HAHN AND ASSOCIATES, INC.
ENVIRONMENTAL CONSULTANTS

January 13, 2015

Ms. Krystal Rodriquez
State of Washington Department of Ecology
UST/Toxics Cleanup Program
15 West Yakima Avenue, Suite 200
Yakima, Washington 98902

Ecology Cleanup File 9606
HAI Project No. 8755

SUBJECT: Findings Letter for October 2014 Soil and Pit Water Sampling Activities
Former Heidi's Gas and Deli
320 E. Jewett Blvd., White Salmon, Washington

Dear Ms. Rodriguez:

Hahn and Associates, Inc. (HAI) has prepared this letter report to describe sampling activities performed by HAI at the above-referenced property in October 2014. These sampling activities were conducted to assess the quality of standing water within an open excavation as well as the quality of soils in select areas of the excavation, including a previously exposed petroleum underground storage tank (UST).

1.0 Background

Martin S. Burck Associates, Inc. (MSBA), on behalf of the current property owner, completed UST decommissioning activities at the property in September 2013. As documented in a 2014 MSBA report[1], gasoline-, diesel-, and oil-range petroleum hydrocarbons were detected in soil beneath the removed fuel dispenser island during decommissioning at concentrations above Washington Department of Ecology (Ecology) Model Toxic Control Act (MTCA) Method A Cleanup Levels as established for unrestricted property use.

MSBA initiated soil removal activities in the dispenser island area in November 2013, at which time a previously unknown 250-gallon UST (herein identified as "UST No. 1") was uncovered to the north of the former dispenser area, partially extending beneath the existing site structure (Figure 1). Soil samples collected by MSBA upon discovery confirmed a release from this small UST, with the release being attributed to gasoline- and oil-range petroleum hydrocarbons. MSBA hypothesized that this UST may have had more than one use over the years, but at some point, based on sampling of contents and underlying soil, was used to contain gasoline. Based on the small size and location of this UST (partially below the site structure), MSBA concluded that the previously undocumented tank was likely installed early in the history of the property. The release

[1] Martin S. Burck Associates, Inc. (2013). *Underground Storage Tank Assessment and Closure Report, Former Heidi's Gas and Deli, 320 East Jewett Boulevard, White Salmon, Washington, Site ID #602 793 139, Tank ID #A4889*. January 31, 2014.

associated with this UST was reported to Ecology in correspondence dated January 9, 2014.[2]

As described by MSBA, groundwater was not encountered during UST decommissioning or soil removal activities, and the vertical extend of soil contamination beneath the property was limited by the presence of competent bedrock, which was described as being present at depths between approximately 5 to 9 feet below ground surface (bgs) beneath the former fuel dispenser area.

The cited November 2013 MSBA report states that soil removal activities as related to the former dispenser island and the 250-gallon UST would be initiated in February 2014, at which time all cleanup activities at the site would be documented and provided to Ecology for review.

Based on a May 6, 2014 *Soil Sample Data Map* prepared by MSBA, in conjunction with a site visit conducted by HAI on October 21, 2014, it is understood that the above-described 250-gallon UST has been decommissioned and removed from the site. It is understood that soil contamination as related to this UST has not yet been removed or otherwise remediated.

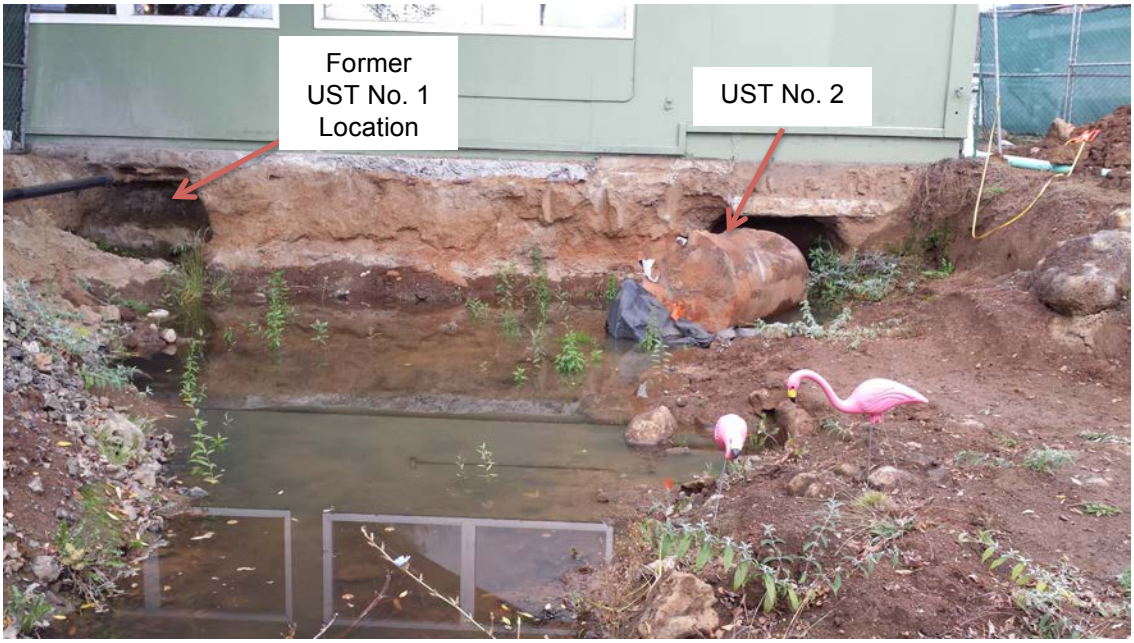
Based on available documentation provided by MSBA and the current property owner, either on or before February 13, 2014, representatives of the current property owner discovered a second UST with an estimated capacity of approximately 575-gallons (based on reported dimensions) at the property (Figure 1). This additional UST (herein identified as "UST No. 2") was similarly situated partially extending beneath the site structure, at a location east of the previously identified 250-gallon UST ("UST No. 1"). Based on the available laboratory report, the contents of UST 2, described as "water", were sampled by MSBA on February 13, 2014, with the laboratory reporting the presence of gasoline-and oil-range petroleum hydrocarbons within the water.

Based on available correspondence it does not appear that the property owner has reported the presence of UST No. 2 to Ecology. Further, there is no record of soils beneath this UST ever having been assessed for the presence of a release associated with this tank.

Figure 1 depicts the approximate location of the former fueling island area excavation, as well as UST No. 1 (former) and UST No. 2 (existing). Figure 1 also depicts that portion of the excavation containing water (western area; estimated to be approximately up to 3.5 feet deep), and the portion of the excavation that is dry (eastern area; estimated to be approximately 2 feet deep). According to a November 13, 2014 teleconference with MSBA and representatives of the property owner, the water within the pit is attributed to stormwater run-off that has accumulated within the pit over time as opposed to groundwater infiltration. Further, it was clarified that the eastern (shallow) area of excavation was related only to initial removal of overburden in preparation for the removal of underlying contaminated soil present in a thin band immediately above bedrock (e.g., 5 to 6 feet bgs) reportedly attributable to lateral migration from the UST No. 1 area.

[2] Correspondence from Brian D. Chenoweth (Chenoweth Law Group, PC) to Frosti Smith (Ecology), Bill Mason (City of White Salmon Planning), and Kevin Barry (Klickitat County Health Department. January 9, 2014.

Photograph 1 below depicts locations of UST No. 1 (former), UST No. 2 (existing), as well as the standing water within the excavation.



Photograph 1: October 21, 2014. View to north including cavities beneath building from UST Nos. 1 (former) and 2 (existing).

2.0 October 2014 Sampling Objectives

The objective of the work activities as described herein were to assess accessible soils beneath UST No. 2 to evaluate the presence and magnitude of a release as may be attributable to this tank. Further, because the open excavation contains water, a secondary objective was to test the water to ascertain the presence of petroleum contamination. Lastly, several near surface soil samples were collected for the purpose of evaluating the quality of accessible soils disturbed by previous excavation activities. Sampling activities and results as related to these project objectives are described in the following sections of this letter report.

3.0 Pit Water Sampling Activities and Findings

A sample of the pit water was collected by HAI on October 21, 2014 with the use of a new disposable polyethylene bailer. Water sampling activities were completed prior to any soil sampling activities to avoid disturbance to soils or the pit water prior to sample collection. The water sample was collected by lowering the bailer through the water column at a location approximately 15 feet south of the existing site structure. Approximately 8-inches of water were present within the excavation at the time of sampling. Nowhere did the pit water exhibit field screening evidence of contamination (e.g., no sheen or petroleum odor was noted).

The water sample was assigned sample number 8755-141021-101 and was submitted to Apex Laboratories, LLC of Portland, Oregon for the following analyses:

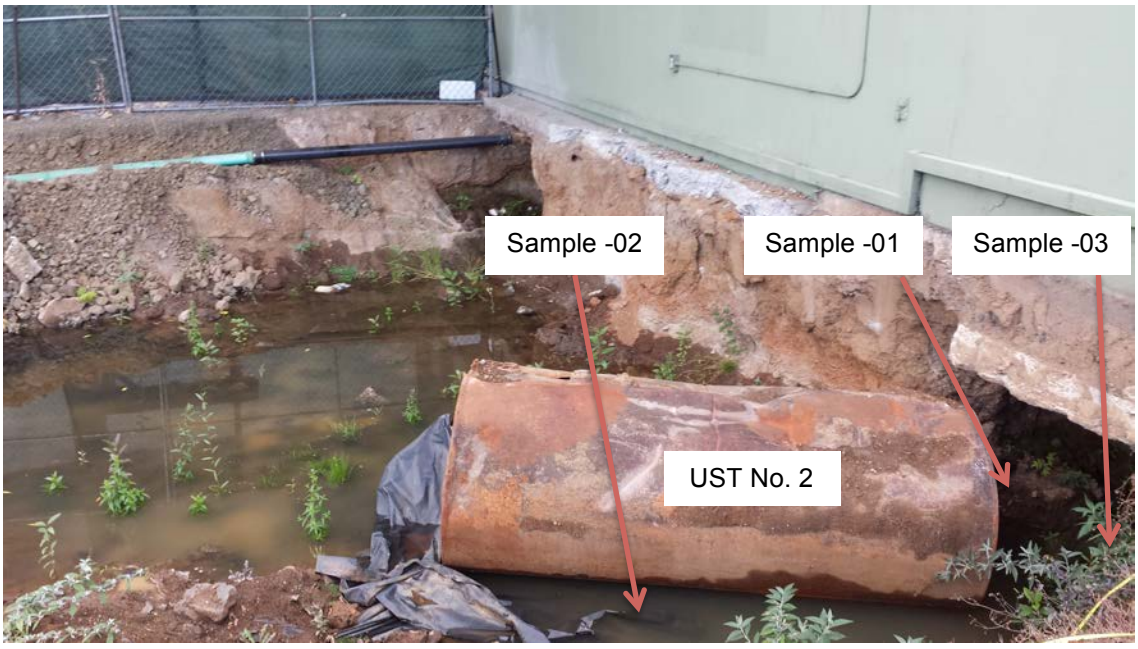
- Diesel- and oil-range hydrocarbons by NW Method TPH-Dx,
- Gasoline-range hydrocarbons by NW Method TPH-Gx, and
- Volatile Organic Compounds (VOCs) by U.S. Environmental Protection Agency (EPA) Method 8260B.

The laboratory report documenting results of the water sample testing is included within Attachment A. As provided on the report, diesel-, oil-, gasoline-range petroleum hydrocarbons, and VOCs were not detected in the sample of pit water at concentrations greater than laboratory method reporting limits (MRLs).

As described above, field screening and analytical testing of water standing within the open excavation detected no evidence of petroleum-related contamination.

4.0 UST No. 2 Area Soil Sampling Activities and Findings

Soil samples 8755-141021-01, -02, and -03 were all collected by HAI from soils immediately beneath the estimated former location of UST No. 2. Based on the position of UST No. 2 at the time of sampling relative to the adjacent cavity beneath the southeastern end of the site structure, it appears that the UST was dragged several feet to the south subsequent to its discovery such that it no longer extended beneath the building (Photograph 2). Figure 1 depicts the original location of UST No. 2, based on the observed soil cavity as well as information provided by MSBA.



Photograph 2: October 21, 2014. View to northwest showing UST No.2 and cavity beneath building from which it was extricated. Depicted sample locations are approximated.

Samples -01 and -03 were collected on the pit floor within the cavity beneath the site structure, while sample -02 was collected near the southern end of the UST as it would have been situated prior to removal from beneath the site structure. Samples -01

through -03 were collected through the water column within the pit, all at a depth of approximately 5 feet below the surrounding land surface. Sample locations are depicted on Figure 1.

Soil samples were collected with the use of a decontaminated stainless hand auger (-01 and -03) or trowel (-02). Samples were immediately transferred into glass jars, capped with Teflon-lined lids, and placed into a chilled cooler for transport to the analytical laboratory under chain-of-custody. Samples for gasoline-range petroleum hydrocarbon and VOC analyses were preserved in the field in accordance with EPA Method 5035 (Closed-System Purge-and-Trap). There was no field screening evidence of contamination (e.g., organic vapor headspace, discoloration, sheen, petroleum odor) noted at any of the three sample locations or within other observable soils proximate to UST No. 2.

Soil samples 8755-141021-01 through -03 were submitted to Apex Laboratories, LLC of Portland, Oregon for the following analyses:

- Diesel- and oil-range hydrocarbons by NW Method TPH-Dx,
- Gasoline-range hydrocarbons by NW Method TPH-Gx, and
- Benzene, toluene, ethylbenzene, xylene (BTEX) and naphthalene by U.S. Environmental Protection Agency (EPA) Method 8260B

The laboratory report documenting results of the soil sample testing is included within Attachment B, and results are summarized on Table 1.

As provided on Table 1, gasoline- and diesel-range petroleum hydrocarbons, BTEX, and naphthalene were not detected in soil samples -01 through -03 at concentrations greater than laboratory MRLs. Low levels of oil-range petroleum hydrocarbons were detected in sample -01 [81.2 milligrams per kilogram (mg/kg)] and -02 (56.7 mg/kg).

The detected oil-range petroleum hydrocarbon concentrations are well below the 2,000 mg/kg MTCA Method A Soil Cleanup Level as established by Ecology for unrestricted land use. Further, because of sporadic low-level oil-range petroleum hydrocarbons in the excavation (below MTCA Cleanup Levels) as previously documented by MSBA, it does not appear that the detected oil-range petroleum concentrations are attributable to a release from UST No. 2.

5.0 Open Excavation Area Soil Sampling Activities and Findings

Several soil samples were collected by HAI on October 21, 2014 from accessible areas within the excavation in order to assess the quality of exposed soils. Specifically, soil samples 8755-141021-04 through -10 were collected with use of a decontaminated stainless steel hand trowel from exposed soils at locations depicted on Figure 1. At all locations, the upper approximate two-inches of soil were removed in order to expose a fresh soil surface.

Field screening of soils at the time of collection suggested the presence of possible contamination at sample locations -06 (odor), -08 (odor and mild sheen), and -10 (odor, mild sheen, patchy discoloration). Exposed soils at no other sample locations exhibited field-screening evidence of potential contamination.

Soil samples 8755-141021-04 through -10 were submitted to Apex Laboratories, LLC of Portland, Oregon. Samples were analyzed for one or more of the following analyses:

- Diesel- and oil-range hydrocarbons by NW Method TPH-Dx,
- Gasoline-range hydrocarbons by NW Method TPH-Gx, and
- Benzene, toluene, ethylbenzene, xylene (BTEX) and naphthalene by U.S. Environmental Protection Agency (EPA) Method 8260B

The laboratory report documenting results of the soil sample testing is included within Attachment B, and results are summarized on Table 1.

As provided on Table 1, gasoline- and diesel-range petroleum hydrocarbons, BTEX, and naphthalene were not detected in any soil sample at concentrations greater than laboratory MRLs. Low levels of oil-range petroleum hydrocarbons were detected in sample -05 (155 mg/kg) and -08 (169 mg/kg).

The detected oil-range petroleum hydrocarbon concentrations are well below the 2,000 mg/kg MTCA Method A Soil Cleanup Level as established by Ecology for unrestricted land use. Low level oil-range petroleum hydrocarbons have similarly been reported by MSBA on behalf of the property owner. No oil-range petroleum hydrocarbon concentrations, either as documented herein by HAI or as previously documented by MSBA, have been detected in soil at levels of concern.

6.0 Conclusions

Based on HAI field activities as conducted on October 21, 2014 the following conclusions are provided:

- Field screening and analytical testing of standing water within the open excavation did not detect contamination by petroleum hydrocarbons or volatile organic compounds.

- Sampling of soils near the location of UST No. 2 did not detect the presence of contamination as would appear attributable to a release from UST No. 2.

- Four of 8 soil samples collected from the open excavation detected low-level concentrations of oil-range petroleum hydrocarbons, but all at concentrations well below MTCA Method A Cleanup Levels for Unrestricted Land Use.

Based on review of January 9, 2014 correspondence to Ecology and as discussed during a November 13 teleconference with MSBA, it is understood that the property owner intends removal of an additional volume of soil immediately south of the former fuel island to complete cleanup related to releases from that area. Further, it is understood that soil removal activities as related to the formerly undocumented UST No. 1, both beneath the existing structure and extending above bedrock to the east-southeast remain necessary and are similarly being planned for completion by the current property owner.

No documentation of property owner plans to decommission and remove UST No. 2 from the property have been noted by HAI at this time, although it is presumed such an activity would occur prior to the planned UST No.1-related soil removal. Figure 1 depicts the general location of remaining areas of soil removal at the site, based on HAI's

understanding of site conditions as described by MSBA, in conjunction with the October 21, 2014 sampling results as described herein.

If you have any questions or comments regarding this report, please do not hesitate to contact me at 503.796.0717.

Sincerely,

Rob Ede, L.G.
Principal

Ben Uhl
Field Manager, WA Site Assessor

cc: Mr. James Kacena, Law Office of James L. Kacena, PLLC
Ms. Patty Dost, Pearl Legal Group, PC
Mr. Brooks Foster, Chenoweth Law Group PC

Attachments (2):

Table 1 - Summary of October 21, 2014 Soil Testing Results
Figure 1 - Gasoline-Range Petroleum Hydrocarbons in Soil
Attachment A – Chain of Custody and Laboratory Report – October 21, 2014 Pit Water Sample
Attachment B – Chain of Custody and Laboratory Report, October 21, 2014 Soil Samples

TABLE 1 – Summary of October 21, 2014 Soil Testing Results

Soil Reference Levels[1] in mg/kg	Gasoline	Diesel	Oil	Benzene	Toluene	Ethylbenzene	Xylenes	Naphthalene
Method A Soil Cleanup Levels for Unrestricted Land Uses ==>	30.	2,000.	2,000.	0.03	7.	6.	9.	

Soil Testing Results in mg/kg

Sample Location	Sample Number	Sample Date	Sample Depth (feet bgs)	NW TPH-Gx	NW TPH-Dx		EPA Method 8260B				
				Gasoline	Diesel-Range	Oil-Range	Benzene	Toluene	Ethylbenzene	Xylenes	Naphthalene
-01	8755-141021-01	21-Oct-14	5.0 - 5.25	6.1 U	25. U	81.2	0.0153 U	0.061 U	0.0305 U	0.0915 U	0.061 U
-02	8755-141021-02	21-Oct-14	5.0 - 5.25	5.87 U	25. U	56.7	0.0147 U	0.0587 U	0.0294 U	0.0881 U	0.0587 U
-03	8755-141021-03	21-Oct-14	5.0 - 5.25	6.79 U	25. U	50. U	0.017 U	0.0679 U	0.0339 U	0.102 U	0.0679 U
-04	8755-141021-04	21-Oct-14	3.0 - 3.25	NT	NT	NT	0.0147 U	0.0586 U	0.0293 U	0.088 U	0.0586 U
-05	8755-141021-05	21-Oct-14	2.0 - 2.25	5.43 U	25. U	155.	0.0136 U	0.0543 U	0.0272 U	0.0815 U	0.0543 U
-06	8755-141021-06	21-Oct-14	2.0 - 2.25	6.1 U	25. U	50. U	0.0153 U	0.061 U	0.0305 U	0.0916 U	0.061 U
-07	8755-141021-07	21-Oct-14	3.0 - 3.25	NT	NT	NT	0.0149 U	0.0597 U	0.0298 U	0.0895 U	0.0697 U
-08	8755-141021-08	21-Oct-14	3.5 - 3.75	5.95 U	25. U	169.	0.0149 U	0.0595 U	0.0297 U	0.0892 U	0.0597 U
-09	8755-141021-09	21-Oct-14	3.0 - 3.25	8.14 U	25. U	50. U	0.0204 U	0.0814 U	0.0407 U	0.122 U	0.0814 U
-10	8755-141021-10	21-Oct-14	3.5 - 3.75	39.5 U	25. U	50. U	0.0178 U	0.0712 U	0.0356 U	0.107 U	0.0712 U

Notes:

bgs = below ground surface
EPA = U.S. Environmental Protection Agency
Dx = diesel- and oil-range hydrocarbons
Gx = gasoline-range hydrocarbons
mg/kg = milligrams per kilogram
NT = not tested
NW = Northwest Method
TPH = total petroleum hydrocarbons
U = not detected above indicated method reporting level

1 = Model Toxics Control Act (MTCA) Method A Cleanup Levels (WAC 173-340-900), November 2007
Bold and Highlighted = Exceeds MTCA Method A Cleanup Level for Unrestricted Land Use

NORTH

Former Service Station
(Portion of Existing Structure)

Former UST No. 1:
Additional Soil Removal Recommended
by MSBA Below Building in Area of Former UST.

Former Fuel Dispenser
Island Area

UST No. 2

Estimated Limits of Additional Soil Removal Recommended by MSBA for Lateral Extent of Contamination sourced from UST No. 1

Additional Soil Removal Recommended by MSBA Below Sidewalk South of Former Fuel Dispenser Island

2,800@5'
AB1
8.11U@5'
2,430@4.5'
S7
AB2
S6
9.24U@5'
S1
5.28U@8'
NSW
5.97U@4'
12,200@8.5'
WSW
5.76U@4'
5.97U@6'
SB-2
SB-1/RB
EDISP/
SB-3
ESW
S4
-10
39.5@3.5
92.7@5.5'
6.15U@4'
193@5.5'
-01
6.1U@5'
-03
6.79U@5'
-02
5.87U@5'
-04
7.49U@4' (pea gravel)
1,130@7.5'
5.81U@4.8'
7,450@6.5'
3,270@8'
16,900@8.5'
SSW
5.79U@4'
1,810@9'
S3
No Data
(contaminated at 5 '?)
S2
7.73U@5'
2,910@7.5'
5.51U@8.5'
6.31U@9'
-09
8.14U@3'
S5
95.7@4.5'
-05
5.43U@2'
-07
-08
5.95U@3.5'
-06
6.1U@2'

LEGEND

- Site Boundary
- Existing Structure
- Former Structure
- Underground Storage Tank (UST)
- HAI Soil Sample (Oct-14)
- MSBA Soil Samples (multiple dates-2013)
- Limit of MSBA Fuel Island-Soil Removal (different colors for different phases)
- Area of excavation: 3 to 3.5 feet deep with standing water (Oct 2014)
- Area of apparent backfilled excavation: 2 feet deep with no standing water Oct 2014)
- 4,200@7.5' 5.51U@8.5' 6.31U@9' — Gasoline-Range TPH concentration in soil in mg/kg at feet bgs (relative to sidewalk). Red Text depicts >MTCA Method A
- U = Not detected at a concentration above the indicated Method Reporting Level.

Notes:
MSBA=Martin S. Burck Associates, Inc.
MSBA soil sample data, current and "additional" excavation limits are from MSBA *Soil Sample Data Map*, Revised 5/6/14

1"=10'
0 5 10 20
Scale in Feet
Scale 1 inch = 10 feet

FIGURE 1
Gasoline-Range TPH in Soil
Heidi's Gas and Deli
320 East Jewett Blvd.
White Salmon, Washington

HAHN AND ASSOCIATES, INC.
Project No. 8755 December 2014

ATTACHMENT A

Laboratory Analytical Reports and Chain-of-Custody Documentation
October 21, 2014 Pit Water Sample

Apex Labs

12232 S.W. Garden Place
Tigard, OR 97223
503-718-2323 Phone
503-718-0333 Fax

Friday, November 7, 2014

Rob Ede
Hahn and Associates
434 NW 6th Ave. Suite 203
Portland, OR 97209

RE: White Salmon / 8755

Enclosed are the results of analyses for work order A4J0686, which was received by the laboratory on 10/23/2014 at 4:00:00PM.

Thank you for using Apex Labs. We appreciate your business and strive to provide the highest quality services to the environmental industry.

If you have any questions concerning this report or the services we offer, please feel free to contact me by email at: pnerenberg@apex-labs.com, or by phone at 503-718-2323.

Apex Laboratories

Philip Nerenberg, Lab Director

Apex Labs

12232 S.W. Garden Place
Tigard, OR 97223
503-718-2323 Phone
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Hahn and Associates	Project: **White Salmon**	
434 NW 6th Ave. Suite 203	Project Number: 8755	**Reported:**
Portland, OR 97209	Project Manager: Rob Ede	11/07/14 10:42

ANALYTICAL REPORT FOR SAMPLES

SAMPLE INFORMATION

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
8755-141021-101	A4J0686-03	Water	10/21/14 12:00	10/23/14 16:00

Apex Laboratories

Philip Nerenberg, Lab Director

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Apex Labs

12232 S.W. Garden Place
Tigard, OR 97223
503-718-2323 Phone
503-718-0333 Fax

Hahn and Associates	Project: **White Salmon**	
434 NW 6th Ave. Suite 203	Project Number: 8755	**Reported:**
Portland, OR 97209	Project Manager: Rob Ede	11/07/14 10:42

ANALYTICAL SAMPLE RESULTS

Diesel and Oil Hydrocarbons by NWTPH-Dx

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
8755-141021-101 (A4J0686-03)			**Matrix: Water**		**Batch: 4100765**			
Diesel	ND	---	0.200	mg/L	1	10/28/14 02:32	NWTPH-Dx	
Oil	ND	---	0.400	"	"	"	"	
Surrogate: o-Terphenyl (Surr)			*Recovery: 98 %*	*Limits: 50-150 %*	"	"	"	

Apex Laboratories

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Philip Nerenberg

Philip Nerenberg, Lab Director

Apex Labs

12232 S.W. Garden Place
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Hahn and Associates	Project: **White Salmon**	
434 NW 6th Ave. Suite 203	Project Number: 8755	**Reported:**
Portland, OR 97209	Project Manager: Rob Ede	11/07/14 10:42

ANALYTICAL SAMPLE RESULTS

Gasoline Range Hydrocarbons (Benzene through Naphthalene) by NWTPH-Gx

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
8755-141021-101 (A4J0686-03)			**Matrix: Water**		**Batch: 4100760**			
Gasoline Range Organics	ND	---	0.100	mg/L	1	10/28/14 17:40	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)			*Recovery: 99 %*	*Limits: 50-150 %*	"	"	"	
1,4-Difluorobenzene (Sur)			*90 %*	*Limits: 50-150 %*	"	"	"	

Apex Laboratories

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Philip Nerenberg

Philip Nerenberg, Lab Director

Apex Labs

12232 S.W. Garden Place
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503-718-2323 Phone
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Hahn and Associates	Project: **White Salmon**	
434 NW 6th Ave. Suite 203	Project Number: 8755	**Reported:**
Portland, OR 97209	Project Manager: Rob Ede	11/07/14 10:42

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260B

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
8755-141021-101 (A4J0686-03)			**Matrix: Water**		**Batch: 4100760**			
Acetone	ND	---	20.0	ug/L	1	10/28/14 17:40	EPA 8260B	
Benzene	ND	---	0.250	"	"	"	"	
Bromobenzene	ND	---	0.500	"	"	"	"	
Bromochloromethane	ND	---	1.00	"	"	"	"	
Bromodichloromethane	ND	---	1.00	"	"	"	"	
Bromoform	ND	---	1.00	"	"	"	"	
Bromomethane	ND	---	5.00	"	"	"	"	Q-31
2-Butanone (MEK)	ND	---	10.0	"	"	"	"	
n-Butylbenzene	ND	---	1.00	"	"	"	"	
sec-Butylbenzene	ND	---	1.00	"	"	"	"	
tert-Butylbenzene	ND	---	1.00	"	"	"	"	
Carbon tetrachloride	ND	---	0.500	"	"	"	"	
Chlorobenzene	ND	---	0.500	"	"	"	"	
Chloroethane	ND	---	5.00	"	"	"	"	
Chloroform	ND	---	1.00	"	"	"	"	
Chloromethane	ND	---	5.00	"	"	"	"	E-03
2-Chlorotoluene	ND	---	1.00	"	"	"	"	
4-Chlorotoluene	ND	---	1.00	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	---	5.00	"	"	"	"	
Dibromochloromethane	ND	---	1.00	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	---	0.500	"	"	"	"	
Dibromomethane	ND	---	1.00	"	"	"	"	
1,2-Dichlorobenzene	ND	---	0.500	"	"	"	"	
1,3-Dichlorobenzene	ND	---	0.500	"	"	"	"	
1,4-Dichlorobenzene	ND	---	0.500	"	"	"	"	
Dichlorodifluoromethane	ND	---	1.00	"	"	"	"	
1,1-Dichloroethane	ND	---	0.500	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	---	0.500	"	"	"	"	
1,1-Dichloroethene	ND	---	0.500	"	"	"	"	
cis-1,2-Dichloroethene	ND	---	0.500	"	"	"	"	
trans-1,2-Dichloroethene	ND	---	0.500	"	"	"	"	
1,2-Dichloropropane	ND	---	0.500	"	"	"	"	
1,3-Dichloropropane	ND	---	1.00	"	"	"	"	
2,2-Dichloropropane	ND	---	1.00	"	"	"	"	
1,1-Dichloropropene	ND	---	1.00	"	"	"	"	

Apex Laboratories

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Philip Nerenberg

Philip Nerenberg, Lab Director

Apex Labs

12232 S.W. Garden Place
Tigard, OR 97223
503-718-2323 Phone
503-718-0333 Fax

Hahn and Associates	Project: **White Salmon**	
434 NW 6th Ave. Suite 203	Project Number: 8755	**Reported:**
Portland, OR 97209	Project Manager: Rob Ede	11/07/14 10:42

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260B

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
8755-141021-101 (A4J0686-03)			**Matrix: Water**		**Batch: 4100760**			
cis-1,3-Dichloropropene	ND	---	1.00	ug/L	1	"	EPA 8260B	
trans-1,3-Dichloropropene	ND	---	1.00	"	"	"	"	
Ethylbenzene	ND	---	0.500	"	"	"	"	
Hexachlorobutadiene	ND	---	5.00	"	"	"	"	
2-Hexanone	ND	---	10.0	"	"	"	"	
Isopropylbenzene	ND	---	1.00	"	"	"	"	
4-Isopropyltoluene	ND	---	1.00	"	"	"	"	
4-Methyl-2-pentanone (MiBK)	ND	---	10.0	"	"	"	"	
Methyl tert-butyl ether (MTBE)	ND	---	1.00	"	"	"	"	
Methylene chloride	ND	---	5.00	"	"	"	"	
Naphthalene	ND	---	2.00	"	"	"	"	
n-Propylbenzene	ND	---	0.500	"	"	"	"	
Styrene	ND	---	1.00	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	---	0.500	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	---	0.500	"	"	"	"	
Tetrachloroethene (PCE)	ND	---	0.500	"	"	"	"	
Toluene	ND	---	1.00	"	"	"	"	
1,2,3-Trichlorobenzene	ND	---	2.00	"	"	"	"	
1,2,4-Trichlorobenzene	ND	---	2.00	"	"	"	"	
1,1,1-Trichloroethane	ND	---	0.500	"	"	"	"	
1,1,2-Trichloroethane	ND	---	0.500	"	"	"	"	
Trichloroethene (TCE)	ND	---	0.500	"	"	"	"	
Trichlorofluoromethane	ND	---	2.00	"	"	"	"	
1,2,3-Trichloropropane	ND	---	1.00	"	"	"	"	
1,2,4-Trimethylbenzene	ND	---	1.00	"	"	"	"	
1,3,5-Trimethylbenzene	ND	---	1.00	"	"	"	"	
Vinyl chloride	ND	---	0.500	"	"	"	"	
m,p-Xylene	ND	---	1.00	"	"	"	"	
o-Xylene	ND	---	0.500	"	"	"	"	
Surrogate: Dibromofluoromethane (Surr)			*Recovery: 93 %*	*Limits: 80-120 %*	"	"	"	
1,4-Difluorobenzene (Surr)			*97 %*	*Limits: 80-120 %*	"	"	"	
Toluene-d8 (Surr)			*94 %*	*Limits: 80-120 %*	"	"	"	
4-Bromofluorobenzene (Surr)			*97 %*	*Limits: 80-120 %*	"	"	"	

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Hahn and Associates	Project: **White Salmon**	
434 NW 6th Ave. Suite 203	Project Number: 8755	**Reported:**
Portland, OR 97209	Project Manager: Rob Ede	11/07/14 10:42

QUALITY CONTROL (QC) SAMPLE RESULTS

Diesel and Oil Hydrocarbons by NWTPH-Dx

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 4100765 - EPA 3510C (Fuels/Acid Ext.)									**Water**			
Blank (4100765-BLK1)					Prepared: 10/27/14 15:04		Analyzed: 10/27/14 21:23					
NWTPH-Dx												
Diesel	ND	---	0.182	mg/L	1	---	---	---	---	---	---	
Oil	ND	---	0.364	"	"	---	---	---	---	---	---	
Surr: o-Terphenyl (Surr)		*Recovery: 88 %*		*Limits: 50-150 %*		*Dilution: 1x*						
LCS (4100765-BS1)					Prepared: 10/27/14 15:04		Analyzed: 10/27/14 21:46					
NWTPH-Dx												
Diesel	1.09	---	0.200	mg/L	1	1.25	---	87	58-115%	---	---	
Surr: o-Terphenyl (Surr)		*Recovery: 89 %*		*Limits: 50-150 %*		*Dilution: 1x*						
LCS Dup (4100765-BSD1)					Prepared: 10/27/14 15:04		Analyzed: 10/27/14 22:10					**Q-19**
NWTPH-Dx												
Diesel	1.12	---	0.200	mg/L	1	1.25	---	90	58-115%	3	20%	
Surr: o-Terphenyl (Surr)		*Recovery: 88 %*		*Limits: 50-150 %*		*Dilution: 1x*						

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Hahn and Associates	Project: **White Salmon**	
434 NW 6th Ave. Suite 203	Project Number: 8755	**Reported:**
Portland, OR 97209	Project Manager: Rob Ede	11/07/14 10:42

QUALITY CONTROL (QC) SAMPLE RESULTS

Gasoline Range Hydrocarbons (Benzene through Naphthalene) by NWTPH-Gx

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 4100760 - EPA 5030B									Water			
Blank (4100760-BLK1)					Prepared: 10/28/14 10:00		Analyzed: 10/28/14 16:15					
NWTPH-Gx (MS)												
Gasoline Range Organics	ND	---	0.100	mg/L	1	---	---	---	---	---	---	
Surr: 4-Bromofluorobenzene (Sur)		*Recovery: 97 %*		*Limits: 50-150 %*			*Dilution: 1x*					
1,4-Difluorobenzene (Sur)		*89 %*		*50-150 %*			*"*					
LCS (4100760-BS2)					Prepared: 10/28/14 10:00		Analyzed: 10/28/14 15:47					
NWTPH-Gx (MS)												
Gasoline Range Organics	0.463	---	0.100	mg/L	1	0.500	---	93	70-130%	---	---	
Surr: 4-Bromofluorobenzene (Sur)		*Recovery: 97 %*		*Limits: 50-150 %*			*Dilution: 1x*					
1,4-Difluorobenzene (Sur)		*97 %*		*50-150 %*			*"*					
Duplicate (4100760-DUP1)					Prepared: 10/28/14 15:49		Analyzed: 10/28/14 18:08					
QC Source Sample: 8755-141021-101 (A4J0686-03)												
NWTPH-Gx (MS)												
Gasoline Range Organics	ND	---	0.100	mg/L	1	---	ND	---	---	---	30%	
Surr: 4-Bromofluorobenzene (Sur)		*Recovery: 98 %*		*Limits: 50-150 %*			*Dilution: 1x*					
1,4-Difluorobenzene (Sur)		*90 %*		*50-150 %*			*"*					

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Hahn and Associates	Project: **White Salmon**	
434 NW 6th Ave. Suite 203	Project Number: 8755	**Reported:**
Portland, OR 97209	Project Manager: Rob Ede	11/07/14 10:42

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260B

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 4100760 - EPA 5030B							**Water**					
Blank (4100760-BLK1)					Prepared: 10/28/14 10:00 Analyzed: 10/28/14 16:15							
EPA 8260B												
Acetone	ND	---	20.0	ug/L	1	---	---	---	---	---	---	
Benzene	ND	---	0.250	"	"	---	---	---	---	---	---	
Bromobenzene	ND	---	0.500	"	"	---	---	---	---	---	---	
Bromochloromethane	ND	---	1.00	"	"	---	---	---	---	---	---	
Bromodichloromethane	ND	---	1.00	"	"	---	---	---	---	---	---	
Bromoform	ND	---	1.00	"	"	---	---	---	---	---	---	
Bromomethane	ND	---	5.00	"	"	---	---	---	---	---	---	Q-31
2-Butanone (MEK)	ND	---	10.0	"	"	---	---	---	---	---	---	
n-Butylbenzene	ND	---	1.00	"	"	---	---	---	---	---	---	
sec-Butylbenzene	ND	---	1.00	"	"	---	---	---	---	---	---	
tert-Butylbenzene	ND	---	1.00	"	"	---	---	---	---	---	---	
Carbon tetrachloride	ND	---	0.500	"	"	---	---	---	---	---	---	
Chlorobenzene	ND	---	0.500	"	"	---	---	---	---	---	---	
Chloroethane	ND	---	5.00	"	"	---	---	---	---	---	---	
Chloroform	ND	---	1.00	"	"	---	---	---	---	---	---	
Chloromethane	ND	---	5.00	"	"	---	---	---	---	---	---	E-03
2-Chlorotoluene	ND	---	1.00	"	"	---	---	---	---	---	---	
4-Chlorotoluene	ND	---	1.00	"	"	---	---	---	---	---	---	
1,2-Dibromo-3-chloropropane	ND	---	5.00	"	"	---	---	---	---	---	---	
Dibromochloromethane	ND	---	1.00	"	"	---	---	---	---	---	---	
1,2-Dibromoethane (EDB)	ND	---	0.500	"	"	---	---	---	---	---	---	
Dibromomethane	ND	---	1.00	"	"	---	---	---	---	---	---	
1,2-Dichlorobenzene	ND	---	0.500	"	"	---	---	---	---	---	---	
1,3-Dichlorobenzene	ND	---	0.500	"	"	---	---	---	---	---	---	
1,4-Dichlorobenzene	ND	---	0.500	"	"	---	---	---	---	---	---	
Dichlorodifluoromethane	ND	---	1.00	"	"	---	---	---	---	---	---	
1,1-Dichloroethane	ND	---	0.500	"	"	---	---	---	---	---	---	
1,2-Dichloroethane (EDC)	ND	---	0.500	"	"	---	---	---	---	---	---	
1,1-Dichloroethene	ND	---	0.500	"	"	---	---	---	---	---	---	

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Hahn and Associates	Project: **White Salmon**	
434 NW 6th Ave. Suite 203	Project Number: 8755	**Reported:**
Portland, OR 97209	Project Manager: Rob Ede	11/07/14 10:42

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260B

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 4100760 - EPA 5030B							**Water**					
Blank (4100760-BLK1)					Prepared: 10/28/14 10:00		Analyzed: 10/28/14 16:15					
cis-1,2-Dichloroethene	ND	---	0.500	ug/L	"	---	---	---	---	---	---	
trans-1,2-Dichloroethene	ND	---	0.500	"	"	---	---	---	---	---	---	
1,2-Dichloropropane	ND	---	0.500	"	"	---	---	---	---	---	---	
1,3-Dichloropropane	ND	---	1.00	"	"	---	---	---	---	---	---	
2,2-Dichloropropane	ND	---	1.00	"	"	---	---	---	---	---	---	
1,1-Dichloropropene	ND	---	1.00	"	"	---	---	---	---	---	---	
cis-1,3-Dichloropropene	ND	---	1.00	"	"	---	---	---	---	---	---	
trans-1,3-Dichloropropene	ND	---	1.00	"	"	---	---	---	---	---	---	
Ethylbenzene	ND	---	0.500	"	"	---	---	---	---	---	---	
Hexachlorobutadiene	ND	---	5.00	"	"	---	---	---	---	---	---	
2-Hexanone	ND	---	10.0	"	"	---	---	---	---	---	---	
Isopropylbenzene	ND	---	1.00	"	"	---	---	---	---	---	---	
4-Isopropyltoluene	ND	---	1.00	"	"	---	---	---	---	---	---	
4-Methyl-2-pentanone (MiBK)	ND	---	10.0	"	"	---	---	---	---	---	---	
Methyl tert-butyl ether (MTBE)	ND	---	1.00	"	"	---	---	---	---	---	---	
Methylene chloride	ND	---	5.00	"	"	---	---	---	---	---	---	
Naphthalene	ND	---	2.00	"	"	---	---	---	---	---	---	
n-Propylbenzene	ND	---	0.500	"	"	---	---	---	---	---	---	
Styrene	ND	---	1.00	"	"	---	---	---	---	---	---	
1,1,1,2-Tetrachloroethane	ND	---	0.500	"	"	---	---	---	---	---	---	
1,1,2,2-Tetrachloroethane	ND	---	0.500	"	"	---	---	---	---	---	---	
Tetrachloroethene (PCE)	ND	---	0.500	"	"	---	---	---	---	---	---	
Toluene	ND	---	1.00	"	"	---	---	---	---	---	---	
1,2,3-Trichlorobenzene	ND	---	2.00	"	"	---	---	---	---	---	---	
1,2,4-Trichlorobenzene	ND	---	2.00	"	"	---	---	---	---	---	---	
1,1,1-Trichloroethane	ND	---	0.500	"	"	---	---	---	---	---	---	
1,1,2-Trichloroethane	ND	---	0.500	"	"	---	---	---	---	---	---	
Trichloroethene (TCE)	ND	---	0.500	"	"	---	---	---	---	---	---	
Trichlorofluoromethane	ND	---	2.00	"	"	---	---	---	---	---	---	
1,2,3-Trichloropropane	ND	---	1.00	"	"	---	---	---	---	---	---	

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434 NW 6th Ave. Suite 203	Project Number: 8755	**Reported:**
Portland, OR 97209	Project Manager: Rob Ede	11/07/14 10:42

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260B

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 4100760 - EPA 5030B									**Water**			
Blank (4100760-BLK1)					Prepared: 10/28/14 10:00		Analyzed: 10/28/14 16:15					
1,2,4-Trimethylbenzene	ND	---	1.00	"	"	---	---	---	---	---	---	
1,3,5-Trimethylbenzene	ND	---	1.00	"	"	---	---	---	---	---	---	
Vinyl chloride	ND	---	0.500	"	"	---	---	---	---	---	---	
m,p-Xylene	ND	---	1.00	"	"	---	---	---	---	---	---	
o-Xylene	ND	---	0.500	"	"	---	---	---	---	---	---	
Surr: Dibromofluoromethane (Surr)			*Recovery: 90 %*		*Limits: 80-120 %*		*Dilution: 1x*					
1,4-Difluorobenzene (Surr)			*95 %*		*80-120 %*		*"*					
Toluene-d8 (Surr)			*94 %*		*80-120 %*		*"*					
4-Bromofluorobenzene (Surr)			*94 %*		*80-120 %*		*"*					
LCS (4100760-BS1)					Prepared: 10/28/14 10:00		Analyzed: 10/28/14 15:19					
EPA 8260B												
Acetone	44.1	---	20.0	ug/L	1	40.0	---	110	70-130%	---	---	
Benzene	18.0	---	0.250	"	"	20.0	---	90	"	---	---	
Bromobenzene	19.1	---	0.500	"	"	"	---	96	"	---	---	
Bromochloromethane	17.2	---	1.00	"	"	"	---	86	"	---	---	
Bromodichloromethane	19.1	---	1.00	"	"	"	---	96	"	---	---	
Bromoform	20.8	---	1.00	"	"	"	---	104	"	---	---	
Bromomethane	7.86	---	5.00	"	"	"	---	39	"	---	---	Q-31
2-Butanone (MEK)	37.4	---	10.0	"	"	40.0	---	94	"	---	---	
n-Butylbenzene	18.2	---	1.00	"	"	20.0	---	91	"	---	---	
sec-Butylbenzene	18.6	---	1.00	"	"	"	---	93	"	---	---	
tert-Butylbenzene	19.0	---	1.00	"	"	"	---	95	"	---	---	
Carbon tetrachloride	22.1	---	0.500	"	"	"	---	111	"	---	---	
Chlorobenzene	19.7	---	0.500	"	"	"	---	99	"	---	---	
Chloroethane	16.8	---	5.00	"	"	"	---	84	"	---	---	
Chloroform	18.7	---	1.00	"	"	"	---	94	"	---	---	
Chloromethane	49.0	---	5.00	"	"	"	---	245	"	---	---	E-03, Q-41
2-Chlorotoluene	19.0	---	1.00	"	"	"	---	95	"	---	---	
4-Chlorotoluene	18.9	---	1.00	"	"	"	---	94	"	---	---	
1,2-Dibromo-3-chloropropane	17.9	---	5.00	"	"	"	---	90	"	---	---	

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434 NW 6th Ave. Suite 203	Project Number: 8755	**Reported:**
Portland, OR 97209	Project Manager: Rob Ede	11/07/14 10:42

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260B

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 4100760 - EPA 5030B								**Water**				
LCS (4100760-BS1)					Prepared: 10/28/14 10:00		Analyzed: 10/28/14 15:19					
Dibromochloromethane	21.0	---	1.00	ug/L	"	"	---	105	"	---	---	
1,2-Dibromoethane (EDB)	20.1	---	0.500	"	"	"	---	100	"	---	---	
Dibromomethane	18.6	---	1.00	"	"	"	---	93	"	---	---	
1,2-Dichlorobenzene	19.4	---	0.500	"	"	"	---	97	"	---	---	
1,3-Dichlorobenzene	19.4	---	0.500	"	"	"	---	97	"	---	---	
1,4-Dichlorobenzene	18.8	---	0.500	"	"	"	---	94	"	---	---	
Dichlorodifluoromethane	17.1	---	1.00	"	"	"	---	85	"	---	---	
1,1-Dichloroethane	18.3	---	0.500	"	"	"	---	91	"	---	---	
1,2-Dichloroethane (EDC)	19.2	---	0.500	"	"	"	---	96	"	---	---	
1,1-Dichloroethene	19.4	---	0.500	"	"	"	---	97	"	---	---	
cis-1,2-Dichloroethene	18.4	---	0.500	"	"	"	---	92	"	---	---	
trans-1,2-Dichloroethene	18.6	---	0.500	"	"	"	---	93	"	---	---	
1,2-Dichloropropane	17.7	---	0.500	"	"	"	---	88	"	---	---	
1,3-Dichloropropane	18.9	---	1.00	"	"	"	---	95	"	---	---	
2,2-Dichloropropane	21.0	---	1.00	"	"	"	---	105	"	---	---	
1,1-Dichloropropene	19.0	---	1.00	"	"	"	---	95	"	---	---	
cis-1,3-Dichloropropene	19.1	---	1.00	"	"	"	---	96	"	---	---	
trans-1,3-Dichloropropene	20.3	---	1.00	"	"	"	---	102	"	---	---	
Ethylbenzene	19.6	---	0.500	"	"	"	---	98	"	---	---	
Hexachlorobutadiene	18.0	---	5.00	"	"	"	---	90	"	---	---	
2-Hexanone	34.8	---	10.0	"	"	40.0	---	87	"	---	---	
Isopropylbenzene	19.9	---	1.00	"	"	20.0	---	99	"	---	---	
4-Isopropyltoluene	19.3	---	1.00	"	"	"	---	97	"	---	---	
4-Methyl-2-pentanone (MiBK)	33.5	---	10.0	"	"	40.0	---	84	"	---	---	
Methyl tert-butyl ether (MTBE)	17.1	---	1.00	"	"	20.0	---	86	"	---	---	
Methylene chloride	17.3	---	5.00	"	"	"	---	87	"	---	---	
Naphthalene	18.6	---	2.00	"	"	"	---	93	"	---	---	
n-Propylbenzene	18.4	---	0.500	"	"	"	---	92	"	---	---	
Styrene	21.1	---	1.00	"	"	"	---	106	"	---	---	
1,1,1,2-Tetrachloroethane	20.8	---	0.500	"	"	"	---	104	"	---	---	

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434 NW 6th Ave. Suite 203	Project Number: 8755	**Reported:**
Portland, OR 97209	Project Manager: Rob Ede	11/07/14 10:42

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260B

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 4100760 - EPA 5030B									**Water**			
LCS (4100760-BS1)					Prepared: 10/28/14 10:00		Analyzed: 10/28/14 15:19					
1,1,2,2-Tetrachloroethane	17.9	---	0.500	"	"	"	---	89	"	---	---	
Tetrachloroethene (PCE)	20.6	---	0.500	"	"	"	---	103	"	---	---	
Toluene	19.4	---	1.00	"	"	"	---	97	"	---	---	
1,2,3-Trichlorobenzene	18.2	---	2.00	"	"	"	---	91	"	---	---	
1,2,4-Trichlorobenzene	18.3	---	2.00	"	"	"	---	92	"	---	---	
1,1,1-Trichloroethane	19.3	---	0.500	"	"	"	---	96	"	---	---	
1,1,2-Trichloroethane	19.4	---	0.500	"	"	"	---	97	"	---	---	
Trichloroethene (TCE)	19.7	---	0.500	"	"	"	---	99	"	---	---	
Trichlorofluoromethane	20.0	---	2.00	"	"	"	---	100	"	---	---	
1,2,3-Trichloropropane	18.2	---	1.00	"	"	"	---	91	"	---	---	
1,2,4-Trimethylbenzene	19.4	---	1.00	"	"	"	---	97	"	---	---	
1,3,5-Trimethylbenzene	19.6	---	1.00	"	"	"	---	98	"	---	---	
Vinyl chloride	16.4	---	0.500	"	"	"	---	82	"	---	---	
m,p-Xylene	39.8	---	1.00	"	"	40.0	---	99	"	---	---	
o-Xylene	19.9	---	0.500	"	"	20.0	---	99	"	---	---	
Surr: Dibromofluoromethane (Surr)			*Recovery: 91 %*		*Limits: 80-120 %*		*Dilution: 1x*					
1,4-Difluorobenzene (Surr)			*96 %*		*80-120 %*		*"*					
Toluene-d8 (Surr)			*92 %*		*80-120 %*		*"*					
4-Bromofluorobenzene (Surr)			*95 %*		*80-120 %*		*"*					
Duplicate (4100760-DUP1)					Prepared: 10/28/14 15:49		Analyzed: 10/28/14 18:08					
QC Source Sample: 8755-141021-101 (A4J0686-03)												
EPA 8260B												
Acetone	ND	---	20.0	ug/L	1	---	ND	---	---	---	30%	
Benzene	ND	---	0.250	"	"	---	ND	---	---	---	30%	
Bromobenzene	ND	---	0.500	"	"	---	ND	---	---	---	30%	
Bromochloromethane	ND	---	1.00	"	"	---	ND	---	---	---	30%	
Bromodichloromethane	ND	---	1.00	"	"	---	ND	---	---	---	30%	
Bromoform	ND	---	1.00	"	"	---	ND	---	---	---	30%	
Bromomethane	ND	---	5.00	"	"	---	ND	---	---	---	30%	Q-31
2-Butanone (MEK)	ND	---	10.0	"	"	---	ND	---	---	---	30%	
n-Butylbenzene	ND	---	1.00	"	"	---	ND	---	---	---	30%	

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Philip Nerenberg

Philip Nerenberg, Lab Director

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503-718-0333 Fax

Hahn and Associates	Project: **White Salmon**	
434 NW 6th Ave. Suite 203	Project Number: 8755	**Reported:**
Portland, OR 97209	Project Manager: Rob Ede	11/07/14 10:42

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260B

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 4100760 - EPA 5030B							**Water**					
Duplicate (4100760-DUP1)					Prepared: 10/28/14 15:49 Analyzed: 10/28/14 18:08							
QC Source Sample: 8755-141021-101 (A4J0686-03)												
sec-Butylbenzene	ND	---	1.00	ug/L	"	---	ND	---	---	---	30%	
tert-Butylbenzene	ND	---	1.00	"	"	---	ND	---	---	---	30%	
Carbon tetrachloride	ND	---	0.500	"	"	---	ND	---	---	---	30%	
Chlorobenzene	ND	---	0.500	"	"	---	ND	---	---	---	30%	
Chloroethane	ND	---	5.00	"	"	---	ND	---	---	---	30%	
Chloroform	ND	---	1.00	"	"	---	ND	---	---	---	30%	
Chloromethane	ND	---	5.00	"	"	---	ND	---	---	---	30%	E-03
2-Chlorotoluene	ND	---	1.00	"	"	---	ND	---	---	---	30%	
4-Chlorotoluene	ND	---	1.00	"	"	---	ND	---	---	---	30%	
1,2-Dibromo-3-chloropropane	ND	---	5.00	"	"	---	ND	---	---	---	30%	
Dibromochloromethane	ND	---	1.00	"	"	---	ND	---	---	---	30%	
1,2-Dibromoethane (EDB)	ND	---	0.500	"	"	---	ND	---	---	---	30%	
Dibromomethane	ND	---	1.00	"	"	---	ND	---	---	---	30%	
1,2-Dichlorobenzene	ND	---	0.500	"	"	---	ND	---	---	---	30%	
1,3-Dichlorobenzene	ND	---	0.500	"	"	---	ND	---	---	---	30%	
1,4-Dichlorobenzene	ND	---	0.500	"	"	---	ND	---	---	---	30%	
Dichlorodifluoromethane	ND	---	1.00	"	"	---	ND	---	---	---	30%	
1,1-Dichloroethane	ND	---	0.500	"	"	---	ND	---	---	---	30%	
1,2-Dichloroethane (EDC)	ND	---	0.500	"	"	---	ND	---	---	---	30%	
1,1-Dichloroethene	ND	---	0.500	"	"	---	ND	---	---	---	30%	
cis-1,2-Dichloroethene	ND	---	0.500	"	"	---	ND	---	---	---	30%	
trans-1,2-Dichloroethene	ND	---	0.500	"	"	---	ND	---	---	---	30%	
1,2-Dichloropropane	ND	---	0.500	"	"	---	ND	---	---	---	30%	
1,3-Dichloropropane	ND	---	1.00	"	"	---	ND	---	---	---	30%	
2,2-Dichloropropane	ND	---	1.00	"	"	---	ND	---	---	---	30%	
1,1-Dichloropropene	ND	---	1.00	"	"	---	ND	---	---	---	30%	
cis-1,3-Dichloropropene	ND	---	1.00	"	"	---	ND	---	---	---	30%	
trans-1,3-Dichloropropene	ND	---	1.00	"	"	---	ND	---	---	---	30%	
Ethylbenzene	ND	---	0.500	"	"	---	ND	---	---	---	30%	

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Philip Nerenberg, Lab Director

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Hahn and Associates	Project: **White Salmon**	
434 NW 6th Ave. Suite 203	Project Number: 8755	**Reported:**
Portland, OR 97209	Project Manager: Rob Ede	11/07/14 10:42

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260B

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 4100760 - EPA 5030B												**Water**
Duplicate (4100760-DUP1)						Prepared: 10/28/14 15:49		Analyzed: 10/28/14 18:08				
QC Source Sample: 8755-141021-101 (A4J0686-03)												
Hexachlorobutadiene	ND	---	5.00	ug/L	"	---	ND	---	---	---	30%	
2-Hexanone	ND	---	10.0	"	"	---	ND	---	---	---	30%	
Isopropylbenzene	ND	---	1.00	"	"	---	ND	---	---	---	30%	
4-Isopropyltoluene	ND	---	1.00	"	"	---	ND	---	---	---	30%	
4-Methyl-2-pentanone (MiBK)	ND	---	10.0	"	"	---	ND	---	---	---	30%	
Methyl tert-butyl ether (MTBE)	ND	---	1.00	"	"	---	ND	---	---	---	30%	
Methylene chloride	ND	---	5.00	"	"	---	ND	---	---	---	30%	
Naphthalene	ND	---	2.00	"	"	---	ND	---	---	---	30%	
n-Propylbenzene	ND	---	0.500	"	"	---	ND	---	---	---	30%	
Styrene	ND	---	1.00	"	"	---	ND	---	---	---	30%	
1,1,1,2-Tetrachloroethane	ND	---	0.500	"	"	---	ND	---	---	---	30%	
1,1,2,2-Tetrachloroethane	ND	---	0.500	"	"	---	ND	---	---	---	30%	
Tetrachloroethene (PCE)	ND	---	0.500	"	"	---	ND	---	---	---	30%	
Toluene	ND	---	1.00	"	"	---	ND	---	---	---	30%	
1,2,3-Trichlorobenzene	ND	---	2.00	"	"	---	ND	---	---	---	30%	
1,2,4-Trichlorobenzene	ND	---	2.00	"	"	---	ND	---	---	---	30%	
1,1,1-Trichloroethane	ND	---	0.500	"	"	---	ND	---	---	---	30%	
1,1,2-Trichloroethane	ND	---	0.500	"	"	---	ND	---	---	---	30%	
Trichloroethene (TCE)	ND	---	0.500	"	"	---	ND	---	---	---	30%	
Trichlorofluoromethane	ND	---	2.00	"	"	---	ND	---	---	---	30%	
1,2,3-Trichloropropane	ND	---	1.00	"	"	---	ND	---	---	---	30%	
1,2,4-Trimethylbenzene	ND	---	1.00	"	"	---	ND	---	---	---	30%	
1,3,5-Trimethylbenzene	ND	---	1.00	"	"	---	ND	---	---	---	30%	
Vinyl chloride	ND	---	0.500	"	"	---	ND	---	---	---	30%	
m,p-Xylene	ND	---	1.00	"	"	---	ND	---	---	---	30%	
o-Xylene	ND	---	0.500	"	"	---	ND	---	---	---	30%	

Surr: Dibromofluoromethane (Surr)	*Recovery: 92 %*	*Limits: 80-120 %*	*Dilution: 1x*
1,4-Difluorobenzene (Surr)	*96 %*	*80-120 %*	*"*
Toluene-d8 (Surr)	*93 %*	*80-120 %*	*"*

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Hahn and Associates	Project: **White Salmon**	
434 NW 6th Ave. Suite 203	Project Number: 8755	**Reported:**
Portland, OR 97209	Project Manager: Rob Ede	11/07/14 10:42

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260B

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 4100760 - EPA 5030B												**Water**
Duplicate (4100760-DUP1)						Prepared: 10/28/14 15:49 Analyzed: 10/28/14 18:08						
QC Source Sample: 8755-141021-101 (A4J0686-03)												
Surr: 4-Bromofluorobenzene (Surr)						*Recovery: 97 %*	*Limits: 80-120 %*					*Dilution: 1x*

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Hahn and Associates	Project: **White Salmon**	
434 NW 6th Ave. Suite 203	Project Number: 8755	**Reported:**
Portland, OR 97209	Project Manager: Rob Ede	11/07/14 10:42

SAMPLE PREPARATION INFORMATION

Diesel and Oil Hydrocarbons by NWTPH-Dx

Prep: EPA 3510C (Fuels/Acid Ext.)

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 4100765							
A4J0686-03	Water	NWTPH-Dx	10/21/14 12:00	10/27/14 15:09	1000mL/5mL	1000mL/5mL	1.00

Gasoline Range Hydrocarbons (Benzene through Naphthalene) by NWTPH-Gx

Prep: EPA 5030B

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 4100760							
A4J0686-03	Water	NWTPH-Gx (MS)	10/21/14 12:00	10/28/14 15:49	5mL/5mL	5mL/5mL	1.00

Volatile Organic Compounds by EPA 8260B

Prep: EPA 5030B

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 4100760							
A4J0686-03	Water	EPA 8260B	10/21/14 12:00	10/28/14 15:49	5mL/5mL	5mL/5mL	1.00

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Hahn and Associates	Project: **White Salmon**	
434 NW 6th Ave. Suite 203	Project Number: 8755	**Reported:**
Portland, OR 97209	Project Manager: Rob Ede	11/07/14 10:42

Notes and Definitions

Qualifiers:

E-03	Result is reported as an estimated value. QA protocols have not been met for this analyte.
Q-19	Blank Spike Duplicate (BSD) sample analyzed in place of Matrix Spike/Duplicate samples due to limited sample amount available for analysis.
Q-31	Estimated Results. Recovery of Continuing Calibration Verification sample below lower control limit for this analyte. Results are likely biased low.
Q-41	Estimated Results. Recovery of Continuing Calibration Verification sample above upper control limit for this analyte. Results are likely biased high.

Notes and Conventions:

DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis. Results listed as 'wet' or without 'dry'designation are not dry weight corrected.
RPD	Relative Percent Difference
MDL	If MDL is not listed, data has been evaluated to the Method Reporting Limit only.
WMSC	Water Miscible Solvent Correction has been applied to Results and MRLs for volatiles soil samples per EPA 8000C.
Batch QC	Unless specifically requested, this report contains only results for Batch QC derived from client samples included in this report. All analyses were performed with the appropriate Batch QC (including Sample Duplicates, Matrix Spikes and/or Matrix Spike Duplicates) in order to meet or exceed method and regulatory requirements. Any exceptions to this will be qualified in this report. Complete Batch QC results are available upon request. In cases where there is insufficient sample provided for Sample Duplicates and/or Matrix Spikes, a Lab Control Sample Duplicate (LCS Dup) is analyzed to demonstrate accuracy and precision of the extraction and analysis.
Blank Policy	Apex assesses blank data for potential high bias down to a level equal to ½ the method reporting limit (MRL), except for conventional chemistry and HCID analyses which are assessed only to the MRL. Sample results flagged with a B or B-02 qualifier are potentially biased high if they are less than ten times the level found in the blank for inorganic analyses or less than five times the level found in the blank for organic analyses. For accurate comparison of volatile results to the level found in the blank; water sample results should be divided by the dilution factor, and soil sample results should be divided by 1/50 of the sample dilution to account for the sample prep factor. Results qualified as reported below the MRL may include a potential high bias if associated with a B or B-02 qualified blank. B and B-02 qualifications are not applied to J qualified results reported below the MRL.
---	QC results are not applicable. For example, % Recoveries for Blanks and Duplicates, % RPD for Blanks, Blank Spikes and Matrix Spikes, etc.
***	Used to indicate a possible discrepency with the Sample and Sample Duplicate results when the %RPD is not available. In this case, either the Sample or the Sample Duplicate has a reportable result for this analyte, while the other is Non Detect (ND).

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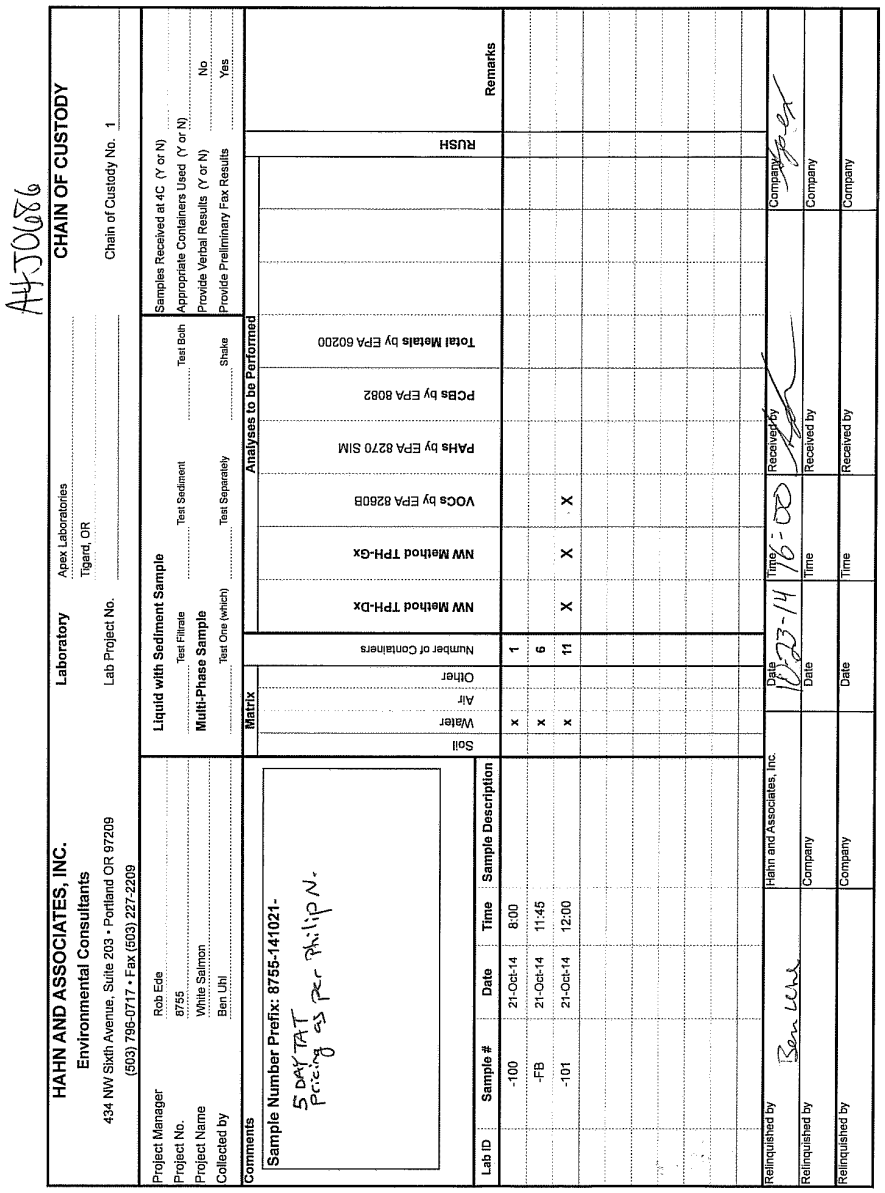
Hahn and Associates	Project: **White Salmon**	
434 NW 6th Ave. Suite 203	Project Number: 8755	**Reported:**
Portland, OR 97209	Project Manager: Rob Ede	11/07/14 10:42



HAHN AND ASSOCIATES, INC.
Environmental Consultants
434 NW Sixth Avenue, Suite 203 • Portland OR 97209
(503) 796-0717 • Fax (503) 227-2209

Laboratory: Apex Laboratories, Tigard, OR
Lab Project No.

CHAIN OF CUSTODY
Chain of Custody No. 1

Project Manager: Rob Ede
Project No.: 8755
Project Name: White Salmon
Collected by: Ben Uhl

Liquid with Sediment Sample — Test Filtrate / Test Sediment / Test Both
Multi-Phase Sample — Test One (which) / Test Separately / Shake

Samples Received at 4C (Y or N)
Appropriate Containers Used (Y or N)
Provide Verbal Results (Y or N): No
Provide Preliminary Fax Results: Yes

Comments
Sample Number Prefix: 8755-141021-
5 DAY TAT
Pricing as per Philip N.

Lab ID	Sample #	Date	Time	Sample Description	Matrix: Soil	Water	Air	Other	Number of Containers	NW Method TPH-Dx	NW Method TPH-Gx	VOCs by EPA 8260B	PAHs by EPA 8270 SIM	PCBs by EPA 8082	Total Metals by EPA 6020D	RUSH	Remarks
	-100	21-Oct-14	8:00			x			1								
	-FB	21-Oct-14	11:45			x			6		X	X					
	-101	21-Oct-14	12:00			x			11	X	X	X					

Relinquished by: Ben Uhl — Hahn and Associates, Inc. — Date: 10-23-14 — Time: 16:00 — Received by: — Company:
Relinquished by: — Company: — Date: — Time: — Received by: — Company:
Relinquished by: — Company: — Date: — Time: — Received by: — Company:

AYJ0686

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Philip Nerenberg

Philip Nerenberg, Lab Director

ATTACHMENT B

Laboratory Analytical Reports and Chain-of-Custody Documentation
October 21, 2014 Soil Samples

Apex Labs

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Wednesday, November 5, 2014

Rob Ede
Hahn and Associates
434 NW 6th Ave. Suite 203
Portland, OR 97209

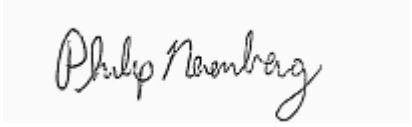
RE: White Salmon / 8755

Enclosed are the results of analyses for work order A4J0650, which was received by the laboratory on 10/23/2014 at 4:00:00PM.

Thank you for using Apex Labs. We appreciate your business and strive to provide the highest quality services to the environmental industry.

If you have any questions concerning this report or the services we offer, please feel free to contact me by email at: pnerenberg@apex-labs.com, or by phone at 503-718-2323.

Apex Laboratories



Philip Nerenberg, Lab Director

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Hahn and Associates	Project: **White Salmon**	
434 NW 6th Ave. Suite 203	Project Number: 8755	**Reported:**
Portland, OR 97209	Project Manager: Rob Ede	11/05/14 16:38

ANALYTICAL REPORT FOR SAMPLES

SAMPLE INFORMATION

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
8755-141021-01	A4J0650-01	Soil	10/21/14 13:00	10/23/14 16:00
8755-141021-02	A4J0650-02	Soil	10/21/14 13:14	10/23/14 16:00
8755-141021-03	A4J0650-03	Soil	10/21/14 13:22	10/23/14 16:00
8755-141021-04	A4J0650-04	Soil	10/21/14 13:30	10/23/14 16:00
8755-141021-05	A4J0650-05	Soil	10/21/14 13:40	10/23/14 16:00
8755-141021-06	A4J0650-06	Soil	10/21/14 13:58	10/23/14 16:00
8755-141021-07	A4J0650-07	Soil	10/21/14 14:20	10/23/14 16:00
8755-141021-08	A4J0650-08	Soil	10/21/14 14:31	10/23/14 16:00
8755-141021-09	A4J0650-09	Soil	10/21/14 14:42	10/23/14 16:00
8755-141021-10	A4J0650-10	Soil	10/21/14 15:00	10/23/14 16:00

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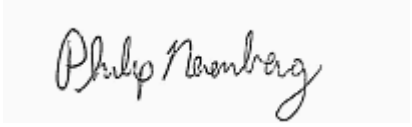

Philip Nerenberg, Lab Director

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Hahn and Associates	Project: **White Salmon**	
434 NW 6th Ave. Suite 203	Project Number: 8755	**Reported:**
Portland, OR 97209	Project Manager: Rob Ede	11/05/14 16:38

ANALYTICAL SAMPLE RESULTS

Diesel and Oil Hydrocarbons by NWTPH-Dx

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
8755-141021-01 (A4J0650-01RE1)			**Matrix: Soil**		**Batch: 4100805**			
Diesel	ND	---	25.0	mg/kg dry	1	10/29/14 11:40	NWTPH-Dx	
Oil	**81.2**	---	50.0	"	"	"	"	
Surrogate: o-Terphenyl (Surr)			*Recovery: 87 %*	*Limits: 50-150 %*	"	"	"	
8755-141021-02 (A4J0650-02)			**Matrix: Soil**		**Batch: 4100805**			
Diesel	ND	---	25.0	mg/kg dry	1	10/28/14 22:52	NWTPH-Dx	
Oil	**56.7**	---	50.0	"	"	"	"	
Surrogate: o-Terphenyl (Surr)			*Recovery: 91 %*	*Limits: 50-150 %*	"	"	"	
8755-141021-03 (A4J0650-03)			**Matrix: Soil**		**Batch: 4100805**			
Diesel	ND	---	25.0	mg/kg dry	1	10/28/14 23:40	NWTPH-Dx	
Oil	ND	---	50.0	"	"	"	"	
Surrogate: o-Terphenyl (Surr)			*Recovery: 84 %*	*Limits: 50-150 %*	"	"	"	
8755-141021-05 (A4J0650-05)			**Matrix: Soil**		**Batch: 4100805**			
Diesel	ND	---	25.0	mg/kg dry	1	10/29/14 00:27	NWTPH-Dx	
Oil	**155**	---	50.0	"	"	"	"	
Surrogate: o-Terphenyl (Surr)			*Recovery: 84 %*	*Limits: 50-150 %*	"	"	"	
8755-141021-06 (A4J0650-06)			**Matrix: Soil**		**Batch: 4100805**			
Diesel	ND	---	25.0	mg/kg dry	1	10/28/14 21:09	NWTPH-Dx	
Oil	ND	---	50.0	"	"	"	"	
Surrogate: o-Terphenyl (Surr)			*Recovery: 89 %*	*Limits: 50-150 %*	"	"	"	
8755-141021-08 (A4J0650-08)			**Matrix: Soil**		**Batch: 4100805**			
Diesel	ND	---	25.0	mg/kg dry	1	10/28/14 21:29	NWTPH-Dx	
Oil	**169**	---	50.0	"	"	"	"	
Surrogate: o-Terphenyl (Surr)			*Recovery: 98 %*	*Limits: 50-150 %*	"	"	"	
8755-141021-09 (A4J0650-09)			**Matrix: Soil**		**Batch: 4100805**			
Diesel	ND	---	25.0	mg/kg dry	1	10/28/14 22:08	NWTPH-Dx	
Oil	ND	---	50.0	"	"	"	"	
Surrogate: o-Terphenyl (Surr)			*Recovery: 102 %*	*Limits: 50-150 %*	"	"	"	
8755-141021-10 (A4J0650-10)			**Matrix: Soil**		**Batch: 4100805**			
Diesel	ND	---	25.0	mg/kg dry	1	10/28/14 22:28	NWTPH-Dx	
Oil	ND	---	50.0	"	"	"	"	
Surrogate: o-Terphenyl (Surr)			*Recovery: 97 %*	*Limits: 50-150 %*	"	"	"	

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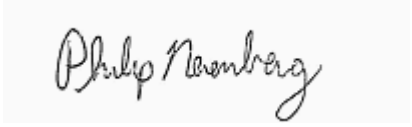

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Hahn and Associates	Project: **White Salmon**	
434 NW 6th Ave. Suite 203	Project Number: 8755	**Reported:**
Portland, OR 97209	Project Manager: Rob Ede	11/05/14 16:38

ANALYTICAL SAMPLE RESULTS

Gasoline Range Hydrocarbons (Benzene through Naphthalene) by NWTPH-Gx

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
8755-141021-01 (A4J0650-01)			**Matrix: Soil**		**Batch: 4100782**			
Gasoline Range Organics	ND	---	6.10	mg/kg dry	50	10/28/14 14:13	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)			*Recovery: 82 %*	*Limits: 50-150 %*	1	"	"	
1,4-Difluorobenzene (Sur)			*84 %*	*Limits: 50-150 %*	"	"	"	
8755-141021-02 (A4J0650-02)			**Matrix: Soil**		**Batch: 4100782**			
Gasoline Range Organics	ND	---	5.87	mg/kg dry	50	10/28/14 15:06	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)			*Recovery: 72 %*	*Limits: 50-150 %*	1	"	"	
1,4-Difluorobenzene (Sur)			*80 %*	*Limits: 50-150 %*	"	"	"	
8755-141021-03 (A4J0650-03)			**Matrix: Soil**		**Batch: 4100782**			
Gasoline Range Organics	ND	---	6.79	mg/kg dry	50	10/28/14 16:24	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)			*Recovery: 76 %*	*Limits: 50-150 %*	1	"	"	
1,4-Difluorobenzene (Sur)			*80 %*	*Limits: 50-150 %*	"	"	"	
8755-141021-05 (A4J0650-05)			**Matrix: Soil**		**Batch: 4100782**			
Gasoline Range Organics	ND	---	5.43	mg/kg dry	50	10/28/14 16:50	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)			*Recovery: 76 %*	*Limits: 50-150 %*	1	"	"	
1,4-Difluorobenzene (Sur)			*83 %*	*Limits: 50-150 %*	"	"	"	
8755-141021-06 (A4J0650-06)			**Matrix: Soil**		**Batch: 4100782**			
Gasoline Range Organics	ND	---	6.10	mg/kg dry	50	10/28/14 17:17	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)			*Recovery: 77 %*	*Limits: 50-150 %*	1	"	"	
1,4-Difluorobenzene (Sur)			*79 %*	*Limits: 50-150 %*	"	"	"	
8755-141021-08 (A4J0650-08)			**Matrix: Soil**		**Batch: 4100782**			
Gasoline Range Organics	ND	---	5.95	mg/kg dry	50	10/28/14 17:43	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)			*Recovery: 77 %*	*Limits: 50-150 %*	1	"	"	
1,4-Difluorobenzene (Sur)			*83 %*	*Limits: 50-150 %*	"	"	"	
8755-141021-09 (A4J0650-09)			**Matrix: Soil**		**Batch: 4100782**			
Gasoline Range Organics	ND	---	8.14	mg/kg dry	50	10/28/14 18:09	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)			*Recovery: 76 %*	*Limits: 50-150 %*	1	"	"	
1,4-Difluorobenzene (Sur)			*82 %*	*Limits: 50-150 %*	"	"	"	
8755-141021-10 (A4J0650-10)			**Matrix: Soil**		**Batch: 4100782**			
Gasoline Range Organics	**39.5**	---	7.12	mg/kg dry	50	10/28/14 18:36	NWTPH-Gx (MS)	F-13
Surrogate: 4-Bromofluorobenzene (Sur)			*Recovery: 85 %*	*Limits: 50-150 %*	1	"	"	
1,4-Difluorobenzene (Sur)			*83 %*	*Limits: 50-150 %*	"	"	"	

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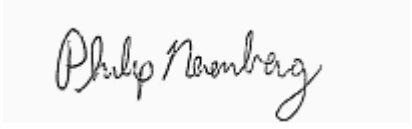

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Hahn and Associates	Project: **White Salmon**	
434 NW 6th Ave. Suite 203	Project Number: 8755	**Reported:**
Portland, OR 97209	Project Manager: Rob Ede	11/05/14 16:38

ANALYTICAL SAMPLE RESULTS

BTEX+N Compounds by EPA 8260B

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
8755-141021-01 (A4J0650-01)			**Matrix: Soil**		**Batch: 4100782**			
Benzene	ND	---	15.3	ug/kg dry	50	10/28/14 14:13	5035/8260B	
Toluene	ND	---	61.0	"	"	"	"	
Ethylbenzene	ND	---	30.5	"	"	"	"	
Xylenes, total	ND	---	91.5	"	"	"	"	
Naphthalene	ND	---	61.0	"	"	"	"	
Surrogate: Dibromofluoromethane (Surr)			*Recovery: 91 %*	*Limits: 70-130 %*	1	"	"	
1,4-Difluorobenzene (Surr)			*96 %*	*Limits: 70-130 %*	"	"	"	
Toluene-d8 (Surr)			*91 %*	*Limits: 70-130 %*	"	"	"	
4-Bromofluorobenzene (Surr)			*90 %*	*Limits: 70-130 %*	"	"	"	
8755-141021-02 (A4J0650-02)			**Matrix: Soil**		**Batch: 4100782**			
Benzene	ND	---	14.7	ug/kg dry	50	10/28/14 15:06	5035/8260B	
Toluene	ND	---	58.7	"	"	"	"	
Ethylbenzene	ND	---	29.4	"	"	"	"	
Xylenes, total	ND	---	88.1	"	"	"	"	
Naphthalene	ND	---	58.7	"	"	"	"	
Surrogate: Dibromofluoromethane (Surr)			*Recovery: 89 %*	*Limits: 70-130 %*	1	"	"	
1,4-Difluorobenzene (Surr)			*92 %*	*Limits: 70-130 %*	"	"	"	
Toluene-d8 (Surr)			*91 %*	*Limits: 70-130 %*	"	"	"	
4-Bromofluorobenzene (Surr)			*86 %*	*Limits: 70-130 %*	"	"	"	
8755-141021-03 (A4J0650-03)			**Matrix: Soil**		**Batch: 4100782**			
Benzene	ND	---	17.0	ug/kg dry	50	10/28/14 16:24	5035/8260B	
Toluene	ND	---	67.9	"	"	"	"	
Ethylbenzene	ND	---	33.9	"	"	"	"	
Xylenes, total	ND	---	102	"	"	"	"	
Naphthalene	ND	---	67.9	"	"	"	"	
Surrogate: Dibromofluoromethane (Surr)			*Recovery: 88 %*	*Limits: 70-130 %*	1	"	"	
1,4-Difluorobenzene (Surr)			*94 %*	*Limits: 70-130 %*	"	"	"	
Toluene-d8 (Surr)			*92 %*	*Limits: 70-130 %*	"	"	"	
4-Bromofluorobenzene (Surr)			*91 %*	*Limits: 70-130 %*	"	"	"	
8755-141021-04 (A4J0650-04)			**Matrix: Soil**		**Batch: 4100880**			
Benzene	ND	---	14.7	ug/kg dry	50	10/30/14 13:10	5035/8260B	
Toluene	ND	---	58.6	"	"	"	"	
Ethylbenzene	ND	---	29.3	"	"	"	"	
Xylenes, total	ND	---	88.0	"	"	"	"	

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Hahn and Associates	Project: **White Salmon**	
434 NW 6th Ave. Suite 203	Project Number: 8755	**Reported:**
Portland, OR 97209	Project Manager: Rob Ede	11/05/14 16:38

ANALYTICAL SAMPLE RESULTS

BTEX+N Compounds by EPA 8260B

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
8755-141021-04 (A4J0650-04)			**Matrix: Soil**		**Batch: 4100880**			
Naphthalene	ND	---	58.6	ug/kg dry	50	"	5035/8260B	
Surrogate: Dibromofluoromethane (Surr)			*Recovery: 98 %*	*Limits: 70-130 %*	1	"	"	
1,4-Difluorobenzene (Surr)			*99 %*	*Limits: 70-130 %*	"	"	"	
Toluene-d8 (Surr)			*97 %*	*Limits: 70-130 %*	"	"	"	
4-Bromofluorobenzene (Surr)			*95 %*	*Limits: 70-130 %*	"	"	"	
8755-141021-05 (A4J0650-05)			**Matrix: Soil**		**Batch: 4100782**			
Benzene	ND	---	13.6	ug/kg dry	50	10/28/14 16:50	5035/8260B	
Toluene	ND	---	54.3	"	"	"	"	
Ethylbenzene	ND	---	27.2	"	"	"	"	
Xylenes, total	ND	---	81.5	"	"	"	"	
Naphthalene	ND	---	54.3	"	"	"	"	
Surrogate: Dibromofluoromethane (Surr)			*Recovery: 90 %*	*Limits: 70-130 %*	1	"	"	
1,4-Difluorobenzene (Surr)			*97 %*	*Limits: 70-130 %*	"	"	"	
Toluene-d8 (Surr)			*89 %*	*Limits: 70-130 %*	"	"	"	
4-Bromofluorobenzene (Surr)			*89 %*	*Limits: 70-130 %*	"	"	"	
8755-141021-06 (A4J0650-06)			**Matrix: Soil**		**Batch: 4100782**			
Benzene	ND	---	15.3	ug/kg dry	50	10/28/14 17:17	5035/8260B	
Toluene	ND	---	61.0	"	"	"	"	
Ethylbenzene	ND	---	30.5	"	"	"	"	
Xylenes, total	ND	---	91.6	"	"	"	"	
Naphthalene	ND	---	61.0	"	"	"	"	
Surrogate: Dibromofluoromethane (Surr)			*Recovery: 90 %*	*Limits: 70-130 %*	1	"	"	
1,4-Difluorobenzene (Surr)			*92 %*	*Limits: 70-130 %*	"	"	"	
Toluene-d8 (Surr)			*89 %*	*Limits: 70-130 %*	"	"	"	
4-Bromofluorobenzene (Surr)			*91 %*	*Limits: 70-130 %*	"	"	"	
8755-141021-07 (A4J0650-07)			**Matrix: Soil**		**Batch: 4100880**			
Benzene	ND	---	14.9	ug/kg dry	50	10/30/14 13:36	5035/8260B	
Toluene	ND	---	59.7	"	"	"	"	
Ethylbenzene	ND	---	29.8	"	"	"	"	
Xylenes, total	ND	---	89.5	"	"	"	"	
Naphthalene	ND	---	59.7	"	"	"	"	
Surrogate: Dibromofluoromethane (Surr)			*Recovery: 96 %*	*Limits: 70-130 %*	1	"	"	
1,4-Difluorobenzene (Surr)			*101 %*	*Limits: 70-130 %*	"	"	"	
Toluene-d8 (Surr)			*86 %*	*Limits: 70-130 %*	"	"	"	

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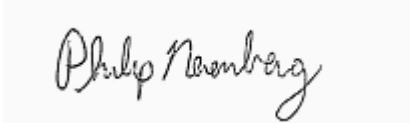

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Hahn and Associates	Project: **White Salmon**	
434 NW 6th Ave. Suite 203	Project Number: 8755	**Reported:**
Portland, OR 97209	Project Manager: Rob Ede	11/05/14 16:38

ANALYTICAL SAMPLE RESULTS

BTEX+N Compounds by EPA 8260B

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
8755-141021-07 (A4J0650-07)			**Matrix: Soil**		**Batch: 4100880**			
Surrogate: 4-Bromofluorobenzene (Surr)			*Recovery: 92 %*	*Limits: 70-130 %*	1	"	5035/8260B	
8755-141021-08 (A4J0650-08)			**Matrix: Soil**		**Batch: 4100782**			
Benzene	ND	---	14.9	ug/kg dry	50	10/28/14 17:43	5035/8260B	
Toluene	ND	---	59.5	"	"	"	"	
Ethylbenzene	ND	---	29.7	"	"	"	"	
Xylenes, total	ND	---	89.2	"	"	"	"	
Naphthalene	ND	---	59.5	"	"	"	"	
Surrogate: Dibromofluoromethane (Surr)			*Recovery: 92 %*	*Limits: 70-130 %*	1	"	"	
1,4-Difluorobenzene (Surr)			*96 %*	*Limits: 70-130 %*	"	"	"	
Toluene-d8 (Surr)			*90 %*	*Limits: 70-130 %*	"	"	"	
4-Bromofluorobenzene (Surr)			*87 %*	*Limits: 70-130 %*	"	"	"	
8755-141021-09 (A4J0650-09)			**Matrix: Soil**		**Batch: 4100782**			
Benzene	ND	---	20.4	ug/kg dry	50	10/28/14 18:09	5035/8260B	
Toluene	ND	---	81.4	"	"	"	"	
Ethylbenzene	ND	---	40.7	"	"	"	"	
Xylenes, total	ND	---	122	"	"	"	"	
Naphthalene	ND	---	81.4	"	"	"	"	
Surrogate: Dibromofluoromethane (Surr)			*Recovery: 91 %*	*Limits: 70-130 %*	1	"	"	
1,4-Difluorobenzene (Surr)			*95 %*	*Limits: 70-130 %*	"	"	"	
Toluene-d8 (Surr)			*91 %*	*Limits: 70-130 %*	"	"	"	
4-Bromofluorobenzene (Surr)			*89 %*	*Limits: 70-130 %*	"	"	"	
8755-141021-10 (A4J0650-10)			**Matrix: Soil**		**Batch: 4100782**			
Benzene	ND	---	17.8	ug/kg dry	50	10/28/14 18:36	5035/8260B	
Toluene	ND	---	71.2	"	"	"	"	
Ethylbenzene	ND	---	35.6	"	"	"	"	
Xylenes, total	ND	---	107	"	"	"	"	
Naphthalene	ND	---	71.2	"	"	"	"	
Surrogate: Dibromofluoromethane (Surr)			*Recovery: 89 %*	*Limits: 70-130 %*	1	"	"	
1,4-Difluorobenzene (Surr)			*93 %*	*Limits: 70-130 %*	"	"	"	
Toluene-d8 (Surr)			*89 %*	*Limits: 70-130 %*	"	"	"	
4-Bromofluorobenzene (Surr)			*91 %*	*Limits: 70-130 %*	"	"	"	

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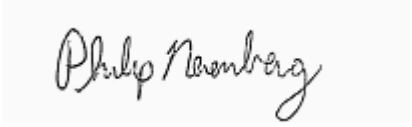

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Hahn and Associates	Project: **White Salmon**	
434 NW 6th Ave. Suite 203	Project Number: 8755	**Reported:**
Portland, OR 97209	Project Manager: Rob Ede	11/05/14 16:38

ANALYTICAL SAMPLE RESULTS

Percent Dry Weight

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
8755-141021-01 (A4J0650-01)			**Matrix: Soil**		**Batch: 4100753**			
% Solids	**78.8**	---	1.00	% by Weight	1	10/28/14 12:27	EPA 8000C	
8755-141021-02 (A4J0650-02)			**Matrix: Soil**		**Batch: 4100753**			
% Solids	**81.6**	---	1.00	% by Weight	1	10/28/14 12:27	EPA 8000C	
8755-141021-03 (A4J0650-03)			**Matrix: Soil**		**Batch: 4100753**			
% Solids	**75.4**	---	1.00	% by Weight	1	10/28/14 12:27	EPA 8000C	
8755-141021-04 (A4J0650-04)			**Matrix: Soil**		**Batch: 4100753**			
% Solids	**82.2**	---	1.00	% by Weight	1	10/28/14 12:27	EPA 8000C	
8755-141021-05 (A4J0650-05)			**Matrix: Soil**		**Batch: 4100753**			
% Solids	**84.7**	---	1.00	% by Weight	1	10/28/14 12:27	EPA 8000C	
8755-141021-06 (A4J0650-06)			**Matrix: Soil**		**Batch: 4100753**			
% Solids	**81.7**	---	1.00	% by Weight	1	10/28/14 12:27	EPA 8000C	
8755-141021-07 (A4J0650-07)			**Matrix: Soil**		**Batch: 4100753**			
% Solids	**81.1**	---	1.00	% by Weight	1	10/28/14 12:27	EPA 8000C	
8755-141021-08 (A4J0650-08)			**Matrix: Soil**		**Batch: 4100753**			
% Solids	**77.2**	---	1.00	% by Weight	1	10/28/14 12:27	EPA 8000C	
8755-141021-09 (A4J0650-09)			**Matrix: Soil**		**Batch: 4100753**			
% Solids	**76.7**	---	1.00	% by Weight	1	10/28/14 12:27	EPA 8000C	
8755-141021-10 (A4J0650-10)			**Matrix: Soil**		**Batch: 4100753**			
% Solids	**73.1**	---	1.00	% by Weight	1	10/28/14 12:27	EPA 8000C	

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Hahn and Associates	Project: **White Salmon**	
434 NW 6th Ave. Suite 203	Project Number: 8755	**Reported:**
Portland, OR 97209	Project Manager: Rob Ede	11/05/14 16:38

QUALITY CONTROL (QC) SAMPLE RESULTS

Diesel and Oil Hydrocarbons by NWTPH-Dx

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 4100805 - EPA 3546 (Fuels)							**Soil**					
Blank (4100805-BLK1)					Prepared: 10/28/14 14:50 Analyzed: 10/28/14 22:39							
NWTPH-Dx												
Diesel	ND	---	25.0	mg/kg wet	1	---	---	---	---	---	---	
Oil	ND	---	50.0	"	"	---	---	---	---	---	---	
Surr: o-Terphenyl (Surr)			*Recovery: 93 %*	*Limits: 50-150 %*			*Dilution: 1x*					
LCS (4100805-BS1)					Prepared: 10/28/14 14:50 Analyzed: 10/28/14 22:59							
NWTPH-Dx												
Diesel	116	---	25.0	mg/kg wet	1	125	---	92	76-115%	---	---	
Surr: o-Terphenyl (Surr)			*Recovery: 98 %*	*Limits: 50-150 %*			*Dilution: 1x*					
Duplicate (4100805-DUP3)					Prepared: 10/28/14 14:50 Analyzed: 10/29/14 12:21							
QC Source Sample: 8755-141021-01 (A4J0650-01RE1)												
NWTPH-Dx												
Diesel	ND	---	25.0	mg/kg dry	1	---	ND	---	---	---	30%	
Oil	**78.1**	---	50.0	"	"	---	81.2	---	---	4	30%	
Surr: o-Terphenyl (Surr)			*Recovery: 89 %*	*Limits: 50-150 %*			*Dilution: 1x*					

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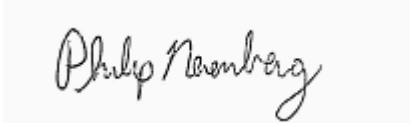

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Philip Nerenberg, Lab Director

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Tigard, OR 97223
503-718-2323 Phone
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Hahn and Associates	Project: **White Salmon**	
434 NW 6th Ave. Suite 203	Project Number: 8755	**Reported:**
Portland, OR 97209	Project Manager: Rob Ede	11/05/14 16:38

QUALITY CONTROL (QC) SAMPLE RESULTS

Gasoline Range Hydrocarbons (Benzene through Naphthalene) by NWTPH-Gx

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 4100782 - EPA 5035A							**Soil**					
Blank (4100782-BLK1)					Prepared: 10/28/14 09:00 Analyzed: 10/28/14 12:25							
NWTPH-Gx (MS)												
Gasoline Range Organics	ND	---	3.33	mg/kg wet	50	---	---	---	---	---	---	
Surr: 4-Bromofluorobenzene (Sur)			*Recovery: 79 %*	*Limits: 50-150 %*			*Dilution: 1x*					
1,4-Difluorobenzene (Sur)			*87 %*	*50-150 %*			*"*					
LCS (4100782-BS2)					Prepared: 10/28/14 09:00 Analyzed: 10/28/14 11:58							
NWTPH-Gx (MS)												
Gasoline Range Organics	20.9	---	5.00	mg/kg wet	50	25.0	---	84	70-130%	---	---	
Surr: 4-Bromofluorobenzene (Sur)			*Recovery: 81 %*	*Limits: 50-150 %*			*Dilution: 1x*					
1,4-Difluorobenzene (Sur)			*80 %*	*50-150 %*			*"*					
Duplicate (4100782-DUP1)					Prepared: 10/21/14 13:00 Analyzed: 10/28/14 14:39							
QC Source Sample: 8755-141021-01 (A4J0650-01)												
NWTPH-Gx (MS)												
Gasoline Range Organics	ND	---	6.31	mg/kg dry	50	---	ND	---	---	---	30%	
Surr: 4-Bromofluorobenzene (Sur)			*Recovery: 77 %*	*Limits: 50-150 %*			*Dilution: 1x*					
1,4-Difluorobenzene (Sur)			*81 %*	*50-150 %*			*"*					

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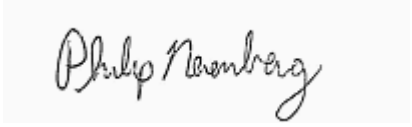

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Hahn and Associates	Project: **White Salmon**	
434 NW 6th Ave. Suite 203	Project Number: 8755	**Reported:**
Portland, OR 97209	Project Manager: Rob Ede	11/05/14 16:38

QUALITY CONTROL (QC) SAMPLE RESULTS

BTEX+N Compounds by EPA 8260B

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 4100782 - EPA 5035A							**Soil**					
Blank (4100782-BLK1)					Prepared: 10/28/14 09:00 Analyzed: 10/28/14 12:25							
5035/8260B												
Benzene	ND	---	8.33	ug/kg wet	50	---	---	---	---	---	---	
Toluene	ND	---	33.3	"	"	---	---	---	---	---	---	
Ethylbenzene	ND	---	16.7	"	"	---	---	---	---	---	---	
Xylenes, total	ND	---	50.0	"	"	---	---	---	---	---	---	
Naphthalene	ND	---	33.3	"	"	---	---	---	---	---	---	
Surr: Dibromofluoromethane (Surr)			*Recovery: 93 %*		*Limits: 70-130 %*				*Dilution: 1x*			
1,4-Difluorobenzene (Surr)			*99 %*		*70-130 %*				*"*			
Toluene-d8 (Surr)			*94 %*		*70-130 %*				*"*			
4-Bromofluorobenzene (Surr)			*90 %*		*70-130 %*				*"*			
LCS (4100782-BS1)					Prepared: 10/28/14 09:00 Analyzed: 10/28/14 11:31							
5035/8260B												
Benzene	961	---	12.5	ug/kg wet	50	1000	---	96	65-135%	---	---	
Toluene	967	---	50.0	"	"	"	---	97	"	---	---	
Ethylbenzene	995	---	25.0	"	"	"	---	100	"	---	---	
Xylenes, total	2880	---	75.0	"	"	3000	---	96	"	---	---	
Naphthalene	870	---	50.0	"	"	1000	---	87	"	---	---	
Surr: Dibromofluoromethane (Surr)			*Recovery: 92 %*		*Limits: 70-130 %*				*Dilution: 1x*			
1,4-Difluorobenzene (Surr)			*99 %*		*70-130 %*				*"*			
Toluene-d8 (Surr)			*95 %*		*70-130 %*				*"*			
4-Bromofluorobenzene (Surr)			*87 %*		*70-130 %*				*"*			
Duplicate (4100782-DUP1)					Prepared: 10/21/14 13:00 Analyzed: 10/28/14 14:39							
QC Source Sample: 8755-141021-01 (A4J0650-01)												
5035/8260B												
Benzene	ND	---	15.8	ug/kg dry	50	---	ND	---	---	---	30%	
Toluene	ND	---	63.1	"	"	---	ND	---	---	---	30%	
Ethylbenzene	ND	---	31.6	"	"	---	ND	---	---	---	30%	
Xylenes, total	ND	---	94.7	"	"	---	ND	---	---	---	30%	
Naphthalene	ND	---	63.1	"	"	---	ND	---	---	---	30%	
Surr: Dibromofluoromethane (Surr)			*Recovery: 92 %*		*Limits: 70-130 %*				*Dilution: 1x*			
1,4-Difluorobenzene (Surr)			*94 %*		*70-130 %*				*"*			

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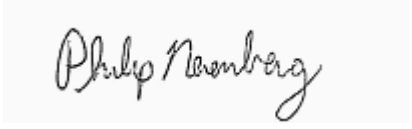

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Hahn and Associates	Project: **White Salmon**	
434 NW 6th Ave. Suite 203	Project Number: 8755	**Reported:**
Portland, OR 97209	Project Manager: Rob Ede	11/05/14 16:38

QUALITY CONTROL (QC) SAMPLE RESULTS

BTEX+N Compounds by EPA 8260B

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 4100782 - EPA 5035A							**Soil**					
Duplicate (4100782-DUP1)					Prepared: 10/21/14 13:00 Analyzed: 10/28/14 14:39							
QC Source Sample: 8755-141021-01 (A4J0650-01)												
Surr: Toluene-d8 (Surr)			*Recovery: 93 %*	*Limits: 70-130 %*			*Dilution: 1x*					
4-Bromofluorobenzene (Surr)			*87 %*	*70-130 %*			*"*					
Matrix Spike (4100782-MS1)					Prepared: 10/21/14 13:14 Analyzed: 10/28/14 15:32							
QC Source Sample: 8755-141021-02 (A4J0650-02)												
5035/8260B												
Benzene	1110	---	14.7	ug/kg dry	50	1170	ND	95	65-135%	---	---	
Toluene	1060	---	58.7	"	"	"	ND	91	"	---	---	
Ethylbenzene	1130	---	29.4	"	"	"	ND	97	"	---	---	
Xylenes, total	3230	---	88.1	"	"	3520	ND	92	"	---	---	
Naphthalene	954	---	58.7	"	"	1170	ND	81	"	---	---	
Surr: Dibromofluoromethane (Surr)			*Recovery: 92 %*	*Limits: 70-130 %*			*Dilution: 1x*					
1,4-Difluorobenzene (Surr)			*96 %*	*70-130 %*			*"*					
Toluene-d8 (Surr)			*90 %*	*70-130 %*			*"*					
4-Bromofluorobenzene (Surr)			*88 %*	*70-130 %*			*"*					

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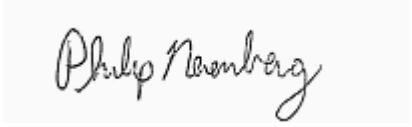

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Hahn and Associates	Project: **White Salmon**	
434 NW 6th Ave. Suite 203	Project Number: 8755	**Reported:**
Portland, OR 97209	Project Manager: Rob Ede	11/05/14 16:38

QUALITY CONTROL (QC) SAMPLE RESULTS

BTEX+N Compounds by EPA 8260B

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 4100880 - EPA 5035A							**Soil**					
Blank (4100880-BLK1)					Prepared: 10/30/14 10:00 Analyzed: 10/30/14 12:38							
5035/8260B												
Benzene	ND	---	8.33	ug/kg wet	50	---	---	---	---	---	---	
Toluene	ND	---	33.3	"	"	---	---	---	---	---	---	
Ethylbenzene	ND	---	16.7	"	"	---	---	---	---	---	---	
Xylenes, total	ND	---	50.0	"	"	---	---	---	---	---	---	
Naphthalene	ND	---	33.3	"	"	---	---	---	---	---	---	
Surr: Dibromofluoromethane (Surr)			*Recovery: 95 %*		*Limits: 70-130 %*				*Dilution: 1x*			
1,4-Difluorobenzene (Surr)			*101 %*		*70-130 %*				*"*			
Toluene-d8 (Surr)			*90 %*		*70-130 %*				*"*			
4-Bromofluorobenzene (Surr)			*94 %*		*70-130 %*				*"*			
LCS (4100880-BS1)					Prepared: 10/30/14 10:00 Analyzed: 10/30/14 11:47							
5035/8260B												
Benzene	1050	---	12.5	ug/kg wet	50	1000	---	105	65-135%	---	---	
Toluene	1020	---	50.0	"	"	"	---	102	"	---	---	
Ethylbenzene	1030	---	25.0	"	"	"	---	103	"	---	---	
Xylenes, total	3210	---	75.0	"	"	3000	---	107	"	---	---	
Naphthalene	822	---	50.0	"	"	1000	---	82	"	---	---	
Surr: Dibromofluoromethane (Surr)			*Recovery: 99 %*		*Limits: 70-130 %*				*Dilution: 1x*			
1,4-Difluorobenzene (Surr)			*100 %*		*70-130 %*				*"*			
Toluene-d8 (Surr)			*95 %*		*70-130 %*				*"*			
4-Bromofluorobenzene (Surr)			*92 %*		*70-130 %*				*"*			

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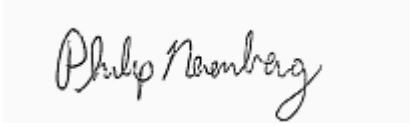

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Hahn and Associates	Project: **White Salmon**	
434 NW 6th Ave. Suite 203	Project Number: 8755	**Reported:**
Portland, OR 97209	Project Manager: Rob Ede	11/05/14 16:38

QUALITY CONTROL (QC) SAMPLE RESULTS

Percent Dry Weight

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 4100753 - Total Solids (Dry Weight)									**Soil**			
Duplicate (4100753-DUP4)					Prepared: 10/27/14 16:27 Analyzed: 10/28/14 12:27							
QC Source Sample: 8755-141021-10 (A4J0650-10)												
EPA 8000C												
% Solids	**77.3**	---	1.00	% by Weight	1	---	73.1	---	---	6	20%	

No Client related Batch QC samples analyzed for this batch. See notes page for more information.

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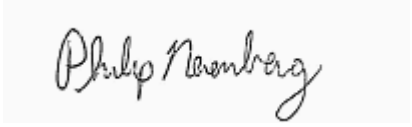

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Hahn and Associates	Project: **White Salmon**	
434 NW 6th Ave. Suite 203	Project Number: 8755	**Reported:**
Portland, OR 97209	Project Manager: Rob Ede	11/05/14 16:38

SAMPLE PREPARATION INFORMATION

Diesel and Oil Hydrocarbons by NWTPH-Dx

Prep: EPA 3546 (Fuels)

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 4100805							
A4J0650-01RE1	Soil	NWTPH-Dx	10/21/14 13:00	10/28/14 14:50	12.01g/5mL	10g/5mL	0.83
A4J0650-02	Soil	NWTPH-Dx	10/21/14 13:14	10/28/14 14:50	13.17g/5mL	10g/5mL	0.76
A4J0650-03	Soil	NWTPH-Dx	10/21/14 13:22	10/28/14 14:50	11.69g/5mL	10g/5mL	0.86
A4J0650-05	Soil	NWTPH-Dx	10/21/14 13:40	10/28/14 14:50	13.23g/5mL	10g/5mL	0.76
A4J0650-06	Soil	NWTPH-Dx	10/21/14 13:58	10/28/14 14:50	12.99g/5mL	10g/5mL	0.77
A4J0650-08	Soil	NWTPH-Dx	10/21/14 14:31	10/28/14 14:50	11.52g/5mL	10g/5mL	0.87
A4J0650-09	Soil	NWTPH-Dx	10/21/14 14:42	10/28/14 14:50	13.36g/5mL	10g/5mL	0.75
A4J0650-10	Soil	NWTPH-Dx	10/21/14 15:00	10/28/14 14:50	13.48g/5mL	10g/5mL	0.74

Gasoline Range Hydrocarbons (Benzene through Naphthalene) by NWTPH-Gx

Prep: EPA 5035A

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 4100782							
A4J0650-01	Soil	NWTPH-Gx (MS)	10/21/14 13:00	10/21/14 13:00	6.67g/5mL	10g/10mL	0.75
A4J0650-02	Soil	NWTPH-Gx (MS)	10/21/14 13:14	10/21/14 13:14	6.46g/5mL	10g/10mL	0.77
A4J0650-03	Soil	NWTPH-Gx (MS)	10/21/14 13:22	10/21/14 13:22	6.43g/5mL	10g/10mL	0.78
A4J0650-05	Soil	NWTPH-Gx (MS)	10/21/14 13:40	10/21/14 13:40	6.52g/5mL	10g/10mL	0.77
A4J0650-06	Soil	NWTPH-Gx (MS)	10/21/14 13:58	10/21/14 13:58	6.14g/5mL	10g/10mL	0.81
A4J0650-08	Soil	NWTPH-Gx (MS)	10/21/14 14:31	10/21/14 14:31	7.24g/5mL	10g/10mL	0.69
A4J0650-09	Soil	NWTPH-Gx (MS)	10/21/14 14:42	10/21/14 14:42	4.92g/5mL	10g/10mL	1.02
A4J0650-10	Soil	NWTPH-Gx (MS)	10/21/14 15:00	10/21/14 15:00	6.48g/5mL	10g/10mL	0.77

BTEX+N Compounds by EPA 8260B

Prep: EPA 5035A

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 4100782							
A4J0650-01	Soil	5035/8260B	10/21/14 13:00	10/21/14 13:00	6.67g/5mL	10g/10mL	0.75
A4J0650-02	Soil	5035/8260B	10/21/14 13:14	10/21/14 13:14	6.46g/5mL	10g/10mL	0.77
A4J0650-03	Soil	5035/8260B	10/21/14 13:22	10/21/14 13:22	6.43g/5mL	10g/10mL	0.78
A4J0650-05	Soil	5035/8260B	10/21/14 13:40	10/21/14 13:40	6.52g/5mL	10g/10mL	0.77
A4J0650-06	Soil	5035/8260B	10/21/14 13:58	10/21/14 13:58	6.14g/5mL	10g/10mL	0.81
A4J0650-08	Soil	5035/8260B	10/21/14 14:31	10/21/14 14:31	7.24g/5mL	10g/10mL	0.69
A4J0650-09	Soil	5035/8260B	10/21/14 14:42	10/21/14 14:42	4.92g/5mL	10g/10mL	1.02

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Hahn and Associates	Project: **White Salmon**	
434 NW 6th Ave. Suite 203	Project Number: 8755	**Reported:**
Portland, OR 97209	Project Manager: Rob Ede	11/05/14 16:38

SAMPLE PREPARATION INFORMATION

BTEX+N Compounds by EPA 8260B

Prep: EPA 5035A

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
A4J0650-10	Soil	5035/8260B	10/21/14 15:00	10/21/14 15:00	6.48g/5mL	10g/10mL	0.77
Batch: 4100880							
A4J0650-04	Soil	5035/8260B	10/21/14 13:30	10/21/14 13:30	6.36g/5mL	10g/10mL	0.79
A4J0650-07	Soil	5035/8260B	10/21/14 14:20	10/21/14 14:20	6.42g/5mL	10g/10mL	0.78

Percent Dry Weight

Prep: Total Solids (Dry Weight)

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 4100753							
A4J0650-01	Soil	EPA 8000C	10/21/14 13:00	10/27/14 16:27	1N/A/1N/A	1N/A/1N/A	NA
A4J0650-02	Soil	EPA 8000C	10/21/14 13:14	10/27/14 16:27	1N/A/1N/A	1N/A/1N/A	NA
A4J0650-03	Soil	EPA 8000C	10/21/14 13:22	10/27/14 16:27	1N/A/1N/A	1N/A/1N/A	NA
A4J0650-04	Soil	EPA 8000C	10/21/14 13:30	10/27/14 16:27	1N/A/1N/A	1N/A/1N/A	NA
A4J0650-05	Soil	EPA 8000C	10/21/14 13:40	10/27/14 16:27	1N/A/1N/A	1N/A/1N/A	NA
A4J0650-06	Soil	EPA 8000C	10/21/14 13:58	10/27/14 16:27	1N/A/1N/A	1N/A/1N/A	NA
A4J0650-07	Soil	EPA 8000C	10/21/14 14:20	10/27/14 16:27	1N/A/1N/A	1N/A/1N/A	NA
A4J0650-08	Soil	EPA 8000C	10/21/14 14:31	10/27/14 16:27	1N/A/1N/A	1N/A/1N/A	NA
A4J0650-09	Soil	EPA 8000C	10/21/14 14:42	10/27/14 16:27	1N/A/1N/A	1N/A/1N/A	NA
A4J0650-10	Soil	EPA 8000C	10/21/14 15:00	10/27/14 16:27	1N/A/1N/A	1N/A/1N/A	NA

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Philip Nerenberg

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Hahn and Associates	Project: **White Salmon**	
434 NW 6th Ave. Suite 203	Project Number: 8755	**Reported:**
Portland, OR 97209	Project Manager: Rob Ede	11/05/14 16:38

Notes and Definitions

Qualifiers:

F-13	The chromatographic pattern does not resemble the fuel standard used for quantitation

Notes and Conventions:

DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis. Results listed as 'wet' or without 'dry'designation are not dry weight corrected.
RPD	Relative Percent Difference
MDL	If MDL is not listed, data has been evaluated to the Method Reporting Limit only.
WMSC	Water Miscible Solvent Correction has been applied to Results and MRLs for volatiles soil samples per EPA 8000C.
Batch QC	Unless specifically requested, this report contains only results for Batch QC derived from client samples included in this report. All analyses were performed with the appropriate Batch QC (including Sample Duplicates, Matrix Spikes and/or Matrix Spike Duplicates) in order to meet or exceed method and regulatory requirements. Any exceptions to this will be qualified in this report. Complete Batch QC results are available upon request. In cases where there is insufficient sample provided for Sample Duplicates and/or Matrix Spikes, a Lab Control Sample Duplicate (LCS Dup) is analyzed to demonstrate accuracy and precision of the extraction and analysis.
Blank Policy	Apex assesses blank data for potential high bias down to a level equal to ½ the method reporting limit (MRL), except for conventional chemistry and HCID analyses which are assessed only to the MRL. Sample results flagged with a B or B-02 qualifier are potentially biased high if they are less than ten times the level found in the blank for inorganic analyses or less than five times the level found in the blank for organic analyses. For accurate comparison of volatile results to the level found in the blank; water sample results should be divided by the dilution factor, and soil sample results should be divided by 1/50 of the sample dilution to account for the sample prep factor. Results qualified as reported below the MRL may include a potential high bias if associated with a B or B-02 qualified blank. B and B-02 qualifications are not applied to J qualified results reported below the MRL.
---	QC results are not applicable. For example, % Recoveries for Blanks and Duplicates, % RPD for Blanks, Blank Spikes and Matrix Spikes, etc.
***	Used to indicate a possible discrepency with the Sample and Sample Duplicate results when the %RPD is not available. In this case, either the Sample or the Sample Duplicate has a reportable result for this analyte, while the other is Non Detect (ND).

Apex Laboratories

Philip Nerenberg, Lab Director

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Apex Labs

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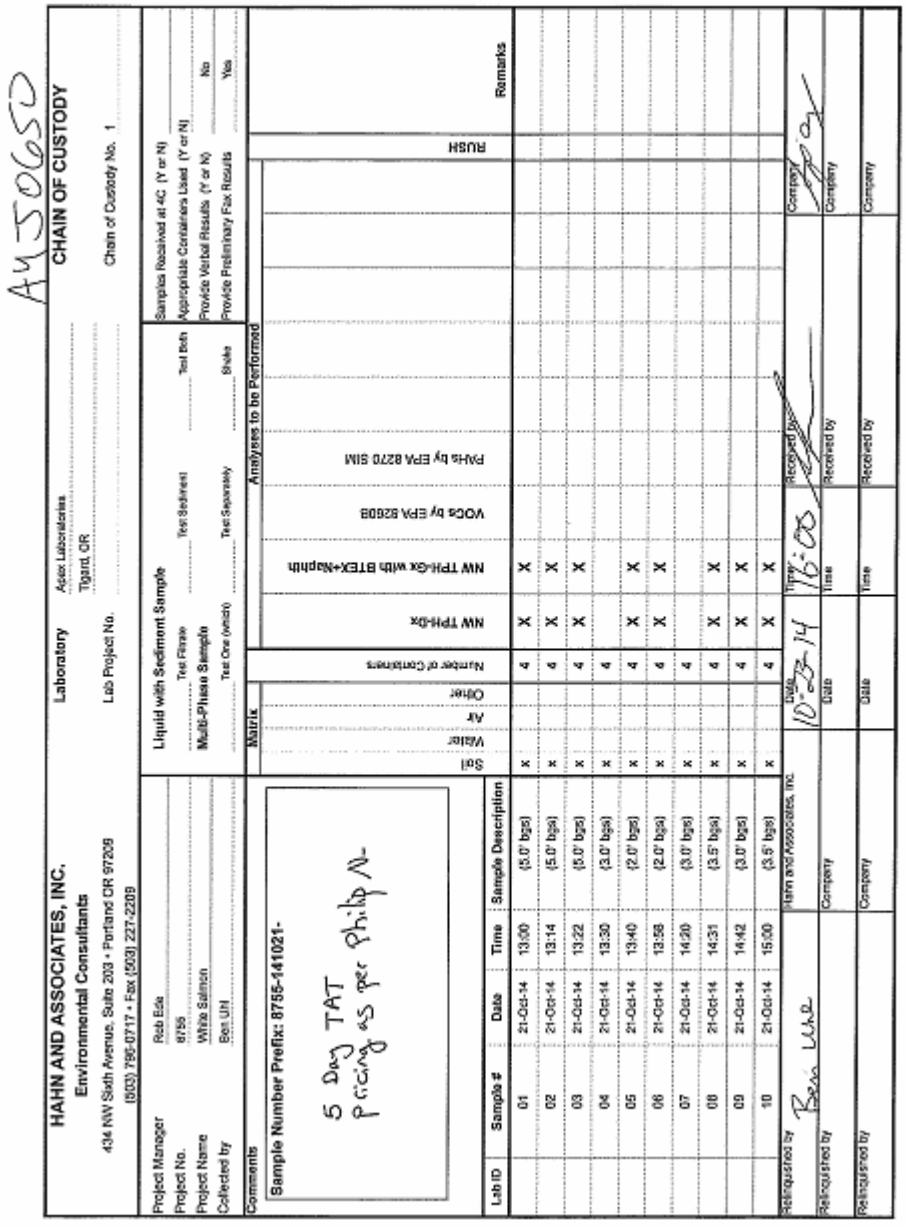
Tigard, OR 97223
503-718-2323 Phone
503-718-0333 Fax

Hahn and Associates	Project: **White Salmon**	
434 NW 6th Ave. Suite 203	Project Number: 8755	**Reported:**
Portland, OR 97209	Project Manager: Rob Ede	11/05/14 16:38



HAHN AND ASSOCIATES, INC.
Environmental Consultants
434 NW Sixth Avenue, Suite 203 • Portland OR 97209
(503) 796-0717 • Fax (503) 227-2209

Laboratory: Apex Laboratories, Tigard, OR
Lab Project No.

CHAIN OF CUSTODY
Chain of Custody No. 1

Project Manager: Rob Ede
Project No.: 8755
Project Name: White Salmon
Collected by: Ben Uhl

Liquid with Sediment Sample: Test Filtrate / Test Sediment / Test Both
Multi-Phase Sample: Test One (which) / Test Separately / Shake

Samples Received at 4C (Y or N)
Appropriate Containers Used (Y or N)
Provide Verbal Results (Y or N): No
Provide Preliminary Fax Results: Yes

Comments
Sample Number Prefix: 8755-141021-
5 day TAT
Pricing as per Phil N.

Lab ID	Sample #	Date	Time	Sample Description	Matrix: Soil	Water	Air	Other	Number of Containers	Analyses to be Performed: NW TPH-Dx	NW TPH-Gx with BTEX+Naphth	VOCs by EPA 8260B	PAHs by EPA 8270 SIM	RUSH	Remarks
	01	21-Oct-14	13:00	(5.0' bgs)	x				4	X	X				
	02	21-Oct-14	13:14	(5.0' bgs)	x				4	X	X				
	03	21-Oct-14	13:22	(5.0' bgs)	x				4	X	X				
	04	21-Oct-14	13:30	(3.0' bgs)	x				4						
	05	21-Oct-14	13:40	(2.0' bgs)	x				4	X	X				
	06	21-Oct-14	13:58	(2.0' bgs)	x				4	X	X				
	07	21-Oct-14	14:20	(3.0' bgs)	x				4						
	08	21-Oct-14	14:31	(3.5' bgs)	x				4	X	X				
	09	21-Oct-14	14:42	(3.0' bgs)	x				4	X	X				
	10	21-Oct-14	15:00	(3.5' bgs)	x				4	X	X				

Relinquished by: Ben Uhl — Hahn and Associates, Inc. — Date 10-23-14 — Time 16:05 — Received by — Company
Relinquished by — Company — Date — Time — Received by — Company
Relinquished by — Company — Date — Time — Received by — Company

Apex Laboratories

Philip Nerenberg

Philip Nerenberg, Lab Director

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