

UST Decommissioning and Risk-Based Closure Report

Milwaukie Public Works

6101 SE Johnson Creek Blvd, Portland, Oregon 97206

HydroCon Project Number: 2022-080

DEQ LUST #03-22-0783

Prepared for:

City of Milwaukie
10722 SE Main Street
Milwaukie, OR 97206

November 9, 2022

Prepared by:



HydroCon, LLC

300 W 15th Street, Suite 212 Vancouver, Washington 98660

Phone: (360) 703-6079

www.hydroconllc.net



Table of Contents

1.0 INTRODUCTION.....	1
1.1 Description of Property.....	1
1.2 Scope of Work	1
2.0 HEALTH AND SAFETY	1
2.1 Health and Safety Plan	1
2.2 Underground Utility Locates	1
3.0 SITE ACTIVITIES	1
3.1 UST Decommissioning	2
3.2 Compliance Soil Sampling.....	2
3.3 Laboratory Analysis	3
3.4 Site Restoration	3
3.5 Groundwater	3
4.0 CONCEPTUAL SITE MODEL	3
5.0 SOIL ANALYTICAL RESULTS	4
5.1 UST Decommissioning Compliance Soil Sample Results	4
6.0 SUMMARY AND CONCLUSIONS	4
7.0 QUALIFICATIONS.....	6

List of Figures

Figure 1 – Site Location

Figure 2 – Soil Sample Location and Results

List of Tables

Table 1 – Summary of Soil Analytical Results

Appendices

Appendix A – Disposal Receipts

Appendix B – Photographic Documentation

Appendix C – Laboratory Reports and Chain-of-Custody Documentation

1.0 INTRODUCTION

This report details the decommissioning by removal of two underground storage tanks (USTs), one 2,000-gallon containing diesel and one 5,000-gallon containing gasoline, three dispensers, and subsequent compliance soil sampling activities completed September 27, 2022.

1.1 Description of Property

The "Site" is located at 6101 SE Johnson Creek Blvd in in Portland, Oregon (Figure 1). The City of Milwaukie Public Works Department operates and maintains the property as a maintenance yard. A fuel dispensing system consisting of two USTs, dispensers, product piping, and fueling canopy was located in the center of the maintenance yard. The fueling system location and layout is shown on Figure 2.

According to City officials, the Site was formerly a rock pit that has been subsequently backfilled with undocumented fill.

1.2 Scope of Work

HydroCon Environmental, LLC (HydroCon) was contracted by Peak Environmental, LLC (Peak) to complete UST decommissioning regulatory soil sampling and reporting requirements.

2.0 HEALTH AND SAFETY

2.1 Health and Safety Plan

HydroCon prepared a site-specific health and safety plan (HASP) to govern health and safety protocols used during this investigation. Work was performed using Occupational Safety and Health Administration (OSHA) Level D work attire consisting of hard hats, safety glasses, protective gloves, and protective boots.

2.2 Underground Utility Locates

Prior to the commencement of subsurface activities, public utility notification was requested through the Oregon One Call service.

3.0 SITE ACTIVITIES

This section provides a discussion of the fieldwork procedures used to decommission the USTs, fueling system components, and perform compliance soil sampling activities.

3.1 UST Decommissioning

On September 27, 2022, Jamie's Environmental (Jamie's) removed the remaining contents in each UST using a vacuum truck, cleaned the interiors of the USTs by triple rinsing with a power washer, and removed the rinse water from the USTs. Jamie's transported the residual fuels and rinse water to ORRCO in Portland, Oregon for recycling. Approximately 404 gallons of product and rinsate were removed from the USTs. Disposal receipts for the product and rinsate are included in Appendix A.

Following cleaning and inerting of the USTs, they were removed from the ground by Peak. Both USTs were single-wall "STIP 3" construction, and appeared to be in excellent condition with little or no visual corrosion observed. The USTs were removed from the Site, and recycled at Schnitzer Steel in Portland, Oregon. The UST disposal receipt is included in Appendix A.

Soil underlying both USTs did not exhibit any field indications of contamination, including visual and olfactory observations. Additionally, a photoionization detector was used to field screen the soil for presence of volatile organic vapors. No significant PID readings were observed in the soil. The former UST pits area were subsequently backfilled with clean fill. Photographic documentation of UST decommissioning and sampling are included in Appendix B.

3.2 Compliance Soil Sampling

A total of 11 compliance soil samples were collected by HydroCon field personnel from beneath the USTs, product lines and former dispensers for laboratory analysis. These included:

- Two soil samples (COM-NW-8.5 and COM-SW-8.5) collected at a depth of approximately 8.5 feet below ground surface (bgs) under the 2,000-gallon diesel UST.
- Two soil samples (COM-NE-11 and COM-SS-11) were collected at a depth of approximately 11 feet bgs under the 5,000-gallon gasoline UST.
- Two soil samples (COM-DP20-03 and COM-DP40-03) were collected at a depth of approximately 3 feet bgs under the diesel product line.
- Two soil samples (COM-GP20-03 and COM-GP40-03) were collected at a depth of approximately 3 feet bgs under the gasoline product line.
- One soil sample (COM-GD-03) was collected at a depth of approximately 3 feet bgs under the gasoline dispenser.
- Two soil samples (COM-DD1-03 and COM-DD2-03) were collected at a depth of approximately 3 feet bgs under the diesel dispensers.

The selected soil samples were collected directly from the excavator bucket or a clean hand auger and placed into labeled laboratory prepared jars and sealed with Teflon-lined lids. A new pair of disposable nitrile gloves was used to collect each sample. Soil samples were collected utilizing 5035A field preservation, a preservation method utilized to limit the loss of volatile organic compounds (VOCs), and immediately placed in an ice filled cooler along with chain-of-custody documentation for shipment to Apex Laboratories in Tigard, Oregon. Locations of compliance soil samples are shown on Figure 2. Laboratory reports and Chain of Custody Documentation are included in Appendix C.

3.3 Laboratory Analysis

Soil samples were submitted for laboratory analysis to Apex Laboratories, LLC in Tigard, Oregon. The soil samples were analyzed for one or all of the following:

- Total Gasoline-Range Petroleum Hydrocarbons (GRPH) by Northwest Method NWTPH-Gx;
- Total Diesel-Range (DRPH) and Oil-Range (ORPH) Petroleum Hydrocarbons by Northwest Method NWTPH-Dx;
- Full-List VOCs by EPA Method 8260D (COM-DP20-03 only);
- Polyaromatic Hydrocarbons (PAHs) by EPA Method 8270E SIM (COM-DP20-03 only);
- Polychlorinated Biphenyls (PCBs) by EPA Method 8082A (COM-DP20-03 only); and
- RCRA 8 Metals by EPA Method 6020B (COM-DP20-03 only).

A copy of the laboratory report and chain-of-custody documentation is included in Appendix C.

3.4 Site Restoration

After the confirmation samples were collected, the UST excavation was backfilled with clean crushed gravel fill at the bottom of the excavation, and the remainder of the excavation was backfilled with the stockpiled clean overburden soil.

3.5 Groundwater

No groundwater was encountered decommissioning of the USTs or associated fueling system to a total explored depth of 11 feet bgs.

4.0 CONCEPTUAL SITE MODEL

A Conceptual Site Model (CSM) was prepared for the site. The site is zoned Light Industrial. As a result, the following exposure pathways appear to be potentially complete for commercial and excavation worker receptors. The detected analytical results are compared to the DEQ Risk-Based Concentrations (RBCs) for these receptors for the following media and potentially complete exposure pathways:

Soil:

- Soil Ingestion, Dermal Contact, and Inhalation (RBC_{ss}) (excavation worker only);
- Volatilization to Outdoor Air (RBC_{so}); and
- Vapor Intrusion into Buildings (RBC_{si}).

RBC_{ss} for occupational receptors was not included in this CSM. The Site is entirely capped with an asphalt parking lot; therefore, the pathway is incomplete. However, RBC_{ss} for excavation workers is

included based on the potential for future utility trenching or excavation on-site.

No groundwater or indications of groundwater were observed during the UST decommissioning activities. Additionally, the Site and surrounding properties are connected to the municipal water system, and no nearby wells were found through a search of the Oregon Water Resources Department (OWRD) Well Log Query (https://apps.wrd.state.or.us/apps/gw/well_log/, accessed on October 26, 2022). As a result, the DEQ RBC for Leaching to Groundwater was considered incomplete and was excluded from this CSM.

The DEQ RBCs for the applicable exposure pathways are summarized on Table 1.

5.0 SOIL ANALYTICAL RESULTS

The soil analytical results are reported in milligrams per kilogram (mg/kg) or parts per million. The laboratory reports and chain-of-custody documentation are included in Appendix C. Results are summarized below and shown on Table 1 and Figure 2.

The detected analytical results are compared to the DEQ RBCs for current potential receptors (residential and excavation worker), which were summarized in Section 4.0.

5.1 UST Decommissioning Compliance Soil Sample Results

DRPH was detected at concentrations above laboratory method reporting limits (MRLs) in soil samples COM-SW-8.5, COM-DP40-03 and COM-DD1-03, and ORPH was detected in soil samples COM-NW-8.5, COM-DP20-03 and COM-DP-40-03. All detected concentrations of ORPH and DRPH were well below applicable RBCs.

Soil sample COM-DP20-03 was also further analyzed for VOCs, PCBs, PAHs and RCRA 8 metals, based on containing detectable concentrations of DRPH, and the highest concentration of ORPH. No VOCs or PCBs were detected above their respective MRLs. Multiple PAHs were detected but at concentrations above the MRLs, but far below applicable RBCs.

Multiple RCRA 8 metals were detected, however the detected concentrations were below applicable RBCs, and also below regional background levels in soil for the Portland Basin¹.

6.0 SUMMARY AND CONCLUSIONS

On September 27, 2022, Peak Environmental decommissioned one 2,000-gallon diesel UST and one 5,000-gallon gasoline UST at the City of Milwaukie Maintenance Yard. A total of 11 compliance soil samples were collected from beneath the USTs, product lines and former dispensers. During decommissioning activities, no obvious petroleum contamination was detected through field screening.

The samples were analyzed for NWTPH-Gx, NWTPH-Dx, VOCs, PAHs and RCRA 8 metals. Sample

¹ Background Levels of Metals in Soils for Cleanups (Fact Sheet), Oregon DEQ, dated January 25, 2018

analysis identified the presence of diesel, oil, multiple PAHs, and multiple RCRA 8 metals, but all detected concentrations were far below applicable RBCs. The source of the oil contamination is unknown, but according to City of Milwaukie staff, the Site was formerly a rock pit that was backfilled with undocumented fill.

Based on the results of a risk-based site assessment, current site conditions are protective of the environment and human health for the current occupational receptors, and no further remedial actions are required at this time. HydroCon recommends submittal of this report to DEQ with request for regulatory closure of the LUST file.

7.0 QUALIFICATIONS

HydroCon's services were performed in a manner consistent with generally accepted practices of the profession undertaken in similar studies in the same geographical area during the same time period. HydroCon makes no warranties, either expressed or implied, regarding the findings, conclusions or recommendations. Please note that HydroCon does not warrant the work of laboratories, regulatory agencies, or other third parties supplying information used in the preparation of the report.

Findings and conclusions resulting from these services are based upon information derived from the on-site activities and other services performed under this scope of work; such information is subject to change over time. Certain indicators of the presence of hazardous substances, petroleum products, or other constituents may have been latent, inaccessible, unobservable, nondetectable or not present during these services, and we cannot represent that the site contains no hazardous substances, toxic materials, petroleum products, or other latent conditions beyond those identified during this monitoring. Subsurface conditions may vary from those encountered at specific sampling locations or during other surveys, tests, assessments, investigations, or exploratory services; the data, interpretations and findings are based solely upon data obtained at the time and within the scope of these services.

This report is intended for the sole use of **City of Milwaukie**. This report may not be used or relied upon by any other party without the written consent of HydroCon. The scope of services performed in execution of this evaluation may not be appropriate to satisfy the needs of other users, and use or re-use of this document or the findings, conclusions, or recommendations is at the risk of said user.

The conclusions presented in this report are, in part, based upon subsurface sampling performed at selected locations and depths. There may be conditions between borings or samples that differ significantly from those presented in this report and which cannot be predicted by this study.

Signature:

Report Prepared By:



David Borys
President

Report Reviewed By:



Chris Daschel, RG
Project Geologist





Sample Identification	Sample Date	Soil Analytical Results in mg/kg		
		GRPH	DRPH	ORPH
COM-NW-8.5	09/27/22	-	<21.2	158
COM-SW-8.5	09/27/22	-	22	<39.3
COM-NE-11	09/27/22	<8.45	-	-
COM-SE-11	09/27/22	<6.92	-	-
COM-DP20-03	09/27/22	-	<197	991
COM-DP40-03	09/27/22	-	243	288
COM-GP20-03	09/27/22	<10.7	-	-
COM-GP40-03	09/27/22	<7.38	-	-
COM-GD-03	09/27/22	<8.80	-	-
COM-DD1-03	09/27/22	-	291	<47.7
COM-DD2-03	09/27/22	-	<20.5	<41

Legend

- Buried Diesel Piping
- Buried Gasoline Piping
- Dispenser Island

COM-DP40-03 Soil Sample Location

0 30 60
SCALE IN FEET
1" = 30'

314 W 15th Street, Suite 300, Vancouver, Washington 98660
Phone 360.703.6079 Fax 360.703.6086

DATE: 9-29-2022
DWN: LC
CHK: DB
APPROVED: DB
PRJ. MGR: DB
PROJECT NO: 2022-080

FIGURE 2
SOIL SAMPLING
UNDERGROUND STORAGE TANK DECOMMISSIONING
CITY OF MILWAUKIE SHOPS
6101 SE JOHNSON CREEK BLVD
MILWAUKIE, OREGON

C:\Users\Lindsey\Desktop\HydroCon\TEMP\PHASE I Figures\2022-080 Milwaukie\2022-080 Milwaukie UST.dwg



Table 1
Summary of UST Decommissioning Analytical Results
City of Milwaukie Maintenance Yard Facility
6101 SE Johnson Creek Blvd, Milwaukie, Oregon

Sample Identification	Sample Depth (feet bgs)	Sample Date	Soil Analytical Results in mg/kg																							
			GRPH	DRPH	ORPH	RBDM VOCs	Acenaphthene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Chrysene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene	Phenanthrene	Pyrene	Remaining PAHs	Arsenic	Barium	Cadmium	Chromium	Lead	Remaining RCRA 8 Metals	PCBs	
COM-NW-8.5	8.5	09/27/22	-	<21.2	158	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
COM-SW-8.5	8.5	09/27/22	-	22	<39.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
COM-NE-11	11.0	09/27/22	<8.45	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
COM-SE-11	11.0	09/27/22	<6.92	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
COM-DP20-03	3.0	09/27/22	-	<197	991	<0.0785	0.326	0.261	0.289	0.315	0.42	0.234	0.507	0.231	0.273	0.25	0.509	<0.200	1.71	83.9	0.273	11.5	23.9	<1.01	<0.0103	
COM-DP40-03	3.0	09/27/22	-	243	288	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
COM-GP20-03	3.0	09/27/22	<10.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
COM-GP40-03	3.0	09/27/22	<7.38	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
COM-GD-03	3.0	09/27/22	<8.80	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
COM-DD1-03	3.0	09/27/22	-	291	<47.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
COM-DD2-03	3.0	09/27/22	-	<20.5	<41	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Soil Ingestion, Dermal Contact, and Inhalation (RBC _{ss})																										
Occupational Worker			20,000	14,000	36,000	37	70,000	21	2	21	-	2,100	30,000	47000	21	-	23000	-	1.9	220000	1100	>Max	800	-	0.59	
Construction Worker			9,700	4,600	11,000	380	21,000	170	17	170	-	17,000	10,000	14000	170	-	7500	-	15	69000	360	530000	800	-	4.9	
Excavation Worker			>Max	>Max	>Max	11,000	590,000	4,800	490	4,900	-	490,000	280,000	390000	4,900	-	210,000	-	420	-	9700	>Max	800	-	140	
Volatilization to Outdoor Air (RBC _{so})																										
Occupational			69,000	>Max	>Max	50	>Mav	>Csat	NV	NV	-	NV	NV	>Mav	NV	-	>Mav	-	NV	NV	NV	NV	NV	NV	>Csat	
Vapor Intrusion into Buildings (RBC _{si})																										
Occupational			>Max	>Max	>Max	2.1	>Mav	>Csat	NV	NV	-	NV	NV	>Mav	NV	-	>Mav	-	NV	NV	NV	NV	NV	NV	>Csat	

NOTES:
Chemical analyses performed by APEX Labs of Tigard, Oregon.
Gasoline-Range Total Petroleum Hydrocarbons (GRPH) analyzed by Northwest Method NWTPH-Gx.
Diesel-Range Total Petroleum Hydrocarbons (DRPH) analyzed by Northwest Method NWTPH-Dx.
Oil-Range Total Petroleum Hydrocarbons (ORPH) analyzed by Northwest Method NWTPH-Dx.
RBDM Compunds analyzed by EPA Method 8260CD
¹Oregon Department of Environmental Quality (DEQ). Risk-Based Decision Making for the Remediation of Petroleum-Contaminated Sites.
µg/L = micrograms per liter (parts per billion)
Bold indicates analyte detection exceeds one or more RBC.
<100 indicates the analyte was not detected above the laboratory reporting limit.
>S = this groundwater RBC exceeds the solubility limit.
* - Sample flagged as results for diesel range is due to overlap from gasoline range product.

APPENDIX A
DISPOSAL RECEIPTS

SCHNITZER STEEL PRODUCTS - PORTLAND 12005 North Burgard Portland, OR 97203 (503)286-5771

PEAK ENVIRONMENTAL LLC
Vendor # PEAK10

Date: 10/04/22
Check No: 2111808475

SEE ATTACHED FOR DETAIL

dep. 10/13/22

THE SECURITY FEATURES ON THIS CHECK INCLUDE A BLUE VOID PANTO PRINTED ON WATERMARKED PAPER, A MICROPRINTED BORDER AND THERMOCHROMATIC INK.

Schnitzer



SCHNITZER STEEL PRODUCTS - PORTLAND

12005 North Burgard
Portland, OR 97203
(503)286-5771

BANK OF AMERICA
64-1278/811 GA

No. 2111808475

DATE

10/04/22

PAY EXACTLY Six Hundred Seventy Nine and 64/100 Dollars

\$*****679.64

PAY TO THE
ORDER OF

PEAK ENVIRONMENTAL LLC
7202 NE HWY 99
STE 106 #182
VANCOUVER, WA 98665



Authorized Signature
Void After 180 Days



⑈ 2111808475 ⑈ ⑆061112788⑆3359879767⑈

2022-010

DATE: 10/04/22

BANK: LB - BofA-Portland-OR

Supplier#: PEAK10

WST - Portland-OR

SETTLEMENT SUMMARY

FOR: PEAK ENVIRONMENTAL LLC

1010 NW SULMAN RD

PAGE NO: 1

VANCOUVER

WA 98665

PEAK ENVIRONMENTAL LLC

VANCOUVER

WA

LOAD DATE	CONTRACT #	LN	MATERIAL DESCRIPTION	----	WEIGHTS (IN LB)-----	OUR PRICE	UM	ADJ. AMOUNT	TOTAL	AMT		
	SHIPMNT #		CODE	YD		YOUR PRICE	UM	INITIAL FRT	INITIAL	PAY		
	TICKET #			INITIAL CHECK		YOUR INVCE	AMT	DEAD FRT	FRT	ADJ		
	INVOICE #			SETTLE CHECK				EXCESS FRT	OTHER	ADJ		
	VEHICLE NO./ TRIP#	/	B/L#	/SHIPPER S.O.				FRT GST/HST	CHK	AMT		

09/28/22			#1 & #2 HMS UNPREPARED		RECV G	37020	SHIP G	37020	200.0000	NT	.00	692.00
	TZVBRM		111-100 F		T	30100	T	30100	200.0000	NT	.00	
	TZVBRM		808475		N	6920	N	6920	692.00			
	TZVBRM01								.00			
			SETTLE WGT	6920					.00			
	TK TZVBRM											692.00

09/28/22			FACILITY FEE - FER		RECV G	30100	SHIP G	30100	-12.3600	*	.00	-12.36
	TZVBRM		FACFER M		T	30100	T	30100	-12.3600	*	.00	
	TZVBRM		808475						-12.36			
	TZVBRM00								.00			
									.00			
	TK TZVBRM											-12.36

						6920	TOTAL FOR INVOICE	:		679.64		

					WEIGHT	6920						
					CHECK LB808475 TOTALS =							679.64

* SETTLEMENT = initial payment less freight adj & adj. amount

* FREIGHT ADJ = dead & excess freight based on guaranteed minimum weight

* ADJ. AMOUNT = difference between our weights and your weights at contracted price

* OTHER MISC = tolerance/second adjustments after final settlement was made

221298



RECEIVING RECORD

Head Office
4150 N. Suttle Rd.
Portland, OR 97217
1-800-367-8894

R 01-22-0927-003

Received From:

Jammies Environmental
128 Industrial Way
Longview WA 98632
EPA# WAH000022628
Phone: 360-577-5691
Customer ID# **9586**
Driver:

Receiving Location: Plant # 1

FPI
4150 N. Suttle Road
Portland, OR 97217

Phone 503-286-8352
EPA# ORD980975692

Date	Terms	Written By	Sales Rep.	Page
09/27/22	-0-	Salomon	84	1 of 1

Line	Qty.	Unit	Item	%H2O	Manifest #	B/L#	Net Qty
1	1	Each	Truck Wash Out Generator ID# 9586 Jammies Environmental			221298	
2	1	Each	XRF Analysis Testing Generator ID# 9586 Jammies Environmental			221298	
			Total Each 2.				

3	404	Gal.	Emulsified Fuel Generator ID# 9586 Jammies Environmental profile attached, City of Milwaukie. (JOB#221298)	40 %		221298	
			Total Gal. 404.				

Customer warrants that the waste petroleum products being received do not contain any contaminants including, without limitation, pesticides, chlorinated solvents at total concentrations greater than 1000 PPM, PCB's greater than 2 PPM, or any other material classified as hazardous waste by 40 CFR part 261, Subparts C and D (implementing the Federal Resource Conservation and Recovery Act) or by any other state or local hazardous waste classification program. Should Laboratory tests find this product not in compliance with 40 CFR part 261 customer agrees to pay all disposal costs incurred.

Signed X _____ DATE: 09/27/22

must be legibly filled in, in ink, in Indelible Pencil, or in
Carbon, and retained by the Agent

Shipper's No. 66# 221 298

Carrier Jammie's Environmental SCAC

Carrier's No. 221298

RECEIVED, subject to individually determined rates or contracts that have been agreed upon in writing between the carrier and shipper, if applicable, otherwise to the rates, classifications and rules that have been established by the carrier and are available to the shipper, on request; and all applicable state and federal regulations;

at _____, date _____ from _____

The Property described below, in apparent good order, except as stated (contents and condition of contents of packages unknown), marked, consigned, and described as indicated below which said company (the word company being understood throughout this document as meaning an individual or corporation in possession of the property under the contract) agrees to carry to said destination, on its route, or otherwise to deliver to another carrier on the route to said destination. It is mutually agreed as to each of the above that the carrier of all or any of said Property over all or any portion of said route to destination and as to each party at any time interested in all or any of said Property that every service to be performed hereunder shall be subject to all the conditions not prohibited by law, whether printed or written, herein contained, including the conditions on the back hereof, which are hereby agreed to by the shipper and accepted for himself and his assigns.

TO: Oil Re-refining Co. (ORRCO)
Consignee 4150 N. Suttle Rd.
Street
Destination Portland, OR Zip 97217

FROM: City of Milwaukee
Shipper
Street 6201 SE Johnson Creek Blvd.
Origin Milwaukee, WI Zip 53222

Route

Delivering Carrier Jammie's Environment!

Vehicle
Number

U.S. DOT Hazmat
Reg. Number: 0101521550471DE

Number and Type of Packages	HM	I.D. Number	Description of Articles	Hazard Class	Pkg. Grp.	Total Quantity (mass, volume, or activity)	Weight (subject to correction)	Class or Rate
1 TT	X	UN1268	Petroleum products, n.o.s. (Gasoline, diesel) water	3	III	404 gal.		

Remit COD to:

Address:

City: _____ State: _____ Zip: _____

NOTE: Where the rate is dependent on value, shippers are required to state specifically in writing the agreed or declared value of the property. The agreed or declared value of the property is hereby specifically stated by the shipper to be not exceeding \$ _____ Per _____

NOTE: Liability Limitation for loss or damage in this shipment may be applicable. See 49 U.S.C. 14706(c)(1)(A) and (B).

This is to certify that the above-named materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation according to the applicable regulations of the Department of Transportation. Per _____

Subject to Section 7 of conditions, if this shipment is to be delivered to the consignee without recourse on the consignor, the consignor shall sign the following statement:

The carrier shall not make delivery of this shipment without payment of freight and all other lawful charges.

(Signature of Consignor)

COD AMT:

\$

TOTAL CHARGES:

\$

COD FEE:	
-----------------	--

Prepaid ☒Prepaid ☐
Collect ☐ \$**FREIGHT CHARGES:**

☒ Prepaid ☐ Collect

☐ BY SHIPPER	☒ BY CARRIER
-------------------------------------	--

PLACARDS REQUIRED

Class 3

PLACARDS
SUPPLIED

DRIVER'S
SIGNATURE

SHIPPER: City of Milwaukee (Peak Env)

CARRIER: Jammie's Environmental

PER: [Signature] DATE: PER: DATE:

**EMERGENCY RESPONSE
TELEPHONE NUMBER:**

NRC: (800) 883-4672

NAME OR CONTRACT NUMBER
OR OTHER UNIQUE IDENTIFIER

UST Wash Water



JAMMIE'S ENVIRONMENTAL, INC. DAILY WORK ORDER

TIME IN: SEP27 5:36AM

TIME OUT: 9:27:22 2009

Customer: <u>Peak Environmental</u>	Contact: <u>Gurrett</u>	Date: <u>9-27-22</u>
Address: <u>@ City of Milwaukee</u>	Phone:	Job #: <u>221298</u>
City:	State:	PO #:

EMPLOYEE NAME	C	Shop	Job Start	Job Stop	Shop	Lunch	Total	DISPOSAL INFORMATION	
								FACILITY	GALLON
<u>Burt</u>		<u>0530</u>	<u>700</u>	<u>1020</u>	<u>200</u>		<u>8.5</u>		

C=Personnel Codes: F=Foreman, O=Operator, C/S=Confined Space Tech, T=Tech, TR=Training

WASHOUT

YES NO

ROLLING STOCK	EQ #	EQUIPMENT	EQ #	HOSE/PIPE/FITTING	SIZE	QTY	PPE	QTY
AIR MOVER-Gap/Guzzler		TRASH or DIAPHRAGM PUMP		PETROLEUM ~ CHEM	<u>2"</u>	<u>50'</u>	LEVEL D	<u>1</u>
500 GAL VACUUM TRAILER		SLUDGE or TRANSFER PUMP		GREEN CAMLOCK			LEVEL C	
80 BBL 3,000 GAL	<u>9</u>	DRUM LOADER		FLEX HOSE 4" or 6"			LEVEL B	
120 BBL 5,000 GAL		AIR PICK		KANNA FLEX			FRC'S	
SUPPORT TRUCK		LINE or BOILER CAMERA		HARD PIPE			GREEN/CHEM	
DUMP TRUCK		WATER BLAST GEAR	EQ #	AIR HOSE			TYVEK	
DUMP TRUCK & PUP		NOZZLES - 2D/3D/GAMMA		LAYFLAT or RED RUBBER				
JET ROD TRUCK/TRAILER		BED BUSTER		DUCT TAPE ROLL	<u>1</u>		ENVIRONMENTAL	QTY
UTILITY/DUMP/ TRAILER		CONCRETE DEMO ROBOT		CLEANING AGENTS	GAL	55 GAL DRUMS		
PRESSURE WASHER		COATING REMOVAL ROBOT		CAUSTIC SOAP			DRUM LINERS	
HYDRAULIC POWER PAK		SLUDGE REMOVAL ROBOT		BIG ORANGE			ABSORBENT PADS EA.	
AIR COMPRESSOR		SAFETY ITEMS	QTY	PH MINUS/ACID			ABSORBENT BOOM	
ROLL OFF-1 BOX		CSR RESCUE TRAILER		PH PLUS/CAUSTIC			VISQUEEN	
ROLL OFF-2 BOX		AIR MONITOR		SCRAM/YELLOW			FLOOR DRY/GRANULAR	
LINER TYPE	QT	BOX #'s		SCBA/SUPPLIED AIR EQ			T-RAGS	
6 MIL				AIR BOTTLES			EQUIPMENT NOT LISTED or RENTAL EQUIPMENT:	
DW FELT				TRIPOD/WINCH				
DW SCREEN								
VB LINER								

ROLLING STOCK	EQ #	DETAILED JOB DESCRIPTION:
8K,10K or 20K BLASTER @ 300hp		
8K,10K or 20K BLASTER @ 400hp		<u>530-700 load & mob</u>
40K BLASTER @ 300 HP		
40K BLASTER @ 400 HP		<u>700-1020 - triple rinse 2 tanks</u>
HOT WATER TRUCK 8k @ 400 HP		<u>1020-11:00 mob to ORCO to offload</u>
8K @ 600 HP		<u>11:00-12:30 offload, wash out</u>
		<u>12:30-200 mob to JET</u>

WORK ORDER PREPARED BY: <u>[Signature]</u>	PREVAILING WAGE	<u>YES</u>	NO
	IS JOB COMPLETE	<u>YES</u>	NO
	OWED PERDIEM	<u>YES</u>	NO

APPENDIX B
PHOTOGRAPHIC DOCUMENTATION

UST Decommissioning

City of Milwaukie Maintenance Yard ■ Milwaukie, OR

Project No. 2022-080 ■ Photo Date: September 27, 2022



Photo #1 UST pit: 2,000-gallon diesel UST



Photo #2 UST pit: 5,000-gallon gasoline UST pit



Photo #3 5,000-gallon gasoline UST. No visual corrosion



Photo #4 2,000-gallon diesel UST. Minimal rust on bottom of UST. No holes observed



Photo #5 Former dispenser area



Photo #6 Clean sump under former dispenser location

APPENDIX C

**LABORATORY REPORT AND CHAIN-OF-CUSTODY
DOCUMENTATION**



ANALYTICAL REPORT

AMENDED REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: OR100062

Wednesday, October 19, 2022

Dave Borys
HydroCon LLC
314 W 15th Street Suite 300
Vancouver, WA 98660

RE: A2I0878 - Peak City of Milwaukie - 2022-080

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

Enclosed are the results of analyses for work order A2I0878, which was received by the laboratory on 9/28/2022 at 12:44:00PM.

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

Please note: All samples will be disposed of within 30 days of sample receipt, unless prior arrangements have been made.

Cooler Receipt Information

(See Cooler Receipt Form for details)

Cooler #1	4.1 degC
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This Final Report is the official version of the data results for this sample submission, unless superseded by a subsequent, labeled amended report.

All other deliverables derived from this data, including Electronic Data Deliverables (EDDs), CLP-like forms, client requested summary sheets, and all other products are considered secondary to this report.



Apex Laboratories

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Michele Poquiz, Forensics Project Manager

**ANALYTICAL REPORT****AMENDED REPORT****Apex Laboratories, LLC**

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

HydroCon LLC

314 W 15th Street Suite 300

Vancouver, WA 98660

Project: **Peak City of Milwaukie**Project Number: **2022-080**Project Manager: **Dave Borys****Report ID:****A210878 - 10 19 22 1243****ANALYTICAL REPORT FOR SAMPLES****SAMPLE INFORMATION**

Client Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
COM-NW-8.5	A210878-01	Soil	09/27/22 13:20	09/28/22 12:44
COM-SW-8.5	A210878-02	Soil	09/27/22 13:30	09/28/22 12:44
COM-NE-11	A210878-03	Soil	09/27/22 13:40	09/28/22 12:44
COM-SE-11	A210878-04	Soil	09/27/22 13:45	09/28/22 12:44
COM-DP20-03	A210878-05	Soil	09/27/22 13:55	09/28/22 12:44
COM-DP40-03	A210878-06	Soil	09/27/22 14:05	09/28/22 12:44
COM-GP20-03	A210878-07	Soil	09/27/22 14:10	09/28/22 12:44
COM-GP40-03	A210878-08	Soil	09/27/22 14:15	09/28/22 12:44
COM-GD-03	A210878-09	Soil	09/27/22 14:20	09/28/22 12:44
COM-DD1-03	A210878-10	Soil	09/27/22 14:25	09/28/22 12:44
COM-DD2-03	A210878-11	Soil	09/27/22 14:30	09/28/22 12:44

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Michele Poquiz, Forensics Project Manager



ANALYTICAL REPORT

AMENDED REPORT

Apex Laboratories, LLC

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Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

HydroCon LLC

314 W 15th Street Suite 300

Vancouver, WA 98660

Project: Peak City of Milwaukie

Project Number: 2022-080

Project Manager: Dave Borys

Report ID:

A2I0878 - 10 19 22 1243

ANALYTICAL CASE NARRATIVE

Work Order: A2I0878

Amended Report Revision 1

This report supersedes all previous reports.

The Final Report has been amended to include 8260 RBDM VOCs, PAHs, PCBs, and RCRA 8 Metals results for sample COM-DP20-03 (Apex Lab WO A2I0878-05).

Cameron O'Brien

Project Manager

10/11/22

NWTPH-Dx with Silica Gel Column Cleanup Note

Upon further quality assurance review, the results of the NWTPH-Dx analysis after silica gel column cleanup should not be relied upon. These results have been removed from the report.

Michele Poquiz

Forensics Project Manager

10/14/22

Apex Laboratories

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Michele Poquiz, Forensics Project Manager



ANALYTICAL REPORT

AMENDED REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

HydroCon LLC

314 W 15th Street Suite 300

Vancouver, WA 98660

Project: **Peak City of Milwaukie**Project Number: **2022-080**Project Manager: **Dave Borys****Report ID:****A210878 - 10 19 22 1243**

ANALYTICAL SAMPLE RESULTS

Diesel and/or Oil Hydrocarbons by NWTPH-Dx

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
COM-NW-8.5 (A2I0878-01RE2)				Matrix: Soil		Batch: 2210953		
Diesel	ND	---	21.2	mg/kg dry	1	09/29/22 12:59	NWTPH-Dx	
Oil	158	---	42.4	mg/kg dry	1	09/29/22 12:59	NWTPH-Dx	
Surrogate: o-Terphenyl (Surr)		Recovery: 90 %		Limits: 50-150 %	1	09/29/22 12:59	NWTPH-Dx	
COM-SW-8.5 (A2I0878-02RE1)				Matrix: Soil		Batch: 2210953		
Diesel	21.9	---	19.6	mg/kg dry	1	09/29/22 11:00	NWTPH-Dx	F-11
Oil	ND	---	39.3	mg/kg dry	1	09/29/22 11:00	NWTPH-Dx	
Surrogate: o-Terphenyl (Surr)		Recovery: 82 %		Limits: 50-150 %	1	09/29/22 11:00	NWTPH-Dx	
COM-DP20-03 (A2I0878-05RE1)				Matrix: Soil		Batch: 2210953		
Diesel	ND	---	197	mg/kg dry	10	09/29/22 12:35	NWTPH-Dx	
Oil	991	---	393	mg/kg dry	10	09/29/22 12:35	NWTPH-Dx	
Surrogate: o-Terphenyl (Surr)		Recovery: 78 %		Limits: 50-150 %	10	09/29/22 12:35	NWTPH-Dx	S-05
COM-DP40-03 (A2I0878-06RE1)				Matrix: Soil		Batch: 2210953		
Diesel	243	---	101	mg/kg dry	5	09/29/22 12:11	NWTPH-Dx	
Oil	288	---	201	mg/kg dry	5	09/29/22 12:11	NWTPH-Dx	
Surrogate: o-Terphenyl (Surr)		Recovery: 85 %		Limits: 50-150 %	5	09/29/22 12:11	NWTPH-Dx	S-05
COM-DD1-03 (A2I0878-10)				Matrix: Soil		Batch: 2210953		
Diesel	291	---	23.9	mg/kg dry	1	09/29/22 03:14	NWTPH-Dx	F-11
Oil	ND	---	47.7	mg/kg dry	1	09/29/22 03:14	NWTPH-Dx	
Surrogate: o-Terphenyl (Surr)		Recovery: 61 %		Limits: 50-150 %	1	09/29/22 03:14	NWTPH-Dx	
COM-DD2-03 (A2I0878-11RE1)				Matrix: Soil		Batch: 2210953		
Diesel	ND	---	20.5	mg/kg dry	1	09/29/22 11:24	NWTPH-Dx	
Oil	ND	---	41.0	mg/kg dry	1	09/29/22 11:24	NWTPH-Dx	
Surrogate: o-Terphenyl (Surr)		Recovery: 81 %		Limits: 50-150 %	1	09/29/22 11:24	NWTPH-Dx	

Apex Laboratories

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Michele Poquiz, Forensics Project Manager



ANALYTICAL REPORT

AMENDED REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

HydroCon LLC

314 W 15th Street Suite 300

Vancouver, WA 98660

Project: **Peak City of Milwaukie**Project Number: **2022-080**Project Manager: **Dave Borys****Report ID:****A210878 - 10 19 22 1243**

ANALYTICAL SAMPLE RESULTS

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

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
COM-NE-11 (A210878-03)				Matrix: Soil		Batch: 2210962		
Gasoline Range Organics	ND	---	8.45	mg/kg dry	50	09/29/22 12:47	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		Recovery:	109 %	Limits: 50-150 %	1	09/29/22 12:47	NWTPH-Gx (MS)	
1,4-Difluorobenzene (Sur)			107 %	50-150 %	1	09/29/22 12:47	NWTPH-Gx (MS)	
COM-SE-11 (A210878-04)				Matrix: Soil		Batch: 2210962		
Gasoline Range Organics	ND	---	6.92	mg/kg dry	50	09/29/22 13:14	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		Recovery:	110 %	Limits: 50-150 %	1	09/29/22 13:14	NWTPH-Gx (MS)	
1,4-Difluorobenzene (Sur)			107 %	50-150 %	1	09/29/22 13:14	NWTPH-Gx (MS)	
COM-GP20-03 (A210878-07)				Matrix: Soil		Batch: 2210962		
Gasoline Range Organics	ND	---	10.7	mg/kg dry	50	09/29/22 13:41	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		Recovery:	109 %	Limits: 50-150 %	1	09/29/22 13:41	NWTPH-Gx (MS)	
1,4-Difluorobenzene (Sur)			108 %	50-150 %	1	09/29/22 13:41	NWTPH-Gx (MS)	
COM-GP40-03 (A210878-08)				Matrix: Soil		Batch: 2210962		
Gasoline Range Organics	ND	---	7.38	mg/kg dry	50	09/29/22 14:08	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		Recovery:	110 %	Limits: 50-150 %	1	09/29/22 14:08	NWTPH-Gx (MS)	
1,4-Difluorobenzene (Sur)			108 %	50-150 %	1	09/29/22 14:08	NWTPH-Gx (MS)	
COM-GD-03 (A210878-09)				Matrix: Soil		Batch: 2210962		
Gasoline Range Organics	ND	---	8.80	mg/kg dry	50	09/29/22 14:35	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		Recovery:	111 %	Limits: 50-150 %	1	09/29/22 14:35	NWTPH-Gx (MS)	
1,4-Difluorobenzene (Sur)			107 %	50-150 %	1	09/29/22 14:35	NWTPH-Gx (MS)	

Apex Laboratories

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Michele Poquiz, Forensics Project Manager



ANALYTICAL REPORT

AMENDED REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

HydroCon LLC

314 W 15th Street Suite 300

Vancouver, WA 98660

Project: **Peak City of Milwaukie**Project Number: **2022-080**Project Manager: **Dave Borys****Report ID:****A210878 - 10 19 22 1243**

ANALYTICAL SAMPLE RESULTS

Selected Volatile Organic Compounds by EPA 5035A/8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
COM-DP20-03 (A210878-05)		Matrix: Soil		Batch: 22J0379				
Benzene	ND	---	0.0157	mg/kg dry	50	10/11/22 14:04	5035A/8260D	
Toluene	ND	---	0.0785	mg/kg dry	50	10/11/22 14:04	5035A/8260D	
Ethylbenzene	ND	---	0.0393	mg/kg dry	50	10/11/22 14:04	5035A/8260D	
Xylenes, total	ND	---	0.118	mg/kg dry	50	10/11/22 14:04	5035A/8260D	
Methyl tert-butyl ether (MTBE)	ND	---	0.0785	mg/kg dry	50	10/11/22 14:04	5035A/8260D	
Naphthalene	ND	---	0.157	mg/kg dry	50	10/11/22 14:04	5035A/8260D	
1,2-Dibromoethane (EDB)	ND	---	0.0785	mg/kg dry	50	10/11/22 14:04	5035A/8260D	
1,2-Dichloroethane (EDC)	ND	---	0.0393	mg/kg dry	50	10/11/22 14:04	5035A/8260D	
Isopropylbenzene	ND	---	0.0785	mg/kg dry	50	10/11/22 14:04	5035A/8260D	
1,2,4-Trimethylbenzene	ND	---	0.0785	mg/kg dry	50	10/11/22 14:04	5035A/8260D	
1,3,5-Trimethylbenzene	ND	---	0.0785	mg/kg dry	50	10/11/22 14:04	5035A/8260D	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery:</i>	<i>106 %</i>	<i>Limits:</i>	<i>80-120 %</i>	<i>1</i>	<i>10/11/22 14:04</i>	<i>5035A/8260D</i>
<i>Toluene-d8 (Surr)</i>			<i>99 %</i>		<i>80-120 %</i>	<i>1</i>	<i>10/11/22 14:04</i>	<i>5035A/8260D</i>
<i>4-Bromofluorobenzene (Surr)</i>			<i>94 %</i>		<i>79-120 %</i>	<i>1</i>	<i>10/11/22 14:04</i>	<i>5035A/8260D</i>

Apex Laboratories

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Michele Poquiz, Forensics Project Manager



ANALYTICAL REPORT

AMENDED REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

HydroCon LLC

314 W 15th Street Suite 300

Vancouver, WA 98660

Project: **Peak City of Milwaukie**Project Number: **2022-080**Project Manager: **Dave Borys****Report ID:****A210878 - 10 19 22 1243**

ANALYTICAL SAMPLE RESULTS

Polychlorinated Biphenyls by EPA 8082A

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
COM-DP20-03 (A210878-05)				Matrix: Soil		Batch: 22J0642		C-07
Aroclor 1016	ND	---	0.0103	mg/kg dry	1	10/18/22 08:35	EPA 8082A	
Aroclor 1221	ND	---	0.0103	mg/kg dry	1	10/18/22 08:35	EPA 8082A	
Aroclor 1232	ND	---	0.0103	mg/kg dry	1	10/18/22 08:35	EPA 8082A	
Aroclor 1242	ND	---	0.0103	mg/kg dry	1	10/18/22 08:35	EPA 8082A	
Aroclor 1248	ND	---	0.0103	mg/kg dry	1	10/18/22 08:35	EPA 8082A	
Aroclor 1254	ND	---	0.0103	mg/kg dry	1	10/18/22 08:35	EPA 8082A	
Aroclor 1260	ND	---	0.0103	mg/kg dry	1	10/18/22 08:35	EPA 8082A	
<i>Surrogate: Decachlorobiphenyl (Surr)</i>		<i>Recovery: 76 %</i>		<i>Limits: 60-125 %</i>	<i>1</i>	<i>10/18/22 08:35</i>	<i>EPA 8082A</i>	

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503-718-2323

ORELAP ID: OR100062

HydroCon LLC

314 W 15th Street Suite 300

Vancouver, WA 98660

Project: **Peak City of Milwaukie**Project Number: **2022-080**Project Manager: **Dave Borys****Report ID:****A210878 - 10 19 22 1243**

ANALYTICAL SAMPLE RESULTS

Polyaromatic Hydrocarbons (PAHs) by EPA 8270E (SIM)

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
COM-DP20-03 (A210878-05)				Matrix: Soil		Batch: 22J0405		
Acenaphthene	0.326	---	0.200	mg/kg dry	20	10/11/22 17:20	EPA 8270E SIM	Q-42
Acenaphthylene	ND	---	0.200	mg/kg dry	20	10/11/22 17:20	EPA 8270E SIM	
Anthracene	ND	---	0.200	mg/kg dry	20	10/11/22 17:20	EPA 8270E SIM	
Benz(a)anthracene	0.261	---	0.200	mg/kg dry	20	10/11/22 17:20	EPA 8270E SIM	Q-42
Benzo(a)pyrene	0.289	---	0.200	mg/kg dry	20	10/11/22 17:20	EPA 8270E SIM	Q-42
Benzo(b)fluoranthene	0.315	---	0.200	mg/kg dry	20	10/11/22 17:20	EPA 8270E SIM	M-05, Q-42
Benzo(k)fluoranthene	ND	---	0.200	mg/kg dry	20	10/11/22 17:20	EPA 8270E SIM	Q-42
Benzo(g,h,i)perylene	0.420	---	0.200	mg/kg dry	20	10/11/22 17:20	EPA 8270E SIM	
Chrysene	0.234	---	0.200	mg/kg dry	20	10/11/22 17:20	EPA 8270E SIM	Q-42
Dibenz(a,h)anthracene	ND	---	0.200	mg/kg dry	20	10/11/22 17:20	EPA 8270E SIM	
Fluoranthene	0.507	---	0.200	mg/kg dry	20	10/11/22 17:20	EPA 8270E SIM	Q-42
Fluorene	0.231	---	0.200	mg/kg dry	20	10/11/22 17:20	EPA 8270E SIM	Q-42
Indeno(1,2,3-cd)pyrene	0.273	---	0.200	mg/kg dry	20	10/11/22 17:20	EPA 8270E SIM	Q-42
1-Methylnaphthalene	ND	---	0.200	mg/kg dry	20	10/11/22 17:20	EPA 8270E SIM	
2-Methylnaphthalene	ND	---	0.200	mg/kg dry	20	10/11/22 17:20	EPA 8270E SIM	
Naphthalene	ND	---	0.200	mg/kg dry	20	10/11/22 17:20	EPA 8270E SIM	
Phenanthrene	0.250	---	0.200	mg/kg dry	20	10/11/22 17:20	EPA 8270E SIM	Q-42
Pyrene	0.509	---	0.200	mg/kg dry	20	10/11/22 17:20	EPA 8270E SIM	Q-42
Dibenzofuran	ND	---	0.200	mg/kg dry	20	10/11/22 17:20	EPA 8270E SIM	Q-42
Surrogate: 2-Fluorobiphenyl (Surr)		Recovery: 97 %		Limits: 44-120 %	20	10/11/22 17:20	EPA 8270E SIM	
p-Terphenyl-d14 (Surr)		81 %		54-127 %	20	10/11/22 17:20	EPA 8270E SIM	

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Michele Poquiz, Forensics Project Manager

Page 8 of 30

**ANALYTICAL REPORT****AMENDED REPORT****Apex Laboratories, LLC**

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

HydroCon LLC

314 W 15th Street Suite 300

Vancouver, WA 98660

Project: **Peak City of Milwaukie**Project Number: **2022-080**Project Manager: **Dave Borys****Report ID:****A210878 - 10 19 22 1243****ANALYTICAL SAMPLE RESULTS****Total Metals by EPA 6020B (ICPMS)**

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
COM-DP20-03 (A210878-05)				Matrix: Soil				
Batch: 22J0397								
Arsenic	1.71	---	1.01	mg/kg dry	10	10/11/22 17:38	EPA 6020B	Q-42
Barium	83.9	---	1.01	mg/kg dry	10	10/11/22 17:38	EPA 6020B	
Cadmium	0.273	---	0.202	mg/kg dry	10	10/11/22 17:38	EPA 6020B	Q-42
Chromium	11.5	---	1.01	mg/kg dry	10	10/11/22 17:38	EPA 6020B	
Lead	23.9	---	0.202	mg/kg dry	10	10/11/22 17:38	EPA 6020B	Q-42
Mercury	ND	---	0.0807	mg/kg dry	10	10/11/22 17:38	EPA 6020B	
Selenium	ND	---	1.01	mg/kg dry	10	10/11/22 17:38	EPA 6020B	
Silver	ND	---	0.202	mg/kg dry	10	10/11/22 17:38	EPA 6020B	

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Michele Poquiz, Forensics Project Manager



ANALYTICAL REPORT

AMENDED REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

HydroCon LLC

314 W 15th Street Suite 300

Vancouver, WA 98660

Project: **Peak City of Milwaukie**Project Number: **2022-080**Project Manager: **Dave Borys****Report ID:****A210878 - 10 19 22 1243**

ANALYTICAL SAMPLE RESULTS

Percent Dry Weight

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
COM-NW-8.5 (A210878-01)				Matrix: Soil		Batch: 2210937		
% Solids	93.8	---	1.00	%	1	09/29/22 05:44	EPA 8000D	
COM-SW-8.5 (A210878-02)				Matrix: Soil		Batch: 2210937		
% Solids	95.3	---	1.00	%	1	09/29/22 05:44	EPA 8000D	
COM-NE-11 (A210878-03)				Matrix: Soil		Batch: 2210990		
% Solids	89.9	---	1.00	%	1	09/30/22 06:35	EPA 8000D	
COM-SE-11 (A210878-04)				Matrix: Soil		Batch: 2210990		
% Solids	89.2	---	1.00	%	1	09/30/22 06:35	EPA 8000D	
COM-DP20-03 (A210878-05)				Matrix: Soil		Batch: 2210937		
% Solids	96.1	---	1.00	%	1	09/29/22 05:44	EPA 8000D	
COM-DP40-03 (A210878-06)				Matrix: Soil		Batch: 2210937		
% Solids	94.0	---	1.00	%	1	09/29/22 05:44	EPA 8000D	
COM-GP20-03 (A210878-07)				Matrix: Soil		Batch: 2210990		
% Solids	93.1	---	1.00	%	1	09/30/22 06:35	EPA 8000D	
COM-GP40-03 (A210878-08)				Matrix: Soil		Batch: 2210990		
% Solids	93.6	---	1.00	%	1	09/30/22 06:35	EPA 8000D	
COM-GD-03 (A210878-09)				Matrix: Soil		Batch: 2210990		
% Solids	88.9	---	1.00	%	1	09/30/22 06:35	EPA 8000D	
COM-DD1-03 (A210878-10)				Matrix: Soil		Batch: 2210937		
% Solids	82.0	---	1.00	%	1	09/29/22 05:44	EPA 8000D	
COM-DD2-03 (A210878-11)				Matrix: Soil		Batch: 2210937		
% Solids	93.1	---	1.00	%	1	09/29/22 05:44	EPA 8000D	

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QUALITY CONTROL (QC) SAMPLE RESULTS

Diesel and/or Oil Hydrocarbons by NWTPH-Dx

Analyte	Result	Detection L Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 2210953 - EPA 3546 (Fuels)						Soil						
Blank (2210953-BLK1)		Prepared: 09/28/22 17:59 Analyzed: 09/28/22 21:45										
NWTPH-Dx												
Diesel	ND	---	18.2	mg/kg wet	1	---	---	---	---	---	---	
Oil	ND	---	36.4	mg/kg wet	1	---	---	---	---	---	---	
Surr: o-Terphenyl (Surr)		Recovery: 96 %		Limits: 50-150 %		Dilution: 1x						
LCS (2210953-BS1)		Prepared: 09/28/22 17:59 Analyzed: 09/28/22 22:06										
NWTPH-Dx												
Diesel	116	---	20.0	mg/kg wet	1	125	---	93	38 - 132%	---	---	
Surr: o-Terphenyl (Surr)		Recovery: 103 %		Limits: 50-150 %		Dilution: 1x						

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QUALITY CONTROL (QC) SAMPLE RESULTS

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

Analyte	Result	Detection L Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 2210962 - EPA 5035A						Soil						
Blank (2210962-BLK1)		Prepared: 09/29/22 08:00 Analyzed: 09/29/22 10:32										
NWTPH-Gx (MS)												
Gasoline Range Organics	ND	---	3.33	mg/kg wet	50	---	---	---	---	---	---	
Surr: 4-Bromofluorobenzene (Sur)		Recovery: 109 %		Limits: 50-150 %		Dilution: 1x						
1,4-Difluorobenzene (Sur)		106 %		50-150 %		"						
LCS (2210962-BS2)		Prepared: 09/29/22 08:00 Analyzed: 09/29/22 10:05										
NWTPH-Gx (MS)												
Gasoline Range Organics	25.2	---	5.00	mg/kg wet	50	25.0	---	101	80 - 120%	---	---	
Surr: 4-Bromofluorobenzene (Sur)		Recovery: 107 %		Limits: 50-150 %		Dilution: 1x						
1,4-Difluorobenzene (Sur)		106 %		50-150 %		"						

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QUALITY CONTROL (QC) SAMPLE RESULTS

Selected Volatile Organic Compounds by EPA 5035A/8260D

Analyte	Result	Detection L Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 22J0379 - EPA 5035A						Soil						
Blank (22J0379-BLK1)		Prepared: 10/11/22 08:00 Analyzed: 10/11/22 10:55										
5035A/8260D												
Benzene	ND	---	0.00667	mg/kg wet	50	---	---	---	---	---	---	
Toluene	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Ethylbenzene	ND	---	0.0167	mg/kg wet	50	---	---	---	---	---	---	
Xylenes, total	ND	---	0.0500	mg/kg wet	50	---	---	---	---	---	---	
Methyl tert-butyl ether (MTBE)	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Naphthalene	ND	---	0.0667	mg/kg wet	50	---	---	---	---	---	---	
1,2-Dibromoethane (EDB)	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
1,2-Dichloroethane (EDC)	ND	---	0.0167	mg/kg wet	50	---	---	---	---	---	---	
Isopropylbenzene	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
1,2,4-Trimethylbenzene	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
1,3,5-Trimethylbenzene	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 106 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		99 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		94 %		79-120 %		"						
LCS (22J0379-BS1)		Prepared: 10/11/22 08:00 Analyzed: 10/11/22 10:01										
5035A/8260D												
Benzene	1.11	---	0.0100	mg/kg wet	50	1.00	---	111	80 - 120%	---	---	
Toluene	0.990	---	0.0500	mg/kg wet	50	1.00	---	99	80 - 120%	---	---	
Ethylbenzene	0.970	---	0.0250	mg/kg wet	50	1.00	---	97	80 - 120%	---	---	
Xylenes, total	2.93	---	0.0750	mg/kg wet	50	3.00	---	98	80 - 120%	---	---	
Methyl tert-butyl ether (MTBE)	1.09	---	0.0500	mg/kg wet	50	1.00	---	109	80 - 120%	---	---	
Naphthalene	0.885	---	0.100	mg/kg wet	50	1.00	---	89	80 - 120%	---	---	
1,2-Dibromoethane (EDB)	1.03	---	0.0500	mg/kg wet	50	1.00	---	103	80 - 120%	---	---	
1,2-Dichloroethane (EDC)	1.11	---	0.0250	mg/kg wet	50	1.00	---	111	80 - 120%	---	---	
Isopropylbenzene	0.978	---	0.0500	mg/kg wet	50	1.00	---	98	80 - 120%	---	---	
1,2,4-Trimethylbenzene	1.01	---	0.0500	mg/kg wet	50	1.00	---	101	80 - 120%	---	---	
1,3,5-Trimethylbenzene	1.05	---	0.0500	mg/kg wet	50	1.00	---	105	80 - 120%	---	---	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 107 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		100 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		96 %		79-120 %		"						

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6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

HydroCon LLC

314 W 15th Street Suite 300

Vancouver, WA 98660

Project: **Peak City of Milwaukie**Project Number: **2022-080**Project Manager: **Dave Borys****Report ID:****A210878 - 10 19 22 1243**

QUALITY CONTROL (QC) SAMPLE RESULTS

Polychlorinated Biphenyls by EPA 8082A

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 22J0642 - EPA 3546						Soil						
Blank (22J0642-BLK1)		Prepared: 10/17/22 10:26 Analyzed: 10/18/22 08:00						C-07				
EPA 8082A												
Aroclor 1016	ND	---	0.00909	mg/kg wet	1	---	---	---	---	---	---	
Aroclor 1221	ND	---	0.00909	mg/kg wet	1	---	---	---	---	---	---	
Aroclor 1232	ND	---	0.00909	mg/kg wet	1	---	---	---	---	---	---	
Aroclor 1242	ND	---	0.00909	mg/kg wet	1	---	---	---	---	---	---	
Aroclor 1248	ND	---	0.00909	mg/kg wet	1	---	---	---	---	---	---	
Aroclor 1254	ND	---	0.00909	mg/kg wet	1	---	---	---	---	---	---	
Aroclor 1260	ND	---	0.00909	mg/kg wet	1	---	---	---	---	---	---	
Surr: Decachlorobiphenyl (Surr)		Recovery: 90 %		Limits: 60-125 %		Dilution: 1x						
LCS (22J0642-BS1)		Prepared: 10/17/22 10:26 Analyzed: 10/18/22 08:18						C-07				
EPA 8082A												
Aroclor 1016	0.181	---	0.0100	mg/kg wet	1	0.250	---	72	47 - 134%	---	---	
Aroclor 1260	0.218	---	0.0100	mg/kg wet	1	0.250	---	87	53 - 140%	---	---	
Surr: Decachlorobiphenyl (Surr)		Recovery: 95 %		Limits: 60-125 %		Dilution: 1x						
Duplicate (22J0642-DUP1)		Prepared: 10/17/22 10:26 Analyzed: 10/18/22 09:11						C-07				
QC Source Sample: COM-DP20-03 (A210878-05)												
EPA 8082A												
Aroclor 1016	ND	---	0.0102	mg/kg dry	1	---	ND	---	---	---	30%	
Aroclor 1221	ND	---	0.0102	mg/kg dry	1	---	ND	---	---	---	30%	
Aroclor 1232	ND	---	0.0102	mg/kg dry	1	---	ND	---	---	---	30%	
Aroclor 1242	ND	---	0.0102	mg/kg dry	1	---	ND	---	---	---	30%	
Aroclor 1248	ND	---	0.0102	mg/kg dry	1	---	ND	---	---	---	30%	
Aroclor 1254	ND	---	0.0102	mg/kg dry	1	---	ND	---	---	---	30%	
Aroclor 1260	ND	---	0.0102	mg/kg dry	1	---	0.00858	---	---	***	30%	
Surr: Decachlorobiphenyl (Surr)		Recovery: 75 %		Limits: 60-125 %		Dilution: 1x						

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Project: **Peak City of Milwaukie**Project Number: **2022-080**Project Manager: **Dave Borys****Report ID:****A210878 - 10 19 22 1243**

QUALITY CONTROL (QC) SAMPLE RESULTS

Polyaromatic Hydrocarbons (PAHs) by EPA 8270E (SIM)

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 22J0405 - EPA 3546						Soil						
Blank (22J0405-BLK1)		Prepared: 10/11/22 12:38 Analyzed: 10/11/22 16:30										
EPA 8270E SIM												
Acenaphthene	ND	---	0.00909	mg/kg wet	1	---	---	---	---	---	---	
Acenaphthylene	ND	---	0.00909	mg/kg wet	1	---	---	---	---	---	---	
Anthracene	ND	---	0.00909	mg/kg wet	1	---	---	---	---	---	---	
Benz(a)anthracene	ND	---	0.00909	mg/kg wet	1	---	---	---	---	---	---	
Benzo(a)pyrene	ND	---	0.00909	mg/kg wet	1	---	---	---	---	---	---	
Benzo(b)fluoranthene	ND	---	0.00909	mg/kg wet	1	---	---	---	---	---	---	
Benzo(k)fluoranthene	ND	---	0.00909	mg/kg wet	1	---	---	---	---	---	---	
Benzo(g,h,i)perylene	ND	---	0.00909	mg/kg wet	1	---	---	---	---	---	---	
Chrysene	ND	---	0.00909	mg/kg wet	1	---	---	---	---	---	---	
Dibenz(a,h)anthracene	ND	---	0.00909	mg/kg wet	1	---	---	---	---	---	---	
Fluoranthene	ND	---	0.00909	mg/kg wet	1	---	---	---	---	---	---	
Fluorene	ND	---	0.00909	mg/kg wet	1	---	---	---	---	---	---	
Indeno(1,2,3-cd)pyrene	ND	---	0.00909	mg/kg wet	1	---	---	---	---	---	---	
1-Methylnaphthalene	ND	---	0.00909	mg/kg wet	1	---	---	---	---	---	---	
2-Methylnaphthalene	ND	---	0.00909	mg/kg wet	1	---	---	---	---	---	---	
Naphthalene	ND	---	0.00909	mg/kg wet	1	---	---	---	---	---	---	
Phenanthrene	ND	---	0.00909	mg/kg wet	1	---	---	---	---	---	---	
Pyrene	ND	---	0.00909	mg/kg wet	1	---	---	---	---	---	---	
Dibenzofuran	ND	---	0.00909	mg/kg wet	1	---	---	---	---	---	---	
Surr: 2-Fluorobiphenyl (Surr)		Recovery: 88 %		Limits: 44-120 %		Dilution: 1x						
p-Terphenyl-d14 (Surr)		92 %		54-127 %		"						

LCS (22J0405-BS1)

Prepared: 10/11/22 12:38 Analyzed: 10/11/22 16:55

EPA 8270E SIM

Acenaphthene	0.759	---	0.0100	mg/kg wet	1	0.800	---	95	40 - 123%	---	---
Acenaphthylene	0.765	---	0.0100	mg/kg wet	1	0.800	---	96	32 - 132%	---	---
Anthracene	0.768	---	0.0100	mg/kg wet	1	0.800	---	96	47 - 123%	---	---
Benz(a)anthracene	0.738	---	0.0100	mg/kg wet	1	0.800	---	92	49 - 126%	---	---
Benzo(a)pyrene	0.783	---	0.0100	mg/kg wet	1	0.800	---	98	45 - 129%	---	---
Benzo(b)fluoranthene	0.775	---	0.0100	mg/kg wet	1	0.800	---	97	45 - 132%	---	---
Benzo(k)fluoranthene	0.820	---	0.0100	mg/kg wet	1	0.800	---	103	47 - 132%	---	---
Benzo(g,h,i)perylene	0.750	---	0.0100	mg/kg wet	1	0.800	---	94	43 - 134%	---	---
Chrysene	0.787	---	0.0100	mg/kg wet	1	0.800	---	98	50 - 124%	---	---

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Project Manager: Dave Borys

Report ID:

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QUALITY CONTROL (QC) SAMPLE RESULTS

Polyaromatic Hydrocarbons (PAHs) by EPA 8270E (SIM)

Analyte	Result	Detection L Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 22J0405 - EPA 3546						Soil						
LCS (22J0405-BS1)		Prepared: 10/11/22 12:38		Analyzed: 10/11/22 16:55								
Dibenz(a,h)anthracene	0.773	---	0.0100	mg/kg wet	1	0.800	---	97	45 - 134%	---	---	
Fluoranthene	0.787	---	0.0100	mg/kg wet	1	0.800	---	98	50 - 127%	---	---	
Fluorene	0.733	---	0.0100	mg/kg wet	1	0.800	---	92	43 - 125%	---	---	
Indeno(1,2,3-cd)pyrene	0.776	---	0.0100	mg/kg wet	1	0.800	---	97	45 - 133%	---	---	
1-Methylnaphthalene	0.686	---	0.0100	mg/kg wet	1	0.800	---	86	40 - 120%	---	---	
2-Methylnaphthalene	0.687	---	0.0100	mg/kg wet	1	0.800	---	86	38 - 122%	---	---	
Naphthalene	0.724	---	0.0100	mg/kg wet	1	0.800	---	91	35 - 123%	---	---	
Phenanthrene	0.761	---	0.0100	mg/kg wet	1	0.800	---	95	50 - 121%	---	---	
Pyrene	0.798	---	0.0100	mg/kg wet	1	0.800	---	100	47 - 127%	---	---	
Dibenzofuran	0.737	---	0.0100	mg/kg wet	1	0.800	---	92	44 - 120%	---	---	
Surr: 2-Fluorobiphenyl (Surr)		Recovery: 95 %		Limits: 44-120 %		Dilution: 1x						
p-Terphenyl-d14 (Surr)		82 %		54-127 %		"						

Duplicate (22J0405-DUP1) Prepared: 10/11/22 12:38 Analyzed: 10/11/22 17:45

QC Source Sample: COM-DP20-03 (A210878-05)

EPA 8270E SIM

Acenaphthene	ND	---	0.204	mg/kg dry	20	---	0.326	---	---	***	30%	Q-04
Acenaphthylene	ND	---	0.204	mg/kg dry	20	---	ND	---	---	---	30%	
Anthracene	ND	---	0.204	mg/kg dry	20	---	ND	---	---	---	30%	
Benz(a)anthracene	ND	---	0.204	mg/kg dry	20	---	0.261	---	---	***	30%	Q-04
Benzo(a)pyrene	ND	---	0.204	mg/kg dry	20	---	0.289	---	---	***	30%	Q-04
Benzo(b)fluoranthene	ND	---	0.204	mg/kg dry	20	---	0.315	---	---	***	30%	Q-04
Benzo(k)fluoranthene	ND	---	0.204	mg/kg dry	20	---	0.133	---	---	***	30%	Q-04
Benzo(g,h,i)perylene	0.314	---	0.204	mg/kg dry	20	---	0.420	---	---	29	30%	
Chrysene	ND	---	0.204	mg/kg dry	20	---	0.234	---	---	***	30%	Q-04
Dibenz(a,h)anthracene	ND	---	0.204	mg/kg dry	20	---	ND	---	---	---	30%	
Fluoranthene	ND	---	0.204	mg/kg dry	20	---	0.507	---	---	***	30%	Q-04
Fluorene	ND	---	0.204	mg/kg dry	20	---	0.231	---	---	***	30%	Q-04
Indeno(1,2,3-cd)pyrene	ND	---	0.204	mg/kg dry	20	---	0.273	---	---	***	30%	Q-04
1-Methylnaphthalene	ND	---	0.204	mg/kg dry	20	---	ND	---	---	---	30%	
2-Methylnaphthalene	ND	---	0.204	mg/kg dry	20	---	ND	---	---	---	30%	
Naphthalene	ND	---	0.204	mg/kg dry	20	---	ND	---	---	---	30%	
Phenanthrene	ND	---	0.204	mg/kg dry	20	---	0.250	---	---	***	30%	Q-04
Pyrene	ND	---	0.204	mg/kg dry	20	---	0.509	---	---	***	30%	Q-04

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Report ID:

A210878 - 10 19 22 1243

QUALITY CONTROL (QC) SAMPLE RESULTS

Polyaromatic Hydrocarbons (PAHs) by EPA 8270E (SIM)

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 22J0405 - EPA 3546						Soil						
Duplicate (22J0405-DUP1)		Prepared: 10/11/22 12:38 Analyzed: 10/11/22 17:45										
QC Source Sample: COM-DP20-03 (A210878-05)												
Dibenzofuran	ND	---	0.204	mg/kg dry	20	---	0.175	---	---	***	30%	Q-04
Surr: 2-Fluorobiphenyl (Surr)		Recovery: 97 %		Limits: 44-120 %		Dilution: 20x						
p-Terphenyl-d14 (Surr)		85 %		54-127 %		"						
Matrix Spike (22J0405-MS1)						Prepared: 10/11/22 12:38 Analyzed: 10/11/22 18:11						
QC Source Sample: COM-DP20-03 (A210878-05)												
EPA 8270E SIM												
Acenaphthene	0.953	---	0.191	mg/kg dry	20	0.763	0.326	82	40 - 123%	---	---	
Acenaphthylene	0.828	---	0.191	mg/kg dry	20	0.763	ND	109	32 - 132%	---	---	
Anthracene	0.813	---	0.191	mg/kg dry	20	0.763	ND	107	47 - 123%	---	---	
Benz(a)anthracene	1.07	---	0.191	mg/kg dry	20	0.763	0.261	106	49 - 126%	---	---	
Benzo(a)pyrene	1.27	---	0.191	mg/kg dry	20	0.763	0.289	129	45 - 129%	---	---	
Benzo(b)fluoranthene	1.30	---	0.191	mg/kg dry	20	0.763	0.315	129	45 - 132%	---	---	
Benzo(k)fluoranthene	1.08	---	0.191	mg/kg dry	20	0.763	0.133	125	47 - 132%	---	---	
Benzo(g,h,i)perylene	1.26	---	0.191	mg/kg dry	20	0.763	0.420	110	43 - 134%	---	---	
Chrysene	1.11	---	0.191	mg/kg dry	20	0.763	0.234	114	50 - 124%	---	---	
Dibenz(a,h)anthracene	0.794	---	0.191	mg/kg dry	20	0.763	ND	104	45 - 134%	---	---	
Fluoranthene	1.55	---	0.191	mg/kg dry	20	0.763	0.507	137	50 - 127%	---	---	Q-01
Fluorene	0.858	---	0.191	mg/kg dry	20	0.763	0.231	82	43 - 125%	---	---	
Indeno(1,2,3-cd)pyrene	1.16	---	0.191	mg/kg dry	20	0.763	0.273	117	45 - 133%	---	---	
1-Methylnaphthalene	0.642	---	0.191	mg/kg dry	20	0.763	ND	84	40 - 120%	---	---	
2-Methylnaphthalene	0.661	---	0.191	mg/kg dry	20	0.763	ND	87	38 - 122%	---	---	
Naphthalene	0.779	---	0.191	mg/kg dry	20	0.763	ND	102	35 - 123%	---	---	
Phenanthrene	1.01	---	0.191	mg/kg dry	20	0.763	0.250	100	50 - 121%	---	---	
Pyrene	1.71	---	0.191	mg/kg dry	20	0.763	0.509	157	47 - 127%	---	---	Q-01
Dibenzofuran	0.839	---	0.191	mg/kg dry	20	0.763	0.175	87	44 - 120%	---	---	
Surr: 2-Fluorobiphenyl (Surr)		Recovery: 98 %		Limits: 44-120 %		Dilution: 20x						
p-Terphenyl-d14 (Surr)		85 %		54-127 %		"						

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Michele Poquiz, Forensics Project Manager

Page 17 of 30



ANALYTICAL REPORT

AMENDED REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

HydroCon LLC

314 W 15th Street Suite 300

Vancouver, WA 98660

Project: **Peak City of Milwaukie**Project Number: **2022-080**Project Manager: **Dave Borys****Report ID:****A210878 - 10 19 22 1243**

QUALITY CONTROL (QC) SAMPLE RESULTS

Total Metals by EPA 6020B (ICPMS)

Analyte	Result	Detection L Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 22J0397 - EPA 3051A							Soil					
Blank (22J0397-BLK1)		Prepared: 10/11/22 10:42 Analyzed: 10/11/22 17:22										
EPA 6020B												
Arsenic	ND	---	0.962	mg/kg wet	10	---	---	---	---	---	---	
Barium	ND	---	0.962	mg/kg wet	10	---	---	---	---	---	---	
Cadmium	ND	---	0.192	mg/kg wet	10	---	---	---	---	---	---	
Chromium	ND	---	0.962	mg/kg wet	10	---	---	---	---	---	---	
Lead	ND	---	0.192	mg/kg wet	10	---	---	---	---	---	---	
Mercury	ND	---	0.0769	mg/kg wet	10	---	---	---	---	---	---	
Selenium	ND	---	0.962	mg/kg wet	10	---	---	---	---	---	---	
Silver	ND	---	0.192	mg/kg wet	10	---	---	---	---	---	---	
LCS (22J0397-BS1)		Prepared: 10/11/22 10:42 Analyzed: 10/11/22 17:33										
EPA 6020B												
Arsenic	47.1	---	1.00	mg/kg wet	10	50.0	---	94	80 - 120%	---	---	
Barium	48.0	---	1.00	mg/kg wet	10	50.0	---	96	80 - 120%	---	---	
Cadmium	47.8	---	0.200	mg/kg wet	10	50.0	---	96	80 - 120%	---	---	
Chromium	46.8	---	1.00	mg/kg wet	10	50.0	---	94	80 - 120%	---	---	
Lead	53.0	---	0.200	mg/kg wet	10	50.0	---	106	80 - 120%	---	---	
Mercury	0.984	---	0.0800	mg/kg wet	10	1.00	---	98	80 - 120%	---	---	
Selenium	23.5	---	1.00	mg/kg wet	10	25.0	---	94	80 - 120%	---	---	
Silver	26.4	---	0.200	mg/kg wet	10	25.0	---	105	80 - 120%	---	---	
Duplicate (22J0397-DUP1)		Prepared: 10/11/22 10:42 Analyzed: 10/11/22 17:43										
QC Source Sample: COM-DP20-03 (A210878-05)												
EPA 6020B												
Arsenic	2.98	---	1.03	mg/kg dry	10	---	1.71	---	---	54	20%	Q-05
Barium	56.8	---	1.03	mg/kg dry	10	---	83.9	---	---	39	20%	Q-04
Cadmium	0.241	---	0.206	mg/kg dry	10	---	0.273	---	---	12	20%	
Chromium	14.9	---	1.03	mg/kg dry	10	---	11.5	---	---	26	20%	Q-04
Lead	27.7	---	0.206	mg/kg dry	10	---	23.9	---	---	15	20%	
Mercury	ND	---	0.0824	mg/kg dry	10	---	ND	---	---	---	20%	
Selenium	ND	---	1.03	mg/kg dry	10	---	ND	---	---	---	20%	
Silver	ND	---	0.206	mg/kg dry	10	---	ND	---	---	---	20%	
Matrix Spike (22J0397-MS1)		Prepared: 10/11/22 10:42 Analyzed: 10/11/22 17:48										

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Michele Poquiz, Forensics Project Manager



ANALYTICAL REPORT

AMENDED REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

HydroCon LLC

314 W 15th Street Suite 300

Vancouver, WA 98660

Project: **Peak City of Milwaukie**Project Number: **2022-080**Project Manager: **Dave Borys****Report ID:****A210878 - 10 19 22 1243**

QUALITY CONTROL (QC) SAMPLE RESULTS

Total Metals by EPA 6020B (ICPMS)

Analyte	Result	Detection L Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 22J0397 - EPA 3051A							Soil					
Matrix Spike (22J0397-MS1)		Prepared: 10/11/22 10:42 Analyzed: 10/11/22 17:48										
QC Source Sample: COM-DP20-03 (A2I0878-05)												
EPA 6020B												
Arsenic	47.5	---	1.01	mg/kg dry	10	50.4	1.71	91	75 - 125%	---	---	Q-04
Barium	105	---	1.01	mg/kg dry	10	50.4	83.9	42	75 - 125%	---	---	
Cadmium	46.6	---	0.202	mg/kg dry	10	50.4	0.273	92	75 - 125%	---	---	
Chromium	62.0	---	1.01	mg/kg dry	10	50.4	11.5	100	75 - 125%	---	---	Q-04
Lead	93.9	---	0.202	mg/kg dry	10	50.4	23.9	139	75 - 125%	---	---	
Mercury	0.913	---	0.0807	mg/kg dry	10	1.01	ND	91	75 - 125%	---	---	
Selenium	22.9	---	1.01	mg/kg dry	10	25.2	ND	91	75 - 125%	---	---	
Silver	24.8	---	0.202	mg/kg dry	10	25.2	ND	99	75 - 125%	---	---	
Matrix Spike Dup (22J0397-MSD1)		Prepared: 10/11/22 10:42 Analyzed: 10/11/22 18:35										
QC Source Sample: COM-DP20-03 (A2I0878-05)												
EPA 6020B												
Arsenic	50.5	---	5.04	mg/kg dry	50	50.4	ND	100	75 - 125%	6	20%	
Silver	25.0	---	1.01	mg/kg dry	50	25.2	ND	99	75 - 125%	0.8	20%	

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Project: **Peak City of Milwaukie**Project Number: **2022-080**Project Manager: **Dave Borys****Report ID:****A210878 - 10 19 22 1243**

QUALITY CONTROL (QC) SAMPLE RESULTS

Percent Dry Weight

Analyte	Result	Detection L Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 2210937 - Total Solids (Dry Weight)							Soil					
Duplicate (2210937-DUP6)		Prepared: 09/28/22 18:56 Analyzed: 09/29/22 05:44										
QC Source Sample: COM-NW-8.5 (A210878-01)												
EPA 8000D												
% Solids	93.0	---	1.00	%	1	---	93.8	---	---	0.9	10%	
Duplicate (2210937-DUP7)		Prepared: 09/28/22 18:56 Analyzed: 09/29/22 05:44										
QC Source Sample: COM-SW-8.5 (A210878-02)												
EPA 8000D												
% Solids	94.2	---	1.00	%	1	---	95.3	---	---	1	10%	
Duplicate (2210937-DUP8)		Prepared: 09/28/22 18:56 Analyzed: 09/29/22 05:44										
QC Source Sample: COM-DP20-03 (A210878-05)												
EPA 8000D												
% Solids	96.1	---	1.00	%	1	---	96.1	---	---	0.06	10%	

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

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Michele Poquiz, Forensics Project Manager

**ANALYTICAL REPORT****AMENDED REPORT****Apex Laboratories, LLC**

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Project: **Peak City of Milwaukie**Project Number: **2022-080**Project Manager: **Dave Borys****Report ID:****A210878 - 10 19 22 1243****QUALITY CONTROL (QC) SAMPLE RESULTS****Percent Dry Weight**

Analyte	Result	Detection L Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 2210990 - Total Solids (Dry Weight)							Soil					

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

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Project: **Peak City of Milwaukie**Project Number: **2022-080**Project Manager: **Dave Borys****Report ID:****A210878 - 10 19 22 1243**

SAMPLE PREPARATION INFORMATION

Diesel and/or 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: 2210953							
A210878-01RE2	Soil	NWTPH-Dx	09/27/22 13:20	09/28/22 17:59	10.05g/5mL	10g/5mL	1.00
A210878-02RE1	Soil	NWTPH-Dx	09/27/22 13:30	09/28/22 17:59	10.69g/5mL	10g/5mL	0.94
A210878-05RE1	Soil	NWTPH-Dx	09/27/22 13:55	09/28/22 17:59	10.58g/5mL	10g/5mL	0.95
A210878-06RE1	Soil	NWTPH-Dx	09/27/22 14:05	09/28/22 17:59	10.57g/5mL	10g/5mL	0.95
A210878-10	Soil	NWTPH-Dx	09/27/22 14:25	09/28/22 17:59	10.23g/5mL	10g/5mL	0.98
A210878-11RE1	Soil	NWTPH-Dx	09/27/22 14:30	09/28/22 17:59	10.47g/5mL	10g/5mL	0.96

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: 2210962							
A210878-03	Soil	NWTPH-Gx (MS)	09/27/22 13:40	09/27/22 13:40	3.53g/5mL	5g/5mL	1.42
A210878-04	Soil	NWTPH-Gx (MS)	09/27/22 13:45	09/27/22 13:45	4.44g/5mL	5g/5mL	1.13
A210878-07	Soil	NWTPH-Gx (MS)	09/27/22 14:10	09/27/22 14:10	2.6g/5mL	5g/5mL	1.92
A210878-08	Soil	NWTPH-Gx (MS)	09/27/22 14:15	09/27/22 14:15	3.8g/5mL	5g/5mL	1.32
A210878-09	Soil	NWTPH-Gx (MS)	09/27/22 14:20	09/27/22 14:20	3.44g/5mL	5g/5mL	1.45

Selected Volatile Organic Compounds by EPA 5035A/8260D

Prep: EPA 5035A

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 22J0379							
A210878-05	Soil	5035A/8260D	09/27/22 13:55	09/27/22 13:55	3.4g/5mL	5g/5mL	1.47

Polychlorinated Biphenyls by EPA 8082A

Prep: EPA 3546

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 22J0642							
A210878-05	Soil	EPA 8082A	09/27/22 13:55	10/17/22 10:26	10.08g/5mL	10g/5mL	0.99

Polyaromatic Hydrocarbons (PAHs) by EPA 8270E (SIM)

Prep: EPA 3546

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
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Michele Poquiz, Forensics Project Manager

Page 22 of 30



ANALYTICAL REPORT

AMENDED REPORT

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6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

HydroCon LLC

314 W 15th Street Suite 300

Vancouver, WA 98660

Project: **Peak City of Milwaukie**Project Number: **2022-080**Project Manager: **Dave Borys****Report ID:****A210878 - 10 19 22 1243**

SAMPLE PREPARATION INFORMATION

Polyaromatic Hydrocarbons (PAHs) by EPA 8270E (SIM)

Prep: EPA 3546

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 22J0405							
A210878-05	Soil	EPA 8270E SIM	09/27/22 13:55	10/11/22 12:38	10.39g/5mL	10g/5mL	0.96

Total Metals by EPA 6020B (ICPMS)

Prep: EPA 3051A

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 22J0397							
A210878-05	Soil	EPA 6020B	09/27/22 13:55	10/11/22 10:42	0.516g/50mL	0.5g/50mL	0.97

Percent Dry Weight

Prep: Total Solids (Dry Weight)

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 22I0937							
A210878-01	Soil	EPA 8000D	09/27/22 13:20	09/28/22 18:56			NA
A210878-02	Soil	EPA 8000D	09/27/22 13:30	09/28/22 18:56			NA
A210878-05	Soil	EPA 8000D	09/27/22 13:55	09/28/22 18:56			NA
A210878-06	Soil	EPA 8000D	09/27/22 14:05	09/28/22 18:56			NA
A210878-10	Soil	EPA 8000D	09/27/22 14:25	09/28/22 18:56			NA
A210878-11	Soil	EPA 8000D	09/27/22 14:30	09/28/22 18:56			NA
Batch: 22I0990							
A210878-03	Soil	EPA 8000D	09/27/22 13:40	09/29/22 13:18			NA
A210878-04	Soil	EPA 8000D	09/27/22 13:45	09/29/22 13:18			NA
A210878-07	Soil	EPA 8000D	09/27/22 14:10	09/29/22 13:18			NA
A210878-08	Soil	EPA 8000D	09/27/22 14:15	09/29/22 13:18			NA
A210878-09	Soil	EPA 8000D	09/27/22 14:20	09/29/22 13:18			NA

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**ANALYTICAL REPORT****AMENDED REPORT****Apex Laboratories, LLC**

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314 W 15th Street Suite 300

Vancouver, WA 98660

Project: **Peak City of Milwaukie**Project Number: **2022-080**Project Manager: **Dave Borys****Report ID:****A210878 - 10 19 22 1243****QUALIFIER DEFINITIONS****Client Sample and Quality Control (QC) Sample Qualifier Definitions:****Apex Laboratories**

- C-07** Extract has undergone Sulfuric Acid Cleanup by EPA 3665A, Sulfur Cleanup by EPA 3660B, and Florisil Cleanup by EPA 3620B in order to minimize matrix interference.
- F-11** The hydrocarbon pattern indicates possible weathered diesel, mineral oil, or a contribution from a related component.
- M-05** Estimated results. Peak separation for structural isomers is insufficient for accurate quantification.
- Q-01** Spike recovery and/or RPD is outside acceptance limits.
- Q-04** Spike recovery and/or RPD is outside control limits due to a non-homogeneous sample matrix.
- Q-05** Analyses are not controlled on RPD values from sample and duplicate concentrations that are below 5 times the reporting level.
- Q-42** Matrix Spike and/or Duplicate analysis was performed on this sample. % Recovery or RPD for this analyte is outside laboratory control limits. (Refer to the QC Section of Analytical Report.)
- S-05** Surrogate recovery is estimated due to sample dilution required for high analyte concentration and/or matrix interference.

Apex Laboratories

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Michele Poquiz, Forensics Project Manager

**ANALYTICAL REPORT****AMENDED REPORT****Apex Laboratories, LLC**

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Project: **Peak City of Milwaukie**Project Number: **2022-080**Project Manager: **Dave Borys****Report ID:****A210878 - 10 19 22 1243****REPORTING NOTES AND CONVENTIONS:****Abbreviations:**

- DET Analyte DETECTED at or above the detection or reporting limit.
- ND Analyte NOT DETECTED at or above the detection or reporting limit.
- NR Result Not Reported.
- RPD Relative Percent Difference. RPDs for Matrix Spikes and Matrix Spike Duplicates are based on concentration, not recovery.

Detection Limits: Limit of Detection (LOD)

Limits of Detection (LODs) are normally set at a level of one half the validated Limit of Quantitation (LOQ).

If no value is listed ('----'), then the data has not been evaluated below the Reporting Limit.

Reporting Limits: Limit of Quantitation (LOQ)

Validated Limits of Quantitation (LOQs) are reported as the Reporting Limits for all analyses where the LOQ, MRL, PQL or CRL are requested. The LOQ represents a level at or above the low point of the calibration curve, that has been validated according to Apex Laboratories' comprehensive LOQ policies and procedures.

Reporting Conventions:

- Basis: Results for soil samples are generally reported on a 100% dry weight basis.
- The Result Basis is listed following the units as "dry", "wet", or " " (blank) designation.
- "dry" Sample results and Reporting Limits are reported on a dry weight basis. (i.e. "ug/kg dry")
- See Percent Solids section for details of dry weight analysis.
- "wet" Sample results and Reporting Limits for this analysis are normally dry weight corrected, but have not been modified in this case.
- " " Results without 'wet' or 'dry' designation are not normally dry weight corrected. These results are considered 'As Received'.

QC Source:

In cases where there is insufficient sample provided for Sample Duplicates and/or Matrix Spikes, a Lab Control Sample Duplicate (LCS Dup) may be analyzed to demonstrate accuracy and precision of the extraction batch.

Non-Client Batch QC Samples (Duplicates and Matrix Spike/Duplicates) are not included in this report. Please request a Full QC report if this data is required.

Miscellaneous Notes:

- " --- " 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 discrepancy 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).

Blanks:

- Standard practice is to evaluate the results from Blank QC Samples down to a level equal to ½ the Reporting Limit (RL).
- For Blank hits falling between ½ the RL and the RL (J flagged hits), the associated sample and QC data will receive a 'B-02' qualifier.
- For Blank hits above the RL, the associated sample and QC data will receive a 'B' qualifier, per Apex Laboratories' Blank Policy.

Apex Laboratories

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**ANALYTICAL REPORT****AMENDED REPORT****Apex Laboratories, LLC**

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Vancouver, WA 98660

Project: **Peak City of Milwaukie**Project Number: **2022-080**Project Manager: **Dave Borys****Report ID:****A210878 - 10 19 22 1243****REPORTING NOTES AND CONVENTIONS (Cont.):****Blanks (Cont.):**

Sample results flagged with a 'B' or 'B-02' qualifier are potentially biased high if the sample results 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.

'B' and 'B-02' qualifications are only applied to sample results detected above the Reporting Level.

Preparation Notes:**Mixed Matrix Samples:****Water Samples:**

Water samples containing significant amounts of sediment are decanted or separated prior to extraction, and only the water portion analyzed, unless otherwise directed by the client.

Soil and Sediment Samples:

Soil and Sediment samples containing significant amounts of water are decanted prior to extraction, and only the solid portion analyzed, unless otherwise directed by the client.

Sampling and Preservation Notes:

Certain regulatory programs, such as National Pollutant Discharge Elimination System (NPDES), require that activities such as sample filtration (for dissolved metals, orthophosphate, hexavalent chromium, etc.) and testing of short hold analytes (pH, Dissolved Oxygen, etc.) be performed in the field (on-site) within a short time window. In addition, sample matrix spikes are required for some analyses, and sufficient volume must be provided, and billable site specific QC requested, if this is required. All regulatory permits should be reviewed to ensure that these requirements are being met.

Data users should be aware of which regulations pertain to the samples they submit for testing. If related sample collection activities are not approved for a particular regulatory program, results should be considered estimates. Apex Laboratories will qualify these analytes according to the most stringent requirements, however results for samples that are for non-regulatory purposes may be acceptable.

Samples that have been filtered and preserved at Apex Laboratories per client request are listed in the preparation section of the report with the date and time of filtration listed.

Apex Laboratories maintains detailed records on sample receipt, including client label verification, cooler temperature, sample preservation, hold

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Michele Poquiz, Forensics Project Manager

**ANALYTICAL REPORT****AMENDED REPORT****Apex Laboratories, LLC**

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

HydroCon LLC

314 W 15th Street Suite 300

Vancouver, WA 98660

Project: **Peak City of Milwaukie**Project Number: **2022-080**Project Manager: **Dave Borys****Report ID:****A210878 - 10 19 22 1243****LABORATORY ACCREDITATION INFORMATION****ORELAP Certification ID: OR100062 (Primary Accreditation)****EPA ID: OR01039**

All methods and analytes reported from work performed at Apex Laboratories are included on Apex Laboratories' ORELAP Scope of Certification, with the exception of any analyte(s) listed below:

Apex Laboratories

Matrix	Analysis	TNI_ID	Analyte	TNI_ID	Accreditation
--------	----------	--------	---------	--------	---------------

All reported analytes are included in Apex Laboratories' current ORELAP scope.

Secondary Accreditations

Apex Laboratories also maintains reciprocal accreditation with non-TNI states (Washington DOE), as well as other state specific accreditations not listed here.

Subcontract Laboratory Accreditations

Subcontracted data falls outside of Apex Laboratories' Scope of Accreditation.

Please see the Subcontract Laboratory report for full details, or contact your Project Manager for more information.

Field Testing Parameters

Results for Field Tested data are provided by the client or sampler, and fall outside of Apex Laboratories' Scope of Accreditation.

Apex Laboratories

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Michele Poquiz, Forensics Project Manager



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6700 S.W. Sandburg Street

Tigard, OR 97223

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ORELAP ID: OR100062

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314 W 15th Street Suite 300

Vancouver, WA 98660

Project: Peak City of MilwaukieProject Number: 2022-080Project Manager: Dave Borys

Report ID:

A210878 - 10 19 22 1243

APEX LABS		CHAIN OF CUSTODY		Lab # <u>A210878</u> COC <u>1 of 2</u>																				
6700 SW Sandburg St., Tigard, OR 97223 PH: 503-718-2323		Project Mgr: <u>David Borys</u>		Project Name: <u>Peak City of Milwaukie</u> Project #: <u>2022-080</u>																				
Company: <u>HCF</u>		Address: <u>David Borys</u>		Phone: <u>503-718-2323</u>																				
Sampled by: <u>David Borys</u>		Site Location: <u>OR WA CA</u>		AK ID: <u>---</u>																				
SAMPLE ID	LAB ID #	DATE	TIME	MATRIX	# OF CONTAINERS	NWTPH-ACID	NWTPH-D	NWTPH-GS	8260 BTEX	8260 RBDN VOCs	8260 HBA VOCs	8260 VOCs PUBL LHM	8270 SEMI-PATH	8270 SEMI-VOL PUBL LHM	8082 PCBs	8081 PAHs	RCRA Metals (B)	Priority Metals (13)	AL, AS, AR, BA, BR, CA, CB, CC, CD, CE, CF, CH, CI, CL, CM, CN, CO, CP, CR, CS, CU, CV, CY, DD, DE, DF, DG, DH, DI, DL, DM, DN, DO, DP, DR, DS, DT, DV, DW, DX, DY, DZ, EA, EB, EC, ED, EE, EF, EG, EH, EI, EJ, EK, EL, EM, EN, EO, EP, EQ, ER, ES, ET, EU, EV, EW, EX, EY, EZ, FA, FB, FC, FD, FE, FF, FG, FH, FI, FJ, FK, FL, FM, FN, FO, FP, FQ, FR, FS, FT, FU, FV, FW, FX, FY, FZ, GA, GB, GC, GD, GE, GF, GG, GH, GI, GL, GM, GN, GO, GP, GQ, GR, GS, GT, GU, GV, GW, GX, GY, GZ, HA, HB, HC, HD, HE, HF, HG, HH, HI, HJ, HK, HL, HM, HN, HO, HP, HQ, HR, HS, HT, HU, HV, HW, HX, HY, HZ, IA, IB, IC, ID, IE, IF, IG, IH, II, IJ, IK, IL, IM, IN, IO, IP, IQ, IR, IS, IT, IU, IV, IW, IX, IY, IZ, JA, JB, JC, JD, JE, JF, JG, JH, JI, JJ, JK, JL, JM, JN, JO, JP, JQ, JR, JS, JT, JU, JV, JW, JX, JY, JZ, KA, KB, KC, KD, KE, KF, KG, KH, KI, KJ, KK, KL, KM, KN, KO, KP, KQ, KR, KS, KT, KU, KV, KW, KX, KY, KZ, LA, LB, LC, LD, LE, LF, LG, LH, LI, LJ, LK, LL, LM, LN, LO, LP, LQ, LR, LS, LT, LU, LV, LW, LX, LY, LZ, MA, MB, MC, MD, ME, MF, MG, MH, MI, MJ, MK, ML, MM, MN, MO, MP, MQ, MR, MS, MT, MU, MV, MW, MX, MY, MZ, NA, NB, NC, ND, NE, NF, NG, NH, NI, NJ, NK, NL, NM, NO, NP, NQ, NR, NS, NT, NU, NV, NW, NX, NY, NZ, OA, OB, OC, OD, OE, OF, OG, OH, OI, OJ, OK, OL, OM, ON, OO, OP, OQ, OR, OS, OT, OU, OV, OW, OX, OY, OZ, PA, PB, PC, PD, PE, PF, PG, PH, PI, PJ, PK, PL, PM, PN, PO, PP, PQ, PR, PS, PT, PU, PV, PW, PX, PY, PZ, QA, QB, QC, QD, QE, QF, QG, QH, QI, QJ, QK, QL, QM, QN, QO, QP, QQ, QR, QS, QT, QU, QV, QW, QX, QY, QZ, RA, RB, RC, RD, RE, RF, RG, RH, RI, RJ, RK, RL, RM, RN, RO, RP, RQ, RR, RS, RT, RU, RV, RW, RX, RY, RZ, SA, SB, SC, SD, SE, SF, SG, SH, SI, SJ, SK, SL, SM, SN, SO, SP, SQ, SR, SS, ST, SU, SV, SW, SX, SY, SZ, TA, TB, TC, TD, TE, TF, TG, TH, TI, TJ, TK, TL, TM, TN, TO, TP, TQ, TR, TS, TT, TU, TV, TW, TX, TY, TZ, UA, UB, UC, UD, UE, UF, UG, UH, UI, UJ, UK, UL, UM, UN, UO, UP, UQ, UR, US, UT, UU, UV, UW, UX, UY, UZ, VA, VB, VC, VD, VE, VF, VG, VH, VI, VJ, VK, VL, VM, VN, VO, VP, VQ, VR, VS, VT, VU, VV, VW, VX, VY, VZ, WA, WB, WC, WD, WE, WF, WG, WH, WI, WJ, WK, WL, WM, WN, WO, WP, WQ, WR, WS, WT, WU, WV, WW, WX, WY, WZ, XA, XB, XC, XD, XE, XF, XG, XH, XI, XJ, XK, XL, XM, XN, XO, XP, XQ, XR, XS, XT, XU, XV, XW, XX, XY, XZ, YA, YB, YC, YD, YE, YF, YG, YH, YI, YJ, YK, YL, YM, YN, YO, YP, YQ, YR, YS, YT, YU, YV, YW, YX, YY, YZ, ZA, ZB, ZC, ZD, ZE, ZF, ZG, ZH, ZI, ZJ, ZK, ZL, ZM, ZN, ZO, ZP, ZQ, ZR, ZS, ZT, ZU, ZV, ZW, ZX, ZY, ZZ	TCAP Metals (B)	TOTAL DSS TCAP	VOL	Me, Mn, Ni, Pb, Se, Ag, Na, Te, Co, Cu, Cd, Cr, Fe, Hg, Mo, Sn, Zn, As, Ba, Be, Br, Ca, Cl, Cs, Pb, Pt, Rh, Sb, Si, Sr, Ti, Tl, U, V, W, Y, Zn	Archival
COM-NW-8.5	9/14/22	1:00	1:00	1:00	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X					
COM-SW-8.5	9/14/22	1:00	1:00	1:00	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X					
COM-NE-11	9/14/22	1:00	1:00	1:00	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X					
COM-SE-11	9/14/22	1:00	1:00	1:00	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X					
COM-DP40-03	9/14/22	1:00	1:00	1:00	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X					
COM-DP40-03	9/14/22	1:00	1:00	1:00	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X					
COM-GP40-03	9/14/22	1:00	1:00	1:00	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X					
COM-GP40-03	9/14/22	1:00	1:00	1:00	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X					
COM-GD-03	9/14/22	1:00	1:00	1:00	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X					
COM-DP1-03	9/14/22	1:00	1:00	1:00	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X					
Normal Turn Around Time (TAT) = 10 Business Days																								
TAT Requested (circle)		1 Day	2 Day	3 Day	4 Day	5 Day	Other: <u>HCF</u>																	
SAMPLES ARE HELD FOR 30 DAYS																								
RELINQUISHED BY:		Signature: <u>David Borys</u>		Date: <u>9/14/22</u>		Signature: <u>David Borys</u>		Date: <u>9/14/22</u>		Signature: <u>David Borys</u>		Date: <u>9/14/22</u>		Signature: <u>David Borys</u>		Date: <u>9/14/22</u>		Signature: <u>David Borys</u>		Date: <u>9/14/22</u>				
Printed Name: <u>David Borys</u>		Printed Name: <u>David Borys</u>		Printed Name: <u>David Borys</u>		Printed Name: <u>David Borys</u>		Printed Name: <u>David Borys</u>		Printed Name: <u>David Borys</u>		Printed Name: <u>David Borys</u>		Printed Name: <u>David Borys</u>		Printed Name: <u>David Borys</u>		Printed Name: <u>David Borys</u>		Printed Name: <u>David Borys</u>				
Company: <u>HCF</u>		Company: <u>HCF</u>		Company: <u>HCF</u>		Company: <u>HCF</u>		Company: <u>HCF</u>		Company: <u>HCF</u>		Company: <u>HCF</u>		Company: <u>HCF</u>		Company: <u>HCF</u>		Company: <u>HCF</u>		Company: <u>HCF</u>				

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Michele Poquiz, Forensics Project Manager

Page 28 of 30



ANALYTICAL REPORT

AMENDED REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

HydroCon LLC

314 W 15th Street Suite 300

Vancouver, WA 98660

Project: Peak City of MilwaukieProject Number: 2022-080Project Manager: Dave Borys

Report ID:

A210878 - 10 19 22 1243

APEX LABS		CHAIN OF CUSTODY		Lab # <u>A210878</u> COC <u>d of d</u>	
6700 SW Sandburg St., Tigard, OR 97223 Ph: 503-718-2323		Project Name: <u>Peak City of Milwaukie</u>		Project #: <u>2022-080</u>	
Company: <u>HCE</u>	Project Mgr: <u>David Borys</u>	Phone: _____	Email: _____	PO # _____	
Address: _____		ANALYSIS REQUEST			
Sampled by: <u>David Borys</u>					
Site Location: <u>OR WA CA</u>					
AK ID: _____					
SAMPLE ID: <u>COM-DDI-03</u>	LAB ID # _____	DATE: <u>9/14/23</u>	TIME: _____	MATRIX: _____	# OF CONTAINERS: _____
		NWTR-HCD	NWTR-DX	NWTR-CX	8260 BTEX
		8260 RBDN VOCs	8260 Halo VOCs	8260 VOCs Pub List	8270 SEMI PAHs
		8270 Seab-Vol Pub List	8082 PCBs	8081 Pchl	HCRA Metals (B)
		Priority Metals (13)	AL, Sn, As, Ba, Be, Bi, Br, Cd, Cr, Co, Cu, Fe, Hg, Mn, Mo, Ni, Pb, Se, Ag, Na, Ti, V, Zn	TOTAL DISS. TCTP	TCTP Metals (B)
		Archives			
SPECIAL INSTRUCTIONS:					
Normal Turn Around Time (TAT) = 10 Business Days					
TAT Requested (circle) 1 Day 2 Day 3 Day 4 DAY 5 DAY Other: <u>HCE</u>					
SAMPLES ARE HELD FOR 30 DAYS					
RELINQUISHED BY: <u>Dan B</u> Date: <u>9/14/23</u> Signature: <u>[Signature]</u>		RECEIVED BY: <u>[Signature]</u> Date: <u>9/28/22</u>		Signature: _____ Date: _____	
Printed Name: <u>David Borys</u> Time: <u>9:00am</u>		Printed Name: <u>Shawn Thompson</u> Time: <u>12:44</u>		Printed Name: _____ Time: _____	
Company: <u>HCE</u>		Company: _____		Company: _____	

Apex Laboratories

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6700 S.W. Sandburg Street

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ORELAP ID: OR100062

HydroCon LLC

314 W 15th Street Suite 300

Vancouver, WA 98660

Project: Peak City of Milwaukie

Project Number: 2022-080

Project Manager: Dave Borys

Report ID:

A210878 - 10 19 22 1243

APEX LABS COOLER RECEIPT FORM

Client: HCE Element WO#: A2 10878

Project/Project #: PEAK CITY OF MILWAUKIE # 2022-80

Delivery Info:

Date/time received: 9/28/22 @ 1244 By: SAT

Delivered by: Apex ☒ Client ☐ ESS ☐ FedEx ☐ UPS ☐ Swift ☐ Senvoy ☐ SDS ☐ Other ☐

Cooler Inspection Date/time inspected: 9/28/22 @ 1405 By: SAT

Chain of Custody included? Yes ☒ No ☐ Custody seals? Yes ☐ No ☒Signed/dated by client? Yes ☒ No ☐Signed/dated by Apex? Yes ☒ No ☐

	Cooler #1	Cooler #2	Cooler #3	Cooler #4	Cooler #5	Cooler #6	Cooler #7
Temperature (°C)	4.1						
Received on ice? (Y/N)	Y						
Temp. blanks? (Y/N)	Y						
Ice type: (Gel/Real/Other)	Gel						
Condition:	Good						

Cooler out of temp? (Y/N) Possible reason why:

Green dots applied to out of temperature samples? Yes ☒Out of temperature samples form initiated? Yes ☒

Sample Inspection: Date/time inspected: 9/28/22 @ 1600 By: AKK

All samples intact? Yes ☒ No ☐ Comments:Bottle labels/COCs agree? Yes ☐ No ☒ Comments: All samples: 3 containers provided, 1 on COC. COM-G40-03 ID on 1/2 VOA reads COM-G40-03.COC/container discrepancies form initiated? Yes ☐ No ☒Containers/volumes received appropriate for analysis? Yes ☒ No ☐ Comments:Do VOA vials have visible headspace? Yes ☐ No ☐ NA ☒

Comments:

Water samples: pH checked: Yes ☐ No ☐ NA ☒ pH appropriate? Yes ☐ No ☐ NA ☒

Comments:

Additional information:

Labeled by:

AKK

Witness:

DSS

Cooler Inspected by:

AKK

Form Y-003 R-00

Apex Laboratories

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Michele Poquiz

Michele Poquiz, Forensics Project Manager

Page 30 of 30