SITE INVESTIGATION REPORT

RIDGEFIELD SCHOOL DISTRICT MAINTENANCE FACILITY (BUS BARN) 304 PIONEER STREET, RIDGEFIELD, WASHINGTON GRANT #G1400560

Prepared for CITY OF RIDGEFIELD

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SITE INVESTIGATION REPORT RIDGEFIELD SCHOOL DISTRICT MAINTENANCE FACILITY (BUS BARN) 304 PIONEER STREET, RIDGEFIELD, WASHINGTON The material and data in this report were prepared under the supervision and direction of the undersigned.

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ACRONYMS AND ABBREVIATIONS

bgs	below ground surface
the City	City of Ridgefield
Ecology	Washington State Department of Ecology
HCID	hydrocarbon identification
MFA	Maul Foster & Alongi, Inc.
MTCA	Model Toxics Control Act
NWTPH	Northwest Total Petroleum Hydrocarbons
the Property	304 Pioneer Street, Ridgefield, Washington
RSD	Ridgefield School District
UST	underground storage tank

Maul Foster & Alongi, Inc. (MFA) has prepared this report for the City of Ridgefield (Ridgefield) and Ridgefield School District (RSD), summarizing environmental conditions on the property located at 304 Pioneer Street in Ridgefield, Washington (the Property) (see Figure 1).

A geophysical survey indicated that former underground storage tanks (USTs) may be present adjacent south-southwest of the Property and also north of the building (Appendix B of MFA, 2014). In addition, there is one UST that is currently in use on the northwest corner of the Property. This investigation, conducted in September 2014 and April 2015, focused on those current and former UST locations (see Figure 2) which were the only identified potential sources of contamination on the Property. The field investigation was completed consistent with the methods and protocol described in the MFA Site Investigation Work Plan (MFA, 2014) and as discussed with Ecology on March 12, 2015.

1.1 Regulatory Framework

This investigation was conducted using an Integrated Planning Grant issued to Ridgefield by the Washington State Department of Ecology (Ecology). This investigation was designed to meet the requirements of the Model Toxics Control Act (MTCA; Washington Administrative Code 173-340) for performing a site investigation. The purpose of the site investigation was to evaluate potential environmental impacts from historic uses of the Property.

2 BACKGROUND AND PHYSICAL SETTING

The Property is zoned as Downtown Mixed Use and is approximately 150 feet long (north-south) and 100 feet wide (east-west). The Property is surrounded by commercial uses and is located on Pioneer Street at the corner of S 3rd Avenue in downtown Ridgefield.

The Property is currently owned and operated by RSD and used as a maintenance facility. The building is commonly referred to in the community as the "Bus Barn." The Property includes an approximately 10,000-square-foot, single-story masonry structure, which is on an approximately one-quarter block bounded by Third Avenue and Pioneer Street. The building is an iconic landmark in downtown Ridgefield. Currently, the building is used for maintenance staff facilities and for storage of dry goods, school-related supplies and archives, and facilities maintenance and repair equipment. The rest of the Property is used for access and parking. See Figure 2 for site features and surrounding area.

The building was formerly used for vehicle sales and maintenance and was a service station. There is a compliant gasoline UST in use on the Property, located at the NW corner of the exterior parking

area, with an associated aboveground fuel dispenser used by RSD for fueling maintenance equipment.

2.1 Site History

Before 1920, the Property was occupied by the Chas H. Greely Garage, which housed a gasoline engine repair shop in the northernmost part of the building. Historical Sanborne maps (MFA, 2014) showed two gasoline USTs outside the southern part of the building (see Figure 2). The area north of the Property was undeveloped, there was an auto repair shop to the east, a tire shop and two adjacent domestic buildings to the southeast, a combined business (cobbler) and domestic residence to the south, another combined business (tailor) and domestic residence to the southwest, and a bank to the west.

Between 1920 and 1930, the auto repair shop was changed to an electric supply office on the east side of the Property. To the south, a lodging establishment had been developed and, adjacent to it, a domestic residence with attached garage. To the southeast, a hand laundry was established, and to the southwest there was an adjoined post office and grocery store.

Environmental records (provided by Environmental Data Resources, Inc.) indicated that a Site Characterization and Independent Cleanup Action Report had been prepared for the site in 1991; however, Ecology has no record of this (MFA, 2014).

2.2 Site Geology and Hydrogeology

Shallow borings were completed on and near the Property (see Appendix A for geologic boring logs). Typically, fine sands and silty sands were observed from the surface to depths of 14 to 15 feet below ground surface (bgs). As documented at the Park Laundry Site unsaturated, low-permeability clay underlies the sand and perches groundwater above it. Deeper borings advanced by MFA on the nearby former Park Laundry property indicate that the bottom of the clay perching layer is around 50 feet bgs. The clay is underlain by silty gravels and sandy gravels of the Upper Troutdale Formation underlie the low-permeability clay.

On the Property, perched groundwater was first observed at approximately 9 feet bgs in September 2014 and at approximately 6 feet bgs in April 2015. Based on investigations completed for the former Park Laundry site, shallow groundwater closely follows the topography. The groundwater flow direction at Park Laundry is to the west and northwest. Based on local topography (see Figure 3), shallow groundwater flow at the Property may be similar to Park Laundry.

3.1 Field Procedures

As described above, groundwater is shallow, perched, and the uppermost saturated zone only extends to approximately 11 feet bgs. For this investigation, borings were advanced from the ground surface to the bottom of the shallow saturated zone for B1 through B7, and from the ground surface to ten feet bgs for BW7 through BW16 (see Figures 4 and 5) In addition, one sub-slab soil vapor sampling location beneath the interior building floor was completed to evaluate for possible impacts to indoor air.

During the September 2014 investigation, two soil samples from the unsaturated zone were collected from each boring location and analyzed for hazardous substances (0 to 3 feet bgs and immediately above the water table). A groundwater sample was also collected from just below the water table. During the April 2015 investigation, among the nine borings that were advanced, five soil samples were analyzed from the unsaturated zone and six soil samples were analyzed from the saturated zone. A groundwater sample was collected from just below the water table for four boring locations. A sub-slab soil vapor sample beneath the interior building floor directly west of B8 was collected.

For the September 2014 investigation, soil and groundwater samples were analyzed for petroleum hydrocarbons by the Northwest Total Petroleum Hydrocarbons-Hydrocarbon Identification (NWTPH-HCID) method. Follow-up analyses depended on the potential type of petroleum hydrocarbons identified. If gasoline-range hydrocarbons were detected, follow-up analyses were conducted for gasoline; BTEX (benzene, toluene, ethylbenzene, and total xylenes); and lead. If diesel-range hydrocarbons were detected, follow-up analyses included analysis for diesel.

One groundwater sample from a location in the vicinity of former maintenance activities (boring B6) was also analyzed for volatile organic compounds. For the April 2015 investigation, soil and groundwater samples were analyzed for gasoline-range petroleum hydrocarbons by the NWTPH-Gx, for diesel and lube oil-range petroleum hydrocarbons by NWTPH-Dx, and for BTEX by U.S. Environmental Protection Agency (USEPA) 8021B. The sub-slab soil vapor sample was analyzed for gasoline and BTEX by USEPA TO-15, for natural gases in soil vapor by American Society for Testing and Materials D-1946 Modified, and for volatile petroleum hydrocarbon fractions by USEPA TO-15 Modified air-phase hydrocarbons. See Appendices B, C, and D for the field sampling data sheets, the laboratory analytical reports, and the data validation memorandum, respectively.

3.2 Results

Concentrations of petroleum and petroleum-related constituents detected during this investigation were screened against MTCA Method A cleanup levels for both groundwater and soil. In addition,

groundwater and sub-slab soil vapor results were screened against Method B screening levels to evaluate potential impacts to indoor air. The results of the investigation are summarized in Tables 1, 2, and 3, and exceedances are shown on Figures 4 and 5.

3.2.1 Soil

For the September 2014 investigation, NWTPH-HCID detected gasoline in soil in borings B2, B3, and B4 (near former USTs along the south and southwest of the building), and in boring B7 (near a former UST along the north side of the building). Follow-up analysis for gasoline concentrations indicated that all exceeded Method A cleanup levels. Among the April 2015 soil samples, gasoline was detected in B12 at 8.0 feet bgs and B16 at 8.0 feet bgs, both of which had gasoline concentrations that exceed Method A cleanup levels.

Soil samples with gasoline exceedances from B2, B3, B7, B12, and B16 were in deeper soil samples, from 7 to 8.5 feet bgs. Although B2, B3, and B7 were collected above the water table, the September 2014 investigation was conducted during low water conditions and it is likely that these locations are in an area where fluctuating groundwater levels may cause smearing of contamination in the seasonally unsaturated zone. B12 and B16 were collected in April 2015 during seasonally higher water conditions; both of these samples were in the saturated zone at 8.0 feet bgs. In light of this, it appears that these samples could be affected by concentrations in a groundwater smear zone and are not indicative of the source of gasoline. However, shallow soil (3 feet bgs) in B4 was impacted with gasoline above MTCA Method A, and could be an indication of a source. B4 soil, both shallow and deeper, also had exceedances of ethylbenzene.

For the September 2014 investigation, NWTPH-HCID detected diesel in soil in borings B3, B4, and B7; follow-up analysis for diesel concentrations indicated that only B4 and B7 had concentrations above Method A cleanup levels. Among the April 2015 soil samples, diesel was detected in B12 at 8.0 feet bgs and B16 at 8.0 feet bgs, both of which had diesel concentrations that exceed Method A cleanup levels. As with several of the gasoline detections, the diesel exceedances were from deeper soil samples that may be within the smear zone or saturated zone and therefore influenced by concentrations migrating in groundwater. From these data, it is not clear exactly where the diesel originates. The highest concentration of diesel is from B7, which is near the eastern boundary of the Property.

While there were some detections of lead, there were no exceedances in any of the soil samples.

3.2.2 Groundwater

There was only one detection in groundwater that exceeded MTCA Method A cleanup levels: a diesel concentration in boring B7. No concentrations were above MTCA Method B screening criteria for the protection of indoor air quality.

3.2.3 Sub-Slab Soil Vapor

The sub-slab soil vapor sample at SS1 did not exceed MTCA Method B screening criteria for the protection of indoor air quality for BTEX, gasoline, and additional air-phase petroleum hydrocarbons.



Several concentrations of gasoline in soil exceeded MTCA criteria, primarily on the south side of the building and adjacent to former USTs, but also two exceedances on the north side of the building, also adjacent to a former UST.

However, gasoline was not detected in any of the groundwater samples. There was, however, one detection/exceedance of diesel in groundwater at the sample location adjacent to the building on the north side.

Based on the data, we can still conclude that there is some gasoline and diesel contamination on the Property and directly adjacent to the south, likely associated with former USTs. There are no exceedances in either soil or groundwater that trigger a vapor intrusion concern. The sub-slab vapor location in the southern section of the building floor had no exceedances.

The services undertaken in completing this report were performed consistent with generally accepted professional consulting principles and practices. No other warranty, express or implied, is made. These services were performed consistent with our agreement with our client. This report is solely for the use and information of our client unless otherwise noted. Any reliance on this report by a third party is at such party's sole risk.

Opinions and recommendations contained in this report apply to conditions existing when services were performed and are intended only for the client, purposes, locations, time frames, and project parameters indicated. We are not responsible for the impacts of any changes in environmental standards, practices, or regulations subsequent to performance of services. We do not warrant the accuracy of information supplied by others, or the use of segregated portions of this report.

MFA. 2014a. Memorandum (re: environmental screening for Bus Barn property, 304 Pioneer Street, Ridgefield, WA) to file, from A. Johnson and M. D'Andrea, Maul Foster & Alongi, Inc., Vancouver, Washington. July 24.

MFA. 2014b. Site investigation work plan, Ridgefield School District Maintenance Facility (Bus Barn), 304 Pioneer Street. Maul Foster & Alongi, Inc., Vancouver, Washington. October 1.

MFA. 2015. Memorandum (re: Ridgefield School District – Bus Barn) to N. McCann and S. Stuart, from J. Maul and M. D'Andrea, Maul Foster & Alongi, Inc., Vancouver, Washington. March 26.

TABLES



		Location: Sample Name: Collection Date:	B1 B1-W 09/15/2014	B2 B2-W 09/15/2014	B3 B3-W 09/15/2014	B4 B4-W 09/15/2014	B5 B5-W 09/16/2014	B6 B6-W 09/17/2014	B6 B6-W-DUP 09/17/2014	B7 B7-W 09/16/2014
	Vapor Intrusion, Method B, Groundwater	MTCA A								
Dissolved Metals (ug/L)										
Lead	NV	15								0.1 U
VOCs (ug/L)	-	-		-	-					
1,1,1,2-Tetrachloroethane	7.4	NV						0.5 U	0.5 U	
1,1,1-Trichloroethane	11000	200						0.5 U	0.5 U	
1,1,2,2-Tetrachloroethane	6.2	NV						1 U	1 U	
1,1,2-Trichloroethane	7.9	NV						1 U	1 U	
1,1-Dichloroethane	2300	NV						0.3 U	0.3 U	
1,1-Dichloroethene	130	NV						0.5 U	0.5 U	
1,1-Dichloropropene	NV	NV						0.3 U	0.3 U	
1,2,3-Trichlorobenzene	NV	NV						1 U	1 U	
1,2,3-Trichloropropane	NV	NV						0.5 U	0.5 U	
1,2,4-Trichlorobenzene	3900	NV						1 U	1 U	
1,2,4-Trimethylbenzene	24	NV						0.5 U	1.53	
1,2-Dibromo-3-chloropropane	NV	NV						1 U	1 U	
1,2-Dibromoethane	0.74	0.01						1 U	1 U	
1,2-Dichlorobenzene	1800	NV						1 U	1 U	
1,2-Dichloroethane	4.2	NV						0.5 U	0.5 U	
1,2-Dichloropropane	28	NV						0.3 U	0.3 U	
1,3,5-Trimethylbenzene	25	NV						0.5 U	0.5 U	
1,3-Dichlorobenzene	NV	NV						0.5 U	0.5 U	
1,3-Dichloropropane	NV	NV						0.5 U	0.5 U	
1,4-Dichlorobenzene	7900	NV						1 U	1 U	
2,2-Dichloropropane	NV	NV						0.3 U	0.3 U	
2-Butanone	NV	NV						10 U	10 U	
2-Chlorotoluene	NV	NV						0.5 U	0.5 U	
2-Hexanone	NV	NV						10 U	10 U	
4-Chlorotoluene	NV	NV						0.5 U	0.5 U	
4-lsopropyltoluene	NV	NV						0.5 U	0.5 U	
4-Methyl-2-pentanone	11000	NV						20 U	20 U	
Acetone	NV	NV						10 U	10 U	
Acrylonitrile	NV	NV						5 U	5 U	
Benzene	2.4	5						0.3 U	0.3 U	0.3 U
Bromobenzene	NV	NV						0.3 U	0.3 U	
Bromodichloromethane	0.09	NV						0.5 U	0.5 U	
Bromoform	200	NV						1 U	1 U	
Bromomethane	13	NV						1 U	1 U	

Table 1 Groundwater Analytical Results Bus Barn Site City of Ridgefield Ridgefield, Washington

		Location:	B1	B2	B3	B4	B5	B6	B6	B7
		Sample Name:	B1-W	B2-W	B3-W	B4-W	B5-W	B6-W	B6-W-DUP	B7-W
		Collection Date:	09/15/2014	09/15/2014	09/15/2014	09/15/2014	09/16/2014	09/17/2014	09/17/2014	09/16/2014
	Vapor Intrusion, Method B, Groundwater	MTCA A								
Carbon disulfide	400	NV						1 U	1 U	
Carbon tetrachloride	0.22	NV						0.5 U	0.5 U	
Chlorobenzene	100	NV						0.5 U	0.5 U	
Chlorobromomethane	NV	NV						1 U	1 U	
Chloroethane	12	NV						1 U	1 U	
Chloroform	1.2	NV						0.3 U	0.3 U	
Chloromethane	5.2	NV						0.5 U	0.5 U	
cis-1,2-Dichloroethene	160	NV						0.3 U	0.3 U	
cis-1,3-Dichloropropene	NV	NV						0.5 U	0.5 U	
Dibromochloromethane	0.22	NV						1 U	1 U	
Dibromomethane	NV	NV						1 U	1 U	
Dichlorodifluoromethane	9.9	NV						0.5 U	0.5 U	
Ethylbenzene	2800	700						0.5 U	0.54	1.7
Freon 113	1100	NV						1 U	1 U	
Hexachlorobutadiene	0.81	NV						1 U	1 U	
Isopropylbenzene	720	NV						0.3 U	0.3 U	
m,p-Xylene	NV	1000 ^a						1 U	1 U	
Methyl tert-butyl ether	610	20						0.5 U	0.5 U	
Methylene chloride	94	5						20 U	20 U	
Naphthalene	170	160						1 U	1.22	
n-Butylbenzene	NV	NV						0.5 U	0.5 U	
n-Propylbenzene	NV	NV						0.5 U	0.5 U	
o-Xylene	440	1000 ^a						0.3 U	0.3 U	
sec-Butylbenzene	NV	NV						0.5 U	0.5 U	
Styrene	78	NV						0.5 U	0.5 U	
tert-Butylbenzene	NV	NV						0.5 U	0.5 U	
Tetrachloroethene	1	5						1 U	1 U	
Toluene	15000	1000						0.5 U	0.5 U	0.93
trans-1,2-dichloroethene	130	NV						0.5 U	0.5 U	
trans-1,3-Dichloropropene	NV	NV						0.5 U	0.5 U	
Trichloroethene	0.42	200						0.3 U	0.3 U	
Trichlorofluoromethane	120	NV						1 U	1 U	
Vinyl chloride	0.35	NV						0.3 U	0.3 U	
Xylenes, Total	NV	1000								4.69

Table 1

Groundwater Analytical Results Bus Barn Site City of Ridgefield Ridgefield, Washington

		Location [.]	B1	B2	B3	R4	B5	B6	B6	B7
		Sample Name	B1-W/	B2-W/	B3-W	B4-W/	B5-W	B6-W	B6-W-DUP	B7-W/
		Collection Date:	09/15/2014	09/15/2014	09/15/2014	09/15/2014	09/16/2014	09/17/2014	09/17/2014	09/16/2014
	Vapor Intrusion		07/13/2014	07/13/2014	07/13/2014	07/13/2014	07/10/2014	077172014	07/17/2014	07/10/2014
	Method B,	MTCA A								
	Groundwater									
Hydrocarbon Identification (Presence	e/Absence)		1		1	1		1	1	
Diesel	NV	NV	ND	ND	ND	ND	ND	ND	ND	DETECT
Gasoline/Mineral Spirits	NV	NV	ND	ND	ND	ND	ND	ND	ND	ND
Kerosene	NV	NV	ND	ND	ND	ND	ND	ND	ND	ND
Lube Oil	NV	NV	ND	ND	ND	ND	ND	ND	ND	ND
TPH (ug/L)	-						-			
Gasoline	NV	1000								100 U
Diesel	NV	500								853 J
Lube Oil	NV	500								482
NOTES:			• •			• •	-			
Detections are in bold font.										
Results that exceed MTCA cleanup levels	are shaded. Non-dete	ct results are not evalua	ted. Results are shac	ded according to ex	ceedance of highes	t evaluated cleanu	p levels.			
= not analyzed.										
DUP = field duplicate.										
J = Result is an estimated value.										
Method B = Washington screening level in	n groundwater protect	ive of indoor air, for Met	hod B. From Table B-	1, Draft Guidance fo	or Evaluating Soil Vap	por Intrusion in Wash	ington State, 2009.			
MTCA = Model Toxics Control Act.										
MTCA A = MTCA Method A unrestricted la	ind use.									
ND = non-detect.										
NV = no value.										
TPH = total petroleum hydrocarbons.										
U = Result is non-detect at or above meth	od reporting limit.									
ug/L = micrograms per liter.										
VOC = volatile organic compound.										
^a Total xylenes cleanup level is used.										

Table 1

Groundwater Analytical Results Bus Barn Site City of Ridgefield Ridgefield, Washington

	Location:	B1	B1	B2	B2	B3	B3	B4	B4	B5	B5	B6	B6	B7
Samp	ole Name:	B1-S-2.0	B1-S-8.5	B2-S-2.0	B2-S-8.0	B3-S-2.0	B3-S-7.0	B4-S-3.0	B4-S-7.0	B5-S-2.0	B5-S-7.0	B6-S-2.0	B6-S-8.5	B7-S-1.5
Collec	tion Date:	09/15/2014	09/15/2014	09/15/2014	09/15/2014	09/15/2014	09/15/2014	09/15/2014	09/15/2014	09/16/2014	09/16/2014	09/16/2014	09/16/2014	09/16/2014
Collection Dept	:h (ft bgs):	2.0	8.5	2.0	8.0	2.0	7.0	3.0	7.0	2.0	7.0	2.0	8.5	1.5
	MTCA A													
Metals (mg/kg)														
Lead	250				11		8.63	9.11	7.77					
VOCs (mg/kg)														
Benzene	0.03				0.0193 U		0.0191 U	0.0183 U	0.0191 U					
Ethylbenzene	6				0.0321 U		2.06 J	8.27 J	9.08 J					
Toluene	7				0.0971		0.0395 J	0.364 J	1.18 J					
Xylenes, Total	9				0.0964 U		0.0956 U	0.0913 U	4.49 J					
Hydrocarbon Identif	ication (Pres	ence/Absence)												
Gasoline	NV	ND	ND	ND	DETECT	ND	DETECT	DETECT	DETECT	ND	ND	ND	ND	ND
Diesel	NV	ND	ND	ND	ND	ND	DETECT	DETECT	DETECT	ND	ND	ND	ND	ND
Hydraulic Oil	NV	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Kerosene	NV	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Lube Oil	NV	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TPH (mg/kg)	-		-	-	-		-		-		-		-	
Gasoline	100				444 J		1320 J	2990 J	4310 J					
Diesel	2000						461 J	1970 J	4200 J					
Lube Oil	2000						63.8 U	113 J	151 J					

Table 2 Soil Analytical Results Bus Barn Site City of Ridgefield Ridgefield, Washington

	Location:	B8	B9	B10	B11	B12	B12	B13	B14	B15	B16	B16
Samp	ole Name:	B8-S-7.5	B9-S-6.0	B10-S-5.5	B11-S-8.0	B12-S-5.5	B12-S-8.0	B13-S-8.0	B14-S-5.0	B15-S-8.0	B16-S-5.5	B16-S-8.0
Collect	tion Date:	04/15/2015	04/15/2015	04/15/2015	04/15/2015	04/15/2015	04/15/2015	04/15/2015	04/15/2015	04/15/2015	04/15/2015	04/15/2015
Collection Dept	th (ft bgs):	7.5	6.0	5.5	8.0	5.5	8.0	8.0	5.0	8.0	5.5	8.0
	MTCA A											
Metals (mg/kg)						•						
Lead	250											
VOCs (mg/kg)		-				• •			-	-		
Benzene	0.03	0.02 U	0.0188 U	0.0196 U	0.0193 U	0.0192 U	0.0196 U	0.0191 U	0.018 U	0.0194 U	0.019 U	0.0194 U
Ethylbenzene	6	0.0334 U	0.0314 U	0.0327 U	0.0322 U	0.032 U	0.0327 U	0.0318 U	0.0301 U	0.0324 U	0.0317 U	0.0323 U
Toluene	7	0.0334 U	0.0314 U	0.0327 U	0.0322 U	0.122	0.109	0.0318 U	0.0301 U	0.0324 U	0.0317 U	0.0323 U
Xylenes, Total	9	0.1 U	0.0941 U	0.0982 U	0.0966 U	0.096 U	0.0981 U	0.0955 U	0.0902 U	0.0972 U	0.0952 U	0.0968 U
Hydrocarbon Identifi	ication (Pres	(
Gasoline	NV											
Diesel	NV											
Hydraulic Oil	NV											
Kerosene	NV											
Lube Oil	NV											
TPH (mg/kg)	-	-		-	-	-	-	-	-	-	-	-
Gasoline	100	3.34 U	3.14 U	3.27 U	3.22 U	615	718	3.18 U	3.01 U	3.24 U	3.17 U	955
Diesel	2000	20 U	18.8 U	19.6 U	19.3 U	50 J	548 J	19.1 U	18 U	19.4 U	111	6420
Lube Oil	2000	66.7 U	62.7 U	65.5 U	64.4 U	64 U	65.4 U	63.7 U	60.1 U	64.8 U	63.5 U	64.5 U

Table 2 Soil Analytical Results Bus Barn Site City of Ridgefield Ridgefield, Washington

Table 3 Sub-Slab Soil Vapor Analytical Results Bus Barn Site City of Ridgefield Ridgefield, Washington

	Location:	SS-1
	Sample Date:	4/15/2015
	MTCA B Sub-Slab	
VOCs (ug/m3)		
Benzene	10.7	3.2
Ethylbenzene	15200	6.7
Toluene	76200	20
m,p-Xylene	1520 ^a	24
o-Xylene	1520	13
TPH (ug/m3)		
Gasoline	NV	3300 J
APH (ug/m3) ^b		
C5-C6 Aliphatic + >C6-C8 Aliphatic	90000	205.5
>C8-C10 Aliphatic + >C10-C12 Aliphatic	4700	1800
>C8-C10 Aromatic	6000	160
>C10-C12 Aromatic	NV	86 U

NOTES:

Detections are in **bold** font.

Results that exceed MTCA B cleanup levels are shaded. Non-detect results are not evaluated against cleanup levels.

The lower of available MTCA B carcinogen or non-carcinogen value is used.

APH = air-phase petroleum hydrocarbons.

J = the result is an estimated value.

MTCA B = Model Toxics Control Act Method B.

TPH = total petroleum hydrocarbons.

U = the result is non-detect.

ug/m3 = micrograms per cubic meter.

^aMTCA B value for m-xylene.

^bVPH results are the sum of indicated aliphatic or aromatic fractions. Non-detect results are

summed as one-half the reporting limit.

FIGURES





E





This product is for informational purposes and may not have been prepared for, or be suitable for legal, engineering, or surveying purposes. Users of this information should review or consult the primary data and information sources to ascertain the usability of the information.



Figure 1 Site Location

Bus Barn Property City of Ridgefield Ridgefield, Washington





Figure 2 Site Features

Bus Barn Property City of Ridgefield Ridgefield, Washington

Legend

⊕ Light Pole

UST Potential Historical UST

UST Currently in Use

Underground Pipeline

Property Boundary





Source: Aerial photograph (2014) obtained from Clark County GIS. Site features are approximate. Bus barn layout inset provided by Group Mackenzie.



This product is for informational purposes and may not have been prepared for, or be suitable for kgal, engineering, or surveying purposes. Users of this information should review or consult the primary data and information sources to ascertain the usability of the information. Path: X:\0239.28 City of Ridgefield\05 IPG Bus Bam\Projects\Site Investigation Report\Fig3_Area Topography.



Project: 8006.31.05 Produced By: js chane

This pro for legal,



duct is for informational purposes and may not have been prepared for, or be suitable engineering, or surveying purposes. Users of this information should review or he primary data and information sources to ascertain the usability of the information. 200 Feet



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ton -	Benzene	NA	NA	Benzene	NA	NA				Depth (ft bg	s) 5.0	Depth (ft bgs)	8.0	2	A Read and
	Toulene	NA	NA	Toulene	NA	NA				Benzene	ND	Benzene	ND	En la Bar	in the
这一个学校了	ETBZ	NA	NA	ETBZ	NA	NA			15	Toulene	ND	Toulene	ND		CHE I
三 一天王王王	Total Xylenes	NA	NA	Total Xylenes	NA	NA				ETBZ	ND	ETBZ	ND	Carles .	
AND ANY	Gasoline	ND	ND	Gasoline	ND	ND		1 100		Total Xylene	s ND	Total Xylenes	ND		S. HERE
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V.	ETB	3Z	ND				and the second second				/	Toulene	NA	0.0315 U	
and the second second	Tota	al Xylenes	ND							//		ETBZ	NA	0.0315 U	
(CI)	Gas	soline	ND	11-		10		- I io	/		he was	Total Xylenes	NA	0.983	
and the second se	Dies	sel	ND		rd		686	C.C. ILL			E States	Gasoline	ND	466 J	T
		3.6	and and a second		e S	<u>ک</u>	19	1919			CI -EP	Diesel	ND	2650 J	
		B2					International Action			Cal-J	Ele en		P16		11NS
	Depth (ft bgs)	2.0	8.0	· · · · · · · · · · · · · · · · · · ·			10 - 20	6				Dopth (ft bas)	5.5	80	J. A. P
2 ann	Benzene	NA	0.193 U				CPC)	UST	4		Har	Benzono			ALL BELLE
-	Toulene	NA	0.0971							A CONTRACT	B9	Toulono			
	ETBZ	NA	0.0321 U							Depth (ft k	bas) 6.0				6-10 H
	Total Xylenes	NA	0.0964 U	C IRIS C	12					Benzene					And
and draw	Gasoline	ND	444 J			18 22				Toulene					TE.
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	De	pth (ft bas)	8.0			h /				Dissol		12 4	2.2		
-FF	Be	nzene	ND			Y				Diesei		1	30.5	B8	
100	Tou	ulene	ND	1 Derte anne 1		ISU	11	0-		-			De	pth (ft bgs)	7.5
1	ET	BZ	ND		1 million	UST				SHE			Be	nzene	ND
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See. 1	Ga	soline	ND			a		Ť Š	nomalies				EI	ΒZ	ND
and and	Die	esel	ND	the tal				K	ioneer S	t	1		То	tal Xylenes	ND
The second second	HE P		13			and and				COST			Ga	soline	ND
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- 1	Depth (ft bgs	3) 2.0	8.5	State States	a find			C			States, and				all the second
I I	Benzene	NA	NA	ALL PROPERTY	D4	8		FIFU	D40			D2			- Marte
	Toulene	NA	NA	Donth (ft ha	B4	7.0		Denth (ft here)	B12		Dauth (ft has)	B3		B11	
1.	ETBZ	NA	NA	Depth (it by	S) 3.0	7.0		Depth (it bgs)	5.5	8.0	Deptn (π bgs)	2.0 7.0	De	epth (ft bgs)	8.0
Bass West	Total Xylenes	s NA	NA	Benzene	0.0183	0.0191	A A	Benzene			Berizene	INA 0.191		nzene	ND
J. I.	Gasoline	ND	ND	Toulene	0.364	1.18 J	569	Toulene	0.122	0.109	Toulene	NA 0.039		ulene	ND
1	Diesel	ND	ND	EIBZ	8.27 J	9.08 J			ND		EIBZ	NA 2.06	JE	BZ	ND
The A State		185 12	A		es 0.0913	J 4.49 J	a mar		ND	ND	Iotal Xylenes	NA 0.0956		tal Xylenes	ND
E REAL		2.3. 2.3	· · · · ·	Gasoline	2990 J	4310 J	. 344	Gasoline	ND	718	Gasoline	ND 1320	J Ga	asoline	ND
		1 Inclusion		Diesel	1970 J	4200 J	STE USA	Diesel	50	548	Diesel	ND 63.8	U Di	esel	ND
A state of the			11 S. 11			2 1 1	11	A State				- he-	and a		284

Figure 4 Soil Results

Bus Barn Property City of Ridgefield Ridgefield, Washington

Legend

UST

Boring Location

⊕ Light Pole

UST Potential Historical UST

UST Currently in Use

Underground Pipeline

Property Boundary

Notes: ETBZ = ethylbenzene mg/kg = milligrams per kilogram MTCA = Model Toxics Control Act NA = not analyzed ND = non-detect ft bgs = feet below ground surface J = estimated value

MTCA A Exceedance





Source: Aerial photograph (2014) obtained from Clark County GIS. Site features are approximate. Bus barn layout inset provided by Group Mackenzie.



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Figure 5 Groundwater and Sub-Slab Vapor Results

Bus Barn Property City of Ridgefield Ridgefield, Washington

Legend

Boring Location

- Groundwater Exceedance Found (with results in ug/L) \bigcirc
- No Exceedance Found

Sub-Slab Soil Vapor Location

- ▲ No Exceedance Found
- ❀ Light Pole
- Potential Historical UST
- UST UST Currently in Use
- Underground Pipeline
- F × -× × × -× Fence
- Property Boundary

<u>Notes:</u> ug/L = micrograms per liter ug/m³ micrograms per cubic meter MTCA = Model Toxics Control Act J = estimated value

MTCA A Exceedance



Source: Aerial photograph (2014) obtained from Clark County GIS. Site features are approximate.



This product is for informational purposes and may not have been prepared for, or be suitable for kgal, engineering, or surveying purposes. Users of this information should review or consult the primary data and information sources to ascertain the usability of the information.





ſ								G	eologi	С	Borehole L	ehole Log/Well Construction		
	Mau	Foster &	Alo	ongi,∣	Inc.		Project I 0239 .	Numb 28.05	ber		Well I E	Number B1		Sheet 1 of 1
	Proje Proje Stan Drille Geol Sam	ect Name ect Location //End Date er/Equipment logist/Engineer ple Method	Rid Rid 09/ Cas S. H Geo	lgefield lgefield 15/14 to scade D Harvest oprobe	IPG B , Wasl) 09/15 Drilling er	Bus Ba hingto 5/14 1, Inc./	arn on 'Geoprobe			4		TOC Elevation (fe Surface Elevation Northing Easting Hole Depth Outer Hole Diam	eet) n (feet)	15.0-feet 2-inch
ſ	S)	Well			_ Sá	ample	Data					Soil Descripti	on	
	Depth (feet, BG\$	Details	Interval	Percent Recovery	Collection Method	Number	Name (Type)	Blows/6"	Lithologic Column					
WFKUJEU SVIZSS Z8/UZSS Z8/D5/UZSS Z8/D5/E4/D 5/1/15	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15		7	80 100	GP GP GP		B1-S-2.0 B1-S-8.5 B1-W				 0.0 to 0.5 feet: CC 0.5 to 4.0 feet: SA yellowish oral fine to coarse 4.0 to 15.0 feet: S plasticity; 609 9.0 feet: Color fines to 20%; Total Depth = 15. Temporary 1-inch surface. 	DNCRETE. NDY SILT WITH G nge mottling; 60% f ; 10% gravel; mois SILTY SAND (SM); 6 sand, fine, poorly change to brown w increase in sand to 0 feet below ground 0 feet below ground 0 PVC screen set fr	GRAVEL (ML) fines, low plas t. reddish brown graded; mois graded; mois 80%; wet.	; reddish brown with sticity; 30% sand, n; 40% fines, low st.
	NOTE	S: 1) GP = Geo chloride. 5) Depth to water	brobe. BGS =	2) ppm = below g 70 feet k	n = parts ground s pelow	s per m surface	nillion. 3) PID 9.	= Pho	to ionization	n de	etector, soil head sp	ace reading in parts p	per million (ppm). 4) PVC = poly vinyl
ןכ	<u> </u>	J												

						Geologic	ic Borehole Log/Well Construction			
Mau	I Foster &	Alon	gi, I	nc.	Project Num	ber 5	Well Number	Sheet		
Proj Proj Stal Drill Geo San	iect Name iect Location rt/End Date ler/Equipment ologist/Engineer nole Method	Ridge Ridge 09/15/ Casca S. Ha Geop	efield efield, /14 to ade D rveste robe	IPG B Wash 09/15 rilling er	U235.26.0 Bus Barn hington 5/14 I, Inc./Geoprobe	5	TOC Elevation (fe Surface Elevation Northing Easting Hole Depth Outer Hole Diam	et) (feet) 15.0-feet 2-inch		
	Well			Sa	amnle Data		Soil Description	2		
Depth (feet, BGS	Details	Interval	Percent Recovery	Collection Method	Name (Type)	Lithologic Column	Son Descriptio	"		
1			80	GP	B2-S-2.0 PID = 3.8 ppm		 0.0 to 0.5 feet: CONCRETE. 0.5 to 4.0 feet: SANDY SILT WITH G yellowish orange mottling; 60% fi toughness; 30% sand, fine, poon to subrounded; dry. 3.5 feet: Color change to gray; pet 4.0 to 5.0 feet: No recovery. 	RAVEL (ML); reddish brown with ines, low plasticity, low ly graded; 10% gravel, fine, round troleum hydrocarbon-like odor.		
6 7 8 9 10 11 12	7	7.	100	GP GP GW	B2-S-8.0 PID = 260 ppm B2-W		5.0 to 14.0 feet: SAND WITH SILT (S nonplastic; 85% sand, fine to me hydrocarbon-like odor; dry to mo @ 9.5 feet: Color change to reddish l	iP-SM); gray; 15% fines, dium, poorly graded; petroleum ist.		
14 1/2 C-19-con-							14.0 to 15.0 feet: CLAY (CL); light bro mottling; 100% fines, medium pla	own with yellowish orange asticity, medium toughness; wet.		
07.80							i otal Depth = 15.0 feet below ground	i surface.		
							remporary 1-inch PVC screen set fro ground surface.	эт 10.0 to 15.0 feet below		
NOTI	ES: 1) GP = Geor chloride. 5)	probe. 2 BGS = b	2) ppm elow gi	= parts round s	s per million. 3) PID = Pho surface.	oto ionization d	detector, soil head space reading in parts p	er million (ppm). 4) PVC = poly vinyl		
	Depth to water ground surface	= 8.62 i e.	feet b	elow						

							G	eologic	ic Borehole Log/Well Construction				
Mau	I Foster &	Alc	ongi,	Inc.		Project	Numb	er	Well Number	Sheet			
Proj Proj Star Drill Geo Sarr	ect Name ect Location t/End Date er/Equipment logist/Engineer nple Method	Ric Ric 09/ Ca S. I Ge	dgefield dgefield /15/14 to scade L Harvest oprobe	IPG E , Wasl 0 09/15 Drilling ter	Bus Bai hingtoi 5/14 1, Inc./(0239. rn n Geoprobe	28.05		B3 TOC Elevation (fe Surface Elevation Northing Easting Hole Depth Outer Hole Diam	1 of 1 pet) n (feet) 15.0-feet 2-inch			
کار ا	Well		· .	~ Sá	ample I	Data			Soil Descripti	on			
Depth (feet, BG;	Details	Interval	Percent Recovery	Collectior Method	Number	Name (Type)	Blows/6"	Lithologic Column					
-			100	GP					0.0 to 0.5 feet: CONCRETE.				
2 3					P	В3-S-2.0 ID = 6.9 ppi	m		 0.5 to 9.0 feet: SILTY SAND (SM); d reddish mottling; 45% fines, low sand, fine, poorly graded; dry. @ 2.5 to 2.7 feet: SAND with trace fi @ 3.0 feet: Color change to dark gra hydrocarbon-like odor. 	ark brown and dark gray with plasticity, low toughness; 55% ines. ay with gray mottling; petroleum			
6 7 8 9			- 80	GP	Pi	В3-S-7.0 D = 74.2 pp	m		@ 6.5 feet: Decrease in fines to 20% to wet.	5; increase in sand to 80%; moist			
Ē	-	Z							9.0 to 10.0 feet: No recovery.				
<u> </u>			-										
11			50	GP GW					10.0 to 12.5 feet: SAND (SP); brown medium, poorly graded; wet.	to reddish brown; 100% sand,			
Ē 13						B3-W			12.5 to 15.0 feet: No recovery				
14									Total Dooth - 15 0 foot balance aroun				
	Temporary 1-inch PVC screen set from 10.0 to 15.0 feet below ground surface.												
NOTE	ES: 1) GP = Geo chloride. 5) Depth to wated	probe BGS r = 9.3	. 2) ppm = below g 35 feet k	n = parts ground s below	s per mi surface.	llion. 3) PID	= Phot	to ionization o	detector, soil head space reading in parts p	per million (ppm). 4) PVC = poly vinyl			

							G	eologic	Borehole Log/Well Construction		
	Mau	I Foster &	Along	gi, Ind	c.	Project I 0239 .2	Vumb 28.05	er	Well Number B4	Sheet 1 of 1	
	Proje Proje Stan Drille Geo Sam	ect Name ect Location t/End Date er/Equipment logist/Engineer pple Method	Ridgef Ridgef 09/15/1 Casca S. Har Geopr	field IP(field, W 14 to 09 de Drill vester robe	G Bus Ba /ashingto 9/15/14 ling, Inc	arn on /Geoprobe			TOC Elevation (fe Surface Elevation Northing Easting Hole Depth Outer Hole Diam	eet) n (feet) 15.0-feet 2-inch	
	(Si	Well		> 5	Sample	Data		6	Soil Descripti	on	
	Depth (feet, BG	Details	Interval	Recovery	Method Number	Jaquin Name (Type)					
E				70 G	ЭP				0.0 to 0.5 feet: CONCRETE.		
	_ 1								0.5 to 2.0 feet: SANDY GRAVEL (Gl coarse; 60% gravel, medium, an @ 0.5 to 1.5 feet: Half of macrocore powder.	P); brown; 40% sand, medium to gular to rounded; dry. liner filled with brick-colored	
	3					B4-S-3.0			 to 3.5 feet: SANDY SILT (ML); bi medium toughness; 45% sand, t brown and yellowish brown fines 3.0 feet: Color change to gray; pe 	rown; 55% fines, low plasticity, fine, poorly graded; trace reddish s; dry. troleum hydrocarbon-like odor.	
Ē	4					PID = 1.0 ppr	n	날 날 날 날 날	3.5 to 5.0 feet: No recovery.		
Ē	_ +									-	
	5		1	100 G	₽				5.0 to 15.0 feet: SAND (SP); dark gropoorly graded; petroleum hydrod	ay; 5% fines; 95% sand, fine, arbon-like odor; moist to wet.	
שט פאט 19/1/8 קריניקינייקינייקינייקינייקינייקינייקיני	_ 6 _ 7 _ 8 _ 9 _ 10 _ 11 _ 12 _ 13 _ 14 _ 15	Z	7	100 G G	P SP W	В4-S-7.0 ID = 802.3 pp B4-W	nm		@ 10.5 feet: Color change to reddish increase in sand size to medium	h brown with tan mottling; sand.	
19.28.									Total Depth = 15.0 feet below ground	d surface.	
22U/GU-82									Temporary 1-inch PVC screen set fr ground surface.	om 10.0 to 15.0 feet below	
INI /GIN I W/PROJECTS/U239.28/U239.	NOTE	:S: 1) GP = Geo	probe. 2)	ppm = c	parts per n	nillion. 3) PID :	= Phot	to ionization o	letector, soil head space reading in parts o	per million (ppm). 4) PVC = polv vinvl	
	<u> </u>	chloride. 5) Depth to water ground surface	BGS = be = 9.43 fe	eet belo	nd surface	9.					

						G	eologic	Borehole Log/Well Construction			
	Mau	Foster &	Alongi, l	nc.	Project N 0239.2	lumb 2 8.05	er	Well Number B5	Sheet 1 of 1		
	Proje Proje Start Drille Geol Sam	ect Name ect Location /End Date er/Equipment logist/Engineer ple Method	Ridgefield I Ridgefield, 09/16/14 to Cascade Di S. Harveste Geoprobe	PG Bu Wash 09/16/ rilling, r	us Barn ington /14 Inc./Geoprobe			TOC Elevation (fe Surface Elevation Northing Easting Hole Depth Outer Hole Diam	et) (feet) 15.0-feet 2-inch		
	6	Well		_ Sa	mple Data			Soil Descriptio	on		
	Depth (feet, BG)	Details	Interval Percent Recovery	Collection Method	Name (Type)	Blows/6"	Lithologic Column				
8.05.GPJ 5/1/15	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15		100	GP GP GW	В5-S-2.0 PID = 1.0 ppn В5-S-7.0 PID = 1.0 ppn В5-W	n		 0 to 0.5 feet: SAND WITH GRAVEL (well graded; 10% gravel, fine, su 0.5 to 15.0 feet: SILTY SAND (SM); t mottling; 25% fines, nonplastic; 7 tan fines; dry to moist. @ 8.5 feet: Wet. 	SW); 90% sand, fine to coarse, bangular; trace fines; dry. frown with dark red and brown 5% sand, fine, well graded; trace		
239.2								Tomporary 1 inch PVC coroon oot fro	m 10.0 to 15.0 foot below		
3LWC W:\GIN1\GIN1WPROJEC1S\0239.28\0239.28.05\0	NOTE	S: 1) GP = Geop chloride. 5) i	probe. 2) ppm BGS = below gr	= parts ound s	per million. 3) PID = urface.	= Pho	to ionization d	ground surface.	er million (ppm). 4) PVC = poly vinyl		

					G	eologic	Borehole Log/Well Construction				
Mau	I Foster &	Alongi, I	nc.	Project N	Vumb	er	Well Number	Sheet			
Proje Proje Stan Drille Geo Sam	ect Name ect Location t/End Date er/Equipment logist/Engineer sple Method	Ridgefield Ridgefield, 09/16/14 to Cascade D S. Harvest Geoprobe	IPG E , Wasi) 09/17 Drilling er	0239.1 Bus Barn hington 7/14 J, Inc./Geoprobe	28.05		B6 TOC Elevation (fe Surface Elevation Northing Easting Hole Depth Outer Hole Diam	1 of 1 et) (feet) 15.0-feet 2-inch			
S)	Well		<u>د</u> S	ample Data		0	Soil Descriptio	n			
Depth (feet, BG	Details	Interval Percent Recovery	Collection Method	Name (Type)	Blows/6"	Lithologic Column					
-		100	GP				0.0 to 0.5 feet: ASPHALT.				
2 3				В6-S-2.0 PID = 5.2 ppr	n	0 <u>0</u>	0.5 to 0.8 feet: GRAVEL (GP); gray; 0.8 to 7.5 feet: SILTY SAND (SM); re nonplastic; 75% sand, fine, well g	100% gravel, coarse, subangular. ddish brown; 25% fines, raded; trace tan fines; dry.			
5 6 7		- 100	GP				@ 4.0 feet: Color change to reddish b	brown mottled with tan.			
8 9 10 10		100	GP GW	В6-S-8.5 PID = 2.1 ppr	n		 7.5 to 15.0 feet: SAND with SILT (SP nonplastic; 90% sand, medium, p @ 9.0 feet: Wet. 	-SM); brown; 10% fines, oorly graded; dry to moist. - - - - - - - -			
12 13 14 15				B6-W B6-W-DUP			@ 12.5 feet: Color change to brown v	vith reddish brown mottling.			
							Total Depth = 15.0 feet below ground	surface.			
	Temporary 1-inch PVC screen set from 10.0 to 15.0 feet below ground surface.										
NOTE	S: 1) GP = Geor chloride. 5)	probe. 2) ppm BGS = below g	= part round	s per million. 3) PID : surface.	= Phot	to ionization c	letector, soil head space reading in parts p	er million (ppm). 4) PVC = poly vinyl			

				G	eologic	Borehole Log/Well Construction			
Mau	I Foster &	Alongi, I	nc.	Project Numb 0239.28.05	er	Well Number B7	Sheet 1 of 1		
Proje Proje Stan Drille Geo Sam	ect Name ect Location t/End Date er/Equipment logist/Engineer pple Method	Ridgefield Ridgefield, 09/16/14 to Cascade D S. Harveste Geoprobe	IPG E Wasl 09/16 rilling er	Bus Barn hington 5/14 1, Inc./Geoprobe		TOC Elevation (fee Surface Elevation (Northing Easting Hole Depth Outer Hole Diam	et) (feet) 15.0-feet 2-inch		
ŝ	Well		_ Sa	ample Data	0	Soil Description	า		
Depth (feet, BG	Details	Interval Percent Recovery	Collectio Method	Name (Type)	Lithologi Column				
		100	GP			0.0 to 0.5 feet: ASPHALT.			
1 2 3				В7-S-1.5 PID = 8.2 ppm		 0.5 to 15.0 feet: SILTY SAND (SM); gr 60% sand, fine, poorly graded; pe dry. 0.5 to 4.8 feet: Trace gravel, round, orange and black fines. 1.0 feet: Color change to brown; no 3.5 feet: Color change to brown model. 	ray; 40% fines, low plasticity; troleum hydrocarbon-like odor; , coarse; trace 1/8" to 1/4" o odor observed.		
<u> </u>									
5		100	GP			@ 4.8 feet: Color change to dark gray. increase in sand to 80%; moist to	; decrease in fines to 20%; wet.		
						@ 6.0 feet: Petroleum hydrocarbon-lik	e odor.		
9				В7-S-8.5 PID = 105.3 ppm		@ 8.7 feet: Wet.			
11		100	GP GW			@ 10.0 feet: Rainbow sheen observed	d in sample core.		
13				B7-W		@ 13.0 feet: Color change to tan with observed.	red brown mottling; no odor		
<u> </u>						Total Depth = 15.0 feet below ground	surface.		
						Temporary 1-inch PVC screen set from ground surface.	m 10.0 to 15.0 feet below		
	:S: 1) GP = Geog chloride. 51	probe. 2) ppm BGS = below qi	= part:	s per million. 3) PID = Phot surface.	to ionization c	letector, soil head space reading in parts pe	r million (ppm). 4) PVC = poly vinyl		
	· · · · · · · · · · · · · · · · · · ·								

	Moul Foster 9 Alarmi Int					Geologic E					Borehole Log/Well Construction		
	Maul Foster & Alongi, Inc.				Project Number					Well Number Sheet			
	Project Name Project Location Start/End Date Driller/Equipment Geologist/Engineer Sample Method		Rid Rid 4/1 Pac E. H Geo	gefield gefield, 5/15 to cific Sol less oprobe	IPG B , Wash 4/15/1: il and	us Barn hington 5 Water/Geoprobe					TOC Elevation (feet) Surface Elevation (feet) Northing Easting Hole Depth 10.0-feet Outer Hole Diam 2.25-inch		
	3GS)	Well Details	-	nt ery	s2 q tion	ample b	Data I	.9/	gic	5	Soil Description		
	Depth (feet, E		Interva	Percer Recov	Colleci Methoo	Numbe	Name (Type)	Blows/	Litholo	Colum			
Ē				100%	GP						0.0 to 0.5 feet: CONCRETE.		
	1 2 3 4 5 - 6 - 7 - 8 - 9 10	Σ	, . -	100%	GP GW	F	В8-S-5.5 PID = 0 ppm В8-S-7.5 PID = 0.3 ppr В8-W-8.0 PID = 132 ppi	n			 0.5 to 1.6 feet: SANDY SILT (ML); yellowish brown; 85% tines, low plasticity; 15% sand, fine; dry. (@ 1.6 to 1.8 feet: Grey angular gravel and charcoal. 1.6 to 6.0 feet: SANDY SILT (ML); orangish brown; 85% fines, low plasticity; 15% sand, fine; dry to moist. (@ 3.3 to 6.0 feet: Mottling. 6.0 to 7.8 feet: SANDY SILT (ML); orangish brown with mottling; 60% fines; 40% sand, fine to medium; wet. 7.8 to 10.0 feet: SAND with SILT (SP-SM); gray; 10% fines; 90% sand, fine to medium; micaceous; petroleum hydrocarbon-like odor; wet. (@ 8.5 to 9.0 feet: Sheen test on soil produced an iridescent sheen. 		
2111 1 WIT RUJEU 1 312235 2010233 20.0310233 20.00.05 4 0111 10													
C W:/GINTR	NOTE	ES: 1) GP = Geop stainless-stee	robe. I wate	2) ppm r sample	= parts er set fre	s per m om 6.0	illion. 3) PID : to 10.0 feet be	= Pho elow gi	to ioniza round ຣເ	ation o urface	detector, soil head space reading in parts per million (ppm). 4) Geoprobe e.		
GBL	$\overline{\nabla}$	surface.	- 7.0	Teel De		Jound	'						

	_						G	eologic	Borehole Log/Well Construction		
	Maul Foster & Alongi, Inc.					Project . 0239.	Numb 28.05	ber 5	Well Number B9	Sheet 1 of 1	
	Project Name Project Location Start/End Date Driller/Equipment Geologist/Engineer			Igefield Igefield, 5/15 to cific Soi Hess oprobe	IPG B Wasł 4/15/1: I and	ius Barn hington 5 Water/Geoprobe		<u></u>	TOC Elevation (fe Surface Elevation Northing Easting Hole Depth Outer Hole Diam	eet) n (feet) 12.5-feet 2 25-inch	
-	Gan	Well	Gei	oprobe	Sé	ample Data			Soil Descripti	0n	
44000	(feet, BGS	Details	Interval	Percent Recovery	Collection Method	Name (Type)	Blows/6"	Lithologic Column			
Ē				80%	GP				0.0 to 0.4 feet: CONCRETE; multiple	e concrete and gravel slabs.	
Lundunulu	1								0.4 to 1.5 feet: SILT (ML); brown; 90 sand, fine; dry.	% fines, low plasticity, stiff; 10%	
	2 3								plasticity; 15% sand, fine; dry to	moist. –	
	4								@ 3.5 feet: Mottling; micaceous.		
Ē	,								4.0 to 5.0 feet: No recovery.		
	5			⁼ 100%	GP				5.0 to 7.5 feet: SANDY SILT (ML); re fines, low plasticity; 15% sand, fi	eddish brown with mottling; 85%	
	6					B9-S-6.0 PID = 0 ppp				-	
	7									-	
huduu	8	2	Z						7.5 to 10.0 feet: SILTY SAND (SM); sand, fine to medium; micaceou	orangish brown; 30% fines; 70% s; wet.	
L	9				GW	B9-S-8.5 PID = 0 ppn				-	
	10					B9-W-10.5					
	11									-	
	12									-	
Ē									Total Depth - 12 5 feet below group	dsurface	
									Total Depth - 12.5 leet below ground	u sunace.	
/1/15											
3PJ 5											
28.05.0											
0239.2											
28.05											
\0239.											
239.28											
CTS/0											
ROJE											
NTWP											
W:\GINT\GI	ΝΟΤΕ	:S: 1) GP = Geo stainless-stee	probe. el wate	2) ppm er sample	= parts r set fro	s per million. 3) PID om 8.5 to 12.5 feet be	= Pho elow g	to ionization c round surface	letector, soil head space reading in parts p	per million (ppm). 4) Geoprobe	
GBLWC	∇	Depth to water surface.	r = 7.9) feet be	low g	round					

							Geologic	Borehole Log/Well Construction		
	Maul Foster & Alongi, Inc.					Project Nun	nber 05	Well Number	Sheet	
	Project Name Ridgefield IPG Project Location Ridgefield, Wa Start/End Date 4/15/15 to 4/15 Driller/Equipment Pacific Soil an Geologist/Engineer E. Hess			IPG B Wasi 4/15/1: 1 and	us Barn hington 5 Water/Geoprobe		TOC Elevation (fe Surface Elevation Northing Easting Hole Depth Outer Hole Diam	ret) (feet) 12.5-feet 2.25-inch		
-	San		Geo	oprobe	<u>د</u>	mple Data			2.25-111011	
	Depth (feet, BGS	Details	Interval	Percent Recovery	Collection Method	Name (Type)	Lithologic Column			
E				75%	GP			0.0 to 0.3 feet: ASPHALT; black.		
	_ 1 _ 2 _ 3 _ 4 _ 5			- 80%	GP	P10 S 5 5		 0.3 to 0.6 feet: ASPHALT SUBBASE, gravel, angular. 0.6 to 3.3 feet: SANDY SILT (ML); re plasticity; 15% sand, fine to medi @ 2.2 feet: Mottling. 3.3 to 5.0 feet: No recovery. 5.0 to 9.0 feet: SILTY SAND (SM); re fines, low plasticity; 70% sand, fin 	; blackish brown; 15% sand; 85% ddish brown; 85% fines, low ium; dry to moist. addish brown with mottling; 30% ne to medium; micaceous; moist	
	_ 6 _ 7 _ 8 _ 9 _ 10	Z	7		GW	B10-S-3.5 PID = 0.3 ppm B10-S-8.0 PID = 7.2 ppm		to wet. @ 5.5 feet: Wet. @ 8.0 to 8.5 feet: Gray; petroleum hy 9.0 to 10.0 feet: No recovery.	/drocarbon-like odor.	
<u>utuuluu</u>	_ 11 12					B10-W-10.5				
E	-									
INTW/PROJECTS\0239.28\0239.28.05\0239.28.05 5/1/15								Total Depth – 12.3 reet below ground	i sundce.	
VC W:\GINT\C	NOTE	S: 1) GP = Geor stainless-stee	orobe. el wate	2) ppm er sample	= parts r set fro	per million. 3) PID = Pl om 8.5 to 12.5 feet below	hoto ionization d v ground surface.	etector, soil head space reading in parts p	er million (ppm). 4) Geoprobe	
GBLV	$\overline{\Delta}$	surface.	- 7.0	ieel De	now g	Junu				
					G	oologic	Borebole Log/Well Co	netruction		
--	-----------------	--------------------------------	------------------------	--	---------	---	---	--		
Mau	I Fostor &	Alonai	Inc	Project I	Jumh			Sheet		
Inau		Alongi,		0239.2	28.05		B11	1 of 1		
Project Name Ridgefield IPG Bus Barn Project Location Ridgefield, Washington Start/End Date 4/15/15 to 4/15/15 Driller/Equipment Pacific Soil and Water/Geoprobe Geologist/Engineer E. Hess Sample Method Geoprobe						TOC Elevation (Surface Elevatio Northing Easting Hole Depth Outer Hole Dian	reet) n (feet) 10.0-feet n 2.25-inch			
)epth feet, BGS)	Well Details	nterval Percent Recovery	Collection Aethod S	mple Data aquin Name (Type)	lows/6"	ithologic Column	Soil Descript	ion		
30			02	<	ш	01				
1 2 3 4 5 6 7 8		60%	GP	B11-S-5.5 PID = 0 ppm B11-S-8.0 PID = 0 ppm	,		 0.0 to 1.0 feet: CONCRETE; gray. 1.0 to 2.5 feet: SANDY SILT (ML); or plasticity; 20% sand, fine to coed (1.9 to 2.0 feet: Gray lense. 2.5 to 3.0 feet: SANDY SILT (ML); or 75% fines, low plasticity; 25% s micaceous; dry. 3.0 to 5.0 feet: No recovery. 5.0 to 6.5 feet: SANDY SILT (ML); or 75% fines, low plasticity; 25% s micaceous; moist. 6.5 to 8.25 feet: SILTY SAND (SM), fines, low plasticity; 60% sand, micaceous; wet. 8.25 to 10.0 feet: No recovery. 	rangish brown; 75% fines, low rse; 5% gravel; micaceous; dry. eddish brown with gray mottling; and, coarse; trace gravel; and, coarse; trace gravel;		
= 10							Total Depth = 10.0 feet below group	nd surface		
							Drin rou was al a 10 degree angle p	onned to the west.		

Foster & ct Name ct Location /End Date r/Equipment ogist/Engineer ole Method Well Details	Alongi, Ind Ridgefield IPG Ridgefield, W 4/15/15 to 4/1 Pacific Soil au E. Hess Geoprobe	Project Num 0239.28.0 Bus Barn Isshington /15 d Water/Geoprobe	nber 05	Well Number B12 TOC Elevation (fe Surface Elevation Northing Easting	Sheet 1 of 1 et) (feet)
ct Name ct Location /End Date r/Equipment ogist/Engineer ole Method Well Details	Ridgefield IPG Ridgefield, W 4/15/15 to 4/1 Pacific Soil at E. Hess Geoprobe	a Bus Barn Ishington /15 d Water/Geoprobe Sample Data	<u>.</u>	TOC Elevation (fe Surface Elevation Northing Easting	et) (feet)
Vveii Details	terval ercent ecovery	Sample Data		Hole Depth Outer Hole Diam	10.0-feet 2.25-inch
		Name (Type)	Lithologic Column	Soil Descriptic	n
*****	80% 0			0.0 to 0.5 feet: ASPHALT: black	
	- 100% G	р B12-S-5.5 PID = 47.5 ppm B12-S-8.0 PID = 231.2 ppm		 0.0 to 0.5 feet: ASPHAL1; black. 0.5 to 1.9 feet: SANDY SILT (ML); graplasticity, stiff; 20% sand, fine; pedry. 1.9 to 2.7 feet: SANDY SILT (ML); refines, low plasticity; 20% sand, fine, hydrocarbon-like odor; dry. 2.7 to 4.0 feet: SANDY SILT (ML); grafines, low plasticity; 20% sand, fine, hydrocarbon-like odor; dry to mode 4.0 to 5.0 feet: No recovery. 5.0 to 6.4 feet: SANDY SILT (ML); grafines, low plasticity; 20% sand, fine, hydrocarbon-like odor; moist. 6.4 to 10.0 feet: SILTY SAND (SM); graves and, medium, well sorted; wet. Total Depth = 10.0 feet below ground 	ayish brown; 80% fines, low stroleum hydrocarbon-like odor;
S: 1) GP = Geop Depth to water	probe. 2) ppm = p = 6.75 feet bek	arts per million. 3) PID = Ph W	noto ionization de	etector, soil head space reading in parts p	er million (ppm).
	S: 1) GP = Geop	$\overline{\underline{a}} \underline{a} \underline{b} \underline{c} \overline{b} \overline{c}$	$\boxed{3} \underbrace{3} $	$\frac{\tilde{g}}{\tilde{g}} \frac{\tilde{g}}{\tilde{g}} \frac{\tilde{g}}}{\tilde{g}} \frac{\tilde{g}}{\tilde{g}}$	a) a) b) b) <td< td=""></td<>

	Geologic				Borehole Log/Well Construction				
Mau	I Foster &	Along	ji, Inc.		Project I 0239.	Numbe 28.05	er	Well Number B13	Sheet 1 of 1
Proj Proj Star Drill Gec San	ect Name ect Location t/End Date er/Equipment logist/Engineer nple Method	Ridgefi Ridgefi 4/15/15 Pacific E. Hess Geopro	ïeld IPG ïeld, Was 5 to 4/15/ : Soil and s obe	Bus B shingto 15 I Wate	arn on r/Geoprobe			TOC Elevation (fe Surface Elevation Northing Easting Hole Depth Outer Hole Diam	eet) (feet) 10.0-feet 2.25-inch
ŝ	Well		、 e ¹	Sample	Data		0	Soil Description	on
Depth (feet, BG	Details	Interval Percent	Recovery Collection	Number	Name (Type)	Blows/6"	Lithologic Column		
Ē		80	0% GP	'				0.0 to 0.8 feet: ASPHALT and SUBB	ASE.
1 2 3 4 5 6 7 8 9	Ž	— 10	10% GF		B13-S-5.0 PID = 0 ppm B13-S-8.0 PID = 0 ppm	2		 0.8 to 6.0 feet: SANDY SILT (ML); re 70% fines, low plasticity; 30% sa dry. @ 5.0 feet: Moist. 6.0 to 10.0 feet: SILTY SAND (SM); i plasticity; 60% sand, fine to coar @ 8.5 to 9.0 feet: Brick red color. 	reddish brown with gray mottling; and, fine to medium; micaceous; reddish brown; 40% fines, low se; wet.
<u>=</u> 10								Total Depth = 10.0 feet below ground	d surface.
NOTE	ES: 1) GP = Geop	probe. 2)	ppm = pa	rts per n	nillion. 3) PID	= Phote	o ionization d	detector, soil head space reading in parts p	per million (ppm).
⊥	Depth to water = 6 feet below ground ∑ surface.								

					Geologic Borehole					
Maul Foster &	Alor	ngi, I	Inc.		Project I 0239.	Numb 28.05	er	Well Number B14	Sheet 1 of 1	
Project Name Project Location Start/End Date Driller/Equipment Geologist/Engineer Sample Method	Ridg Ridg 4/15/ Pacit E. He Geoj	efield efield (15 to fic Sol ess probe	IPG B , Wasl 4/15/1 il and	Bus Ba hingto 5 Wate	arn on r/Geoprobe			TOC Elevation (f Surface Elevation Northing Easting Hole Depth Outer Hole Diam	eet) n (feet) 10.0-feet 2.25-inch	
(S) B Well Details	erval	rcent covery	llection thod co	ample	Data	"9/S/M	nologic lumn	Soil Descripti	on	
Del (fee	Inte	Pe Re	Ne C	Nui	Name (Type)	Blo	Lit Co			
		60%	GP GW		B14-S-5.0 PID = 0.6 ppr B14-S-7.5 PID = 0.7 ppr B14-W-8.0	n n		 0.0 to 0.4 feet: ASPHALT; dry. 0.4 to 2.1 feet: GRAVEL (GW); black, anguing coarse; 90% gravel, black, anguing 2.1 to 2.8 feet: SAND with SILT (SM) 90% sand, fine to coarse; micad 2.8 to 3.0 feet: SILTY SAND (SM); refines; 80% sand, fine to coarse; 3.0 to 5.0 feet: No recovery. 5.0 to 5.8 feet: SILTY SAND (SM); refines; 80% sand, fine to coarse; 5.8 to 8.0 feet: SILTY SAND with GF fines, low plasticity; 65% sand, to rounded to subangular, fine to coarse; 8.0 to 10.0 feet: No recovery. 	kish brown; 10% sand, fine to llar; dry.	

					Geologic	orehole Log/Well Construction		
Mau	I Foster &	Along	i, Inc.	Project Nu 0239.28	umber 3.05	Well Number B15	Sheet 1 of 1	
Proj Proj Star Drill Geo San	iect Name iect Location t/End Date er/Equipment blogist/Engineer nple Method	Ridgefie Ridgefie 4/15/15 Pacific E. Hess Geopro	eld IPG E eld, Wasi to 4/15/1 Soil and be	Bus Barn hington 5 Water/Geoprobe		TOC Elevation (fe Surface Elevation Northing Easting Hole Depth Outer Hole Diam	eet) n (feet) 10.0-feet 2.25-inch	
(S)	Well		<u> </u>	ample Data	. 0	Soil Descripti	on	
Depth (feet, BG	Details	Interval Percent	Recovery Collectio Method	Name (Type)	Blows/6" Lithologi Column			
1		90	% GP			0.0 to 1.0 feet: ASPHALT and SUBB	ASE; black and gray brown.	
2 3		L				1.0 to 5.7 feet: SANDY SILT (ML); re fines, low plasticity; 15% sand, fi micaceous; dry to moist.	ddish brown with motting; 85% ine to coarse; trace gravel;	
4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		80	% GP			@ 3.5 feet: Moist.		
6 7		l		В15-S-5.5 PID = 0.3 ppm		5.7 to 9.0 feet: SILTY SAND (SM); o plasticity; 70% sand, fine to coar @ 6.5 feet: Wet.	rangish brown; 30% fines, low rse; micaceous; moist to wet.	
8 9	Ž	-		B15-S-8.0 PID = 0.3 ppm		9.0 to 10.0 feet: No recovery.		
- 10						Total Depth = 10.0 feet below ground	d surface.	
NOTE	ES: 1) GP = Geop	probe. 2) p	opm = part	s per million. 3) PID =	Photo ionization o	letector, soil head space reading in parts p	per million (ppm).	
<u> </u>	surface.	- 7.9 7661	n nelow g	ouna				

			_	Geologic Borehole Log/Well Construction						
Ma	ul Foster &	Alongi,	Inc.	F	Project N	lumb	er	Well Number B16		Sheet
Pr Pr Sta Dr Ge Sa	oject Name oject Location art/End Date iller/Equipment cologist/Engineer mple Method	Ridgefield Ridgefield 4/15/15 to Pacific So E. Hess Geoprobe	IPG E , Wasl 4/15/1 il and	Bus Barn hington 5 Water/Geo _l	probe	0.00		TOC Elevation Surface Elev Northing Easting Hole Depth Outer Hole E	on (feet) ation (fee Diam	t) 10.0-feet 2.25-inch
(SS	Well	5	, _S Sa	ample Data		٩.	<u>i</u> c	Soil Des	cription	
Depth (feet, B(Details	Interval Percent Recove	Collecti Method	ioquina Mame Name	e (Type)	Blows/6	Litholog Column			
1 1 2 3 4 5 6 1		7 70% 7 80%	GP	B16 PID = 2)-S-5.5)-S-8.0 (05.8 pp)	m		 0.0 to 0.4 feet: CONCRETE. 0.4 to 0.7 feet: BRICK. 0.7 to 6.6 feet: SANDY SILT (M. plasticity; 20% sand, fine to @ 2.7 to 6.6 feet: Mottling. @ 5.3 feet: Moist. 6.6 to 9.0 feet: SILTY SAND (Si sand, fine to medium; petro 9.0 to 10.0 feet: No recovery. Total Depth = 10.0 feet below gate 	I); orangis medium; //); gray; 3 leum hydr	sh brown; 80% fines, low dry to moist.
	Depth to water surface.	= 7.9 feet be	elow g	round	-	-			·	

APPENDIX B FIELD SAMPLING DATA SHEETS



400 E. Mill Plain Blvd, Suite 400, Vancouver, WA 98660 (360) 694-2691 Fax. (360) 906-1958

Soil Field Sampling Data Sheet

Client Name	City of Ridgefield	Sample Location	B1
Project Number	0239.28.05	Sampler	SVH
Project Name	Bus Barn Property - IPG	Sampling Date	09/15/2014
Sampling Event		Sample Name	B1-S-8.5
Sub Area		Sample Depth	8.5
FSDS QA:	VAU 10/14/14	Easting	Northing TOC

Sample Information

Sampling Method	Sample Type	Sample Category	PID/FID	Sampling Time	Container Code	#
(4) GeoProbe	Soil	Discrete		12:42:00 PM	2 oz. soil	
					4 oz. soil	1
					8 oz. soil	1
					Other	
					Total Containers	2

Sample Description:	
General Sampling Comment	

Sampling Method Code:

(1) Backhoe, (2) Hand Auger, (3) Drill Bit Cutting Head, (4) Geoprobe, (5) Split Spoon, (6) Shelbey Tube, (7) Grab, (8) Other (Specify)

400 E. Mill Plain Blvd, Suite 400, Vancouver, WA 98660 (360) 694-2691 Fax. (360) 906-1958

Soil Field Sampling Data Sheet

Client Name	City of Ridgefield	Sample Location	B1
Project Number	0239.28.05	Sampler	SVH
Project Name	Bus Barn Property - IPG	Sampling Date	09/15/2014
Sampling Event		Sample Name	B1-S 2.0
Sub Area		Sample Depth	2
FSDS QA:	VAU 10/14/14	Easting	Northing TOC

Sample Information

Sampling Method	Sample Type	Sample Category	PID/FID	Sampling Time	Container Code	#
(4) GeoProbe	Soil	Discrete		12:40:00 PM	2 oz. soil	
					4 oz. soil	1
					8 oz. soil	1
					Other	
					Total Containers	2

Sample Description:	
General Sampling Comment	

Sampling Method Code:

(1) Backhoe, (2) Hand Auger, (3) Drill Bit Cutting Head, (4) Geoprobe, (5) Split Spoon, (6) Shelbey Tube, (7) Grab, (8) Other (Specify)

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Soil Field Sampling Data Sheet

Client Name	City of Ridgefield	Sample Location	B2
Project Number	0239.28.05	Sampler	SVH
Project Name	Bus Barn Property - IPG	Sampling Date	09/15/2014
Sampling Event		Sample Name	B2-S 8.0
Sub Area		Sample Depth	8
FSDS QA:	VAU 10/14/14	Easting	Northing TOC

Sample Information

Sampling Method	Sample Type	Sample Category	PID/FID	Sampling Time	Container Code	#
(4) GeoProbe	Soil	Discrete	260	1:10:00 PM	2 oz. soil	
					4 oz. soil	1
					8 oz. soil	1
					Other	
					Total Containers	2

Sample Description:	
General Sampling Comment	

Sampling Method Code:

(1) Backhoe, (2) Hand Auger, (3) Drill Bit Cutting Head, (4) Geoprobe, (5) Split Spoon, (6) Shelbey Tube, (7) Grab, (8) Other (Specify)

400 E. Mill Plain Blvd, Suite 400, Vancouver, WA 98660 (360) 694-2691 Fax. (360) 906-1958

Soil Field Sampling Data Sheet

Client Name	City of Ridgefield	Sample Location	B2
Project Number	0239.28.05	Sampler	SVH
Project Name	Bus Barn Property - IPG	Sampling Date	09/15/2014
Sampling Event		Sample Name	B2-S 2.0
Sub Area		Sample Depth	2
FSDS QA:	VAU 10/14/14	Easting	Northing TOC

Sample Information

Sampling Method	Sample Type	Sample Category	PID/FID	Sampling Time	Container Code	#
(4) GeoProbe	Soil	Discrete	3.8	1:00:00 PM	2 oz. soil	
					4 oz. soil	1
					8 oz. soil	1
					Other	
					Total Containers	2

Sample Description:	
General Sampling Comment	

Sampling Method Code:

(1) Backhoe, (2) Hand Auger, (3) Drill Bit Cutting Head, (4) Geoprobe, (5) Split Spoon, (6) Shelbey Tube, (7) Grab, (8) Other (Specify)

400 E. Mill Plain Blvd, Suite 400, Vancouver, WA 98660 (360) 694-2691 Fax. (360) 906-1958

Soil Field Sampling Data Sheet

Client Name	City of Ridgefield	Sample Location	B3
Project Number	0239.28.05	Sampler	SVH
Project Name	Bus Barn Property - IPG	Sampling Date	09/15/2014
Sampling Event		Sample Name	B3-S 7.0
Sub Area		Sample Depth	7
FSDS QA:	VAU 10/14/14	Easting	Northing TOC

Sample Information

Sampling Method	Sample Type	Sample Category	PID/FID	Sampling Time	Container Code	#
(4) GeoProbe	Soil	Discrete	74.2	3:10:00 PM	2 oz. soil	
					4 oz. soil	1
					8 oz. soil	1
					Other	
					Total Containers	2

Sample Description:	
General Sampling Comment	

Sampling Method Code:

(1) Backhoe, (2) Hand Auger, (3) Drill Bit Cutting Head, (4) Geoprobe, (5) Split Spoon, (6) Shelbey Tube, (7) Grab, (8) Other (Specify)

400 E. Mill Plain Blvd, Suite 400, Vancouver, WA 98660 (360) 694-2691 Fax. (360) 906-1958

Soil Field Sampling Data Sheet

Client Name	City of Ridgefield	Sample Location	B3
Project Number	0239.28.05	Sampler	SVH
Project Name	Bus Barn Property - IPG	Sampling Date	09/15/2014
Sampling Event		Sample Name	B3-S 2.0
Sub Area		Sample Depth	2
FSDS QA:	VAU 10/14/14	Easting	Northing TOC

Sample Information

Sampling Method	Sample Type	Sample Category	PID/FID	Sampling Time	Container Code	#
(4) GeoProbe	Soil	Discrete	6.9	2:20:00 PM	2 oz. soil	
					4 oz. soil	1
					8 oz. soil	1
					Other	
					Total Containers	2

Sample Description:	
General Sampling Comment	

Sampling Method Code:

(1) Backhoe, (2) Hand Auger, (3) Drill Bit Cutting Head, (4) Geoprobe, (5) Split Spoon, (6) Shelbey Tube, (7) Grab, (8) Other (Specify)

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Soil Field Sampling Data Sheet

Client Name	City of Ridgefield	Sample Location	B4
Project Number	0239.28.05	Sampler	SVH
Project Name	Bus Barn Property - IPG	Sampling Date	09/15/2014
Sampling Event		Sample Name	B4-S 7.0
Sub Area		Sample Depth	7
FSDS QA:	VAU 10/14/14	Easting	Northing TOC

Sample Information

Sampling Method	Sample Type	Sample Category	PID/FID	Sampling Time	Container Code	#
(4) GeoProbe	Soil	Discrete	802.3	3:45:00 PM	2 oz. soil	
					4 oz. soil	1
					8 oz. soil	1
					Other	
					Total Containers	2

Sample Description:	
General Sampling Comment	

Sampling Method Code:

(1) Backhoe, (2) Hand Auger, (3) Drill Bit Cutting Head, (4) Geoprobe, (5) Split Spoon, (6) Shelbey Tube, (7) Grab, (8) Other (Specify)

400 E. Mill Plain Blvd, Suite 400, Vancouver, WA 98660 (360) 694-2691 Fax. (360) 906-1958

Soil Field Sampling Data Sheet

Client Name	City of Ridgefield	Sample Location	B4
Project Number	0239.28.05	Sampler	SVH
Project Name	Bus Barn Property - IPG	Sampling Date	09/15/2014
Sampling Event		Sample Name	B4-S 3.0
Sub Area		Sample Depth	3
FSDS QA:	VAU 10/14/14	Easting	Northing TOC

Sample Information

Sampling Method	Sample Type	Sample Category	PID/FID	Sampling Time	Container Code	#
(4) GeoProbe	Soil	Discrete	1.0	3:40:00 PM	2 oz. soil	
					4 oz. soil	1
					8 oz. soil	1
					Other	
					Total Containers	2

Sample Description:	
General Sampling Comment	

Sampling Method Code:

(1) Backhoe, (2) Hand Auger, (3) Drill Bit Cutting Head, (4) Geoprobe, (5) Split Spoon, (6) Shelbey Tube, (7) Grab, (8) Other (Specify)

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Soil Field Sampling Data Sheet

Client Name	City of Ridgefield	Sample Location	B5
Project Number	0239.28.05	Sampler	SVH
Project Name	Bus Barn Property - IPG	Sampling Date	09/15/2014
Sampling Event		Sample Name	B5-S 7.0
Sub Area		Sample Depth	7
FSDS QA:	VAU 10/14/14	Easting	Northing TOC

Sample Information

Sampling Method	Sample Type	Sample Category	PID/FID	Sampling Time	Container Code	#
(4) GeoProbe	Soil	Discrete	1.0	2:00:00 PM	2 oz. soil	
					4 oz. soil	1
					8 oz. soil	1
					Other	
					Total Containers	2

Sample Description:	
General Sampling Comment	

Sampling Method Code:

(1) Backhoe, (2) Hand Auger, (3) Drill Bit Cutting Head, (4) Geoprobe, (5) Split Spoon, (6) Shelbey Tube, (7) Grab, (8) Other (Specify)

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Soil Field Sampling Data Sheet

Client Name	City of Ridgefield	Sample Location	B5
Project Number	0239.28.05	Sampler	SVH
Project Name	Bus Barn Property - IPG	Sampling Date	09/15/2014
Sampling Event		Sample Name	B5-S 2.0
Sub Area		Sample Depth	2
FSDS QA:	VAU 10/14/14	Easting	Northing TOC

Sample Information

Sampling Method	Sample Type	Sample Category	PID/FID	Sampling Time	Container Code	#
(4) GeoProbe	Soil	Discrete	1.1	1:50:00 PM	2 oz. soil	
					4 oz. soil	1
					8 oz. soil	1
					Other	
					Total Containers	2

Sample Description:	
General Sampling Comment	

Sampling Method Code:

(1) Backhoe, (2) Hand Auger, (3) Drill Bit Cutting Head, (4) Geoprobe, (5) Split Spoon, (6) Shelbey Tube, (7) Grab, (8) Other (Specify)

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Soil Field Sampling Data Sheet

Client Name	City of Ridgefield	Sample Location	B6
Project Number	0239.28.05	Sampler	SVH
Project Name	Bus Barn Property - IPG	Sampling Date	09/15/2014
Sampling Event		Sample Name	B6-S 2.0
Sub Area		Sample Depth	2
FSDS QA:	VAU 10/14/14	Easting	Northing TOC

Sample Information

Sampling Method	Sample Type	Sample Category	PID/FID	Sampling Time	Container Code	#
(4) GeoProbe	Soil	Discrete	5.2	3:30:00 PM	2 oz. soil	
					4 oz. soil	1
					8 oz. soil	1
					Other	
					Total Containers	2

Sample Description:	
General Sampling Comment	

Sampling Method Code:

(1) Backhoe, (2) Hand Auger, (3) Drill Bit Cutting Head, (4) Geoprobe, (5) Split Spoon, (6) Shelbey Tube, (7) Grab, (8) Other (Specify)

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Soil Field Sampling Data Sheet

Client Name	City of Ridgefield	Sample Location	B6
Project Number	0239.28.05	Sampler	SVH
Project Name	Bus Barn Property - IPG	Sampling Date	09/15/2014
Sampling Event		Sample Name	B6-S-8.5
Sub Area		Sample Depth	8.5
FSDS QA:	VAU 10/14/14	Easting	Northing TOC

Sample Information

Sampling Method	Sample Type	Sample Category	PID/FID	Sampling Time	Container Code	#
(4) GeoProbe	Soil	Discrete	2.1	3:40:00 PM	2 oz. soil	
					4 oz. soil	1
					8 oz. soil	1
					Other	
					Total Containers	2

Sample Description:	
General Sampling Comment	

Sampling Method Code:

(1) Backhoe, (2) Hand Auger, (3) Drill Bit Cutting Head, (4) Geoprobe, (5) Split Spoon, (6) Shelbey Tube, (7) Grab, (8) Other (Specify)

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Soil Field Sampling Data Sheet

Client Name	City of Ridgefield	Sample Location	B7
Project Number	0239.28.05	Sampler	SVH
Project Name	Bus Barn Property - IPG	Sampling Date	09/15/2014
Sampling Event		Sample Name	B7-S-8.5
Sub Area		Sample Depth	8.5
FSDS QA:	VAU 10/14/14	Easting	Northing TOC

Sample Information

Sampling Method	Sample Type	Sample Category	PID/FID	Sampling Time	Container Code	#
(4) GeoProbe	Soil	Discrete	105.3	4:15:00 PM	2 oz. soil	
					4 oz. soil	1
					8 oz. soil	1
					Other	
					Total Containers	2

Sample Description:	
General Sampling Comment	

Sampling Method Code:

(1) Backhoe, (2) Hand Auger, (3) Drill Bit Cutting Head, (4) Geoprobe, (5) Split Spoon, (6) Shelbey Tube, (7) Grab, (8) Other (Specify)

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Soil Field Sampling Data Sheet

Client Name	City of Ridgefield	Sample Location	В7
Project Number	0239.28.05	Sampler	SVH
Project Name	Bus Barn Property - IPG	Sampling Date	09/15/2014
Sampling Event		Sample Name	B7-S-1.5
Sub Area		Sample Depth	1.5
FSDS QA:	VAU 10/14/14	Easting	Northing TOC

Sample Information

Sampling Method	Sample Type	Sample Category	PID/FID	Sampling Time	Container Code	#
(4) GeoProbe	Soil	Discrete	8.2	4:00:00 PM	2 oz. soil	
					4 oz. soil	1
					8 oz. soil	1
					Other	
					Total Containers	2

Sample Description:	
General Sampling Comment	

Sampling Method Code:

(1) Backhoe, (2) Hand Auger, (3) Drill Bit Cutting Head, (4) Geoprobe, (5) Split Spoon, (6) Shelbey Tube, (7) Grab, (8) Other (Specify)

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Soil Field Sampling Data Sheet

Client Name	City of Ridgefield	Sample Location	B8
Project Number	0239.28.05	Sampler	ENH
Project Name	Bus Barn Property - IPG	Sampling Date	04/15/2015
Sampling Event	April 2015	Sample Name	B8-S-5.5
Sub Area		Sample Depth	5.5
FSDS QA:	CBS	Easting	Northing TOC

Sample Information

Sampling Method	Sample Type	Sample Category	PID/FID	Sampling Time	Container Code	#
(4) GeoProbe	Soil	Discrete	0	9:30:00 AM	2 oz. soil	
					4 oz. soil	
					8 oz. soil	1
					Other	
					Total Containers	1
General Sampling	Comment					

Sampling Method Code:

(1) Backhoe, (2) Hand Auger, (3) Drill Bit Cutting Head, (4) Geoprobe, (5) Split Spoon, (6) Shelbey Tube, (7) Grab, (8) Other (Specify)

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Soil Field Sampling Data Sheet

Client Name	City of Ridgefield	Sample Location	B8
Project Number	0239.28.05	Sampler	ENH
Project Name	Bus Barn Property - IPG	Sampling Date	04/15/2015
Sampling Event	April 2015	Sample Name	B8-S-7.5
Sub Area		Sample Depth	7.5
FSDS QA:	CBS	Easting	Northing TOC

Sample Information

Sampling Method	Sample Type	Sample Category	PID/FID	Sampling Time	Container Code	#
(4) GeoProbe	Soil	Discrete	0.3	9:35:00 AM	2 oz. soil	
					4 oz. soil	
					8 oz. soil	1
					Other	
					Total Containers	1
Sample Description	n: o	0% fines, 40% sand	orangish brow	n.		
General Sampling	Comment					

Sampling Method Code:

(1) Backhoe, (2) Hand Auger, (3) Drill Bit Cutting Head, (4) Geoprobe, (5) Split Spoon, (6) Shelbey Tube, (7) Grab, (8) Other (Specify)

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Soil Field Sampling Data Sheet

Client Name	City of Ridgefield	Sample Location	В9
Project Number	0239.28.05	Sampler	ENH
Project Name	Bus Barn Property - IPG	Sampling Date	04/15/2015
Sampling Event	April 2015	Sample Name	B9-S-8.5
Sub Area		Sample Depth	8.5
FSDS QA:	CBS	Easting	Northing TOC

Sample Information

Sampling Method	Sample Type	Sample Category	PID/FID	Sampling Time	Container Code	#
(4) GeoProbe	Soil	Discrete	0	10:00:00 AM	2 oz. soil	
					4 oz. soil	
					8 oz. soil	1
					Other	
					Total Containers	1
Carrie Description	3	0% fines 70% and	orangish valla	wish brown		
Sample Description	n: ³	0% fines, 70% sand	; orangish yello	wish brown.		
General Sampling	Comment					

Sampling Method Code:

(1) Backhoe, (2) Hand Auger, (3) Drill Bit Cutting Head, (4) Geoprobe, (5) Split Spoon, (6) Shelbey Tube, (7) Grab, (8) Other (Specify)

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Soil Field Sampling Data Sheet

Client Name	City of Ridgefield	Sample Location	В9
Project Number	0239.28.05	Sampler	ENH
Project Name	Bus Barn Property - IPG	Sampling Date	04/15/2015
Sampling Event	April 2015	Sample Name	B9-S-6.0
Sub Area		Sample Depth	6
FSDS QA:	CBS	Easting	Northing TOC

Sample Information

Sampling Method	Sample Type	Sample Category	PID/FID	Sampling Time	Container Code	#
(4) GeoProbe	Soil	Discrete	0	10:05:00 AM	2 oz. soil	
					4 oz. soil	
					8 oz. soil	1
					Other	
					Total Containers	1
				- 		
General Sampling	Comment					

Sampling Method Code:

(1) Backhoe, (2) Hand Auger, (3) Drill Bit Cutting Head, (4) Geoprobe, (5) Split Spoon, (6) Shelbey Tube, (7) Grab, (8) Other (Specify)

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Soil Field Sampling Data Sheet

Client Name	City of Ridgefield	Sample Location	B10
Project Number	0239.28.05	Sampler	ENH
Project Name	Bus Barn Property - IPG	Sampling Date	04/15/2015
Sampling Event	April 2015	Sample Name	B10-S-8.0
Sub Area		Sample Depth	8
FSDS QA:	CBS	Easting	Northing TOC

Sample Information

Sampling Method	Sample Type	Sample Category	PID/FID	Sampling Time	Container Code	#
(4) GeoProbe	Soil	Discrete	7.2	11:40:00 AM	2 oz. soil	
					4 oz. soil	2
					8 oz. soil	
					Other	
					Total Containers	2
Sample Description	n:	0% mes, 70% said	, gray.			
General Sampling	Comment					

Sampling Method Code:

(1) Backhoe, (2) Hand Auger, (3) Drill Bit Cutting Head, (4) Geoprobe, (5) Split Spoon, (6) Shelbey Tube, (7) Grab, (8) Other (Specify)

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Soil Field Sampling Data Sheet

Client Name	City of Ridgefield	Sample Location	B10
Project Number	0239.28.05	Sampler	ENH
Project Name	Bus Barn Property - IPG	Sampling Date	04/15/2015
Sampling Event	April 2015	Sample Name	B10-S-5.5
Sub Area		Sample Depth	5.5
FSDS QA:	CBS	Easting	Northing TOC

Sample Information

Sampling Method	Sample Type	Sample Category	PID/FID	Sampling Time	Container Code	#
(4) GeoProbe	Soil	Discrete	0.3	11:45:00 AM	2 oz. soil	
					4 oz. soil	
					8 oz. soil	1
					Other	
					Total Containers	1
Sample Description	n: ³¹	0% fines, 70% sand	; reddish brown.			
General Sampling	Comment					

Sampling Method Code:

(1) Backhoe, (2) Hand Auger, (3) Drill Bit Cutting Head, (4) Geoprobe, (5) Split Spoon, (6) Shelbey Tube, (7) Grab, (8) Other (Specify)

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Soil Field Sampling Data Sheet

Client Name	City of Ridgefield	Sample Location	B11
Project Number	0239.28.05	Sampler	ENH
Project Name	Bus Barn Property - IPG	Sampling Date	04/15/2015
Sampling Event	April 2015	Sample Name	B11-S-5.5
Sub Area		Sample Depth	5.5
FSDS QA:	CBS	Easting	Northing

Sample Information

Sampling Method	Sample Type	Sample Category	PID/FID	Sampling Time	Container Code	#
(4) GeoProbe	Soil	Discrete	0	1:10:00 PM	2 oz. soil	
					4 oz. soil	
					8 oz. soil	1
					Other	
					Total Containers	1
	n:	5% mes, 25% sand	, gray reduisir b	10wii.		
General Sampling	Comment					

Sampling Method Code:

(1) Backhoe, (2) Hand Auger, (3) Drill Bit Cutting Head, (4) Geoprobe, (5) Split Spoon, (6) Shelbey Tube, (7) Grab, (8) Other (Specify)

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Soil Field Sampling Data Sheet

Client Name	City of Ridgefield	Sample Location	B11
Project Number	0239.28.05	Sampler	ENH
Project Name	Bus Barn Property - IPG	Sampling Date	04/15/2015
Sampling Event	April 2015	Sample Name	B11-S-8.0
Sub Area		Sample Depth	8
FSDS QA:	CBS	Easting	Northing TOC

Sample Information

Sampling Method	Sample Type	Sample Category	PID/FID	Sampling Time	Container Code	#
(4) GeoProbe	Soil	Discrete	0	1:15:00 PM	2 oz. soil	
					4 oz. soil	
					8 oz. soil	1
					Other	
					Total Containers	1
Sample Description	n: 4	0% fines, 60% sand	reddish brown			
General Sampling	Comment					

Sampling Method Code:

(1) Backhoe, (2) Hand Auger, (3) Drill Bit Cutting Head, (4) Geoprobe, (5) Split Spoon, (6) Shelbey Tube, (7) Grab, (8) Other (Specify)

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Soil Field Sampling Data Sheet

Client Name	City of Ridgefield	Sample Location	B12
Project Number	0239.28.05	Sampler	ENH
Project Name	Bus Barn Property - IPG	Sampling Date	04/15/2015
Sampling Event	April 2015	Sample Name	B12-S-8.0
Sub Area		Sample Depth	8
FSDS QA:	CBS	Easting	Northing TOC

Sample Information

Sampling Method	Sample Type	Sample Category	PID/FID	Sampling Time	Container Code	#
(4) GeoProbe	Soil	Discrete	231.2	1:35:00 PM	2 oz. soil	
					4 oz. soil	
					8 oz. soil	1
					Other	
					Total Containers	1
Conorol Sompling	Commont		, gruy.			
General Sampling	Comment					

Sampling Method Code:

(1) Backhoe, (2) Hand Auger, (3) Drill Bit Cutting Head, (4) Geoprobe, (5) Split Spoon, (6) Shelbey Tube, (7) Grab, (8) Other (Specify)

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Soil Field Sampling Data Sheet

Client Name	City of Ridgefield	Sample Location	B12
Project Number	0239.28.05	Sampler	ENH
Project Name	Bus Barn Property - IPG	Sampling Date	04/15/2015
Sampling Event	April 2015	Sample Name	B12-S-5.5
Sub Area		Sample Depth	5.5
FSDS QA:	CBS	Easting	Northing TOC

Sample Information

Sampling Method	Sample Type	Sample Category	PID/FID	Sampling Time	Container Code	#
(4) GeoProbe	Soil	Discrete	47.5	1:30:00 PM	2 oz. soil	
					4 oz. soil	
					8 oz. soil	1
					Other	
					Total Containers	1
Sample Description	n: ⁸	0% fines, 20% sand	; greenish gray.			
General Sampling	Comment					

Sampling Method Code:

(1) Backhoe, (2) Hand Auger, (3) Drill Bit Cutting Head, (4) Geoprobe, (5) Split Spoon, (6) Shelbey Tube, (7) Grab, (8) Other (Specify)

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Soil Field Sampling Data Sheet

Client Name	City of Ridgefield	Sample Location	B13
Project Number	0239.28.05	Sampler	ENH
Project Name	Bus Barn Property - IPG	Sampling Date	04/15/2015
Sampling Event	April 2015	Sample Name	B13-S-5.0
Sub Area		Sample Depth	5
FSDS QA:	CBS	Easting	Northing TOC

Sample Information

Sampling Method	Sample Type	Sample Category	PID/FID	Sampling Time	Container Code	#
(4) GeoProbe	Soil	Discrete	0	2:30:00 PM	2 oz. soil	
					4 oz. soil	
					8 oz. soil	1
					Other	
					Total Containers	1
Sample Description	n: [/	0% fines, 30% sand;	reddish brown			
General Sampling	Comment					

Sampling Method Code:

(1) Backhoe, (2) Hand Auger, (3) Drill Bit Cutting Head, (4) Geoprobe, (5) Split Spoon, (6) Shelbey Tube, (7) Grab, (8) Other (Specify)

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Soil Field Sampling Data Sheet

Client Name	City of Ridgefield	Sample Location	B13
Project Number	0239.28.05	Sampler	ENH
Project Name	Bus Barn Property - IPG	Sampling Date	04/15/2015
Sampling Event	April 2015	Sample Name	B13-S-8.0
Sub Area		Sample Depth	8
FSDS QA:	CBS	Easting	Northing TOC

Sample Information

Sampling Method	Sample Type	Sample Category	PID/FID	Sampling Time	Container Code	#
(4) GeoProbe	Soil	Discrete	0	2:35:00 PM	2 oz. soil	
					4 oz. soil	
					8 oz. soil	1
					Other	
					Total Containers	1
Sample Description	n: 4	0% fines, 60% sand;	reddish brown.			
General Sampling	Comment					

Sampling Method Code:

(1) Backhoe, (2) Hand Auger, (3) Drill Bit Cutting Head, (4) Geoprobe, (5) Split Spoon, (6) Shelbey Tube, (7) Grab, (8) Other (Specify)

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Soil Field Sampling Data Sheet

Client Name	City of Ridgefield	Sample Location	B14
Project Number	0239.28.05	Sampler	ENH
Project Name	Bus Barn Property - IPG	Sampling Date	04/15/2015
Sampling Event	April 2015	Sample Name	B14-S-7.5
Sub Area		Sample Depth	7.5
FSDS QA:	CBS	Easting	Northing TOC

Sample Information

Sampling Method	Sample Type	Sample Category	PID/FID	Sampling Time	Container Code	#
(4) GeoProbe	Soil	Discrete	0.7	3:05:00 PM	2 oz. soil	
					4 oz. soil	
					8 oz. soil	1
					Other	
					Total Containers	1
Sample Description:		0% fines, 65% sand,	, 15% gravel; red	ddish brown.		
General Sampling	Comment					

Sampling Method Code:

(1) Backhoe, (2) Hand Auger, (3) Drill Bit Cutting Head, (4) Geoprobe, (5) Split Spoon, (6) Shelbey Tube, (7) Grab, (8) Other (Specify)

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Soil Field Sampling Data Sheet

Client Name	City of Ridgefield	Sample Location	B14
Project Number	0239.28.05	Sampler	ENH
Project Name	Bus Barn Property - IPG	Sampling Date	04/15/2015
Sampling Event	April 2015	Sample Name	B14-S-5.0
Sub Area		Sample Depth	5
FSDS QA:	CBS	Easting	Northing TOC

Sample Information

Sampling Method	Sample Type	Sample Category	PID/FID	Sampling Time	Container Code	#
(4) GeoProbe	Soil	Discrete	0.6	3:00:00 PM	2 oz. soil	
					4 oz. soil	
					8 oz. soil	1
					Other	
					Total Containers	1
Sample Description	n: 2	0% fines, 80% sand;	readisn brown			
General Sampling	Comment					

Sampling Method Code:

(1) Backhoe, (2) Hand Auger, (3) Drill Bit Cutting Head, (4) Geoprobe, (5) Split Spoon, (6) Shelbey Tube, (7) Grab, (8) Other (Specify)

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Soil Field Sampling Data Sheet

Client Name	City of Ridgefield	Sample Location	B15
Project Number	0239.28.05	Sampler	ENH
Project Name	Bus Barn Property - IPG	Sampling Date	04/15/2015
Sampling Event	April 2015	Sample Name	B15-S-5.5
Sub Area		Sample Depth	5.5
FSDS QA:	CBS	Easting	Northing TOC

Sample Information

Sampling Method	Sample Type	Sample Category	PID/FID	Sampling Time	Container Code	#
(4) GeoProbe	Soil	Discrete	0.3	3:55:00 PM	2 oz. soil	
					4 oz. soil	
					8 oz. soil	1
					Other	
					Total Containers	1
Sample Description:		5% fines, 15% sand,	, trace gravel; re	ddish brown.		
General Sampling Comment						

Sampling Method Code:

(1) Backhoe, (2) Hand Auger, (3) Drill Bit Cutting Head, (4) Geoprobe, (5) Split Spoon, (6) Shelbey Tube, (7) Grab, (8) Other (Specify)
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Soil Field Sampling Data Sheet

Client Name	City of Ridgefield	Sample Location	B15
Project Number	0239.28.05	Sampler	ENH
Project Name	Bus Barn Property - IPG	Sampling Date	04/15/2015
Sampling Event	April 2015	Sample Name	B15-S-8.0
Sub Area		Sample Depth	8
FSDS QA:	CBS	Easting	Northing TOC

Sample Information

Sampling Method	Sample Type	Sample Category	PID/FID	Sampling Time	Container Code	#
(4) GeoProbe	Soil	Discrete	0.3	4:00:00 PM	2 oz. soil	
					4 oz. soil	
					8 oz. soil	1
					Other	
					Total Containers	1
Sample Description	n: ³⁰	0% fines, 70% sand	; orangish browı	n.		
General Sampling						

Sampling Method Code:

(1) Backhoe, (2) Hand Auger, (3) Drill Bit Cutting Head, (4) Geoprobe, (5) Split Spoon, (6) Shelbey Tube, (7) Grab, (8) Other (Specify)

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Soil Field Sampling Data Sheet

Client Name	City of Ridgefield	Sample Location	B16
Project Number	0239.28.05	Sampler	ENH
Project Name	Bus Barn Property - IPG	Sampling Date	04/15/2015
Sampling Event	April 2015	Sample Name	B16-S-8.0
Sub Area		Sample Depth	8
FSDS QA:	CBS	Easting	Northing TOC

Sample Information

Sampling Method	Sample Type	Sample Category	PID/FID	Sampling Time	Container Code	#
(4) GeoProbe	Soil	Discrete	205.8	4:35:00 PM	2 oz. soil	
					4 oz. soil	
					8 oz. soil	1
					Other	
					Total Containers	1
Conoral Sampling	n:		, gray.			
General Sampling	Comment					

Sampling Method Code:

(1) Backhoe, (2) Hand Auger, (3) Drill Bit Cutting Head, (4) Geoprobe, (5) Split Spoon, (6) Shelbey Tube, (7) Grab, (8) Other (Specify)

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Soil Field Sampling Data Sheet

Client Name	City of Ridgefield	Sample Location	B16
Project Number	0239.28.05	Sampler	ENH
Project Name	Bus Barn Property - IPG	Sampling Date	04/15/2015
Sampling Event	April 2015	Sample Name	B16-S-5.5
Sub Area		Sample Depth	5.5
FSDS QA:	CBS	Easting	Northing TOC

Sample Information

Sampling Method	Sample Type	Sample Category	PID/FID	Sampling Time	Container Code	#
(4) GeoProbe	Soil	Discrete		4:30:00 PM	2 oz. soil	
					4 oz. soil	
					8 oz. soil	1
					Other	
					Total Containers	1
	n: o	0% mes, 20% said				
General Sampling	Comment					

Sampling Method Code:

(1) Backhoe, (2) Hand Auger, (3) Drill Bit Cutting Head, (4) Geoprobe, (5) Split Spoon, (6) Shelbey Tube, (7) Grab, (8) Other (Specify)

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Water Field Sampling Data Sheet

Client Name	City of Ridgefield	Sample Location	B4
Project #	0239.28.05	Sampler	SVH
Project Name	Bus Barn IPG	Sampling Date	9/15/2014
Sampling Event		Sample Name	B4-W
Sub Area		Sample Depth	12.5
FSDS QA:	MD 10/13/14	Easting	Northing TOC

Hydrology/Level Measurements

			(Product Thickness)	(Water Column)	(Gallons/ft x Water Column)		
Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW	Pore Volume
9/15/2014	16:00	15		9.43		5.57	0.91

(0.75" = 0.023 gal/ft) (1" = 0.041 gal/ft) (1.5" = 0.092 gal/ft) (2" = 0.163 gal/ft) (3" = 0.367 gal/ft) (4" = 0.653 gal/ft) (6" = 1.469 gal/ft) (8" = 2.611 gal/ft)

Water Quality Data

Purge Method	Time	Purge Vol (gal)	Flowrate l/min	pН	Temp (C)	E Cond (uS/cm)	DO (mg/L)	EH	Turbidity
(2) Peristaltic Pump									
Final Field Parameters	5:45:00 PM	2	0.2	7.08	19.42	264	1.79	-17.8	40.93

Methods: (1) Submersible Pump (2) Peristaltic Pump (3) Disposable Bailer (4) Vacuum Pump (5) Dedicated Bailer (6) Inertia Pump (7) Other (specify)

Water Quality Observations: Clear and colorless.

Sample Information

Sampling Method	Sample Type	Sampling Time	Container Code/Preservative	#	Filtered
(2) Peristaltic Pump	Groundwater	5:45:00 PM	VOA-Glass	4	No
			Amber Glass	2	No
			White Poly		
			Yellow Poly		
			Green Poly		
			Red Total Poly		
			Red Dissolved Poly	1	Yes
			Total Bottles	7	

General Sampling Comments

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Water Field Sampling Data Sheet

Client Name	City of Ridgefield	Sample Location	В3
Project #	0239.28.05	Sampler	SVH
Project Name	Bus Barn IPG	Sampling Date	9/15/2014
Sampling Event		Sample Name	B3-W
Sub Area		Sample Depth	12.5
FSDS QA:	MD 10/13/14	Easting	Northing TOC

Hydrology/Level Measurements

			(Product Thickness)	(Water Column)	(Gallons/ft x Water Column)		
Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW	Pore Volume
9/15/2014	15:20	15		9.35		5.65	0.92

(0.75" = 0.023 gal/ft) (1" = 0.041 gal/ft) (1.5" = 0.092 gal/ft) (2" = 0.163 gal/ft) (3" = 0.367 gal/ft) (4" = 0.653 gal/ft) (6" = 1.469 gal/ft) (8" = 2.611 gal/ft)

Water Quality Data

Purge Method	Time	Purge Vol (gal)	Flowrate l/min	pН	Temp (C)	E Cond (uS/cm)	DO (mg/L)	EH	Turbidity
(2) Peristaltic Pump									
Final Field Parameters	4:50:00 PM	2	0.6	6.68	24.89	159	6.88	14.8	102.3

Methods: (1) Submersible Pump (2) Peristaltic Pump (3) Disposable Bailer (4) Vacuum Pump (5) Dedicated Bailer (6) Inertia Pump (7) Other (specify)

Water Quality Observations: Slight yellowish tint. Sediment in samples sinks to bottom. Slightly turbid.

Sample Information

Sampling Method	Sample Type	Sampling Time	Container Code/Preservative #		Filtered
(2) Peristaltic Pump	Groundwater	4:50:00 PM	VOA-Glass	5	No
			Amber Glass	2	No
			White Poly		
			Yellow Poly		
			Green Poly		
			Red Total Poly		
			Red Dissolved Poly	1	Yes
			Total Bottles	8	

General Sampling Comments

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Water Field Sampling Data Sheet

Client Name	City of Ridgefield	Sample Location	B2
Project #	0239.28.05	Sampler	SVH
Project Name	Bus Barn IPG	Sampling Date	9/15/2014
Sampling Event		Sample Name	B2-W
Sub Area		Sample Depth	12.5
FSDS QA:	MD 10/13/14	Easting	Northing TOC

Hydrology/Level Measurements

			(Product Thickness)	(Water Column)	(Gallons/ft x Water Column)		
Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW	Pore Volume
9/15/2014	14:00	15		8.62		6.38	1.04

(0.75" = 0.023 gal/ft) (1" = 0.041 gal/ft) (1.5" = 0.092 gal/ft) (2" = 0.163 gal/ft) (3" = 0.367 gal/ft) (4" = 0.653 gal/ft) (6" = 1.469 gal/ft) (8" = 2.611 gal/ft)

Water Quality Data

Purge Method	Time	Purge Vol (gal)	Flowrate l/min	pН	Temp (C)	E Cond (uS/cm)	DO (mg/L)	EH	Turbidity
(2) Peristaltic Pump									
Final Field Parameters	4:30:00 PM	4	1	6.65	23.07	177	7.08	64.9	77.89

Methods: (1) Submersible Pump (2) Peristaltic Pump (3) Disposable Bailer (4) Vacuum Pump (5) Dedicated Bailer (6) Inertia Pump (7) Other (specify)

Water Quality Observations: ^{Turbid.}

Sample Information

Sampling Method	Sample Type	Sampling Time	Container Code/Preservative	#	Filtered
(2) Peristaltic Pump	Groundwater	4:30:00 PM	VOA-Glass	5	No
			Amber Glass	2	No
			White Poly		
			Yellow Poly		
			Green Poly		
			Red Total Poly		
			Red Dissolved Poly	1	Yes
			Total Bottles	8	

General Sampling Comments

Purged for approximately 1 hour with little success in getting turbidity lower than 20 NTUs.

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Water Field Sampling Data Sheet

Client Name	City of Ridgefield	Sample Location	B1
Project #	0239.28.05	Sampler	SVH
Project Name	Bus Barn IPG	Sampling Date	9/15/2014
Sampling Event		Sample Name	B1-W
Sub Area		Sample Depth	12.5
FSDS QA:	MD 10/13/14	Easting	Northing TOC

Hydrology/Level Measurements

			(Product Thickness)	(Water Column)	(Gallons/ft x Water Column)		
Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW	Pore Volume
9/15/2014	13:15	15		8.7		6.3	1.03

(0.75" = 0.023 gal/ft) (1" = 0.041 gal/ft) (1.5" = 0.092 gal/ft) (2" = 0.163 gal/ft) (3" = 0.367 gal/ft) (4" = 0.653 gal/ft) (6" = 1.469 gal/ft) (8" = 2.611 gal/ft)

Water Quality Data

Purge Method	Time	Purge Vol (gal)	Flowrate l/min	pН	Temp (C)	E Cond (uS/cm)	DO (mg/L)	EH	Turbidity
(2) Peristaltic Pump	1:30:00 PM	2	0.1	9.53	22.57	240	7.78	-47	63.17
	1:50:00 PM	3	0.08	9.4	22.71	233	6.63	-62.7	22.75
Final Field Parameters	2:20:00 PM	4	0.08	9.26	23.58	228	6.69	-64.2	15.97

Methods: (1) Submersible Pump (2) Peristaltic Pump (3) Disposable Bailer (4) Vacuum Pump (5) Dedicated Bailer (6) Inertia Pump (7) Other (specify)

Water Quality Observations: Clear and colorless.

Sample Information

Sampling Method	Sample Type	Sampling Time	Container Code/Preservative	#	Filtered
(2) Peristaltic Pump	Groundwater	2:20:00 PM	VOA-Glass	3	No
			Amber Glass	2	No
			White Poly		
			Yellow Poly		
			Green Poly		
			Red Total Poly		
			Red Dissolved Poly	1	Yes
			Total Bottles	6	

General Sampling Comments

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Water Field Sampling Data Sheet

Client Name	City of Ridgefield	Sample Location	B7
Project #	0239.28.05	Sampler	SVH
Project Name	Bus Barn IPG	Sampling Date	9/16/2014
Sampling Event		Sample Name	B7-W
Sub Area		Sample Depth	12.5
FSDS QA:	MD 10/13/14	Easting	Northing TOC

Hydrology/Level Measurements

					(Product Thickness)	(Water Column)	(Gallons/ft x Water Column)
Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW	Pore Volume
9/16/2014	17:00	15		10			

(0.75" = 0.023 gal/ft) (1" = 0.041 gal/ft) (1.5" = 0.092 gal/ft) (2" = 0.163 gal/ft) (3" = 0.367 gal/ft) (4" = 0.653 gal/ft) (6" = 1.469 gal/ft) (8" = 2.611 gal/ft)

Water Quality Data

Purge Method	Time	Purge Vol (gal)	Flowrate l/min	pН	Temp (C)	E Cond (uS/cm)	DO (mg/L)	EH	Turbidity
(2) Peristaltic Pump									
Final Field Parameters	5:30:00 PM	1.5	0.1	6.03	19.3	195	1.43	10.2	284.2

Methods: (1) Submersible Pump (2) Peristaltic Pump (3) Disposable Bailer (4) Vacuum Pump (5) Dedicated Bailer (6) Inertia Pump (7) Other (specify)

Water Quality Observations:	Slight yellowish/gra
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Slight yellowish/gray tint; slightly turbid.

Sample Information

Sampling Method	Sample Type	Sampling Time	Container Code/Preservative	#	Filtered
(2) Peristaltic Pump	Groundwater	5:30:00 PM	VOA-Glass	5	No
			Amber Glass	2	No
			White Poly		
			Yellow Poly		
			Green Poly		
			Red Total Poly		
			Red Dissolved Poly	1	Yes
			Total Bottles	8	

General Sampling Comments

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Water Field Sampling Data Sheet

Client Name	City of Ridgefield	Sample Location	B5
Project #	0239.28.05	Sampler	SVH
Project Name	Bus Barn IPG	Sampling Date	9/16/2014
Sampling Event		Sample Name	B5-W
Sub Area		Sample Depth	12.5
FSDS QA:	MD 10/13/14	Easting	Northing

Hydrology/Level Measurements

l i i i i i i i i i i i i i i i i i i i					(Product Thickness)	(Water Column)	(Gallons/ft x Water Column)
Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW	Pore Volume
9/16/2014		15					

(0.75" = 0.023 gal/ft) (1" = 0.041 gal/ft) (1.5" = 0.092 gal/ft) (2" = 0.163 gal/ft) (3" = 0.367 gal/ft) (4" = 0.653 gal/ft) (6" = 1.469 gal/ft) (8" = 2.611 gal/ft)

Water Quality Data

Purge Method	Time	Purge Vol (gal)	Flowrate l/min	pН	Temp (C)	E Cond (uS/cm)	DO (mg/L)	EH	Turbidity
(2) Peristaltic Pump									
Final Field Parameters	5:10:00 PM	1.5	0.05	6.44	23.95	193	7.73	68.9	32.22

Methods: (1) Submersible Pump (2) Peristaltic Pump (3) Disposable Bailer (4) Vacuum Pump (5) Dedicated Bailer (6) Inertia Pump (7) Other (specify)

Water Quality Observations: Clear and colorless.

Sample Information

Sampling Method	Sample Type	Sampling Time	Container Code/Preservative	#	Filtered
(2) Peristaltic Pump	Groundwater	5:10:00 PM	VOA-Glass	3	No
			Amber Glass	2	No
			White Poly		
			Yellow Poly		
			Green Poly		
			Red Total Poly		
			Red Dissolved Poly	1	Yes
			Total Bottles	6	

General Sampling Comments

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Water Field Sampling Data Sheet

Client Name	City of Ridgefield	Sample Location	B6
Project #	0239.28.05	Sampler	SVH/KRT
Project Name	Bus Barn IPG	Sampling Date	9/17/2014
Sampling Event		Sample Name	B6-W-DUP
Sub Area		Sample Depth	12.5
FSDS QA:	MD 10/13/14	Easting	Northing

Hydrology/Level Measurements

					(Product Thickness)	(Water Column)	(Gallons/ft x Water Column)
Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW	Pore Volume

(0.75" = 0.023 gal/ft) (1" = 0.041 gal/ft) (1.5" = 0.092 gal/ft) (2" = 0.163 gal/ft) (3" = 0.367 gal/ft) (4" = 0.653 gal/ft) (6" = 1.469 gal/ft) (8" = 2.611 gal/ft) (2" = 0.163 gal/ft) (3" = 0.367 gal/ft) (4" = 0.653 gal/ft) (6" = 1.469 gal/ft) (8" = 2.611 gal/ft) (3" = 0.367 gal/ft) (4" = 0.653 gal/ft) (6" = 1.469 gal/ft) (8" = 2.611 gal/ft) (3" = 0.367 gal/ft) (4" = 0.653 gal/ft) (6" = 1.469 gal/ft) (8" = 2.611 gal/ft) (3" = 0.367 gal/ft) (4" = 0.653 gal/ft) (6" = 1.469 gal/ft) (8" = 2.611 gal/ft) (3" = 0.367 gal/ft) (4" = 0.653 gal/ft) (6" = 1.469 gal/ft) (8" = 2.611 gal/ft) (3" = 0.367 gal/ft) (4" = 0.653 gal/ft) (6" = 1.469 gal/ft) (8" = 2.611 gal/ft) (3" = 0.611 gal/ft) (3" = 0.653 gal/ft)

Water Quality Data

Purge Method	Time	Purge Vol (gal)	Flowrate l/min	pН	Temp (C)	E Cond (uS/cm)	DO (mg/L)	EH	Turbidity
(2) Peristaltic Pump									
Final Field Parameters	11:42:00 AM	1.5	0.025	7.31	26.5	161	6.98	73.4	258.1

Methods: (1) Submersible Pump (2) Peristaltic Pump (3) Disposable Bailer (4) Vacuum Pump (5) Dedicated Bailer (6) Inertia Pump (7) Other (specify)

Water Quality Observations:	Cloudy; light brown/tan.
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Sample Information

Sampling Method	Sample Type	Sampling Time	Container Code/Preservative	#	Filtered
(2) Peristaltic Pump	Groundwater	11:42:00 AM	VOA-Glass	5	No
			Amber Glass	2	No
			White Poly		
			Yellow Poly		
			Green Poly		
			Red Total Poly		
			Red Dissolved Poly	1	Yes
			Total Bottles	8	

General Sampling Comments

Duplicate sample collected at this location (B6-W-DUP). Screen set at 10 to 15 feet bgs. Water for turbidity reading collected directly from discharge tubing (not flow through cell).

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Water Field Sampling Data Sheet

Client Name	City of Ridgefield	Sample Location	B6
Project #	0239.28.05	Sampler	SVH/KRT
Project Name	Bus Barn IPG	Sampling Date	9/17/2014
Sampling Event		Sample Name	B6-W
Sub Area		Sample Depth	12.5
FSDS QA:	MD 10/13/14	Easting	Northing TOC

Hydrology/Level Measurements

					(Product Thickness)	(Water Column)	(Gallons/ft x Water Column)
Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW	Pore Volume

(0.75" = 0.023 gal/ft) (1" = 0.041 gal/ft) (1.5" = 0.092 gal/ft) (2" = 0.163 gal/ft) (3" = 0.367 gal/ft) (4" = 0.653 gal/ft) (6" = 1.469 gal/ft) (8" = 2.611 gal/ft) (2" = 0.163 gal/ft) (3" = 0.367 gal/ft) (4" = 0.653 gal/ft) (6" = 1.469 gal/ft) (8" = 2.611 gal/ft) (3" = 0.653 gal/ft) (4" = 0.653 gal/ft) (6" = 1.469 gal/ft) (8" = 2.611 gal/ft) (3" = 0.653 gal/ft) (4" = 0.653 gal/ft) (5" = 0.653 gal/ft)

Water Quality Data

Purge Method	Time	Purge Vol (gal)	Flowrate l/min	pH	Temp (C)	E Cond (uS/cm)	DO (mg/L)	EH	Turbidity
(2) Peristaltic Pump									
Final Field Parameters	11:42:00 AM	1.5	0.025	7.31	26.5	161	6.98	73.4	258.1

Methods: (1) Submersible Pump (2) Peristaltic Pump (3) Disposable Bailer (4) Vacuum Pump (5) Dedicated Bailer (6) Inertia Pump (7) Other (specify)

Water Quality Observations:	Cloudy; light brown/tan.
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Sample Information

Sampling Method	Sample Type	Sampling Time	Container Code/Preservative	#	Filtered
(2) Peristaltic Pump	Groundwater	11:42:00 AM	VOA-Glass	5	No
· ·			Amber Glass	2	No
			White Poly		
			Yellow Poly		
			Green Poly		
			Red Total Poly		
			Red Dissolved Poly	1	Yes
			Total Bottles	8	

General Sampling Comments

Duplicate sample collected at this location (B6-W-DUP). Screen set at 10 to 15 feet bgs. Water for turbidity reading collected directly from discharge tubing (not flow through cell).

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Water Field Sampling Data Sheet

Client Name	City of Ridgefield	Sample Location	B8
Project #	0239.28.05	Sampler	ENH/ARH
Project Name	Bus Barn IPG	Sampling Date	4/15/2015
Sampling Event	April 2015	Sample Name	B8-W-8.0
Sub Area		Sample Depth	8
FSDS QA:	CBS	Easting	Northing TOC

Hydrology/Level Measurements

					(Product Thickness)	(Water Column)	(Gallons/ft x Water Column)
Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW	Pore Volume
4/15/2015	9:30	10		7.5			

(0.75" = 0.023 gal/ft) (1" = 0.041 gal/ft) (1.5" = 0.092 gal/ft) (2" = 0.163 gal/ft) (3" = 0.367 gal/ft) (4" = 0.653 gal/ft) (6" = 1.469 gal/ft) (8" = 2.611 gal/ft)

Water Quality Data

Purge Method	Time	Purge Vol (gal)	Flowrate l/min	рН	Temp (C)	E Cond (uS/cm)	DO (mg/L)	EH	Turbidity
(2) Peristaltic Pump									
Final Field Parameters	10:00:00 AM	0.5		6.6	12.5	469			461

Methods: (1) Submersible Pump (2) Peristaltic Pump (3) Disposable Bailer (4) Vacuum Pump (5) Dedicated Bailer (6) Inertia Pump (7) Other (specify)

Water Quality Observations:	Petroleum-like odor.
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Sample Information

Sampling Method	Sample Type	Sampling Time	Container Code/Preservative	#	Filtered
(2) Peristaltic Pump	Groundwater	10:00:00 AM	VOA-Glass	3	No
			Amber Glass	1	No
			White Poly		
			Yellow Poly		
			Green Poly		
			Red Total Poly		
			Red Dissolved Poly		
			Total Bottles	4	

General Sampling Comments

Screen set at 6 to 10 feet bgs.

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Water Field Sampling Data Sheet

Client Name	City of Ridgefield	Sample Location	B9
Project #	0239.28.05	Sampler	ENH/ARH
Project Name	Bus Barn IPG	Sampling Date	4/15/2015
Sampling Event	April 2015	Sample Name	B9-W-10.5
Sub Area		Sample Depth	10.5
FSDS QA:	CBS	Easting	Northing TOC

Hydrology/Level Measurements

I Contraction of the second					(Product Thickness)	(Water Column)	(Gallons/ft x Water Column)
Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW	Pore Volume
4/15/2015	10:00	12.5		7.9			

(0.75" = 0.023 gal/ft) (1" = 0.041 gal/ft) (1.5" = 0.092 gal/ft) (2" = 0.163 gal/ft) (3" = 0.367 gal/ft) (4" = 0.653 gal/ft) (6" = 1.469 gal/ft) (8" = 2.611 gal/ft)

Water Quality Data

Purge Method	Time	Purge Vol (gal)	Flowrate l/min	рН	Temp (C)	E Cond (uS/cm)	DO (mg/L)	EH	Turbidity
(2) Peristaltic Pump									
Final Field Parameters	10:30:00 AM	0.5		6.71	13.6	269			252

Methods: (1) Submersible Pump (2) Peristaltic Pump (3) Disposable Bailer (4) Vacuum Pump (5) Dedicated Bailer (6) Inertia Pump (7) Other (specify)

Water Quality Observations:	Petroleum-like odor.
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Sample Information

Sampling Method	Sample Type	Sampling Time	Container Code/Preservative	#	Filtered
(2) Peristaltic Pump	Groundwater	10:30:00 AM	VOA-Glass	3	No
			Amber Glass	1	No
			White Poly		
			Yellow Poly		
			Green Poly		
			Red Total Poly		
			Red Dissolved Poly		
			Total Bottles	4	

General Sampling Comments

Screen set at 8.5 to 12.5 feet bgs.

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Water Field Sampling Data Sheet

Client Name	City of Ridgefield	Sample Location	B10	
Project #	0239.28.05	Sampler	ENH	
Project Name	Bus Barn IPG	Sampling Date	4/15/2015	
Sampling Event	April 2015	Sample Name	B10-W-10.5	
Sub Area		Sample Depth	10.5	
FSDS QA:	CBS	Easting	Northing TOC	

Hydrology/Level Measurements

I Contraction of the second					(Product Thickness)	(Water Column)	(Gallons/ft x Water Column)
Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW	Pore Volume
4/15/2015	11:45	12.5		6.3			

(0.75" = 0.023 gal/ft) (1" = 0.041 gal/ft) (1.5" = 0.092 gal/ft) (2" = 0.163 gal/ft) (3" = 0.367 gal/ft) (4" = 0.653 gal/ft) (6" = 1.469 gal/ft) (8" = 2.611 gal/ft)

Water Quality Data

Purge Method	Time	Purge Vol (gal)	Flowrate l/min	рН	Temp (C)	E Cond (uS/cm)	DO (mg/L)	EH	Turbidity
(2) Peristaltic Pump									
Final Field Parameters	12:10:00 AM	0.5		6.75	14	137.1			339.8

Methods: (1) Submersible Pump (2) Peristaltic Pump (3) Disposable Bailer (4) Vacuum Pump (5) Dedicated Bailer (6) Inertia Pump (7) Other (specify)

Water Quality Observations:	Turbidity did not decrease.
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Sample Information

Sampling Method	Sample Type	Sampling Time	Container Code/Preservative	#	Filtered
(2) Peristaltic Pump	Groundwater	12:10:00 PM	VOA-Glass	3	No
			Amber Glass	1	No
			White Poly		
			Yellow Poly		
			Green Poly		
			Red Total Poly		
			Red Dissolved Poly		
			Total Bottles	4	'

General Sampling Comments

Screen set at 8.5 to 12.5 feet bgs. Well was going dry so had to pump at a slow rate to fill sample bottles.

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Water Field Sampling Data Sheet

Client Name	City of Ridgefield	Sample Location	B14
Project #	0239.28.05	Sampler	ENH
Project Name	Bus Barn IPG	Sampling Date	4/15/2015
Sampling Event	April 2015	Sample Name	B14-W-8.0
Sub Area		Sample Depth	8
FSDS QA:	CBS	Easting	Northing

Hydrology/Level Measurements

					(Product Thickness)	(Water Column)	(Gallons/ft x Water Column)
Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW	Pore Volume
4/15/2015	15:15	10		2			

(0.75" = 0.023 gal/ft) (1" = 0.041 gal/ft) (1.5" = 0.092 gal/ft) (2" = 0.163 gal/ft) (3" = 0.367 gal/ft) (4" = 0.653 gal/ft) (6" = 1.469 gal/ft) (8" = 2.611 gal/ft)

Water Quality Data

Purge Method	Time	Purge Vol (gal)	Flowrate l/min	рН	Temp (C)	E Cond (uS/cm)	DO (mg/L)	EH	Turbidity
(2) Peristaltic Pump									
Final Field Parameters	3:20:00 PM	1		6.27	16.2	210			43.67

Methods: (1) Submersible Pump (2) Peristaltic Pump (3) Disposable Bailer (4) Vacuum Pump (5) Dedicated Bailer (6) Inertia Pump (7) Other (specify)

Water Quality Observations:

Sample Information

Sampling Method	Sample Type	Sampling Time	Container Code/Preservative	#	Filtered
(2) Peristaltic Pump	Groundwater	3:20:00 PM	VOA-Glass	3	No
			Amber Glass	1	No
			White Poly		
			Yellow Poly		
			Green Poly		
			Red Total Poly		
			Red Dissolved Poly		
			Total Bottles	4	

General Sampling Comments

Screen set at 6 to 10 feet bgs.







11711 SE Capps Road, Ste B Clackamas, Oregon 97015 TEL: 503-607-1331 FAX: 503-607-1336 Website: <u>www.specialtyanalytical.com</u>

September 30, 2014

Merideth D'Andrea Maul Foster & Alongi 400 E. Mill Plain Blvd. Suite 400 Vancouver, WA 98660 TEL: (503) 501-5216 FAX (360) 906-1958 RE: Bus Barn / 0239.28.05

Dear Merideth D'Andrea:

Order No.: 1409099

Specialty Analytical received 5 sample(s) on 9/17/2014 for the analyses presented in the following report.

There were no problems with the analysis and all data for associated QC met EPA or laboratory specifications, except where noted in the Case Narrative, or as qualified with flags. Results apply only to the samples analyzed. Without approval of the laboratory, the reproduction of this report is only permitted in its entirety.

If you have any questions regarding these tests, please feel free to call.

Sincerely,

Marty French Lab Director

Specialty	Analytical
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Maul Foster & Alongi

Bus Barn / 0239.28.05

CLIENT:

Project:

Date Reported: 30-Sep-14

Lab ID:	1409099-001			Colle	ction Date:	9/15/201	4 2:20:00 PM
Client Sample ID:	B1-W				Matrix:	WATER	
Analyses		Result	RL	Oual	Units	DF	Date Analyzed
Anaryses		Kesut	KL	Quai	Omts	DI	Date Analyzeu
NWTPH HCID			NWHCID				Analyst: BS
Diesel		ND	0.619		mg/L	1	9/17/2014 3:42:53 PM
Gasoline		ND	0.246		mg/L	1	9/17/2014 3:42:53 PM
Kerosene		ND	0.619		mg/L	1	9/17/2014 3:42:53 PM
Lube Oil		ND	0.619		mg/L	1	9/17/2014 3:42:53 PM
Mineral Spirits		ND	0.246		mg/L	1	9/17/2014 3:42:53 PM
Surr: BFB		100	30.2-133		%REC	1	9/17/2014 3:42:53 PM
Surr: o-Terphenyl		86.5	50-150		%REC	1	9/17/2014 3:42:53 PM
Lab IDa	1400000 002			Calla	ation Data	0/15/201	4 4.20.00 DM
Lab ID:	1409099-002			Cone	ction Date:	9/15/201	4 4:50:00 PM
Client Sample ID:	B2-W				Matrix:	WATER	
Analyses		Result	RL	Qual	Units	DF	Date Analyzed
NWTPH HCID			NWHCID				Analyst: BS
Diesel		ND	0.634		mg/L	1	9/17/2014 4:12:53 PM
Gasoline		ND	0.252		mg/L	1	9/17/2014 4:12:53 PM
Kerosene		ND	0.634		mg/L	1	9/17/2014 4:12:53 PM
Lube Oil		ND	0.634		mg/L	1	9/17/2014 4:12:53 PM
Mineral Spirits		ND	0.252		mg/L	1	9/17/2014 4:12:53 PM
Surr: BFB		104	30.2-133		%REC	1	9/17/2014 4:12:53 PM
Surr: o-Terphenyl		84.7	50-150		%REC	1	9/17/2014 4:12:53 PM
Lab ID:	1409099-003			Colle	ction Date:	9/15/201	4 4:50:00 PM
Client Sample ID:	B3-W				Matrix:	WATER	
Analyses		Result	RL	Qual	Units	DF	Date Analyzed
NWTPH HCID			NWHCID				Analyst: BS
Diesel		ND	0.634		mg/L	1	9/17/2014 4:42:53 PM
Gasoline		ND	0.252		mg/L	1	9/17/2014 4:42:53 PM
Kerosene		ND	0.634		mg/L	1	9/17/2014 4:42:53 PM
Lube Oil		ND	0.634		mg/L	1	9/17/2014 4:42:53 PM
Mineral Spirits		ND	0.252		- mg/L	1	9/17/2014 4:42:53 PM
Surr: BFB		79.5	30.2-133		%REC	1	9/17/2014 4:42:53 PM
Surr: o-Terphenyl		92.5	50-150		%REC	1	9/17/2014 4:42:53 PM

Lab Order:

1409099

Date Reported: 30-Sep-14

CLIENT:Maul Foster & AlongiLab Order:1409099Project:Bus Barn / 0239.28.05

Lab ID: 140 Client Sample ID: B4	09099-004 -W		Colle	ction Date: Matrix	: 9/15/20 : WATE	14 5:45:00 PM R
Analyses	Resu	lt RL	Qual	Units	DF	Date Analyzed
NWTPH HCID		NWHCID				Analyst: BS
Diesel	ND	0.661		mg/L	1	9/17/2014 5:12:53 PM
Gasoline	ND	0.262		mg/L	1	9/17/2014 5:12:53 PM
Kerosene	ND	0.661		mg/L	1	9/17/2014 5:12:53 PM
Lube Oil	ND	0.661		mg/L	1	9/17/2014 5:12:53 PM
Mineral Spirits	ND	0.262		mg/L	1	9/17/2014 5:12:53 PM
Surr: BFB	113	30.2-133		%REC	1	9/17/2014 5:12:53 PM
Surr: o-Terphenyl	94.9	50-150		%REC	1	9/17/2014 5:12:53 PM

WO#: **1409099**

Client: Project:	Maul Foster & Alongi Bus Barn / 0239.28.05						Т	'estCode: I	NWTPHHCI	D_W	
Sample ID: MB-818 Client ID: PBW	38 SampType: MBLK Batch ID: 8188	TestCoo TestN	le: NWTPHHC lo: NWHCID	CID_ Units: mg/L HCID_W		Prep Da Analysis Da	te: 9/17/20 te: 9/17/20	14 14	RunNo: 168 SeqNo: 222	353	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	ND	0.630									
Gasoline	ND	0.250									
Kerosene	ND	0.630									
Lube Oil	ND	0.630									
Mineral Spirits	ND	0.250									
Surr: BFB	0.796		1.000		79.6	30.2	133				
Surr: o-Terphenyl	0.905		1.000		90.4	50	150				

Qualifiers: B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

O RSD is greater than RSDlimit

R RPD outside accepted recovery limits

S Spike Recovery outside accepted recovery

Page 1 of 1

RECORD Page 401	rson/Project Manager Meridleth D'Andrea A FA A FA A FA A FA A FA A FA A Pla D BIVELSA A FA A DA SA 91 Fax D339-38-05 Project Name BUS Furn Location OR WA Other A DO ROW OTH POINT	Analyses For Laboratory Use Lab Job No. AOT CPA Shipped Via AOT CPA Air Bill No. Analytical Containers? Y / N Specialty Analytical Trip Blanks? Y / N	Comments Lab I.D.	Relinquished By Company Received For Lab By: Received For Lab By: Date Time Time Parte Time
CHAIN OF CUSTODY	Specialty Analytical Contact Period 11711 SE Capps Road Company 11711 SE Capps Road Company Clackamas, OR 97015 Address Phone: 503-607-1331 Address Fax: 5039607-155 Phone Project No Project No PLENE Hazi E 8.77E Invoice To	5-7 Business Days Specify Specify Ist Be Scheduled With The Lab In Advance	Sample I.D. Matrix X J N N N N N J J N N N N N N J J N N N N N N N J J N N N N N N N N J	Authur Hander David II Time Received By AT-A Samples Will Be Disposed of 60 Days After Receipt. 160 days subject to storage fee(s)
	Collected By: Signature	Signature Printed Turn Around Time Turn Around Time Rush Analyses F	Date 01-02-0-0-0-0-0-0-0-0-0-0-0-0-0-0-0-0-0-	Relinquished By: Company: Unless Reclaimec Samples held beyo



11711 SE Capps Road, Ste B Clackamas, Oregon 97015 TEL: 503-607-1331 FAX: 503-607-1336 Website: <u>www.specialtyanalytical.com</u>

October 15, 2014

Merideth D'Andrea Maul Foster & Alongi 400 E. Mill Plain Blvd. Suite 400 Vancouver, WA 98660 TEL: (503) 501-5216 FAX (360) 906-1958 RE: Bus Barn / 0239.28.05

Dear Merideth D'Andrea:

Order No.: 1409113

Specialty Analytical received 5 sample(s) on 9/18/2014 for the analyses presented in the following report.

There were no problems with the analysis and all data for associated QC met EPA or laboratory specifications, except where noted in the Case Narrative, or as qualified with flags. Results apply only to the samples analyzed. Without approval of the laboratory, the reproduction of this report is only permitted in its entirety.

If you have any questions regarding these tests, please feel free to call.

Sincerely,

Marty French Lab Director

Date Reported: 15-Oct-14

CLIENT:Maul Foster & AlongiProject:Bus Barn / 0239.28.05Lab ID:1409113-001Client Sample ID:B5-W

Collection Date: 9/16/2014 5:10:00 PM

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
NWTPH HCID	1	WHCID				Analyst: BS
Diesel	ND	0.631		mg/L	1	9/20/2014 7:36:57 PM
Gasoline	ND	0.251		mg/L	1	9/20/2014 7:36:57 PM
Kerosene	ND	0.631		mg/L	1	9/20/2014 7:36:57 PM
Lube Oil	ND	0.631		mg/L	1	9/20/2014 7:36:57 PM
Mineral Spirits	ND	0.251		mg/L	1	9/20/2014 7:36:57 PM
Surr: BFB	67.2	30.2-133		%REC	1	9/20/2014 7:36:57 PM
Surr: o-Terphenyl	62.1	50-150		%REC	1	9/20/2014 7:36:57 PM

Date Reported: 15-Oct-14

CLIENT:Maul Foster & AlongiProject:Bus Barn / 0239.28.05Lab ID:1409113-002

Client Sample ID: B7-W

Collection Date: 9/16/2014 5:30:00 PM

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
NWTPH-DX - RBC		NWTPH-DX				Analyst: BS
Diesel	0.853	0.0800	A4	mg/L	1	9/22/2014 3:14:11 PM
Lube Oil	0.482	0.200		mg/L	1	9/22/2014 3:14:11 PM
Surr: o-Terphenyl	117	50-150		%REC	1	9/22/2014 3:14:11 PM
NWTPH HCID		NWHCID				Analyst: BS
Diesel	DIESEL	0.640		mg/L	1	9/20/2014 8:06:57 PM
Gasoline	ND	0.254		mg/L	1	9/20/2014 8:06:57 PM
Kerosene	ND	0.640		mg/L	1	9/20/2014 8:06:57 PM
Lube Oil	ND	0.640		mg/L	1	9/20/2014 8:06:57 PM
Mineral Spirits	ND	0.254		mg/L	1	9/20/2014 8:06:57 PM
Surr: BFB	118	30.2-133		%REC	1	9/20/2014 8:06:57 PM
Surr: o-Terphenyl	84.0	50-150		%REC	1	9/20/2014 8:06:57 PM
BTEX - RBC		SW8021B				Analyst: BS
Benzene	ND	0.300		µg/L	1	9/24/2014 4:37:36 PM
Toluene	0.930	0.500		µg/L	1	9/24/2014 4:37:36 PM
Ethylbenzene	1.70	0.500		µg/L	1	9/24/2014 4:37:36 PM
Xylenes, Total	4.69	1.50		µg/L	1	9/24/2014 4:37:36 PM
Surr: 4-Bromofluorobenzene	102	74.8-126		%REC	1	9/24/2014 4:37:36 PM
NWTPH-GX		NWTPH-GX				Analyst: BS
Gasoline	ND	100		µg/L	1	9/24/2014 4:38:57 PM
Surr: 4-Bromofluorobenzene	112	50-150		%REC	1	9/24/2014 4:38:57 PM
ICP/MS METALS-DISSOLVED RI	ECOVERABLE	SW6020A				Analyst: KP
Lead	ND	0.100		µg/L	1	10/10/2014 11:06:00 AM

Date Reported: 15-Oct-14

CLIENT:Maul Foster & AlongiProject:Bus Barn / 0239.28.05

Lab ID: 1409113-003

Client Sample ID: B6-W

Collection Date: 9/17/2014 11:42:00 AM

Analyses	Result	RL	Qual U	J nit	DF	Date Analyzed
NWTPH HCID		NWHCID				Analyst: BS
Diesel	ND	0.613	m	g/L	1	9/20/2014 8:36:57 PM
Gasoline	ND	0.243	m	g/L	1	9/20/2014 8:36:57 PM
Kerosene	ND	0.613	m	g/L	1	9/20/2014 8:36:57 PM
Lube Oil	ND	0.613	m	g/L	1	9/20/2014 8:36:57 PM
Mineral Spirits	ND	0.243	m	g/L	1	9/20/2014 8:36:57 PM
Surr: BFB	101	30.2-133	%	REC	1	9/20/2014 8:36:57 PM
Surr: o-Terphenyl	61.4	50-150	%	REC	1	9/20/2014 8:36:57 PM
VOLATILE ORGANICS BY GC/MS		SW8260B				Analyst: CK
1,1,1,2-Tetrachloroethane	ND	0.500	μ	g/L	1	9/23/2014 3:20:00 PM
1,1,1-Trichloroethane	ND	0.500	hõ	g/L	1	9/23/2014 3:20:00 PM
1,1,2,2-Tetrachloroethane	ND	1.00	hõ	g/L	1	9/23/2014 3:20:00 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	1.00	hõ	g/L	1	9/23/2014 3:20:00 PM
1,1,2-Trichloroethane	ND	1.00	hõ	g/L	1	9/23/2014 3:20:00 PM
1,1-Dichloroethane	ND	0.300	hõ	g/L	1	9/23/2014 3:20:00 PM
1,1-Dichloroethene	ND	0.500	μί	g/L	1	9/23/2014 3:20:00 PM
1,1-Dichloropropene	ND	0.300	μί	g/L	1	9/23/2014 3:20:00 PM
1,2,3-Trichlorobenzene	ND	1.00	μ	g/L	1	9/23/2014 3:20:00 PM
1,2,3-Trichloropropane	ND	0.500	μ	g/L	1	9/23/2014 3:20:00 PM
1,2,4-Trichlorobenzene	ND	1.00	μç	g/L	1	9/23/2014 3:20:00 PM
1,2,4-Trimethylbenzene	ND	0.500	μç	g/L	1	9/23/2014 3:20:00 PM
1,2-Dibromo-3-chloropropane	ND	1.00	μç	g/L	1	9/23/2014 3:20:00 PM
1,2-Dibromoethane	ND	1.00	μç	g/L	1	9/23/2014 3:20:00 PM
1,2-Dichlorobenzene	ND	1.00	μç	g/L	1	9/23/2014 3:20:00 PM
1,2-Dichloroethane	ND	0.500	μç	g/L	1	9/23/2014 3:20:00 PM
1,2-Dichloropropane	ND	0.300	μç	g/L	1	9/23/2014 3:20:00 PM
1,3,5-Trimethylbenzene	ND	0.500	μ	g/L	1	9/23/2014 3:20:00 PM
1,3-Dichlorobenzene	ND	0.500	μ	g/L	1	9/23/2014 3:20:00 PM
1,3-Dichloropropane	ND	0.500	μί	g/L	1	9/23/2014 3:20:00 PM
1,4-Dichlorobenzene	ND	1.00	μ	g/L	1	9/23/2014 3:20:00 PM
2,2-Dichloropropane	ND	0.300	μ	g/L	1	9/23/2014 3:20:00 PM
2-Butanone	ND	10.0	μ	g/L	1	9/23/2014 3:20:00 PM
2-Chlorotoluene	ND	0.500	μί	g/L	1	9/23/2014 3:20:00 PM
2-Hexanone	ND	10.0	μί	g/L	1	9/23/2014 3:20:00 PM
4-Chlorotoluene	ND	0.500	μί	g/L	1	9/23/2014 3:20:00 PM
4-Isopropyltoluene	ND	0.500	μί	g/L	1	9/23/2014 3:20:00 PM
4-Methyl-2-pentanone	ND	20.0	μί	g/L	1	9/23/2014 3:20:00 PM
Acetone	ND	10.0	hč	g/L	1	9/23/2014 3:20:00 PM
Acrylonitrile	ND	5.00	hć	g/L	1	9/23/2014 3:20:00 PM

Date Reported: 15-Oct-14

CLIENT:Maul Foster & AlongiProject:Bus Barn / 0239.28.05Lab ID:1409113-003Client Sample ID:B6-W

Collection Date: 9/17/2014 11:42:00 AM

Analyses	Result	RL	Qual U	U nit I	DF	Date Analyzed
VOLATILE ORGANICS BY GC/MS		SW8260B				Analyst: CK
Benzene	ND	0.300	μ	g/L	1	9/23/2014 3:20:00 PM
Bromobenzene	ND	0.300	μ	- g/L	1	9/23/2014 3:20:00 PM
Bromochloromethane	ND	1.00	μ	- g/L	1	9/23/2014 3:20:00 PM
Bromodichloromethane	ND	0.500	h	g/L	1	9/23/2014 3:20:00 PM
Bromoform	ND	1.00	há	g/L	1	9/23/2014 3:20:00 PM
Bromomethane	ND	1.00	há	g/L	1	9/23/2014 3:20:00 PM
Carbon Disulfide	ND	1.00	há	g/L	1	9/23/2014 3:20:00 PM
Carbon tetrachloride	ND	0.500	há	g/L	1	9/23/2014 3:20:00 PM
Chlorobenzene	ND	0.500	há	g/L	1	9/23/2014 3:20:00 PM
Chloroethane	ND	1.00	há	g/L	1	9/23/2014 3:20:00 PM
Chloroform	ND	0.300	há	g/L	1	9/23/2014 3:20:00 PM
Chloromethane	ND	0.500	há	g/L	1	9/23/2014 3:20:00 PM
cis-1,2-Dichloroethene	ND	0.300	há	g/L	1	9/23/2014 3:20:00 PM
cis-1,3-Dichloropropene	ND	0.500	há	g/L	1	9/23/2014 3:20:00 PM
Dibromochloromethane	ND	1.00	há	g/L	1	9/23/2014 3:20:00 PM
Dibromomethane	ND	1.00	há	g/L	1	9/23/2014 3:20:00 PM
Dichlorodifluoromethane	ND	0.500	há	g/L	1	9/23/2014 3:20:00 PM
Ethylbenzene	ND	0.500	há	g/L	1	9/23/2014 3:20:00 PM
Hexachlorobutadiene	ND	1.00	há	g/L	1	9/23/2014 3:20:00 PM
Isopropylbenzene	ND	0.300	há	g/L	1	9/23/2014 3:20:00 PM
m,p-Xylene	ND	1.00	μ	g/L	1	9/23/2014 3:20:00 PM
Methyl tert-butyl ether	ND	0.500	μ	g/L	1	9/23/2014 3:20:00 PM
Methylene Chloride	ND	20.0	μ	g/L	1	9/23/2014 3:20:00 PM
Naphthalene	ND	1.00	μ	g/L	1	9/23/2014 3:20:00 PM
n-Butylbenzene	ND	0.500	μ	g/L	1	9/23/2014 3:20:00 PM
n-Propylbenzene	ND	0.500	μ	g/L	1	9/23/2014 3:20:00 PM
o-Xylene	ND	0.300	μ	g/L	1	9/23/2014 3:20:00 PM
sec-Butylbenzene	ND	0.500	μ	g/L	1	9/23/2014 3:20:00 PM
Styrene	ND	0.500	μ	g/L	1	9/23/2014 3:20:00 PM
tert-Butylbenzene	ND	0.500	μ	g/L	1	9/23/2014 3:20:00 PM
Tetrachloroethene	ND	1.00	μ	g/L	1	9/23/2014 3:20:00 PM
Toluene	ND	0.500	há	g/L	1	9/23/2014 3:20:00 PM
trans-1,2-Dichloroethene	ND	0.500	há	g/L	1	9/23/2014 3:20:00 PM
trans-1,3-Dichloropropene	ND	0.500	h	g/L	1	9/23/2014 3:20:00 PM
Trichloroethene	ND	0.300	h	g/L	1	9/23/2014 3:20:00 PM
Trichlorofluoromethane	ND	1.00	h	g/L	1	9/23/2014 3:20:00 PM
Vinyl Chloride	ND	0.300	h	g/L	1	9/23/2014 3:20:00 PM
Surr: 1,2-Dichloroethane-d4	103	72.2-129	%	REC	1	9/23/2014 3:20:00 PM
Surr: 4-Bromofluorobenzene	90.0	73.5-125	%	REC	1	9/23/2014 3:20:00 PM

Date Reported: 15-Oct-14

CLIENT: Maul Foster & Alongi Collection Date: 9/17/2014 11:42:00 AM Bus Barn / 0239.28.05 **Project:** Lab ID: 1409113-003 **Client Sample ID:** B6-W Matrix: WATER Analyses Result RL Qual DF **Date Analyzed** Unit

					-
VOLATILE ORGANICS BY GC/MS		SW8260B			Analyst: CK
Surr: Dibromofluoromethane	108	58.8-148	%REC	1	9/23/2014 3:20:00 PM
Surr: Toluene-d8	104	79.8-137	%REC	1	9/23/2014 3:20:00 PM

Date Reported: 15-Oct-14

CLIENT: Maul Foster & Alongi

Bus Barn / 0239.28.05 **Project:** Lab ID:

Client Sample ID:

1409113-004

B6-W-DUP

Collection Date: 9/17/2014 11:42:00 AM

Analyses	Result	RL	Qual Unit	DF	Date Analyzed
NWTPH HCID		NWHCID			Analyst: BS
Diesel	ND	0.640	mg/L	1	9/20/2014 9:06:57 PM
Gasoline	ND	0.254	mg/L	1	9/20/2014 9:06:57 PM
Kerosene	ND	0.640	mg/L	1	9/20/2014 9:06:57 PM
Lube Oil	ND	0.640	mg/L	1	9/20/2014 9:06:57 PM
Mineral Spirits	ND	0.254	mg/L	1	9/20/2014 9:06:57 PM
Surr: BFB	97.3	30.2-133	%REC	1	9/20/2014 9:06:57 PM
Surr: o-Terphenyl	81.4	50-150	%REC	1	9/20/2014 9:06:57 PM
VOLATILE ORGANICS BY GC/MS		SW8260B			Analyst: CK
1,1,1,2-Tetrachloroethane	ND	0.500	µg/L	1	9/23/2014 2:46:00 PM
1,1,1-Trichloroethane	ND	0.500	µg/L	1	9/23/2014 2:46:00 PM
1,1,2,2-Tetrachloroethane	ND	1.00	µg/L	1	9/23/2014 2:46:00 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	1.00	µg/L	1	9/23/2014 2:46:00 PM
1,1,2-Trichloroethane	ND	1.00	µg/L	1	9/23/2014 2:46:00 PM
1,1-Dichloroethane	ND	0.300	µg/L	1	9/23/2014 2:46:00 PM
1,1-Dichloroethene	ND	0.500	µg/L	1	9/23/2014 2:46:00 PM
1,1-Dichloropropene	ND	0.300	µg/L	1	9/23/2014 2:46:00 PM
1,2,3-Trichlorobenzene	ND	1.00	µg/L	1	9/23/2014 2:46:00 PM
1,2,3-Trichloropropane	ND	0.500	µg/L	1	9/23/2014 2:46:00 PM
1,2,4-Trichlorobenzene	ND	1.00	µg/L	1	9/23/2014 2:46:00 PM
1,2,4-Trimethylbenzene	1.53	0.500	µg/L	1	9/23/2014 2:46:00 PM
1,2-Dibromo-3-chloropropane	ND	1.00	µg/L	1	9/23/2014 2:46:00 PM
1,2-Dibromoethane	ND	1.00	µg/L	1	9/23/2014 2:46:00 PM
1,2-Dichlorobenzene	ND	1.00	µg/L	1	9/23/2014 2:46:00 PM
1,2-Dichloroethane	ND	0.500	µg/L	1	9/23/2014 2:46:00 PM
1,2-Dichloropropane	ND	0.300	µg/L	1	9/23/2014 2:46:00 PM
1,3,5-Trimethylbenzene	ND	0.500	µg/L	1	9/23/2014 2:46:00 PM
1,3-Dichlorobenzene	ND	0.500	µg/L	1	9/23/2014 2:46:00 PM
1,3-Dichloropropane	ND	0.500	µg/L	1	9/23/2014 2:46:00 PM
1,4-Dichlorobenzene	ND	1.00	µg/L	1	9/23/2014 2:46:00 PM
2,2-Dichloropropane	ND	0.300	µg/L	1	9/23/2014 2:46:00 PM
2-Butanone	ND	10.0	µg/L	1	9/23/2014 2:46:00 PM
2-Chlorotoluene	ND	0.500	µg/L	1	9/23/2014 2:46:00 PM
2-Hexanone	ND	10.0	μg/L	1	9/23/2014 2:46:00 PM
4-Chlorotoluene	ND	0.500	µg/L	1	9/23/2014 2:46:00 PM
4-Isopropyltoluene	ND	0.500	µg/L	1	9/23/2014 2:46:00 PM
4-Methyl-2-pentanone	ND	20.0	µg/L	1	9/23/2014 2:46:00 PM
Acetone	ND	10.0	µg/L	1	9/23/2014 2:46:00 PM
Acrylonitrile	ND	5.00	µg/L	1	9/23/2014 2:46:00 PM

Date Reported: 15-Oct-14

CLIENT:Maul Foster & AlongiProject:Bus Barn / 0239.28.05Lab ID:1409113-004Client Sample ID:B6-W-DUP

Collection Date: 9/17/2014 11:42:00 AM

Analyses	Result	RL	Qual Unit	DF	Date Analyzed
VOLATILE ORGANICS BY GC/MS		SW8260B			Analyst: CK
Benzene	ND	0.300	µg/L	1	9/23/2014 2:46:00 PM
Bromobenzene	ND	0.300	µg/L	1	9/23/2014 2:46:00 PM
Bromochloromethane	ND	1.00	µg/L	1	9/23/2014 2:46:00 PM
Bromodichloromethane	ND	0.500	µg/L	1	9/23/2014 2:46:00 PM
Bromoform	ND	1.00	µg/L	1	9/23/2014 2:46:00 PM
Bromomethane	ND	1.00	µg/L	1	9/23/2014 2:46:00 PM
Carbon Disulfide	ND	1.00	µg/L	1	9/23/2014 2:46:00 PM
Carbon tetrachloride	ND	0.500	µg/L	1	9/23/2014 2:46:00 PM
Chlorobenzene	ND	0.500	µg/L	1	9/23/2014 2:46:00 PM
Chloroethane	ND	1.00	µg/L	1	9/23/2014 2:46:00 PM
Chloroform	ND	0.300	µg/L	1	9/23/2014 2:46:00 PM
Chloromethane	ND	0.500	µg/L	1	9/23/2014 2:46:00 PM
cis-1,2-Dichloroethene	ND	0.300	µg/L	1	9/23/2014 2:46:00 PM
cis-1,3-Dichloropropene	ND	0.500	µg/L	1	9/23/2014 2:46:00 PM
Dibromochloromethane	ND	1.00	µg/L	1	9/23/2014 2:46:00 PM
Dibromomethane	ND	1.00	µg/L	1	9/23/2014 2:46:00 PM
Dichlorodifluoromethane	ND	0.500	µg/L	1	9/23/2014 2:46:00 PM
Ethylbenzene	0.540	0.500	µg/L	1	9/23/2014 2:46:00 PM
Hexachlorobutadiene	ND	1.00	µg/L	1	9/23/2014 2:46:00 PM
Isopropylbenzene	ND	0.300	µg/L	1	9/23/2014 2:46:00 PM
m,p-Xylene	ND	1.00	µg/L	1	9/23/2014 2:46:00 PM
Methyl tert-butyl ether	ND	0.500	µg/L	1	9/23/2014 2:46:00 PM
Methylene Chloride	ND	20.0	µg/L	1	9/23/2014 2:46:00 PM
Naphthalene	1.22	1.00	µg/L	1	9/23/2014 2:46:00 PM
n-Butylbenzene	ND	0.500	µg/L	1	9/23/2014 2:46:00 PM
n-Propylbenzene	ND	0.500	µg/L	1	9/23/2014 2:46:00 PM
o-Xylene	ND	0.300	µg/L	1	9/23/2014 2:46:00 PM
sec-Butylbenzene	ND	0.500	µg/L	1	9/23/2014 2:46:00 PM
Styrene	ND	0.500	µg/L	1	9/23/2014 2:46:00 PM
tert-Butylbenzene	ND	0.500	µg/L	1	9/23/2014 2:46:00 PM
Tetrachloroethene	ND	1.00	µg/L	1	9/23/2014 2:46:00 PM
Toluene	ND	0.500	µg/L	1	9/23/2014 2:46:00 PM
trans-1,2-Dichloroethene	ND	0.500	µg/L	1	9/23/2014 2:46:00 PM
trans-1,3-Dichloropropene	ND	0.500	µg/L	1	9/23/2014 2:46:00 PM
Trichloroethene	ND	0.300	µg/L	1	9/23/2014 2:46:00 PM
Trichlorofluoromethane	ND	1.00	µg/L	1	9/23/2014 2:46:00 PM
Vinyl Chloride	ND	0.300	µg/L	1	9/23/2014 2:46:00 PM
Surr: 1,2-Dichloroethane-d4	100	72.2-129	%REC	1	9/23/2014 2:46:00 PM
Surr: 4-Bromofluorobenzene	90.5	73.5-125	%REC	1	9/23/2014 2:46:00 PM

Date Reported: 15-Oct-14

CLIENT: Maul Foster & Alongi **Collection Date:** 9/17/2014 11:42:00 AM Bus Barn / 0239.28.05 **Project:** Lab ID: 1409113-004 **Client Sample ID:** B6-W-DUP Matrix: WATER Result RL Qual DF Date Analyzed Analyses Unit

VOLATILE ORGANICS BY GC/MS		SW8260B			Analyst: CK
Surr: Dibromofluoromethane	107	58.8-148	%REC	1	9/23/2014 2:46:00 PM
Surr: Toluene-d8	101	79.8-137	%REC	1	9/23/2014 2:46:00 PM

Date Reported: 15-Oct-14

CLIENT:Maul Foster & AlongiProject:Bus Barn / 0239.28.05Lab ID:1409113-005Client Sample ID:Trip Blank

Collection Date: 9/17/2014

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
VOLATILE ORGANICS BY GC/MS	:	SW8260B				Analyst: CK
1,1,1,2-Tetrachloroethane	ND	0.500		µg/L	1	9/23/2014 1:07:00 PM
1,1,1-Trichloroethane	ND	0.500		µg/L	1	9/23/2014 1:07:00 PM
1,1,2,2-Tetrachloroethane	ND	1.00		µg/L	1	9/23/2014 1:07:00 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	1.00		µg/L	1	9/23/2014 1:07:00 PM
1,1,2-Trichloroethane	ND	1.00		µg/L	1	9/23/2014 1:07:00 PM
1,1-Dichloroethane	ND	0.300		µg/L	1	9/23/2014 1:07:00 PM
1,1-Dichloroethene	ND	0.500		µg/L	1	9/23/2014 1:07:00 PM
1,1-Dichloropropene	ND	0.300		µg/L	1	9/23/2014 1:07:00 PM
1,2,3-Trichlorobenzene	ND	1.00		µg/L	1	9/23/2014 1:07:00 PM
1,2,3-Trichloropropane	ND	0.500		µg/L	1	9/23/2014 1:07:00 PM
1,2,4-Trichlorobenzene	ND	1.00		µg/L	1	9/23/2014 1:07:00 PM
1,2,4-Trimethylbenzene	ND	0.500		µg/L	1	9/23/2014 1:07:00 PM
1,2-Dibromo-3-chloropropane	ND	1.00		µg/L	1	9/23/2014 1:07:00 PM
1,2-Dibromoethane	ND	1.00		µg/L	1	9/23/2014 1:07:00 PM
1,2-Dichlorobenzene	ND	1.00		µg/L	1	9/23/2014 1:07:00 PM
1,2-Dichloroethane	ND	0.500		µg/L	1	9/23/2014 1:07:00 PM
1,2-Dichloropropane	ND	0.300		µg/L	1	9/23/2014 1:07:00 PM
1,3,5-Trimethylbenzene	ND	0.500		µg/L	1	9/23/2014 1:07:00 PM
1,3-Dichlorobenzene	ND	0.500		µg/L	1	9/23/2014 1:07:00 PM
1,3-Dichloropropane	ND	0.500		µg/L	1	9/23/2014 1:07:00 PM
1,4-Dichlorobenzene	ND	1.00		µg/L	1	9/23/2014 1:07:00 PM
2,2-Dichloropropane	ND	0.300		µg/L	1	9/23/2014 1:07:00 PM
2-Butanone	ND	10.0		µg/L	1	9/23/2014 1:07:00 PM
2-Chlorotoluene	ND	0.500		µg/L	1	9/23/2014 1:07:00 PM
2-Hexanone	ND	10.0		µg/L	1	9/23/2014 1:07:00 PM
4-Chlorotoluene	ND	0.500		µg/L	1	9/23/2014 1:07:00 PM
4-Isopropyltoluene	ND	0.500		µg/L	1	9/23/2014 1:07:00 PM
4-Methyl-2-pentanone	ND	20.0		µg/L	1	9/23/2014 1:07:00 PM
Acetone	ND	10.0		µg/L	1	9/23/2014 1:07:00 PM
Acrylonitrile	ND	5.00		µg/L	1	9/23/2014 1:07:00 PM
Benzene	ND	0.300		µg/L	1	9/23/2014 1:07:00 PM
Bromobenzene	ND	0.300		µg/L	1	9/23/2014 1:07:00 PM
Bromochloromethane	ND	1.00		µg/L	1	9/23/2014 1:07:00 PM
Bromodichloromethane	ND	0.500		µg/L	1	9/23/2014 1:07:00 PM
Bromoform	ND	1.00		µg/L	1	9/23/2014 1:07:00 PM
Bromomethane	ND	1.00		µg/L	1	9/23/2014 1:07:00 PM
Carbon Disulfide	ND	1.00		µg/L	1	9/23/2014 1:07:00 PM
Carbon tetrachloride	ND	0.500		µg/L	1	9/23/2014 1:07:00 PM
Chlorobenzene	ND	0.500		µg/L	1	9/23/2014 1:07:00 PM

Date Reported: 15-Oct-14

CLIENT:Maul Foster & AlongiProject:Bus Barn / 0239.28.05Lab ID:1409113-005Client Sample ID:Trip Blank

Collection Date: 9/17/2014

Analyses	Result	RL	Qual Unit	DF	Date Analyzed
VOLATILE ORGANICS BY GC/MS		SW8260B			Analyst: CK
Chloroethane	ND	1.00	µg/L	1	9/23/2014 1:07:00 PM
Chloroform	ND	0.300	µg/L	1	9/23/2014 1:07:00 PM
Chloromethane	ND	0.500	µg/L	1	9/23/2014 1:07:00 PM
cis-1,2-Dichloroethene	ND	0.300	μg/L	1	9/23/2014 1:07:00 PM
cis-1,3-Dichloropropene	ND	0.500	μg/L	1	9/23/2014 1:07:00 PM
Dibromochloromethane	ND	1.00	μg/L	1	9/23/2014 1:07:00 PM
Dibromomethane	ND	1.00	μg/L	1	9/23/2014 1:07:00 PM
Dichlorodifluoromethane	ND	0.500	μg/L	1	9/23/2014 1:07:00 PM
Ethylbenzene	ND	0.500	μg/L	1	9/23/2014 1:07:00 PM
Hexachlorobutadiene	ND	1.00	μg/L	1	9/23/2014 1:07:00 PM
Isopropylbenzene	ND	0.300	µg/L	1	9/23/2014 1:07:00 PM
m,p-Xylene	ND	1.00	µg/L	1	9/23/2014 1:07:00 PM
Methyl tert-butyl ether	ND	0.500	µg/L	1	9/23/2014 1:07:00 PM
Methylene Chloride	ND	20.0	µg/L	1	9/23/2014 1:07:00 PM
Naphthalene	ND	1.00	µg/L	1	9/23/2014 1:07:00 PM
n-Butylbenzene	ND	0.500	µg/L	1	9/23/2014 1:07:00 PM
n-Propylbenzene	ND	0.500	µg/L	1	9/23/2014 1:07:00 PM
o-Xylene	ND	0.300	µg/L	1	9/23/2014 1:07:00 PM
sec-Butylbenzene	ND	0.500	µg/L	1	9/23/2014 1:07:00 PM
Styrene	ND	0.500	µg/L	1	9/23/2014 1:07:00 PM
tert-Butylbenzene	ND	0.500	µg/L	1	9/23/2014 1:07:00 PM
Tetrachloroethene	ND	1.00	µg/L	1	9/23/2014 1:07:00 PM
Toluene	ND	0.500	µg/L	1	9/23/2014 1:07:00 PM
trans-1,2-Dichloroethene	ND	0.500	µg/L	1	9/23/2014 1:07:00 PM
trans-1,3-Dichloropropene	ND	0.500	µg/L	1	9/23/2014 1:07:00 PM
Trichloroethene	ND	0.300	µg/L	1	9/23/2014 1:07:00 PM
Trichlorofluoromethane	ND	1.00	µg/L	1	9/23/2014 1:07:00 PM
Vinyl Chloride	ND	0.300	µg/L	1	9/23/2014 1:07:00 PM
Surr: 1,2-Dichloroethane-d4	105	72.2-129	%REC	1	9/23/2014 1:07:00 PM
Surr: 4-Bromofluorobenzene	87.1	73.5-125	%REC	1	9/23/2014 1:07:00 PM
Surr: Dibromofluoromethane	110	58.8-148	%REC	1	9/23/2014 1:07:00 PM
Surr: Toluene-d8	104	79.8-137	%REC	1	9/23/2014 1:07:00 PM

WO#: 1409113

specially initially field	Specialty	Analytical
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Client: Project:	Maul Foster Bus Barn / (& Alongi)239.28.05					Т	estCode: 6	020_WDISS	}	
Sample ID: Client ID:	ICV ICV	SampType: ICV Batch ID: 8335	TestCode: 6020_WDI TestNo: SW6020A	SS Units: µg/L		Prep Date Analysis Date	: 10/10/2 0	014	RunNo: 173 SeqNo: 227	300 7160	
Analyte		Result	PQL SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead		50.5	0.100 50.00	0	101	90	110				
Sample ID: Client ID:	1409141-001DDUP ZZZZZZ	SampType: DUP Batch ID: 8335	TestCode: 6020_WDI TestNo: SW6020A	SS Units: µg/L		Prep Date Analysis Date	: 10/10/20	014	RunNo: 173 SeqNo: 227	300 7164	
Analyte		Result	PQL SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead		ND	0.500					0	0	20	
Sample ID:	1409141-001DMS	SampType: MS	TestCode: 6020_WDI	SS Units: µg/L		Prep Date	:		RunNo: 173	300	
Client ID:	ZZZZZZ	Batch ID: 8335	TestNo: SW6020A			Analysis Date	: 10/10/2	014	SeqNo: 227	7165	
Analyte		Result	PQL SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead		53.7	0.500 50.00	0	107	70	130				
Sample ID: Client ID:	1409141-001DMSD ZZZZZZ	SampType: MSD Batch ID: 8335	TestCode: 6020_WDI TestNo: SW6020A	SS Units: μg/L		Prep Date Analysis Date	: : 10/10/2	014	RunNo: 173 SeqNo: 227	300 7166	
Analyte		Result	PQL SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead		53.4	0.500 50.00	0	107	70	130	53.70	0.467	20	

Qualifiers:

B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

d ND Not Detected at the Reporting Limit

O RSD is greater than RSDlimit

R RPD outside accepted recovery limits

S Spike Recovery outside accepted recovery

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WO#: 1409113

Specialty Analytical

Client: Project:	Maul Foster & AlongiTestCode:6020_WDISSBus Barn / 0239.28.05TestCode:6020_WDISS										
Sample ID: CCV Client ID: CCV	SampType: CCV Batch ID: 8335	TestCo Testl	de: 6020_WDI No: SW6020A	SS Units: µg/L	Prep Date: Analysis Date: 10/1			014	RunNo: 173 SeqNo: 227	00 170	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	I %RPD	RPDLimit	Qual
Lead	50.3	0.100	50.00	0	101	90	110				

Qualifiers: B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

O RSD is greater than RSDlimit

R RPD outside accepted recovery limits

S Spike Recovery outside accepted recovery

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WO#: 1409113

15-Oct-14

Client: Mau Project: Bus	ıl Foster & Alongi Barn / 0239.28.05					Т	estCode: 8	3260_25_W		
Sample ID: CCV MSVWS	S-1997 SampType: CCV	TestCode: 8260_	25_W Units: µg/L		Prep Dat	e:		RunNo: 169	910	
Client ID: CCV	Batch ID: R16910	TestNo: SW82	60B		Analysis Dat	e: 9/23/20	14	SeqNo: 223	3283	
Analyte	Result	PQL SPK va	alue SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	63.6	0.500 60	0.00 0	106	80	120				
1,2-Dichloropropane	70.3	0.300 60	0.00 0	117	80	120				
Chloroform	65.1	0.300 60	0.00 0	108	80	120				
Ethylbenzene	65.5	0.500 60	0.00 0	109	80	120				
Toluene	66.4	0.500 60	0.00 0	111	80	120				
Vinyl Chloride	57.8	0.300 60	0.00 0	96.4	80	120				
Sample ID: LCS MSVWS	S-1998 SampType: LCS	TestCode: 8260_	25_W Units: µg/L		Prep Dat	e:		RunNo: 169	910	
Client ID: LCSW	Batch ID: R16910	TestNo: SW82	SW8260B Analysis Date: 9/23/2014			14	SeqNo: 223284			
Analyte	Result	PQL SPK va	alue SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	63.9	0.500 60	0.00 0	106	61.2	135				
Benzene	67.6	0.300 60	0.00 0	113	76.8	125				
Chlorobenzene	64.0	0.500 60	0.00 0	107	84.1	116				
Toluene	67.9	0.500 60	0.00 0	113	82	122				
Trichloroethene	67.5	0.300 60	0.00 0	113	68.5	124				
Sample ID: MB	SampType: MBLK	TestCode: 8260_	25_W Units: µg/L		Prep Dat	e:		RunNo: 169	910	
Client ID: PBW	Batch ID: R16910	TestNo: SW82	60B		Analysis Dat	e: 9/23/20	14	SeqNo: 223285		
Analyte	Result	PQL SPK va	alue SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1,2-Tetrachloroethane	ND	0.500								
1,1,1-Trichloroethane	ND	0.500								
Qualifiers: B Anal O RSD	Qualifiers: B Analyte detected in the associated Method Blank H Holding times for preparation or analysis exceeded ND Not Detected at the Reporting Limit Page 3 of 14 O RSD is greater than RSDlimit R RPD outside accepted recovery limits S Spike Recovery outside accepted recovery									

Specialty Analytical

WO#: 1409113

15-Oct-14

Client: Maul Foste Project: Bus Barn /	er & Alongi 7 0239.28.05						Т	SestCode: 8	260_25_W		
Sample ID: MB	SampType: MBLK	TestCode	e: 8260_25_W	/ Units: μg/L		Prep Da	te:		RunNo: 169	910	
Client ID: PBW	Batch ID: R16910	TestNo	: SW8260B			Analysis Da	te: 9/23/20	14	SeqNo: 223	3285	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,2,2-Tetrachloroethane	ND	1.00									
1,1,2-Trichloro-1,2,2-trifluoroethar	ne ND	1.00									
1,1,2-Trichloroethane	ND	1.00									
1,1-Dichloroethane	ND	0.300									
1,1-Dichloroethene	ND	0.500									
1,1-Dichloropropene	ND	0.300									
1,2,3-Trichlorobenzene	ND	1.00									
1,2,3-Trichloropropane	ND	0.500									
1,2,4-Trichlorobenzene	ND	1.00									
1,2,4-Trimethylbenzene	ND	0.500									
1,2-Dibromo-3-chloropropane	ND	1.00									
1,2-Dibromoethane	ND	1.00									
1,2-Dichlorobenzene	ND	1.00									
1,2-Dichloroethane	ND	0.500									
1,2-Dichloropropane	ND	0.300									
1,3,5-Trimethylbenzene	ND	0.500									
1,3-Dichlorobenzene	ND	0.500									
1,3-Dichloropropane	ND	0.500									
1,4-Dichlorobenzene	ND	1.00									
2,2-Dichloropropane	ND	0.300									
2-Butanone	ND	10.0									
2-Chlorotoluene	ND	0.500									
2-Hexanone	ND	10.0									
4-Chlorotoluene	ND	0.500									
4-Isopropyltoluene	ND	0.500									
4-Methyl-2-pentanone	ND	20.0									
Qualifiers: B Analyte detect	cted in the associated Method Bl	ank	H Holding	g times for preparatio	n or analysis	exceeded	ND	Not Detected at the	Reporting Limi	t Pa	ge 4 of 14

O RSD is greater than RSDlimit

Specialty Analytical

R RPD outside accepted recovery limits

S Spike Recovery outside accepted recovery
WO#: 1409113

15-Oct-14

Client: Project:	Maul Foster & Alongi Bus Barn / 0239.28.05							1	TestCode: 8	260_25_W		
Sample ID: MB	SampType: MB	BLK	TestCoo	de: 8260_25_V	V Units: µg/L		Prep Da	ite:		RunNo: 169	910	
Client ID: PBW	Batch ID: R1	6910	TestN	lo: SW8260B			Analysis Da	te: 9/23/20)14	SeqNo: 223	3285	
Analyte	Re	esult	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Acetone		ND	10.0									
Acrylonitrile		ND	5.00									
Benzene		ND	0.300									
Bromobenzene		ND	0.300									
Bromochloromethar	e	ND	1.00									
Bromodichlorometha	ane	ND	0.500									
Bromoform		ND	1.00									
Bromomethane		ND	1.00									
Carbon Disulfide		ND	1.00									
Carbon tetrachloride)	ND	0.500									
Chlorobenzene		ND	0.500									
Chloroethane		ND	1.00									
Chloroform		ND	0.300									
Chloromethane		ND	0.500									
cis-1,2-Dichloroethe	ne	ND	0.300									
cis-1,3-Dichloroprop	pene	ND	0.500									
Dibromochlorometh	ane	ND	1.00									
Dibromomethane		ND	1.00									
Dichlorodifluoromet	nane	ND	0.500									
Ethylbenzene		ND	0.500									
Hexachlorobutadien	e	ND	1.00									
Isopropylbenzene		ND	0.300									
m,p-Xylene		ND	1.00									
Methyl tert-butyl eth	er	ND	0.500									
Methylene Chloride		ND	20.0									
Naphthalene		ND	1.00									
Qualifiers: B	Analyte detected in the associated	Method Blank		H Holdin	g times for preparatio	on or analysis	exceeded	ND	Not Detected at the	e Reporting Limi	t Pa	ge 5 of 14

uyt

ng time for preparation ary eporting L

O RSD is greater than RSDlimit

Specialty Analytical

R RPD outside accepted recovery limits

S Spike Recovery outside accepted recover

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WO#: 1409113

15-Oct-14

Client: Project:	Maul Foster Bus Barn /	r & Alongi 0239.28.05]	TestCode: 8	260_25_W		
Sample ID: MB		SampType: MBLK	TestCo	de: 8260_25_W	Ι Units: μg/L		Prep Da	te:		RunNo: 169	910	
Client ID: PBW		Batch ID: R16910	TestN	lo: SW8260B			Analysis Da	te: 9/23/20)14	SeqNo: 223	3285	
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
n-Butylbenzene		ND	0.500									
n-Propylbenzene		ND	0.500									
o-Xylene		ND	0.300									
sec-Butylbenzene		ND	0.500									
Styrene		ND	0.500									
tert-Butylbenzene		ND	0.500									
Tetrachloroethene		ND	1.00									
Toluene		ND	0.500									
trans-1,2-Dichloroe	thene	ND	0.500									
trans-1,3-Dichlorop	ropene	ND	0.500									
Trichloroethene		ND	0.300									
Trichlorofluorometh	ane	ND	1.00									
Vinyl Chloride		ND	0.300									
Surr: 1,2-Dichlor	oethane-d4	98.8		100.0		98.8	72.2	129				
Surr: 4-Bromoflu	orobenzene	89.5		100.0		89.5	73.5	125				
Surr: Dibromoflue	oromethane	106		100.0		106	58.8	148				
Surr: Toluene-d8		101		100.0		101	79.8	137				
Sample ID: 14091	13-003BMS	SampType: MS	TestCo	de: 8260 25 V	/ Units: ua/L		Prep Da	te:		RunNo [.] 169	910	
		Botch ID: B16010	Tooth	Lo: 6100_10_1				to: 0/22/20	14	SogNo: 22	5560	
Cilent ID. DO-W		Dalchid. Riggiu	Testr	NO. 3446260B			Analysis Da	le. 9/23/20	/14	Sequo. 223	5502	
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene		41.1	0.500	40.00	0	103	47.8	165				
Benzene		42.5	0.300	40.00	0	106	71.5	118				
Qualifiers: B O	Analyte detect RSD is greater	ed in the associated Method Bla r than RSDlimit	nnk	H Holding R RPD or	g times for preparation itside accepted recove	n or analysis ery limits	exceeded	ND S	Not Detected at the Spike Recovery ou	e Reporting Limi tside accepted re	t Pa	ge 6 of 14

Specialty Analytical

WO#: 1409113

15-Oct-14

Client: Mau	ll Foster & Alongi						л		260 25 W		
Project: Bus	Darii / 0239.28.03						1	estCode: 8	200_25_W		
Sample ID: 1409113-003	BMS SampType: MS	TestCo	de: 8260_25_V	V Units: µg/L		Prep Da	te:		RunNo: 169	910	
Client ID: B6-W	Batch ID: R16910	Test	No: SW8260B			Analysis Da	te: 9/23/20	14	SeqNo: 223	3562	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chlorobenzene	42.4	0.500	40.00	0	106	79.8	114				
Toluene	45.6	0.500	40.00	0.1000	114	79.6	121				
Trichloroethene	40.8	0.300	40.00	0	102	73.6	120				
Sample ID: 1409113-003	BMSD SampType [,] MSD	TestCo	de 8260 25 V	V Units: ua/l		Pren Da	te:		RunNo: 169	910	
Client ID: B6-W	Batch ID: R16910	Testl	No: SW8260B	- ormo: µg,=		Analysis Da	te: 9/23/20	14	SeqNo: 223	3563	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	42.4	0.500	40.00	0	106	47.8	165	41.09	3.26	20	
Benzene	43.7	0.300	40.00	0	109	71.5	118	42.53	2.74	20	
Chlorobenzene	43.9	0.500	40.00	0	110	79.8	114	42.36	3.66	20	
Toluene	47.4	0.500	40.00	0.1000	118	79.6	121	45.63	3.85	20	
Trichloroethene	41.8	0.300	40.00	0	105	73.6	120	40.82	2.49	20	

Specialty Analytical

Qualifiers: B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

O RSD is greater than RSDlimit

R RPD outside accepted recovery limits

S Spike Recovery outside accepted recovery

Page 7 of 14

WO#: 1409113

15-Oct-14

Client: Project:	Maul Bus B	Foster & Alongi arn / 0239.28.05						Т	estCode:]	BTEXRBC_V	W	
Sample ID:	LCS-R16924	SampType: LCS	TestCoo	le: BTEXRBC	_W Units: μg/L		Prep Da	te:		RunNo: 169	24	
Client ID:	LCSW	Batch ID: R16924	TestN	lo: SW8021B			Analysis Da	te: 9/24/20	14	SeqNo: 223	504	
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene		44.5	0.300	50.00	0	89.0	75.8	113				
Toluene		49.3	0.500	50.00	0	98.5	77	116				
Ethylbenzer	ne	50.2	0.500	50.00	0	100	76.6	118				
Xylenes, To	tal	140	1.50	150.0	0	93.5	76.7	118				
Sample ID:	MB-R16924	SampType: MBLK	TestCoo	le: BTEXRBC	_W Units: μg/L		Prep Da	te:		RunNo: 169)24	
Client ID:	PBW	Batch ID: R16924	TestN	lo: SW8021B			Analysis Da	te: 9/24/20	14	SeqNo: 223	505	
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene		ND	0.300									
Toluene		ND	0.500									
Ethylbenzer	ne	ND	0.500									
Xylenes, To	tal	ND	1.50									
Surr: 4-B	romofluorobenze	ne 97.5		100.0		97.5	74.8	126				
Sample ID:	1409115-001BN	IS SampType: MS	TestCoo	le: BTEXRBC	_W Units: μg/L		Prep Da	te:		RunNo: 169)24	
Client ID:	ZZZZZZ	Batch ID: R16924	TestN	lo: SW8021B			Analysis Da	te: 9/24/20	14	SeqNo: 223	507	
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene		28.1	0.300	25.00	4.800	93.1	67.8	118				
Toluene		28.9	0.500	25.00	2.060	107	74.7	117				
Ethylbenzer	ne	149	0.500	25.00	78.38	283	74.5	115				SMI
Xylenes, To	tal	227	1.50	75.00	96.86	174	76.8	120				SMI
Qualifiers:	B Analyte O RSD is	detected in the associated Method B greater than RSDlimit	lank	H Holdin R RPD o	ng times for preparatio putside accepted recov	n or analysis ery limits	exceeded	ND N S S	Not Detected at th Spike Recovery or	e Reporting Limit utside accepted re	t Pa	ige 8 of 14

Specialty Analytical

WO#: 1409113

Specialty A	Analytical
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Client: Maul Foster	r & Alongi										
Project: Bus Barn /	0239.28.05						T	CestCode: B	TEXRBC_	W	
Sample ID: 1409115-001BMS	SampType: MS	TestCo	de: BTEXRBC	:_W Units: µg/L		Prep Da	te:		RunNo: 169	924	
Client ID: ZZZZZZ	Batch ID: R16924	Test	lo: SW8021B			Analysis Da	te: 9/24/20	14	SeqNo: 223	3507	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sample ID: 1409115-001BMSD	SampType: MSD	TestCo	de: BTEXRBC	:_W Units: µg/L		Prep Da	te:		RunNo: 169	924	
Sample ID: 1409115-001BMSD Client ID: ZZZZZZ	SampType: MSD Batch ID: R16924	TestCoo TestN	de: BTEXRBC	_W Units: µg/L		Prep Da Analysis Da	te: te: 9/24/20	114	RunNo: 169 SeqNo: 223	924 3508	
Sample ID: 1409115-001BMSD Client ID: ZZZZZZ Analyte	SampType: MSD Batch ID: R16924 Result	TestCoo TestN PQL	de: BTEXRBC No: SW8021B SPK value	Σ_W Units: μg/L SPK Ref Val	%REC	Prep Da Analysis Da LowLimit	te: te: 9/24/20 HighLimit	114 RPD Ref Val	RunNo: 169 SeqNo: 223 %RPD	924 3508 RPDLimit	Qual
Sample ID: 1409115-001BMSD Client ID: ZZZZZZ Analyte Benzene	SampType: MSD Batch ID: R16924 Result 26.2	TestCoo TestN PQL 0.300	de: BTEXRBC No: SW8021B SPK value 25.00	C_W Units: µg/L SPK Ref Val 4.800	%REC 85.8	Prep Da Analysis Da LowLimit 67.8	te: te: 9/24/20 HighLimit 118	1 14 RPD Ref Val 28.07	RunNo: 169 SeqNo: 223 %RPD 6.70	224 3508 RPDLimit 20	Qual
Sample ID: 1409115-001BMSD Client ID: ZZZZZZ Analyte Benzene Toluene	SampType: MSD Batch ID: R16924 Result 26.2 27.4	TestCor TestN PQL 0.300 0.500	de: BTEXRBC No: SW8021B SPK value 25.00 25.00	C_W Units: μg/L SPK Ref Val 4.800 2.060	%REC 85.8 101	Prep Da Analysis Da LowLimit 67.8 74.7	te: te: 9/24/20 HighLimit 118 117	114 RPD Ref Val 28.07 28.89	RunNo: 169 SeqNo: 223 %RPD 6.70 5.26	224 3508 RPDLimit 20 20	Qual
Sample ID: 1409115-001BMSD Client ID: ZZZZZZ Analyte Benzene Toluene Ethylbenzene	SampType: MSD Batch ID: R16924 Result 26.2 27.4 148	TestCor TestN PQL 0.300 0.500 0.500	de: BTEXRBC No: SW8021B SPK value 25.00 25.00 25.00	C_W Units: μg/L SPK Ref Val 4.800 2.060 78.38	%REC 85.8 101 277	Prep Da Analysis Da LowLimit 67.8 74.7 74.5	te: HighLimit 118 117 115	114 RPD Ref Val 28.07 28.89 149.1	RunNo: 169 SeqNo: 223 %RPD 6.70 5.26 1.05	224 3508 RPDLimit 20 20 20	Qual

Qualifiers: B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

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O RSD is greater than RSDlimit

R RPD outside accepted recovery limits

S Spike Recovery outside accepted recovery

WO#: 1409113

Qual

Qual

Qual

Client: Project:	Maul Foster & Alongi Bus Barn / 0239.28.05							Т	estCode:	NWTPHDXI	LL_W
Sample ID: CCV	SampType:	CCV	TestCod	e: NWTPHDX	LL Units: mg/L		Prep Dat	e:		RunNo: 168	399
Client ID: CCV	Batch ID:	8207	TestN	o: NWTPH-D>	sw3510B		Analysis Dat	e: 9/22/20	14	SeqNo: 223	3114
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit
Diesel		6.16	0.0800	6.000	0	103	85	115			
Lube Oil		3.05	0.200	3.000	0	102	85	115			
Sample ID: MB-820	07 SampType:	MBLK	TestCod	e: NWTPHDX	LL Units: mg/L		Prep Dat	e: 9/19/20	14	RunNo: 168	399
Client ID: PBW	Batch ID:	8207	TestN	o: NWTPH-D>	sw3510B		Analysis Dat	e: 9/22/20	14	SeqNo: 223	8115
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit
Diesel		ND	0.0800								
Lube Oil		ND	0.200	0.0000		4.40	50	450			
Surr: o- i erpnenyi		0.296		0.2000		148	50	150			
Sample ID: LCS-82	207 SampType:	LCS	TestCod	e: NWTPHDX	LL Units: mg/L		Prep Dat	e: 9/19/20	14	RunNo: 168	399
Client ID: LCSW	Batch ID:	8207	TestN	o: NWTPH-D>	G SW3510B		Analysis Dat	e: 9/22/20	14	SeqNo: 223	3116
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit
Diesel		1.06	0.0800	1.000	0	106	60.7	121			
Lube Oil		1.09	0.200	1.000	0	109	64	126			
Sample ID: LCSD-	3207 SampType:	LCSD	TestCod	e: NWTPHDX	LL Units: mg/L		Prep Dat	e: 9/19/20	14	RunNo: 168	399
Client ID: LCSS0	2 Batch ID:	8207	TestN	o: NWTPH-D>	c SW3510B		Analysis Dat	e: 9/22/20	14	SeqNo: 223	3117
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit

Qualifiers: B Analyte detected in the associated Method Blank

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Specialty Analytical

H Holding times for preparation or analysis exceeded

aration or analysis exceeded ND N

RSD is greater than RSDlimit

R RPD outside accepted recovery limits

ND Not Detected at the Reporting Limit S Spike Recovery outside accepted recovery Page 10 of 14

Qual

WO#: 1409113

Specialty	Analytical
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Client: Project:	Maul Foster Bus Barn / 02	& Alongi 239.28.05						Т	'estCode: N	WTPHDXI	LL_W	
Sample ID: LO	CSD-8207 CSS02	SampType: LCSD Batch ID: 8207	TestCoo TestN	le: NWTPHDX lo: NWTPH-D>	LL Units: mg/L CSW3510B		Prep Dat Analysis Dat	e: 9/19/20 e: 9/22/20	14 14	RunNo: 168 SeqNo: 223	399 3117	
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel Lube Oil		1.04 1.15	0.0800 0.200	1.000 1.000	0 0	104 115	60.7 64	121 126	1.061 1.089	2.28 5.43	20 20	
Sample ID: Co	cv cv	SampType: CCV Batch ID: 8207	TestCoo TestN	ie: NWTPHDX Io: NWTPH-D>	LL Units: mg/L SW3510B		Prep Dat Analysis Dat	e: e: 9/24/20	14	RunNo: 168 SeqNo: 223	399 3579	
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel Lube Oil		7.18 4.52	0.0800 0.200	8.000 4.000	0 0	89.8 113	85 85	115 115				

 Qualifiers:
 B
 Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

O RSD is greater than RSDlimit

R RPD outside accepted recovery limits

S Spike Recovery outside accepted recovery

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WO#: 1409113

Specialty Analytical

Client: Project:	Maul Fos Bus Barn	ster & Alongi / 0239.28.05					Т	estCode: 1	NWTPHGX_	W	
Sample ID:	ссч	SampType: CCV	TestCode: NWTPHG	X_W Units: µg/L		Prep Dat	ie:		RunNo: 169	925	
Client ID:	CCV	Batch ID: R16925	TestNo: NWTPH-G	x		Analysis Dat	te: 9/24/20	14	SeqNo: 223	3513	
Analyte		Result	PQL SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline		1840	100 2000	0	91.9	80	120				
Sample ID:	MB-R16925	SampType: MBLK	TestCode: NWTPHG	X_W Units: µg/L		Prep Dat	ie:		RunNo: 169	925	
Client ID:	PBW	Batch ID: R16925	TestNo: NWTPH-G	x		Analysis Dat	te: 9/24/20	14	SeqNo: 223	3514	
Analyte		Result	PQL SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline		ND	100								
Surr: 4-B	romofluorobenzene	107	100.0		107	50	150				
Sample ID:	LCS-R16925	SampType: LCS	TestCode: NWTPHG	X_W Units: µg/L		Prep Dat	e:		RunNo: 169	925	
Client ID:	LCSW	Batch ID: R16925	TestNo: NWTPH-G	x		Analysis Dat	te: 9/24/20	14	SeqNo: 223	8515	
Analyte		Result	PQL SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline		1050	100 1000	0	105	74.4	128				
Sample ID:	1409115-001BDUP	SampType: DUP	TestCode: NWTPHG	X_W Units: µg/L		Prep Dat	e:		RunNo: 169	925	
Client ID:	ZZZZZZ	Batch ID: R16925	TestNo: NWTPH-G	x		Analysis Dat	te: 9/24/20	14	SeqNo: 223	3517	
Analyte		Result	PQL SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline		1100	100					1171	6.02	20	

Qualifiers:

В

Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

O RSD is greater than RSDlimit

R RPD outside accepted recovery limits

S Spike Recovery outside accepted recovery

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WO#: 1409113

Specialty	Analytical
	v

Client: M Project: B	Iaul Foster & Alongi Sus Barn / 0239.28.05		TestCode:	NWTPHGX_W
Sample ID: CCV	SampType: CCV	TestCode: NWTPHGX_W Units: µg/L	Prep Date:	RunNo: 16925
Client ID: CCV	Batch ID: R16925	TestNo: NWTPH-Gx	Analysis Date: 9/24/2014	SeqNo: 223523
Analyte	Result	PQL SPK value SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val	%RPD RPDLimit Qual
Gasoline	2010	100 2000 0	101 80 120	
Sample ID: CCB	SampType: CCB	TestCode: NWTPHGX_W Units: µg/L	Prep Date:	RunNo: 16925
Client ID: CCB	Batch ID: R16925	TestNo: NWTPH-Gx	Analysis Date: 9/24/2014	SeqNo: 223573
Analyte	Result	PQL SPK value SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val	%RPD RPDLimit Qual
Gasoline	ND	100		
Surr: 4-Bromofluorok	benzene 111	100.0	111 50 150	
Sample ID: CCV	SampType: CCV	TestCode: NWTPHGX_W Units: µg/L	Prep Date:	RunNo: 16925
Client ID: CCV	Batch ID: R16925	TestNo: NWTPH-Gx	Analysis Date: 9/24/2014	SeqNo: 223575
Analyte	Result	PQL SPK value SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val	%RPD RPDLimit Qual
Gasoline	2590	100 2500 0	104 80 120	

Qualifiers:

B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

O RSD is greater than RSDlimit

R RPD outside accepted recovery limits

S Spike Recovery outside accepted recovery

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WO#: 1409113

Client: Project:	Maul Foster & Alongi Bus Barn / 0239.28.05						Т	'estCode: N	NWTPHHCI	D_W	
Sample ID: MB-820 Client ID: PBW	D1 SampType: MBLK Batch ID: 8201	TestCoo TestN	e: NWTPHHC	CID_ Units: mg/L HCID_W		Prep Da Analysis Da	te: 9/19/20 te: 9/20/20	14 14	RunNo: 168 SeqNo: 223	391 3044	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	ND	0.630									
Gasoline	ND	0.250									
Kerosene	ND	0.630									
Lube Oil	ND	0.630									
Mineral Spirits	ND	0.250									
Surr: BFB	1.32		1.000		132	30.2	133				
Surr: o-Terphenyl	1.33		1.000		133	50	150				

Qualifiers: B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

O RSD is greater than RSDlimit

R RPD outside accepted recovery limits

S Spike Recovery outside accepted recovery

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KEY TO FLAGS

- A This sample contains a Gasoline Range Organic not identified as a specific hydrocarbon product. The result was quantified against gasoline calibration standards
- A1 This sample contains a Diesel Range Organic not identified as a specific hydrocarbon product. The result was quantified against diesel calibration standards.
- A2 This sample contains a Lube Oil Range Organic not identified as a specific hydrocarbon product. The result was quantified against a lube oil calibration standard.
- A3 The result was determined to be Non-Detect based on hydrocarbon pattern recognition. The product was carry-over from another hydrocarbon type.
- A4 The product appears to be aged or degraded diesel.
- B The blank exhibited a positive result great than the reporting limit for this compound.
- CN See Case Narrative.
- D Result is based from a dilution.
- E Result exceeds the calibration range for this compound. The result should be considered as estimate.
- F The positive result for this hydrocarbon is due to single component contamination. The product does not match any hydrocarbon in the fuels library.
- G Result may be biased high due to biogenic interferences. Clean up is recommended.
- H Sample was analyzed outside recommended holding time.
- HT At clients request, samples was analyzed outside of recommended holding time.
- J The result for this analyte is between the MDL and the PQL and should be considered as estimated concentration.
- K Diesel result is biased high due to amount of Oil contained in the sample.
- L Diesel result is biased high due to amount of Gasoline contained in the sample.
- M Oil result is biased high due to amount of Diesel contained in the sample.
- MC Sample concentration is greater than 4x the spiked value, the spiked value is considered insignificant.
- MI Result is outside control limits due to matrix interference.
- MSA Value determined by Method of Standard Addition.
- O Laboratory Control Standard (LCS) exceeded laboratory control limits, but meets CCV criteria. Data meets EPA requirements.
- Q Detection levels elevated due to sample matrix.
- R RPD control limits were exceeded.
- RF Duplicate failed due to result being at or near the method-reporting limit.
- RP Matrix spike values exceed established QC limits; post digestion spike is in control.
- S Recovery is outside control limits.
- SC Closing CCV or LCS exceeded high recovery control limits, but associated samples are non-detect. Data meets EPA requirements.
- * The result for this parameter was greater that the maximum contaminant level of the TCLP regulatory limit.

OF CUSTODY RECORD	Contact Person/Project Manager Meridleth D' Andrea Company Maul Foster & Alona, Inc. Address 400 E. Mill Plain Blug Suite 400 Phone 360-694-2691 Fax Project No 0339. 38. 05 Project Name Bus Barn Project No 0339. 38. 05 Project Name Bus Barn Invoice To MFA Other P.O.No.	No. of Containers No. of Containers No. of Containers No. 400 No. 400 No. 70 H - HCID Shipped Via 60 No. 70 H - HCID Shipped Via 60 No. 70 H - HCID Air Bill No. Air Bill No. 70 H - HCID Air Bill No. 70 H - HCID Air Bill No. 70 H - HCID 70			When the set of
CHAIN.	Specialty Analytical 11711 SE Capps Road Clackamas, OR 97015 Phone: 503-607-1331 Fax: 503-607-1335 Collected By: Signature Printed	Signature Keller The terred of Printed Keller The Ferred of The Printed Keller The Ferred of The Former of The For	Date Time Sample I.D. Matrix 9/15/11 11/20 8/14 1 0 0 9/14/14 1710 85-10 0 0 0 0 9/14/14 1730 87-10 0 0 0 0 0 9/14/14 1730 85-10 0 0 0 0 0	7/17/14 - TRIP BLANK W	Relinquished By: $D_{AA}/M_{AA}/M_{AA}/M_{AA}$ Date Time Received Company: $M = A$ $2/18$ $7:K$ Company. Unless Reclaimed, Samples Will Be Disposed of 50 Days After Receipt. Samples held beyond 60 days subject to storage fee(s)



11711 SE Capps Road, Ste B Clackamas, Oregon 97015 TEL: 503-607-1331 FAX: 503-607-1336 Website: <u>www.specialtyanalytical.com</u>

October 10, 2014

Merideth D'Andrea Maul Foster & Alongi 400 E. Mill Plain Blvd. Suite 400 Vancouver, WA 98660 TEL: (503) 501-5216 FAX (360) 906-1958 RE: Bus Barn / 0239.28.05

Dear Merideth D'Andrea:

Order No.: 1409114

Specialty Analytical received 14 sample(s) on 9/18/2014 for the analyses presented in the following report.

There were no problems with the analysis and all data for associated QC met EPA or laboratory specifications, except where noted in the Case Narrative, or as qualified with flags. Results apply only to the samples analyzed. Without approval of the laboratory, the reproduction of this report is only permitted in its entirety.

If you have any questions regarding these tests, please feel free to call.

Sincerely,

Marty French Lab Director

Date Reported: 10-Oct-14

CLIENT:Maul Foster & AlongiProject:Bus Barn / 0239.28.05Lab ID:1409114-001Client Sample ID:B1-S-2.0

Collection Date: 9/15/2014 12:40:00 PM

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
NWTPH-HCID	1	WHCID				Analyst: BS
Gasoline	ND	24.5		mg/Kg-dry	1	9/20/2014 2:50:24 AM
Mineral Spirits	ND	24.5		mg/Kg-dry	1	9/20/2014 2:50:24 AM
Kerosene	ND	61.3		mg/Kg-dry	1	9/20/2014 2:50:24 AM
Diesel	ND	61.3		mg/Kg-dry	1	9/20/2014 2:50:24 AM
Lube Oil	ND	123		mg/Kg-dry	1	9/20/2014 2:50:24 AM
Hydraulic Oil	ND	123		mg/Kg-dry	1	9/20/2014 2:50:24 AM
Surr: BFB	97.2	50-150		%REC	1	9/20/2014 2:50:24 AM
Surr: o-Terphenyl	54.3	50-150		%REC	1	9/20/2014 2:50:24 AM

Client Sample ID:

Date Reported: 10-Oct-14

 CLIENT:
 Maul Foster & Alongi

 Project:
 Bus Barn / 0239.28.05

 Lab ID:
 1409114-002

B1-S-8.5

Collection Date: 9/15/2014 12:42:00 PM

Result	RL	Qual	Unit	DF	Date Analyzed
1	WHCID				Analyst: BS
ND	26.3		mg/Kg-dry	1	9/20/2014 3:50:24 AM
ND	26.3		mg/Kg-dry	1	9/20/2014 3:50:24 AM
ND	65.9		mg/Kg-dry	1	9/20/2014 3:50:24 AM
ND	65.9		mg/Kg-dry	1	9/20/2014 3:50:24 AM
ND	132		mg/Kg-dry	1	9/20/2014 3:50:24 AM
ND	132		mg/Kg-dry	1	9/20/2014 3:50:24 AM
93.1	50-150		%REC	1	9/20/2014 3:50:24 AM
50.9	50-150		%REC	1	9/20/2014 3:50:24 AM
	Result ND ND ND ND ND 93.1 50.9	ResultRLND26.3ND26.3ND26.3ND65.9ND65.9ND132ND13293.150-15050.950-150	ResultRLQualNWHCIDND26.3ND26.3ND65.9ND65.9ND13293.150-15050.950-150	Result RL Qual Unit ND 26.3 mg/Kg-dry ND 26.3 mg/Kg-dry ND 26.3 mg/Kg-dry ND 65.9 mg/Kg-dry ND 65.9 mg/Kg-dry ND 132 mg/Kg-dry ND 132 mg/Kg-dry 93.1 50-150 %REC 50.9 50-150 %REC	Result RL Qual Unit DF NWHCID 1 ND 26.3 mg/Kg-dry 1 ND 26.3 mg/Kg-dry 1 ND 65.9 mg/Kg-dry 1 ND 65.9 mg/Kg-dry 1 ND 132 mg/Kg-dry 1 ND 132 mg/Kg-dry 1 93.1 50-150 %REC 1 50.9 50-150 %REC 1

Date Reported: 10-Oct-14

 CLIENT:
 Maul Foster & Alongi

 Project:
 Bus Barn / 0239.28.05

 Lab ID:
 1409114-003

Client Sample ID: B2-S-2.0

Collection Date: 9/15/2014 1:00:00 PM

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
NWTPH-HCID	,	WHCID				Analyst: BS
Gasoline	ND	25.6		mg/Kg-dry	1	9/20/2014 4:20:24 AM
Mineral Spirits	ND	25.6		mg/Kg-dry	1	9/20/2014 4:20:24 AM
Kerosene	ND	64.0		mg/Kg-dry	1	9/20/2014 4:20:24 AM
Diesel	ND	64.0		mg/Kg-dry	1	9/20/2014 4:20:24 AM
Lube Oil	ND	128		mg/Kg-dry	1	9/20/2014 4:20:24 AM
Hydraulic Oil	ND	128		mg/Kg-dry	1	9/20/2014 4:20:24 AM
Surr: BFB	90.0	50-150		%REC	1	9/20/2014 4:20:24 AM
Surr: o-Terphenyl	52.0	50-150		%REC	1	9/20/2014 4:20:24 AM

Date Reported: 10-Oct-14

CLIENT: Maul Foster & Alongi Bus Barn / 0239.28.05 **Project:** Lab ID:

1409114-004

Client Sample ID: B2-S-8.0 Collection Date: 9/15/2014 1:10:00 PM

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
NWTPH-HCID		NWHCID				Analyst: BS
Gasoline	Gasoline	25.7		mg/Kg-dry	1	9/20/2014 4:50:24 AM
Mineral Spirits	ND	25.7		mg/Kg-dry	1	9/20/2014 4:50:24 AM
Kerosene	ND	64.3		mg/Kg-dry	1	9/20/2014 4:50:24 AM
Diesel	ND	64.3		mg/Kg-dry	1	9/20/2014 4:50:24 AM
Lube Oil	ND	129		mg/Kg-dry	1	9/20/2014 4:50:24 AM
Hydraulic Oil	ND	129		mg/Kg-dry	1	9/20/2014 4:50:24 AM
Surr: BFB	116	50-150		%REC	1	9/20/2014 4:50:24 AM
Surr: o-Terphenyl	52.5	50-150		%REC	1	9/20/2014 4:50:24 AM
BTEX - RBC		SW8021B				Analyst: BS
Benzene	ND	0.0193		mg/Kg-dry	1	9/23/2014 2:29:34 PM
Toluene	0.0971	0.0321		mg/Kg-dry	1	9/23/2014 2:29:34 PM
Ethylbenzene	ND	0.0321		mg/Kg-dry	1	9/23/2014 2:29:34 PM
Xylenes, Total	ND	0.0964		mg/Kg-dry	1	9/23/2014 2:29:34 PM
Surr: 4-Bromofluorobenzene	78.9	42.6-126		%REC	1	9/23/2014 2:29:34 PM
NWTPH-GX		NWTPH-GX				Analyst: BS
Gasoline	444	3.21		mg/Kg-dry	1	9/23/2014 2:01:17 PM
Surr: 4-Bromofluorobenzene	166	50-150	SMI	%REC	1	9/23/2014 2:01:17 PM
ICP/MS METALS-TOTAL RECOV	/ERABLE	SW6020A				Analyst: KP
Lead	11000	282		µg/Kg-dry	10	10/6/2014 12:27:00 PM

Date Reported: 10-Oct-14

CLIENT: Maul Foster & Alongi Bus Barn / 0239.28.05 **Project:** Lab ID:

1409114-005

Client Sample ID: B3-S-2.0 **Collection Date:** 9/15/2014 2:20:00 PM

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
NWTPH-HCID	1	WHCID				Analyst: BS
Gasoline	ND	25.9		mg/Kg-dry	1	9/20/2014 5:20:24 AM
Mineral Spirits	ND	25.9		mg/Kg-dry	1	9/20/2014 5:20:24 AM
Kerosene	ND	64.8		mg/Kg-dry	1	9/20/2014 5:20:24 AM
Diesel	ND	64.8		mg/Kg-dry	1	9/20/2014 5:20:24 AM
Lube Oil	ND	130		mg/Kg-dry	1	9/20/2014 5:20:24 AM
Hydraulic Oil	ND	130		mg/Kg-dry	1	9/20/2014 5:20:24 AM
Surr: BFB	97.6	50-150		%REC	1	9/20/2014 5:20:24 AM
Surr: o-Terphenyl	50.3	50-150		%REC	1	9/20/2014 5:20:24 AM

Date Reported: 10-Oct-14

 CLIENT:
 Maul Foster & Alongi

 Project:
 Bus Barn / 0239.28.05

 Lab ID:
 1409114-006

Client Sample ID: B3-S-7.0

Collection Date: 9/15/2014 3:10:00 PM

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
NWTPH-HCID		NWHCID				Analyst: BS
Gasoline	GASOLINE	25.5		mg/Kg-dry	1	9/20/2014 5:50:24 AM
Mineral Spirits	ND	25.5		mg/Kg-dry	1	9/20/2014 5:50:24 AM
Kerosene	ND	63.8		mg/Kg-dry	1	9/20/2014 5:50:24 AM
Diesel	DIESEL	63.8		mg/Kg-dry	1	9/20/2014 5:50:24 AM
Lube Oil	ND	128		mg/Kg-dry	1	9/20/2014 5:50:24 AM
Hydraulic Oil	ND	128		mg/Kg-dry	1	9/20/2014 5:50:24 AM
Surr: BFB	147	50-150		%REC	1	9/20/2014 5:50:24 AM
Surr: o-Terphenyl	59.2	50-150		%REC	1	9/20/2014 5:50:24 AM
NWTPH-DX		NWTPH-DX				Analyst: BS
Diesel	461	19.1	A1	mg/Kg-dry	1	9/26/2014 12:24:03 AM
Lube Oil	ND	63.8		mg/Kg-dry	1	9/26/2014 12:24:03 AM
Surr: o-Terphenyl	107	50-150		%REC	1	9/26/2014 12:24:03 AM
BTEX - RBC		SW8021B				Analyst: BS
Benzene	ND	0.0191		mg/Kg-dry	1	9/23/2014 3:59:34 PM
Toluene	0.0395	0.0319		mg/Kg-dry	1	9/23/2014 3:59:34 PM
Ethylbenzene	2.06	0.0319		mg/Kg-dry	1	9/23/2014 3:59:34 PM
Xylenes, Total	ND	0.0956		mg/Kg-dry	1	9/23/2014 3:59:34 PM
Surr: 4-Bromofluorobenzene	135	42.6-126	SMI	%REC	1	9/23/2014 3:59:34 PM
NWTPH-GX		NWTPH-GX				Analyst: BS
Gasoline	1320	31.9		mg/Kg-dry	10	9/24/2014 12:01:17 AM
Surr: 4-Bromofluorobenzene	236	50-150	SMI	%REC	10	9/24/2014 12:01:17 AM
ICP/MS METALS-TOTAL RECO	VERABLE	SW6020A				Analyst: KP
Lead	8630	290		µg/Kg-dry	10	10/6/2014 12:35:00 PM

Date Reported: 10-Oct-14

 CLIENT:
 Maul Foster & Alongi

 Project:
 Bus Barn / 0239.28.05

 Lab ID:
 1409114-007

Client Sample ID: B4-S-3.0

Collection Date: 9/15/2014 3:40:00 PM

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
NWTPH-HCID		NWHCID				Analyst: BS
Gasoline	GASOLINE	24.4		mg/Kg-dry	1	9/20/2014 6:20:24 AM
Mineral Spirits	ND	24.4		mg/Kg-dry	1	9/20/2014 6:20:24 AM
Kerosene	ND	60.9		mg/Kg-dry	1	9/20/2014 6:20:24 AM
Diesel	DIESEL	60.9		mg/Kg-dry	1	9/20/2014 6:20:24 AM
Lube Oil	ND	122		mg/Kg-dry	1	9/20/2014 6:20:24 AM
Hydraulic Oil	ND	122		mg/Kg-dry	1	9/20/2014 6:20:24 AM
Surr: BFB	418	50-150	SMI	%REC	1	9/20/2014 6:20:24 AM
Surr: o-Terphenyl	62.6	50-150		%REC	1	9/20/2014 6:20:24 AM
NWTPH-DX		NWTPH-DX				Analyst: BS
Diesel	1970	18.3	A1	mg/Kg-dry	1	9/26/2014 1:24:03 AM
Lube Oil	113	60.9	М	mg/Kg-dry	1	9/26/2014 1:24:03 AM
Surr: o-Terphenyl	121	50-150		%REC	1	9/26/2014 1:24:03 AM
BTEX - RBC		SW8021B				Analyst: BS
Benzene	ND	0.0183		mg/Kg-dry	1	9/24/2014 11:18:34 PM
Toluene	0.364	0.0304		mg/Kg-dry	1	9/24/2014 11:18:34 PM
Ethylbenzene	8.27	0.0304		mg/Kg-dry	1	9/24/2014 11:18:34 PM
Xylenes, Total	ND	0.0913		mg/Kg-dry	1	9/24/2014 11:18:34 PM
Surr: 4-Bromofluorobenzene	391	42.6-126	SMI	%REC	1	9/24/2014 11:18:34 PM
NWTPH-GX		NWTPH-GX				Analyst: BS
Gasoline	2990	30.4		mg/Kg-dry	10	9/23/2014 2:31:17 PM
Surr: 4-Bromofluorobenzene	578	50-150	SMI	%REC	10	9/23/2014 2:31:17 PM
ICP/MS METALS-TOTAL RECO	VERABLE	SW6020A				Analyst: KP
Lead	9110	293		µg/Kg-dry	10	10/6/2014 12:42:00 PM

Date Reported: 10-Oct-14

CLIENT:Maul Foster & AlongiProject:Bus Barn / 0239.28.05

Lab ID: 1409114-008

Client Sample ID: B4-S-7.0

Collection Date: 9/15/2014 3:45:00 PM

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
NWTPH-HCID		NWHCID				Analyst: BS
Gasoline	GASOLINE	25.4		mg/Kg-dry	1	9/20/2014 6:50:24 AM
Mineral Spirits	ND	25.4		mg/Kg-dry	1	9/20/2014 6:50:24 AM
Kerosene	ND	63.5		mg/Kg-dry	1	9/20/2014 6:50:24 AM
Diesel	DIESEL	63.5		mg/Kg-dry	1	9/20/2014 6:50:24 AM
Lube Oil	ND	127		mg/Kg-dry	1	9/20/2014 6:50:24 AM
Hydraulic Oil	ND	127		mg/Kg-dry	1	9/20/2014 6:50:24 AM
Surr: BFB	838	50-150	SMI	%REC	1	9/20/2014 6:50:24 AM
Surr: o-Terphenyl	79.7	50-150		%REC	1	9/20/2014 6:50:24 AM
NWTPH-DX		NWTPH-DX				Analyst: BS
Diesel	4200	19.1	A1	mg/Kg-dry	1	9/26/2014 1:54:03 AM
Lube Oil	151	63.5	М	mg/Kg-dry	1	9/26/2014 1:54:03 AM
Surr: o-Terphenyl	127	50-150		%REC	1	9/26/2014 1:54:03 AM
BTEX - RBC		SW8021B				Analyst: BS
Benzene	ND	0.0191		mg/Kg-dry	1	9/24/2014 11:46:34 PM
Toluene	1.18	0.0318		mg/Kg-dry	1	9/24/2014 11:46:34 PM
Ethylbenzene	9.08	0.0318		mg/Kg-dry	1	9/24/2014 11:46:34 PM
Xylenes, Total	4.49	0.0953		mg/Kg-dry	1	9/24/2014 11:46:34 PM
Surr: 4-Bromofluorobenzene	466	42.6-126	SMI	%REC	1	9/24/2014 11:46:34 PM
NWTPH-GX		NWTPH-GX				Analyst: BS
Gasoline	4310	31.8		mg/Kg-dry	10	9/23/2014 3:01:17 PM
Surr: 4-Bromofluorobenzene	922	50-150	SMI	%REC	10	9/23/2014 3:01:17 PM
ICP/MS METALS-TOTAL RECO	VERABLE	SW6020A				Analyst: KP
Lead	7770	305		µg/Kg-dry	10	10/6/2014 12:50:00 PM

Date Reported: 10-Oct-14

 CLIENT:
 Maul Foster & Alongi

 Project:
 Bus Barn / 0239.28.05

 Lab ID:
 1409114-009

Client Sample ID: B5-S-2.0

Collection Date: 9/16/2014 1:50:00 PM

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
NWTPH-HCID	1	WHCID				Analyst: BS
Gasoline	ND	24.0		mg/Kg-dry	1	9/20/2014 7:20:24 AM
Mineral Spirits	ND	24.0		mg/Kg-dry	1	9/20/2014 7:20:24 AM
Kerosene	ND	59.9		mg/Kg-dry	1	9/20/2014 7:20:24 AM
Diesel	ND	59.9		mg/Kg-dry	1	9/20/2014 7:20:24 AM
Lube Oil	ND	120		mg/Kg-dry	1	9/20/2014 7:20:24 AM
Hydraulic Oil	ND	120		mg/Kg-dry	1	9/20/2014 7:20:24 AM
Surr: BFB	97.6	50-150		%REC	1	9/20/2014 7:20:24 AM
Surr: o-Terphenyl	50.9	50-150		%REC	1	9/20/2014 7:20:24 AM

Date Reported: 10-Oct-14

CLIENT: Maul Foster & Alongi Bus Barn / 0239.28.05 **Project:** Lab ID: 1409114-010

Client Sample ID: B5-S-7.0 **Collection Date:** 9/16/2014 2:00:00 PM

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
NWTPH-HCID	1	WHCID				Analyst: BS
Gasoline	ND	25.3		mg/Kg-dry	1	9/20/2014 7:50:24 AM
Mineral Spirits	ND	25.3		mg/Kg-dry	1	9/20/2014 7:50:24 AM
Kerosene	ND	63.1		mg/Kg-dry	1	9/20/2014 7:50:24 AM
Diesel	ND	63.1		mg/Kg-dry	1	9/20/2014 7:50:24 AM
Lube Oil	ND	126		mg/Kg-dry	1	9/20/2014 7:50:24 AM
Hydraulic Oil	ND	126		mg/Kg-dry	1	9/20/2014 7:50:24 AM
Surr: BFB	92.4	50-150		%REC	1	9/20/2014 7:50:24 AM
Surr: o-Terphenyl	52.3	50-150		%REC	1	9/20/2014 7:50:24 AM

Client Sample ID:

Date Reported: 10-Oct-14

 CLIENT:
 Maul Foster & Alongi

 Project:
 Bus Barn / 0239.28.05

 Lab ID:
 1409114-011

B6-S-2.0

Collection Date: 9/16/2014 3:30:00 PM

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
NWTPH-HCID	1	WHCID				Analyst: BS
Gasoline	ND	24.2		mg/Kg-dry	1	9/20/2014 8:20:24 AM
Mineral Spirits	ND	24.2		mg/Kg-dry	1	9/20/2014 8:20:24 AM
Kerosene	ND	60.6		mg/Kg-dry	1	9/20/2014 8:20:24 AM
Diesel	ND	60.6		mg/Kg-dry	1	9/20/2014 8:20:24 AM
Lube Oil	ND	121		mg/Kg-dry	1	9/20/2014 8:20:24 AM
Hydraulic Oil	ND	121		mg/Kg-dry	1	9/20/2014 8:20:24 AM
Surr: BFB	87.7	50-150		%REC	1	9/20/2014 8:20:24 AM
Surr: o-Terphenyl	51.4	50-150		%REC	1	9/20/2014 8:20:24 AM

Date Reported: 10-Oct-14

CLIENT:Maul Foster & AlongiProject:Bus Barn / 0239.28.05Lab ID:1409114-012Client Sample ID:B6-S-8.5

Collection Date: 9/16/2014 3:40:00 PM

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
NWTPH-HCID	1	WHCID				Analyst: BS
Gasoline	ND	25.4		mg/Kg-dry	1	9/20/2014 8:50:24 AM
Mineral Spirits	ND	25.4		mg/Kg-dry	1	9/20/2014 8:50:24 AM
Kerosene	ND	63.4		mg/Kg-dry	1	9/20/2014 8:50:24 AM
Diesel	ND	63.4		mg/Kg-dry	1	9/20/2014 8:50:24 AM
Lube Oil	ND	127		mg/Kg-dry	1	9/20/2014 8:50:24 AM
Hydraulic Oil	ND	127		mg/Kg-dry	1	9/20/2014 8:50:24 AM
Surr: BFB	87.3	50-150		%REC	1	9/20/2014 8:50:24 AM
Surr: o-Terphenyl	51.0	50-150		%REC	1	9/20/2014 8:50:24 AM

Date Reported: 10-Oct-14

CLIENT: Maul Foster & Alongi Bus Barn / 0239.28.05 **Project:** Lab ID: 1409114-013

Client Sample ID: B7-S-1.5 **Collection Date:** 9/16/2014 4:00:00 PM

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
NWTPH-HCID	1	WHCID				Analyst: BS
Gasoline	ND	24.5		mg/Kg-dry	1	9/20/2014 9:20:24 AM
Mineral Spirits	ND	24.5		mg/Kg-dry	1	9/20/2014 9:20:24 AM
Kerosene	ND	61.3		mg/Kg-dry	1	9/20/2014 9:20:24 AM
Diesel	ND	61.3		mg/Kg-dry	1	9/20/2014 9:20:24 AM
Lube Oil	ND	123		mg/Kg-dry	1	9/20/2014 9:20:24 AM
Hydraulic Oil	ND	123		mg/Kg-dry	1	9/20/2014 9:20:24 AM
Surr: BFB	93.1	50-150		%REC	1	9/20/2014 9:20:24 AM
Surr: o-Terphenyl	52.6	50-150		%REC	1	9/20/2014 9:20:24 AM

Date Reported: 10-Oct-14

CLIENT: Maul Foster & Alongi Bus Barn / 0239.28.05 **Project:**

Lab ID: 1409114-014

Client Sample ID:

B7-S-8.5

Collection Date: 9/16/2014 4:15:00 PM

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
NWTPH-HCID		NWHCID				Analyst: BS
Gasoline	GASOLINE	25.2		mg/Kg-dry	1	9/20/2014 9:50:24 AM
Mineral Spirits	ND	25.2		mg/Kg-dry	1	9/20/2014 9:50:24 AM
Kerosene	ND	62.9		mg/Kg-dry	1	9/20/2014 9:50:24 AM
Diesel	DIESEL	62.9		mg/Kg-dry	1	9/20/2014 9:50:24 AM
Lube Oil	ND	126		mg/Kg-dry	1	9/20/2014 9:50:24 AM
Hydraulic Oil	ND	126		mg/Kg-dry	1	9/20/2014 9:50:24 AM
Surr: BFB	159	50-150	SMI	%REC	1	9/20/2014 9:50:24 AM
Surr: o-Terphenyl	91.7	50-150		%REC	1	9/20/2014 9:50:24 AM
NWTPH-DX		NWTPH-DX				Analyst: BS
Diesel	2650	18.9		mg/Kg-dry	1	9/26/2014 2:24:03 AM
Lube Oil	170	62.9	М	mg/Kg-dry	1	9/26/2014 2:24:03 AM
Surr: o-Terphenyl	182	50-150	SMI	%REC	1	9/26/2014 2:24:03 AM
BTEX - RBC		SW8021B				Analyst: BS
Benzene	ND	0.0189		mg/Kg-dry	1	9/23/2014 5:29:34 PM
Toluene	ND	0.0315		mg/Kg-dry	1	9/23/2014 5:29:34 PM
Ethylbenzene	ND	0.0315		mg/Kg-dry	1	9/23/2014 5:29:34 PM
Xylenes, Total	0.983	0.0944		mg/Kg-dry	1	9/23/2014 5:29:34 PM
Surr: 4-Bromofluorobenzene	82.8	42.6-126		%REC	1	9/23/2014 5:29:34 PM
NWTPH-GX		NWTPH-GX				Analyst: BS
Gasoline	466	3.15		mg/Kg-dry	1	9/23/2014 3:31:17 PM
Surr: 4-Bromofluorobenzene	151	50-150	SMI	%REC	1	9/23/2014 3:31:17 PM
ICP/MS METALS-TOTAL RECO	VERABLE	SW6020A				Analyst: KP
Lead	8440	276		µg/Kg-dry	10	10/6/2014 12:57:00 PM

WO#: 1409114

10-Oct-14

Specialty Analytical

Client:		Maul Foster & Alongi										
Project:		Bus Barn / 0239.28.05						Т	estCode: 6	020_S		
Sample ID:	ICV	SampType: ICV	TestCode: 6)20_S	Units: µg/Kg		Prep Dat	e:		RunNo: 171	76	
Client ID:	ICV	Batch ID: 8219	TestNo: S	W6020A	SW3050B		Analysis Dat	e: 10/6/20	14	SeqNo: 225	5475	
Analyte		Result	PQL SF	'K value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead		4530	25.0	5000	0	90.6	90	110				
Sample ID:	CCV	SampType: CCV	TestCode: 6	020_S	Units: µg/Kg		Prep Dat	e:		RunNo: 17 1	76	
Client ID:	ccv	Batch ID: 8219	TestNo: S	W6020A	SW3050B	Analysis Date: 10/6/2014			14	SeqNo: 225	6476	
Analyte		Result	PQL SF	'K value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead		4510	25.0	5000	0	90.1	90	110				
Sample ID:	MBLK-	8219 SampType: MBLK	TestCode: 6)20_S	Units: µg/Kg		Prep Dat	e:		RunNo: 17 1	76	
Client ID:	PBS	Batch ID: 8219	TestNo: S	W6020A	SW3050B		Analysis Dat	e: 10/6/20	14	SeqNo: 225	5477	
Analyte		Result	PQL SF	'K value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead		ND	25.0									
Sample ID:	LCS-82	219 SampType: LCS	TestCode: 6)20_S	Units: µg/Kg		Prep Dat	e: 9/23/20	14	RunNo: 17 1	76	
Client ID:	LCSS	Batch ID: 8219	TestNo: S	W6020A	SW3050B		Analysis Dat	e: 10/6/20	14	SeqNo: 225	5478	
Analyte		Result	PQL SF	YK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead		4640	25.0	5000	0	92.8	80	120				

Qualifiers:

Analyte detected in the associated Method Blank В

Holding times for preparation or analysis exceeded Η

ND Not Detected at the Reporting Limit

0 RSD is greater than RSDlimit R RPD outside accepted recovery limits S Spike Recovery outside accepted recovery Page 1 of 15

WO#: 1409114

10-Oct-14

Specialty Analytical

Client: Project:	N E	Maul Foster Bus Barn / C	& Alongi 0239.28.05							Т	CestCode: 6	6020_S		
Sample ID: Client ID:	CCV CCV		SampType: (Batch ID: 8	CCV 3219	TestCoo TestN	le: 6020_S lo: SW6020A	Units: µg/K SW3050B	g	Prep Da Analysis Da	te: te: 10/6/20	14	RunNo: 17 [.] SeqNo: 22	176 5484	
Analyte				Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead				4620	25.0	5000	0	92.5	90	110				
Sample ID:	1409116-	008BDUP	SampType: I	DUP	TestCod	e: 6020_S	Units: µg/K	g-dry	Prep Da	te: 9/23/20	14	RunNo: 17	176	
Client ID:	ZZZZZZ		Batch ID: 8	3219	TestN	o: SW6020A	SW3050B		Analysis Da	te: 10/6/20	14	SeqNo: 22	5492	
Analyte				Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead				7360	302						7062	4.10	20	
Sample ID:	1409116-	008BMS	SampType: I	MS	TestCoc	e: 6020_S	Units: µg/K	g-dry	Prep Da	te: 9/23/20	14	RunNo: 17 ′	176	
Client ID:	ZZZZZZ		Batch ID: 8	8219	TestN	o: SW6020A	SW3050B		Analysis Da	te: 10/6/20	14	SeqNo: 22	5493	
Analyte				Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead				13000	286	5712	7062	104	70	130				
Sample ID:	CCV		SampType: 0	CCV	TestCod	le: 6020_S	Units: µg/K	g	Prep Da	te:		RunNo: 17	176	
Client ID:	CCV		Batch ID: 8	8219	TestN	o: SW6020A	SW3050B		Analysis Da	te: 10/6/20	14	SeqNo: 22	5495	
Analyte				Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead				4620	25.0	5000	0	92.4	90	110				

Qualifiers:

B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

ceeded ND Not Detected at the Reporting Limit

O RSD is greater than RSDlimit

R RPD outside accepted recovery limits

S Spike Recovery outside accepted recovery

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WO#: 1409114

10-Oct-14

Specially Analytical	ecialty Analytic	al
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Client:	Maul Foster	& Alongi												
Project:	Bus Barn /	0239.28.05					TestCode: 6020_S							
Sample ID:	1409116-008BMSD	SampType: MSD	TestCod	le: 6020_S	Units: µg/Kg-c	lry	Prep Date	e: 9/23/20	14	RunNo: 171	176			
Client ID:	ZZZZZZ	Batch ID: 8219	TestN	lo: SW6020A	SW3050B		Analysis Date	e: 10/6/20	14	SeqNo: 22	5496			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual		
Lead		12700	296	5923	7062	95.2	70	130	12990	2.25	20			
Sample ID:	ICV	SampType: ICV	TestCoo	le: 6020_S	Units: µg/Kg		Prep Date	e:		RunNo: 171	176			
Client ID:	ICV	Batch ID: 8219	TestN	lo: SW6020A	SW3050B		Analysis Date	e: 10/9/20	14	SeqNo: 22	5827			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual		
Lead		5060	25.0	5000	0	101	90	110						
Sample ID:	ссу	SampType: CCV	TestCod	le: 6020_S	Units: µg/Kg		Prep Date	e:		RunNo: 17 1	176			
Client ID:	сси	Batch ID: 8219	TestN	lo: SW6020A	SW3050B		Analysis Date	e: 10/9/20	14	SeqNo: 22	5829			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual		
Lead		5090	25.0	5000	0	102	90	110						

Qualifiers:

O RSD is greater than RSDlimit

R RPD outside accepted recovery limits

S Spike Recovery outside accepted recovery

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WO#: 1409114

10-Oct-14

Client: Project:]	Maul Foste Bus Barn /	r & Alongi 0239.28.05						Т	estCode:	BTEXRBC_S	5	
Sample ID:	CCV		SampType: CCV	TestCode	BTEXRBC_	S Units: mg/Kg		Prep Date	:		RunNo: 169	917	
Client ID:	ссу		Batch ID: 8212	TestNo	SW8021B	5030		Analysis Date	e: 9/23/20	14	SeqNo: 223	359	
Analyte			Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene			2.38	0.0150	2.500	0	95.1	85	115				
Toluene			2.60	0.0250	2.500	0	104	85	115				
Ethylbenzene	е		2.65	0.0250	2.500	0	106	85	115				
Xylenes, Tot	al		7.39	0.0750	7.500	0	98.5	85	115				
Sample ID:	MB-8212	2	SampType: MBLK	TestCode	BTEXRBC_	S Units: mg/Kg		Prep Date	e: 9/23/20	14	RunNo: 169	017	
Client ID:	PBS		Batch ID: 8212	TestNo	SW8021B	5030		Analysis Date	e: 9/23/20	14	SeqNo: 223	360	
Analyte			Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene			ND	0.0150									
Toluene			ND	0.0250									
Ethylbenzene	е		ND	0.0250									
Xylenes, Tot	al		ND	0.0750									
Surr: 4-Br	omofluor	benzene	2.75		5.000		55.0	42.6	126				
Sample ID:	LCS-821	2	SampType: LCS	TestCode	BTEXRBC_	S Units: mg/Kg		Prep Date	: 9/23/20	14	RunNo: 169)17	
Client ID:	LCSS		Batch ID: 8212	TestNo	SW8021B	5030		Analysis Date	: 9/23/20	14	SeqNo: 223	361	
Analyte			Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene			0.973	0.0150	1.250	0	77.8	68.7	117				
Toluene			1.11	0.0250	1.250	0	88.4	71.4	115				
Ethylbenzen	е		0.991	0.0250	1.250	0	79.3	76.3	115				
Xylenes, Tot	al		2.96	0.0750	3.750	0	78.9	70.1	116				
Qualifiers:	B O	Analyte detect RSD is greate	ed in the associated Methors than RSDlimit	od Blank	H Holding R RPD out	times for preparation tside accepted recover	or analysis y limits	exceeded	ND N S S	Not Detected at the Spike Recovery o	ne Reporting Limi utside accepted re	t Pa	ge 4 of 15

Specialty Analytical

WO#: 1409114

Client: Project:	Maul Foster Bus Barn / 0	& Alongi)239.28.05						Т	'estCode: B	BTEXRBC_S	5	
Sample ID: LC	S-8212	SampType: LCS	TestCod	e: BTEXRBC	_S Units: mg/K	g	Prep Date:	9/23/20	14	RunNo: 169	917	
Client ID: LC	SS	Batch ID: 8212	TestN	o: SW8021B	5030		Analysis Date:	9/23/20	14	SeqNo: 223	3361	
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit H	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sample ID: 14	09114-004AMS	SampType: MS	TestCod	e: BTEXRBC	_ S Units: mg/K	g-dry	Prep Date:	9/23/20	14	RunNo: 169	917	
Client ID: B2	2-S-8.0	Batch ID: 8212	TestN	o: SW8021B	5030		Analysis Date:	9/23/20	14	SeqNo: 223	3363	
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit H	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene		1.26	0.0193	1.607	0.009000	77.6	32.2	108				
Toluene		1.41	0.0321	1.607	0.09707	81.7	56.7	110				
Ethylbenzene		1.48	0.0321	1.607	0	92.3	53.3	107				
Xylenes, Total		4.07	0.0964	4.821	0	84.4	47.5	119				
Sample ID: 14	09114-004AMSD	SampType: MSD	TestCod	e: BTEXRBC	_ S Units: mg/K	g-dry	Prep Date:	9/23/20	14	RunNo: 16 9	917	
Client ID: B2	2-S-8.0	Batch ID: 8212	TestN	o: SW8021B	5030		Analysis Date:	9/23/20	14	SeqNo: 223	3364	
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit H	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene		1.27	0.0193	1.607	0.009000	78.5	32.2	108	1.256	1.17	20	
Toluene		1.41	0.0321	1.607	0.09707	81.9	56.7	110	1.410	0.182	20	
Ethylbenzene		1.53	0.0321	1.607	0	95.1	53.3	107	1.484	2.99	20	
Xylenes, Total		4.09	0.0964	4.821	0	84.9	47.5	119	4.071	0.520	20	

Specialty Analytical

Qualifiers: B Analyte detected in t

Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

S

O RSD is greater than RSDlimit

R RPD outside accepted recovery limits

Spike Recovery outside accepted recovery

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WO#: 1409114

10-Oct-14

Client:MProject:B	faul Foster & Alongi sus Barn / 0239.28.05						Т	SestCode: E	BTEXRBC_S	5	
Sample ID: CCV	SampType: CCV	TestCo	ode: BTEXRBC	_S Units: mg/Kg		Prep Da	te:		RunNo: 169	917	
Client ID: CCV	Batch ID: 8212	Test	:No: SW8021B	5030		Analysis Da	te: 9/24/20	14	SeqNo: 223	3568	
Analyte	Resu	ılt PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	2.1	8 0.0150	2.500	0	87.3	85	115				
Toluene	2.1	5 0.0250	2.500	0	86.0	85	115				
Ethylbenzene	2.3	0.0250	2.500	0	92.7	85	115				
Xylenes, Total	6.5	0.0750	7.500	0	86.7	85	115				
Surr: 4-Bromofluorol	benzene 5.1	1	5.000		102	42.6	126				
Sample ID: CCB	SampType: CCB	TestCo	ode: BTEXRBC	_S Units: mg/Kg		Prep Da	te:		RunNo: 169	917	
Client ID: CCB	Batch ID: 8212	Test	:No: SW8021B	5030		Analysis Da	te: 9/24/20	14	SeqNo: 223	3569	
Analyte	Resu	ılt PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	Ν	D 0.0150									
Toluene	Ν	D 0.0250									
Ethylbenzene	N	D 0.0250									
Xylenes, Total	N	D 0.0750									
Surr: 4-Bromofluorol	penzene 2.9	2	5.000		58.3	42.6	126				

Specialty Analytical

Qualifiers: B Analyte detected in the associated Method Blank

O RSD is greater than RSDlimit

R RPD outside accepted recovery limits

S Spike Recovery outside accepted recovery

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WO#: 1409114

10-Oct-14

Client: Maul Fo Project: Bus Barr	ster & Alongi n / 0239.28.05			TestCode:	HCID_NW		
Sample ID: MB-8200 SampType: MBLK		TestCode: HCID_NW Units: mg/Kg		Prep Date: 9/19/2014	RunNo: 16888		
Client ID: PBS	Batch ID: 8200	TestNo: NWHCID		Analysis Date: 9/20/2014	SeqNo: 223003		
Analyte	Result	PQL SPK value	SPK Ref Val %REC	LowLimit HighLimit RPD Ref Val	%RPD RPDLimit Qual		
Gasoline	ND	20.0					
Mineral Spirits	ND	20.0					
Kerosene	ND	50.0					
Diesel	ND	50.0					
Lube Oil	ND	100					
Hydraulic Oil	ND	100					
Surr: BFB	96.8	100.0	96.8	50 150			
Surr: o-Terphenyl	51.3	100.0	51.3	50 150			
Sample ID: 1409114-001ADU	P SampType: DUP	TestCode: HCID_NW	Units: mg/Kg-dry	Prep Date: 9/19/2014	RunNo: 16888		
Client ID: B1-S-2.0	Batch ID: 8200	TestNo: NWHCID		Analysis Date: 9/20/2014	SeqNo: 223005		
Analyte	Result	PQL SPK value	SPK Ref Val %REC	LowLimit HighLimit RPD Ref Val	%RPD RPDLimit Qual		
Gasoline	ND	24.5		0	0 20		
Mineral Spirits	ND	24.5		0	0 20		
Kerosene	ND	61.3		0	0 20		

Qualifiers: B Analyte detected in the associated Method Blank

ND

ND

ND

61.3

123

123

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

O RSD is greater than RSDlimit

Specialty Analytical

Diesel

Lube Oil

Hydraulic Oil

R RPD outside accepted recovery limits

S Spike Recovery outside accepted recovery

0

0

0

0

0

0

20

20

20

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WO#: 1409114

10-Oct-14

Client: Mau Project: Bus	l Foster & Alongi Barn / 0239.28.05						Т	estCode: I	HCID_NW		
Sample ID: 1409114-014, Client ID: B7-S-8.5	ADUP SampType: DUP Batch ID: 8200	TestCode: HCID_NW TestNo: NWHCID		Units: mg/Kg-dry		Prep Date: 9/19/2014 Analysis Date: 9/20/2014			RunNo: 16888 SeqNo: 223019		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline	GASOLINE	25.2						157.4	0.401	20	
Mineral Spirits	ND	25.2						0	0	20	
Kerosene	ND	62.9						0	0	20	
Diesel	DIESEL	62.9						1409	6.60	20	
Lube Oil	ND	126						0	0	20	
Hydraulic Oil	ND	126						0	0	20	

 Qualifiers:
 B
 Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

O RSD is greater than RSDlimit

R RPD outside accepted recovery limits

S Spike Recovery outside accepted recovery

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WO#: 1409114

Client: Project:	Maul Foster & Bus Barn / 02	z Alongi 39.28.05	TestCode: NWTPHDX_S							S			
Sample ID: CCV Client ID: CCV		SampType: CCV Batch ID: 8233	TestCode: NWTPHDX_S Units: mg/Kg TestNo: NWTPH-Dx SW3545A		Prep Date: Analysis Date: 9/25/2014			4	RunNo: 17022 SeqNo: 223693				
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
Diesel Lube Oil		1060 513	15.0 50.0	999.0 499.5	0 0	106 103	85 85	115 115					
Sample ID: MB-	•8233	SampType: MBLK	TestCode: NWTPHDX_S Units: mg/Kg Prep Da				Prep Date	ate: 9/24/2014 RunNo: 17022)22		
Client ID: PBS	5	Batch ID: 8233	TestNo	NWTPH-Dx	SW3545A		Analysis Date: 9/25/2014			SeqNo: 223694			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
Diesel Lube Oil Surr: o-Terphe	enyl	ND ND 35.9	15.0 50.0	33.33		108	50	150					
Sample ID: LCS	-8233	SampType: LCS	TestCode	TestCode: NWTPHDX_S Units: mg/Kg Prep Date: 9/24/2014				4	RunNo: 17022				
Client ID: LCS	S	Batch ID: 8233	TestNo	NWTPH-Dx	SW3545A		Analysis Date: 9/25/2014			SeqNo: 223695			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
Diesel Lube Oil		188 193	15.0 50.0	166.7 166.7	0 0	113 116	76.3 69.9	125 127					
Sample ID: 1409	9135-003ADUP	SampType: DUP	TestCode: NWTPHDX_S Units: mg/Kg-dry Prep D				Prep Date	Prep Date: 9/24/2014			RunNo: 17022		
Client ID: ZZZ	ZZZ	Batch ID: 8233	TestNo	NWTPH-Dx	SW3545A		Analysis Date: 9/25/2014			SeqNo: 223699			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
Qualifiers:	B Analyte detected i O RSD is greater the	n the associated Method Blank an RSDlimit		H Holding R RPD ou	g times for preparation itside accepted recover	or analysis y limits	exceeded	ND N S S _I	ot Detected at the pike Recovery out	Reporting Limi	t Pa	ge 9 of 15	
WO#: 1409114

	Specialty	Analytical
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Client: Project:	Maul Foste Bus Barn /	r & Alongi 0239.28.05					Т	estCode: N	WTPHDX_	S	
Sample ID:	1409135-003ADUP	SampType: DUP	TestCode: NWTPHDX	_ S Units: mg/Kg-d	ry	Prep Date:	9/24/201	14	RunNo: 170	22	
Client ID:	ZZZZZZ	Batch ID: 8233	TestNo: NWTPH-Dx	SW3545A		Analysis Date:	9/25/201	14	SeqNo: 223	699	
Analyte		Result	PQL SPK value	SPK Ref Val	%REC	LowLimit H	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel		ND	16.6					0	0	20	
Lube Oil		ND	55.2					0	0	20	
Sample ID:	CCV	SampType: CCV	TestCode: NWTPHDX	_ S Units: mg/Kg		Prep Date:			RunNo: 170	22	
Client ID:	CCV	Batch ID: 8233	TestNo: NWTPH-Dx	SW3545A		Analysis Date:	9/25/201	14	SeqNo: 223	706	
Analyte		Result	PQL SPK value	SPK Ref Val	%REC	LowLimit H	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel		1220	15.0 1332	0	91.5	85	115				
Lube Oil		671	50.0 666.0	0	101	85	115				
Sample ID:	ССВ	SampType: CCB	TestCode: NWTPHDX	_S Units: mg/Kg		Prep Date:			RunNo: 170	22	
Client ID:	ССВ	Batch ID: 8233	TestNo: NWTPH-Dx	SW3545A		Analysis Date:	9/25/201	14	SeqNo: 223	707	
Analyte		Result	PQL SPK value	SPK Ref Val	%REC	LowLimit H	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel		ND	15.0								
Lube Oil		ND	50.0			50	450				
Surr: o- I	erphenyl	34.7	33.30		104	50	150				
Sample ID:	1409125-002ADUP	SampType: DUP	TestCode: NWTPHDX	_ S Units: mg/Kg-d	ry	Prep Date:	9/25/201	14	RunNo: 170	22	
Client ID:	ZZZZZZ	Batch ID: 8233	TestNo: NWTPH-Dx	SW3545A		Analysis Date:	9/26/201	14	SeqNo: 223	719	
Analyte		Result	PQL SPK value	SPK Ref Val	%REC	LowLimit H	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Qualifiers:	B Analyte detectO RSD is greate	ed in the associated Method Blank r than RSDlimit	H Holding R RPD ou	g times for preparation o itside accepted recovery	r analysis limits	exceeded	ND N S S	lot Detected at the pike Recovery ou	Reporting Limit	Pag	e 10 of 15

WO#: 1409114

Client:	Maul Foster	& Alongi									
Project:	Bus Barn / ()239.28.05					Т	estCode: N	WTPHDX_	S	
Sample ID:	1409125-002ADUP	SampType: DUP	TestCode: NWTPHD>	(_S Units: mg/Kg-	dry	Prep Date	e: 9/25/20	14	RunNo: 170)22	
Client ID:	ZZZZZZ	Batch ID: 8233	TestNo: NWTPH-D	x SW3545A		Analysis Dat	e: 9/26/20	14	SeqNo: 223	3719	
Analyte		Result	PQL SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel		1730	90.7					1759	1.46	20	к
Lube Oil		3550	302					3807	6.90	20	
Sample ID:	CCV	SampType: CCV	TestCode: NWTPHD>	K_S Units: mg/Kg		Prep Dat	e:		RunNo: 170)22	
Client ID:	сси	Batch ID: 8233	TestNo: NWTPH-D	x SW3545A		Analysis Dat	e: 9/26/20	14	SeqNo: 223	3720	
Analyte		Result	PQL SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel		1130	15.0 999.0	0	113	85	115				
Lube Oil		528	50.0 499.5	0	106	85	115				

Qualifiers: B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

O RSD is greater than RSDlimit

R RPD outside accepted recovery limits

S Spike Recovery outside accepted recovery

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WO#: 1409114

Client: Project:	Maul Foster & Alongi Bus Barn / 0239.28.05			TestCode: N	WTPHGX_S
Sample ID: CCV Client ID: CCV	SampType: CCV Batch ID: 8214	TestCode: NWTPHGX_S L TestNo: NWTPH-Gx 5	Jnits: mg/Kg 1030_G_S	Prep Date: Analysis Date: 9/23/2014	RunNo: 16919 SeqNo: 223411
Analyte	Result	PQL SPK value SPK	Ref Val %REC	LowLimit HighLimit RPD Ref Val	%RPD RPDLimit Qual
Gasoline	93.7	2.50 100.0	0 93.7	80 120	
Sample ID: MB-821	4 SampType: MBLK	TestCode: NWTPHGX_S	Jnits: mg/Kg	Prep Date: 9/23/2014	RunNo: 16919
Client ID: PBS	Batch ID: 8214	TestNo: NWTPH-Gx 5	030_G_S	Analysis Date: 9/23/2014	SeqNo: 223412
Analyte	Result	PQL SPK value SPK	Ref Val %REC	LowLimit HighLimit RPD Ref Val	%RPD RPDLimit Qual
Gasoline Surr: 4-Bromofluo	ND robenzene 3.55	2.50 5.000	71.0	50 150	
Sample ID: LCS-82	14 SampType: LCS	TestCode: NWTPHGX_S	Jnits: mg/Kg	Prep Date: 9/23/2014	RunNo: 16919
Client ID: LCSS	Batch ID: 8214	TestNo: NWTPH-Gx 5	030_G_S	Analysis Date: 9/23/2014	SeqNo: 223413
Analyte	Result	PQL SPK value SPK	Ref Val %REC	LowLimit HighLimit RPD Ref Val	%RPD RPDLimit Qual
Gasoline	50.4	2.50 50.00	0 101	53.5 121	
Sample ID: CCV	SampType: CCV	TestCode: NWTPHGX_S	Jnits: mg/Kg	Prep Date:	RunNo: 16919
Client ID: CCV	Batch ID: 8214	TestNo: NWTPH-Gx 5	030_G_S	Analysis Date: 9/23/2014	SeqNo: 223421
Analyte	Result	PQL SPK value SPK	Ref Val %REC	LowLimit HighLimit RPD Ref Val	%RPD RPDLimit Qual
Gasoline	113	2.50 125.0	0 90.7	80 120	

Qualifiers:

В

Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

O RSD is greater than RSDlimit

R RPD outside accepted recovery limits

S Spike Recovery outside accepted recovery

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WO#: 1409114

Client: Project:	Maul Foster a Bus Barn / 02	& Alongi 239.28.05						Т	'estCode: N	WTPHGX_	S	
Sample ID: CCB		SampType: CCB	TestCode: NW	TPHGX_S	Units: mg/Kg		Prep Date	e:		RunNo: 169	919	
Client ID: CCB		Batch ID: 8214	TestNo: NN	/TPH-Gx	5030_G_S		Analysis Date	e: 9/23/20	14	SeqNo: 223	3422	
Analyte		Result	PQL SPK	Kvalue S	PK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline Surr: 4-Bromoflu	uorobenzene	ND 3.25	2.50	5.000		65.0	50	150				
Sample ID: 14091	136-002ADUP	SampType: DUP	TestCode: NW	TPHGX_S	Units: mg/Kg-c	lry	Prep Date	e: 9/23/20	14	RunNo: 169	919	
Client ID: ZZZZ	ZZ	Batch ID: 8214	TestNo: NN	/TPH-Gx	5030_G_S		Analysis Date	e: 9/23/20	14	SeqNo: 223	3426	
Analyte		Result	PQL SPK	(value S	PK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline		ND	2.62						0	0	20	
Sample ID: CCV		SampType: CCV	TestCode: NW	TPHGX_S	Units: mg/Kg		Prep Date	ə:		RunNo: 169	919	
Client ID: CCV		Batala ID 0014	TestNo: NW	/TPH-Gx	5030_G_S		Analysis Date	e: 9/23/20	14	SeqNo: 223	3432	
		Batch ID: 8214										
Analyte		Result	PQL SPK	(value S	PK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Analyte Gasoline		Result 91.9	PQL SPK	Value S	PK Ref Val 0	%REC 91.9	LowLimit 80	HighLimit 120	RPD Ref Val	%RPD	RPDLimit	Qual
Analyte Gasoline Sample ID: CCB		Result 91.9 SampType: CCB	PQL SPK 2.50 TestCode: NV	(value S 100.0 /TPHGX_S	PK Ref Val 0 Units: mg/Kg	%REC 91.9	LowLimit 80 Prep Date	HighLimit 120 e:	RPD Ref Val	%RPD RunNo: 169	RPDLimit	Qual
Analyte Gasoline Sample ID: CCB Client ID: CCB		SampType: CCB Batch ID: 8214	PQL SPK 2.50 TestCode: NM TestNo: NM	(value S 100.0 /TPHGX_S	PK Ref Val 0 5 Units: mg/Kg 5030_G_S	%REC 91.9	LowLimit 80 Prep Date Analysis Date	HighLimit 120 e: e: 9/23/20	RPD Ref Val	%RPD RunNo: 169 SeqNo: 223	RPDLimit 019 0433	Qual
Analyte Gasoline Sample ID: CCB Client ID: CCB Analyte		SampType: CCB Batch ID: 8214 Result SampType: CCB Batch ID: 8214 Result	PQL SPK 2.50 TestCode: NM TestNo: NM PQL SPK	<pre>(value S 100.0 //TPHGX_S //TPH-GX (value S)</pre>	PK Ref Val 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	%REC 91.9 %REC	LowLimit 80 Prep Date Analysis Date LowLimit	HighLimit 120 e: e: 9/23/20 HighLimit	RPD Ref Val	%RPD RunNo: 169 SeqNo: 223 %RPD	RPDLimit 919 9433 RPDLimit	Qual
Analyte Gasoline Sample ID: CCB Client ID: CCB Analyte Gasoline Surr: 4-Bromoflu	uorobenzene	SampType: CCB Batch ID: 8214 SampType: CCB Batch ID: 8214 Result ND 3.24	PQL SPK 2.50 TestCode: NM TestNo: NM PQL SPK 2.50	(value S 100.0 /TPHGX_S /TPH-GX (value S 5.000	PK Ref Val 0 5 Units: mg/Kg 5030_G_S PK Ref Val	%REC 91.9 %REC 64.9	LowLimit 80 Prep Date Analysis Date LowLimit	HighLimit 120 e: e: 9/23/20 HighLimit 150	RPD Ref Val	%RPD RunNo: 169 SeqNo: 223 %RPD	RPDLimit 919 9433 RPDLimit	Qual

WO#: 1409114

Specially I mary field	Specialty Analytic	cal
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Client: Project:	Maul Foste Bus Barn /	r & Alongi 0239.28.05		TestCode:	NWTPHGX_S
Sample ID: Client ID:	1409114-006ADUP B3-S-7.0	SampType: DUP Batch ID: 8214	TestCode: NWTPHGX_S Units: mg/Kg-dry TestNo: NWTPH-Gx 5030_G_S	Prep Date: 9/23/2014 Analysis Date: 9/24/2014	RunNo: 16919 SeqNo: 223435
Analyte		Result	PQL SPK value SPK Ref Val %R	EC LowLimit HighLimit RPD Ref Val	%RPD RPDLimit Qual
Gasoline		1310	31.9	1322	0.695 20
Sample ID: Client ID:	CCV CCV	SampType: CCV Batch ID: 8214	TestCode: NWTPHGX_S Units: mg/Kg TestNo: NWTPH-Gx 5030_G_S	Prep Date: Analysis Date: 9/24/2014	RunNo: 16919 SeqNo: 223440
Analyte		Result	PQL SPK value SPK Ref Val %R	EC LowLimit HighLimit RPD Ref Val	%RPD RPDLimit Qual
Gasoline		130	2.50 125.0 0 10	4 80 120	
Sample ID:	CCV	SampType: CCV	TestCode: NWTPHGX_S Units: mg/Kg	Prep Date:	RunNo: 17067
Client ID:	ссу	Batch ID: 8214	TestNo: NWTPH-Gx 5030_G_S	Analysis Date: 9/30/2014	SeqNo: 224192
Analyte		Result	PQL SPK value SPK Ref Val %R	EC LowLimit HighLimit RPD Ref Val	%RPD RPDLimit Qual
Mineral Spir	its	90.4	50.0 100.0 0 90	4 80 120	
Sample ID:	ССВ	SampType: CCB	TestCode: NWTPHGX_S Units: mg/Kg	Prep Date:	RunNo: 17067
Client ID:	ССВ	Batch ID: 8214	TestNo: NWTPH-Gx 5030_G_S	Analysis Date: 9/30/2014	SeqNo: 224193
Analyte		Result	PQL SPK value SPK Ref Val %R	EC LowLimit HighLimit RPD Ref Val	%RPD RPDLimit Qual
Mineral Spir	its	ND	50.0		

Qualifiers: B Ana

Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

O RSD is greater than RSDlimit

R RPD outside accepted recovery limits

S Spike Recovery outside accepted recovery

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WO#: **1409114**

Specialty Analytical

Client: Project:	Maul Foster & Alongi Bus Barn / 0239.28.05					Т	estCode:	NWTPHGX_	S	
Sample ID: CCV Client ID: CCV	SampType: CCV Batch ID: 8214	TestCode: NWTPHC TestNo: NWTPH-	GX_S Units: mg/Kg Gx 5030_G_S		Prep Dat Analysis Dat	e: e: 9/30/20	14	RunNo: 170 SeqNo: 224	67 200	
Analyte	Result	PQL SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	I %RPD	RPDLimit	Qual
Mineral Spirits	122	50.0 125.0	0	97.8	80	120				

Qualifiers: B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

O RSD is greater than RSDlimit

R RPD outside accepted recovery limits

S Spike Recovery outside accepted recovery

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KEY TO FLAGS

- A This sample contains a Gasoline Range Organic not identified as a specific hydrocarbon product. The result was quantified against gasoline calibration standards
- A1 This sample contains a Diesel Range Organic not identified as a specific hydrocarbon product. The result was quantified against diesel calibration standards.
- A2 This sample contains a Lube Oil Range Organic not identified as a specific hydrocarbon product. The result was quantified against a lube oil calibration standard.
- A3 The result was determined to be Non-Detect based on hydrocarbon pattern recognition. The product was carry-over from another hydrocarbon type.
- A4 The product appears to be aged or degraded diesel.
- B The blank exhibited a positive result great than the reporting limit for this compound.
- CN See Case Narrative.
- D Result is based from a dilution.
- E Result exceeds the calibration range for this compound. The result should be considered as estimate.
- F The positive result for this hydrocarbon is due to single component contamination. The product does not match any hydrocarbon in the fuels library.
- G Result may be biased high due to biogenic interferences. Clean up is recommended.
- H Sample was analyzed outside recommended holding time.
- HT At clients request, samples was analyzed outside of recommended holding time.
- J The result for this analyte is between the MDL and the PQL and should be considered as estimated concentration.
- K Diesel result is biased high due to amount of Oil contained in the sample.
- L Diesel result is biased high due to amount of Gasoline contained in the sample.
- M Oil result is biased high due to amount of Diesel contained in the sample.
- MC Sample concentration is greater than 4x the spiked value, the spiked value is considered insignificant.
- MI Result is outside control limits due to matrix interference.
- MSA Value determined by Method of Standard Addition.
- O Laboratory Control Standard (LCS) exceeded laboratory control limits, but meets CCV criteria. Data meets EPA requirements.
- Q Detection levels elevated due to sample matrix.
- R RPD control limits were exceeded.
- RF Duplicate failed due to result being at or near the method-reporting limit.
- RP Matrix spike values exceed established QC limits; post digestion spike is in control.
- S Recovery is outside control limits.
- SC Closing CCV or LCS exceeded high recovery control limits, but associated samples are non-detect. Data meets EPA requirements.
- * The result for this parameter was greater that the maximum contaminant level of the TCLP regulatory limit.

IN OF CUSTODY RECORD	Contact Person/Project Manager <u>Merid 64</u> b Minure Company <u>Man 7-08796 & Monnis Inc.</u> Address <u>400 & Mill Plan Blud Strube</u> Phone <u>300 694-31691 Fax</u> Phone <u>300 694-31691 Fax</u> Project No. <u>0339-39, 05 Project Name <u>Bus Pern</u> Project No. <u>0339-39, 05 Project Name <u>Bus Pern</u> Project Site Location OR wa cother Invoice To <u>MPA</u> Project Name <u>Pus Pern</u></u></u>	For Laboratory Use Analyses Analyses Analyses Analyses Analyses Analyses Analyses Analyses Analyse An	2 2
CEA	Specialty Analytical 11711 SE Capps Road Clackamas, OR 97015 Phone: 503-607-1331 Fax: 503-607-1331 Fax: 503-607-1336 Phone: 503-607-1336 Phone: 503-607-1336 Phone: 503-607-1336 Phone: 503-607-1336 Phone: 503-607-1337 Phone: 503-607-137 Phone: 503-607-147 Phone: 503-607-147 Phone: 503-607-147 Phone	Signature Printed Turn Around Time Turn Around Time Rush Analyses Days Becify Rush Analyses Must Be Scheduled With The Lab in Advance Pate Time Sample ID. Pate Time Sample ID.	HIS: 40 B4-5-3.0 S 9116 1550 $B5-5-3.0$ S 9116 1350 $B5-5-3.0$ S 1530 $B5-5-3.0$ S S 1530 $B5-5-3.0$ S S 1530 $B6-5-7.0$ S S 1520 $B6-5-7.0$ S S Relinquished By: Shy Luchtwict For Pate Time Rec Relinquished By: Shy Luchtwict For $9[18-5-6,5]$ Contany: $A-7-4$ S Relinquished By: Shy Luchtwict For $9[18-5-6,5]$ $Bit<7.0$ S Rec Relinquished By: Shy Luchtwict For $9[18-5-7,0]$ $Bit<7.0$ S S Relinquished By: Shy Luchtwict For $Bit<7.0$ $Bit<7.0$ S S S Relinquished By: Shy Luchtwict For $Bit<7.0$ $Bit<7.0$ S S S Samples Reclaimed, Samples Will Be Disposed of 60 Days After Receipt. Samples to storage fee(s) S S S S S S S S

Page Lot 2	nager Meridam D'Andrea HESTER & Anna I. Inc. LUII Main Blued Steyoo Ver UND 98 6 60 2 (9) Fax Wa X Other BUS Barn Wa X Other P.O.No.	For Laboratory Use Lab Job No. Lab Job No. Shipped Via Shipped Via Air Bill No. Temperature On Receipt Air Bill No. Specialty Analytical Trip Blanks? Y / N Specialty Analytical Trip Blanks? Y / N	nquished By Date Time npany: Date Time npany: Date Time NOCHIWAVCI 91014 (500
CHAIN OF CUSTODY RECORD	Company Man Company Man Address 400 E Phone 760 694 Project No 0239, 20 Project No 0239, 20 Invoice To MCM	NN Matrix NN MIPH-DX NNTPH-CX NNTPH-CX MUTPH-CX	Received By: Relit Company: Received By: Com t
	Specialty Analytical II711 SE Capps Road Clackamas, OR 97015 Phone: 503-607-1331 Phone: 503-607-1331 Collected By:	Signature	Relinquished By: M.M.M.M.M.M.M.M. Date Time Company: M.A.M.M.M.M.M.M.M.M. Date Time Unless Reclaimed, Samples Will Be Disposed of 60 Days After Receipt Samples held beyond 60 days subject to storage fee(s)



11711 SE Capps Road, Ste B Clackamas, Oregon 97015 TEL: 503-607-1331 FAX: 503-607-1336 Website: <u>www.specialtyanalytical.com</u>

April 27, 2015

Merideth D'Andrea Maul Foster & Alongi 400 E. Mill Plain Blvd. Suite 400 Vancouver, WA 98660 TEL: (503) 501-5216 FAX: (360) 906-1958 RE: Bus Barn / 0239.28.05 Dear Merideth D'Andrea:

Order No.: 1504161

Specialty Analytical received 23 sample(s) on 4/17/2015 for the analyses presented in the following report.

There were no problems with the analysis and all data for associated QC met EPA or laboratory specifications, except where noted in the Case Narrative, or as qualified with flags. Results apply only to the samples analyzed. Without approval of the laboratory, the reproduction of this report is only permitted in its entirety.

If you have any questions regarding these tests, please feel free to call.

Sincerely,

anud

Marty French Lab Director

Date Reported: 27-Apr-15

CLIENT: Project:	Maul Foster & Alongi Bus Barn / 0239.28.05					Lab Ord	ler: 1504161
Lab ID:	1504161-001			Colle	ection Date:	4/15/20	15 9:30:00 AM
Client Sample	e ID: B8-S-5.5				Matrix	SOIL	
Analyses		Result	RL	Qual	Units	DF	Date Analyzed
HOLD PER C Hold	LIENT REQUEST	Hold	PER CLIENT 0			1	Analyst: knb 4/27/2015 9:57:23 AM
Lab ID:	1504161-002			Colle	ction Date:	4/15/20	15 9:35:00 AM
Client Sample	e ID: B8-S-7.5				Matrix	SOIL	
Analyses		Result	RL	Qual	Units	DF	Date Analyzed
NWTPH-DX			NWTPH-DX				Analyst: JRC
Diesel		ND	20.0		mg/Kg-dry	[,] 1	4/23/2015 4:15:00 AM
Lube Oil		ND	66.7		mg/Kg-dry	[,] 1	4/23/2015 4:15:00 AM
Surr: o-Terp	ohenyl	96.1	50-150		%REC	1	4/23/2015 4:15:00 AM
BTEX - RBC			SW8021B				Analyst: BS
Benzene		ND	0.0200		mg/Kg-dry	[,] 1	4/23/2015 9:01:24 PM
Toluene		ND	0.0334		mg/Kg-dry	[,] 1	4/23/2015 9:01:24 PM
Ethylbenzene		ND	0.0334		mg/Kg-dry	[,] 1	4/23/2015 9:01:24 PM
Xylenes, Total	I	ND	0.100		mg/Kg-dry	[,] 1	4/23/2015 9:01:24 PM
Surr: 4-Bror	mofluorobenzene	60.2	42.6-126		%REC	1	4/23/2015 9:01:24 PM
NWTPH-GX			NWTPH-GX				Analyst: BS
Gasoline		ND	3.34		mg/Kg-dry	[,] 1	4/23/2015 9:01:38 PM
Surr: 4-Bror	mofluorobenzene	57.0	50-150		%REC	1	4/23/2015 9:01:38 PM

Date Reported: 27-Apr-15

CLIENT: Project:	Maul Foster & Alongi Bus Barn / 0239.28.05					Lab Ord	ler: 1504161
Lab ID:	1504161-003			Colle	ection Date	: 4/15/20	15 10:00:00 AM
Client Sample	ID: B8-W-8.0				Matrix	: WATE	R
Analyses		Result	RL	Qual	Units	DF	Date Analyzed
NWTPH-DX - RBC			NWTPH-DX				Analyst: BS
Diesel		2.00	0.0784	A1	mg/L	1	4/24/2015 12:07:54 AM
Lube Oil		0.263	0.196		mg/L	1	4/24/2015 12:07:54 AM
Surr: o-Terp	henyl	130	50-150		%REC	1	4/24/2015 12:07:54 AM
BTEX - RBC			SW8021B				Analyst: BS
Benzene		ND	0.300		µg/L	1	4/24/2015 4:20:19 AM
Toluene		ND	0.500		µg/L	1	4/24/2015 4:20:19 AM
Ethylbenzene		ND	0.500		µg/L	1	4/24/2015 4:20:19 AM
Xylenes, Total		ND	1.50		µg/L	1	4/24/2015 4:20:19 AM
Surr: 4-Brom	nofluorobenzene	109	74.8-126		%REC	1	4/24/2015 4:20:19 AM
NWTPH-GX			NWTPH-GX				Analyst: BS
Gasoline		322	100		µg/L	1	4/24/2015 4:20:37 AM
Surr: 4-Brom	nofluorobenzene	109	50-150		%REC	1	4/24/2015 4:20:37 AM

Lab ID:	Collection Date: 4/15/2015 10:00:00 AM							
Client Sample ID:	B9-S-8.5	Matri				K: SOIL		
Analyses		Result	RL	Qual	Units	DF	Date Analyzed	
HOLD PER CLIENT	REQUEST	Hold	PER CLIENT			1	Analyst: knb 4/27/2015 9:57:23 AM	

Date Reported: 27-Apr-15

1504161

CLIENT:Maul Foster & AlongiLab Order:Project:Bus Barn / 0239.28.05

Lab ID:	1504161-005	Collection Date: 4/15/2015 10:05:00 AM							
Client Sample ID:	B9-S-6.0	Matrix: SOIL							
Analyses		Result	RL	Qual	Units	DF	Date Analyzed		
NWTPH-DX			NWTPH-DX				Analyst: JRC		
Diesel		ND	18.8		mg/Kg-dry	1	4/23/2015 4:36:00 AM		
Lube Oil		ND	62.7		mg/Kg-dry	1	4/23/2015 4:36:00 AM		
Surr: o-Terphenyl		104	50-150		%REC	1	4/23/2015 4:36:00 AM		
BTEX - RBC			SW8021B				Analyst: BS		
Benzene		ND	0.0188		mg/Kg-dry	1	4/23/2015 9:28:24 PM		
Toluene		ND	0.0314		mg/Kg-dry	1	4/23/2015 9:28:24 PM		
Ethylbenzene		ND	0.0314		mg/Kg-dry	1	4/23/2015 9:28:24 PM		
Xylenes, Total		ND	0.0941		mg/Kg-dry	1	4/23/2015 9:28:24 PM		
Surr: 4-Bromofluoro	benzene	54.2	42.6-126		%REC	1	4/23/2015 9:28:24 PM		
NWTPH-GX			NWTPH-GX				Analyst: BS		
Gasoline		ND	3.14		mg/Kg-dry	1	4/23/2015 9:28:38 PM		
Surr: 4-Bromofluoro	benzene	63.9	50-150		%REC	1	4/23/2015 9:28:38 PM		

Lab ID: 1504161-006			Collec	ction Date:	4/15/20	15 10:30:00 AM
Client Sample ID: B9-W-10.5				Matrix:	WATE	R
Analyses	Result	RL	Qual	Units	DF	Date Analyzed
NWTPH-DX - RBC	1	WTPH-DX				Analyst: BS
Diesel	0.174	0.0777		mg/L	1	4/24/2015 12:29:54 AM
Lube Oil	0.194	0.194		mg/L	1	4/24/2015 12:29:54 AM
Surr: o-Terphenyl	107	50-150		%REC	1	4/24/2015 12:29:54 AM
BTEX - RBC	;	SW8021B				Analyst: BS
Benzene	ND	0.300		µg/L	1	4/24/2015 4:48:19 AM
Toluene	ND	0.500		µg/L	1	4/24/2015 4:48:19 AM
Ethylbenzene	ND	0.500		µg/L	1	4/24/2015 4:48:19 AM
Xylenes, Total	ND	1.50		µg/L	1	4/24/2015 4:48:19 AM
Surr: 4-Bromofluorobenzene	106	74.8-126		%REC	1	4/24/2015 4:48:19 AM
NWTPH-GX	1	NWTPH-GX				Analyst: BS
Gasoline	ND	100		µg/L	1	4/24/2015 4:48:37 AM
Surr: 4-Bromofluorobenzene	106	50-150		%REC	1	4/24/2015 4:48:37 AM

Date Reported: 27-Apr-15

CLIENT: Project:	Maul Foster & Alongi Bus Barn / 0239.28.05					Lab Ord	ler: 1504161	
Lab ID:	1504161-007			Colle	ection Date:	4/15/20	15 11:40:00 AM	
Client Sample ID	: B10-S-8.0				Matrix	SOIL		
Analyses		Result	RL	Qual	Units	DF	Date Analyzed	
HOLD PER CLIER Hold	NT REQUEST	Hold	PER CLIENT 0			1	Analyst: knb 4/27/2015 9:57:23	AM
Lab ID:	1504161-008			Colle	ection Date:	4/15/20	15 11:45:00 AM	
Client Sample ID	: B10-S-5.5				Matrix	SOIL		
Analyses		Result	RL	Qual	Units	DF	Date Analyzed	
NWTPH-DX			NWTPH-DX				Analyst: JRC	
Diesel		ND	19.6		mg/Kg-dry	[,] 1	4/23/2015 4:58:00	AM
Lube Oil		ND	65.5		mg/Kg-dry	[,] 1	4/23/2015 4:58:00	AM
Surr: o-Terphen	yl	104	50-150		%REC	1	4/23/2015 4:58:00	AM
BTEX - RBC			SW8021B				Analyst: BS	
Benzene		ND	0.0196		mg/Kg-dry	[,] 1	4/23/2015 10:23:24	PM
Toluene		ND	0.0327		mg/Kg-dry	[,] 1	4/23/2015 10:23:24	PM
Ethylbenzene		ND	0.0327		mg/Kg-dry	[,] 1	4/23/2015 10:23:24	PM
Xylenes, Total		ND	0.0982		mg/Kg-dry	[,] 1	4/23/2015 10:23:24	PM
Surr: 4-Bromoflu	iorobenzene	51.0	42.6-126		%REC	1	4/23/2015 10:23:24	PM
NWTPH-GX			NWTPH-GX				Analyst: BS	
Gasoline		ND	3.27		mg/Kg-dry	[,] 1	4/23/2015 10:23:38	B PM
Surr: 4-Bromoflu	lorobenzene	63.3	50-150		%REC	1	4/23/2015 10:23:38	B PM

Date Reported: 27-Apr-15

Lab Order: 1504161 **CLIENT:** Maul Foster & Alongi **Project:** Bus Barn / 0239.28.05 Lab ID: Collection Date: 4/15/2015 12:10:00 PM 1504161-009 Client Sample ID: B10-W-10.5 Matrix: WATER Result RL Qual Units DF **Date Analyzed** Analyses **NWTPH-DX - RBC NWTPH-DX** Analyst: BS 4/24/2015 1:34:54 AM Diesel 0.267 0.0755 mg/L 1 Lube Oil 0.630 0.189 mg/L 1 4/24/2015 1:34:54 AM Surr: o-Terphenyl 50-150 %REC 4/24/2015 1:34:54 AM 123 1 **BTEX - RBC** SW8021B Analyst: BS 4/24/2015 5:15:19 AM Benzene 0.300 ND µg/L 1

Toluene	ND	0.500	µg/L	1	4/24/2015 5:15:19 AM
Ethylbenzene	ND	0.500	μg/L	1	4/24/2015 5:15:19 AM
Xylenes, Total	ND	1.50	μg/L	1	4/24/2015 5:15:19 AM
Surr: 4-Bromofluorobenzene	108	74.8-126	%REC	1	4/24/2015 5:15:19 AM
NWTPH-GX		NWTPH-GX			Analyst: BS
O H					
Gasoline	ND	100	µg/L	1	4/24/2015 5:15:37 AM
Gasoline Surr: 4-Bromofluorobenzene	ND 106	100 50-150	μg/L %REC	1 1	4/24/2015 5:15:37 AM 4/24/2015 5:15:37 AM

Lab ID:			Collec	tion Date:	4/15/202	15 1:10:00 PM	
Client Sample ID:	B11-S-5.5	Matrix: SOIL					
Analyses		Result	RL	Qual	Units	DF	Date Analyzed
HOLD PER CLIENT	REQUEST	PE Hold	R CLIENT 0			1	Analyst: knb 4/27/2015 9:57:23 AM

Date Reported: 27-Apr-15

Lab Order: 1504161 **CLIENT:** Maul Foster & Alongi **Project:** Bus Barn / 0239.28.05 Collection Date: 4/15/2015 1:15:00 PM Lab ID: 1504161-011 Matrix: SOIL Client Sample ID: B11-S-8.0 Result RL Qual Units DF Analyses **Date Analyzed**

NWTPH-DX		NWTPH-DX			Analyst: JRC
Diesel	ND	19.3	mg/Kg-dry	1	4/23/2015 5:20:00 AM
Lube Oil	ND	64.4	mg/Kg-dry	1	4/23/2015 5:20:00 AM
Surr: o-Terphenyl	87.9	50-150	%REC	1	4/23/2015 5:20:00 AM
BTEX - RBC		SW8021B			Analyst: BS
Benzene	ND	0.0193	mg/Kg-dry	1	4/23/2015 10:51:24 PM
Toluene	ND	0.0322	mg/Kg-dry	1	4/23/2015 10:51:24 PM
Ethylbenzene	ND	0.0322	mg/Kg-dry	1	4/23/2015 10:51:24 PM
Xylenes, Total	ND	0.0966	mg/Kg-dry	1	4/23/2015 10:51:24 PM
Surr: 4-Bromofluorobenzene	63.1	42.6-126	%REC	1	4/23/2015 10:51:24 PM
NWTPH-GX		NWTPH-GX			Analyst: BS
Gasoline	ND	3.22	mg/Kg-dry	1	4/23/2015 10:51:38 PM
Surr: 4-Bromofluorobenzene	60.9	50-150	%REC	1	4/23/2015 10:51:38 PM

Lab ID:	1504161-012

Collection Date: 4/15/2015 1:30:00 PM

Client Sample ID: B12-S-5.5		Matrix: SOIL						
Analyses	Result	RL	Qual	Units	DF	Date Analyzed		
NWTPH-DX						Analyst: JRC		
Diesel	50.0	19.2	A1	ma/Ka-drv	1	4/23/2015 5:42:00 AM		
Lube Oil	ND	64.0		mg/Kg-dry	1	4/23/2015 5:42:00 AM		
Surr: o-Terphenyl	75.8	50-150		%REC	1	4/23/2015 5:42:00 AM		
BTEX - RBC	ę	SW8021B				Analyst: BS		
Benzene	ND	0.0192		mg/Kg-dry	1	4/24/2015 7:59:24 AM		
Toluene	0.122	0.0320		mg/Kg-dry	1	4/24/2015 7:59:24 AM		
Ethylbenzene	ND	0.0320		mg/Kg-dry	1	4/24/2015 7:59:24 AM		
Xylenes, Total	ND	0.0960		mg/Kg-dry	1	4/24/2015 7:59:24 AM		
Surr: 4-Bromofluorobenzene	124	42.6-126		%REC	1	4/24/2015 7:59:24 AM		
NWTPH-GX	I	WTPH-GX				Analyst: BS		
Gasoline	615	6.40		mg/Kg-dry	2	4/24/2015 1:00:38 PM		
Surr: 4-Bromofluorobenzene	179	50-150	SMI	%REC	2	4/24/2015 1:00:38 PM		

Date Reported: 27-Apr-15

Lab Order: 1504161 **CLIENT:** Maul Foster & Alongi **Project:** Bus Barn / 0239.28.05 Collection Date: 4/15/2015 1:35:00 PM Lab ID: 1504161-013 Client Sample ID: B12-S-8.0 Matrix: SOIL Result RL Qual Units DF Analyses **Date Analyzed NWTPH-DX NWTPH-DX** Analyst: JRC 4/23/2015 6:03:00 AM Diesel 548 19.6 A1 mg/Kg-dry 1 Lube Oil ND 65.4 mg/Kg-dry 1 4/23/2015 6:03:00 AM %REC Surr: o-Terphenyl 4/23/2015 6:03:00 AM 100 50-150 1 **BTEX - RBC** SW8021B Analyst: **BS** 4/24/2015 8:26:24 AM ND Benzene 0.0196 mg/Kg-dry 1 Toluene 0.109 0.0327 mg/Kg-dry 1 4/24/2015 8:26:24 AM Ethylbenzene ND 4/24/2015 8:26:24 AM 0.0327 mg/Kg-dry 1 ND Xylenes, Total 0.0981 mg/Kg-dry 1 4/24/2015 8:26:24 AM SMI %REC 4/24/2015 8:26:24 AM Surr: 4-Bromofluorobenzene 138 42.6-126 1 **NWTPH-GX NWTPH-GX** Analyst: BS Gasoline 718 6.54 2 4/24/2015 1:30:38 PM mg/Kg-dry Surr: 4-Bromofluorobenzene 177 50-150 SMI %REC 2 4/24/2015 1:30:38 PM

Lab ID: Client Sample ID:	1504161-014 B13-S-5.0	Collection Date: 4/15/2015 2:30:00 PM Matrix: SOIL								
Analyses		Result	lt RL Qual Units DF Date Analy							
HOLD PER CLIENT	REQUEST	PE Hold	R CLIENT			1	Analyst: knb 4/27/2015 9:57:23 AM			

Date Reported: 27-Apr-15

 CLIENT:
 Maul Foster & Alongi
 Lab Order:
 1504161

 Project:
 Bus Barn / 0239.28.05
 Collection Date:
 4/15/2015 2:35:00 PM

 Lab ID:
 1504161-015
 Collection Date:
 4/15/2015 2:35:00 PM

 Client Sample ID:
 B13-S-8.0
 Matrix:
 SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
						Analyst: IPC
				ma/Ka day	1	4/22/2015 6:25:00 AM
Diesei	ND	19.1		mg/kg-ary	1	4/23/2015 6.25.00 AM
Lube Oil	ND	63.7		mg/Kg-dry	1	4/23/2015 6:25:00 AM
Surr: o-Terphenyl	103	50-150		%REC	1	4/23/2015 6:25:00 AM
BTEX - RBC		SW8021B				Analyst: BS
Benzene	ND	0.0191		mg/Kg-dry	1	4/23/2015 11:18:24 PM
Toluene	ND	0.0318		mg/Kg-dry	1	4/23/2015 11:18:24 PM
Ethylbenzene	ND	0.0318		mg/Kg-dry	1	4/23/2015 11:18:24 PM
Xylenes, Total	ND	0.0955		mg/Kg-dry	1	4/23/2015 11:18:24 PM
Surr: 4-Bromofluorobenzene	52.2	42.6-126		%REC	1	4/23/2015 11:18:24 PM
NWTPH-GX		NWTPH-GX				Analyst: BS
Gasoline	ND	3.18		mg/Kg-dry	1	4/23/2015 11:18:38 PM
Surr: 4-Bromofluorobenzene	60.7	50-150		%REC	1	4/23/2015 11:18:38 PM

Lab ID: 15	04161-016		Collection Date: 4/15/2015 3:00:00 PM								
Client Sample ID: B	14-S-5.0				Matrix: S	SOIL					
Analyses		Result	RL	Qual	Units	DF	Date Analyzed				
NWTPH-DX			NWTPH-DX				Analyst: JRC				
Diesel		ND	18.0		mg/Kg-dry	1	4/23/2015 8:14:00 AM				
Lube Oil		ND	60.1		mg/Kg-dry	1	4/23/2015 8:14:00 AM				
Surr: o-Terphenyl		94.2	50-150		%REC	1	4/23/2015 8:14:00 AM				
BTEX - RBC		:	SW8021B				Analyst: BS				
Benzene		ND	0.0180		mg/Kg-dry	1	4/23/2015 11:46:24 PM				
Toluene		ND	0.0301		mg/Kg-dry	1	4/23/2015 11:46:24 PM				
Ethylbenzene		ND	0.0301		mg/Kg-dry	1	4/23/2015 11:46:24 PM				
Xylenes, Total		ND	0.0902		mg/Kg-dry	1	4/23/2015 11:46:24 PM				
Surr: 4-Bromofluorobe	nzene	54.5	42.6-126		%REC	1	4/23/2015 11:46:24 PM				
NWTPH-GX			NWTPH-GX				Analyst: BS				
Gasoline		ND	3.01		mg/Kg-dry	1	4/23/2015 11:46:38 PM				
Surr: 4-Bromofluorobe	nzene	63.0	50-150		%REC	1	4/23/2015 11:46:38 PM				

Date Reported: 27-Apr-15

CLIENT: Project:	Maul Foster & Alongi Bus Barn / 0239.28.05					Lab Ord	ler: 1504161
Lab ID:	1504161-017			Colle	ction Date	e: 4/15/20	15 3:05:00 PM
Client Sample ID	B 14-S-7.5				Matrix	: SOIL	
Analyses		Result	RL	Qual	Units	DF	Date Analyzed
HOLD PER CLIE	NT REQUEST	I	PER CLIENT				Analyst: knb
Hold		Hold	0			1	4/27/2015 9:57:23 AM
Lab ID:	1504161-018			Colle	ction Date	e: 4/15/20	15 3:20:00 PM
Client Sample ID	B 14-W-8.0				Matrix	K: WATE	R
Analyses		Result	RL	Qual	Units	DF	Date Analyzed
NWTPH-DX - RBC		1	WTPH-DX				Analyst: BS
Diesel		ND	0.0775		mg/L	1	4/24/2015 12:51:54 AM
Lube Oil		ND	0.194		mg/L	1	4/24/2015 12:51:54 AM
Surr: o-Terphen	yl	77.2	50-150		%REC	1	4/24/2015 12:51:54 AM
BTEX - RBC		:	SW8021B				Analyst: BS
Benzene		ND	0.300		µg/L	1	4/24/2015 5:42:19 AM
Toluene		ND	0.500		µg/L	1	4/24/2015 5:42:19 AM
Ethylbenzene		ND	0.500		µg/L	1	4/24/2015 5:42:19 AM
Xylenes, Total		ND	1.50		µg/L	1	4/24/2015 5:42:19 AM
Surr: 4-Bromofle	uorobenzene	106	74.8-126		%REC	1	4/24/2015 5:42:19 AM
NWTPH-GX		l	WTPH-GX				Analyst: BS
Gasoline		ND	100		µg/L	1	4/24/2015 5:42:37 AM
Surr: 4-Bromofle	uorobenzene	106	50-150		%REC	1	4/24/2015 5:42:37 AM
Lab ID:	1504161-019			Colle	ction Date	e: 4/15/20	15 3:55:00 PM
Client Sample ID	B 15-S-5.5				Matrix	: SOIL	
Analyses		Result	RL	Qual	Units	DF	Date Analyzed

HOLD PER CLIENT REQUEST		ER CLIENT		Analyst: knb
Hold	Hold	0	1	4/27/2015 9:57:23 AM

Date Reported: 27-Apr-15

CLIENT:Maul Foster & AlongiLab Order:1504161Project:Bus Barn / 0239.28.05

Lab ID:	1504161-020	Collection Date: 4/15/2015 4:00:00 PM										
Client Sample ID:	B15-S-8.0				Matrix: S	SOIL						
Analyses		Result	RL	Qual	Units	DF	Date Analyzed					
NWTPH-DX		I	NWTPH-DX				Analyst: JRC					
Diesel		ND	19.4		mg/Kg-dry	1	4/23/2015 7:08:00 AM					
Lube Oil		ND	64.8		mg/Kg-dry	1	4/23/2015 7:08:00 AM					
Surr: o-Terphenyl		103	50-150		%REC	1	4/23/2015 7:08:00 AM					
BTEX - RBC		:	SW8021B				Analyst: BS					
Benzene		ND	0.0194		mg/Kg-dry	1	4/24/2015 12:13:24 AM					
Toluene		ND	0.0324		mg/Kg-dry	1	4/24/2015 12:13:24 AM					
Ethylbenzene		ND	0.0324		mg/Kg-dry	1	4/24/2015 12:13:24 AM					
Xylenes, Total		ND	0.0972		mg/Kg-dry	1	4/24/2015 12:13:24 AM					
Surr: 4-Bromofluoro	benzene	53.2	42.6-126		%REC	1	4/24/2015 12:13:24 AM					
NWTPH-GX			NWTPH-GX				Analyst: BS					
Gasoline		ND	3.24		mg/Kg-dry	1	4/24/2015 12:13:38 AM					
Surr: 4-Bromofluoro	benzene	58.6	50-150		%REC	1	4/24/2015 12:13:38 AM					

Lab ID: 1504161-021 Collection Date: 4/15/2015 4:30:00 PM									
Client Sample ID: B16-	S-5.5			Matrix:	SOIL				
Analyses	Res	ult RL	Qual	Units	DF	Date Analyzed			
NWTPH-DX		NWTPH-D)	ĸ			Analyst: JRC			
Diesel	11	1 19.0	A4	mg/Kg-dry	1	4/23/2015 7:30:00 AM			
Lube Oil	N	D 63.5		mg/Kg-dry	1	4/23/2015 7:30:00 AM			
Surr: o-Terphenyl	12	6 50-150	I	%REC	1	4/23/2015 7:30:00 AM			
BTEX - RBC		SW8021B				Analyst: BS			
Benzene	N	D 0.0190		mg/Kg-dry	1	4/24/2015 12:41:24 AM			
Toluene	N	D 0.0317		mg/Kg-dry	1	4/24/2015 12:41:24 AM			
Ethylbenzene	N	D 0.0317		mg/Kg-dry	1	4/24/2015 12:41:24 AM			
Xylenes, Total	N	D 0.0952		mg/Kg-dry	1	4/24/2015 12:41:24 AM			
Surr: 4-Bromofluorobenze	ene 54.	5 42.6-126	i	%REC	1	4/24/2015 12:41:24 AM			
NWTPH-GX		NWTPH-G	x			Analyst: BS			
Gasoline	N	D 3.17		mg/Kg-dry	1	4/24/2015 12:41:38 AM			
Surr: 4-Bromofluorobenze	ene 62.	2 50-150	1	%REC	1	4/24/2015 12:41:38 AM			

Gasoline

Surr: 4-Bromofluorobenzene

Date Reported: 27-Apr-15

2

2

mg/Kg-dry

%REC

1504161

4/24/2015 9:33:38 AM

4/24/2015 9:33:38 AM

CLIENT:Maul Foster & AlongiLab Order:Project:Bus Barn / 0239.28.05

955

220

Collection Date: 4/15/2015 4:35:00 PM Lab ID: 1504161-022 Client Sample ID: B16-S-8.0 Matrix: SOIL Result RL Qual Units DF Analyses **Date Analyzed NWTPH-DX NWTPH-DX** Analyst: JRC Diesel 6420 19.4 mg/Kg-dry 1 4/23/2015 7:52:00 AM Lube Oil ND 64.5 mg/Kg-dry 1 4/23/2015 7:52:00 AM %REC Surr: o-Terphenyl 50-150 4/23/2015 7:52:00 AM 215 SMI 1 **BTEX - RBC** SW8021B Analyst: BS 4/24/2015 8:54:24 AM Benzene ND 0.0194 mg/Kg-dry 1 Toluene ND 0.0323 mg/Kg-dry 1 4/24/2015 8:54:24 AM Ethylbenzene ND 4/24/2015 8:54:24 AM 0.0323 mg/Kg-dry 1 Xylenes, Total ND 0.0968 mg/Kg-dry 1 4/24/2015 8:54:24 AM %REC 4/24/2015 8:54:24 AM Surr: 4-Bromofluorobenzene 105 42.6-126 1 **NWTPH-GX NWTPH-GX** Analyst: BS

6.45

SMI

50-150

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WO#: **1504161**

27-Apr-15

Client: N Project: H	Maul Foster & Alongi Bus Barn / 0239.28.05						TestCode:	BTEXRBC_S	
Sample ID: CCV	SampType: CCV	TestCode:	BTEXRBC_S	Units: mg/Kg		Prep Date	e:	RunNo: 19828	
Client ID: CCV	Batch ID: 9282	TestNo:	SW8021B	5030		Analysis Date	e: 4/23/2015	SeqNo: 265303	
Analyte	Result	PQL S	PK value S	PK Ref Val	%REC	LowLimit	HighLimit RPD Ref Val	%RPD RPDLimit	Qual
Benzene	2.29	0.0150	2.500	0	91.4	85	115		
Toluene	2.42	0.0250	2.500	0	96.8	85	115		
Ethylbenzene	2.50	0.0250	2.500	0	100	85	115		
Xylenes, Total	8.15	0.0750	7.500	0	109	85	115		
Sample ID: MB-9282	SampType: MBLK	TestCode:	BTEXRBC_S	Units: mg/Kg		Prep Date	e: 4/17/2015	RunNo: 19828	
Client ID: PBS	Batch ID: 9282	TestNo:	SW8021B	5030		Analysis Date	e: 4/23/2015	SeqNo: 265304	
Analyte	Result	PQL S	PK value S	PK Ref Val	%REC	LowLimit	HighLimit RPD Ref Val	%RPD RPDLimit	Qual
Benzene	ND	0.0150							
Toluene	ND	0.0250							
Ethylbenzene	ND	0.0250							
Xylenes, Total	ND	0.0750							
Surr: 4-Bromofluor	obenzene 4.00		5.000		80.0	42.6	126		
Sample ID: LCS-928	2 SampType: LCS	TestCode:	BTEXRBC_S	Units: mg/Kg		Prep Date	e: 4/17/2015	RunNo: 19828	
Client ID: LCSS	Batch ID: 9282	TestNo:	SW8021B	5030		Analysis Date	e: 4/23/2015	SeqNo: 265305	
Analyte	Result	PQL S	PK value S	PK Ref Val	%REC	LowLimit	HighLimit RPD Ref Val	%RPD RPDLimit	Qual
Benzene	0.996	0.0150	1.250	0	79.7	68.7	117		
Toluene	1.11	0.0250	1.250	0	88.6	71.4	115		
Ethylbenzene	1.26	0.0250	1.250	0	101	76.3	115		
Xylenes, Total	3.91	0.0750	3.750	0	104	70.1	116		
Qualifiers: B O	Analyte detected in the associated Method RSD is greater than RSDlimit	l Blank	H Holding ti R RPD outs	imes for preparation ide accepted recover	or analysi y limits	s exceeded	ND Not Detected at t S Spike Recovery of	the Reporting Limit Pa outside accepted recov	nge 1 of 13

Specialty Analytical

WO#: 1504161

Client: Ma Project: Bu	aul Foster & Alongi as Barn / 0239.28.05						Т	estCode: B	TEXRBC_S	5	
Sample ID: LCS-9282	SampType: LCS	TestCode	BTEXRBC	S Units: mg/Kg		Prep Date	e: 4/17/20	15	RunNo: 198	328	
Client ID: LCSS	Batch ID: 9282	TestNo	: SW8021B	5030		Analysis Date	: 4/23/20	15	SeqNo: 265	5305	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sample ID: 1504160-0	D1AMS SampType: MS	TestCode	BTEXRBC	S Units: mg/Kg-	dry	Prep Date	e: 4/17/20	15	RunNo: 198	328	
Client ID: ZZZZZZ	Batch ID: 9282	TestNo	: SW8021B	5030		Analysis Date	e: 4/23/20	15	SeqNo: 265	5306	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	1.20	0.0186	1.553	0	77.1	32.2	108				
Toluene	1.30	0.0311	1.553	0	83.6	56.7	110				
Ethylbenzene	1.70	0.0311	1.553	0	109	53.3	107				S
Xylenes, Total	4.95	0.0932	4.660	0	106	47.5	119				
Sample ID: 1504160-0	D1AMSD SampType: MSD	TestCode	: BTEXRBC_	S Units: mg/Kg-	dry	Prep Date	e: 4/17/20	15	RunNo: 198	328	
Client ID: ZZZZZZ	Batch ID: 9282	TestNo	: SW8021B	5030		Analysis Date	e: 4/23/20	15	SeqNo: 265	5307	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	1.25	0.0186	1.553	0	80.5	32.2	108	1.197	4.37	20	
Toluene	1.39	0.0311	1.553	0	89.7	56.7	110	1.298	7.11	20	
Ethylbenzene	1.54	0.0311	1.553	0	99.4	53.3	107	1.699	9.58	20	
Xylenes, Total	4.89	0.0932	4.660	0	105	47.5	119	4.946	1.14	20	

Qualifiers:

B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

reeded ND Not Detected at the Reporting Limit

O RSD is greater than RSDlimit

R RPD outside accepted recovery limits

S Spike Recovery outside accepted recov

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WO#: **1504161**

27-Apr-15

Specialty	Analytical
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Client: Project:	Maul Foster & Alongi Bus Barn / 0239.28.05	TestCode: BTEXRBC_S									
Sample ID: CCV Client ID: CCV	SampType: CCV Batch ID: 9282	TestCoo TestN	TestNo: SW8021B 5030			Prep Date: Analysis Date: 4/24/2015			RunNo: 19828 SeqNo: 265319		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	2.44	0.0150	2.500	0	97.6	85	115				
Toluene	2.56	0.0250	2.500	0	102	85	115				
Ethylbenzene	2.49	0.0250	2.500	0	99.5	85	115				
Xylenes, Total	7.29	0.0750	7.500	0	97.2	85	115				

Qualifiers: B Analyte detected in the associated Method Blank

S Spike Recovery outside accepted recov

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O RSD is greater than RSDlimit

WO#: **1504161**

27-Apr-15

Client: Project:	Maul Foster & Bus Barn / 023	Alongi 39.28.05						1	TestCode: E	STEXRBC_V	W	
Sample ID: CCV	S	ampType: CCV	TestCo	de: BTEXRBC	_W Units: µg/L		Prep Da	te:		RunNo: 198	331	
Client ID: CCV		Batch ID: R19831	Test	lo: SW8021B			Analysis Da	te: 4/24/2(015	SeqNo: 26	5358	
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene		48.8	0.300	50.00	0	97.6	85	115				
Toluene		51.1	0.500	50.00	0	102	85	115				
Ethylbenzene		49.8	0.500	50.00	0	99.5	85	115				
Xylenes, Total		146	1.50	150.0	0	97.2	85	115				
Sample ID: MB-R19	9831 S	ampType: MBLK	TestCo	de: BTEXRBC	_W Units: µg/L		Prep Da	te:		RunNo: 198	331	
Client ID: PBW		Batch ID: R19831	Test	No: SW8021B			Analysis Da	te: 4/24/20	015	SeqNo: 26	5359	
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene		ND	0.300									
Toluene		ND	0.500									
Ethylbenzene		ND	0.500									
Xylenes, Total		ND	1.50									
Surr: 4-Bromofluc	orobenzene	88.4		100.0		88.4	74.8	126				
Sample ID: 150416	1-009BMS S	ampType: MS	TestCo	de: BTEXRBC	_W Units: µg/L		Prep Da	te:		RunNo: 198	331	
Client ID: B10-W-	-10.5	Batch ID: R19831	Test	No: SW8021B			Analysis Da	te: 4/24/20	015	SeqNo: 26	5367	
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene		24.6	0.300	25.00	0	98.6	67.8	118				
Toluene		26.1	0.500	25.00	0	105	74.7	117				
Ethylbenzene		25.0	0.500	25.00	0	99.8	74.5	115				
Xylenes, Total		77.8	1.50	75.00	0	104	76.8	120				
Qualifiers: B O	Analyte detected RSD is greater th	in the associated Method an RSDlimit	Blank	H Holdir R RPD o	ng times for preparation outside accepted recov	on or analysi very limits	is exceeded	ND S	Not Detected at th Spike Recovery ou	e Reporting Lim	it Pa eco	uge 4 of 13

Specialty Analytical

WO#: 1504161

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Specialty	Analytical
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Xylenes, Total

Client:	Maul Foster	: & Alongi										
Project:	Bus Barn / (0239.28.05						Т	'estCode: B	TEXRBC_	W	
Sample ID:	1504161-009BMS	SampType: MS	TestCoo	de: BTEXRBC	_W Units: µg/L		Prep Da	te:		RunNo: 198	331	
Client ID:	B10-W-10.5	Batch ID: R19831	TestN	lo: SW8021B			Analysis Da	te: 4/24/20	15	SeqNo: 26	5367	
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sample ID:	1504161-009BMSD	SampType: MSD	TestCoo	le: BTEXRBC	_W Units: µg/L		Prep Da	te:		RunNo: 198	331	
Sample ID: Client ID:	1504161-009BMSD B10-W-10.5	SampType: MSD Batch ID: R19831	TestCoo TestN	de: BTEXRBC lo: SW8021B	_W Units: µg/L		Prep Da Analysis Da	te: te: 4/24/20	115	RunNo: 198 SeqNo: 26	331 5368	
Sample ID: Client ID: Analyte	1504161-009BMSD B10-W-10.5	SampType: MSD Batch ID: R19831 Result	TestCoo TestN PQL	de: BTEXRBC lo: SW8021B SPK value	-W Units: μg/L SPK Ref Val	%REC	Prep Da Analysis Da LowLimit	te: te: 4/24/20 HighLimit	1 15 RPD Ref Val	RunNo: 198 SeqNo: 26 %RPD	331 5368 RPDLimit	Qual
Sample ID: Client ID: Analyte Benzene	1504161-009BMSD B10-W-10.5	SampType: MSD Batch ID: R19831 Result 26.2	TestCoc TestN PQL 0.300	de: BTEXRBC lo: SW8021B SPK value 25.00	SPK Ref Val	%REC 105	Prep Da Analysis Da LowLimit 67.8	te: te: 4/24/20 HighLimit 118	1 15 RPD Ref Val 24.64	RunNo: 198 SeqNo: 26 %RPD 6.14	331 5368 RPDLimit 20	Qual
Sample ID: Client ID: Analyte Benzene Toluene	1504161-009BMSD B10-W-10.5	SampType: MSD Batch ID: R19831 Result 26.2 27.5	TestCoo TestN PQL 0.300 0.500	de: BTEXRBC lo: SW8021B SPK value 25.00 25.00	SPK Ref Val 0	%REC 105 110	Prep Da Analysis Da LowLimit 67.8 74.7	te: te: 4/24/20 HighLimit 118 117	115 RPD Ref Val 24.64 26.14	RunNo: 198 SeqNo: 26 %RPD 6.14 4.93	331 5368 RPDLimit 20 20	Qual

0

105

76.8

120

Qualifiers: B Analyte detected in the associated Method Blank

78.4

1.50

75.00

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

77.76

0.820

O RSD is greater than RSDlimit

R RPD outside accepted recovery limits

S Spike Recovery outside accepted recov

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WO#: **1504161**

27-Apr-15

Client: Project:	Maul Foster Bus Barn /	r & Alongi 0239.28.05					Т	estCode: N	WTPHDX_	S	
Sample ID: MB-	-9289	SampType: MBLK	TestCode: NWTPHDX_	S Units: mg/Kg		Prep Date	e: 4/20/20	15	RunNo: 197	789	
Client ID: PBS	S	Batch ID: 9289	TestNo: NWTPH-Dx	SW3545A		Analysis Date	e: 4/21/20	15	SeqNo: 264	4759	
Analyte		Result	PQL SPK value S	PK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel		ND	15.0								
Lube Oil		ND	50.0								
Surr: o-Terph	enyl	36.7	33.30		110	50	150				
Sample ID: LCS	S-9289	SampType: LCS	TestCode: NWTPHDX_	S Units: mg/Kg		Prep Date	e: 4/20/20	15	RunNo: 197	789	
Client ID: LCS	SS	Batch ID: 9289	TestNo: NWTPH-Dx	SW3545A		Analysis Date	e: 4/21/20	15	SeqNo: 264	1760	
Analyte		Result	PQL SPK value S	PK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel		180	15.0 166.5	0	108	76.3	125				
Lube Oil		168	50.0 166.5	0	101	69.9	127				
Sample ID: 150	4165-013ADUP	SampType: DUP	TestCode: NWTPHDX_	S Units: mg/Kg-	dry	Prep Date	e: 4/20/20	15	RunNo: 197	789	
Client ID: ZZZ	ZZZ	Batch ID: 9289	TestNo: NWTPH-Dx	SW3545A		Analysis Date	e: 4/21/20	15	SeqNo: 264	1764	
Analyte		Result	PQL SPK value S	PK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel		ND	19.2					0	0	20	
Lube Oil		ND	64.1					0	0	20	RF
Sample ID: CC	v	SampType: CCV	TestCode: NWTPHDX_	S Units: mg/Kg		Prep Date	e:		RunNo: 197	789	
Client ID: CC	v	Batch ID: 9289	TestNo: NWTPH-Dx	SW3545A		Analysis Date	e: 4/21/20	15	SeqNo: 264	1766	
Analyte		Result	PQL SPK value S	PK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Qualifiers:	B Analyte detecO RSD is greate	ted in the associated Method Bl r than RSDlimit	ank H Holding t R RPD outs	imes for preparation side accepted recover	or analys	is exceeded	ND N S S	Not Detected at the spike Recovery ou	e Reporting Lim	it Pa eco [,]	ge 6 of 13

Specialty Analytical

WO#: **1504161**

27-Apr-15

Client: Project:	Maul Foster & Bus Barn / 023	Alongi 9.28.05							Т	estCode: N	NWTPHDX_	S	
Sample ID: CCV	S	атрТуре: ССV	TestCoo	de: NWTPHD	X_S Un	its: mg/Kg]	Prep Dat	e:		RunNo: 19	789	
Client ID: CCV		Batch ID: 9289	TestN	lo: NWTPH-D	x SW	/3545A		Analysis Dat	e: 4/21/20	15	SeqNo: 26	4766	
Analyte		Result	PQL	SPK value	SPK R	ef Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel		1250	15.0	999.0		0	125	85	115				SC
Lube Oil		558	50.0	499.5		0	112	85	115				
Sample ID: CCV	S	ampType: CCV	TestCoo	de: NWTPHD	X_S Un	its: mg/Kg]	Prep Dat	e:		RunNo: 19	789	
Client ID: CCV		Batch ID: 9289	TestN	lo: NWTPH-D	x SW	/3545A		Analysis Dat	e: 4/22/20	15	SeqNo: 26	5207	
Analyte		Result	PQL	SPK value	SPK R	ef Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel		1030	15.0	999.0		0	103	85	115				
Lube Oil		548	50.0	499.5		0	110	85	115				
Sample ID: CCB	S	ampType: CCB	TestCoo	de: NWTPHD	X_S Un	its: mg/Kg	9	Prep Dat	e:		RunNo: 19	789	
Client ID: CCB		Batch ID: 9289	TestN	lo: NWTPH-D	x SW	/3545A		Analysis Dat	e: 4/23/20	15	SeqNo: 26	5208	
Analyte		Result	PQL	SPK value	SPK R	ef Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel		ND	15.0										
Lube Oil		ND	50.0										
Surr: o-Terphe	nyl	36.6		33.30			110	50	150				
Sample ID: 1504	161-015ADUP S	ampType: DUP	TestCoo	de: NWTPHD	X_S Un	its: mg/Kg	g-dry	Prep Dat	e: 4/20/20)15	RunNo: 19	789	
Client ID: B13-	S-8.0	Batch ID: 9289	TestN	lo: NWTPH-D	x SW	/3545A		Analysis Dat	e: 4/23/20	15	SeqNo: 26	5216	
Analyte		Result	PQL	SPK value	SPK R	ef Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Qualifiers: B	Analyte detected iRSD is greater that	in the associated Method l an RSDlimit	Blank	H Holdin R RPD o	ng times f	or preparatio	on or analysi very limits	s exceeded	ND S	Not Detected at the Spike Recovery or	e Reporting Lim	nit Pa	age 7 of 13

Specialty Analytical

WO#: 1504161

Specialty	Analytical
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Client: Project:	Maul Foster Bus Barn / 0	& Alongi 239.28.05					Т	'estCode: N	WTPHDX_	S	
Sample ID: 1 Client ID:	1504161-015ADUP B13-S-8.0	SampType: DUP Batch ID: 9289	TestCode: NWT TestNo: NWT	"PHDX_S Units: m "PH-Dx SW3545A	g/Kg-dry	Prep Date Analysis Date	e: 4/20/20 e: 4/23/20	15 15	RunNo: 197 SeqNo: 265	789 5216	
Analyte		Result	PQL SPK v	alue SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel Lube Oil		ND ND	19.1 63.7					0 0	0 200	20 20	RF RF
Sample ID: (Client ID: (CCV CCV	SampType: CCV Batch ID: 9289	TestCode: NWT TestNo: NWT	"PHDX_S Units: m "PH-Dx SW3545A	g/Kg	Prep Date Analysis Date	e: e: 4/23/20	15	RunNo: 197 SeqNo: 265	789 5224	
Analyte		Result	PQL SPK v	alue SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel Lube Oil		1530 765	15.0 1 50.0 6	1332 0 66.0 0	115 115	85 85	115 115				

Qualifiers: B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

O RSD is greater than RSDlimit

R RPD outside accepted recovery limits

S Spike Recovery outside accepted recov

WO#: **1504161**

27-Apr-15

Client: Project:		Maul Foster & Along Bus Barn / 0239.28.0	gi)5						1	SestCode:	NWTPHDXI	LL_W	
Sample ID:	CCV	SampTy	vpe: CCV	TestCo	de: NWTPHD)	KLL Units: mg/L		Prep Da	te:		RunNo: 19	826	
Client ID:	ccv	Batch	ID: 9299	TestN	lo: NWTPH-D	x SW3510B		Analysis Da	te: 4/23/20)15	SeqNo: 26	5269	
Analyte			Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel			9.18	0.0800	8.000	0	115	85	115				
Hydraulic Oil	il		4.57	0.200	4.000	0	114	85	115				
Lube Oil			4.60	0.200	4.000	0	115	85	115				
Sample ID: I	MB-929	9 SampTy	pe: MBLK	TestCoo	de: NWTPHD)	KLL Units: mg/L		Prep Da	te: 4/21/2()15	RunNo: 19	826	
Client ID:	PBW	Batch	ID: 9299	TestN	lo: NWTPH-D	x SW3510B		Analysis Da	te: 4/23/20	015	SeqNo: 26	5270	
Analyte			Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel			ND	0.0800									
Lube Oil			ND	0.200									
Surr: o-Te	erphenyl	l	0.206		0.2000		103	50	150				
Sample ID: I	LCS-92	99 SampTy	/pe: LCS	TestCoo	de: NWTPHD)	KLL Units: mg/L		Prep Da	te: 4/21/2()15	RunNo: 19	826	
Client ID:	LCSW	Batch	ID: 9299	TestN	lo: NWTPH-D	x SW3510B		Analysis Da	te: 4/23/20)15	SeqNo: 26	5271	
Analyte			Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel			0.858	0.0800	1.000	0	85.8	60.7	121				
Lube Oil			1.02	0.200	1.000	0	102	64	126				

Specialty Analytical

Qualifiers: B A

0

Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

exceeded ND Not Detected at the Reporting Limit

RSD is greater than RSDlimit

R RPD outside accepted recovery limits

S Spike Recovery outside accepted recov

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WO#: **1504161**

Specialty	Analytical
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Client:	Maul Foster	& Alongi										
Project:	Bus Barn / (1239.28.05						ľ	estCode: N	WTPHDXI	LL_W	
Sample ID: LCS	SD-9299	SampType: LCSD	TestCoo	de: NWTPHD)	(LL Units: mg/L		Prep Da	te: 4/21/20	15	RunNo: 198	326	
Client ID: LCS	SS02	Batch ID: 9299	TestN	lo: NWTPH-D	x SW3510B		Analysis Da	te: 4/23/20	15	SeqNo: 26	5272	
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel		0.877	0.0800	1.000	0	87.7	60.7	121	0.8582	2.18	20	
Lube Oil		1.14	0.200	1.000	0	114	64	126	1.018	11.4	20	
Sample ID: CC	v	SampType: CCV	TestCoo	le: NWTPHD)	KLL Units: mg/L		Prep Da	te:		RunNo: 198	326	
Client ID: CC	v	Batch ID: 9299	TestN	lo: NWTPH-D	x SW3510B		Analysis Da	te: 4/24/20	15	SeqNo: 26	5279	
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel		6.21	0.0800	6.000	0	104	85	115				
Hydraulic Oil		3.33	0.200	3.000	0	111	85	115				
Lube Oil		3.27	0.200	3.000	0	109	85	115				

 Qualifiers:
 B
 Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

O RSD is greater than RSDlimit

R RPD outside accepted recovery limits

S Spike Recovery outside accepted recov

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WO#: **1504161**

Specialty Analytical

Client: Project:	Maul Foster & Alongi Bus Barn / 0239.28.05		Test	Code: NWTPHGX_S
Sample ID: CCV	SampType: CCV	TestCode: NWTPHGX_S Units: mg	g/Kg Prep Date:	RunNo: 19832
Client ID: CCV	Batch ID: 9281	TestNo: NWTPH-Gx 5030_G_S	Analysis Date: 4/23/2015	SeqNo: 265370
Analyte	Result	PQL SPK value SPK Ref Val	%REC LowLimit HighLimit RPI	D Ref Val %RPD RPDLimit Qual
Gasoline	84.3	2.50 100.0 0	84.3 80 120	
Sample ID: MB-928	1 SampType: MBLK	TestCode: NWTPHGX_S Units: mg	g/Kg Prep Date: 4/17/2015	RunNo: 19832
Client ID: PBS	Batch ID: 9281	TestNo: NWTPH-Gx 5030_G_S	Analysis Date: 4/23/2015	SeqNo: 265371
Analyte	Result	PQL SPK value SPK Ref Val	%REC LowLimit HighLimit RPI	D Ref Val %RPD RPDLimit Qual
Gasoline	ND	2.50		
Surr: 4-Bromofluo	robenzene 3.58	5.000	71.7 50 150	
Sample ID: LCS-928	31 SampType: LCS	TestCode: NWTPHGX_S Units: mg	g/Kg Prep Date: 4/17/2015	RunNo: 19832
Client ID: LCSS	Batch ID: 9281	TestNo: NWTPH-Gx 5030_G_S	Analysis Date: 4/23/2015	SeqNo: 265372
Analyte	Result	PQL SPK value SPK Ref Val	%REC LowLimit HighLimit RPI	D Ref Val %RPD RPDLimit Qual
Gasoline	59.0	2.50 50.00 0	118 53.5 121	
Sample ID: 1504160	0-004ADUP SampType: DUP	TestCode: NWTPHGX_S Units: mg	g/Kg-dry Prep Date: 4/17/2015	RunNo: 19832
Client ID: ZZZZZZ	Batch ID: 9281	TestNo: NWTPH-Gx 5030_G_S	Analysis Date: 4/23/2015	SeqNo: 265375
Analyte	Result	PQL SPK value SPK Ref Val	%REC LowLimit HighLimit RPI	D Ref Val %RPD RPDLimit Qual
Gasoline	ND	3.11		0 0 20

Qualifiers:

В

Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

O RSD is greater than RSDlimit

R RPD outside accepted recovery limits

S Spike Recovery outside accepted reco

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WO#: 1504161

Specialty Analytical

Client:	Maul Foster	& Alongi		
Project:	Bus Barn / G	0239.28.05		TestCode: NWTPHGX_S
Sample ID:	1504161-005ADUP	SampType: DUP	TestCode: NWTPHGX_S Units: mg/Kg-dry Prep Date: 4/17/2	2015 RunNo: 19832
Client ID:	B9-S-6.0	Batch ID: 9281	TestNo: NWTPH-Gx 5030_G_S Analysis Date: 4/23/2	2015 SeqNo: 265379
Analyte		Result	PQL SPK value SPK Ref Val %REC LowLimit HighLimit	RPD Ref Val %RPD RPDLimit Qual
Gasoline		ND	3.14	0 0 20
Sample ID:	ссу	SampType: CCV	TestCode: NWTPHGX_S Units: mg/Kg Prep Date:	RunNo: 19832
Client ID:	сси	Batch ID: 9281	TestNo: NWTPH-Gx 5030_G_S Analysis Date: 4/24/2	2015 SeqNo: 265387
Analyte		Result	PQL SPK value SPK Ref Val %REC LowLimit HighLimit	RPD Ref Val %RPD RPDLimit Qual
Gasoline		105	2.50 125.0 0 84.0 80 120	
Sample ID:	CCV	SampType: CCV	TestCode: NWTPHGX_S Units: mg/Kg Prep Date:	RunNo: 19832
Client ID:	ссу	Batch ID: 9281	TestNo: NWTPH-Gx 5030_G_S Analysis Date: 4/24/2	2015 SeqNo: 265395
Analyte		Result	PQL SPK value SPK Ref Val %REC LowLimit HighLimit	RPD Ref Val %RPD RPDLimit Qual
Gasoline		124	2.50 125.0 0 98.9 80 120	 I

Qualifiers: B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

O RSD is greater than RSDlimit

R RPD outside accepted recovery limits

S Spike Recovery outside accepted recov

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WO#: 1504161

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Specialty An	alytical
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Client: Project:	Maul Foster & Alongi Bus Barn / 0239.28.05		TestCode: N	WTPHGX_W
Sample ID: CCV Client ID: CCV	SampType: CCV Batch ID: R19833	TestCode: NWTPHGX_ Units: µg/L TestNo: NWTPH-Gx	Prep Date: Analysis Date: 4/24/2015	RunNo: 19833 SeqNo: 265403
Analyte	Result	PQL SPK value SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val	%RPD RPDLimit Qual
Gasoline	2100	100 2500 0	84.0 80 120	
Sample ID: MB-R1	9833 SampType: MBLK	TestCode: NWTPHGX_ Units: µg/L	Prep Date:	RunNo: 19833
Client ID: PBW	Batch ID: R19833	TestNo: NWTPH-Gx	Analysis Date: 4/24/2015	SeqNo: 265404
Analyte	Result	PQL SPK value SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val	%RPD RPDLimit Qual
Gasoline Surr: 4-Bromoflu	orobenzene 104	100 100.0	104 50 150	
Sample ID: 150416	61-009BDUP SampType: DUP	TestCode: NWTPHGX_ Units: µg/L	Prep Date:	RunNo: 19833
Client ID: B10-W	-10.5 Batch ID: R19833	TestNo: NWTPH-Gx	Analysis Date: 4/24/2015	SeqNo: 265412
Analyte	Result	PQL SPK value SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val	%RPD RPDLimit Qual
Gasoline	ND	100	0	0 20
Sample ID: CCV	SampType: CCV	TestCode: NWTPHGX_ Units: µg/L	Prep Date:	RunNo: 19833
Client ID: CCV	Batch ID: R19833	TestNo: NWTPH-Gx	Analysis Date: 4/24/2015	SeqNo: 265413
Analyte	Result	PQL SPK value SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val	%RPD RPDLimit Qual
Gasoline	2470	100 2500 0	98.9 80 120	

Qualifiers:

В

0

Analyte detected in the associated Method Blank

Holding times for preparation or analysis exceeded Η

ND Not Detected at the Reporting Limit

RSD is greater than RSDlimit

R RPD outside accepted recovery limits S Spike Recovery outside accepted recov

KEY TO FLAGS

- A This sample contains a Gasoline Range Organic not identified as a specific hydrocarbon product. The result was quantified against gasoline calibration standards
- A1 This sample contains a Diesel Range Organic not identified as a specific hydrocarbon product. The result was quantified against diesel calibration standards.
- A2 This sample contains a Lube Oil Range Organic not identified as a specific hydrocarbon product. The result was quantified against a lube oil calibration standard.
- A3 The result was determined to be Non-Detect based on hydrocarbon pattern recognition. The product was carry-over from another hydrocarbon type.
- A4 The product appears to be aged or degraded diesel.
- B The blank exhibited a positive result great than the reporting limit for this compound.
- CN See Case Narrative.
- D Result is based from a dilution.
- E Result exceeds the calibration range for this compound. The result should be considered as estimate.
- F The positive result for this hydrocarbon is due to single component contamination. The product does not match any hydrocarbon in the fuels library.
- G Result may be biased high due to biogenic interferences. Clean up is recommended.
- H Sample was analyzed outside recommended holding time.
- HT At clients request, samples was analyzed outside of recommended holding time.
- J The result for this analyte is between the MDL and the PQL and should be considered as estimated concentration.
- K Diesel result is biased high due to amount of Oil contained in the sample.
- L Diesel result is biased high due to amount of Gasoline contained in the sample.
- M Oil result is biased high due to amount of Diesel contained in the sample.
- MC Sample concentration is greater than 4x the spiked value, the spiked value is considered insignificant.
- MI Result is outside control limits due to matrix interference.
- MSA Value determined by Method of Standard Addition.
- O Laboratory Control Standard (LCS) exceeded laboratory control limits, but meets CCV criteria. Data meets EPA requirements.
- Q Detection levels elevated due to sample matrix.
- R RPD control limits were exceeded.
- RF Duplicate failed due to result being at or near the method-reporting limit.
- RP Matrix spike values exceed established QC limits; post digestion spike is in control.
- S Recovery is outside control limits.
- SC Closing CCV or LCS exceeded high recovery control limits, but associated samples are non-detect. Data meets EPA requirements.
- * The result for this parameter was greater that the maximum contaminant level of the TCLP regulatory limit.

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5/1/2015 Ms. Mary Benzinger Maul Foster and Alongi Inc. 2001 NW 19th Ave Suite 200 Portland OR 97209

Project Name: Bus Barn Project #: 0239.28.05 Workorder #: 1504335A

Dear Ms. Mary Benzinger

The following report includes the data for the above referenced project for sample(s) received on 4/20/2015 at Air Toxics Ltd.

The data and associated QC analyzed by TO-15 are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Air Toxics Ltd. for your air analysis needs. Air Toxics Ltd. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Kelly Buettner at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

Killy Butte

Kelly Buettner Project Manager

A Eurofins Lancaster Laboratories Company

180 Blue Ravine Road, Suite B Folsom, CA 95630



WORK ORDER #: 1504335A

Work Order Summary

CLIENT:	Ms. Mary Benzinger	BILL TO:	Accounts Payable
	Maul Foster and Alongi Inc.		Maul Foster and Alongi Inc.
	2001 NW 19th Ave		400 E. Mill Plain Blvd
	Suite 200		Suite 400
	Portland, OR 97209		Vancouver, WA 98660
PHONE:	971-544-2139	P.O. #	
FAX:	971-544-2140	PROJECT #	0239.28.05 Bus Barn
DATE RECEIVED:	04/20/2015	CONTACT	Kally Buatthar
DATE COMPLETED:	05/01/2015	contact.	Keny Ductuler

			RECEIPT	FINAL
FRACTION #	NAME	TEST	VAC./PRES.	PRESSURE
01A	SS-1	TO-15	4.7 "Hg	4.8 psi
02A	Lab Blank	TO-15	NA	NA
03A	CCV	TO-15	NA	NA
04A	LCS	TO-15	NA	NA
04AA	LCSD	TO-15	NA	NA

CERTIFIED BY:

layes

05/01/15 DATE:

Technical Director

Certification numbers: AZ Licensure AZ0775, NJ NELAP - CA016, NY NELAP - 11291, TX NELAP - T104704343-14-7, UT NELAP CA009332014-5, VA NELAP - 460197, WA NELAP - C935 Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program) Accreditation number: CA300005, Effective date: 10/18/2014, Expiration date: 10/17/2015. Eurofins Air Toxics Inc.. certifies that the test results contained in this report meet all requirements of the NELAC standards

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eurofins Air Toxics

LABORATORY NARRATIVE EPA Method TO-15 Maul Foster and Alongi Inc. Workorder# 1504335A

One 6 Liter Summa Canister (100% Certified) sample was received on April 20, 2015. The laboratory performed analysis via EPA Method TO-15 using GC/MS in the full scan mode.

This workorder was independently validated prior to submittal using 'USEPA National Functional Guidelines' as generally applied to the analysis of volatile organic compounds in air. A rules-based, logic driven, independent validation engine was employed to assess completeness, evaluate pass/fail of relevant project quality control requirements and verification of all quantified amounts.

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

A single point calibration for TPH referenced to Gasoline was performed for each daily analytical batch. Recovery is reported as 100% in the associated results for each CCV.

Definition of Data Qualifying Flags

Eight qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).

J - Estimated value.

E - Exceeds instrument calibration range.

- S Saturated peak.
- Q Exceeds quality control limits.

U - Compound analyzed for but not detected above the reporting limit, LOD, or MDL value. See data page for project specific U-flag definition.

UJ- Non-detected compound associated with low bias in the CCV

N - The identification is based on presumptive evidence.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified

b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue



Summary of Detected Compounds EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: SS-1

Lab ID#: 1504335A-01A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Benzene	0.78	1.0	2.5	3.2
Toluene	0.78	5.2	3.0	20
Ethyl Benzene	0.78	1.5	3.4	6.7
m,p-Xylene	0.78	5.5	3.4	24
o-Xylene	0.78	3.0	3.4	13
TPH ref. to Gasoline (MW=100)	78	820	320	3300



Client Sample ID: SS-1 Lab ID#: 1504335A-01A EPA METHOD TO-15 GC/MS FULL SCAN

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File Name: Dil. Factor:	j042309 1.57	Date of Collection: 4/15/15 3:36:00 PM Date of Analysis: 4/23/15 03:48 PM		
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Benzene	0.78	1.0	2.5	3.2
Toluene	0.78	5.2	3.0	20
Ethyl Benzene	0.78	1.5	3.4	6.7
m,p-Xylene	0.78	5.5	3.4	24
o-Xylene	0.78	3.0	3.4	13
TPH ref. to Gasoline (MW=100)	78	820	320	3300

Container Type: 6 Liter Summa Canister (100% Certified)

		Method
Surrogates	%Recovery	Limits
Toluene-d8	106	70-130
1,2-Dichloroethane-d4	100	70-130
4-Bromofluorobenzene	103	70-130



Client Sample ID: Lab Blank Lab ID#: 1504335A-02A EPA METHOD TO-15 GC/MS FULL SCAN

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File Name: Dil. Factor:	j042307d 1.00	Date Date	e of Collection: NA e of Analysis: 4/23	/15 01:23 PM
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Benzene	0.50	Not Detected	1.6	Not Detected
Toluene	0.50	Not Detected	1.9	Not Detected
Ethyl Benzene	0.50	Not Detected	2.2	Not Detected
m,p-Xylene	0.50	Not Detected	2.2	Not Detected
o-Xylene	0.50	Not Detected	2.2	Not Detected
TPH ref. to Gasoline (MW=100)	50	Not Detected	200	Not Detected

		Method
Surrogates	%Recovery	Limits
Toluene-d8	100	70-130
1,2-Dichloroethane-d4	101	70-130
4-Bromofluorobenzene	98	70-130



Client Sample ID: CCV Lab ID#: 1504335A-03A EPA METHOD TO-15 GC/MS FULL SCAN

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File Name: Dil. Factor:	j042302a 1.00	Date of Collection: NA Date of Analysis: 4/23/15 10:17 AM
Compound		%Recovery
Benzene		96
Toluene		97
Ethyl Benzene		99
m,p-Xylene		103
o-Xylene		106
TPH ref. to Gasoline (MW=100)		100

		Method
Surrogates	%Recovery	Limits
Toluene-d8	104	70-130
1,2-Dichloroethane-d4	104	70-130
4-Bromofluorobenzene	100	70-130



Client Sample ID: LCS Lab ID#: 1504335A-04A EPA METHOD TO-15 GC/MS FULL SCAN

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File Name: Dil. Factor:	j042303a 1.00	Date of Collec Date of Analys	tion: NA sis: 4/23/15 10:50 AM
Compound		%Recovery	Method Limits
Benzene		101	70-130
Toluene		103	70-130
Ethyl Benzene		108	70-130
m,p-Xylene		112	70-130
o-Xylene		115	70-130
TPH ref. to Gasoline (MW=100)		Not Spiked	

Surrogates	%Recovery	Method Limits
Toluene-d8	104	70-130
1,2-Dichloroethane-d4	102	70-130
4-Bromofluorobenzene	105	70-130



Client Sample ID: LCSD Lab ID#: 1504335A-04AA EPA METHOD TO-15 GC/MS FULL SCAN

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File Name: Dil. Factor:	j042304a 1.00	Date of Collection: NA Date of Analysis: 4/23/15 11:21 AM		
Compound		%Recovery	Method Limits	
Benzene		102	70-130	
Toluene		103	70-130	
Ethyl Benzene		109	70-130	
m,p-Xylene		113	70-130	
o-Xylene		116	70-130	
TPH ref. to Gasoline (MW=100)		Not Spiked		

Surrogates	%Recovery	Method Limits
Toluene-d8	103	70-130
1,2-Dichloroethane-d4	100	70-130
4-Bromofluorobenzene	103	70-130



5/1/2015 Ms. Mary Benzinger Maul Foster and Alongi Inc. 2001 NW 19th Ave Suite 200 Portland OR 97209

Project Name: Bus Barn Project #: 0239.28.05 Workorder #: 1504335B

Dear Ms. Mary Benzinger

The following report includes the data for the above referenced project for sample(s) received on 4/20/2015 at Air Toxics Ltd.

The data and associated QC analyzed by Modified ASTM D-1946 are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Air Toxics Ltd. for your air analysis needs. Air Toxics Ltd. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Kelly Buettner at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

Killy Butte

Kelly Buettner Project Manager

A Eurofins Lancaster Laboratories Company

180 Blue Ravine Road, Suite B Folsom, CA 95630



WORK ORDER #: 1504335B

Work Order Summary

CLIENT:	Ms. Mary Benzinger	BILL TO:	Accounts Payable
	Maul Foster and Alongi Inc.		Maul Foster and Alongi Inc.
	2001 NW 19th Ave		400 E. Mill Plain Blvd
	Suite 200		Suite 400
	Portland, OR 97209		Vancouver, WA 98660
PHONE:	971-544-2139	P.O. #	
FAX:	971-544-2140	PROJECT #	0239.28.05 Bus Barn
DATE RECEIVED:	04/20/2015	CONTACT	Kally Duattnar
DATE COMPLETED:	05/01/2015	contact.	Keny Ductulei

		KECEH I	FIIIAL
NAME	<u>TEST</u>	VAC./PRES.	PRESSURE
SS-1	Modified ASTM D-1946	4.7 "Hg	4.8 psi
Lab Blank	Modified ASTM D-1946	NA	NA
LCS	Modified ASTM D-1946	NA	NA
LCSD	Modified ASTM D-1946	NA	NA
	<u>NAME</u> SS-1 Lab Blank LCS LCSD	NAMETESTSS-1Modified ASTM D-1946Lab BlankModified ASTM D-1946LCSModified ASTM D-1946LCSDModified ASTM D-1946	NAMETESTVAC./PRES.SS-1Modified ASTM D-19464.7 "HgLab BlankModified ASTM D-1946NALCSModified ASTM D-1946NALCSDModified ASTM D-1946NA

CERTIFIED BY:

layes

05/01/15 DATE:

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FINAT

Technical Director

Certification numbers: AZ Licensure AZ0775, NJ NELAP - CA016, NY NELAP - 11291, TX NELAP - T104704343-14-7, UT NELAP CA009332014-5, VA NELAP - 460197, WA NELAP - C935 Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program) Accreditation number: CA300005, Effective date: 10/18/2014, Expiration date: 10/17/2015. Eurofins Air Toxics Inc.. certifies that the test results contained in this report meet all requirements of the NELAC standards

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LABORATORY NARRATIVE Modified ASTM D-1946 Maul Foster and Alongi Inc. Workorder# 1504335B

One 6 Liter Summa Canister (100% Certified) sample was received on April 20, 2015. The laboratory performed analysis via Modified ASTM Method D-1946 for Helium in air using GC/TCD. The method involves direct injection of 1.0 mL of sample.

Method modifications taken to run these samples are summarized in the table below. Specific project requirements may over-ride the ATL modifications.

Requirement	ASTM D-1946	ATL Modifications
Calibration	A single point calibration is performed using a reference standard closely matching the composition of the unknown.	A minimum of 5-point calibration curve is performed. Quantitation is based on average Response Factor.
Reference Standard	The composition of any reference standard must be known to within 0.01 mol % for any component.	The standards used by ATL are blended to a >/= 95% accuracy.
Sample Injection Volume	Components whose concentrations are in excess of 5 % should not be analyzed by using sample volumes greater than 0.5 mL.	The sample container is connected directly to a fixed volume sample loop of 1.0 mL on the GC. Linear range is defined by the calibration curve. Bags are loaded by vacuum.
Normalization	Normalize the mole percent values by multiplying each value by 100 and dividing by the sum of the original values. The sum of the original values should not differ from 100% by more than 1.0%.	Results are not normalized. The sum of the reported values can differ from 100% by as much as 15%, either due to analytical variability or an unusual sample matrix.
Precision	Precision requirements established at each concentration level.	Duplicates should agree within 25% RPD for detections > 5 X's the RL.

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

There were no analytical discrepancies.



Definition of Data Qualifying Flags

Seven qualifiers may have been used on the data analysis sheets and indicate as follows:

- B Compound present in laboratory blank greater than reporting limit.
- J Estimated value.
- E Exceeds instrument calibration range.
- S Saturated peak.
- Q Exceeds quality control limits.
- U Compound analyzed for but not detected above the detection limit.
- M Reported value may be biased due to apparent matrix interferences.

File extensions may have been used on the data analysis sheets and indicates as follows:

- a-File was requantified
- b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue



Summary of Detected Compounds NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

Client Sample ID: SS-1

Lab ID#: 1504335B-01A No Detections Were Found.



Client Sample ID: SS-1 Lab ID#: 1504335B-01A NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name: Dil. Factor:	10042319c 1.57	Date of Collection: 4/15/15 3:36:00 PM Date of Analysis: 4/23/15 09:08 PM	
Compound		Rpt. Limit (%)	Amount (%)
Helium		0.078	Not Detected

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Container Type: 6 Liter Summa Canister (100% Certified)



Client Sample ID: Lab Blank Lab ID#: 1504335B-02A NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name: Dil. Factor:	10042303c 1.00	Date of Collection: NA Date of Analysis: 4/23/15 09:39 AM	
Compound		Rpt. Limit (%)	Amount (%)
Helium		0.050	Not Detected

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Client Sample ID: LCS Lab ID#: 1504335B-03A NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name: Dil. Factor:	10042302c 1.00	Date of Collection Date of Analysis	on: NA s: 4/23/15 08:57 AM
Compound		%Recovery	Method Limits
Helium		102	85-115



Client Sample ID: LCSD Lab ID#: 1504335B-03AA NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name: Dil. Factor:	10042320c 1.00	Date of Collec Date of Analy	ction: NA sis: 4/23/15 09:47 PM
Compound		%Recovery	Method Limits
Helium		102	85-115



5/1/2015 Ms. Mary Benzinger Maul Foster and Alongi Inc. 2001 NW 19th Ave Suite 200 Portland OR 97209

Project Name: Bus Barn Project #: 0239.28.05 Workorder #: 1504335C

Dear Ms. Mary Benzinger

The following report includes the data for the above referenced project for sample(s) received on 4/20/2015 at Air Toxics Ltd.

The data and associated QC analyzed by Modified TO-15 APH are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Air Toxics Ltd. for your air analysis needs. Air Toxics Ltd. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Kelly Buettner at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

Killy Butte

Kelly Buettner Project Manager

A Eurofins Lancaster Laboratories Company

180 Blue Ravine Road, Suite B Folsom, CA 95630



WORK ORDER #: 1504335C

Work Order Summary

CLIENT:	Ms. Mary Benzinger	BILL TO:	Accounts Payable
	Maul Foster and Alongi Inc.		Maul Foster and Alongi Inc.
	2001 NW 19th Ave		400 E. Mill Plain Blvd
	Suite 200		Suite 400
	Portland, OR 97209		Vancouver, WA 98660
PHONE:	971-544-2139	P.O. #	
FAX:	971-544-2140	PROJECT #	0239.28.05 Bus Barn
DATE RECEIVED:	04/20/2015	CONTACT	Kally Buottnor
DATE COMPLETED:	05/01/2015	contact.	Keny Buetmen

			KECEIF I	FINAL
FRACTION #	NAME	TEST	VAC./PRES.	PRESSURE
01A	SS-1	Modified TO-15 APH	4.7 "Hg	4.8 psi
01B	SS-1	Modified TO-15 APH	4.7 "Hg	4.8 psi
02A	Lab Blank	Modified TO-15 APH	NA	NA
02B	Lab Blank	Modified TO-15 APH	NA	NA
03A	CCV	Modified TO-15 APH	NA	NA
03B	CCV	Modified TO-15 APH	NA	NA

CERTIFIED BY:

layes

05/01/15 DATE:

DECEIDT

FINAT

Technical Director

Certification numbers: AZ Licensure AZ0775, NJ NELAP - CA016, NY NELAP - 11291, TX NELAP - T104704343-14-7, UT NELAP CA009332014-5, VA NELAP - 460197, WA NELAP - C935 Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program) Accreditation number: CA300005, Effective date: 10/18/2014, Expiration date: 10/17/2015. Eurofins Air Toxics Inc.. certifies that the test results contained in this report meet all requirements of the NELAC standards

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LABORATORY NARRATIVE Modified TO-15 & VPH Fractions Maul Foster and Alongi Inc. Workorder# 1504335C

One 6 Liter Summa Canister (100% Certified) sample was received on April 20, 2015. The laboratory performed analysis via EPA Method TO-15 and Air Toxics VPH (Volatile Petroleum Hydrocarbon) methods for the Determination of VPH Fractions using GC/MS in the full scan mode. The method involves concentrating up to 0.5 liters of air. The concentrated aliquot is then flash vaporized and swept through a water management system to remove water vapor. Following dehumidification, the sample passes directly into the GC/MS for analysis. This method is designed to measure gaseous phase aliphatic and aromatic compounds in ambient air and soil gas collected in stainless steel Summa canisters. Air Toxics VPH method is a hybrid of EPA TO-15, MADEP APH and WSDE VPH methods. Chromatographic peaks were identified via mass spectrum as either aliphatic or aromatic petroleum hydrocarbons and included in the appropriate range as defined by the method. The volatile Aliphatic hydrocarbons are collectively quantified within the C5 to C6 range, C6 to C8 range, C8 to C10 range and the C10 to C12 range. Additionally, the volatile Aromatic hydrocarbons are collectively quantified within the C5 to C6 ranges refer to the equivalent carbon (EC) ranges.

Aliphatic data is calculated from the Total Ion chromatogram which has been reprocessed in a duplicate file differentiated from the original by the addition of an alphanumeric extension. The Aromatic calculation also uses the information contained in the associated Extracted Ion file.

Receiving Notes

🔅 eurofins

There were no receiving discrepancies.

Analytical Notes

There were no analytical discrepancies.

Definition of Data Qualifying Flags

Eight qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).

- J Estimated value.
- E Exceeds instrument calibration range.
- S Saturated peak.
- Q Exceeds quality control limits.
- U Compound analyzed for but not detected above the reporting limit.
- UJ- Non-detected compound associated with low bias in the CCV
- N The identification is based on presumptive evidence.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified

b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue



Summary of Detected Compounds MODIFIED METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: SS-1

Lab ID#: 1504335C-01A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
>C6-C8 Aliphatic Hydrocarbons (ref. to Heptane)	16	44	64	180
>C8-C10 Aliphatic Hydrocarbons (ref. to Decane)	16	120	91	700
>C10-C12 Aliphatic Hydrocarbons (ref. to Dodecane)	16	160	110	1100
Client Sample ID: SS-1				
Lab ID#: 1504335C-01B				
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)

>C8-C10 Aromatic Hydrocarbons 16 32 77 160	16 32	-C10 Aromatic Hydrocarbons	6 32	77	160
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Client Sample ID: SS-1 Lab ID#: 1504335C-01A MODIFIED METHOD TO-15 GC/MS FULL SCAN

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File Name: Dil. Factor:	j042309a Date of Collection: 4/15/15 3:36:00 1.57 Date of Analysis: 4/23/15 03:48 PI		5/15 3:36:00 PM /15 03:48 PM	
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
C5-C6 Aliphatic Hydrocarbons (ref. to Pentane + Hexane)	16	Not Detected	51	Not Detected
>C6-C8 Aliphatic Hydrocarbons (ref. to Heptane)	16	44	64	180
>C8-C10 Aliphatic Hydrocarbons (ref. to Decane)	16	120	91	700
>C10-C12 Aliphatic Hydrocarbons (ref. to Dodecane)	16	160	110	1100

Container Type: 6 Liter Summa Canister (100% Certified)



Client Sample ID: SS-1 Lab ID#: 1504335C-01B MODIFIED METHOD TO-15 GC/MS FULL SCAN

File Name:	j042309c Date of Collection: 4/15/15 3:36:00 F			5/15 3:36:00 PM
Dil. Factor:	1.57 Date of Analysis: 4/23/15 03:48 PM			/15 03:48 PM
Compound	Rpt. Limit	Amount	Rpt. Limit	Amount
	(ppbv)	(ppbv)	(ug/m3)	(ug/m3)
>C8-C10 Aromatic Hydrocarbons	16	32	77	160
>C10-C12 Aromatic Hydrocarbons	16	Not Detected	86	Not Detected

٦

Container Type: 6 Liter Summa Canister (100% Certified)



Client Sample ID: Lab Blank Lab ID#: 1504335C-02A MODIFIED METHOD TO-15 GC/MS FULL SCAN

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File Name: Dil. Factor:	j042307a Date of Collection: NA 1.00 Date of Analysis: 4/23/15 01::		/15 01:23 PM	
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
C5-C6 Aliphatic Hydrocarbons (ref. to Pentane + Hexane)	10	Not Detected	32	Not Detected
>C6-C8 Aliphatic Hydrocarbons (ref. to Heptane)	10	Not Detected	41	Not Detected
>C8-C10 Aliphatic Hydrocarbons (ref. to Decane)	10	Not Detected	58	Not Detected
>C10-C12 Aliphatic Hydrocarbons (ref. to Dodecane)	10	Not Detected	70	Not Detected



Client Sample ID: Lab Blank Lab ID#: 1504335C-02B MODIFIED METHOD TO-15 GC/MS FULL SCAN

File Name:	j042307c	Date of Collection: NA		
Dil. Factor:	1.00	Date of Analysis: 4/23/15 01:23 PM		
Compound	Rpt. Limit	Amount	Rpt. Limit	Amount
	(ppbv)	(ppbv)	(ug/m3)	(ug/m3)
>C8-C10 Aromatic Hydrocarbons	10	Not Detected	49	Not Detected
>C10-C12 Aromatic Hydrocarbons	10	Not Detected	55	Not Detected

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Client Sample ID: CCV Lab ID#: 1504335C-03A MODIFIED METHOD TO-15 GC/MS FULL SCAN

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File Name: Dil. Factor:	j042305a 1.00	Date of Collection: NA Date of Analysis: 4/23/15 12:02 F	PM
Compound		%Recovery	
C5-C6 Aliphatic Hydrocarbons (ref. to Pentane + Hexane)		97	
>C6-C8 Aliphatic Hydrocarbons (ref. to Heptane)		98	
>C8-C10 Aliphatic Hydrocarbons (ref. to Decane)		98	
>C10-C12 Aliphatic Hydrocarbons (ref. to Dodecane)		101	



Client Sample ID: CCV Lab ID#: 1504335C-03B MODIFIED METHOD TO-15 GC/MS FULL SCAN

File Name: Dil. Factor:	j042305c 1.00	Date of Collection: NA Date of Analysis: 4/23/15 12:02 PM
Compound		%Recovery
 >C8-C10 Aromatic Hydrocarbons >C10-C12 Aromatic Hydrocarbons 		104 106

APPENDIX D DATA VALIDATION MEMORANDUM



DATA QUALITY ASSURANCE/QUALITY CONTROL REVIEW

PROJECT NO. 0239.28.05 | OCTOBER 9, 2014 | CITY OF RIDGEFIELD

This report reviews the analytical results for reconnaissance groundwater and soil samples collected by the Maul Foster & Alongi, Inc. (MFA) project team on the Bus Barn site in Ridgefield, Washington. The samples were collected on September 15, 2014 and April 15, 2015.

Specialty Analytical, Inc. (SA) performed the analyses. SA report numbers 1409099, 1409113, 1409114 and 1504161 were reviewed. The analyses performed and samples analyzed are listed below. Some samples were archived without analyses performed. Data validation tracking sheets associated with the analyses, documenting data review, are attached.

Analysis	Reference
BTEX	USEPA 8021B
Diesel and Lube Oil	NWTPH-Dx
Dissolved Metals	USEPA 6020A
Gasoline	NWTPH-Gx
HCID	NWTPH-HCID
Volatile Organic Compounds	USEPA 8260B

BTEX = benzene, toluene, ethylbenzene, and total xylenes. HCID = Hydrocarbon Identification.

NWTPH = Northwest Total Petroleum Hydrocarbons.

USEPA = U.S. Environmental Protection Agency.

Samples Analyzed					
Report 1409099	Report 1409113	Report 1409114	Report 1504161		
B1-W	B5-W	B1-S-2.0	B8-S-7.5		
B2-W	B7-W	B1-S-8.5	B8-W-8.0		
B3-W	B6-W	B2-S-2.0	B9-S-6.0		
B4-W	B6-W-DUP	B2-S-8.0	B9-W-10.5		
-	Trip Blank	B3-S-2.0	B10-S-5.5		
-	-	B3-S-7.0	B8-S-5.5		
-	-	B4-S-3.0	B9-S-8.5		
-	-	B4-S-7.0	B10-S-8.0		
-	-	B5-S-2.0	B10-W-10.5		
-	-	B5-S-7.0	B11-S-5.5		
-	-	B6-S-2.0	B11-S-8.0		
-	-	B6-S-8.5	B12-S-5.5		
-	-	B7-S-1.5	B12-S-8.0		

Samples Analyzed					
Report 1409099	Report 1409113	Report 1409114	Report 1504161		
-	-	B7-S-8.5	B13-S-5.0		
			B13-S-8.0		
			B14-S-5.0		
			B14-S-7.5		
			B14-W-8.0		
			B15-S-5.5		
			B15-S-8.0		
			B16-S-5.5		
			B16-S-8.0		

DATA QUALIFICATIONS

Analytical results were evaluated according to applicable sections of USEPA procedures (USEPA, 2008, 2010) and appropriate laboratory and method-specific guidelines (SA, 2014; USEPA, 1986).

In reports 1409113, 1409114 and 1504161, various sample results for diesel by Method NWTPH-Dx were identified by the laboratory as containing compounds not identified as specific hydrocarbon products. Additionally, lube oil results for samples B4-S-3.0, B4-S-7.0, and B7-S-8.5 were biased because of diesel results. These results were quantified using the appropriate calibration standards. The results for diesel have been qualified with a "J" as estimated.

Report	Sample	Component	Original Result (ug/L)	Qualified Result (ug/L)
1409113	B7-W	Diesel	0.853	0.853 J
1504161	B8-W-8.0	Diesel	2.00	2.00 J

ug/L = micrograms per liter.

Report	Sample	Component	Original Result (mg/kg)	Qualified Result (mg/kg)
1409114	B3-S-7.0	Diesel	461	461 J
1409114	B4-S-3.0	Diesel	1970	1970 J
1409114	B4-S-3.0	Lube Oil	113	113 J
1409114	B4-S-7.0	Diesel	4200	4200 J
1409114	B4-S-7.0	Lube Oil	151	151 J
1409114	B7-S-8.5	Lube Oil	170	170 J
1504161	B12-S-5.5	Diesel	50.0	50.0 J
1504161	B12-S-8.0	Diesel	548	548 J

mg/kg = milligrams per kilogram.

The data are considered acceptable for their intended use, with the appropriate data qualifiers assigned.

HOLDING TIMES, PRESERVATION, AND SAMPLE STORAGE

Holding Times

Extractions and analyses were performed within the recommended holding time criteria.

Preservation and Sample Storage

The samples were preserved and stored appropriately.

BLANKS

Method Blanks

Laboratory method blank analyses were performed at the required frequencies. For purposes of data qualification, the method blanks were associated with all samples prepared in the analytical batch. All laboratory method blanks were non-detect for all target analytes.

Trip Blanks

Trip blanks were submitted with 1409113 for USEPA Method 8260B analysis. All target analytes were non-detect.

Equipment Rinsate Blanks

Equipment rinsate blanks were not required for this sampling event, as all samples were collected using dedicated, single-use equipment.

SURROGATE RECOVERY RESULTS

The samples were spiked with surrogate compounds to evaluate laboratory performance on individual samples. The laboratory appropriately documented and qualified surrogate outliers. Associated batch quality assurance/quality control for samples with surrogate outliers was within acceptance limits.

The reviewer took no action based on or surrogate percent recoveries that were outside acceptance limits due to dilutions necessary to quantify high concentrations of target analytes present in the samples. NWTPH-HCID surrogate percent recovery exceedances were not qualified because the results are not quantified and are reported as presence or absence.

In report 1409114, the NWTPH-Gx surrogate 4-bromofluorobenzene exceeded upper percent recovery acceptance limits for samples B2-S-8.0, B3-S-7.0, B4-S-3.0, B4-S-7.0, and B7-S-8.5 because of matrix interference. The USEPA Method 8021B surrogate 4-bromofluorobenzene also exceeded upper percent recovery acceptance limits for B3-S-7.0, B4-S-3.0, and B4-S-7.0 because of matrix interference. Associated detected sample results were qualified with "J" as estimated. Non-detect results were not qualified.

Report	Sample	Component	Original Result (mg/kg)	Qualified Result (mg/kg)
1409114	B2-S-8.0	Gasoline	444	444 J
1409114	B3-S-7.0	Gasoline	1320	1320 J
1409114	B3-S-7.0	Toluene	0.0395	0.0395 J
1409114	B3-S-7.0	Ethylbenzene	2.06	2.06 J
1409114	B4-S-3.0	Toluene	0.364	0.364 J
1409114	B4-S-3.0	Ethylbenzene	8.27	8.27 J
1409114	B4-S-3.0	Gasoline	2990	2990 J
1409114	B4-S-7.0	Gasoline	4310	4310 J
1409114	B4-S-7.0	Toluene	1.18	1.18 J
1409114	B4-S-7.0	Ethylbenzene	9.08	9.08 J
1409114	B4-S-7.0	Total Xylenes	4.49	4.49 J
1409114	B7-S-8.5	Gasoline	466	466 J

In report 1409114, the NWTPH-Dx surrogate o-terphenyl exceeded upper percent recovery acceptance limits for sample B7-S-8.5 (182%) because of matrix interference. Associated detected sample results were qualified with "J" as estimated. Non-detect results were not qualified. NWTPH-Dx results flagged by the laboratory because of carryover are qualified in the data qualifications section above.

Report	Sample	Component	Original Result (mg/kg)	Qualified Result (mg/kg)
1409114	B7-S-8.5	Diesel	2650	2650 J

In report 1504161, some NWTPH-Gx, NWTPH-Dx and BTEX surrogate results exceeded upper percent recovery acceptance limits due to matrix interference. Results were not qualified as the exceedances were minor, associated sample data was non-detect, or the target analyte results were significantly greater than the surrogate added.

All remaining surrogate recoveries were within acceptance limits.

MATRIX SPIKE/MATRIX SPIKE DUPLICATE RESULTS

Matrix spike/matrix spike duplicate (MS/MSD) results are used to evaluate laboratory precision and accuracy. All MS/MSD samples were extracted and analyzed at the required frequency.

In report 1409113, the USEPA Method 8021B MS/MSD exceeded percent recovery acceptance limits for ethylbenzene and total xylenes because of matrix interference. The MS/MSD were prepared with a sample from an unrelated project and remaining batch quality control met acceptance criteria; thus, no results were qualified.

In report 1504161, the MS for ethylbenzene exceeded the upper limit of percent recovery. No actions were taken as all associated results were non-detects.

All remaining MS/MSD results were within acceptance limits for percent recovery and relative percent differences (RPDs).

LABORATORY DUPLICATE RESULTS

Duplicate results are used to evaluate laboratory precision. All duplicate samples were extracted and analyzed at the required frequency. Some NWTPH-Dx duplicate results exceeded RPD criteria. No results were qualified as the detections were barely above the detection limit. All other RPDs were within acceptance limits.

LABORATORY CONTROL SAMPLE/LABORATORY CONTROL SAMPLE DUPLICATE RESULTS

A laboratory control sample/laboratory control sample duplicate (LCS/LCSD) is spiked with target analytes to provide information on laboratory precision and accuracy. The LCS/LCSD samples were extracted and analyzed at the required frequency. All LCS/LCSD analytes were within acceptance limits for percent recovery and RPD.

FIELD DUPLICATE RESULTS

Field duplicate samples measure both field and laboratory precision. One field duplicate was submitted for analysis in report 1409113 (B6-W/B6-W-DUP). MFA uses acceptance criteria of 100 percent RPD for results that are less than five times the method reporting limit (MRL), or 50 percent RPD for results that are greater than five times the MRL. Non-detect data are not used in the evaluation of field duplicate results. All analytes were within the acceptance criteria.

CONTINUING CALIBRATION VERIFICATION AND INITIAL CALIBRATION VERIFICATION RESULTS

Continuing calibration verification (CCV) and initial calibration verification (ICV) results are used to demonstrate instrument precision and accuracy through the end of the sample batch. A NWTPH-Dx CCV for diesel slightly exceeded the upper limits of acceptance criteria, but no results were qualified as all associated results were non-detect.

All remaining CCVs and ICVs were within acceptance limits for percent recovery.

REPORTING LIMITS

SA used routine reporting limits for non-detect results, except for samples requiring dilutions because of high analyte concentrations and/or matrix interferences.

DATA PACKAGE

The data packages were reviewed for transcription errors, omissions, and anomalies. In report 1409113, the chain of custody was submitted to the laboratory with a request for total lead analysis. The analysis request was changed to dissolved lead at the request of the MFA

project manager. The reviewer confirmed that the samples submitted for USEPA 6020A analysis were field filtered.

No additional issues were found.
- USEPA. 1986. Test methods for evaluating solid waste: physical/chemical methods. EPA-530/SW-846. U.S. Environmental Protection Agency, Office of Solid Waste and Emergency Response. September (revision 6, February 2007).
- USEPA. 2008. USEPA contract laboratory program, national functional guidelines for organics data review. EPA 540/R-08/01. U.S. Environmental Protection Agency, Office of Emergency and Remedial Response. June.
- USEPA. 2010. USEPA contract laboratory program national functional guidelines for inorganic superfund data review. EPA 540/R-10/011. U.S. Environmental Protection Agency, Office of Superfund Remediation and Technology Innovation. January.

ATTACHMENT DATA VALIDATION TRACKING



This document tracks Stage 2A validation completion for the analysis indicated below.

Lab Report	1409099	Reviewer	MEB
Analysis/Method	NWTPH-HCID	Date	9/30/2014
Batch Number(s)	8188		

	Validation Area	Acceptable Yes/No/NA/NR	Comments	Q
	Temperature	Yes		
<u>0</u>	Holding Time	Yes		
d L	Trip Blank	NA		
Sa	Field/Eq. Blank	NA		
	Field Dup RPD	NA		
Ľ.	ССВ	NA		
alib	ICV	NA		
U U	CCV	NA		
	Method Blank	Yes		
	LCS/LCSD %	NA		
ch	LCS/LCSD RPD	NA		
Bat	Lab Dup RPD	NA		
	MS/MSD %	NA		
	MS/MSD RPD	NA		
_	Dilution	Yes		
era	Reporting Limit	Yes		
Gen	MDL	NA		
0	Surrogates	Yes		
SL	Labeled Analog	NA		
oxir	EMPC	NA		
Ō	2378-TCDF	NA		

Samples reviewed (in bold font):						
B1-W	Trip Blank	-	-			
B2-W	-	-	-			
B3-W	-	-	-			
B4-W	-	-	-			

Notes:		
Definitions:		
Calibr. = calibration.	LCS/LCSD = laboratory control	NA = not applicable.
CCB = continuing calibration blank.	sample/laboratory control sample	NR = not reported.
CCV = continuing calibration verification.	MDI = method detection limit	Q = qualifier.
EMPC = estimated maximum potential concentration.	MS/MSD = matrix spike/matrix spike	RPD = relative percent difference.
ICV = initial calibration verification.	duplicate.	

This document tracks Stage 2A validation completion for the analysis indicated below.

Lab Report	1409113	Reviewer	MEB
Analysis/Method	NWTPH-HCID	Date	9/30/2014
Batch Number(s)	8201		

	Validation Area	Acceptable Yes/No/NA/NR	Comments	Q
	Temperature	Yes		
<u>0</u>	Holding Time	Yes		
d L	Trip Blank	NA		
Sa	Field/Eq. Blank	NA		
	Field Dup RPD	NA		
Ŀ	ССВ	NA		
alib	ICV	NA		
Ŭ	CCV	NA		
	Method Blank	Yes		
	LCS/LCSD %	NA		
С	LCS/LCSD RPD	NA		
Bat	Lab Dup RPD	NA		
	MS/MSD %	NA		
	MS/MSD RPD	NA		
_	Dilution	No		
era	Reporting Limit	Yes		
Gen	MDL	NA		
0	Surrogates	Yes		
SL	Labeled Analog	NA		
oxir	EMPC	NA		
Ō	2378-TCDF	NA		

Samples reviewed (in bold font):					
B5-W	Trip Blank	-	-		
B6-W	-	-	-		
B7-W	-	-	-		
B6-W-DUP	-	-	-		

Notes:		
Definitions:		
Calibr. = calibration.	LCS/LCSD = laboratory control	NA = not applicable.
CCB = continuing calibration blank.	sample/laboratory control sample	NR = not reported.
CCV = continuing calibration verification.	MDL - mathed dataction limit	Q = qualifier.
EMPC = estimated maximum potential concentration.		RPD = relative percent difference.
ICV = initial calibration verification.	duplicate.	

This document tracks Stage 2A validation completion for the analysis indicated below.

Lab Report	1409113	Reviewer	MEB
Analysis/Method	NWTPH-DX	Date	9/30/2014
Batch Number(s)	8207		

	Validation Area	Acceptable Yes/No/NA/NR	Comments	Q
	Temperature	Yes		
<u>e</u>	Holding Time	Yes		
dm	Trip Blank	NA		
Sa	Field/Eq. Blank	NA		
	Field Dup RPD	NA		
Ŀ	ССВ	Yes		
alib	ICV	NA		
Ŭ	CCV	Yes		
	Method Blank	Yes		
	LCS/LCSD %	Yes		
ch	LCS/LCSD RPD	Yes		
Bat	Lab Dup RPD	yes		
	MS/MSD %	NA		
	MS/MSD RPD	NA		
_	Dilution	No		
era	Reporting Limit	Yes		
Gen	MDL	NA		
0	Surrogates	Yes		
SL	Labeled Analog	NA		
oxir	EMPC	NA		
D	2378-TCDF	NA		

Samples reviewed (in bold font):					
B5-W	Trip Blank	-	-		
B6-W	-	-	-		
B7-W	-	-	-		
B6-W-DUP	-	-	-		

Notes:		
Definitions:		
Calibr. = calibration.	LCS/LCSD = laboratory control	NA = not applicable.
CCB = continuing calibration blank.	sample/laboratory control sample	NR = not reported.
CCV = continuing calibration verification.	MDI method detection limit	Q = qualifier.
EMPC = estimated maximum potential concentration.		RPD = relative percent difference.
ICV = initial calibration verification.	MS/MSD = matrix spike/matrix spike duplicate.	

This document tracks Stage 2A validation completion for the analysis indicated below.

Lab Report	1409113	Reviewer	MEB
Analysis/Method	NWTPH-GX	Date	9/30/2014
Batch Number(s)	R16925		

	Validation Area	Acceptable Yes/No/NA/NR	Comments	Q
	Temperature	Yes		
e	Holding Time	Yes		
dm	Trip Blank	NA		
Sa	Field/Eq. Blank	NA		
	Field Dup RPD	NA		
Ľ.	ССВ	Yes		
alib	ICV	NA		
C	CCV	Yes		
	Method Blank	Yes		
	LCS/LCSD %	Yes		
ch	LCS/LCSD RPD	Yes		
Bat	Lab Dup RPD	Yes		
	MS/MSD %	NA		
	MS/MSD RPD	NA		
	Dilution	No		
era	Reporting Limit	Yes		
Gen	MDL	NA		
U	Surrogates	Yes		
SL	Labeled Analog	NA		
oxir	EMPC	NA		
D	2378-TCDF	NA		

Samples reviewed (in bold font):					
B5-W	Trip Blank	-	-		
B6-W	-	-	-		
B7-W	-	-	-		
B6-W-DUP	-	-	-		

Notes:		
Definitions:		
Calibr. = calibration.	LCS/LCSD = laboratory control	NA = not applicable.
CCB = continuing calibration blank.	sample/laboratory control sample	NR = not reported.
CCV = continuing calibration verification.	MDI method detection limit	Q = qualifier.
EMPC = estimated maximum potential concentration.		RPD = relative percent difference.
ICV = initial calibration verification.	MS/MSD = matrix spike/matrix spike duplicate.	

This document tracks Stage 2A validation completion for the analysis indicated below.

Lab Report	1409113	Reviewer	MEB
Analysis/Method	BTEX	Date	9/30/2014
Batch Number(s)	R16924		

	Validation Area	Acceptable Yes/No/NA/NR	Comments	Q
	Temperature	Yes		
<u>0</u>	Holding Time	Yes		
d L	Trip Blank	NA		
Sa	Field/Eq. Blank	NA		
	Field Dup RPD	NA		
Ľ.	ССВ	NA		
alib	ICV	NA		
U U	CCV	NA		
	Method Blank	Yes		
ch	LCS/LCSD %	Yes		
	LCS/LCSD RPD	NA		
Bat	Lab Dup RPD	NA		
	MS/MSD %	Yes		
	MS/MSD RPD	Yes		
_	Dilution	No		
era	Reporting Limit	Yes		
Sen	MDL	NA		
U	Surrogates	Yes		
SL	Labeled Analog	NA		
oxir	EMPC	NA		
Ō	2378-TCDF	NA		

Samples reviewed (in bold font):					
B5-W	Trip Blank	-	-		
B6-W	-	-	-		
B7-W	-	-	-		
B6-W-DUP	-	-	-		

Notes:		
Definitions:		
Calibr. = calibration.	LCS/LCSD = laboratory control	NA = not applicable.
CCB = continuing calibration blank.	sample/laboratory control sample	NR = not reported.
CCV = continuing calibration verification.	MDL – method detection limit	Q = qualifier.
EMPC = estimated maximum potential concentration.	MS/MSD = matrix spike/matrix spike	RPD = relative percent difference.
ICV = initial calibration verification.	duplicate.	

This document tracks Stage 2A validation completion for the analysis indicated below.

Lab Report	1409113	Reviewer	MEB
Analysis/Method	SW6020A	Date	9/30/2014
Batch Number(s)	8335		

	Validation Area	Acceptable Yes/No/NA/NR	Comments	Q
	Temperature	Yes		
<u>e</u>	Holding Time	Yes		
d L	Trip Blank	NA		
Sa	Field/Eq. Blank	NA		
	Field Dup RPD	NA		
Ľ.	ССВ	NA		
alib	ICV	Yes		
Ŭ	CCV	NA		
	Method Blank	Yes		
	LCS/LCSD %	NA		
ch	LCS/LCSD RPD	NA		
Bat	Lab Dup RPD	Yes		
	MS/MSD %	Yes		
	MS/MSD RPD	Yes		
_	Dilution	Yes		
era	Reporting Limit	Yes		
Gen	MDL	NA		
0	Surrogates	Yes		
SL	Labeled Analog	NA		
oxir	EMPC	NA		
Ō	2378-TCDF	NA		

Samples reviewed (in bold font):					
B5-W	Trip Blank	-	-		
B6-W	-	-	-		
B7-W	-	-	-		
B6-W-DUP	-	-	-		

Notes:		
Definitions:		
Calibr. = calibration.	LCS/LCSD = laboratory control	NA = not applicable.
CCB = continuing calibration blank.	sample/laboratory control sample	NR = not reported.
CCV = continuing calibration verification.	MDL – method detection limit	Q = qualifier.
EMPC = estimated maximum potential concentration.	MS/MSD = matrix spike/matrix spike	RPD = relative percent difference.
ICV = initial calibration verification.	duplicate.	

This document tracks Stage 2A validation completion for the analysis indicated below.

Lab Report	1409113	Reviewer	MEB
Analysis/Method	SW8260B	Date	9/30/2014
Batch Number(s)	R16910		

	Validation Area	Acceptable Yes/No/NA/NR	Comments	Q
	Temperature	Yes		
<u>e</u>	Holding Time	Yes		
d L	Trip Blank	NA		
Sa	Field/Eq. Blank	NA		
	Field Dup RPD	NA		
Ŀ.	ССВ	Yes		
alib	ICV	NA		
Ŭ	CCV	Yes		
	Method Blank	Yes		
	LCS/LCSD %	NA		
ch	LCS/LCSD RPD	NA		
Bat	Lab Dup RPD	NA		
	MS/MSD %	Yes		
	MS/MSD RPD	Yes		
_	Dilution	No		
era	Reporting Limit	Yes		
Gen	MDL	NA		
	Surrogates	Yes		
SL	Labeled Analog	NA		
oxir	EMPC	NA		
Dic	2378-TCDF	NA		

Samples reviewed (in bold font):					
B5-W	Trip Blank	-	-		
B6-W	-	-	-		
B7-W	-	-	-		
B6-W-DUP	-	-	-		

Notes:		
Definitions		
Calibr. = calibration. CCB = continuing calibration blank. CCV = continuing calibration verification. EMPC = estimated maximum potential concentration. ICV = initial calibration verification.	LCS/LCSD = laboratory control sample/laboratory control sample duplicate. MDL = method detection limit. MS/MSD = matrix spike/matrix spike duplicate.	NA = not applicable. NR = not reported. Q = qualifier. RPD = relative percent difference.

This document tracks Stage 2A validation completion for the analysis indicated below.

Lab Report	1409114	Reviewer	MEB
Analysis/Method	NWTPH-HCID	Date	10/8/2014
Batch Number(s)	8200		

	Validation Area	Acceptable Yes/No/NA/NR	Comments	Q
	Temperature	Yes		
<u>0</u>	Holding Time	Yes		
du	Trip Blank	NA		
Sa	Field/Eq. Blank	NA		
	Field Dup RPD	NA		
Ľ.	ССВ	NA		
alib	ICV	NA		
O	CCV	NA		
	Method Blank	Yes		
	LCS/LCSD %	NA		
ch	LCS/LCSD RPD	NA		
Bat	Lab Dup RPD	Yes		
	MS/MSD %	NA		
	MS/MSD RPD	NA		
_	Dilution	Yes		
era	Reporting Limit	Yes		
Gen	MDL	NA		
0	Surrogates	No	No qualification necessary. See notes.	
SL	Labeled Analog	NA		
oxir	EMPC	NA		
Ō	2378-TCDF	NA		

Samples reviewed (in bold font):					
B1-S-2.0	B3-S-2.0	B5-S-2.0	B7-S-1.5		
B1-S-8.5	B3-S-7.0	B5-S-7.0	B7-S-8.5		
B2-S-2.0	B4-S-3.0	B6-S-2.0	-		
B2-S-8.0	B4-S-7.0	B6-S-8.5	-		

Notes:

HCID method is qualitative.

This document tracks Stage 2A validation completion for the analysis indicated below.

Lab Report	1409114	Reviewer	MEB
Analysis/Method	NWTPH-Dx	Date	10/8/2014
Batch Number(s)	8233		

	Validation Area	Acceptable Yes/No/NA/NR	Comments	Q
	Temperature	Yes		
<u>0</u>	Holding Time	Yes		
d m	Trip Blank	NA		
Sa	Field/Eq. Blank	NA		
	Field Dup RPD	NA		
<u>.</u>	ССВ	Yes		
alib	ICV	NA		
O	CCV	Yes		
	Method Blank	Yes		
	LCS/LCSD %	Yes		
ch	LCS/LCSD RPD	NA		
Bat	Lab Dup RPD	Yes		
	MS/MSD %	NA		
	MS/MSD RPD	NA		
_	Dilution	Yes		
iera	Reporting Limit	Yes		
Gen	MDL	NA		
0	Surrogates	Yes		
sr	Labeled Analog	NA		
oxir	EMPC	NA		
Dio	2378-TCDF	NA		

Samples reviewed (in bold font):					
B1-S-2.0	B3-S-2.0	B5-S-2.0	B7-S-1.5		
B1-S-8.5	B3-S-7.0	B5-S-7.0	B7-S-8.5		
B2-S-2.0	B4-S-3.0	B6-S-2.0	-		
B2-S-8.0	B4-S-7.0	B6-S-8.5	-		

Notes:

Diesel chromatogram is not a standard pattern: samples B3-S-7.0, B4-S-3.0, B4-S-7.0. Lube oil result for B4-S-3.0, B4-S-7.0, and B7-S-8.5 is biased high because of diesel-range detections. Qualify result with "J."

This document tracks Stage 2A validation completion for the analysis indicated below.

Lab Report	1409114	Reviewer	MEB
Analysis/Method	NWTPH-Gx	Date	10/8/2014
Batch Number(s)	8214		

Volidation Area	Assautable		
validation Area	Yes/No/NA/NR	Comments	Q
Temperature	Yes		
Holding Time	Yes		
Trip Blank	NA		
Field/Eq. Blank	NA		
Field Dup RPD	NA		
ССВ	Yes		
ICV	NA		
CCV	Yes		
Method Blank	Yes		
LCS/LCSD %	Yes		
LCS/LCSD RPD	NA		
Lab Dup RPD	Yes		
MS/MSD %	NA		
MS/MSD RPD	NA		
Dilution	Yes		
Reporting Limit	Yes		
MDL	NA		
Surrogates	No	See notes.	J
Labeled Analog	NA		
EMPC	NA		
2378-TCDF	NA		
	Temperature Holding Time Trip Blank Field/Eq. Blank Field Dup RPD CCB ICV CCV Method Blank LCS/LCSD % LCS/LCSD RPD Lab Dup RPD Lab Dup RPD MS/MSD % MS/MSD % MS/MSD RPD Dilution Reporting Limit MDL Surrogates Labeled Analog EMPC 2378-TCDF	TemperatureYesHolding TimeYesTrip BlankNAField/Eq. BlankNAField Dup RPDNACCBYesICVNACCVYesMethod BlankYesLCS/LCSD %YesLCS/LCSD RPDNALab Dup RPDYesMS/MSD %NAMs/MSD RPDNADilutionYesReporting LimitYesMDLNASurrogatesNoLabeled AnalogNA2378-TCDFNA	Tesh KorkkrikkTemperatureYesHolding TimeYesTrip BlankNAField/Eq. BlankNAField Dup RPDNACCBYesICVNACCVYesMethod BlankYesLCS/LCSD %YesLCS/LCSD RPDNALCS/LCSD RPDNAMathon RPDYesMorrerYesICVNALCS/LCSD RPDNALab Dup RPDYesMS/MSD %NADilutionYesReporting LimitYesMDLNASurrogatesNoEMPCNA2378-TCDFNA

Samples reviewed (in bold font):					
B1-S-2.0	B3-S-2.0	B5-S-2.0	B7-S-1.5		
B1-S-8.5	B3-S-7.0	B5-S-7.0	B7-S-8.5		
B2-S-2.0	B4-S-3.0	B6-S-2.0	-		
B2-S-8.0	B4-S-7.0	B6-S-8.5	-		

Notes:

High surrogate percent recovery for all sample results. B2-S-8.0 (166%), B3-S-7.0 (236%), B4-S-3.0 (578%), B4-S-7.0 (466%), and B7-S-8.5 (151%). Qualify all gasoline results with "J."

This document tracks Stage 2A validation completion for the analysis indicated below.

Lab Report	1409114		Reviewer	MEB
Analysis/Method	BTEX / USEPA 8021		Date	10/8/2014
Batch Number(s)	8212			

	Validation Area	Acceptable Yes/No/NA/NR	Comments	Q
	Temperature	Yes		
<u>0</u>	Holding Time	Yes		
d L	Trip Blank	NA		
Sa	Field/Eq. Blank	NA		
	Field Dup RPD	NA		
Ľ.	ССВ	NA		
alib	ICV	NA		
O	CCV	Yes		
	Method Blank	Yes		
-	LCS/LCSD %	Yes		
ch	LCS/LCSD RPD	NA		
Bat	Lab Dup RPD	NA		
	MS/MSD %	Yes		
	MS/MSD RPD	Yes		
_	Dilution	Yes		
era	Reporting Limit	Yes		
Gen	MDL	NA		
0	Surrogates	No	See notes.	J
SL	Labeled Analog	NA		
oxir	EMPC	NA		
Ō	2378-TCDF	NA		

Samples reviewed (in bold font):					
B1-S-2.0	B3-S-2.0	B5-S-2.0	B7-S-1.5		
B1-S-8.5	B3-S-7.0	B5-S-7.0	B7-S-8.5		
B2-S-2.0	B4-S-3.0	B6-S-2.0	-		
B2-S-8.0	B4-S-7.0	B6-S-8.5	-		

Notes:

High surrogate percent recovery for all samples. B3-S-7.0 (135%), B4-S-3.0 (391%), B4-S-7.0 (466%). Qualify all detected results with "J."

This document tracks Stage 2A validation completion for the analysis indicated below.

Lab Report	1409114		Reviewer	MEB
Analysis/Method	USEPA 6020A (dissolved)		Date	10/8/2014
Batch Number(s)	8219			

	Validation Area	Acceptable Yes/No/NA/NR	Comments	Q
	Temperature	Yes		
<u>0</u>	Holding Time	Yes		
d L	Trip Blank	NA		
Sa	Field/Eq. Blank	NA		
	Field Dup RPD	NA		
Ľ.	ССВ	NA		
alib	ICV	Yes		
U U	CCV	Yes		
	Method Blank	Yes		
	LCS/LCSD %	Yes		
ch	LCS/LCSD RPD	NA		
Bat	Lab Dup RPD	Yes		
	MS/MSD %	Yes		
	MS/MSD RPD	Yes		
_	Dilution	Yes		
era	Reporting Limit	Yes		
Gen	MDL	NA		
0	Surrogates	NA		
SL	Labeled Analog	NA		
oxir	EMPC	NA		
Ō	2378-TCDF	NA		

Samples reviewed (in bold font):					
B1-S-2.0	B3-S-2.0	B5-S-2.0	B7-S-1.5		
B1-S-8.5	B3-S-7.0	B5-S-7.0	B7-S-8.5		
B2-S-2.0	B4-S-3.0	B6-S-2.0	-		
B2-S-8.0	B4-S-7.0	B6-S-8.5	-		

Notes:

This document tracks Stage 2A validation completion for the analysis indicated below.

Lab Report	1504161		Reviewer	EAN
Analysis/Method	BTEX / USEPA SW8021B		Date	5/13/2015
Batch Number(s)	9282 and R19831			

	Validation Area	Acceptable Yes/No/NA/NR	Comments	Q
	Temperature	Yes		
<u>0</u>	Holding Time	Yes		
d L	Trip Blank	NA		
Sa	Field/Eq. Blank	NA		
	Field Dup RPD	NA		
Ľ.	ССВ	NR		
alib	ICV	NR		
O	CCV	Yes		
	Method Blank	Yes		
	LCS/LCSD %	Yes		
ch	LCS/LCSD RPD	NA		
Bat	Lab Dup RPD	NA		
	MS/MSD %	Yes	Minor exceedance - all associated data ND, no qualifications	
	MS/MSD RPD	Yes		
_	Dilution	Yes		
era	Reporting Limit	Yes		
Sen	MDL	NA		
U	Surrogates	Yes	Minor exceedances from matrix interference, no qualifications	
SL	Labeled Analog	NA		
ioxir	EMPC	NA		
Die	2378-TCDF	NA		

Samples reviewed (in bold font):					
B8-S-7.5	B9-W-10.5	B11-S-8.0	B13-S-8.0		
B8-W-8.0	B10-S-5.5	B12-S-5.5	B14-S-5.0		
B9-S-6.0	B10-W-10.5	B12-S-8.0	B16-S-8.0		
B14-W-8.0	B15-S-8.0	B16-S-5.5			

Notes:

This document tracks Stage 2A validation completion for the analysis indicated below.

Lab Report	1504161		Reviewer	EAN
Analysis/Method	NWTPH-DX		Date	5/13/2015
Batch Number(s)	9289 and 9299			

	Validation Area	Acceptable Yes/No/NA/NR	Comments	Q
	Temperature	Yes		
<u>0</u>	Holding Time	Yes		
dm	Trip Blank	NA		
Sa	Field/Eq. Blank	NA		
	Field Dup RPD	NA		
۲.	ССВ	Yes		
alib	ICV	NR		
C	CCV	Yes	Slight exceedance, all data ND, no qualifications	
	Method Blank	Yes		
	LCS/LCSD %	Yes		
ch	LCS/LCSD RPD	Yes		
Bat	Lab Dup RPD	Yes	Slight exceedances due to results near RL, no qualifications	
	MS/MSD %	NA		
	MS/MSD RPD	NA		
_	Dilution	Yes		
era	Reporting Limit	Yes		
Gen	MDL	NA		
U	Surrogates	NA		
SL	Labeled Analog	NA		
oxir	EMPC	NA		
Dio	2378-TCDF	NA		

Samples reviewed (in bold font):					
B8-S-7.5	B9-W-10.5	B11-S-8.0	B13-S-8.0		
B8-W-8.0	B10-S-5.5	B12-S-5.5	B14-S-5.0		
B9-S-6.0	B10-W-10.5	B12-S-8.0	B16-S-8.0		
B14-W-8.0	B15-S-8.0	B16-S-5.5			

Notes:

This document tracks Stage 2A validation completion for the analysis indicated below.

Lab Report	1504161		Reviewer	EAN
Analysis/Method	NWTPH-GX		Date	5/13/2015
Batch Number(s)	9281 and R19833			

		Accontable		
	Validation Area	Yes/No/NA/NR	Comments	Q
	Temperature	Yes		
<u>e</u>	Holding Time	Yes		
Samp	Trip Blank	NA		
	Field/Eq. Blank	NA		
	Field Dup RPD	NA		
Ŀ.	ССВ	NR		
alib	ICV	Yes		
U U	CCV	Yes		
	Method Blank	Yes		
	LCS/LCSD %	Yes		
ch	LCS/LCSD RPD	NA		
Bat	Lab Dup RPD	Yes		
	MS/MSD %	NA		
	MS/MSD RPD	NA		
_	Dilution	Yes		
era	Reporting Limit	Yes		
Gen	MDL	NA		
	Surrogates	NA		
SL	Labeled Analog	NA		
oxir	EMPC	NA		
Ō	2378-TCDF	NA		

Samples reviewed (in bold font):					
B8-S-7.5	B9-W-10.5	B11-S-8.0	B13-S-8.0		
B8-W-8.0	B10-S-5.5	B12-S-5.5	B14-S-5.0		
B9-S-6.0	B10-W-10.5	B12-S-8.0	B16-S-8.0		
B14-W-8.0	B15-S-8.0	B16-S-5.5			

DATA QUALITY ASSURANCE/QUALITY CONTROL REVIEW

PROJECT NO. 0239.28.05 | MAY 4, 2015 | CITY OF RIDGEFIELD

This report reviews the analytical results for a sub-slab soil vapor sample collected by the Maul Foster & Alongi, Inc. (MFA) project team on the Bus Barn site in Ridgefield, Washington. The sample was collected on April 15, 2015.

Eurofins Air Toxics, Inc. (AT) performed the analyses. AT report numbers 1504335A, 1504335B, and 1504335C were reviewed. The analyses performed and samples analyzed are listed below.

Analysis	Reference
BTEX Compounds	USEPA TO-15
TPH Gasoline	USEPA TO-15
Natural Gases in Soil Vapor	ASTM D-1946 Modified
Volatile Petroleum Hydrocarbon (VPH) Fractions	USEPA TO-15 Modified APH

APH = air-phase hydrocarbons.

ASTM = American Society for Testing and Materials.

BTEX = benzene, toluene, ethylbenzene, and xylenes.

TPH = total petroleum hydrocarbons.

USEPA = U.S. Environmental Protection Agency.

	Samples Analyzed			
Ī	Report 1504335A-C			
Ī	SS-1			

DATA QUALIFICATIONS

Analytical results were evaluated according to applicable sections of USEPA procedures (USEPA, 2014) and appropriate laboratory and method-specific guidelines (AT 2014; USEPA, 1986, 1999).

The sample was collected under a helium shroud to detect leaks in the collection system. Helium was not detected in the sample.

Data validation procedures were modified, as appropriate, to accommodate quality-control requirements for methods not specifically addressed by the functional guidelines (e.g., USEPA Method TO-15).

In report 1504335A, AT noted that TPH gasoline was assessed against a single point calibration by USEPA TO-15. The associated CCVs for TPH as gasoline had acceptable recoveries. The results have been qualified as estimated with "J" by the reviewer due to quantification against a single point calibration.

Report	Sample	Component	Original Result (µg/m ³)	Qualified Result (µg/m³)
1504335A	SS-1	TPH Gasoline	3300	3300 J

The data are considered acceptable for their intended use, with the appropriate data qualifiers assigned.

HOLDING TIMES, PRESERVATION, AND SAMPLE STORAGE

Holding Times

Extractions and analyses were performed within the recommended holding time criteria.

Preservation and Sample Storage

The samples were preserved and stored appropriately.

BLANKS

Method Blanks

Laboratory method blank analyses were performed at the required frequencies. For purposes of data qualification, the method blanks were associated with all samples prepared in the analytical batch. All laboratory method blanks were non-detect for all target analytes.

Trip Blanks

Trip blanks were not submitted for analysis.

Equipment Rinsate Blanks

Equipment rinsate blanks were not required for this sampling event, as all samples were collected using dedicated, single-use equipment.

SURROGATE RECOVERY RESULTS

The samples were spiked with surrogate compounds to evaluate laboratory performance on individual samples for USEPA Method TO-15 analysis. A surrogate is not required by ASTM D1946 or USEPA Method TO-15 APH Modified methods. All surrogates were within acceptance limits for percent recovery.

MATRIX SPIKE/MATRIX SPIKE DUPLICATE RESULTS

MS/MSD results are used to evaluate laboratory precision and accuracy. MS/MSDs are not required for soil vapor methods, so they were not analyzed for these reports.

LABORATORY DUPLICATE RESULTS

Duplicate results are used to evaluate laboratory precision. No laboratory duplicates were reported.

LABORATORY CONTROL SAMPLE/LABORATORY CONTROL SAMPLE DUPLICATE RESULTS

An LCS/LCSD is spiked with target analytes to provide information on laboratory precision and accuracy.

LCS/LCSD batch quality control samples were not reported for TPH gasoline by USEPA Method TO-15. The sample results were assessed against a single point calibration and have been qualified "J" as estimated by the reviewer.

LCS/ LCSD batch quality control samples were not reported for USEPA TO-15 Modified APH. All associated CCVs were within acceptance limits; thus, the results were not qualified.

The remaining LCS/LCSD samples were extracted and analyzed at the required frequency and were within acceptance limits for percent recovery and RPD.

FIELD DUPLICATE RESULTS

Field duplicate samples measure both field and laboratory precision. No field duplicate were submitted for analysis.

CONTINUING CALIBRATION VERIFICATION AND INITIAL CALIBRATION VERIFICATION RESULTS

Continuing calibration verification (CCV) results are used to demonstrate instrument precision and accuracy through the end of the sample batch. All CCVs were within acceptance limits.

REPORTING LIMITS

AT used routine reporting limits (RLs) for non-detect results. RLs were elevated because of canister dilution caused by residual canister vacuum.

DATA PACKAGE

The data packages were reviewed for transcription errors, omissions, and anomalies. No issues were found.

- AT. 2014. Laboratory quality assurance manual. Eurofins Air Toxics, Inc. Folsom, California. March 5.
- USEPA. 1986. Test methods for evaluating solid waste: physical/chemical methods. EPA-530/SW-846. U.S. Environmental Protection Agency, Office of Solid Waste and Emergency Response. September (revision 6, February 2007).
- USEPA. 1999. Compendium Method TO-15. Determination of Volatile Organic Compounds (VOCs) in Air Collected in Specially-Prepared Canisters and Analyzed by Gas Chromatography/Mass Spectrometry (GC/MS). U.S. Environmental Protection Agency. Office of Research and Development. January.
- USEPA. 2014. USEPA contract laboratory program, national functional guidelines for Superfund organic methods data review. EPA 540/R-014/002. U.S. Environmental Protection Agency, Office of Superfund Remediation and Technology Innovation. August.