0	1		04/08/15 17:29	67-64-1	
Allyl chloride	ND	ug/L	4.0	1		04/08/15 17:29	107-05-1	
Benzene	ND	ug/L	1.0	1		04/08/15 17:29	71-43-2	
Bromobenzene	ND	ug/L	1.0	1		04/08/15 17:29	108-86-1	
Bromochloromethane	ND	ug/L	1.0	1		04/08/15 17:29	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	1		04/08/15 17:29	75-27-4	
Bromoform	ND	ug/L	4.0	1		04/08/15 17:29	75-25-2	
Bromomethane	ND	ug/L	4.0	1		04/08/15 17:29	74-83-9	
2-Butanone (MEK)	ND	ug/L	5.0	1		04/08/15 17:29	78-93-3	
n-Butylbenzene	ND	ug/L	1.0	1		04/08/15 17:29	104-51-8	
sec-Butylbenzene	ND	ug/L	1.0	1		04/08/15 17:29	135-98-8	L3
tert-Butylbenzene	ND	ug/L	1.0	1		04/08/15 17:29	98-06-6	
Carbon tetrachloride	ND	ug/L	1.0	1		04/08/15 17:29	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		04/08/15 17:29	108-90-7	
Chloroethane	ND	ug/L	1.0	1		04/08/15 17:29	75-00-3	
Chloroform	ND	ug/L	1.0	1		04/08/15 17:29	67-66-3	
Chloromethane	ND	ug/L	4.0	1		04/08/15 17:29	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	1		04/08/15 17:29	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	1		04/08/15 17:29	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	4.0	1		04/08/15 17:29	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		04/08/15 17:29	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		04/08/15 17:29	106-93-4	
Dibromomethane	ND	ug/L	4.0	1		04/08/15 17:29	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		04/08/15 17:29	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		04/08/15 17:29	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		04/08/15 17:29	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	1		04/08/15 17:29	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	1		04/08/15 17:29	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		04/08/15 17:29	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		04/08/15 17:29	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		04/08/15 17:29	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		04/08/15 17:29	156-60-5	
Dichlorofluoromethane	ND	ug/L	1.0	1		04/08/15 17:29	75-43-4	
1,2-Dichloropropane	ND	ug/L	4.0	1		04/08/15 17:29	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	1		04/08/15 17:29	142-28-9	
2,2-Dichloropropane	ND	ug/L	4.0	1		04/08/15 17:29	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	1		04/08/15 17:29	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	4.0	1		04/08/15 17:29	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	4.0	1		04/08/15 17:29	10061-02-6	
Diethyl ether (Ethyl ether)	ND	ug/L	10.0	1		04/08/15 17:29	60-29-7	
Ethylbenzene	ND	ug/L	1.0	1		04/08/15 17:29	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	1		04/08/15 17:29	87-68-3	L1

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
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ANALYTICAL RESULTS

Project: 14-1004 FSY
Pace Project No.: 10300801

Sample: GP3W **Lab ID: 10300802003** Collected: 03/25/15 11:10 Received: 03/26/15 18:07 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 VOC	Analytical Method: EPA 8260							
Isopropylbenzene (Cumene)	ND	ug/L	1.0	1		04/08/15 17:29	98-82-8	
p-Isopropyltoluene	ND	ug/L	1.0	1		04/08/15 17:29	99-87-6	L3
Methylene Chloride	ND	ug/L	4.0	1		04/08/15 17:29	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	1		04/08/15 17:29	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	1		04/08/15 17:29	1634-04-4	
Naphthalene	ND	ug/L	4.0	1		04/08/15 17:29	91-20-3	
n-Propylbenzene	ND	ug/L	1.0	1		04/08/15 17:29	103-65-1	
Styrene	ND	ug/L	1.0	1		04/08/15 17:29	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		04/08/15 17:29	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		04/08/15 17:29	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		04/08/15 17:29	127-18-4	
Tetrahydrofuran	ND	ug/L	10.0	1		04/08/15 17:29	109-99-9	
Toluene	ND	ug/L	1.0	1		04/08/15 17:29	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		04/08/15 17:29	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		04/08/15 17:29	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		04/08/15 17:29	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		04/08/15 17:29	79-00-5	
Trichloroethene	ND	ug/L	0.40	1		04/08/15 17:29	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		04/08/15 17:29	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	4.0	1		04/08/15 17:29	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		04/08/15 17:29	76-13-1	
1,2,4-Trimethylbenzene	ND	ug/L	1.0	1		04/08/15 17:29	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	1.0	1		04/08/15 17:29	108-67-8	
Vinyl chloride	ND	ug/L	0.40	1		04/08/15 17:29	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1		04/08/15 17:29	1330-20-7	
Surrogates								
1,2-Dichloroethane-d4 (S)	102	%.	75-125	1		04/08/15 17:29	17060-07-0	
Toluene-d8 (S)	100	%.	75-125	1		04/08/15 17:29	2037-26-5	
4-Bromofluorobenzene (S)	102	%.	75-125	1		04/08/15 17:29	460-00-4	

Sample: GP4W **Lab ID: 10300802004** Collected: 03/25/15 11:40 Received: 03/26/15 18:07 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8270D MSSV PAH by SIM	Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3510							
Acenaphthene	ND	ug/L	0.045	1	03/31/15 13:40	04/02/15 12:43	83-32-9	
Acenaphthylene	ND	ug/L	0.045	1	03/31/15 13:40	04/02/15 12:43	208-96-8	
Anthracene	ND	ug/L	0.045	1	03/31/15 13:40	04/02/15 12:43	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.045	1	03/31/15 13:40	04/02/15 12:43	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.045	1	03/31/15 13:40	04/02/15 12:43	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.045	1	03/31/15 13:40	04/02/15 12:43	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.045	1	03/31/15 13:40	04/02/15 12:43	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.045	1	03/31/15 13:40	04/02/15 12:43	207-08-9	
Chrysene	ND	ug/L	0.045	1	03/31/15 13:40	04/02/15 12:43	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.045	1	03/31/15 13:40	04/02/15 12:43	53-70-3	
Fluoranthene	ND	ug/L	0.045	1	03/31/15 13:40	04/02/15 12:43	206-44-0	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
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ANALYTICAL RESULTS

Project: 14-1004 FSY
Pace Project No.: 10300801

Sample: GP4W **Lab ID: 10300802004** Collected: 03/25/15 11:40 Received: 03/26/15 18:07 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8270D MSSV PAH by SIM	Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3510							
Fluorene	ND	ug/L	0.045	1	03/31/15 13:40	04/02/15 12:43	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.045	1	03/31/15 13:40	04/02/15 12:43	193-39-5	
Naphthalene	ND	ug/L	0.045	1	03/31/15 13:40	04/02/15 12:43	91-20-3	
Phenanthrene	ND	ug/L	0.045	1	03/31/15 13:40	04/02/15 12:43	85-01-8	
Pyrene	ND	ug/L	0.045	1	03/31/15 13:40	04/02/15 12:43	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	80	%.	52-125	1	03/31/15 13:40	04/02/15 12:43	321-60-8	
p-Terphenyl-d14 (S)	73	%.	62-125	1	03/31/15 13:40	04/02/15 12:43	1718-51-0	
8260 VOC	Analytical Method: EPA 8260							
Acetone	**33.5**	ug/L	20.0	1		04/04/15 04:09	67-64-1	
Allyl chloride	ND	ug/L	4.0	1		04/04/15 04:09	107-05-1	
Benzene	ND	ug/L	1.0	1		04/04/15 04:09	71-43-2	
Bromobenzene	ND	ug/L	1.0	1		04/04/15 04:09	108-86-1	
Bromochloromethane	ND	ug/L	4.0	1		04/04/15 04:09	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	1		04/04/15 04:09	75-27-4	
Bromoform	ND	ug/L	4.0	1		04/04/15 04:09	75-25-2	
Bromomethane	ND	ug/L	4.0	1		04/04/15 04:09	74-83-9	
2-Butanone (MEK)	ND	ug/L	5.0	1		04/04/15 04:09	78-93-3	
n-Butylbenzene	ND	ug/L	1.0	1		04/04/15 04:09	104-51-8	C0,L2
sec-Butylbenzene	ND	ug/L	1.0	1		04/04/15 04:09	135-98-8	
tert-Butylbenzene	ND	ug/L	1.0	1		04/04/15 04:09	98-06-6	
Carbon tetrachloride	ND	ug/L	1.0	1		04/04/15 04:09	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		04/04/15 04:09	108-90-7	
Chloroethane	ND	ug/L	1.0	1		04/04/15 04:09	75-00-3	
Chloroform	ND	ug/L	1.0	1		04/04/15 04:09	67-66-3	
Chloromethane	ND	ug/L	4.0	1		04/04/15 04:09	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	1		04/04/15 04:09	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	1		04/04/15 04:09	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	4.0	1		04/04/15 04:09	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		04/04/15 04:09	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		04/04/15 04:09	106-93-4	
Dibromomethane	ND	ug/L	4.0	1		04/04/15 04:09	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		04/04/15 04:09	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		04/04/15 04:09	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		04/04/15 04:09	106-46-7	
Dichlorodifluoromethane	ND	ug/L	4.0	1		04/04/15 04:09	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	1		04/04/15 04:09	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		04/04/15 04:09	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		04/04/15 04:09	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		04/04/15 04:09	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		04/04/15 04:09	156-60-5	
Dichlorofluoromethane	ND	ug/L	1.0	1		04/04/15 04:09	75-43-4	
1,2-Dichloropropane	ND	ug/L	4.0	1		04/04/15 04:09	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	1		04/04/15 04:09	142-28-9	
2,2-Dichloropropane	ND	ug/L	4.0	1		04/04/15 04:09	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	1		04/04/15 04:09	563-58-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
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ANALYTICAL RESULTS

Project: 14-1004 FSY
Pace Project No.: 10300801

Sample: GP4W **Lab ID: 10300802004** Collected: 03/25/15 11:40 Received: 03/26/15 18:07 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 VOC	Analytical Method: EPA 8260							
cis-1,3-Dichloropropene	ND	ug/L	4.0	1		04/04/15 04:09	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	4.0	1		04/04/15 04:09	10061-02-6	
Diethyl ether (Ethyl ether)	ND	ug/L	4.0	1		04/04/15 04:09	60-29-7	
Ethylbenzene	ND	ug/L	1.0	1		04/04/15 04:09	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	1		04/04/15 04:09	87-68-3	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	1		04/04/15 04:09	98-82-8	
p-Isopropyltoluene	ND	ug/L	1.0	1		04/04/15 04:09	99-87-6	
Methylene Chloride	ND	ug/L	4.0	1		04/04/15 04:09	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	1		04/04/15 04:09	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	1		04/04/15 04:09	1634-04-4	
Naphthalene	ND	ug/L	4.0	1		04/04/15 04:09	91-20-3	C0,L2
n-Propylbenzene	ND	ug/L	1.0	1		04/04/15 04:09	103-65-1	
Styrene	ND	ug/L	1.0	1		04/04/15 04:09	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		04/04/15 04:09	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		04/04/15 04:09	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		04/04/15 04:09	127-18-4	
Tetrahydrofuran	ND	ug/L	10.0	1		04/04/15 04:09	109-99-9	
Toluene	ND	ug/L	1.0	1		04/04/15 04:09	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		04/04/15 04:09	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		04/04/15 04:09	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		04/04/15 04:09	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		04/04/15 04:09	79-00-5	
Trichloroethene	ND	ug/L	0.40	1		04/04/15 04:09	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		04/04/15 04:09	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	4.0	1		04/04/15 04:09	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		04/04/15 04:09	76-13-1	
1,2,4-Trimethylbenzene	ND	ug/L	1.0	1		04/04/15 04:09	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	1.0	1		04/04/15 04:09	108-67-8	
Vinyl chloride	ND	ug/L	0.40	1		04/04/15 04:09	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1		04/04/15 04:09	1330-20-7	
Surrogates								
1,2-Dichloroethane-d4 (S)	96	%.	75-125	1		04/04/15 04:09	17060-07-0	pH
Toluene-d8 (S)	99	%.	75-125	1		04/04/15 04:09	2037-26-5	
4-Bromofluorobenzene (S)	103	%.	75-125	1		04/04/15 04:09	460-00-4	

Sample: GP6W **Lab ID: 10300802005** Collected: 03/25/15 13:20 Received: 03/26/15 18:07 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8270D MSSV PAH by SIM	Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3510							
Acenaphthene	**4.4**	ug/L	0.21	5	03/31/15 13:40	04/03/15 11:10	83-32-9	
Acenaphthylene	ND	ug/L	0.21	5	03/31/15 13:40	04/03/15 11:10	208-96-8	
Anthracene	ND	ug/L	0.21	5	03/31/15 13:40	04/03/15 11:10	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.21	5	03/31/15 13:40	04/03/15 11:10	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.21	5	03/31/15 13:40	04/03/15 11:10	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.21	5	03/31/15 13:40	04/03/15 11:10	205-99-2	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
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ANALYTICAL RESULTS

Project: 14-1004 FSY
Pace Project No.: 10300801

Sample: GP6W **Lab ID: 10300802005** Collected: 03/25/15 13:20 Received: 03/26/15 18:07 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8270D MSSV PAH by SIM	Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3510							
Benzo(g,h,i)perylene	ND	ug/L	0.21	5	03/31/15 13:40	04/03/15 11:10	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.21	5	03/31/15 13:40	04/03/15 11:10	207-08-9	
Chrysene	ND	ug/L	0.21	5	03/31/15 13:40	04/03/15 11:10	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.21	5	03/31/15 13:40	04/03/15 11:10	53-70-3	
Fluoranthene	ND	ug/L	0.21	5	03/31/15 13:40	04/03/15 11:10	206-44-0	
Fluorene	**2.3**	ug/L	0.21	5	03/31/15 13:40	04/03/15 11:10	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.21	5	03/31/15 13:40	04/03/15 11:10	193-39-5	
Naphthalene	**231**	ug/L	2.1	50	03/31/15 13:40	04/03/15 11:32	91-20-3	
Phenanthrene	**0.92**	ug/L	0.21	5	03/31/15 13:40	04/03/15 11:10	85-01-8	
Pyrene	ND	ug/L	0.21	5	03/31/15 13:40	04/03/15 11:10	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	117	%.	52-125	5	03/31/15 13:40	04/03/15 11:10	321-60-8	D3
p-Terphenyl-d14 (S)	87	%.	62-125	5	03/31/15 13:40	04/03/15 11:10	1718-51-0	
8260 VOC	Analytical Method: EPA 8260							
Acetone	**60.5**	ug/L	20.0	1		04/08/15 17:58	67-64-1	
Allyl chloride	ND	ug/L	4.0	1		04/08/15 17:58	107-05-1	
Benzene	ND	ug/L	1.0	1		04/08/15 17:58	71-43-2	
Bromobenzene	ND	ug/L	1.0	1		04/08/15 17:58	108-86-1	
Bromochloromethane	ND	ug/L	1.0	1		04/08/15 17:58	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	1		04/08/15 17:58	75-27-4	
Bromoform	ND	ug/L	4.0	1		04/08/15 17:58	75-25-2	
Bromomethane	ND	ug/L	4.0	1		04/08/15 17:58	74-83-9	
2-Butanone (MEK)	**14.5**	ug/L	5.0	1		04/08/15 17:58	78-93-3	
n-Butylbenzene	**2.7**	ug/L	1.0	1		04/08/15 17:58	104-51-8	
sec-Butylbenzene	**1.6**	ug/L	1.0	1		04/08/15 17:58	135-98-8	C0,L1
tert-Butylbenzene	ND	ug/L	1.0	1		04/08/15 17:58	98-06-6	
Carbon tetrachloride	ND	ug/L	1.0	1		04/08/15 17:58	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		04/08/15 17:58	108-90-7	
Chloroethane	ND	ug/L	1.0	1		04/08/15 17:58	75-00-3	
Chloroform	ND	ug/L	1.0	1		04/08/15 17:58	67-66-3	
Chloromethane	ND	ug/L	4.0	1		04/08/15 17:58	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	1		04/08/15 17:58	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	1		04/08/15 17:58	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	4.0	1		04/08/15 17:58	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		04/08/15 17:58	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		04/08/15 17:58	106-93-4	
Dibromomethane	ND	ug/L	4.0	1		04/08/15 17:58	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		04/08/15 17:58	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		04/08/15 17:58	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		04/08/15 17:58	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	1		04/08/15 17:58	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	1		04/08/15 17:58	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		04/08/15 17:58	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		04/08/15 17:58	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		04/08/15 17:58	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		04/08/15 17:58	156-60-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
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ANALYTICAL RESULTS

Project: 14-1004 FSY
Pace Project No.: 10300801

Sample: GP6W **Lab ID: 10300802005** Collected: 03/25/15 13:20 Received: 03/26/15 18:07 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 VOC	Analytical Method: EPA 8260							
Dichlorofluoromethane	ND	ug/L	1.0	1		04/08/15 17:58	75-43-4	
1,2-Dichloropropane	ND	ug/L	4.0	1		04/08/15 17:58	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	1		04/08/15 17:58	142-28-9	
2,2-Dichloropropane	ND	ug/L	4.0	1		04/08/15 17:58	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	1		04/08/15 17:58	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	4.0	1		04/08/15 17:58	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	4.0	1		04/08/15 17:58	10061-02-6	
Diethyl ether (Ethyl ether)	ND	ug/L	10.0	1		04/08/15 17:58	60-29-7	
Ethylbenzene	**4.6**	ug/L	1.0	1		04/08/15 17:58	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	1		04/08/15 17:58	87-68-3	L3
Isopropylbenzene (Cumene)	**2.1**	ug/L	1.0	1		04/08/15 17:58	98-82-8	
p-Isopropyltoluene	**12.1**	ug/L	1.0	1		04/08/15 17:58	99-87-6	C0,L1
Methylene Chloride	ND	ug/L	4.0	1		04/08/15 17:58	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	1		04/08/15 17:58	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	1		04/08/15 17:58	1634-04-4	
Naphthalene	**228**	ug/L	20.0	5		04/09/15 15:20	91-20-3	H5
n-Propylbenzene	**2.8**	ug/L	1.0	1		04/08/15 17:58	103-65-1	
Styrene	ND	ug/L	1.0	1		04/08/15 17:58	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		04/08/15 17:58	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		04/08/15 17:58	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		04/08/15 17:58	127-18-4	
Tetrahydrofuran	ND	ug/L	10.0	1		04/08/15 17:58	109-99-9	
Toluene	**1.8**	ug/L	1.0	1		04/08/15 17:58	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		04/08/15 17:58	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		04/08/15 17:58	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		04/08/15 17:58	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		04/08/15 17:58	79-00-5	
Trichloroethene	ND	ug/L	0.40	1		04/08/15 17:58	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		04/08/15 17:58	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	4.0	1		04/08/15 17:58	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		04/08/15 17:58	76-13-1	
1,2,4-Trimethylbenzene	**96.4**	ug/L	1.0	1		04/08/15 17:58	95-63-6	
1,3,5-Trimethylbenzene	**32.6**	ug/L	1.0	1		04/08/15 17:58	108-67-8	
Vinyl chloride	ND	ug/L	0.40	1		04/08/15 17:58	75-01-4	
Xylene (Total)	**49.7**	ug/L	3.0	1		04/08/15 17:58	1330-20-7	
Surrogates								
1,2-Dichloroethane-d4 (S)	100	%.	75-125	1		04/08/15 17:58	17060-07-0	
Toluene-d8 (S)	100	%.	75-125	1		04/08/15 17:58	2037-26-5	
4-Bromofluorobenzene (S)	96	%.	75-125	1		04/08/15 17:58	460-00-4	

Sample: GP7W **Lab ID: 10300802006** Collected: 03/25/15 13:40 Received: 03/26/15 18:07 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8270D MSSV PAH by SIM	Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3510							
Acenaphthene	**3.0**	ug/L	0.043	1	03/31/15 13:40	04/02/15 13:26	83-32-9	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

ANALYTICAL RESULTS

Project: 14-1004 FSY
Pace Project No.: 10300801

Sample: GP7W **Lab ID: 10300802006** Collected: 03/25/15 13:40 Received: 03/26/15 18:07 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8270D MSSV PAH by SIM	Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3510							
Acenaphthylene	ND	ug/L	0.043	1	03/31/15 13:40	04/02/15 13:26	208-96-8	
Anthracene	**1.1**	ug/L	0.043	1	03/31/15 13:40	04/02/15 13:26	120-12-7	
Benzo(a)anthracene	**0.15**	ug/L	0.043	1	03/31/15 13:40	04/02/15 13:26	56-55-3	
Benzo(a)pyrene	**0.14**	ug/L	0.043	1	03/31/15 13:40	04/02/15 13:26	50-32-8	
Benzo(b)fluoranthene	**0.16**	ug/L	0.043	1	03/31/15 13:40	04/02/15 13:26	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.043	1	03/31/15 13:40	04/02/15 13:26	191-24-2	
Benzo(k)fluoranthene	**0.068**	ug/L	0.043	1	03/31/15 13:40	04/02/15 13:26	207-08-9	
Chrysene	**0.16**	ug/L	0.043	1	03/31/15 13:40	04/02/15 13:26	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.043	1	03/31/15 13:40	04/02/15 13:26	53-70-3	
Fluoranthene	**0.90**	ug/L	0.043	1	03/31/15 13:40	04/02/15 13:26	206-44-0	
Fluorene	**1.6**	ug/L	0.043	1	03/31/15 13:40	04/02/15 13:26	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.043	1	03/31/15 13:40	04/02/15 13:26	193-39-5	
Naphthalene	**2.1**	ug/L	0.043	1	03/31/15 13:40	04/02/15 13:26	91-20-3	
Phenanthrene	**4.2**	ug/L	0.043	1	03/31/15 13:40	04/02/15 13:26	85-01-8	
Pyrene	**0.70**	ug/L	0.043	1	03/31/15 13:40	04/02/15 13:26	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	76	%.	52-125	1	03/31/15 13:40	04/02/15 13:26	321-60-8	
p-Terphenyl-d14 (S)	79	%.	62-125	1	03/31/15 13:40	04/02/15 13:26	1718-51-0	
8260 VOC	Analytical Method: EPA 8260							
Acetone	ND	ug/L	20.0	1		04/04/15 04:24	67-64-1	
Allyl chloride	ND	ug/L	4.0	1		04/04/15 04:24	107-05-1	
Benzene	ND	ug/L	1.0	1		04/04/15 04:24	71-43-2	
Bromobenzene	ND	ug/L	1.0	1		04/04/15 04:24	108-86-1	
Bromochloromethane	ND	ug/L	4.0	1		04/04/15 04:24	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	1		04/04/15 04:24	75-27-4	
Bromoform	ND	ug/L	4.0	1		04/04/15 04:24	75-25-2	
Bromomethane	ND	ug/L	4.0	1		04/04/15 04:24	74-83-9	
2-Butanone (MEK)	ND	ug/L	5.0	1		04/04/15 04:24	78-93-3	
n-Butylbenzene	ND	ug/L	1.0	1		04/04/15 04:24	104-51-8	C0,L2
sec-Butylbenzene	ND	ug/L	1.0	1		04/04/15 04:24	135-98-8	
tert-Butylbenzene	ND	ug/L	1.0	1		04/04/15 04:24	98-06-6	
Carbon tetrachloride	ND	ug/L	1.0	1		04/04/15 04:24	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		04/04/15 04:24	108-90-7	
Chloroethane	ND	ug/L	1.0	1		04/04/15 04:24	75-00-3	
Chloroform	ND	ug/L	1.0	1		04/04/15 04:24	67-66-3	
Chloromethane	ND	ug/L	4.0	1		04/04/15 04:24	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	1		04/04/15 04:24	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	1		04/04/15 04:24	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	4.0	1		04/04/15 04:24	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		04/04/15 04:24	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		04/04/15 04:24	106-93-4	
Dibromomethane	ND	ug/L	4.0	1		04/04/15 04:24	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		04/04/15 04:24	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		04/04/15 04:24	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		04/04/15 04:24	106-46-7	
Dichlorodifluoromethane	ND	ug/L	4.0	1		04/04/15 04:24	75-71-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

ANALYTICAL RESULTS

Project: 14-1004 FSY
Pace Project No.: 10300801

Sample: GP7W **Lab ID: 10300802006** Collected: 03/25/15 13:40 Received: 03/26/15 18:07 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 VOC	Analytical Method: EPA 8260							
1,1-Dichloroethane	ND	ug/L	1.0	1		04/04/15 04:24	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		04/04/15 04:24	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		04/04/15 04:24	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		04/04/15 04:24	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		04/04/15 04:24	156-60-5	
Dichlorofluoromethane	ND	ug/L	1.0	1		04/04/15 04:24	75-43-4	
1,2-Dichloropropane	ND	ug/L	4.0	1		04/04/15 04:24	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	1		04/04/15 04:24	142-28-9	
2,2-Dichloropropane	ND	ug/L	4.0	1		04/04/15 04:24	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	1		04/04/15 04:24	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	4.0	1		04/04/15 04:24	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	4.0	1		04/04/15 04:24	10061-02-6	
Diethyl ether (Ethyl ether)	ND	ug/L	4.0	1		04/04/15 04:24	60-29-7	
Ethylbenzene	ND	ug/L	1.0	1		04/04/15 04:24	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	1		04/04/15 04:24	87-68-3	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	1		04/04/15 04:24	98-82-8	
p-Isopropyltoluene	ND	ug/L	1.0	1		04/04/15 04:24	99-87-6	
Methylene Chloride	ND	ug/L	4.0	1		04/04/15 04:24	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	1		04/04/15 04:24	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	1		04/04/15 04:24	1634-04-4	
Naphthalene	ND	ug/L	4.0	1		04/04/15 04:24	91-20-3	C0,L2
n-Propylbenzene	ND	ug/L	1.0	1		04/04/15 04:24	103-65-1	
Styrene	ND	ug/L	1.0	1		04/04/15 04:24	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		04/04/15 04:24	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		04/04/15 04:24	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		04/04/15 04:24	127-18-4	
Tetrahydrofuran	ND	ug/L	10.0	1		04/04/15 04:24	109-99-9	
Toluene	ND	ug/L	1.0	1		04/04/15 04:24	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		04/04/15 04:24	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		04/04/15 04:24	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		04/04/15 04:24	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		04/04/15 04:24	79-00-5	
Trichloroethene	ND	ug/L	0.40	1		04/04/15 04:24	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		04/04/15 04:24	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	4.0	1		04/04/15 04:24	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		04/04/15 04:24	76-13-1	
1,2,4-Trimethylbenzene	ND	ug/L	1.0	1		04/04/15 04:24	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	1.0	1		04/04/15 04:24	108-67-8	
Vinyl chloride	ND	ug/L	0.40	1		04/04/15 04:24	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1		04/04/15 04:24	1330-20-7	
Surrogates								
1,2-Dichloroethane-d4 (S)	96	%.	75-125	1		04/04/15 04:24	17060-07-0	
Toluene-d8 (S)	100	%.	75-125	1		04/04/15 04:24	2037-26-5	
4-Bromofluorobenzene (S)	102	%.	75-125	1		04/04/15 04:24	460-00-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

ANALYTICAL RESULTS

Project: 14-1004 FSY
Pace Project No.: 10300801

Sample: Trip Blank **Lab ID: 10300802007** Collected: 03/25/15 00:00 Received: 03/26/15 18:07 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 VOC	Analytical Method: EPA 8260							
Acetone	ND	ug/L	20.0	1		04/04/15 01:16	67-64-1	
Allyl chloride	ND	ug/L	4.0	1		04/04/15 01:16	107-05-1	
Benzene	ND	ug/L	1.0	1		04/04/15 01:16	71-43-2	
Bromobenzene	ND	ug/L	1.0	1		04/04/15 01:16	108-86-1	
Bromochloromethane	ND	ug/L	4.0	1		04/04/15 01:16	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	1		04/04/15 01:16	75-27-4	
Bromoform	ND	ug/L	4.0	1		04/04/15 01:16	75-25-2	
Bromomethane	ND	ug/L	4.0	1		04/04/15 01:16	74-83-9	
2-Butanone (MEK)	ND	ug/L	5.0	1		04/04/15 01:16	78-93-3	
n-Butylbenzene	ND	ug/L	1.0	1		04/04/15 01:16	104-51-8	C0,L2
sec-Butylbenzene	ND	ug/L	1.0	1		04/04/15 01:16	135-98-8	
tert-Butylbenzene	ND	ug/L	1.0	1		04/04/15 01:16	98-06-6	
Carbon tetrachloride	ND	ug/L	1.0	1		04/04/15 01:16	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		04/04/15 01:16	108-90-7	
Chloroethane	ND	ug/L	1.0	1		04/04/15 01:16	75-00-3	
Chloroform	ND	ug/L	1.0	1		04/04/15 01:16	67-66-3	
Chloromethane	ND	ug/L	4.0	1		04/04/15 01:16	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	1		04/04/15 01:16	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	1		04/04/15 01:16	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	4.0	1		04/04/15 01:16	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		04/04/15 01:16	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		04/04/15 01:16	106-93-4	
Dibromomethane	ND	ug/L	4.0	1		04/04/15 01:16	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		04/04/15 01:16	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		04/04/15 01:16	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		04/04/15 01:16	106-46-7	
Dichlorodifluoromethane	ND	ug/L	4.0	1		04/04/15 01:16	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	1		04/04/15 01:16	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		04/04/15 01:16	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		04/04/15 01:16	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		04/04/15 01:16	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		04/04/15 01:16	156-60-5	
Dichlorofluoromethane	ND	ug/L	1.0	1		04/04/15 01:16	75-43-4	
1,2-Dichloropropane	ND	ug/L	4.0	1		04/04/15 01:16	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	1		04/04/15 01:16	142-28-9	
2,2-Dichloropropane	ND	ug/L	4.0	1		04/04/15 01:16	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	1		04/04/15 01:16	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	4.0	1		04/04/15 01:16	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	4.0	1		04/04/15 01:16	10061-02-6	
Diethyl ether (Ethyl ether)	ND	ug/L	4.0	1		04/04/15 01:16	60-29-7	
Ethylbenzene	ND	ug/L	1.0	1		04/04/15 01:16	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	1		04/04/15 01:16	87-68-3	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	1		04/04/15 01:16	98-82-8	
p-Isopropyltoluene	ND	ug/L	1.0	1		04/04/15 01:16	99-87-6	
Methylene Chloride	ND	ug/L	4.0	1		04/04/15 01:16	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	1		04/04/15 01:16	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	1		04/04/15 01:16	1634-04-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
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ANALYTICAL RESULTS

Project: 14-1004 FSY
Pace Project No.: 10300801

Sample: Trip Blank **Lab ID: 10300802007** Collected: 03/25/15 00:00 Received: 03/26/15 18:07 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 VOC	Analytical Method: EPA 8260							
Naphthalene	ND	ug/L	4.0	1		04/04/15 01:16	91-20-3	C0,L2
n-Propylbenzene	ND	ug/L	1.0	1		04/04/15 01:16	103-65-1	
Styrene	ND	ug/L	1.0	1		04/04/15 01:16	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		04/04/15 01:16	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		04/04/15 01:16	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		04/04/15 01:16	127-18-4	
Tetrahydrofuran	ND	ug/L	10.0	1		04/04/15 01:16	109-99-9	
Toluene	ND	ug/L	1.0	1		04/04/15 01:16	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		04/04/15 01:16	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		04/04/15 01:16	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		04/04/15 01:16	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		04/04/15 01:16	79-00-5	
Trichloroethene	ND	ug/L	0.40	1		04/04/15 01:16	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		04/04/15 01:16	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	4.0	1		04/04/15 01:16	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		04/04/15 01:16	76-13-1	
1,2,4-Trimethylbenzene	ND	ug/L	1.0	1		04/04/15 01:16	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	1.0	1		04/04/15 01:16	108-67-8	
Vinyl chloride	ND	ug/L	0.40	1		04/04/15 01:16	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1		04/04/15 01:16	1330-20-7	
Surrogates								
1,2-Dichloroethane-d4 (S)	93	%.	75-125	1		04/04/15 01:16	17060-07-0	
Toluene-d8 (S)	101	%.	75-125	1		04/04/15 01:16	2037-26-5	
4-Bromofluorobenzene (S)	100	%.	75-125	1		04/04/15 01:16	460-00-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
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QUALITY CONTROL DATA

Project: 14-1004 FSY
Pace Project No.: 10300801

QC Batch: MPRP/53220
QC Batch Method: ASTM D2974
Analysis Method: ASTM D2974
Analysis Description: Dry Weight/Percent Moisture
Associated Lab Samples: 10300801001

SAMPLE DUPLICATE: 1926782

Parameter	Units	10300376001 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	87.6	87.1	1	30	

SAMPLE DUPLICATE: 1926783

Parameter	Units	10300801001 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	15.5	15.0	3	30	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA

Project: 14-1004 FSY
Pace Project No.: 10300801

QC Batch: MPRP/53225 Analysis Method: ASTM D2974
QC Batch Method: ASTM D2974 Analysis Description: Dry Weight/Percent Moisture
Associated Lab Samples: 10300801002, 10300801003, 10300801004, 10300801005, 10300801006, 10300801007, 10300801008

SAMPLE DUPLICATE: 1926958

Parameter	Units	1244878001 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	14.2	16.0	12	30	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
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(612)607-1700

QUALITY CONTROL DATA

Project: 14-1004 FSY
Pace Project No.: 10300801

QC Batch: MSV/30935 Analysis Method: EPA 8260
QC Batch Method: EPA 5035/5030B Analysis Description: 8260 MSV 5030 Med Level
Associated Lab Samples: 10300801001, 10300801002, 10300801003, 10300801004, 10300801006, 10300801007, 10300801009

METHOD BLANK: 1928535 Matrix: Solid
Associated Lab Samples: 10300801001, 10300801002, 10300801003, 10300801004, 10300801006, 10300801007, 10300801009

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	ND	50.0	04/01/15 15:22	
1,1,1-Trichloroethane	ug/kg	ND	50.0	04/01/15 15:22	
1,1,2,2-Tetrachloroethane	ug/kg	ND	50.0	04/01/15 15:22	
1,1,2-Trichloroethane	ug/kg	ND	50.0	04/01/15 15:22	
1,1,2-Trichlorotrifluoroethane	ug/kg	ND	200	04/01/15 15:22	
1,1-Dichloroethane	ug/kg	ND	50.0	04/01/15 15:22	
1,1-Dichloroethene	ug/kg	ND	200	04/01/15 15:22	
1,1-Dichloropropene	ug/kg	ND	50.0	04/01/15 15:22	
1,2,3-Trichlorobenzene	ug/kg	ND	50.0	04/01/15 15:22	
1,2,3-Trichloropropane	ug/kg	ND	200	04/01/15 15:22	
1,2,4-Trichlorobenzene	ug/kg	ND	50.0	04/01/15 15:22	
1,2,4-Trimethylbenzene	ug/kg	ND	50.0	04/01/15 15:22	
1,2-Dibromo-3-chloropropane	ug/kg	ND	500	04/01/15 15:22	
1,2-Dibromoethane (EDB)	ug/kg	ND	50.0	04/01/15 15:22	
1,2-Dichlorobenzene	ug/kg	ND	50.0	04/01/15 15:22	
1,2-Dichloroethane	ug/kg	ND	50.0	04/01/15 15:22	
1,2-Dichloropropane	ug/kg	ND	50.0	04/01/15 15:22	
1,3,5-Trimethylbenzene	ug/kg	ND	50.0	04/01/15 15:22	
1,3-Dichlorobenzene	ug/kg	ND	50.0	04/01/15 15:22	
1,3-Dichloropropane	ug/kg	ND	50.0	04/01/15 15:22	
1,4-Dichlorobenzene	ug/kg	ND	50.0	04/01/15 15:22	
2,2-Dichloropropane	ug/kg	ND	200	04/01/15 15:22	
2-Butanone (MEK)	ug/kg	ND	250	04/01/15 15:22	
2-Chlorotoluene	ug/kg	ND	50.0	04/01/15 15:22	
4-Chlorotoluene	ug/kg	ND	50.0	04/01/15 15:22	
4-Methyl-2-pentanone (MIBK)	ug/kg	ND	250	04/01/15 15:22	
Acetone	ug/kg	ND	1000	04/01/15 15:22	
Allyl chloride	ug/kg	ND	200	04/01/15 15:22	
Benzene	ug/kg	ND	20.0	04/01/15 15:22	
Bromobenzene	ug/kg	ND	50.0	04/01/15 15:22	
Bromochloromethane	ug/kg	ND	200	04/01/15 15:22	
Bromodichloromethane	ug/kg	ND	50.0	04/01/15 15:22	
Bromoform	ug/kg	ND	200	04/01/15 15:22	
Bromomethane	ug/kg	ND	500	04/01/15 15:22	
Carbon tetrachloride	ug/kg	ND	200	04/01/15 15:22	
Chlorobenzene	ug/kg	ND	50.0	04/01/15 15:22	
Chloroethane	ug/kg	ND	500	04/01/15 15:22	
Chloroform	ug/kg	ND	50.0	04/01/15 15:22	
Chloromethane	ug/kg	ND	200	04/01/15 15:22	
cis-1,2-Dichloroethene	ug/kg	ND	50.0	04/01/15 15:22	
cis-1,3-Dichloropropene	ug/kg	ND	50.0	04/01/15 15:22	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA

Project: 14-1004 FSY
Pace Project No.: 10300801

METHOD BLANK: 1928535 Matrix: Solid
Associated Lab Samples: 10300801001, 10300801002, 10300801003, 10300801004, 10300801006, 10300801007, 10300801009

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Dibromochloromethane	ug/kg	ND	50.0	04/01/15 15:22	
Dibromomethane	ug/kg	ND	50.0	04/01/15 15:22	
Dichlorodifluoromethane	ug/kg	ND	200	04/01/15 15:22	
Dichlorofluoromethane	ug/kg	ND	500	04/01/15 15:22	
Diethyl ether (Ethyl ether)	ug/kg	ND	200	04/01/15 15:22	
Ethylbenzene	ug/kg	ND	50.0	04/01/15 15:22	
Hexachloro-1,3-butadiene	ug/kg	ND	250	04/01/15 15:22	
Isopropylbenzene (Cumene)	ug/kg	ND	50.0	04/01/15 15:22	
Methyl-tert-butyl ether	ug/kg	ND	50.0	04/01/15 15:22	
Methylene Chloride	ug/kg	ND	200	04/01/15 15:22	
n-Butylbenzene	ug/kg	ND	50.0	04/01/15 15:22	
n-Propylbenzene	ug/kg	ND	50.0	04/01/15 15:22	
Naphthalene	ug/kg	ND	200	04/01/15 15:22	
p-Isopropyltoluene	ug/kg	ND	50.0	04/01/15 15:22	
sec-Butylbenzene	ug/kg	ND	50.0	04/01/15 15:22	
Styrene	ug/kg	ND	50.0	04/01/15 15:22	
tert-Butylbenzene	ug/kg	ND	50.0	04/01/15 15:22	
Tetrachloroethene	ug/kg	ND	50.0	04/01/15 15:22	
Tetrahydrofuran	ug/kg	ND	2000	04/01/15 15:22	
Toluene	ug/kg	ND	50.0	04/01/15 15:22	
trans-1,2-Dichloroethene	ug/kg	ND	200	04/01/15 15:22	
trans-1,3-Dichloropropene	ug/kg	ND	50.0	04/01/15 15:22	
Trichloroethene	ug/kg	ND	50.0	04/01/15 15:22	
Trichlorofluoromethane	ug/kg	ND	200	04/01/15 15:22	
Vinyl chloride	ug/kg	ND	20.0	04/01/15 15:22	
Xylene (Total)	ug/kg	ND	150	04/01/15 15:22	
1,2-Dichloroethane-d4 (S)	%.	87	55-150	04/01/15 15:22	
4-Bromofluorobenzene (S)	%.	101	54-131	04/01/15 15:22	
Toluene-d8 (S)	%.	97	61-125	04/01/15 15:22	

LABORATORY CONTROL SAMPLE: 1928536

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	1000	1010	101	75-125	
1,1,1-Trichloroethane	ug/kg	1000	1070	107	66-125	
1,1,2,2-Tetrachloroethane	ug/kg	1000	1200	120	69-125	E,SS
1,1,2-Trichloroethane	ug/kg	1000	1050	105	75-125	
1,1,2-Trichlorotrifluoroethane	ug/kg	1000	970	97	55-125	
1,1-Dichloroethane	ug/kg	1000	1010	101	67-125	
1,1-Dichloroethene	ug/kg	1000	932	93	62-125	
1,1-Dichloropropene	ug/kg	1000	971	97	65-125	
1,2,3-Trichlorobenzene	ug/kg	1000	1060	106	58-132	
1,2,3-Trichloropropane	ug/kg	1000	1050	105	71-125	
1,2,4-Trichlorobenzene	ug/kg	1000	1030	103	63-128	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA

Project: 14-1004 FSY
Pace Project No.: 10300801

LABORATORY CONTROL SAMPLE: 1928536

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2,4-Trimethylbenzene	ug/kg	1000	967	97	74-125	
1,2-Dibromo-3-chloropropane	ug/kg	2500	2760	111	55-142	
1,2-Dibromoethane (EDB)	ug/kg	1000	1030	103	75-125	
1,2-Dichlorobenzene	ug/kg	1000	1030	103	75-125	
1,2-Dichloroethane	ug/kg	1000	913	91	71-125	
1,2-Dichloropropane	ug/kg	1000	959	96	74-125	
1,3,5-Trimethylbenzene	ug/kg	1000	979	98	72-125	
1,3-Dichlorobenzene	ug/kg	1000	946	95	75-125	
1,3-Dichloropropane	ug/kg	1000	987	99	75-125	
1,4-Dichlorobenzene	ug/kg	1000	981	98	75-125	
2,2-Dichloropropane	ug/kg	1000	951	95	45-125	
2-Butanone (MEK)	ug/kg	5000	5050	101	39-136	
2-Chlorotoluene	ug/kg	1000	968	97	73-125	
4-Chlorotoluene	ug/kg	1000	931	93	74-125	
4-Methyl-2-pentanone (MIBK)	ug/kg	5000	5270	105	55-132	
Acetone	ug/kg	5000	5260	105	55-131	
Allyl chloride	ug/kg	1000	956	96	53-125	
Benzene	ug/kg	1000	943	94	69-125	
Bromobenzene	ug/kg	1000	925	93	75-125	
Bromochloromethane	ug/kg	1000	976	98	75-125	
Bromodichloromethane	ug/kg	1000	1020	102	75-125	
Bromoform	ug/kg	1000	1010	101	71-125	
Bromomethane	ug/kg	1000	826	83	42-150	
Carbon tetrachloride	ug/kg	1000	959	96	62-125	
Chlorobenzene	ug/kg	1000	980	98	75-125	
Chloroethane	ug/kg	1000	875	87	41-150	
Chloroform	ug/kg	1000	947	95	72-125	
Chloromethane	ug/kg	1000	732	73	50-125	
cis-1,2-Dichloroethene	ug/kg	1000	986	99	73-125	
cis-1,3-Dichloropropene	ug/kg	1000	957	96	74-125	
Dibromochloromethane	ug/kg	1000	1070	107	75-125	
Dibromomethane	ug/kg	1000	1110	111	75-125	
Dichlorodifluoromethane	ug/kg	1000	663	66	30-125	
Dichlorofluoromethane	ug/kg	1000	871	87	30-150	
Diethyl ether (Ethyl ether)	ug/kg	1000	1020	102	58-125	
Ethylbenzene	ug/kg	1000	969	97	72-125	
Hexachloro-1,3-butadiene	ug/kg	1000	959	96	59-138	
Isopropylbenzene (Cumene)	ug/kg	1000	1040	104	72-125	
Methyl-tert-butyl ether	ug/kg	1000	995	99	72-125	
Methylene Chloride	ug/kg	1000	955	95	71-125	
n-Butylbenzene	ug/kg	1000	939	94	65-125	
n-Propylbenzene	ug/kg	1000	951	95	71-125	
Naphthalene	ug/kg	1000	1150	115	55-139	
p-Isopropyltoluene	ug/kg	1000	991	99	69-125	
sec-Butylbenzene	ug/kg	1000	964	96	68-125	
Styrene	ug/kg	1000	1030	103	75-125	
tert-Butylbenzene	ug/kg	1000	977	98	70-125	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA

Project: 14-1004 FSY
Pace Project No.: 10300801

LABORATORY CONTROL SAMPLE: 1928536

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Tetrachloroethene	ug/kg	1000	1030	103	69-125	
Tetrahydrofuran	ug/kg	10000	11800	118	62-129	
Toluene	ug/kg	1000	991	99	72-125	
trans-1,2-Dichloroethene	ug/kg	1000	908	91	68-125	
trans-1,3-Dichloropropene	ug/kg	1000	957	96	74-125	
Trichloroethene	ug/kg	1000	1010	101	72-125	
Trichlorofluoromethane	ug/kg	1000	890	89	30-150	
Vinyl chloride	ug/kg	1000	765	76	53-125	
Xylene (Total)	ug/kg	3000	3120	104	74-125	
1,2-Dichloroethane-d4 (S)	%.			94	55-150	
4-Bromofluorobenzene (S)	%.			94	54-131	
Toluene-d8 (S)	%.			100	61-125	

MATRIX SPIKE SAMPLE: 1928537

Parameter	Units	10300801001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	ND	1150	1120	97	62-150	
1,1,1-Trichloroethane	ug/kg	ND	1150	1160	101	58-150	
1,1,2,2-Tetrachloroethane	ug/kg	ND	1150	1390	121	30-150	E,SS
1,1,2-Trichloroethane	ug/kg	ND	1150	1180	103	61-149	
1,1,2-Trichlorotrifluoroethane	ug/kg	ND	1150	1060	92	45-150	
1,1-Dichloroethane	ug/kg	ND	1150	1070	93	56-150	
1,1-Dichloroethene	ug/kg	ND	1150	955	83	48-150	
1,1-Dichloropropene	ug/kg	ND	1150	1010	88	58-150	
1,2,3-Trichlorobenzene	ug/kg	ND	1150	1130	99	55-150	
1,2,3-Trichloropropane	ug/kg	ND	1150	1190	104	57-148	
1,2,4-Trichlorobenzene	ug/kg	ND	1150	1110	96	61-150	
1,2,4-Trimethylbenzene	ug/kg	ND	1150	1080	94	64-150	
1,2-Dibromo-3-chloropropane	ug/kg	ND	2880	3000	104	40-150	
1,2-Dibromoethane (EDB)	ug/kg	ND	1150	1110	97	62-147	
1,2-Dichlorobenzene	ug/kg	ND	1150	1110	97	73-133	
1,2-Dichloroethane	ug/kg	ND	1150	962	84	63-132	
1,2-Dichloropropane	ug/kg	ND	1150	1040	91	69-127	
1,3,5-Trimethylbenzene	ug/kg	ND	1150	1080	94	63-137	
1,3-Dichlorobenzene	ug/kg	ND	1150	1010	88	69-133	
1,3-Dichloropropane	ug/kg	ND	1150	1090	95	70-130	
1,4-Dichlorobenzene	ug/kg	ND	1150	1020	89	69-130	
2,2-Dichloropropane	ug/kg	ND	1150	1010	87	54-135	
2-Butanone (MEK)	ug/kg	ND	5750	5650	98	49-145	
2-Chlorotoluene	ug/kg	ND	1150	1060	92	68-129	
4-Chlorotoluene	ug/kg	ND	1150	1010	87	67-134	
4-Methyl-2-pentanone (MIBK)	ug/kg	ND	5750	5860	102	60-150	
Acetone	ug/kg	ND	5750	5540	96	65-135	
Allyl chloride	ug/kg	ND	1150	969	84	55-126	
Benzene	ug/kg	ND	1150	1020	89	63-126	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA

Project: 14-1004 FSY
Pace Project No.: 10300801

MATRIX SPIKE SAMPLE: 1928537

Parameter	Units	10300801001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Bromobenzene	ug/kg	ND	1150	1030	89	68-133	
Bromochloromethane	ug/kg	ND	1150	983	85	66-130	
Bromodichloromethane	ug/kg	ND	1150	1080	94	68-129	
Bromoform	ug/kg	ND	1150	1100	96	63-135	
Bromomethane	ug/kg	ND	1150	906	77	30-150	
Carbon tetrachloride	ug/kg	ND	1150	1050	91	56-140	
Chlorobenzene	ug/kg	ND	1150	1050	91	69-130	
Chloroethane	ug/kg	ND	1150	935	81	46-150	
Chloroform	ug/kg	ND	1150	1000	87	70-127	
Chloromethane	ug/kg	ND	1150	723	63	51-125	
cis-1,2-Dichloroethene	ug/kg	ND	1150	988	86	68-125	
cis-1,3-Dichloropropene	ug/kg	ND	1150	1020	88	67-126	
Dibromochloromethane	ug/kg	ND	1150	1190	103	66-135	
Dibromomethane	ug/kg	ND	1150	1140	99	68-132	
Dichlorodifluoromethane	ug/kg	ND	1150	564	49	30-138	
Dichlorofluoromethane	ug/kg	ND	1150	991	86	30-150	
Diethyl ether (Ethyl ether)	ug/kg	ND	1150	1060	92	56-135	
Ethylbenzene	ug/kg	ND	1150	1050	92	69-126	
Hexachloro-1,3-butadiene	ug/kg	ND	1150	1070	93	50-150	
Isopropylbenzene (Cumene)	ug/kg	ND	1150	1110	96	65-135	
Methyl-tert-butyl ether	ug/kg	ND	1150	1100	95	66-129	
Methylene Chloride	ug/kg	ND	1150	954	83	64-125	
n-Butylbenzene	ug/kg	ND	1150	1030	90	62-141	
n-Propylbenzene	ug/kg	ND	1150	1060	92	65-135	
Naphthalene	ug/kg	ND	1150	1240	107	62-150	
p-Isopropyltoluene	ug/kg	ND	1150	1090	95	62-139	
sec-Butylbenzene	ug/kg	ND	1150	1070	93	64-137	
Styrene	ug/kg	ND	1150	1080	94	70-132	
tert-Butylbenzene	ug/kg	ND	1150	1090	94	65-136	
Tetrachloroethene	ug/kg	ND	1150	1120	97	61-142	
Tetrahydrofuran	ug/kg	ND	11500	12800	111	68-138	
Toluene	ug/kg	ND	1150	1080	94	66-128	
trans-1,2-Dichloroethene	ug/kg	ND	1150	862	75	63-129	
trans-1,3-Dichloropropene	ug/kg	ND	1150	1040	90	67-132	
Trichloroethene	ug/kg	ND	1150	1040	90	52-150	
Trichlorofluoromethane	ug/kg	ND	1150	1060	92	39-150	
Vinyl chloride	ug/kg	ND	1150	738	64	50-125	
Xylene (Total)	ug/kg	ND	3460	3350	97	70-130	
1,2-Dichloroethane-d4 (S)	%.				93	55-150	
4-Bromofluorobenzene (S)	%.				96	54-131	
Toluene-d8 (S)	%.				102	61-125	

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REPORT OF LABORATORY ANALYSIS

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(612)607-1700

QUALITY CONTROL DATA

Project: 14-1004 FSY
Pace Project No.: 10300801

SAMPLE DUPLICATE: 1928538

Parameter	Units	10300801002 Result	Dup Result	RPD	Max RPD	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	ND	ND		30	
1,1,1-Trichloroethane	ug/kg	ND	ND		30	
1,1,2,2-Tetrachloroethane	ug/kg	ND	ND		30	
1,1,2-Trichloroethane	ug/kg	ND	ND		30	
1,1,2-Trichlorotrifluoroethane	ug/kg	ND	ND		30	
1,1-Dichloroethane	ug/kg	ND	ND		30	
1,1-Dichloroethene	ug/kg	ND	ND		30	
1,1-Dichloropropene	ug/kg	ND	ND		30	
1,2,3-Trichlorobenzene	ug/kg	ND	ND		30	
1,2,3-Trichloropropane	ug/kg	ND	ND		30	
1,2,4-Trichlorobenzene	ug/kg	ND	ND		30	
1,2,4-Trimethylbenzene	ug/kg	ND	ND		30	
1,2-Dibromo-3-chloropropane	ug/kg	ND	ND		30	
1,2-Dibromoethane (EDB)	ug/kg	ND	ND		30	
1,2-Dichlorobenzene	ug/kg	ND	ND		30	
1,2-Dichloroethane	ug/kg	ND	ND		30	
1,2-Dichloropropane	ug/kg	ND	ND		30	
1,3,5-Trimethylbenzene	ug/kg	ND	ND		30	
1,3-Dichlorobenzene	ug/kg	ND	ND		30	
1,3-Dichloropropane	ug/kg	ND	ND		30	
1,4-Dichlorobenzene	ug/kg	ND	ND		30	
2,2-Dichloropropane	ug/kg	ND	ND		30	
2-Butanone (MEK)	ug/kg	ND	ND		30	
2-Chlorotoluene	ug/kg	ND	ND		30	
4-Chlorotoluene	ug/kg	ND	ND		30	
4-Methyl-2-pentanone (MIBK)	ug/kg	ND	ND		30	
Acetone	ug/kg	ND	ND		30	
Allyl chloride	ug/kg	ND	ND		30	
Benzene	ug/kg	ND	ND		30	
Bromobenzene	ug/kg	ND	ND		30	
Bromochloromethane	ug/kg	ND	ND		30	
Bromodichloromethane	ug/kg	ND	ND		30	
Bromoform	ug/kg	ND	ND		30	
Bromomethane	ug/kg	ND	ND		30	
Carbon tetrachloride	ug/kg	ND	ND		30	
Chlorobenzene	ug/kg	ND	ND		30	
Chloroethane	ug/kg	ND	ND		30	
Chloroform	ug/kg	ND	ND		30	
Chloromethane	ug/kg	ND	ND		30	
cis-1,2-Dichloroethene	ug/kg	ND	ND		30	
cis-1,3-Dichloropropene	ug/kg	ND	ND		30	
Dibromochloromethane	ug/kg	ND	ND		30	
Dibromomethane	ug/kg	ND	ND		30	
Dichlorodifluoromethane	ug/kg	ND	ND		30	
Dichlorofluoromethane	ug/kg	ND	ND		30	
Diethyl ether (Ethyl ether)	ug/kg	ND	ND		30	
Ethylbenzene	ug/kg	ND	ND		30	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA

Project: 14-1004 FSY
Pace Project No.: 10300801

SAMPLE DUPLICATE: 1928538

Parameter	Units	10300801002 Result	Dup Result	RPD	Max RPD	Qualifiers
Hexachloro-1,3-butadiene	ug/kg	ND	ND		30	
Isopropylbenzene (Cumene)	ug/kg	ND	ND		30	
Methyl-tert-butyl ether	ug/kg	ND	ND		30	
Methylene Chloride	ug/kg	ND	ND		30	
n-Butylbenzene	ug/kg	ND	ND		30	
n-Propylbenzene	ug/kg	ND	ND		30	
Naphthalene	ug/kg	ND	ND		30	
p-Isopropyltoluene	ug/kg	ND	ND		30	
sec-Butylbenzene	ug/kg	ND	ND		30	
Styrene	ug/kg	ND	ND		30	
tert-Butylbenzene	ug/kg	ND	ND		30	
Tetrachloroethene	ug/kg	ND	ND		30	
Tetrahydrofuran	ug/kg	ND	ND		30	
Toluene	ug/kg	ND	13.9J		30	
trans-1,2-Dichloroethene	ug/kg	ND	ND		30	
trans-1,3-Dichloropropene	ug/kg	ND	ND		30	
Trichloroethene	ug/kg	ND	ND		30	
Trichlorofluoromethane	ug/kg	ND	ND		30	
Vinyl chloride	ug/kg	ND	ND		30	
Xylene (Total)	ug/kg	ND	ND		30	
1,2-Dichloroethane-d4 (S)	%.	92	91	2		
4-Bromofluorobenzene (S)	%.	97	97	2		
Toluene-d8 (S)	%.	100	101	0		

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
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(612)607-1700

QUALITY CONTROL DATA

Project: 14-1004 FSY
Pace Project No.: 10300801

QC Batch: MSV/30950
QC Batch Method: EPA 5035/5030B
Analysis Method: EPA 8260
Analysis Description: 8260 MSV 5030 Med Level
Associated Lab Samples: 10300801005

METHOD BLANK: 1929419
Matrix: Solid
Associated Lab Samples: 10300801005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	ND	50.0	04/07/15 18:06	
1,1,1-Trichloroethane	ug/kg	ND	50.0	04/07/15 18:06	
1,1,2,2-Tetrachloroethane	ug/kg	ND	50.0	04/07/15 18:06	
1,1,2-Trichloroethane	ug/kg	ND	50.0	04/07/15 18:06	
1,1,2-Trichlorotrifluoroethane	ug/kg	ND	500	04/07/15 18:06	
1,1-Dichloroethane	ug/kg	ND	50.0	04/07/15 18:06	
1,1-Dichloroethene	ug/kg	ND	50.0	04/07/15 18:06	
1,1-Dichloropropene	ug/kg	ND	50.0	04/07/15 18:06	
1,2,3-Trichlorobenzene	ug/kg	ND	50.0	04/07/15 18:06	
1,2,3-Trichloropropane	ug/kg	ND	200	04/07/15 18:06	
1,2,4-Trichlorobenzene	ug/kg	ND	50.0	04/07/15 18:06	
1,2,4-Trimethylbenzene	ug/kg	ND	50.0	04/07/15 18:06	
1,2-Dibromo-3-chloropropane	ug/kg	ND	500	04/07/15 18:06	
1,2-Dibromoethane (EDB)	ug/kg	ND	50.0	04/07/15 18:06	
1,2-Dichlorobenzene	ug/kg	ND	50.0	04/07/15 18:06	
1,2-Dichloroethane	ug/kg	ND	50.0	04/07/15 18:06	
1,2-Dichloropropane	ug/kg	ND	50.0	04/07/15 18:06	
1,3,5-Trimethylbenzene	ug/kg	ND	50.0	04/07/15 18:06	
1,3-Dichlorobenzene	ug/kg	ND	50.0	04/07/15 18:06	
1,3-Dichloropropane	ug/kg	ND	50.0	04/07/15 18:06	
1,4-Dichlorobenzene	ug/kg	ND	50.0	04/07/15 18:06	
2,2-Dichloropropane	ug/kg	ND	200	04/07/15 18:06	
2-Butanone (MEK)	ug/kg	ND	250	04/07/15 18:06	
2-Chlorotoluene	ug/kg	ND	50.0	04/07/15 18:06	
4-Chlorotoluene	ug/kg	ND	50.0	04/07/15 18:06	
4-Methyl-2-pentanone (MIBK)	ug/kg	ND	250	04/07/15 18:06	
Acetone	ug/kg	ND	1000	04/07/15 18:06	
Allyl chloride	ug/kg	ND	200	04/07/15 18:06	
Benzene	ug/kg	ND	20.0	04/07/15 18:06	
Bromobenzene	ug/kg	ND	50.0	04/07/15 18:06	
Bromochloromethane	ug/kg	ND	50.0	04/07/15 18:06	
Bromodichloromethane	ug/kg	ND	50.0	04/07/15 18:06	
Bromoform	ug/kg	ND	200	04/07/15 18:06	
Bromomethane	ug/kg	ND	500	04/07/15 18:06	
Carbon tetrachloride	ug/kg	ND	50.0	04/07/15 18:06	
Chlorobenzene	ug/kg	ND	50.0	04/07/15 18:06	
Chloroethane	ug/kg	ND	500	04/07/15 18:06	
Chloroform	ug/kg	ND	50.0	04/07/15 18:06	
Chloromethane	ug/kg	ND	200	04/07/15 18:06	
cis-1,2-Dichloroethene	ug/kg	ND	50.0	04/07/15 18:06	
cis-1,3-Dichloropropene	ug/kg	ND	50.0	04/07/15 18:06	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
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(612)607-1700

QUALITY CONTROL DATA

Project: 14-1004 FSY
Pace Project No.: 10300801

METHOD BLANK: 1929419 Matrix: Solid
Associated Lab Samples: 10300801005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Dibromochloromethane	ug/kg	ND	50.0	04/07/15 18:06	
Dibromomethane	ug/kg	ND	50.0	04/07/15 18:06	
Dichlorodifluoromethane	ug/kg	ND	200	04/07/15 18:06	
Dichlorofluoromethane	ug/kg	ND	500	04/07/15 18:06	
Diethyl ether (Ethyl ether)	ug/kg	ND	200	04/07/15 18:06	
Ethylbenzene	ug/kg	ND	50.0	04/07/15 18:06	
Hexachloro-1,3-butadiene	ug/kg	ND	250	04/07/15 18:06	
Isopropylbenzene (Cumene)	ug/kg	ND	50.0	04/07/15 18:06	
Methyl-tert-butyl ether	ug/kg	ND	50.0	04/07/15 18:06	
Methylene Chloride	ug/kg	ND	200	04/07/15 18:06	
n-Butylbenzene	ug/kg	ND	50.0	04/07/15 18:06	
n-Propylbenzene	ug/kg	ND	50.0	04/07/15 18:06	
Naphthalene	ug/kg	ND	200	04/07/15 18:06	
p-Isopropyltoluene	ug/kg	ND	50.0	04/07/15 18:06	
sec-Butylbenzene	ug/kg	ND	50.0	04/07/15 18:06	
Styrene	ug/kg	ND	50.0	04/07/15 18:06	
tert-Butylbenzene	ug/kg	ND	50.0	04/07/15 18:06	
Tetrachloroethene	ug/kg	ND	50.0	04/07/15 18:06	
Tetrahydrofuran	ug/kg	ND	2000	04/07/15 18:06	
Toluene	ug/kg	ND	100	04/07/15 18:06	C0
trans-1,2-Dichloroethene	ug/kg	ND	50.0	04/07/15 18:06	
trans-1,3-Dichloropropene	ug/kg	ND	50.0	04/07/15 18:06	
Trichloroethene	ug/kg	ND	50.0	04/07/15 18:06	
Trichlorofluoromethane	ug/kg	ND	200	04/07/15 18:06	
Vinyl chloride	ug/kg	ND	20.0	04/07/15 18:06	
Xylene (Total)	ug/kg	ND	150	04/07/15 18:06	
1,2-Dichloroethane-d4 (S)	%.	90	55-150	04/07/15 18:06	
4-Bromofluorobenzene (S)	%.	98	54-131	04/07/15 18:06	
Toluene-d8 (S)	%.	99	61-125	04/07/15 18:06	

LABORATORY CONTROL SAMPLE: 1929420

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	1000	990	99	75-125	
1,1,1-Trichloroethane	ug/kg	1000	885	88	66-125	
1,1,2,2-Tetrachloroethane	ug/kg	1000	917	92	69-125	
1,1,2-Trichloroethane	ug/kg	1000	988	99	75-125	
1,1,2-Trichlorotrifluoroethane	ug/kg	1000	1030	103	55-125	
1,1-Dichloroethane	ug/kg	1000	901	90	67-125	
1,1-Dichloroethene	ug/kg	1000	836	84	62-125	
1,1-Dichloropropene	ug/kg	1000	936	94	65-125	
1,2,3-Trichlorobenzene	ug/kg	1000	993	99	58-132	
1,2,3-Trichloropropane	ug/kg	1000	909	91	71-125	
1,2,4-Trichlorobenzene	ug/kg	1000	1020	102	63-128	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA

Project: 14-1004 FSY
Pace Project No.: 10300801

LABORATORY CONTROL SAMPLE: 1929420

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2,4-Trimethylbenzene	ug/kg	1000	1010	101	74-125	
1,2-Dibromo-3-chloropropane	ug/kg	2500	2280	91	55-142	
1,2-Dibromoethane (EDB)	ug/kg	1000	951	95	75-125	
1,2-Dichlorobenzene	ug/kg	1000	992	99	75-125	
1,2-Dichloroethane	ug/kg	1000	889	89	71-125	
1,2-Dichloropropane	ug/kg	1000	939	94	74-125	
1,3,5-Trimethylbenzene	ug/kg	1000	969	97	72-125	
1,3-Dichlorobenzene	ug/kg	1000	994	99	75-125	
1,3-Dichloropropane	ug/kg	1000	975	97	75-125	
1,4-Dichlorobenzene	ug/kg	1000	938	94	75-125	
2,2-Dichloropropane	ug/kg	1000	883	88	45-125	
2-Butanone (MEK)	ug/kg	5000	3590	72	39-136	
2-Chlorotoluene	ug/kg	1000	996	100	73-125	
4-Chlorotoluene	ug/kg	1000	1000	100	74-125	
4-Methyl-2-pentanone (MIBK)	ug/kg	5000	4510	90	55-132	
Acetone	ug/kg	5000	5000	100	55-131	
Allyl chloride	ug/kg	1000	826	83	53-125	
Benzene	ug/kg	1000	911	91	69-125	
Bromobenzene	ug/kg	1000	973	97	75-125	
Bromochloromethane	ug/kg	1000	877	88	75-125	
Bromodichloromethane	ug/kg	1000	957	96	75-125	
Bromoform	ug/kg	1000	977	98	71-125	
Bromomethane	ug/kg	1000	664	66	42-150	
Carbon tetrachloride	ug/kg	1000	864	86	62-125	
Chlorobenzene	ug/kg	1000	977	98	75-125	
Chloroethane	ug/kg	1000	876	88	41-150	
Chloroform	ug/kg	1000	870	87	72-125	
Chloromethane	ug/kg	1000	738	74	50-125	
cis-1,2-Dichloroethene	ug/kg	1000	840	84	73-125	
cis-1,3-Dichloropropene	ug/kg	1000	986	99	74-125	
Dibromochloromethane	ug/kg	1000	954	95	75-125	
Dibromomethane	ug/kg	1000	930	93	75-125	
Dichlorodifluoromethane	ug/kg	1000	700	70	30-125	
Dichlorofluoromethane	ug/kg	1000	811	81	30-150	
Diethyl ether (Ethyl ether)	ug/kg	1000	894	89	58-125	
Ethylbenzene	ug/kg	1000	1010	101	72-125	
Hexachloro-1,3-butadiene	ug/kg	1000	1040	104	59-138	
Isopropylbenzene (Cumene)	ug/kg	1000	967	97	72-125	
Methyl-tert-butyl ether	ug/kg	1000	870	87	72-125	
Methylene Chloride	ug/kg	1000	861	86	71-125	
n-Butylbenzene	ug/kg	1000	1020	102	65-125	
n-Propylbenzene	ug/kg	1000	979	98	71-125	
Naphthalene	ug/kg	1000	977	98	55-139	
p-Isopropyltoluene	ug/kg	1000	1000	100	69-125	
sec-Butylbenzene	ug/kg	1000	969	97	68-125	
Styrene	ug/kg	1000	965	97	75-125	
tert-Butylbenzene	ug/kg	1000	964	96	70-125	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA

Project: 14-1004 FSY
Pace Project No.: 10300801

LABORATORY CONTROL SAMPLE: 1929420

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Tetrachloroethene	ug/kg	1000	1040	104	69-125	
Tetrahydrofuran	ug/kg	10000	9810	98	62-129	
Toluene	ug/kg	1000	1050	105	72-125	
trans-1,2-Dichloroethene	ug/kg	1000	921	92	68-125	
trans-1,3-Dichloropropene	ug/kg	1000	969	97	74-125	
Trichloroethene	ug/kg	1000	1020	102	72-125	
Trichlorofluoromethane	ug/kg	1000	836	84	30-150	
Vinyl chloride	ug/kg	1000	694	69	53-125	
Xylene (Total)	ug/kg	3000	3010	100	74-125	
1,2-Dichloroethane-d4 (S)	%.			87	55-150	
4-Bromofluorobenzene (S)	%.			100	54-131	
Toluene-d8 (S)	%.			100	61-125	

MATRIX SPIKE SAMPLE: 1929421

Parameter	Units	10301194001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	ND	1150	1130	98	62-150	
1,1,1-Trichloroethane	ug/kg	ND	1150	991	86	58-150	
1,1,2,2-Tetrachloroethane	ug/kg	ND	1150	1180	103	30-150	
1,1,2-Trichloroethane	ug/kg	ND	1150	1180	102	61-149	
1,1,2-Trichlorotrifluoroethane	ug/kg	ND	1150	1260	110	45-150	
1,1-Dichloroethane	ug/kg	ND	1150	1010	88	56-150	
1,1-Dichloroethene	ug/kg	ND	1150	993	87	48-150	
1,1-Dichloropropene	ug/kg	ND	1150	1040	91	58-150	
1,2,3-Trichlorobenzene	ug/kg	ND	1150	1340	117	55-150	
1,2,3-Trichloropropane	ug/kg	ND	1150	1060	92	57-148	
1,2,4-Trichlorobenzene	ug/kg	ND	1150	1270	111	61-150	
1,2,4-Trimethylbenzene	ug/kg	ND	1150	1210	105	64-150	
1,2-Dibromo-3-chloropropane	ug/kg	ND	2870	3010	105	40-150	
1,2-Dibromoethane (EDB)	ug/kg	ND	1150	1140	99	62-147	
1,2-Dichlorobenzene	ug/kg	ND	1150	1230	107	73-133	
1,2-Dichloroethane	ug/kg	ND	1150	1010	88	63-132	
1,2-Dichloropropane	ug/kg	ND	1150	1130	98	69-127	
1,3,5-Trimethylbenzene	ug/kg	ND	1150	1140	99	63-137	
1,3-Dichlorobenzene	ug/kg	ND	1150	1180	103	69-133	
1,3-Dichloropropane	ug/kg	ND	1150	1150	100	70-130	
1,4-Dichlorobenzene	ug/kg	ND	1150	1120	97	69-130	
2,2-Dichloropropane	ug/kg	ND	1150	999	87	54-135	
2-Butanone (MEK)	ug/kg	ND	5730	4760	83	49-145	
2-Chlorotoluene	ug/kg	ND	1150	1210	105	68-129	
4-Chlorotoluene	ug/kg	ND	1150	1150	100	67-134	
4-Methyl-2-pentanone (MIBK)	ug/kg	ND	5730	5610	98	60-150	
Acetone	ug/kg	ND	5730	5890	103	65-135	
Allyl chloride	ug/kg	ND	1150	981	86	55-126	
Benzene	ug/kg	ND	1150	1030	89	63-126	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA

Project: 14-1004 FSY
Pace Project No.: 10300801

MATRIX SPIKE SAMPLE: 1929421

Parameter	Units	10301194001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Bromobenzene	ug/kg	ND	1150	1120	97	68-133	
Bromochloromethane	ug/kg	ND	1150	955	83	66-130	
Bromodichloromethane	ug/kg	ND	1150	1170	102	68-129	
Bromoform	ug/kg	ND	1150	1200	104	63-135	
Bromomethane	ug/kg	ND	1150	895	78	30-150	
Carbon tetrachloride	ug/kg	ND	1150	1010	88	56-140	
Chlorobenzene	ug/kg	ND	1150	1120	98	69-130	
Chloroethane	ug/kg	ND	1150	943	82	46-150	
Chloroform	ug/kg	ND	1150	1010	87	70-127	
Chloromethane	ug/kg	ND	1150	749	65	51-125	
cis-1,2-Dichloroethene	ug/kg	ND	1150	993	87	68-125	
cis-1,3-Dichloropropene	ug/kg	ND	1150	1160	101	67-126	
Dibromochloromethane	ug/kg	ND	1150	1130	98	66-135	
Dibromomethane	ug/kg	ND	1150	1060	93	68-132	
Dichlorodifluoromethane	ug/kg	ND	1150	589	51	30-138	
Dichlorofluoromethane	ug/kg	ND	1150	993	87	30-150	
Diethyl ether (Ethyl ether)	ug/kg	ND	1150	971	85	56-135	
Ethylbenzene	ug/kg	ND	1150	1150	100	69-126	
Hexachloro-1,3-butadiene	ug/kg	ND	1150	1350	118	50-150	
Isopropylbenzene (Cumene)	ug/kg	ND	1150	1160	101	65-135	
Methyl-tert-butyl ether	ug/kg	ND	1150	1030	89	66-129	
Methylene Chloride	ug/kg	ND	1150	993	87	64-125	
n-Butylbenzene	ug/kg	ND	1150	1260	110	62-141	
n-Propylbenzene	ug/kg	ND	1150	1160	101	65-135	
Naphthalene	ug/kg	ND	1150	1320	114	62-150	
p-Isopropyltoluene	ug/kg	ND	1150	1220	106	62-139	
sec-Butylbenzene	ug/kg	ND	1150	1180	103	64-137	
Styrene	ug/kg	ND	1150	1140	100	70-132	
tert-Butylbenzene	ug/kg	ND	1150	1170	102	65-136	
Tetrachloroethene	ug/kg	ND	1150	1230	107	61-142	
Tetrahydrofuran	ug/kg	ND	11500	11100	97	68-138	
Toluene	ug/kg	ND	1150	1190	100	66-128	
trans-1,2-Dichloroethene	ug/kg	ND	1150	1050	92	63-129	
trans-1,3-Dichloropropene	ug/kg	ND	1150	1100	96	67-132	
Trichloroethene	ug/kg	ND	1150	1150	100	52-150	
Trichlorofluoromethane	ug/kg	ND	1150	1080	94	39-150	
Vinyl chloride	ug/kg	ND	1150	719	63	50-125	
Xylene (Total)	ug/kg	ND	3440	3540	103	70-130	
1,2-Dichloroethane-d4 (S)	%.				85	55-150	
4-Bromofluorobenzene (S)	%.				99	54-131	
Toluene-d8 (S)	%.				99	61-125	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 14-1004 FSY
Pace Project No.: 10300801

SAMPLE DUPLICATE: 1929422

Parameter	Units	10301194002 Result	Dup Result	RPD	Max RPD	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	ND	ND		30	
1,1,1-Trichloroethane	ug/kg	ND	ND		30	
1,1,2,2-Tetrachloroethane	ug/kg	ND	ND		30	
1,1,2-Trichloroethane	ug/kg	ND	ND		30	
1,1,2-Trichlorotrifluoroethane	ug/kg	ND	ND		30	
1,1-Dichloroethane	ug/kg	ND	ND		30	
1,1-Dichloroethene	ug/kg	ND	ND		30	
1,1-Dichloropropene	ug/kg	ND	ND		30	
1,2,3-Trichlorobenzene	ug/kg	ND	ND		30	
1,2,3-Trichloropropane	ug/kg	ND	ND		30	
1,2,4-Trichlorobenzene	ug/kg	ND	ND		30	
1,2,4-Trimethylbenzene	ug/kg	ND	ND		30	
1,2-Dibromo-3-chloropropane	ug/kg	ND	ND		30	
1,2-Dibromoethane (EDB)	ug/kg	ND	ND		30	
1,2-Dichlorobenzene	ug/kg	ND	ND		30	
1,2-Dichloroethane	ug/kg	ND	ND		30	
1,2-Dichloropropane	ug/kg	ND	ND		30	
1,3,5-Trimethylbenzene	ug/kg	ND	ND		30	
1,3-Dichlorobenzene	ug/kg	ND	ND		30	
1,3-Dichloropropane	ug/kg	ND	ND		30	
1,4-Dichlorobenzene	ug/kg	ND	ND		30	
2,2-Dichloropropane	ug/kg	ND	ND		30	
2-Butanone (MEK)	ug/kg	ND	ND		30	
2-Chlorotoluene	ug/kg	ND	ND		30	
4-Chlorotoluene	ug/kg	ND	ND		30	
4-Methyl-2-pentanone (MIBK)	ug/kg	ND	ND		30	
Acetone	ug/kg	ND	ND		30	
Allyl chloride	ug/kg	ND	ND		30	
Benzene	ug/kg	ND	ND		30	
Bromobenzene	ug/kg	ND	ND		30	
Bromochloromethane	ug/kg	ND	ND		30	
Bromodichloromethane	ug/kg	ND	ND		30	
Bromoform	ug/kg	ND	ND		30	
Bromomethane	ug/kg	ND	ND		30	
Carbon tetrachloride	ug/kg	ND	ND		30	
Chlorobenzene	ug/kg	ND	ND		30	
Chloroethane	ug/kg	ND	ND		30	
Chloroform	ug/kg	ND	ND		30	
Chloromethane	ug/kg	ND	ND		30	
cis-1,2-Dichloroethene	ug/kg	ND	ND		30	
cis-1,3-Dichloropropene	ug/kg	ND	ND		30	
Dibromochloromethane	ug/kg	ND	ND		30	
Dibromomethane	ug/kg	ND	ND		30	
Dichlorodifluoromethane	ug/kg	ND	ND		30	
Dichlorofluoromethane	ug/kg	ND	ND		30	
Diethyl ether (Ethyl ether)	ug/kg	ND	ND		30	
Ethylbenzene	ug/kg	ND	ND		30	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA

Project: 14-1004 FSY
Pace Project No.: 10300801

SAMPLE DUPLICATE: 1929422

Parameter	Units	10301194002 Result	Dup Result	RPD	Max RPD	Qualifiers
Hexachloro-1,3-butadiene	ug/kg	ND	ND		30	
Isopropylbenzene (Cumene)	ug/kg	ND	ND		30	
Methyl-tert-butyl ether	ug/kg	ND	ND		30	
Methylene Chloride	ug/kg	ND	ND		30	
n-Butylbenzene	ug/kg	ND	ND		30	
n-Propylbenzene	ug/kg	ND	ND		30	
Naphthalene	ug/kg	ND	ND		30	
p-Isopropyltoluene	ug/kg	ND	ND		30	
sec-Butylbenzene	ug/kg	ND	ND		30	
Styrene	ug/kg	ND	ND		30	
tert-Butylbenzene	ug/kg	ND	ND		30	
Tetrachloroethene	ug/kg	ND	ND		30	
Tetrahydrofuran	ug/kg	ND	ND		30	
Toluene	ug/kg	ND	45.8J		30	
trans-1,2-Dichloroethene	ug/kg	ND	ND		30	
trans-1,3-Dichloropropene	ug/kg	ND	ND		30	
Trichloroethene	ug/kg	ND	ND		30	
Trichlorofluoromethane	ug/kg	ND	ND		30	
Vinyl chloride	ug/kg	ND	ND		30	
Xylene (Total)	ug/kg	ND	ND		30	
1,2-Dichloroethane-d4 (S)	%.	86	88	1		
4-Bromofluorobenzene (S)	%.	103	101	4		
Toluene-d8 (S)	%.	102	102	2		

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA

Project: 14-1004 FSY
Pace Project No.: 10300801

QC Batch: MSV/30970
QC Batch Method: EPA 5035/5030B
Analysis Method: EPA 8260
Analysis Description: 8260 MSV 5030 Med Level
Associated Lab Samples: 10300801008

METHOD BLANK: 1930731
Matrix: Solid
Associated Lab Samples: 10300801008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	ND	50.0	04/07/15 18:27	
1,1,1-Trichloroethane	ug/kg	ND	50.0	04/07/15 18:27	
1,1,2,2-Tetrachloroethane	ug/kg	ND	50.0	04/07/15 18:27	
1,1,2-Trichloroethane	ug/kg	ND	50.0	04/07/15 18:27	
1,1,2-Trichlorotrifluoroethane	ug/kg	ND	500	04/07/15 18:27	
1,1-Dichloroethane	ug/kg	ND	50.0	04/07/15 18:27	
1,1-Dichloroethene	ug/kg	ND	50.0	04/07/15 18:27	
1,1-Dichloropropene	ug/kg	ND	50.0	04/07/15 18:27	
1,2,3-Trichlorobenzene	ug/kg	ND	50.0	04/07/15 18:27	
1,2,3-Trichloropropane	ug/kg	ND	200	04/07/15 18:27	
1,2,4-Trichlorobenzene	ug/kg	ND	50.0	04/07/15 18:27	
1,2,4-Trimethylbenzene	ug/kg	ND	50.0	04/07/15 18:27	
1,2-Dibromo-3-chloropropane	ug/kg	ND	500	04/07/15 18:27	
1,2-Dibromoethane (EDB)	ug/kg	ND	50.0	04/07/15 18:27	
1,2-Dichlorobenzene	ug/kg	ND	50.0	04/07/15 18:27	
1,2-Dichloroethane	ug/kg	ND	50.0	04/07/15 18:27	
1,2-Dichloropropane	ug/kg	ND	50.0	04/07/15 18:27	
1,3,5-Trimethylbenzene	ug/kg	ND	50.0	04/07/15 18:27	
1,3-Dichlorobenzene	ug/kg	ND	50.0	04/07/15 18:27	
1,3-Dichloropropane	ug/kg	ND	50.0	04/07/15 18:27	
1,4-Dichlorobenzene	ug/kg	ND	50.0	04/07/15 18:27	
2,2-Dichloropropane	ug/kg	ND	200	04/07/15 18:27	
2-Butanone (MEK)	ug/kg	ND	250	04/07/15 18:27	
2-Chlorotoluene	ug/kg	ND	50.0	04/07/15 18:27	
4-Chlorotoluene	ug/kg	ND	50.0	04/07/15 18:27	
4-Methyl-2-pentanone (MIBK)	ug/kg	ND	250	04/07/15 18:27	
Acetone	ug/kg	ND	1000	04/07/15 18:27	
Allyl chloride	ug/kg	ND	200	04/07/15 18:27	
Benzene	ug/kg	ND	20.0	04/07/15 18:27	
Bromobenzene	ug/kg	ND	50.0	04/07/15 18:27	
Bromochloromethane	ug/kg	ND	50.0	04/07/15 18:27	
Bromodichloromethane	ug/kg	ND	50.0	04/07/15 18:27	
Bromoform	ug/kg	ND	200	04/07/15 18:27	
Bromomethane	ug/kg	ND	500	04/07/15 18:27	
Carbon tetrachloride	ug/kg	ND	50.0	04/07/15 18:27	
Chlorobenzene	ug/kg	ND	50.0	04/07/15 18:27	
Chloroethane	ug/kg	ND	500	04/07/15 18:27	
Chloroform	ug/kg	ND	50.0	04/07/15 18:27	
Chloromethane	ug/kg	ND	200	04/07/15 18:27	
cis-1,2-Dichloroethene	ug/kg	ND	50.0	04/07/15 18:27	
cis-1,3-Dichloropropene	ug/kg	ND	50.0	04/07/15 18:27	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA

Project: 14-1004 FSY
Pace Project No.: 10300801

METHOD BLANK: 1930731 Matrix: Solid
Associated Lab Samples: 10300801008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Dibromochloromethane	ug/kg	ND	50.0	04/07/15 18:27	
Dibromomethane	ug/kg	ND	50.0	04/07/15 18:27	
Dichlorodifluoromethane	ug/kg	ND	200	04/07/15 18:27	
Dichlorofluoromethane	ug/kg	ND	500	04/07/15 18:27	
Diethyl ether (Ethyl ether)	ug/kg	ND	200	04/07/15 18:27	
Ethylbenzene	ug/kg	ND	50.0	04/07/15 18:27	
Hexachloro-1,3-butadiene	ug/kg	ND	250	04/07/15 18:27	
Isopropylbenzene (Cumene)	ug/kg	ND	50.0	04/07/15 18:27	
Methyl-tert-butyl ether	ug/kg	ND	50.0	04/07/15 18:27	
Methylene Chloride	ug/kg	ND	200	04/07/15 18:27	
n-Butylbenzene	ug/kg	ND	50.0	04/07/15 18:27	
n-Propylbenzene	ug/kg	ND	50.0	04/07/15 18:27	
Naphthalene	ug/kg	ND	200	04/07/15 18:27	
p-Isopropyltoluene	ug/kg	ND	50.0	04/07/15 18:27	
sec-Butylbenzene	ug/kg	ND	50.0	04/07/15 18:27	
Styrene	ug/kg	ND	50.0	04/07/15 18:27	
tert-Butylbenzene	ug/kg	ND	50.0	04/07/15 18:27	
Tetrachloroethene	ug/kg	ND	50.0	04/07/15 18:27	
Tetrahydrofuran	ug/kg	ND	2000	04/07/15 18:27	
Toluene	ug/kg	ND	100	04/07/15 18:27	
trans-1,2-Dichloroethene	ug/kg	ND	50.0	04/07/15 18:27	
trans-1,3-Dichloropropene	ug/kg	ND	50.0	04/07/15 18:27	
Trichloroethene	ug/kg	ND	50.0	04/07/15 18:27	
Trichlorofluoromethane	ug/kg	ND	200	04/07/15 18:27	
Vinyl chloride	ug/kg	ND	20.0	04/07/15 18:27	
Xylene (Total)	ug/kg	ND	150	04/07/15 18:27	
1,2-Dichloroethane-d4 (S)	%.	88	55-150	04/07/15 18:27	
4-Bromofluorobenzene (S)	%.	100	54-131	04/07/15 18:27	
Toluene-d8 (S)	%.	101	61-125	04/07/15 18:27	

LABORATORY CONTROL SAMPLE: 1930732

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	1000	1070	107	75-125	
1,1,1-Trichloroethane	ug/kg	1000	913	91	66-125	
1,1,2,2-Tetrachloroethane	ug/kg	1000	957	96	69-125	
1,1,2-Trichloroethane	ug/kg	1000	1020	102	75-125	
1,1,2-Trichlorotrifluoroethane	ug/kg	1000	1310	131	55-125	L0
1,1-Dichloroethane	ug/kg	1000	905	91	67-125	
1,1-Dichloroethene	ug/kg	1000	923	92	62-125	
1,1-Dichloropropene	ug/kg	1000	967	97	65-125	
1,2,3-Trichlorobenzene	ug/kg	1000	1040	104	58-132	
1,2,3-Trichloropropane	ug/kg	1000	952	95	71-125	
1,2,4-Trichlorobenzene	ug/kg	1000	1100	110	63-128	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA

Project: 14-1004 FSY
Pace Project No.: 10300801

LABORATORY CONTROL SAMPLE: 1930732

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2,4-Trimethylbenzene	ug/kg	1000	1030	103	74-125	
1,2-Dibromo-3-chloropropane	ug/kg	2500	2560	102	55-142	
1,2-Dibromoethane (EDB)	ug/kg	1000	1020	102	75-125	
1,2-Dichlorobenzene	ug/kg	1000	1000	100	75-125	
1,2-Dichloroethane	ug/kg	1000	906	91	71-125	
1,2-Dichloropropane	ug/kg	1000	927	93	74-125	
1,3,5-Trimethylbenzene	ug/kg	1000	973	97	72-125	
1,3-Dichlorobenzene	ug/kg	1000	1020	102	75-125	
1,3-Dichloropropane	ug/kg	1000	1030	103	75-125	
1,4-Dichlorobenzene	ug/kg	1000	937	94	75-125	
2,2-Dichloropropane	ug/kg	1000	878	88	45-125	
2-Butanone (MEK)	ug/kg	5000	4310	86	39-136	
2-Chlorotoluene	ug/kg	1000	1030	103	73-125	
4-Chlorotoluene	ug/kg	1000	995	100	74-125	
4-Methyl-2-pentanone (MIBK)	ug/kg	5000	5090	102	55-132	
Acetone	ug/kg	5000	4840	97	55-131	
Allyl chloride	ug/kg	1000	912	91	53-125	
Benzene	ug/kg	1000	916	92	69-125	
Bromobenzene	ug/kg	1000	986	99	75-125	
Bromochloromethane	ug/kg	1000	880	88	75-125	
Bromodichloromethane	ug/kg	1000	1020	102	75-125	
Bromoform	ug/kg	1000	1030	103	71-125	
Bromomethane	ug/kg	1000	753	75	42-150	
Carbon tetrachloride	ug/kg	1000	929	93	62-125	
Chlorobenzene	ug/kg	1000	988	99	75-125	
Chloroethane	ug/kg	1000	920	92	41-150	
Chloroform	ug/kg	1000	888	89	72-125	
Chloromethane	ug/kg	1000	738	74	50-125	
cis-1,2-Dichloroethene	ug/kg	1000	884	88	73-125	
cis-1,3-Dichloropropene	ug/kg	1000	983	98	74-125	
Dibromochloromethane	ug/kg	1000	1020	102	75-125	
Dibromomethane	ug/kg	1000	984	98	75-125	
Dichlorodifluoromethane	ug/kg	1000	826	83	30-125	
Dichlorofluoromethane	ug/kg	1000	932	93	30-150	
Diethyl ether (Ethyl ether)	ug/kg	1000	975	98	58-125	
Ethylbenzene	ug/kg	1000	1030	103	72-125	
Hexachloro-1,3-butadiene	ug/kg	1000	1060	106	59-138	
Isopropylbenzene (Cumene)	ug/kg	1000	1000	100	72-125	
Methyl-tert-butyl ether	ug/kg	1000	924	92	72-125	
Methylene Chloride	ug/kg	1000	908	91	71-125	
n-Butylbenzene	ug/kg	1000	1020	102	65-125	
n-Propylbenzene	ug/kg	1000	985	98	71-125	
Naphthalene	ug/kg	1000	1090	109	55-139	
p-Isopropyltoluene	ug/kg	1000	1030	103	69-125	
sec-Butylbenzene	ug/kg	1000	947	95	68-125	
Styrene	ug/kg	1000	1030	103	75-125	
tert-Butylbenzene	ug/kg	1000	953	95	70-125	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA

Project: 14-1004 FSY
Pace Project No.: 10300801

LABORATORY CONTROL SAMPLE: 1930732

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Tetrachloroethene	ug/kg	1000	1050	105	69-125	
Tetrahydrofuran	ug/kg	10000	10200	102	62-129	
Toluene	ug/kg	1000	1030	103	72-125	
trans-1,2-Dichloroethene	ug/kg	1000	963	96	68-125	
trans-1,3-Dichloropropene	ug/kg	1000	1000	100	74-125	
Trichloroethene	ug/kg	1000	997	100	72-125	
Trichlorofluoromethane	ug/kg	1000	1120	112	30-150	
Vinyl chloride	ug/kg	1000	716	72	53-125	
Xylene (Total)	ug/kg	3000	3130	104	74-125	
1,2-Dichloroethane-d4 (S)	%.			85	55-150	
4-Bromofluorobenzene (S)	%.			99	54-131	
Toluene-d8 (S)	%.			99	61-125	

MATRIX SPIKE SAMPLE: 1931019

Parameter	Units	10301299001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	ND	1090	389	36	62-150	M1
1,1,1-Trichloroethane	ug/kg	ND	1090	343	32	58-150	M1
1,1,2,2-Tetrachloroethane	ug/kg	ND	1090	366	34	30-150	
1,1,2-Trichloroethane	ug/kg	ND	1090	392	36	61-149	M1
1,1,2-Trichlorotrifluoroethane	ug/kg	ND	1090	362J	33	45-150	M0
1,1-Dichloroethane	ug/kg	ND	1090	364	33	56-150	M1
1,1-Dichloroethene	ug/kg	ND	1090	326	30	48-150	M1
1,1-Dichloropropene	ug/kg	ND	1090	363	33	58-150	M1
1,2,3-Trichlorobenzene	ug/kg	ND	1090	398	37	55-150	M1
1,2,3-Trichloropropane	ug/kg	ND	1090	330	30	57-148	M1
1,2,4-Trichlorobenzene	ug/kg	ND	1090	409	38	61-150	M1
1,2,4-Trimethylbenzene	ug/kg	ND	1090	387	36	64-150	M1
1,2-Dibromo-3-chloropropane	ug/kg	ND	2730	807	30	40-150	M1
1,2-Dibromoethane (EDB)	ug/kg	ND	1090	362	33	62-147	M1
1,2-Dichlorobenzene	ug/kg	ND	1090	378	35	73-133	M1
1,2-Dichloroethane	ug/kg	ND	1090	364	33	63-132	M1
1,2-Dichloropropane	ug/kg	ND	1090	376	35	69-127	M1
1,3,5-Trimethylbenzene	ug/kg	ND	1090	346	32	63-137	M1
1,3-Dichlorobenzene	ug/kg	ND	1090	396	36	69-133	M1
1,3-Dichloropropane	ug/kg	ND	1090	404	37	70-130	M1
1,4-Dichlorobenzene	ug/kg	ND	1090	373	34	69-130	M1
2,2-Dichloropropane	ug/kg	ND	1090	323	30	54-135	M1
2-Butanone (MEK)	ug/kg	ND	5440	1380	25	49-145	M1
2-Chlorotoluene	ug/kg	ND	1090	370	34	68-129	M1
4-Chlorotoluene	ug/kg	ND	1090	350	32	67-134	M1
4-Methyl-2-pentanone (MIBK)	ug/kg	ND	5440	1650	30	60-150	M1
Acetone	ug/kg	ND	5440	1970	36	65-135	M1
Allyl chloride	ug/kg	ND	1090	333	31	55-126	M1
Benzene	ug/kg	ND	1090	351	32	63-126	M1

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA

Project: 14-1004 FSY
Pace Project No.: 10300801

MATRIX SPIKE SAMPLE: 1931019

Parameter	Units	10301299001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Bromobenzene	ug/kg	ND	1090	382	35	68-133	M1
Bromochloromethane	ug/kg	ND	1090	350	32	66-130	M1
Bromodichloromethane	ug/kg	ND	1090	388	36	68-129	M1
Bromoform	ug/kg	ND	1090	389	36	63-135	M1
Bromomethane	ug/kg	ND	1090	364J	33	30-150	
Carbon tetrachloride	ug/kg	ND	1090	320	29	56-140	M1
Chlorobenzene	ug/kg	ND	1090	389	36	69-130	M1
Chloroethane	ug/kg	ND	1090	267J	25	46-150	M1
Chloroform	ug/kg	ND	1090	345	31	70-127	M1
Chloromethane	ug/kg	ND	1090	291	27	51-125	M1
cis-1,2-Dichloroethene	ug/kg	ND	1090	340	31	68-125	M1
cis-1,3-Dichloropropene	ug/kg	ND	1090	374	34	67-126	M1
Dibromochloromethane	ug/kg	ND	1090	374	34	66-135	M1
Dibromomethane	ug/kg	ND	1090	360	33	68-132	M1
Dichlorodifluoromethane	ug/kg	ND	1090	234	21	30-138	M1
Dichlorofluoromethane	ug/kg	ND	1090	325J	30	30-150	
Diethyl ether (Ethyl ether)	ug/kg	ND	1090	339	31	56-135	M1
Ethylbenzene	ug/kg	ND	1090	380	35	69-126	M1
Hexachloro-1,3-butadiene	ug/kg	ND	1090	334	31	50-150	M1
Isopropylbenzene (Cumene)	ug/kg	ND	1090	384	35	65-135	M1
Methyl-tert-butyl ether	ug/kg	ND	1090	327	30	66-129	M1
Methylene Chloride	ug/kg	ND	1090	390	36	64-125	M1
n-Butylbenzene	ug/kg	ND	1090	351	32	62-141	M1
n-Propylbenzene	ug/kg	ND	1090	375	34	65-135	M1
Naphthalene	ug/kg	ND	1090	329	30	62-150	M1
p-Isopropyltoluene	ug/kg	ND	1090	348	32	62-139	M1
sec-Butylbenzene	ug/kg	ND	1090	346	32	64-137	M1
Styrene	ug/kg	ND	1090	369	34	70-132	M1
tert-Butylbenzene	ug/kg	ND	1090	340	31	65-136	M1
Tetrachloroethene	ug/kg	ND	1090	357	33	61-142	M1
Tetrahydrofuran	ug/kg	ND	10900	4060	37	68-138	M1
Toluene	ug/kg	ND	1090	424	36	66-128	M1
trans-1,2-Dichloroethene	ug/kg	ND	1090	351	32	63-129	M1
trans-1,3-Dichloropropene	ug/kg	ND	1090	359	33	67-132	M1
Trichloroethene	ug/kg	ND	1090	374	34	52-150	M1
Trichlorofluoromethane	ug/kg	ND	1090	272	25	39-150	M1
Vinyl chloride	ug/kg	ND	1090	271	25	50-125	M1
Xylene (Total)	ug/kg	ND	3270	1190	36	70-130	MS
1,2-Dichloroethane-d4 (S)	%.				86	55-150	
4-Bromofluorobenzene (S)	%.				95	54-131	
Toluene-d8 (S)	%.				99	61-125	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA

Project: 14-1004 FSY
Pace Project No.: 10300801

SAMPLE DUPLICATE: 1931020

Parameter	Units	10301179001 Result	Dup Result	RPD	Max RPD	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	ND	ND		30	
1,1,1-Trichloroethane	ug/kg	ND	ND		30	
1,1,2,2-Tetrachloroethane	ug/kg	ND	ND		30	
1,1,2-Trichloroethane	ug/kg	ND	ND		30	
1,1,2-Trichlorotrifluoroethane	ug/kg	ND	ND		30	
1,1-Dichloroethane	ug/kg	ND	ND		30	
1,1-Dichloroethene	ug/kg	ND	ND		30	
1,1-Dichloropropene	ug/kg	ND	ND		30	
1,2,3-Trichlorobenzene	ug/kg	ND	ND		30	
1,2,3-Trichloropropane	ug/kg	ND	ND		30	
1,2,4-Trichlorobenzene	ug/kg	ND	ND		30	
1,2,4-Trimethylbenzene	ug/kg	ND	ND		30	
1,2-Dibromo-3-chloropropane	ug/kg	ND	ND		30	
1,2-Dibromoethane (EDB)	ug/kg	ND	ND		30	
1,2-Dichlorobenzene	ug/kg	ND	ND		30	
1,2-Dichloroethane	ug/kg	ND	ND		30	
1,2-Dichloropropane	ug/kg	ND	ND		30	
1,3,5-Trimethylbenzene	ug/kg	ND	ND		30	
1,3-Dichlorobenzene	ug/kg	ND	ND		30	
1,3-Dichloropropane	ug/kg	ND	ND		30	
1,4-Dichlorobenzene	ug/kg	ND	ND		30	
2,2-Dichloropropane	ug/kg	ND	ND		30	
2-Butanone (MEK)	ug/kg	ND	ND		30	
2-Chlorotoluene	ug/kg	ND	ND		30	
4-Chlorotoluene	ug/kg	ND	ND		30	
4-Methyl-2-pentanone (MIBK)	ug/kg	ND	ND		30	
Acetone	ug/kg	ND	ND		30	
Allyl chloride	ug/kg	ND	ND		30	
Benzene	ug/kg	ND	ND		30	
Bromobenzene	ug/kg	ND	ND		30	
Bromochloromethane	ug/kg	ND	ND		30	
Bromodichloromethane	ug/kg	ND	ND		30	
Bromoform	ug/kg	ND	ND		30	
Bromomethane	ug/kg	ND	ND		30	
Carbon tetrachloride	ug/kg	ND	ND		30	
Chlorobenzene	ug/kg	ND	ND		30	
Chloroethane	ug/kg	ND	ND		30	
Chloroform	ug/kg	ND	13.9J		30	
Chloromethane	ug/kg	ND	ND		30	
cis-1,2-Dichloroethene	ug/kg	ND	ND		30	
cis-1,3-Dichloropropene	ug/kg	ND	ND		30	
Dibromochloromethane	ug/kg	ND	ND		30	
Dibromomethane	ug/kg	ND	ND		30	
Dichlorodifluoromethane	ug/kg	ND	ND		30	
Dichlorofluoromethane	ug/kg	ND	ND		30	
Diethyl ether (Ethyl ether)	ug/kg	ND	ND		30	
Ethylbenzene	ug/kg	ND	ND		30	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA

Project: 14-1004 FSY
Pace Project No.: 10300801

SAMPLE DUPLICATE: 1931020

Parameter	Units	10301179001 Result	Dup Result	RPD	Max RPD	Qualifiers
Hexachloro-1,3-butadiene	ug/kg	ND	ND		30	
Isopropylbenzene (Cumene)	ug/kg	ND	ND		30	
Methyl-tert-butyl ether	ug/kg	ND	ND		30	
Methylene Chloride	ug/kg	ND	ND		30	
n-Butylbenzene	ug/kg	ND	ND		30	
n-Propylbenzene	ug/kg	ND	ND		30	
Naphthalene	ug/kg	ND	ND		30	
p-Isopropyltoluene	ug/kg	ND	ND		30	
sec-Butylbenzene	ug/kg	ND	ND		30	
Styrene	ug/kg	ND	ND		30	
tert-Butylbenzene	ug/kg	ND	ND		30	
Tetrachloroethene	ug/kg	ND	ND		30	
Tetrahydrofuran	ug/kg	ND	ND		30	
Toluene	ug/kg	ND	37.3J		30	
trans-1,2-Dichloroethene	ug/kg	ND	ND		30	
trans-1,3-Dichloropropene	ug/kg	ND	ND		30	
Trichloroethene	ug/kg	ND	ND		30	
Trichlorofluoromethane	ug/kg	ND	ND		30	
Vinyl chloride	ug/kg	ND	ND		30	
Xylene (Total)	ug/kg	ND	ND		30	
1,2-Dichloroethane-d4 (S)	%.	87	89	23		
4-Bromofluorobenzene (S)	%.	98	100	23		
Toluene-d8 (S)	%.	101	101	25		

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA

Project: 14-1004 FSY
Pace Project No.: 10300801

QC Batch: MSV/30960 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV 465 W
Associated Lab Samples: 10300802002, 10300802003, 10300802005

METHOD BLANK: 1929706 Matrix: Water
Associated Lab Samples: 10300802002, 10300802003, 10300802005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	1.0	04/08/15 16:31	
1,1,1-Trichloroethane	ug/L	ND	1.0	04/08/15 16:31	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	04/08/15 16:31	
1,1,2-Trichloroethane	ug/L	ND	1.0	04/08/15 16:31	
1,1,2-Trichlorotrifluoroethane	ug/L	ND	1.0	04/08/15 16:31	
1,1-Dichloroethane	ug/L	ND	1.0	04/08/15 16:31	
1,1-Dichloroethene	ug/L	ND	1.0	04/08/15 16:31	
1,1-Dichloropropene	ug/L	ND	1.0	04/08/15 16:31	
1,2,3-Trichlorobenzene	ug/L	ND	1.0	04/08/15 16:31	
1,2,3-Trichloropropane	ug/L	ND	4.0	04/08/15 16:31	
1,2,4-Trichlorobenzene	ug/L	ND	1.0	04/08/15 16:31	
1,2,4-Trimethylbenzene	ug/L	ND	1.0	04/08/15 16:31	
1,2-Dibromo-3-chloropropane	ug/L	ND	4.0	04/08/15 16:31	
1,2-Dibromoethane (EDB)	ug/L	ND	1.0	04/08/15 16:31	
1,2-Dichlorobenzene	ug/L	ND	1.0	04/08/15 16:31	
1,2-Dichloroethane	ug/L	ND	1.0	04/08/15 16:31	
1,2-Dichloropropane	ug/L	ND	4.0	04/08/15 16:31	
1,3,5-Trimethylbenzene	ug/L	ND	1.0	04/08/15 16:31	
1,3-Dichlorobenzene	ug/L	ND	1.0	04/08/15 16:31	
1,3-Dichloropropane	ug/L	ND	1.0	04/08/15 16:31	
1,4-Dichlorobenzene	ug/L	ND	1.0	04/08/15 16:31	
2,2-Dichloropropane	ug/L	ND	4.0	04/08/15 16:31	
2-Butanone (MEK)	ug/L	ND	5.0	04/08/15 16:31	
2-Chlorotoluene	ug/L	ND	1.0	04/08/15 16:31	
4-Chlorotoluene	ug/L	ND	1.0	04/08/15 16:31	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	5.0	04/08/15 16:31	
Acetone	ug/L	ND	20.0	04/08/15 16:31	
Allyl chloride	ug/L	ND	4.0	04/08/15 16:31	
Benzene	ug/L	ND	1.0	04/08/15 16:31	
Bromobenzene	ug/L	ND	1.0	04/08/15 16:31	
Bromochloromethane	ug/L	ND	1.0	04/08/15 16:31	
Bromodichloromethane	ug/L	ND	1.0	04/08/15 16:31	
Bromoform	ug/L	ND	4.0	04/08/15 16:31	
Bromomethane	ug/L	ND	4.0	04/08/15 16:31	
Carbon tetrachloride	ug/L	ND	1.0	04/08/15 16:31	
Chlorobenzene	ug/L	ND	1.0	04/08/15 16:31	
Chloroethane	ug/L	ND	1.0	04/08/15 16:31	
Chloroform	ug/L	ND	1.0	04/08/15 16:31	
Chloromethane	ug/L	ND	4.0	04/08/15 16:31	
cis-1,2-Dichloroethene	ug/L	ND	1.0	04/08/15 16:31	
cis-1,3-Dichloropropene	ug/L	ND	4.0	04/08/15 16:31	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA

Project: 14-1004 FSY
Pace Project No.: 10300801

METHOD BLANK: 1929706 Matrix: Water
Associated Lab Samples: 10300802002, 10300802003, 10300802005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Dibromochloromethane	ug/L	ND	1.0	04/08/15 16:31	
Dibromomethane	ug/L	ND	4.0	04/08/15 16:31	
Dichlorodifluoromethane	ug/L	ND	1.0	04/08/15 16:31	
Dichlorofluoromethane	ug/L	ND	1.0	04/08/15 16:31	
Diethyl ether (Ethyl ether)	ug/L	ND	10.0	04/08/15 16:31	
Ethylbenzene	ug/L	ND	1.0	04/08/15 16:31	
Hexachloro-1,3-butadiene	ug/L	3.3	1.0	04/08/15 16:31	CH
Isopropylbenzene (Cumene)	ug/L	ND	1.0	04/08/15 16:31	
Methyl-tert-butyl ether	ug/L	ND	1.0	04/08/15 16:31	
Methylene Chloride	ug/L	ND	4.0	04/08/15 16:31	
n-Butylbenzene	ug/L	ND	1.0	04/08/15 16:31	
n-Propylbenzene	ug/L	ND	1.0	04/08/15 16:31	
Naphthalene	ug/L	ND	4.0	04/08/15 16:31	
p-Isopropyltoluene	ug/L	ND	1.0	04/08/15 16:31	
sec-Butylbenzene	ug/L	ND	1.0	04/08/15 16:31	
Styrene	ug/L	ND	1.0	04/08/15 16:31	
tert-Butylbenzene	ug/L	ND	1.0	04/08/15 16:31	
Tetrachloroethene	ug/L	ND	1.0	04/08/15 16:31	
Tetrahydrofuran	ug/L	ND	10.0	04/08/15 16:31	
Toluene	ug/L	ND	1.0	04/08/15 16:31	
trans-1,2-Dichloroethene	ug/L	ND	1.0	04/08/15 16:31	
trans-1,3-Dichloropropene	ug/L	ND	4.0	04/08/15 16:31	
Trichloroethene	ug/L	ND	0.40	04/08/15 16:31	
Trichlorofluoromethane	ug/L	ND	1.0	04/08/15 16:31	
Vinyl chloride	ug/L	ND	0.40	04/08/15 16:31	
Xylene (Total)	ug/L	ND	3.0	04/08/15 16:31	
1,2-Dichloroethane-d4 (S)	%.	103	75-125	04/08/15 16:31	
4-Bromofluorobenzene (S)	%.	103	75-125	04/08/15 16:31	
Toluene-d8 (S)	%.	100	75-125	04/08/15 16:31	

LABORATORY CONTROL SAMPLE: 1929707

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	20	20.7	103	75-125	
1,1,1-Trichloroethane	ug/L	20	19.4	97	75-125	
1,1,2,2-Tetrachloroethane	ug/L	20	19.6	98	75-125	
1,1,2-Trichloroethane	ug/L	20	20.6	103	75-125	
1,1,2-Trichlorotrifluoroethane	ug/L	20	19.5	98	60-135	
1,1-Dichloroethane	ug/L	20	20.4	102	69-125	
1,1-Dichloroethene	ug/L	20	18.7	93	68-125	
1,1-Dichloropropene	ug/L	20	21.9	110	74-125	
1,2,3-Trichlorobenzene	ug/L	20	26.7	134	69-136	
1,2,3-Trichloropropane	ug/L	20	22.0	110	75-125	
1,2,4-Trichlorobenzene	ug/L	20	24.2	121	73-127	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA

Project: 14-1004 FSY
Pace Project No.: 10300801

LABORATORY CONTROL SAMPLE: 1929707

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2,4-Trimethylbenzene	ug/L	20	22.6	113	75-125	
1,2-Dibromo-3-chloropropane	ug/L	50	57.0	114	65-145	
1,2-Dibromoethane (EDB)	ug/L	20	20.7	103	75-125	
1,2-Dichlorobenzene	ug/L	20	21.5	107	75-125	
1,2-Dichloroethane	ug/L	20	20.5	103	73-125	
1,2-Dichloropropane	ug/L	20	20.7	104	75-125	
1,3,5-Trimethylbenzene	ug/L	20	22.1	111	75-125	
1,3-Dichlorobenzene	ug/L	20	20.9	105	74-125	
1,3-Dichloropropane	ug/L	20	21.0	105	75-125	
1,4-Dichlorobenzene	ug/L	20	20.4	102	75-125	
2,2-Dichloropropane	ug/L	20	19.6	98	59-139	
2-Butanone (MEK)	ug/L	100	100	100	63-130	
2-Chlorotoluene	ug/L	20	20.1	101	72-125	
4-Chlorotoluene	ug/L	20	20.3	101	73-125	
4-Methyl-2-pentanone (MIBK)	ug/L	100	99.2	99	71-126	
Acetone	ug/L	100	96.8	97	69-131	
Allyl chloride	ug/L	20	20.9	105	67-125	
Benzene	ug/L	20	19.6	98	71-125	
Bromobenzene	ug/L	20	21.7	108	75-125	
Bromochloromethane	ug/L	20	22.2	111	75-125	
Bromodichloromethane	ug/L	20	19.2	96	75-125	
Bromoform	ug/L	20	20.9	105	70-125	
Bromomethane	ug/L	20	26.7	133	30-150	
Carbon tetrachloride	ug/L	20	22.5	113	75-126	
Chlorobenzene	ug/L	20	20.2	101	75-125	
Chloroethane	ug/L	20	20.2	101	65-134	
Chloroform	ug/L	20	20.1	100	75-125	
Chloromethane	ug/L	20	25.2	126	39-150	
cis-1,2-Dichloroethene	ug/L	20	20.9	105	72-125	
cis-1,3-Dichloropropene	ug/L	20	21.3	106	75-125	
Dibromochloromethane	ug/L	20	20.9	104	75-125	
Dibromomethane	ug/L	20	22.3	112	75-125	
Dichlorodifluoromethane	ug/L	20	22.5	112	50-134	
Dichlorofluoromethane	ug/L	20	20.0	100	69-125	
Diethyl ether (Ethyl ether)	ug/L	20	21.7	108	72-125	
Ethylbenzene	ug/L	20	20.5	103	75-125	
Hexachloro-1,3-butadiene	ug/L	20	29.5	148	70-138	CH,L0
Isopropylbenzene (Cumene)	ug/L	20	22.6	113	75-125	
Methyl-tert-butyl ether	ug/L	20	20.2	101	73-125	
Methylene Chloride	ug/L	20	22.4	112	73-125	
n-Butylbenzene	ug/L	20	26.6	133	72-133	
n-Propylbenzene	ug/L	20	21.5	107	72-126	
Naphthalene	ug/L	20	21.9	110	70-127	
p-Isopropyltoluene	ug/L	20	26.9	135	72-132	L0
sec-Butylbenzene	ug/L	20	27.2	136	73-132	L0
Styrene	ug/L	20	21.9	110	75-125	
tert-Butylbenzene	ug/L	20	22.0	110	73-128	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA

Project: 14-1004 FSY
Pace Project No.: 10300801

LABORATORY CONTROL SAMPLE: 1929707

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Tetrachloroethene	ug/L	20	19.9	100	74-125	
Tetrahydrofuran	ug/L	200	212	106	62-133	
Toluene	ug/L	20	20.3	102	74-125	
trans-1,2-Dichloroethene	ug/L	20	20.7	103	69-125	
trans-1,3-Dichloropropene	ug/L	20	20.6	103	75-125	
Trichloroethene	ug/L	20	20.2	101	75-125	
Trichlorofluoromethane	ug/L	20	20.4	102	74-127	
Vinyl chloride	ug/L	20	22.8	114	66-132	
Xylene (Total)	ug/L	60	59.6	99	75-125	
1,2-Dichloroethane-d4 (S)	%.			105	75-125	
4-Bromofluorobenzene (S)	%.			98	75-125	
Toluene-d8 (S)	%.			100	75-125	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1936066 1936067

Parameter	Units	10302089001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1,2-Tetrachloroethane	ug/L	ND	200	200	204	207	102	103	70-138	1	30	
1,1,1-Trichloroethane	ug/L	ND	200	200	192	190	96	95	55-150	1	30	
1,1,2,2-Tetrachloroethane	ug/L	ND	200	200	197	199	98	100	64-140	1	30	
1,1,2-Trichloroethane	ug/L	ND	200	200	202	201	101	100	67-137	1	30	
1,1,2-Trichlorotrifluoroethane	ug/L	ND	200	200	202	201	101	101	51-150	0	30	
1,1-Dichloroethane	ug/L	ND	200	200	199	187	99	94	49-150	6	30	
1,1-Dichloroethene	ug/L	ND	200	200	191	183	96	92	40-150	4	30	
1,1-Dichloropropene	ug/L	ND	200	200	196	193	98	96	50-150	1	30	
1,2,3-Trichlorobenzene	ug/L	ND	200	200	214	236	107	118	59-148	10	30	
1,2,3-Trichloropropane	ug/L	ND	200	200	223	220	112	110	65-141	1	30	
1,2,4-Trichlorobenzene	ug/L	ND	200	200	195	212	97	106	61-140	8	30	
1,2,4-Trimethylbenzene	ug/L	111	200	200	308	307	98	98	58-141	0	30	
1,2-Dibromo-3-chloropropane	ug/L	ND	500	500	550	581	110	116	53-150	5	30	
1,2-Dibromoethane (EDB)	ug/L	ND	200	200	201	208	101	104	65-137	3	30	
1,2-Dichlorobenzene	ug/L	ND	200	200	209	206	104	103	66-133	1	30	
1,2-Dichloroethane	ug/L	ND	200	200	194	193	97	97	54-138	0	30	
1,2-Dichloropropane	ug/L	ND	200	200	201	195	101	98	62-138	3	30	
1,3,5-Trimethylbenzene	ug/L	50.3	200	200	254	251	102	100	58-140	1	30	
1,3-Dichlorobenzene	ug/L	ND	200	200	205	204	103	102	66-132	0	30	
1,3-Dichloropropane	ug/L	ND	200	200	201	205	101	103	66-134	2	30	
1,4-Dichlorobenzene	ug/L	ND	200	200	201	198	100	99	65-129	1	30	
2,2-Dichloropropane	ug/L	ND	200	200	194	183	97	92	40-150	6	30	
2-Butanone (MEK)	ug/L	ND	1000	1000	1000	1040	100	104	51-147	4	30	
2-Chlorotoluene	ug/L	ND	200	200	205	200	102	100	58-147	2	30	
4-Chlorotoluene	ug/L	ND	200	200	200	195	100	97	64-138	3	30	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	1000	1000	954	1020	95	102	59-143	7	30	
Acetone	ug/L	ND	1000	1000	1110	1170	107	113	63-147	5	30	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA

Project: 14-1004 FSY
Pace Project No.: 10300801

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1936066 1936067

Parameter	Units	10302089001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Allyl chloride	ug/L	ND	200	200	175	171	88	85	45-150	2	30	
Benzene	ug/L	1660	200	200	1850	1780	96	58	53-139	4	30	
Bromobenzene	ug/L	ND	200	200	214	209	107	105	66-136	2	30	
Bromochloromethane	ug/L	ND	200	200	208	198	104	99	64-136	5	30	
Bromodichloromethane	ug/L	ND	200	200	186	192	93	96	66-138	3	30	
Bromoform	ug/L	ND	200	200	202	209	101	104	59-136	3	30	
Bromomethane	ug/L	ND	200	200	220	206	110	103	30-150	7	30	
Carbon tetrachloride	ug/L	ND	200	200	210	202	105	101	56-150	4	30	
Chlorobenzene	ug/L	ND	200	200	201	197	101	99	65-133	2	30	
Chloroethane	ug/L	ND	200	200	196	186	98	93	48-150	5	30	
Chloroform	ug/L	ND	200	200	200	187	100	93	57-145	7	30	
Chloromethane	ug/L	ND	200	200	205	215	103	108	30-150	5	30	
cis-1,2-Dichloroethene	ug/L	ND	200	200	196	193	98	96	49-150	2	30	
cis-1,3-Dichloropropene	ug/L	ND	200	200	201	202	100	101	64-130	1	30	
Dibromochloromethane	ug/L	ND	200	200	204	212	102	106	68-138	4	30	
Dibromomethane	ug/L	ND	200	200	212	210	106	105	67-134	1	30	
Dichlorodifluoromethane	ug/L	ND	200	200	200	189	100	94	45-150	6	30	
Dichlorofluoromethane	ug/L	ND	200	200	191	185	96	92	54-150	3	30	
Diethyl ether (Ethyl ether)	ug/L	ND	200	200	206	199	103	99	50-145	4	30	
Ethylbenzene	ug/L	117	200	200	309	301	96	92	55-139	3	30	
Hexachloro-1,3-butadiene	ug/L	ND	200	200	210	215	105	107	49-150	2	30	CH
Isopropylbenzene (Cumene)	ug/L	15.9	200	200	225	220	105	102	64-142	2	30	
Methyl-tert-butyl ether	ug/L	ND	200	200	191	192	96	96	62-129	0	30	
Methylene Chloride	ug/L	ND	200	200	196	185	98	93	57-132	5	30	
n-Butylbenzene	ug/L	16.8	200	200	227	235	105	109	55-150	4	30	
n-Propylbenzene	ug/L	29.9	200	200	229	228	100	99	59-142	1	30	
Naphthalene	ug/L	ND	200	200	229	252	103	114	51-150	9	30	
p-Isopropyltoluene	ug/L	ND	200	200	247	256	120	125	60-149	4	30	
sec-Butylbenzene	ug/L	12.8	200	200	227	230	107	109	60-150	1	30	
Styrene	ug/L	ND	200	200	209	207	104	103	68-134	1	30	
tert-Butylbenzene	ug/L	ND	200	200	200	198	100	99	62-146	1	30	
Tetrachloroethene	ug/L	ND	200	200	199	192	99	96	50-150	3	30	
Tetrahydrofuran	ug/L	ND	2000	2000	2200	2150	110	107	59-145	2	30	
Toluene	ug/L	33.9	200	200	230	227	98	97	52-148	1	30	
trans-1,2-Dichloroethene	ug/L	ND	200	200	195	190	97	95	45-150	3	30	
trans-1,3-Dichloropropene	ug/L	ND	200	200	199	204	100	102	68-132	2	30	
Trichloroethene	ug/L	ND	200	200	204	196	102	98	52-150	4	30	
Trichlorofluoromethane	ug/L	ND	200	200	192	187	96	93	55-150	3	30	
Vinyl chloride	ug/L	ND	200	200	192	186	96	93	43-150	3	30	
Xylene (Total)	ug/L	227	600	600	805	790	96	94	54-144	2	30	
1,2-Dichloroethane-d4 (S)	%.						99	97	75-125			
4-Bromofluorobenzene (S)	%.						100	99	75-125			
Toluene-d8 (S)	%.						100	101	75-125			

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA

Project: 14-1004 FSY
Pace Project No.: 10300801

QC Batch: MSV/31022 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV 465 W
Associated Lab Samples: 10300802001, 10300802004, 10300802006, 10300802007

METHOD BLANK: 1934951 Matrix: Water
Associated Lab Samples: 10300802001, 10300802004, 10300802006, 10300802007

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	1.0	04/04/15 00:47	
1,1,1-Trichloroethane	ug/L	ND	1.0	04/04/15 00:47	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	04/04/15 00:47	
1,1,2-Trichloroethane	ug/L	ND	1.0	04/04/15 00:47	
1,1,2-Trichlorotrifluoroethane	ug/L	ND	1.0	04/04/15 00:47	
1,1-Dichloroethane	ug/L	ND	1.0	04/04/15 00:47	
1,1-Dichloroethene	ug/L	ND	1.0	04/04/15 00:47	
1,1-Dichloropropene	ug/L	ND	1.0	04/04/15 00:47	
1,2,3-Trichlorobenzene	ug/L	ND	1.0	04/04/15 00:47	
1,2,3-Trichloropropane	ug/L	ND	4.0	04/04/15 00:47	
1,2,4-Trichlorobenzene	ug/L	ND	1.0	04/04/15 00:47	
1,2,4-Trimethylbenzene	ug/L	ND	1.0	04/04/15 00:47	
1,2-Dibromo-3-chloropropane	ug/L	ND	4.0	04/04/15 00:47	
1,2-Dibromoethane (EDB)	ug/L	ND	1.0	04/04/15 00:47	
1,2-Dichlorobenzene	ug/L	ND	1.0	04/04/15 00:47	
1,2-Dichloroethane	ug/L	ND	1.0	04/04/15 00:47	
1,2-Dichloropropane	ug/L	ND	4.0	04/04/15 00:47	
1,3,5-Trimethylbenzene	ug/L	ND	1.0	04/04/15 00:47	
1,3-Dichlorobenzene	ug/L	ND	1.0	04/04/15 00:47	
1,3-Dichloropropane	ug/L	ND	1.0	04/04/15 00:47	
1,4-Dichlorobenzene	ug/L	ND	1.0	04/04/15 00:47	
2,2-Dichloropropane	ug/L	ND	4.0	04/04/15 00:47	
2-Butanone (MEK)	ug/L	ND	5.0	04/04/15 00:47	
2-Chlorotoluene	ug/L	ND	1.0	04/04/15 00:47	
4-Chlorotoluene	ug/L	ND	1.0	04/04/15 00:47	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	5.0	04/04/15 00:47	
Acetone	ug/L	ND	20.0	04/04/15 00:47	
Allyl chloride	ug/L	ND	4.0	04/04/15 00:47	
Benzene	ug/L	ND	1.0	04/04/15 00:47	
Bromobenzene	ug/L	ND	1.0	04/04/15 00:47	
Bromochloromethane	ug/L	ND	4.0	04/04/15 00:47	
Bromodichloromethane	ug/L	ND	1.0	04/04/15 00:47	
Bromoform	ug/L	ND	4.0	04/04/15 00:47	
Bromomethane	ug/L	ND	4.0	04/04/15 00:47	
Carbon tetrachloride	ug/L	ND	1.0	04/04/15 00:47	
Chlorobenzene	ug/L	ND	1.0	04/04/15 00:47	
Chloroethane	ug/L	ND	1.0	04/04/15 00:47	
Chloroform	ug/L	ND	1.0	04/04/15 00:47	
Chloromethane	ug/L	ND	4.0	04/04/15 00:47	
cis-1,2-Dichloroethene	ug/L	ND	1.0	04/04/15 00:47	
cis-1,3-Dichloropropene	ug/L	ND	4.0	04/04/15 00:47	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA

Project: 14-1004 FSY
Pace Project No.: 10300801

METHOD BLANK: 1934951 Matrix: Water
Associated Lab Samples: 10300802001, 10300802004, 10300802006, 10300802007

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Dibromochloromethane	ug/L	ND	1.0	04/04/15 00:47	
Dibromomethane	ug/L	ND	4.0	04/04/15 00:47	
Dichlorodifluoromethane	ug/L	ND	4.0	04/04/15 00:47	
Dichlorofluoromethane	ug/L	ND	1.0	04/04/15 00:47	
Diethyl ether (Ethyl ether)	ug/L	ND	4.0	04/04/15 00:47	
Ethylbenzene	ug/L	ND	1.0	04/04/15 00:47	
Hexachloro-1,3-butadiene	ug/L	ND	1.0	04/04/15 00:47	
Isopropylbenzene (Cumene)	ug/L	ND	1.0	04/04/15 00:47	
Methyl-tert-butyl ether	ug/L	ND	1.0	04/04/15 00:47	
Methylene Chloride	ug/L	ND	4.0	04/04/15 00:47	
n-Butylbenzene	ug/L	ND	1.0	04/04/15 00:47	
n-Propylbenzene	ug/L	ND	1.0	04/04/15 00:47	
Naphthalene	ug/L	ND	4.0	04/04/15 00:47	
p-Isopropyltoluene	ug/L	ND	1.0	04/04/15 00:47	
sec-Butylbenzene	ug/L	ND	1.0	04/04/15 00:47	
Styrene	ug/L	ND	1.0	04/04/15 00:47	
tert-Butylbenzene	ug/L	ND	1.0	04/04/15 00:47	
Tetrachloroethene	ug/L	ND	1.0	04/04/15 00:47	
Tetrahydrofuran	ug/L	ND	10.0	04/04/15 00:47	
Toluene	ug/L	ND	1.0	04/04/15 00:47	
trans-1,2-Dichloroethene	ug/L	ND	1.0	04/04/15 00:47	
trans-1,3-Dichloropropene	ug/L	ND	4.0	04/04/15 00:47	
Trichloroethene	ug/L	ND	0.40	04/04/15 00:47	
Trichlorofluoromethane	ug/L	ND	1.0	04/04/15 00:47	
Vinyl chloride	ug/L	ND	0.40	04/04/15 00:47	
Xylene (Total)	ug/L	ND	3.0	04/04/15 00:47	
1,2-Dichloroethane-d4 (S)	%.	98	75-125	04/04/15 00:47	
4-Bromofluorobenzene (S)	%.	101	75-125	04/04/15 00:47	
Toluene-d8 (S)	%.	99	75-125	04/04/15 00:47	

LABORATORY CONTROL SAMPLE: 1934952

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	20	19.1	95	75-125	
1,1,1-Trichloroethane	ug/L	20	18.1	91	75-125	
1,1,2,2-Tetrachloroethane	ug/L	20	18.3	91	75-125	
1,1,2-Trichloroethane	ug/L	20	17.0	85	75-125	
1,1,2-Trichlorotrifluoroethane	ug/L	20	19.5	97	60-135	
1,1-Dichloroethane	ug/L	20	16.6	83	69-125	
1,1-Dichloroethene	ug/L	20	18.1	90	68-125	
1,1-Dichloropropene	ug/L	20	18.9	94	74-125	
1,2,3-Trichlorobenzene	ug/L	20	16.1	80	69-136	
1,2,3-Trichloropropane	ug/L	20	18.9	95	75-125	
1,2,4-Trichlorobenzene	ug/L	20	14.9	75	73-127	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA

Project: 14-1004 FSY
Pace Project No.: 10300801

LABORATORY CONTROL SAMPLE: 1934952

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2,4-Trimethylbenzene	ug/L	20	17.4	87	75-125	
1,2-Dibromo-3-chloropropane	ug/L	50	40.0	80	65-145	
1,2-Dibromoethane (EDB)	ug/L	20	17.2	86	75-125	
1,2-Dichlorobenzene	ug/L	20	15.7	78	75-125	
1,2-Dichloroethane	ug/L	20	20.6	103	73-125	
1,2-Dichloropropane	ug/L	20	18.5	93	75-125	
1,3,5-Trimethylbenzene	ug/L	20	17.2	86	75-125	
1,3-Dichlorobenzene	ug/L	20	17.9	89	74-125	
1,3-Dichloropropane	ug/L	20	19.8	99	75-125	
1,4-Dichlorobenzene	ug/L	20	17.4	87	75-125	
2,2-Dichloropropane	ug/L	20	15.5	78	59-139	
2-Butanone (MEK)	ug/L	100	93.3	93	63-130	
2-Chlorotoluene	ug/L	20	17.3	86	72-125	
4-Chlorotoluene	ug/L	20	16.9	84	73-125	
4-Methyl-2-pentanone (MIBK)	ug/L	100	98.8	99	71-126	
Acetone	ug/L	100	126	126	69-131	
Allyl chloride	ug/L	20	16.5	83	67-125	
Benzene	ug/L	20	18.7	93	71-125	
Bromobenzene	ug/L	20	18.7	94	75-125	
Bromochloromethane	ug/L	20	19.1	95	75-125	
Bromodichloromethane	ug/L	20	19.8	99	75-125	
Bromoform	ug/L	20	19.4	97	70-125	
Bromomethane	ug/L	20	15.9	79	30-150	
Carbon tetrachloride	ug/L	20	17.5	87	75-126	
Chlorobenzene	ug/L	20	19.6	98	75-125	
Chloroethane	ug/L	20	16.4	82	65-134	
Chloroform	ug/L	20	19.1	96	75-125	
Chloromethane	ug/L	20	15.1	75	39-150	
cis-1,2-Dichloroethene	ug/L	20	18.0	90	72-125	
cis-1,3-Dichloropropene	ug/L	20	18.0	90	75-125	
Dibromochloromethane	ug/L	20	18.5	92	75-125	
Dibromomethane	ug/L	20	20.5	102	75-125	
Dichlorodifluoromethane	ug/L	20	17.0	85	50-134	
Dichlorofluoromethane	ug/L	20	19.7	98	69-125	
Diethyl ether (Ethyl ether)	ug/L	20	19.6	98	72-125	
Ethylbenzene	ug/L	20	18.6	93	75-125	
Hexachloro-1,3-butadiene	ug/L	20	17.5	87	70-138	
Isopropylbenzene (Cumene)	ug/L	20	18.6	93	75-125	
Methyl-tert-butyl ether	ug/L	20	19.9	100	73-125	
Methylene Chloride	ug/L	20	16.4	82	73-125	
n-Butylbenzene	ug/L	20	13.9	70	72-133	L0
n-Propylbenzene	ug/L	20	17.1	85	72-126	
Naphthalene	ug/L	20	13.6	68	70-127	L0
p-Isopropyltoluene	ug/L	20	16.5	82	72-132	
sec-Butylbenzene	ug/L	20	15.6	78	73-132	
Styrene	ug/L	20	18.9	95	75-125	
tert-Butylbenzene	ug/L	20	17.7	88	73-128	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA

Project: 14-1004 FSY
Pace Project No.: 10300801

LABORATORY CONTROL SAMPLE: 1934952

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Tetrachloroethene	ug/L	20	17.1	85	74-125	
Tetrahydrofuran	ug/L	200	214	107	62-133	
Toluene	ug/L	20	18.7	94	74-125	
trans-1,2-Dichloroethene	ug/L	20	17.2	86	69-125	
trans-1,3-Dichloropropene	ug/L	20	18.1	91	75-125	
Trichloroethene	ug/L	20	19.3	96	75-125	
Trichlorofluoromethane	ug/L	20	20.0	100	74-127	
Vinyl chloride	ug/L	20	16.4	82	66-132	
Xylene (Total)	ug/L	60	55.5	93	75-125	
1,2-Dichloroethane-d4 (S)	%.			96	75-125	
4-Bromofluorobenzene (S)	%.			100	75-125	
Toluene-d8 (S)	%.			100	75-125	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1936139 1936140

Parameter	Units	10300800006 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1,2-Tetrachloroethane	ug/L	ND	10	10	6.7	7.5	67	75	70-138	12	30	M1
1,1,1-Trichloroethane	ug/L	ND	10	10	7.5	9.3	75	93	55-150	21	30	
1,1,2,2-Tetrachloroethane	ug/L	ND	10	10	7.1	8.0	71	80	64-140	12	30	
1,1,2-Trichloroethane	ug/L	ND	10	10	6.8	8.2	68	82	67-137	19	30	
1,1,2-Trichlorotrifluoroethane	ug/L	ND	10	10	7.2	7.9	72	79	51-150	9	30	
1,1-Dichloroethane	ug/L	ND	10	10	7.4	8.3	74	83	49-150	12	30	
1,1-Dichloroethene	ug/L	ND	10	10	6.6	8.6	66	86	40-150	26	30	
1,1-Dichloropropene	ug/L	ND	10	10	6.7	8.5	67	85	50-150	23	30	
1,2,3-Trichlorobenzene	ug/L	ND	10	10	6.3	7.3	63	73	59-148	14	30	
1,2,3-Trichloropropane	ug/L	ND	10	10	7.7	8.5	77	85	65-141	11	30	
1,2,4-Trichlorobenzene	ug/L	ND	10	10	5.9	7.3	59	73	61-140	21	30	M1
1,2,4-Trimethylbenzene	ug/L	ND	10	10	6.3	7.4	63	74	58-141	16	30	
1,2-Dibromo-3-chloropropane	ug/L	ND	25	25	16.4	19.8	65	79	53-150	19	30	
1,2-Dibromoethane (EDB)	ug/L	ND	10	10	6.7	7.7	67	77	65-137	14	30	
1,2-Dichlorobenzene	ug/L	ND	10	10	6.3	7.1	63	71	66-133	12	30	M1
1,2-Dichloroethane	ug/L	ND	10	10	7.5	8.8	75	88	54-138	16	30	
1,2-Dichloropropane	ug/L	ND	10	10	8.5	9.5	85	95	62-138	11	30	
1,3,5-Trimethylbenzene	ug/L	ND	10	10	6.5	7.3	65	73	58-140	12	30	
1,3-Dichlorobenzene	ug/L	ND	10	10	6.7	7.9	67	79	66-132	16	30	
1,3-Dichloropropane	ug/L	ND	10	10	8.2	8.4	82	84	66-134	3	30	
1,4-Dichlorobenzene	ug/L	ND	10	10	5.9	7.4	59	74	65-129	23	30	M1
2,2-Dichloropropane	ug/L	ND	10	10	5.0	5.6	50	56	40-150	12	30	
2-Butanone (MEK)	ug/L	ND	50	50	37.0	46.4	74	93	51-147	22	30	
2-Chlorotoluene	ug/L	ND	10	10	6.6	7.9	66	79	58-147	17	30	
4-Chlorotoluene	ug/L	ND	10	10	6.0	7.6	60	76	64-138	23	30	M1
4-Methyl-2-pentanone (MIBK)	ug/L	ND	50	50	37.0	43.8	74	88	59-143	17	30	
Acetone	ug/L	ND	50	50	48.7	61.3	97	123	63-147	23	30	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA

Project: 14-1004 FSY
Pace Project No.: 10300801

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1936139 1936140

Parameter	Units	10300800006 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Allyl chloride	ug/L	ND	10	10	7.4	7.9	74	79	45-150	6	30	
Benzene	ug/L	ND	10	10	7.5	9.8	70	93	53-139	26	30	
Bromobenzene	ug/L	ND	10	10	7.1	8.4	71	84	66-136	16	30	
Bromochloromethane	ug/L	ND	10	10	7.6	7.5	76	75	64-136	2	30	
Bromodichloromethane	ug/L	ND	10	10	8.1	9.1	81	91	66-138	12	30	
Bromoform	ug/L	ND	10	10	7.0	8.2	70	82	59-136	16	30	
Bromomethane	ug/L	ND	10	10	7.4	8.9	74	89	30-150	19	30	
Carbon tetrachloride	ug/L	ND	10	10	6.7	9.0	67	90	56-150	29	30	
Chlorobenzene	ug/L	ND	10	10	7.1	8.7	71	87	65-133	20	30	
Chloroethane	ug/L	ND	10	10	8.3	8.1	83	81	48-150	2	30	
Chloroform	ug/L	ND	10	10	7.6	9.0	76	90	57-145	18	30	
Chloromethane	ug/L	ND	10	10	6.1	6.7	61	67	30-150	9	30	
cis-1,2-Dichloroethene	ug/L	6.6	10	10	14.9	15.7	83	91	49-150	5	30	
cis-1,3-Dichloropropene	ug/L	ND	10	10	7.1	7.9	71	79	64-130	10	30	
Dibromochloromethane	ug/L	ND	10	10	6.7	8.1	67	81	68-138	18	30	M1
Dibromomethane	ug/L	ND	10	10	7.9	9.1	79	91	67-134	14	30	
Dichlorodifluoromethane	ug/L	ND	10	10	7.5	7.3	75	73	45-150	2	30	
Dichlorofluoromethane	ug/L	ND	10	10	9.5	9.9	95	99	54-150	4	30	
Diethyl ether (Ethyl ether)	ug/L	ND	10	10	7.8	7.9	78	79	50-145	1	30	
Ethylbenzene	ug/L	ND	10	10	6.8	8.4	68	84	55-139	20	30	
Hexachloro-1,3-butadiene	ug/L	ND	10	10	7.3	7.5	73	75	49-150	2	30	
Isopropylbenzene (Cumene)	ug/L	ND	10	10	6.8	7.9	68	79	64-142	16	30	
Methyl-tert-butyl ether	ug/L	ND	10	10	8.2	9.6	82	96	62-129	16	30	
Methylene Chloride	ug/L	ND	10	10	8.1	9.2	81	92	57-132	13	30	
n-Butylbenzene	ug/L	ND	10	10	4.9	5.6	49	56	55-150	14	30	M0
n-Propylbenzene	ug/L	ND	10	10	6.2	7.5	62	75	59-142	19	30	
Naphthalene	ug/L	ND	10	10	5.4	6.3	54	63	51-150	16	30	
p-Isopropyltoluene	ug/L	ND	10	10	6.0	6.8	60	68	60-149	13	30	
sec-Butylbenzene	ug/L	ND	10	10	5.7	6.7	57	67	60-150	16	30	M1
Styrene	ug/L	ND	10	10	6.4	7.6	64	76	68-134	17	30	M1
tert-Butylbenzene	ug/L	ND	10	10	6.4	7.7	64	77	62-146	18	30	
Tetrachloroethene	ug/L	ND	10	10	6.5	8.2	60	77	50-150	23	30	
Tetrahydrofuran	ug/L	ND	100	100	91.4	102	91	102	59-145	11	30	
Toluene	ug/L	ND	10	10	7.7	8.2	77	82	52-148	6	30	
trans-1,2-Dichloroethene	ug/L	ND	10	10	7.1	9.3	71	93	45-150	28	30	
trans-1,3-Dichloropropene	ug/L	ND	10	10	6.9	7.2	69	72	68-132	5	30	
Trichloroethene	ug/L	0.71	10	10	8.5	9.3	78	86	52-150	9	30	
Trichlorofluoromethane	ug/L	ND	10	10	7.9	8.6	79	86	55-150	8	30	
Vinyl chloride	ug/L	0.73	10	10	10	9.5	92	88	43-150	5	30	
Xylene (Total)	ug/L	ND	30	30	20.5	23.7	68	79	54-144	15	30	
1,2-Dichloroethane-d4 (S)	%.						93	95	75-125			
4-Bromofluorobenzene (S)	%.						99	101	75-125			
Toluene-d8 (S)	%.						101	94	75-125			

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

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA

Project: 14-1004 FSY
Pace Project No.: 10300801

QC Batch: OEXT/28678 Analysis Method: EPA 8270D by SIM
QC Batch Method: EPA 3550 Analysis Description: 8270D Solid PAH by SIM MSSV
Associated Lab Samples: 10300801001, 10300801002, 10300801003, 10300801004, 10300801005, 10300801006, 10300801007, 10300801008

METHOD BLANK: 1926871 Matrix: Solid
Associated Lab Samples: 10300801001, 10300801002, 10300801003, 10300801004, 10300801005, 10300801006, 10300801007, 10300801008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Acenaphthene	ug/kg	ND	10.0	03/30/15 08:10	
Acenaphthylene	ug/kg	ND	10.0	03/30/15 08:10	
Anthracene	ug/kg	ND	10.0	03/30/15 08:10	
Benzo(a)anthracene	ug/kg	ND	10.0	03/30/15 08:10	
Benzo(a)pyrene	ug/kg	ND	10.0	03/30/15 08:10	
Benzo(b)fluoranthene	ug/kg	ND	10.0	03/30/15 08:10	
Benzo(g,h,i)perylene	ug/kg	ND	10.0	03/30/15 08:10	
Benzo(k)fluoranthene	ug/kg	ND	10.0	03/30/15 08:10	
Chrysene	ug/kg	ND	10.0	03/30/15 08:10	
Dibenz(a,h)anthracene	ug/kg	ND	10.0	03/30/15 08:10	
Fluoranthene	ug/kg	ND	10.0	03/30/15 08:10	
Fluorene	ug/kg	ND	10.0	03/30/15 08:10	
Indeno(1,2,3-cd)pyrene	ug/kg	ND	10.0	03/30/15 08:10	
Naphthalene	ug/kg	ND	10.0	03/30/15 08:10	
Phenanthrene	ug/kg	ND	10.0	03/30/15 08:10	
Pyrene	ug/kg	ND	10.0	03/30/15 08:10	
2-Fluorobiphenyl (S)	%.	66	55-125	03/30/15 08:10	
p-Terphenyl-d14 (S)	%.	82	30-150	03/30/15 08:10	

LABORATORY CONTROL SAMPLE: 1926872

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Acenaphthene	ug/kg	33.3	24.1	72	53-125	
Acenaphthylene	ug/kg	33.3	24.6	74	53-125	
Anthracene	ug/kg	33.3	30.7	92	61-125	
Benzo(a)anthracene	ug/kg	33.3	26.1	78	62-125	
Benzo(a)pyrene	ug/kg	33.3	28.1	84	64-125	
Benzo(b)fluoranthene	ug/kg	33.3	27.2	82	66-125	
Benzo(g,h,i)perylene	ug/kg	33.3	27.1	81	59-125	
Benzo(k)fluoranthene	ug/kg	33.3	26.7	80	61-125	
Chrysene	ug/kg	33.3	25.3	76	63-125	
Dibenz(a,h)anthracene	ug/kg	33.3	27.0	81	59-125	
Fluoranthene	ug/kg	33.3	27.1	81	64-125	
Fluorene	ug/kg	33.3	25.4	76	57-125	
Indeno(1,2,3-cd)pyrene	ug/kg	33.3	25.9	78	58-125	
Naphthalene	ug/kg	33.3	18.6	56	52-125	
Phenanthrene	ug/kg	33.3	25.9	78	60-125	
Pyrene	ug/kg	33.3	30.7	92	63-125	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA

Project: 14-1004 FSY
Pace Project No.: 10300801

LABORATORY CONTROL SAMPLE: 1926872

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
2-Fluorobiphenyl (S)	%.			67	55-125	
p-Terphenyl-d14 (S)	%.			78	30-150	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1926873 1926874

Parameter	Units	10299933023 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Acenaphthene	ug/kg	ND	56.1	56.2	36.3	36.2	65	64	39-125	0	30	
Acenaphthylene	ug/kg	ND	56.1	56.2	38.6	38.0	68	66	30-150	2	30	
Anthracene	ug/kg	ND	56.1	56.2	40.4	43.0	70	74	30-150	6	30	
Benzo(a)anthracene	ug/kg	ND	56.1	56.2	29.6	32.9	46	52	30-150	11	30	
Benzo(a)pyrene	ug/kg	ND	56.1	56.2	30.4	35.9	54	64	30-150	16	30	
Benzo(b)fluoranthene	ug/kg	4.2J	56.1	56.2	30.0	33.4	46	52	30-150	11	30	
Benzo(g,h,i)perylene	ug/kg	ND	56.1	56.2	27.4	31.3	49	56	30-150	13	30	
Benzo(k)fluoranthene	ug/kg	ND	56.1	56.2	28.3	34.3	47	58	30-150	19	30	
Chrysene	ug/kg	ND	56.1	56.2	30.1	32.8	47	52	30-150	9	30	
Dibenz(a,h)anthracene	ug/kg	ND	56.1	56.2	28.0	30.8	50	55	30-150	10	30	
Fluoranthene	ug/kg	ND	56.1	56.2	30.0	32.1	41	45	30-150	7	30	
Fluorene	ug/kg	ND	56.1	56.2	37.6	37.9	66	66	30-146	1	30	
Indeno(1,2,3-cd)pyrene	ug/kg	ND	56.1	56.2	29.0	30.3	52	54	30-150	4	30	
Naphthalene	ug/kg	ND	56.1	56.2	33.9	31.6	60	56	30-131	7	30	
Phenanthrene	ug/kg	ND	56.1	56.2	36.5	37.4	57	59	30-150	2	30	
Pyrene	ug/kg	6.8J	56.1	56.2	37.2	40.7	54	60	30-150	9	30	
2-Fluorobiphenyl (S)	%.						65	61	55-125			
p-Terphenyl-d14 (S)	%.						61	62	30-150			

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA

Project: 14-1004 FSY
Pace Project No.: 10300801

QC Batch: OEXT/28710 Analysis Method: EPA 8270D by SIM
QC Batch Method: EPA 3510 Analysis Description: 8270D PAH by SIM MSSV
Associated Lab Samples: 10300802001, 10300802002, 10300802003, 10300802004, 10300802005, 10300802006

METHOD BLANK: 1928857 Matrix: Water
Associated Lab Samples: 10300802001, 10300802002, 10300802003, 10300802004, 10300802005, 10300802006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Acenaphthene	ug/L	ND	0.040	04/02/15 08:23	
Acenaphthylene	ug/L	ND	0.040	04/02/15 08:23	
Anthracene	ug/L	ND	0.040	04/02/15 08:23	
Benzo(a)anthracene	ug/L	ND	0.040	04/02/15 08:23	
Benzo(a)pyrene	ug/L	ND	0.040	04/02/15 08:23	
Benzo(b)fluoranthene	ug/L	ND	0.040	04/02/15 08:23	
Benzo(g,h,i)perylene	ug/L	ND	0.040	04/02/15 08:23	
Benzo(k)fluoranthene	ug/L	ND	0.040	04/02/15 08:23	
Chrysene	ug/L	ND	0.040	04/02/15 08:23	
Dibenz(a,h)anthracene	ug/L	ND	0.040	04/02/15 08:23	
Fluoranthene	ug/L	ND	0.040	04/02/15 08:23	
Fluorene	ug/L	ND	0.040	04/02/15 08:23	
Indeno(1,2,3-cd)pyrene	ug/L	ND	0.040	04/02/15 08:23	
Naphthalene	ug/L	ND	0.040	04/02/15 08:23	
Phenanthrene	ug/L	ND	0.040	04/02/15 08:23	
Pyrene	ug/L	ND	0.040	04/02/15 08:23	
2-Fluorobiphenyl (S)	%.	71	52-125	04/02/15 08:23	
p-Terphenyl-d14 (S)	%.	77	62-125	04/02/15 08:23	

LABORATORY CONTROL SAMPLE & LCSD: 1928858 1928859

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Acenaphthene	ug/L	1	0.74	0.74	74	74	44-125	0	20	
Acenaphthylene	ug/L	1	0.74	0.77	74	77	44-125	4	20	
Anthracene	ug/L	1	0.97	0.98	97	98	55-125	1	20	
Benzo(a)anthracene	ug/L	1	0.83	0.84	83	84	56-125	1	20	
Benzo(a)pyrene	ug/L	1	0.91	0.91	91	91	61-125	0	20	
Benzo(b)fluoranthene	ug/L	1	0.89	0.90	89	90	60-125	1	20	
Benzo(g,h,i)perylene	ug/L	1	0.88	0.89	88	89	53-125	2	20	
Benzo(k)fluoranthene	ug/L	1	0.87	0.85	87	85	59-125	2	20	
Chrysene	ug/L	1	0.82	0.84	82	84	61-125	2	20	
Dibenz(a,h)anthracene	ug/L	1	0.91	0.90	91	90	51-125	1	20	
Fluoranthene	ug/L	1	0.92	0.93	92	93	64-125	2	20	
Fluorene	ug/L	1	0.76	0.79	76	79	52-125	4	20	
Indeno(1,2,3-cd)pyrene	ug/L	1	0.87	0.87	87	87	54-125	0	20	
Naphthalene	ug/L	1	0.69	0.71	69	71	35-125	3	20	
Phenanthrene	ug/L	1	0.81	0.83	81	83	55-125	3	20	
Pyrene	ug/L	1	0.87	0.88	87	88	59-125	1	20	
2-Fluorobiphenyl (S)	%.				69	70	52-125			
p-Terphenyl-d14 (S)	%.				76	77	62-125			

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

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

QUALIFIERS

Project: 14-1004 FSY
Pace Project No.: 10300801

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 adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

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.

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

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

TNI - The NELAC Institute.

BATCH QUALIFIERS

Batch: MSSV/12116

[M5]	A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

ANALYTE QUALIFIERS

B	Analyte was detected in the associated method blank.
C0	Result confirmed by second analysis.
C8	Result may be biased high due to carryover from previously analyzed sample.
CH	The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased high.
D3	Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.
E	Analyte concentration exceeded the calibration range. The reported result is estimated.
H5	Reanalysis conducted in excess of EPA method holding time. Results confirm original analysis performed in hold time.
L0	Analyte recovery in the laboratory control sample (LCS) was outside QC limits.
L1	Analyte recovery in the laboratory control sample (LCS) was above QC limits. Results may be biased high.
L2	Analyte recovery in the laboratory control sample (LCS) was below QC limits. Results may be biased low.
L3	Analyte recovery in the laboratory control sample (LCS) exceeded QC limits. Analyte presence below reporting limits in associated samples. Results unaffected by high bias.
M0	Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
MS	Analyte recovery in the matrix spike was outside QC limits for one or more of the constituent analytes used in the calculated result.
P3	Sample extract could not be concentrated to the routine final volume, resulting in elevated reporting limits.

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

QUALIFIERS

Project: 14-1004 FSY
Pace Project No.: 10300801

ANALYTE QUALIFIERS

S4	Surrogate recovery not evaluated against control limits due to sample dilution.
SS	This analyte did not meet the secondary source verification criteria for the initial calibration. The reported result should be considered an estimated value.
pH	Post-analysis pH measurement indicates insufficient VOA sample preservation.

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 14-1004 FSY
Pace Project No.: 10300801

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
10300801001	**GP1 2-4**	ASTM D2974	MPRP/53220		
10300801002	**GP2 2-4**	ASTM D2974	MPRP/53225		
10300801003	**GP3 2-4**	ASTM D2974	MPRP/53225		
10300801004	**GP4 2-4**	ASTM D2974	MPRP/53225		
10300801005	**GP5 4-8**	ASTM D2974	MPRP/53225		
10300801006	**GP6 4-8**	ASTM D2974	MPRP/53225		
10300801007	**GP7 2-4**	ASTM D2974	MPRP/53225		
10300801008	**GP50 4-8**	ASTM D2974	MPRP/53225		
10300801001	**GP1 2-4**	EPA 3550	OEXT/28678	EPA 8270D by SIM	MSSV/12097
10300801002	**GP2 2-4**	EPA 3550	OEXT/28678	EPA 8270D by SIM	MSSV/12097
10300801003	**GP3 2-4**	EPA 3550	OEXT/28678	EPA 8270D by SIM	MSSV/12097
10300801004	**GP4 2-4**	EPA 3550	OEXT/28678	EPA 8270D by SIM	MSSV/12097
10300801005	**GP5 4-8**	EPA 3550	OEXT/28678	EPA 8270D by SIM	MSSV/12097
10300801006	**GP6 4-8**	EPA 3550	OEXT/28678	EPA 8270D by SIM	MSSV/12097
10300801007	**GP7 2-4**	EPA 3550	OEXT/28678	EPA 8270D by SIM	MSSV/12097
10300801008	**GP50 4-8**	EPA 3550	OEXT/28678	EPA 8270D by SIM	MSSV/12097
10300802001	**GP1W**	EPA 3510	OEXT/28710	EPA 8270D by SIM	MSSV/12116
10300802002	**GP2W**	EPA 3510	OEXT/28710	EPA 8270D by SIM	MSSV/12116
10300802003	**GP3W**	EPA 3510	OEXT/28710	EPA 8270D by SIM	MSSV/12116
10300802004	**GP4W**	EPA 3510	OEXT/28710	EPA 8270D by SIM	MSSV/12116
10300802005	**GP6W**	EPA 3510	OEXT/28710	EPA 8270D by SIM	MSSV/12116
10300802006	**GP7W**	EPA 3510	OEXT/28710	EPA 8270D by SIM	MSSV/12116
10300801001	**GP1 2-4**	EPA 5035/5030B	MSV/30935	EPA 8260	MSV/30956
10300801002	**GP2 2-4**	EPA 5035/5030B	MSV/30935	EPA 8260	MSV/30956
10300801003	**GP3 2-4**	EPA 5035/5030B	MSV/30935	EPA 8260	MSV/30956
10300801004	**GP4 2-4**	EPA 5035/5030B	MSV/30935	EPA 8260	MSV/30956
10300801005	**GP5 4-8**	EPA 5035/5030B	MSV/30950	EPA 8260	MSV/30961
10300801006	**GP6 4-8**	EPA 5035/5030B	MSV/30935	EPA 8260	MSV/30956
10300801007	**GP7 2-4**	EPA 5035/5030B	MSV/30935	EPA 8260	MSV/30956
10300801008	**GP50 4-8**	EPA 5035/5030B	MSV/30970	EPA 8260	MSV/30986
10300801009	**Trip Blank**	EPA 5035/5030B	MSV/30935	EPA 8260	MSV/30956
10300802001	**GP1W**	EPA 8260	MSV/31022		
10300802002	**GP2W**	EPA 8260	MSV/30960		
10300802003	**GP3W**	EPA 8260	MSV/30960		
10300802004	**GP4W**	EPA 8260	MSV/31022		
10300802005	**GP6W**	EPA 8260	MSV/30960		
10300802006	**GP7W**	EPA 8260	MSV/31022		
10300802007	**Trip Blank**	EPA 8260	MSV/31022		

REPORT OF LABORATORY ANALYSIS

Pace Analytical®
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

L. Carlson

Page: 1 of 2

1825556

Section A Required Client Information:

Company: Env. Troubleshooters
Address: 3825 Grand Ave
Duluth, MN 55807
Email To: jmccarthy@etsmn.com
Phone: 218-722-6013 Fax:
Requested Due Date/TAT: Std 10 day

Section B Required Project Information:

Report To:
Copy To: Same
Purchase Order No.:
Project Name: FSY (Fraser Shipyard)
Project Number: 14-1004

Section C Invoice Information:

Attention:
Company Name: Same
Address:
Pace Quote Reference: ET15
Pace Project Manager: Lori Castile
Pace Profile #:

REGULATORY AGENCY
☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☒ RCRA ☐ OTHER

Site Location STATE: WI

Requested Analysis Filtered (Y/N)

Section D Required Client Information

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

Matrix Codes (MATRIX / CODE): Drinking Water DW; Water WT; Waste Water WW; Product P; Soil/Solid SL; Oil OL; Wipe WP; Air AR; Tissue TS; Other OT

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED: COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	PAH SIM	VOCs	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	GP1 2-4	SL	G			3/24/15	1010		5	3						2		X	X			
2	GP2 2-4	SL	G			3/24/15	1100		5	3						2		X	X			
3	GP3 2-4	SL	G			3/24/15	1145		5	3						2		X	X			
4	GP4 2-4	SL	G			3/24/15	1320		5	3						2		X	X			
5	GP5 4-8	SL	G			→ 3/25/15	1030		5	3						2		X	X			
6	GP6 4-8	SL	G			3/24/15	1600		5	3						2		X	X			
7	GP7 2-4	SL	G			3/24/15	1400		5	3						2		X	X			
8	GP50 4-8	SL	G			→ 3/25/15	1035		5	3						2		X	X			
9	TB 3/24/15 pmm																					
10																						
11																						
12																						

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS: Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
	John McCarthy / ET	3/26/15	1510		3/26/15	1510				
		3/26/15	1545		3/26/15	1545				
		3/26/15	1907	PACE	3-26-15	1807	5.8	Y	Y	Y
							3.8			

ORIGINAL

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: John McCarthy
SIGNATURE of SAMPLER: DATE Signed (MM/DD/YY): 3/26/15

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

F-ALL-Q-020rev.07, 15-May-2007

Pace Analytical®	Document Name: Sample Condition Upon Receipt Form	Document Revised: 28Feb2014 Page 1 of 1
	Document No.: F-MN-L-213-rev.09	Issuing Authority: Pace Minnesota Quality Office

Sample Condition Upon Receipt

Client Name: Env. Troubleshooters

Project #: WO#: 10300801

10300801

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☒ Pace ☐ SpeeDee ☐ Other:

Tracking Number:

Custody Seal on Cooler/Box Present? ☐ Yes ☒ No **Seals Intact?** ☐ Yes ☒ No

Optional: Proj. Due Date: Proj. Name:

Packing Material: ☐ Bubble Wrap ☒ Bubble Bags ☐ None ☐ Other: **Temp Blank?** ☒ Yes ☐ No

Thermom. Used: ☒ B88A9130516413 ☐ B88A912167504 ☐ B88A9132521491 **Type of Ice:** ☒ Wet ☐ Blue ☐ None ☐ Samples on ice, cooling process has begun

Cooler Temp Read (°C): 3.2 **Cooler Temp Corrected (°C):** 3.4 **Biological Tissue Frozen?** ☐ Yes ☐ No ☒ N/A

Temp should be above freezing to 6°C **Correction Factor:** +0.2 **Date and Initials of Person Examining Contents:** 3/26/15 mm

				Comments:
Chain of Custody Present?	☒ Yes	☐ No	☐ N/A	1.
Chain of Custody Filled Out?	☒ Yes	☐ No	☐ N/A	2.
Chain of Custody Relinquished?	☒ Yes	☐ No	☐ N/A	3.
Sampler Name and/or Signature on COC?	☒ Yes	☐ No	☐ N/A	4.
Samples Arrived within Hold Time?	☒ Yes	☐ No	☐ N/A	5.
Short Hold Time Analysis (<72 hr)?	☐ Yes	☒ No	☐ N/A	6.
Rush Turn Around Time Requested?	☐ Yes	☒ No	☐ N/A	7.
Sufficient Volume?	☒ Yes	☐ No	☐ N/A	8.
Correct Containers Used?	☒ Yes	☐ No	☐ N/A	9.
-Pace Containers Used?	☒ Yes	☐ No	☐ N/A	
Containers Intact?	☒ Yes	☐ No	☐ N/A	10.
Filtered Volume Received for Dissolved Tests?	☐ Yes	☐ No	☒ N/A	11.
Sample Labels Match COC?	☒ Yes	☐ No	☐ N/A	12.
-Includes Date/Time/ID/Analysis Matrix: SL				
All containers needing acid/base preservation have been checked?	☐ Yes	☐ No	☒ N/A	13. ☐ HNO_3 ☐ H_2SO_4 ☐ NaOH ☐ HCl
All containers needing preservation are found to be in compliance with EPA recommendation? (HNO_3, H_2SO_4, HCl<2; NaOH >9 Sulfide, NaOH>12 Cyanide)	☐ Yes	☐ No	☐ N/A	Sample #
Exceptions: VOA, Coliform, TOC, Oil and Grease, DRO/8015 (water) DOC	☒ Yes	☐ No		Initial when completed: Lot # of added preservative:
Headspace in VOA Vials (>6mm)?	☐ Yes	☐ No	☒ N/A	14.
Trip Blank Present?	☒ Yes	☐ No	☐ N/A	15.
Trip Blank Custody Seals Present?	☐ Yes	☒ No	☐ N/A	
Pace Trip Blank Lot # (if purchased):				

CLIENT NOTIFICATION/RESOLUTION **Field Data Required?** ☐ Yes ☐ No

Person Contacted: Date/Time:

Comments/Resolution: TB NOT ON COC.

Project Manager Review: Date: 03/27/15

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e out of hold, incorrect preservative, out of temp, incorrect containers)

CHAIN-OF-CUSTODY / Analytical Request Document

Pace Analytical® www.pacelabs.com

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

10300801

CMS 3/27/15

Page: 2 of 2

1491486

Section A Required Client Information:

Company: Env. Troubleshooters
Address: 3825 Grand Ave
Duluth MN 55807
Email To: jmccarthy@etsmn.com
Phone: 218 722 6003 Fax:
Requested Due Date/TAT: Std - 10 day

Section B Required Project Information:

Report To:
Copy To: Same
Purchase Order No.:
Project Name: FSY
Project Number: 14-1004

Section C Invoice Information:

Attention:
Company Name: Same
Address:
Pace Quote Reference: ETIS
Pace Project Manager: Lori Castile
Pace Profile #:

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☒ RCRA ☐ OTHER

Site Location STATE: WI

Section D Required Client Information

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

Matrix Codes — MATRIX / CODE: Drinking Water DW; Water WT; Waste Water WW; Product P; Soil/Solid SL; Oil OL; Wipe WP; Air AR; Tissue TS; Other OT

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED: COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	PAH SIM	VOC	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	GP1W	WT	G		3/25/15		1040		5	2			3						X	X			10300802 001
2	GP2W	WT	G		3/25/15		1055		5	2			3						X	X			002
3	GP3W	WT	G		3/25/15		1110		5	2			3						X	X			003
4	GP4W	WT	G		3/25/15		1140		5	2			3						X	X			004
5	GP6W	WT	G		3/25/15		1320		5	2			3						X	X			005
6	GP7W	WT	G		3/25/15		1340		5	2			3						X	X			006
7	TB 3/26/15																						007
8																							
9																							
10																							
11																							
12																							

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS: Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
	John McCarthy/ET	3/26/15	1510		3/26/15	1510				
		3/24/15	1545		3/24/15	1545				
		3/24/15	1807	PACE	3-26-15	1807	5.8	Y	Y	Y
							3.8			

ORIGINAL

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: John McCarthy

SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 3/26/15

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

Pace Analytical®	Document Name: Sample Condition Upon Receipt Form	Document Revised: 28Feb2014 Page 1 of 1
	Document No.: F-MN-L-213-rev.09	Issuing Authority: Pace Minnesota Quality Office

Sample Condition Upon Receipt

Client Name: Environmental Troubleshooters

Project #: WO#: 10300802

10300802

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☒ Pace ☐ SpeeDee ☐ Other:

Tracking Number:

Custody Seal on Cooler/Box Present? ☒ Yes ☐ No **Seals Intact?** ☒ Yes ☐ No

Optional: Proj. Due Date: Proj. Name:

Packing Material: ☐ Bubble Wrap ☒ Bubble Bags ☐ None ☐ Other: **Temp Blank?** ☒ Yes ☐ No

Thermom. Used: ☒ B88A9130516413 ☐ B88A912167504 ☐ B88A9132521491 **Type of Ice:** ☒ Wet ☐ Blue ☐ None ☐ Samples on ice, cooling process has begun

Cooler Temp Read (°C): 3.2 **Cooler Temp Corrected (°C):** 3.4 **Biological Tissue Frozen?** ☐ Yes ☐ No ☒ N/A

Temp should be above freezing to 6°C **Correction Factor:** +0.2 **Date and Initials of Person Examining Contents:** 3/26/15 WM

				Comments:
Chain of Custody Present?	☒ Yes	☐ No	☐ N/A	1.
Chain of Custody Filled Out?	☒ Yes	☐ No	☐ N/A	2.
Chain of Custody Relinquished?	☒ Yes	☐ No	☐ N/A	3.
Sampler Name and/or Signature on COC?	☒ Yes	☐ No	☐ N/A	4.
Samples Arrived within Hold Time?	☒ Yes	☐ No	☐ N/A	5.
Short Hold Time Analysis (<72 hr)?	☐ Yes	☒ No	☐ N/A	6.
Rush Turn Around Time Requested?	☐ Yes	☒ No	☐ N/A	7.
Sufficient Volume?	☒ Yes	☐ No	☐ N/A	8.
Correct Containers Used?	☒ Yes	☐ No	☐ N/A	9.
-Pace Containers Used?	☒ Yes	☐ No	☐ N/A	
Containers Intact?	☒ Yes	☐ No	☐ N/A	10.
Filtered Volume Received for Dissolved Tests?	☐ Yes	☐ No	☒ N/A	11.
Sample Labels Match COC? -Includes Date/Time/ID/Analysis Matrix: WT	☒ Yes	☐ No	☐ N/A	12.
All containers needing acid/base preservation have been checked?	☐ Yes	☐ No	☒ N/A	13. ☐ HNO_3 ☐ H_2SO_4 ☐ NaOH ☐ HCl
All containers needing preservation are found to be in compliance with EPA recommendation? (HNO_3, H_2SO_4, HCl<2; NaOH >9 Sulfide, NaOH>12 Cyanide)	☐ Yes	☐ No	☒ N/A	Sample #
Exceptions: VOA, Coliform, TOC, Oil and Grease, DRO/8015 (water) DOC	☒ Yes	☐ No		Initial when completed: Lot # of added preservative:
Headspace in VOA Vials (>6mm)?	☐ Yes	☒ No	☐ N/A	14.
Trip Blank Present?	☒ Yes	☐ No	☐ N/A	15.
Trip Blank Custody Seals Present?	☐ Yes	☒ No	☐ N/A	
Pace Trip Blank Lot # (if purchased): 0303429				

CLIENT NOTIFICATION/RESOLUTION **Field Data Required?** ☐ Yes ☐ No

Person Contacted: Date/Time:

Comments/Resolution: TB NOT on COC.

Project Manager Review: Date: 03/27/15

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e out of hold, incorrect preservative, out of temp, incorrect containers)

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

July 15, 2015

Mr. John McCarthy
Environmental Troubleshooters
3825 Grand Avenue
Duluth, MN 55807

RE: Project: 141004 Fraser
Pace Project No.: 10312785

Dear Mr. McCarthy:
Enclosed are the analytical results for sample(s) received by the laboratory on July 01, 2015. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,

Lori Castille
lori.castille@pacelabs.com
Project Manager

Enclosures

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

CERTIFICATIONS

Project: 141004 Fraser
Pace Project No.: 10312785

Minnesota Certification IDs

1700 Elm Street SE Suite 200, Minneapolis, MN 55414
A2LA Certification #: 2926.01
Alaska Certification #: UST-078
Alaska Certification #MN00064
Alabama Certification #40770
Arizona Certification #: AZ-0014
Arkansas Certification #: 88-0680
California Certification #: 01155CA
Colorado Certification #Pace
Connecticut Certification #: PH-0256
EPA Region 8 Certification #: 8TMS-L
Florida/NELAP Certification #: E87605
Guam Certification #:14-008r
Georgia Certification #: 959
Georgia EPD #: Pace
Idaho Certification #: MN00064
Hawaii Certification #MN00064
Illinois Certification #: 200011
Indiana Certification#C-MN-01
Iowa Certification #: 368
Kansas Certification #: E-10167
Kentucky Dept of Envi. Protection - DW #90062
Kentucky Dept of Envi. Protection - WW #:90062
Louisiana DEQ Certification #: 3086
Louisiana DHH #: LA140001
Maine Certification #: 2013011
Maryland Certification #: 322
Michigan DEPH Certification #: 9909
Minnesota Certification #: 027-053-137
Mississippi Certification #: Pace
Montana Certification #: MT0092
Nevada Certification #: MN_00064
Nebraska Certification #: Pace
New Jersey Certification #: MN-002
New York Certification #: 11647
North Carolina Certification #: 530
North Carolina State Public Health #: 27700
North Dakota Certification #: R-036
Ohio EPA #: 4150
Ohio VAP Certification #: CL101
Oklahoma Certification #: 9507
Oregon Certification #: MN200001
Oregon Certification #: MN300001
Pennsylvania Certification #: 68-00563
Puerto Rico Certification
Saipan (CNMI) #:MP0003
South Carolina #:74003001
Texas Certification #: T104704192
Tennessee Certification #: 02818
Utah Certification #: MN000642013-4
Virginia DGS Certification #: 251
Virginia/VELAP Certification #: Pace
Washington Certification #: C486
West Virginia Certification #: 382
West Virginia DHHR #:9952C
Wisconsin Certification #: 999407970

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

SAMPLE SUMMARY

Project: 141004 Fraser
Pace Project No.: 10312785

Lab ID	Sample ID	Matrix	Date Collected	Date Received
10312785001	**PSA-GP-8W**	Water	06/29/15 13:50	07/01/15 10:05
10312785002	**PSA-GP-81W**	Water	06/29/15 13:45	07/01/15 10:05
10312785003	**PSA-GP-9W**	Water	06/29/15 14:00	07/01/15 10:05
10312785004	**PSA-GP-8 2-4**	Solid	06/29/15 10:30	07/01/15 10:05
10312785005	**PSA-GP-9 2-4**	Solid	06/29/15 11:00	07/01/15 10:05
10312785006	**PSA-GP-9 6-3**	Solid	06/29/15 11:05	07/01/15 10:05
10312785007	**PSA-GP-10 2-4**	Solid	06/29/15 12:30	07/01/15 10:05
10312785008	**PSA-GP-11 2-4**	Solid	06/29/15 13:00	07/01/15 10:05

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(612)607-1700

SAMPLE ANALYTE COUNT

Project: 141004 Fraser
Pace Project No.: 10312785

Lab ID	Sample ID	Method	Analysts	Analytes Reported
10312785001	**PSA-GP-8W**	EPA 8270D by SIM	LT	18
10312785002	**PSA-GP-81W**	EPA 8270D by SIM	LT	18
10312785003	**PSA-GP-9W**	EPA 8270D by SIM	LT	18
10312785004	**PSA-GP-8 2-4**	ASTM D2974	JDL	1
		EPA 8270D by SIM	AS1	18
10312785005	**PSA-GP-9 2-4**	ASTM D2974	JDL	1
		EPA 8270D by SIM	AS1	18
10312785006	**PSA-GP-9 6-3**	ASTM D2974	JDL	1
		EPA 8270D by SIM	AS1	18
10312785007	**PSA-GP-10 2-4**	ASTM D2974	JDL	1
		EPA 8270D by SIM	AS1	18
10312785008	**PSA-GP-11 2-4**	ASTM D2974	JDL	1
		EPA 8270D by SIM	AS1	18

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

ANALYTICAL RESULTS

Project: 141004 Fraser
Pace Project No.: 10312785

Sample: PSA-GP-8W **Lab ID: 10312785001** Collected: 06/29/15 13:50 Received: 07/01/15 10:05 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8270D MSSV PAH by SIM	Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3510								
Acenaphthene	**0.78**	ug/L	0.043	0.0035	1	07/06/15 23:44	07/09/15 08:31	83-32-9	
Acenaphthylene	ND	ug/L	0.043	0.0043	1	07/06/15 23:44	07/09/15 08:31	208-96-8	
Anthracene	**0.079**	ug/L	0.043	0.0048	1	07/06/15 23:44	07/09/15 08:31	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.043	0.0032	1	07/06/15 23:44	07/09/15 08:31	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.043	0.0033	1	07/06/15 23:44	07/09/15 08:31	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.043	0.0083	1	07/06/15 23:44	07/09/15 08:31	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.043	0.0059	1	07/06/15 23:44	07/09/15 08:31	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.043	0.0041	1	07/06/15 23:44	07/09/15 08:31	207-08-9	
Chrysene	ND	ug/L	0.043	0.0057	1	07/06/15 23:44	07/09/15 08:31	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.043	0.010	1	07/06/15 23:44	07/09/15 08:31	53-70-3	
Fluoranthene	**0.087**	ug/L	0.043	0.0062	1	07/06/15 23:44	07/09/15 08:31	206-44-0	
Fluorene	**0.56**	ug/L	0.043	0.0061	1	07/06/15 23:44	07/09/15 08:31	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.043	0.0060	1	07/06/15 23:44	07/09/15 08:31	193-39-5	
Naphthalene	**0.056**	ug/L	0.043	0.0099	1	07/06/15 23:44	07/09/15 08:31	91-20-3	
Phenanthrene	ND	ug/L	0.043	0.013	1	07/06/15 23:44	07/09/15 08:31	85-01-8	
Pyrene	**0.063**	ug/L	0.043	0.0069	1	07/06/15 23:44	07/09/15 08:31	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	74	%.	52-125		1	07/06/15 23:44	07/09/15 08:31	321-60-8	
p-Terphenyl-d14 (S)	84	%.	62-125		1	07/06/15 23:44	07/09/15 08:31	1718-51-0	

Sample: PSA-GP-81W **Lab ID: 10312785002** Collected: 06/29/15 13:45 Received: 07/01/15 10:05 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8270D MSSV PAH by SIM	Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3510								
Acenaphthene	**0.71**	ug/L	0.042	0.0034	1	07/06/15 23:44	07/09/15 08:53	83-32-9	
Acenaphthylene	**0.092**	ug/L	0.042	0.0041	1	07/06/15 23:44	07/09/15 08:53	208-96-8	
Anthracene	**0.073**	ug/L	0.042	0.0046	1	07/06/15 23:44	07/09/15 08:53	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.042	0.0031	1	07/06/15 23:44	07/09/15 08:53	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.042	0.0031	1	07/06/15 23:44	07/09/15 08:53	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.042	0.0080	1	07/06/15 23:44	07/09/15 08:53	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.042	0.0056	1	07/06/15 23:44	07/09/15 08:53	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.042	0.0039	1	07/06/15 23:44	07/09/15 08:53	207-08-9	
Chrysene	ND	ug/L	0.042	0.0055	1	07/06/15 23:44	07/09/15 08:53	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.042	0.010	1	07/06/15 23:44	07/09/15 08:53	53-70-3	
Fluoranthene	**0.086**	ug/L	0.042	0.0059	1	07/06/15 23:44	07/09/15 08:53	206-44-0	
Fluorene	**0.51**	ug/L	0.042	0.0059	1	07/06/15 23:44	07/09/15 08:53	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.042	0.0058	1	07/06/15 23:44	07/09/15 08:53	193-39-5	
Naphthalene	**0.064**	ug/L	0.042	0.0095	1	07/06/15 23:44	07/09/15 08:53	91-20-3	
Phenanthrene	ND	ug/L	0.042	0.013	1	07/06/15 23:44	07/09/15 08:53	85-01-8	
Pyrene	**0.068**	ug/L	0.042	0.0067	1	07/06/15 23:44	07/09/15 08:53	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	70	%.	52-125		1	07/06/15 23:44	07/09/15 08:53	321-60-8	
p-Terphenyl-d14 (S)	73	%.	62-125		1	07/06/15 23:44	07/09/15 08:53	1718-51-0	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

ANALYTICAL RESULTS

Project: 141004 Fraser
Pace Project No.: 10312785

Sample: PSA-GP-9W **Lab ID: 10312785003** Collected: 06/29/15 14:00 Received: 07/01/15 10:05 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8270D MSSV PAH by SIM	Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3510								
Acenaphthene	**1.4**	ug/L	0.043	0.0035	1	07/06/15 23:44	07/09/15 09:15	83-32-9	
Acenaphthylene	ND	ug/L	0.043	0.0043	1	07/06/15 23:44	07/09/15 09:15	208-96-8	
Anthracene	**0.17**	ug/L	0.043	0.0047	1	07/06/15 23:44	07/09/15 09:15	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.043	0.0032	1	07/06/15 23:44	07/09/15 09:15	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.043	0.0032	1	07/06/15 23:44	07/09/15 09:15	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.043	0.0082	1	07/06/15 23:44	07/09/15 09:15	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.043	0.0058	1	07/06/15 23:44	07/09/15 09:15	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.043	0.0041	1	07/06/15 23:44	07/09/15 09:15	207-08-9	
Chrysene	ND	ug/L	0.043	0.0057	1	07/06/15 23:44	07/09/15 09:15	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.043	0.010	1	07/06/15 23:44	07/09/15 09:15	53-70-3	
Fluoranthene	**0.17**	ug/L	0.043	0.0061	1	07/06/15 23:44	07/09/15 09:15	206-44-0	
Fluorene	**0.46**	ug/L	0.043	0.0061	1	07/06/15 23:44	07/09/15 09:15	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.043	0.0060	1	07/06/15 23:44	07/09/15 09:15	193-39-5	
Naphthalene	**0.29**	ug/L	0.043	0.0098	1	07/06/15 23:44	07/09/15 09:15	91-20-3	
Phenanthrene	**1.5**	ug/L	0.043	0.013	1	07/06/15 23:44	07/09/15 09:15	85-01-8	
Pyrene	**0.14**	ug/L	0.043	0.0069	1	07/06/15 23:44	07/09/15 09:15	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	76	%.	52-125		1	07/06/15 23:44	07/09/15 09:15	321-60-8	
p-Terphenyl-d14 (S)	83	%.	62-125		1	07/06/15 23:44	07/09/15 09:15	1718-51-0	

Sample: PSA-GP-8 2-4 **Lab ID: 10312785004** Collected: 06/29/15 10:30 Received: 07/01/15 10:05 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
Dry Weight	Analytical Method: ASTM D2974								
Percent Moisture	**22.3**	%	0.10	0.10	1		07/14/15 11:28		
8270D MSSV PAH by SIM	Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3550								
Acenaphthene	**268**	ug/kg	12.8	0.46	1	07/02/15 17:57	07/05/15 16:45	83-32-9	M1
Acenaphthylene	**120**	ug/kg	12.8	0.44	1	07/02/15 17:57	07/05/15 16:45	208-96-8	M1
Anthracene	**544**	ug/kg	257	7.9	20	07/02/15 17:57	07/06/15 14:27	120-12-7	M1
Benzo(a)anthracene	**1340**	ug/kg	257	4.7	20	07/02/15 17:57	07/06/15 14:27	56-55-3	M1
Benzo(a)pyrene	**1540**	ug/kg	257	5.1	20	07/02/15 17:57	07/06/15 14:27	50-32-8	M1,R1
Benzo(b)fluoranthene	**1760**	ug/kg	257	9.0	20	07/02/15 17:57	07/06/15 14:27	205-99-2	M1,R1
Benzo(g,h,i)perylene	**1080**	ug/kg	257	9.1	20	07/02/15 17:57	07/06/15 14:27	191-24-2	M1,R1
Benzo(k)fluoranthene	**674**	ug/kg	257	10.3	20	07/02/15 17:57	07/06/15 14:27	207-08-9	M1,R1
Chrysene	**1560**	ug/kg	257	6.3	20	07/02/15 17:57	07/06/15 14:27	218-01-9	M1,R1
Dibenz(a,h)anthracene	**320**	ug/kg	12.8	0.55	1	07/02/15 17:57	07/05/15 16:45	53-70-3	M1
Fluoranthene	**3110**	ug/kg	257	5.6	20	07/02/15 17:57	07/06/15 14:27	206-44-0	M1,R1
Fluorene	**274**	ug/kg	12.8	0.40	1	07/02/15 17:57	07/05/15 16:45	86-73-7	M1
Indeno(1,2,3-cd)pyrene	**878**	ug/kg	257	9.9	20	07/02/15 17:57	07/06/15 14:27	193-39-5	M1,R1
Naphthalene	**142**	ug/kg	12.8	0.48	1	07/02/15 17:57	07/05/15 16:45	91-20-3	M1
Phenanthrene	**2940**	ug/kg	257	6.4	20	07/02/15 17:57	07/06/15 14:27	85-01-8	M1,R1

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

ANALYTICAL RESULTS

Project: 141004 Fraser
Pace Project No.: 10312785

Sample: PSA-GP-8 2-4 **Lab ID: 10312785004** Collected: 06/29/15 10:30 Received: 07/01/15 10:05 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
8270D MSSV PAH by SIM	Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3550								
Pyrene	**3120**	ug/kg	257	6.2	20	07/02/15 17:57	07/06/15 14:27	129-00-0	M1,R1
Surrogates									
2-Fluorobiphenyl (S)	73	%.	55-125		1	07/02/15 17:57	07/05/15 16:45	321-60-8	
p-Terphenyl-d14 (S)	76	%.	30-150		1	07/02/15 17:57	07/05/15 16:45	1718-51-0	

Sample: PSA-GP-9 2-4 **Lab ID: 10312785005** Collected: 06/29/15 11:00 Received: 07/01/15 10:05 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
Dry Weight	Analytical Method: ASTM D2974								
Percent Moisture	**13.8**	%	0.10	0.10	1		07/14/15 11:28		
8270D MSSV PAH by SIM	Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3550								
Acenaphthene	**35.9**	ug/kg	11.6	0.42	1	07/02/15 17:57	07/05/15 15:20	83-32-9	
Acenaphthylene	**13.5**	ug/kg	11.6	0.39	1	07/02/15 17:57	07/05/15 15:20	208-96-8	
Anthracene	**78.5**	ug/kg	11.6	0.35	1	07/02/15 17:57	07/05/15 15:20	120-12-7	
Benzo(a)anthracene	**272**	ug/kg	11.6	0.21	1	07/02/15 17:57	07/05/15 15:20	56-55-3	
Benzo(a)pyrene	**287**	ug/kg	11.6	0.23	1	07/02/15 17:57	07/05/15 15:20	50-32-8	
Benzo(b)fluoranthene	**339**	ug/kg	11.6	0.40	1	07/02/15 17:57	07/05/15 15:20	205-99-2	
Benzo(g,h,i)perylene	**181**	ug/kg	11.6	0.41	1	07/02/15 17:57	07/05/15 15:20	191-24-2	
Benzo(k)fluoranthene	**137**	ug/kg	11.6	0.46	1	07/02/15 17:57	07/05/15 15:20	207-08-9	
Chrysene	**309**	ug/kg	11.6	0.28	1	07/02/15 17:57	07/05/15 15:20	218-01-9	
Dibenz(a,h)anthracene	**59.1**	ug/kg	11.6	0.50	1	07/02/15 17:57	07/05/15 15:20	53-70-3	
Fluoranthene	**608**	ug/kg	57.8	1.3	5	07/02/15 17:57	07/06/15 14:50	206-44-0	
Fluorene	**34.4**	ug/kg	11.6	0.36	1	07/02/15 17:57	07/05/15 15:20	86-73-7	
Indeno(1,2,3-cd)pyrene	**162**	ug/kg	11.6	0.44	1	07/02/15 17:57	07/05/15 15:20	193-39-5	
Naphthalene	**27.0**	ug/kg	11.6	0.43	1	07/02/15 17:57	07/05/15 15:20	91-20-3	
Phenanthrene	**462**	ug/kg	57.8	1.4	5	07/02/15 17:57	07/06/15 14:50	85-01-8	
Pyrene	**576**	ug/kg	57.8	1.4	5	07/02/15 17:57	07/06/15 14:50	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	76	%.	55-125		1	07/02/15 17:57	07/05/15 15:20	321-60-8	
p-Terphenyl-d14 (S)	89	%.	30-150		1	07/02/15 17:57	07/05/15 15:20	1718-51-0	

Sample: PSA-GP-9 6-3 **Lab ID: 10312785006** Collected: 06/29/15 11:05 Received: 07/01/15 10:05 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
Dry Weight	Analytical Method: ASTM D2974								
Percent Moisture	**20.3**	%	0.10	0.10	1		07/14/15 11:28		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

ANALYTICAL RESULTS

Project: 141004 Fraser
Pace Project No.: 10312785

Sample: PSA-GP-9 6-3 **Lab ID: 10312785006** Collected: 06/29/15 11:05 Received: 07/01/15 10:05 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
8270D MSSV PAH by SIM	Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3550								
Acenaphthene	ND	ug/kg	12.5	0.45	1	07/02/15 17:57	07/05/15 14:59	83-32-9	
Acenaphthylene	ND	ug/kg	12.5	0.42	1	07/02/15 17:57	07/05/15 14:59	208-96-8	
Anthracene	ND	ug/kg	12.5	0.38	1	07/02/15 17:57	07/05/15 14:59	120-12-7	
Benzo(a)anthracene	**18.3**	ug/kg	12.5	0.23	1	07/02/15 17:57	07/05/15 14:59	56-55-3	
Benzo(a)pyrene	**26.2**	ug/kg	12.5	0.25	1	07/02/15 17:57	07/05/15 14:59	50-32-8	
Benzo(b)fluoranthene	**35.2**	ug/kg	12.5	0.44	1	07/02/15 17:57	07/05/15 14:59	205-99-2	
Benzo(g,h,i)perylene	**19.4**	ug/kg	12.5	0.44	1	07/02/15 17:57	07/05/15 14:59	191-24-2	
Benzo(k)fluoranthene	**13.1**	ug/kg	12.5	0.50	1	07/02/15 17:57	07/05/15 14:59	207-08-9	
Chrysene	**31.6**	ug/kg	12.5	0.31	1	07/02/15 17:57	07/05/15 14:59	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	12.5	0.54	1	07/02/15 17:57	07/05/15 14:59	53-70-3	
Fluoranthene	**98.3**	ug/kg	12.5	0.27	1	07/02/15 17:57	07/05/15 14:59	206-44-0	
Fluorene	ND	ug/kg	12.5	0.39	1	07/02/15 17:57	07/05/15 14:59	86-73-7	
Indeno(1,2,3-cd)pyrene	**15.3**	ug/kg	12.5	0.48	1	07/02/15 17:57	07/05/15 14:59	193-39-5	
Naphthalene	ND	ug/kg	12.5	0.46	1	07/02/15 17:57	07/05/15 14:59	91-20-3	
Phenanthrene	**94.8**	ug/kg	12.5	0.31	1	07/02/15 17:57	07/05/15 14:59	85-01-8	
Pyrene	**82.2**	ug/kg	12.5	0.30	1	07/02/15 17:57	07/05/15 14:59	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	74	%.	55-125		1	07/02/15 17:57	07/05/15 14:59	321-60-8	
p-Terphenyl-d14 (S)	85	%.	30-150		1	07/02/15 17:57	07/05/15 14:59	1718-51-0	

Sample: PSA-GP-10 2-4 **Lab ID: 10312785007** Collected: 06/29/15 12:30 Received: 07/01/15 10:05 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
Dry Weight	Analytical Method: ASTM D2974								
Percent Moisture	**10.0**	%	0.10	0.10	1		07/14/15 11:29		
8270D MSSV PAH by SIM	Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3550								
Acenaphthene	**15.6**	ug/kg	11.1	0.40	1	07/02/15 17:57	07/05/15 15:42	83-32-9	
Acenaphthylene	**30.4**	ug/kg	11.1	0.38	1	07/02/15 17:57	07/05/15 15:42	208-96-8	
Anthracene	**64.3**	ug/kg	11.1	0.34	1	07/02/15 17:57	07/05/15 15:42	120-12-7	
Benzo(a)anthracene	**185**	ug/kg	11.1	0.20	1	07/02/15 17:57	07/05/15 15:42	56-55-3	
Benzo(a)pyrene	**151**	ug/kg	11.1	0.22	1	07/02/15 17:57	07/05/15 15:42	50-32-8	
Benzo(b)fluoranthene	**206**	ug/kg	11.1	0.39	1	07/02/15 17:57	07/05/15 15:42	205-99-2	
Benzo(g,h,i)perylene	**120**	ug/kg	11.1	0.39	1	07/02/15 17:57	07/05/15 15:42	191-24-2	
Benzo(k)fluoranthene	**63.3**	ug/kg	11.1	0.45	1	07/02/15 17:57	07/05/15 15:42	207-08-9	
Chrysene	**243**	ug/kg	11.1	0.27	1	07/02/15 17:57	07/05/15 15:42	218-01-9	
Dibenz(a,h)anthracene	**45.8**	ug/kg	11.1	0.48	1	07/02/15 17:57	07/05/15 15:42	53-70-3	
Fluoranthene	**267**	ug/kg	11.1	0.24	1	07/02/15 17:57	07/05/15 15:42	206-44-0	
Fluorene	**28.8**	ug/kg	11.1	0.34	1	07/02/15 17:57	07/05/15 15:42	86-73-7	
Indeno(1,2,3-cd)pyrene	**91.1**	ug/kg	11.1	0.43	1	07/02/15 17:57	07/05/15 15:42	193-39-5	
Naphthalene	**71.1**	ug/kg	11.1	0.41	1	07/02/15 17:57	07/05/15 15:42	91-20-3	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
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(612)607-1700

ANALYTICAL RESULTS

Project: 141004 Fraser
Pace Project No.: 10312785

Sample: PSA-GP-10 2-4 **Lab ID: 10312785007** Collected: 06/29/15 12:30 Received: 07/01/15 10:05 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
8270D MSSV PAH by SIM	Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3550								
Phenanthrene	**365**	ug/kg	11.1	0.28	1	07/02/15 17:57	07/05/15 15:42	85-01-8	
Pyrene	**299**	ug/kg	11.1	0.27	1	07/02/15 17:57	07/05/15 15:42	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	76	%.	55-125		1	07/02/15 17:57	07/05/15 15:42	321-60-8	
p-Terphenyl-d14 (S)	89	%.	30-150		1	07/02/15 17:57	07/05/15 15:42	1718-51-0	

Sample: PSA-GP-11 2-4 **Lab ID: 10312785008** Collected: 06/29/15 13:00 Received: 07/01/15 10:05 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
Dry Weight	Analytical Method: ASTM D2974								
Percent Moisture	**12.8**	%	0.10	0.10	1		07/14/15 11:29		
8270D MSSV PAH by SIM	Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3550								
Acenaphthene	**81.0**	ug/kg	11.5	0.41	1	07/02/15 17:57	07/05/15 16:24	83-32-9	
Acenaphthylene	**58.2**	ug/kg	11.5	0.39	1	07/02/15 17:57	07/05/15 16:24	208-96-8	
Anthracene	**362**	ug/kg	11.5	0.35	1	07/02/15 17:57	07/05/15 16:24	120-12-7	
Benzo(a)anthracene	**980**	ug/kg	115	2.1	10	07/02/15 17:57	07/06/15 15:12	56-55-3	
Benzo(a)pyrene	**983**	ug/kg	115	2.3	10	07/02/15 17:57	07/06/15 15:12	50-32-8	
Benzo(b)fluoranthene	**1260**	ug/kg	115	4.0	10	07/02/15 17:57	07/06/15 15:12	205-99-2	
Benzo(g,h,i)perylene	**763**	ug/kg	115	4.1	10	07/02/15 17:57	07/06/15 15:12	191-24-2	
Benzo(k)fluoranthene	**494**	ug/kg	115	4.6	10	07/02/15 17:57	07/06/15 15:12	207-08-9	
Chrysene	**1570**	ug/kg	115	2.8	10	07/02/15 17:57	07/06/15 15:12	218-01-9	
Dibenz(a,h)anthracene	**213**	ug/kg	11.5	0.49	1	07/02/15 17:57	07/05/15 16:24	53-70-3	
Fluoranthene	**1790**	ug/kg	115	2.5	10	07/02/15 17:57	07/06/15 15:12	206-44-0	
Fluorene	**173**	ug/kg	11.5	0.35	1	07/02/15 17:57	07/05/15 16:24	86-73-7	
Indeno(1,2,3-cd)pyrene	**611**	ug/kg	115	4.4	10	07/02/15 17:57	07/06/15 15:12	193-39-5	
Naphthalene	**310**	ug/kg	11.5	0.43	1	07/02/15 17:57	07/05/15 16:24	91-20-3	
Phenanthrene	**1500**	ug/kg	115	2.8	10	07/02/15 17:57	07/06/15 15:12	85-01-8	
Pyrene	**1920**	ug/kg	115	2.8	10	07/02/15 17:57	07/06/15 15:12	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	72	%.	55-125		1	07/02/15 17:57	07/05/15 16:24	321-60-8	
p-Terphenyl-d14 (S)	72	%.	30-150		1	07/02/15 17:57	07/05/15 16:24	1718-51-0	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA

Project: 141004 Fraser
Pace Project No.: 10312785

QC Batch: MPRP/56041 Analysis Method: ASTM D2974
QC Batch Method: ASTM D2974 Analysis Description: Dry Weight/Percent Moisture
Associated Lab Samples: 10312785004, 10312785005, 10312785006, 10312785007, 10312785008

SAMPLE DUPLICATE: 2021616

Parameter	Units	10312785004 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	22.3	22.5	1	30	

SAMPLE DUPLICATE: 2021617

Parameter	Units	10313338017 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	14.3	14.6	2	30	

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

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA

Project: 141004 Fraser
Pace Project No.: 10312785

QC Batch: OEXT/29868 Analysis Method: EPA 8270D by SIM
QC Batch Method: EPA 3550 Analysis Description: 8270D Solid PAH by SIM MSSV
Associated Lab Samples: 10312785004, 10312785005, 10312785006, 10312785007, 10312785008

METHOD BLANK: 2013035 Matrix: Solid
Associated Lab Samples: 10312785004, 10312785005, 10312785006, 10312785007, 10312785008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Acenaphthene	ug/kg	ND	10.0	07/05/15 13:34	
Acenaphthylene	ug/kg	ND	10.0	07/05/15 13:34	
Anthracene	ug/kg	ND	10.0	07/05/15 13:34	
Benzo(a)anthracene	ug/kg	ND	10.0	07/05/15 13:34	
Benzo(a)pyrene	ug/kg	ND	10.0	07/05/15 13:34	
Benzo(b)fluoranthene	ug/kg	ND	10.0	07/05/15 13:34	
Benzo(g,h,i)perylene	ug/kg	ND	10.0	07/05/15 13:34	
Benzo(k)fluoranthene	ug/kg	ND	10.0	07/05/15 13:34	
Chrysene	ug/kg	ND	10.0	07/05/15 13:34	
Dibenz(a,h)anthracene	ug/kg	ND	10.0	07/05/15 13:34	
Fluoranthene	ug/kg	ND	10.0	07/05/15 13:34	
Fluorene	ug/kg	ND	10.0	07/05/15 13:34	
Indeno(1,2,3-cd)pyrene	ug/kg	ND	10.0	07/05/15 13:34	
Naphthalene	ug/kg	ND	10.0	07/05/15 13:34	
Phenanthrene	ug/kg	ND	10.0	07/05/15 13:34	
Pyrene	ug/kg	ND	10.0	07/05/15 13:34	
2-Fluorobiphenyl (S)	%.	82	55-125	07/05/15 13:34	
p-Terphenyl-d14 (S)	%.	88	30-150	07/05/15 13:34	

LABORATORY CONTROL SAMPLE: 2013036

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Acenaphthene	ug/kg	33.3	27.0	81	53-125	
Acenaphthylene	ug/kg	33.3	26.8	80	53-125	
Anthracene	ug/kg	33.3	29.4	88	61-125	
Benzo(a)anthracene	ug/kg	33.3	28.9	87	62-125	
Benzo(a)pyrene	ug/kg	33.3	29.8	89	64-125	
Benzo(b)fluoranthene	ug/kg	33.3	31.3	94	66-125	
Benzo(g,h,i)perylene	ug/kg	33.3	30.2	91	59-125	
Benzo(k)fluoranthene	ug/kg	33.3	30.0	90	61-125	
Chrysene	ug/kg	33.3	27.8	83	63-125	
Dibenz(a,h)anthracene	ug/kg	33.3	30.4	91	59-125	
Fluoranthene	ug/kg	33.3	33.5	100	64-125	
Fluorene	ug/kg	33.3	28.0	84	57-125	
Indeno(1,2,3-cd)pyrene	ug/kg	33.3	29.7	89	58-125	
Naphthalene	ug/kg	33.3	25.9	78	52-125	
Phenanthrene	ug/kg	33.3	27.0	81	60-125	
Pyrene	ug/kg	33.3	31.8	95	63-125	
2-Fluorobiphenyl (S)	%.			84	55-125	
p-Terphenyl-d14 (S)	%.			91	30-150	

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

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
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QUALITY CONTROL DATA

Project: 141004 Fraser
Pace Project No.: 10312785

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2013037 2013038

Parameter	Units	10312785004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Acenaphthene	ug/kg	268	42.9	42.9	85.5	68.9	-426	-465	39-125	22	30	M1
Acenaphthylene	ug/kg	120	42.9	42.9	81.6	62.4	-90	-135	30-150	27	30	M1
Anthracene	ug/kg	544	42.9	42.9	187	140	-832	-941	30-150	29	30	M1
Benzo(a)anthracene	ug/kg	1340	42.9	42.9	532	392	-1870	-2200	30-150	30	30	E,M1
Benzo(a)pyrene	ug/kg	1540	42.9	42.9	624	442	-2140	-2570	30-150	34	30	E,M1, R1
Benzo(b)fluoranthene	ug/kg	1760	42.9	42.9	806	571	-2230	-2780	30-150	34	30	E,M1, R1
Benzo(g,h,i)perylene	ug/kg	1080	42.9	42.9	473	329	-1420	-1750	30-150	36	30	E,M1, R1
Benzo(k)fluoranthene	ug/kg	674	42.9	42.9	273	200	-934	-1110	30-150	31	30	M1,R1
Chrysene	ug/kg	1560	42.9	42.9	592	404	-2250	-2690	30-150	38	30	E,M1, R1
Dibenz(a,h)anthracene	ug/kg	320	42.9	42.9	167	124	-356	-458	30-150	30	30	M1
Fluoranthene	ug/kg	3110	42.9	42.9	1210	859	-4410	-5240	30-150	34	30	E,M1, R1
Fluorene	ug/kg	274	42.9	42.9	87.2	69.7	-435	-476	30-146	22	30	M1
Indeno(1,2,3-cd)pyrene	ug/kg	878	42.9	42.9	392	284	-1130	-1390	30-150	32	30	M1,R1
Naphthalene	ug/kg	142	42.9	42.9	71.3	66.1	-165	-177	30-131	8	30	M1
Phenanthrene	ug/kg	2940	42.9	42.9	745	496	-5110	-5690	30-150	40	30	E,M1, R1
Pyrene	ug/kg	3120	42.9	42.9	1160	786	-4560	-5430	30-150	38	30	E,M1, R1
2-Fluorobiphenyl (S)	%.						79	80	55-125			
p-Terphenyl-d14 (S)	%.						82	85	30-150			

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

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA

Project: 141004 Fraser
Pace Project No.: 10312785

QC Batch: OEXT/29909 Analysis Method: EPA 8270D by SIM
QC Batch Method: EPA 3510 Analysis Description: 8270D PAH by SIM MSSV
Associated Lab Samples: 10312785001, 10312785002, 10312785003

METHOD BLANK: 2014899 Matrix: Water
Associated Lab Samples: 10312785001, 10312785002, 10312785003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Acenaphthene	ug/L	ND	0.040	07/09/15 07:26	
Acenaphthylene	ug/L	ND	0.040	07/09/15 07:26	
Anthracene	ug/L	ND	0.040	07/09/15 07:26	
Benzo(a)anthracene	ug/L	ND	0.040	07/09/15 07:26	
Benzo(a)pyrene	ug/L	ND	0.040	07/09/15 07:26	
Benzo(b)fluoranthene	ug/L	ND	0.040	07/09/15 07:26	
Benzo(g,h,i)perylene	ug/L	ND	0.040	07/09/15 07:26	
Benzo(k)fluoranthene	ug/L	ND	0.040	07/09/15 07:26	
Chrysene	ug/L	ND	0.040	07/09/15 07:26	
Dibenz(a,h)anthracene	ug/L	ND	0.040	07/09/15 07:26	
Fluoranthene	ug/L	ND	0.040	07/09/15 07:26	
Fluorene	ug/L	ND	0.040	07/09/15 07:26	
Indeno(1,2,3-cd)pyrene	ug/L	ND	0.040	07/09/15 07:26	
Naphthalene	ug/L	ND	0.040	07/09/15 07:26	
Phenanthrene	ug/L	ND	0.040	07/09/15 07:26	
Pyrene	ug/L	ND	0.040	07/09/15 07:26	
2-Fluorobiphenyl (S)	%.	74	52-125	07/09/15 07:26	
p-Terphenyl-d14 (S)	%.	92	62-125	07/09/15 07:26	

LABORATORY CONTROL SAMPLE & LCSD: 2014900 2014901

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Acenaphthene	ug/L	1	0.87	0.76	87	76	44-125	13	20	
Acenaphthylene	ug/L	1	0.91	0.80	91	80	44-125	12	20	
Anthracene	ug/L	1	1.1	1.0	112	102	55-125	9	20	
Benzo(a)anthracene	ug/L	1	0.92	0.89	92	89	56-125	3	20	
Benzo(a)pyrene	ug/L	1	1.0	1.0	100	100	61-125	0	20	
Benzo(b)fluoranthene	ug/L	1	1.0	0.91	105	91	60-125	14	20	
Benzo(g,h,i)perylene	ug/L	1	0.70	0.71	70	71	53-125	1	20	
Benzo(k)fluoranthene	ug/L	1	0.92	0.85	92	85	59-125	7	20	
Chrysene	ug/L	1	0.95	0.93	95	93	61-125	2	20	
Dibenz(a,h)anthracene	ug/L	1	0.59	0.62	59	62	51-125	5	20	
Fluoranthene	ug/L	1	0.97	0.94	97	94	64-125	3	20	
Fluorene	ug/L	1	0.95	0.86	95	86	52-125	9	20	
Indeno(1,2,3-cd)pyrene	ug/L	1	0.80	0.79	80	79	54-125	1	20	
Naphthalene	ug/L	1	0.86	0.75	86	75	35-125	14	20	
Phenanthrene	ug/L	1	0.88	0.80	88	80	55-125	10	20	
Pyrene	ug/L	1	0.98	0.97	98	97	59-125	1	20	
2-Fluorobiphenyl (S)	%.				77	66	52-125			
p-Terphenyl-d14 (S)	%.				87	84	62-125			

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

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

QUALIFIERS

Project: 141004 Fraser
Pace Project No.: 10312785

DEFINITIONS

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

ND - Not Detected at or above LOD.

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

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

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

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

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

TNI - The NELAC Institute.

BATCH QUALIFIERS

Batch: MSSV/12712

[M5]	A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

ANALYTE QUALIFIERS

E	Analyte concentration exceeded the calibration range. The reported result is estimated.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
R1	RPD value was outside control limits.

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 141004 Fraser
Pace Project No.: 10312785

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
10312785004	**PSA-GP-8 2-4**	ASTM D2974	MPRP/56041		
10312785005	**PSA-GP-9 2-4**	ASTM D2974	MPRP/56041		
10312785006	**PSA-GP-9 6-3**	ASTM D2974	MPRP/56041		
10312785007	**PSA-GP-10 2-4**	ASTM D2974	MPRP/56041		
10312785008	**PSA-GP-11 2-4**	ASTM D2974	MPRP/56041		
10312785004	**PSA-GP-8 2-4**	EPA 3550	OEXT/29868	EPA 8270D by SIM	MSSV/12687
10312785005	**PSA-GP-9 2-4**	EPA 3550	OEXT/29868	EPA 8270D by SIM	MSSV/12687
10312785006	**PSA-GP-9 6-3**	EPA 3550	OEXT/29868	EPA 8270D by SIM	MSSV/12687
10312785007	**PSA-GP-10 2-4**	EPA 3550	OEXT/29868	EPA 8270D by SIM	MSSV/12687
10312785008	**PSA-GP-11 2-4**	EPA 3550	OEXT/29868	EPA 8270D by SIM	MSSV/12687
10312785001	**PSA-GP-8W**	EPA 3510	OEXT/29909	EPA 8270D by SIM	MSSV/12712
10312785002	**PSA-GP-81W**	EPA 3510	OEXT/29909	EPA 8270D by SIM	MSSV/12712
10312785003	**PSA-GP-9W**	EPA 3510	OEXT/29909	EPA 8270D by SIM	MSSV/12712

Pace Analytical®
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

1032785

Page: 1 of 1

1746748

Section A Required Client Information:	Section B Required Project Information:	Section C Invoice Information:
Company: Enr. Troubleshooters	Report To:	Attention:
Address: 3825 Grand Ave Duluth MN 55807	Copy To: Same	Company Name: Same
		Address:
Email To: jmccarty@etsmn.com	Purchase Order No.:	Pace Quote Reference: EQ15
Phone: (218)722-6013 Fax: -6319	Project Name: Fraser	Pace Project Manager: Lori Castillo
Requested Due Date/TAT: STD 10 day	Project Number: 141004	Pace Profile #:

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☒ RCRA ☐ OTHER _____

Site Location STATE: WI

Section D Required Client Information

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

Matrix Codes MATRIX / CODE

Drinking Water	DW
Water	WT
Waste Water	WW
Product	P
Soil/Solid	SL
Oil	OL
Wipe	WP
Air	AR
Tissue	TS
Other	OT

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED COMPOSITE END/GRAB DATE	COLLECTED COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Requested Analysis Filtered (Y/N) Y/N	Analysis Test: PAH SIM	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	PSA-GP-8W	WT		6/29/15	1350				2	2								Y	X		001
2	PSA-GP-8IW	WT		6/29/15	1345				2	2								Y	X		002
3	PSA-GP-9W	WT		6/29/15	1400				2	2								Y	X		003
4																					
5	PSA-GP-8 2-4	SL	G	6/29/15	1030				3	3								Y	X		004
6	PSA-GP-9 2-4	SL	G	6/29/15	1100				3	3								Y	X		005
7	PSA-GP-9 6-8	SL	G	6/29/15	1105				3	3								Y	X		006
8	PSA-GP-10 2-4	SL	G	6/29/15	1230				3	3								Y	X		007
9	PSA-GP-11 2-4	SL	G	6/29/15	1300				3	3								Y	X		008
10																					
11																					
12																					

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	John McCarty / ET	6/30/15	1445		6/30/15	1445		Y		
		6/30/15	1730		7/1/15	1005	5.1	Y	Y	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: John McCarty

SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 6/30/15

Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

ORIGINAL

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

F-ALL-Q-020rev.07, 15-May-2007

Pace Analytical	Document Name: Sample Condition Upon Receipt Form	Document Revised: 23Feb2015 Page 1 of 1
	Document No.: F-MN-L-213-rev.13	Issuing Authority: Pace Minnesota Quality Office

Sample Condition Upon Receipt

Client Name: Enc. Troubleshooters **Project #:** WO#: 10312785

10312785

Courier: ☑ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace ☐ SpeeDee ☐ Other:

Tracking Number: 773451020620

Custody Seal on Cooler/Box Present? ☑ Yes ☐ No **Seals Intact?** ☑ Yes ☐ No **Optional:** Proj. Due Date: Proj. Name:

Packing Material: ☑ Bubble Wrap ☐ Bubble Bags ☐ None ☐ Other: **Temp Blank?** ☑ Yes ☐ No

Thermometer Used: ☐ B88A9130516413 ☑ B88A912167504 ☐ B88A0143310098 **Type of Ice:** ☑ Wet ☐ Blue ☐ None ☐ Samples on ice, cooling process has begun

Cooler Temp Read (°C): 5.0 **Cooler Temp Corrected (°C):** 5.1 **Biological Tissue Frozen?** ☐ Yes ☐ No ☑ N/A

Temp should be above freezing to 6°C **Correction Factor:** +0.1 **Date and Initials of Person Examining Contents:** JMR 7/1/15

USDA Regulated Soil (☐ N/A, water sample)

Did samples originate in a quarantine zone within the United States: AL, AR, AZ, CA, FL, GA, ID, LA. MS, NC, NM, NY, OK, OR, SC, TN, TX or WA (check maps)? ☐ Yes ☑ No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? ☐ Yes ☑ No

If Yes to either question, fill out a Regulated Soil Checklist (F-MN-Q-338) and include with SCUR/COC paperwork.

				COMMENTS:
Chain of Custody Present?	☑ Yes	☐ No	☐ N/A	1.
Chain of Custody Filled Out?	☑ Yes	☐ No	☐ N/A	2.
Chain of Custody Relinquished?	☑ Yes	☐ No	☐ N/A	3.
Sampler Name and/or Signature on COC?	☑ Yes	☐ No	☐ N/A	4.
Samples Arrived within Hold Time?	☑ Yes	☐ No	☐ N/A	5.
Short Hold Time Analysis (<72 hr)?	☐ Yes	☑ No	☐ N/A	6.
Rush Turn Around Time Requested?	☐ Yes	☑ No	☐ N/A	7.
Sufficient Volume?	☑ Yes	☐ No	☐ N/A	8.
Correct Containers Used?	☑ Yes	☐ No	☐ N/A	9.
-Pace Containers Used?	☑ Yes	☐ No	☐ N/A	
Containers Intact?	☑ Yes	☐ No	☐ N/A	10.
Filtered Volume Received for Dissolved Tests?	☐ Yes	☐ No	☑ N/A	11. Note if sediment is visible in the dissolved container
Sample Labels Match COC?	☑ Yes	☐ No	☐ N/A	12.
-Includes Date/Time/ID/Analysis Matrix: WT, SL				
All containers needing acid/base preservation have been checked?	☐ Yes	☐ No	☑ N/A	13. ☐ HNO_3 ☐ H_2SO_4 ☐ NaOH ☐ HCl
All containers needing preservation are found to be in compliance with EPA recommendation? (HNO_3, H_2SO_4, HCl<2; NaOH >9 Sulfide, NaOH>12 Cyanide)	☐ Yes	☐ No	☑ N/A	Sample #
Exceptions: VOA, Coliform, TOC, Oil and Grease, DRO/8015 (water) DOC	☐ Yes	☐ No	☑ N/A	Initial when completed: Lot # of added preservative:
Headspace in VOA Vials (>6mm)?	☐ Yes	☐ No	☑ N/A	14.
Trip Blank Present?	☐ Yes	☐ No	☑ N/A	15.
Trip Blank Custody Seals Present?	☐ Yes	☐ No	☑ N/A	
Pace Trip Blank Lot # (if purchased):				

CLIENT NOTIFICATION/RESOLUTION **Field Data Required?** ☐ Yes ☐ No

Person Contacted: Date/Time:

Comments/Resolution:

Project Manager Review: Date: 7/6/15

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e out of hold, incorrect preservative, out of temp, incorrect containers).

APPENDIX C

CONTAMINATED SOIL DISPOSAL MANIFESTS

·O V, LLC.

. 218-626-3830 FAX: 218-626-1009

JSTRIAL/NON-HAZARDOUS MATERIAL TRANSPORT AND DISPOSAL MANIFEST

GENERATOR

1. **Work Site Name** Fraser Shipyard
   Address 1 Clough Avenue
   City, St., Zip Superior, WI 54880
   Owner's Name Tom Curelli, Director of Operations
   Owner's Phone No. 715-394-7787 ext 101

2. **Consultant/Contractor** Environmental Trouble Shooters
   Address 3825 Grand Avenue
   City, St., Zip Duluth, MN 55807
   Operator's Phone 218-722-6013

PROFILE #: #14-157-I

3. **Waste Disposal Site** VONCO V, LLC.
   Mailing Address 1100 West Gary Street
   City, St., Zip Duluth, MN 55808

4. **Responsible Agency** MN Pollution Control Agency
   Address 520 Lafayette Road
   City, St., Zip St. Paul, MN 55155-3898

5. Description of Materials	6. Containers (No.-Type)	7. Total Quantity (m^3 or yd^3)
Soil Contaminated with used Petroleum	1- Dump Truck	10-12 CY/truck

8. **Special Handling Instructions and Additional Information**

9. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and governmental regulations. The above listed material(s) is (are) not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law.

Name & Title (Printed or Typed) Tom Curelli Signature T Curelli Date 11/26/14

TRANSPORTER

10. **Transporter 1** (Acknowledgement of receipt of materials)
    Name/Title _____ Signature _____ Date _____
    Address _____ City, St., Zip _____ Phone No. _____

11. **Transporter 2** (Acknowledgement of receipt of materials)
    Name/Title Dennis Hipshen Signature _____ Date _____
    Address Sipsas Trucking City, St., Zip 54843 Phone No. 715-372-8221

DISPOSAL SITE

12. **Discrepancy Indication Space** C5

Ticket # 253184 Tons 16.75 Yards _____
E _____ N _____ Elev. _____

13. **Waste Disposal Site Owner or Operator:** Certification of receipt of non-hazardous materials covered by this manifest except as noted in item 12.

Name/Title (Printed or Typed) DK
Signature DK Date 12/10/14

CONTRACTOR - WHITE TRANSPORTER - CANARY WASTE DISPOSAL SITE - PINK GENERATOR/OPERATOR - GOLD

JCO V, LLC.

E: 218-626-3830 FAX: 218-626-1009

JSTRIAL/NON-HAZARDOUS MATERIAL TRANSPORT AND DISPOSAL MANIFEST

PROFILE #: #14-157-I

GENERATOR

1. **Work Site Name** Fraser Shipyard
   Address 1 Clough Avenue
   City, St., Zip Superior, WI 54880
   Owner's Name Tom Curelli, Director of Operations
   Owner's Phone No. 715-394-7787 ext 101
2. **Consultant/Contractor** Environmental Trouble Shooters
   Address 3825 Grand Avenue
   City, St., Zip Duluth, MN 55807
   Operator's Phone 218-722-6013

3. **Waste Disposal Site** VONCO V, LLC.
   Mailing Address 1100 West Gary Street
   City, St., Zip Duluth, MN 55808
4. **Responsible Agency** MN Pollution Control Agency
   Address 520 Lafayette Road
   City, St., Zip St. Paul, MN 55155-3898

5. Description of Materials	6. Containers (No.-Type)	7. Total Quantity (m^3 or yd^3)
Soil Contaminated with used Petroleum	1- Dump Truck	10-12 CY/truck

8. **Special Handling Instructions and Additional Information**

9. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and governmental regulations. The above listed material(s) is (are) not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law.

Name & Title (Printed or Typed) Tom Curelli Signature T Curelli Date 11/26/14

TRANSPORTER

10. **Transporter 1** (Acknowledgement of receipt of materials)
    Name/Title RJS CONST. GROUP Bob Pollock Signature Bob Pollock Date 12-10-14
    Address 1 CLOUGH AVE City, St., Zip Superior WI, 54880 Phone No. 715-394-7771
11. **Transporter 2** (Acknowledgement of receipt of materials)
    Name/Title _____ Signature _____ Date _____
    Address _____ City, St., Zip _____ Phone No. _____

DISPOSAL SITE

12. **Discrepancy Indication Space** CS

Ticket # 253185 Tons 12.75 Yards _____

E _____ N _____ Elev. _____

13. **Waste Disposal Site Owner or Operator:** Certification of receipt of non-hazardous materials covered by this manifest except as noted in item 12.

Name/Title (Printed or Typed) DM

Signature DM Date 12/10/14

CONTRACTOR - WHITE TRANSPORTER - CANARY WASTE DISPOSAL SITE - PINK GENERATOR/OPERATOR - GOLD

JNCO V, LLC.

ONE: 218-626-3830 FAX: 218-626-1009

INDUSTRIAL/NON-HAZARDOUS MATERIAL TRANSPORT AND DISPOSAL MANIFEST

GENERATOR

1. **Work Site Name** Fraser Shipyard
   Address 1 Clough Avenue
   City, St., Zip Superior, WI 54880
   Owner's Name Tom Curelli, Director of Operations
   Owner's Phone No. 715-394-7787 ext 101
2. **Consultant/Contractor** Environmental Trouble Shooters
   Address 3825 Grand Avenue
   City, St., Zip Duluth, MN 55807
   Operator's Phone 218-722-6013

PROFILE #: #14-157-I

3. **Waste Disposal Site** VONCO V, LLC.
   Mailing Address 1100 West Gary Street
   City, St., Zip Duluth, MN 55808
4. **Responsible Agency** MN Pollution Control Agency
   Address 520 Lafayette Road
   City, St., Zip St. Paul, MN 55155-3898

5. Description of Materials	6. Containers (No.-Type)	7. Total Quantity (m^3 or yd^3)
Soil Contaminated with used Petroleum	1- Dump Truck	10-12 CY/truck

8. **Special Handling Instructions and Additional Information**

9. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and governmental regulations. The above listed material(s) is (are) not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law.

Name & Title (Printed or Typed) Tom Curelli Signature [signature] Date 11/26/14

TRANSPORTER

10. **Transporter 1** (Acknowledgement of receipt of materials)
    Name/Title RJS Const. Group Emil Mannila Signature [signature] Date 12-10-14
    Address 1 Clough Ave. City, St., Zip Superior, WI 54880 Phone No. 715-394-7771
11. **Transporter 2** (Acknowledgement of receipt of materials)
    Name/Title _____ Signature _____ Date _____
    Address _____ City, St., Zip _____ Phone No. _____

DISPOSAL SITE

12. **Discrepancy Indication Space** CS

Ticket # 253187 Tons 13.90 Yards _____

E _____ N _____ Elev. _____

13. **Waste Disposal Site Owner or Operator:** Certification of receipt of non-hazardous materials covered by this manifest except as noted in item 12.

Name/Title (Printed or Typed) DL

Signature DL Date 12/10/14

CONTRACTOR - WHITE TRANSPORTER - CANARY WASTE DISPOSAL SITE - PINK GENERATOR/OPERATOR - GOLD

VONCO V, LLC.

PHONE: 218-626-3830 FAX: 218-626-1009

INDUSTRIAL/NON-HAZARDOUS MATERIAL TRANSPORT AND DISPOSAL MANIFEST

GENERATOR

1. **Work Site Name** Fraser Shipyard
   Address 1 Clough Avenue
   City, St., Zip Superior, WI 54880
   Owner's Name Tom Curelli, Director of Operations
   Owner's Phone No. 715-394-7787 ext 101
2. **Consultant/Contractor** Environmental Trouble Shooters
   Address 3825 Grand Avenue
   City, St., Zip Duluth, MN 55807
   Operator's Phone 218-722-6013

PROFILE #: #14-157-I

3. **Waste Disposal Site** VONCO V, LLC.
   Mailing Address 1100 West Gary Street
   City, St., Zip Duluth, MN 55808
4. **Responsible Agency** MN Pollution Control Agency
   Address 520 Lafayette Road
   City, St., Zip St. Paul, MN 55155-3898

5. Description of Materials	6. Containers (No.-Type)	7. Total Quantity (m^3 or yd^3)
Soil Contaminated with used Petroleum	1- Dump Truck	10-12 CY/truck

8. **Special Handling Instructions and Additional Information**

9. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and governmental regulations. The above listed material(s) is (are) not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law.

Name & Title (Printed or Typed) Tom Curelli Signature T.M. Curelli Date 11/26/14

TRANSPORTER

10. **Transporter 1** (Acknowledgement of receipt of materials)
    Name/Title RJS CONST. GROUP MARK WIARDA (2646) Signature Mark Wiarda Date 12-10-14
    Address 1 CLOUGH AVE City, St., Zip SUPERIOR, WI 54880 Phone No. 715-394-7771
11. **Transporter 2** (Acknowledgement of receipt of materials)
    Name/Title _____ Signature _____ Date _____
    Address _____ City, St., Zip _____ Phone No. _____

DISPOSAL SITE

12. **Discrepancy Indication Space** 05

Ticket # 253188 Tons 14.27 Yards _____
E _____ N _____ Elev. _____

13. **Waste Disposal Site Owner or Operator:** Certification of receipt of non-hazardous materials covered by this manifest except as noted in item 12.

Name/Title (Printed or Typed) DM
Signature DM Date 12/10/14

CONTRACTOR - WHITE TRANSPORTER - CANARY WASTE DISPOSAL SITE - PINK GENERATOR/OPERATOR - GOLD

CO V, LLC.

: 218-626-3830 FAX: 218-626-1009

STRIAL/NON-HAZARDOUS MATERIAL TRANSPORT AND DISPOSAL MANIFEST

PROFILE #: #14-157-I

GENERATOR

1. **Work Site Name** Fraser Shipyard
   Address 1 Clough Avenue
   City, St., Zip Superior, WI 54880
   Owner's Name Tom Curelli, Director of Operations
   Owner's Phone No. 715-394-7787 ext 101
2. **Consultant/Contractor** Environmental Trouble Shooters
   Address 3825 Grand Avenue
   City, St., Zip Duluth, MN 55807
   Operator's Phone 218-722-6013

3. **Waste Disposal Site** VONCO V, LLC.
   Mailing Address 1100 West Gary Street
   City, St., Zip Duluth, MN 55808
4. **Responsible Agency** MN Pollution Control Agency
   Address 520 Lafayette Road
   City, St., Zip St. Paul, MN 55155-3898

5. Description of Materials	6. Containers (No.-Type)	7. Total Quantity (m^3 or yd^3)
Soil Contaminated with used Petroleum	1- Dump Truck	10-12 CY/truck

8. **Special Handling Instructions and Additional Information**

9. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and governmental regulations. The above listed material(s) is (are) not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law.

Name & Title (Printed or Typed) Tom Curelli Signature T.M Curelli Date 11/26/14

TRANSPORTER

10. **Transporter 1** (Acknowledgement of receipt of materials)
    Name/Title RJS CONST. GROUP EDWARD T CHRUSCIELSKI Signature [signature] Date 12-10-14
    Address 1 CLOUGH AVE City, St., Zip SUPERIOR, WI 54880 Phone No. 715 394 7771
11. **Transporter 2** (Acknowledgement of receipt of materials)
    Name/Title _____ Signature _____ Date _____
    Address _____ City, St., Zip _____ Phone No. _____

DISPOSAL SITE

12. **Discrepancy Indication Space** C5

Ticket # 253189 Tons 13.20 Yards _____

E _____ N _____ Elev. _____

13. **Waste Disposal Site Owner or Operator:** Certification of receipt of non-hazardous materials covered by this manifest except as noted in item 12.

Name/Title (Printed or Typed) DW

Signature DW Date 12/10/14

CONTRACTOR - WHITE TRANSPORTER - CANARY WASTE DISPOSAL SITE - PINK GENERATOR/OPERATOR - GOLD

5

VONCO V, LLC.

E: 218-626-3830 FAX: 218-626-1009

INDUSTRIAL/NON-HAZARDOUS MATERIAL TRANSPORT AND DISPOSAL MANIFEST

GENERATOR

1. **Work Site Name** Fraser Shipyard
   Address 1 Clough Avenue
   City, St., Zip Superior, WI 54880
   Owner's Name Tom Curelli, Director of Operations
   Owner's Phone No. 715-394-7787 ext 101
2. **Consultant/Contractor** Environmental Trouble Shooters
   Address 3825 Grand Avenue
   City, St., Zip Duluth, MN 55807
   Operator's Phone 218-722-6013

PROFILE #: #14-157-I

3. **Waste Disposal Site** VONCO V, LLC.
   Mailing Address 1100 West Gary Street
   City, St., Zip Duluth, MN 55808
4. **Responsible Agency** MN Pollution Control Agency
   Address 520 Lafayette Road
   City, St., Zip St. Paul, MN 55155-3898

5. Description of Materials	6. Containers (No.-Type)	7. Total Quantity (m^3 or yd^3)
Soil Contaminated with used Petroleum	1- Dump Truck	10-12 CY/truck

8. **Special Handling Instructions and Additional Information**

9. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and governmental regulations. The above listed material(s) is (are) not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law.

Name & Title (Printed or Typed) Tom Curelli Signature T Curelli Date 11/26/14

TRANSPORTER

10. **Transporter 1** (Acknowledgement of receipt of materials)
    Name/Title RJS CONST. GROUP Alan Dalsen Signature [signature] Date 12-10-14
    Address 1 CLOUGH AVE City, St., Zip SUPERIOR WI 54880 Phone No. 715-394-7771
11. **Transporter 2** (Acknowledgement of receipt of materials)
    Name/Title _____ Signature _____ Date _____
    Address _____ City, St., Zip _____ Phone No. _____

DISPOSAL SITE

12. **Discrepancy Indication Space** C5

Ticket # 253190 Tons 14.36 Yards _____

E _____ N _____ Elev. _____

13. **Waste Disposal Site Owner or Operator:** Certification of receipt of non-hazardous materials covered by this manifest except as noted in item 12.

Name/Title (Printed or Typed) DL

Signature DL Date 12/10/14

CONTRACTOR - WHITE TRANSPORTER - CANARY WASTE DISPOSAL SITE - PINK GENERATOR/OPERATOR - GOLD

NCO V, LLC.

NE: 218-626-3830 FAX: 218-626-1009

NDUSTRIAL/NON-HAZARDOUS MATERIAL TRANSPORT AND DISPOSAL MANIFEST

GENERATOR

1. **Work Site Name** Fraser Shipyard
   Address 1 Clough Avenue
   City, St., Zip Superior, WI 54880
   Owner's Name Tom Curelli, Director of Operations
   Owner's Phone No. 715-394-7787 ext 101
2. **Consultant/Contractor** Environmental Trouble Shooters
   Address 3825 Grand Avenue
   City, St., Zip Duluth, MN 55807
   Operator's Phone 218-722-6013

PROFILE #: #14-157-I

3. **Waste Disposal Site** VONCO V, LLC.
   Mailing Address 1100 West Gary Street
   City, St., Zip Duluth, MN 55808
4. **Responsible Agency** MN Pollution Control Agency
   Address 520 Lafayette Road
   City, St., Zip St. Paul, MN 55155-3898

5. Description of Materials	6. Containers (No.-Type)	7. Total Quantity (m^3 or yd^3)
Soil Contaminated with used Petroleum	1- Dump Truck	10-12 CY/truck

8. **Special Handling Instructions and Additional Information**

9. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and governmental regulations. The above listed material(s) is (are) not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law.

Name & Title (Printed or Typed) Tom Curelli Signature T.M Curelli Date 11/26/14

TRANSPORTER

10. **Transporter 1** (Acknowledgement of receipt of materials)
    Name/Title RJS Const. Group Signature _____ Date 12-10-14
    Address 1 Clough Ave. City, St., Zip Superior WI 54880 Phone No. 715 394-7771
11. **Transporter 2** (Acknowledgement of receipt of materials)
    Name/Title Charlene R. Copeland Signature Charlene Copeland Date 12/10/14
    Address _____ City, St., Zip _____ Phone No. _____

DISPOSAL SITE

12. **Discrepancy Indication Space** C5

Ticket # 253192 Tons 14.36 Yards _____

E _____ N _____ Elev. _____

13. **Waste Disposal Site Owner or Operator:** Certification of receipt of non-hazardous materials covered by this manifest except as noted in item 12.

Name/Title (Printed or Typed) DM

Signature DM Date 12/10/14

CONTRACTOR - WHITE TRANSPORTER - CANARY WASTE DISPOSAL SITE - PINK GENERATOR/OPERATOR - GOLD

8

VONCO V, LLC.

PHONE: 218-626-3830 FAX: 218-626-1009

INDUSTRIAL/NON-HAZARDOUS MATERIAL TRANSPORT AND DISPOSAL MANIFEST

GENERATOR

1. **Work Site Name** Fraser Shipyard
   Address 1 Clough Avenue
   City, St., Zip Superior, WI 54880
   Owner's Name Tom Curelli, Director of Operations
   Owner's Phone No. 715-394-7787 ext 101
2. **Consultant/Contractor** Environmental Trouble Shooters
   Address 3825 Grand Avenue
   City, St., Zip Duluth, MN 55807
   Operator's Phone 218-722-6013

PROFILE #: #14-157-I

3. **Waste Disposal Site** VONCO V, LLC.
   Mailing Address 1100 West Gary Street
   City, St., Zip Duluth, MN 55808
4. **Responsible Agency** MN Pollution Control Agency
   Address 520 Lafayette Road
   City, St., Zip St. Paul, MN 55155-3898

5. Description of Materials	6. Containers (No.-Type)	7. Total Quantity (m^3 or yd^3)
Soil Contaminated with used Petroleum	1- Dump Truck	10-12 CY/truck

8. **Special Handling Instructions and Additional Information**

9. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and governmental regulations. The above listed material(s) is (are) not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law.

Name & Title (Printed or Typed) Tom Curelli Signature TJ Curelli Date 11/26/14

TRANSPORTER

10. **Transporter 1** (Acknowledgement of receipt of materials)

Name/Title _____ Signature _____ Date _____

Address _____ City, St., Zip _____ Phone No. _____

11. **Transporter 2** (Acknowledgement of receipt of materials)

Name/Title Dennis Hipsher Signature _____ Date 12-10-14

Address Sipsens Trucking City, St., Zip _____ Phone No. 715-372-8224

DISPOSAL SITE

12. **Discrepancy Indication Space** CS

Ticket # 253193 Tons 17.41 Yards _____

E _____ N _____ Elev. _____

13. **Waste Disposal Site Owner or Operator:** Certification of receipt of non-hazardous materials covered by this manifest except as noted in item 12.

Name/Title (Printed or Typed) DM

Signature DM Date 12/10/14

CONTRACTOR - WHITE TRANSPORTER - CANARY WASTE DISPOSAL SITE - PINK GENERATOR/OPERATOR - GOLD

ICO V, LLC.

E: 218-626-3830 FAX: 218-626-1009

JSTRIAL/NON-HAZARDOUS MATERIAL TRANSPORT AND DISPOSAL MANIFEST

PROFILE #: #14-157-I

GENERATOR

1. **Work Site Name** Fraser Shipyard
   Address 1 Clough Avenue
   City, St., Zip Superior, WI 54880
   Owner's Name Tom Curelli, Director of Operations
   Owner's Phone No. 715-394-7787 ext 101
2. **Consultant/Contractor** Environmental Trouble Shooters
   Address 3825 Grand Avenue
   City, St., Zip Duluth, MN 55807
   Operator's Phone 218-722-6013

3. **Waste Disposal Site** VONCO V, LLC.
   Mailing Address 1100 West Gary Street
   City, St., Zip Duluth, MN 55808
4. **Responsible Agency** MN Pollution Control Agency
   Address 520 Lafayette Road
   City, St., Zip St. Paul, MN 55155-3898

5. Description of Materials	6. Containers (No.-Type)	7. Total Quantity (m^3 or yd^3)
Soil Contaminated with used Petroleum	1- Dump Truck	10-12 CY/truck

8. **Special Handling Instructions and Additional Information**

9. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and governmental regulations. The above listed material(s) is (are) not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law.

Name & Title (Printed or Typed) Tom Curelli Signature T M Curelli Date 11/26/14

TRANSPORTER

10. **Transporter 1** (Acknowledgement of receipt of materials)
    RJS Const. Group
    Name/Title Bob Pollock Truck Driver Signature Bob Pollock Date 12-10-14
    Address 1 Clough Ave. City, St., Zip Superior, WI 54880 Phone No. 715-394-7771
11. **Transporter 2** (Acknowledgement of receipt of materials)
    Name/Title _____ Signature _____ Date _____
    Address _____ City, St., Zip _____ Phone No. _____

DISPOSAL SITE

12. **Discrepancy Indication Space** CS

Ticket # 253194 Tons 12.87 Yards _____

E _____ N _____ Elev. _____

13. **Waste Disposal Site Owner or Operator:** Certification of receipt of non-hazardous materials covered by this manifest except as noted in item 12.

Name/Title (Printed or Typed) DM

Signature DM Date 12/10/14

CONTRACTOR - WHITE TRANSPORTER - CANARY WASTE DISPOSAL SITE - PINK GENERATOR/OPERATOR - GOLD

VONCO V, LLC.

VONE: 218-626-3830 FAX: 218-626-1009

INDUSTRIAL/NON-HAZARDOUS MATERIAL TRANSPORT AND DISPOSAL MANIFEST

GENERATOR

PROFILE #: #14-157-I

1. **Work Site Name** Fraser Shipyard
   Address 1 Clough Avenue
   City, St., Zip Superior, WI 54880
   Owner's Name Tom Curelli, Director of Operations
   Owner's Phone No. 715-394-7787 ext 101

2. **Consultant/Contractor** Environmental Trouble Shooters
   Address 3825 Grand Avenue
   City, St., Zip Duluth, MN 55807
   Operator's Phone 218-722-6013

3. **Waste Disposal Site** VONCO V, LLC.
   Mailing Address 1100 West Gary Street
   City, St., Zip Duluth, MN 55808

4. **Responsible Agency** MN Pollution Control Agency
   Address 520 Lafayette Road
   City, St., Zip St. Paul, MN 55155-3898

5. Description of Materials	6. Containers (No.-Type)	7. Total Quantity (m^3 or yd^3)
Soil Contaminated with used Petroleum	1- Dump Truck	10-12 CY/truck

8. **Special Handling Instructions and Additional Information**

9. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and governmental regulations. The above listed material(s) is (are) not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law.

Name & Title (Printed or Typed) Tom Curelli Signature TM Curelli Date 11/26/14

TRANSPORTER

10. **Transporter 1** (Acknowledgement of receipt of materials)
Name/Title RJS CONST. GROUP EDWARD TCH/RUSCINSKI Signature [signature] Date 12-10-14
Address 1 CLOUGH AVE. City, St., Zip SUPERIOR, WI 54880 Phone No. 715-394-7771

11. **Transporter 2** (Acknowledgement of receipt of materials)
Name/Title _____ Signature _____ Date _____
Address _____ City, St., Zip _____ Phone No. _____

DISPOSAL SITE

12. **Discrepancy Indication Space** C5

Ticket # 253195 Tons 13.02 Yards _____
E _____ N _____ Elev. _____

13. **Waste Disposal Site Owner or Operator:** Certification of receipt of non-hazardous materials covered by this manifest except as noted in item 12.

Name/Title (Printed or Typed) DM
Signature DM Date 12/10/14

CONTRACTOR - WHITE TRANSPORTER - CANARY WASTE DISPOSAL SITE - PINK GENERATOR/OPERATOR - GOLD

12

NCO V, LLC.

NE: 218-626-3830 FAX: 218-626-1009

NDUSTRIAL/NON-HAZARDOUS MATERIAL TRANSPORT AND DISPOSAL MANIFEST

GENERATOR

1. **Work Site Name** Fraser Shipyard
   Address 1 Clough Avenue
   City, St., Zip Superior, WI 54880
   Owner's Name Tom Curelli, Director of Operations
   Owner's Phone No. 715-394-7787 ext 101
2. **Consultant/Contractor** Environmental Trouble Shooters
   Address 3825 Grand Avenue
   City, St., Zip Duluth, MN 55807
   Operator's Phone 218-722-6013

PROFILE #: #14-157-I

3. **Waste Disposal Site** VONCO V, LLC.
   Mailing Address 1100 West Gary Street
   City, St., Zip Duluth, MN 55808
4. **Responsible Agency** MN Pollution Control Agency
   Address 520 Lafayette Road
   City, St., Zip St. Paul, MN 55155-3898

5. Description of Materials	6. Containers (No.-Type)	7. Total Quantity (m^3 or yd^3)
Soil Contaminated with used Petroleum	1- Dump Truck	10-12 CY/truck

8. **Special Handling Instructions and Additional Information**

9. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and governmental regulations. The above listed material(s) is (are) not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law.

Name & Title (Printed or Typed) Tom Curelli Signature T M Curelli Date 11/26/14

TRANSPORTER

10. **Transporter 1** (Acknowledgement of receipt of materials)
    Name/Title RJS CONST. GROUP Signature _____ Date 12-10-14
    Address 1 CLOUGH AVE City, St., Zip SUPERIOR WI 54880 Phone No. 715 394 7771
11. **Transporter 2** (Acknowledgement of receipt of materials)
    Name/Title MARK CWIKDA 2646 Signature Mark Cwikda Date 12-10-14
    Address _____ City, St., Zip _____ Phone No. _____

DISPOSAL SITE

12. **Discrepancy Indication Space** 05

Ticket # 253196 Tons 12.61 Yards _____

E _____ N _____ Elev. _____

13. **Waste Disposal Site Owner or Operator:** Certification of receipt of non-hazardous materials covered by this manifest except as noted in item 12.

Name/Title (Printed or Typed) DL

Signature DL Date 12/10/14

CONTRACTOR - WHITE TRANSPORTER - CANARY WASTE DISPOSAL SITE - PINK GENERATOR/OPERATOR - GOLD

14

CO V, LLC.

: 218-626-3830 FAX: 218-626-1009

USTRIAL/NON-HAZARDOUS MATERIAL TRANSPORT AND DISPOSAL MANIFEST

GENERATOR

1. **Work Site Name** Fraser Shipyard
   Address 1 Clough Avenue
   City, St., Zip Superior, WI 54880
   Owner's Name Tom Curelli, Director of Operations
   Owner's Phone No. 715-394-7787 ext 101
2. **Consultant/Contractor** Environmental Trouble Shooters
   Address 3825 Grand Avenue
   City, St., Zip Duluth, MN 55807
   Operator's Phone 218-722-6013

PROFILE #: #14-157-I

3. **Waste Disposal Site** VONCO V, LLC.
   Mailing Address 1100 West Gary Street
   City, St., Zip Duluth, MN 55808
4. **Responsible Agency** MN Pollution Control Agency
   Address 520 Lafayette Road
   City, St., Zip St. Paul, MN 55155-3898

5. Description of Materials	6. Containers (No.-Type)	7. Total Quantity (m^3 or yd^3)
Soil Contaminated with used Petroleum	1- Dump Truck	10-12 CY/truck

8. **Special Handling Instructions and Additional Information**

9. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and governmental regulations. The above listed material(s) is (are) not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law.

Name & Title (Printed or Typed) Tom Curelli Signature T Curelli Date 11/26/14

TRANSPORTER

10. **Transporter 1** (Acknowledgement of receipt of materials)
    Name/Title RJS Const. Group Emil Mannila Signature [signature] Date 12-10-14
    Address 1 Clough Ave City, St., Zip Superior WI, 54880 Phone No. 715-394-7771
11. **Transporter 2** (Acknowledgement of receipt of materials)
    Name/Title _____ Signature _____ Date _____
    Address _____ City, St., Zip _____ Phone No. _____

DISPOSAL SITE

12. **Discrepancy Indication Space** C5

Ticket # 253200 Tons 11.78 Yards _____

E _____ N _____ Elev. _____

13. **Waste Disposal Site Owner or Operator:** Certification of receipt of non-hazardous materials covered by this manifest except as noted in item 12.

Name/Title (Printed or Typed) DH

Signature DH Date 12/10/14

CONTRACTOR - WHITE TRANSPORTER - CANARY WASTE DISPOSAL SITE - PINK GENERATOR/OPERATOR - GOLD

CO V, LLC.

. 218-626-3830 FAX: 218-626-1009

STRIAL/NON-HAZARDOUS MATERIAL TRANSPORT AND DISPOSAL MANIFEST

PROFILE #: #14-157-I

GENERATOR

1. **Work Site Name** Fraser Shipyard
   Address 1 Clough Avenue
   City, St., Zip Superior, WI 54880
   Owner's Name Tom Curelli, Director of Operations
   Owner's Phone No. 715-394-7787 ext 101
2. **Consultant/Contractor** Environmental Trouble Shooters
   Address 3825 Grand Avenue
   City, St., Zip Duluth, MN 55807
   Operator's Phone 218-722-6013

3. **Waste Disposal Site** VONCO V, LLC.
   Mailing Address 1100 West Gary Street
   City, St., Zip Duluth, MN 55808
4. **Responsible Agency** MN Pollution Control Agency
   Address 520 Lafayette Road
   City, St., Zip St. Paul, MN 55155-3898

5. Description of Materials	6. Containers (No.-Type)	7. Total Quantity (m^3 or yd^3)
Soil Contaminated with used Petroleum	1- Dump Truck	10-12 CY/truck

8. **Special Handling Instructions and Additional Information**

9. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and governmental regulations. The above listed material(s) is (are) not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law.

Name & Title (Printed or Typed) Tom Curelli Signature T M Curelli Date 11/26/14

TRANSPORTER

10. **Transporter 1** (Acknowledgement of receipt of materials)
    Name/Title RJS CONST GROUP Signature _____ Date 12-10-14
    Address 1 CLOUGH AVE City, St., Zip SUPERIOR WI, 54880 Phone No. 715-394-7771
11. **Transporter 2** (Acknowledgement of receipt of materials)
    Name/Title Charlene Copeland Signature Charlene Copeland Date 12/10/14
    Address _____ City, St., Zip _____ Phone No. _____

DISPOSAL SITE

12. **Discrepancy Indication Space** C5

Ticket # 253201 Tons 13.22 Yards _____

E _____ N _____ Elev. _____

13. **Waste Disposal Site Owner or Operator:** Certification of receipt of non-hazardous materials covered by this manifest except as noted in item 12.

Name/Title (Printed or Typed) DL

Signature DL Date 12/10/14

CONTRACTOR - WHITE TRANSPORTER - CANARY WASTE DISPOSAL SITE - PINK GENERATOR/OPERATOR - GOLD

11

ɔNCO V, LLC.

ɔNE: 218-626-3830   FAX: 218-626-1009

ɴDUSTRIAL/NON-HAZARDOUS MATERIAL TRANSPORT AND DISPOSAL MANIFEST

GENERATOR

PROFILE #: #14-157-I

1. **Work Site Name** Fraser Shipyard
   Address 1 Clough Avenue
   City, St., Zip Superior, WI 54880
   Owner's Name Tom Curelli, Director of Operations
   Owner's Phone No. 715-394-7787 ext 101
2. **Consultant/Contractor** Environmental Trouble Shooters
   Address 3825 Grand Avenue
   City, St., Zip Duluth, MN 55807
   Operator's Phone 218-722-6013
3. **Waste Disposal Site** **VONCO V, LLC.**
   Mailing Address **1100 West Gary Street**
   City, St., Zip **Duluth, MN 55808**
4. **Responsible Agency** **MN Pollution Control Agency**
   Address **520 Lafayette Road**
   City, St., Zip **St. Paul, MN 55155-3898**

5. Description of Materials	6. Containers (No.-Type)	7. Total Quantity (m^3 or yd^3)
Soil Contaminated with used Petroleum	1- Dump Truck	10-12 CY/truck

8. **Special Handling Instructions and Additional Information**

9. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and governmental regulations. The above listed material(s) is (are) not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law.

Name & Title (Printed or Typed) Tom Curelli   Signature TM Curelli   Date 11/26/14

TRANSPORTER

10. **Transporter 1** (Acknowledgement of receipt of materials)
    Name/Title D   Signature ____   Date ____
    Address ____   City, St., Zip ____   Phone No. ____
11. **Transporter 2** (Acknowledgement of receipt of materials)
    Name/Title Dennis Hipsher   Signature [signature]   Date 12-10
    Address Sipsas Trucking   City, St., Zip ____   Phone No. 715-372-8221

DISPOSAL SITE

12. **Discrepancy Indication Space** CS

Ticket # 253203 Tons 14.29 Yards ____

E ____ N ____ Elev. ____

13. **Waste Disposal Site Owner or Operator:** Certification of receipt of non-hazardous materials covered by this manifest except as noted in item 12.
    Name/Title (Printed or Typed) DW
    Signature DW   Date 12/10/14

CONTRACTOR - WHITE   TRANSPORTER - CANARY   WASTE DISPOSAL SITE - PINK   GENERATOR/OPERATOR - GOLD

VONCO V, LLC.

PHONE: 218-626-3830 FAX: 218-626-1009

INDUSTRIAL/NON-HAZARDOUS MATERIAL TRANSPORT AND DISPOSAL MANIFEST

GENERATOR

1. **Work Site Name** Fraser Shipyard
   Address 1 Clough Avenue
   City, St., Zip Superior, WI 54880
   Owner's Name Tom Curelli, Director of Operations
   Owner's Phone No. 715-394-7787 ext 101
2. **Consultant/Contractor** Environmental Trouble Shooters
   Address 3825 Grand Avenue
   City, St., Zip Duluth, MN 55807
   Operator's Phone 218-722-6013

PROFILE #: #14-157-I

3. **Waste Disposal Site** VONCO V, LLC.
   Mailing Address 1100 West Gary Street
   City, St., Zip Duluth, MN 55808
4. **Responsible Agency** MN Pollution Control Agency
   Address 520 Lafayette Road
   City, St., Zip St. Paul, MN 55155-3898

5. Description of Materials	6. Containers (No.-Type)	7. Total Quantity (m^3 or yd^3)
Soil Contaminated with used Petroleum	1- Dump Truck	10-12 CY/truck

8. **Special Handling Instructions and Additional Information**

9. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and governmental regulations. The above listed material(s) is (are) not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law.

Name & Title (Printed or Typed) Tom Curelli Signature T.M. Curelli Date 11/26/14

TRANSPORTER

10. **Transporter 1** (Acknowledgement of receipt of materials)
    Name/Title RJS Const. Group Bob Pollock Truck Driver Signature Bob Pollock Date 12-1
    Address 1 Clough Ave. City, St., Zip Superior WI, 54880 Phone No. 715-394-7771
11. **Transporter 2** (Acknowledgement of receipt of materials)
    Name/Title _____ Signature _____ Date _____
    Address _____ City, St., Zip _____ Phone No. _____

DISPOSAL SITE

12. **Discrepancy Indication Space** C5

Ticket # 253205 Tons 12.75 Yards _____

E _____ N _____ Elev. _____

13. **Waste Disposal Site Owner or Operator:** Certification of receipt of non-hazardous materials covered by this manifest except as noted in item 12.

Name/Title (Printed or Typed) DH

Signature DH Date 12/10/14

CONTRACTOR - WHITE TRANSPORTER - CANARY WASTE DISPOSAL SITE - PINK GENERATOR/OPERATOR - GOLD

#16

VONCO V, LLC.

PHONE: 218-626-3830 FAX: 218-626-1009

INDUSTRIAL/NON-HAZARDOUS MATERIAL TRANSPORT AND DISPOSAL MANIFEST

GENERATOR

1. **Work Site Name** Fraser Shipyard
   Address 1 Clough Avenue
   City, St., Zip Superior, WI 54880
   Owner's Name Tom Curelli, Director of Operations
   Owner's Phone No. 715-394-7787 ext 101
2. **Consultant/Contractor** Environmental Trouble Shooters
   Address 3825 Grand Avenue
   City, St., Zip Duluth, MN 55807
   Operator's Phone 218-722-6013

PROFILE #: #14-157-I

3. **Waste Disposal Site** VONCO V, LLC.
   Mailing Address 1100 West Gary Street
   City, St., Zip Duluth, MN 55808
4. **Responsible Agency** MN Pollution Control Agency
   Address 520 Lafayette Road
   City, St., Zip St. Paul, MN 55155-3898

5. Description of Materials	6. Containers (No.-Type)	7. Total Quantity (m^3 or yd^3)
Soil Contaminated with used Petroleum	1- Dump Truck	10-12 CY/truck

8. **Special Handling Instructions and Additional Information**

9. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and governmental regulations. The above listed material(s) is (are) not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law.

Name & Title (Printed or Typed) Tom Curelli Signature TM Curelli Date 11/26/14

TRANSPORTER

10. **Transporter 1** (Acknowledgement of receipt of materials)
    Name/Title RJS Const. Group EDWARD JOHANSCHLSKI Signature [signature] Date 12-10-14
    Address 1 CLOUGH AVE. City, St., Zip SUPERIOR, WI 54880 Phone No. 715-394-7771
11. **Transporter 2** (Acknowledgement of receipt of materials)
    Name/Title _____ Signature _____ Date _____
    Address _____ City, St., Zip _____ Phone No. _____

DISPOSAL SITE

12. **Discrepancy Indication Space** CS

Ticket # 253206 Tons 11.68 Yards _____
E _____ N _____ Elev. _____

13. **Waste Disposal Site Owner or Operator:** Certification of receipt of non-hazardous materials covered by this manifest except as noted in item 12.
    Name/Title (Printed or Typed) DL
    Signature DL Date 12/10/14

CONTRACTOR - WHITE TRANSPORTER - CANARY WASTE DISPOSAL SITE - PINK GENERATOR/OPERATOR - GOLD

VONCO V, LLC.

PHONE: 218-626-3830 FAX: 218-626-1009

INDUSTRIAL/NON-HAZARDOUS MATERIAL TRANSPORT AND DISPOSAL MANIFEST

GENERATOR

1. **Work Site Name** Fraser Shipyard
   Address 1 Clough Avenue
   City, St., Zip Superior, WI 54880
   Owner's Name Tom Curelli, Director of Operations
   Owner's Phone No. 715-394-7787 ext 101
2. **Consultant/Contractor** Environmental Trouble Shooters
   Address 3825 Grand Avenue
   City, St., Zip Duluth, MN 55807
   Operator's Phone 218-722-6013

PROFILE #: #14-157-I

3. **Waste Disposal Site** VONCO V, LLC.
   Mailing Address 1100 West Gary Street
   City, St., Zip Duluth, MN 55808
4. **Responsible Agency** MN Pollution Control Agency
   Address 520 Lafayette Road
   City, St., Zip St. Paul, MN 55155-3898

5. Description of Materials	6. Containers (No.-Type)	7. Total Quantity (m^3 or yd^3)
Soil Contaminated with used Petroleum	1- Dump Truck	10-12 CY/truck

8. **Special Handling Instructions and Additional Information**

9. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and governmental regulations. The above listed material(s) is (are) not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law.

Name & Title (Printed or Typed) Tom Curelli Signature T Curelli Date 11/26/14

TRANSPORTER

10. **Transporter 1** (Acknowledgement of receipt of materials)
    Name/Title RJS CONST. GROUP Signature _____ Date 12-10-14
    Address 1 CLOUGH AVE. City, St., Zip SUPERIOR WI 54880 Phone No. 715-394-7771
11. **Transporter 2** (Acknowledgement of receipt of materials)
    Name/Title MARK MIARDA Signature Mark Miarda Date 12-10-14
    Address _____ City, St., Zip _____ Phone No. _____

DISPOSAL SITE

12. **Discrepancy Indication Space** C5

Ticket # 253207 Tons 11.73 Yards _____

E _____ N _____ Elev. _____

13. **Waste Disposal Site Owner or Operator:** Certification of receipt of non-hazardous materials covered by this manifest except as noted in item 12.

Name/Title (Printed or Typed) DM

Signature DM Date 12/10/14

CONTRACTOR - WHITE TRANSPORTER - CANARY WASTE DISPOSAL SITE - PINK GENERATOR/OPERATOR - GOLD

54/60

VONCO V, LLC.

PHONE: 218-626-3830 FAX: 218-626-1009

INDUSTRIAL/NON-HAZARDOUS MATERIAL TRANSPORT AND DISPOSAL MANIFEST

GENERATOR

1. **Work Site Name** Fraser Shipyard
   Address 1 Clough Avenue
   City, St., Zip Superior, WI 54880
   Owner's Name Tom Curelli, Director of Operations
   Owner's Phone No. 715-394-7787 ext 101
2. **Consultant/Contractor** Environmental Trouble Shooters
   Address 3825 Grand Avenue
   City, St., Zip Duluth, MN 55807
   Operator's Phone 218-722-6013

PROFILE #: #14-157-I

3. **Waste Disposal Site** VONCO V, LLC.
   Mailing Address 1100 West Gary Street
   City, St., Zip Duluth, MN 55808
4. **Responsible Agency** MN Pollution Control Agency
   Address 520 Lafayette Road
   City, St., Zip St. Paul, MN 55155-3898

5. Description of Materials	6. Containers (No.-Type)	7. Total Quantity (m^3 or yd^3)
Soil Contaminated with used Petroleum	1- Dump Truck	10-12 CY/truck

8. **Special Handling Instructions and Additional Information**

9. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and governmental regulations. The above listed material(s) is (are) not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law.

Name & Title (Printed or Typed) Tom Curelli Signature [signature] Date 11/26/14

TRANSPORTER

10. **Transporter 1** (Acknowledgement of receipt of materials)
    Name/Title RJS Const. Group Signature [signature] Date 12-22-14
    Address 1 Clough Ave City, St., Zip Superior WI 54880 Phone No. 715-394-7771
11. **Transporter 2** (Acknowledgement of receipt of materials)
    Name/Title _____ Signature _____ Date _____
    Address _____ City, St., Zip _____ Phone No. _____

DISPOSAL SITE

12. **Discrepancy Indication Space** CS

Ticket # 253588 Tons 17.84 Yards _____

E _____ N _____ Elev. _____

13. **Waste Disposal Site Owner or Operator:** Certification of receipt of non-hazardous materials covered by this manifest except as noted in item 12.

Name/Title (Printed or Typed) DM

Signature DM Date 12/22/14

CONTRACTOR - WHITE TRANSPORTER - CANARY WASTE DISPOSAL SITE - PINK GENERATOR/OPERATOR - GOLD

59

VONCO V, LLC.

PHONE: 218-626-3830 FAX: 218-626-1009

INDUSTRIAL/NON-HAZARDOUS MATERIAL TRANSPORT AND DISPOSAL MANIFEST

GENERATOR

1. **Work Site Name** Fraser Shipyard
   Address 1 Clough Avenue
   City, St., Zip Superior, WI 54880
   Owner's Name Tom Curelli, Director of Operations
   Owner's Phone No. 715-394-7787 ext 101
2. **Consultant/Contractor** Environmental Trouble Shooters
   Address 3825 Grand Avenue
   City, St., Zip Duluth, MN 55807
   Operator's Phone 218-722-6013

PROFILE #: #14-157-I

3. **Waste Disposal Site** VONCO V, LLC.
   Mailing Address 1100 West Gary Street
   City, St., Zip Duluth, MN 55808
4. **Responsible Agency** MN Pollution Control Agency
   Address 520 Lafayette Road
   City, St., Zip St. Paul, MN 55155-3898

5. Description of Materials	6. Containers (No.-Type)	7. Total Quantity (m^3 or yd^3)
Soil Contaminated with used Petroleum	1- Dump Truck	10-12 CY/truck

8. **Special Handling Instructions and Additional Information**

9. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and governmental regulations. The above listed material(s) is (are) not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law.

Name & Title (Printed or Typed) Tom Curelli Signature TM Curelli Date 11/26/14

TRANSPORTER

10. **Transporter 1** (Acknowledgement of receipt of materials)
    Name/Title _____ Signature _____ Date _____
    Address _____ City, St., Zip _____ Phone No. _____
11. **Transporter 2** (Acknowledgement of receipt of materials)
    Name/Title RJS CONST. GROUP Clarence Lowe Signature Clarence Lowe Date 12-12-14
    Address 1 CLOUGH AVE. City, St., Zip SUPERIOR WI, 54880 Phone No. 715-394-7771

DISPOSAL SITE

12. **Discrepancy Indication Space** C5

Ticket # 253325 Tons 10.71 Yards _____
E _____ N _____ Elev. _____

13. **Waste Disposal Site Owner or Operator:** Certification of receipt of non-hazardous materials covered by this manifest except as noted in item 12.

Name/Title (Printed or Typed) DLL
Signature DLL Date 12/12/14

CONTRACTOR - WHITE TRANSPORTER - CANARY WASTE DISPOSAL SITE - PINK GENERATOR/OPERATOR - GOLD

57

CO V, LLC.

: 218-626-3830 FAX: 218-626-1009

STRIAL/NON-HAZARDOUS MATERIAL TRANSPORT AND DISPOSAL MANIFEST

GENERATOR

1. **Work Site Name** Fraser Shipyard
   Address 1 Clough Avenue
   City, St., Zip Superior, WI 54880
   Owner's Name Tom Curelli, Director of Operations
   Owner's Phone No. 715-394-7787 ext 101
2. **Consultant/Contractor** Environmental Trouble Shooters
   Address 3825 Grand Avenue
   City, St., Zip Duluth, MN 55807
   Operator's Phone 218-722-6013

PROFILE #: #14-157-I

3. **Waste Disposal Site** VONCO V, LLC.
   Mailing Address 1100 West Gary Street
   City, St., Zip Duluth, MN 55808
4. **Responsible Agency** MN Pollution Control Agency
   Address 520 Lafayette Road
   City, St., Zip St. Paul, MN 55155-3898

5. Description of Materials	6. Containers (No.-Type)	7. Total Quantity (m^3 or yd^3)
Soil Contaminated with used Petroleum	1- Dump Truck	10-12 CY/truck

8. **Special Handling Instructions and Additional Information**

9. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and governmental regulations. The above listed material(s) is (are) not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law.

Name & Title (Printed or Typed) Tom Curelli Signature T M Curelli Date 11/26/14

TRANSPORTER

10. **Transporter 1** (Acknowledgement of receipt of materials)
    Name/Title RJS Constr. Group Charlene Copeland/Dump Truck Driver Signature Charlene Copeland Date 12-12-14
    Address 1 CLOUGH Ave City, St., Zip Superior WI 54880 Phone No. 715-394-7721
11. **Transporter 2** (Acknowledgement of receipt of materials)
    Name/Title _____ Signature _____ Date _____
    Address _____ City, St., Zip _____ Phone No. _____

DISPOSAL SITE

12. **Discrepancy Indication Space** CS
    Ticket # 253323 Tons 14.84 Yards _____
    E _____ N _____ Elev. _____

13. **Waste Disposal Site Owner or Operator:** Certification of receipt of non-hazardous materials covered by this manifest except as noted in item 12.
    Name/Title (Printed or Typed) DL
    Signature DL Date 12/12/14

CONTRACTOR - WHITE TRANSPORTER - CANARY WASTE DISPOSAL SITE - PINK GENERATOR/OPERATOR - GOLD

51

VONCO V, LLC.

PHONE: 218-626-3830 FAX: 218-626-1009

INDUSTRIAL/NON-HAZARDOUS MATERIAL TRANSPORT AND DISPOSAL MANIFEST

GENERATOR

1. **Work Site Name** Fraser Shipyard
   Address 1 Clough Avenue
   City, St., Zip Superior, WI 54880
   Owner's Name Tom Curelli, Director of Operations
   Owner's Phone No. 715-394-7787 ext 101
2. **Consultant/Contractor** Environmental Trouble Shooters
   Address 3825 Grand Avenue
   City, St., Zip Duluth, MN 55807
   Operator's Phone 218-722-6013

PROFILE #: #14-157-I

3. **Waste Disposal Site** VONCO V, LLC.
   Mailing Address 1100 West Gary Street
   City, St., Zip Duluth, MN 55808
4. **Responsible Agency** MN Pollution Control Agency
   Address 520 Lafayette Road
   City, St., Zip St. Paul, MN 55155-3898

5. Description of Materials	6. Containers (No.-Type)	7. Total Quantity (m^3 or yd^3)
Soil Contaminated with used Petroleum	1- Dump Truck	10-12 CY/truck

8. **Special Handling Instructions and Additional Information**

9. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and governmental regulations. The above listed material(s) is (are) not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law.

Name & Title (Printed or Typed) Tom Curelli Signature T M Curelli Date 11/26/14

TRANSPORTER

10. **Transporter 1** (Acknowledgement of receipt of materials)
    Name/Title AJS Const. Group Wayne Borek Signature Wayne Borek Date 12-12
    Address 1 Clough Ave City, St., Zip Superior WI 54880 Phone No. 715-394-7771
11. **Transporter 2** (Acknowledgement of receipt of materials)
    Name/Title _____ Signature _____ Date 12/12/14
    Address 1 Clough Ave City, St., Zip Superior WI 54880 Phone No. 715-394-7771

DISPOSAL SITE

12. **Discrepancy Indication Space** CS

Ticket # 253322 Tons 15.44 Yards _____

E _____ N _____ Elev. _____

13. **Waste Disposal Site Owner or Operator:** Certification of receipt of non-hazardous materials covered by this manifest except as noted in item 12.

Name/Title (Printed or Typed) DLL

Signature DLL Date 12/12/14

CONTRACTOR - WHITE TRANSPORTER - CANARY WASTE DISPOSAL SITE - PINK GENERATOR/OPERATOR - GOLD

53

VONCO V, LLC.

PHONE: 218-626-3830 FAX: 218-626-1009

INDUSTRIAL/NON-HAZARDOUS MATERIAL TRANSPORT AND DISPOSAL MANIFEST

GENERATOR

1. **Work Site Name** Fraser Shipyard
   Address 1 Clough Avenue
   City, St., Zip Superior, WI 54880
   Owner's Name Tom Curelli, Director of Operations
   Owner's Phone No. 715-394-7787 ext 101
2. **Consultant/Contractor** Environmental Trouble Shooters
   Address 3825 Grand Avenue
   City, St., Zip Duluth, MN 55807
   Operator's Phone 218-722-6013

PROFILE #: #14-157-I

3. **Waste Disposal Site** VONCO V, LLC.
   Mailing Address 1100 West Gary Street
   City, St., Zip Duluth, MN 55808
4. **Responsible Agency** MN Pollution Control Agency
   Address 520 Lafayette Road
   City, St., Zip St. Paul, MN 55155-3898

5. Description of Materials	6. Containers (No.-Type)	7. Total Quantity (m^3 or yd^3)
Soil Contaminated with used Petroleum	1- Dump Truck	10-12 CY/truck

8. **Special Handling Instructions and Additional Information**

9. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and governmental regulations. The above listed material(s) is (are) not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law.

Name & Title (Printed or Typed) Tom Curelli Signature T.M Curelli Date 11/26/14

TRANSPORTER

10. **Transporter 1** (Acknowledgement of receipt of materials)
    Name/Title RJS Const. Group STAN Maki - Driver Signature Stan Maki Date 12-12-14
    Address 1 CLOUGH Ave City, St., Zip Superior WI 54880 Phone No. 715-394-7771
11. **Transporter 2** (Acknowledgement of receipt of materials)
    Name/Title R&B Robst. Labor Signature Date 12-19-14
    Address 1 Clough Ave City, St., Zip Superior WI 54880 Phone No. 715-394-7771

DISPOSAL SITE

12. **Discrepancy Indication Space** C5

Ticket # 253319 Tons 14.43 Yards

E N Elev.

13. **Waste Disposal Site Owner or Operator:** Certification of receipt of non-hazardous materials covered by this manifest except as noted in item 12.

Name/Title (Printed or Typed) DW

Signature DW Date 12/12/14

CONTRACTOR - WHITE TRANSPORTER - CANARY WASTE DISPOSAL SITE - PINK GENERATOR/OPERATOR - GOLD

52

VONCO V, LLC.

218-626-3830 FAX: 218-626-1009

INDUSTRIAL/NON-HAZARDOUS MATERIAL TRANSPORT AND DISPOSAL MANIFEST

GENERATOR

1. **Work Site Name** Fraser Shipyard
   Address 1 Clough Avenue
   City, St., Zip Superior, WI 54880
   Owner's Name Tom Curelli, Director of Operations
   Owner's Phone No. 715-394-7787 ext 101
2. **Consultant/Contractor** Environmental Trouble Shooters
   Address 3825 Grand Avenue
   City, St., Zip Duluth, MN 55807
   Operator's Phone 218-722-6013

PROFILE #: #14-157-I

3. **Waste Disposal Site** VONCO V, LLC.
   Mailing Address 1100 West Gary Street
   City, St., Zip Duluth, MN 55808
4. **Responsible Agency** MN Pollution Control Agency
   Address 520 Lafayette Road
   City, St., Zip St. Paul, MN 55155-3898

5. Description of Materials	6. Containers (No.-Type)	7. Total Quantity (m^3 or yd^3)
Soil Contaminated with used Petroleum	1- Dump Truck	10-12 CY/truck

8. **Special Handling Instructions and Additional Information**

9. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and governmental regulations. The above listed material(s) is (are) not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law.

Name & Title (Printed or Typed) Tom Curelli Signature T Curelli Date 11/26/14

TRANSPORTER

10. **Transporter 1** (Acknowledgement of receipt of materials)
    Name/Title RJS CONST. GROUP EDWARD JCHRUSCIELSKI Signature [signature] Date 12-12-14
    Address 1 CLOUGH AVE City, St., Zip SUPERIOR WI 54880 Phone No. 715-394-7771
11. **Transporter 2** (Acknowledgement of receipt of materials)
    Name/Title _____ Signature _____ Date _____
    Address ~~1 CLOUGH AVE~~ City, St., Zip SUPERIOR WI 54880 Phone No. ~~715-394-7771~~

DISPOSAL SITE

12. **Discrepancy Indication Space** CS
    Ticket # 253318 Tons 14.25 Yards _____
    E _____ N _____ Elev. _____

13. **Waste Disposal Site Owner or Operator:** Certification of receipt of non-hazardous materials covered by this manifest except as noted in item 12.
    Name/Title (Printed or Typed) DL
    Signature DL Date 12/12/14

CONTRACTOR - WHITE TRANSPORTER - CANARY WASTE DISPOSAL SITE - PINK GENERATOR/OPERATOR - GOLD

54

VONCO V, LLC.

PHONE: 218-626-3830 FAX: 218-626-1009

INDUSTRIAL/NON-HAZARDOUS MATERIAL TRANSPORT AND DISPOSAL MANIFEST

GENERATOR

1. **Work Site Name** Fraser Shipyard
   Address 1 Clough Avenue
   City, St., Zip Superior, WI 54880
   Owner's Name Tom Curelli, Director of Operations
   Owner's Phone No. 715-394-7787 ext 101
2. **Consultant/Contractor** Environmental Trouble Shooters
   Address 3825 Grand Avenue
   City, St., Zip Duluth, MN 55807
   Operator's Phone 218-722-6013

PROFILE #: #14-157-I

3. **Waste Disposal Site** VONCO V, LLC.
   Mailing Address 1100 West Gary Street
   City, St., Zip Duluth, MN 55808
4. **Responsible Agency** MN Pollution Control Agency
   Address 520 Lafayette Road
   City, St., Zip St. Paul, MN 55155-3898

5. Description of Materials	6. Containers (No.-Type)	7. Total Quantity (m^3 or yd^3)
Soil Contaminated with used Petroleum	1- Dump Truck	10-12 CY/truck

8. **Special Handling Instructions and Additional Information**

9. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and governmental regulations. The above listed material(s) is (are) not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law.

Name & Title (Printed or Typed) Tom Curelli Signature T Curelli Date 11/26/14

TRANSPORTER

10. **Transporter 1** (Acknowledgement of receipt of materials)
    Name/Title RJ Const. Group Clarence Lewis Signature Clarence Lewis Date 12-12-14
    Address 1 CLOUGH Ave City, St., Zip Superior WI 54880 Phone No. 715-394-7771
11. **Transporter 2** (Acknowledgement of receipt of materials)
    Name/Title _____ Signature _____ Date _____
    Address _____ City, St., Zip _____ Phone No. _____

DISPOSAL SITE

12. **Discrepancy Indication Space** CS

Ticket # 253315 Tons 13.02 Yards _____

E _____ N _____ Elev. _____

13. **Waste Disposal Site Owner or Operator:** Certification of receipt of non-hazardous materials covered by this manifest except as noted in item 12.

Name/Title (Printed or Typed) DL

Signature DL Date 12/12/14

CONTRACTOR - WHITE TRANSPORTER - CANARY WASTE DISPOSAL SITE - PINK GENERATOR/OPERATOR - GOLD

56

VONCO V, LLC.

PHONE: 218-626-3830 FAX: 218-626-1009

INDUSTRIAL/NON-HAZARDOUS MATERIAL TRANSPORT AND DISPOSAL MANIFEST

PROFILE #: #14-157-I

GENERATOR

1. **Work Site Name** Fraser Shipyard
   Address 1 Clough Avenue
   City, St., Zip Superior, WI 54880
   Owner's Name Tom Curelli, Director of Operations
   Owner's Phone No. 715-394-7787 ext 101
2. **Consultant/Contractor** Environmental Trouble Shooters
   Address 3825 Grand Avenue
   City, St., Zip Duluth, MN 55807
   Operator's Phone 218-722-6013

3. **Waste Disposal Site** VONCO V, LLC.
   Mailing Address 1100 West Gary Street
   City, St., Zip Duluth, MN 55808
4. **Responsible Agency** MN Pollution Control Agency
   Address 520 Lafayette Road
   City, St., Zip St. Paul, MN 55155-3898

5. Description of Materials	6. Containers (No.-Type)	7. Total Quantity (m^3 or yd^3)
Soil Contaminated with used Petroleum	1- Dump Truck	10-12 CY/truck

8. **Special Handling Instructions and Additional Information**

9. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and governmental regulations. The above listed material(s) is (are) not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law.

Name & Title (Printed or Typed) Tom Curelli Signature T Curelli Date 11/26/14

TRANSPORTER

10. **Transporter 1** (Acknowledgement of receipt of materials)

Name/Title _____ Signature _____ Date _____

Address _____ City, St., Zip _____ Phone No. _____

11. **Transporter 2** (Acknowledgement of receipt of materials)

Name/Title RJS Const. Group Charlene Copeland Signature Charlene Copeland Date 12-12-14

Address 1 Clough Ave City, St., Zip Superior WI 54880 Phone No. 715-394-7771

DISPOSAL SITE

12. **Discrepancy Indication Space** C5

Ticket # 253311 Tons 14.67 Yards _____

E _____ N _____ Elev. _____

13. **Waste Disposal Site Owner or Operator:** Certification of receipt of non-hazardous materials covered by this manifest except as noted in item 12.

Name/Title (Printed or Typed) DL

Signature DL Date 12/12/14

CONTRACTOR - WHITE TRANSPORTER - CANARY WASTE DISPOSAL SITE - PINK GENERATOR/OPERATOR - GOLD

5F

VONCO V, LLC.

PHONE: 218-626-3830 FAX: 218-626-1009

INDUSTRIAL/NON-HAZARDOUS MATERIAL TRANSPORT AND DISPOSAL MANIFEST

GENERATOR

1. **Work Site Name** Fraser Shipyard
   Address 1 Clough Avenue
   City, St., Zip Superior, WI 54880
   Owner's Name Tom Curelli, Director of Operations
   Owner's Phone No. 715-394-7787 ext 101
2. **Consultant/Contractor** Environmental Trouble Shooters
   Address 3825 Grand Avenue
   City, St., Zip Duluth, MN 55807
   Operator's Phone 218-722-6013

PROFILE #: #14-157-I

3. **Waste Disposal Site** VONCO V, LLC.
   Mailing Address 1100 West Gary Street
   City, St., Zip Duluth, MN 55808
4. **Responsible Agency** MN Pollution Control Agency
   Address 520 Lafayette Road
   City, St., Zip St. Paul, MN 55155-3898

5. Description of Materials	6. Containers (No.-Type)	7. Total Quantity (m^3 or yd^3)
Soil Contaminated with used Petroleum	1- Dump Truck	10-12 CY/truck

8. **Special Handling Instructions and Additional Information**

9. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and governmental regulations. The above listed material(s) is (are) not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law.

Name & Title (Printed or Typed) Tom Curelli Signature TM Curelli Date 11/26/14

TRANSPORTER

10. **Transporter 1** (Acknowledgement of receipt of materials)
    Name/Title RJS Const. Group Charlene Copeland Signature Charlene Copeland Date 12-12-14
    Address 1 CLOUGH AVE City, St., Zip SUPERIOR, WI 54880 Phone No. 715-394-7771
11. **Transporter 2** (Acknowledgement of receipt of materials)
    Name/Title _____ Signature _____ Date _____
    Address _____ City, St., Zip _____ Phone No. _____

DISPOSAL SITE

12. **Discrepancy Indication Space** C5

Ticket # 253305 Tons 16.60 Yards _____

E _____ N _____ Elev. _____

13. **Waste Disposal Site Owner or Operator:** Certification of receipt of non-hazardous materials covered by this manifest except as noted in item 12.

Name/Title (Printed or Typed) DL

Signature DL Date 12/12/14

CONTRACTOR - WHITE TRANSPORTER - CANARY WASTE DISPOSAL SITE - PINK GENERATOR/OPERATOR - GOLD

5D

NCO V, LLC.

NE: 218-626-3830 FAX: 218-626-1009

NDUSTRIAL/NON-HAZARDOUS MATERIAL TRANSPORT AND DISPOSAL MANIFEST

GENERATOR

1. **Work Site Name** Fraser Shipyard
   Address 1 Clough Avenue
   City, St., Zip Superior, WI 54880
   Owner's Name Tom Curelli, Director of Operations
   Owner's Phone No. 715-394-7787 ext 101
2. **Consultant/Contractor** Environmental Trouble Shooters
   Address 3825 Grand Avenue
   City, St., Zip Duluth, MN 55807
   Operator's Phone 218-722-6013

PROFILE #: #14-157-I

3. **Waste Disposal Site** VONCO V, LLC.
   Mailing Address 1100 West Gary Street
   City, St., Zip Duluth, MN 55808
4. **Responsible Agency** MN Pollution Control Agency
   Address 520 Lafayette Road
   City, St., Zip St. Paul, MN 55155-3898

5. Description of Materials	6. Containers (No.-Type)	7. Total Quantity (m^3 or yd^3)
Soil Contaminated with used Petroleum	1- Dump Truck	10-12 CY/truck

8. **Special Handling Instructions and Additional Information**

9. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and governmental regulations. The above listed material(s) is (are) not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law.

Name & Title (Printed or Typed) Tom Curelli Signature T Curelli Date 11/26/14

TRANSPORTER

10. **Transporter 1** (Acknowledgement of receipt of materials)

Name/Title _____ Signature _____ Date _____

Address _____ City, St., Zip _____ Phone No. _____

11. **Transporter 2** (Acknowledgement of receipt of materials)

Name/Title RJS Const. Group Charlene Copeland Signature Charlene Copeland Date 12-12-14

Address 1 Clough Ave City, St., Zip Superior WI 54880 Phone No. 715-394-7771

DISPOSAL SITE

12. **Discrepancy Indication Space** C5

Ticket # 2533296 Tons 15.05 Yards _____

E _____ N _____ Elev. _____

13. **Waste Disposal Site Owner or Operator:** Certification of receipt of non-hazardous materials covered by this manifest except as noted in item 12.

Name/Title (Printed or Typed) DL

Signature DL Date 12/12/14

CONTRACTOR - WHITE TRANSPORTER - CANARY WASTE DISPOSAL SITE - PINK GENERATOR/OPERATOR - GOLD

CO V, LLC.

: 218-626-3830 FAX: 218-626-1009

JSTRIAL/NON-HAZARDOUS MATERIAL TRANSPORT AND DISPOSAL MANIFEST

GENERATOR

1. **Work Site Name** Fraser Shipyard
   Address 1 Clough Avenue
   City, St., Zip Superior, WI 54880
   Owner's Name Tom Curelli, Director of Operations
   Owner's Phone No. 715-394-7787 ext 101

2. **Consultant/Contractor** Environmental Trouble Shooters
   Address 3825 Grand Avenue
   City, St., Zip Duluth, MN 55807
   Operator's Phone 218-722-6013

PROFILE #: #14-157-I

3. **Waste Disposal Site** VONCO V, LLC.
   Mailing Address 1100 West Gary Street
   City, St., Zip Duluth, MN 55808

4. **Responsible Agency** MN Pollution Control Agency
   Address 520 Lafayette Road
   City, St., Zip St. Paul, MN 55155-3898

5. Description of Materials	6. Containers (No.-Type)	7. Total Quantity (m^3 or yd^3)
Soil Contaminated with used Petroleum	1- Dump Truck	10-12 CY/truck

8. **Special Handling Instructions and Additional Information**

9. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and governmental regulations. The above listed material(s) is (are) not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law.

Name & Title (Printed or Typed) Tom Curelli Signature T Curelli Date 11/26/14

TRANSPORTER

10. **Transporter 1** (Acknowledgement of receipt of materials)
Name/Title RJS Coast Guard Charlene Copeland Signature Charlene Copeland Date 12/12/14
Address 1 Clough Ave City, St., Zip Superior WI 54880 Phone No. 715-394-7771

11. **Transporter 2** (Acknowledgement of receipt of materials)
Name/Title _____ Signature _____ Date _____
Address _____ City, St., Zip _____ Phone No. _____

DISPOSAL SITE

12. **Discrepancy Indication Space** (5)

Ticket # 253288 Tons 14.17 Yards _____
E _____ N _____ Elev. _____

13. **Waste Disposal Site Owner or Operator:** Certification of receipt of non-hazardous materials covered by this manifest except as noted in item 12.

Name/Title (Printed or Typed) DLL
Signature DLL Date 12/12/14

CONTRACTOR - WHITE TRANSPORTER - CANARY WASTE DISPOSAL SITE - PINK GENERATOR/OPERATOR - GOLD

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VONCO V, LLC.

PHONE: 218-626-3830 FAX: 218-626-1009

INDUSTRIAL/NON-HAZARDOUS MATERIAL TRANSPORT AND DISPOSAL MANIFEST

GENERATOR

1. **Work Site Name** Fraser Shipyard
   Address 1 Clough Avenue
   City, St., Zip Superior, WI 54880
   Owner's Name Tom Curelli, Director of Operations
   Owner's Phone No. 715-394-7787 ext 101
2. **Consultant/Contractor** Environmental Trouble Shooters
   Address 3825 Grand Avenue
   City, St., Zip Duluth, MN 55807
   Operator's Phone 218-722-6013

PROFILE #: #14-157-I

3. **Waste Disposal Site** VONCO V, LLC.
   Mailing Address 1100 West Gary Street
   City, St., Zip Duluth, MN 55808
4. **Responsible Agency** MN Pollution Control Agency
   Address 520 Lafayette Road
   City, St., Zip St. Paul, MN 55155-3898

5. Description of Materials	6. Containers (No.-Type)	7. Total Quantity (m^3 or yd^3)
Soil Contaminated with used Petroleum	1- Dump Truck	10-12 CY/truck

8. **Special Handling Instructions and Additional Information**

9. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and governmental regulations. The above listed material(s) is (are) not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law.

Name & Title (Printed or Typed) Tom Curelli Signature T Curelli Date 11/26/14

TRANSPORTER

10. **Transporter 1** (Acknowledgement of receipt of materials)
    Name/Title RJS Const. Group Charlene Copeland Signature Charlene Copeland Date 12-11-14
    Address 1 CLOUGH AVE. City, St., Zip Superior WI, 54880 Phone No. 715-394-7771
11. **Transporter 2** (Acknowledgement of receipt of materials)
    Name/Title _____ Signature _____ Date _____
    Address _____ City, St., Zip _____ Phone No. _____

DISPOSAL SITE

12. **Discrepancy Indication Space** C5

Ticket # 253277 Tons 13.31 Yards _____

E _____ N _____ Elev. _____

13. **Waste Disposal Site Owner or Operator:** Certification of receipt of non-hazardous materials covered by this manifest except as noted in item 12.

Name/Title (Printed or Typed) DL

Signature DL Date 12/12/14

CONTRACTOR - WHITE TRANSPORTER - CANARY WASTE DISPOSAL SITE - PINK GENERATOR/OPERATOR - GOLD

45

VONCO V, LLC.

PHONE: 218-626-3830 FAX: 218-626-1009

INDUSTRIAL/NON-HAZARDOUS MATERIAL TRANSPORT AND DISPOSAL MANIFEST

GENERATOR

1. **Work Site Name** Fraser Shipyard
   Address 1 Clough Avenue
   City, St., Zip Superior, WI 54880
   Owner's Name Tom Curelli, Director of Operations
   Owner's Phone No. 715-394-7787 ext 101
2. **Consultant/Contractor** Environmental Trouble Shooters
   Address 3825 Grand Avenue
   City, St., Zip Duluth, MN 55807
   Operator's Phone 218-722-6013

PROFILE #: #14-157-I

3. **Waste Disposal Site** VONCO V, LLC.
   Mailing Address 1100 West Gary Street
   City, St., Zip Duluth, MN 55808
4. **Responsible Agency** MN Pollution Control Agency
   Address 520 Lafayette Road
   City, St., Zip St. Paul, MN 55155-3898

5. Description of Materials	6. Containers (No.-Type)	7. Total Quantity (m^3 or yd^3)
Soil Contaminated with used Petroleum	1- Dump Truck	10-12 CY/truck

8. **Special Handling Instructions and Additional Information**

9. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and governmental regulations. The above listed material(s) is (are) not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law.
   Name & Title (Printed or Typed) Tom Curelli Signature T Curelli Date 11/26/14

TRANSPORTER

10. **Transporter 1** (Acknowledgement of receipt of materials)
    RJS Const Group
    Name/Title Charlene Copeland/Dump Truck Driver Signature Charlene Copeland Date 12-11-14
    Address 1 CLOUGH AVE. City, St., Zip Superior WI 54880 Phone No. 715-394-7771
11. **Transporter 2** (Acknowledgement of receipt of materials)
    Name/Title _____ Signature _____ Date _____
    Address _____ City, St., Zip _____ Phone No. _____

DISPOSAL SITE

12. **Discrepancy Indication Space** CS
    Ticket # 253267 Tons 15.58 Yards _____
    E _____ N _____ Elev. _____
13. **Waste Disposal Site Owner or Operator:** Certification of receipt of non-hazardous materials covered by this manifest except as noted in item 12.
    Name/Title (Printed or Typed) DU
    Signature DU Date 12/11/14

CONTRACTOR - WHITE TRANSPORTER - CANARY WASTE DISPOSAL SITE - PINK GENERATOR/OPERATOR - GOLD

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VONCO V, LLC.

PHONE: 218-626-3830 FAX: 218-626-1009

INDUSTRIAL/NON-HAZARDOUS MATERIAL TRANSPORT AND DISPOSAL MANIFEST

GENERATOR

1. **Work Site Name** Fraser Shipyard
   Address 1 Clough Avenue
   City, St., Zip Superior, WI 54880
   Owner's Name Tom Curelli, Director of Operations
   Owner's Phone No. 715-394-7787 ext 101
2. **Consultant/Contractor** Environmental Trouble Shooters
   Address 3825 Grand Avenue
   City, St., Zip Duluth, MN 55807
   Operator's Phone 218-722-6013

PROFILE #: #14-157-I

3. **Waste Disposal Site** VONCO V, LLC.
   Mailing Address 1100 West Gary Street
   City, St., Zip Duluth, MN 55808
4. **Responsible Agency** MN Pollution Control Agency
   Address 520 Lafayette Road
   City, St., Zip St. Paul, MN 55155-3898

5. Description of Materials	6. Containers (No.-Type)	7. Total Quantity (m^3 or yd^3)
Soil Contaminated with used Petroleum	1- Dump Truck	10-12 CY/truck

8. **Special Handling Instructions and Additional Information**

9. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and governmental regulations. The above listed material(s) is (are) not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law.

Name & Title (Printed or Typed) Tom Curelli Signature TM Curelli Date 11/26/14

TRANSPORTER

10. **Transporter 1** (Acknowledgement of receipt of materials)

Name/Title _____ Signature _____ Date _____

Address _____ City, St., Zip _____ Phone No. _____

11. **Transporter 2** (Acknowledgement of receipt of materials)

Name/Title Dennis Hyska Signature [signature] Date 12-11

Address Sipsas Trucking City, St., Zip 54847 Phone No. 715-372-822[illegible]

DISPOSAL SITE

12. **Discrepancy Indication Space** 05

Ticket # 2532604 Tons 15.14 Yards _____

E _____ N _____ Elev. _____

13. **Waste Disposal Site Owner or Operator:** Certification of receipt of non-hazardous materials covered by this manifest except as noted in item 12.

Name/Title (Printed or Typed) DL

Signature DL Date 12/11/14

CONTRACTOR - WHITE TRANSPORTER - CANARY WASTE DISPOSAL SITE - PINK GENERATOR/OPERATOR - GOLD

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VONCO V, LLC.

PHONE: 218-626-3830 FAX: 218-626-1009

INDUSTRIAL/NON-HAZARDOUS MATERIAL TRANSPORT AND DISPOSAL MANIFEST

GENERATOR

1. **Work Site Name** Fraser Shipyard
   Address 1 Clough Avenue
   City, St., Zip Superior, WI 54880
   Owner's Name Tom Curelli, Director of Operations
   Owner's Phone No. 715-394-7787 ext 101
2. **Consultant/Contractor** Environmental Trouble Shooters
   Address 3825 Grand Avenue
   City, St., Zip Duluth, MN 55807
   Operator's Phone 218-722-6013

PROFILE #: #14-157-I

3. **Waste Disposal Site** VONCO V, LLC.
   Mailing Address 1100 West Gary Street
   City, St., Zip Duluth, MN 55808
4. **Responsible Agency** MN Pollution Control Agency
   Address 520 Lafayette Road
   City, St., Zip St. Paul, MN 55155-3898

5. Description of Materials	6. Containers (No.-Type)	7. Total Quantity (m^3 or yd^3)
Soil Contaminated with used Petroleum	1- Dump Truck	10-12 CY/truck

8. **Special Handling Instructions and Additional Information**

9. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and governmental regulations. The above listed material(s) is (are) not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law.

Name & Title (Printed or Typed) Tom Curelli Signature T Curelli Date 11/26/14

TRANSPORTER

10. **Transporter 1** (Acknowledgement of receipt of materials)
    Name/Title RSS Consulting Group EDWARD J CHRLSCIULSKI Signature [signature] Date 12-11-14
    Address 1 CLOUGH AVE City, St., Zip Superior WI 54880 Phone No. 715 394-7771
11. **Transporter 2** (Acknowledgement of receipt of materials)
    Name/Title _____ Signature _____ Date _____
    Address _____ City, St., Zip _____ Phone No. _____

DISPOSAL SITE

12. **Discrepancy Indication Space** C5

Ticket # 253262 Tons 11.10 Yards _____
E _____ N _____ Elev. _____

13. **Waste Disposal Site Owner or Operator:** Certification of receipt of non-hazardous materials covered by this manifest except as noted in item 12.

Name/Title (Printed or Typed) DM
Signature DM Date 12/11/14

CONTRACTOR - WHITE TRANSPORTER - CANARY WASTE DISPOSAL SITE - PINK GENERATOR/OPERATOR - GOLD

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JCO V, LLC.

E: 218-626-3830 FAX: 218-626-1009

JUSTRIAL/NON-HAZARDOUS MATERIAL TRANSPORT AND DISPOSAL MANIFEST

PROFILE #: #14-157-I

GENERATOR

1. **Work Site Name** Fraser Shipyard
   Address 1 Clough Avenue
   City, St., Zip Superior, WI 54880
   Owner's Name Tom Curelli, Director of Operations
   Owner's Phone No. 715-394-7787 ext 101
2. **Consultant/Contractor** Environmental Trouble Shooters
   Address 3825 Grand Avenue
   City, St., Zip Duluth, MN 55807
   Operator's Phone 218-722-6013

3. **Waste Disposal Site** VONCO V, LLC.
   Mailing Address 1100 West Gary Street
   City, St., Zip Duluth, MN 55808
4. **Responsible Agency** MN Pollution Control Agency
   Address 520 Lafayette Road
   City, St., Zip St. Paul, MN 55155-3898

5. Description of Materials	6. Containers (No.-Type)	7. Total Quantity (m^3 or yd^3)
Soil Contaminated with used Petroleum	1- Dump Truck	10-12 CY/truck

8. **Special Handling Instructions and Additional Information**

9. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and governmental regulations. The above listed material(s) is (are) not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law.

Name & Title (Printed or Typed) Tom Curelli Signature T Curelli Date 11/26/14

TRANSPORTER

10. **Transporter 1** (Acknowledgement of receipt of materials)
    Name/Title RJS Const. Group Emil Mandila Signature Emil Mandila Date 12-11-14
    Address 1 Clough Ave City, St., Zip Superior WI 54880 Phone No. 715-394-7871
11. **Transporter 2** (Acknowledgement of receipt of materials)
    Name/Title _____ Signature _____ Date _____
    Address _____ City, St., Zip _____ Phone No. _____

DISPOSAL SITE

12. **Discrepancy Indication Space** CS

Ticket # 2532161 Tons 13.46 Yards _____

E _____ N _____ Elev. _____

13. **Waste Disposal Site Owner or Operator:** Certification of receipt of non-hazardous materials covered by this manifest except as noted in item 12.

Name/Title (Printed or Typed) DL

Signature DL Date 12/11/14

CONTRACTOR - WHITE TRANSPORTER - CANARY WASTE DISPOSAL SITE - PINK GENERATOR/OPERATOR - GOLD

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VONCO V, LLC.

E: 218-626-3830 FAX: 218-626-1009

INDUSTRIAL/NON-HAZARDOUS MATERIAL TRANSPORT AND DISPOSAL MANIFEST

PROFILE #: #14-157-I

GENERATOR

1. **Work Site Name** Fraser Shipyard
   Address 1 Clough Avenue
   City, St., Zip Superior, WI 54880
   Owner's Name Tom Curelli, Director of Operations
   Owner's Phone No. 715-394-7787 ext 101
2. **Consultant/Contractor** Environmental Trouble Shooters
   Address 3825 Grand Avenue
   City, St., Zip Duluth, MN 55807
   Operator's Phone 218-722-6013
3. **Waste Disposal Site** VONCO V, LLC.
   Mailing Address 1100 West Gary Street
   City, St., Zip Duluth, MN 55808
4. **Responsible Agency** MN Pollution Control Agency
   Address 520 Lafayette Road
   City, St., Zip St. Paul, MN 55155-3898

5. Description of Materials	6. Containers (No.-Type)	7. Total Quantity (m^3 or yd^3)
Soil Contaminated with used Petroleum	1- Dump Truck	10-12 CY/truck

8. **Special Handling Instructions and Additional Information**

9. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and governmental regulations. The above listed material(s) is (are) not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law.

Name & Title (Printed or Typed) Tom Curelli Signature T Curelli Date 11/26/14

TRANSPORTER

10. **Transporter 1** (Acknowledgement of receipt of materials)
    Name/Title RJS Const Group Charlene Copeland/Dump Truck Driver Signature Charlene Copeland Date 12-11-14
    Address 1 CLOUGH AVE City, St., Zip SUPERIOR WI 54880 Phone No. 715-394-7771
11. **Transporter 2** (Acknowledgement of receipt of materials)
    Name/Title _____ Signature _____ Date _____
    Address _____ City, St., Zip _____ Phone No. _____

DISPOSAL SITE

12. **Discrepancy Indication Space** CS

Ticket # 253256 Tons 14.90 Yards _____

E _____ N _____ Elev. _____

13. **Waste Disposal Site Owner or Operator:** Certification of receipt of non-hazardous materials covered by this manifest except as noted in item 12.

Name/Title (Printed or Typed) DM

Signature DM Date 12/11/14

CONTRACTOR - WHITE TRANSPORTER - CANARY WASTE DISPOSAL SITE - PINK GENERATOR/OPERATOR - GOLD

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NCO V, LLC.

NE: 218-626-3830 FAX: 218-626-1009

DUSTRIAL/NON-HAZARDOUS MATERIAL TRANSPORT AND DISPOSAL MANIFEST

GENERATOR

1. **Work Site Name** Fraser Shipyard
   Address 1 Clough Avenue
   City, St., Zip Superior, WI 54880
   Owner's Name Tom Curelli, Director of Operations
   Owner's Phone No. 715-394-7787 ext 101
2. **Consultant/Contractor** Environmental Trouble Shooters
   Address 3825 Grand Avenue
   City, St., Zip Duluth, MN 55807
   Operator's Phone 218-722-6013

PROFILE #: #14-157-I

3. **Waste Disposal Site** VONCO V, LLC.
   Mailing Address 1100 West Gary Street
   City, St., Zip Duluth, MN 55808
4. **Responsible Agency** MN Pollution Control Agency
   Address 520 Lafayette Road
   City, St., Zip St. Paul, MN 55155-3898

5. Description of Materials	6. Containers (No.-Type)	7. Total Quantity (m^3 or yd^3)
Soil Contaminated with used Petroleum	1- Dump Truck	10-12 CY/truck

8. **Special Handling Instructions and Additional Information**

9. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and governmental regulations. The above listed material(s) is (are) not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law.

Name & Title (Printed or Typed) Tom Curelli Signature T Curelli Date 11/26/14

TRANSPORTER

10. **Transporter 1** (Acknowledgement of receipt of materials)

Name/Title _____ Signature _____ Date _____

Address _____ City, St., Zip _____ Phone No. _____

11. **Transporter 2** (Acknowledgement of receipt of materials)

Name/Title Dennis Hipsher Signature _____ Date 12-11

Address Sipsas Trucking City, St., Zip 54847 Phone No. 715-372-8221

DISPOSAL SITE

12. **Discrepancy Indication Space**

C5

Ticket # 253255 Tons 16.49 Yards _____

E _____ N _____ Elev. _____

13. **Waste Disposal Site Owner or Operator:** Certification of receipt of non-hazardous materials covered by this manifest except as noted in item 12.

Name/Title (Printed or Typed) DM

Signature DM Date 12/11/14

CONTRACTOR - WHITE TRANSPORTER - CANARY WASTE DISPOSAL SITE - PINK GENERATOR/OPERATOR - GOLD

,ICO V, LLC.

,E: 218-626-3830 FAX: 218-626-1009

/USTRIAL/NON-HAZARDOUS MATERIAL TRANSPORT AND DISPOSAL MANIFEST

GENERATOR

1. **Work Site Name** Fraser Shipyard
   Address 1 Clough Avenue
   City, St., Zip Superior, WI 54880
   Owner's Name Tom Curelli, Director of Operations
   Owner's Phone No. 715-394-7787 ext 101
2. **Consultant/Contractor** Environmental Trouble Shooters
   Address 3825 Grand Avenue
   City, St., Zip Duluth, MN 55807
   Operator's Phone 218-722-6013

PROFILE #: #14-157-I

3. **Waste Disposal Site** VONCO V, LLC.
   Mailing Address 1100 West Gary Street
   City, St., Zip Duluth, MN 55808
4. **Responsible Agency** MN Pollution Control Agency
   Address 520 Lafayette Road
   City, St., Zip St. Paul, MN 55155-3898

5. Description of Materials	6. Containers (No.-Type)	7. Total Quantity (m^3 or yd^3)
Soil Contaminated with used Petroleum	1- Dump Truck	10-12 CY/truck

8. **Special Handling Instructions and Additional Information**

9. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and governmental regulations. The above listed material(s) is (are) not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law.

Name & Title (Printed or Typed) Tom Curelli Signature T Curelli Date 11/26/14

TRANSPORTER

10. **Transporter 1** (Acknowledgement of receipt of materials)
    Name/Title RJ's Const. Group EDWARD VCHRUSCIELSKI Signature [signature] Date 12-11-14
    Address 1 CLOUGH AVE City, St., Zip SUPERIOR WI 54880 Phone No. 715-394-7771
11. **Transporter 2** (Acknowledgement of receipt of materials)
    Name/Title _____ Signature _____ Date _____
    Address _____ City, St., Zip _____ Phone No. _____

DISPOSAL SITE

12. **Discrepancy Indication Space** C5

Ticket # 253254 Tons 12.95 Yards _____
E _____ N _____ Elev. _____

13. **Waste Disposal Site Owner or Operator:** Certification of receipt of non-hazardous materials covered by this manifest except as noted in item 12.
    Name/Title (Printed or Typed) DL
    Signature DL Date 12/11/14

CONTRACTOR - WHITE TRANSPORTER - CANARY WASTE DISPOSAL SITE - PINK GENERATOR/OPERATOR - GOLD

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VONCO V, LLC.

E: 218-626-3830 FAX: 218-626-1009

INDUSTRIAL/NON-HAZARDOUS MATERIAL TRANSPORT AND DISPOSAL MANIFEST

PROFILE #: #14-157-I

GENERATOR

1. **Work Site Name** Fraser Shipyard
   Address 1 Clough Avenue
   City, St., Zip Superior, WI 54880
   Owner's Name Tom Curelli, Director of Operations
   Owner's Phone No. 715-394-7787 ext 101
2. **Consultant/Contractor** Environmental Trouble Shooters
   Address 3825 Grand Avenue
   City, St., Zip Duluth, MN 55807
   Operator's Phone 218-722-6013

3. **Waste Disposal Site** VONCO V, LLC.
   Mailing Address 1100 West Gary Street
   City, St., Zip Duluth, MN 55808
4. **Responsible Agency** MN Pollution Control Agency
   Address 520 Lafayette Road
   City, St., Zip St. Paul, MN 55155-3898

5. Description of Materials	6. Containers (No.-Type)	7. Total Quantity (m^3 or yd^3)
Soil Contaminated with used Petroleum	1- Dump Truck	10-12 CY/truck

8. **Special Handling Instructions and Additional Information**

9. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and governmental regulations. The above listed material(s) is (are) not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law.

Name & Title (Printed or Typed) Tom Curelli Signature T Curelli Date 11/26/14

TRANSPORTER

10. **Transporter 1** (Acknowledgement of receipt of materials)
    Name/Title RJS Const Group Emil Mannila Signature Emil Mannila Date 12-11-14
    Address 1 Clough Ave City, St., Zip Superior WI 54880 Phone No. 715-394-7771
11. **Transporter 2** (Acknowledgement of receipt of materials)
    Name/Title _____ Signature _____ Date _____
    Address _____ City, St., Zip _____ Phone No. _____

DISPOSAL SITE

12. **Discrepancy Indication Space** CS

Ticket # 253253 Tons 14.58 Yards _____

E _____ N _____ Elev. _____

13. **Waste Disposal Site Owner or Operator:** Certification of receipt of non-hazardous materials covered by this manifest except as noted in item 12.

Name/Title (Printed or Typed) DL

Signature DL Date 12/11/14

CONTRACTOR - WHITE TRANSPORTER - CANARY WASTE DISPOSAL SITE - PINK GENERATOR/OPERATOR - GOLD

ONCO V, LLC.

PHONE: 218-626-3830 FAX: 218-626-1009

INDUSTRIAL/NON-HAZARDOUS MATERIAL TRANSPORT AND DISPOSAL MANIFEST

GENERATOR

1. **Work Site Name** Fraser Shipyard
   Address 1 Clough Avenue
   City, St., Zip Superior, WI 54880
   Owner's Name Tom Curelli, Director of Operations
   Owner's Phone No. 715-394-7787 ext 101
2. **Consultant/Contractor** Environmental Trouble Shooters
   Address 3825 Grand Avenue
   City, St., Zip Duluth, MN 55807
   Operator's Phone 218-722-6013

PROFILE #: #14-157-I

3. **Waste Disposal Site** VONCO V, LLC.
   Mailing Address 1100 West Gary Street
   City, St., Zip Duluth, MN 55808
4. **Responsible Agency** MN Pollution Control Agency
   Address 520 Lafayette Road
   City, St., Zip St. Paul, MN 55155-3898

5. Description of Materials	6. Containers (No.-Type)	7. Total Quantity (m^3 or yd^3)
Soil Contaminated with used Petroleum	1- Dump Truck	10-12 CY/truck

8. **Special Handling Instructions and Additional Information**

9. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and governmental regulations. The above listed material(s) is (are) not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law.

Name & Title (Printed or Typed) Tom Curelli Signature Tom Curelli Date 11/26/14

TRANSPORTER

10. **Transporter 1** (Acknowledgement of receipt of materials)
    Name/Title RJS CONST. GROUP Charlene Copeland / Dump Truck Driver Signature Charlene Copeland Date 12-11-14
    Address 1 CLOUGH AVE City, St., Zip SUPERIOR WI 54880 Phone No. 715-394-7771
11. **Transporter 2** (Acknowledgement of receipt of materials)
    Name/Title _____ Signature _____ Date _____
    Address _____ City, St., Zip _____ Phone No. _____

DISPOSAL SITE

12. **Discrepancy Indication Space** C5

Ticket # 253250 Tons 14.61 Yards _____

E _____ N _____ Elev. _____

13. **Waste Disposal Site Owner or Operator:** Certification of receipt of non-hazardous materials covered by this manifest except as noted in item 12.

Name/Title (Printed or Typed) DU

Signature DU Date 12/11/14

CONTRACTOR - WHITE TRANSPORTER - CANARY WASTE DISPOSAL SITE - PINK GENERATOR/OPERATOR - GOLD

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ICO V, LLC.

E: 218-626-3830 FAX: 218-626-1009

JUSTRIAL/NON-HAZARDOUS MATERIAL TRANSPORT AND DISPOSAL MANIFEST

GENERATOR

PROFILE #: #14-157-I

1. **Work Site Name** Fraser Shipyard
   Address 1 Clough Avenue
   City, St., Zip Superior, WI 54880
   Owner's Name Tom Curelli, Director of Operations
   Owner's Phone No. 715-394-7787 ext 101

2. **Consultant/Contractor** Environmental Trouble Shooters
   Address 3825 Grand Avenue
   City, St., Zip Duluth, MN 55807
   Operator's Phone 218-722-6013

3. **Waste Disposal Site** VONCO V, LLC.
   Mailing Address 1100 West Gary Street
   City, St., Zip Duluth, MN 55808

4. **Responsible Agency** MN Pollution Control Agency
   Address 520 Lafayette Road
   City, St., Zip St. Paul, MN 55155-3898

5. Description of Materials	6. Containers (No.-Type)	7. Total Quantity (m^3 or yd^3)
Soil Contaminated with used Petroleum	1- Dump Truck	10-12 CY/truck

8. **Special Handling Instructions and Additional Information**

9. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and governmental regulations. The above listed material(s) is (are) not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law.

Name & Title (Printed or Typed) Tom Curelli Signature T Curelli Date 11/26/14

TRANSPORTER

10. **Transporter 1** (Acknowledgement of receipt of materials)

Name/Title _____ Signature _____ Date _____

Address _____ City, St., Zip _____ Phone No. _____

11. **Transporter 2** (Acknowledgement of receipt of materials)

Name/Title Dennis Hipshen Signature _____ Date _____

Address Sipsas Trucking City, St., Zip 54847 Phone No. 715-372-8221

DISPOSAL SITE

12. **Discrepancy Indication Space** C5

Ticket # 253249 Tons 13.88 Yards _____

E _____ N _____ Elev. _____

13. **Waste Disposal Site Owner or Operator:** Certification of receipt of non-hazardous materials covered by this manifest except as noted in item 12.

Name/Title (Printed or Typed) DH

Signature DH Date 12/11/14

CONTRACTOR - WHITE TRANSPORTER - CANARY WASTE DISPOSAL SITE - PINK GENERATOR/OPERATOR - GOLD

VONCO V, LLC.

PHONE: 218-626-3830 FAX: 218-626-1009

INDUSTRIAL/NON-HAZARDOUS MATERIAL TRANSPORT AND DISPOSAL MANIFEST

GENERATOR

1. **Work Site Name** Fraser Shipyard
   Address 1 Clough Avenue
   City, St., Zip Superior, WI 54880
   Owner's Name Tom Curelli, Director of Operations
   Owner's Phone No. 715-394-7787 ext 101
2. **Consultant/Contractor** Environmental Trouble Shooters
   Address 3825 Grand Avenue
   City, St., Zip Duluth, MN 55807
   Operator's Phone 218-722-6013

PROFILE #: #14-157-I

3. **Waste Disposal Site** VONCO V, LLC.
   Mailing Address 1100 West Gary Street
   City, St., Zip Duluth, MN 55808
4. **Responsible Agency** MN Pollution Control Agency
   Address 520 Lafayette Road
   City, St., Zip St. Paul, MN 55155-3898

5. Description of Materials	6. Containers (No.-Type)	7. Total Quantity (m^3 or yd^3)
Soil Contaminated with used Petroleum	1- Dump Truck	10-12 CY/truck

8. **Special Handling Instructions and Additional Information**

9. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and governmental regulations. The above listed material(s) is (are) not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law.

Name & Title (Printed or Typed) Tom Curelli Signature T M Curelli Date 11/26/14

TRANSPORTER

10. **Transporter 1** (Acknowledgement of receipt of materials)
    Name/Title RJS CONST GROUP EDWARD JEZEWSKI Signature [signature] Date 12-11-14
    Address 1 CLOUGH AVE. City, St., Zip SUPERIOR WI 54880 Phone No. 715-394-7771
11. **Transporter 2** (Acknowledgement of receipt of materials)
    Name/Title _____ Signature _____ Date _____
    Address _____ City, St., Zip _____ Phone No. _____

DISPOSAL SITE

12. **Discrepancy Indication Space** C5

Ticket # 253248 Tons 11.59 Yards _____

E _____ N _____ Elev. _____

13. **Waste Disposal Site Owner or Operator:** Certification of receipt of non-hazardous materials covered by this manifest except as noted in item 12.

Name/Title (Printed or Typed) DL

Signature DL Date 12/11/14

CONTRACTOR - WHITE TRANSPORTER - CANARY WASTE DISPOSAL SITE - PINK GENERATOR/OPERATOR - GOLD

NCO V, LLC.

NE: 218-626-3830 FAX: 218-626-1009

NDUSTRIAL/NON-HAZARDOUS MATERIAL TRANSPORT AND DISPOSAL MANIFEST

GENERATOR

1. **Work Site Name** Fraser Shipyard
   Address 1 Clough Avenue
   City, St., Zip Superior, WI 54880
   Owner's Name Tom Curelli, Director of Operations
   Owner's Phone No. 715-394-7787 ext 101

2. **Consultant/Contractor** Environmental Trouble Shooters
   Address 3825 Grand Avenue
   City, St., Zip Duluth, MN 55807
   Operator's Phone 218-722-6013

PROFILE #: #14-157-I

3. **Waste Disposal Site** VONCO V, LLC.
   Mailing Address 1100 West Gary Street
   City, St., Zip Duluth, MN 55808

4. **Responsible Agency** MN Pollution Control Agency
   Address 520 Lafayette Road
   City, St., Zip St. Paul, MN 55155-3898

5. Description of Materials	6. Containers (No.-Type)	7. Total Quantity (m^3 or yd^3)
Soil Contaminated with used Petroleum	1- Dump Truck	10-12 CY/truck

8. **Special Handling Instructions and Additional Information**

9. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and governmental regulations. The above listed material(s) is (are) not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law.

Name & Title (Printed or Typed) Tom Curelli Signature T Curelli Date 11/26/14

TRANSPORTER

10. **Transporter 1** (Acknowledgement of receipt of materials)
    Name/Title RJS Const. Group Emil Mannika Signature Emil Mannika Date 12-11-14
    Address 1 CLOUGH AVE. City, St., Zip SUPERIOR WI 54880 Phone No. 715-394-7771

11. **Transporter 2** (Acknowledgement of receipt of materials)
    Name/Title _____ Signature _____ Date _____
    Address _____ City, St., Zip _____ Phone No. _____

DISPOSAL SITE

12. **Discrepancy Indication Space** C5

Ticket # 253247 Tons 10.14 Yards _____
E _____ N _____ Elev. _____

13. **Waste Disposal Site Owner or Operator:** Certification of receipt of non-hazardous materials covered by this manifest except as noted in item 12.

Name/Title (Printed or Typed) DM
Signature DM Date 12/11/14

CONTRACTOR - WHITE TRANSPORTER - CANARY WASTE DISPOSAL SITE - PINK GENERATOR/OPERATOR - GOLD

CO V, LLC.

: 218-626-3830 FAX: 218-626-1009

STRIAL/NON-HAZARDOUS MATERIAL TRANSPORT AND DISPOSAL MANIFEST

GENERATOR

1. **Work Site Name** Fraser Shipyard
   Address 1 Clough Avenue
   City, St., Zip Superior, WI 54880
   Owner's Name Tom Curelli, Director of Operations
   Owner's Phone No. 715-394-7787 ext 101
2. **Consultant/Contractor** Environmental Trouble Shooters
   Address 3825 Grand Avenue
   City, St., Zip Duluth, MN 55807
   Operator's Phone 218-722-6013

PROFILE #: #14-157-I

3. **Waste Disposal Site** VONCO V, LLC.
   Mailing Address 1100 West Gary Street
   City, St., Zip Duluth, MN 55808
4. **Responsible Agency** MN Pollution Control Agency
   Address 520 Lafayette Road
   City, St., Zip St. Paul, MN 55155-3898

5. Description of Materials	6. Containers (No.-Type)	7. Total Quantity (m^3 or yd^3)
Soil Contaminated with used Petroleum	1- Dump Truck	10-12 CY/truck

8. **Special Handling Instructions and Additional Information**

9. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and governmental regulations. The above listed material(s) is (are) not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law.

Name & Title (Printed or Typed) Tom Curelli Signature T Curelli Date 11/26/14

TRANSPORTER

10. **Transporter 1** (Acknowledgement of receipt of materials)
    Name/Title RJS CONST. GROUP Charlene Copeland / Dump Truck Driver Signature Charlene Copeland Date 12-11-14
    Address 1 CLOUGH AVE City, St., Zip SUPERIOR WI 54880 Phone No. 715-394-7771
11. **Transporter 2** (Acknowledgement of receipt of materials)
    Name/Title _____ Signature _____ Date _____
    Address _____ City, St., Zip _____ Phone No. _____

DISPOSAL SITE

12. **Discrepancy Indication Space** C5

Ticket # 253244 Tons 13.77 Yards _____

E _____ N _____ Elev. _____

13. **Waste Disposal Site Owner or Operator:** Certification of receipt of non-hazardous materials covered by this manifest except as noted in item 12.

Name/Title (Printed or Typed) DL

Signature DL Date 12/11/14

CONTRACTOR - WHITE TRANSPORTER - CANARY WASTE DISPOSAL SITE - PINK GENERATOR/OPERATOR - GOLD

ONCO V, LLC.

PHONE: 218-626-3830 FAX: 218-626-1009

INDUSTRIAL/NON-HAZARDOUS MATERIAL TRANSPORT AND DISPOSAL MANIFEST

GENERATOR

1. **Work Site Name** Fraser Shipyard
   Address 1 Clough Avenue
   City, St., Zip Superior, WI 54880
   Owner's Name Tom Curelli, Director of Operations
   Owner's Phone No. 715-394-7787 ext 101
2. **Consultant/Contractor** Environmental Trouble Shooters
   Address 3825 Grand Avenue
   City, St., Zip Duluth, MN 55807
   Operator's Phone 218-722-6013

PROFILE #: #14-157-I

3. **Waste Disposal Site** VONCO V, LLC.
   Mailing Address 1100 West Gary Street
   City, St., Zip Duluth, MN 55808
4. **Responsible Agency** MN Pollution Control Agency
   Address 520 Lafayette Road
   City, St., Zip St. Paul, MN 55155-3898

5. Description of Materials	6. Containers (No.-Type)	7. Total Quantity (m^3 or yd^3)
Soil Contaminated with used Petroleum	1- Dump Truck	10-12 CY/truck

8. **Special Handling Instructions and Additional Information**

9. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and governmental regulations. The above listed material(s) is (are) not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law.

Name & Title (Printed or Typed) Tom Curelli Signature T M Curelli Date 11/26/14

TRANSPORTER

10. **Transporter 1** (Acknowledgement of receipt of materials)

Name/Title _____ Signature _____ Date _____

Address _____ City, St., Zip _____ Phone No. _____

11. **Transporter 2** (Acknowledgement of receipt of materials)

Name/Title Dennis Hipsher Signature _____ Date 12-11-14

Address Sipsas Trucking City, St., Zip 54847 Phone No. 715-392-822

DISPOSAL SITE

12. **Discrepancy Indication Space** C5

Ticket # 253243 Tons 15.56 Yards _____

E _____ N _____ Elev. _____

13. **Waste Disposal Site Owner or Operator:** Certification of receipt of non-hazardous materials covered by this manifest except as noted in item 12.

Name/Title (Printed or Typed) _____

Signature _____ Date 12/11/14

CONTRACTOR - WHITE TRANSPORTER - CANARY WASTE DISPOSAL SITE - PINK GENERATOR/OPERATOR - GOLD

NCO V, LLC.

NE: 218-626-3830 FAX: 218-626-1009

DUSTRIAL/NON-HAZARDOUS MATERIAL TRANSPORT AND DISPOSAL MANIFEST

GENERATOR

1. **Work Site Name** Fraser Shipyard
   Address 1 Clough Avenue
   City, St., Zip Superior, WI 54880
   Owner's Name Tom Curelli, Director of Operations
   Owner's Phone No. 715-394-7787 ext 101
2. **Consultant/Contractor** Environmental Trouble Shooters
   Address 3825 Grand Avenue
   City, St., Zip Duluth, MN 55807
   Operator's Phone 218-722-6013

PROFILE #: #14-157-I

3. **Waste Disposal Site** VONCO V, LLC.
   Mailing Address 1100 West Gary Street
   City, St., Zip Duluth, MN 55808
4. **Responsible Agency** MN Pollution Control Agency
   Address 520 Lafayette Road
   City, St., Zip St. Paul, MN 55155-3898

5. Description of Materials	6. Containers (No.-Type)	7. Total Quantity (m^3 or yd^3)
Soil Contaminated with used Petroleum	1- Dump Truck	10-12 CY/truck

8. **Special Handling Instructions and Additional Information**

9. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and governmental regulations. The above listed material(s) is (are) not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law.
   Name & Title (Printed or Typed) Tom Curelli Signature TM Curelli Date 11/26/14

TRANSPORTER

10. **Transporter 1** (Acknowledgement of receipt of materials)
    Name/Title RJS Const Group EDWARD J CHRUSCIELSKI Signature [signature] Date 12-11-14
    Address 1 CLOUGH AVE City, St., Zip Superior WI 54880 Phone No. 715-394-7771
11. **Transporter 2** (Acknowledgement of receipt of materials)
    Name/Title _____ Signature _____ Date _____
    Address _____ City, St., Zip _____ Phone No. _____

DISPOSAL SITE

12. **Discrepancy Indication Space** CS
    Ticket # 253242 Tons 13.69 Yards _____
    E _____ N _____ Elev. _____

13. **Waste Disposal Site Owner or Operator:** Certification of receipt of non-hazardous materials covered by this manifest except as noted in item 12.
    Name/Title (Printed or Typed) DL
    Signature DL Date 12/11/14

CONTRACTOR - WHITE TRANSPORTER - CANARY WASTE DISPOSAL SITE - PINK GENERATOR/OPERATOR - GOLD

VONCO V, LLC.

PHONE: 218-626-3830 FAX: 218-626-1009

INDUSTRIAL/NON-HAZARDOUS MATERIAL TRANSPORT AND DISPOSAL MANIFEST

GENERATOR

1. **Work Site Name** Fraser Shipyard
   Address 1 Clough Avenue
   City, St., Zip Superior, WI 54880
   Owner's Name Tom Curelli, Director of Operations
   Owner's Phone No. 715-394-7787 ext 101
2. **Consultant/Contractor** Environmental Trouble Shooters
   Address 3825 Grand Avenue
   City, St., Zip Duluth, MN 55807
   Operator's Phone 218-722-6013

PROFILE #: #14-157-I

3. **Waste Disposal Site** VONCO V, LLC.
   Mailing Address 1100 West Gary Street
   City, St., Zip Duluth, MN 55808
4. **Responsible Agency** MN Pollution Control Agency
   Address 520 Lafayette Road
   City, St., Zip St. Paul, MN 55155-3898

5. Description of Materials	6. Containers (No.-Type)	7. Total Quantity (m^3 or yd^3)
Soil Contaminated with used Petroleum	1- Dump Truck	10-12 CY/truck

8. **Special Handling Instructions and Additional Information**

9. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and governmental regulations. The above listed material(s) is (are) not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law.

Name & Title (Printed or Typed) Tom Curelli Signature TM Curelli Date 11/26/14

TRANSPORTER

10. **Transporter 1** (Acknowledgement of receipt of materials)
    Name/Title RJS Const. Group Emil Mannila Signature Emil Mannila Date 12-11-14
    Address 1 Clough Ave City, St., Zip Superior WI 54880 Phone No. 715-394-7771
11. **Transporter 2** (Acknowledgement of receipt of materials)
    Name/Title _____ Signature _____ Date _____
    Address _____ City, St., Zip _____ Phone No. _____

DISPOSAL SITE

12. **Discrepancy Indication Space** 05

Ticket # 253241 Tons 11.05 Yards _____

E _____ N _____ Elev. _____

13. **Waste Disposal Site Owner or Operator:** Certification of receipt of non-hazardous materials covered by this manifest except as noted in item 12.

Name/Title (Printed or Typed) DW

Signature DW Date 12/11/14

CONTRACTOR - WHITE TRANSPORTER - CANARY WASTE DISPOSAL SITE - PINK GENERATOR/OPERATOR - GOLD

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VONCO V, LLC.

PHONE: 218-626-3830 FAX: 218-626-1009

INDUSTRIAL/NON-HAZARDOUS MATERIAL TRANSPORT AND DISPOSAL MANIFEST

GENERATOR

1. **Work Site Name** Fraser Shipyard
   Address 1 Clough Avenue
   City, St., Zip Superior, WI 54880
   Owner's Name Tom Curelli, Director of Operations
   Owner's Phone No. 715-394-7787 ext 101
2. **Consultant/Contractor** Environmental Trouble Shooters
   Address 3825 Grand Avenue
   City, St., Zip Duluth, MN 55807
   Operator's Phone 218-722-6013

PROFILE #: #14-157-I

3. **Waste Disposal Site** VONCO V, LLC.
   Mailing Address 1100 West Gary Street
   City, St., Zip Duluth, MN 55808
4. **Responsible Agency** MN Pollution Control Agency
   Address 520 Lafayette Road
   City, St., Zip St. Paul, MN 55155-3898

5. Description of Materials	6. Containers (No.-Type)	7. Total Quantity (m^3 or yd^3)
Soil Contaminated with used Petroleum	1- Dump Truck	10-12 CY/truck

8. **Special Handling Instructions and Additional Information**

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Name & Title (Printed or Typed) Tom Curelli Signature T Curelli Date 11/26/14

TRANSPORTER

10. **Transporter 1** (Acknowledgement of receipt of materials)

Name/Title _____ Signature _____ Date _____

Address _____ City, St., Zip _____ Phone No. _____

11. **Transporter 2** (Acknowledgement of receipt of materials)

Name/Title Dennis Hipshen Signature _____ Date 12-10

Address Sipsas Trucking City, St., Zip 54847 Phone No. 715-372-5221

DISPOSAL SITE

12. **Discrepancy Indication Space** C5

Ticket # 253235 Tons 15.02 Yards _____

E _____ N _____ Elev. _____

13. **Waste Disposal Site Owner or Operator:** Certification of receipt of non-hazardous materials covered by this manifest except as noted in item 12.

Name/Title (Printed or Typed) DH

Signature DH Date 12/11/14

CONTRACTOR - WHITE TRANSPORTER - CANARY WASTE DISPOSAL SITE - PINK GENERATOR/OPERATOR - GOLD

VONCO V, LLC.

PHONE: 218-626-3830 FAX: 218-626-1009

INDUSTRIAL/NON-HAZARDOUS MATERIAL TRANSPORT AND DISPOSAL MANIFEST

GENERATOR

1. **Work Site Name** Fraser Shipyard
   Address 1 Clough Avenue
   City, St., Zip Superior, WI 54880
   Owner's Name Tom Curelli, Director of Operations
   Owner's Phone No. 715-394-7787 ext 101

2. **Consultant/Contractor** Environmental Trouble Shooters
   Address 3825 Grand Avenue
   City, St., Zip Duluth, MN 55807
   Operator's Phone 218-722-6013

PROFILE #: #14-157-I

3. **Waste Disposal Site** VONCO V, LLC.
   Mailing Address 1100 West Gary Street
   City, St., Zip Duluth, MN 55808

4. **Responsible Agency** MN Pollution Control Agency
   Address 520 Lafayette Road
   City, St., Zip St. Paul, MN 55155-3898

5. Description of Materials	6. Containers (No.-Type)	7. Total Quantity (m^3 or yd^3)
Soil Contaminated with used Petroleum	1- Dump Truck	10-12 CY/truck

8. **Special Handling Instructions and Additional Information**

9. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and governmental regulations. The above listed material(s) is (are) not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law.

Name & Title (Printed or Typed) Tom Curelli Signature T M Curelli Date 11/26/14

TRANSPORTER

10. **Transporter 1** (Acknowledgement of receipt of materials)
RJS CONST. GROUP
Name/Title Charlene Copeland Signature Charlene Copeland Date 12-11-14
SUPERIOR
Address 1 CLOUGH AVE City, St., Zip WI 54880 Phone No. 715-394-7771

11. **Transporter 2** (Acknowledgement of receipt of materials)
Name/Title _____ Signature _____ Date _____
Address _____ City, St., Zip _____ Phone No. _____

DISPOSAL SITE

12. **Discrepancy Indication Space** C5

Ticket # 253234 Tons 11.61 Yards _____
E _____ N _____ Elev. _____

13. **Waste Disposal Site Owner or Operator:** Certification of receipt of non-hazardous materials covered by this manifest except as noted in item 12.

Name/Title (Printed or Typed) DLL
Signature DLL Date 12/11/14

CONTRACTOR - WHITE TRANSPORTER - CANARY WASTE DISPOSAL SITE - PINK GENERATOR/OPERATOR - GOLD

25

ɅCO V, LLC.

Ɛ: 218-626-3830 FAX: 218-626-1009

ɅSTRIAL/NON-HAZARDOUS MATERIAL TRANSPORT AND DISPOSAL MANIFEST

PROFILE #: #14-157-I

GENERATOR

1. **Work Site Name** Fraser Shipyard
   Address 1 Clough Avenue
   City, St., Zip Superior, WI 54880
   Owner's Name Tom Curelli, Director of Operations
   Owner's Phone No. 715-394-7787 ext 101

2. **Consultant/Contractor** Environmental Trouble Shooters
   Address 3825 Grand Avenue
   City, St., Zip Duluth, MN 55807
   Operator's Phone 218-722-6013

3. **Waste Disposal Site** **VONCO V, LLC.**
   Mailing Address **1100 West Gary Street**
   City, St., Zip **Duluth, MN 55808**

4. **Responsible Agency** **MN Pollution Control Agency**
   Address **520 Lafayette Road**
   City, St., Zip **St. Paul, MN 55155-3898**

5. Description of Materials	6. Containers (No.-Type)	7. Total Quantity (m^3 or yd^3)
Soil Contaminated with used Petroleum	1- Dump Truck	10-12 CY/truck

8. **Special Handling Instructions and Additional Information**

9. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and governmental regulations. The above listed material(s) is (are) not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law.

Name & Title (Printed or Typed) Tom Curelli Signature T M Curelli Date 11/26/14

TRANSPORTER

10. **Transporter 1** (Acknowledgement of receipt of materials)
    Name/Title RJS CONST GROUP / EDWARD J OHRVSCIELSKI Signature [signature] Date 12-11-14
    Address 1 CLOUGH AVE City, St., Zip SUPERIOR WI 54880 Phone No. 715-394-7771

11. **Transporter 2** (Acknowledgement of receipt of materials)
    Name/Title ______ Signature ______ Date ______
    Address ______ City, St., Zip ______ Phone No. ______

DISPOSAL SITE

12. **Discrepancy Indication Space** C5
    Ticket # 253232 Tons 14.00 Yards ______
    E ______ N ______ Elev. ______

13. **Waste Disposal Site Owner or Operator:** Certification of receipt of non-hazardous materials covered by this manifest except as noted in item 12.
    Name/Title (Printed or Typed) DM
    Signature DM Date 12/11/14

CONTRACTOR - WHITE TRANSPORTER - CANARY WASTE DISPOSAL SITE - PINK GENERATOR/OPERATOR - GOLD

CO V, LLC.

. 218-626-3830 FAX: 218-626-1009

STRIAL/NON-HAZARDOUS MATERIAL TRANSPORT AND DISPOSAL MANIFEST

GENERATOR

1. **Work Site Name** Fraser Shipyard
   Address 1 Clough Avenue
   City, St., Zip Superior, WI 54880
   Owner's Name Tom Curelli, Director of Operations
   Owner's Phone No. 715-394-7787 ext 101
2. **Consultant/Contractor** Environmental Trouble Shooters
   Address 3825 Grand Avenue
   City, St., Zip Duluth, MN 55807
   Operator's Phone 218-722-6013

PROFILE #: #14-157-I

3. **Waste Disposal Site** VONCO V, LLC.
   Mailing Address 1100 West Gary Street
   City, St., Zip Duluth, MN 55808
4. **Responsible Agency** MN Pollution Control Agency
   Address 520 Lafayette Road
   City, St., Zip St. Paul, MN 55155-3898

5. Description of Materials	6. Containers (No.-Type)	7. Total Quantity (m^3 or yd^3)
Soil Contaminated with used Petroleum	1- Dump Truck	10-12 CY/truck

8. **Special Handling Instructions and Additional Information**

9. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and governmental regulations. The above listed material(s) is (are) not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law.

Name & Title (Printed or Typed) Tom Curelli Signature TM Curelli Date 11/26/14

TRANSPORTER

10. **Transporter 1** (Acknowledgement of receipt of materials)
    Name/Title RJS CONST GROUP Emil Mannila Signature [signature] Date 12-11-14
    Address 1 CLOUGH AVE City, St., Zip SUPERIOR WI 54880 Phone No. 715-394-7771
11. **Transporter 2** (Acknowledgement of receipt of materials)
    Name/Title _____ Signature _____ Date _____
    Address _____ City, St., Zip _____ Phone No. _____

DISPOSAL SITE

12. **Discrepancy Indication Space** CS

Ticket # 253231 Tons 11.73 Yards _____

E _____ N _____ Elev. _____

13. **Waste Disposal Site Owner or Operator:** Certification of receipt of non-hazardous materials covered by this manifest except as noted in item 12.

Name/Title (Printed or Typed) DM

Signature DM Date 12/11/14

CONTRACTOR - WHITE TRANSPORTER - CANARY WASTE DISPOSAL SITE - PINK GENERATOR/OPERATOR - GOLD

ONCO V, LLC.

PHONE: 218-626-3830 FAX: 218-626-1009

INDUSTRIAL/NON-HAZARDOUS MATERIAL TRANSPORT AND DISPOSAL MANIFEST

GENERATOR

1. **Work Site Name** Fraser Shipyard
   Address 1 Clough Avenue
   City, St., Zip Superior, WI 54880
   Owner's Name Tom Curelli, Director of Operations
   Owner's Phone No. 715-394-7787 ext 101
2. **Consultant/Contractor** Environmental Trouble Shooters
   Address 3825 Grand Avenue
   City, St., Zip Duluth, MN 55807
   Operator's Phone 218-722-6013

PROFILE #: #14-157-I

3. **Waste Disposal Site** VONCO V, LLC.
   Mailing Address 1100 West Gary Street
   City, St., Zip Duluth, MN 55808
4. **Responsible Agency** MN Pollution Control Agency
   Address 520 Lafayette Road
   City, St., Zip St. Paul, MN 55155-3898

5. Description of Materials	6. Containers (No.-Type)	7. Total Quantity (m^3 or yd^3)
Soil Contaminated with used Petroleum	1- Dump Truck	10-12 CY/truck

8. **Special Handling Instructions and Additional Information**

9. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and governmental regulations. The above listed material(s) is (are) not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law.

Name & Title (Printed or Typed) Tom Curelli Signature T M Curelli Date 11/26/14

TRANSPORTER

10. **Transporter 1** (Acknowledgement of receipt of materials)

Name/Title _____ Signature _____ Date _____

Address _____ City, St., Zip _____ Phone No. _____

11. **Transporter 2** (Acknowledgement of receipt of materials)

Name/Title Dennis Hipshen Signature _____ Date _____

Address S. Pbas Trucking City, St., Zip 54847 Phone No. 715-372-822

DISPOSAL SITE

12. **Discrepancy Indication Space** CS

Ticket # 253227 Tons 16.03 Yards _____

E _____ N _____ Elev. _____

13. **Waste Disposal Site Owner or Operator:** Certification of receipt of non-hazardous materials covered by this manifest except as noted in item 12.

Name/Title (Printed or Typed) DL

Signature DL Date 12/11/14

CONTRACTOR - WHITE TRANSPORTER - CANARY WASTE DISPOSAL SITE - PINK GENERATOR/OPERATOR - GOLD

VONCO V, LLC.

PHONE: 218-626-3830 FAX: 218-626-1009

INDUSTRIAL/NON-HAZARDOUS MATERIAL TRANSPORT AND DISPOSAL MANIFEST

GENERATOR

1. **Work Site Name** Fraser Shipyard
   Address 1 Clough Avenue
   City, St., Zip Superior, WI 54880
   Owner's Name Tom Curelli, Director of Operations
   Owner's Phone No. 715-394-7787 ext 101
2. **Consultant/Contractor** Environmental Trouble Shooters
   Address 3825 Grand Avenue
   City, St., Zip Duluth, MN 55807
   Operator's Phone 218-722-6013

PROFILE #: #14-157-I

3. **Waste Disposal Site** VONCO V, LLC.
   Mailing Address 1100 West Gary Street
   City, St., Zip Duluth, MN 55808
4. **Responsible Agency** MN Pollution Control Agency
   Address 520 Lafayette Road
   City, St., Zip St. Paul, MN 55155-3898

5. Description of Materials	6. Containers (No.-Type)	7. Total Quantity (m^3 or yd^3)
Soil Contaminated with used Petroleum	1- Dump Truck	10-12 CY/truck

8. **Special Handling Instructions and Additional Information**

9. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and governmental regulations. The above listed material(s) is (are) not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law.

Name & Title (Printed or Typed) Tom Curelli Signature T M Curelli Date 11/26/14

TRANSPORTER

10. **Transporter 1** (Acknowledgement of receipt of materials)
    Name/Title RJS Const. Group Charlene Copeland/Dump Truck Driver Signature Charlene Copeland Date 12-1-14
    Address 1 Clough Ave City, St., Zip Superior WI 54880 Phone No. 715-394-7771
11. **Transporter 2** (Acknowledgement of receipt of materials)
    Name/Title _____ Signature _____ Date _____
    Address _____ City, St., Zip _____ Phone No. _____

DISPOSAL SITE

12. **Discrepancy Indication Space** 05

Ticket # 253226 Tons 12.95 Yards _____

E _____ N _____ Elev. _____

13. **Waste Disposal Site Owner or Operator:** Certification of receipt of non-hazardous materials covered by this manifest except as noted in item 12.

Name/Title (Printed or Typed) DM

Signature DM Date 12/11/14

CONTRACTOR - WHITE TRANSPORTER - CANARY WASTE DISPOSAL SITE - PINK GENERATOR/OPERATOR - GOLD

,CO V, LLC.

.: 218-626-3830 FAX: 218-626-1009

JSTRIAL/NON-HAZARDOUS MATERIAL TRANSPORT AND DISPOSAL MANIFEST

GENERATOR

1. **Work Site Name** Fraser Shipyard
   Address 1 Clough Avenue
   City, St., Zip Superior, WI 54880
   Owner's Name Tom Curelli, Director of Operations
   Owner's Phone No. 715-394-7787 ext 101
2. **Consultant/Contractor** Environmental Trouble Shooters
   Address 3825 Grand Avenue
   City, St., Zip Duluth, MN 55807
   Operator's Phone 218-722-6013

PROFILE #: #14-157-I

3. **Waste Disposal Site** **VONCO V, LLC.**
   Mailing Address **1100 West Gary Street**
   City, St., Zip **Duluth, MN 55808**
4. **Responsible Agency** **MN Pollution Control Agency**
   Address **520 Lafayette Road**
   City, St., Zip **St. Paul, MN 55155-3898**

5. Description of Materials	6. Containers (No.-Type)	7. Total Quantity (m^3 or yd^3)
Soil Contaminated with used Petroleum	1- Dump Truck	10-12 CY/truck

8. **Special Handling Instructions and Additional Information**

9. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and governmental regulations. The above listed material(s) is (are) not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law.

Name & Title (Printed or Typed) Tom Curelli Signature T M Curelli Date 11/26/14

TRANSPORTER

10. **Transporter 1** (Acknowledgement of receipt of materials)
    Name/Title RJS Const. Group EDWARD JCHAWSCIELSKI Signature [signature] Date 12-11-14
    Address 1 CLOUGH AVE City, St., Zip SUPERIOR WI 54880 Phone No. 715-394-7771
11. **Transporter 2** (Acknowledgement of receipt of materials)
    Name/Title Signature Date
    Address City, St., Zip Phone No.

DISPOSAL SITE

12. **Discrepancy Indication Space** C5
    Ticket # 253225 Tons 11.72 Yards
    E N Elev.
13. **Waste Disposal Site Owner or Operator:** Certification of receipt of non-hazardous materials covered by this manifest except as noted in item 12.
    Name/Title (Printed or Typed) [signature]
    Signature [signature] Date 12/11/14

CONTRACTOR - WHITE TRANSPORTER - CANARY WASTE DISPOSAL SITE - PINK GENERATOR/OPERATOR - GOLD

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V, LLC.

526-3830 FAX: 218-626-1009

AL/NON-HAZARDOUS MATERIAL TRANSPORT AND DISPOSAL MANIFEST

PROFILE #: #14-157-I

GENERATOR

1. **Work Site Name** Fraser Shipyard
   Address 1 Clough Avenue
   City, St., Zip Superior, WI 54880
   Owner's Name Tom Curelli, Director of Operations
   Owner's Phone No. 715-394-7787 ext 101

2. **Consultant/Contractor** Environmental Trouble Shooters
   Address 3825 Grand Avenue
   City, St., Zip Duluth, MN 55807
   Operator's Phone 218-722-6013

3. **Waste Disposal Site** VONCO V, LLC.
   Mailing Address 1100 West Gary Street
   City, St., Zip Duluth, MN 55808

4. **Responsible Agency** MN Pollution Control Agency
   Address 520 Lafayette Road
   City, St., Zip St. Paul, MN 55155-3898

5. Description of Materials	6. Containers (No.-Type)	7. Total Quantity (m^3 or yd^3)
Soil Contaminated with used Petroleum	1- Dump Truck	10-12 CY/truck

8. **Special Handling Instructions and Additional Information**

9. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and governmental regulations. The above listed material(s) is (are) not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law.

Name & Title (Printed or Typed) Tom Curelli Signature T Curelli Date 11/26/14

TRANSPORTER

10. **Transporter 1** (Acknowledgement of receipt of materials)
    Name/Title _____ Signature _____ Date _____
    Address _____ City, St., Zip _____ Phone No. _____

11. **Transporter 2** (Acknowledgement of receipt of materials)
    Name/Title Dennis Hipsher Signature _____ Date 12-11
    Address Sipsas Trucking City, St., Zip 55847 Phone No. 715-372-8221

DISPOSAL SITE

12. **Discrepancy Indication Space** C5

Ticket # 253219 Tons 14.23 Yards _____
E _____ N _____ Elev. _____

13. **Waste Disposal Site Owner or Operator:** Certification of receipt of non-hazardous materials covered by this manifest except as noted in item 12.

Name/Title (Printed or Typed) DH
Signature DH Date 12/11/14

CONTRACTOR - WHITE TRANSPORTER - CANARY WASTE DISPOSAL SITE - PINK GENERATOR/OPERATOR - GOLD

VONCO V, LLC.

PHONE: 218-626-3830 FAX: 218-626-1009

INDUSTRIAL/NON-HAZARDOUS MATERIAL TRANSPORT AND DISPOSAL MANIFEST

GENERATOR

1. **Work Site Name** Fraser Shipyard
   Address 1 Clough Avenue
   City, St., Zip Superior, WI 54880
   Owner's Name Tom Curelli, Director of Operations
   Owner's Phone No. 715-394-7787 ext 101
2. **Consultant/Contractor** Environmental Trouble Shooters
   Address 3825 Grand Avenue
   City, St., Zip Duluth, MN 55807
   Operator's Phone 218-722-6013

PROFILE #: #14-157-I

3. **Waste Disposal Site** VONCO V, LLC.
   Mailing Address 1100 West Gary Street
   City, St., Zip Duluth, MN 55808
4. **Responsible Agency** MN Pollution Control Agency
   Address 520 Lafayette Road
   City, St., Zip St. Paul, MN 55155-3898

5. Description of Materials	6. Containers (No.-Type)	7. Total Quantity (m^3 or yd^3)
Soil Contaminated with used Petroleum	1- Dump Truck	10-12 CY/truck

8. **Special Handling Instructions and Additional Information**

9. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and governmental regulations. The above listed material(s) is (are) not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law.

Name & Title (Printed or Typed) Tom Curelli Signature [signature] Date 11/26/14

TRANSPORTER

10. **Transporter 1** (Acknowledgement of receipt of materials)
    Name/Title RJS Const. Group Emil Massila Signature [signature] Date 12-11-14
    Address 1 Clough Ave. City, St., Zip Superior WI, 54880 Phone No. 715-394-777[illegible]
11. **Transporter 2** (Acknowledgement of receipt of materials)
    Name/Title _____ Signature _____ Date _____
    Address _____ City, St., Zip _____ Phone No. _____

DISPOSAL SITE

12. **Discrepancy Indication Space** C5

Ticket # 253217 Tons 12.72 Yards _____

E _____ N _____ Elev. _____

13. **Waste Disposal Site Owner or Operator:** Certification of receipt of non-hazardous materials covered by this manifest except as noted in item 12.

Name/Title (Printed or Typed) [signature] Signature [signature] Date 12/11/14

CONTRACTOR - WHITE TRANSPORTER - CANARY WASTE DISPOSAL SITE - PINK GENERATOR/OPERATOR - GOLD

NCO V, LLC.

NE: 218-626-3830 FAX: 218-626-1009

INDUSTRIAL/NON-HAZARDOUS MATERIAL TRANSPORT AND DISPOSAL MANIFEST

GENERATOR

1. **Work Site Name** Fraser Shipyard
   Address 1 Clough Avenue
   City, St., Zip Superior, WI 54880
   Owner's Name Tom Curelli, Director of Operations
   Owner's Phone No. 715-394-7787 ext 101
2. **Consultant/Contractor** Environmental Trouble Shooters
   Address 3825 Grand Avenue
   City, St., Zip Duluth, MN 55807
   Operator's Phone 218-722-6013

PROFILE #: #14-157-I

3. **Waste Disposal Site** VONCO V, LLC.
   Mailing Address 1100 West Gary Street
   City, St., Zip Duluth, MN 55808
4. **Responsible Agency** MN Pollution Control Agency
   Address 520 Lafayette Road
   City, St., Zip St. Paul, MN 55155-3898

5. Description of Materials	6. Containers (No.-Type)	7. Total Quantity (m^3 or yd^3)
Soil Contaminated with used Petroleum	1- Dump Truck	10-12 CY/truck

8. **Special Handling Instructions and Additional Information**

9. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and governmental regulations. The above listed material(s) is (are) not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law.

Name & Title (Printed or Typed) Tom Curelli Signature T Curelli Date 11/26/14

TRANSPORTER

10. **Transporter 1** (Acknowledgement of receipt of materials)
    Name/Title RJS CONST GROUP EDWARD J CHRUSCIEL SR Signature Superman Date 12-11-14
    Address 1 CLOUGH AVE City, St., Zip WI 54880 Phone No. 715-394-7771
11. **Transporter 2** (Acknowledgement of receipt of materials)
    Name/Title _____ Signature _____ Date _____
    Address _____ City, St., Zip _____ Phone No. _____

DISPOSAL SITE

12. **Discrepancy Indication Space** CS
    Ticket # 253216 Tons 14.57 Yards _____
    E _____ N _____ Elev. _____

13. **Waste Disposal Site Owner or Operator:** Certification of receipt of non-hazardous materials covered by this manifest except as noted in item 12.
    Name/Title (Printed or Typed) DM
    Signature DM Date 12/11/14

CONTRACTOR - WHITE TRANSPORTER - CANARY WASTE DISPOSAL SITE - PINK GENERATOR/OPERATOR - GOLD

VONCO V, LLC.

PHONE: 218-626-3830 FAX: 218-626-1009

INDUSTRIAL/NON-HAZARDOUS MATERIAL TRANSPORT AND DISPOSAL MANIFEST

GENERATOR

1. **Work Site Name** Fraser Shipyard
   Address 1 Clough Avenue
   City, St., Zip Superior, WI 54880
   Owner's Name Tom Curelli, Director of Operations
   Owner's Phone No. 715-394-7787 ext 101
2. **Consultant/Contractor** Environmental Trouble Shooters
   Address 3825 Grand Avenue
   City, St., Zip Duluth, MN 55807
   Operator's Phone 218-722-6013

PROFILE #: #14-157-I

3. **Waste Disposal Site** VONCO V, LLC.
   Mailing Address 1100 West Gary Street
   City, St., Zip Duluth, MN 55808
4. **Responsible Agency** MN Pollution Control Agency
   Address 520 Lafayette Road
   City, St., Zip St. Paul, MN 55155-3898

5. Description of Materials	6. Containers (No.-Type)	7. Total Quantity (m^3 or yd^3)
Soil Contaminated with used Petroleum	1- Dump Truck	10-12 CY/truck

8. **Special Handling Instructions and Additional Information**

9. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and governmental regulations. The above listed material(s) is (are) not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law.

Name & Title (Printed or Typed) Tom Curelli Signature T Curelli Date 11/26/14

TRANSPORTER

10. **Transporter 1** (Acknowledgement of receipt of materials)
    RJS CONST. Group
    Name/Title _____ Signature _____ Date 12-11-14
    Address 1 CLOUGH AVE. City, St., Zip SUPERIOR WI 54880 Phone No. 715-394-7776

11. **Transporter 2** (Acknowledgement of receipt of materials)
    Name/Title Charlene Copeland/Dump Truck Driver Signature Charlene Copeland Date 12/11/14
    Address _____ City, St., Zip _____ Phone No. _____

DISPOSAL SITE

12. **Discrepancy Indication Space** 15

Ticket # 253215 Tons 11.92 Yards _____

E _____ N _____ Elev. _____

13. **Waste Disposal Site Owner or Operator:** Certification of receipt of non-hazardous materials covered by this manifest except as noted in item 12.

Name/Title (Printed or Typed) DH

Signature DH Date 12/11/14

CONTRACTOR - WHITE TRANSPORTER - CANARY WASTE DISPOSAL SITE - PINK GENERATOR/OPERATOR - GOLD

,O V, LLC.
.18-626-3830 FAX: 218-626-1009

,TRIAL/NON-HAZARDOUS MATERIAL TRANSPORT AND DISPOSAL MANIFEST

PROFILE #: #14-157-I

GENERATOR

1. **Work Site Name** Fraser Shipyard
   Address 1 Clough Avenue
   City, St., Zip Superior, WI 54880
   Owner's Name Tom Curelli, Director of Operations
   Owner's Phone No. 715-394-7787 ext 101
2. **Consultant/Contractor** Environmental Trouble Shooters
   Address 3825 Grand Avenue
   City, St., Zip Duluth, MN 55807
   Operator's Phone 218-722-6013

3. **Waste Disposal Site** VONCO V, LLC.
   Mailing Address 1100 West Gary Street
   City, St., Zip Duluth, MN 55808
4. **Responsible Agency** MN Pollution Control Agency
   Address 520 Lafayette Road
   City, St., Zip St. Paul, MN 55155-3898

5. Description of Materials	6. Containers (No.-Type)	7. Total Quantity (m^3 or yd^3)
Soil Contaminated with used Petroleum	1- Dump Truck	10-12 CY/truck

8. **Special Handling Instructions and Additional Information**

9. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and governmental regulations. The above listed material(s) is (are) not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law.

Name & Title (Printed or Typed) Tom Curelli Signature TM Curelli Date 11/26/14

TRANSPORTER

10. **Transporter 1** (Acknowledgement of receipt of materials)

Name/Title _____ Signature _____ Date _____

Address _____ City, St., Zip _____ Phone No. _____

11. **Transporter 2** (Acknowledgement of receipt of materials)

Name/Title Dennis Hypsher Signature _____ Date _____

Address Sipsas Trucking City, St., Zip _____ Phone No. 715-372-8221

DISPOSAL SITE

12. **Discrepancy Indication Space** 05

Ticket # 253214 Tons 12.19 Yards _____

E _____ N _____ Elev. _____

13. **Waste Disposal Site Owner or Operator:** Certification of receipt of non-hazardous materials covered by this manifest except as noted in item 12.

Name/Title (Printed or Typed) DH

Signature DH Date 12/1/14

CONTRACTOR - WHITE TRANSPORTER - CANARY WASTE DISPOSAL SITE - PINK GENERATOR/OPERATOR - GOLD

NCO V, LLC.

NE: 218-626-3830 FAX: 218-626-1009

DUSTRIAL/NON-HAZARDOUS MATERIAL TRANSPORT AND DISPOSAL MANIFEST

GENERATOR

1. **Work Site Name** Fraser Shipyard
   Address 1 Clough Avenue
   City, St., Zip Superior, WI 54880
   Owner's Name Tom Curelli, Director of Operations
   Owner's Phone No. 715-394-7787 ext 101
2. **Consultant/Contractor** Environmental Trouble Shooters
   Address 3825 Grand Avenue
   City, St., Zip Duluth, MN 55807
   Operator's Phone 218-722-6013

PROFILE #: #14-157-I

3. **Waste Disposal Site** VONCO V, LLC.
   Mailing Address 1100 West Gary Street
   City, St., Zip Duluth, MN 55808
4. **Responsible Agency** MN Pollution Control Agency
   Address 520 Lafayette Road
   City, St., Zip St. Paul, MN 55155-3898

5. Description of Materials	6. Containers (No.-Type)	7. Total Quantity (m^3 or yd^3)
Soil Contaminated with used Petroleum	1- Dump Truck	10-12 CY/truck

8. **Special Handling Instructions and Additional Information**

9. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and governmental regulations. The above listed material(s) is (are) not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law.
   Name & Title (Printed or Typed) Tom Curelli Signature T Curelli Date 11/26/14

TRANSPORTER

10. **Transporter 1** (Acknowledgement of receipt of materials)
    Name/Title RJS Const Group Emil Mannila Signature Emil Mannila Date 12-11-14
    Address 1 CLOUGH AVE City, St., Zip Superior WI 54880 Phone No. 715-394-7776
11. **Transporter 2** (Acknowledgement of receipt of materials)
    Name/Title _____ Signature _____ Date _____
    Address _____ City, St., Zip _____ Phone No. _____

DISPOSAL SITE

12. **Discrepancy Indication Space** C5
    Ticket # 253212 Tons 10.04 Yards _____
    E _____ N _____ Elev. _____

13. **Waste Disposal Site Owner or Operator:** Certification of receipt of non-hazardous materials covered by this manifest except as noted in item 12.
    Name/Title (Printed or Typed) DL
    Signature DL Date 12/11/14

CONTRACTOR - WHITE TRANSPORTER - CANARY WASTE DISPOSAL SITE - PINK GENERATOR/OPERATOR - GOLD

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NCO V, LLC.

/NE: 218-626-3830 FAX: 218-626-1009

/DUSTRIAL/NON-HAZARDOUS MATERIAL TRANSPORT AND DISPOSAL MANIFEST

PROFILE #: #14-157-I

GENERATOR

1. **Work Site Name** Fraser Shipyard
   Address 1 Clough Avenue
   City, St., Zip Superior, WI 54880
   Owner's Name Tom Curelli, Director of Operations
   Owner's Phone No. 715-394-7787 ext 101

2. **Consultant/Contractor** Environmental Trouble Shooters
   Address 3825 Grand Avenue
   City, St., Zip Duluth, MN 55807
   Operator's Phone 218-722-6013

3. **Waste Disposal Site** **VONCO V, LLC.**
   Mailing Address **1100 West Gary Street**
   City, St., Zip **Duluth, MN 55808**

4. **Responsible Agency** **MN Pollution Control Agency**
   Address **520 Lafayette Road**
   City, St., Zip **St. Paul, MN 55155-3898**

5. Description of Materials	6. Containers (No.-Type)	7. Total Quantity (m³ or yd³)
Soil Contaminated with used Petroleum	1- Dump Truck	10-12 CY/truck

8. **Special Handling Instructions and Additional Information**

9. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and governmental regulations. The above listed material(s) is (are) not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law.

Name & Title (Printed or Typed) Tom Curelli Signature T M Curelli Date 11/26/14

TRANSPORTER

10. **Transporter 1** (Acknowledgement of receipt of materials)
Name/Title RJS Const. Group / Edward D Chruscielski Signature [signature] Date 12-11-14
Address 1 Clough Ave City, St., Zip Superior WI 54880 Phone No. 715-394-7771

11. **Transporter 2** (Acknowledgement of receipt of materials)
Name/Title ______ Signature ______ Date ______
Address ______ City, St., Zip ______ Phone No. ______

DISPOSAL SITE

12. **Discrepancy Indication Space** C5

Ticket # 253211 Tons 10.62 Yards ______

E ______ N ______ Elev. ______

13. **Waste Disposal Site Owner or Operator:** Certification of receipt of non-hazardous materials covered by this manifest except as noted in item 12.

Name/Title (Printed or Typed) [signature]

Signature [signature] Date 12/11/14

CONTRACTOR - WHITE TRANSPORTER - CANARY WASTE DISPOSAL SITE - PINK GENERATOR/OPERATOR - GOLD

VONCO V, LLC.

218-626-3830 FAX: 218-626-1009

INDUSTRIAL/NON-HAZARDOUS MATERIAL TRANSPORT AND DISPOSAL MANIFEST

PROFILE #: 14-157-I

GENERATOR

1. **Work Site Name** Fraser Shipyard
   Address 1 Clough Avenue
   City, St., Zip Superior, WI 54880
   Owner's Name Tom Curelli, Director of Operations
   Owner's Phone No. 715-394-7787, ext. 101
2. **Consultant/Contractor** Environmental Trouble Shooters
   Address 3825 Grand Avenue
   City, St., Zip Duluth, MN 55807
   Operator's Phone 218-722-6013
3. **Waste Disposal Site** VONCO V, LLC.
   Mailing Address 1100 West Gary Street
   City, St., Zip Duluth, MN 55808
4. **Responsible Agency** MN Pollution Control Agency
   Address 520 Lafayette Road
   City, St., Zip St. Paul, MN 55155-3898

5. Description of Materials	6. Containers (No.-Type)	7. Total Quantity (m^3 or yd^3)
Soil Contaminated with used Petroleum	1 - Dump Truck	10-12 CY/truck

8. **Special Handling Instructions and Additional Information**

9. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and governmental regulations. The above listed material(s) is (are) not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law.

Name & Title (Printed or Typed) Tom Curelli, Director of Operations Signature _____ Date _____

TRANSPORTER

10. **Transporter 1** (Acknowledgement of receipt of materials)

Name/Title _____ Signature _____ Date _____

Address _____ City, St., Zip _____ Phone No. _____

11. **Transporter 2** (Acknowledgement of receipt of materials)

Name/Title _____ Signature _____ Date _____

Address _____ City, St., Zip _____ Phone No. _____

DISPOSAL SITE

12. **Discrepancy Indication Space** CS

Ticket # 267-169 Tons 15.11 Yards _____

E _____ N _____ Elev. 5

13. **Waste Disposal Site Owner or Operator:** Certification of receipt of non-hazardous materials covered by this manifest except as noted in item 12.

Name/Title (Printed or Typed) _____

Signature _____ Date 7/15/15

CONTRACTOR - WHITE TRANSPORTER - CANARY WASTE DISPOSAL SITE - PINK GENERATOR/OPERATOR - GOLD

O V, LLC.

8-626-3830 . FAX: 218-626-1009

IAL/NON-HAZARDOUS MATERIAL TRANSPORT AND DISPOSAL MANIFEST

PROFILE #: 14-157-I

GENERATOR

Work Site Name: Fraser Shipyard

Address: 1 Clough Avenue

City, St., Zip: Superior, WI 54880

Owner's Name: Tom Curelli, Director of Operations

Owner's Phone No.: 715-394-7787, ext. 101

2. Consultant/Contractor: Environmental Trouble Shooters

Address: 3825 Grand Avenue

City, St., Zip: Duluth, MN 55807

Operator's Phone: 218-722-6013

3. Waste Disposal Site: VONCO V, LLC.

Mailing Address: 1100 West Gary Street

City, St., Zip: Duluth, MN 55808

4. Responsible Agency: MN Pollution Control Agency

Address: 520 Lafayette Road

City, St., Zip: St. Paul, MN 55155-3898

5. Description of Materials	6. Containers (No.-Type)	7. Total Quantity (m^3 or yd^3)
Soil Contaminated with used Petroleum	1 - Dump Truck	10-12 CY/truck

8. Special Handling Instructions and Additional Information

9. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and governmental regulations. The above listed material(s) is (are) not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law.

Name & Title (Printed or Typed): Tom Curelli, Director of Operations Signature _____ Date _____

TRANSPORTER

10. **Transporter 1** (Acknowledgement of receipt of materials)

Name/Title _____ Signature _____ Date _____

Address _____ City, St., Zip _____ Phone No. _____

11. **Transporter 2** (Acknowledgement of receipt of materials)

Name/Title _____ Signature _____ Date _____

Address _____ City, St., Zip _____ Phone No. _____

DISPOSAL SITE

12. Discrepancy Indication Space

(S

262164 Ticket # _____ Tons 13.58 Yards _____

E _____ N _____ Elev. _____

13. **Waste Disposal Site Owner or Operator:** Certification of receipt of non-hazardous materials covered by this manifest except as noted in item 12.

Name/Title (Printed or Typed) DAL

Signature DAL Date 7/13/15

CONTRACTOR - WHITE TRANSPORTER - CANARY WASTE DISPOSAL SITE - PINK GENERATOR/OPERATOR - GOLD

.CO V, LLC.

.E: 218-626-3830 FAX: 218-626-1009

.DUSTRIAL/NON-HAZARDOUS MATERIAL TRANSPORT AND DISPOSAL MANIFEST

PROFILE #: 14-157-I

GENERATOR

1. **Work Site Name** Fraser Shipyard
   Address 1 Clough Avenue
   City, St., Zip Superior, WI 54880
   Owner's Name Tom Curelli, Director of Operations
   Owner's Phone No. 715-394-7787, ext. 101
2. **Consultant/Contractor** Environmental Trouble Shooters
   Address 3825 Grand Avenue
   City, St., Zip Duluth, MN 55807
   Operator's Phone 218-722-6013

3. **Waste Disposal Site** VONCO V, LLC.
   Mailing Address 1100 West Gary Street
   City, St., Zip Duluth, MN 55808
4. **Responsible Agency** MN Pollution Control Agency
   Address 520 Lafayette Road
   City, St., Zip St. Paul, MN 55155-3898

5. Description of Materials	6. Containers (No.-Type)	7. Total Quantity (m^3 or yd^3)
Soil Contaminated with used Petroleum	1 - Dump Truck	10-12 CY/truck

8. **Special Handling Instructions and Additional Information**

9. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and governmental regulations. The above listed material(s) is (are) not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law.

Name & Title (Printed or Typed) Tom Curelli, Director of Operations Signature _____ Date _____

TRANSPORTER

10. **Transporter 1** (Acknowledgement of receipt of materials)

Name/Title _____ Signature _____ Date _____

Address _____ City, St., Zip _____ Phone No. _____

11. **Transporter 2** (Acknowledgement of receipt of materials)

Name/Title _____ Signature _____ Date _____

Address _____ City, St., Zip _____ Phone No. _____

DISPOSAL SITE

12. **Discrepancy Indication Space**

15

262155 Ticket # _____ Tons 12.58 Yards _____

E _____ N _____ Elev. _____

13. **Waste Disposal Site Owner or Operator:** Certification of receipt of non-hazardous materials covered by this manifest except as noted in item 12.

Name/Title (Printed or Typed) DM

Signature DM Date 7/13/15

CONTRACTOR - WHITE TRANSPORTER - CANARY WASTE DISPOSAL SITE - PINK GENERATOR/OPERATOR - GOLD

ɔO V, LLC.

. 218-626-3830 . FAX: 218-626-1009

ɹSTRIAL/NON-HAZARDOUS MATERIAL TRANSPORT AND DISPOSAL MANIFEST

PROFILE #: 14-157-I

GENERATOR

1. **Work Site Name** Fraser Shipyard
   Address 1 Clough Avenue
   City, St., Zip Superior, WI 54880
   Owner's Name Tom Curelli, Director of Operations
   Owner's Phone No. 715-394-7787, ext. 101
2. **Consultant/Contractor** Environmental Trouble Shooters
   Address 3825 Grand Avenue
   City, St., Zip Duluth, MN 55807
   Operator's Phone 218-722-6013
3. **Waste Disposal Site** VONCO V, LLC.
   Mailing Address 1100 West Gary Street
   City, St., Zip Duluth, MN 55808
4. **Responsible Agency** MN Pollution Control Agency
   Address 520 Lafayette Road
   City, St., Zip St. Paul, MN 55155-3898

5. Description of Materials	6. Containers (No.-Type)	7. Total Quantity (m^3 or yd^3)
Soil Contaminated with used Petroleum	1 - Dump Truck	10-12 CY/truck

8. **Special Handling Instructions and Additional Information**

9. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and governmental regulations. The above listed material(s) is (are) not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law.

Name & Title (Printed or Typed) Tom Curelli, Director of Operations Signature _____ Date _____

TRANSPORTER

10. **Transporter 1** (Acknowledgement of receipt of materials)
    Name/Title _____ Signature _____ Date _____
    Address _____ City, St., Zip _____ Phone No. _____
11. **Transporter 2** (Acknowledgement of receipt of materials)
    Name/Title _____ Signature _____ Date _____
    Address _____ City, St., Zip _____ Phone No. _____

DISPOSAL SITE

12. **Discrepancy Indication Space**

Ticket # 2607108 Tons 13.95 Yards _____

E _____ N _____ Elev. _____

13. **Waste Disposal Site Owner or Operator:** Certification of receipt of non-hazardous materials covered by this manifest except as noted in item 12.

Name/Title (Printed or Typed) _____

Signature _____ Date _____

CONTRACTOR - WHITE TRANSPORTER - CANARY WASTE DISPOSAL SITE - PINK GENERATOR/OPERATOR - GOLD

ɔO V, LLC.

218-626-3830 FAX: 218-626-1009

ɔTRIAL/NON-HAZARDOUS MATERIAL TRANSPORT AND DISPOSAL MANIFEST

PROFILE #: 14-157-I

GENERATOR

1. **Work Site Name** Fraser Shipyard
   Address 1 Clough Avenue
   City, St., Zip Superior, WI 54880
   Owner's Name Tom Curelli, Director of Operations
   Owner's Phone No. 715-394-7787, ext. 101
2. **Consultant/Contractor** Environmental Trouble Shooters
   Address 3825 Grand Avenue
   City, St., Zip Duluth, MN 55807
   Operator's Phone 218-722-6013
3. **Waste Disposal Site** VONCO V, LLC.
   Mailing Address 1100 West Gary Street
   City, St., Zip Duluth, MN 55808
4. **Responsible Agency** MN Pollution Control Agency
   Address 520 Lafayette Road
   City, St., Zip St. Paul, MN 55155-3898

5. Description of Materials	6. Containers (No.-Type)	7. Total Quantity (m^3 or yd^3)
Soil Contaminated with used Petroleum	1 - Dump Truck	10-12 CY/truck

8. **Special Handling Instructions and Additional Information**

9. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and governmental regulations. The above listed material(s) is (are) not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law.

Name & Title (Printed or Typed) Tom Curelli, Director of Operations Signature _____ Date _____

TRANSPORTER

10. **Transporter 1** (Acknowledgement of receipt of materials)

Name/Title _____ Signature _____ Date _____

Address _____ City, St., Zip _____ Phone No. _____

11. **Transporter 2** (Acknowledgement of receipt of materials)

Name/Title _____ Signature _____ Date _____

Address _____ City, St., Zip _____ Phone No. _____

DISPOSAL SITE

12. **Discrepancy Indication Space** CS

Ticket # 262163 Tons 13.19 Yards _____

E _____ N _____ Elev. _____

13. **Waste Disposal Site Owner or Operator:** Certification of receipt of non-hazardous materials covered by this manifest except as noted in item 12.

Name/Title (Printed or Typed) DL

Signature DL Date 7/10/15

CONTRACTOR - WHITE TRANSPORTER - CANARY WASTE DISPOSAL SITE - PINK GENERATOR/OPERATOR - GOLD

◂CO V, LLC.

◂E: 218-626-3830 . FAX: 218-626-1009

◂DUSTRIAL/NON-HAZARDOUS MATERIAL TRANSPORT AND DISPOSAL MANIFEST

GENERATOR

1. **Work Site Name** Fraser Shipyard
   Address 1 Clough Avenue
   City, St., Zip Superior, WI 54880
   Owner's Name Tom Curelli, Director of Operations
   Owner's Phone No. 715-394-7787, ext. 101
2. **Consultant/Contractor** Environmental Trouble Shooters
   Address 3825 Grand Avenue
   City, St., Zip Duluth, MN 55807
   Operator's Phone 218-722-6013

PROFILE #: 14-157-I

3. **Waste Disposal Site** VONCO V, LLC.
   Mailing Address 1100 West Gary Street
   City, St., Zip Duluth, MN 55808
4. **Responsible Agency** MN Pollution Control Agency
   Address 520 Lafayette Road
   City, St., Zip St. Paul, MN 55155-3898

5. Description of Materials	6. Containers (No.-Type)	7. Total Quantity (m^3 or yd^3)
Soil Contaminated with used Petroleum	1 - Dump Truck	10-12 CY/truck

8. **Special Handling Instructions and Additional Information**

9. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and governmental regulations. The above listed material(s) is (are) not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law.

Name & Title (Printed or Typed) Tom Curelli, Director of Operations Signature _____ Date _____

TRANSPORTER

10. **Transporter 1** (Acknowledgement of receipt of materials)

Name/Title _____ Signature _____ Date _____

Address _____ City, St., Zip _____ Phone No. _____

11. **Transporter 2** (Acknowledgement of receipt of materials)

Name/Title _____ Signature _____ Date _____

Address _____ City, St., Zip _____ Phone No. _____

DISPOSAL SITE

12. **Discrepancy Indication Space**

CS

262-156 Ticket # _____ Tons 15.19 Yards _____

E _____ N _____ Elev. _____

13. **Waste Disposal Site Owner or Operator:** Certification of receipt of non-hazardous materials covered by this manifest except as noted in item 12.

Name/Title (Printed or Typed) DAL

Signature DAL Date 7/13/15

CONTRACTOR - WHITE TRANSPORTER - CANARY WASTE DISPOSAL SITE - PINK GENERATOR/OPERATOR - GOLD

VONCO V, LLC.

218-626-3830 FAX: 218-626-1009

5

INDUSTRIAL/NON-HAZARDOUS MATERIAL TRANSPORT AND DISPOSAL MANIFEST

PROFILE #: 14-157-I

GENERATOR

1. **Work Site Name** Fraser Shipyard
   Address 1 Clough Avenue
   City, St., Zip Superior, WI 54880
   Owner's Name Tom Curelli, Director of Operations
   Owner's Phone No. 715-394-7787, ext. 101
2. **Consultant/Contractor** Environmental Trouble Shooters
   Address 3825 Grand Avenue
   City, St., Zip Duluth, MN 55807
   Operator's Phone 218-722-6013
3. **Waste Disposal Site** VONCO V, LLC.
   Mailing Address 1100 West Gary Street
   City, St., Zip Duluth, MN 55808
4. **Responsible Agency** MN Pollution Control Agency
   Address 520 Lafayette Road
   City, St., Zip St. Paul, MN 55155-3898

5. Description of Materials	6. Containers (No.-Type)	7. Total Quantity (m^3 or yd^3)
Soil Contaminated with used Petroleum	1 - Dump Truck	10-12 CY/truck

8. **Special Handling Instructions and Additional Information**

9. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and governmental regulations. The above listed material(s) is (are) not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law.

Name & Title (Printed or Typed) Tom Curelli, Director of Operations Signature [signature] Date 6-15-15

TRANSPORTER

10. **Transporter 1** (Acknowledgement of receipt of materials)
    Name/Title RJS Constr Group LLC Signature [signature] Date 6-15-15
    Address 1 Clough Ave City, St., Zip Superior WI 54880 Phone No. 7153947771
11. **Transporter 2** (Acknowledgement of receipt of materials)
    Name/Title _____ Signature _____ Date _____
    Address _____ City, St., Zip _____ Phone No. _____

DISPOSAL SITE

12. **Discrepancy Indication Space** CS

Ticket # 259105 Tons 18.13 Yards _____

E _____ N _____ Elev. _____

13. **Waste Disposal Site Owner or Operator:** Certification of receipt of non-hazardous materials covered by this manifest except as noted in item 12.

Name/Title (Printed or Typed) DU

Signature DU Date 6/15/15

CONTRACTOR - WHITE TRANSPORTER - CANARY WASTE DISPOSAL SITE - PINK GENERATOR/OPERATOR - GOLD

·CO V, LLC.

218-626-3830 FAX: 218-626-1009

4

·STRIAL/NON-HAZARDOUS MATERIAL TRANSPORT AND DISPOSAL MANIFEST

PROFILE #: 14-157-I

GENERATOR

1. **Work Site Name** Fraser Shipyard
   Address 1 Clough Avenue
   City, St., Zip Superior, WI 54880
   Owner's Name Tom Curelli, Director of Operations
   Owner's Phone No. 715-394-7787, ext. 101
2. **Consultant/Contractor** Environmental Trouble Shooters
   Address 3825 Grand Avenue
   City, St., Zip Duluth, MN 55807
   Operator's Phone 218-722-6013
3. **Waste Disposal Site** VONCO V, LLC.
   Mailing Address 1100 West Gary Street
   City, St., Zip Duluth, MN 55808
4. **Responsible Agency** MN Pollution Control Agency
   Address 520 Lafayette Road
   City, St., Zip St. Paul, MN 55155-3898

5. Description of Materials	6. Containers (No.-Type)	7. Total Quantity (m^3 or yd^3)
Soil Contaminated with used Petroleum	1 - Dump Truck	10-12 CY/truck

8. **Special Handling Instructions and Additional Information**

9. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and governmental regulations. The above listed material(s) is (are) not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law.

Name & Title (Printed or Typed) Tom Curelli, Director of Operations Signature [signature] Date 6-15-15

TRANSPORTER

10. **Transporter 1** (Acknowledgement of receipt of materials)

Name/Title R&S Const. Group LLC Signature [signature] Date 6-15-15

Address 1 Clough Ave City, St., Zip Superior WI 54880 Phone No. 715-394-7771

11. **Transporter 2** (Acknowledgement of receipt of materials)

Name/Title _____ Signature _____ Date _____

Address _____ City, St., Zip _____ Phone No. _____

DISPOSAL SITE

12. **Discrepancy Indication Space** CS

Ticket # 259141 Tons 16.27 Yards _____

E _____ N _____ Elev. _____

13. **Waste Disposal Site Owner or Operator:** Certification of receipt of non-hazardous materials covered by this manifest except as noted in item 12.

Name/Title (Printed or Typed) DU

Signature DU Date 6/15/15

CONTRACTOR - WHITE TRANSPORTER - CANARY WASTE DISPOSAL SITE - PINK GENERATOR/OPERATOR - GOLD

~~CO V, LLC.
~~218-626-3830 FAX: 218-626-1009

2

~~STRIAL/NON-HAZARDOUS MATERIAL TRANSPORT AND DISPOSAL MANIFEST

PROFILE #: 14-157-I

GENERATOR

1. Work Site Name: Fraser Shipyard
   Address: 1 Clough Avenue
   City, St., Zip: Superior, WI 54880
   Owner's Name: Tom Curelli, Director of Operations
   Owner's Phone No.: 715-394-7787, ext. 101

2. Consultant/Contractor: Environmental Trouble Shooters
   Address: 3825 Grand Avenue
   City, St., Zip: Duluth, MN 55807
   Operator's Phone: 218-722-6013

3. Waste Disposal Site: VONCO V, LLC.
   Mailing Address: 1100 West Gary Street
   City, St., Zip: Duluth, MN 55808

4. Responsible Agency: MN Pollution Control Agency
   Address: 520 Lafayette Road
   City, St., Zip: St. Paul, MN 55155-3898

5. Description of Materials	6. Containers (No.-Type)	7. Total Quantity (m^3 or yd^3)
Soil Contaminated with used Petroleum	1 - Dump Truck	10-12 CY/truck

8. Special Handling Instructions and Additional Information

9. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and governmental regulations. The above listed material(s) is (are) not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law.

Name & Title (Printed or Typed): Tom Curelli, Director of Operations Signature: [signature] Date: 6-15-15

TRANSPORTER

10. **Transporter 1** (Acknowledgement of receipt of materials)
    Name/Title: RJS Const. Group LLC Signature: Wayne Boell Date: 6-15-15
    Address: 1 Clough Ave City, St., Zip: Superior, WI 54880 Phone No.: 7153947771

11. **Transporter 2** (Acknowledgement of receipt of materials)
    Name/Title: Signature: Date:
    Address: City, St., Zip: Phone No.:

DISPOSAL SITE

12. Discrepancy Indication Space
    CS
    Ticket # 259157 Tons 19.37 Yards
    E N Elev.

13. **Waste Disposal Site Owner or Operator:** Certification of receipt of non-hazardous materials covered by this manifest except as noted in item 12.
    Name/Title (Printed or Typed): DW
    Signature: DW Date: 6/15/15

CONTRACTOR - WHITE TRANSPORTER - CANARY WASTE DISPOSAL SITE - PINK GENERATOR/OPERATOR - GOLD

NCO V, LLC.

E: 218-626-3830 FAX: 218-626-1009

/

USTRIAL/NON-HAZARDOUS MATERIAL TRANSPORT AND DISPOSAL MANIFEST

GENERATOR

1. **Work Site Name** Fraser Shipyard
   Address 1 Clough Avenue
   City, St., Zip Superior, WI 54880
   Owner's Name Tom Curelli, Director of Operations
   Owner's Phone No. 715-394-7787, ext. 101
2. **Consultant/Contractor** Environmental Trouble Shooters
   Address 3825 Grand Avenue
   City, St., Zip Duluth, MN 55807
   Operator's Phone 218-722-6013

PROFILE #: 14-157-I

3. **Waste Disposal Site** VONCO V, LLC.
   Mailing Address 1100 West Gary Street
   City, St., Zip Duluth, MN 55808
4. **Responsible Agency** MN Pollution Control Agency
   Address 520 Lafayette Road
   City, St., Zip St. Paul, MN 55155-3898

5. Description of Materials	6. Containers (No.-Type)	7. Total Quantity (m^3 or yd^3)
Soil Contaminated with used Petroleum	1 - Dump Truck	10-12 CY/truck

8. **Special Handling Instructions and Additional Information**

9. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and governmental regulations. The above listed material(s) is (are) not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law.

Name & Title (Printed or Typed) Tom Curelli, Director of Operations Signature [signature] Date 6-15-15

TRANSPORTER

10. **Transporter 1** (Acknowledgement of receipt of materials)
    Name/Title RSS Coast Group LLC Signature Wayne Boelk Date 6-15-15
    Address 1 Clough Ave City, St., Zip Superior WI 54880 Phone No. 715-394-7771
11. **Transporter 2** (Acknowledgement of receipt of materials)
    Name/Title _____ Signature _____ Date _____
    Address _____ City, St., Zip _____ Phone No. _____

DISPOSAL SITE

12. **Discrepancy Indication Space** 15

Ticket # 259132 Tons 16.36 Yards _____

E _____ N _____ Elev. _____

13. **Waste Disposal Site Owner or Operator:** Certification of receipt of non-hazardous materials covered by this manifest except as noted in item 12.

Name/Title (Printed or Typed) DL

Signature DL Date 6/15/15

CONTRACTOR - WHITE TRANSPORTER - CANARY WASTE DISPOSAL SITE - PINK GENERATOR/OPERATOR - GOLD

,O V, LLC.

,18-626-3830 FAX: 218-626-1009

9

,TRIAL/NON-HAZARDOUS MATERIAL TRANSPORT AND DISPOSAL MANIFEST

PROFILE #: 14-157-I

GENERATOR

1. **Work Site Name** Fraser Shipyard
   Address 1 Clough Avenue
   City, St., Zip Superior, WI 54880
   Owner's Name Tom Curelli, Director of Operations
   Owner's Phone No. 715-394-7787, ext. 101

2. **Consultant/Contractor** Environmental Trouble Shooters
   Address 3825 Grand Avenue
   City, St., Zip Duluth, MN 55807
   Operator's Phone 218-722-6013

3. **Waste Disposal Site** VONCO V, LLC.
   Mailing Address 1100 West Gary Street
   City, St., Zip Duluth, MN 55808

4. **Responsible Agency** MN Pollution Control Agency
   Address 520 Lafayette Road
   City, St., Zip St. Paul, MN 55155-3898

5. Description of Materials	6. Containers (No.-Type)	7. Total Quantity (m^3 or yd^3)
Soil Contaminated with used Petroleum	1 - Dump Truck	10-12 CY/truck

8. **Special Handling Instructions and Additional Information**

9. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and governmental regulations. The above listed material(s) is (are) not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law.

Name & Title (Printed or Typed) Tom Curelli, Director of Operations Signature [signature] Date 7-8-15

TRANSPORTER

10. **Transporter 1** (Acknowledgement of receipt of materials)
    Name/Title RJS Const. Group LLC Signature Wayne Barth Date 7-8-15
    Address 1 Clough Ave City, St., Zip Superior, WI 54880 Phone No. 7153947771

11. **Transporter 2** (Acknowledgement of receipt of materials)
    Name/Title _____ Signature _____ Date _____
    Address _____ City, St., Zip _____ Phone No. _____

DISPOSAL SITE

12. **Discrepancy Indication Space** CS

261385 Ticket # _____ Tons 18.32 Yards _____

E _____ N _____ Elev. _____

13. **Waste Disposal Site Owner or Operator:** Certification of receipt of non-hazardous materials covered by this manifest except as noted in item 12.

Name/Title (Printed or Typed) DLL

Signature DLL Date 7/8/15

CONTRACTOR - WHITE TRANSPORTER - CANARY WASTE DISPOSAL SITE - PINK GENERATOR/OPERATOR - GOLD

VONCO V, LLC.

218-626-3830 FAX: 218-626-1009

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INDUSTRIAL/NON-HAZARDOUS MATERIAL TRANSPORT AND DISPOSAL MANIFEST

PROFILE #: 14-157-I

GENERATOR

1. **Work Site Name** Fraser Shipyard
   Address 1 Clough Avenue
   City, St., Zip Superior, WI 54880
   Owner's Name Tom Curelli, Director of Operations
   Owner's Phone No. 715-394-7787, ext. 101
2. **Consultant/Contractor** Environmental Trouble Shooters
   Address 3825 Grand Avenue
   City, St., Zip Duluth, MN 55807
   Operator's Phone 218-722-6013
3. **Waste Disposal Site** VONCO V, LLC.
   Mailing Address 1100 West Gary Street
   City, St., Zip Duluth, MN 55808
4. **Responsible Agency** MN Pollution Control Agency
   Address 520 Lafayette Road
   City, St., Zip St. Paul, MN 55155-3898

5. Description of Materials	6. Containers (No.-Type)	7. Total Quantity (m^3 or yd^3)
Soil Contaminated with used Petroleum	1 - Dump Truck	10-12 CY/truck

8. **Special Handling Instructions and Additional Information**

9. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and governmental regulations. The above listed material(s) is (are) not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law.

Name & Title (Printed or Typed) Tom Curelli, Director of Operations Signature [signature] Date 7-8-15

TRANSPORTER

10. **Transporter 1** (Acknowledgement of receipt of materials)
    Name/Title RJS Const Group LLC Signature [signature] Date 7-8-15
    Address 1 Clough Ave City, St., Zip Superior WI 54880 Phone No. 715-394-7771
11. **Transporter 2** (Acknowledgement of receipt of materials)
    Name/Title _____ Signature _____ Date _____
    Address _____ City, St., Zip _____ Phone No. _____

DISPOSAL SITE

12. **Discrepancy Indication Space** CS

Ticket # 261420 Tons 22.20 Yards _____

E _____ N _____ Elev. _____

13. **Waste Disposal Site Owner or Operator:** Certification of receipt of non-hazardous materials covered by this manifest except as noted in item 12.

Name/Title (Printed or Typed) [signature]

Signature [signature] Date 7/8/15

CONTRACTOR - WHITE TRANSPORTER - CANARY WASTE DISPOSAL SITE - PINK GENERATOR/OPERATOR - GOLD

...O V, LLC.

12

. 218-626-3830 FAX: 218-626-1009

...USTRIAL/NON-HAZARDOUS MATERIAL TRANSPORT AND DISPOSAL MANIFEST

PROFILE #: 14-157-I

GENERATOR

1. **Work Site Name** Fraser Shipyard
   Address 1 Clough Avenue
   City, St., Zip Superior, WI 54880
   Owner's Name Tom Curelli, Director of Operations
   Owner's Phone No. 715-394-7787, ext. 101
2. **Consultant/Contractor** Environmental Trouble Shooters
   Address 3825 Grand Avenue
   City, St., Zip Duluth, MN 55807
   Operator's Phone 218-722-6013
3. **Waste Disposal Site** VONCO V, LLC.
   Mailing Address 1100 West Gary Street
   City, St., Zip Duluth, MN 55808
4. **Responsible Agency** MN Pollution Control Agency
   Address 520 Lafayette Road
   City, St., Zip St. Paul, MN 55155-3898

5. Description of Materials	6. Containers (No.-Type)	7. Total Quantity (m^3 or yd^3)
Soil Contaminated with used Petroleum	1 - Dump Truck	10-12 CY/truck

8. **Special Handling Instructions and Additional Information**

9. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and governmental regulations. The above listed material(s) is (are) not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law.

Name & Title (Printed or Typed) Tom Curelli, Director of Operations Signature [signature] Date 7-8-15

TRANSPORTER

10. **Transporter 1** (Acknowledgement of receipt of materials)

Name/Title RJS Const Group LLC Signature Wayne Booth Date 7-8-15

Address 1 Clough Ave City, St., Zip Superior, WI 54880 Phone No. 715 394-7771

11. **Transporter 2** (Acknowledgement of receipt of materials)

Name/Title _____ Signature _____ Date _____

Address _____ City, St., Zip _____ Phone No. _____

DISPOSAL SITE

12. **Discrepancy Indication Space** CS

Ticket # 261494 Tons 15.19 Yards _____

E _____ N _____ Elev. _____

13. **Waste Disposal Site Owner or Operator:** Certification of receipt of non-hazardous materials covered by this manifest except as noted in item 12.

Name/Title (Printed or Typed) DLL

Signature DLL Date 7/8/15

CONTRACTOR - WHITE TRANSPORTER - CANARY WASTE DISPOSAL SITE - PINK GENERATOR/OPERATOR - GOLD

J V, LLC.

.8-626-3830 FAX: 218-626-1009

12

RIAL/NON-HAZARDOUS MATERIAL TRANSPORT AND DISPOSAL MANIFEST

PROFILE #: 14-157-I

GENERATOR

1. **Work Site Name** Fraser Shipyard
   Address 1 Clough Avenue
   City, St., Zip Superior, WI 54880
   Owner's Name Tom Curelli, Director of Operations
   Owner's Phone No. 715-394-7787, ext. 101
2. **Consultant/Contractor** Environmental Trouble Shooters
   Address 3825 Grand Avenue
   City, St., Zip Duluth, MN 55807
   Operator's Phone 218-722-6013

3. **Waste Disposal Site** VONCO V, LLC.
   Mailing Address 1100 West Gary Street
   City, St., Zip Duluth, MN 55808
4. **Responsible Agency** MN Pollution Control Agency
   Address 520 Lafayette Road
   City, St., Zip St. Paul, MN 55155-3898

5. Description of Materials	6. Containers (No.-Type)	7. Total Quantity (m^3 or yd^3)
Soil Contaminated with used Petroleum	1 - Dump Truck	10-12 CY/truck

8. **Special Handling Instructions and Additional Information**

9. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and governmental regulations. The above listed material(s) is (are) not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law.

Name & Title (Printed or Typed) Tom Curelli, Director of Operations Signature [signature] Date 7-8-15

TRANSPORTER

10. **Transporter 1** (Acknowledgement of receipt of materials)
    Name/Title RJS Const. Group LLC Signature Wayne Boulb Date 7-8-15
    Address 1 Clough Ave Superior City, St., Zip WI 54880 Phone No. 715 394 7721
11. **Transporter 2** (Acknowledgement of receipt of materials)
    Name/Title _____ Signature _____ Date _____
    Address _____ City, St., Zip _____ Phone No. _____

DISPOSAL SITE

12. **Discrepancy Indication Space** CS

Ticket # 261458 Tons 16.10 Yards _____

E _____ N _____ Elev. _____

13. **Waste Disposal Site Owner or Operator:** Certification of receipt of non-hazardous materials covered by this manifest except as noted in item 12.

Name/Title (Printed or Typed) DU

Signature DU Date 7/8/15

CONTRACTOR - WHITE TRANSPORTER - CANARY WASTE DISPOSAL SITE - PINK GENERATOR/OPERATOR - GOLD

VONCO V, LLC.

218-626-3830 FAX: 218-626-1009

13

INDUSTRIAL/NON-HAZARDOUS MATERIAL TRANSPORT AND DISPOSAL MANIFEST

GENERATOR

PROFILE #: 14-157-I

1. **Work Site Name** Fraser Shipyard
   Address 1 Clough Avenue
   City, St., Zip Superior, WI 54880
   Owner's Name Tom Curelli, Director of Operations
   Owner's Phone No. 715-394-7787, ext. 101
2. **Consultant/Contractor** Environmental Trouble Shooters
   Address 3825 Grand Avenue
   City, St., Zip Duluth, MN 55807
   Operator's Phone 218-722-6013
3. **Waste Disposal Site** VONCO V, LLC.
   Mailing Address 1100 West Gary Street
   City, St., Zip Duluth, MN 55808
4. **Responsible Agency** MN Pollution Control Agency
   Address 520 Lafayette Road
   City, St., Zip St. Paul, MN 55155-3898

5. Description of Materials	6. Containers (No.-Type)	7. Total Quantity (m^3 or yd^3)
Soil Contaminated with used Petroleum	1 - Dump Truck	10-12 CY/truck

8. **Special Handling Instructions and Additional Information**

9. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and governmental regulations. The above listed material(s) is (are) not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law.

Name & Title (Printed or Typed) Tom Curelli, Director of Operations Signature [signature] Date 7-8-15

TRANSPORTER

10. **Transporter 1** (Acknowledgement of receipt of materials)
    Name/Title RJS Const. Group LLC Signature Wayne Boucher Date 7-8-15
    Address 1 Clough Ave City, St., Zip Superior, WI 54880 Phone No. 715-394-7771
11. **Transporter 2** (Acknowledgement of receipt of materials)
    Name/Title _____ Signature _____ Date _____
    Address _____ City, St., Zip _____ Phone No. _____

DISPOSAL SITE

12. **Discrepancy Indication Space** C5

Ticket # 261528 Tons 14.47 Yards _____

E _____ N _____ Elev. _____

13. **Waste Disposal Site Owner or Operator:** Certification of receipt of non-hazardous materials covered by this manifest except as noted in item 12.

Name/Title (Printed or Typed) DL

Signature DL Date 7/8/15

CONTRACTOR - WHITE TRANSPORTER - CANARY WASTE DISPOSAL SITE - PINK GENERATOR/OPERATOR - GOLD

VONCO V, LLC.

218-626-3830 FAX: 218-626-1009

7

INDUSTRIAL/NON-HAZARDOUS MATERIAL TRANSPORT AND DISPOSAL MANIFEST

PROFILE #: 14-157-I

GENERATOR

1. **Work Site Name** Fraser Shipyard
   Address 1 Clough Avenue
   City, St., Zip Superior, WI 54880
   Owner's Name Tom Curelli, Director of Operations
   Owner's Phone No. 715-394-7787, ext. 101
2. **Consultant/Contractor** Environmental Trouble Shooters
   Address 3825 Grand Avenue
   City, St., Zip Duluth, MN 55807
   Operator's Phone 218-722-6013

3. **Waste Disposal Site** VONCO V, LLC.
   Mailing Address 1100 West Gary Street
   City, St., Zip Duluth, MN 55808
4. **Responsible Agency** MN Pollution Control Agency
   Address 520 Lafayette Road
   City, St., Zip St. Paul, MN 55155-3898

5. Description of Materials	6. Containers (No.-Type)	7. Total Quantity (m^3 or yd^3)
Soil Contaminated with used Petroleum	1 - Dump Truck	10-12 CY/truck

8. **Special Handling Instructions and Additional Information**

9. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and governmental regulations. The above listed material(s) is (are) not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law.

Name & Title (Printed or Typed) Tom Curelli, Director of Operations Signature [signature] Date 7-8-15

TRANSPORTER

10. **Transporter 1** (Acknowledgement of receipt of materials)
    Name/Title RJS Const Group LLC Signature Stan Mocki Date 7-8-15
    Address 1 Clough Ave City, St., Zip Superior, WI 54880 Phone No. 715 394-7771
11. **Transporter 2** (Acknowledgement of receipt of materials)
    Name/Title _____ Signature _____ Date _____
    Address _____ City, St., Zip _____ Phone No. _____

DISPOSAL SITE

12. **Discrepancy Indication Space** CS

Ticket # 26/363 Tons 17.26 Yards _____

E _____ N _____ Elev. _____

13. **Waste Disposal Site Owner or Operator:** Certification of receipt of non-hazardous materials covered by this manifest except as noted in item 12.

Name/Title (Printed or Typed) DLL

Signature DLL Date 7/8/15

CONTRACTOR - WHITE TRANSPORTER - CANARY WASTE DISPOSAL SITE - PINK GENERATOR/OPERATOR - GOLD

...CO V, LLC.

...: 218-626-3830 FAX: 218-626-1009

8

...DUSTRIAL/NON-HAZARDOUS MATERIAL TRANSPORT AND DISPOSAL MANIFEST

PROFILE #: 14-157-I

GENERATOR

1. **Work Site Name** Fraser Shipyard
   Address 1 Clough Avenue
   City, St., Zip Superior, WI 54880
   Owner's Name Tom Curelli, Director of Operations
   Owner's Phone No. 715-394-7787, ext. 101
2. **Consultant/Contractor** Environmental Trouble Shooters
   Address 3825 Grand Avenue
   City, St., Zip Duluth, MN 55807
   Operator's Phone 218-722-6013
3. **Waste Disposal Site** VONCO V, LLC.
   Mailing Address 1100 West Gary Street
   City, St., Zip Duluth, MN 55808
4. **Responsible Agency** MN Pollution Control Agency
   Address 520 Lafayette Road
   City, St., Zip St. Paul, MN 55155-3898

5. Description of Materials	6. Containers (No.-Type)	7. Total Quantity (m^3 or yd^3)
Soil Contaminated with used Petroleum	1 - Dump Truck	10-12 CY/truck

8. **Special Handling Instructions and Additional Information**

9. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and governmental regulations. The above listed material(s) is (are) not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law.

Name & Title (Printed or Typed) Tom Curelli, Director of Operations Signature [signature] Date 7-8-15

TRANSPORTER

10. **Transporter 1** (Acknowledgement of receipt of materials)

Name/Title RJS Const. Group LLC Signature [signature] Date 7-8-15

Address 1 Clough Ave City, St., Zip Superior, WI Phone No. 715 394 7771

11. **Transporter 2** (Acknowledgement of receipt of materials)

Name/Title _____ Signature _____ Date _____

Address _____ City, St., Zip _____ Phone No. _____

DISPOSAL SITE

12. **Discrepancy Indication Space** CS

261404 Ticket # Tons 21.03 Yards

E _____ N _____ Elev. _____

13. **Waste Disposal Site Owner or Operator:** Certification of receipt of non-hazardous materials covered by this manifest except as noted in item 12.

Name/Title (Printed or Typed) DAL

Signature DAL Date 7/8/15

CONTRACTOR - WHITE TRANSPORTER - CANARY WASTE DISPOSAL SITE - PINK GENERATOR/OPERATOR - GOLD

VONCO V, LLC.

218-626-3830 FAX: 218-626-1009

19

INDUSTRIAL/NON-HAZARDOUS MATERIAL TRANSPORT AND DISPOSAL MANIFEST

PROFILE #: 14-157-I

GENERATOR

1. **Work Site Name** Fraser Shipyard
   Address 1 Clough Avenue
   City, St., Zip Superior, WI 54880
   Owner's Name Tom Curelli, Director of Operations
   Owner's Phone No. 715-394-7787, ext. 101
2. **Consultant/Contractor** Environmental Trouble Shooters
   Address 3825 Grand Avenue
   City, St., Zip Duluth, MN 55807
   Operator's Phone 218-722-6013
3. **Waste Disposal Site** VONCO V, LLC.
   Mailing Address 1100 West Gary Street
   City, St., Zip Duluth, MN 55808
4. **Responsible Agency** MN Pollution Control Agency
   Address 520 Lafayette Road
   City, St., Zip St. Paul, MN 55155-3898

5. Description of Materials	6. Containers (No.-Type)	7. Total Quantity (m^3 or yd^3)
Soil Contaminated with used Petroleum	1 - Dump Truck	10-12 CY/truck

8. **Special Handling Instructions and Additional Information**

9. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and governmental regulations. The above listed material(s) is (are) not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law.

Name & Title (Printed or Typed) Tom Curelli, Director of Operations Signature [signature] Date 7-13-15

TRANSPORTER

10. **Transporter 1** (Acknowledgement of receipt of materials)
    Name/Title RTS Const Group LLC Signature _____ Date _____
    Address _____ City, St., Zip _____ Phone No. _____
11. **Transporter 2** (Acknowledgement of receipt of materials)
    Name/Title SIPSAS Signature _____ Date 7-13-15
    Address _____ City, St., Zip _____ Phone No. _____

DISPOSAL SITE

12. **Discrepancy Indication Space**

Ticket # _____ Tons _____ Yards _____
E _____ N _____ Elev. _____

13. **Waste Disposal Site Owner or Operator:** Certification of receipt of non-hazardous materials covered by this manifest except as noted in item 12.

Name/Title (Printed or Typed) DU
Signature DU Date 7/13/15

CONTRACTOR - WHITE TRANSPORTER - CANARY WASTE DISPOSAL SITE - PINK GENERATOR/OPERATOR - GOLD

VONCO V, LLC.

PHONE: 218-626-3830 FAX: 218-626-1009

20

INDUSTRIAL/NON-HAZARDOUS MATERIAL TRANSPORT AND DISPOSAL MANIFEST

PROFILE #: 14-157-I

GENERATOR

1. **Work Site Name** Fraser Shipyard
   Address 1 Clough Avenue
   City, St., Zip Superior, WI 54880
   Owner's Name Tom Curelli, Director of Operations
   Owner's Phone No. 715-394-7787, ext. 101
2. **Consultant/Contractor** Environmental Trouble Shooters
   Address 3825 Grand Avenue
   City, St., Zip Duluth, MN 55807
   Operator's Phone 218-722-6013
3. **Waste Disposal Site** VONCO V, LLC.
   Mailing Address 1100 West Gary Street
   City, St., Zip Duluth, MN 55808
4. **Responsible Agency** MN Pollution Control Agency
   Address 520 Lafayette Road
   City, St., Zip St. Paul, MN 55155-3898

5. Description of Materials	6. Containers (No.-Type)	7. Total Quantity (m^3 or yd^3)
Soil Contaminated with used Petroleum	1 - Dump Truck	10-12 CY/truck

8. **Special Handling Instructions and Additional Information**

9. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and governmental regulations. The above listed material(s) is (are) not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law.

Name & Title (Printed or Typed) Tom Curelli, Director of Operations Signature [signature] Date 7-13-15

TRANSPORTER

10. **Transporter 1** (Acknowledgement of receipt of materials)

Name/Title RJS Const. Group LLC Signature _____ Date _____

Address _____ City, St., Zip _____ Phone No. _____

11. **Transporter 2** (Acknowledgement of receipt of materials)

Name/Title SIPSAS Signature _____ Date 7-13-15

Address _____ City, St., Zip _____ Phone No. _____

DISPOSAL SITE

12. **Discrepancy Indication Space** 05

Ticket # _____ Tons _____ Yards _____

E _____ N _____ Elev. _____

13. **Waste Disposal Site Owner or Operator:** Certification of receipt of non-hazardous materials covered by this manifest except as noted in item 12.

Name/Title (Printed or Typed) DLL

Signature DLL Date 7/13/15

CONTRACTOR - WHITE TRANSPORTER - CANARY WASTE DISPOSAL SITE - PINK GENERATOR/OPERATOR - GOLD

APPENDIX D

PROPERTY DEED

781183

Document Number

STATE BAR OF WISCONSIN FORM 3 - 2000

QUIT CLAIM DEED

DOCUMENT # 781183

Recorded
FEB. 03,2005 AT 10:00AM
KATHY F. HANSON
DOUGLAS COUNTY RECORDER
SUPERIOR, WI 54880-2769
Fee Amount: $43.00
Transfer Fee: $3730.80

This Deed, made between Fraser Shipyards, Inc., a Wisconsin corporation, Fraser-Nelson Shipbuilding and Dry Dock Co., Inc., a Wisconsin corporation, Troy Johnson, Inc., a Wisconsin, corporation, Grantor, and FSY R/E Group, LLC, a Wisconsin limited liability company, Grantee.

Grantor quit claims to Grantee the following described real estate in Douglas County, State of Wisconsin (if more space is needed, please attach addendum):

See addendum attached hereto as Exhibit A.

Recording Area

Name and Return Address
Krista J. Ebbens, Esq.
Reinhart Boerner Van Deuren, s.c.
W233 N2080 Ridgeview Parkway
Waukesha, WI 53188

43/ck

See attached Exhibit B
Parcel Identification Number (PIN)

This is not homestead property.
(~~is~~) (is not)

Together with all appurtenant rights, title and interests.

Dated this 8th day of December, 2004.

FRASER SHIPYARDS, INC.

* By: ~~Todd~~ Johnson

Its: ~~Exec~~ VP

*

*

*

AUTHENTICATION

Signature(s) _____

_____

authenticated this ____ day of _____, ____

_____

* _____

TITLE: MEMBER STATE BAR OF WISCONSIN

(If not, _____
authorized by §706.06, Wis. Stats.)

THIS INSTRUMENT WAS DRAFTED BY
Krista J. Ebbens, Esq. [1082068]

(Signatures may be authenticated or acknowledged. Both are not necessary.)

ACKNOWLEDGMENT

STATE OF WISCONSIN)
) ss.
Douglas County.)

Personally came before me this 8th day of December, 2004 the above named Todd Johnson as ~~Exec~~ VP of Fraser Shipyards, Inc.

Inc.

to me known to be the person(s) who executed the foregoing instrument and acknowledged the same.

Marcia A. Geyer
* Marcia A Geyer

Notary Public, State of Wisconsin

My Commission is permanent. (If not, state expiration date: ~~My Commission Expires 5/4/2008~~ .)

* Names of persons signing in any capacity must be typed or printed below their signature.

781183

FRASER-NELSON SHIPBUILDING AND
DRY DOCK CO., INC.

By: Todd Johnson
Its: Exec VP

State of Wisconsin)
)ss.
Douglas County)

Personally came before me this 8 day of December, 2004, the above named Todd Johnson as Exec VP of Fraser-Nelson Shipbuilding and Dry Dock Co., Inc. to me known to be the person(s) who executed the foregoing instrument and acknowledged the same.

Marcia A. Geyer
* Marcia A. Geyer
Notary Public, State of Wisconsin
My Commission is permanent. (If not, state expiration date:
My Commission Expires 5/4/2008.)

781183

Grantor: Fraser Shipyards, Inc., Fraser-Nelson Shipbuilding and Dry Dock Co., Inc., and Troy Johnson, Inc.

Grantee: FSY R/E Group, LLC

QUIT CLAIM DEED

EXHIBIT A

PROPERTY DESCRIPTIONS:

1. A piece or parcel of land, being a part of "Lot A", Block 510, Sweetser Division, Superior, Wisconsin, described as follows, to-wit: Beginning at a point on the Northeasterly line of the right-of-way of the Lake Superior Terminal and Transfer Railway Company, which point is the Southwesterly corner of "Lot A"; thence running Northwesterly along said right-of-way line a distance of 129 feet; thence running Northeasterly, at an angle of 90°, with said right-of-way, 215 feet to the Southwesterly line of Howard's slip; thence Southeasterly, along said slip, 217 feet to the Southeasterly corner of said "Lot A", which point is also the Northeasterly corner of Lot numbered 16, of Block 510; thence Southwesterly 150 feet to the place of beginning; containing 665/1000 of an acre.

2. Lot A, Block 510, Sweetser Division, Superior, Wisconsin.

3. Lot 2, Block 510, West Superior, Sweetser Division, Douglas County, Wisconsin (City of Superior).

4. Parts of Lots 1, 2, 3, 4, 5 and 6 on Connor's Point in the City of Superior, Douglas County, Wisconsin, described according to the Plat of Connor's Point, dated and recorded May 13, 1856, in Book "A" of Plats, Page 236, in the office of the Register of Deeds, Douglas County, Wisconsin, to-wit: Beginning at the intersection of the Southeasterly line of Lamborn Avenue with the established Northeasterly dock line of "Howard's Pocket"; thence Northeasterly along said Southeasterly line of Lamborn Avenue, about 394.18 feet to a point distant 90 feet Southwesterly along said Avenue line from the Southwesterly line of Main Street; thence South 50°11' East a distance of 143.37 feet to the Northwesterly line of Lot 5; thence South 44°23' East 201.21 feet; thence South 37°16'30" East about 1833.67 feet to a point in said Northeasterly dock line of "Howard's Pocket" 105.6 feet from the Southerly line of Section 11, measured along said dock line; thence Northwesterly along said dock line about 2213.74 feet to the place of beginning.

5. Lots numbered 5 and 6, in Block numbered 511, in the Townsite of West Superior, Sweetser Division, according to the plat of said Townsite recorded in the office of the Register of Deeds in and for said County.

6. Lot 25, Cummings Slip Addition to West Superior, according to the recorded plat or plats thereof on file and of record in the Office of the Register of Deeds in and for said Douglas County, Wisconsin.

7. Lot numbered 16, in Block numbered 510, in the Townsite of West Superior, Sweetser Division, according to the plat of said Townsite, recorded in the office of the Register of Deeds in and for said County.

8. A tract of land being part of Government Lot 1, Section 11, Township 49, Range 14, bounded on the West by Cumming Slip, on the South by the Northerly line of First Street produced, on the East by the East line of Government Lot 1 produced, to the established dock line in Howard's Pocket, on the North by the said Dock line and Cumming Slip appurtenant thereto (7.108 acres).

9. Lot B, Peyton and Clough's Second Addition to West Superior.

10. That part of Lot 4, Block 511, Sweetser Division, which lies Northerly of a straight line which is parallel with the Northerly line of Bay Street and 107.25 feet Northerly from said North line of Bay Street, in the City of Superior, Douglas County, Wisconsin, according to the plat thereof on file or of record in the office of the Register of Deeds for Douglas County, Wisconsin.

11. Part of Lot 6, Connor's Point, lying Southwesterly of Main Street; commencing at an iron monument located at the intersection of the North line of Lamborn Avenue with the West line of Main Street in Lot 6; then Westerly along North line of Lamborn Avenue for a distance of 27.68 feet to an iron monument for place of beginning; then Northerly making an angle to the left of 73°28' for a distance of 146.24 feet to an iron monument located on the line between Lot 6 and 7, then Westerly along the boundary line between said Lot 6 and 7 to the established harbor line on Easterly side of Howard's Pocket; then Southerly along said harbor line to Northerly line of Lamborn Avenue; then Easterly along Northerly line of Lamborn Avenue to beginning. Except right-of-way, Connor's Point, City of Superior, according to the recorded plat or plats thereof on file and of record in the Office of the Register of Deeds in and for said Douglas County, Wisconsin.

12. Lots 1, 2 and 3, Block 511, Sweetser Division, Superior, Wisconsin.

13. Lot Ten (10) and Twenty-two (22) and Undivided 1/6 of Lots Sixteen (16) and Seventeen (17),Cummings Slip Addition to West Superior, Except Right-of-way (R/W), according to the recorded plat or plats thereof on file and of record in the Office of the Register of Deeds, in and for said Douglas County, Wisconsin.

14. That part of North 4th Street and Catlin Avenue in the City of Superior, Wisconsin, lying northeasterly of the right-of-way limits of the U.S. Highway 53.

15. All of First Street lying easterly of the east line of Baxter Avenue extended. Lamborn Avenue, between the north line of Second Street extended and the Government Harbor Line on Howard's Pocket;

16. An undivided 115/136 of Lots 14 and 15, Cummings Slip Addition to West Superior, Douglas County, Wisconsin.

17. An undivided one-half (1/2) interest in Lots Twenty (20) and Twenty-one (21), Subdivision of Lot One (1), CUMMINGS SLIP ADDITION TO WEST SUPERIOR:

AND,

Lots Twelve (12), Thirteen (13), and an undivided twenty-one one-hundred-thirty-sixths (21/136) interest in Lots Fourteen (14) and Fifteen (15), an undivided five-sixths (5/6) interest in Lots Sixteen (16) and Seventeen (17), and all of Lots Eighteen (18), Nineteen (19), Twenty-three (23) and Twenty-four (24), CUMMINGS SLIP ADDITION TO WEST SUPERIOR, EXCEPT right-of-way.

18. Lots 4, 5, 6 and 7, Block 159, all in West Superior, First Division, in the City of Superior, Douglas County, Wisconsin according to the plat thereof on file and of record in the office of the Register of Deeds in and for said Douglas County, Wisconsin.

19. Lots 3, 6, 7, 8, 11 and 12 in Block 510, Sweetser Division in the City of Superior, Douglas County, Wisconsin, according to the plat thereof on file and of record in the office of the Register of Deeds for said Douglas County.

20. Lot 10 in Block 510, Sweetser Division in the City of Superior, Douglas County, Wisconsin according to the plat thereof on file and of record in the office of the Register of Deeds for said Douglas County, Wisconsin.

21. Lot 1, 4, 5, 9, 13 and 14, Block 510 except part taken for Water Street and except right-of-way, Sweetser Division of West Superior, according to the recorded plat or plats thereof on file and of record in the Office of the Register of Deeds and for Douglas County, Wisconsin.

22. Lot 2 in Block 510, Sweetser Division in the City of Superior, Douglas County, Wisconsin, according to the plat thereof on file and of record in the office of the Register of Deeds for said Douglas County, Wisconsin.

23. Lot 2 to 9, inclusive, Lot 11, Cumming Slip Addition to West Superior, according to the recorded plat or plats thereof on file and of record in the office of the Register of Deeds in and for said Douglas County, Wisconsin.

24. Lots 24 to 38 and Fr. Lots 39 to 43, all inclusive in Subdivision of Lot 1 Cumming Slip Addition, according to the recorded plat or plats thereof on file and of record in the office of the Register of Deeds in and for said Douglas County, Wisconsin.

25. An undivided one-half (1/2) interest in Lot 20, Subdivision of Lot One (1), Cummings Slip Addition to West Superior.

26. An undivided one-half (1/2) interest in Lot 21, Subdivision of Lot One (1), Cummings Slip Addition to West Superior.

27. That part of Lot A lying South of South line of North First Street produced except part taken for Second Street and that part of Lot A lying North of North line of North First Street produced; Lots 1 to 15, inclusive, and Lot 16, except part taken for Second Street, Block 479, West Superior 20th Division.

28. All that part of Lot numbered 15, in Block numbered 510, in the Townsite of West Superior, Sweetser Division, according to the plats of said Townsite recorded in the office of the Register of Deeds in and for said County, described as follows: Commencing at the Southerly corner of said Lot 15, where the Southwesterly side of said lot strikes 5th Street for a place of beginning; thence running Northwest, along its Southwesterly side, the whole length of said lot; thence Northeast along the Northwesterly end of said lot, 65 feet; thence Southeasterly at right angles to said Northwesterly end of said lot, and parallel to the Southwesterly side thereof to the Northwesterly side of 5th Street; thence Southwesterly along the Northwesterly side of 5th Street to the place of beginning.

29. All that part of Government Lots 1 and 2 in Section 11, Township 49 North, Range 14 West, Douglas County, Wisconsin, described as follows: Beginning at a point on the East line of Grand Avenue (formerly Lamborn Avenue), which point is also located on North right-of-way line of the Lake Superior Terminal & Transfer Railway Company as now established, and is 245 feet North of the center line of Third Street when measured along Easterly line of said Grand Avenue; thence East along said right-of-way line a distance of 290.54 feet to a point; thence Northeasterly at an angle to the left of 53°30' a distance of 687 feet more or less to a point on the U.S. Government harbor line as now established on the Southerly side of Howard's Pocket; thence is a Northwesterly direction along said harbor line to a point on the Easterly line of Grand Avenue; thence Southwesterly and South along said East line of Grand Avenue to the point of beginning.

30. All that part of Government Lot 2, Section 14, Township 49 North, Range 14 West, Douglas County, Wisconsin, described as follows: Beginning at the NW corner of said Lot 2, which point is also the N1/4 corner of said Section 14; thence Easterly along said North line of Government Lot 2 a distance of 236 feet more or less, to the U.S. Government harbor line as now established on the Southerly side of Howard's Pocket; thence Southwesterly at an angle to the right of 48°23' along South line of Howard's Slip a distance of 333 feet to a point; thence Southwesterly at an angle to the right of 61°3' a

distance of 212 feet more or less to a point on the North right-of-way line of the Lake Superior Terminal & Transfer Railway Company as now established; thence Northwesterly along said right-of-way line as now established to a point on the Westerly line of Government Lot 2; thence North along said Westerly line of Government Lot 2 to the point of beginning.

31. All that part of Government Lot 2 in Section 11, Township 49 North, Range 14 West, in Douglas County, Wisconsin, described as follows: Commencing at a point on the East line of Grand Avenue (formerly Lamborn Avenue), which point is also located on the North line of the right-of-way of the Lake Superior Terminal & Transfer Railway Company as now established, and is 245 feet North of the center line of Third Street when measured along the East line of Grand Avenue; thence Easterly along Northerly line of the right-of-way of the Lake Superior Terminal & Transfer Railway Company a distance of 290.54 feet to a point, which is the point of beginning of the parcel of land herein to be described; thence at an angle to the left of 53°30' a distance of 687 feet more or less to a point on the U.S. Government harbor line as now established on the Southerly side of Howard's Pocket; thence in a Southeasterly direction along said harbor line to a point on the Northerly line of Government Lot 2 of Section 14 of said Township 49 North, Range 14 West; thence Westerly along said Northerly line of Section 14 to a point on the Northerly line of the right-of-way of the Lake Superior Terminal & Transfer Railway Company as now established; thence Northwesterly and Westerly along said Northerly right-of-way line to the point of beginning.

32. Lot A in the Eleventh Division and Lot D in the Fifteenth Division of the Townsite of West Superior, according to the respective plats thereof on file and of record in the office of Register of Deeds in and for said County of Douglas, Wisconsin.

33. Together with all rights to and under that certain Department of Army Permit with an effective date of January 10, 1977 and an expiration date of January 3, 1980, a copy of which permit is attached to this deed.

Together with all riparian, littoral, terminal and wharfage rights, reversionary rights, and rights of re-entry, if any, of the grantor, upon the lands and waters adjoining any of the premises hereby conveyed, and all other rights, title and interest, if any, in and to such adjoining lands, including the right or use of occupancy which the grantor may now have in and to any lands occupied by streets, alleys or other public places adjoining its premises above described, or any such vacated streets, alleys or public places.

781183

Grantor: Fraser Shipyards, Inc., Fraser-Nelson Shipbuilding and Dry Dock Co., Inc., and Troy Johnson, Inc.

Grantee: FSY R/E Group, LLC

QUIT CLAIM DEED

EXHIBIT B

PARCEL IDENTIFICATION NUMBER

1. 03-803-00927-00
2. 03-803-01014-00
3. 03-803-01018-00
4. 03-803-01088-00
5. 03-803-01090-00
6. 03-803-01093-00
7. 03-803-01113-00
8. 03-803-01121-00
9. 03-803-01123-00
10. 03-803-01124-00
11. 03-803-01125-00
12. 03-803-01126-00
13. 03-803-01128-00
14. 03-803-01132-00
15. 03-803-01133-00
16. 03-803-01135-00
17. 03-803-01136-00
18. 03-803-01137-00
19. 03-803-01138-00
20. 03-803-01139-00
21. 03-803-01141-00
22. 03-803-01142-00
23. 03-803-01143-00
24. 03-803-01144-00
25. 03-803-01399-00
26. 03-803-01468-00
27. 03-803-01483-00
28. 03-803-02125-00
29. 03-803-02126-00
30. 03-803-02127-00
31. 04-804-00918-00

781183

Application No. LS-197A

Name of Applicant Fraser Shipyards, Inc.

Effective Date 10 January 1977

Expiration Date (If applicable) 3 January 1980

DEPARTMENT OF THE ARMY
PERMIT

Referring to written request dated 24 July 1975 for a permit to:

(X) Perform work in or affecting navigable waters of the United States, upon the recommendation of the Chief of Engineers, pursuant to Section 10 of the Rivers and Harbors Act of March 3, 1899 (33 U.S.C. 403);

(X) Discharge dredged or fill material into navigable waters upon the issuance of a permit from the Secretary of the Army acting through the Chief of Engineers pursuant to Section 404 of the Federal Water Pollution Control Act (86 Stat. 816, P.L. 92-500),

( ) Transport dredged material for the purpose of dumping it into ocean waters upon the issuance of a permit from the Secretary of the Army acting through the Chief of Engineers pursuant to Section 103 of the Marine Protection, Research and Sanctuaries Act of 1972 (86 Stat. 1052; P.L. 92-532):

Fraser Shipyards, Inc. — (Here insert the full name and address of the permittee)
Third Street and Clough Avenue
Superior, Wisconsin 54880

is hereby authorized by the Secretary of the Army:

to excavate 57,000 cubic yards of material to facilitate the construction of dry dock "A" and dry dock "B". Dry dock "A" will be 1200 feet x 140 feet x 22 feet deep. Approximately 37,000 cubic yards of material will be used as fill behind the bulkhead and the remaining 20,000 cubic yards will be disposed of at the "Itasca Disposal Site." — (Here describe the proposed structure or activity, and its intended use. In the case of an application for a fill permit, describe the structures, if any, proposed to be erected on the fill. In the case of an application for the discharge of dredged or fill material into navigable waters or the transportation for discharge in ocean waters of dredged material, describe the type and quantity of material to be discharged.)

in Howards Bay of Lake Superior — (Here to be named the ocean, river, harbor, or water concerned.)

at a site in secs. 11 and 14, T. 49 N., R. 14 W., of Douglas County at Superior, Wisconsin — (Here to be named the nearest well-known locality—preferably a town or city—and the distance in miles and tenths from some definite point in the same, stating whether above or below or giving direction by points of compass.)

in accordance with the plans and drawings attached hereto which are incorporated in and made a part of this permit (on drawings: give file number or other definite identification marks): entitled "Proposed Dry Docks" dated 6 June 1975, revised 29 October 1975

subject to the following conditions:

1. General Conditions:

a. That all activities identified and authorized herein shall be consistent with the terms and conditions of this permit; and that any activities not specifically identified and authorized herein shall constitute a violation of the terms and conditions of this permit which may result in the modification, suspension or revocation of this permit, in whole or in part, as set forth more specifically in General Conditions j or k hereto, and in the institution of such legal proceedings as the United States Government may consider appropriate, whether or not this permit has been previously modified, suspended or revoked in whole or in part.

b. That all activities authorized herein shall, if they involve a discharge or deposit into navigable waters or ocean waters, be at all times consistent with applicable water quality standards, effluent limitations and standards of performance, prohibitions, and pretreatment standards established pursuant to Sections 301, 302, 306 and 307 of the Federal Water Pollution Control Act of 1972 (P.L. 92-500; 86 Stat. 816), or pursuant to applicable State and local law.

c. That when the activity authorized herein involves a discharge or deposit of dredged or fill material into navigable waters, the authorized activity shall, if applicable water quality standards are revised or modified during the term of this permit, be modified, if necessary, to conform with such revised or modified water quality standards within 6 months of the effective date of any revision or modification of water quality standards, or as directed by an implementation plan contained in such revised or modified standards, or within such longer period of time as the District Engineer, in consultation with the Regional Administrator of the Environmental Protection Agency, may determine to be reasonable under the circumstances.

d. That the permittee agrees to make every reasonable effort to prosecute the work authorized herein in a manner so as to minimize any adverse impact of the work on fish, wildlife and natural environmental values.

e. That the permittee agrees to prosecute the work authorized herein in a manner so as to minimize any degradation of water quality.

f. That the permittee shall permit the District Engineer or his authorized representative(s) or designee(s) to make periodic inspections at any time deemed necessary in order to assure that the activity being performed under authority of this permit is in accordance with the terms and conditions prescribed herein.

g. That the permittee shall maintain the structure or work authorized herein in good condition and in accordance with the plans and drawings attached hereto.

h. That this permit does not convey any property rights, either in real estate or material, or any exclusive privileges; and that it does not authorize any injury to property or invasion of rights or any infringement of Federal, State, or local laws or regulations, nor does it obviate the requirement to obtain State or local assent required by law for the activity authorized herein.

i. That this permit does not authorize the interference with any existing or proposed Federal project and that the permittee shall not be entitled to compensation for damage or injury to the structures or work authorized herein which may be caused by or result from existing or future operations undertaken by the United States in the public interest.

j. That this permit may be summarily suspended, in whole or in part, upon a finding by the District Engineer that immediate suspension of the activity authorized herein would be in the general public interest. Such suspension shall be effective upon receipt by the permittee of a written notice thereof which shall indicate (1) the extent of the suspension, (2) the reasons for this action, and (3) any corrective or preventative measures to be taken by the permittee which are deemed necessary by the District Engineer to abate imminent hazards to the general public interest. The permittee shall take immediate action to comply with the provisions of this notice. Within ten days following receipt of this notice of suspension, the permittee may request a hearing in order to present information relevant to a decision as to whether his permit should be reinstated, modified or revoked. If a hearing is requested, it shall be conducted pursuant to procedures prescribed by the Chief of Engineers. After completion of the hearing, or within a reasonable time after issuance of the suspension notice to the permittee if no hearing is requested, the permit will either be reinstated, modified or revoked.

k. That this permit may be either modified, suspended or revoked in whole or in part if the Secretary of the Army or his authorized representative determines that there has been a violation of any of the terms or conditions of this permit or that such action would otherwise be in the public interest. Any such modification, suspension, or revocation shall become effective 30 days after receipt by the permittee of written notice of such action which shall specify the facts or conduct warranting same unless (1) within the 30-day period the permittee is able to satisfactorily demonstrate that (a) the alleged violation of the terms and the conditions of this permit did not, in fact, occur or (b) the alleged violation was accidental, and the permittee has been operating in compliance with the terms and conditions of the permit and is able to provide satisfactory assurances that future operations shall be in full compliance with the terms and conditions of this permit; or (2) within the aforesaid 30-day period, the permittee requests that a public hearing be held to present oral and written evidence concerning the proposed modification, suspension or revocation. The conduct of this hearing and the procedures for making a final decision either to modify, suspend or revoke this permit in whole or in part shall be pursuant to procedures prescribed by the Chief of Engineers.

l. That in issuing this permit, the Government has relied on the information and data which the permittee has provided in connection with his permit application. If, subsequent to the issuance of this permit, such information and data prove to be false, incomplete or inaccurate, this permit may be modified, suspended or revoked, in whole or in part, and/or the Government may, in addition, institute appropriate legal proceedings.

m. That any modification, suspension, or revocation of this permit shall not be the basis for any claim for damages against the United

That the permittee shall notify the District Engineer at what time the activity authorized herein will be commenced, as far in advance of the time of commencement as the District Engineer may specify, and of any suspension of work, if for a period of more than one week, resumption of work and its completion.

o. That if the activity authorized herein is not started on or before _____ day of _____, 19____, (one year from the date of issuance of this permit unless otherwise specified) and is not completed on or before _____ day of _____, 19____ (three years from the date of issuance of this permit unless otherwise specified) this permit, if not previously revoked or specifically extended, shall automatically expire.

p. That no attempt shall be made by the permittee to prevent the full and free use by the public of all navigable waters at or adjacent to the activity authorized by this permit.

q. That if the display of lights and signals on any structure or work authorized herein is not otherwise provided for by law, such lights and signals as may be prescribed by the United States Coast Guard shall be installed and maintained by and at the expense of the permittee.

r. That this permit does not authorize or approve the construction of particular structures, the authorization or approval of which may require authorization by the Congress or other agencies of the Federal Government.

s. That if and when the permittee desires to abandon the activity authorized herein, unless such abandonment is part of a transfer procedure by which the permittee is transferring his interests herein to a third party pursuant to General Condition v hereof, he must restore the area to a condition satisfactory to the District Engineer.

t. That if the recording of this permit is possible under applicable State or local law, the permittee shall take such action as may be necessary to record this permit with the Register of Deeds or other appropriate official charged with the responsibility for maintaining records of title to and interests in real property.

u. That there shall be no unreasonable interference with navigation by the existence or use of the activity authorized herein.

v. That this permit may not be transferred to a third party without prior written notice to the District Engineer, either by the transferee's written agreement to comply with all terms and condition of this permit or by the transferee subscribing to this permit in the space provided below and thereby agreeing to comply with all terms and conditions of this permit. In addition, if the permittee transfers the interests authorized herein by conveyance of realty, the deed shall reference this permit and the terms and conditions specified herein and this permit shall be recorded along with the deed with the Register of Deeds or other appropriate official.

The following Special Conditions will be applicable when appropriate:

STRUCTURES FOR SMALL BOATS: That permittee hereby recognizes the possibility that the structure permitted herein may be subject to damage by wave wash from passing vessels. The issuance of this permit does not relieve the permittee from taking all proper steps to insure the integrity of the structure permitted herein and the safety of boats moored thereto from damage by wave wash and the permittee shall not hold the United States liable for any such damage.

DISCHARGE OF DREDGED MATERIAL INTO OCEAN WATERS: That the permittee shall place a copy of this permit in a conspicuous place in the vessel to be used for the transportation and/or dumping of the dredged material as authorized herein.

ERECTION OF STRUCTURE IN OR OVER NAVIGABLE WATERS: That the permittee, upon receipt of a notice of revocation of this permit or upon its expiration before completion of the authorized structure or work, shall, without expense to the United States and in such time and manner as the Secretary of the Army or his authorized representative may direct, restore the waterway to its former conditions. If the permittee fails to comply with the direction of the Secretary of the Army or his authorized representative, the Secretary or his designee may restore the waterway to its former condition, by contract or otherwise, and recover the cost thereof from the permittee.

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MAINTENANCE DREDGING: (1) That when the work authorized herein includes periodic maintenance dredging, it may be performed under this permit for 3 years from the date of issuance of this permit (ten years unless otherwise indicated); and (2) That the permittee will advise the District Engineer in writing at least two weeks before he intends to undertake any maintenance dredging.

II. Special Conditions: (Here list conditions relating specifically to the proposed structure or work authorized by this permit):

a. Establish and carry out a program for immediate removal of debris during construction in order to prevent the accumulation of unsightly, deleterious and/or potentially polluted materials in the waterway.

b. Excavate, dredge, or fill in the watercourse so as to minimize increases in suspended solids and turbidity which may degrade water quality and damage aquatic life outside the immediate area of operation.

c. Investigate for water supply intakes or other activities which may be affected by suspended solids and turbidity increases caused by work in the watercourse and give sufficient notice to the owners of affected activities to allow preparation for any changes in water quality.

d. Complete construction of the bulkhead prior to the placement of fill material behind the bulkhead.

e. Assure that deposition of dredged or excavated materials on shore, and all earthwork operations on shore will be carried out in such a way that sediment runoff and soil erosion to the watercourse are controlled and minimized. Spoil materials from watercourse or onshore operations, including sludge deposits, will not be dumped into the watercourse. Areas for deposit of dredged materials will be provided with temporary dikes or bulkheads for separation and retention of settleable solids.

This permit shall become effective on the date of the District Engineer's signature.

Permittee hereby accepts and agrees to comply with the terms and conditions of this permit.

Vernon White — Jan 24, 1977

PERMITTEE — DATE

FRASER SHIPYARDS, INC.

BY AUTHORITY OF THE SECRETARY OF THE ARMY:

Peter A. Fischer — 30 January 1977

PETER A. FISCHER — DATE

Ass't Chief, Engineer Division

for DISTRICT ENGINEER,

U.S. ARMY, CORPS OF ENGINEERS

Transferee hereby agrees to comply with the terms and conditions of this permit.

TRANSFEREE — DATE

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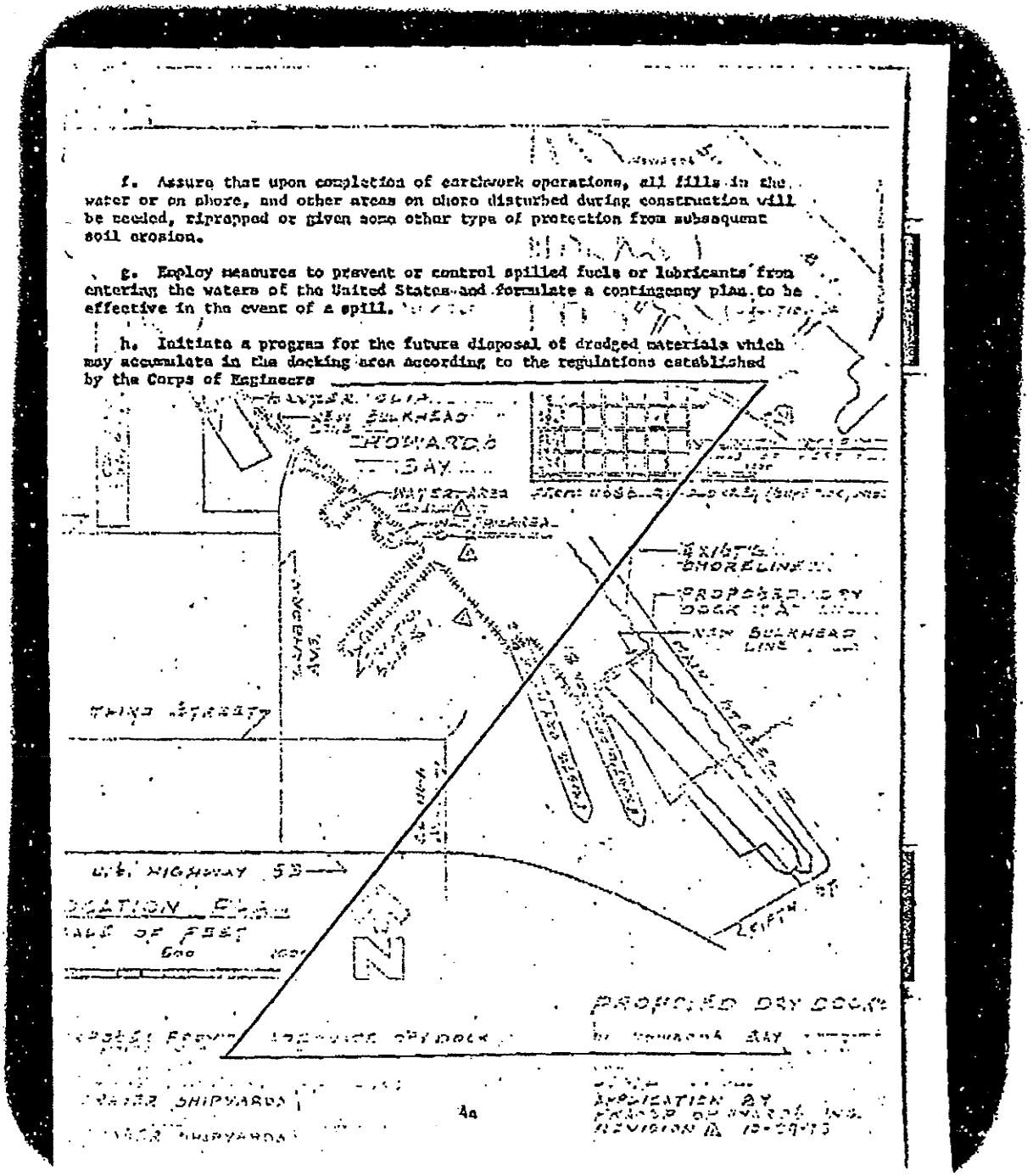
f. Assure that upon completion of earthwork operations, all fills in the water or on shore, and other areas on shore disturbed during construction will be seeded, riprapped or given some other type of protection from subsequent soil erosion.

g. Employ measures to prevent or control spilled fuels or lubricants from entering the waters of the United States and formulate a contingency plan to be effective in the event of a spill.

h. Initiate a program for the future disposal of dredged materials which may accumulate in the docking area according to the regulations established by the Corps of Engineers



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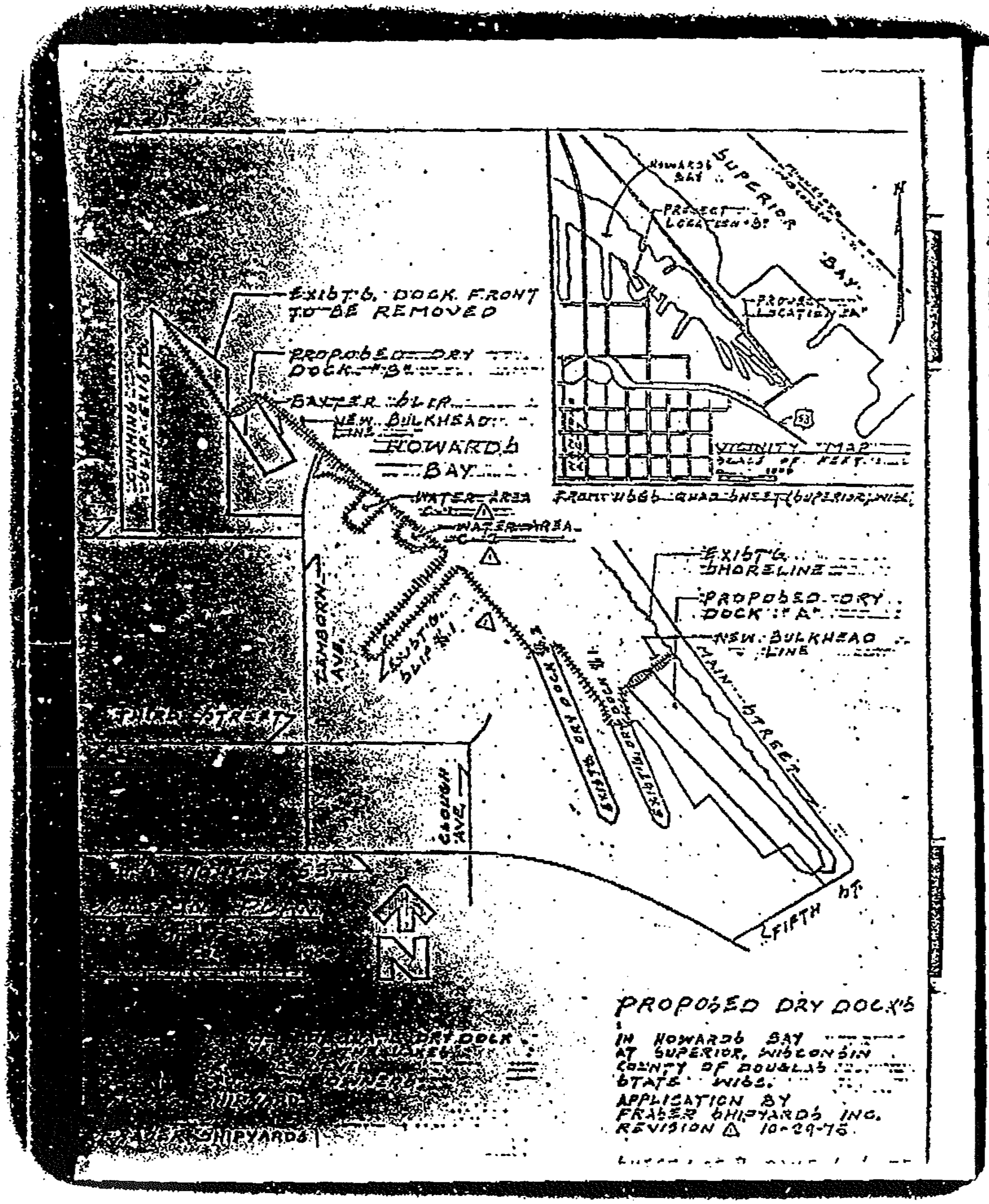
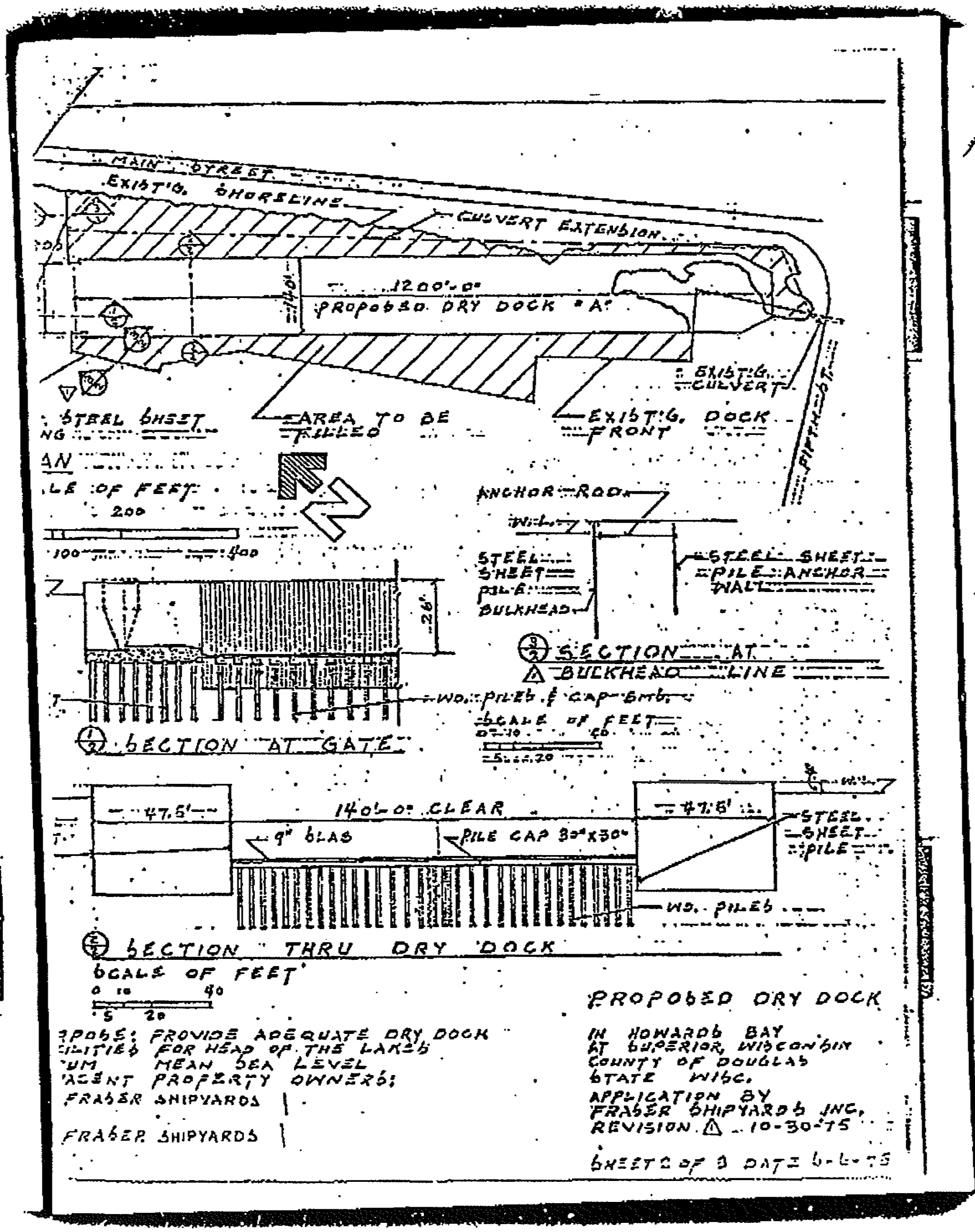

EXIST'G. DOCK FRONT TO BE REMOVED
PROPOSED DRY DOCK "B"
BAXTER SLIP
NEW BULKHEAD LINE
HOWARDS BAY
WATER AREA
EXIST'G. SHORELINE
PROPOSED DRY DOCK "A"
NEW BULKHEAD LINE
MAIN STREET
FIFTH ST.
VICINITY MAP
SUPERIOR BAY
PROPOSED DRY DOCK'S
IN HOWARDS BAY
AT SUPERIOR, WISCONSIN
COUNTY OF DOUGLAS
STATE WISC.
APPLICATION BY
FRASER SHIPYARDS INC.
REVISION 10-29-75

781183


MAIN STREET
EXIST'G. SHORELINE
CULVERT EXTENSION
1200'-0"
140'
PROPOSED DRY DOCK "A"
EXIST'G. CULVERT
FIFTH ST.
STEEL SHEET
AREA TO BE FILLED
EXIST'G. DOCK FRONT
SCALE OF FEET
200
100
400
ANCHOR ROD
STEEL SHEET PILE BULKHEAD
STEEL SHEET PILE ANCHOR WALL
26'
SECTION AT BULKHEAD LINE
WD. PILES & CAP SMS.
SCALE OF FEET
SECTION AT GATE
47.5'
140'-0" CLEAR
47.5'
9" SLAB
PILE CAP 30"x30"
STEEL SHEET PILE
WD. PILES
SECTION THRU DRY DOCK
SCALE OF FEET
0 10 40
5 20
PROPOSED DRY DOCK
IN HOWARDS BAY
AT SUPERIOR, WISCONSIN
COUNTY OF DOUGLAS
STATE WISC.
APPLICATION BY
FRASER SHIPYARDS INC.
REVISION 10-30-75
PURPOSE: PROVIDE ADEQUATE DRY DOCK FACILITIES FOR HEAD OF THE LAKES
DATUM MEAN SEA LEVEL
ADJACENT PROPERTY OWNERS:
FRASER SHIPYARDS
FRASER SHIPYARDS
SHEET 2 OF 3 DATE 6-6-75

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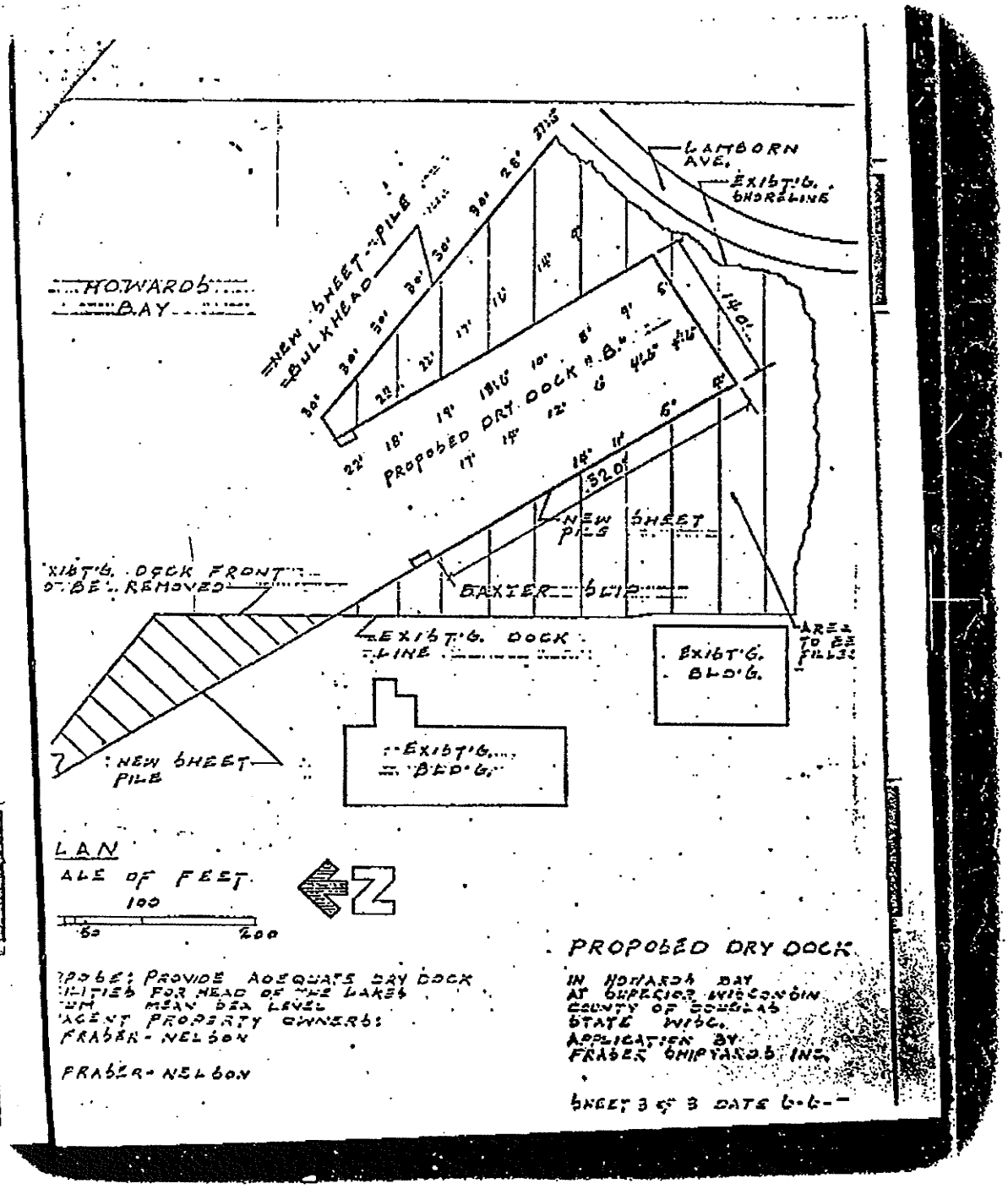

LAITBORN AVE.
EXIST'G. SHORELINE
NEW SHEET-PILE BULKHEAD
HOWARDS BAY
PROPOSED DRY DOCK
NEW SHEET PILE
EXIST'G. DOCK FRONT TO BE REMOVED
BAXTER BLVD.
EXIST'G. DOCK LINE
EXIST'G. BLD'G.
AREA TO BE FILLED
EXIST'G. BLD'G.
NEW SHEET PILE
LAN
ALE OF FEET
100
50
200
PROPOSED DRY DOCK
IN HOWARDS BAY
AT SUPERIOR WISCONSIN
COUNTY OF DOUGLAS
STATE WISC.
APPLICATION BY
FRASER SHIPYARDS INC.
SHEET 3 OF 3 DATE 6-6-
PROBE: PROVIDE ADEQUATE DRY DOCK
FACILITIES FOR HEAD OF THE LAKES
DM MEAN SEA LEVEL
ADJACENT PROPERTY OWNERS:
FRASER-NELSON
FRASER-NELSON

This document is in very poor condition and the Register of Deeds office cannot be held responsible for it's appearance with the scanning or duplication process.

SUBSURFACE SOIL EXPLORATION REPORT

Fraser Shipyard Building Addition
1 Clough Ave
Superior, WI

Prepared For:

RJS Construction Group, LLC
1 Clough Ave
Superior, WI 54880

Prepared By:

EPC Engineering & Testing
539 Garfield Avenue
Duluth, MN 55802

SUBSURFACE SOIL EXPLORATION REPORT

Fraser Shipyard Office Building Addition
1 Clough Ave
Superior, WI

PREPARED FOR:

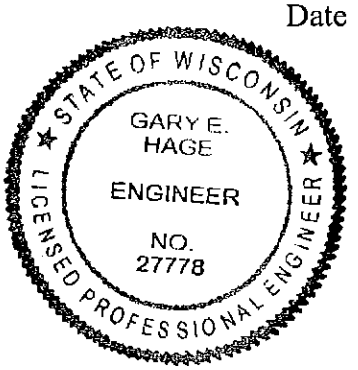
RJS Construction Group, LLC
1 Clough Ave
Superior, WI 54880

EPC Engineering & Testing Project No. 14G0930

I hereby certify that this report was prepared by me or under my direct personal supervision and that I am a duly Licensed Professional Engineer under the Laws of the State of Wisconsin.

Gary E. Hage, P.E.
Registration No. 27778

10/16/14
Date



EPC Engineering & Testing
539 Garfield Avenue (218) 727-1239
Duluth, MN 55802 (218) 727-1248 fax

March 16, 2014

RJS Construction Group, LLC
1 Clough Ave
Superior, WI 54880

Attn: Mr. Todd Koneczny

Re: Subsurface Exploration Soil Report
Fraser Shipyard Office Building Addition
1 Clough Ave
Superior, WI

Dear Mr. Koneczny,

Enclosed is EPC Engineering & Testing's (EPC) geotechnical engineering report for the above-referenced project. We have prepared this report, and based our conclusions and recommendations upon current applicable professional standards. Copies of this report are furnished only to provide the factual data that was gathered and our interpretations with respect to this project, not to provide information regarding environmental concerns potentially associated with this site. It should be noted that the soil samples from the upper 2 to 4 feet of Sandy Fill contained an organic, petroleum-like odor. Soil samples from this project will be saved for a period of two months from the date of this report, unless we are instructed in writing to do otherwise.

If you have any questions concerning the data or recommendations presented, or if we may be of further service on this project, please call. We appreciate the opportunity to be of service to your company on this project.

Respectfully submitted,
EPC Engineering & Testing,

Gary E. Hage, P.E.
Principal Engineer

C: NCE - Mr. Riley Geissler

SUBSURFACE SOIL EXPLORATION REPORT

Fraser Shipyard Office Building Addition
1 Clough Ave
Superior, WI

TABLE OF CONTENTS

EXECUTIVE SUMMARY

We have completed the subsurface soil exploration report for your project. The subsurface conditions beneath the site were found to be somewhat difficult due to relatively deep fill (10-feet), organic/peat soils and a suspected shallow water table, but acceptable for the proposed project with the proposed deep foundation, as we understand the intended scope of construction. In summary, we recommend using a deep, helical pile foundation with a maximum allowable bearing capacity of 25 tons per 1.75-inch square steel shaft and 14/12/10-inch diameter lead helical pile section to support foundations and floor slabs. Pile lengths are estimated at 35-feet, about 5-feet into the dense to very dense sandy soil encountered beginning at 30-feet below existing grade in the soil boring. Test piles should be installed to determine the actual length needed to achieve the specified bearing capacity. More specific details are summarized in the Conclusions and Recommendations sections of this report.

SUBSURFACE SOIL EXPLORATION REPORT
Fraser Shipyard Office Building Addition
1 Clough Ave
Superior, WI

SCOPE OF INVESTIGATION

This report presents the results of a subsurface soil exploration program for the proposed building addition referenced above. This investigation was performed at the direction of the project owner's representative, Mr. Todd Koneczny, by EPC Engineering & Testing (EPC) verbal proposal on September 30, 2014. Mr. Koneczny and Mr. Jon Aamodt, the project structural engineer with Northland Consulting Engineers (NCE), with recommendations of EPC, defined the scope of work performed in this subsurface exploration program.

This investigation was directed towards defining the subsurface conditions beneath the proposed site for this new building construction project. Field explorations and laboratory studies were performed to evaluate soil engineering properties at the site. Mr. Koneczny and Mr. Aamodt provided information about the project. A geotechnical investigation had not been conducted on this site before this investigation.

EPC has prepared this project report for design purposes only; it may not have sufficient subsurface information to prepare an accurate construction bid. EPC recommends that the contractors preparing bids or proposals for this project be provided with copies of this report and the soil boring logs, as supplemental information to the drawings and specifications, not as a part of the Contract Documents.

PROPOSED PROJECT

The proposed project, as described by the owner's representative, Mr. Todd Koneczny, and Mr. Jon Aamondt and Mr. Riley Geissler of Northland Consulting Engineers (NCE), consists of a 50 by 110-foot, single story, continuously heated metal building. Proposed construction is pile supported grade beam foundation and a grade beam supported slab in at least the mezzanine portion of the floor slab, all on helical piles. A shallow insulated foundation is proposed. Structural loading conditions are such that the desired pile capacity for optimum design is 25-tons. We have assumed that existing and final surface elevations will remain similar.

Changes in the nature, design, or location of all parts of this project may occur during development. The conclusions and recommendations contained in this report shall not be considered valid unless the changes are reviewed by the soils engineer. EPC will then make recommended changes or modifications to this report in writing only.

SITE CONDITIONS

Geological Setting

Through an understanding of the geological history and processes of any area, we are better able to define and understand the range of geotechnical properties observed in the geological materials encountered at the site. Knowledge of the anticipated subsurface profile at the site is essential for interpreting and correlating the borings from any geotechnical exploration program.

Based upon information from geological survey reports, and previous soils investigations in the area, the properties of the surficial soils at or near this project site are interpreted as being related to geological deposits of Quaternary unconsolidated materials overlying Precambrian bedrock.

The unconsolidated materials include fill and organic/peat material in the upper 10 feet. The unconsolidated native materials consist of lacustrine (lake clay), alluvium and/or outwash sand and silty/clayey sand, and generally overlay deeper, medium consistency lake clay from higher episodes of Lake Superior, related to the Wisconsinan Pleistocene glaciation.

The unconsolidated materials may also consist of deeper deposits of more stiff clayey till of the Nickerson Moraine Association, and more dense sandy and stony till of the Mille Lacs Highland Morin Association, both associated with the Wisconsinan Pleistocene glaciation.

Bedrock consists generally of a Precambrian mixed suite of basalts, andesites, and rhyolites of the North Shore Volcanic Group. Sandstone may also exist. Depth to bedrock is generally on the order of 300 to 500 feet.

Site Topography

Site topography in the immediate building area is relatively flat due to previous filling and grading.

Existing Adjacent Structures

Existing adjacent structures include the existing Fraser Shipyard Office Building. No documented data was provided on this structures or its foundation. The floor slab has reportedly settled about three inches.

FIELD EXPLORATIONS

The subsurface exploration program consisted of one soil boring. The boring location is shown on the boring location map in the Appendix. Location of this boring was determined by EPC by measuring from existing features of known location. The boring surface elevation was not provided / determined. Location of the boring should be considered accurate only to the degree implied by the method used. We carried the boring to a depth below existing grade (BEG) considered practical to identify adverse soils for the proposed project.

The Boring was made with EPC's CME 55 truck mounted drill rig using 4-1/4 inch inner diameter hollow stem augers. Drilling and field-testing operations were performed on October 7, 2014.

At selected depth intervals in the boring, Standard Penetration Tests (SPT) were conducted in substantial compliance with ASTM Method D1586. The SPT data listed on the boring log is the number of blows required to drive a standard split-tube sampler 12 inches (two six-inch increments) into undisturbed soil using a 140-pound drive hammer dropped 30 inches per blow and calibrated to N68. After an initial "set" of six inches, the number of blows required to drive the sampler an additional 12 inches is known as the penetration resistance or "N" value. The "N" value is an index of the relative density of cohesionless soils and the consistency of cohesive soils.

At the depth interval shown on the boring log, a thin-walled "Shelby" tube sample was obtained in substantial compliance with ASTM Method D1587. This three-inch diameter sample was obtained for use in the laboratory to determine moisture content, dry density (DD) and unconfined compressive strength (UCS). Settlement can also be estimated if a consolidation test is performed on one of these samples.

Partially disturbed samples were obtained from the split-spoon Standard Penetration sampler. All samples were recovered and sealed in the field to preserve natural moisture content and returned to the laboratory for testing.

A field log was prepared for the boring by EPC's drilling supervisor. This log contains factual information and field interpretation of the soil conditions observed between samples, as described in substantial compliance with ASTM D420 and D2488. This field log is on file in EPC's office.

The final log is included in the Appendix. This final log represents the interpretation of the contents of the field log after laboratory observations and testing of the field samples were complete. Final soil descriptions are based upon visual laboratory testing methods. Soils are described in this report according to the Unified Soil Classification System (USCS), as outlined in the boring log key in the Appendix.

Water level readings were observed in the drill hole at the times and under the conditions stated on the boring log. However, it must be noted that fluctuations in the level of the ground water may occur because of variations in the rainfall, temperature, subsurface materials and other conditions or factors different from those observed at the time of the measurements. It should be noted that such conditions are subject to change.

SUBSURFACE CONDITIONS

Soil Conditions

The subsurface soils encountered beneath this site generally consist of four (4) basic stratigraphic units: (1) Sandy and Clayey Fill, (2) Peat, (3) Fat Clay; and (4) Silty Clayey Sand.
More specifically, these soil units are described as follows:

UNIT 1 - SILTY SAND (SM) and FAT CLAY (CH) - MAN-MADE FILL
Silty sand and fat clay fill was encountered from the existing ground surface of the boring to 4-feet (silty sand) and 7.5-feet (fat Clay). It should be noted that the soil samples from the upper 2 to 4 feet of Sandy Fill contained an organic, petroleum-like odor. The sand fill was black and brown in color, moist in moisture condition, contained trace organics (and wood) and little gravel, and was in a medium dense relative density state. The clay fill, encountered from 4 to 7.5-feet below existing grade (BEG) was reddish brown, wet, contained trace to little peat, and was in a soft to medium to stiff consistency state.

UNIT 2 - PEAT – ORGANIC – SWAMP
Peat was encountered below the fill as a 1.5-foot thick layer, beginning at 7.5-feet BEG and terminating at 9-feet BEG. The peat was brown to black in color, moist to wet in moisture condition, fibrous, and was in a very loose relative density state.

UNIT 3 – FAT CLAY (CH) – LACUSTRINE
Fat Clay was encountered below the peat, beginning at 9-feet and extending to about 28-feet BEG. The three feet of clay immediately below the peat had a fill appearance: brown in color, wet in moisture condition, trace black roots, and was in soft to medium consistency state. The fat clay beginning at 12-feet BEG was native: reddish brown, moist to wet, contained trace silt mottling, and was in a stiff consistency state.

UNIT 4-SILTY CLAYEY SAND(SC-SM) and SILTY SAND(SM)– ALLUVIUM / OUTWASH
Silty clayey sand was encountered below the clay beginning at about 28-feet BEG and extended to the voluntary termination depth of the boring at 61-feet BEG. The sandy soil varied in layers with increasing depth from silty clayey sand to silty sand and back again. The deeper layers of silty clayey sand varied toward sandy silty clay. The sandy soil was generally brown to gray at 40-feet BEG, water bearing to wet, and was dense to very dense relative density state (hard consistency state).

Water Table Conditions and Cave-in Levels

Water table observations at the times noted in the boring log indicated that water was observed at 8.5-feet BEG, during the beginning of the relatively short drilling process. Drilling fluid was placed into the auger to prevent sand from caving into the auger, so final water table observations could not be observed. The elevation of St. Louis Bay is usually a good indication of the local water table elevation.

LABORATORY TESTING

Results of the field testing and observed subsurface conditions were evaluated to develop a laboratory testing program. Laboratory testing was directed towards determining existing natural moisture content and visual classification of all samples. Approximate unconfined compressive strength (UCS) by hand/pocket penetrometer (PP) and actual UCS and dry density (DD) was determined for the thin-walled tube.

Results of the laboratory tests are shown on the enclosed boring log and data sheet in the Appendix. Moisture content test results are expressed in percent (%) on an oven dry weight basis, UCS/PP in tons per square foot (tsf) and/or pounds per square foot (psf) and DD in pounds per cubic foot (pcf).

ANALYSIS OF FIELD/LABORATORY DATA

The basic criterion for the design of a foundation requires that the probability of a shear failure in the underlying soils to be reduced to an allowable level of risk for a given project. In addition, settlements or other vertical movements within these soils must not exceed the limits set for the particular type of structure to be supported.

The ultimate bearing capacity of a foundation soil depends upon the size, shape and type of foundation element, depth below the surface, and other related physical characteristics of the supporting soils. Bearing capacity failures will usually be confined to a depth beneath the footing equal to the footing width. For cohesive soils, the average undrained strength is evaluated within this zone as a measure of the shearing resistance against a bearing capacity failure. For granular soils, the ultimate bearing capacity is evaluated from the penetration record ("N" values) within the zone of failure, with due regard to the position of the water table. For long term sustained loading, a factor of safety (FS) of 3.0 against bearing capacity failure by structure overloading is recommended. This usually provides an FS of about 1.5 with respect to mobilization of available shear strength, which is acceptable. For the most unfavorable loading condition, a minimum bearing capacity FS of 2.0 is recommended. For a deep foundation (driven or drilled piles/piers) a minimum F.S. of 2.0 is acceptable.

Settlement is an equally important criteria for determining the allowable bearing capacity or type of foundation for a project. In fact, the allowable bearing pressure or foundation type is controlled by the settlement criteria on most projects.

Bearing Capacity Shear Failure

Due to uncontrolled nature of the fill, the presence of a peat layer and a suspected shallow water table, a standard frost depth spread/strip footing foundation was deemed unacceptable. For the same reasons, reliable, observable and safe removal of these materials with respect to the existing building was also deemed unacceptable. Results of the field and laboratory testing program were used to evaluate the allowable bearing capacity for the proposed project. A total of 17 SPT's were considered in evaluation of the soils from Boring SB-14-1 and a HeliCAPT™ compression analysis was performed by Atlas Foundation Company. Results of this analysis indicated an allowable net vertical bearing capacity of 25 tons per 1.75-inch square shaft with a 14/12/10-inch diameter lead helical pile with an F.S 2.2, based on ultimate compressive load of the pile itself being 55-tons. EPC performed a similar analysis for a 12-inch diameter pipe pile that resulted in an allowable tip load of 25 tons with an FS of over 2.0.

Bearing Capacity Settlement

As discussed, settlement is an equally important criteria for determining the allowable bearing capacity or type of foundation. Settlement generally takes place quickly in granular soils, with the bulk of settlement occurring during or shortly after construction. Settlement of these soils is usually estimated from the standard penetration test (SPT) "N" values. Settlement of structures founded on cohesive soils generally takes place very slowly, over a long period of time compared to granular soils. The exact magnitude and time of settlement varies widely, depending upon the loading history of the soil, foundation type and size, and the magnitude of loads applied to the proposed foundations. Settlements on cohesive soils are usually estimated by performing a consolidation test or from the index and estimated soil strength properties.

Analysis of the data related to settlement of the soils indicated that less than one inch of settlement is estimated for the helical pile at a capacity of 25 tons, based on the analysis referenced above. EPC performed a similar analysis on a 12-inch diameter drilled pile that resulted in an estimated settlement of less than one inch at 25 tons with an FS of 2.0.

DESIGN REQUIREMENTS

Based upon the above analysis of the shear strength of the soil units observed beneath this site, it appears that a drilled helical pile type of foundation is appropriate for this project.

Pile Supported Foundations-For a deep foundation, we offer the following recommendations for this project:

1. EXCAVATION REQUIREMENTS:
No special ground preparation is necessary for the proposed helical pile foundation. Excavated soils should not be reused for backfill.

Boring Number SB-14-	Surface Elevation (ft)	Depth/Elevation to Bottom of Medium Dense Sandy Fill (ft)	Depth/Elevation to Bottom of Clayey Fill (ft)	Depth/Elevation to Bottom of Peat (ft)	Depth/Elevation to Bottom of Stiff Clay (ft)	Depth/Elevation To Bottom of Dense to Very Dense Silty Clayey Sand / Boring (ft)
1		*4.0 / ____	7.5 / ____	9.0 / ____	**28 / ____	61 ____

***Soil samples in this depth range contained an organic, petroleum-like odor.**
****Indicates approximate ending depth and that the clay from 9 to 12-feet was in a medium consistency state and had a fill appearance.**

2. FROST DEPTH:
Provide at least six feet of frost cover (or insulation) to the bottom of all perimeter/exterior foundations.

3. BEARING CAPACITY:
Use a maximum allowable net vertical bearing capacity of 25 tons per helical pile with minimum 1.75 inch diameter square shaft and 14/12/10-inch lead helix section. Pile lengths are estimated to be 35-feet from existing grade of Boring1, or about 5-feet into the dense to very dense silty clayey sand beginning at about 30 feet.

4. LATERAL SUPPORT AND UPLIFT:
Lateral support is usually accounted for with battered piles.

5. UPLIFT CAPACITY:
Use a maximum pile uplift capacity of 8 tons per pile.

6. PILE SPACING:
Pile spacing in the direction of load is an important variable, with increased spacing generally improving performance. Helical pile spacing should not be closer than three times the diameter of the largest helix, or about 3.5-feet.

7. PILE INSTALLATION:

A. Atlas Foundation Company (or approved equivalent) should be contracted to install the piles. The contractor shall supply all pertinent data for equipment that is to be used including the torque required to achieve the specified bearing capacity.

B. Before installation operations start, all pile locations shall be surveyed to document compliance to the construction drawings.

C. If seasonal frost is encountered, pre-drilling is required through the total depth of frozen soils.

D. 25 ton net piles should be drilled to bearing value of 55 tons gross (installation torque 11,000 ft-lbs), based on ultimate compressive load of the pile itself being 55-tons. For 15-ton net pile capacity the piles would be drilled to 45 tons gross (installation torque of 9000 ft-lbs).

8. PILE MONITORING:

We recommend that the first few piles be installed as test piles to determine the actual pile length required to achieve the specified bearing capacity. If the test piles do not reach the recommended amount of torque between 35 and 40 feet BEG, this criteria should be re-evaluated. Observing and properly documenting the developed torque of all piles is recommended. For greater reliability, a static load test can be performed.

Pile Supported Floor Slab

For floor slabs we recommend the following:

1. Construct the floor slab as a structural member on pile supported grade beam foundations.

2. A conventional clean sand cushion layer or a moisture barrier (vapor retarder) and a "base material" may be necessary under the concrete floor, pending any proposed floor coverings. The project architect or engineer should specify the type and placement / location of the base layer and moisture barrier, if required. The American Concrete Institute (ACI) Section 302 of the *Manual of Concrete Practice* discusses vapor retarders and base layers.

Floor Slab Alternative Foundation

As an **economical alternative** a helical pile supported floor slab, consideration can be given to excavating only enough material to install a two foot thick sand cushion beneath the slab. With this alternative, the subgrade should be proof-rolled with a loaded dump truck and any soft areas should be removed. The subgrade should be pre-compacted and shaped to drain water naturally. It must be understood that this alternative could require maintenance or overlay of the concrete slab. The risk of unacceptable settlement with this alternative must be borne by the owner.

Insulated Foundations:

1. Shallow Insulated (perimeter) footing design for <u>continuously heated</u> structure:

A. 24 inch thick, thickened edge (or traditional shape), insulated footings, tapered to the floor slab, have proven successful in the past.

B. Assume a minimum design temperature of 65 degrees F, a freezing index of 2750 degrees days (°F), and a one-inch insulation thickness R-Value of 4.35.

C. Use a minimum of two inches of DOW "SM" insulation or an equal product (low moisture absorbing plastic foam insulation, closed cell extruded polystyrene) installed in two layers, overlapping the connected seams.

D. Place the insulation vertically downward along the outside edge of the thickened edge footing a distance of at least 12 inches below finished grade and at least 12 inches above the interior floor slab, on the outside wall. The insulation should be protected with a flashing on the top. Consideration should be given to protecting all of the insulation with a parge coat, recognizing that it could corrode at the ground line over time.

E. Extend the insulation 48 inches beyond the outside of the foundation wall (48 inches past the footing edge if traditional shape footings), sloping away from the building slightly, for drainage purposes. The water table must be below the insulation at all times of the year.

F. The insulation thickness should be increased by 50% (three inches total) for a distance of 48 inches in both directions of the foundation walls, at the corners of the building.

G. The insulation should be protected from petroleum products, sunlight and damage from all types of surface traffic. A covering of 12 inches will usually suffice.

2. Shallow Insulated footing design for an unheated structure (heated structures with continuous insulation under/against foundations and slabs are considered unheated):

A. Assume a freezing index of 2750 degree days (degrees F), and a one-inch insulation thickness R-Value of 4.35.

B. Use a minimum of four inches of DOW "SM" insulation or an equal product (low moisture absorbing plastic foam insulation, closed cell extruded polystyrene) installed in layers, overlapping the connected seams. The compressive strength of the insulation should be at least 30 psi.

C. Place the insulation under the entire slab and extended 96 inches beyond the outside of the foundation sloping away from the building slightly, for drainage purposes. The water table must be below the insulation at all times of the year.

D. The insulation should be protected from petroleum products, sunlight and damage from all types of surface traffic. A covering of 12 inches will usually suffice.

Geotechnical

We also offer the following geotechnical related design recommendations for this project.

1. Slope backfill away from the foundation at a minimum slope of 10H:1V to promote drainage away from the structure.

2. Use pile supported footings constructed to the same depth of cover (or applicable insulation design) as the rest of the building to support canopy footings, door stoop slabs, etc., to reduce the risk of movement due to fill settlement or from frost heave. The stoop slabs should be constructed as structural members with a minimum six inch air gap between the concrete and soil below.

3. Foundation drain recommendation: Use a perimeter foundation drain near the exterior base of the footings and route to daylight or a storm sewer to reduce the risk of water ponding against the foundation walls. Surround the drain with filter aggregate and wrap it with filter fabric to reduce the risk of clogging.

4. Care must be taken not to undermine the existing building foundation during excavation procedures.

5. The addition should be constructed independent of the existing structure to allow for potential differential movement.

GENERAL CONSTRUCTION REQUIREMENTS

We offer the following recommendations for use in preparing plans and specifications for construction of this project.

General Excavation Requirements

1. Remove all topsoil, vegetation, roots, grass or other visible organic material from areas that are to be excavated or receive fill. Separate topsoil required for the surface of the final site grading. Stockpile in a careful manner to the extent it is not mixed with other materials and will be available for landscaping uses on the site.

2. All soft or spongy areas found during foundation excavation should be over-excavated and replaced with suitable approved compacted backfill material. All subgrade should be sloped to drain naturally.

3. If foundation construction occurs under conditions of freezing temperatures, the base of all foundation excavations and backfill materials should be protected from freezing before and after concrete placement. Surfaces which may become frozen should be thawed before placing of foundation concrete. If freezing has loosened and reduced the bearing capacity of the excavation surface, remove the frozen material to the undisturbed surface. Place the foundation upon that undisturbed soil or compacted engineered backfill. Slab-on-grade soils should not be constructed over frozen soils. Frozen material should not be used as backfill.

4. Foundation excavations in cohesionless soils (sands and gravels) will often result in considerable disturbance of the top one to three inches of soil at the surface of this foundation load bearing soil. The surface of such soils should be re-compacted before placement of the foundation concrete, to avoid unnecessary settlement during or after construction.

5. Excavations for the placement of engineered backfill should extend horizontally a minimum of one foot beyond the outside edge on all sides of the foundation element for every one foot of

over- excavation depth required below the footing elevation, beginning two feet outside the edge of the footing. In peat soils the over- excavation should be extended an additional five feet outside the edge of the footing.

6. The surface of all excavated areas upon which engineered backfill will be placed should be prepared by scarifying to a depth of at least six inches and re-compacting to achieve uniform subgrade conditions before backfill is placed. Selection of procedures and equipment should be the responsibility of the contractor. In general, compaction of cohesive soils is usually best achieved with a sheeps foot compactor. Cohesionless soils are usually best compacted with a vibrating roller or vibrating plate compactor.

General Backfill Requirements

A wide variety of materials may usually be considered as suitable for engineered backfill. The choice of materials is a function of the structural requirements, water table conditions, seasonal construction constraints, placement and compaction methods, and other site/project specific needs. Granular materials which classify as GW, GC, SW, SM, and SC according to the USCS (ASTM D4287) are usually the most suitable engineered backfill. Poorly graded gravels and sand (GP and SP) are generally less desirable because they are usually more difficult to compact. Where frost action is of concern, silty or clayey granular soils with as little as 3-5% of the particles passing the No. 200 sieve can be unacceptable. Inorganic clays and silts of low to medium plasticity (CL and ML) are not suitable for backfill on this project, but may be used for general site grading and landscaping. Soils of high plasticity (CH, MH) are unsuitable.

Specification for the gradation of engineered backfill used on this project should comply with the following general requirements:

1. No organic or other deleterious material.

2. Gradation:

Sieve Size	Percent Passing
3 inch	100
2 inch	85-100
3/4 inch	71-100
# 4	50-80
#200	7 max

3. The upper 12 inches, directly under slab and foundation concrete, should contain no material larger than one inch.

4. Where wet subgrade conditions exist for placement of the first lift, a maximum of 5% passing a No. 200 sieve is recommended.

5. Alternative gradations should be evaluated by the soils engineer for acceptability if these guidelines cannot be satisfied by locally available backfill materials within an economical distance of this project.

General Compaction Requirements

The following compaction requirements are recommended for use in the project specifications.

1. Laboratory compaction standard for granular (non-cohesive) soils: ASTM D1557 - Modified Proctor.

2. Compact backfill to a minimum of the following percentage of the above compaction standard for the respective types of fill material.

Type of Engineered Backfill (Granular)	Compaction/ Density
Foundation Structural Backfill	95%
Slab-on grade Backfill	95%
Non-structural Foundation Backfill	90%
Landscaped Areas	85%
Utility Trenches	90%

3. Place engineered backfill or other fill materials in lifts not to exceed eight inches in a loose condition, unless the contractor can demonstrate satisfactory results by placing thicker lifts.

4. In general, fill materials should be placed and compacted within two percent of optimum moisture content, as determined by above applicable compaction standard. When fill materials are not in this range of moisture content, compaction to the required density may be difficult or not possible. The excavating contractor should be required to be responsible for controlling and adjusting moisture content.

5. Flooding is not an acceptable procedure for compacting of backfill materials and should not be permitted.

6. Compaction of utility trenches in all areas of the project should not be overlooked. Narrow trenches and small areas often require use of small compaction equipment or tools. Thinner (four- to six-inch) lifts may be required to achieve successful compaction. This requirement should be clearly defined in the specifications and reviewed with the contractor or subcontractors performing utility work.

7. Engineered backfill operations should be observed by a qualified soils engineer or their designated representative. In-place density testing should be performed to document that the geotechnical recommendations and compaction requirements in this report are achieved.

8. For this project, we recommend a minimum density testing frequency of one test per 50 l.f. of footing trench backfill, and one per 1000 s.f. of floor slab backfill, per lift. For isolated locations or doubtful areas we recommend a minimum of one test per occasion, as recommended by the soils engineer.

CONCLUSIONS

Based upon the single soil boring drilled in the authorized exploration program and the above-described laboratory testing program, we have drawn the following general conclusions about the subsurface conditions beneath this site:

Soil Conditions

The boring consisted of 7.5-feet of sandy over clayay fill, over 1.5-feet of peat, over 19-feet of medium to stiff clay, over 33-feet of dense to very dense silty clayey sand to the voluntary termination depth of the boring at 61-feet below existing grade.

Water Table Conditions

Water was observed at 8.5-feet BEG during the short time the shallow drilling/sampling portion of the boring remained open. Water should not be a significant problem during shallow foundation excavation unless it is allowed to drain into and pond in open excavations, or it is encountered perched in the sandy fill soils. Dewatering is the responsibility of the contractor.

Allowable Bearing Capacity

A maximum allowable, net pile bearing capacity of 25 tons was determined with an F.S. of 2.2, based on ultimate compressive load of the pile itself being 55-tons, for minimum 1.75-inch square shaft helical piles with 14/12/10-inch diameter helix lead sections.

RECOMMENDATIONS

In summary, we offer the following specific recommendations regarding design of the foundation and other geotechnical engineering aspects of this project.

1. Use the proposed helical pile and grade beam foundation for footings and floor slabs with a maximum allowable, net bearing capacity of 25 tons per pile. Piles lengths are estimated to be 35-feet. Test piles are recommended to determine the actual pile length required prior to ordering all piles for the project.

2. The design recommendations and specifications in the "Design Requirements" and "Construction Requirements" sections of this report should be followed.

LIMITATIONS OF EXPLORATION AND REPORT

We have based the analysis and recommendations submitted in this report in part upon the data obtained from the single soil boring. The nature and extent of variations between the borings many not become evident until construction. If variations then appear evident, it will be necessary for the soils engineer to re-evaluate the recommendations of this report.

As the soils engineer for this project, we recommend that we be provided an opportunity to do a general review of final design drawings and specifications for this project to determine that earth

work and foundation recommendations contained herein have been properly interpreted and included in the design and specifications. We can assume no responsibility for misinterpretation or improper application of our recommendations and conclusions by others.

EPC further recommends that soil engineering and testing services be performed during construction of the excavation and foundation phases of the work. This procedure is to observe compliance with the design drawings, specifications and EPC's recommendations, and it also allows design changes to be made in the event that subsurface conditions differing from those anticipated before construction started are discovered and necessary changes can be recommended in a timely manner.

Responsibility to provide safe working conditions for earthwork and below grade aspects of this project is solely that of the contractors or subcontractors working on the project and is not the responsibility of EPC Engineering & Testing. All local, state and federal requirements, statutes, ordinances, or building codes relating to slopes or temporary sheeting and bracing of trenches and excavations must be observed by contractors during construction.

EPC has prepared this report, consisting of 13 pages, Appendix and letter of transmittal, for the exclusive use of RJS Construction Group and it's designated representatives, for specific application to the design of the Fraser Shipyard Office Building Addition, at the specific location drilled. Copies of this report are furnished only to provide the factual data which were gathered and summarized in the report.

Professional services provided to this project by EPC Engineering & Testing were completed, findings obtained and recommendations prepared using generally accepted engineering principles and practices. Conclusions and recommendations contained herein are based upon the applicable standards of our profession at the time this report was prepared. This warranty is in lieu of all other warranties, either expressed or implied.

Respectfully submitted,

EPC Engineering & Testing,

Gary E. Hage, P.E.
Principal Engineer

Reviewed by;

Brian E. McVean, P.E.
Principal Engineer

APPENDIXES

SUBSURFACE SOIL EXPLORATION REPORT

Fraser Shipyard Office Building Addition
1 Clough Ave
Superior, WI

EPC ENGINEERING & TESTING

Project # 14G0930

COMMON SOIL REPORT ABBREVIATION DEFINITIONS

AASHTO	American Association of State Highway and Transportation Officials
AB	After Boring Completion
BEG	Below Existing Grade
BFG	Below Finished Grade
CI	Confidence Interval
DD	Dry Density
DL	Dead Load
EOB	End of Boring
FS	Factor of Safety
kcf	Kips per Cubic Foot
LL	Live Load
mg/kg	Milligrams per Kilogram
N	Standard Penetration Resistance Value
pcf	Pounds per Cubic Foot
PID	Photoionization Detector
plf	Pounds per Lineal Foot
ppm	Parts Per Million
psf	Pounds per Cubic Foot
SPT	Standard Penetration Test
UCS	Unconfined Compressive Strength
WRT	With Respect To
WT	Water Table

BORING LOG KEY and SOIL CLASSIFICATION DATA

BORING LOG KEY

Water Level

Water levels indicated on the boring logs are as measured at stated times. In pervious soils the elevations indicated are considered reliable levels. However, in impervious soils, even after several days of monitoring, accurate determinations may not be possible. Therefore, additional/alternate methods of ground water elevations should be sought.

Commonly Used Moisture Conditions of Soils are as Follows

Term		Meaning
Dry	-	Requires the addition of considerable moisture to attain optimum for compaction
Moist	-	near optimum moisture for compaction
Wet	-	requires drying to attain optimum moisture for compaction
Saturated (Water Bearing)	-	very wet

Gradation Description and Terminology

Soil Type	Particle Name	Size Range
Coarse Grained Soils	Boulders	over 12"
	Cobbles	3" - 12"
	Gravels	#4 - 3"
	Coarse	¾" - 3"
	Fine	#4 - ¾"
	Sands	#200 - #4
	Coarse	#10 - #4
	Medium	#40 - #10
	Fine	#200 - #40
Fine Grained Soils	Silt*	0.074 mm (#200) - 0.005 mm
	Clay*	less than 0.005 mm

Descriptive Terms of Components Present in Sample (other than ASTM D 2487)

Term	Percent of Dry Weight
Trace	1 - 9
Little	10 - 19
Some	20 - 34
With	35 - 50

Relative Density of Granular Soils

N-Blows/ft	Relative Density	Standard "N" Penetration
0 - 4	Very Loose	Blows per foot of a 140
4 - 10	Loose	pound hammer falling 30"
10 - 30	Medium Dense	on a 2" outside diameter
30 - 50	Dense	split barrel sampler
over 50	Very Dense	

Consistency of Cohesive Soils

Unconfined Compressive Strength (Qu, tsf, or Kg/cm^2)	Consistency	N (SPT)
<0.25	Very Soft	0 - 2
0.25 - 0.50	Soft	2 - 4
0.50 - 1.00	Medium	4 - 8
1.00 - 2.00	Stiff	8 - 15
2.00 - 4.00	Very Stiff	15 - 30
4.00 - 8.00	Hard	over 30

* Silt and Clay sizes are best determined by Atterberg Limits.

TABLE 1 - SOIL CLASSIFICATION CHART ASTM D2487, USC SYSTEM

Criteria for Assigning Group Symbols and Group Names Using Laboratory Tests (A)					Soil Classification	
					Group Symbol	Group Name
Coarse-Grained Soils More Than 50% retained on #200 Sieve	Gravels More than 50% of coarse fraction retained on #4 sieve	Clean Gravels Less then 5% fines (C)	Cu>4 and 1<Cc<3 (E)		GW	Well-graded gravel (F)
			Cu<4 and/or 1>Cc>3 (E)		GP	Poorly-graded gravel (F)
		Gravels with Fines More than 12% fines (C)	Fines classify as ML or MH		GM	Silty gravel (F,G,H)
			Fines classify as CL or CH		GC	Clayey gravel (F,G,H)
	Sands 50% or more of coarse fraction passes #4 sieve	Clean Sands Less than 5% fines (D)	Cu>6 and 1<Cc<3 (E)		SW	Well-graded sand (I)
			Cu<6 and/or 1>Cc>3 (E)		SP	Poorly graded sand (I)
		Sands with Fines More than 12% fines (D)	Fines classify as ML or MH		SM	Silty sand (G,H,I)
			Fines classify as CL or CH		SC	Clayey sand (G,H,I)
Fine-grained Soils 50% or more passes the #200 sieve	Silts and Clays Liquid limit less than 50	inorganic	PI>7 and plots on or above "A" line		CL	Lean clay (K,L,M)
			PI<4 or plots below the "A" line		ML	Silt (K,L,M)
		organic	Liquid limit - oven dried	<0.75	OL	Organic clay (K,L,M,N)
			Liquid limit - not dried			Organic silt (K,L,M,O)
	Silts and Clays Liquid limit 50 or more	inorganic	PI plots on or above the "A" line		CH	Fat clay (K,L,M)
			PI plots below the "A" line		MH	Elastic silt (K,L,M)
		organic	Liquid limit - oven dried	<0.75	OH	Organic clay (K,L,M,P)
			Liquid limit - not dried			Organic silt (K,L,M,Q)
Highly organic soils	Primarily organic matter dark in color, and organic odor				PT	Peat

(A) Based on the material passing the 3" (75 mm) sieve.

(B) If field sample contained cobbles or boulders, or both, add "with cobbles or boulders, or both" to group name.

(C) Gravels with 5 to 12% fines require dual symbols:
GW-GM well-graded gravel with silt
GW-GC well-graded gravel with clay
GP-GM poorly-graded gravel with silt
GP-GC poorly-graded gravel with clay

(D) Sands with 5 to 12% fines require dual symbols:
SW-SM well-graded sand with silt
SW-SC well-graded sand with clay
SP-SM poorly graded sand with silt
SP-SC poorly graded sand with clay

(E) $Cu = D60/D10 \quad Cc = D30^2/(D10 \times D60)$

(F) If soil contains >15% sand, add "with sand" to group name.

(G) If fines classify as CL-ML, use dual symbol GC-GM, or SC-SM.

(H) If fines are organic, add "with organic fines" to group name.

(I) If soil contains >15% gravel, add "with gravel" to group name.

(J) If Atterberg limits plot in hatched area, soil is CL-ML, silty clay.

(K) If soil contains 15 to 29% plus #200, add "with sand" or "with gravel," whichever is predominant.

(L) If soil contains >30% plus #200, predominantly sand, add "sandy" to group name.

(M) If soil contains >30% plus #200, predominantly gravel, add "gravelly" to group name.

(N) PI>4 and plots on or above "A" line. (see fig. 1)

(O) PI<4 or plots below "A" line.

(P) PI plots on or above "A" line.

(Q) PI plots below "A" line.

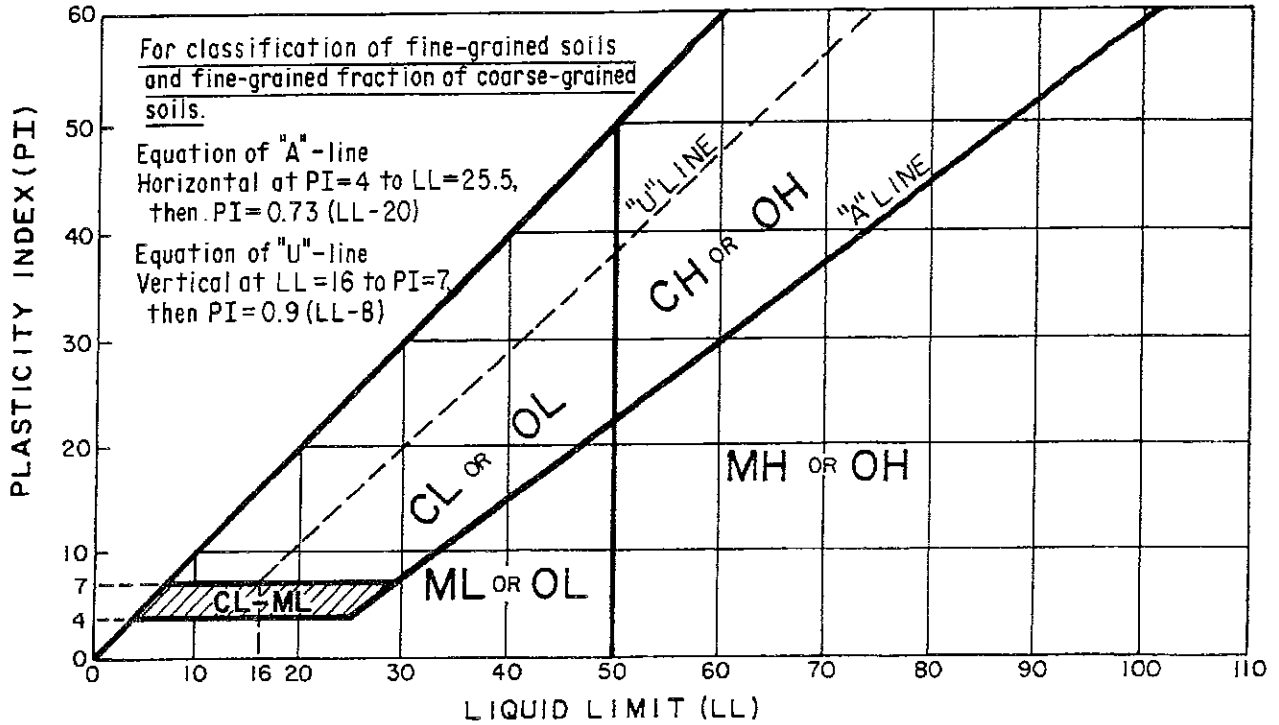
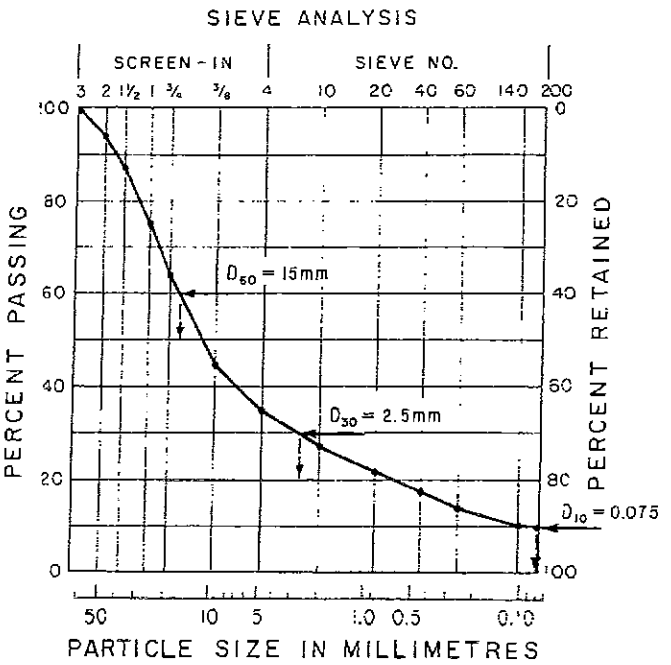


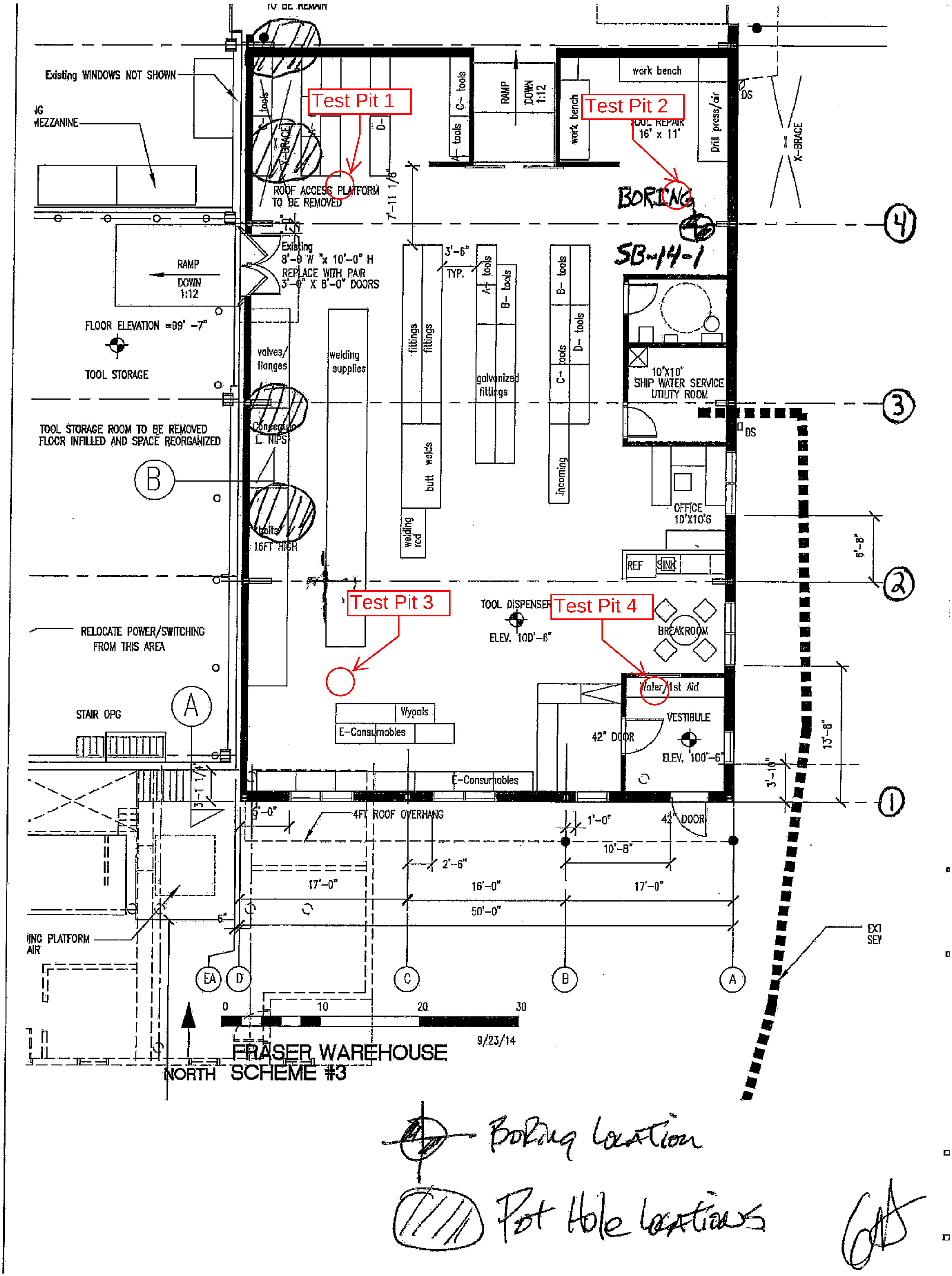
FIG. 4 Plasticity Chart



$$Cu = \frac{D_{60}}{D_{10}} = \frac{15}{0.075} = 200 \qquad Cc = \frac{(D_{30})^2}{D_{10} \times D_{60}} = \frac{(2.5)^2}{0.075 \times 15} = 5.6$$

FIG. 5 Cumulative Particle-Size Plot

BORING LOCATION MAP



Existing WINDOWS NOT SHOWN
MEZZANINE
Test Pit 1
Test Pit 2
Test Pit 3
Test Pit 4
ROOF ACCESS PLATFORM TO BE REMOVED
BORING
SB-14-1
work bench
TOOL REPAIR 16' x 11'
Drill press/air
X-BRACE
DS
RAMP DOWN 1:12
Existing 8'-0" W x 10'-0" H REPLACE WITH PAIR 3'-0" X 8'-0" DOORS
FLOOR ELEVATION =99' -7"
TOOL STORAGE
valves/ flanges
welding supplies
fittings
galvanized fittings
10'X10' SHIP WATER SERVICE UTILITY ROOM
TOOL STORAGE ROOM TO BE REMOVED FLOOR INFILLED AND SPACE REORGANIZED
butt welds
incoming
OFFICE 10'X10'6
bolts 16FT HIGH
welding rod
REF
SINK
TOOL DISPENSER
ELEV. 100'-6"
BREAKROOM
RELOCATE POWER/SWITCHING FROM THIS AREA
Water/1st Aid
VESTIBULE
42" DOOR
Wypals
E-Consumables
STAIR OPG
4FT ROOF OVERHANG
17'-0"
16'-0"
50'-0"
10'-8"
FRASER WAREHOUSE
SCHEME #3
NORTH
9/23/14
Boring location
Pot Hole locations

BORING LOG

EPC Engineering & Testing
Geotechnical • Environmental • Materials Engineering
539 Garfield Avenue
Duluth, Minnesota 55802

BORING NUMBER SB-14-1

CLIENT RJS
PROJECT NAME Fraser Shipyard Office Building Addition
PROJECT NUMBER 14G0930
PROJECT LOCATION Superior, WI
DATE STARTED 10/7/14 **COMPLETED** 10/7/14
GROUND ELEVATION _____ **HOLE SIZE** _____
DRILLING CONTRACTOR EPC Engineering & Testing
GROUND WATER LEVELS:
DRILLING METHOD CME 55 Truck Rig with HSA Cal. to N68
AT TIME OF DRILLING 8.5 ft
LOGGED BY NEW **CHECKED BY** GH
AT END OF DRILLING N/A due to drilling fluid in auger
NOTES _____
AFTER DRILLING ---

ELEVATION (ft)	DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	Pocket Penetrometer (tsf)	DRY UNIT WT. (pcf)	SPT N VALUE / PL MC LL / FINES CONTENT (%)
	0		SILTY SAND (SM) (FILL) Brown and black, moist, little gravel, trace organics, ORGANIC ODOR, medium dense relative density.	SPT 1	67	29-14-9-10 (23)			9.4
			Little wood in sample from 2 to 4-feet.	SPT 2	54	6-8-11-6 (19)			18.5
	5		FAT CLAY (CH) (FILL) Reddish brown, wet, trace to little PEAT, medium to stiff consistency.	SPT 3	54	2-1-3-4 (4)	1.75		34.0
				SPT 4	88	4-5-5-5 (10)			33.1 340.6
			PEAT (PT) Brown to black, moist to wet, fibrous, very loose relative density. With silty sand and clay in sample from 8 to 9-feet.	SPT 5	54	1-1-2-3 (3)	1.0		24.5 24.9
	10		FAT CLAY (CH) (Could Be FILL) Brown, wet, trace to no black roots, medium consistency.	SPT 6	58	1-2-3-4 (5)			28.8
			FAT CLAY (CH) Reddish brown, moist to wet, trace silt mottling, stiff consistency.	SPT 7	100	2-4-6-8 (10)			29.2
	15			SPT 8	100	2-4-6-7 (10)			33.5
				AR	0				
	20			SPT 9	133	3-4-6 (10)			26.2
			Unconfined Compressive Strength at 21-feet = 3610 psf.	ST 10	75		1.4	96	28.9
				SPT 11	83	4-5-6-9 (11)			28.6
	25			SPT 12	111	3-3-5 (8)			23.9
				AR	0				
			SILTY CLAYEY SAND (SC-SM) Brown, wet to water bearing, dense relative density.						

(Continued Next Page)

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BORING NUMBER SB-14-1

CLIENT RJS **PROJECT NAME** Fraser Shipyard Office Building Addition

PROJECT NUMBER 14G0930 **PROJECT LOCATION** Superior, WI

ELEVATION (ft)	DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	Pocket Penetrometer (tsf)	DRY UNIT WT. (pcf)	▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80
	30		SILTY CLAYEY SAND (SC-SM) Brown, wet to water bearing, dense relative density. *(continued)*	SPT 13	89	16-21-10 (31)			21.2
				AR	0				
			SILTY SAND (SM) Brown, wet, dense relative density.						
	35			SPT 14	133	4-15-34 (49)			20.5
				AR	0				
			SILTY CLAYEY SAND (SC-SM) and SANDY SILTY CLAY (CL-ML) Gray, wet, very dense relative density / hard consistency.						
	40			SPT 15	133	18-32-28 (60)			20.9
				AR	0				
			SILTY SAND (SM) Grayish brown, wet, very dense relative density.						
	45			SPT 16	94	20-46-50 (96)			22.6
			Substantial sampler refusal at 45.9-feet.						
				AR	0				
			SILTY CLAYEY SAND (SC-SM) to SANDY SILTY CLAY (CL-ML) Grayish brown, wet, very dense relative density / hard consistency.						
	50			SPT 17	78	15-27-50 (77)			23.1
			Substantial sampler refusal at 50.9-feet.						
	55			AR	0				
	60			SPT 18	89	11-25-33 (58)			20.9
			Bottom of hole at 61.0 feet.						

TEST REPORT

EPC Engineering & Testing
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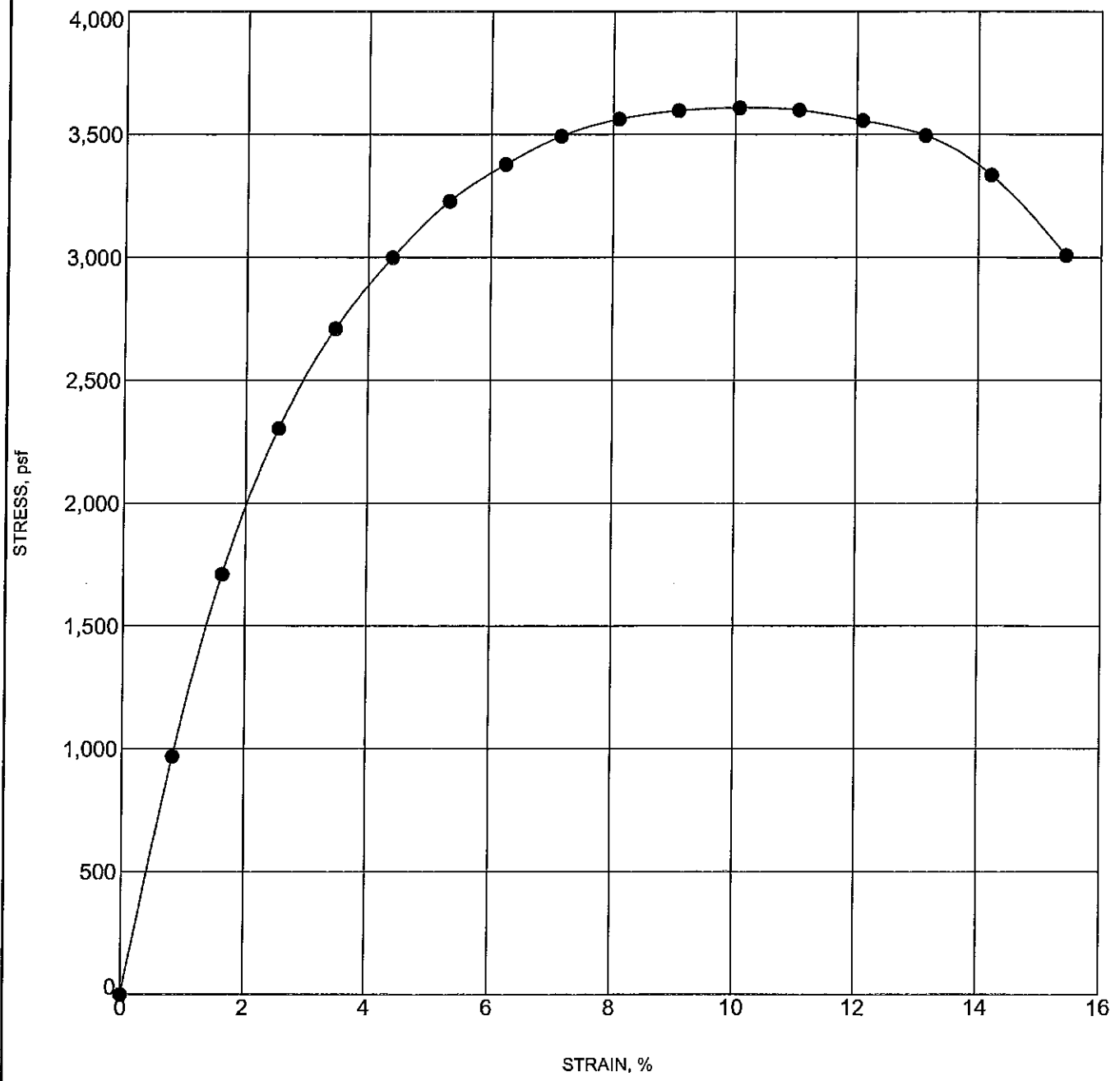
Duluth, Minnesota 55802

UNCONFINED COMPRESSION TEST

CLIENT RJS **PROJECT NAME** Fraser Shipyard Office Building Addition

PROJECT NUMBER 14G0930 **PROJECT LOCATION** Superior, WI



Specimen Identification		Classification	γ_d	MC%
● SB-14-1	20.5		96	27

UNCONFINED 14G0930 RJS FRASER SY BLDG ADD.GPJ GINT US LAB.GDT 10/16/14